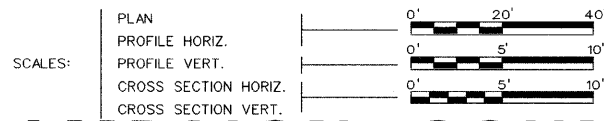


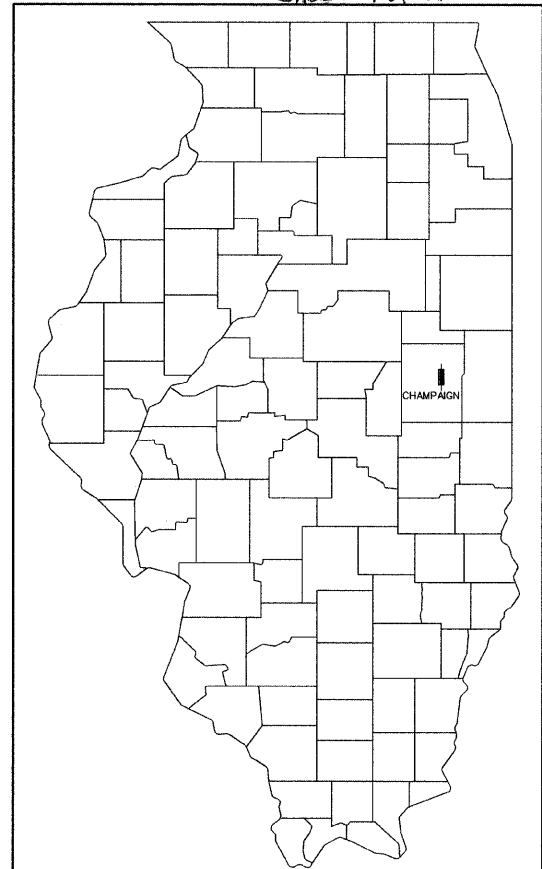
INDEX OF SHEETS

| SHEET NO. | DESCRIPTION |
|-----------|--|
| 1 | TITLE SHEET |
| 2 | GENERAL NOTES |
| 3 | SUMMARY OF QUANTITIES |
| 4 | TYPICAL SECTIONS |
| 5 | SCHEDULE OF QUANTITIES |
| 6 | TIE POINTS |
| 7 | PLAN & PROFILE |
| 8-11 | TRAFFIC CONTROL PLAN STAGE I AND II |
| 12 | EROSION CONTROL PLAN |
| 13-27 | STRUCTURE DETAILS |
| 28-33 | BRIDGE APPROACH SLAB AND CONNECTOR DETAILS |
| 34-37 | DETAILS |
| 38 | PAINT DETAILS |
| 39 | BORING LOGS |
| 40-50 | CROSS SECTIONS |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
BRIDGE REPLACEMENT**



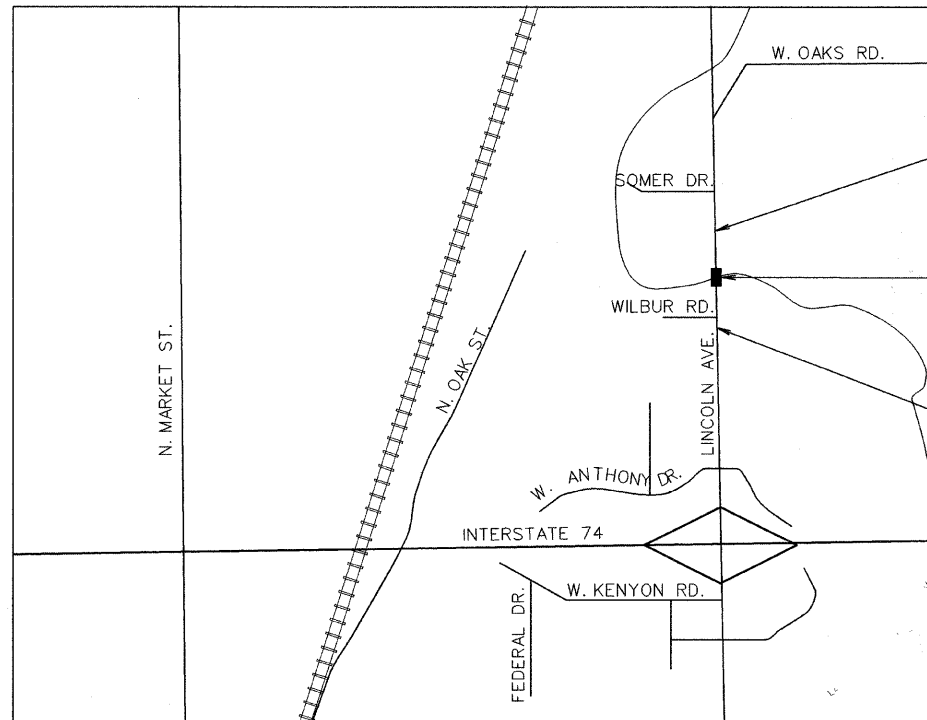
**CHAMPAIGN COUNTY
SECTION 07-25932-00-BR
PROJECT NO. BRS-0019(130)
JOB NO. C-95-320-08
NORTH LINCOLN AVENUE
BRIDGE REPLACEMENT AND
REHABILITATION PROGRAM**



LOCATION INDICATED THUS:

ILLINOIS DEPT. OF TRANSPORTATION STANDARD DRAWINGS

| STANDARD NO. | DESCRIPTION |
|--------------|---|
| 000001-05 | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND A FOOT |
| 280001-04 | TEMPORARY EROSION CONTROL SYSTEMS |
| 420001-07 | PAVEMENT JOINTS |
| 420401-07 | BRIDGE APPROACH PAVEMENT |
| 421001-02 | BAR REINFORCEMENT FOR CRC PAVEMENT |
| 482011-03 | HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS |
| 515001-03 | NAME PLATE FOR BRIDGES |
| 542401-01 | METAL END SECTIONS FOR PIPE CULVERTS |
| 602306-02 | INLET - TYPE B |
| 602601-02 | PRECAST REINFORCED CONCRETE FLAT SLAB TOP |
| 604006-04 | FRAME AND GRATE TYPE 3 |
| 606001-04 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 630001-08 | STEEL PLATE BEAM GUARDRAIL |
| 630301-05 | SHOULDER WIDENING FOR TYPE 1(SPECIAL) GUARDRAIL TERMINALS |
| 631011-05 | TRAFFIC BARRIER TERMINAL, TYPE 2 |
| 631026-04 | TRAFFIC BARRIER TERMINAL, TYPE 5 |
| 631031-07 | TRAFFIC BARRIER TERMINAL, TYPE 6 |
| 635006-03 | REFLECTOR AND TERMINAL MARKER PLACEMENT |
| 635011-02 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 667101-01 | PERMANENT SURVEY MARKERS |
| 701001-02 | OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY |
| 701006-03 | OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE |
| 701301-03 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS, DAY ONLY |
| 701321-10 | LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER |
| 701901-01 | TRAFFIC CONTROL DEVICES |
| 704001-05 | TEMPORARY CONCRETE BARRIER |
| 780001-02 | TYPICAL PAVEMENT MARKINGS |
| 781001-03 | TYPICAL APPLICATIONS RAISED PAVEMENT MARKERS |
| 886001-01 | DETECTOR LOOP INSTALLATIONS |
| 886006-01 | TYPICAL LAYOUT FOR DETECTION LOOPS |



LOCATION MAP

NOT TO SCALE

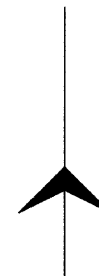
NET LENGTH OF SECTION = 562 FEET = 0.11 MILES
 FUNCTIONAL CLASSIFICATION - URBAN TWO-WAY ARTERIAL
 CURRENT ADT = 2850
 FUTURE ADT = 4000

FOR JOINT UTILITY INFORMATION
 CALL J.U.L.I.E. 1-800-892-0123

END PROJECT STATION 12+62

EXISTING STRUCTURE *010-3168
 PROPOSED STRUCTURE *010-4541

BEGIN PROJECT STATION 7+00



APPROVED 6/3 2009
Jeff Blue
 CHAMPAIGN COUNTY ENGINEER

PASSED 6-15 2009
Dale S.
 DISTRICT FIVE ENGINEER OF LOCAL ROADS & STREETS

Released For Bid Based on Limited Review June 16 2009
[Signature]
 DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



Ryan T. Mumm 06/03/2009
 RYAN T. MUMM
 ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-059507
 LICENSE EXPIRES 11-30-09

Sodemann and Associates, Inc.
 340 NORTH NEIL STREET
 POST OFFICE BOX 557
 CHAMPAIGN, ILLINOIS 61824-0557
 TEL 217 352-7688 FAX 217 352-7922
 ENGINEERING / ANALYSIS / MANAGEMENT



| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|------------------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 2 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

GENERAL NOTES

All elevations shown are referred to the U.S.G.S. datum.

Any reference standards throughout the plans shall be interpreted to be the latest standards of the department as shown on the schedule of standard drawings on the cover sheet.

English units of measurement shall govern over and supersede any metric units shown in this contract. Where included, metric units are for information only.

Utilities - these drawings illustrate the approximate location of all known underground utilities. The contractor may expect to find such utilities within approximately five feet of the position indicated on the drawings. But in every case the contractor shall locate and uncover such utilities, with the assistance of the respective utility companies, before any excavation is started.

Call J.U.L.I.E. 1-800-892-0123 for underground utility location marking prior to start of construction.

Utility companies may be adjusting their facilities at the time of construction of this project. The contractor shall cooperate with those organizations while they perform their work.

During construction the contractor may encounter various types of underground utilities that may not be shown on the plans. The contractor shall cooperate with the engineer and the owner of the utility while the utility company adjusts their facilities if necessary. If it is determined that the utility has been abandoned, the contractor will be directed to remove the utility lines that conflict with his work and cap or plug the lines as directed by the engineer. This work will not be paid for separately and will be considered as included in the contract.

The contractor shall notify all utility companies 48 hours prior to excavation operations.

The excavation for this project is classified as earth excavation and earth excavation (widening) in accordance with the Standard Specifications and as provided in the contract specifications. The earth excavation shall include the removal of the earth and unclassified materials. The contractor shall notify all utility companies 48 hours prior to excavation operations.

Grading shall be done by hand around light poles, utility poles, sign posts, shrubs, trees and other natural or man-made objects where shallow fills or cuts are adjacent to these items. It is the intent that items that do not need to be disturbed by the construction shall be preserved. The decision as to items to remain in place shall be as directed by the engineer. This work will not be paid for separately, but shall be considered included in the contract unit price per cubic yard of earth excavation and no additional compensation shall be allowed.

Seeding shall be done at locations shown on the plans where the existing earth has been disturbed, and at locations directed by the engineer. Any existing areas outside the limits of construction damaged by the contractor shall be seeded at his own expense and no additional compensation will be allowed.

Special attention is called to Article 250.07 regarding seeding dates.

When required by Article 420.21, a protective coat shall be applied to concrete pavement, gutter flags, curb surfaces and other concrete appurtenances adjacent to the pavement.

Before ordering pipe culverts, the contractor shall consult with the engineer as to the exact length and quantity required.

The material of the pipe culvert end sections shall match the material of the pipe culvert on which they are to be installed.

The contractor shall not begin any construction operations until all survey monuments have been sufficiently witnessed or referenced by the engineer. The contractor shall take all necessary precautions to preserve and not disturb the existing iron pipe monuments or right-of-way markers. Any iron pipe monuments or right-of-way markers so disturbed by the contractor shall be reset by a Registered Illinois Land Surveyor. The cost for resetting these monuments shall be paid for by the contractor.

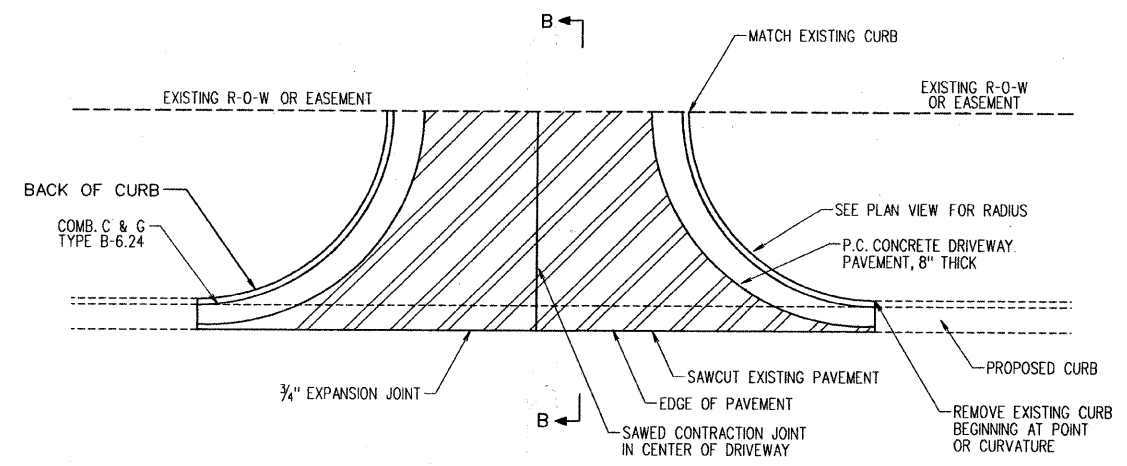
The existing traffic signs and delineators which interfere with the construction operations shall be removed and reset as directed by the engineer. The cost for doing this work will be considered included in the contract and no additional compensation will be allowed.

The Contractor shall locate the 27" UCSD interceptor sewer South of the South abutment prior to driving temporary sheet piling and adjust sheet piling dimensions as necessary with the approval of the Engineer. If the Contractor exposes the interceptor, he shall notify UCSD 48 hours prior to any work in this area. Cost of locating the UCSD interceptor sewer and adjustments to the sheet piling are included with the cost of Temporary Sheet Piling and no other compensation will be allowed.

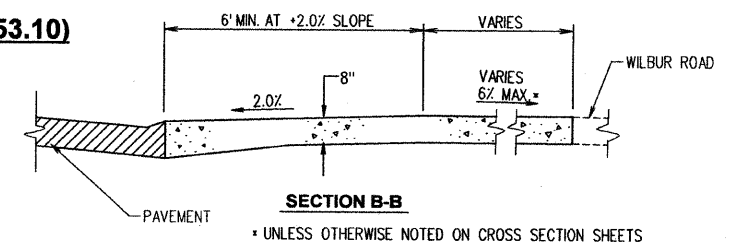
| |
|-------------------------|
| GENERAL NOTES |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| ☉ STATION 10+00 |

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 3 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

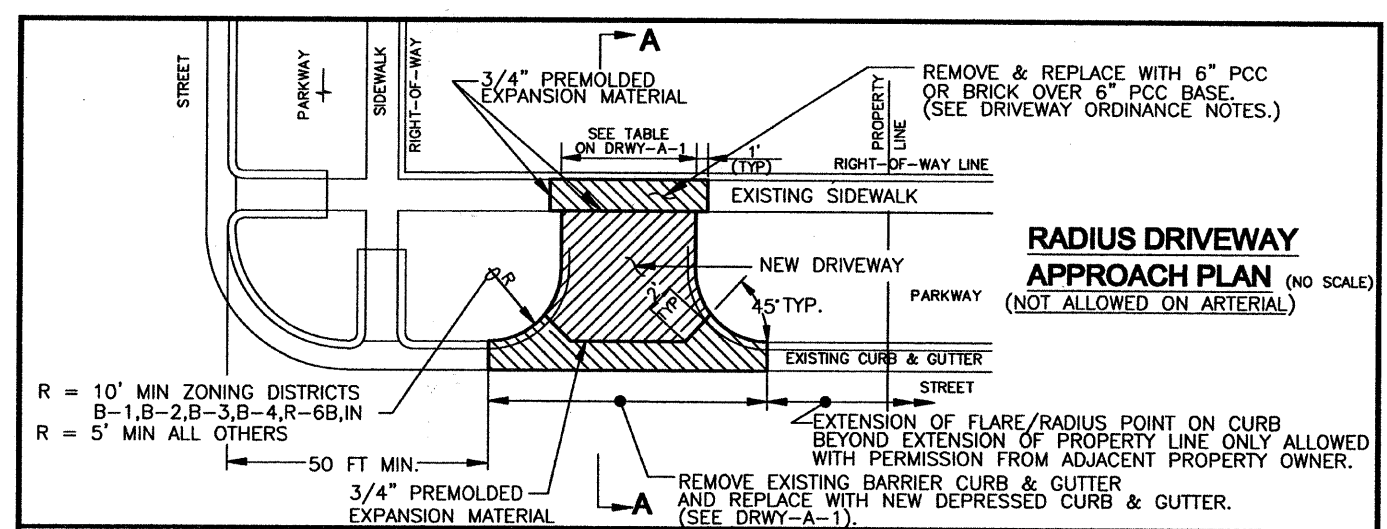
| SUMMARY OF QUANTITIES | | | FAP RTE 806 (LINCOLN AVE.) URBAN TWO WAY ARTERIAL 80% FEDERAL, 20% LOCAL CONSTRUCTION CODE X0 71-2A |
|-------------------------|---|--------|---|
| CODE # | ITEM NAME | UNIT | TOTAL QUANTITY |
| 20100110 | TREE REMOVAL (6 TO 15 UNITS DIAMETER) | UNIT | 8.0 |
| 20200100 | EARTH EXCAVATION | CU YD | 1,058.0 |
| 20700220 | POROUS GRANULAR EMBANKMENT | CU YD | 338.0 |
| 21101615 | TOPSOIL, FURNISH AND PLACE, 4" | SQ YD | 542.0 |
| 25000200 | SEEDING, CLASS 2 | ACRE | 0.31 |
| 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 28.0 |
| 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 28.0 |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 28.0 |
| 25100115 | MULCH METHOD 2 | ACRE | 0.31 |
| 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 400.0 |
| 28000300 | TEMPORARY DITCH CHECKS | EACH | 5.0 |
| 28000400 | PERIMETER EROSION BARRIER | FOOT | 714.0 |
| 28000500 | INLET AND PIPE PROTECTION | EACH | 1.0 |
| 35100100 | AGGREGATE BASE COURSE, TYPE A | TON | 801.0 |
| 40200800 | AGGREGATE SURFACE COURSE, TYPE B | TON | 171.0 |
| 40600100 | BITUMINOUS MATERIALS (PRIME COAT) | GALLON | 84.0 |
| 40600300 | AGGREGATE PRIME COAT | TON | 5.6 |
| 40603085 | HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70 | TON | 702.0 |
| 40600990 | TEMPORARY RAMP | SQ YD | 111.0 |
| 40603315 | HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N70 | TON | 156.0 |
| 42001430 | BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) | SQ YD | 87.0 |
| 42300400 | P.C. CONCRETE DRIVEWAY, PAVEMENT 8 INCH | SQ YD | 217.0 |
| 44000100 | PAVEMENT REMOVAL | SQ YD | 1,507.0 |
| 44000200 | DRIVEWAY PAVEMENT REMOVAL | SQ YD | 229.0 |
| 44000500 | COMBINATION CURB & GUTTER REMOVAL | FOOT | 449.0 |
| 50100100 | REMOVAL OF EXISTING STRUCTURES | EACH | 1.0 |
| 50105220 | PIPE CULVERT REMOVAL | FOOT | 56.0 |
| 50200100 | STRUCTURE EXCAVATION | CU YD | 262.0 |
| 50300100 | FLOOR DRAINS | EACH | 14.0 |
| 50300225 | CONCRETE STRUCTURES | CU YD | 199.6 |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 284.9 |
| 50300260 | BRIDGE DECK GROOVING | SQ YD | 461.0 |
| 50300300 | PROTECTIVE COAT | SQ YD | 563.0 |
| 50500105 | FURNISHING AND ERECTING STRUCTURAL STEEL | L SUM | 1.0 |
| 50500505 | STUD SHEAR CONNECTORS | EACH | 1,288.0 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 80,650.0 |
| 50800515 | BAR SPLICERS | EACH | 669.0 |
| 51201400 | FURNISHING STEEL PILES HP10X42 | FOOT | 1,538.0 |
| 51202305 | DRIVING PILES | FOOT | 1,538.0 |
| 51203400 | TEST PILE STEEL HP10X42 | EACH | 4.0 |
| 51204650 | PILE SHOES | EACH | 30.0 |
| 51205200 | TEMPORARY SHEET PILING | SQ FT | 1,400.0 |
| 51500100 | NAME PLATES | EACH | 1.0 |
| 55021600 | STORM SEWERS, TYPE 2, RCCP, CLASS III, 12" | FOOT | 56.0 |
| 55100500 | STORM SEWER REMOVAL, 12" | FOOT | 45.0 |
| 59300100 | CONTROLLED LOW STRENGTH MATERIAL | CU YD | 28.0 |
| 60240220 | INLETS, TYPE B, TYPE 3 FRAME AND GRATE | EACH | 2.0 |
| 60605000 | COMBINATION CONC. CURB & GUTTER, TYPE B-6.24 | FOOT | 403.0 |
| 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | FOOT | 125.0 |
| 63100045 | TRAFFIC BARRIER TERMINAL, TYPE 2 | EACH | 4.0 |
| 63100070 | TRAFFIC BARRIER TERMINAL, TYPE 5 | EACH | 1.0 |
| 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 3.0 |
| 63300725 | STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS) | FOOT | 25.0 |
| 67100100 | MOBILIZATION | L SUM | 1.0 |
| 70100405 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 | EACH | 1.0 |
| 70100460 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 | L SUM | 1.0 |
| 70106500 | TEMPORARY BRIDGE TRAFFIC SIGNALS | EACH | 1.0 |
| 70300100 | SHORT-TERM PAVEMENT MARKING | FOOT | 141.0 |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 916.0 |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 412.5 |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 262.5 |
| 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS | SQ FT | 15.6 |
| 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 785.0 |
| 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 66.0 |
| 78300100 | PAVEMENT MARKING REMOVAL | SQ FT | 445.6 |
| X5020501 | UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1 | EACH | 1.0 |
| X5020502 | UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2 | EACH | 1.0 |
| XX004565 | GROUTED RIPRAP | SQ YD | 862.0 |
| XX004566 | CONCRETE CUT-OFF WALL | CU YD | 7.2 |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1.0 |
| Z0030250 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) | EACH | 2.0 |
| Z0030350 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) | EACH | 2.0 |
| TEST LEVEL 3 | | | |
| TEST LEVEL 3 | | | |
| *SEE SPECIAL PROVISIONS | | | |
| A SPECIALTY ITEMS | | | |



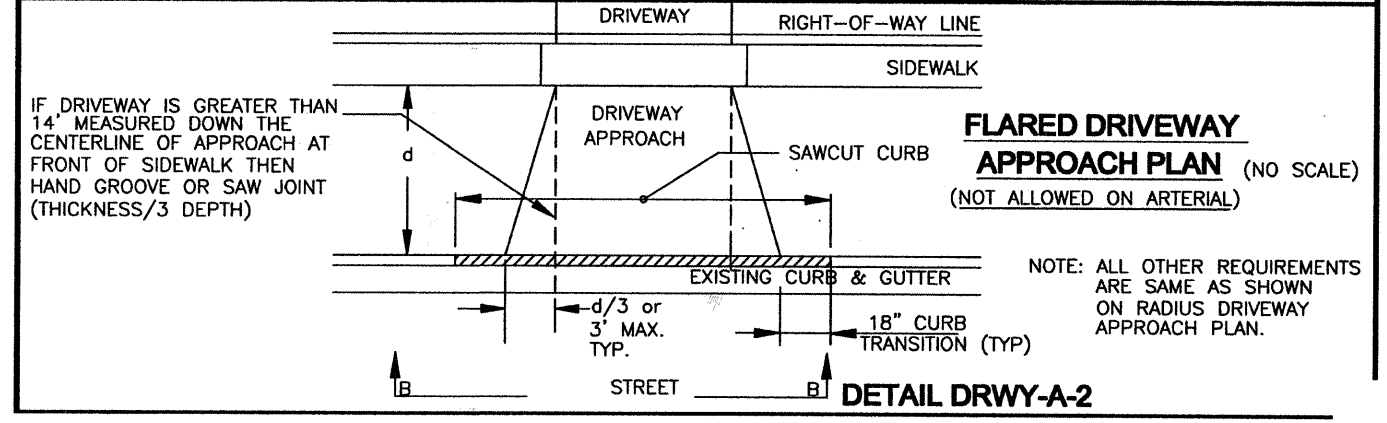
WILBUR ROAD DETAIL WITH TYPE B-6.24 CURB (STA 7+53.10)
NOT TO SCALE



SECTION B-B
* UNLESS OTHERWISE NOTED ON CROSS SECTION SHEETS



RADIUS DRIVEWAY APPROACH PLAN (NO SCALE)
(NOT ALLOWED ON ARTERIAL)



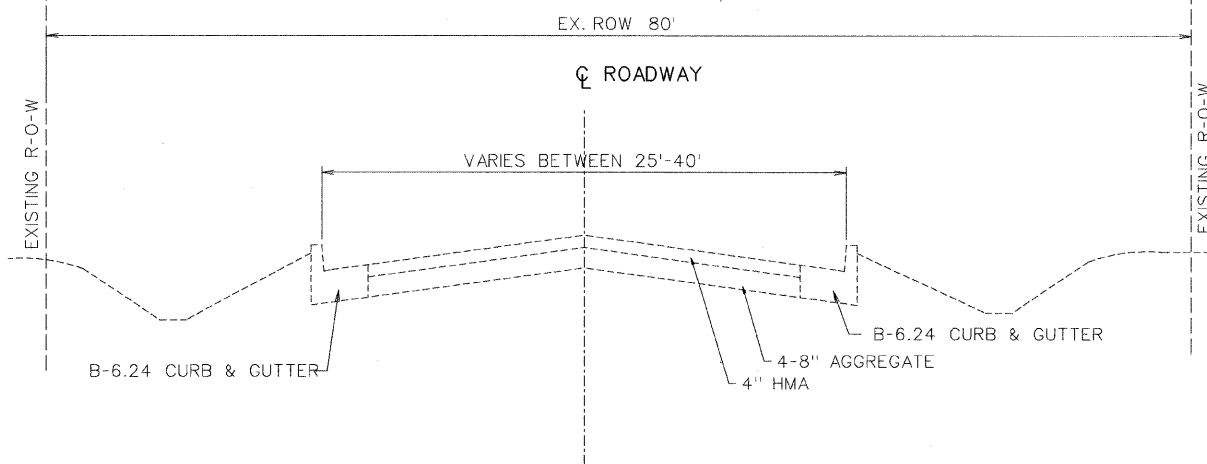
FLARED DRIVEWAY APPROACH PLAN (NO SCALE)
(NOT ALLOWED ON ARTERIAL)
NOTE: ALL OTHER REQUIREMENTS ARE SAME AS SHOWN ON RADIUS DRIVEWAY APPROACH PLAN.

PRIVATE ENTRANCE DETAIL (STA. 7+21.14 & STA. 7+60.98)
NOT TO SCALE

| |
|-------------------------|
| SUMMARY OF QUANTITIES |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| Q. STATION 10+00 |

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|----------------|--------------------------------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 4 |
| STA. _____ TO STA. _____ | | F.H.W.A. REG. ILLINOIS PROJECT | | |

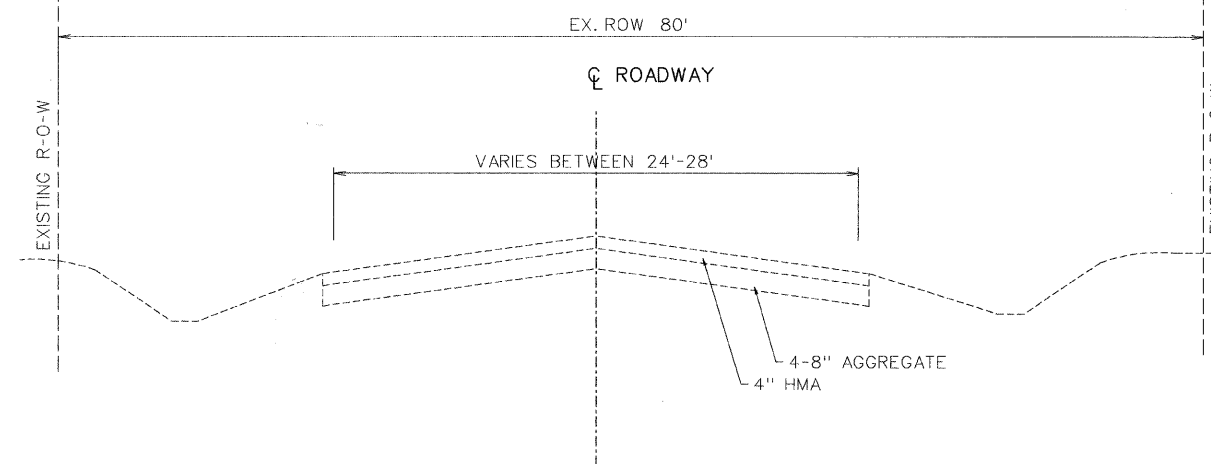
EXISTING TYPICAL PAVEMENT SECTION



STA. 7+00 TO STA. 9+56

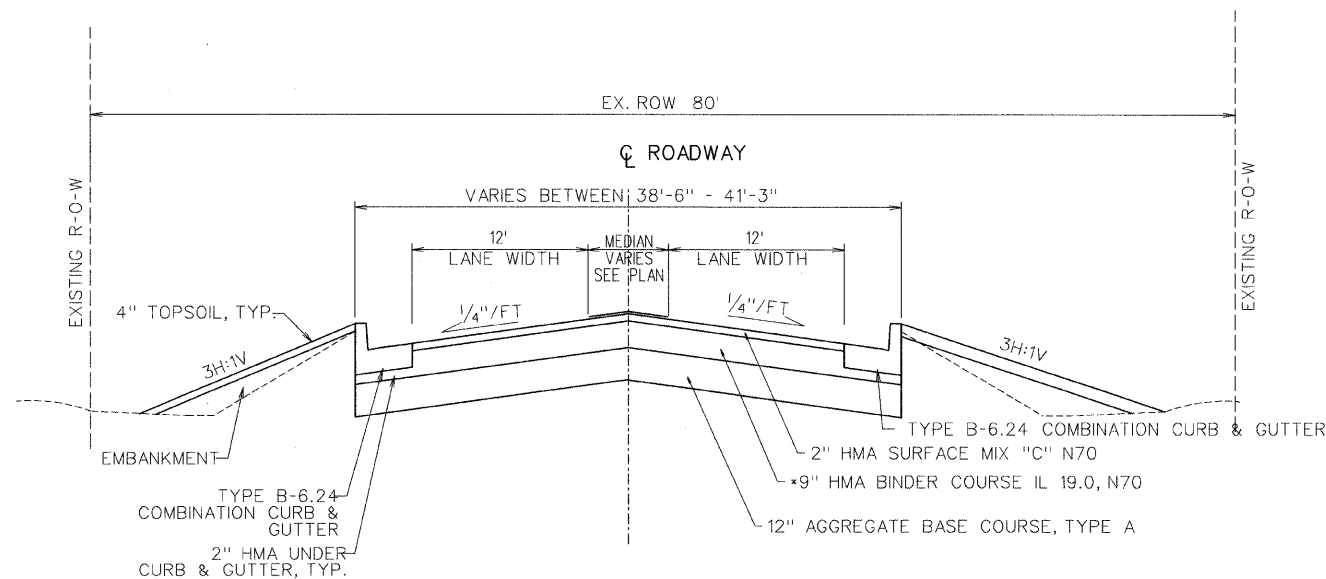
NOTES:
 FUNCTIONAL CLASS - URBAN TWO-WAY ARTERIAL
 CURRENT ADT = 2850
 SEE PLAN AND PROFILE SHEETS FOR TAPERS.

EXISTING TYPICAL PAVEMENT SECTION



STA. 10+43.5 TO STA. 12+62

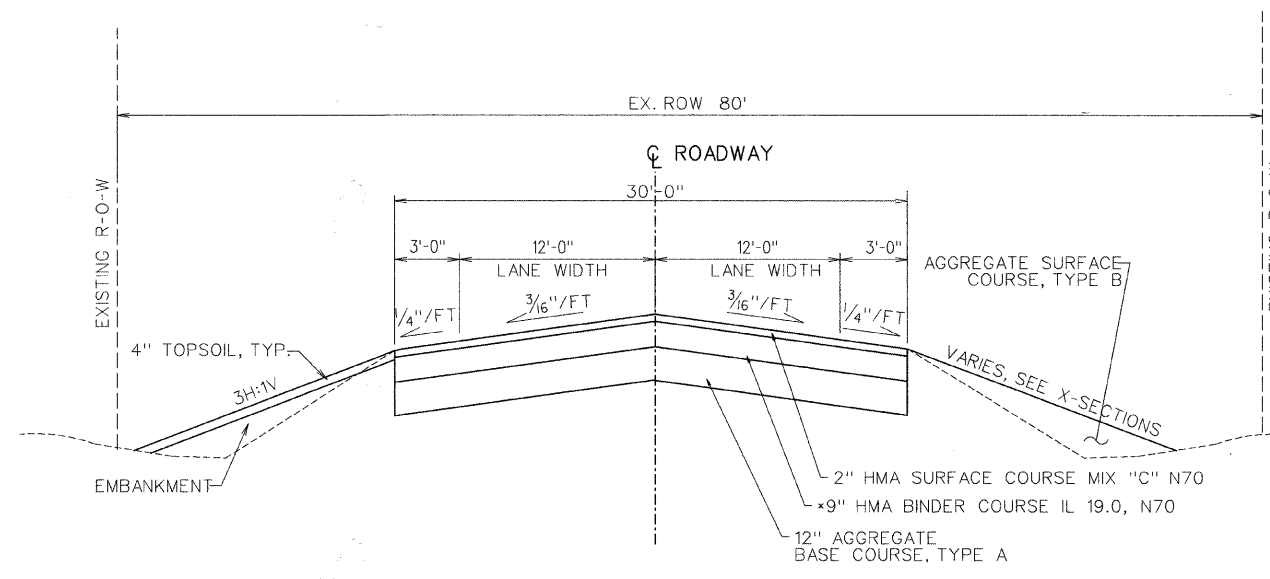
PROPOSED TYPICAL PAVEMENT SECTION



STA. 7+00 TO STA. 9+10

* BINDER LIFT THICKNESS SHALL BE FROM 2 1/4" MINIMUM TO 6" MAXIMUM.

PROPOSED TYPICAL PAVEMENT SECTION



STA. 10+85 TO STA. 12+62

TYPICAL SECTIONS
 SECTION: 07-25932-00-BR
 CHAMPAIGN COUNTY
 ROADWAY STA. 10+00

| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 5 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

| | | |
|-------------------------|-----------------|-------------|
| SEEDING, CLASS 2 | 25000200 | |
| LOCATION | | ACRE |
| LT STA 7+00 TO BRIDGE | | 0.09 |
| RT STA 7+00 TO BRIDGE | | 0.10 |
| LT BRIDGE TO STA 12+62 | | 0.12 |
| TOTAL | | 0.31 |

| | | |
|------------------------|-----------------|-------------|
| MULCH, METHOD 2 | 25100115 | |
| LOCATION | | ACRE |
| LT STA 7+00 TO BRIDGE | | 0.09 |
| RT STA 7+00 TO BRIDGE | | 0.10 |
| LT BRIDGE TO STA 12+62 | | 0.12 |
| TOTAL | | 0.31 |

| | | |
|-----------------------|-----------------|------------|
| GROUTED RIPRAP | XX004565 | |
| LOCATION TO LOCATION | | SQ. YD. |
| STA 9+46 TO STA 10+54 | | 862 |
| TOTAL | | 862 |

| | | |
|--|-----------------|----------|
| TRAFFIC CONTROL AND PROTECTION, STD. 701321 | 70100405 | |
| LOCATION | | EACH |
| SEC. 07-25932-00-BR | | 1 |
| TOTAL | | 1 |

| | | |
|--|-----------------|----------|
| TRAFFIC CONTROL AND PROTECTION, STD. 701306 | 70100460 | |
| LOCATION | | L.SUM |
| SEC. 07-25932-00-BR | | 1 |
| TOTAL | | 1 |

| | | |
|--|-----------------|------------|
| COMBINATION CURB AND GUTTER REMOVAL | 44000500 | |
| LOCATION | | FOOT |
| LT STA 7+00 TO STA 7+36 | | 43 |
| LT STA 7+69 TO STA 9+56 | | 196 |
| RT STA 7+00 TO STA 9+10 | | 210 |
| TOTAL | | 449 |

| | | |
|---|-----------------|------------|
| COMBINATION CURB AND GUTTER, TYPE B-6.24 | 25000200 | |
| LOCATION | | FOOT |
| LT STA 7+00 TO STA 7+36 | | 43 |
| LT STA 7+70 TO STA 9+10 | | 150 |
| RT STA 7+00 TO STA 7+12 | | 210 |
| TOTAL | | 403 |

| | | |
|----------------------------------|-----------------|----------|
| INLET AND PIPE PROTECTION | 28000500 | |
| LOCATION | | EACH |
| STA 11+74 | | 1 |
| TOTAL | | 1 |

| | | |
|--|-----------------|----------|
| TREE REMOVAL (6 TO 15 UNITS DIAMETER) | 20100100 | |
| LOCATION | | UNIT |
| STA 9+48, 30' RT | | 8 |
| TOTAL | | 8 |

| | | |
|---|-----------------|------------|
| STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | 63000001 | |
| LOCATION | | FOOT |
| RT STA 8+19.44 TO STA 8+81.94 | | 62.5 |
| LT STA 11+4.50 TO STA 11+77.00 | | 62.5 |
| TOTAL | | 125 |

| | | |
|---|-----------------|-----------|
| STEEL PLATE BEAM GUARDRAIL, (SHORT RADIUS) | 63300725 | |
| LOCATION | | FOOT |
| RT STA 10+71.02 TO STA 10+72.71 | | 25 |
| TOTAL | | 25 |

| | | |
|---|-----------------|-----------|
| STORM SEWERS, TYPE 2, RCCP, CLASS III, 12" | 55021600 | |
| LOCATION | | FOOT |
| STA 9+02 | | 32 |
| STA 8+84 TO STA 9+02 | | 24 |
| TOTAL | | 56 |

| | | | |
|------------------------------|-----------------|------------|--------------|
| TEMPORARY RAMP | 40600990 | | |
| LOCATION | LENGTH FOOT | WIDTH FOOT | AREA SQ. YD. |
| STA 7+00 TO STA 7+05 | 5 | 36' | 20 |
| STA 9+00.09 TO STA 9+10.09 | 10 | 36' | 40 |
| STA 10+86.35 TO STA 10+96.35 | 10 | 30' | 34 |
| STA 12+57 TO STA 12+62 | 5 | 30' | 17 |
| TOTAL | | | 111 |

| | | |
|---|-----------------|----------|
| TEMPORARY BRIDGE TRAFFIC SIGNALS | 70106500 | |
| LOCATION | | EACH |
| S.N. 010-4504 | | 1 |
| TOTAL | | 1 |

| | | |
|---|-----------------|----------|
| TRAFFIC BARRIER TERMINAL, TYPE 2 | 63100045 | |
| LOCATION | | EACH |
| LT STA 8+69.44 TO STA 8+81.94 | | 1 |
| RT STA 8+06.94 TO STA 8+19.44 | | 1 |
| LT STA 11+77.00 TO STA 11+89.50 | | 1 |
| RT STA 10+72.71 TO STA 10+60.46 | | 1 |
| TOTAL | | 4 |

| | | |
|---|-----------------|----------|
| TRAFFIC BARRIER TERMINAL, TYPE 5 | 63100070 | |
| LOCATION | | EACH |
| RT STA 10+56.35 TO STA 10+71.02 | | 1 |
| TOTAL | | 1 |

| | | |
|---|-----------------|----------|
| TRAFFIC BARRIER TERMINAL, TYPE 6 | 63100085 | |
| LOCATION | | EACH |
| LT STA 8+81.94 TO STA 9+25.09 | | 1 |
| RT STA 8+81.94 TO STA 9+25.09 | | 1 |
| LT STA 10+71.35 TO STA 11+14.50 | | 1 |
| TOTAL | | 3 |

| | | |
|----------------------------|-----------------|----------|
| CONSTRUCTION LAYOUT | Z0013798 | |
| LOCATION | | L SUM |
| SEC. 07-25932-00-BR | | 1 |
| TOTAL | | 1 |

| | | |
|---|-----------------|-----------|
| CONTROLLED LOW STRENGTH MATERIAL | 59300100 | |
| LOCATION | | CU YD |
| STA 9+01 | | 11 |
| STA 9+50 | | 17 |
| TOTAL | | 28 |

| | | |
|--|-----------------|------------|
| P.C. CONCRETE DRIVEWAY PAVEMENT, 8 INCH | 42300400 | |
| LOCATION | | SO YD |
| STA 7+21.14 RT | | 51 |
| STA 7+53.10 LT | | 123 |
| STA 7+60.98 RT | | 43 |
| TOTAL | | 217 |

| BITUMINOUS RESURFACING SCHEDULE *** | | | | | | | | | |
|-------------------------------------|-------------|--|---------------|----------------|---|---------------|----------------|--|----------------------------|
| STATION TO STATION | LENGTH (FT) | BIT. CONC. SURF. CSE. SUPERPAVE MIX "C," N70 (TON) | | | BIT. CONC. BINDER CSE. SUPERPAVE MIX C, N70 (TON) | | | BITUMINOUS MATERIALS PRIME COAT (GALLON) | AGGREGATE PRIME COAT (TON) |
| | | WIDTH (FT) | AREA (SQ. FT) | QUANTITY (TON) | WIDTH (FT) | AREA (SQ. FT) | QUANTITY (TON) | | |
| STA 7+00.00 TO STA 9+10.09 | 210.09 | 32.0 TO 36.5 | 7,196 | 90 | 32.0 TO 36.5 | 7,196 | 405 | 48 | 3.2 |
| STA 10+86.35 TO STA 12+62 | 175.65 | 30.0 | 5,270 | 66 | 30 | 5,270 | 297 | 36 | 2.4 |
| TOTAL | | | 156 | | | 702 | 84 | 5.6 | |

*** NOTE: SEE SUGGESTED STAGE CONSTRUCTION SEQUENCE FOR STAGE I AND STAGE II TRAFFIC CONTROL PLANS FOR INFORMATION ONLY

| | | |
|----------------------|--------------------|--------------------|
| LOCATION | NORTH LINCOLN AVE. | NORTH LINCOLN AVE. |
| MIXTURE USE | BINDER | SURFACE |
| AC/PG | PG 64-22 | PG 64-22 |
| RAPZ (MAX) | 15 | 10 |
| DESIGN AIR VOIDS | 4.0% @ NDES=70 | 4.0% @ NDES=70 |
| MIX COMP (GRADATION) | IL 19.0 | IL 9.5 |
| FRICTION AGGREGATE | N.A. | MIX C |

| | | |
|----------------------------------|--------------------------|-----------------------------------|
| PAVEMENT MARKING SCHEDULE | 78300100 | 70300100 |
| LOCATION | PAVEMENT MARKING REMOVAL | SHORT TERM PVMT MARKING LINE - 4" |
| | SOLID WHITE (SQ. FT.) | SOLID YELLOW (SQ. FT.) |
| | SOLID YELLOW (SQ. FT.) | YELLOW SKIP DASH (SQ. FT.) |
| | SOLID WHITE (SQ. FT.) | SOLID WHITE (SQ. FT.) |
| | SOLID YELLOW (SQ. FT.) | YELLOW SKIP DASH (SQ. FT.) |
| STA 6+71 TO STA. 7+12 | 27.3 | |
| STA. 6+77 TO STA. 7+12 | 27.3 | |
| STA. 7+90 TO STA. 9+37 | 262 | |
| STA. 9+37 TO STA. 14+50 | | 129 |
| STA. 7+00 TO STA. 12+62 | | |
| SUBTOTAL | 27.3 | 289.3 |
| TOTAL | 446.0 | 141 |

| | | |
|--|--|-------------|
| EARTHWORK SCHEDULE | | CU YD |
| EARTH EXCAVATION | | 796 |
| STRUCTURE EXCAVATION | | 262 |
| TOTAL CUT | | 1058 |
| EMBANKMENT | | 74 |
| TOTAL FILL | | 74 |
| BORROW= (EMBANKMENT-(SUIT.EX. x (1-S.F.))) | | 0 |
| BORROW= FURNISHED EXCAVATION | | 0 |
| S.F. = SHRINKAGE FACTOR = 0.25 | | |

| | | |
|---|-----------------|----------|
| IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3 | Z0030250 | |
| LOCATION | | EACH |
| STAGE I | | |
| LT STA 8+58 TO STA 8+67 | | 1 |
| LT STA 11+33 TO STA 11+42 | | 1 |
| TOTAL | | 2 |

| | | |
|--|-----------------|----------|
| IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3 | Z0030350 | |
| LOCATION | | EACH |
| STAGE II | | |
| RT STA 7+84 TO STA 7+93 | | 1 |
| RT STA 12+07 TO STA 12+16 | | 1 |
| TOTAL | | 2 |

| | | |
|-----------------------------------|-----------------|--------------|
| TEMPORARY CONCRETE BARRIER | 70400100 | |
| LOCATION | | FOOT |
| STAGE I | | |
| STA 8+68.75 TO STA 11+31.25 | | 262.5 |
| STAGE II | | |
| STA 7+93.75 TO STA 8+68.75 | | 75 |
| STA 11+31.25 TO STA 12+06.25 | | 75 |
| TOTAL | | 412.5 |

| | | |
|--|-----------------|--------------|
| RELOCATE TEMPORARY CONCRETE BARRIER | 70400200 | |
| LOCATION | | FOOT |
| STAGE II | | |
| STA 8+68.75 TO STA 11+31.25 | | 262.5 |
| TOTAL | | 262.5 |

| | | |
|--------------------------|-----------------|-------------|
| PAVEMENT REMOVAL | 44000100 | |
| LOCATION | | SO YD |
| STA 7+00 TO STA 9+55.8 | | 911 |
| STA 10+43.5 TO STA 12+62 | | 596 |
| TOTAL | | 1507 |

| | | |
|----------------------------------|-----------------|------------|
| DRIVEWAY PAVEMENT REMOVAL | 44000200 | |
| LOCATION | | SO YD |
| STA 7+21.14 | | 44 |
| STA 7+53.10 | | 44 |
| STA 7+60.98 | | 141 |
| TOTAL | | 229 |

| | | |
|--------------------------------------|-----------------|------------|
| TOPSOIL FURNISH AND PLACE, 4" | 21101615 | |
| LOCATION | | SO YD |
| LT STA 7+00 TO BRIDGE | | 155 |
| RT STA 7+00 TO BRIDGE | | 167 |
| LT BRIDGE TO STA 12+62 | | 220 |
| TOTAL | | 542 |

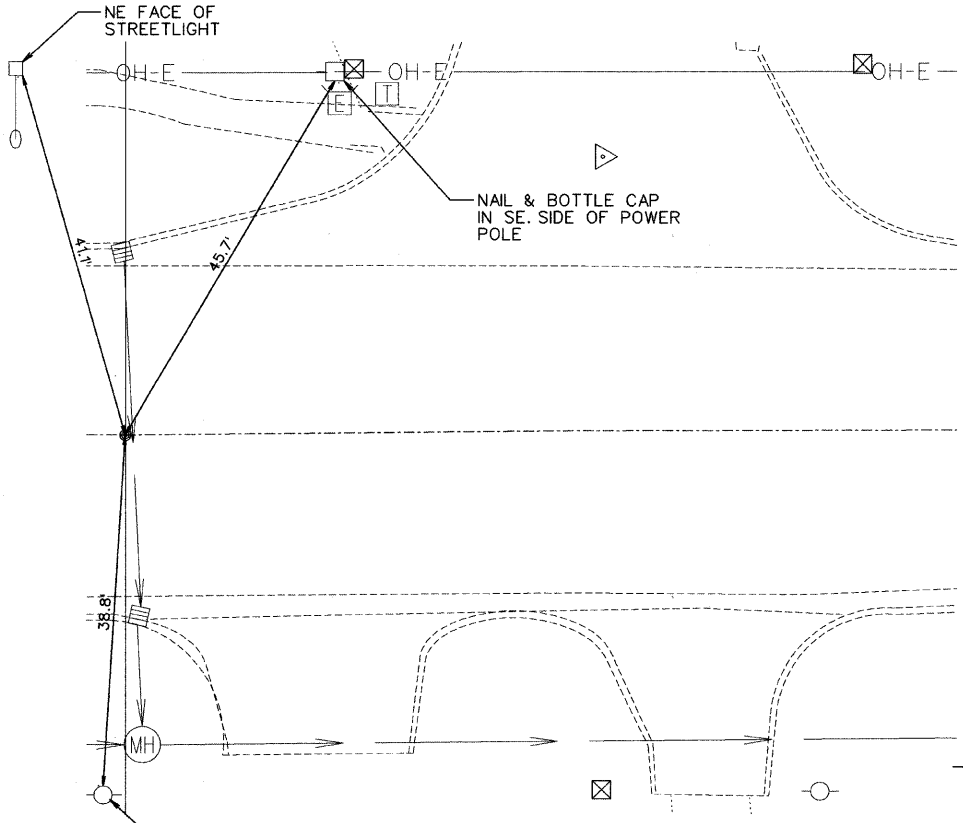
| | | |
|--|-----------------|------------|
| AGGREGATE SURFACE COURSE TYPE B | 40200800 | |
| LOCATION | | TON |
| RT BRIDGE TO STA. 12+62 | | 171 |
| TOTAL | | 171 |

| | | |
|---------------------------------|-----------------|-----------|
| STORM SEWER REMOVAL, 12" | 55100500 | |
| LOCATION | | FOOT |
| STA 9+50 | | 45 |
| TOTAL | | 45 |

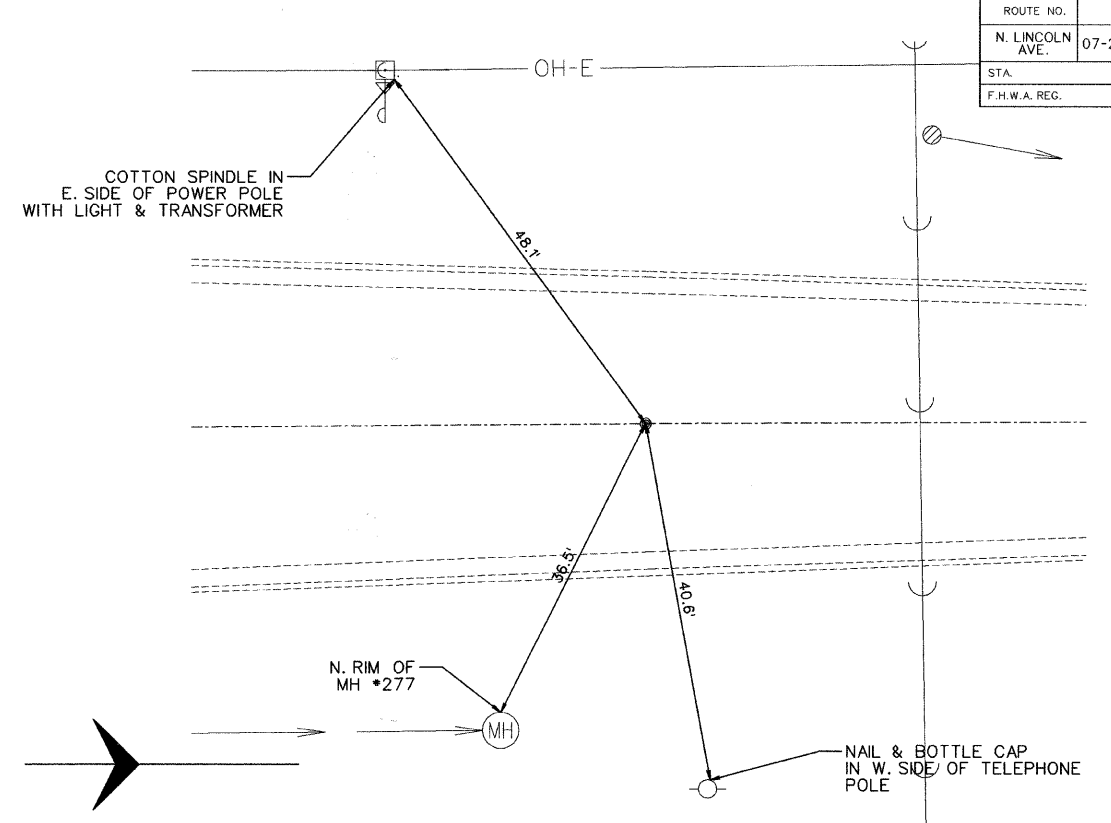
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|-------------------------------|-----------------|-----------|
| PIPE CULVERT REMOVAL | 50105220 | |
| LOCATION | | FOOT |
| 27' LT STA 9+48 TO STA 9+75 | | 27 |
| 31' RT STA 9+56 TO STA 9+61 | | 5 |
| 29' RT STA 10+24 TO STA 10+37 | | 13 |
| 27' LT STA 10+14 TO STA 10+25 | | 11 |
| TOTAL | | 56 |

| |
|-------------------------------|
| SCHEDULE OF QUANTITIES |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| Q STATION 10+00 |

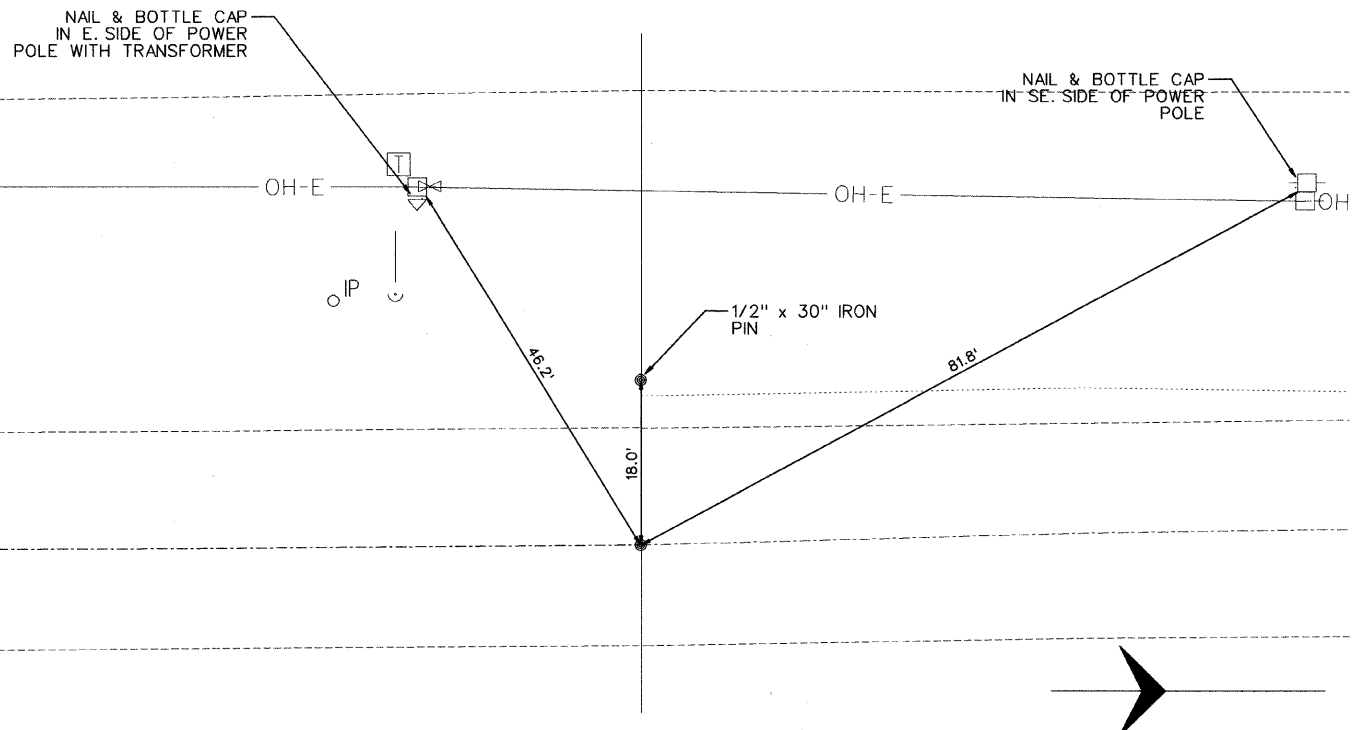
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 6 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



NAIL & BOTTLE CAP IN W. SIDE OF TELEPHONE POLE
 STATION 7+00.051' RT
 MAG NAIL
 N= 1265535.6
 E= 1015953.1



COTTON SPINDLE IN E. SIDE OF POWER POLE WITH LIGHT & TRANSFORMER
 N. RIM OF MH #277
 NAIL & BOTTLE CAP IN W. SIDE OF TELEPHONE POLE
 STATION 8+99.98.062' RT
 MAG NAIL
 N= 1265735.6
 E= 1015951.7



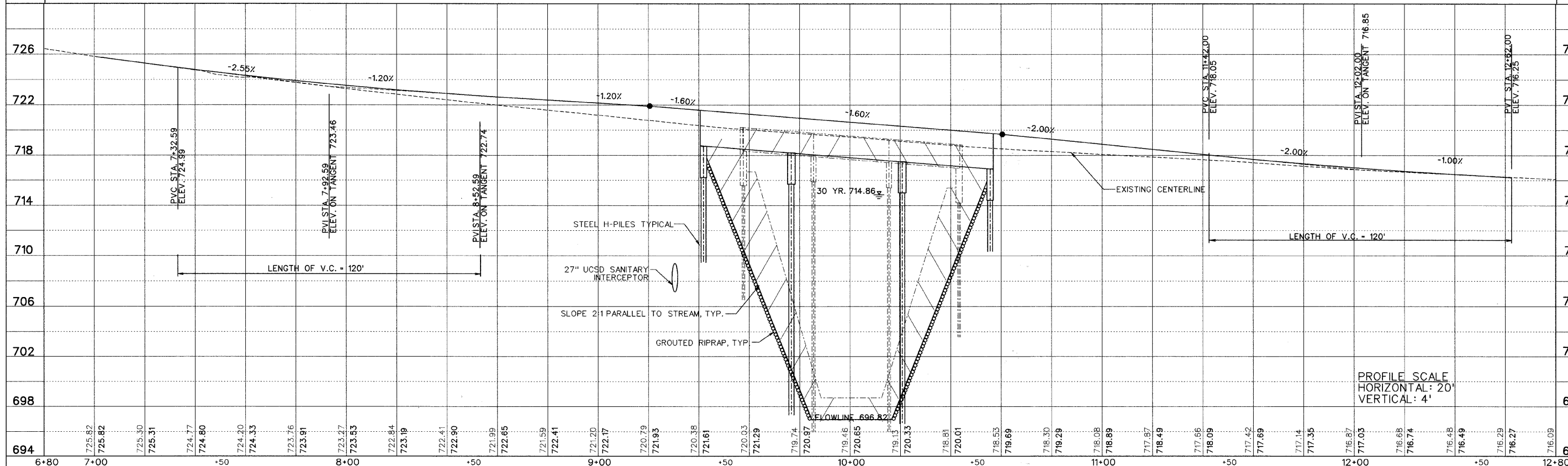
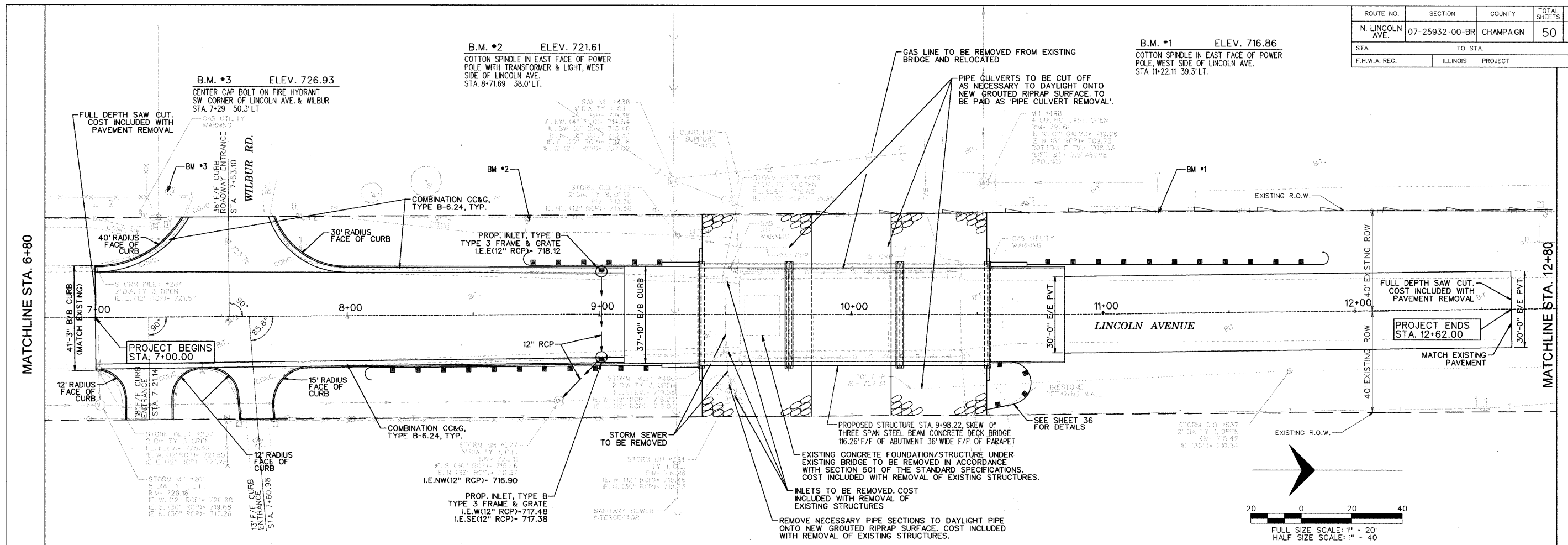
NAIL & BOTTLE CAP IN E. SIDE OF POWER POLE WITH TRANSFORMER
 OH-E
 OH-E
 1/2" x 30" IRON PIN
 STATION 12+99.95.078' RT
 MAG NAIL
 N= 1266135.5
 E= 1015949.1

CL ROAD @ STATION 12+62: N= 1266097.6
 E= 1015948.8

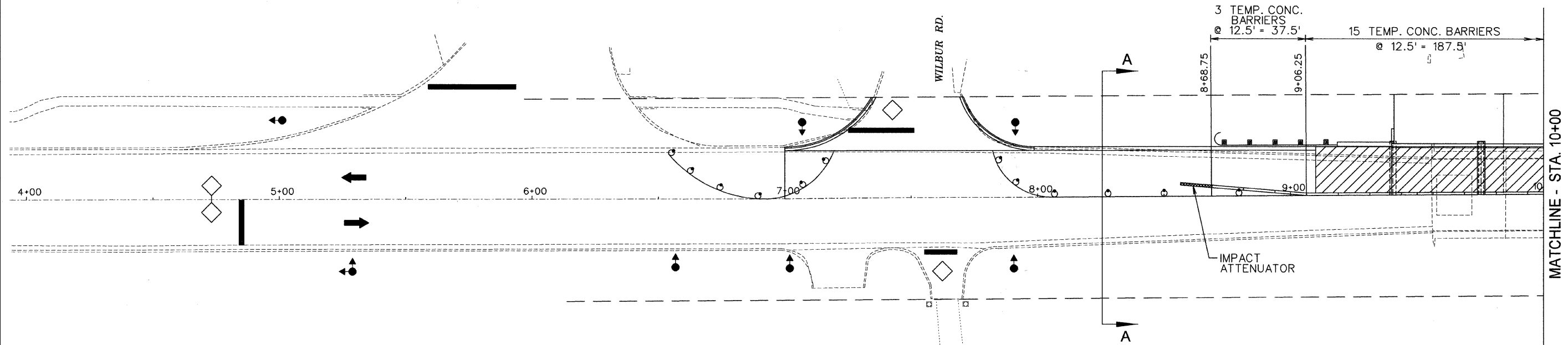
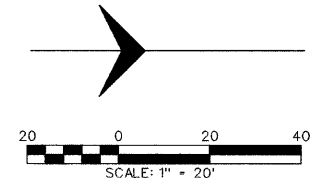
| TIE POINTS | |
|------------|------------------|
| SECTION: | 07-25932-00-BR |
| COUNTY: | CHAMPAIGN COUNTY |
| STATION: | CL STATION 10+00 |

Tie Points.dwg 6/3/2009 9:31:31 AM



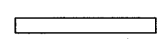




| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 7 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



| | | | | |
|-----------------|------------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 8 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |



LEGEND

-  BRIDGE WORK AREA
-  IMPACT ATTENUATOR
-  TEMP. CONCRETE BARRIER
-  TYPE III BARRICADE
-  DRUM WITH STEADY BURNING LIGHT
-  INDUCTION LOOP DETECTOR
-  TRAFFIC SIGNAL

STAGE I TRAFFIC

TRAFFIC CONTROL SCHEDULE

| LOCATION STATION TO STATION | TEMP. CONC. BARRIER (FOOT) | RELOCATE TEMP. CONC. BARRIER (FOOT) | IMPACT ATTENUATORS TEMPORARY (NR) TL3 (EACH) | IMPACT ATTENUATORS RELOCATE (NR) TL3 (EACH) |
|-----------------------------|----------------------------|-------------------------------------|--|---|
| STAGE I | | | | |
| STA. 8+68.75 TO 11+31.25 | 262.5 | | 2 | |
| STAGE II | | | | |
| STA. 7+93.75 TO 8+68.75 | 75 | | | 2 |
| STA. 8+68.75 TO 11+31.25 | 0 | 262.5 | | |
| STA. 11+31.25 TO 12+06.25 | 75 | | | |
| TOTAL | 412.5 | 262.5 | 2 | 2 |

WORK ZONE PAVEMENT MARKING REMOVAL SCHEDULE

| LOCATION STATION TO STATION | 70301000 WORK ZONE PVMT. MARKING REMOVAL (SQ. FT.) |
|-----------------------------|--|
| STAGE I | |
| STA. 9+00 TO 12+80 | 127 |
| STA. 6+50 TO 14+40 | 264 |
| STAGE II | |
| STA. 4+75 | 26 |
| STA. 14+50 | 26 |
| STA. 6+50 TO 14+40 | 264 |
| STA. 9+00 TO 12+80 | 127 |
| SHORT TERM Q | |
| STA. 4+75 TO 14+50 | 82 |
| TOTAL | 916 |

SUGGESTED STAGE CONSTRUCTION SEQUENCE

STAGE I

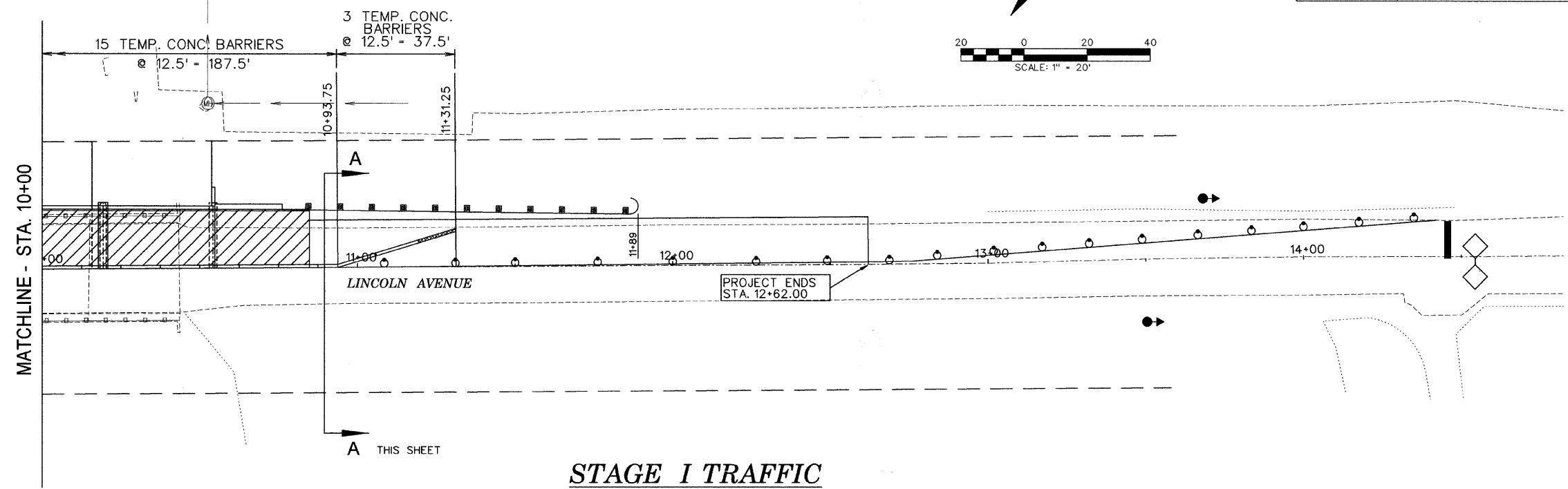
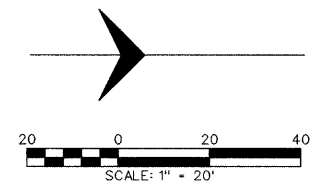
- ERECT TRAFFIC CONTROL FOR STAGE I.
- REMOVE EXISTING BRIDGE AND PAVEMENT LT.
- CONSTRUCT PROPOSED BRIDGE, BASE COURSE STA. 7+00 LT TO STA. 9+10.09 LT AND STA. 10+86.35 LT TO STA. 12+62 LT. CONSTRUCT FIELD ENTRANCE AND TEMPORARY RAMPS.
- CONSTRUCT PROPOSED GUARDRAIL & TERMINALS RT.

GENERAL NOTES

- THIS TRAFFIC CONTROL DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD 701321.
- EXISTING PAVEMENT MARKING THAT CONFLICT WITH THE REVISED STAGE TRAFFIC PATTERNS DURING ALL PHASES OF STAGE CONSTRUCTION SHALL BE REMOVED AS SPECIFIED IN SECTION 783 OF THE STANDARD SPECIFICATIONS AND PAID FOR AS "PAVEMENT MARKING REMOVAL".
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL PROPERTIES DURING ALL PHASES OF CONSTRUCTION.
- EACH DETECTOR LOOP SHALL BE CONNECTED TO A SEPARATE DETECTOR AMPLIFIER.

STAGE I TRAFFIC CONTROL PLAN
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

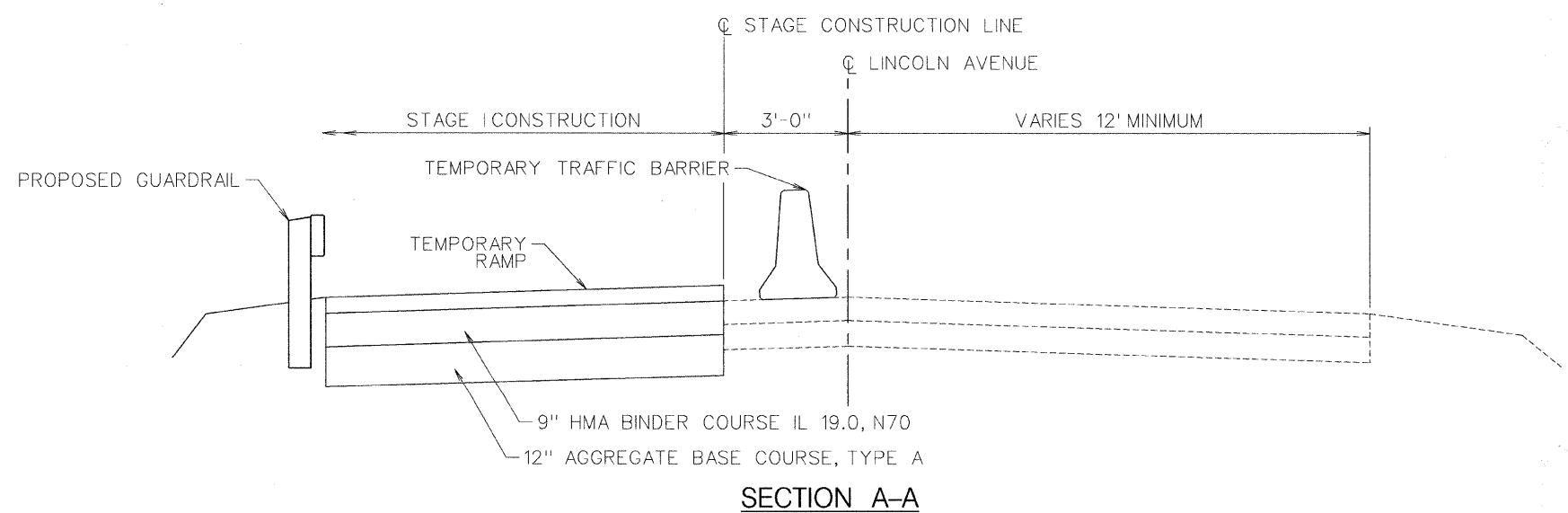
| | | | | |
|-----------------|------------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 9 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |



STAGE I TRAFFIC

TRAFFIC SIGNAL SEQUENCE

| PHASE | A | | | B | | | C | | | D | | | E | | |
|---------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| INTERVAL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| NORTHBOUND | G | Y | R | R | R | R | R | R | R | R | R | R | R | R | R |
| SOUTHBOUND | R | R | R | G | Y | R | R | R | R | R | R | R | R | R | R |
| WILBUR AVE. | R | R | R | R | R | R | G | Y | R | R | R | R | R | R | R |
| SUPERVALU | R | R | R | R | R | R | R | R | R | G | Y | R | R | R | R |
| 7+61 DRIVEWAY | R | R | R | R | R | R | R | R | R | R | R | R | G | Y | R |

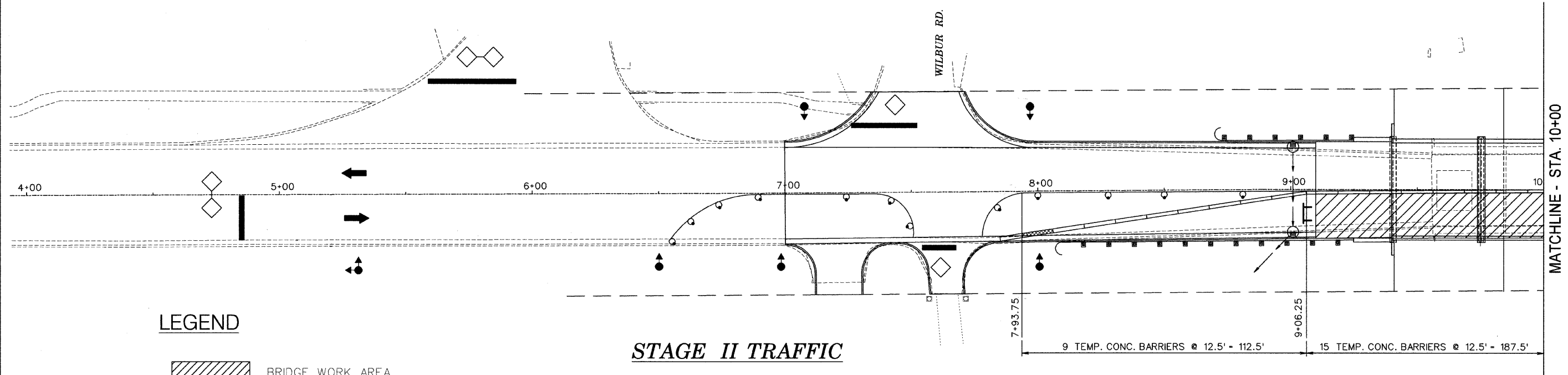
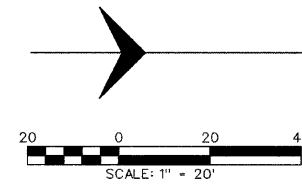


SECTION A-A

STAGE I TRAFFIC CONTROL PLAN
 SECTION: 07-25932-00-BR
 CHAMPAIGN COUNTY
 STA. 10+00

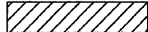

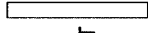




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| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|--------------------------------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 10 |
| STA. TO STA. | | F.H.W.A. REG. ILLINOIS PROJECT | | |



STAGE II TRAFFIC

LEGEND

-  BRIDGE WORK AREA
-  IMPACT ATTENUATOR
-  TEMP. CONCRETE BARRIER
-  TYPE III BARRICADE
-  DRUM WITH STEADY BURNING LIGHT
-  INDUCTION LOOP DETECTOR
-  TRAFFIC SIGNAL

SUGGESTED STAGE CONSTRUCTION SEQUENCE

STAGE II

1. ERECT TRAFFIC CONTROL FOR STAGE II.
2. REMOVE EXISTING BRIDGE AND PAVEMENT RT.
3. CONSTRUCT PROPOSED BRIDGE, BASE COURSE STA. 7+00 RT TO STA. 9+10.09 RT AND STA. 10+86.35 TO STA. 12+62. CONSTRUCT FIELD ENTRANCE AND TEMPORARY RAMPS.
4. CONSTRUCT PROPOSED GUARDRAIL & TERMINALS RT.

FINAL

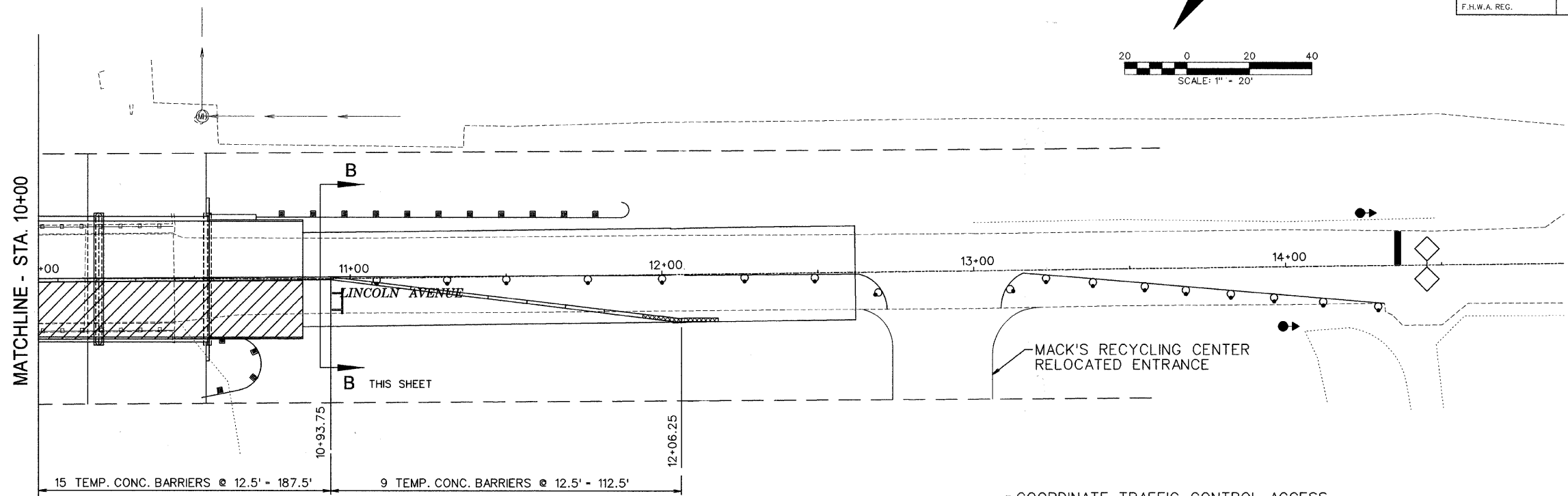
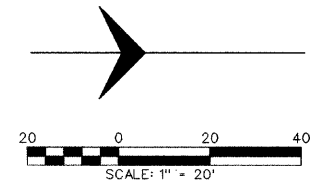
1. REMOVE ALL STAGE TRAFFIC CONTROL AND RE-ESTABLISH NORMAL TRAFFIC PATTERNS
2. COMPLETE HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT, HMA SHOULDERS AND SURFACE COURSE UNDER TRAFFIC WITH FLAGGERS
3. FINAL STRIPING, SEEDING, AND MISC. CLEANUP

GENERAL NOTES

1. THIS TRAFFIC CONTROL DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD 701321.
2. EXISTING PAVEMENT MARKING THAT CONFLICT WITH THE REVISED STAGE TRAFFIC PATTERNS DURING ALL PHASES OF STAGE CONSTRUCTION SHALL BE REMOVED AS SPECIFIED IN SECTION 783 OF THE STANDARD SPECIFICATIONS AND PAID FOR AS "PAVEMENT MARKING REMOVAL".
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL PROPERTIES DURING ALL PHASES OF CONSTRUCTION.
4. EACH DETECTOR LOOP SHALL BE CONNECTED TO A SEPARATE DETECTOR AMPLIFIER.

STAGE II TRAFFIC CONTROL PLAN
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

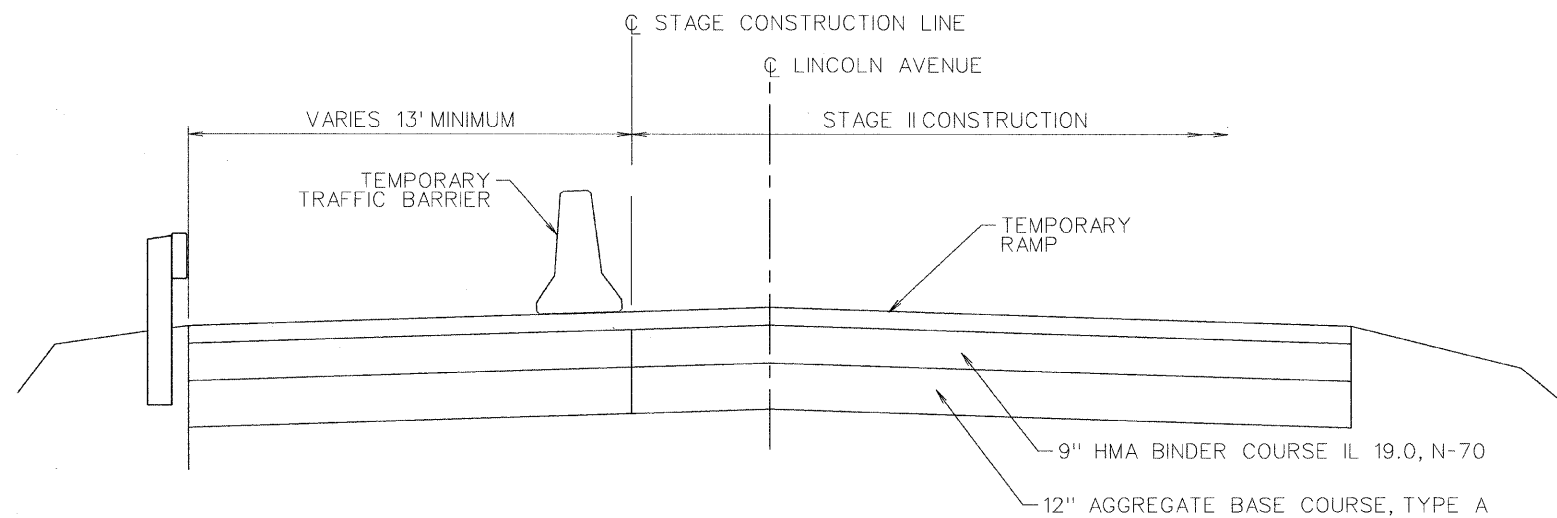
| | | | | |
|-----------------|----------------|--------------------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 11 |
| STA. TO STA. | | F.H.W.A. REG. ILLINOIS PROJECT | | |



STAGE II TRAFFIC

TRAFFIC SIGNAL SEQUENCE

| PHASE | A | | B | | C | | D | | E | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| INTERVAL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| NORTHBOUND | G | Y | R | R | R | R | R | R | R | R | R | R | R | R | R |
| SOUTHBOUND | R | R | R | G | Y | R | R | R | R | R | R | R | R | R | R |
| WILBUR AVE. | R | R | R | R | R | R | G | Y | R | R | R | R | R | R | R |
| SUPERVALU | R | R | R | R | R | R | R | R | R | G | Y | R | R | R | R |
| 7+61 DRIVEWAY | R | R | R | R | R | R | R | R | R | R | R | R | G | Y | R |



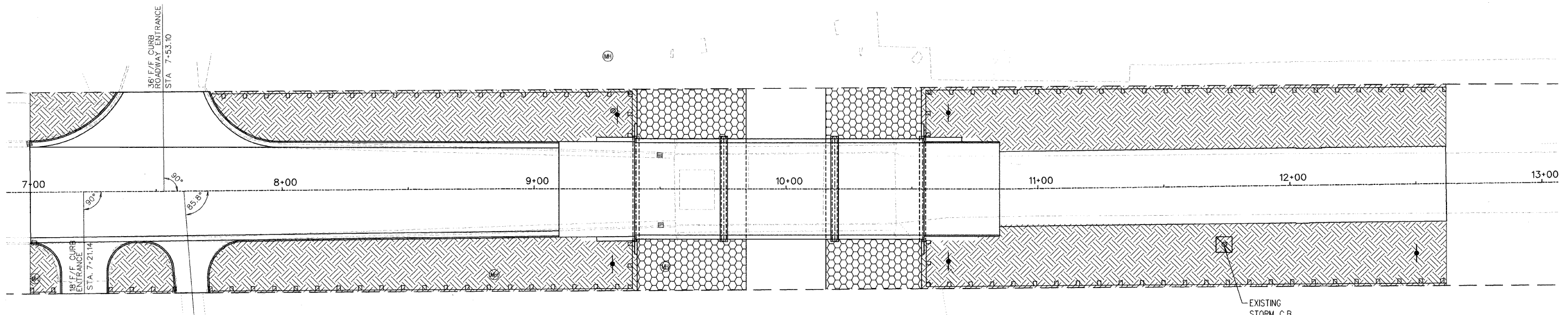
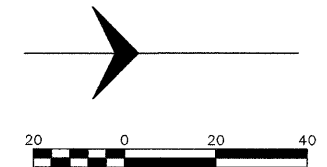
SECTION B-B

STAGE II TRAFFIC CONTROL PLAN
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

| | | | | |
|------------------------------|---------------------------|---------------------|--------------------|-----------------|
| ROUTE NO. N. LINCOLN AVE. | SECTION 07-25932-00-BR | COUNTY CHAMPAIGN | TOTAL SHEETS 50 | SHEET NO. 12 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

INTENDED SEQUENCE

1. PLACEMENT OF PERIMETER EROSION CONTROL BARRIER PRIOR TO COMMENCEMENT OF ANY WORK. SEE STANDARD 28001.
2. REMOVAL OF THE EXISTING STRUCTURE.
3. CONSTRUCTION OF THE NEW SUB STRUCTURE.
4. CONSTRUCTION OF THE NEW SUPERSTRUCTURE.
5. THE PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROLS.
6. FINAL GRADING AND SHAPING INCLUDING PLACEMENT OF AGGREGATE BASE COURSE & BITUMINOUS SURFACE.
7. REMOVAL & PROPER CLEAN UP OF TEMPORARY EROSION CONTROLS.
8. PLACEMENT OF PERMANENT EROSION CONTROLS.



PERMANENT EROSION CONTROL

- GROUTED RIPRAP
- SEEDING, CLASS 2

TEMPORARY EROSION CONTROL

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION

| 28000400 PERIMETER EROSION BARRIER | | | | | |
|---------------------------------------|--------|----|-------|--------|---------------|
| STA | OFFSET | TO | STA | OFFSET | LENGTH |
| 7+00 | 40' LT | | 7+34 | 40' LT | 34 FT |
| 7+71 | 40' LT | | 9+40 | 40' LT | 169 FT |
| 9+40 | 40' LT | | 9+40 | 20' LT | 20 FT |
| 10+54 | 20' LT | | 10+54 | 40' LT | 20 FT |
| 10+54 | 40' LT | | 12+62 | 40' LT | 208 FT |
| 7+00 | 40' RT | | 7+10 | 40' RT | 10 FT |
| 7+30 | 40' RT | | 7+58 | 40' RT | 28 FT |
| 7+71 | 40' RT | | 9+40 | 40' RT | 169 FT |
| 9+40 | 40' RT | | 9+40 | 20' RT | 20 FT |
| 10+54 | 20' RT | | 10+54 | 40' RT | 20 FT |
| 10+54 | 40' RT | | 10+70 | 40' RT | 16 FT |
| TOTAL | | | | | 714 FT |

| 28000300 TEMPORARY DITCH CHECKS | | |
|------------------------------------|--------|---------------|
| STA | OFFSET | QUANTITY |
| 9+25 | 35' LT | 1 EACH |
| 9+25 | 35' RT | 1 EACH |
| 10+60 | 35' LT | 1 EACH |
| 10+60 | 35' RT | 1 EACH |
| 12+50 | 35' RT | 1 EACH |
| TOTAL | | 5 EACH |

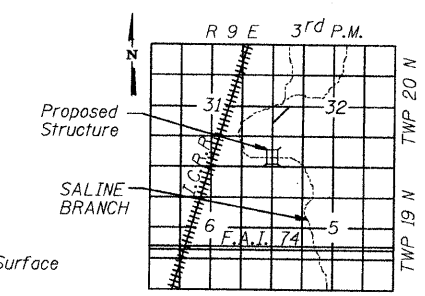
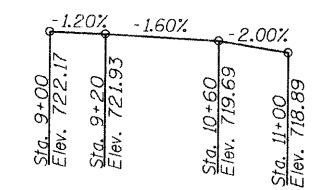
TEMPORARY EROSION CONTROL
THE FOLLOWING QUANTITIES ARE ESTIMATES ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD, AND THERE WILL BE NO CHANGE IN PRICE DUE TO A CHANGE IN PLAN QUANTITY.

| TEMPORARY EROSION CONTROL BILL OF MATERIALS | | |
|--|-------|--------|
| ITEM | UNIT | TOTALS |
| TEMPORARY EROSION CONTROL SEEDING | POUND | 400 |
| PERIMETER EROSION BARRIER | FOOT | 714 |
| TEMPORARY DITCH CHECKS | EACH | 5 |
| INLET AND PIPE PROTECTION | EACH | 1 |

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|------------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 13 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |

BENCHMARK DATA:
 BM #1 - Cotton spindle in East face of power pole West side of Lincoln Avenue. Sta. 11+22.11 39.3' Lt.
 BM #2 - Cotton spindle in East face of power pole with transformer & light, West side of Lincoln Avenue. Sta. 8+71.69 38.0' Lt.
 BM #1 - Center Cap Bolt on Fire Hydrant Southwest corner of Lincoln & Wilbur. Sta. 7+29. 50.3' Lt.

EXISTING STRUCTURE DESCRIPTION
 NO. 010-3168, three span 88'-3/8" long, back to back abutments, with a 28'-0" roadway surface, with precast concrete beams supported on concrete abutments and concrete piers supported by precast concrete piles. Built as Sec. 11B at sta. 2+47.02 in 1963.
 The contractor shall remove the existing structure as required. The existing structure shall be replaced with a three span steel girder concrete deck bridge at a 0° Skew



DESIGN LOADING
 HL 93 and Allowance for 25 P.S.F. Future Wearing Surface

DESIGN STRESSES
 $f_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 GRADE 50W)

DESIGN SPECIFICATIONS
 2007 AASHTO LRFD 4th Edition

WATERWAY DATA

| | | |
|-------------------------------|-------|---------|
| Drainage Area | 58.42 | Sq. Mi. |
| Existing Opening (30 Year) | 810 | Sq. Ft. |
| Required Opening (30 Year) | 627 | Sq. Ft. |
| Proposed Opening (30 Year) | 1134 | Sq. Ft. |
| Design Discharge (30 Year) | 3732 | C.F.S. |
| Computed Discharge (100 Year) | 4920 | C.F.S. |

NAME PLATE
 See Std. 515001

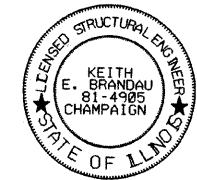
STRUCTURE NO. 010-4541
 SEC. 07-25932-00-BR BUILT 20XX
 F.A.U. 7177
 CHAMPAIGN COUNTY
 LOADING HL-93

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---------|--------|--------|--------|
| Removal of Existing Structures | Each | 1 | | 1 |
| Bridge Deck Grooving | Sq. Yd. | 461 | | 461 |
| Concrete Superstructures | Cu. Yd. | 284.9 | | 284.9 |
| Concrete Structures | Cu. Yd. | | 199.6 | 199.6 |
| Reinforcement Bars, Epoxy Coated | Pound | 67,000 | 13,650 | 80,650 |
| Protective Coat | Sq. Yd. | 563 | | 563 |
| Name Plates | Each | 1 | | 1 |
| Bar Splicers | Each | 537 | 132 | 669 |
| Structure Excavation | Cu. Yd. | | 262 | 262 |
| Porous Granular Embankment | Cu. Yd. | | 338 | 338 |
| Stud Shear Connectors | Each | 1288 | | 1288 |
| Furnishing and Erecting Structural Steel | L. Sum | 1 | | 1 |
| Furnishing Steel Piles HP 10X42 | Foot | | 1538 | 1538 |
| Driving Piles | Foot | | 1538 | 1538 |
| Pile Shoes | Each | | 30 | 30 |
| Test Pile Steel HP 10x42 | Each | | 4 | 4 |
| Grouted Riprap | Sq. Yd. | | 862 | 862 |
| Concrete Cut-Off Wall | Cu. Yd. | | 7.2 | 7.2 |
| Floor Drains | Each | 14 | | 14 |
| Temporary Sheet Piling | Sq. Ft. | | 1400 | 1400 |
| Underwater Structure Excavation Protection - Location 1 | Each | | 1 | 1 |
| Underwater Structure Excavation Protection - Location 2 | Each | | 1 | 1 |

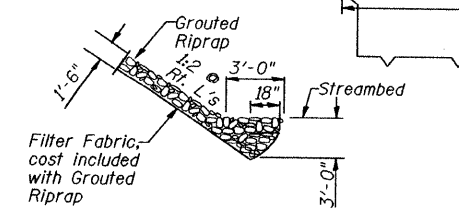
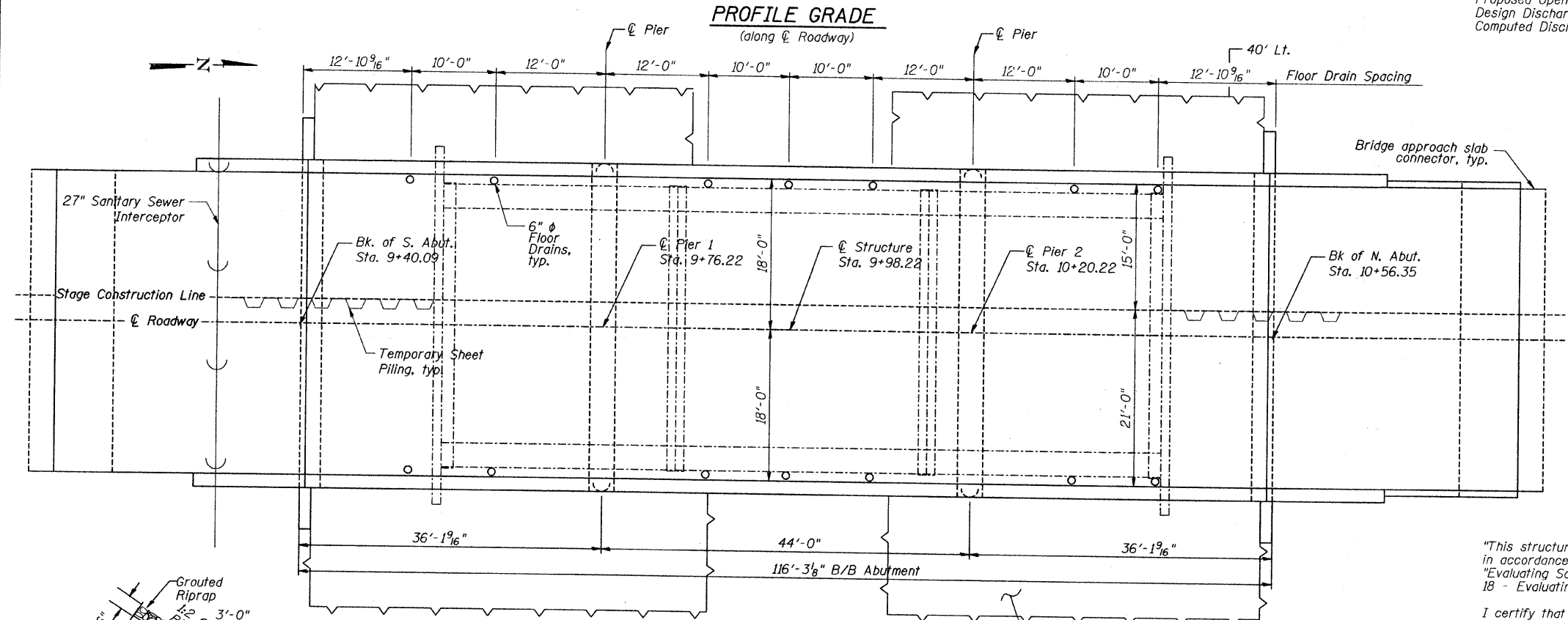
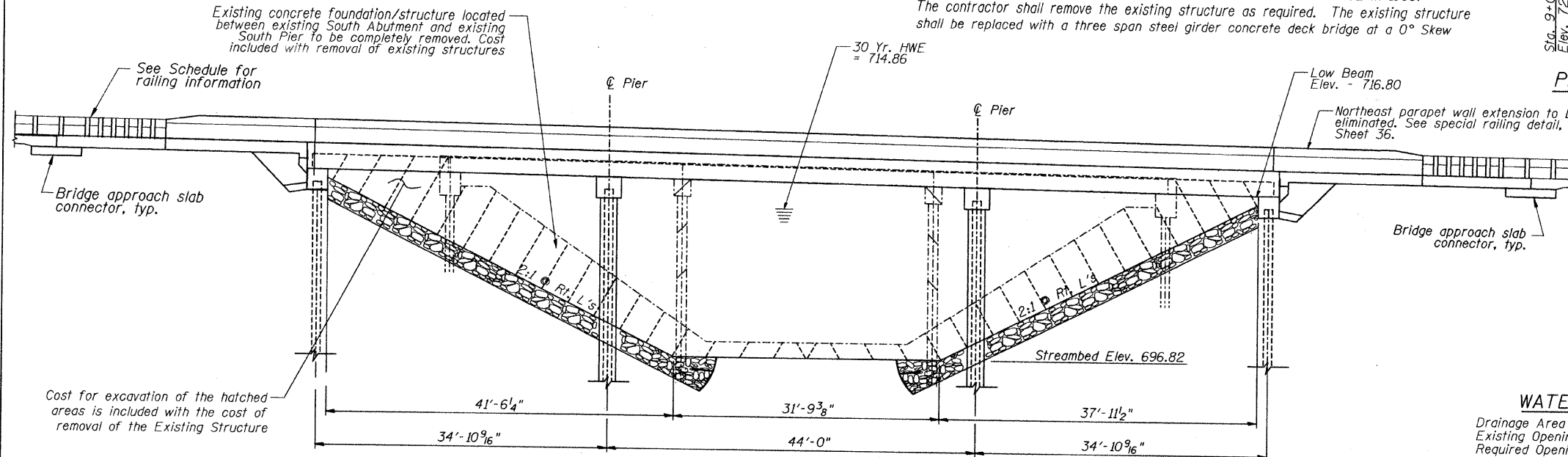
"This structure has been designed to be stable for scour conditions in accordance with the FHWA Technical Advisory - T 5140.23, "Evaluating Scour at Bridges" and Hydraulic Engineering Circular 18 - Evaluating Scour at Bridges.

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 the requirements of the current "AASHTO Standard Specifications for Highway Bridges".



Keith E. Brandau 06/25/09
 KEITH E. BRANDAU DATE
 Illinois Licensed Structural Engineer Number 4905
 License Expires 11/30/10

GENERAL PLAN AND ELEVATION
 SECTION: 07-25932-00-BR
 CHAMPAIGN COUNTY
 & STATION 10+00



SECTION B-B THRU TOE OF RIPRAP
 R-O-W TO R-O-W

| | | | | |
|-----------------|------------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 13A |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |

STRUCTURAL NOTES

Class SI Concrete shall be used in the Abutments and Piers.

Boring Data is shown only as a guide to bidders in estimating soil conditions which may be encountered during construction.

Masonry material salvaged from the existing structure shall not be reused and shall be disposed of off site by the Contractor.

Riprap required to meet the limits shown on the plan shall be paid for as Riprap and shall be grouted. See Special Provisions.

Fasteners shall be high strength bolts. Bolts 3/4" φ, open holes 13/16" φ, unless otherwise noted.

Calculated weight of Structural Steel= 67,933 lbs. (M270 Gr. 50W).

Field welding of construction accessories will not be permitted to beams or girders.

Anchor bolts shall be set before bolting diaphragms over supports.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions. This note supercedes notes on Abutment and Pier Sheets.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustments shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

The contractor shall drive 4 test piles in a permanent location, one at each abutment and one at each pier as directed by the Engineer before ordering the remainder of piles.

The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All construction joints shall be bonded.

Reinforced bars designated (e) shall be epoxy coated.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

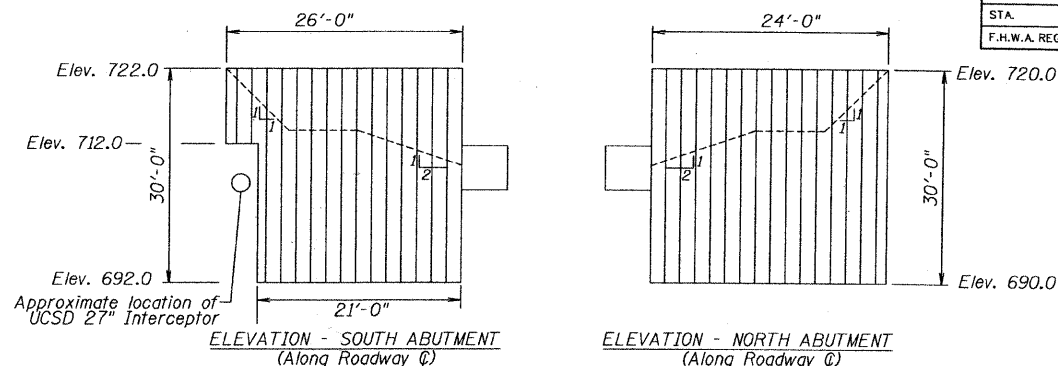
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

The Contractor is advised that the existing precast deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of heavy equipment on the existing beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

Wherever in the plans or specifications the term Standard Specifications is used, it shall be understood by the contractor to mean the Standard Specifications for Road and Bridge Construction as prepared by the Department of Transportation of the State of Illinois and adopted January 1, 2007.

The Contractor shall locate the 27" UCSD interceptor sewer South of the South abutment prior to driving temporary sheet piling and adjust sheet piling dimensions as necessary with the approval of the Engineer. If the Contractor exposes the interceptor, he shall notify UCSD 48 hours prior to any work in this area. Cost of locating the UCSD Interceptor sewer and adjustments to the sheet piling are included with the cost of Temporary Sheet Piling and no other compensation will be allowed.

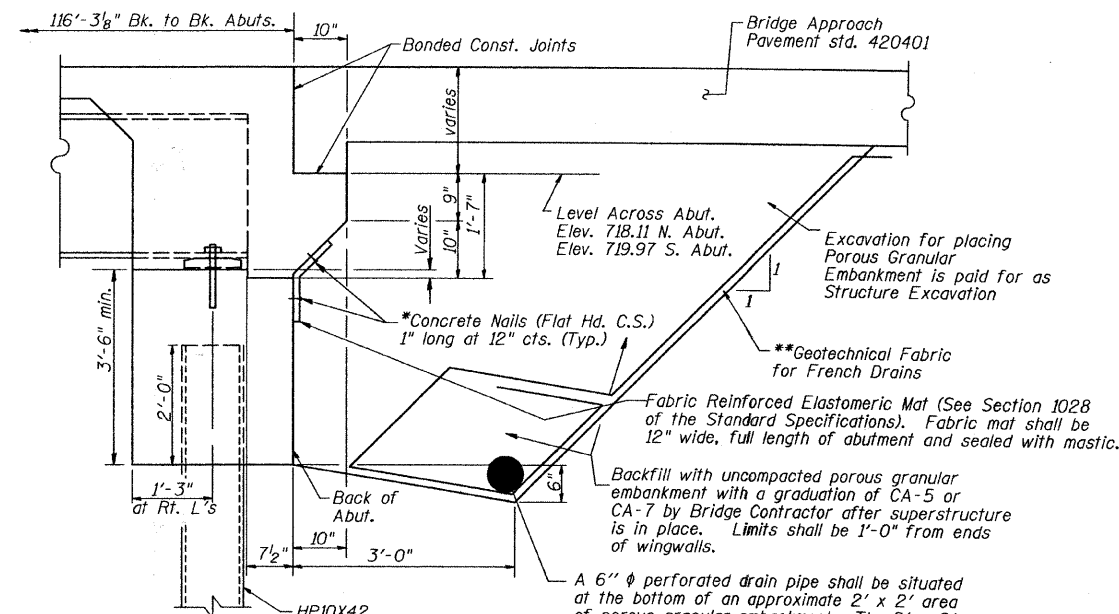


TEMPORARY SHEET PILING DETAILS FOR STAGE CONSTRUCTION

Contractor to anchor sheeting to back of existing abutment wall, connection to be approved by the Engineer. Cost is included with "Temporary Sheet Piling".

TEMPORARY SHEET PILING

South Abutment = 680 Sq.Ft. (Min. Sx= 20in³/ft)
 North Abutment = 720 Sq.Ft. (Min. Sx= 20in³/ft)
 Total = 1400 Sq. Ft.



SECTION THRU ABUTMENT (Dim. at Rt. L's except as noted)

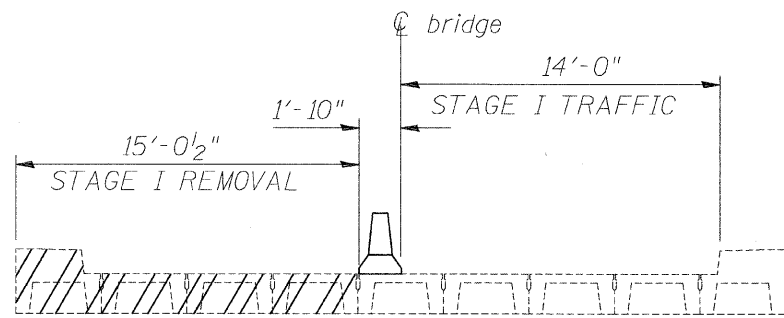
* Included in the cost of "Concrete Structures".
 ** Included in the cost of "Porous Granular Embankment".

| | |
|------------------------------------|--|
| NOTES AND TEMP. SHT. PILING | |
| SECTION: 07-25932-00-BR | |
| CHAMPAIGN COUNTY | |
| Q STATION 10+00 | |

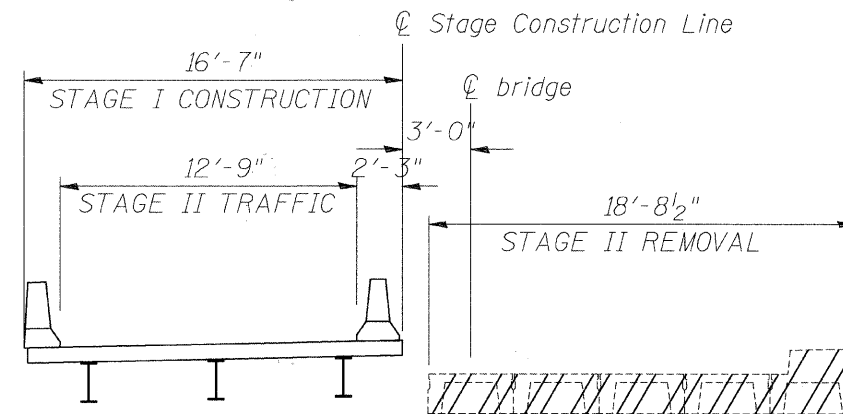
| | | | | |
|-----------------|----------------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 14 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

| | | |
|------|--------------------|------|
| PLAN | SURVEYED | DATE |
| | PLOTTED | |
| | ALIGNMENT CHECKED | |
| | RT. OF WAY CHECKED | |
| | NO. | |

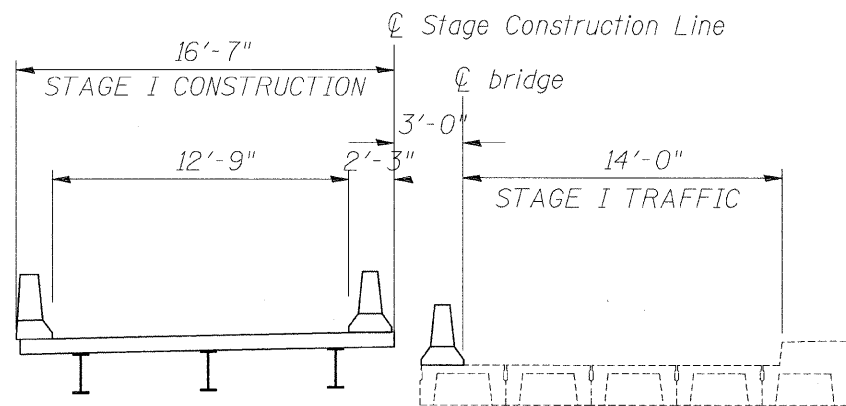
| | | |
|---------|--------------------------|------|
| PROFILE | SURVEYED | DATE |
| | PLOTTED | |
| | GRADES CHECKED | |
| | BEAMS NOTED | |
| | STRUCTURE NOTATIONS CHKD | |
| | NO. | |



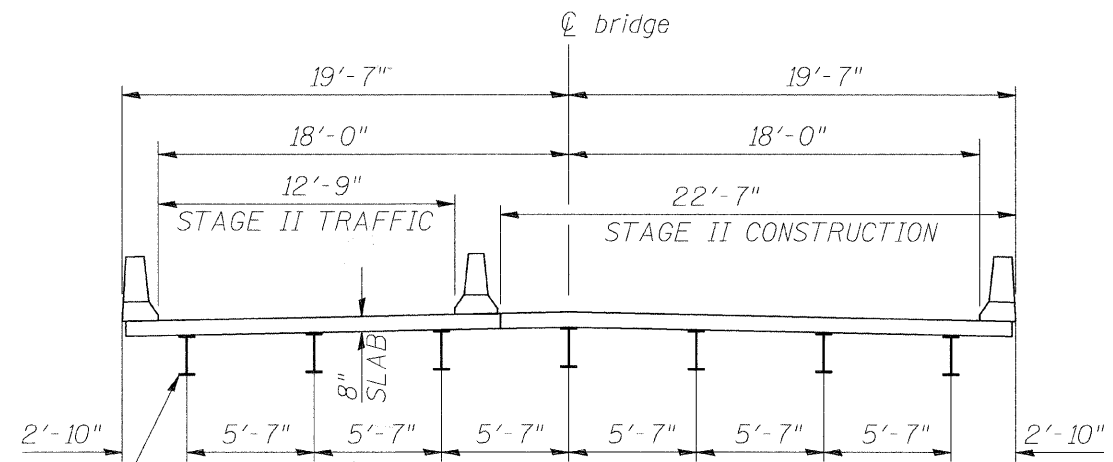
STAGE I REMOVAL
(Looking North)



STAGE II REMOVAL
(Looking North)



STAGE I CONSTRUCTION
(Looking North)

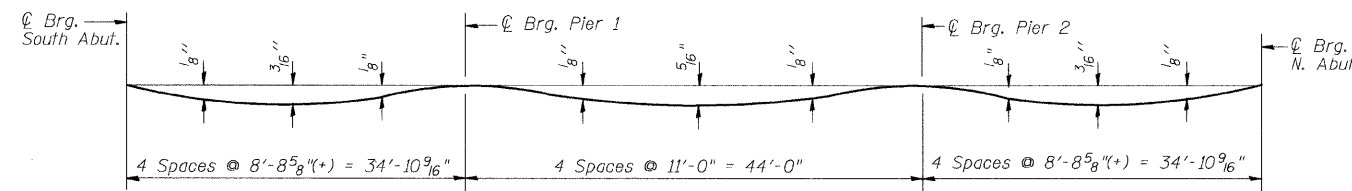
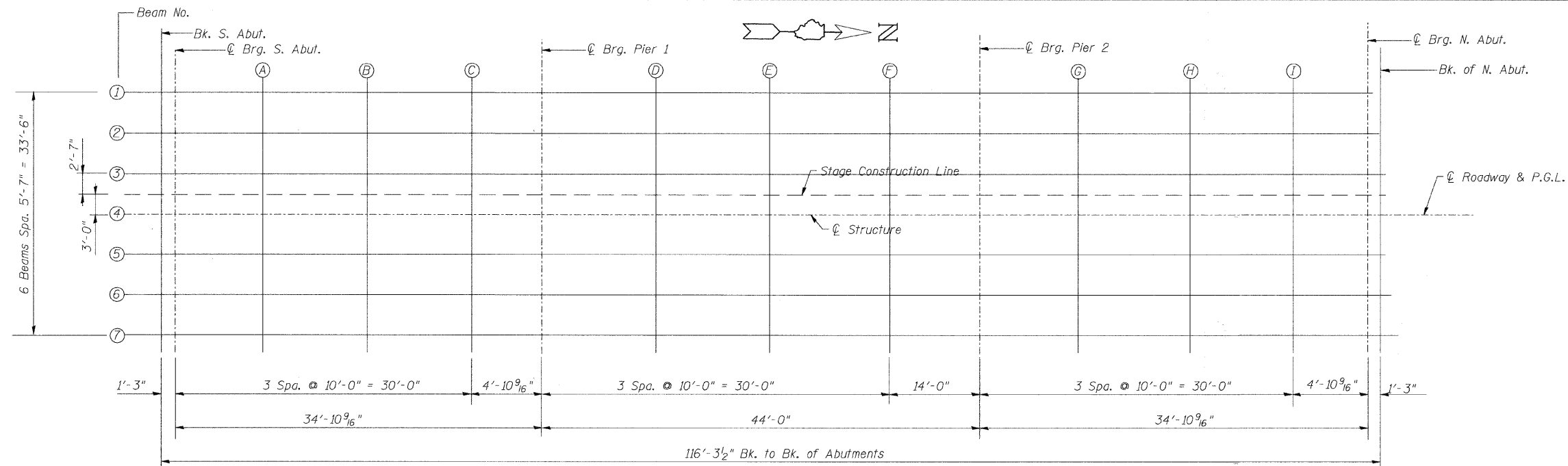


W21 STEEL BEAMS TYPICAL

STAGE II CONSTRUCTION
(Looking North)

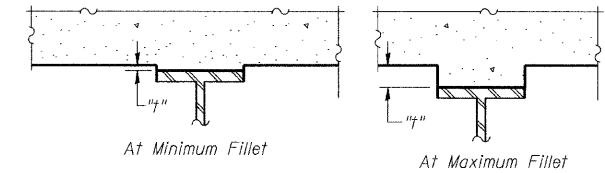
STAGE CONSTRUCTION DETAILS
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
CL STATION 10+00

| | | | | |
|-----------------|------------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 15 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for Dead Load deflections as shown on sheets 5 & 6 of 23.



To determine "h": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheets 5 & 6 of 23. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "h" above top flange of beams.

FILLET HEIGHTS

BEAM 1

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 16.75 | Lt. | 721.32 | 721.32 |
| Cl. S. Abut | 9+41.34 | 16.75 | Lt. | 721.30 | 721.30 |
| A | 9+51.34 | 16.75 | Lt. | 721.14 | 721.16 |
| B | 9+61.34 | 16.75 | Lt. | 720.98 | 721.00 |
| C | 9+71.34 | 16.75 | Lt. | 720.82 | 720.83 |
| Cl. Pier 1 | 9+76.22 | 16.75 | Lt. | 720.74 | 720.74 |
| D | 9+86.22 | 16.75 | Lt. | 720.58 | 720.60 |
| E | 9+96.22 | 16.75 | Lt. | 720.42 | 720.45 |
| F | 10+06.22 | 16.75 | Lt. | 720.26 | 720.28 |
| Cl. Pier 2 | 10+20.22 | 16.75 | Lt. | 720.04 | 720.04 |
| G | 10+30.22 | 16.75 | Lt. | 719.88 | 719.89 |
| H | 10+40.22 | 16.75 | Lt. | 719.72 | 719.74 |
| I | 10+50.22 | 16.75 | Lt. | 719.56 | 719.57 |
| Cl. N. Abut | 10+55.10 | 16.75 | Lt. | 719.48 | 719.48 |
| Bk. Of N. Abut | 10+56.35 | 16.75 | Lt. | 719.46 | 719.46 |

BEAM 2

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 11.167 | Lt. | 721.43 | 721.43 |
| Cl. S. Abut | 9+41.34 | 11.167 | Lt. | 721.41 | 721.41 |
| A | 9+51.34 | 11.167 | Lt. | 721.25 | 721.27 |
| B | 9+61.34 | 11.167 | Lt. | 721.09 | 721.11 |
| C | 9+71.34 | 11.167 | Lt. | 720.93 | 720.94 |
| Cl. Pier 1 | 9+76.22 | 11.167 | Lt. | 720.86 | 720.86 |
| D | 9+86.22 | 11.167 | Lt. | 720.70 | 720.71 |
| E | 9+96.22 | 11.167 | Lt. | 720.54 | 720.56 |
| F | 10+06.22 | 11.167 | Lt. | 720.38 | 720.40 |
| Cl. Pier 2 | 10+20.22 | 11.167 | Lt. | 720.15 | 720.15 |
| G | 10+30.22 | 11.167 | Lt. | 719.99 | 720.00 |
| H | 10+40.22 | 11.167 | Lt. | 719.83 | 719.85 |
| I | 10+50.22 | 11.167 | Lt. | 719.67 | 719.68 |
| Cl. N. Abut | 10+55.10 | 11.167 | Lt. | 719.59 | 719.59 |
| Bk. Of N. Abut | 10+56.35 | 11.167 | Lt. | 719.57 | 719.57 |

TOP OF SLAB ELEVATIONS 1
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 16 |
| STA. | TO STA. | | | |
| F.H.W.A. REC. | ILLINOIS | PROJECT | | |

BEAM 3

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 5.583 | Lt. | 721.52 | 721.52 |
| Cl. S. Abut | 9+41.34 | 5.583 | Lt. | 721.50 | 721.50 |
| A | 9+51.34 | 5.583 | Lt. | 721.34 | 721.36 |
| B | 9+61.34 | 5.583 | Lt. | 721.18 | 721.20 |
| C | 9+71.34 | 5.583 | Lt. | 721.02 | 721.02 |
| Cl. Pier 1 | 9+76.22 | 5.583 | Lt. | 720.94 | 720.94 |
| D | 9+86.22 | 5.583 | Lt. | 720.78 | 720.80 |
| E | 9+96.22 | 5.583 | Lt. | 720.62 | 720.65 |
| F | 10+06.22 | 5.583 | Lt. | 720.46 | 720.48 |
| Cl. Pier 2 | 10+20.22 | 5.583 | Lt. | 720.24 | 720.24 |
| G | 10+30.22 | 5.583 | Lt. | 720.08 | 720.09 |
| H | 10+40.22 | 5.583 | Lt. | 719.92 | 719.94 |
| I | 10+50.22 | 5.583 | Lt. | 719.76 | 719.77 |
| Cl. N. Abut | 10+55.10 | 5.583 | Lt. | 719.68 | 719.68 |
| Bk. Of N. Abut | 10+56.35 | 5.583 | Lt. | 719.66 | 719.66 |

STAGE CONSTRUCTION LINE

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 3.00 | Lt. | 721.56 | 721.56 |
| Cl. S. Abut | 9+41.34 | 3.00 | Lt. | 721.54 | 721.54 |
| A | 9+51.34 | 3.00 | Lt. | 721.38 | 721.40 |
| B | 9+61.34 | 3.00 | Lt. | 721.22 | 721.24 |
| C | 9+71.34 | 3.00 | Lt. | 721.06 | 721.06 |
| Cl. Pier 1 | 9+76.22 | 3.00 | Lt. | 720.98 | 720.98 |
| D | 9+86.22 | 3.00 | Lt. | 720.82 | 720.84 |
| E | 9+96.22 | 3.00 | Lt. | 720.66 | 720.69 |
| F | 10+06.22 | 3.00 | Lt. | 720.50 | 720.52 |
| Cl. Pier 2 | 10+20.22 | 3.00 | Lt. | 720.28 | 720.28 |
| G | 10+30.22 | 3.00 | Lt. | 720.12 | 720.13 |
| H | 10+40.22 | 3.00 | Lt. | 719.96 | 719.98 |
| I | 10+50.22 | 3.00 | Lt. | 719.80 | 719.81 |
| Cl. N. Abut | 10+55.10 | 3.00 | Lt. | 719.72 | 719.72 |
| Bk. Of N. Abut | 10+56.35 | 3.00 | Lt. | 719.70 | 719.70 |

BEAM 4, CL ROADWAY AND PGL

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|--|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 0 | | 721.61 | 721.61 |
| Cl. S. Abut | 9+41.34 | 0 | | 721.59 | 721.59 |
| A | 9+51.34 | 0 | | 721.43 | 721.44 |
| B | 9+61.34 | 0 | | 721.27 | 721.28 |
| C | 9+71.34 | 0 | | 721.11 | 721.11 |
| Cl. Pier 1 | 9+76.22 | 0 | | 721.03 | 721.03 |
| D | 9+86.22 | 0 | | 720.87 | 720.88 |
| E | 9+96.22 | 0 | | 720.71 | 720.74 |
| F | 10+06.22 | 0 | | 720.55 | 720.57 |
| Cl. Pier 2 | 10+20.22 | 0 | | 720.33 | 720.33 |
| G | 10+30.22 | 0 | | 720.17 | 720.18 |
| H | 10+40.22 | 0 | | 720.01 | 720.02 |
| I | 10+50.22 | 0 | | 719.85 | 719.86 |
| Cl. N. Abut | 10+55.10 | 0 | | 719.77 | 719.77 |
| Bk. Of N. Abut | 10+56.35 | 0 | | 719.75 | 719.75 |

BEAM 5

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 5.583 | Rt. | 721.52 | 721.52 |
| Cl. S. Abut | 9+41.34 | 5.583 | Rt. | 721.50 | 721.50 |
| A | 9+51.34 | 5.583 | Rt. | 721.34 | 721.36 |
| B | 9+61.34 | 5.583 | Rt. | 721.18 | 721.20 |
| C | 9+71.34 | 5.583 | Rt. | 721.02 | 721.02 |
| Cl. Pier 1 | 9+76.22 | 5.583 | Rt. | 720.94 | 720.94 |
| D | 9+86.22 | 5.583 | Rt. | 720.78 | 720.80 |
| E | 9+96.22 | 5.583 | Rt. | 720.62 | 720.65 |
| F | 10+06.22 | 5.583 | Rt. | 720.46 | 720.48 |
| Cl. Pier 2 | 10+20.22 | 5.583 | Rt. | 720.24 | 720.24 |
| G | 10+30.22 | 5.583 | Rt. | 720.08 | 720.09 |
| H | 10+40.22 | 5.583 | Rt. | 719.92 | 719.94 |
| I | 10+50.22 | 5.583 | Rt. | 719.76 | 719.77 |
| Cl. N. Abut | 10+55.10 | 5.583 | Rt. | 719.68 | 719.68 |
| Bk. Of N. Abut | 10+56.35 | 5.583 | Rt. | 719.66 | 719.66 |

BEAM 6

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 11.167 | Rt. | 721.43 | 721.43 |
| Cl. S. Abut | 9+41.34 | 11.167 | Rt. | 721.41 | 721.41 |
| A | 9+51.34 | 11.167 | Rt. | 721.25 | 721.27 |
| B | 9+61.34 | 11.167 | Rt. | 721.09 | 721.11 |
| C | 9+71.34 | 11.167 | Rt. | 720.93 | 720.94 |
| Cl. Pier 1 | 9+76.22 | 11.167 | Rt. | 720.86 | 720.86 |
| D | 9+86.22 | 11.167 | Rt. | 720.70 | 720.71 |
| E | 9+96.22 | 11.167 | Rt. | 720.54 | 720.56 |
| F | 10+06.22 | 11.167 | Rt. | 720.38 | 720.40 |
| Cl. Pier 2 | 10+20.22 | 11.167 | Rt. | 720.15 | 720.15 |
| G | 10+30.22 | 11.167 | Rt. | 719.99 | 720.00 |
| H | 10+40.22 | 11.167 | Rt. | 719.83 | 719.85 |
| I | 10+50.22 | 11.167 | Rt. | 719.67 | 719.68 |
| Cl. N. Abut | 10+55.10 | 11.167 | Rt. | 719.59 | 719.59 |
| Bk. Of N. Abut | 10+56.35 | 11.167 | Rt. | 719.57 | 719.57 |

BEAM 7

| LOCATION | STATION | OFFSET | | THEORETICAL GRADE ELEVATIONS | THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION |
|----------------|----------|--------|-----|------------------------------|--|
| Bk. Of S. Abut | 9+40.09 | 16.75 | Rt. | 721.32 | 721.32 |
| Cl. S. Abut | 9+41.34 | 16.75 | Rt. | 721.30 | 721.30 |
| A | 9+51.34 | 16.75 | Rt. | 721.14 | 721.16 |
| B | 9+61.34 | 16.75 | Rt. | 720.98 | 721.00 |
| C | 9+71.34 | 16.75 | Rt. | 720.82 | 720.83 |
| Cl. Pier 1 | 9+76.22 | 16.75 | Rt. | 720.74 | 720.74 |
| D | 9+86.22 | 16.75 | Rt. | 720.58 | 720.60 |
| E | 9+96.22 | 16.75 | Rt. | 720.42 | 720.45 |
| F | 10+06.22 | 16.75 | Rt. | 720.26 | 720.28 |
| Cl. Pier 2 | 10+20.22 | 16.75 | Rt. | 720.04 | 720.04 |
| G | 10+30.22 | 16.75 | Rt. | 719.88 | 719.89 |
| H | 10+40.22 | 16.75 | Rt. | 719.72 | 719.74 |
| I | 10+50.22 | 16.75 | Rt. | 719.56 | 719.57 |
| Cl. N. Abut | 10+55.10 | 16.75 | Rt. | 719.48 | 719.48 |
| Bk. Of N. Abut | 10+56.35 | 16.75 | Rt. | 719.46 | 719.46 |

TOP OF SLAB ELEVATIONS 2
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
CL STATION 10+00

| | | | | |
|-----------------|----------------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 17 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

WEST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|---------|--------|------------------------------|
| End S. Appr. Pav't. | 9+10.09 | 18' LT | 721.74 |
| A | 9+20.09 | 18' LT | 721.62 |
| B | 9+30.09 | 18' LT | 721.46 |
| Bk. of S. Abut. | 9+40.09 | 18' LT | 721.30 |

WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|---------|--------|------------------------------|
| End S. Appr. Pav't. | 9+10.09 | 12' LT | 721.86 |
| A | 9+20.09 | 12' LT | 721.74 |
| B | 9+30.09 | 12' LT | 721.58 |
| Bk. of S. Abut. | 9+40.09 | 12' LT | 721.42 |

STAGE CONSTRUCTION LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|---------|--------|------------------------------|
| End S. Appr. Pav't. | 9+10.09 | 3' LT | 722.00 |
| A | 9+20.09 | 3' LT | 721.88 |
| B | 9+30.09 | 3' LT | 721.72 |
| Bk. of S. Abut. | 9+40.09 | 3' LT | 721.56 |

Q ROADWAY & P.G.L.

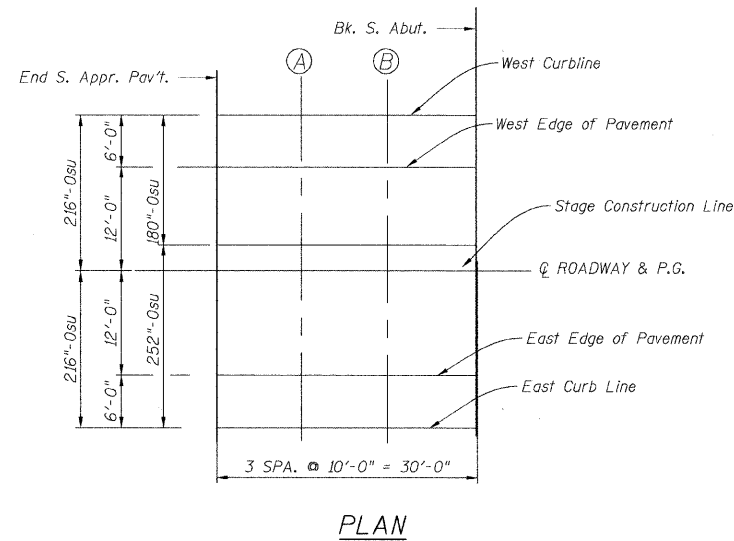
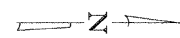
| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|---------|--------|------------------------------|
| End S. Appr. Pav't. | 9+10.09 | 0' LT | 722.05 |
| A | 9+20.09 | 0' LT | 721.93 |
| B | 9+30.09 | 0' LT | 721.77 |
| Bk. of S. Abut. | 9+40.09 | 0' LT | 721.61 |

EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|---------|--------|------------------------------|
| End S. Appr. Pav't. | 9+10.09 | 12' RT | 721.86 |
| A | 9+20.09 | 12' RT | 721.74 |
| B | 9+30.09 | 12' RT | 721.58 |
| Bk. of S. Abut. | 9+40.09 | 12' RT | 721.42 |

EAST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|---------|--------|------------------------------|
| End S. Appr. Pav't. | 9+10.09 | 18' RT | 721.74 |
| A | 9+20.09 | 18' RT | 721.62 |
| B | 9+30.09 | 18' RT | 721.46 |
| Bk. of S. Abut. | 9+40.09 | 18' RT | 721.30 |



TOP OF SOUTH APPROACH SLAB ELEVATIONS

TOP OF SOUTH APPROACH SLAB ELEVATIONS

SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

| | | | | |
|-----------------|----------------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 18 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

WEST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|----------|--------|------------------------------|
| Bk. of N. Abut. | 10+56.35 | 18' LT | 719.44 |
| A | 10+66.35 | 18' LT | 719.25 |
| B | 10+76.35 | 18' LT | 719.05 |
| End N. Appr. Pav't. | 10+86.35 | 18' LT | 718.85 |

WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|----------|--------|------------------------------|
| Bk. of N. Abut. | 10+56.35 | 12' LT | 719.56 |
| A | 10+66.35 | 12' LT | 719.37 |
| B | 10+76.35 | 12' LT | 719.17 |
| End N. Appr. Pav't. | 10+86.35 | 12' LT | 718.97 |

STAGE CONSTRUCTION LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|----------|--------|------------------------------|
| Bk. of N. Abut. | 10+56.35 | 3' LT | 719.70 |
| A | 10+66.35 | 3' LT | 719.51 |
| B | 10+76.35 | 3' LT | 719.31 |
| End N. Appr. Pav't. | 10+86.35 | 3' LT | 719.11 |

Q ROADWAY & P.G.L.

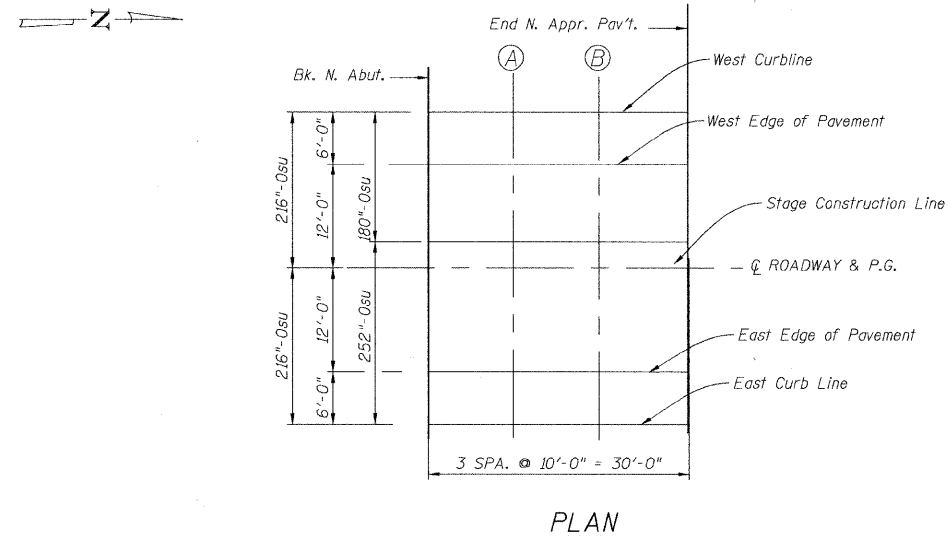
| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|----------|--------|------------------------------|
| Bk. of N. Abut. | 10+56.35 | 0' LT | 719.75 |
| A | 10+66.35 | 0' LT | 719.56 |
| B | 10+76.35 | 0' LT | 719.36 |
| End N. Appr. Pav't. | 10+86.35 | 0' LT | 719.16 |

EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|----------|--------|------------------------------|
| Bk. of N. Abut. | 10+56.35 | 12' RT | 719.56 |
| A | 10+66.35 | 12' RT | 719.37 |
| B | 10+76.35 | 12' RT | 719.17 |
| End N. Appr. Pav't. | 10+86.35 | 12' RT | 718.97 |

EAST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---------------------|----------|--------|------------------------------|
| Bk. of N. Abut. | 10+56.35 | 18' RT | 719.44 |
| A | 10+66.35 | 18' RT | 719.25 |
| B | 10+76.35 | 18' RT | 719.05 |
| End N. Appr. Pav't. | 10+86.35 | 18' RT | 718.85 |

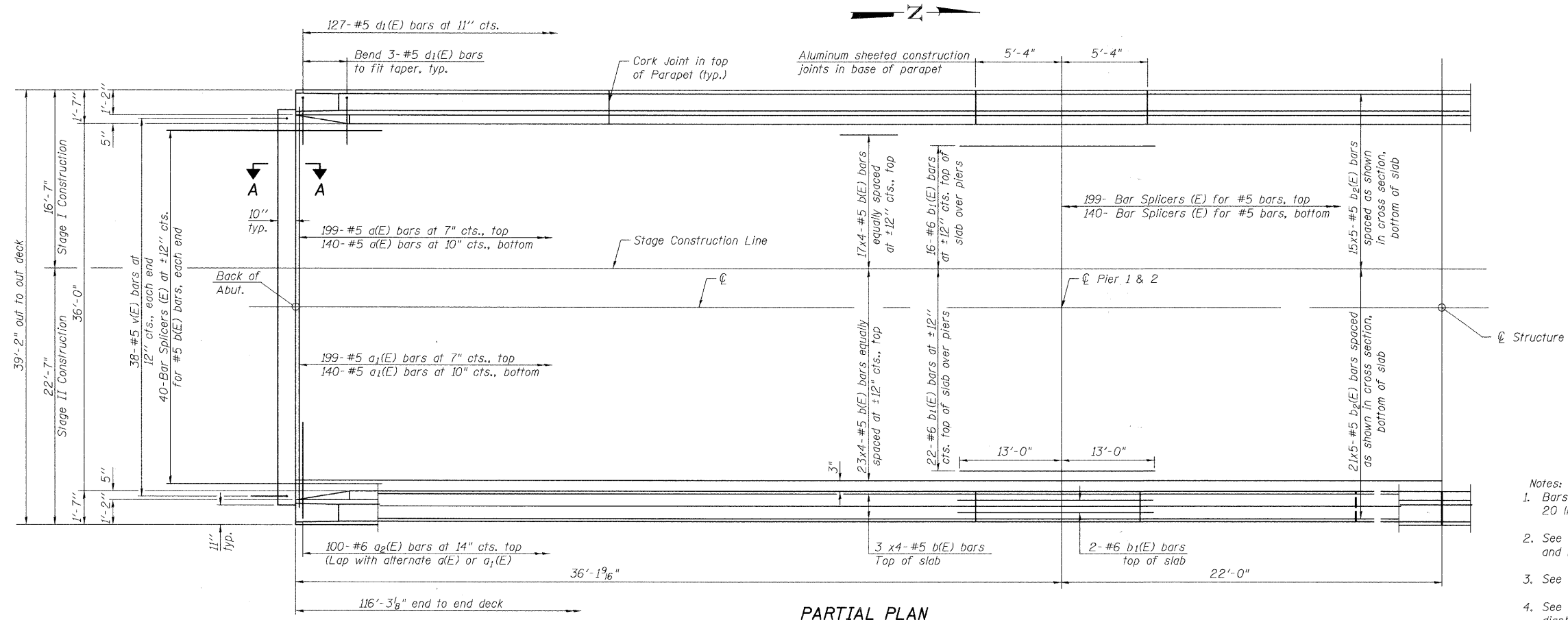


TOP OF NORTH APPROACH SLAB ELEVATIONS

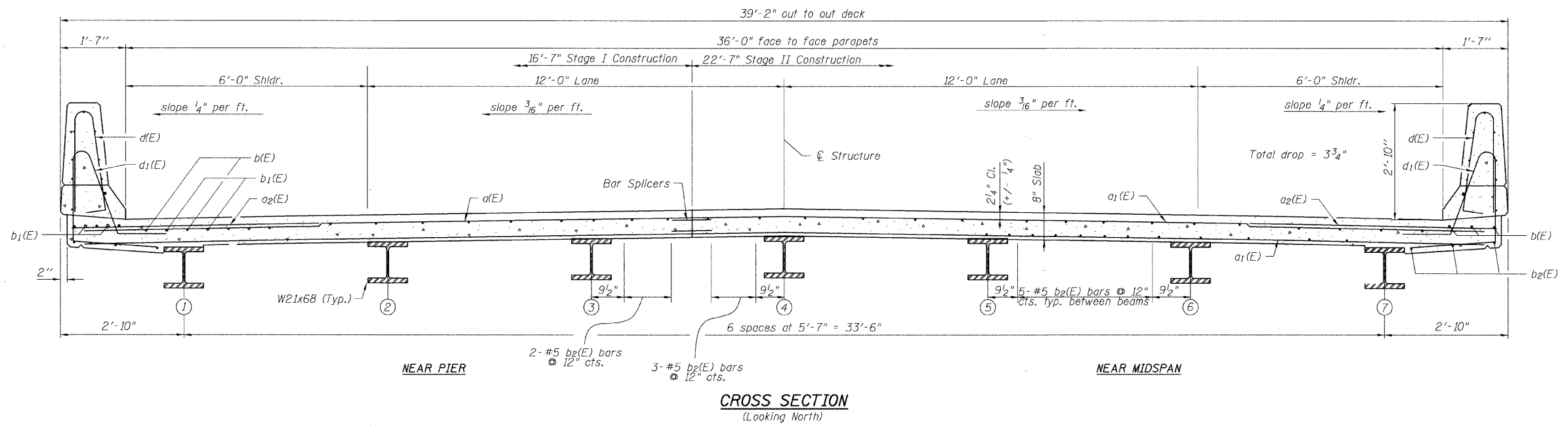
TOP OF NORTH APPROACH SLAB ELEVATIONS

SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 19 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

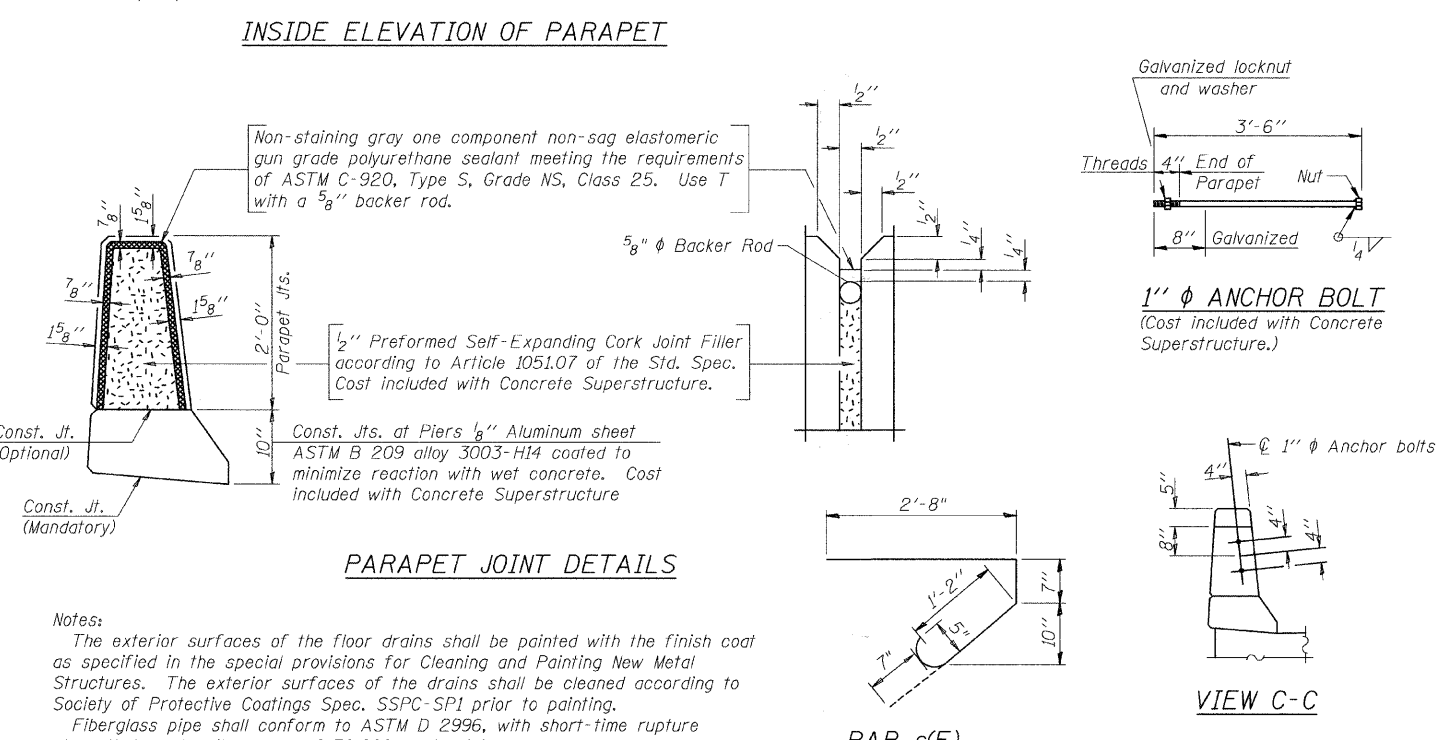
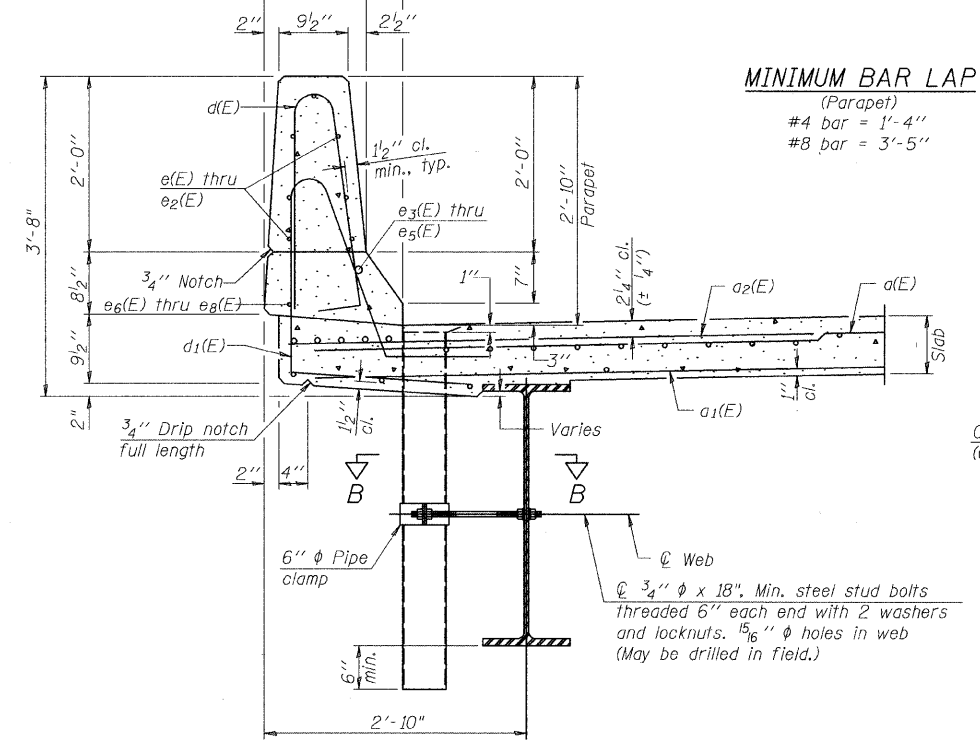
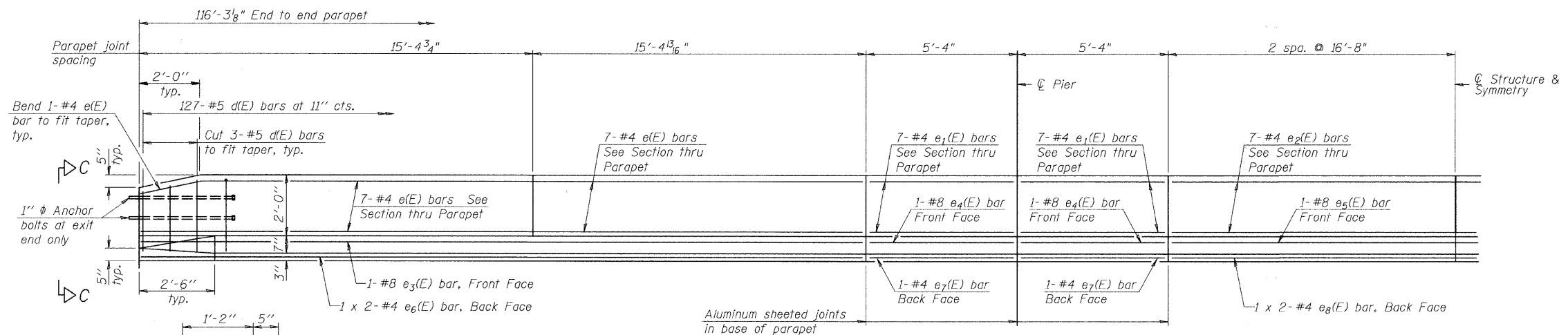


- Notes:
1. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 2. See Sheet 10 of 23 for superstructure details and Bill of Material.
 3. See Sheet 10 of 23 for parapet reinforcement.
 4. See Sheet 14 of 23 for Section A-A and diaphragm details.



SUPERSTRUCTURE
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Centerline Station 10+00

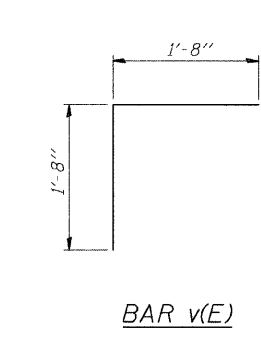
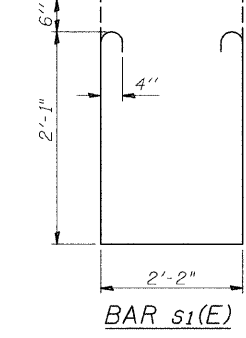
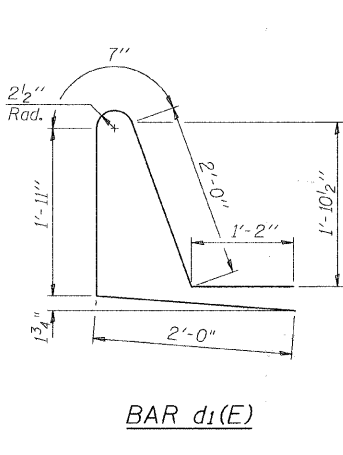
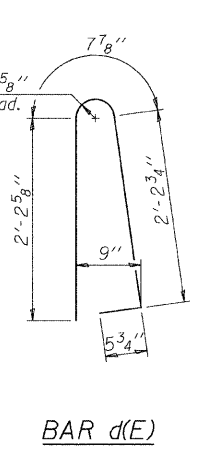
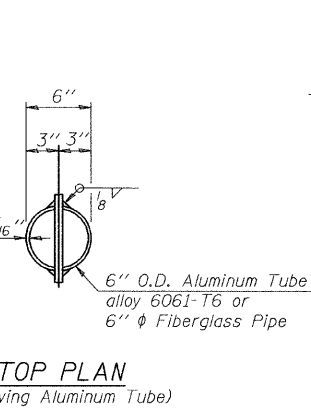
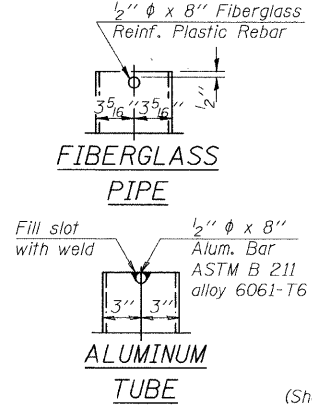
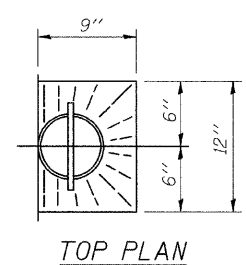
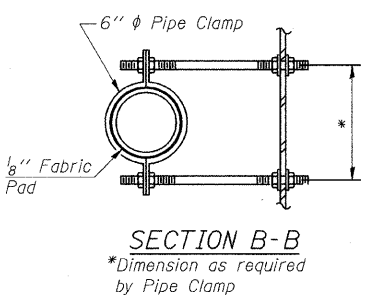
| | | | | |
|------------------------------|---------------------------|-----------------------------|--------------------|-----------------|
| ROUTE NO. N. LINCOLN AVE. | SECTION 07-25932-00-BR | COUNTY CHAMPAIGN | TOTAL SHEETS 50 | SHEET NO. 20 |
| STA. F.H.W.A. REG. | | TO STA. ILLINOIS PROJECT | | |



SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape | |
|----------------------------------|-----|------|--------|----------|--------|
| d(E) | 339 | #5 | 16'-1" | — | |
| a ₁ (E) | 339 | #5 | 22'-1" | — | |
| a ₂ (E) | 200 | #6 | 6'-0" | — | |
| b(E) | 184 | #5 | 30'-9" | — | |
| b ₁ (E) | 84 | #6 | 26'-0" | — | |
| b ₂ (E) | 180 | #5 | 25'-0" | — | |
| d(E) | 254 | #5 | 5'-7" | — | |
| d ₁ (E) | 254 | #5 | 7'-8" | — | |
| e(E) | 56 | #4 | 15'-0" | — | |
| e ₁ (E) | 56 | #4 | 5'-0" | — | |
| e ₂ (E) | 28 | #4 | 16'-4" | — | |
| e ₃ (E) | 4 | #8 | 30'-5" | — | |
| e ₄ (E) | 8 | #8 | 5'-0" | — | |
| e ₅ (E) | 2 | #8 | 33'-0" | — | |
| e ₆ (E) | 8 | #4 | 16'-6" | — | |
| e ₇ (E) | 8 | #4 | 5'-0" | — | |
| e ₈ (E) | 4 | #4 | 17'-9" | — | |
| m(E) | 10 | #6 | 16'-3" | — | |
| m ₁ (E) | 10 | #6 | 22'-3" | — | |
| m ₂ (E) | 42 | #6 | 8'-0" | — | |
| s(E) | 84 | #5 | 5'-0" | U | |
| s ₁ (E) | 84 | #4 | 7'-4" | U | |
| v(E) | 76 | #5 | 3'-4" | Γ | |
| Reinforcement Bars, Epoxy Coated | | | | Pound | 36,700 |
| Concrete Superstructure | | | | Cu. Yds. | 164.7 |

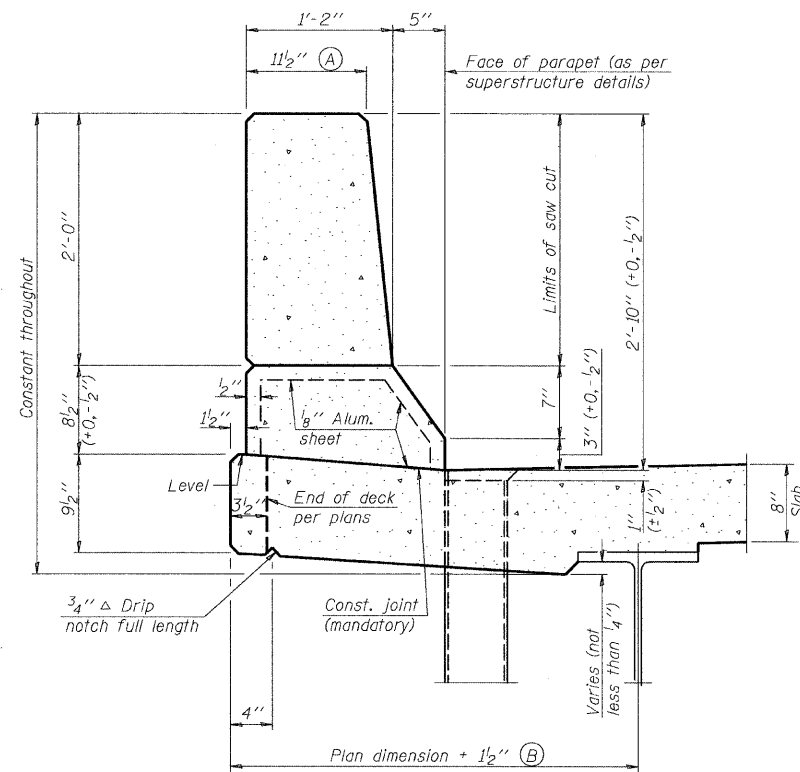
Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.



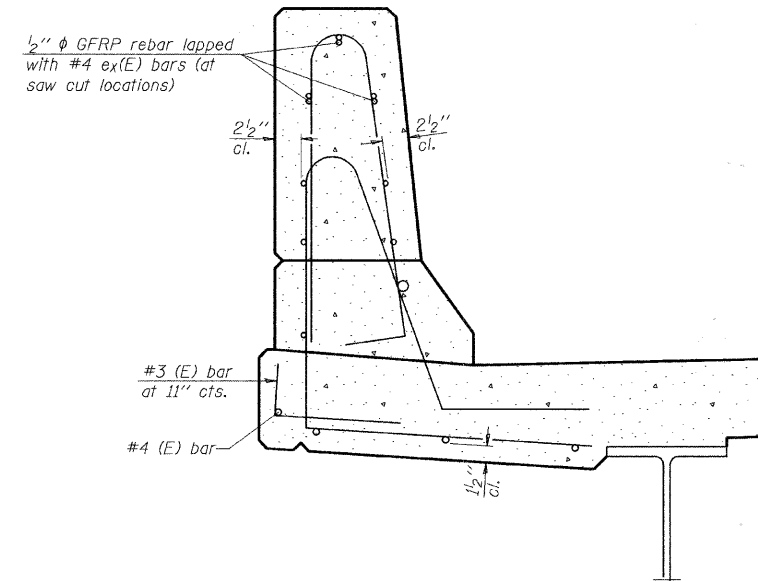
S-I-D 10-1-08

SUPERSTRUCTURE DETAILS
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
STATION 10+00

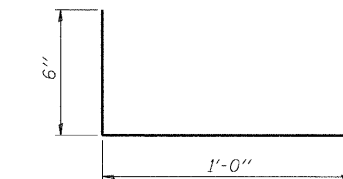
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 21 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



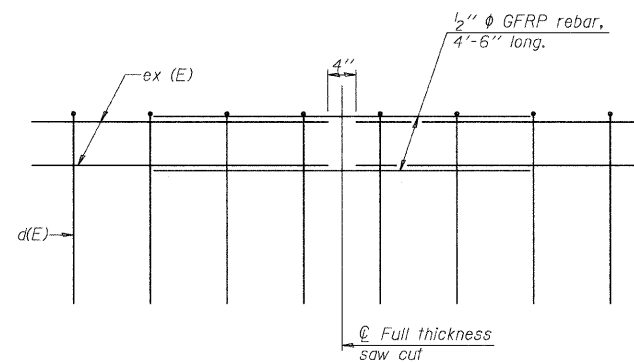
SECTION
(Showing dimensions)



SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

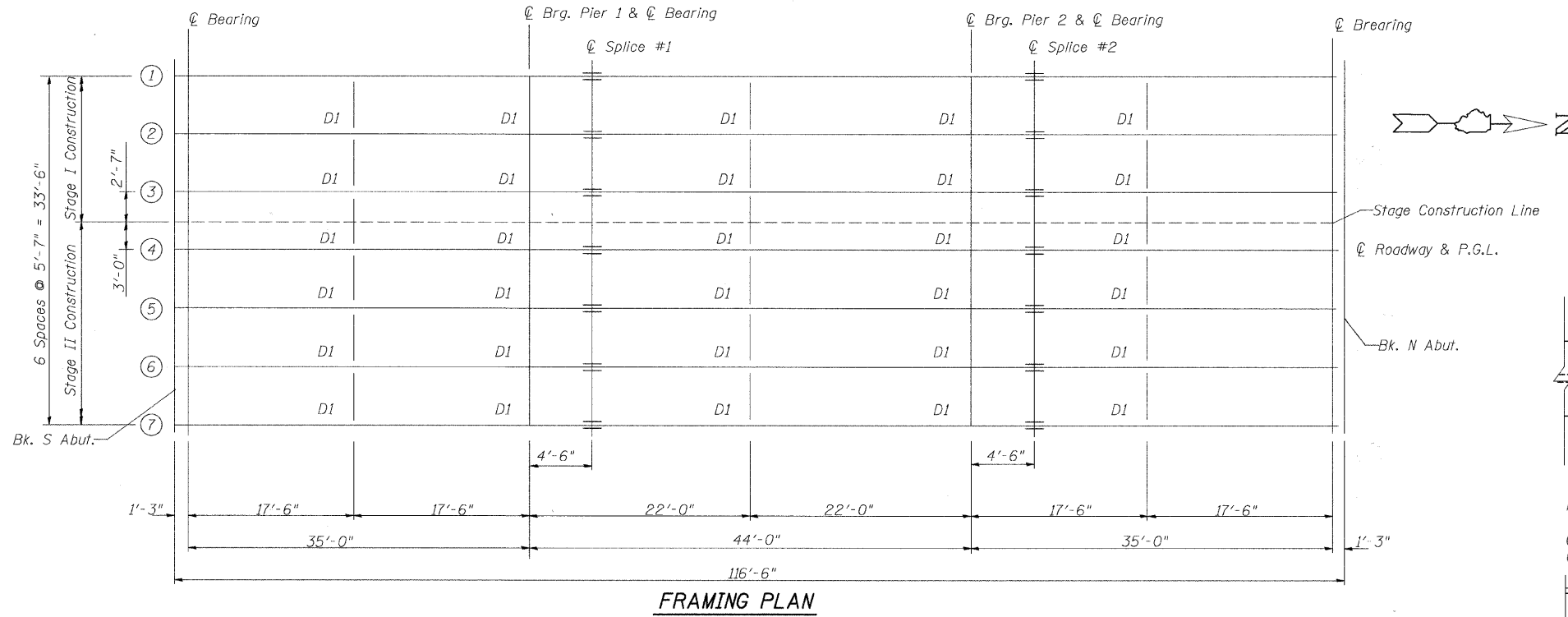
(Place as shown in parapet section at each parapet joint location.)

GENERAL NOTES
All dimensions shall remain the same as shown on contract plans, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. of parapet.
Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

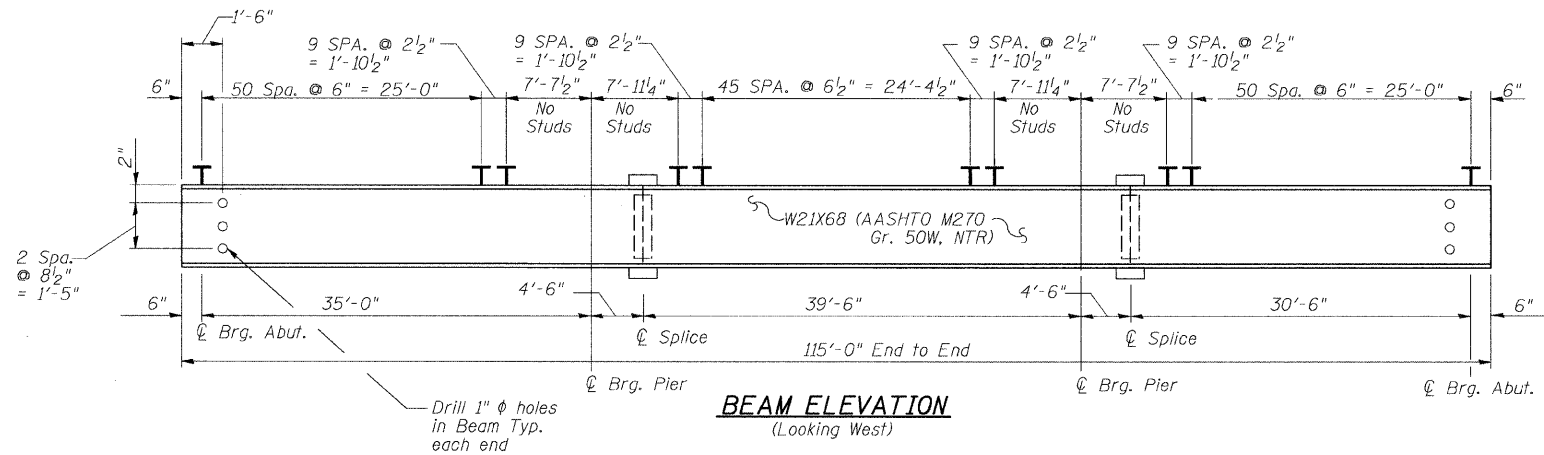
**CONCRETE PARAPET
SLIPFORMING OPTION
STRUCTURE NO. 010-4541**

SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
STATION 10+00

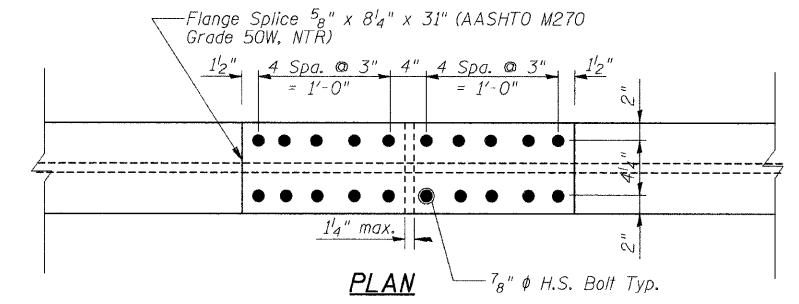
| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 22 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



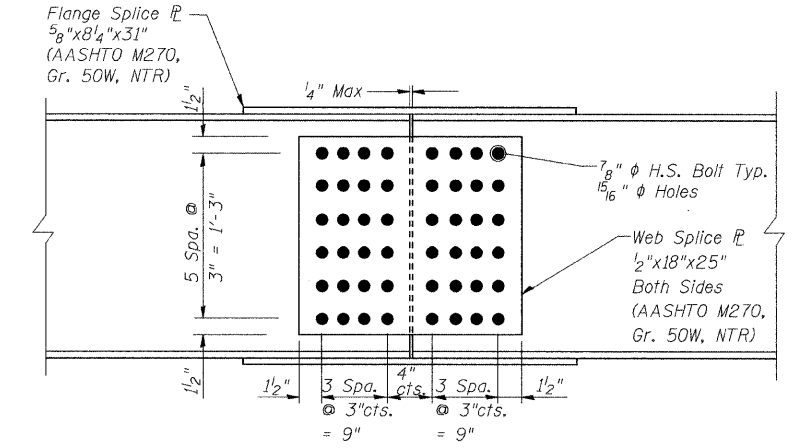
FRAMING PLAN



BEAM ELEVATION
(Looking West)



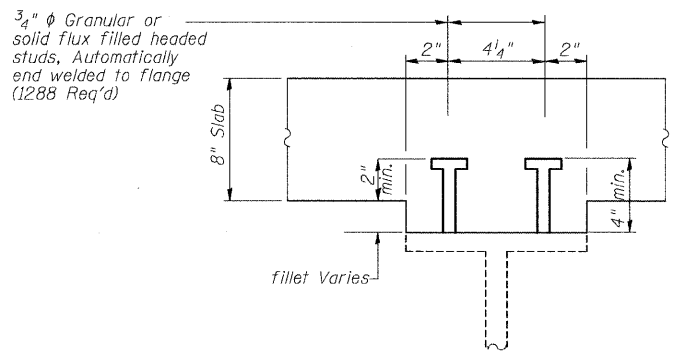
PLAN



ELEVATION

SPLICE

(12 Required)



SECTION A-A

TOP OF BEAM ELEVATIONS *

| Location | Beam 1 | Beam 2 | Beam 3 | Beam 4 | Beam 5 | Beam 6 | Beam 7 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|
| ⊕ Brg. South Abut. | 720.59 | 720.70 | 720.79 | 720.88 | 720.79 | 720.70 | 720.59 |
| ⊕ Brg. Pier 1 | 720.03 | 720.15 | 720.23 | 720.32 | 720.23 | 720.15 | 720.03 |
| ⊕ Splice 1 | 719.96 | 720.08 | 720.16 | 720.25 | 720.16 | 720.08 | 719.96 |
| ⊕ Brg. Pier 2 | 719.33 | 719.44 | 719.53 | 719.62 | 719.53 | 719.44 | 719.33 |
| ⊕ Splice 2 | 719.26 | 719.37 | 719.46 | 719.55 | 719.46 | 719.37 | 719.26 |
| ⊕ Brg. North Abut | 718.77 | 718.88 | 718.97 | 719.06 | 718.97 | 718.88 | 718.77 |

*For Fabrication Only

Notes:

- All structural steel shall conform to the requirements of AASHTO M270, Grade 50W.
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

FRAMING PLAN & BEAM DETAILS
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
⊕ STATION 10+00

| | | | | |
|-----------------|------------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 23 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |

| | 0.4 Span 1 or 0.6 Span 3 | Pier 1 or Pier 2 | 0.5 Span 2 |
|---------------------------|--------------------------------|------------------------|------------|
| I_s | 1,480 | 1,480 | 1,480 |
| $I_c(n)$ | 4,974 | | 4,974 |
| $I_c(3n)$ | 3,699 | | 3,699 |
| S_s | 140 | 140 | 140 |
| $S_c(n)$ | 232 | | 232 |
| $S_c(3n)$ | 208 | | 208 |
| Z | 160 | 160 | 160 |
| $DC1$ | 0.644 | 0.644 | 0.644 |
| M_{DC1} | 54.2 | 102.1 | 53.8 |
| $DC2$ | 0.129 | 0.129 | 0.129 |
| M_{DC2} | 13.0 | 15.0 | 16.3 |
| DW | 0.279 | 0.279 | 0.279 |
| M_{DW} | 28.1 | 32.3 | 35.2 |
| $M_L + IM$ | 292.9 | 174.1 | 344.2 |
| M_u (Strength I) | 638.8 | 499.5 | 742.7 |
| $\phi_f M_n$ or M_{nc} | 1301.6 | | 1301.6 |
| $f_s DC1$ | 4.65 | 8.75 | 4.61 |
| $f_s DC2$ | 0.75 | 1.29 | 0.94 |
| $f_s DW$ | 1.62 | 2.77 | 2.03 |
| $f_s 1.3L + IM$ | 19.70 | 19.40 | 23.14 |
| f_s (Service II) | 26.72 | 32.21 | 30.72 |
| f_s (Total)(Strength I) | 35.69 | 42.82 | 41.14 |
| V_f | 25.0 | | 23.7 |

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in⁴ and in³).

Z : Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in³).

$DC1$: Un-factored non-composite dead load (kips/ft.).

M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).

$DC2$: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW : Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_L + Imp$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

$1.25(M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + Imp$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_f M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).

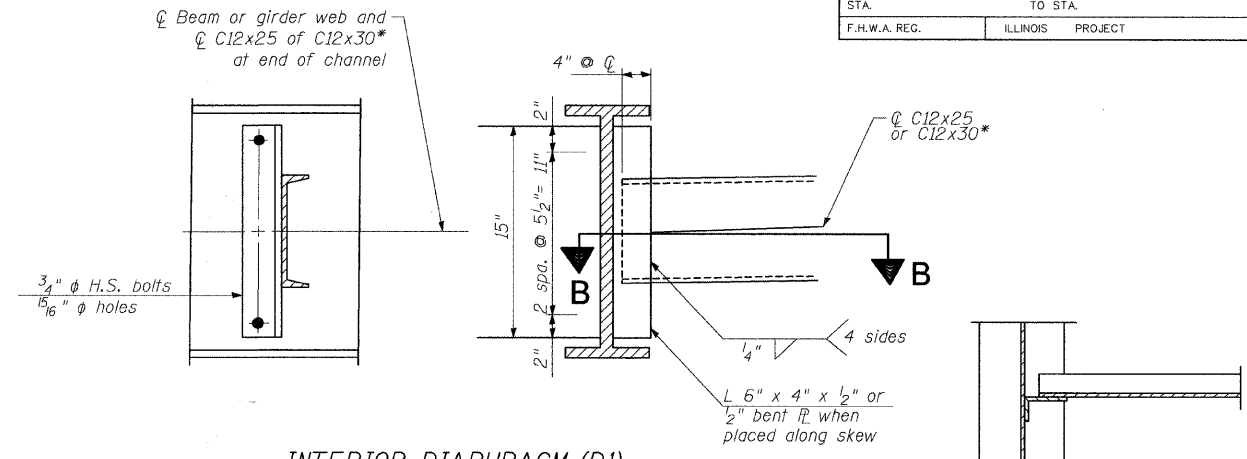
$M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_L + Imp$

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).

$1.25(M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + Imp$

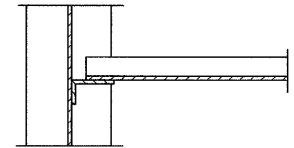
V_f : Factored shear range computed according to Article 6.10.10.

| | Abuts. | Pier 1 or Pier 2 |
|--------------|--------|------------------|
| R_{DC1} | 8.4 | 28.4 |
| R_{DC2} | 1.8 | 5.5 |
| R_{DW} | 4.0 | 11.9 |
| $R_{L + IM}$ | 45.9 | 65.4 |
| R (Total) | 60.1 | 111.2 |



INTERIOR DIAPHRAGM (DI)

(30 Required)



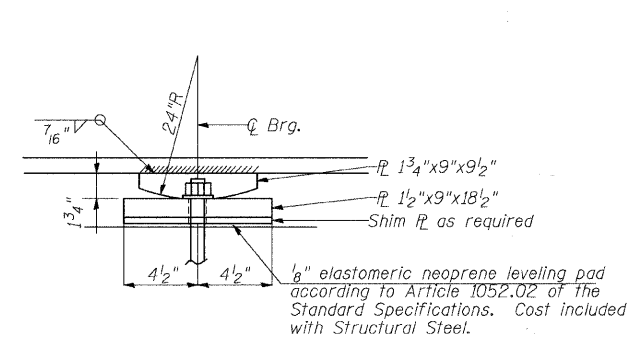
SECTION B-B

Notes:

Two hardened washers required for each set of oversized holes.

*Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

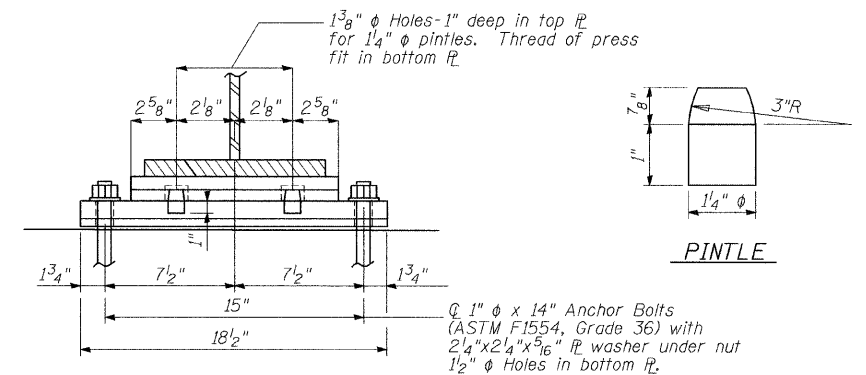


ELEVATION AT PIER

FIXED BEARING

Notes:

- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified, ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
- Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270, Grade 50W.

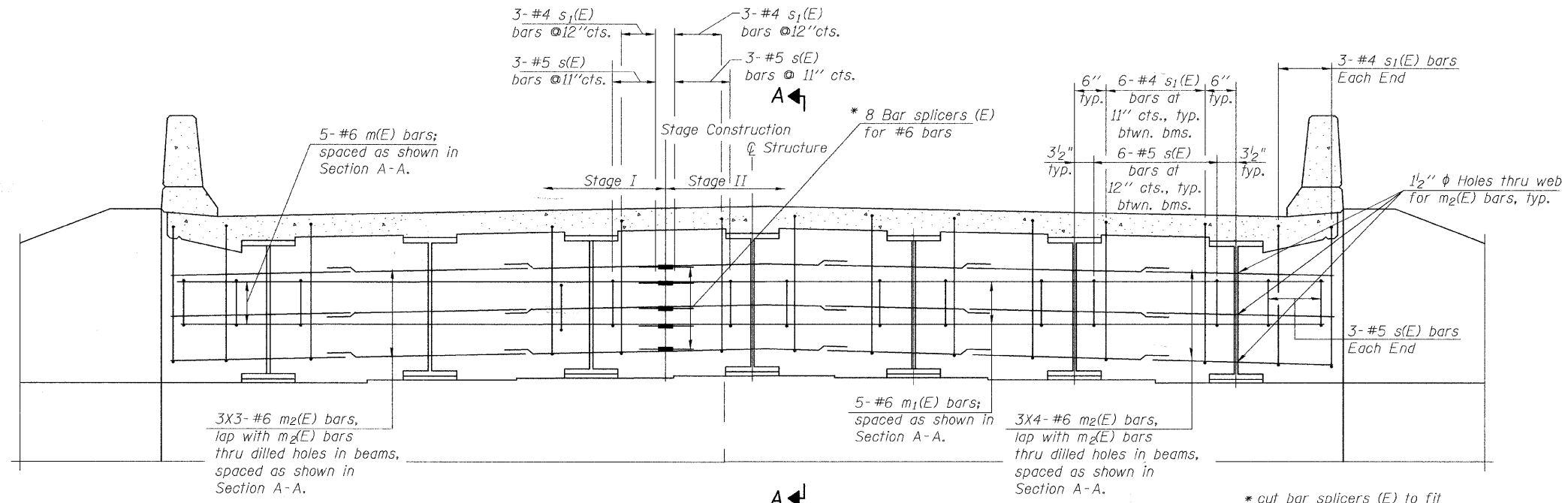


SECTION B-B

PINTLE

FRAMING PLAN & BEAM DETAILS
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
STATION 10+00

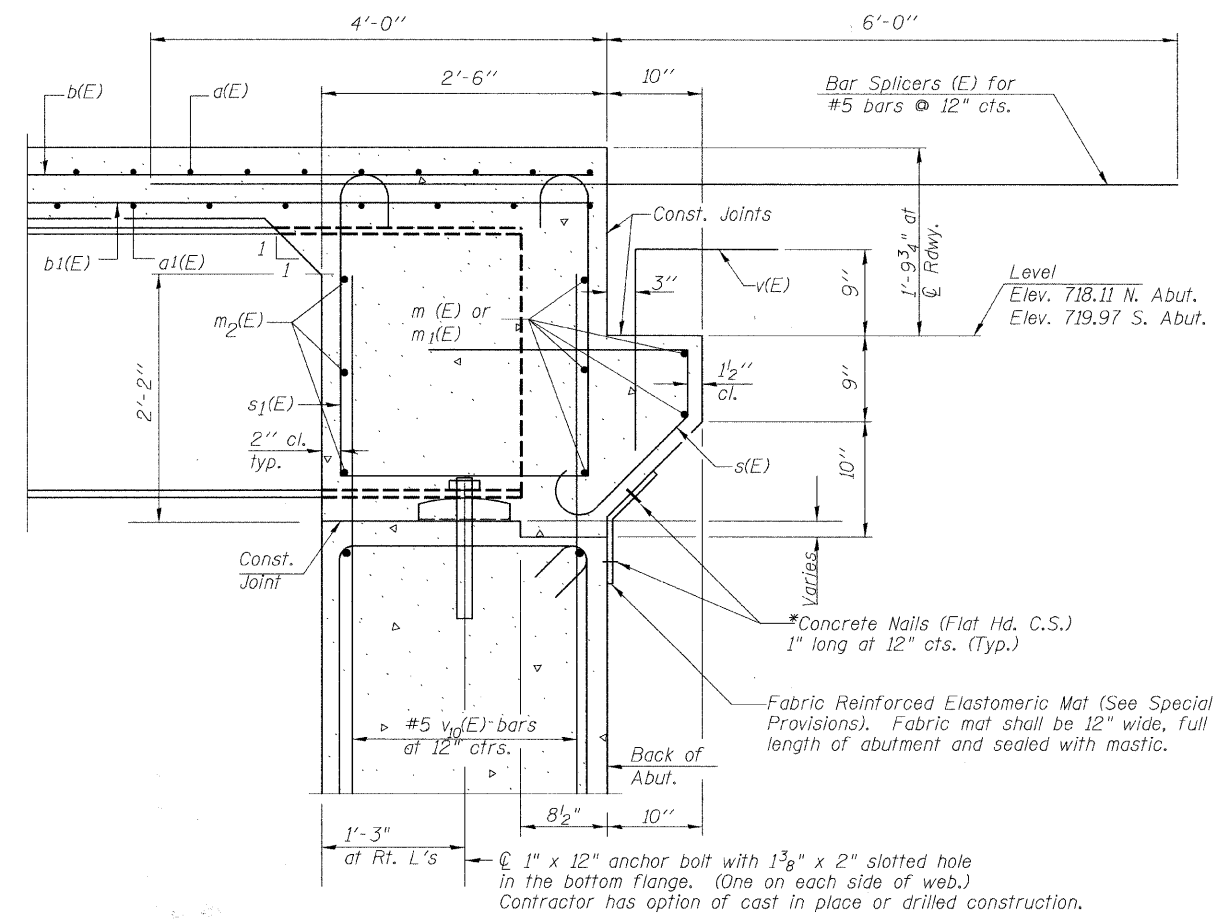
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 24 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



DIAPHRAGM ELEVATION AT ABUTMENT

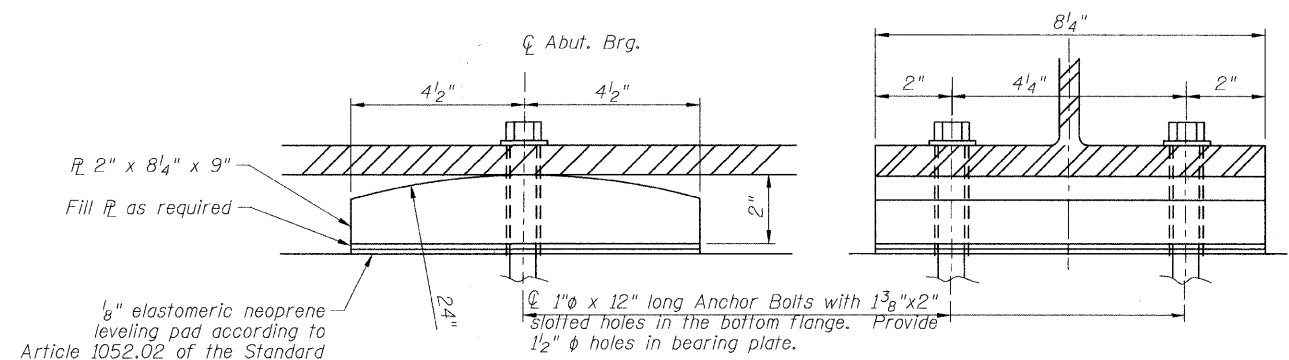
* cut bar splicers (E) to fit in field as required

Notes:
 Reinforcement bars in diaphragm are billed with superstructure on sheet 10 of 23.
 Concrete in diaphragm is included with Concrete Superstructure on sheet 10 of 23.
 For details of bars s(E) and s1(E) see sheet 10 of 23.



SECTION A-A

Dimensions at right angles to abutment, except as shown.



ELEVATION AT ABUT

SECTION B-B

ROCKER PLATE DETAIL

14 REQUIRED

Rocker Plates shall be AASHTO M270 Gr. 50W

MIN. BAR LAP

#6 bar = 2'-9"

DIAPHRAGM DETAILS
 LINCOLN AVENUE OVER SALINE BRANCH
 FAU 7177 SECTION 07-25932-00-BR
 CHAMPAIGN COUNTY
 STRUCTURE NO. 010-4541

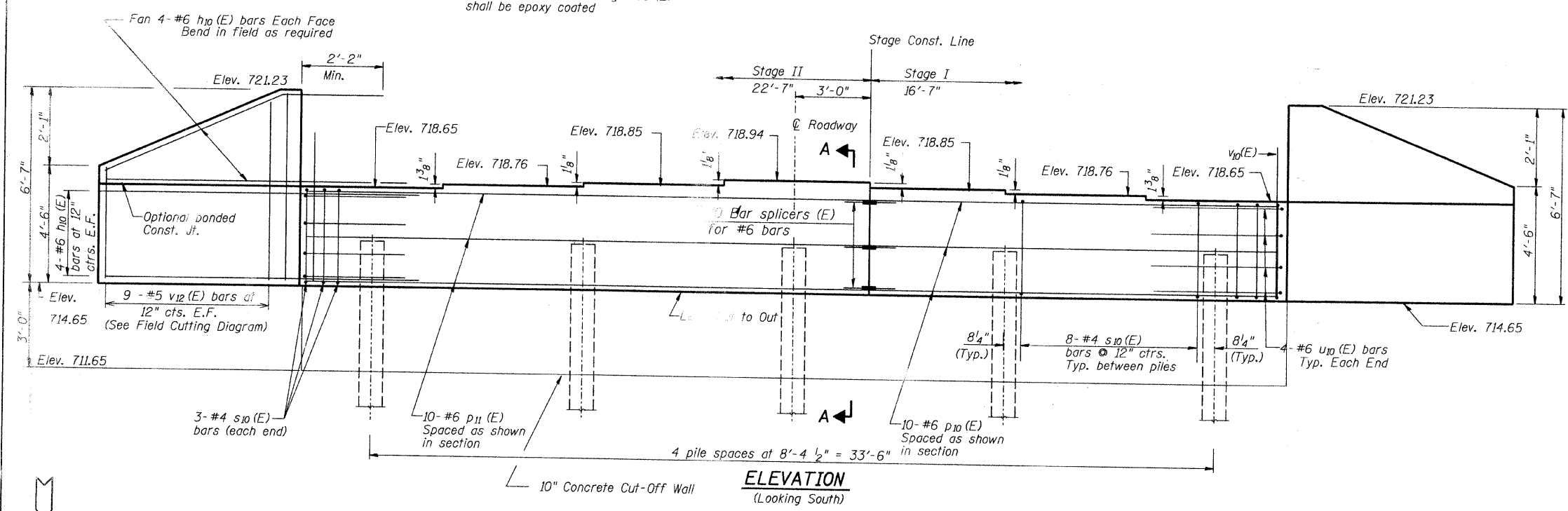
| |
|-------------------------|
| DIAPHRAGM DETAILS |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| STATION 10+00 |

*Included in the cost of "Concrete Structures".

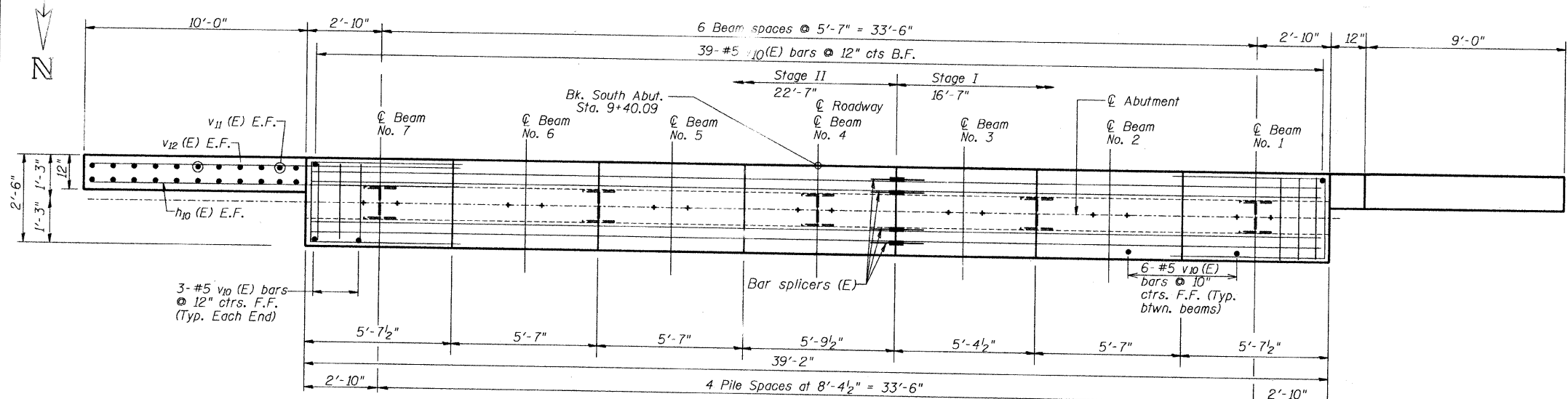
**Included in the cost of "Porous Granular Embankment".

| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 25 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

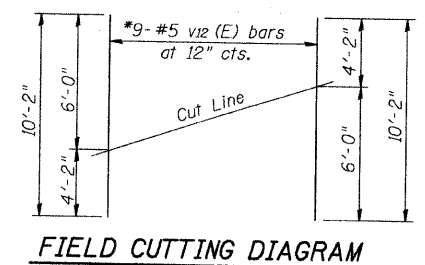
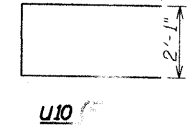
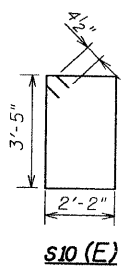
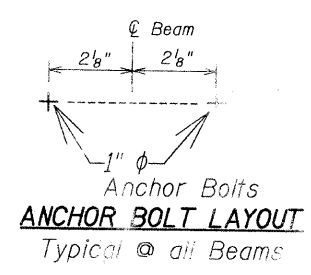
Notes: Pour steps monolithically with cap. Reinforcement bars designated (E) shall be epoxy coated



ELEVATION
(Looking South)

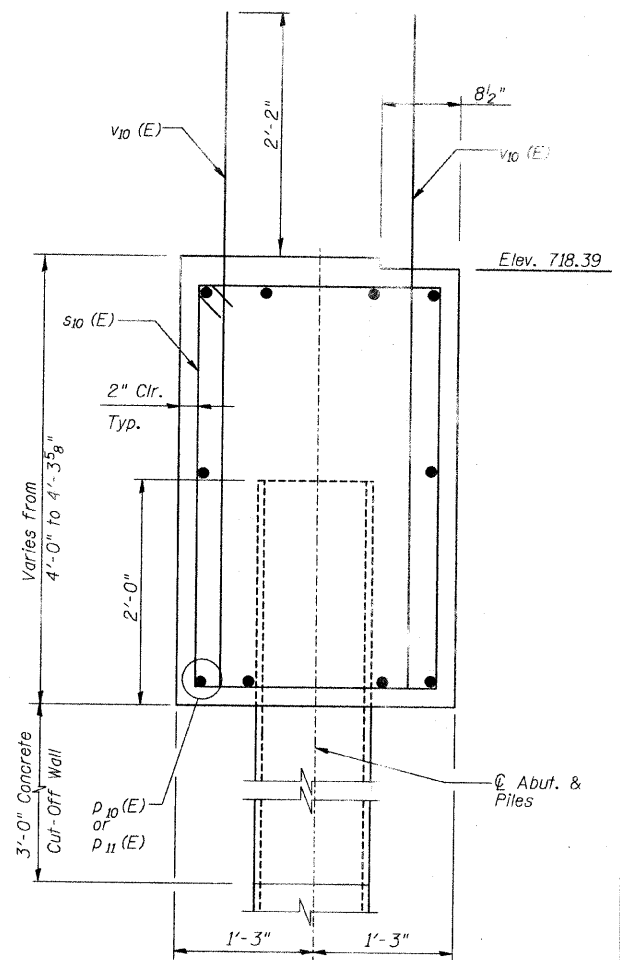


PLAN



FIELD CUTTING DIAGRAM
* Order v12 (E) full length. Cut as shown and use remainder of bars in opposite face.

PILE DATA
Type : Steel HP10X42
Nominal Req'd Bearing : 207 kips
Allowable Resistance Available : 69 kips
Est. Length : 38'
No. Required : 4
Test Pile : 1



SECTION A-A

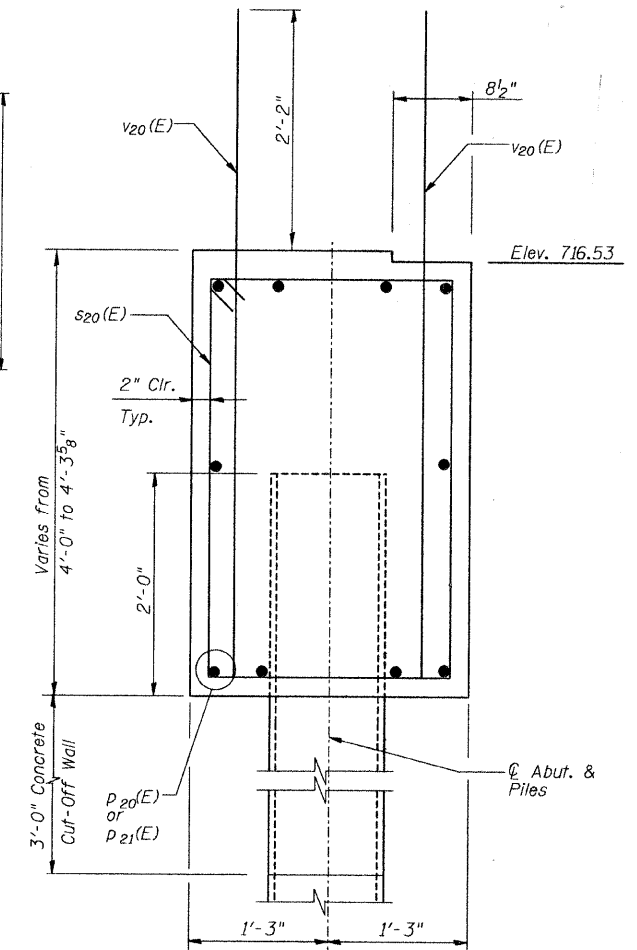
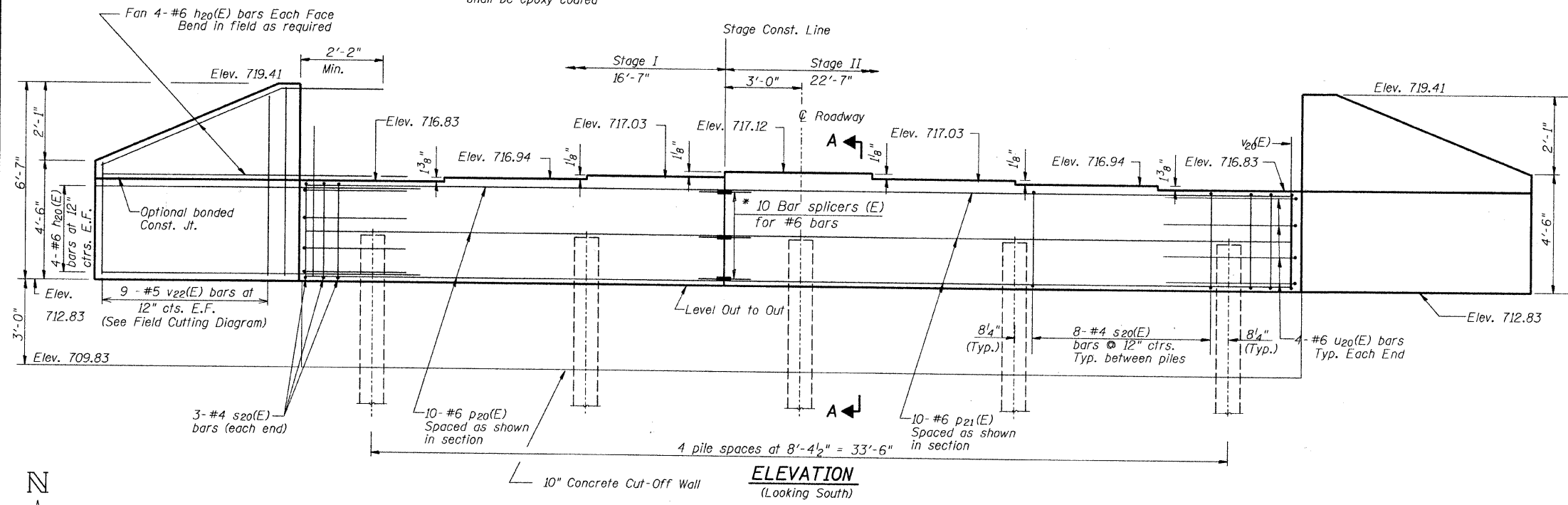
BILL OF MATERIAL

| Bar No. | Size | Length | Shape |
|------------------------|---------|--------|---------|
| v10(E) | 32 | #6 | 12'-6" |
| p10(E) | 10 | #6 | 16'-3" |
| p11(E) | 10 | #6 | 22'-3" |
| s10(E) | 38 | #4 | 11'-11" |
| u10(E) | 8 | #6 | 10'-1" |
| v10(E) | 12 | #5 | 6'-0" |
| v11(E) | 8 | #5 | 6'-3" |
| v12(E) | 18 | #5 | 10'-2" |
| Structure Excavation | Cu. Yd. | 86 | |
| Concrete Structures | Cu. Yd. | 19.2 | |
| Reinforcement Bars | Pound | 2300 | |
| Epoxy Coated | | | |
| Furnishing Steel Piles | Foot | 152 | |
| HP10X42 | | | |
| Driving Piles | Foot | 152 | |
| Concrete Cut-Off Wall | Cu. Yd. | 3.6 | |
| Pile Shoes | Each | 5 | |
| Test Pile HP10X42 | Each | 1 | |

SOUTH ABUTMENT
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q. STATION 10+00

| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 26 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

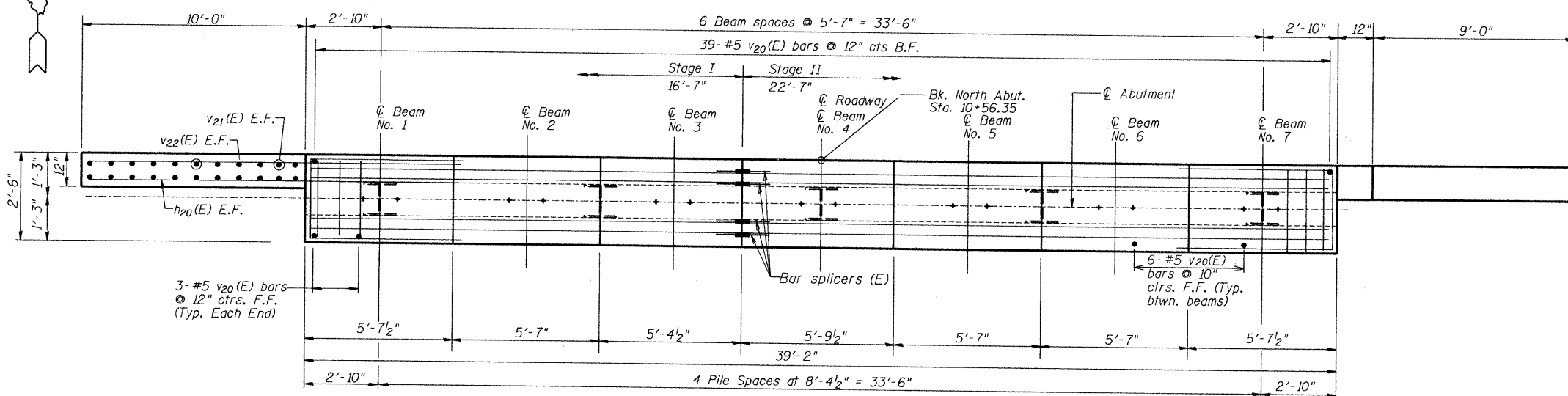
Notes: Pour steps monolithically with cap.
Reinforcement bars designated (E)
shall be epoxy coated



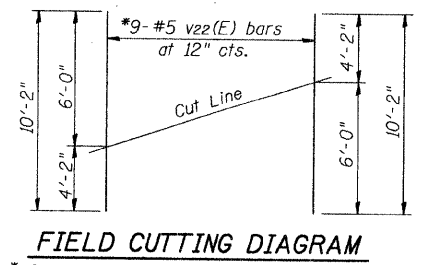
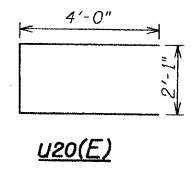
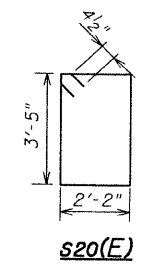
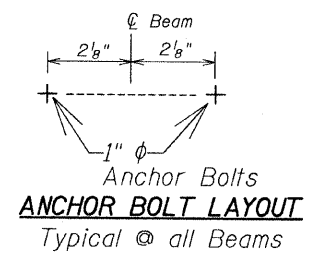
SECTION A-A

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---------------------------------|-----|---------|---------|-------|
| h ₂₀ (E) | 32 | #6 | 12'-6" | — |
| p ₂₀ (E) | 10 | #6 | 16'-3" | — |
| p ₂₁ (E) | 10 | #6 | 22'-3" | — |
| s ₂₀ (E) | 38 | #4 | 11'-11" | □ |
| u ₂₀ (E) | 8 | #6 | 10'-1" | ⊔ |
| v ₂₀ (E) | 72 | #5 | 6'-0" | — |
| v ₂₁ (E) | 8 | #5 | 6'-3" | — |
| v ₂₂ (E) | 18 | #5 | 10'-2" | — |
| Structure Excavation | | Cu. Yd. | 86 | |
| Concrete Structures | | Cu. Yd. | 19.2 | |
| Reinforcement Bars Epoxy Coated | | Pound | 2300 | |
| Furnishing Steel Piles HP10X42 | | Foot | 180 | |
| Driving Piles | | Foot | 180 | |
| Concrete Cut-Off Wall | | Cu. Yd. | 3.6 | |
| Pile Shoes | | Each | 5 | |
| Test Pile HP10X42 | | Each | 1 | |



Note: All edges shall have a standard 3/4" chamfer except as noted. One test pile is required at South Abutment.



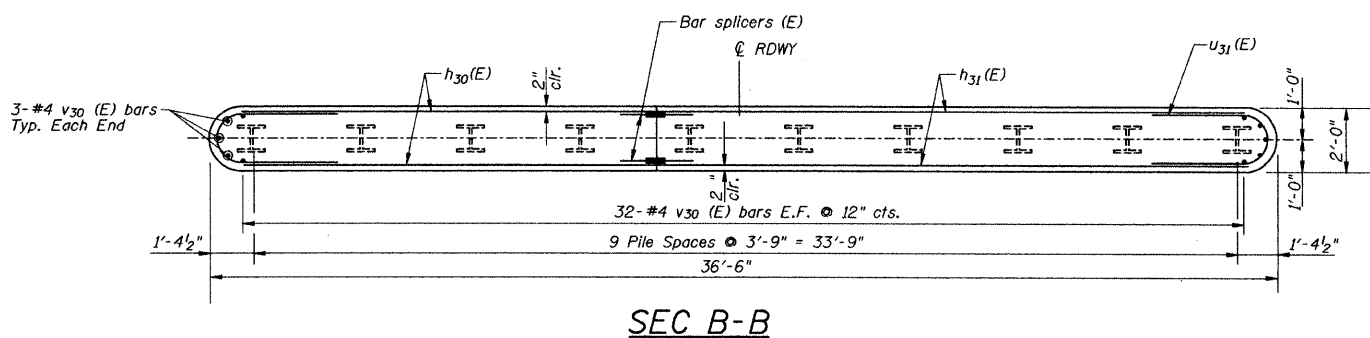
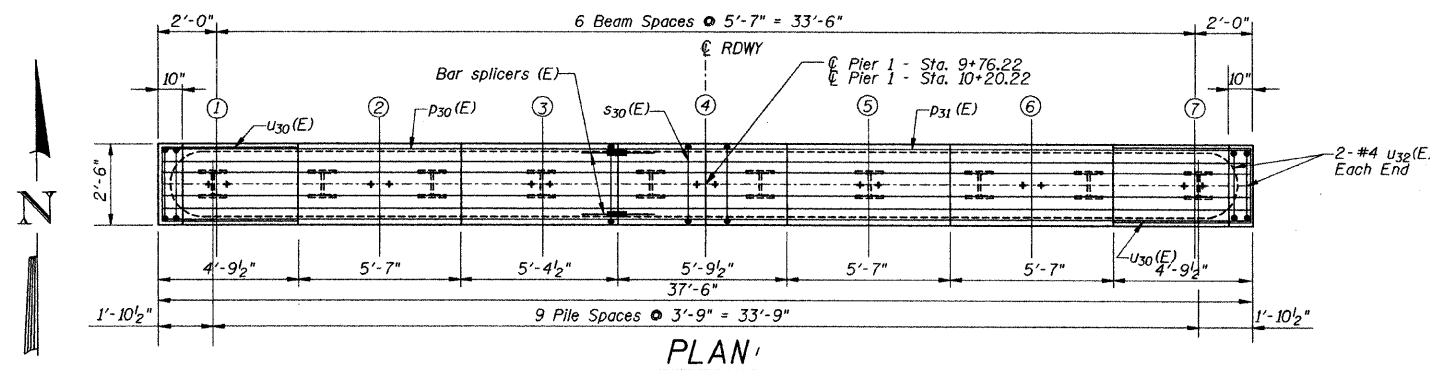
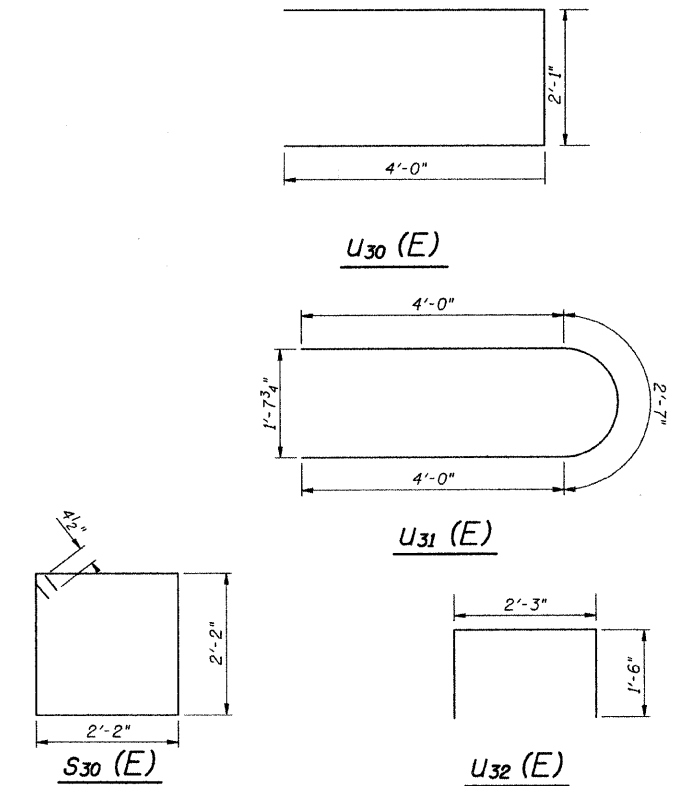
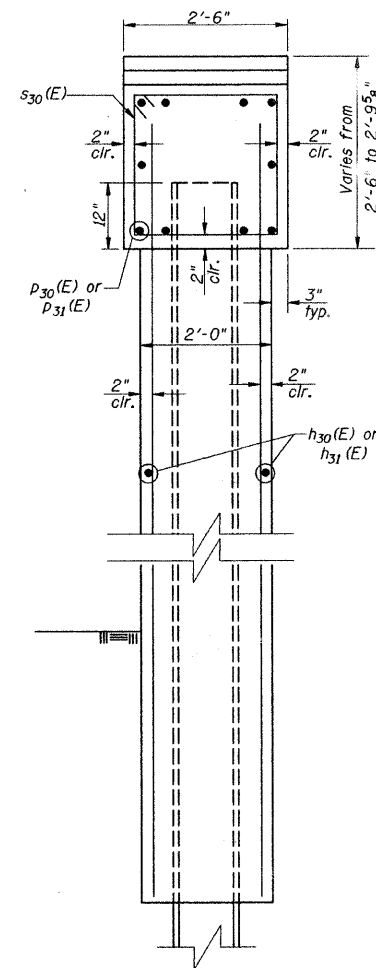
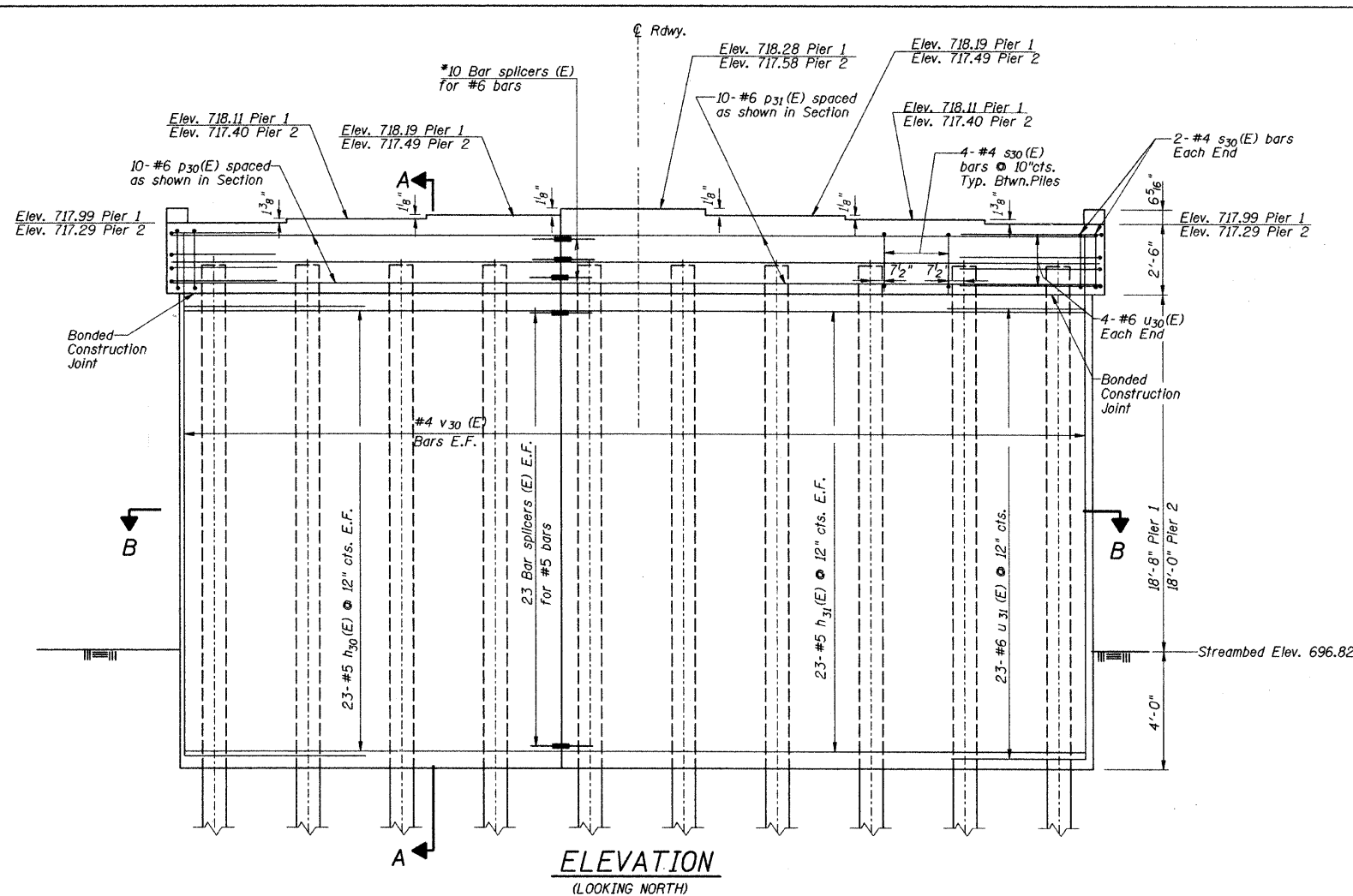
* Order v₂₂(E) full length. Cut as shown and use remainder of bars in opposite face.

PILE DATA

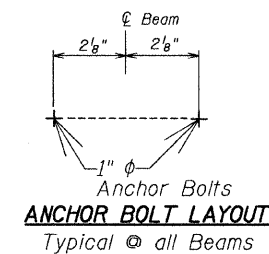
Type : Steel HP10X42
Nominal Req'd Bearing : 207 kips
Allowable Resistance Available : 69 kips
Est. Length : 45'
No. Required : 4
Test Pile : 1

NORTH ABUTMENT
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 27 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



Note: All edges shall have a standard 3/4\"/>



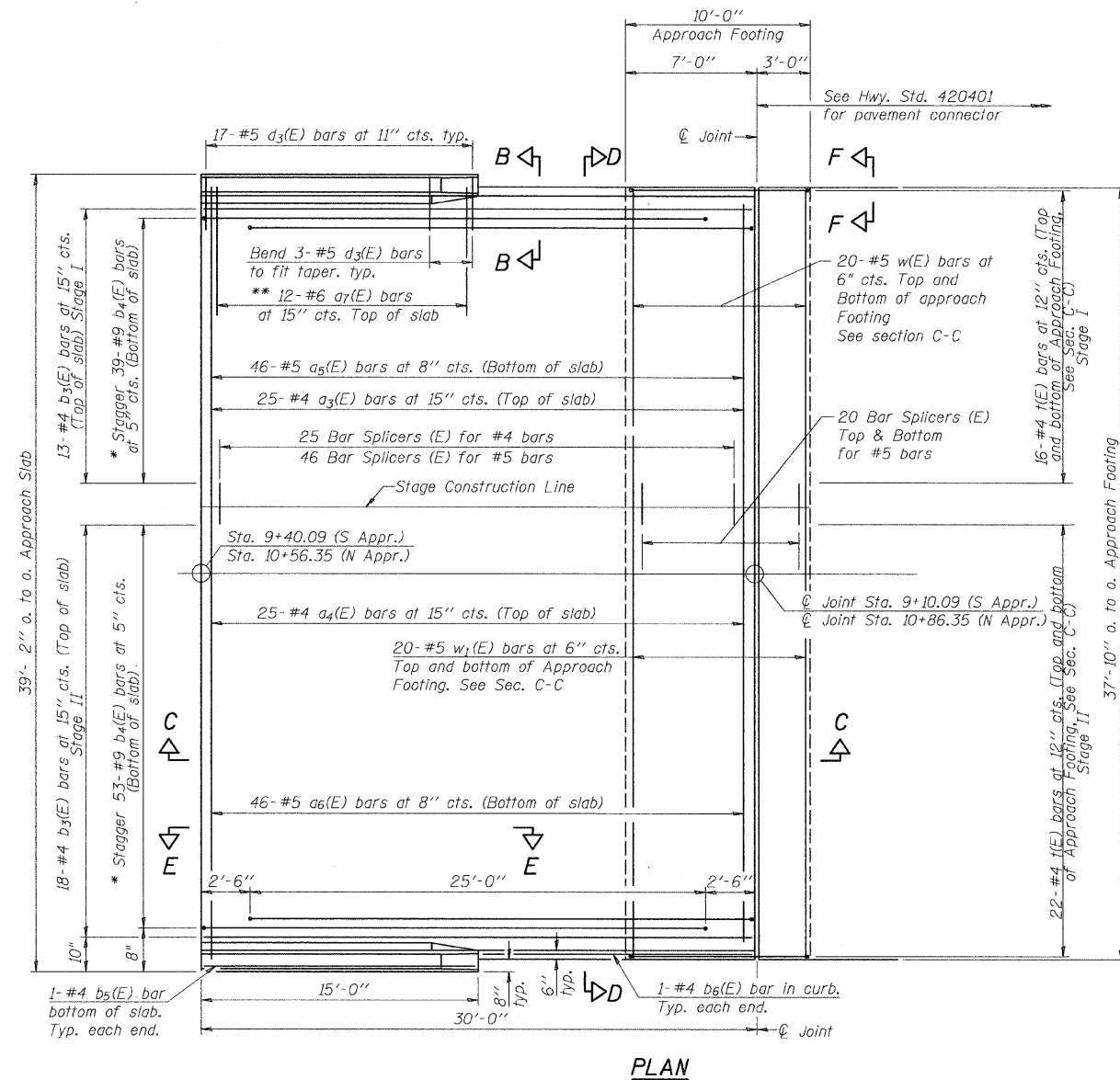
PILE DATA
 Type : Steel HP10X42
 Nominal Req'd Bearing : 237 kips
 Allowable Resistance Available : 79 kips
 Est. Length : 67'
 No. Required : 18
 Test Pile: 2, 1 @ Pier 1, 1 @ Pier 2

BILL OF MATERIAL (2 PIERS)

| Bar | No. | Size | Length | Shape |
|---------------------------------|-----|------|---------|-------|
| h30(E) | 92 | #5 | 15'-0" | — |
| h31(E) | 92 | #5 | 21'-0" | — |
| p30(E) | 20 | #6 | 15'-6" | — |
| p31(E) | 20 | #6 | 21'-6" | — |
| s30(E) | 80 | #4 | 9'-5" | ⊔ |
| U30(E) | 16 | #6 | 10'-1" | ⊔ |
| U31(E) | 92 | #6 | 10'-7" | ⊔ |
| U32(E) | 8 | #4 | 5'-3" | ⊔ |
| v30(E) | 140 | #4 | 24'-0" | — |
| Concrete Structures | | | Cu. Yd. | 137.8 |
| Reinforcement Bars Epoxy Coated | | | Pound | 9050 |
| Furnishing Steel Piles HP 10x42 | | | Foot | 1206 |
| Driving Piles | | | Foot | 1206 |
| Pile Shoes | | | Each | 20 |
| Structure Excavation | | | Cu. Yd. | 90 |
| Test Pile HP10X42 | | | Each | 2 |

PIER DETAILS
 SECTION: 07-25932-00-BR
 CHAMPAIGN COUNTY
 @ STATION 10+00

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|------------------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 28 |
| STA. TO STA. | | | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

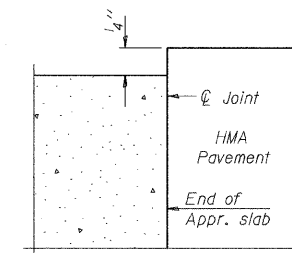


PLAN

- * Tilt #9 b₄(E) bars as required to maintain clearance.
- ** Alternate with a₃(E) or a₄(E) bars, typ. ea. parapet.

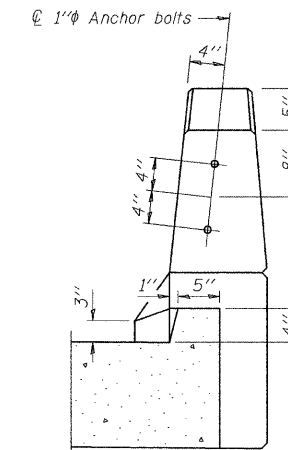
Note:
The Northeast Bridge approach slab parapet wall will be eliminated and replaced with guardrail. See sheet 36 of 50 for details.

Notes:
See sheet 29 of 49 for Sections C-C & D-D and View E-E. a₃(E), a₄(E), a₅(E), a₆(E), and w(E) bar spacings measured perpendicular to ϕ Rdwy.



FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B

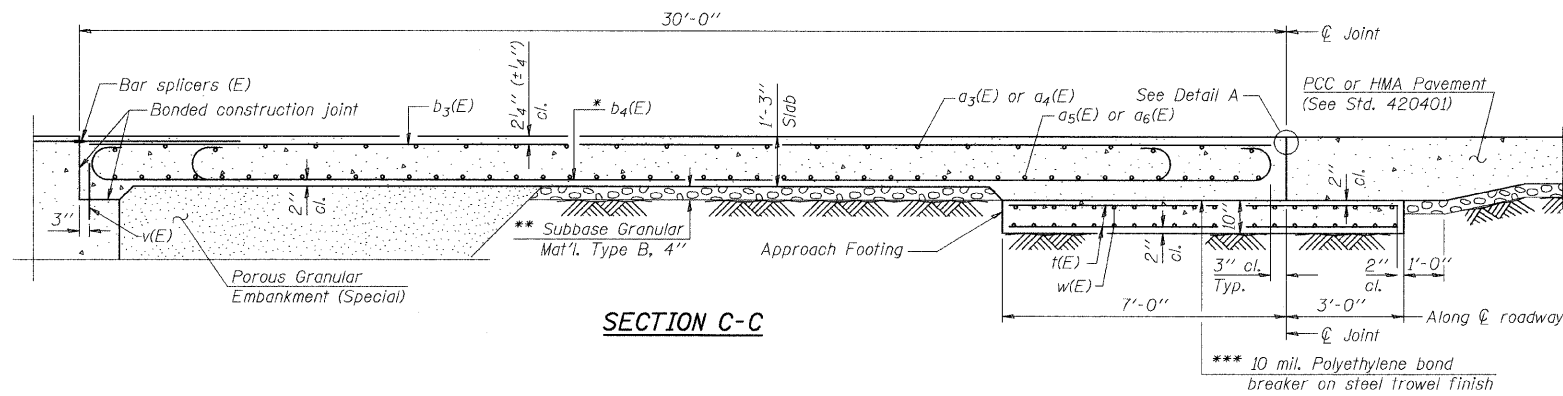
(Exit ends only)

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 010-4541

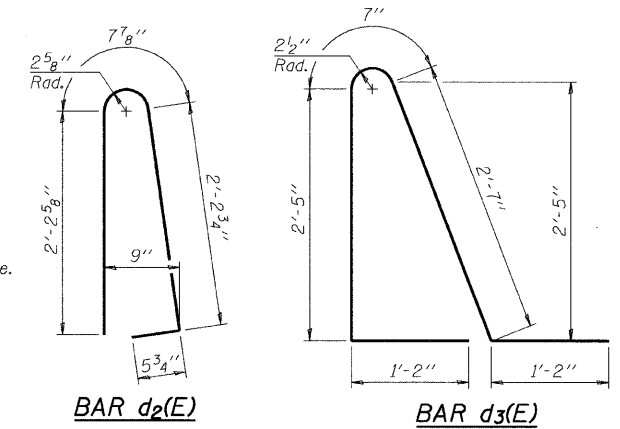
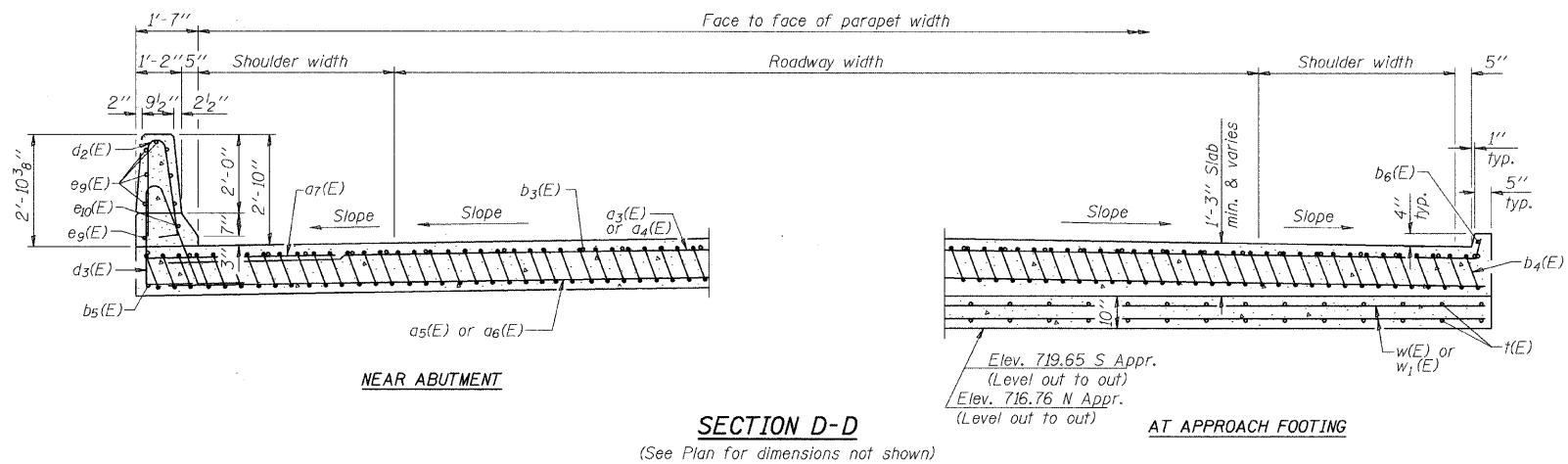
(Sheet 1 of 2)

| | | | |
|------------------------------|--|--|--|
| BRIDGE APPROACH SLAB DETAILS | | | |
| SECTION: 07-25932-00-BR | | | |
| CHAMPAIGN COUNTY | | | |
| ϕ STATION 10+00 | | | |

| | | | | |
|-----------------|----------------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 29 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

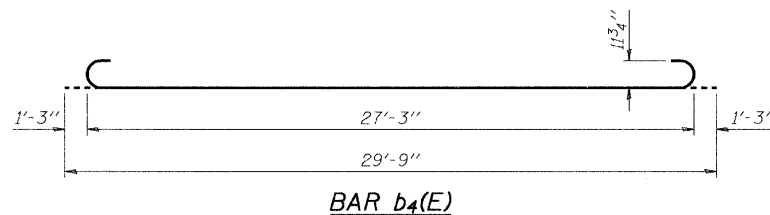
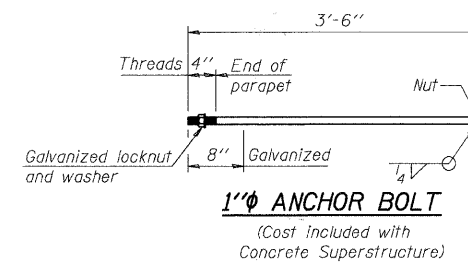
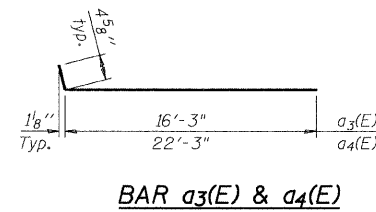
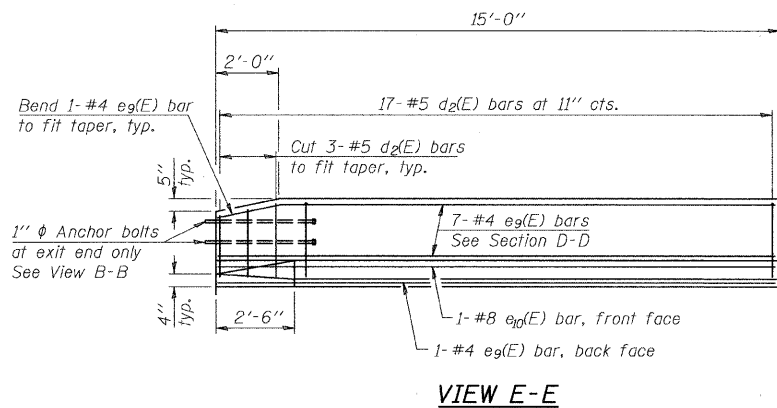


Notes:
 See sheet 11 of 23 for Detail A and View B-B.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 10 of 23.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 21 of 23.
 Cost of excavation for approach footing included with Concrete Structures.
 For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 23.



**TWO APPROACHES
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|--------|-------|
| a3(E) | 50 | #4 | 16'-8" | — |
| a4(E) | 50 | #4 | 22'-8" | — |
| a5(E) | 92 | #5 | 16'-3" | — |
| a6(E) | 92 | #5 | 19'-3" | — |
| a7(E) | 48 | #6 | 6'-0" | — |
| b3(E) | 62 | #4 | 29'-8" | — |
| b4(E) | 184 | #9 | 29'-9" | — |
| b5(E) | 4 | #4 | 14'-8" | — |
| b6(E) | 4 | #4 | 14'-8" | — |
| d2(E) | 68 | #5 | 5'-7" | — |
| d3(E) | 68 | #5 | 7'-11" | — |
| e9(E) | 32 | #4 | 14'-8" | — |
| e10(E) | 4 | #8 | 14'-8" | — |
| t(E) | 38 | #4 | 9'-8" | — |
| w(E) | 80 | #5 | 15'-7" | — |
| w1(E) | 80 | #5 | 21'-7" | — |
| Concrete Superstructure | | Cu. Yd. | 120.2 | |
| Concrete Structures | | Cu. Yd. | 23.4 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 30,300 | |

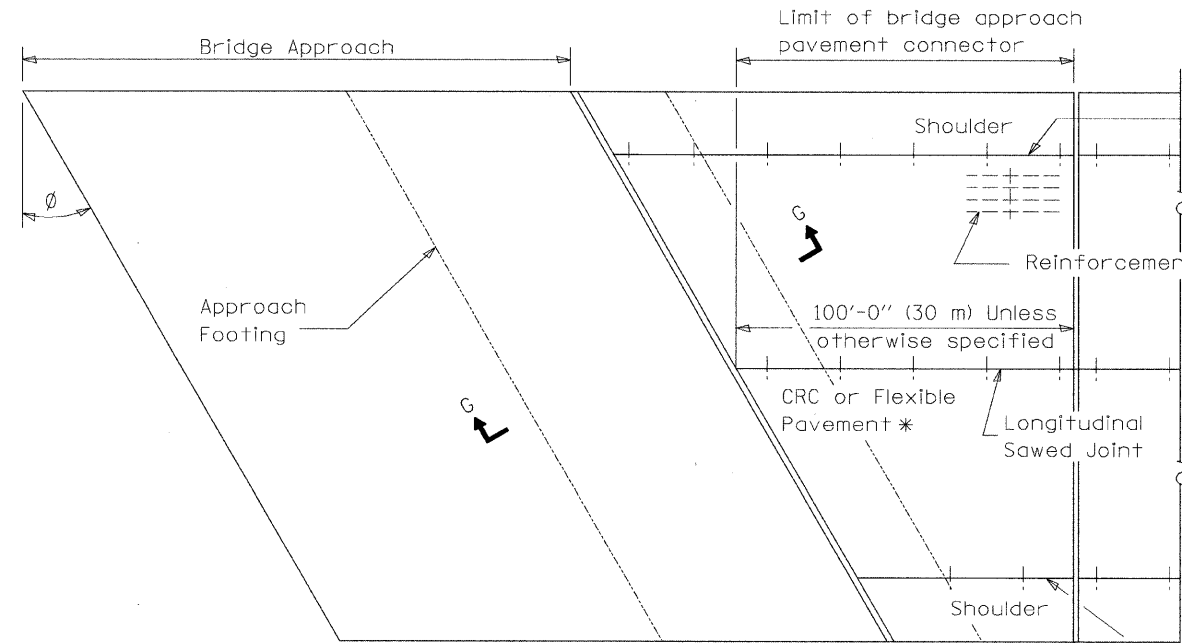


(Sheet 2 of 2)
**BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 010-4541**

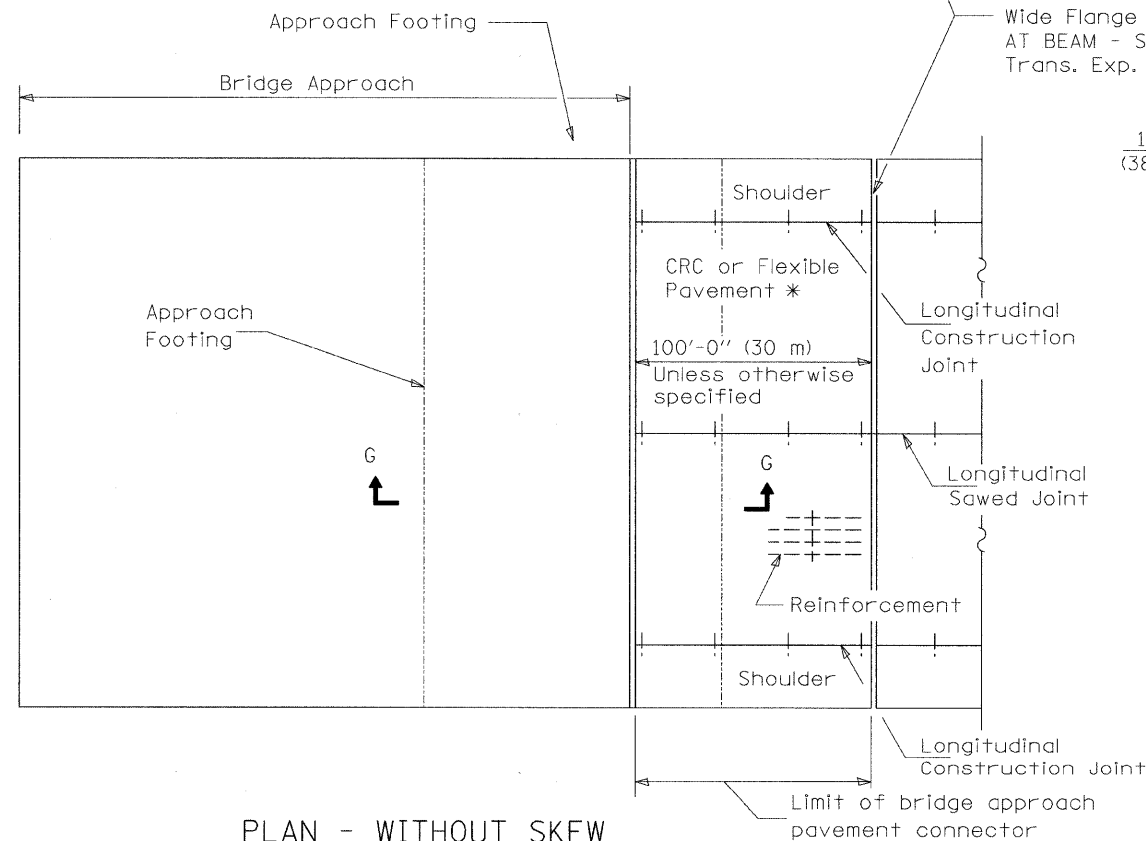
| |
|------------------------------|
| BRIDGE APPROACH SLAB DETAILS |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| Q. STATION 10+00 |

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|-----------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 30 |
| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |

NEW CONSTRUCTION

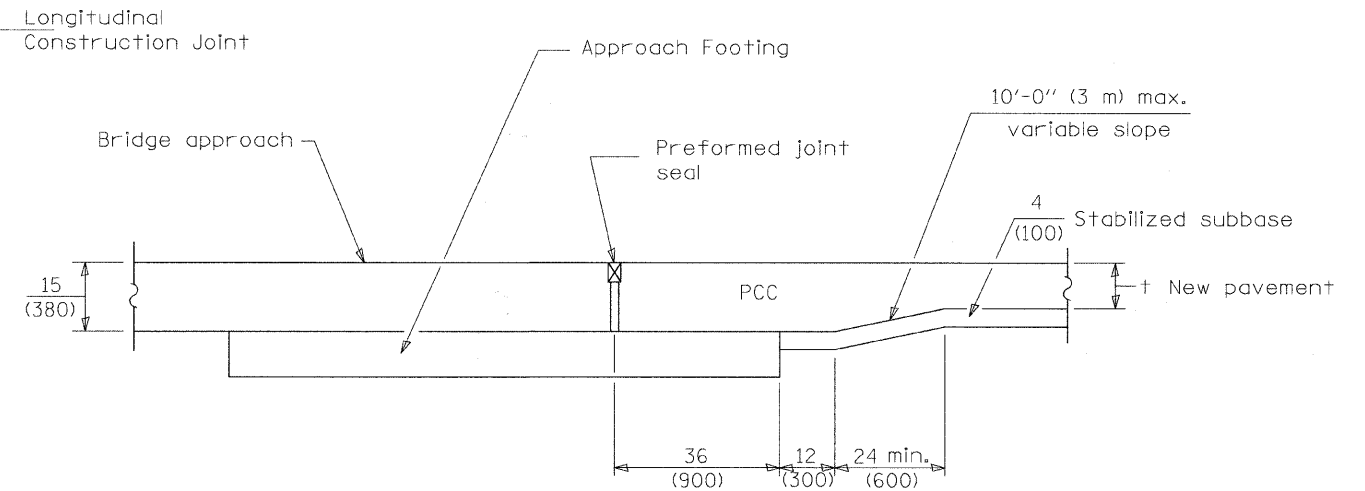


PLAN - WITH SKEW



PLAN - WITHOUT SKEW

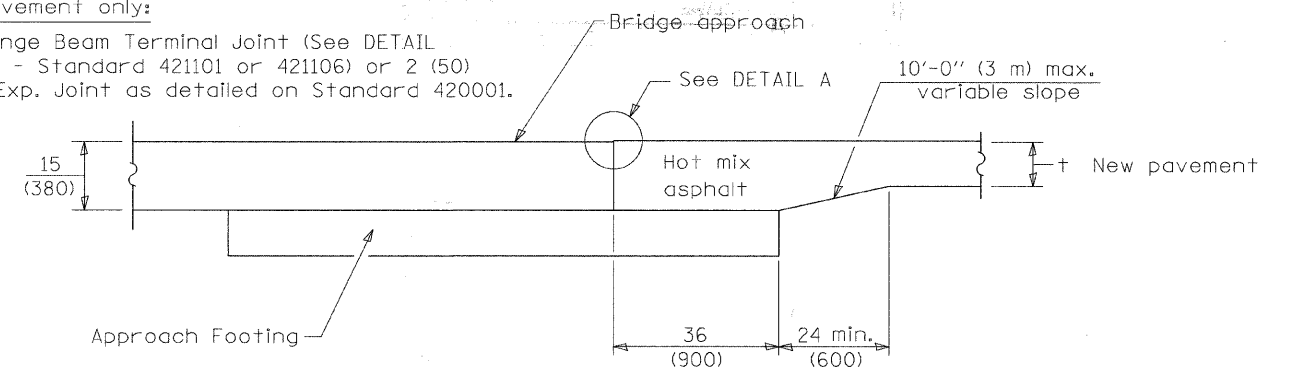
* Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.



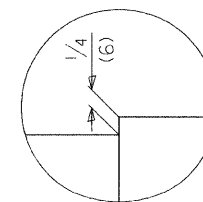
SECTION G-G - RIGID PAVEMENT

Rigid Pavement only:

Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



SECTION G-G - FLEXIBLE PAVEMENT



DETAIL A

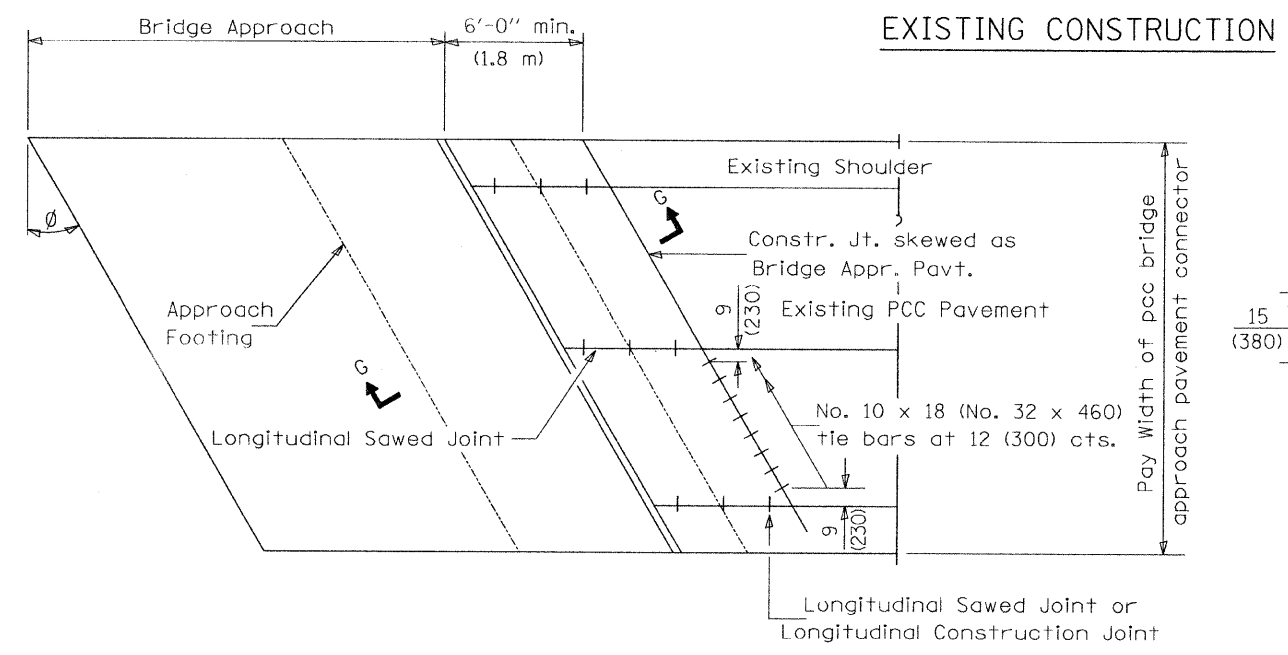
GENERAL NOTES

- THICKNESS-"t"=Thickness of Pavement.
- See Standard 421001 for reinforcement details not shown.
- See Standard 420001 for joint details not shown.
- See plans for details of bridge approach, approach footing and preformed joint seal.
- All dimensions are in inches (millimeters) unless otherwise shown.

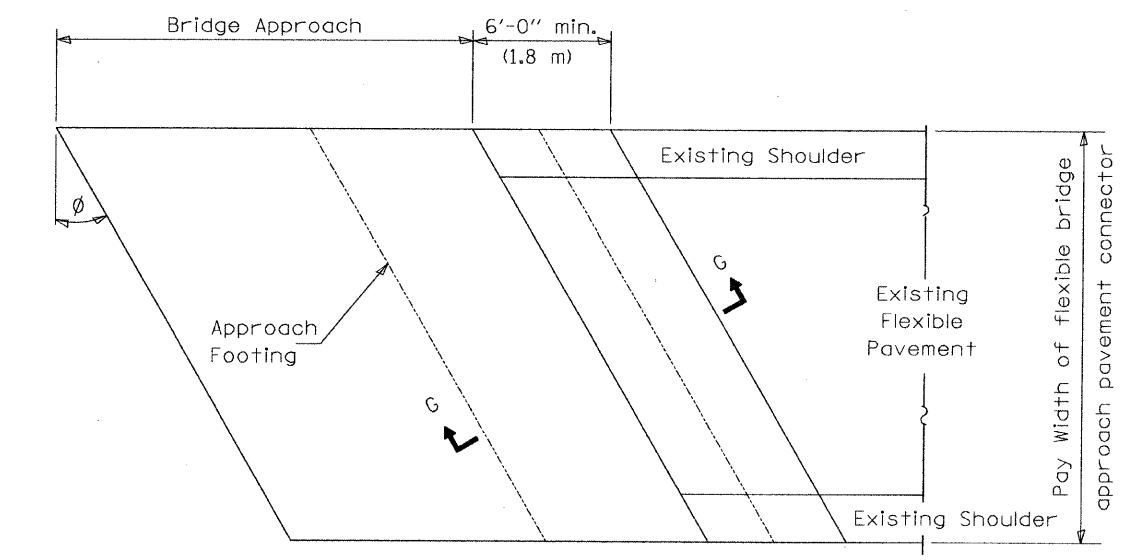
BRIDGE APPROACH PAVEMENT CONNECTOR
(Sheet 1 of 2)

SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q. STATION 10+00

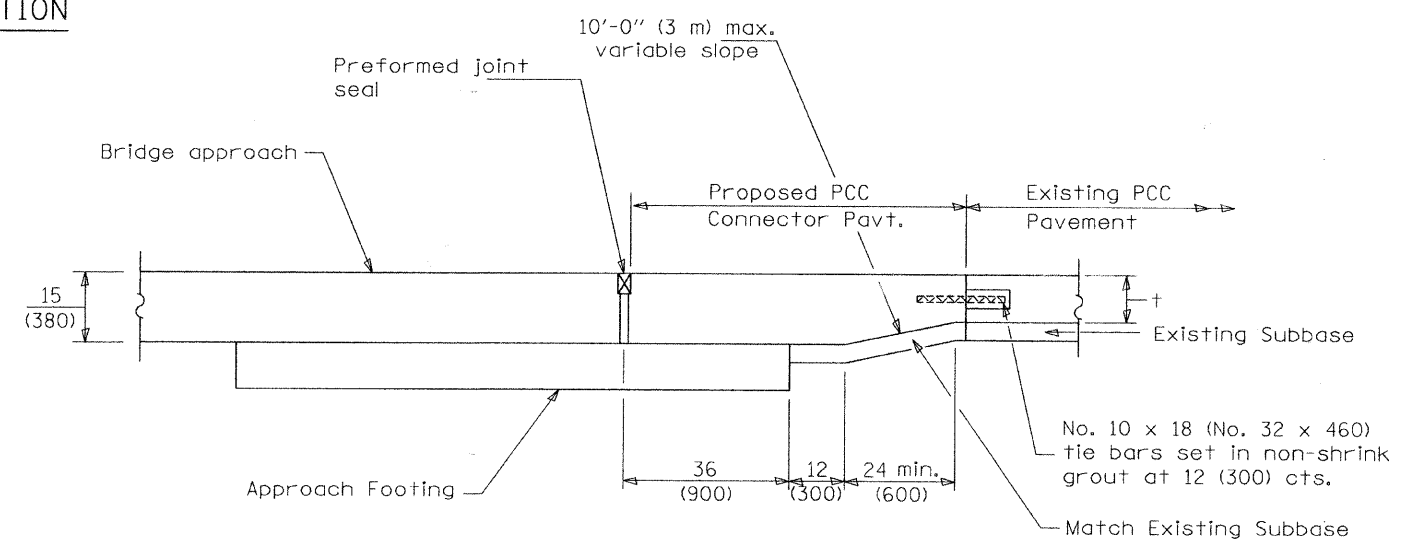
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| STA. | | TO STA. | | |
| F.I.L.W.A. REG. | | ILLINOIS PROJECT | | |



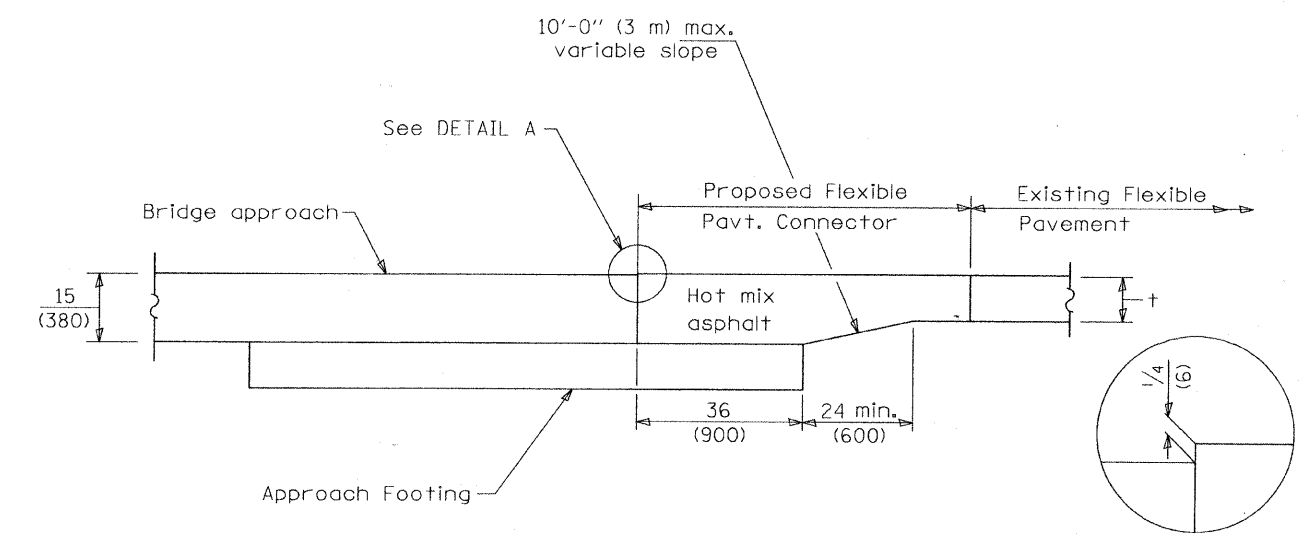
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)



SECTION G-G - RIGID PAVEMENT



SECTION G-G - FLEXIBLE PAVEMENT

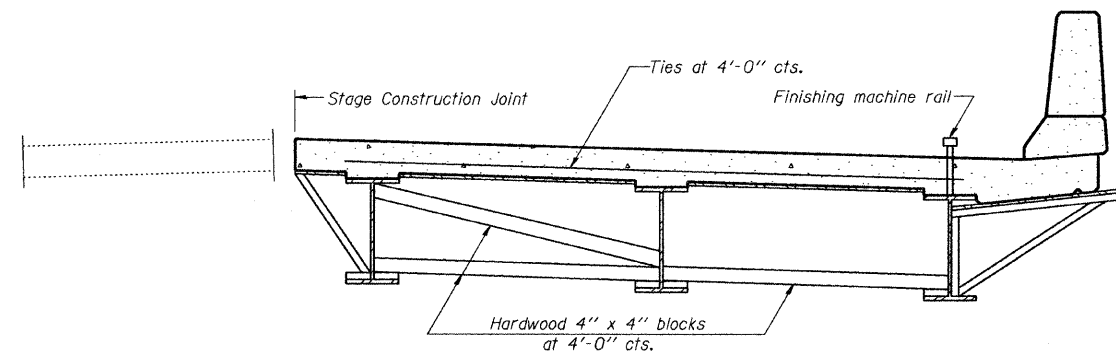
DETAIL A

BRIDGE APPROACH PAVEMENT CONNECTOR
(Sheet 2 of 2)

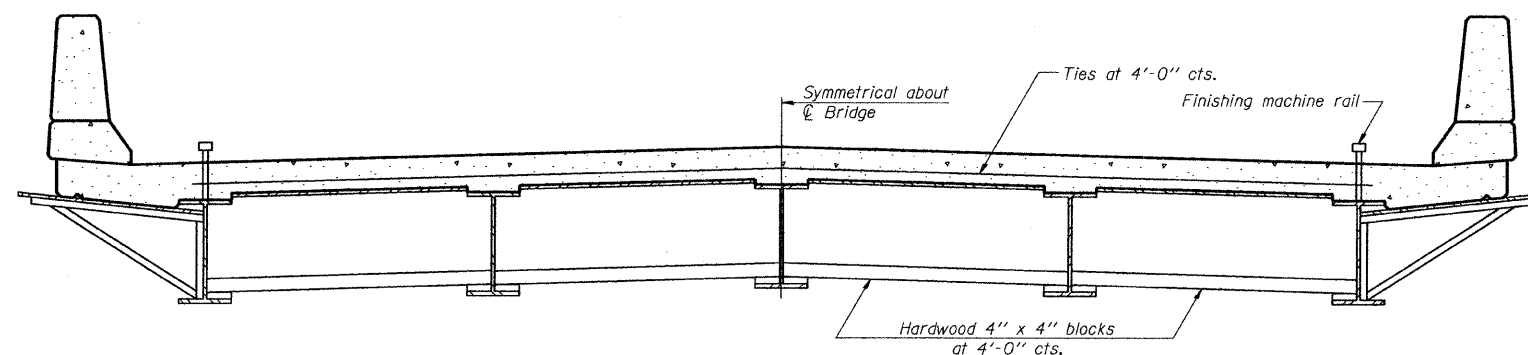
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
Q STATION 10+00

Bridge Approach Pavement Connector.dgn 6/3/2009 1:19:20 PM

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| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |



**FORM BRACES FOR
STAGE CONSTRUCTION**



**FORM BRACES FOR
STANDARD CONSTRUCTION**

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.
 The finishing machine rails shall be placed on the top flange of the exterior beams.
 The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.
 For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.

**CANTILEVER FORMING BRACKETS
FOR SUPERSTRUCTURES WITH
W27 BEAMS AND SMALLER
STRUCTURE NO. 010-4541**

CANTILEVER FORMING BRACKETS
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
STATION 10+00

| | | | | |
|-----------------|----------------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 33 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
 The coil wire shall be made of any suitable soft steel wire.
 The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
 The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
 Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
 The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

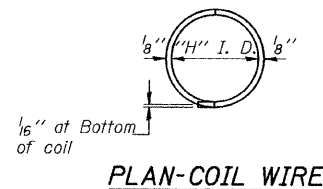
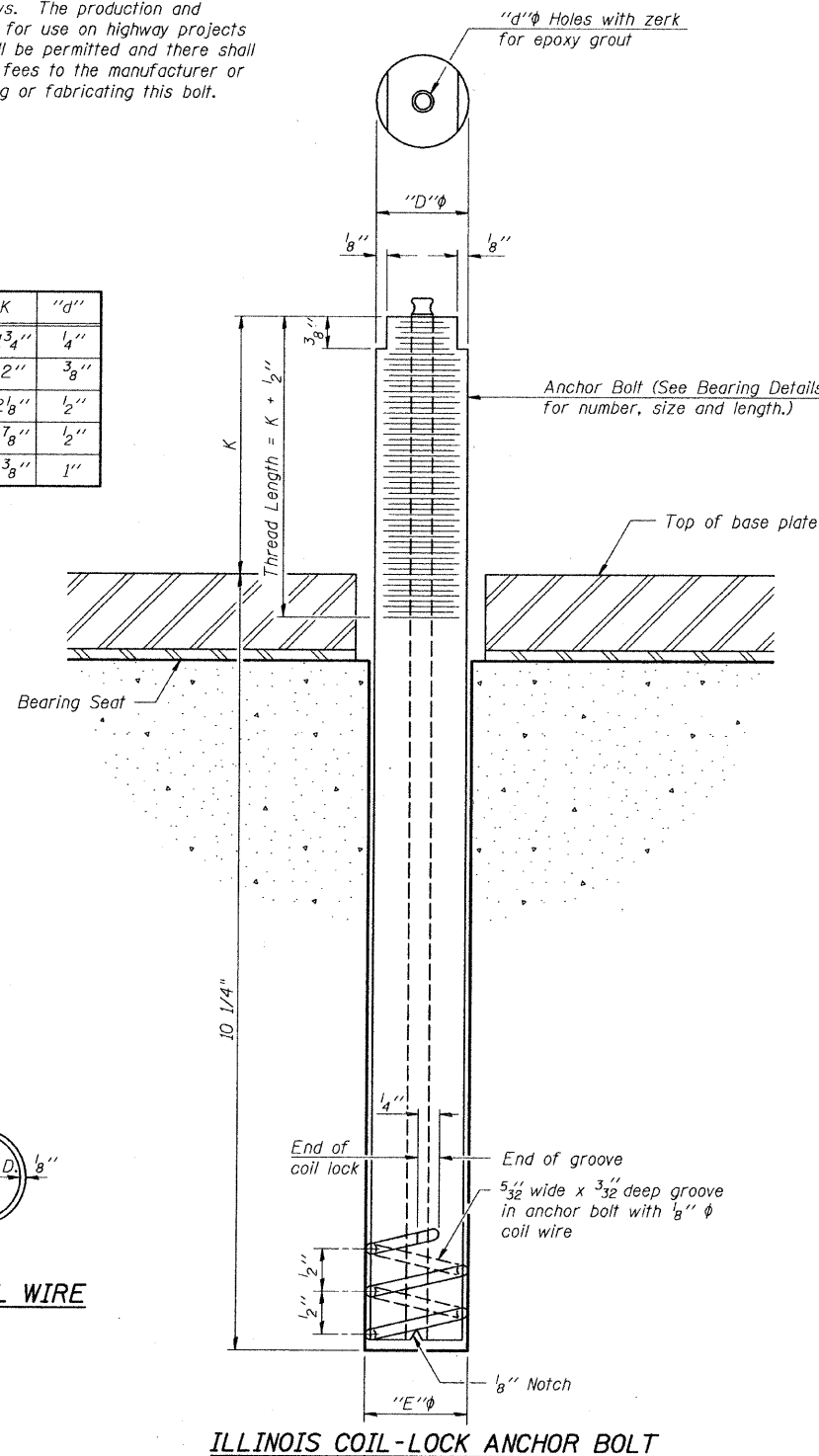
The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
 The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer of the type specified.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

| Location | Type |
|----------|------|
| Abuts. | A307 |
| Piers | A307 |
| | |
| | |

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

| D | E | H | K | "d" |
|--------|--------|---------|--------|------|
| 1" | 1 1/8" | 1 3/16" | 1 3/4" | 1/4" |
| 1 1/4" | 1 3/8" | 1 1/8" | 2" | 3/8" |
| 1 1/2" | 1 5/8" | 1 5/16" | 2 1/8" | 1/2" |
| 2" | 2 1/8" | 1 3/8" | 2 7/8" | 1/2" |
| 2 1/2" | 2 5/8" | 2 5/16" | 3 3/8" | 1" |



ILLINOIS COIL-LOCK ANCHOR BOLT

PLAN

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| ALIGNED | |
| CHECKED | |
| NO. | |

NOTE BOOK

PROFILE

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| GRADES | |
| CHECKED | |
| NO. | |

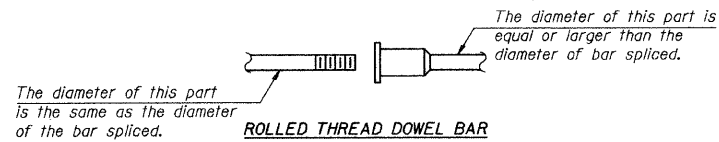
NOTE BOOK

ANCHOR BOLT DETAILS
 SECTION: 07-25932-00-BR
 CHAMPAIGN COUNTY
 Q STATION 10+00

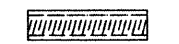
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| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

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| PLAN | SURVEYED | DATE |
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| | GRADES CHECKED | |
| | ALIGNMENT CHECKED | |
| | RT. OF WAY CHECKED | |
| | NO. | |

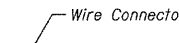
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| PROFILE | SURVEYED | DATE |
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| | GRADES CHECKED | |
| | STRUCTURE NOTATIONS CHKD | |
| | NO. | |



ROLLED THREAD DOWEL BAR



** ONE PIECE

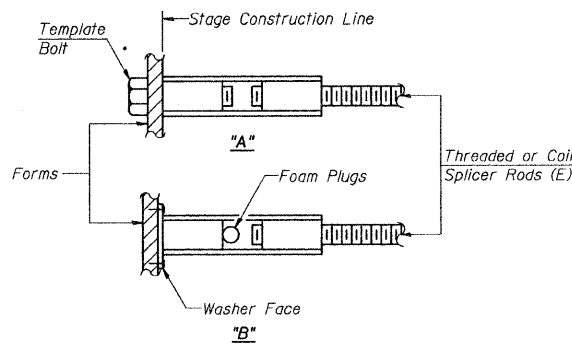


WIRE CONNECTOR

WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



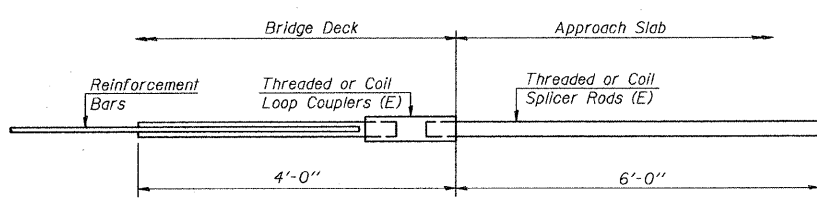
INSTALLATION AND SETTING METHODS

"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.

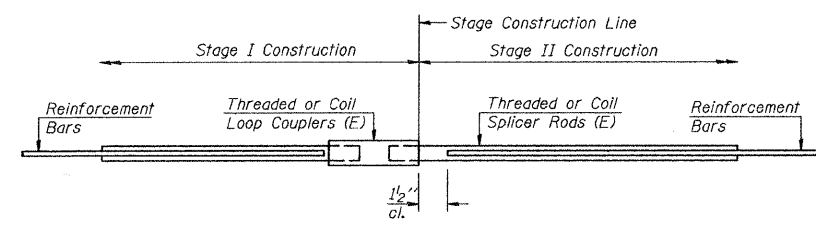
NOTES
 Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

| Bar Size to be Spliced | Splicer Rod or Dowel Bar Length | Strength Requirements | |
|------------------------|---------------------------------|------------------------------|---------------------------------------|
| | | Min. Capacity kips - tension | Min. Pull-Out Strength kips - tension |
| #4 | 1'-8" | 14.7 | 7.9 |
| #5 | 2'-2" | 23.0 | 12.3 |
| #6 | 2'-7" | 33.1 | 17.4 |
| #7 | 3'-5" | 45.1 | 23.8 |
| #8 | 4'-6" | 58.9 | 31.3 |
| #9 | 5'-9" | 75.0 | 39.6 |
| #10 | 7'-3" | 95.0 | 50.3 |
| #11 | 9'-0" | 117.4 | 61.8 |



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



STANDARD

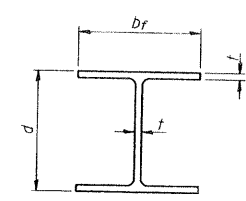
| Bar Size | No. Assemblies Required | Location |
|----------|-------------------------|---------------------|
| #5 | 339 | Superstructure Slab |
| #5 | 132 | Approach Slabs |
| #4 | 50 | Approach Slabs |
| #6 | 16 | Abutment Diaphragms |
| #6 | 20 | Abutments |
| #6 | 20 | Piers |
| #5 | 92 | Piers |

BAR SPLICER ASSEMBLY DETAILS
 STRUCTURE NO.

BAR SPLICER ASSEMBLY DETAILS
 SECTION: 07-25932-00-BR
 CHAMPAIGN COUNTY
 Q STATION 10+00

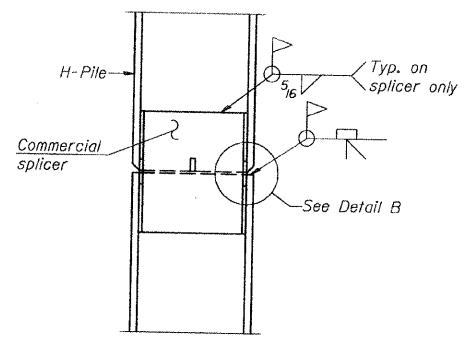
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| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN COUNTY |
| STA. | TO STA. | |
| F.H.W.A. REG. | ILLINOIS PROJECT | |

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 NOTE BOOK NO. _____
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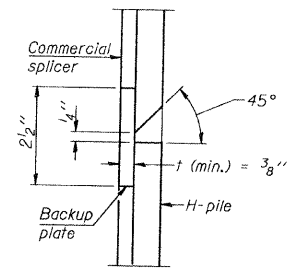


STEEL PILE TABLE

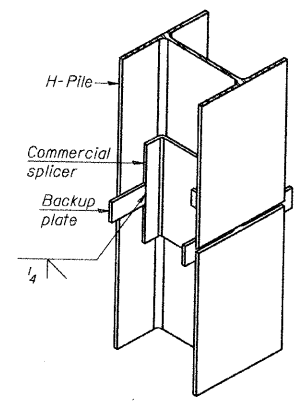
| Designation | Depth d | Flange width bf | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 1 5/16" | 30" |
| x102 | 14" | 14 3/4" | 1 1/16" | 30" |
| x89 | 13 7/8"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



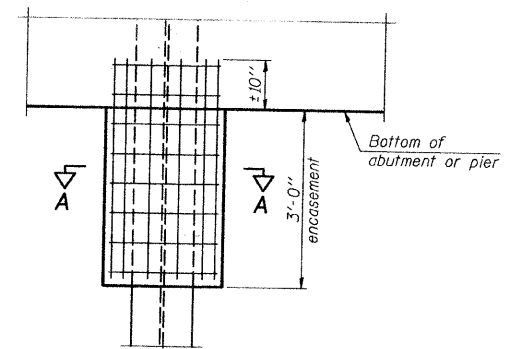
ELEVATION



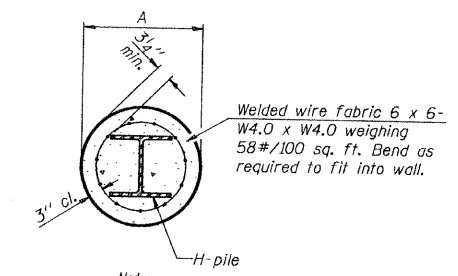
DETAIL "B"



ISOMETRIC VIEW



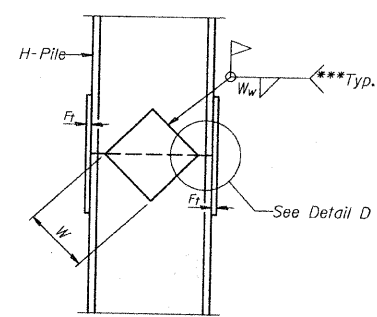
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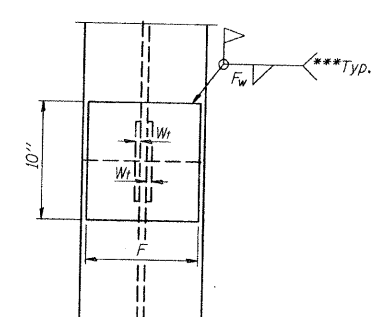
SECTION A-A

Note:
Forms for encasement may be omitted when soil conditions permit.

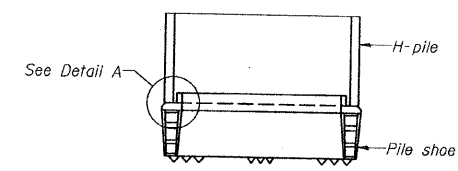
PILE ENCASEMENT



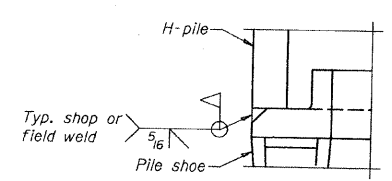
ELEVATION



END VIEW

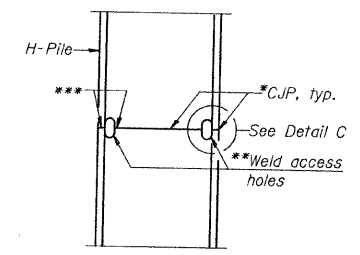


ELEVATION

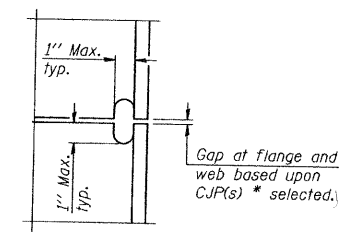


DETAIL A

H-PILE SHOE ATTACHMENT

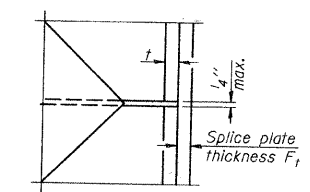


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

WELDED PLATE FIELD SPLICE

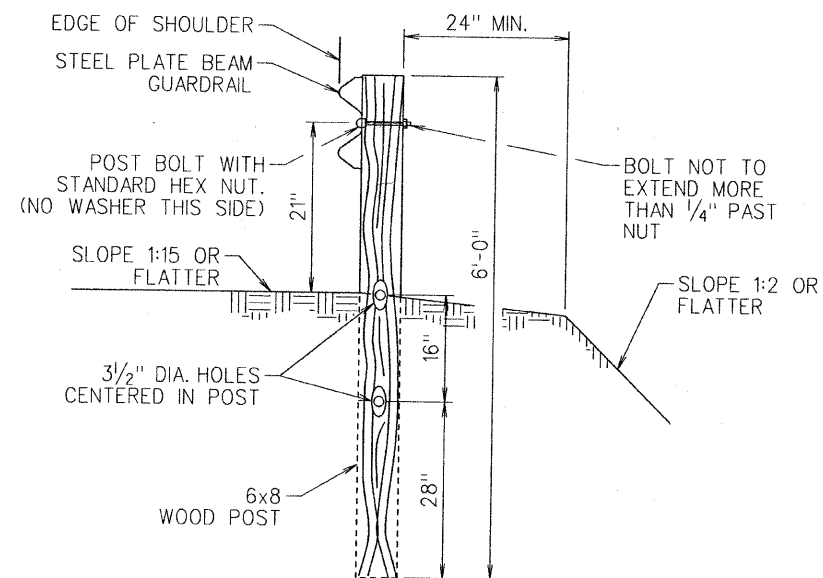
| Designation | F | Ft | Fw | W | Wt | Ww |
|-------------|---------|------|-------|--------|--------|------|
| HP 14x117 | 12 1/2" | 1" | 7/8" | 7 3/4" | 5 1/8" | 1/2" |
| x102 | 12 1/2" | 7/8" | 3/4" | 7 3/4" | 5 1/8" | 1/2" |
| x89 | 12 1/2" | 3/4" | 1/16" | 7 3/4" | 5 1/8" | 1/2" |
| x73 | 12 1/2"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

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
 ** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
 *** Interrupt welds 1/4" from end of each pile.

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

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 NOTE BOOK NO. _____
 STRUCTURE NOTATIONS CHWD _____

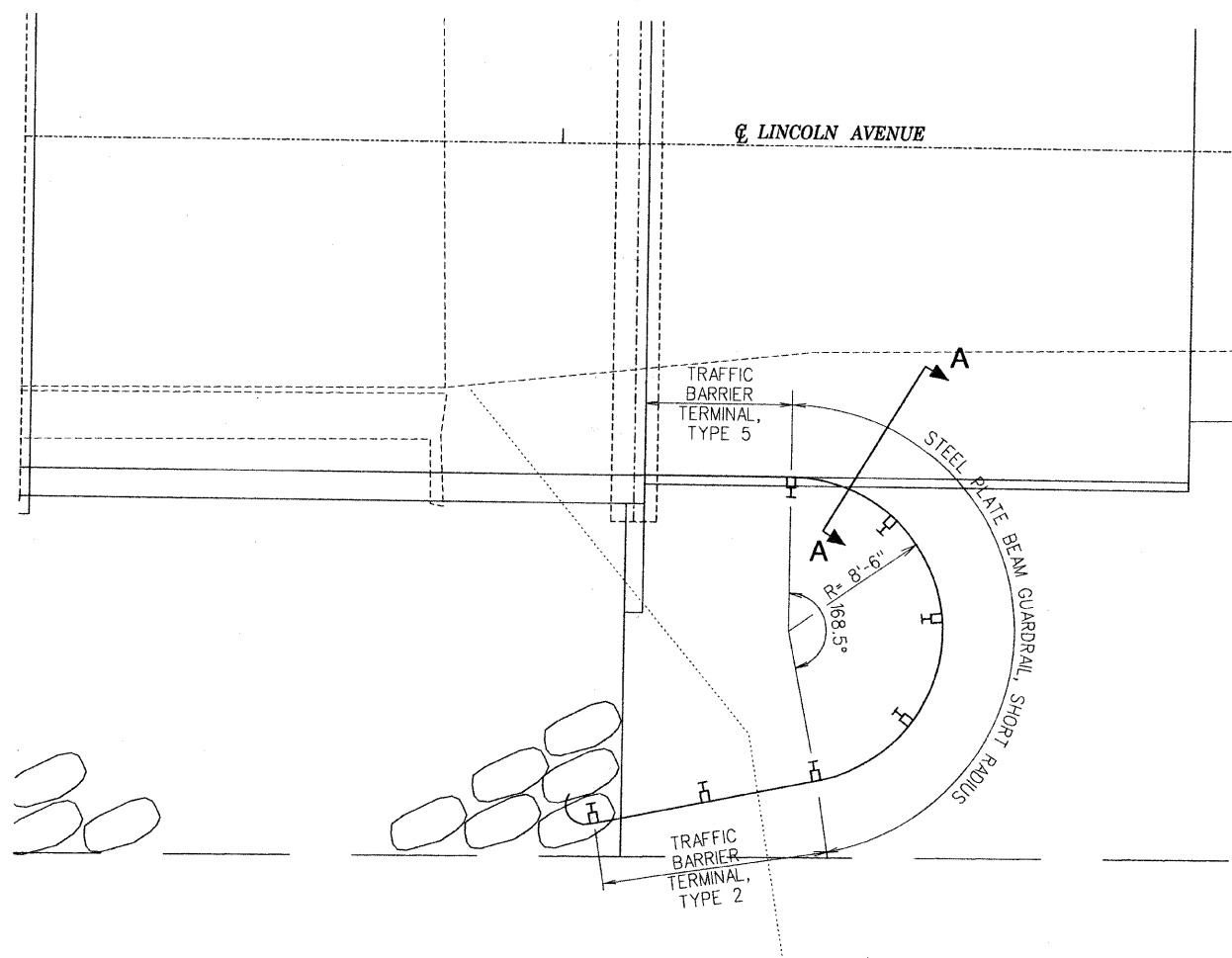
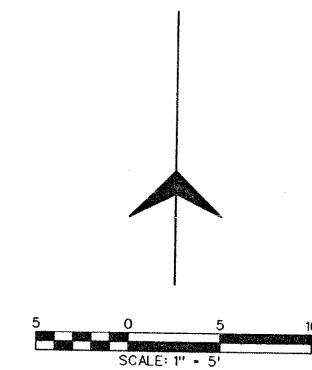
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| STA. | | TO STA. | | |
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SECTION A-A

NOTES:

1. CONSTRUCT ACCORDING TO STANDARD 631011 FOR TRAFFIC BARRIER TERMINAL TYPE 2, EXCEPT DELETE END SECTION AND SPLICE INTO RADIUS GUARDRAIL.
2. FOR THE 8'-6" RADIUS, THE RAIL IS NOT BOLTED TO THE POST LOCATED AT THE MIDPOINT OF THE CURVE.

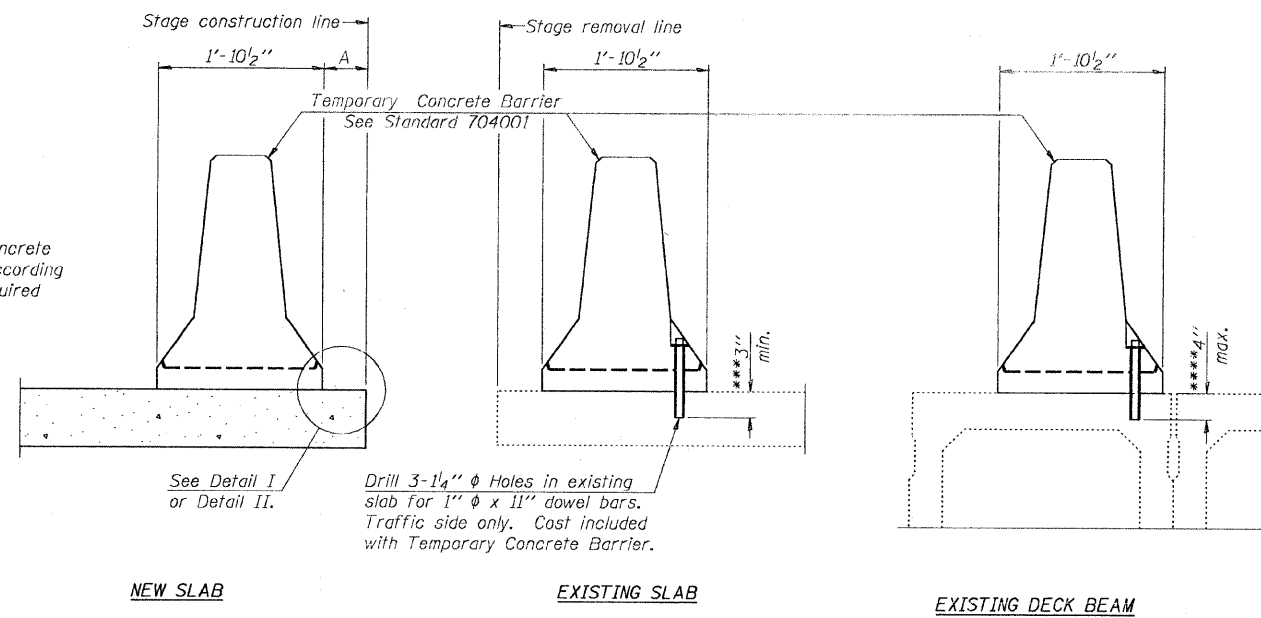


GUARDRAIL DETAIL

| |
|-------------------------|
| GUARDRAIL DETAILS |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| STATION 10+00 |

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------|----------------|------------------|--------------|-----------|
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 37 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

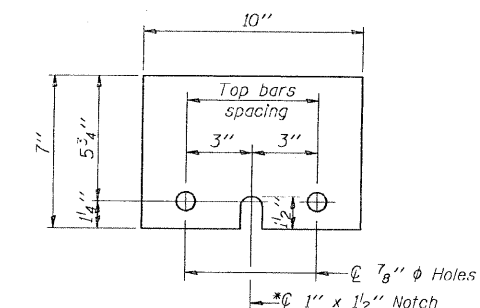
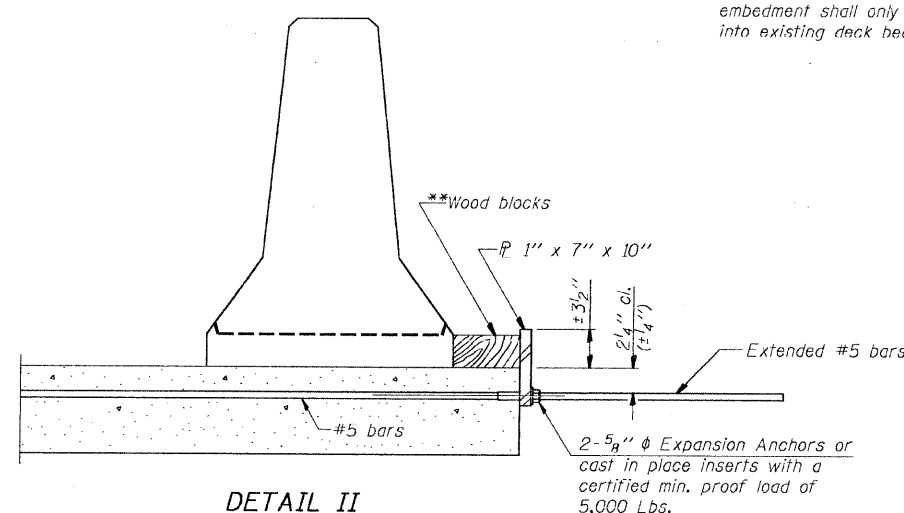
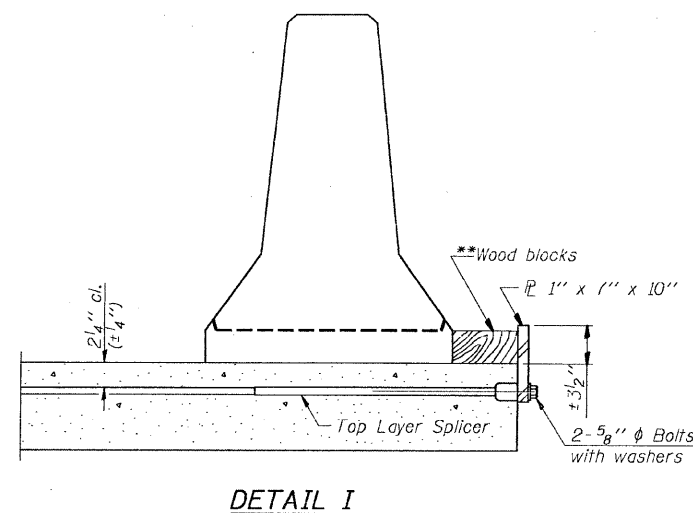
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

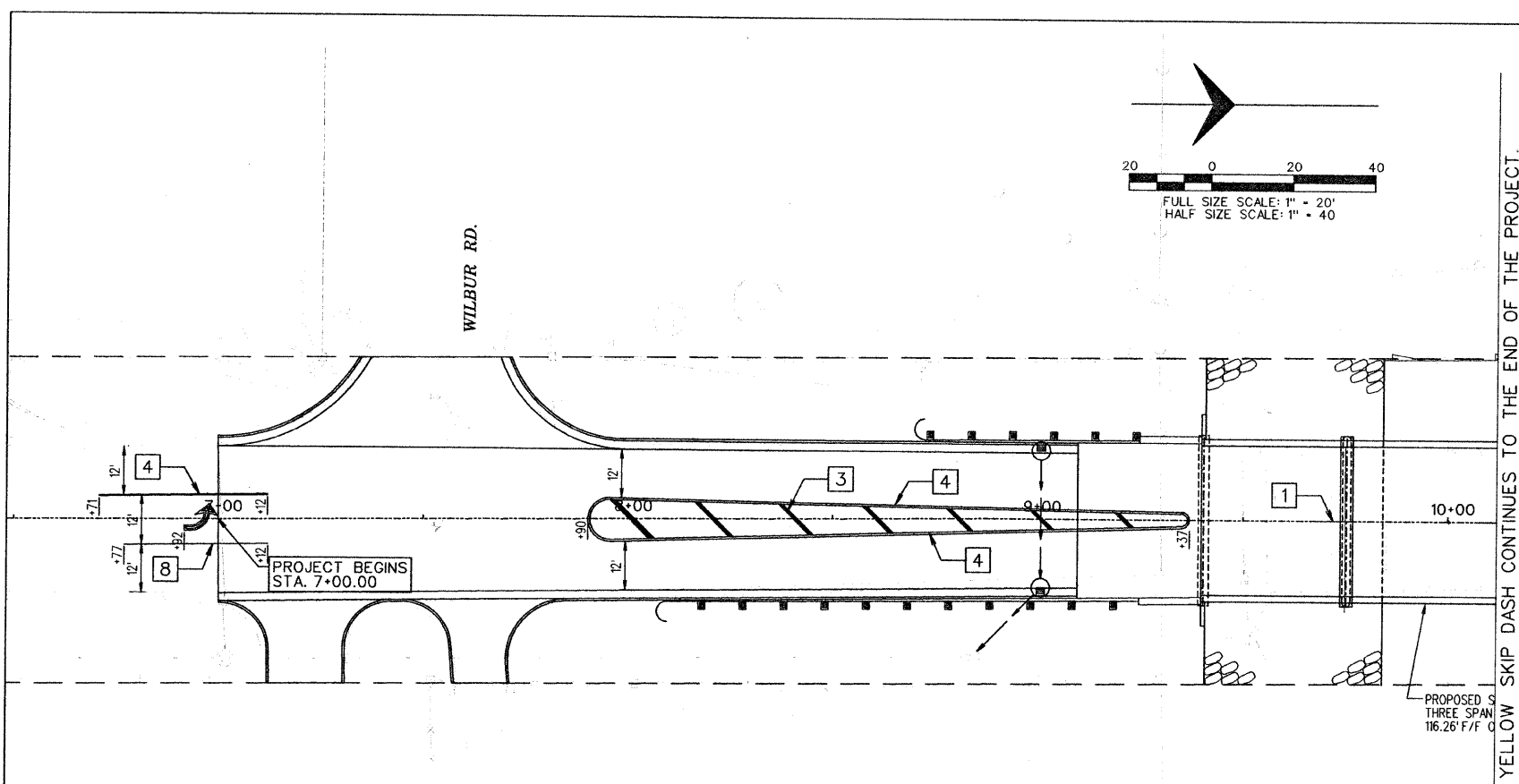
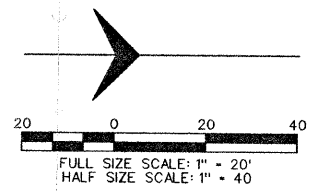


STEEL RETAINER 1" x 7" x 10"

* Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

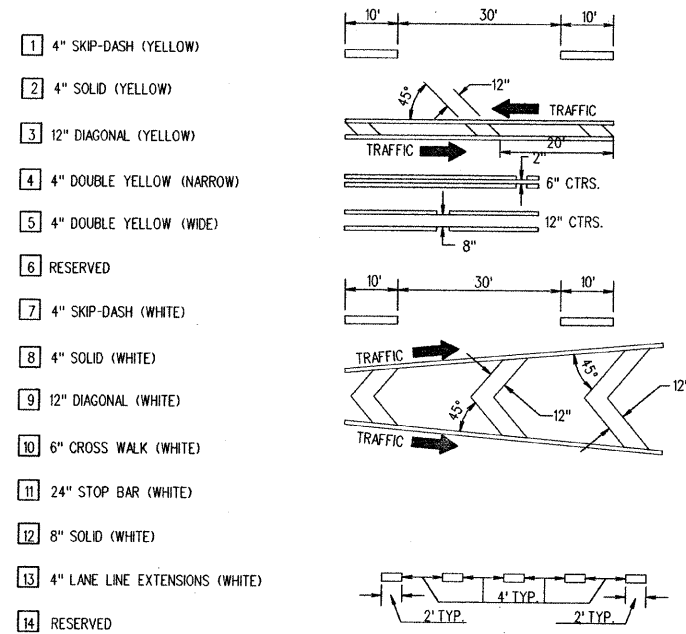
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| STA. | TO STA. | | | |
| F.H.W.A. REG. | ILLINOIS PROJECT | | | |



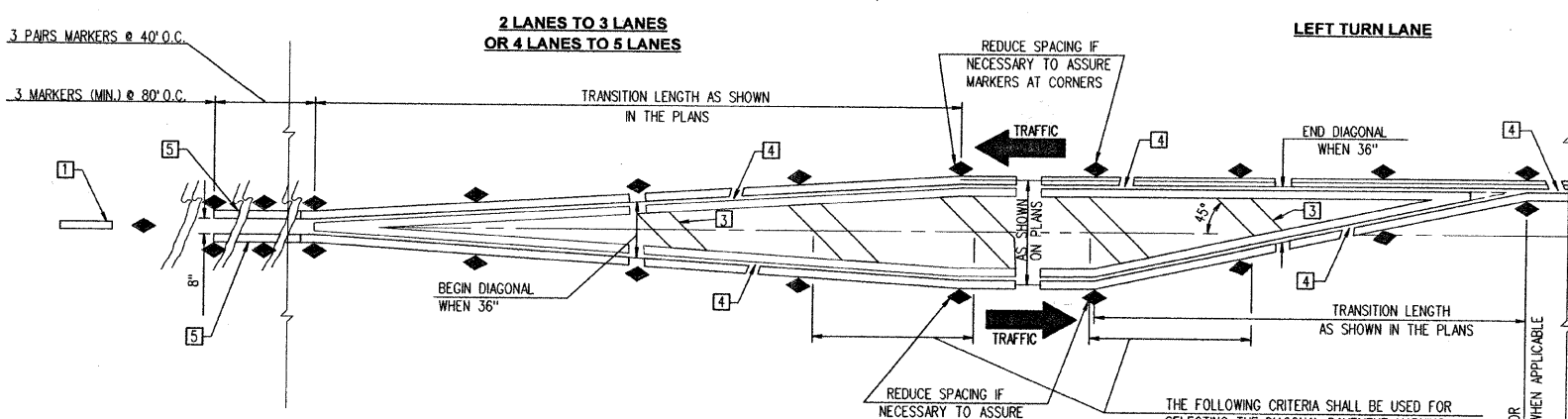
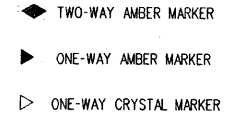
| THERMOPLASTIC PAVEMENT MARKINGS | | | | | |
|---------------------------------|------------|-------------|-------------|--------------|---------------|
| STATION | TO STATION | DESCRIPTION | L & S SQ FT | LINE 4" FOOT | LINE 12" FOOT |
| 6+71 | 7+12 | NAR CL YEL | | 41 | |
| 6+71 | 7+12 | NAR CL YEL | | 41 | |
| 6+77 | 7+12 | LANE WHT | | 35 | |
| 6+92 | | LTA WHT | 15.6 | | |
| 7+90 | 9+37 | NAR CL YEL | | 147 | |
| 7+90 | 9+37 | NAR CL YEL | | 147 | |
| 7+90 | 9+37 | NAR CL YEL | | 147 | |
| 7+90 | 9+37 | NAR CL YEL | | 147 | |
| 7+90 | 9+37 | DIAG CL YEL | | | 66 |
| 9+37 | 12+62 | SD CL YEL | | 80 | |
| TOTALS | | | 15.6 | 785 | 66 |

NOTE: "NAR" MEANS NARROW; "CL" MEANS CENTERLINE; "YEL" MEANS YELLOW; "WHT" MEANS WHITE; "LANE" MEANS LANE LINE; "DIAG" MEANS DIAGONAL; "SD" MEANS SKIP-DASH

TYPICAL PAVEMENT MARKING LEGEND



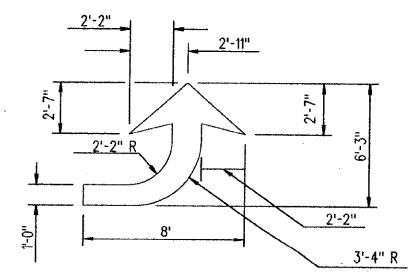
TYPICAL PAVEMENT MARKERS LEGEND



SPECIAL NOTE:
THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).

GENERAL NOTES

1. WHEN PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS, SPECIAL DETAILS WILL BE INCLUDED ELSEWHERE IN THE PLANS.
2. SCALE: NONE
3. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
4. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
5. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
6. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.



TYPICAL APPLICATIONS OF URBAN PAVEMENT MARKINGS AND MARKERS

NOT TO SCALE

| |
|-------------------------|
| PAINT DETAILS |
| SECTION: 07-25932-00-BR |
| CHAMPAIGN COUNTY |
| STATION 10+00 |

GENERAL NOTES

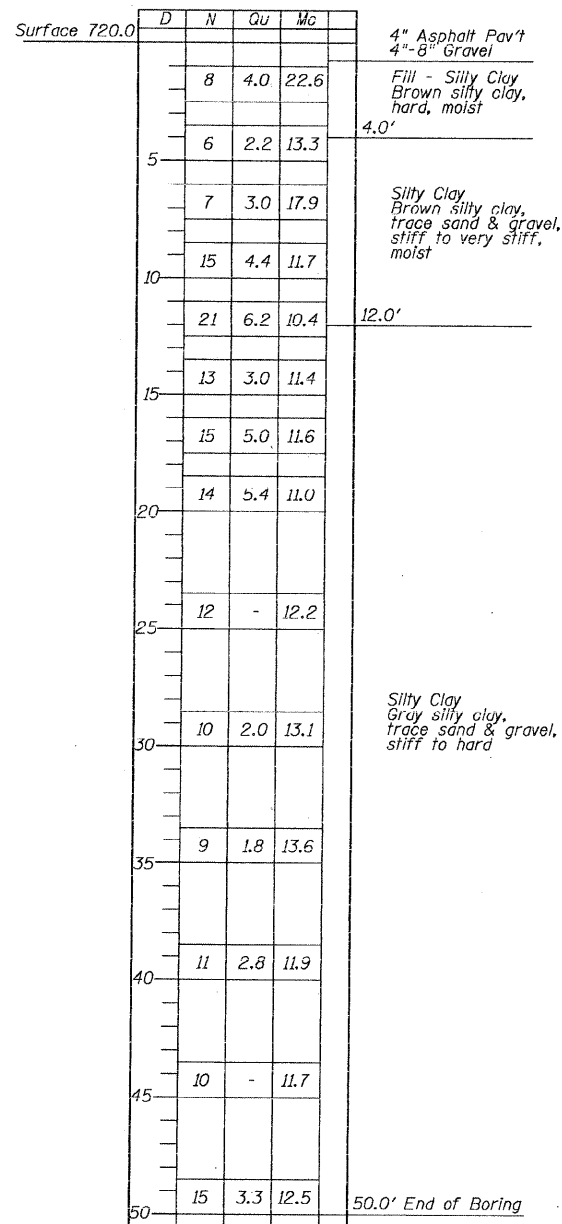
Boring Data is shown only as a guide to bidders in estimating soil conditions which may be encountered during construction.

The contractor shall drive 4 test piles in a permanent location, one at each abutment and one at each pier as directed by the Engineer before ordering the remainder of piles.

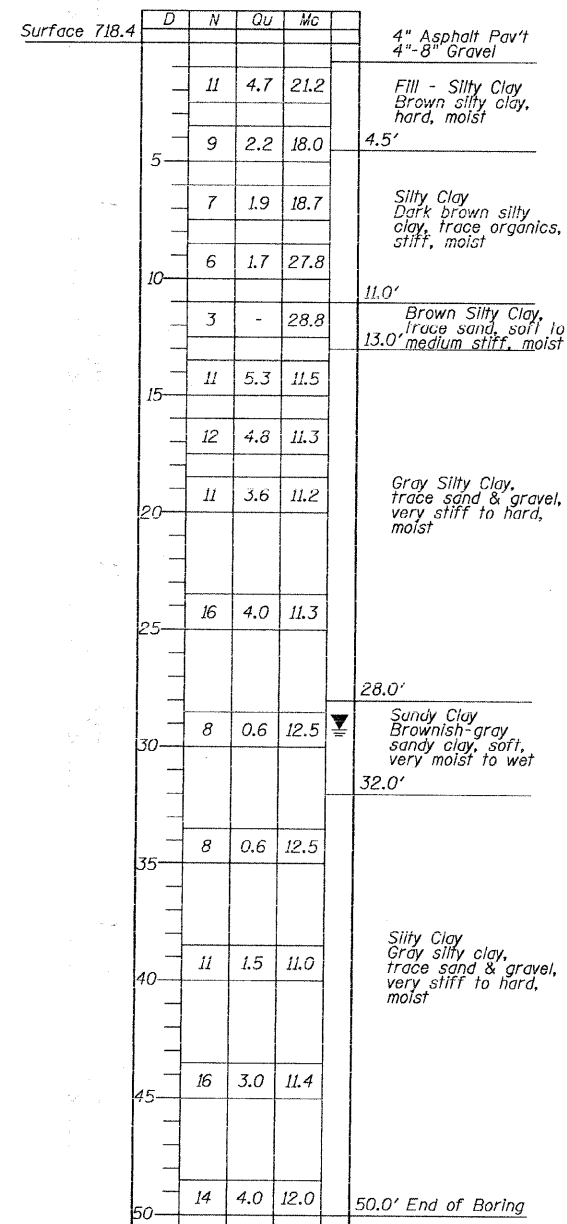
The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.

BORING DATA

- N - Standard Penetration Test - Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 lb. hammer falling 30"
- Qu - Unconfined Compression Strength - Tons/Sq.Ft.
- Mc - Water Content - Percentage of oven dry weight - %
- D - Depth
- P - Penetrometer
- B - Bulge Failure
- S - Shear Failure
- E - Estimated Value



BORING NO. B-1
Sta. 9+50, 12' Lt.



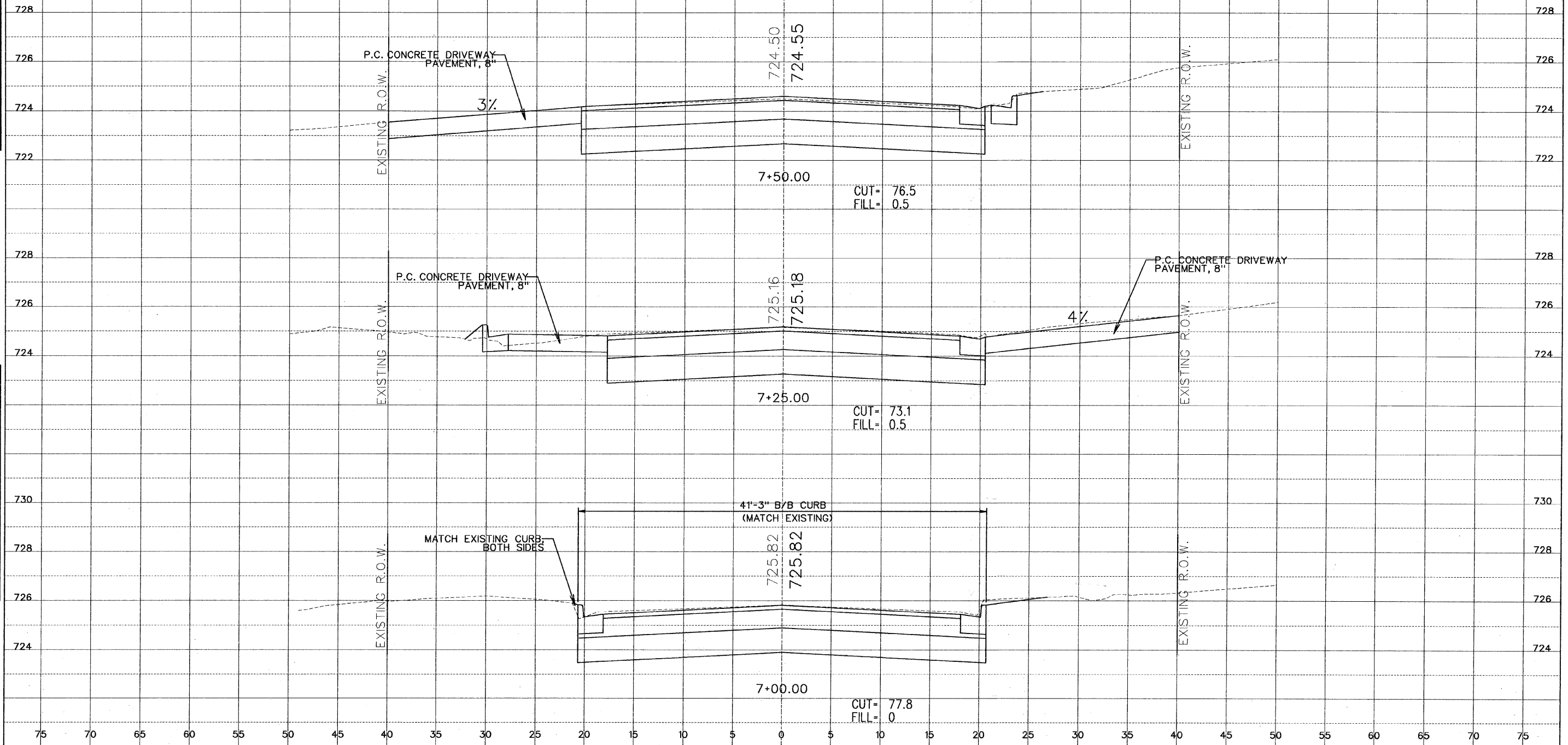
BORING NO. B-2
Sta. 10+50, 12' Rt.

BORING LOGS
SECTION: 07-25932-00-BR
CHAMPAIGN COUNTY
STATION 10+00

23 Boring Log L-995-jgn 6/23/2009 1:53:01 PM

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| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 40 |
| STA. | | TO STA. | | |
| F.H.W.A. REG. | | ILLINOIS PROJECT | | |
| 55 | 60 | 65 | 70 | 75 |

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50



NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

SHEET 40 OF 50 SHEETS 06156

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| FINAL SURVEY | |

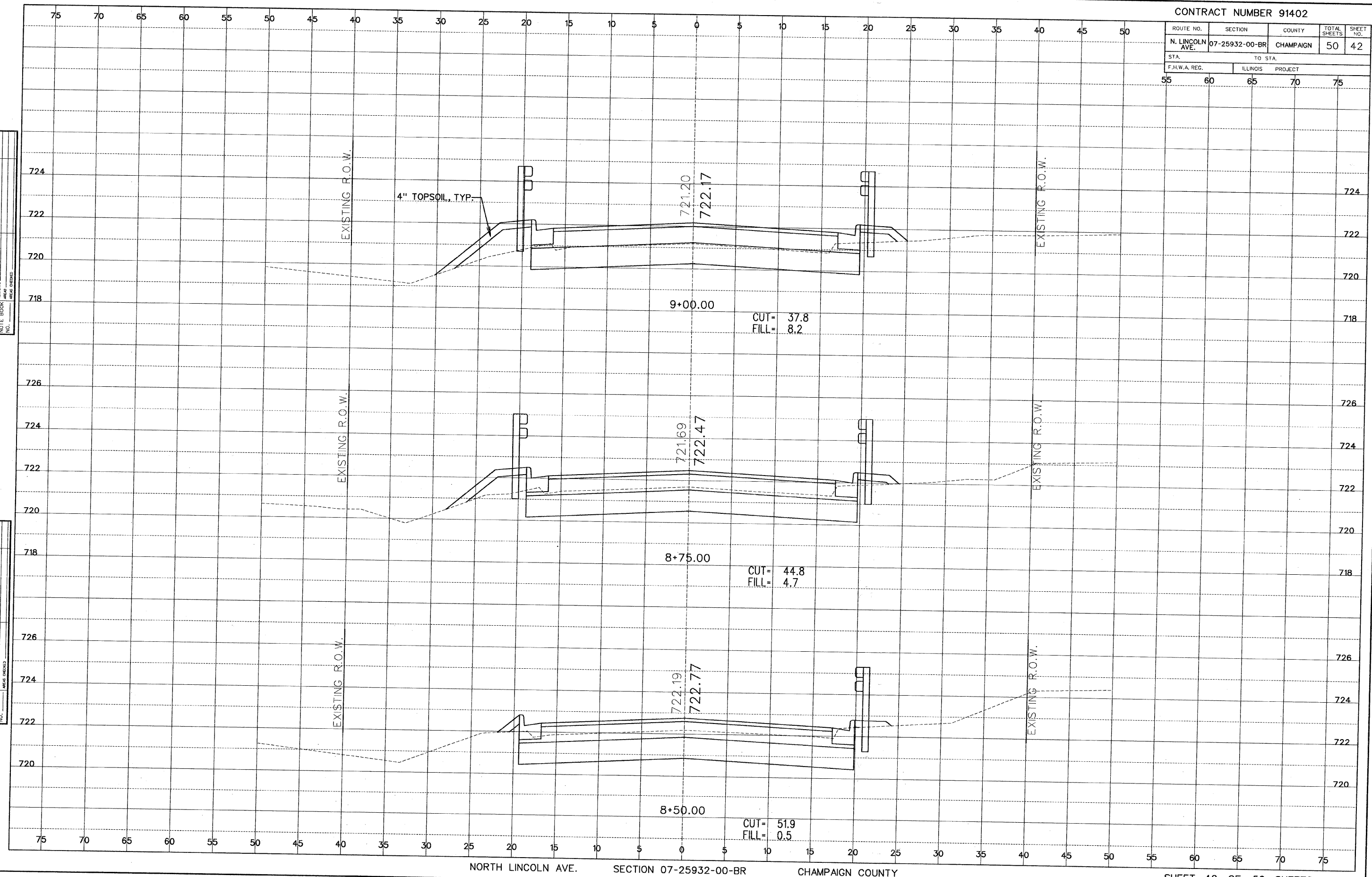
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| F.H.W.A. REG. | | ILLINOIS | PROJECT | |

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| FINAL SURVEY | REVISION |
| NOTE BOOK | TEMPLATE |
| NO. | NO. |
| | FIELD CHECKS |

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| ORIGINAL SURVEY | REVISION |
| NOTE BOOK | TEMPLATE |
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NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

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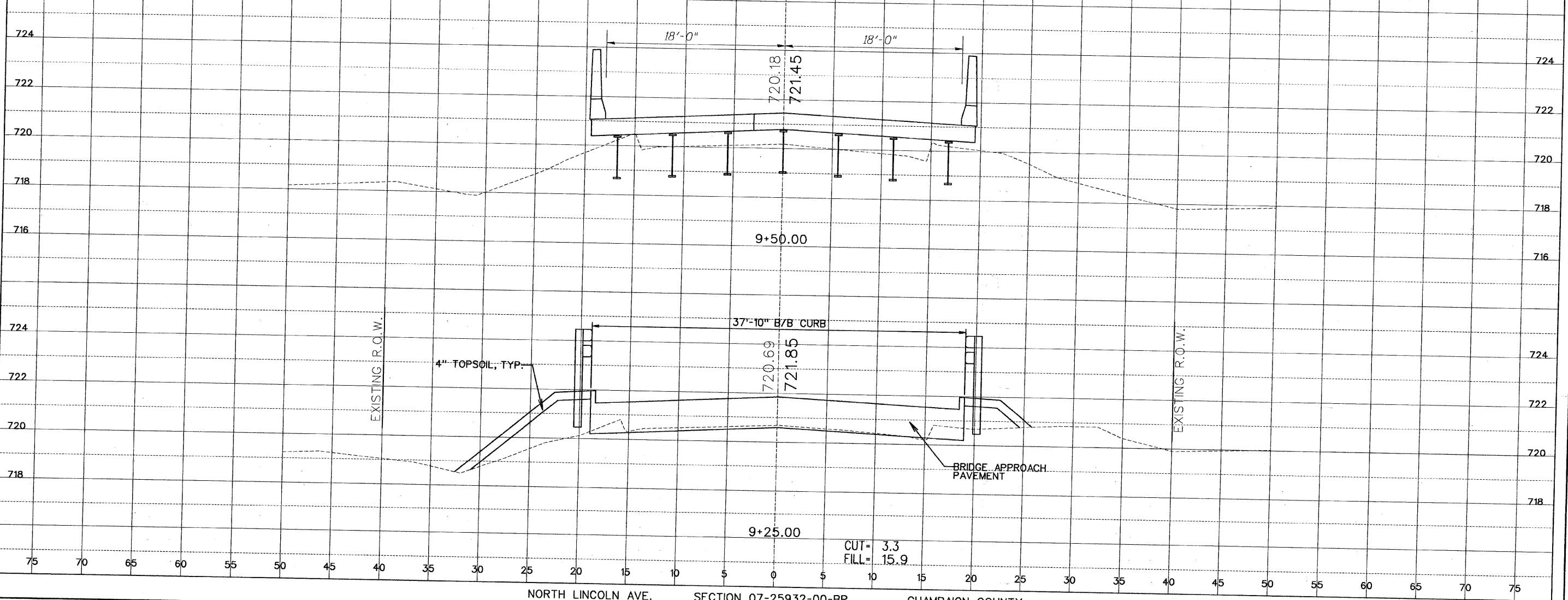
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NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

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 BY: _____
 CHECKED: _____
 SUPERVISOR: _____
 ENGINEER: _____
 SURVEYOR: _____
 DRAWER: _____
 FINAL SURVEY NOTE BOOK NO. _____

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 ENGINEER: _____
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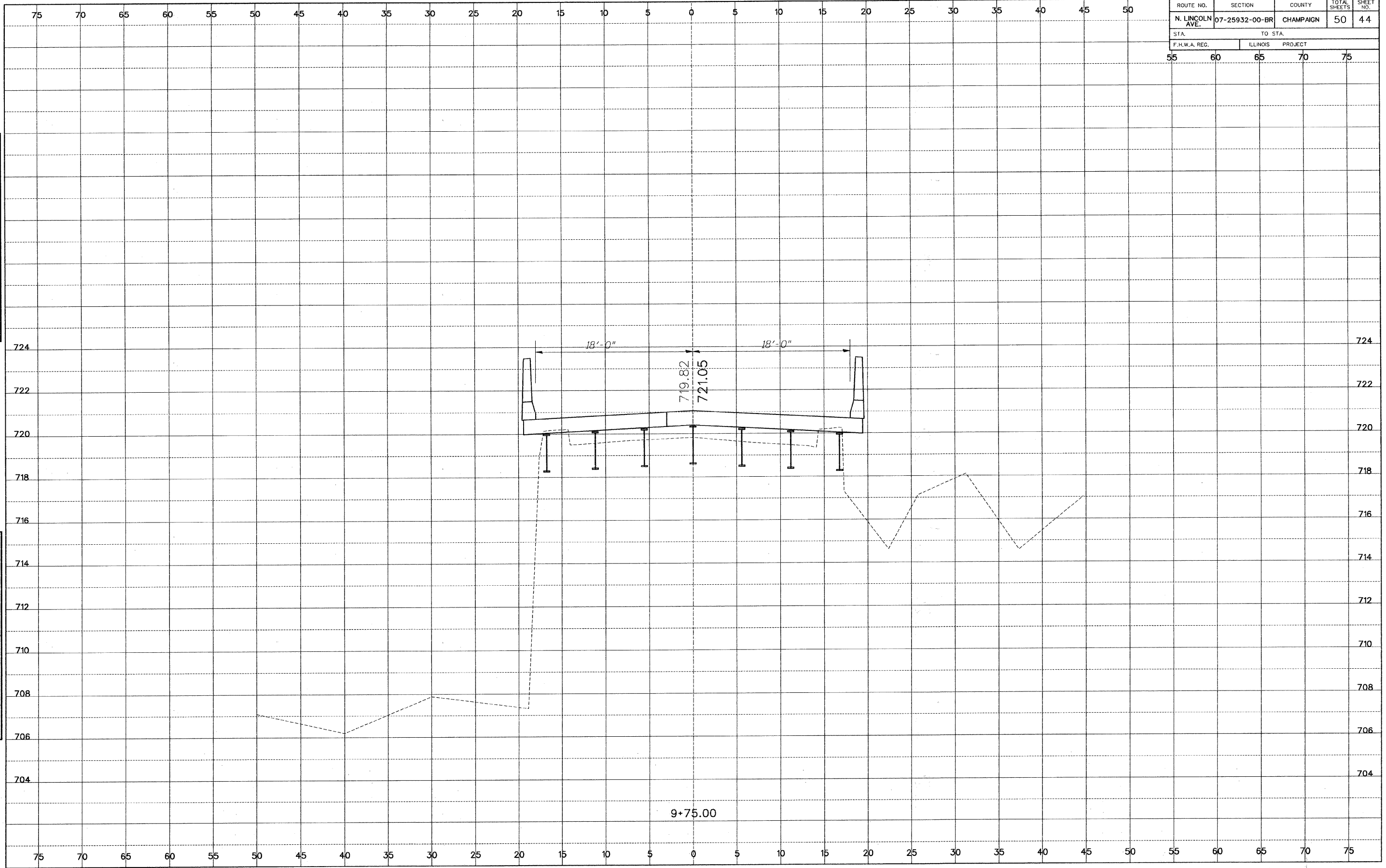


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NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

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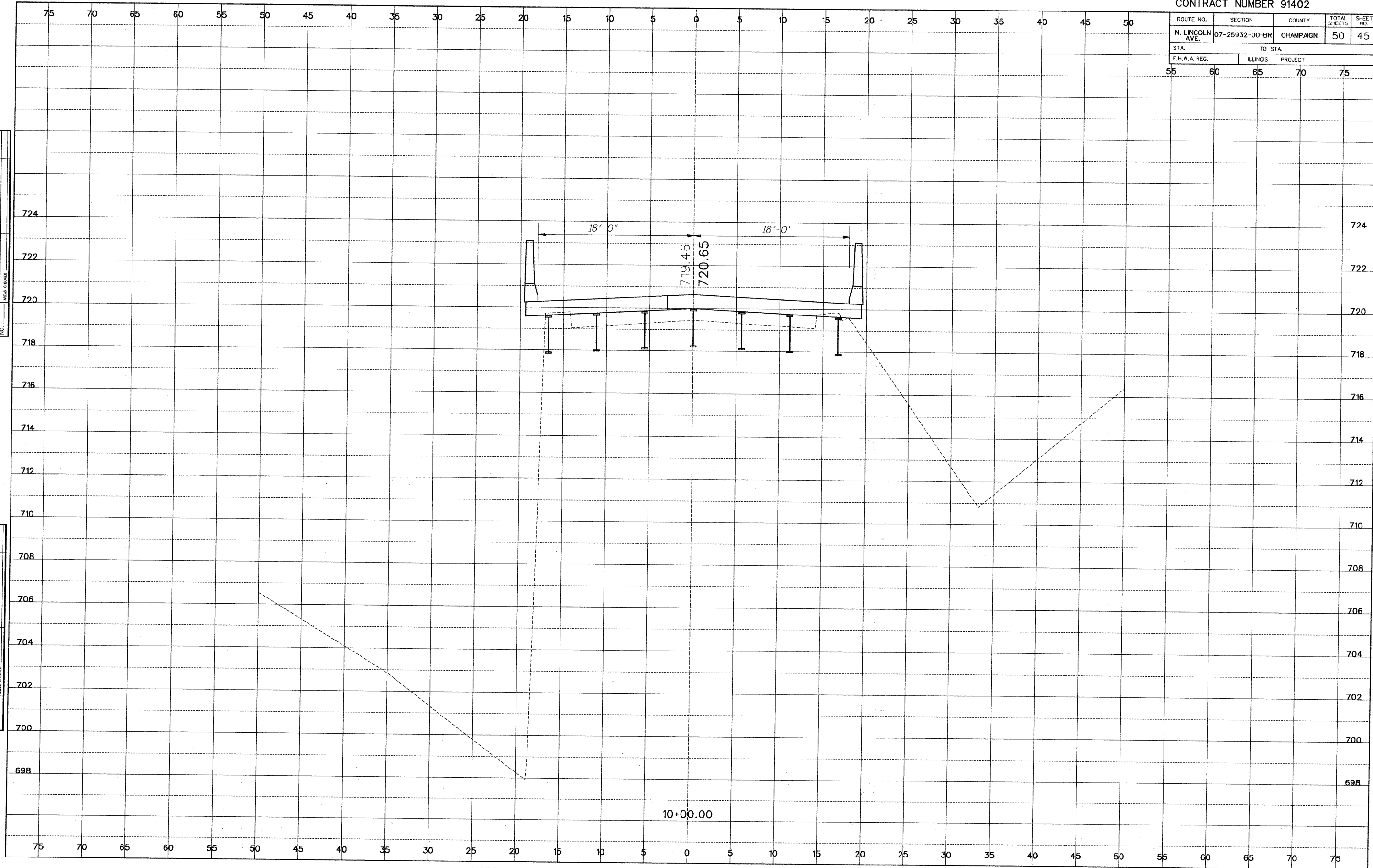
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| STA. TO STA. | | ILLINOIS PROJECT | | |
| F.H.W.A. REG. | | PROJECT | | |

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NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

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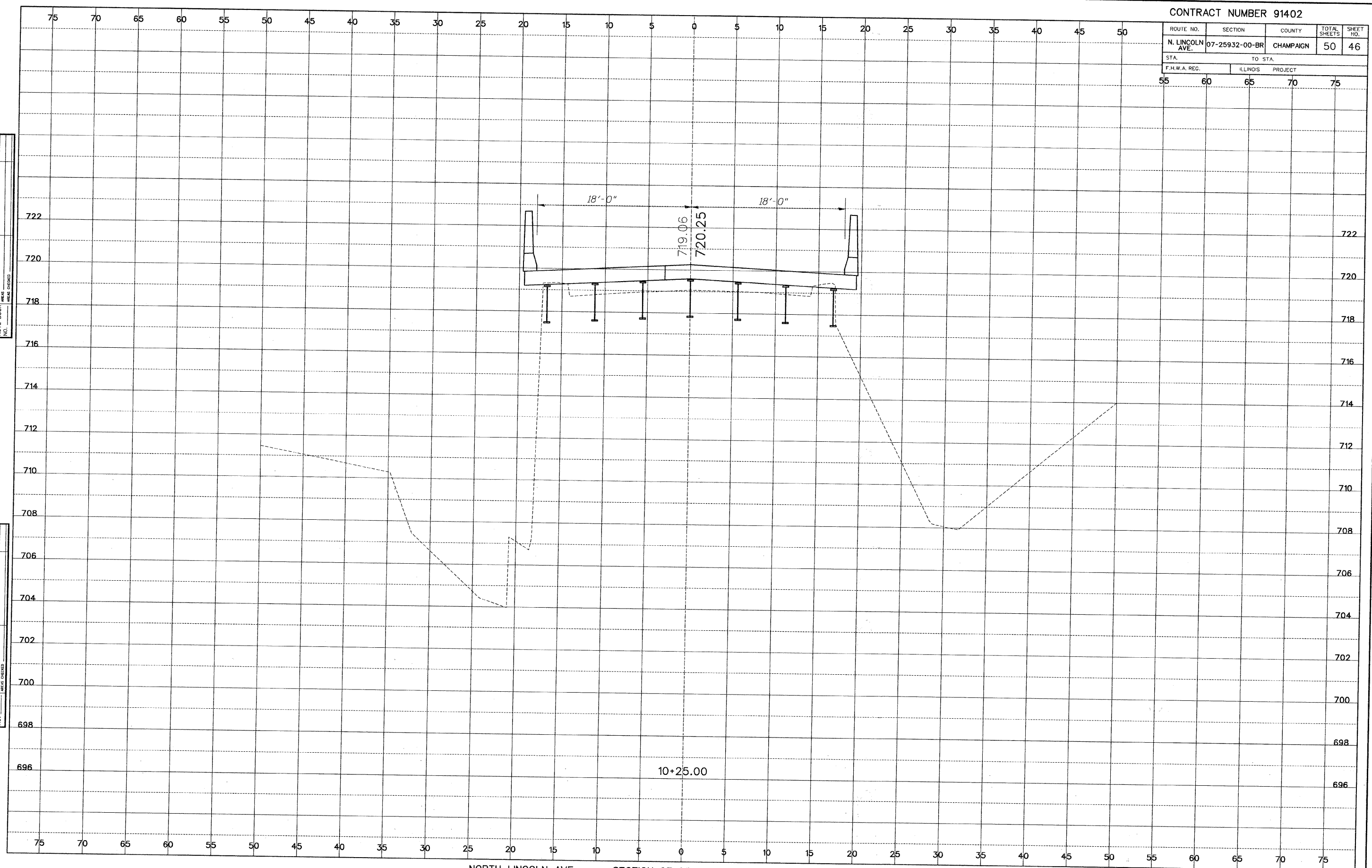
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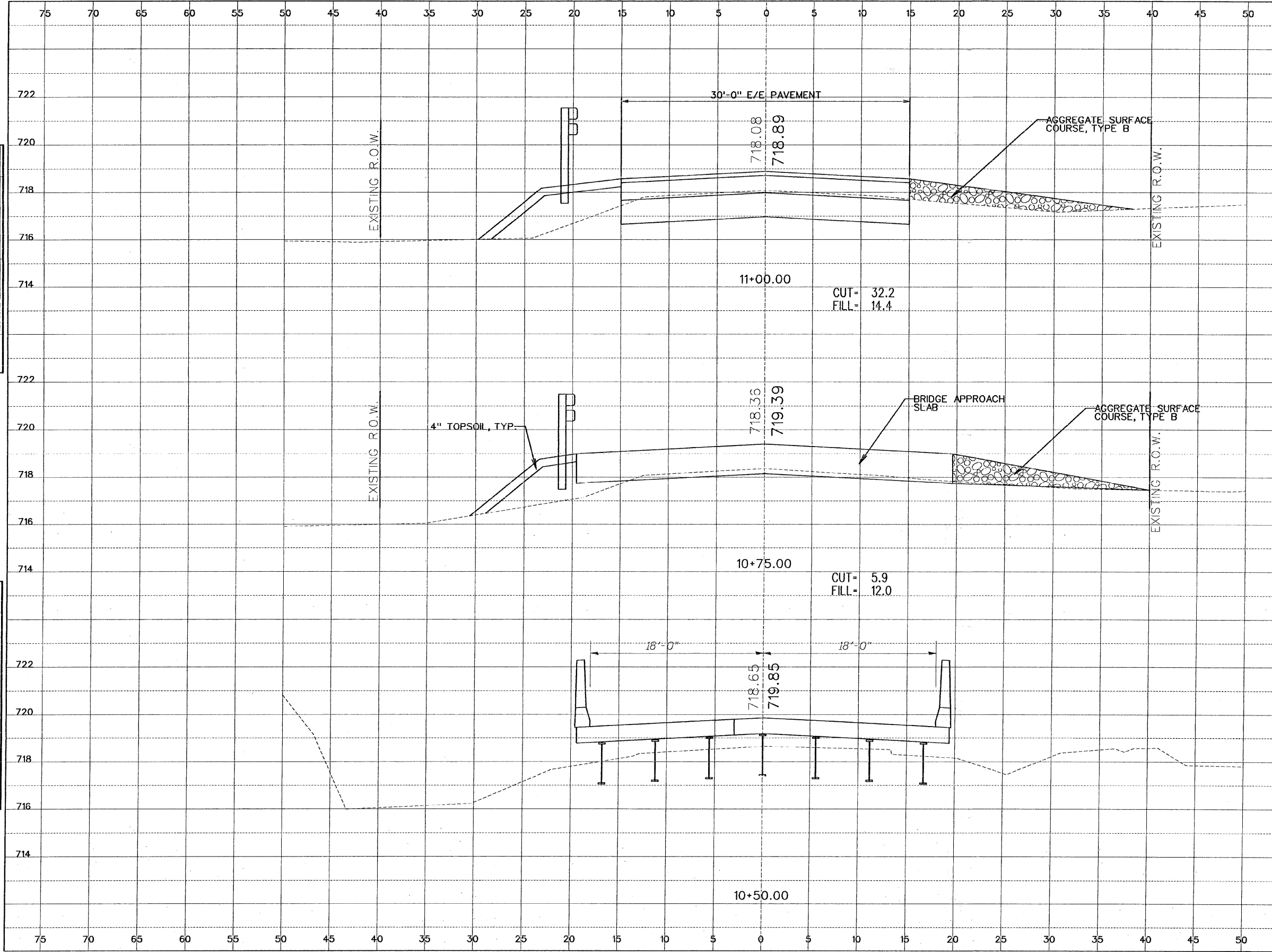
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NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

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| STA. | TO STA. | PROJECT | | |
| F.H.W.A. REG. | ILLINOIS | PROJECT | | |
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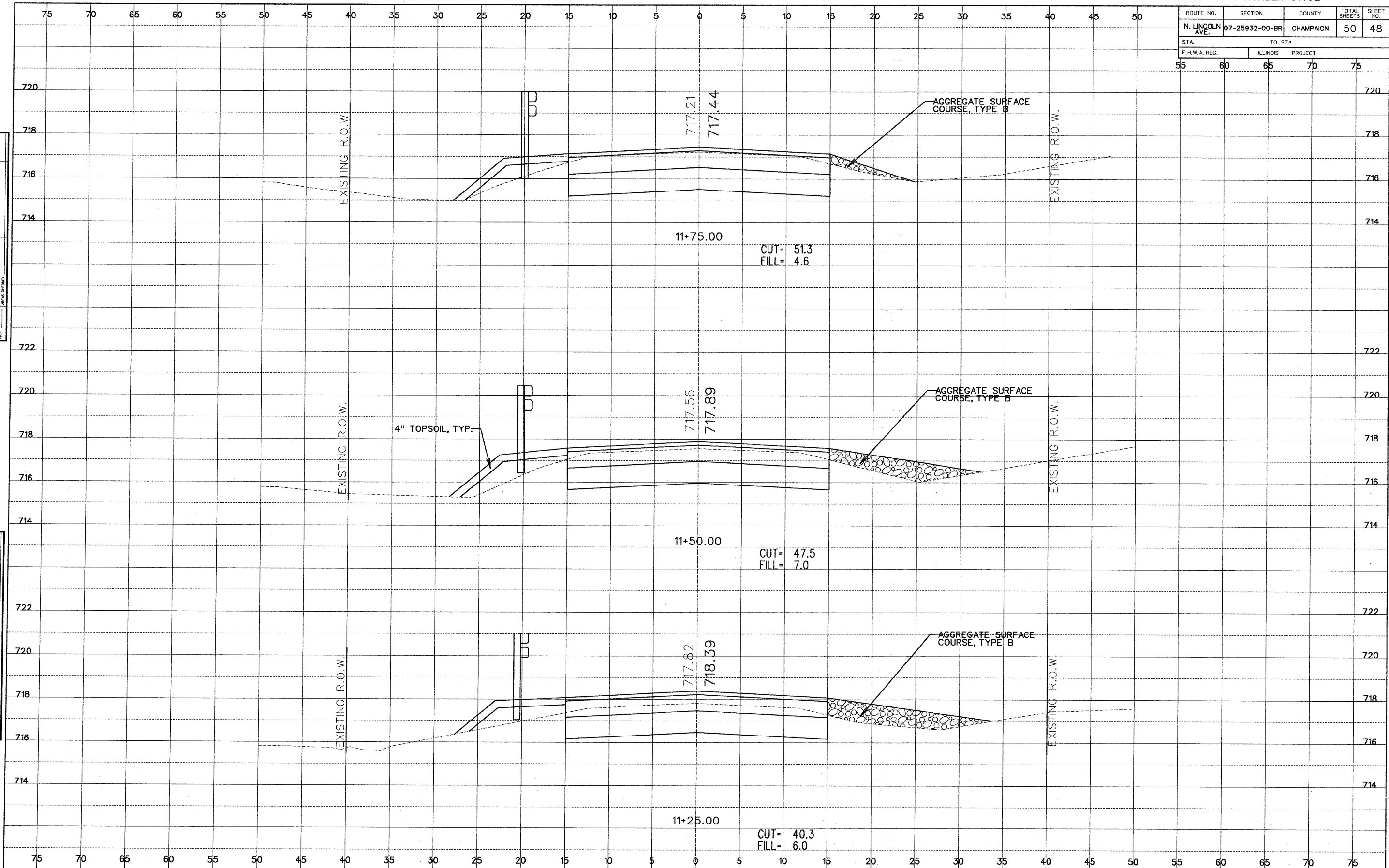
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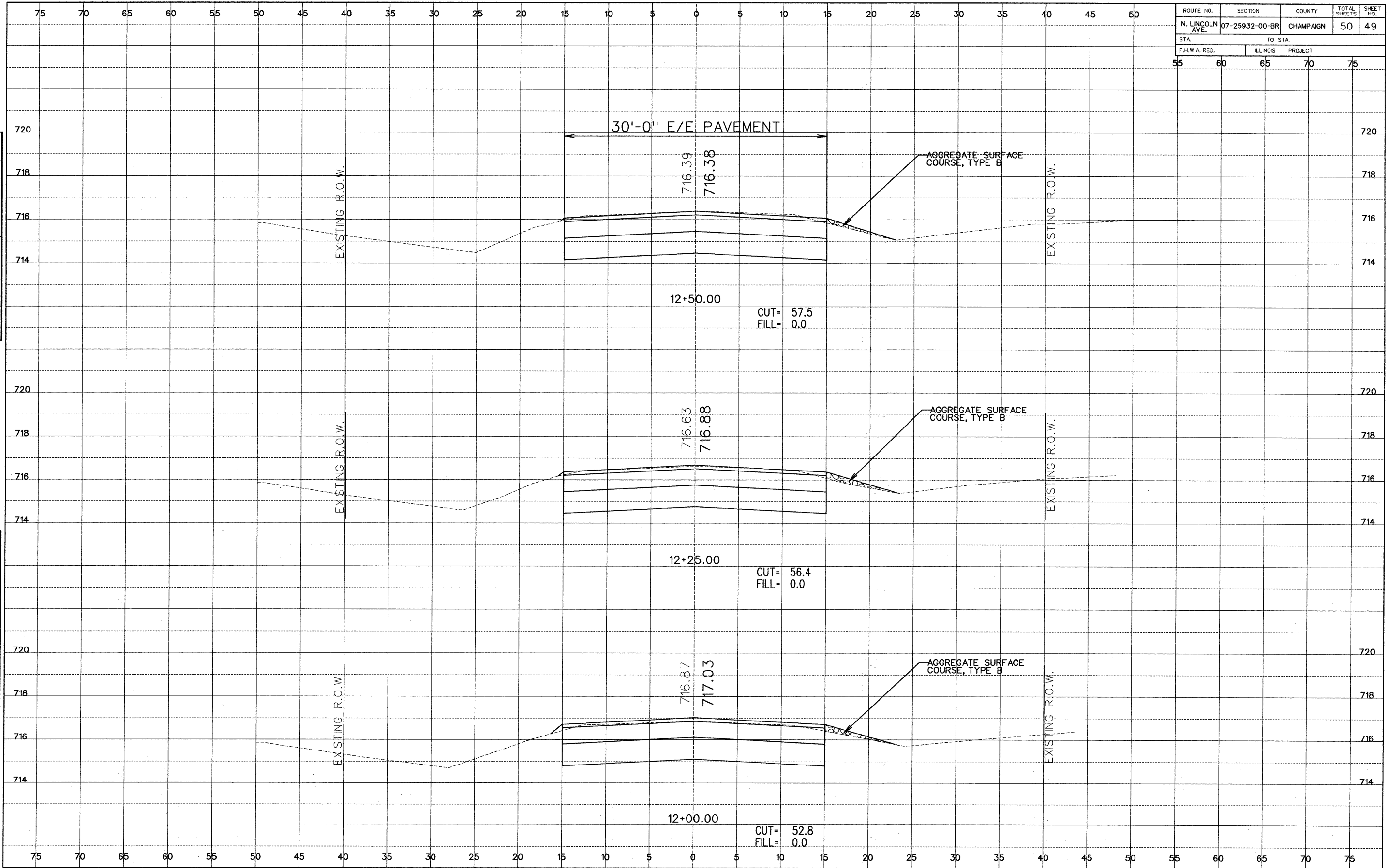


NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

SHEET 48 OF 50 SHEETS 06156

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| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 49 |
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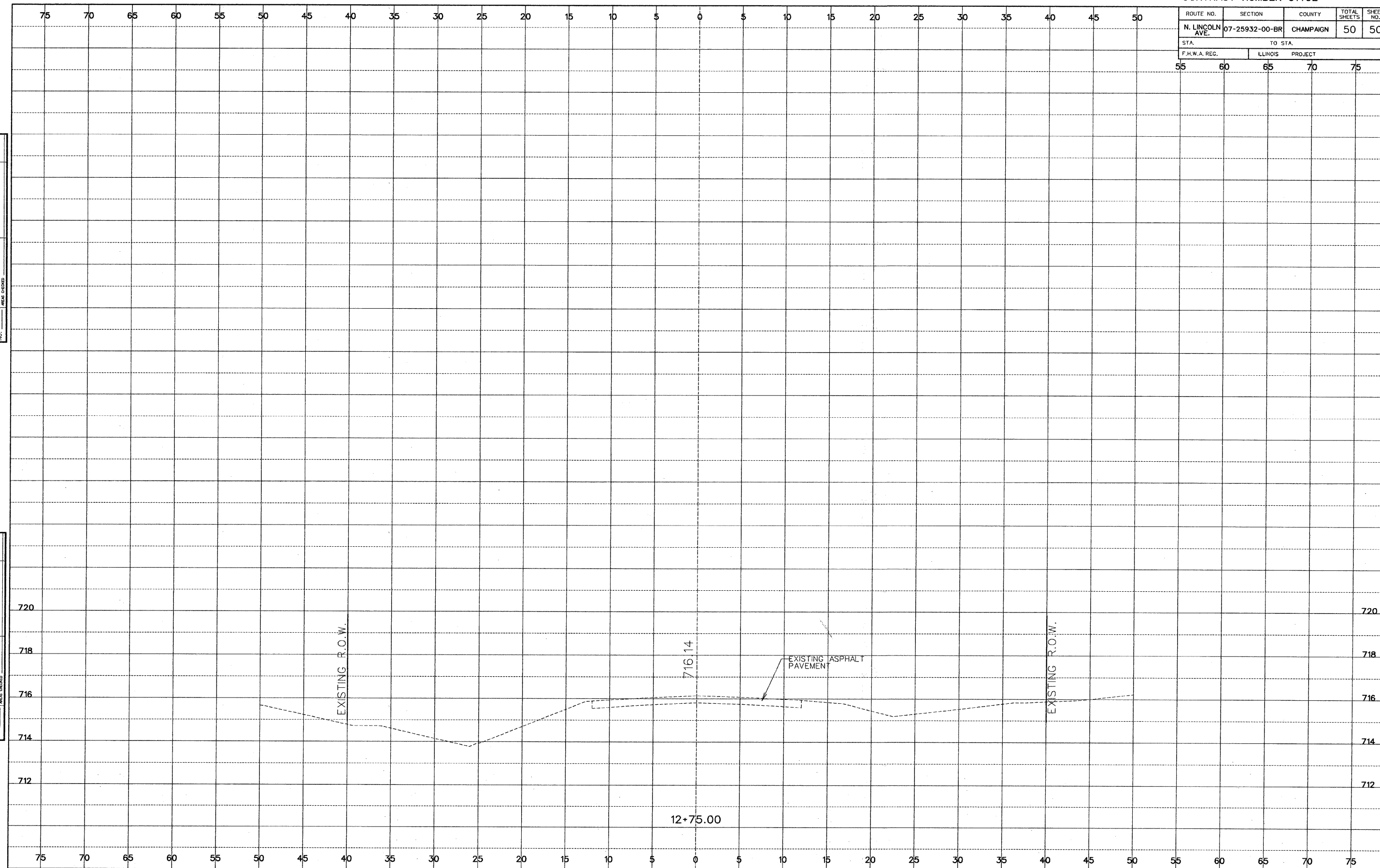
NORTH LINCOLN AVE. SECTION 07-25932-00-BR CHAMPAIGN COUNTY

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| N. LINCOLN AVE. | 07-25932-00-BR | CHAMPAIGN | 50 | 50 |
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ORIGINAL SURVEY

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