

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 75 (IL 29) & F.A.P. 714 (IL 48)
SECTION (4)I; 136B-1
PROJECT ACF-0005(946)
RIPRAP, SLOPE WALL REPAIR (IL 29 OVER IL 48), &
BRIDGE REPLACEMENT (IL 48 OVER BEAR CREEK)
CHRISTIAN COUNTY
C-96-138-10

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|--------------------|--------------|-----------|
| * | (4)I, 136B-1 | CHRISTIAN | 97 | 1 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

**97+1=98
D-96-533-06

INDEX OF SHEETS
SEE SHEET NO. 2

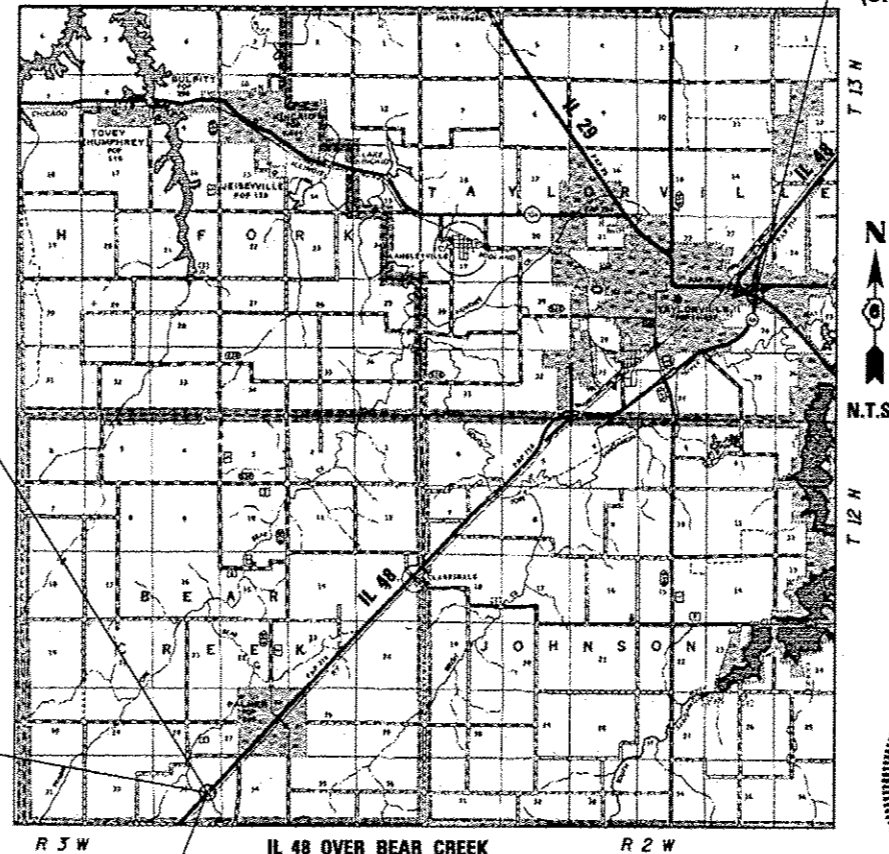
HIGHWAY STANDARDS
SEE SHEET NO. 2

HIGHWAY CLASSIFICATION

F.A.P. ROUTE 75 (IL 29) & 714 (IL 48)
CLASSIFICATION: OTHER PRINCIPAL ARTERIAL (IL 29) & MINOR ARTERIAL (IL 48)
ADT: 8,200 (2012) (IL 29) & 2,950 (2012) (IL 48)
ADT: 8,448 (2014) (IL 29) & 3,039 (2014) (IL 48)
ADT: 11,379 (2034) (IL 29) & 4,093 (2034) (IL 48)
DESIGN SPEED: 45 MPH & 60 MPH
POSTED SPEED: 40 MPH & 55 MPH
PV = 93.0% (IL 29) & 84.0% (IL 48)
SU = 3.0% (IL 29) & 5.0% (IL 48)
MU = 4.0% (IL 29) & 11.0% (IL 48)



STA. 28 + 14.51 PROJECT INCLUDES
EROSION REPAIR WITH STONE
RIPRAP AND SEDIMENT REMOVAL
(SN 011-0010).

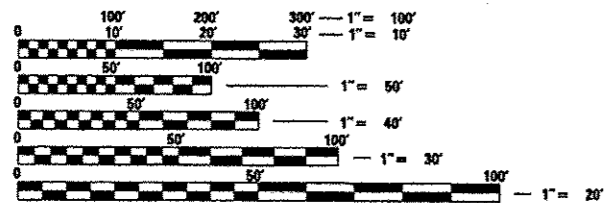


END PROJECT
STA. 632 + 50.00

BEGIN PROJECT
STA. 621 + 50.00

GROSS LENGTH = 1,100 FT. = 0.21 MILE
NET LENGTH = 1,100 FT. = 0.21 MILE

STA. 627 + 90.00 PROJECT INCLUDES REMOVAL OF THE EXISTING
TWO-SPAN CONTINUOUS STEEL BEAM BRIDGE (SN011-0018) AND
REPLACEMENT WITH A THREE-SPAN BRIDGE WITH A CONCRETE
DECK ON CONTINUOUS STEEL BEAMS ON OPEN ABUTMENTS:
39'-2" O. TO O.; 180'-0" BK. TO BK. OF ABUTMENTS. (SN011-0514)

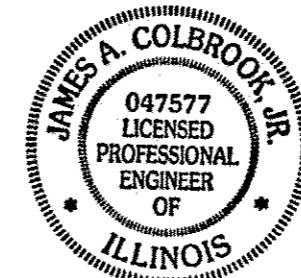


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

SENIOR TEAM ENGINEER: MARK DUST (217) 785-0597
TEAM LEADER: JONATHAN COX (217) 558-5140

CONTRACT NO. 72A61



James A. Colbrook Jr.
EXPIRES 11-30-13 8-16-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED AUGUST 16 2013
Roger L. Amickell
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 4 2013
John D. Baramelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
October 4 2013
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS AND HIGHWAY STANDARDS
- 3 GENERAL NOTES AND COMMITMENTS
- 4 - 10 SUMMARY OF QUANTITIES
- 11 - 14 SCHEDULE OF QUANTITIES
- 15 - 16 TYPICAL SECTIONS IL 48 OVER BEAR CREEK
- 17 TRAFFIC CONTROL TYPICAL SECTIONS - STAGE I IL 48 OVER BEAR CREEK
- 18 - 20 TRAFFIC CONTROL PLANS - STAGE I IL 48 OVER BEAR CREEK
- 21 TRAFFIC CONTROL TYPICAL SECTIONS - STAGE II IL 48 OVER BEAR CREEK
- 22 - 24 TRAFFIC CONTROL PLANS - STAGE II IL 48 OVER BEAR CREEK
- 25 WIDTH RESTRICTION SIGNING PLAN
- 26 - 31 PLANS AND PROFILES IL 48 OVER BEAR CREEK
- 32 - 35 STORM WATER POLLUTION PREVENTION PLANS IL 48 OVER BEAR CREEK
- 36 - 38 EROSION CONTROL PLANS IL 48 OVER BEAR CREEK
- 39 BUTT JOINT DETAILS
- 40 TYPE C INLET BOX DETAILS
- 41 - 71 BRIDGE PLANS IL 48 OVER BEAR CREEK
- 72 - 72A IL 29 OVER IL 48 REPAIR DETAILS
- 73 - 97 CROSS SECTIONS IL 48 OVER BEAR CREEK

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 420401-09 BRIDGE APPROACH PAVEMENT CONNECTOR
- 482001-02 HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
- 515001-03 NAME PLATE FOR BRIDGES
- 542401-01 METAL END SECTION FOR PIPE CULVERTS
- 601101-01 CONCRETE HEADWALL FOR PIPE DRAIN
- 609006-05 BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630301-06 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631031-11 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
- 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-03 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701311-03 LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
- 701321-13 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
- 701901-02 TRAFFIC CONTROL DEVICES
- 704001-07 TEMPORARY CONCRETE BARRIER
- 780001-03 TYPICAL PAVEMENT MARKINGS
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

| | |
|---|--------------|
| DISTRICT SIX | |
| EXAMINED <u>8/5</u> | 20 <u>13</u> |
| <i>[Signature]</i> OPERATIONS ENGINEER | |
| EXAMINED <u>Aug 8</u> | 20 <u>13</u> |
| <i>[Signature]</i> PROJECT IMPLEMENTATION ENGINEER | |
| EXAMINED <u>August 7</u> | 20 <u>13</u> |
| <i>[Signature]</i> PROGRAM DEVELOPMENT ENGINEER | |

design firm
no. 184001036



| | | |
|-----------------------------------|------------|---------|
| USER NAME * g.jameson | DESIGNED - | REVISED |
| FILE NAME * 0672A61-SHT-INDEX.dgn | CHECKED - | REVISED |
| PLOT SCALE * 10.0000 "/> | | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS AND HIGHWAY STANDARDS
IL 29 OVER IL 48 /IL 48 OVER BEAR CREEK**

SCALE: 1" = 5' SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|-----------|--------------------|-----------|
| * | (4)1, 136B-1 | CHRISTIAN | 97 | 2 |
| * 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

GENERAL NOTES

1. THE CONTRACTOR SHALL PROTECT UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATION. THE J.U.L.I.E. NUMBER IS 1-800-892-0123.

THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES IS SHOWN FOR THE CONTRACTOR'S INFORMATION ONLY AND IS NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR OR SUB-CONTRACTOR TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS CONSTRUCTION ACTIVITIES WITH THE VARIOUS UTILITY OWNERS. ALL POTENTIAL CONFLICTS SHALL BE INVESTIGATED AND REMEDIAL ACTION TAKEN PRIOR TO INTERRUPTION OF THE CONTRACTOR'S PROGRESS.

ALL UTILITY FACILITIES THAT REQUIRE RELOCATION WITHIN STATE RIGHT OF WAY SHALL BE COMPLETED BY THE UTILITY COMPANY UNLESS OTHERWISE SHOWN ON THE PLANS.
2. IN ADDITION TO FIELD SURVEYS AND AERIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE AGREED UNIT PRICE BID FOR THE WORK.
3. ALL STATION AND OFFSET REFERENCES ARE TO THE ROADWAY CENTERLINE UNLESS OTHERWISE NOTED. THE STATE PLANE COORDINATE SYSTEM HAS BEEN USED FOR THE HORIZONTAL CONTROL.
4. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM.
5. ANY REFERENCE WITHIN THESE PLANS TO A STANDARD SHALL BE INTERPRETED TO MEAN THE EDITION INDICATED BY THE SUB-NUMBER LISTED ON THE INDEX OF SHEETS AND HIGHWAY STANDARDS SHEET OR THE COPY INCLUDED IN THESE PLANS.
6. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.
7. IF SO DIRECTED BY THE ENGINEER, DITCHES ADJACENT TO EMBANKMENTS SHALL BE CONSTRUCTED PRIOR TO STARTING THE CONSTRUCTION OF THE EMBANKMENT FILL.
8. GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE 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 FOR EARTH EXCAVATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
9. SEEDING SHALL BE DONE ON ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION OPERATIONS AS DIRECTED BY THE ENGINEER. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN UNTILLABLE CONDITION. SEEDING SHALL BE PAID FOR ONLY WITHIN THE PROPOSED RIGHT-OF-WAY OR EASEMENT LIMITS. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED RIGHT-OF-WAY OR EASEMENT LIMITS SHALL BE SEEDDED, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

10. FACTORS USED FOR ESTIMATING PLAN QUANTITIES OR USAGE ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

| | |
|--|---------------------|
| HMA BINDER COURSE | 112 LBS/SQ YD-IN |
| HMA SURFACE COURSE | 112 LBS/SQ YD-IN |
| HMA SHOULDERS | 112 LBS/SQ YD-IN |
| BITUMINOUS MATERIALS: | |
| ON PAVEMENT | 0.00038 TONS/SQ YD |
| ON AGGREGATE SURFACE | 0.001425 TONS/SQ YD |
| AGGREGATE (PRIME COAT) | 0.002 TONS/SQ YD |
| RIPRAP | 1.50 TONS/CU YD |
| SEEDING FERTILIZER RATIO (NIT:PHOS:POT) | 90:90:90 LBS/ACRE |
| AGRICULTURAL GROUND LIMESTONE | 2 TONS/ACRE |
| AGGREGATE (SURFACE, BASE, SUBBASE, BACKFILL) | 2.05 TONS/CU YD |
11. THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION EACH FOR THE MILLED SURFACE, BINDER COURSE AND SURFACE COURSE.
12. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF EIGHT SAND BAGS PER BARRICADE.
13. THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL AND TEMPORARY PAVEMENT MARKINGS PH: (217) 782-7314. THE BUREAU OF OPERATIONS WILL THEN DETERMINE THE ACTUAL LIMITS TO BE STRIPED AS "NO PASSING ZONES."
14. ONLY THOSE TREES LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES, PLANTS, AND WETLANDS FROM DAMAGE. ALL TREES AND STUMPS INDICATED ON THE PLANS FOR REMOVAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
15. WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAW CUT SHALL BE MADE TO ACHIEVE A NEAT BUTT JOINT. SAW CUTS FOR PAVEMENT PATCHES WILL NOT BE MEASURED FOR PAYMENT. ALL OTHER SAWED JOINTS FOR REMOVALS AND BUTT JOINTS SHALL BE CONSIDERED INCLUDED IN THE ITEM BEING REMOVED OR CONSTRUCTED.
16. THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR EXACT PIPE CULVERT LENGTHS BEFORE ORDERING THE PIPE CULVERTS.
17. ALL OPENINGS IN PRECAST STRUCTURES, INCLUDING BOX CULVERTS, SHALL BE PRECAST TO THE PROPER SIZE. THIS INCLUDES OPENINGS FOR PIPE STRUCTURES, MANHOLE OPENINGS AND OPENINGS FOR PIPE UNDERDRAINS. COSTS FOR THESE OPENINGS AND THE CONNECTIONS SHALL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS FOR THE STRUCTURES INVOLVED.
18. WHERE SECTION OR SUB-SECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. IF THE ENGINEER DECIDES TO HAVE THE CONTRACTOR RESET THE MONUMENT, THE WORK SHALL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.
19. THE THICKNESS OF HOT-MIX ASPHALT SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT IS PLACED.

20. EXISTING PAVEMENT DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS, AND NOT OTHERWISE NECESSARY TO REPLACE, SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
21. THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
22. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
23. THE REPLACEMENT OF DAMAGED TEMPORARY PAVEMENT MARKING FOR ANY OF THE TRAFFIC CONTROL STANDARDS WILL NOT BE PAID FOR SEPARATELY. THE REPLACEMENT COST SHALL BE CONSIDERED INCLUDED IN THE COST OF THE TRAFFIC CONTROL STANDARD.

COMMITMENTS

THE RESIDENT ENGINEER SHALL CONTACT STUDIES AND PLANS CONCERNING ANY MAJOR PLAN CHANGE, TO MAKE SURE NO PREVIOUS COMMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN AND ALLOW AN IMPROVED DESIGN FOR FUTURE PROJECTS.

THERE ARE NO COMMITMENTS AT THIS TIME.

UTILITY COMPANIES

ILLINOIS CONSOLIDATED TELEPHONE COMPANY
1000 SOUTH SPRESSER STREET
TAYLORVILLE, IL 62568-1955
ATTN: DOUG HOUCHIN

CITY OF TAYLORVILLE
205 NORTH CHEROKEE STREET
TAYLORVILLE, IL 62568
ATTN: RICHARD WISEMAN

NEW WAVE COMMUNICATIONS
1176 EAST 1500 NORTH ROAD
TAYLORVILLE, IL 62568
ATTN: LARRY REPSCHER

MEDIA COM
4290 BLUESTEM ROAD
P.O. BOX 288
CHARLESTON, IL 61920
ATTN: DALE LINGAFELTER

AMEREN ILLINOIS POWER COMPANY
1915 OLD BUS LINE ROAD
P.O. BOX 579
HILLSBORO, IL 62049
ATTN: JOHN RAPP

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

| MIXTURE USE(S) | SURFACE COURSE | BINDER COURSE | LEVELING BINDER COURSE | BASE COURSE WIDENING | HMA SHOULDER (SURFACE LIFT) | HMA SHOULDER (LOWER LIFTS) |
|---|----------------|---------------|------------------------|----------------------|-----------------------------|----------------------------|
| AC/PG | PG64-22 | PG64-22 | PG64-22 | PG64-22 | PG64-22 | PG64-22 |
| DESIGN AIR VOIDS | 4.0% @ N=70 | 4.0% @ N=70 | 4.0% @ N=70 | 4.0% @ N=70 | 4.0% @ N=50 | 4.0% @ N=50 |
| MIXTURE COMPOSITION (GRADATION MIXTURE) | IL 9.5 | IL 19.0 | IL 9.5 | IL 19.0 | IL 9.5 | IL 19.0 |
| FRICTION AGGREGATE | MIXTURE C | NA | NA | NA | MIXTURE C | NA |

FAP 714
M232

FAP 75
M231

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|------------|---------------------------------------|-------|----------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| | | | | | | |
| | | | | 0004 | 0011 | 0014 |
| | | | | IL 48 | IL 48 | IL 29 |
| 20100210 | TREE REMOVAL (OVER 15 UNITS DIAMETER) | UNIT | 24 | 24 | | |
| 20100500 | TREE REMOVAL, ACRES | ACRE | 0.3 | 0.3 | | |
| 20200100 | EARTH EXCAVATION | CU YD | 660 | 660 | | |
| 20300100 | CHANNEL EXCAVATION | CU YD | 561 | 561 | | |
| 20400800 | FURNISHED EXCAVATION | CU YD | 1,095 | 1,095 | | |
| * 25000200 | SEEDING, CLASS 2 | ACRE | 0.7 | 0.7 | | |
| * 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 62 | 62 | | |
| * 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 62 | 62 | | |
| * 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 62 | 62 | | |
| * 25000700 | AGRICULTURAL GROUND LIMESTONE | TON | 2 | 2 | | |
| * 25100115 | MULCH, METHOD 2 | ACRE | 0.7 | 0.7 | | |
| * 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 201 | 201 | | |
| 28000400 | PERIMETER EROSION BARRIER | FOOT | 94 | 94 | | |
| 28001000 | AGGREGATE (EROSION CONTROL) | TON | 136 | 136 | | |

*SPECIALTY ITEM

design firm
no. 184001036



| | | |
|---------------------------------|------------|---------|
| USER NAME = g.joneson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-SUM.dgn | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK

SCALE: NTS SHEET 1 OF 7 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | (41), 136B-1 | CHRISTIAN | 97 | 4 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

FAP 714
M232

FAP 75
M231

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|----------|---|-------|----------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| | | | | | | |
| | | | | 0004 | 0011 | 0014 |
| | | | | IL 48 | IL 48 | IL 29 |
| 28100107 | STONE RIPRAP, CLASS A4 | SQ YD | 1,896 | 1,783 | | 113 |
| 28100109 | STONE RIPRAP, CLASS A5 | SQ YD | 2,808 | | 2,808 | |
| 28200200 | FILTER FABRIC | SQ YD | 4,788 | 1,783 | 2,808 | 197 |
| 35650500 | BASE COURSE WIDENING 10" | SQ YD | 457 | 457 | | |
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT) | TON | 6 | 6 | | |
| 40600300 | AGGREGATE (PRIME COAT) | TON | 17 | 17 | | |
| 40600635 | LEVELING BINDER (MACHINE METHOD), N70 | TON | 93 | 93 | | |
| 40600895 | CONSTRUCTING TEST STRIP | EACH | 1 | 1 | | |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 160 | 160 | | |
| 40600990 | TEMPORARY RAMP | SQ YD | 412 | 412 | | |
| 40603085 | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 | TON | 138 | 138 | | |
| 40603315 | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 | TON | 278 | 278 | | |
| 42001430 | BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) | SQ YD | 70 | 70 | | |
| 42001500 | P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT | SQ YD | 40 | 40 | | |

design firm
no. 184001036



| | | |
|---------------------------------|------------|---------|
| USER NAME • g.jameson | DESIGNED - | REVISED |
| FILE NAME • 0672A61-SHT-SUM.dgn | CHECKED - | REVISED |
| PLOT SCALE • 1/8"=1'-0" / IN. | DRAWN - | REVISED |
| PLOT DATE • 8/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK

SCALE: NTS SHEET 2 OF 7 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4), 136B-1 | CHRISTIAN | 97 | 5 |
| • 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|---------------------|--|------------------|------------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| | | | | 0004 | 0011 | 0014 |
| | | | | IL 48 | IL 48 | IL 29 |
| 44000100 | PAVEMENT REMOVAL | SQ YD | 185 | 185 | | |
| 44000152 | HOT MIX ASPHALT SURFACE REMOVAL, 3/4" | SQ YD | 2,065 | 2,065 | | |
| 44200156 | PAVEMENT PATCHING, TYPE II, 13 INCH | SQ YD | 80 | 80 | | |
| 44200160 | PAVEMENT PATCHING, TYPE III, 13 INCH | SQ YD | 44 | 44 | | |
| 48102100 | AGGREGATE WEDGE SHOULDER, TYPE B | TON | 104 | 104 | | |
| 48203100 | HOT-MIX ASPHALT SHOULDERS | TON | 186 | 186 | | |
| 50100100 | REMOVAL OF EXISTING STRUCTURES | EACH | 1 | | 1 | |
| 50200100 | STRUCTURE EXCAVATION | CU YD | 313 | | 313 | |
| 50300100 | FLOOR DRAINS | EACH | 12 | | 12 | |
| 50300225 | CONCRETE STRUCTURES | CU YD | 172.6 | | 172.6 | |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 368.9 | | 368.9 | |
| 50300260 | BRIDGE DECK GROOVING | SQ YD | 902 | | 902 | |
| 50300300 | PROTECTIVE COAT | SQ YD | 1,132 | | 1,132 | |
| 50500105 | FURNISHING AND ERECTING STRUCTURAL STEEL | L SUM | 1 | | 1 | |

design firm
no. 184001036



| | | |
|---------------------------------|------------|---------|
| USER NAME * gjameson | DESIGNED - | REVISED |
| FILE NAME * 0672461-SHT-SUM.dgn | CHECKED - | REVISED |
| PLOT SCALE * 10.0000 / IN. | DRAWN - | REVISED |
| PLOT DATE * 0/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK
SCALE: NTS SHEET 3 OF 7 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------|-----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | (4)1, 136B-1 | CHRISTIAN | 97 | 6 |
| * 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

FAP 714
M232

FAP 75
M231

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|------------|----------------------------------|-------|----------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| 0004 | 0011 | 0014 | | | | |
| IL 48 | IL 48 | IL 29 | | | | |
| 50500505 | STUD SHEAR CONNECTORS | EACH | 5,202 | | 5,202 | |
| 50800105 | REINFORCEMENT BARS | POUND | 24,980 | | 24,980 | |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 118,080 | | 118,080 | |
| 50800515 | BAR SPLICERS | EACH | 1,095 | | 1,095 | |
| 50800530 | MECHANICAL SPLICERS | EACH | 112 | | 112 | |
| 51201600 | FURNISHING STEEL PILES HP12X53 | FOOT | 380 | | 380 | |
| 51202305 | DRIVING PILES | FOOT | 380 | | 380 | |
| 51203600 | TEST PILE STEEL HP12X53 | EACH | 2 | | 2 | |
| 51500100 | NAME PLATES | EACH | 1 | | 1 | |
| 51603000 | DRILLED SHAFT IN SOIL | CU YD | 64.3 | | 64.3 | |
| * 51604000 | DRILLED SHAFT IN ROCK | CU YD | 13.7 | | 13.7 | |
| 52100520 | ANCHOR BOLTS, 1" | EACH | 48 | | 48 | |
| 54215547 | METAL END SECTIONS 12" | EACH | 4 | 4 | | |
| 59100100 | GEOCOMPOSITE WALL DRAIN | SQ YD | 84 | | 84 | |

* SPECIALTY ITEM

design firm
no. 184001036



| | | |
|---------------------------------|------------|---------|
| USER NAME * gjameson | DESIGNED - | REVISED |
| FILE NAME * 0672A01-SH1-SUM.dgn | CHECKED - | REVISED |
| PLOT SCALE * 10.0000 / IN. | DRAWN - | REVISED |
| PLOT DATE * 8/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK

SCALE: NTS SHEET 4 OF 7 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------------|--------------|--------------------|--------------|-----------|
| * | (4)1, 136B-1 | CHRISTIAN | 97 | 7 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| [ILLINOIS] FED. AID PROJECT | | | | |

FAP 714
M232

FAP 75
M231

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|------------|--|--------|----------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| 0004 | 0011 | 0014 | | | | |
| IL 48 | IL 48 | IL 29 | | | | |
| 59300100 | CONTROLLED LOW-STRENGTH MATERIAL | CU YD | 3.0 | | | 3.0 |
| 60100945 | PIPE DRAINS 12" | FOOT | 31 | 31 | | |
| 60900240 | TYPE C INLET BOX, STANDARD 609006 | EACH | 4 | 4 | | |
| * 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | FOOT | 125 | 125 | | |
| * 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 4 | 4 | | |
| * 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 4 | 4 | | |
| * 63200310 | GUARDRAIL REMOVAL | FOOT | 508 | 508 | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 7 | 7 | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | |
| 70100405 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 | EACH | 1 | 1 | | |
| 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 | 0.5 | | 0.5 |
| 70100460 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 | L SUM | 1 | 1 | | |
| 70100500 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 | L SUM | 1 | 1 | | |
| 70103815 | TRAFFIC CONTROL SURVEILLANCE | CAL DA | 5 | 5 | | |

* SPECIALTY ITEM

design firm
no. 104001036



| | | |
|---------------------------------|------------|---------|
| USER NAME • gjameson | DESIGNED • | REVISED |
| FILE NAME • 0672461-SHT-SUM.dgn | CHECKED • | REVISED |
| PLOT SCALE • 1/8" = 1' IN. | DRAWN • | REVISED |
| PLOT DATE • 6/16/2013 | CHECKED • | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK

SCALE: NTS SHEET 5 OF 7 SHEETS STA. TO STA.

| | | | | |
|---------------------------|------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (41), 136B-1 | CHRISTIAN | 97 | 8 |
| • | 75(IL 29) & 714(IL 48) | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

FAP 714
M232

FAP 75
M231

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|------------|---|--------|----------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| 0004 | 0011 | 0014 | | | | |
| IL 48 | IL 48 | IL 29 | | | | |
| 70106500 | TEMPORARY BRIDGE TRAFFIC SIGNALS | EACH | 1 | 1 | | |
| 70106700 | TEMPORARY RUMBLE STRIPS | EACH | 6 | 6 | | |
| 70106800 | CHANGEABLE MESSAGE SIGN | CAL MO | 14 | 14 | | |
| * 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 936 | 936 | | |
| * 70300230 | TEMPORARY PAVEMENT MARKING - LINE 5" | FOOT | 4,154 | 4,154 | | |
| * 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24" | FOOT | 24 | 24 | | |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 1,883 | 1,883 | | |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 600 | 600 | | |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 600 | 600 | | |
| * 70600260 | IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 | EACH | 2 | 2 | | |
| * 70600332 | IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 | EACH | 2 | 2 | | |
| * 78001120 | PAINT PAVEMENT MARKING - LINE 5" | FOOT | 2,480 | 2,480 | | |
| * 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 11 | 11 | | |
| * 78200420 | GUARDRAIL MARKERS, TYPE B | EACH | 10 | 10 | | |

* SPECIALTY ITEM

design firm
no. 184001036



| | | |
|---------------------------------|------------|---------|
| USER NAME : g.jameson | DESIGNED - | REVISED |
| FILE NAME : 0672461-SHT-SUM.dgn | CHECKED - | REVISED |
| PLOT SCALE : 10.0000 / IN. | DRAWN - | REVISED |
| PLOT DATE : 8/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SUMMARY OF QUANTITIES | |
|--|----------------------------------|
| IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK | |
| SCALE: NTS | SHEET 6 OF 7 SHEETS STA. TO STA. |

| | | | | |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | (4), 136B-1 | CHRISTIAN | 97 | 9 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

FAP 714
M232

FAP 715
M231

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|------------|---|-------|----------------|---------------------|--------------|--------------|
| | | | | FEDERAL FUNDS | | |
| | | | | 80% FED / 20% STATE | | |
| | | | | RURAL ROADWAY | RURAL BRIDGE | URBAN BRIDGE |
| 0004 | 0011 | 0014 | | | | |
| IL 48 | IL 48 | IL 29 | | | | |
| * 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 4 | 4 | | |
| 78300100 | PAVEMENT MARKING REMOVAL | SQ FT | 924 | 924 | | |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 12 | 12 | | |
| Z0004552 | APPROACH SLAB REMOVAL | SQ YD | 108 | 108 | | |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1 | 1 | | |
| Z0015595 | DECK DRAIN EXTENSIONS | EACH | 12 | | | 12 |
| Z0026407 | TEMPORARY SHEET PILING | SQ FT | 782 | | 782 | |
| Z0046304 | PIPE UNDERDRAINS FOR STRUCTURES 4" | FOOT | 158 | | 158 | |
| X0323260 | SEDIMENT BASIN | EACH | 4 | 4 | | |
| X4401198 | HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH | SQ YD | 2,065 | 2,065 | | |
| X5860110 | GRANULAR BACKFILL FOR STRUCTURES | CU YD | 144 | | 144 | |
| * X7200201 | WIDTH RESTRICTION SIGNING | L SUM | 1 | 1 | | |
| ∅ Z0070600 | TRAINEES | HOURS | 500 | 500 | | |
| ∅ Z0070604 | TRAINEES - TRAINING PROGRAM GRADUATE | HOURS | 500 | 500 | | |

* SPECIALTY ITEM ∅ 0042



| | | |
|---------------------------------|------------|---------|
| USER NAME * gjoneson | DESIGNED - | REVISED |
| FILE NAME * D672AG1-SHT-SUM.dgn | CHECKED - | REVISED |
| PLOT SCALE * 10,0000' / IN. | DRAWN - | REVISED |
| PLOT DATE * 8/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SUMMARY OF QUANTITIES | |
|--|----------------------------------|
| IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK | |
| SCALE: NTS | SHEET 7 OF 7 SHEETS STA. TO STA. |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------------|---------------|--------------------|--------------|-----------|
| * | (411, 136B-1) | CHRISTIAN | 97 | 10 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| [ILLINOIS] FED. AID PROJECT | | | | |

| LOCATION | OFFSET | TOTAL AREA | 20100210 | 20100500 |
|----------------------------|--------|------------|--|---------------------|
| | | | TREE REMOVAL (OVER 15 UNITS DIAMETER) (UNIT) | TREE REMOVAL, ACRES |
| IL 48 OVER BEAR CREEK | | | | |
| STA. 625+25 | 50' LT | | 24 | |
| STA. 623+16 TO STA. 626+75 | RT | | | 0.17 |
| STA. 627+95 TO STA. 629+60 | LT | | | 0.13 |
| TOTALS | | | 24 | 0.30 |

| LOCATION | OFFSET | TOTAL AREA SEEDING | | 25000200 | 25000400 | 25000500 | 25000600 | 25000700 | 25100115 | 28000250 * |
|----------------------------|--------|--------------------|------|-------------------------|---|---|--|-------------------------------------|------------------------|---|
| | | SQ FT | ACRE | SEEDING, CLASS 2 (ACRE) | NITROGEN FERTILIZER NUTRIENT (90LBS/ACRE) (POUND) | PHOSPHORUS FERTILIZER NUTRIENT (90LBS/ACRE) (POUND) | POTASSIUM FERTILIZER NUTRIENT (90LBS/ACRE) (POUND) | AGRICULTURAL GROUND LIMESTONE (TON) | MULCH, METHOD 2 (ACRE) | TEMPORARY EROSION CONTROL SEEDING (POUND) |
| STA. 621+50 TO STA. 625+55 | LT | 10307 | 0.24 | 0.24 | 22 | 22 | 22 | 0.5 | 0.24 | 72 |
| STA. 621+50 TO STA. 625+75 | RT | 7375 | 0.17 | 0.17 | 16 | 16 | 16 | 0.4 | 0.17 | 51 |
| STA. 628+75 TO STA. 632+50 | LT | 6191 | 0.15 | 0.15 | 14 | 14 | 14 | 0.3 | 0.15 | 45 |
| STA. 628+45 TO STA. 632+50 | RT | 4581 | 0.11 | 0.11 | 10 | 10 | 10 | 0.3 | 0.11 | 33 |
| TOTALS | | | | 0.7 | 62 | 62 | 62 | 2 | 0.7 | 201 |

* ASSUMED THREE APPLICATIONS

| LOCATION | OFFSET | 28001000 | X0323260 | EARTH |
|-----------------------|--------|-----------------------------------|-----------------------|--|
| | | AGGREGATE (EROSION CONTROL) (TON) | SEDIMENT BASIN (EACH) | EXCAVATION FOR EROSION CONTROL * (CU YD) |
| IL 48 OVER BEAR CREEK | | | | |
| STA. 624+21 | LT | 8 | | |
| STA. 625+36 | LT | 8 | | |
| STA. 625+93 | LT | 8 | | |
| STA. 626+21 | LT | 8 | | |
| STA. 626+50 | LT | | 1 | 9 |
| STA. 623+71 | RT | 8 | | |
| STA. 626+55 | RT | 8 | | |
| STA. 626+94 | RT | 8 | | |
| STA. 627+01 | RT | 8 | | |
| STA. 627+09 | RT | 8 | | |
| STA. 627+25 | RT | | 1 | 9 |
| STA. 627+03 | LT | | 1 | 9 |
| STA. 627+24 | LT | 8 | | |
| STA. 627+44 | LT | 8 | | |
| STA. 628+05 | LT | 8 | | |
| STA. 629+30 | LT | 8 | | |
| STA. 630+28 | LT | 8 | | |
| STA. 627+50 | RT | | 1 | 9 |
| STA. 627+60 | RT | 8 | | |
| STA. 627+70 | RT | 8 | | |
| STA. 627+90 | RT | 8 | | |
| TOTALS | | 136 | 4 | 36 |

* THE QUANTITY SHOWN FOR EARTH EXCAVATION FOR EROSION CONTROL IS FOR INFORMATION ONLY. THE COST FOR EARTH EXCAVATION IS INCLUDED IN THE COST PER EACH FOR SEDIMENT BASIN. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

| LOCATION | LENGTH | WIDTH | AREA | 40600982 | X4401198 |
|-----------------------|-----------|--------|-------|--|---|
| | | | | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (SQ YD) | HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (SQ YD) |
| IL 48 OVER BEAR CREEK | | | | | |
| 621+50.00 | 621+80.00 | 30.00 | 24.00 | 720.00 | 80 |
| 621+80.00 | 625+68.00 | 388.00 | 24.00 | 9312.00 | 1,035 |
| 628+34.00 | 632+20.00 | 386.00 | 24.00 | 9264.00 | 1,030 |
| 632+20.00 | 632+50.00 | 30.00 | 24.00 | 720.00 | 80 |
| TOTALS | | | | 160 | 2,065 |

| LOCATION | LENGTH | WIDTH | AREA | 44000100 | Z0004552 |
|-----------------------|-----------|-------|-------|--------------------------|-------------------------------|
| | | | | PAVEMENT REMOVAL (SQ YD) | APPROACH SLAB REMOVAL (SQ YD) |
| IL 48 OVER BEAR CREEK | | | | | |
| 625+68.00 | 626+02.00 | 34.00 | 24.00 | 816 | 91 |
| 626+02.00 | 626+22.00 | 20.00 | 24.00 | 480 | 54 |
| 627+79.00 | 627+99.00 | 20.00 | 24.00 | 480 | 54 |
| 627+99.00 | 628+34.00 | 35.00 | 24.00 | 840 | 94 |
| TOTALS | | | | 185 | 108 |

| LOCATION | OFFSET | 78200420 |
|-----------------------|--------|----------------------------------|
| | | GUARDRAIL MARKERS, TYPE B (EACH) |
| IL 48 OVER BEAR CREEK | | |
| STA. 625+68 | LT | 1 |
| STA. 626+48 | LT | 1 |
| STA. 627+28 | LT | 1 |
| STA. 628+08 | LT | 1 |
| STA. 628+88 | LT | 1 |
| STA. 625+14 | RT | 1 |
| STA. 625+94 | RT | 1 |
| STA. 626+74 | RT | 1 |
| STA. 627+54 | RT | 1 |
| STA. 628+34 | RT | 1 |
| TOTALS | | 10 |

design firm
no. 184001036

whks
engineers • planners • land surveyors

USER NAME • g.jameson
FILE NAME • 0672AG1-SHT-SCHEDULE
PLOT SCALE • 10.0000" = 1"
PLOT DATE • 8/19/2013

DESIGNED -
CHECKED -
DRAWN -
CHECKED -

REVISED
REVISED
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK

SCALE: NTS SHEET 1 OF 4 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------------|---------------------------|-----------|--------------|--------------------|
| | (4) IL 136B-1 | CHRISTIAN | 97 | 11 |
| | (*) 75(IL 29) & 71(IL 48) | | | |
| | | | | CONTRACT NO. 72A61 |
| [ILLINOIS] FED. AID PROJECT | | | | |

| LOCATION | OFFSET | 70106700 | 70400100 | 70400200 | 70600260 | 70600332 |
|------------------------------|--------|-------------------------|----------------------------|-------------------------------------|---|--|
| | | TEMPORARY RUMBLE STRIPS | TEMPORARY CONCRETE BARRIER | RELOCATE TEMPORARY CONCRETE BARRIER | IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 | IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 |
| | | (EACH) | (FOOT) | (FOOT) | (EACH) | (EACH) |
| IL 48 OVER BEAR CREEK | | | | | | |
| STA. 604+80 | RT | 1 | | | | |
| STA. 609+80 | RT | 1 | | | | |
| STA. 614+80 | RT | 1 | | | | |
| STA. 622+30 | RT | | | | | |
| STA. 622+55 | LT | | | | | |
| STA. 631+45 | LT | | | | | |
| STA. 631+70 | RT | | | | | |
| STA. 639+20 | LT | 1 | | | | |
| STA. 644+20 | LT | 1 | | | | |
| STA. 649+20 | LT | 1 | | | | |
| STAGE I | | | | | | |
| STA. 624+00 | RT | | | | 1 | |
| STA. 624+00 TO STA. 630+00 | | | 600 | | | |
| STA. 630+00 | RT | | | | 1 | |
| STAGE II | | | | | | |
| STA. 624+00 | LT | | | | | 1 |
| STA. 624+00 TO STA. 630+00 | | | | 600 | | |
| STA. 630+00 | LT | | | | | 1 |
| TOTALS | | 6 | 600 | 600 | 2 | 2 |

| LOCATION | 20200100 | 20300100 | EARTH | EMBANKMENT | EARTHWORK | 20400800 |
|----------------------------|------------------|--------------------|-----------------------------------|--------------|-----------------------------------|----------------------|
| | EARTH EXCAVATION | CHANNEL EXCAVATION | EXCAVATION ADJUSTED FOR SHRINKAGE | | BALANCE WASTE(+) AND SHORTAGE (-) | FURNISHED EXCAVATION |
| | (CU YD) | (CU YD) | (CU YD) | (CU YD) | (CU YD) | |
| PRESTAGE | | | | | | |
| STA. 621+50 TO STA. 626+11 | 22 | | 17 | 0 | 17 | |
| STA. 627+91 TO STA. 632+50 | 23 | | 18 | 0 | 18 | |
| STAGE I | | | | | | |
| STA. 621+50 TO STA. 626+11 | 51 | | 39 | 611 | -572 | |
| STA. 627+91 TO STA. 632+50 | 56 | | 42 | 398 | -356 | |
| STAGE II | | | | | | |
| STA. 621+50 TO STA. 626+11 | 294 | | 221 | 527 | -306 | |
| STA. 627+91 TO STA. 632+50 | 214 | | 161 | 327 | -166 | |
| STAGE III | | | | | | |
| STA. 621+50 TO STA. 626+11 | 0 | | 0 | 5 | -5 | |
| STA. 627+91 TO STA. 632+50 | 0 | | 0 | 4 | -4 | |
| CHANNEL EXCAVATION | | | | | | |
| STA. 626+11 TO STA. 627+91 | | 561 | 421 | 142 | 279 | |
| TOTAL | 660 | 561 | 919 | 2,014 | -1,095 | 1,095 |

SHRINKAGE FACTOR FOR EARTH EXCAVATION = 25%

| LOCATION | OFFSET | 63000001 | 63100085 | 63100167 | 63200310 | 78201000 |
|------------------------------|-----------|--|----------------------------------|--|-------------------|----------------------------------|
| | | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6-FOOT POSTS | TRAFFIC BARRIER TERMINAL, TYPE 6 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | GUARDRAIL REMOVAL | TERMINAL MARKER - DIRECT APPLIED |
| | | (FOOT) | (EACH) | (EACH) | (FOOT) | (EACH) |
| IL 48 OVER BEAR CREEK | | | | | | |
| 624+81.00 | LT | | | | | 1 |
| 624+81.00 | 625+31.00 | LT | | 1 | | |
| 625+08.00 | 626+06.00 | LT | | | 98 | |
| 625+31.00 | 625+43.50 | LT | 12.5 | | | |
| 625+43.50 | 628+87.25 | LT | | 1 | | |
| 627+76.00 | 628+75.00 | LT | | | 99 | |
| 627+94.25 | 628+38.00 | LT | | 1 | | |
| 628+38.00 | 628+88.00 | LT | 50 | | | |
| 628+88.00 | 629+38.00 | LT | | 1 | | |
| 629+38.00 | LT | | | | | 1 |
| 624+10.00 | 626+23.00 | RT | | | 213 | |
| 624+64.00 | RT | | | | | 1 |
| 624+64.00 | 625+14.00 | RT | | 1 | | |
| 625+14.00 | 625+64.00 | RT | 50 | | | |
| 625+64.00 | 626+07.75 | RT | | 1 | | |
| 627+96.00 | 628+94.00 | RT | | | 98 | |
| 628+14.75 | 628+58.50 | RT | | 1 | | |
| 628+58.50 | 628+71.00 | RT | 12.5 | | | |
| 628+71.00 | 629+21.00 | RT | | 1 | | |
| 629+21.00 | RT | | | | | 1 |
| TOTALS | | 125 | 4 | 4 | 508 | 4 |

| LOCATION | OFFSET | WIDTH | 40600990 |
|------------------------------|-----------|-------|----------------|
| | | | TEMPORARY RAMP |
| | | (FT) | (SQ YD) |
| IL 48 OVER BEAR CREEK | | | |
| PRESTAGE | | | |
| 626+12.00 | 626+22.00 | LT | 13.5 |
| 627+79.00 | 627+89.00 | LT | 13.5 |
| STAGE I | | | |
| 625+27.00 | 625+73.00 | RT | 18 |
| 628+39.00 | 628+75.00 | RT | 18 |
| STAGE II | | | |
| 625+27.00 | 625+63.00 | LT | 18 |
| 628+29.00 | 628+75.00 | LT | 18 |
| STAGE III | | | |
| 621+50.00 | 621+60.00 | | 24 |
| 632+40.00 | 632+50.00 | | 24 |
| TOTALS | | | 412 |

| LOCATION | OFFSET | 54215547 | 60100945 | 60900240 |
|------------------------------|--------|------------------------|-----------------|-----------------------------------|
| | | METAL END SECTIONS 12" | PIPE DRAINS 12" | TYPE C INLET BOX, STANDARD 609006 |
| | | (EACH) | (FOOT) | (EACH) |
| IL 48 OVER BEAR CREEK | | | | |
| 625+63.00 | LT | 1 | 8 | 1 |
| 625+83.50 | RT | 1 | 9 | 1 |
| 628+18.50 | LT | 1 | 7 | 1 |
| 628+39.00 | RT | 1 | 7 | 1 |
| TOTALS | | 4 | 31 | 4 |

design firm
no. 184001036



| | | |
|--------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-SCHEDULE.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | | | | |
|---|--|---------------------|-------------|--------------|--------------------|-----------|
| SCHEDULE OF QUANTITIES | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK | | * | (4), 136B-1 | CHRISTIAN | 97 | 12 |
| SCALE: NTS | | SHEET 2 OF 4 SHEETS | | STA. TO STA. | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | | | |

| LOCATION | OFFSET | LENGTH | WIDTH | AREA | THICKNESS | 48102100 AGGREGATE WEDGE SHOULDER, TYPE B |
|-----------------------|-----------|--------|--------|---------|-----------|---|
| STATION | STATION | (FOOT) | (FOOT) | (SQ FT) | (INCHES) | (TON) |
| IL 48 OVER BEAR CREEK | | | | | | |
| STAGE III | | | | | | |
| 621+50.00 | 621+80.00 | LT | 30.00 | 4.00 | 120.00 | 1.25 |
| 621+80.00 | 623+05.00 | LT | 125.00 | 4.00 | 500.00 | 1.75 |
| 623+05.00 | 623+25.00 | LT | 20.00 | 4.00 | 80.00 | 2.25 |
| 623+25.00 | 623+65.00 | LT | 40.00 | 4.00 | 160.00 | 2.25 |
| 623+65.00 | 625+59.00 | LT | 194.00 | 4.00 | 776.00 | 3.25 |
| 621+50.00 | 621+80.00 | RT | 30.00 | 4.00 | 120.00 | 1.25 |
| 621+80.00 | 623+05.00 | RT | 125.00 | 4.00 | 500.00 | 1.75 |
| 623+05.00 | 623+25.00 | RT | 20.00 | 4.00 | 80.00 | 2.25 |
| 623+25.00 | 625+78.00 | RT | 253.00 | 4.00 | 1012.00 | 3.25 |
| 628+25.00 | 629+75.00 | LT | 150.00 | 4.00 | 600.00 | 3.25 |
| 629+75.00 | 630+75.00 | LT | 100.00 | 4.00 | 400.00 | 1.75 |
| 630+75.00 | 630+96.00 | LT | 21.00 | 4.00 | 84.00 | 1.25 |
| 630+96.00 | 632+20.00 | LT | 124.00 | 4.00 | 496.00 | 1.25 |
| 632+20.00 | 632+50.00 | LT | 30.00 | 4.00 | 120.00 | 1.25 |
| 628+44.00 | 629+75.00 | RT | 131.00 | 4.00 | 524.00 | 3.25 |
| 629+75.00 | 630+75.00 | RT | 100.00 | 4.00 | 400.00 | 1.75 |
| 630+75.00 | 630+96.00 | RT | 21.00 | 4.00 | 84.00 | 1.25 |
| 630+96.00 | 632+20.00 | RT | 124.00 | 4.00 | 496.00 | 1.25 |
| 632+20.00 | 632+50.00 | RT | 30.00 | 4.00 | 120.00 | 1.25 |
| TOTALS | | | | | | 104 |

| LOCATION | OFFSET | TOTAL AREA | 28100107 STONE RIPRAP, CLASS A4 | 28100109 STONE RIPRAP, CLASS A5 | 28200200 FILTER FABRIC |
|----------------------------|--------|------------|--|--|------------------------------|
| | | (SQ FT) | (SQ YD) | (SQ YD) | (SQ YD) |
| IL 48 OVER BEAR CREEK | | | | | |
| STA. 624+90 TO STA. 625+85 | LT | 3,032 | 337 | | 337 |
| STA. 625+85 TO STA. 627+95 | LT | 13,372 | | 1,486 | 1,486 |
| STA. 627+95 TO STA. 629+60 | LT | 5,729 | 637 | | 637 |
| STA. 624+40 TO STA. 626+06 | RT | 3,878 | 431 | | 431 |
| STA. 626+06 TO STA. 628+16 | RT | 11,892 | | 1,322 | 1,322 |
| STA. 628+16 TO STA. 629+60 | RT | 3,402 | 378 | | 378 |
| SUBTOTAL | | | 1,783 | 2,808 | 4,591 |
| IL 29 OVER IL 48 | | | | | |
| SUBTOTAL | | | 113 | | 197 |
| TOTALS | | | 1,896 | 2,808 | 4,788 |

| LOCATION | TYPE | COLOR | 70300100 SHORT TERM PAVEMENT MARKING | 70300230 TEMPORARY PAVEMENT MARKING - LINE 5" | 70300280 TEMPORARY PAVEMENT MARKING - LINE 24" | 70301000 WORK ZONE PAVEMENT MARKING REMOVAL | 78001120 PAINT PAVEMENT MARKING - LINE 5" | 78100100 RAISED REFLECTIVE PAVEMENT MARKER | 78300100 PAVEMENT MARKING REMOVAL | 78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | | | | |
|-------------------------------------|---------|--------|---|---|--|---|---|--|--|---|-------|----|-----|----|
| STATION | STATION | OFFSET | (FOOT) | (FOOT) | (FOOT) | (SQ FT) | (FOOT) | (EACH) | (SQ FT) | (EACH) | | | | |
| STAGE 1 | | | | | | | | | | | | | | |
| 621+50 | 626+22 | CL | | | | | | | | 6 | | | | |
| 621+80 | 632+20 | LT | SOLID | YELLOW | | 1,040 | | 434 | 434 | | | | | |
| 621+80 | | RT | SOLID | WHITE | | | | | | | | | | |
| 621+80 | 624+50 | CL | SKIP DASH | YELLOW | | | | | 30 | | | | | |
| 621+90 | 632+20 | RT | SOLID | YELLOW | | 1,032 | | 430 | 430 | | | | | |
| 627+79 | 632+50 | CL | | | | | | | | 6 | | | | |
| 629+50 | 632+20 | CL | SKIP DASH | YELLOW | | | | | 30 | | | | | |
| 632+20 | | LT | SOLID | WHITE | | | | | | | | | | |
| STAGE 2 | | | | | | | | | | | | | | |
| 621+80 | 632+20 | LT | SOLID | YELLOW | | 1,042 | | 433 | | | | | | |
| 621+80 | 632+20 | RT | SOLID | YELLOW | | 1,040 | | 433 | | | | | | |
| 621+80 | | RT | SOLID | WHITE | | | | 24 | | | | | | |
| 632+20 | | LT | SOLID | WHITE | | | | 24 | | | | | | |
| STAGE 3 (ASSUME THREE APPLICATIONS) | | | | | | | | | | | | | | |
| 621+80 | 632+20 | LT | SOLID | WHITE | | 312 | | 35 | | | | | | |
| 621+80 | 632+20 | CL | SKIP DASH | YELLOW | | 312 | | 35 | | | | | | |
| 621+80 | 632+20 | RT | SOLID | WHITE | | 312 | | 35 | | | | | | |
| FINAL PAVEMENT MARKING | | | | | | | | | | | | | | |
| 621+50 | 632+50 | LT | SOLID | WHITE | | | | 1,100 | | | | | | |
| 621+50 | 632+50 | CL | SKIP DASH | YELLOW | | | | 280 | | | | | | |
| 621+50 | 632+50 | RT | SOLID | WHITE | | | | 1,100 | | | | | | |
| 621+50 | | CL | | | | | | | 1 | | | | | |
| 622+30 | | CL | | | | | | | 1 | | | | | |
| 623+10 | | CL | | | | | | | 1 | | | | | |
| 623+90 | | CL | | | | | | | 1 | | | | | |
| 624+70 | | CL | | | | | | | 1 | | | | | |
| 625+50 | | CL | | | | | | | 1 | | | | | |
| 628+70 | | CL | | | | | | | 1 | | | | | |
| 629+50 | | CL | | | | | | | 1 | | | | | |
| 630+30 | | CL | | | | | | | 1 | | | | | |
| 631+10 | | CL | | | | | | | 1 | | | | | |
| 631+90 | | CL | | | | | | | 1 | | | | | |
| SUBTOTAL | | | | | | 936 | | 4,154 | 24 | 1,883 | 2,480 | 11 | 924 | 12 |

| LOCATION | OFFSET | 28000400 PERIMETER EROSION BARRIER |
|-----------------------|-----------|---|
| STATION | STATION | (FOOT) |
| IL 48 OVER BEAR CREEK | | |
| 628+70.00 | 629+60.00 | LT |
| TOTALS | | 94 |

| LOCATION | LENGTH | WIDTH | AREA | 42001430 BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) | 42001500 P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT |
|-----------------------|-----------|--------|--------|--|--|
| STATION | STATION | (FOOT) | (FOOT) | (SQ FT) | (SQ YD) |
| IL 48 OVER BEAR CREEK | | | | | |
| 625+68.00 | 625+81.00 | 13.00 | 24.00 | 312.00 | 35 |
| 625+68.00 | 625+81.00 | 13.00 | 6.92 | 89.96 | 10 |
| 625+68.00 | 625+81.00 | 13.00 | 6.92 | 89.96 | 10 |
| 628+21.00 | 628+34.00 | 13.00 | 24.00 | 312.00 | 35 |
| 628+21.00 | 628+34.00 | 13.00 | 6.92 | 89.96 | 10 |
| 628+21.00 | 628+34.00 | 13.00 | 6.92 | 89.96 | 10 |
| TOTALS | | | | | 70 |
| | | | | | 40 |

design firm
no. 184001036



| | | |
|----------------------------------|------------|---------|
| USER NAME * g.jameson | DESIGNED - | REVISED |
| FILE NAME * 0672AG1-SHT-SCHEDULE | CHECKED - | REVISED |
| PLOT SCALE = 1/8" = 1' IN. | DRAWN - | REVISED |
| PLOT DATE = 01/28/2013 | CHECKED - | REVISED |

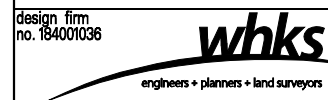
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------|-----------|--------------------|--------------|
| * | (4) IL 136B-1 | CHRISTIAN | 97 | 13 |
| * 751(L 29) & 714(L 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

SCALE: NTS SHEET 3 OF 4 SHEETS STA. TO STA.

| LOCATION | | OFFSET | LENGTH | WIDTH | AREA | THICKNESS | | | | APPLICATIONS OF BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT) (EACH) | 35650500 BASE COURSE WIDENING 10" (SQ YD) | 40600100 BITUMINOUS MATERIALS (PRIME COAT) (GALLON) | 40600300 AGGREGATE (PRIME COAT) (TON) | 40600635 LEVELING BINDER (MACHINE METHOD), N70 (TON) | 40603085 HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (TON) | 40603315 HOT-MIX ASPHALT SURFACE COURSE, MIX C, N70 (TON) | 48203100 HOT-MIX ASPHALT SHOULDERS (TON) |
|-----------------------|-----------|--------|--------|--------|---------|--|--|---|------------------------|---|--|--|--|---|---|--|---|
| | | | | | | LEVELING BINDER (MACHINE METHOD), N70 (INCHES) | HMA BINDER COURSE, IL-19.0, N70 (INCHES) | HMA SURFACE COURSE, MIX C, N70 (INCHES) | HMA SHOULDERS (INCHES) | | | | | | | | |
| STATION | STATION | | (FOOT) | (FOOT) | (SQ FT) | (INCHES) | (INCHES) | (INCHES) | (INCHES) | | | | | | | | |
| IL 48 OVER BEAR CREEK | | | | | | | | | | | | | | | | | |
| PRESTAGE | | | | | | | | | | | | | | | | | |
| 623+25.00 | 623+65.00 | LT | 40.00 | 2.00 | 80.00 | | | | | 2 | 9 | 0.1 | 0.1 | | | | |
| 623+65.00 | 626+14.00 | LT | 249.00 | 3.00 | 747.00 | | | | | 2 | 83 | 0.1 | 0.4 | | | | |
| 626+22.00 | 627+79.00 | LT | 157.00 | 13.50 | 2119.50 | | | 1.5 | | 1 | | 0.1 | 0.5 | | 20 | | |
| 627+71.00 | 630+35.00 | LT | 264.00 | 3.00 | 792.00 | | | | | 2 | 88 | 0.1 | 0.4 | | | | |
| 630+35.00 | 630+75.00 | LT | 40.00 | 2.00 | 80.00 | | | | | 2 | 9 | 0.1 | 0.1 | | | | |
| STAGE I | | | | | | | | | | | | | | | | | |
| 623+25.00 | 624+25.00 | RT | 100.00 | 3.50 | 350.00 | | | | | 2 | 39 | 0.1 | 0.2 | | | | |
| 624+25.00 | 625+78.00 | RT | 153.00 | 6.00 | 918.00 | | | | | 2 | 102 | 0.1 | 0.5 | | | | |
| 628+44.00 | 629+75.00 | RT | 131.00 | 6.00 | 786.00 | | | | | 2 | 88 | 0.1 | 0.4 | | | | |
| 629+75.00 | 630+75.00 | RT | 100.00 | 3.50 | 350.00 | | | | | 2 | 39 | 0.1 | 0.2 | | | | |
| STAGE II | | | | | | | | | | | | | | | | | |
| 623+65.00 | 624+25.00 | LT | 60.00 | 1.50 | 90.00 | | | | | 2 | | 0.1 | 0.1 | | | | 4 |
| 624+25.00 | 625+59.00 | LT | 134.00 | 3.00 | 402.00 | | | | | 2 | | 0.1 | 0.2 | | | | 17 |
| 628+25.00 | 629+75.00 | LT | 150.00 | 3.00 | 450.00 | | | | | 2 | | 0.1 | 0.2 | | | | 19 |
| 629+75.00 | 630+35.00 | LT | 60.00 | 1.50 | 90.00 | | | | | 2 | | 0.1 | 0.1 | | | | 4 |
| STAGE III | | | | | | | | | | | | | | | | | |
| 621+50.00 | 621+80.00 | | 30.00 | 24.00 | 720.00 | | | 1.88 | | 1 | | 0.1 | 0.2 | | | 9 | |
| 621+80.00 | 622+50.00 | | 70.00 | 24.00 | 1680.00 | 0.75 | | 1.50 | | 2 | | 0.2 | 0.8 | 8 | | 16 | |
| 622+50.00 | 623+00.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | | 2.50 | | 2 | | 0.1 | 0.6 | 6 | | 19 | |
| 623+00.00 | 623+50.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | | 3.25 | | 2 | | 0.1 | 0.6 | 6 | | 25 | |
| 623+50.00 | 624+00.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | | 2.75 | | 2 | | 0.1 | 0.6 | 6 | | 21 | |
| 624+00.00 | 624+50.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | | 3.00 | | 2 | | 0.1 | 0.6 | 6 | | 23 | |
| 624+50.00 | 624+58.00 | | 8.00 | 24.00 | 192.00 | 0.75 | | 3.63 | | 2 | | 0.1 | 0.1 | 1 | | 5 | |
| 624+58.00 | 625+00.00 | | 42.00 | 24.00 | 1008.00 | 0.75 | 2.88 | 1.50 | | 3 | | 0.2 | 0.7 | 5 | 19 | 10 | |
| 625+00.00 | 625+68.00 | | 68.00 | 24.00 | 1632.00 | 0.75 | 5.25 | 1.50 | | 3 | | 0.2 | 1.1 | 8 | 54 | 16 | |
| 628+34.00 | 628+50.00 | | 16.00 | 24.00 | 384.00 | 0.75 | 6.25 | 1.50 | | 3 | | 0.1 | 0.3 | 2 | 15 | 4 | |
| 628+50.00 | 629+00.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | 4.75 | 1.50 | | 3 | | 0.2 | 0.8 | 6 | 36 | 12 | |
| 629+00.00 | 629+31.00 | | 31.00 | 24.00 | 744.00 | 0.75 | 2.88 | 1.50 | | 3 | | 0.1 | 0.5 | 4 | 14 | 7 | |
| 629+31.00 | 629+50.00 | | 19.00 | 24.00 | 456.00 | 0.75 | | 3.38 | | 2 | | 0.1 | 0.3 | 3 | | 10 | |
| 629+50.00 | 630+00.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | | 2.50 | | 2 | | 0.1 | 0.6 | 6 | | 19 | |
| 630+00.00 | 630+50.00 | | 50.00 | 24.00 | 1200.00 | 0.75 | | 1.75 | | 2 | | 0.1 | 0.6 | 6 | | 14 | |
| 630+50.00 | 632+20.00 | | 170.00 | 24.00 | 4080.00 | 0.75 | | 1.50 | | 2 | | 0.4 | 1.9 | 20 | | 39 | |
| 632+20.00 | 632+50.00 | | 30.00 | 24.00 | 720.00 | | | 1.88 | | 1 | | 0.1 | 0.2 | | | 9 | |
| 623+25.00 | 624+25.00 | LT | 100.00 | 3.50 | 350.00 | | | | | 2 | | 0.1 | 0.2 | | | | 8 |
| 624+25.00 | 624+50.00 | LT | 25.00 | 6.00 | 150.00 | | | | | 2 | | 0.1 | 0.1 | | | | 4 |
| 624+50.00 | 625+00.00 | LT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 8 |
| 625+00.00 | 625+50.00 | LT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 12 |
| 625+50.00 | 625+59.00 | LT | 9.00 | 6.00 | 54.00 | | | | | 2 | | 0.1 | 0.1 | | | | 3 |
| 623+25.00 | 624+25.00 | RT | 100.00 | 3.50 | 350.00 | | | | | 2 | | 0.1 | 0.2 | | | | 8 |
| 624+25.00 | 624+50.00 | RT | 25.00 | 6.00 | 150.00 | | | | | 2 | | 0.1 | 0.1 | | | | 4 |
| 624+50.00 | 625+00.00 | RT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 8 |
| 625+00.00 | 625+50.00 | RT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 12 |
| 625+50.00 | 625+78.00 | RT | 28.00 | 6.00 | 168.00 | | | | | 2 | | 0.1 | 0.1 | | | | 9 |
| 628+25.00 | 628+50.00 | LT | 25.00 | 6.00 | 150.00 | | | | | 2 | | 0.1 | 0.1 | | | | 8 |
| 628+50.00 | 629+00.00 | LT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 12 |
| 629+00.00 | 629+50.00 | LT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 8 |
| 629+50.00 | 629+75.00 | LT | 25.00 | 6.00 | 150.00 | | | | | 2 | | 0.1 | 0.1 | | | | 3 |
| 629+75.00 | 630+75.00 | LT | 100.00 | 3.50 | 350.00 | | | | | 2 | | 0.1 | 0.2 | | | | 5 |
| 628+44.00 | 628+50.00 | RT | 6.00 | 6.00 | 36.00 | | | | | 2 | | 0.1 | 0.1 | | | | 2 |
| 628+50.00 | 629+00.00 | RT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 12 |
| 629+00.00 | 629+50.00 | RT | 50.00 | 6.00 | 300.00 | | | | | 2 | | 0.1 | 0.2 | | | | 8 |
| 629+50.00 | 629+75.00 | RT | 25.00 | 6.00 | 150.00 | | | | | 2 | | 0.1 | 0.1 | | | | 3 |
| 629+75.00 | 630+75.00 | RT | 100.00 | 3.50 | 350.00 | | | | | 2 | | 0.1 | 0.2 | | | | 5 |
| TOTALS | | | | | | | | | | | 457 | 6 | 17 | 93 | 138 | 278 | 186 |



| | | |
|--------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-SCHEDULE.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

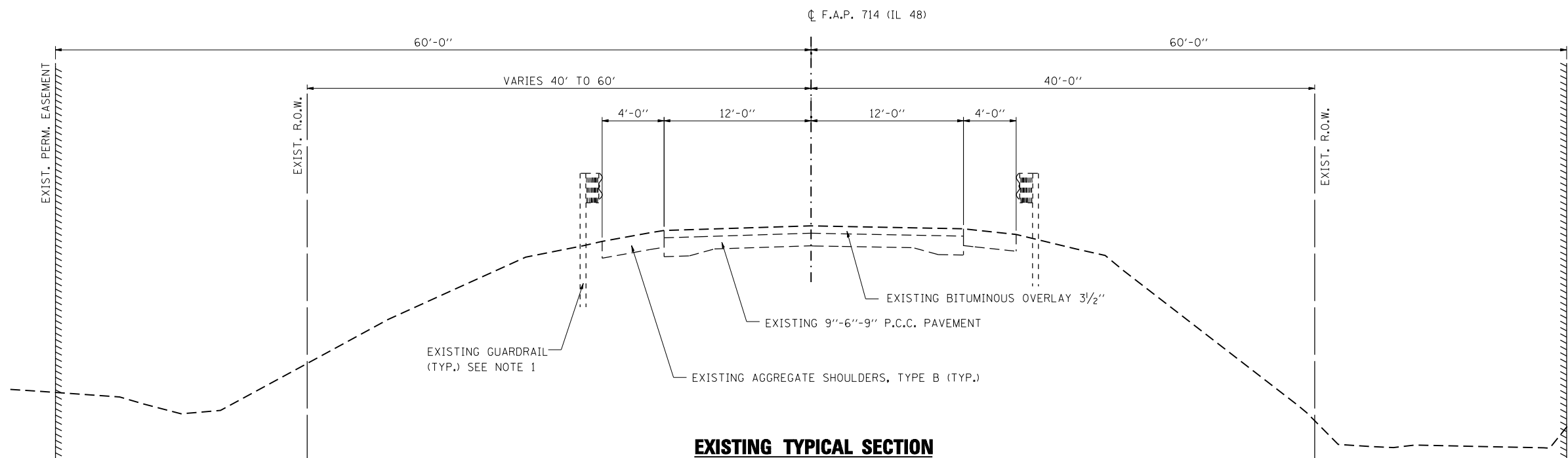
**SCHEDULE OF QUANTITIES
IL 29 OVER IL 48 / IL 48 OVER BEAR CREEK**

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

| | | | | |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | (4), 136B-1 | CHRISTIAN | 97 | 14 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

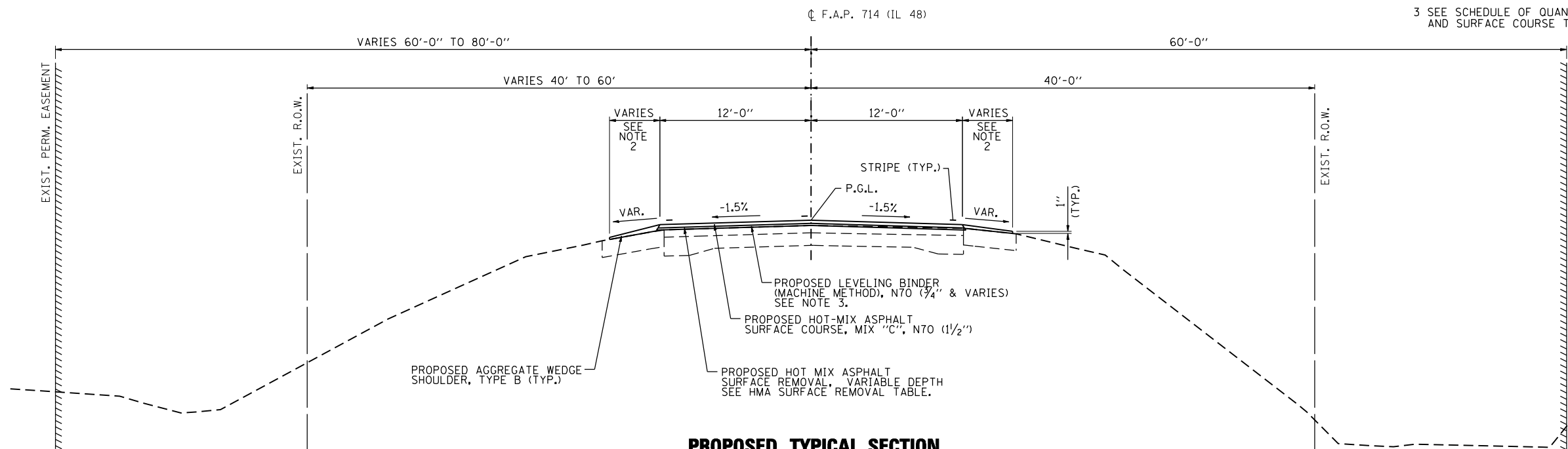
HMA SURFACE REMOVAL TABLE

| STATION | HMA SURFACE REMOVAL DEPTH | |
|-----------|---------------------------|----------|
| | LT | RT |
| | (INCHES) | (INCHES) |
| 621+50.00 | 1.50 | 1.50 |
| 621+80.00 | 0.75 | 0.75 |
| 622+50.00 | 0.75 | 0.75 |
| 623+00.00 | 0.75 | 0.75 |
| 623+50.00 | 0.75 | 0.75 |
| 624+00.00 | 0.75 | 0.75 |
| 624+50.00 | 0.75 | 0.75 |
| 625+00.00 | 0.75 | 0.75 |
| 625+50.00 | 0.75 | 0.75 |
| 625+68.00 | 0.75 | 0.75 |
| 628+34.00 | 0.75 | 0.75 |
| 628+50.00 | 0.75 | 0.75 |
| 629+00.00 | 0.75 | 0.75 |
| 629+50.00 | 1.00 | 0.75 |
| 630+00.00 | 1.50 | 0.75 |
| 630+50.00 | 1.75 | 1.00 |
| 631+00.00 | 1.50 | 1.00 |
| 631+50.00 | 1.50 | 1.00 |
| 632+00.00 | 1.50 | 1.50 |
| 632+20.00 | 1.50 | 1.50 |
| 632+50.00 | 1.50 | 1.50 |



NOTES:

- EXISTING GUARDRAIL FROM STA. 625+08 TO STA. 628+75, LT. AND STA. 625+08 TO STA. 628+75, LT., STA. 624+11 TO STA. 628+94, RT.
- AGGREGATE WEDGE SHOULDER, TYPE B LEFT SHOULDER VARIES FROM 5'-5" AT STA. 621+50 TO 4'-0" AT STA. 621+80 AND FROM 4'-0" AT STA. 632+20 TO 5'-4" AT STA. 632+50, RIGHT SHOULDER VARIES FROM 4'-4" AT STA. 621+50 TO 4'-0" AT STA. 621+80 AND FROM 4'-0" AT STA. 632+20 TO 5'-6" AT STA. 632+50.
- SEE SCHEDULE OF QUANTITIES FOR LEVELING BINDER, BINDER COURSE AND SURFACE COURSE THICKNESSES.



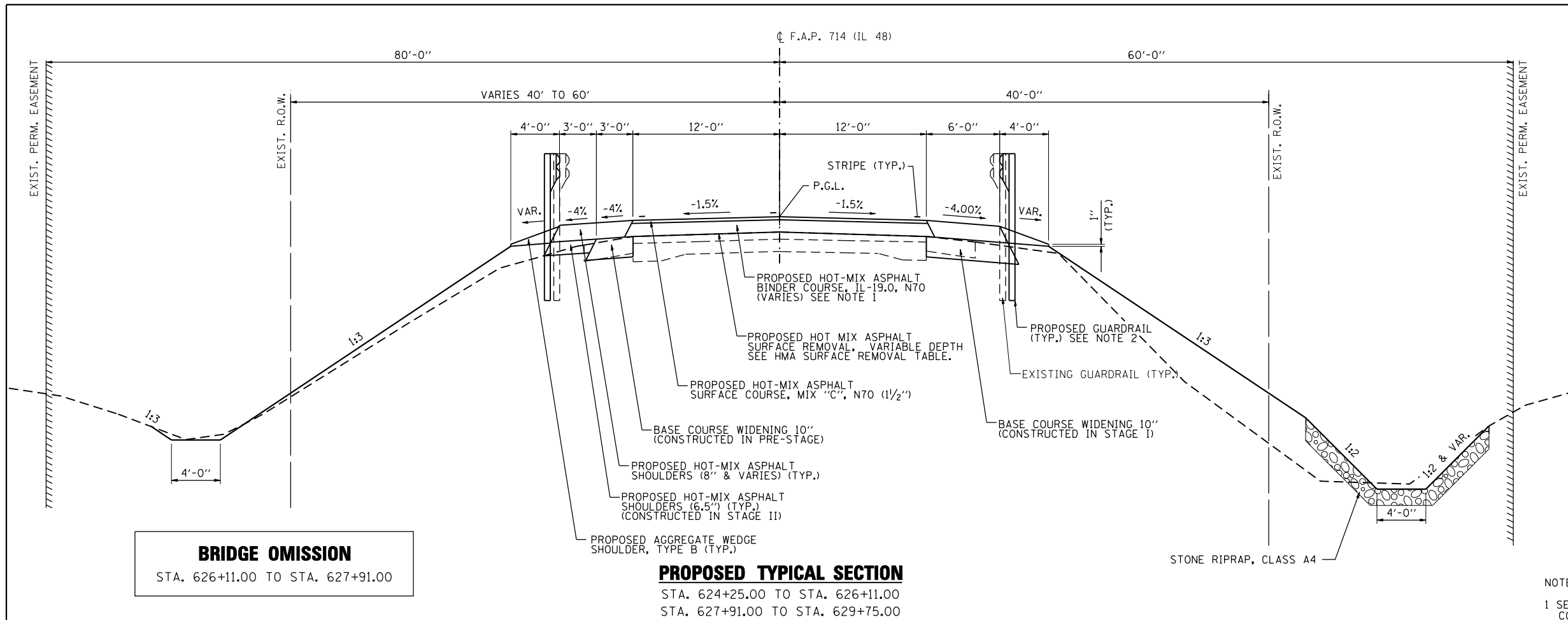
| | | |
|---------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-TYP.dgn | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
IL 48 OVER BEAR CREEK**

SCALE: 1" = 5' SHEET 1 OF 2 SHEETS STA. TO STA.

| | | | | |
|---------------------------|------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4)1, 136B-1 | CHRISTIAN | 97 | 15 |
| • | 75(IL 29) & 714(IL 48) | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |



BRIDGE OMISSION
 STA. 626+11.00 TO STA. 627+91.00

PROPOSED TYPICAL SECTION

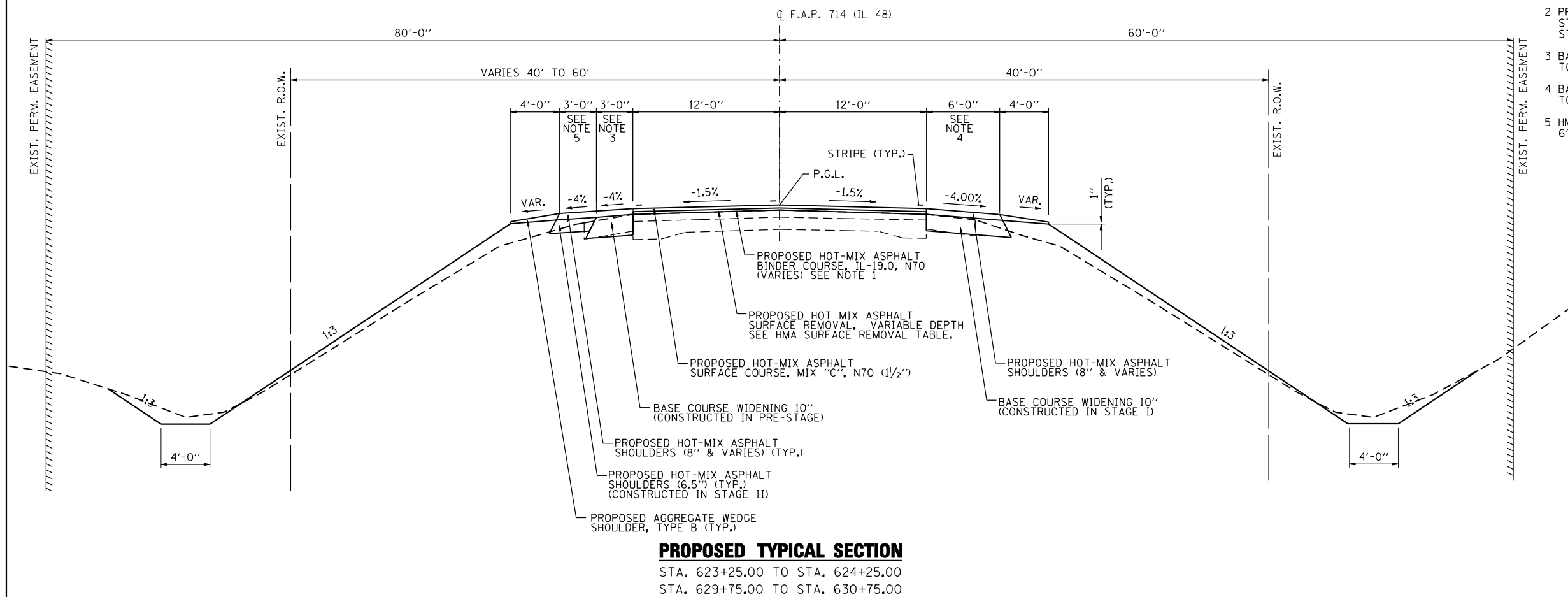
STA. 624+25.00 TO STA. 626+11.00
 STA. 627+91.00 TO STA. 629+75.00

HMA SURFACE REMOVAL TABLE

| STATION | HMA SURFACE REMOVAL DEPTH | |
|-----------|---------------------------|----------|
| | LT | RT |
| | (INCHES) | (INCHES) |
| 621+50.00 | 1.50 | 1.50 |
| 621+80.00 | 0.75 | 0.75 |
| 622+50.00 | 0.75 | 0.75 |
| 623+00.00 | 0.75 | 0.75 |
| 623+50.00 | 0.75 | 0.75 |
| 624+00.00 | 0.75 | 0.75 |
| 624+50.00 | 0.75 | 0.75 |
| 625+00.00 | 0.75 | 0.75 |
| 625+68.00 | 0.75 | 0.75 |
| 628+34.00 | 0.75 | 0.75 |
| 628+50.00 | 0.75 | 0.75 |
| 629+00.00 | 0.75 | 0.75 |
| 629+50.00 | 1.00 | 0.75 |
| 630+00.00 | 1.50 | 0.75 |
| 630+50.00 | 1.75 | 1.00 |
| 631+00.00 | 1.50 | 1.00 |
| 631+50.00 | 1.50 | 1.00 |
| 632+00.00 | 1.50 | 1.50 |
| 632+20.00 | 1.50 | 1.50 |
| 632+50.00 | 1.50 | 1.50 |

NOTES:

- SEE SCHEDULE OF QUANTITIES FOR LEVELING BINDER, BINDER COURSE AND SURFACE COURSE THICKNESSES.
- PROPOSED GUARDRAIL STA. 624+80.86 TO STA. 629+38.04, RT. STA. 624+64 TO STA. 629+21.05, LT.
- BASE COURSE WIDENING 10" VARIES FROM 1' AT STA. 623+25 TO 3' AT STA. 623+65.
- BASE COURSE WIDENING 10" VARIES FROM 1' AT STA. 623+25 TO 6' AT STA. 624+25
- HMA SHOULDER VARIES FROM 1' AT STA. 623+25 TO 6' AT STA. 624+25



PROPOSED TYPICAL SECTION

STA. 623+25.00 TO STA. 624+25.00
 STA. 629+75.00 TO STA. 630+75.00




| | | |
|---------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-TYP.dgn | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

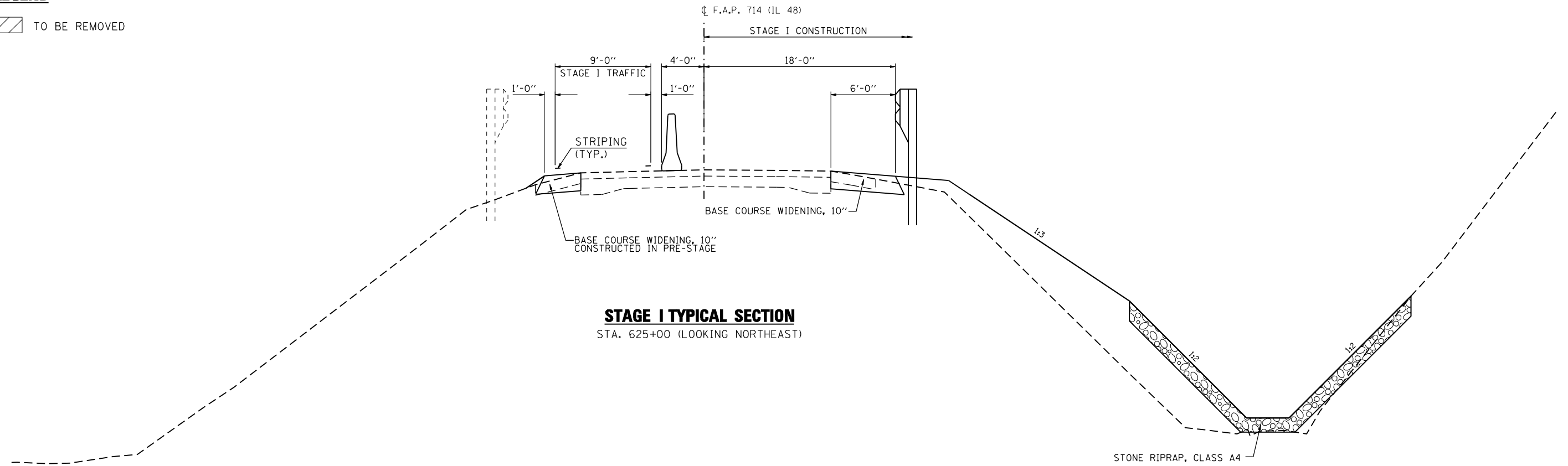
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
 IL 48 OVER BEAR CREEK**
 SCALE: 1" = 5' SHEET 2 OF 2 SHEETS STA. TO STA.

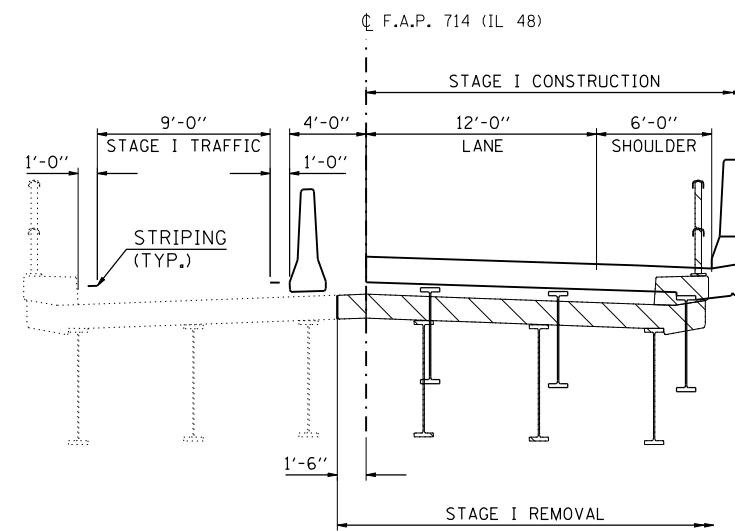
| | | | | |
|--------------------------|--------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4)I, 136B-1 | CHRISTIAN | 97 | 16 |
| • 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |

LEGEND

 TO BE REMOVED



STAGE I TYPICAL SECTION
STA. 625+00 (LOOKING NORTHEAST)

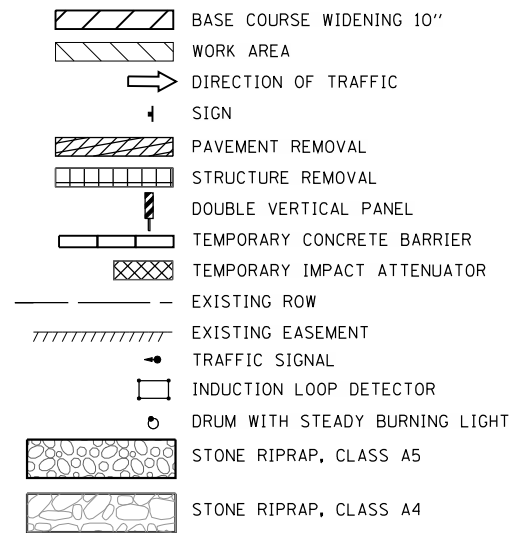


STAGE I BRIDGE TYPICAL SECTION
STA. 627+00 (LOOKING NORTHEAST)

GENERAL NOTES

- REFER TO THE PLAN AND PROFILE SHEETS AND BRIDGE PLANS FOR DRAINAGE ITEMS AND IN-STREAM WORK.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES AT ALL TIMES DURING CONSTRUCTION.
- THE TRAFFIC CONTROL PLANS SHALL BE USED IN CONJUNCTION WITH HIGHWAY STANDARDS 701306, 701321 AND 701326.
- VERTICAL PANELS, DRUMS WITH STEADY BURNING LIGHTS, TYPE III BARRICADES, SIGNS, MICROWAVE DETECTOR SYSTEMS, DETECTOR LOOPS AND TYPE C BI-DIRECTIONAL REFLECTORS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701321. TEMPORARY PAVEMENT MARKINGS, TEMPORARY BRIDGE TRAFFIC SIGNALS, CHANGEABLE MESSAGE SIGNS AND TEMPORARY RUMBLE STRIPS SHALL BE PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL PROVIDE AND ERECT LANE WIDTH AND LOAD RESTRICTION SIGNING. THESE SIGNS SHALL BE PLACED AS DIRECTED BY THE ENGINEER BEFORE IMPLEMENTING ANY STAGE I TRAFFIC CONTROL. SEE LOAD RESTRICTION DETOUR MAP.
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS, PH: (217) 785-5836, AT LEAST 21 DAYS PRIOR TO IMPLEMENTING STAGE I TRAFFIC AND WHEN A SWITCH IN STAGING IS MADE.
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS AT LEAST THREE (3) DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS. REFER TO THE DISTRICT 6 SPECIAL PROVISIONS FOR TEMPORARY BRIDGE TRAFFIC SIGNALS FOR CONTACT INFORMATION.
- UNLESS OTHERWISE INDICATED, TEMPORARY BRIDGE TRAFFIC SIGNALS, STOP BARS, TEMPORARY RUMBLE STRIPS, DETECTOR LOOPS AND ADVANCE SIGN LOCATIONS TO REMAIN IN PLACE THROUGHOUT THE DURATION OF STAGES I AND II AS PER HIGHWAY STANDARD 701321.
- NOMINAL 1½" HOT-MIX ASPHALT OVERLAY SHALL BE PLACED ON THE NORTH SIDE OF THE EXISTING BRIDGE DECK DURING PRE-STAGE CONSTRUCTION.

LEGEND

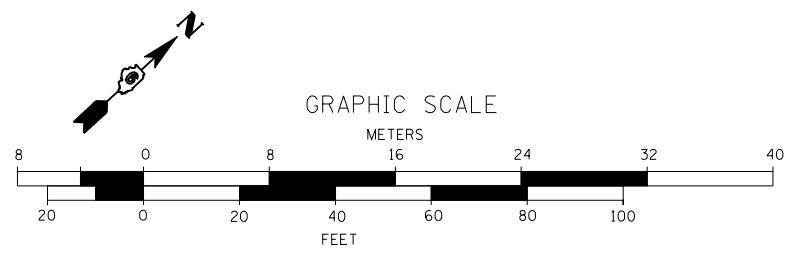
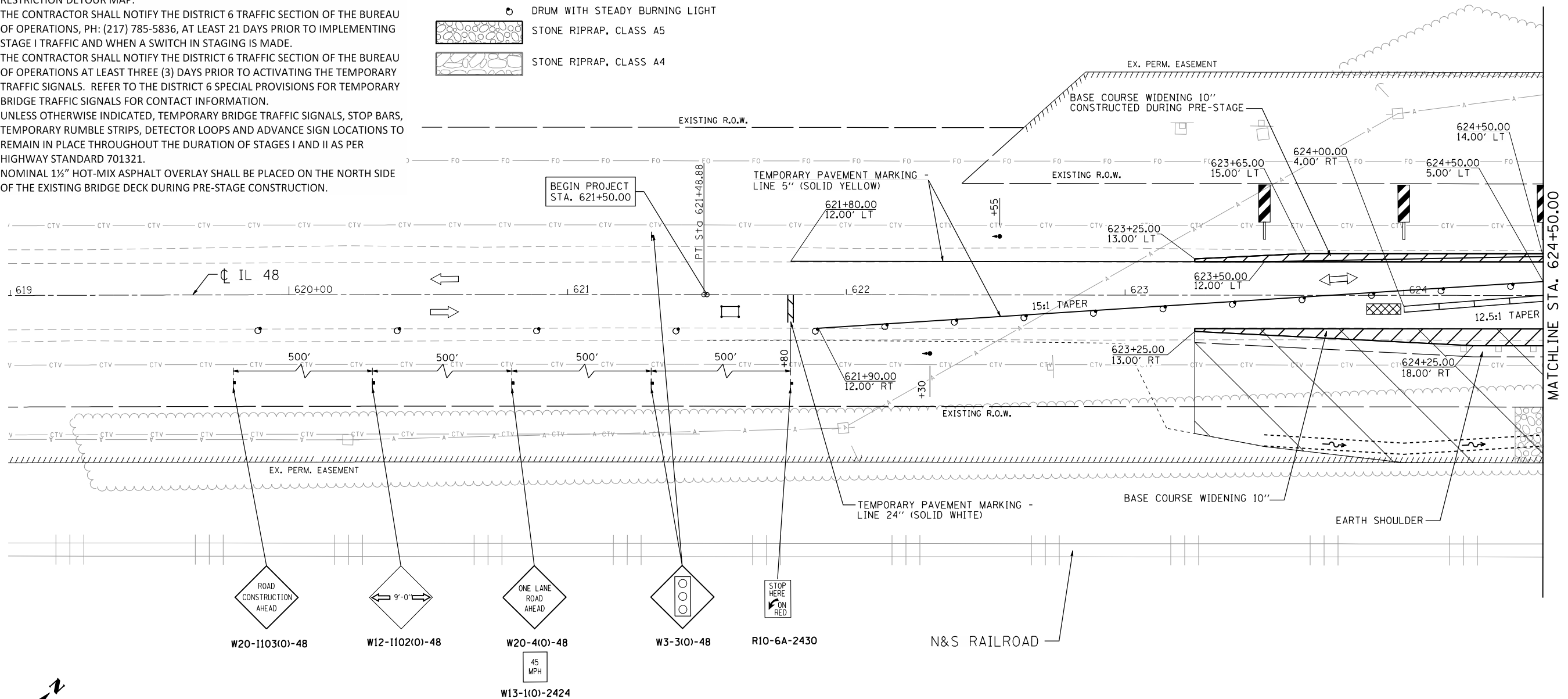


SEQUENCE OF CONSTRUCTION

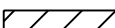
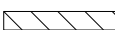



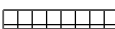

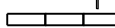

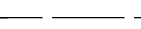
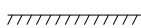





- PRE-STAGE CONSTRUCTION:**
- PATCH THE EXISTING PAVEMENT USING HIGHWAY STANDARD 701201.
 - SET UP TEMPORARY TRAFFIC CONTROL USING THESE PLANS AND IN CONJUNCTION WITH HIGHWAY STANDARD 701326.
 - TRAFFIC REMAINS ON EXISTING PAVEMENT.
 - REMOVE THE AGGREGATE SHOULDER ALONG THE NORTH SIDE OF IL 48.
 - CONSTRUCT THE BASE COURSE WIDENING ALONG THE NORTH SIDE OF IL 48 AS SHOWN IN THE PLANS.
 - PLACE NOMINAL 1½" OVERLAY ON THE NORTH HALF OF THE EXISTING BRIDGE DECK USING HIGHWAY STANDARD 701306.

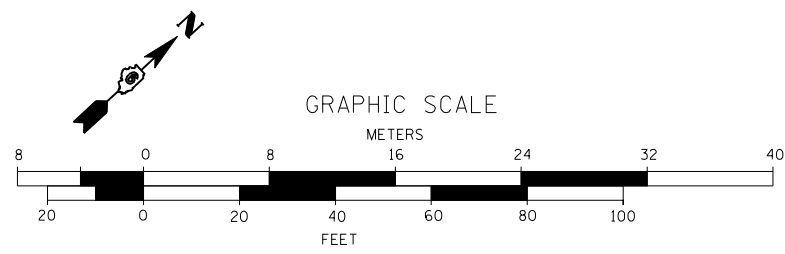
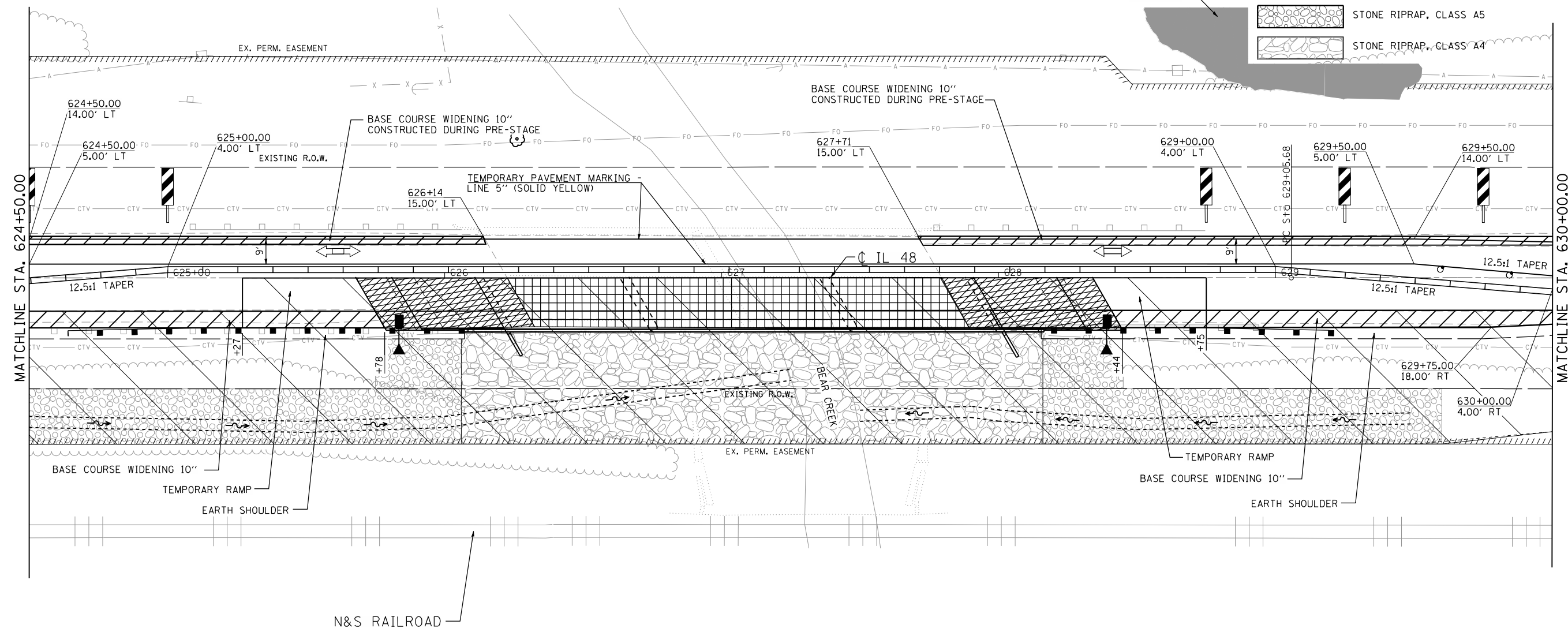
STAGE I CONSTRUCTION:

- SET UP TEMPORARY TRAFFIC CONTROL USING THESE PLANS AND IN CONJUNCTION WITH HIGHWAY STANDARD 701321.
- REMOVE ANY CONFLICTING PAVEMENT MARKINGS, PLACE TEMPORARY CONCRETE BARRIERS, TEMPORARY IMPACT ATTENUATORS, DETECTOR LOOPS, TEMPORARY TRAFFIC SIGNALS AND TEMPORARY PAVEMENT MARKINGS AS SHOWN ON THE PLANS.
- SHIFT TRAFFIC TO STAGE I LANE.
- REMOVE THE SOUTH HALF OF EXISTING BRIDGE.
- REMOVE EXISTING GUARDRAIL, SHOULDERS AND PAVEMENT ALONG THE SOUTH SIDE OF IL 48 AS SHOWN IN THE PLANS.
- CONSTRUCT SOUTH HALF OF PROPOSED BRIDGE, CONNECTOR PAVEMENT AND TEMPORARY RAMPS.
- CONSTRUCT BASE COURSE WIDENING, EARTH SHOULDERS, GUARDRAIL AND THE PROPOSED DITCH FROM STA. 623+25 TO STA. 630+75 ALONG THE SOUTH SIDE OF IL 48.

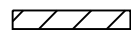
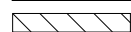
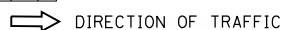



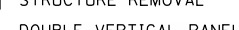
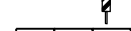
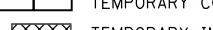

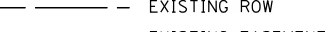
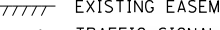
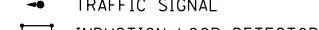
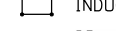
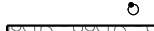



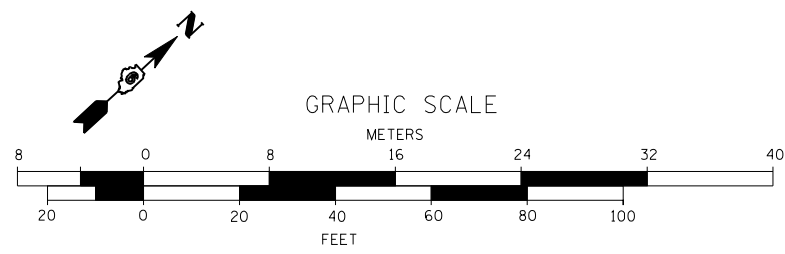
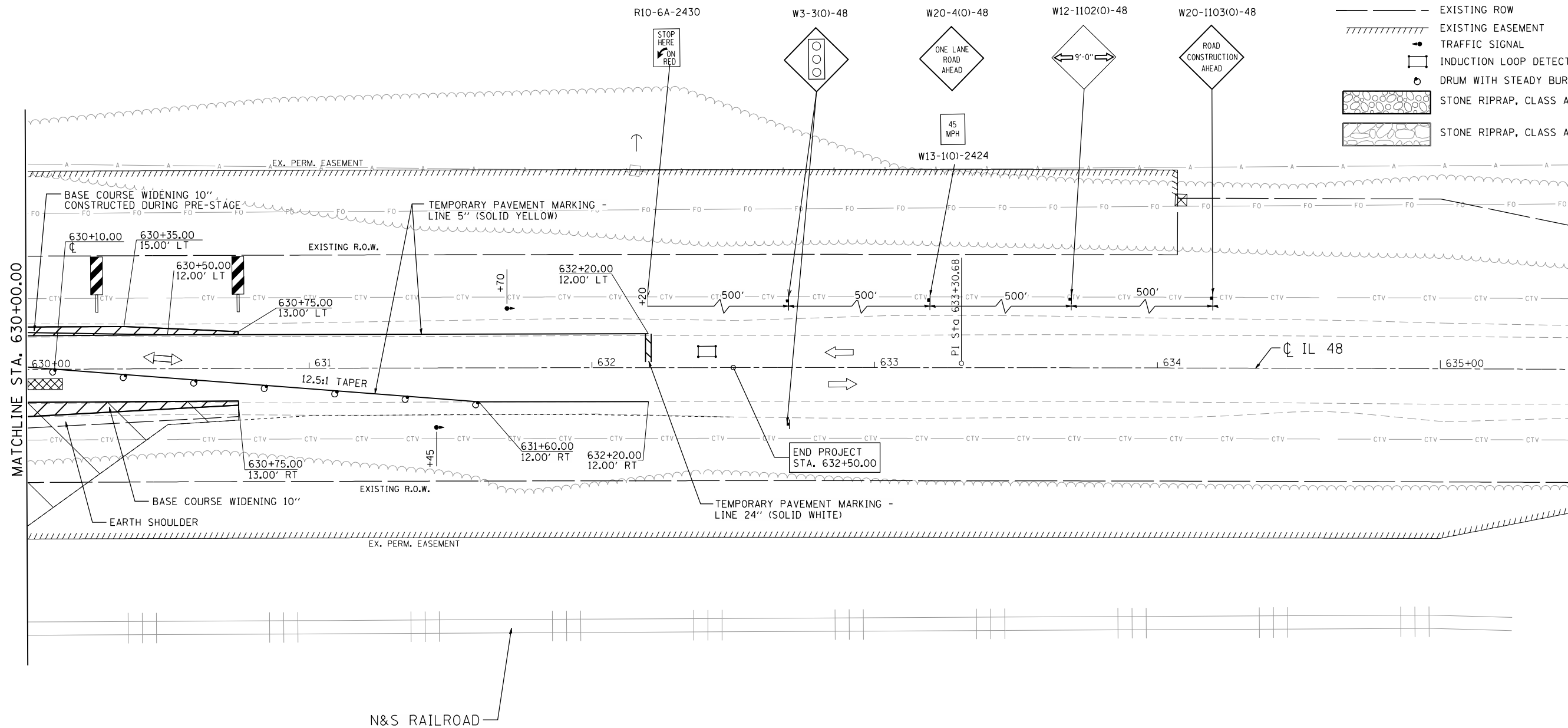
LEGEND

-  BASE COURSE WIDENING 10"
-  WORK AREA
-  DIRECTION OF TRAFFIC
-  SIGN
-  PAVEMENT REMOVAL
-  STRUCTURE REMOVAL
-  DOUBLE VERTICAL PANEL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  EXISTING ROW
-  EXISTING EASEMENT
-  TRAFFIC SIGNAL
-  INDUCTION LOOP DETECTOR
-  DRUM WITH STEADY BURNING LIGHT
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4



LEGEND

-  BASE COURSE WIDENING 10"
-  WORK AREA
-  DIRECTION OF TRAFFIC
-  SIGN
-  PAVEMENT REMOVAL
-  STRUCTURE REMOVAL
-  DOUBLE VERTICAL PANEL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  EXISTING ROW
-  EXISTING EASEMENT
-  TRAFFIC SIGNAL
-  INDUCTION LOOP DETECTOR
-  DRUM WITH STEADY BURNING LIGHT
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4



design firm
no. 184001036
whks
engineers + planners + land surveyors

| | | |
|-------------------------------------|------------|-----------|
| USER NAME = gjameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-STAGE_1.dwg | CHECKED - | REVISED - |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

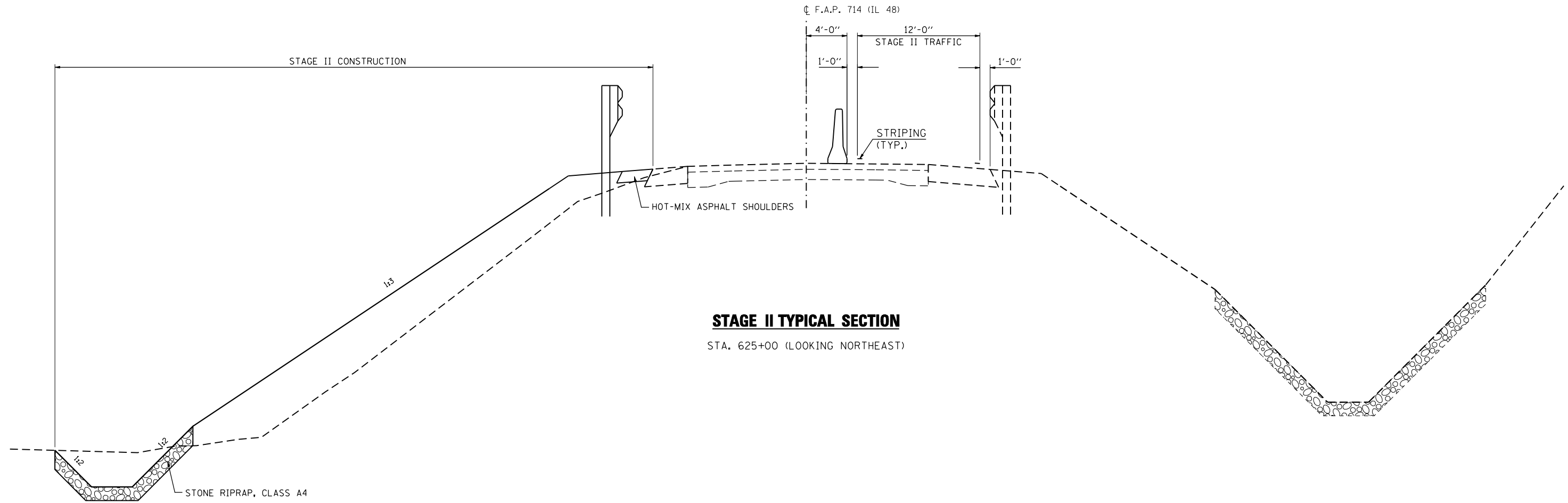
**TRAFFIC CONTROL PLAN - STAGE I
IL 48 OVER BEAR CREEK**

SCALE: 1" = 20' SHEET 3 OF 3 SHEETS STA. 630+00 TO STA. 632+50

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|--------------------|--------------|-----------|
| • | (4)I, 136B-1 | CHRISTIAN | 97 | 20 |
| • 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

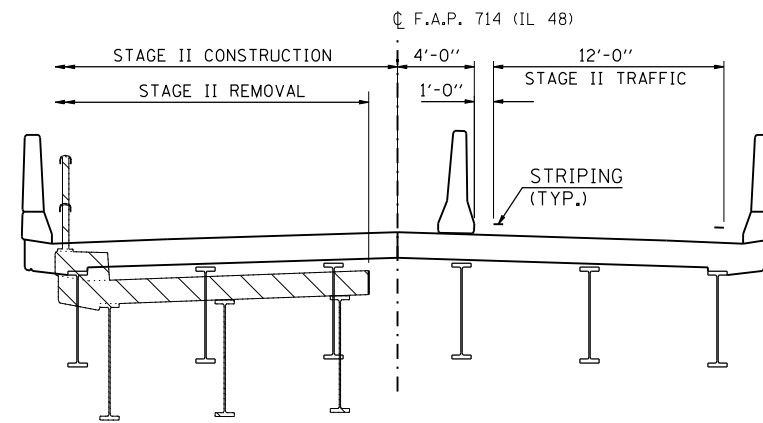
LEGEND

 TO BE REMOVED



STAGE II TYPICAL SECTION

STA. 625+00 (LOOKING NORTHEAST)



STAGE II BRIDGE TYPICAL SECTION

STA. 627+00 (LOOKING NORTHEAST)

design firm
no. 184001036



| | | |
|--------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-TYP-STAGE II | CHECKED - | REVISED |
| PLOT SCALE = 10,0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

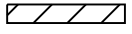
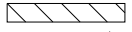





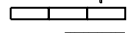

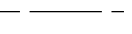
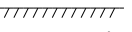





**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL TYPICAL SECTIONS - STAGE II
IL 48 OVER BEAR CREEK**

SCALE: 1" = 5' SHEET 1 OF 1 SHEETS STA. 621+50 TO STA. 624+50

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|-----------|--------------------|-----------|
| • | (4), 136B-1 | CHRISTIAN | 97 | 21 |
| • 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

LEGEND

-  BASE COURSE WIDENING 10"
-  WORK AREA
-  DIRECTION OF TRAFFIC
-  SIGN
-  PAVEMENT REMOVAL
-  STRUCTURE REMOVAL
-  DOUBLE VERTICAL PANEL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  EXISTING ROW
-  EXISTING EASEMENT
-  TRAFFIC SIGNAL
-  INDUCTION LOOP DETECTOR
-  DRUM WITH STEADY BURNING LIGHT
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4

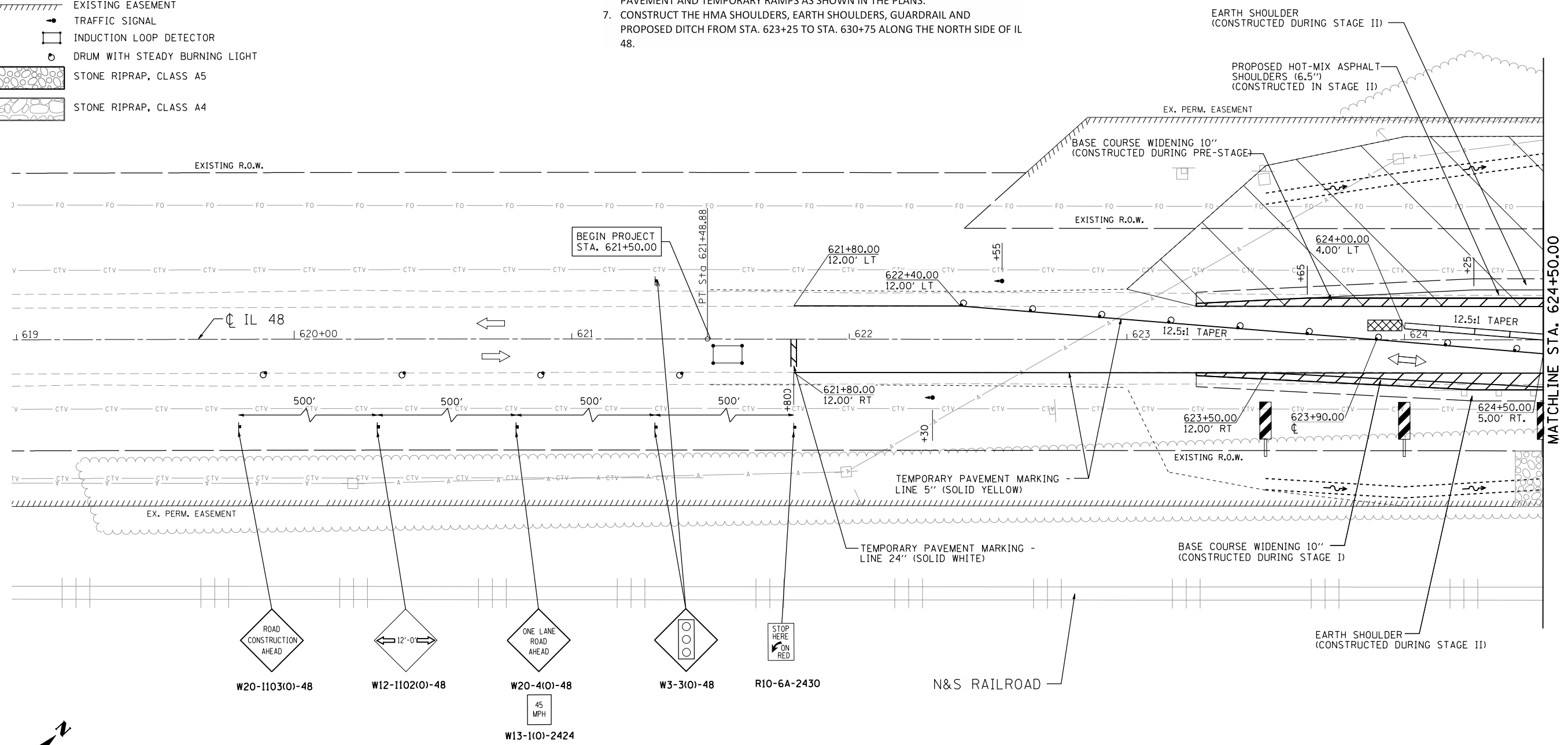
SEQUENCE OF CONSTRUCTION

STAGE II CONSTRUCTION:


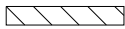





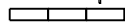

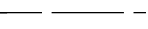
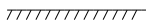





1. SET UP TEMPORARY TRAFFIC CONTROL USING THESE PLANS AND IN CONJUNCTION WITH HIGHWAY STANDARD 701321.
2. REMOVE CONFLICTING PAVEMENT MARKINGS, RELOCATE TEMPORARY CONCRETE BARRIERS, TEMPORARY IMPACT ATTENUATORS AND TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE PLANS.
3. PLACE TEMPORARY STRIPING AS SHOWN IN THE PLANS.
4. SHIFT TRAFFIC TO STAGE II LANE.
5. REMOVE THE NORTH HALF OF THE EXISTING BRIDGE.
6. CONSTRUCT THE NORTH HALF OF THE PROPOSED BRIDGE, APPROACH CONNECTOR PAVEMENT AND TEMPORARY RAMPS AS SHOWN IN THE PLANS.
7. CONSTRUCT THE HMA SHOULDERS, EARTH SHOULDERS, GUARDRAIL AND PROPOSED DITCH FROM STA. 623+25 TO STA. 630+75 ALONG THE NORTH SIDE OF IL 48.

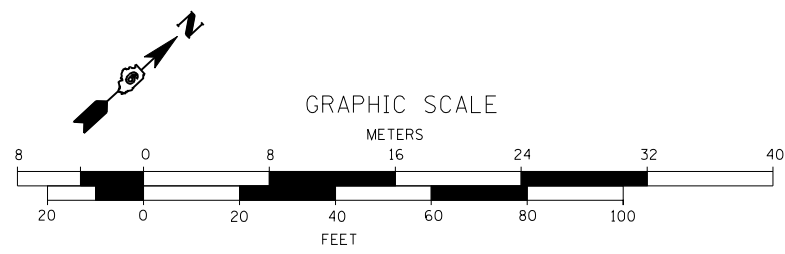
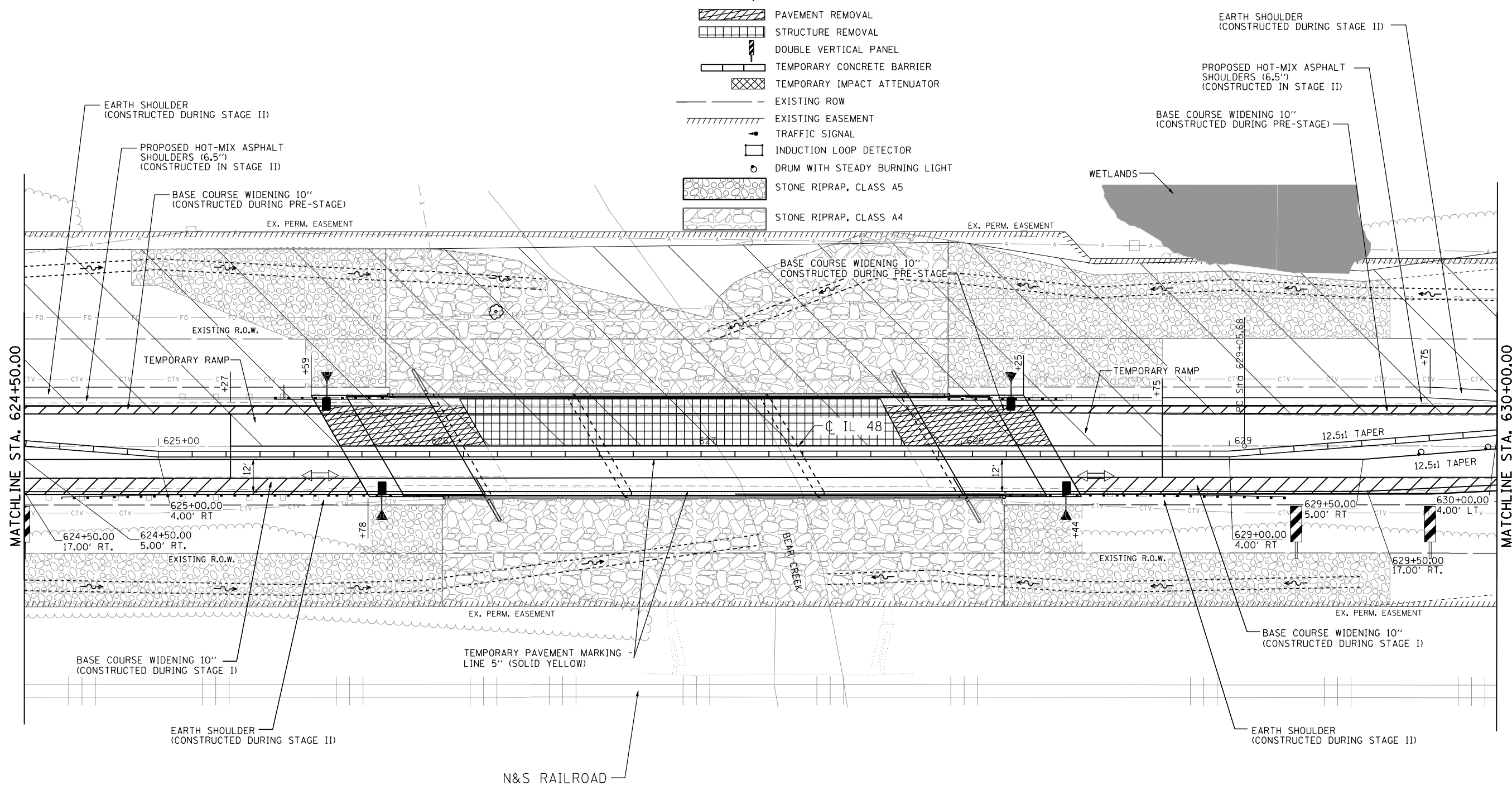
STAGE III CONSTRUCTION:

1. REMOVE TEMPORARY CONCRETE BARRIERS, TEMPORARY IMPACT ATTENUATORS, TEMPORARY TRAFFIC SIGNALS AND TEMPORARY GUARDRAILS.
2. REMOVE CONFLICTING STRIPING AND PLACE WORK ZONE PAVEMENT MARKINGS.
3. SHIFT TRAFFIC TO THE EXISTING LANES.
4. MILL EXISTING PAVEMENT AS SHOWN IN THE PLANS.
5. CONSTRUCT THE LEVELING BINDER, HMA BINDER COURSE AND HMA SURFACE COURSE USING HIGHWAY STANDARD 701306.
6. CONSTRUCT HMA SHOULDERS AND AGGREGATE SHOULDERS USING HIGHWAY STANDARD 701326.
7. PLACE FINAL STRIPING AND CLEANUP.



LEGEND

-  BASE COURSE WIDENING 10"
-  WORK AREA
-  DIRECTION OF TRAFFIC
-  SIGN
-  PAVEMENT REMOVAL
-  STRUCTURE REMOVAL
-  DOUBLE VERTICAL PANEL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  EXISTING ROW
-  EXISTING EASEMENT
-  TRAFFIC SIGNAL
-  INDUCTION LOOP DETECTOR
-  DRUM WITH STEADY BURNING LIGHT
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4



design firm
no. 184001036
whks
engineers + planners + land surveyors

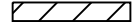
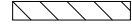
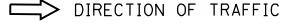


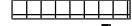
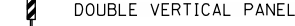


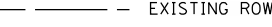

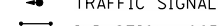
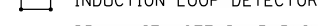



| | | |
|-------------------------------------|------------|-----------|
| USER NAME = gjameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-STAGE_2.dgn | CHECKED - | REVISED - |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |

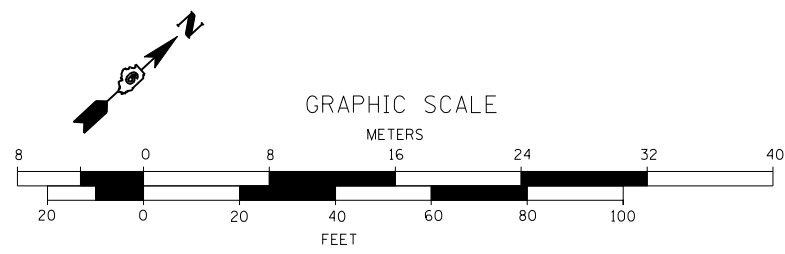
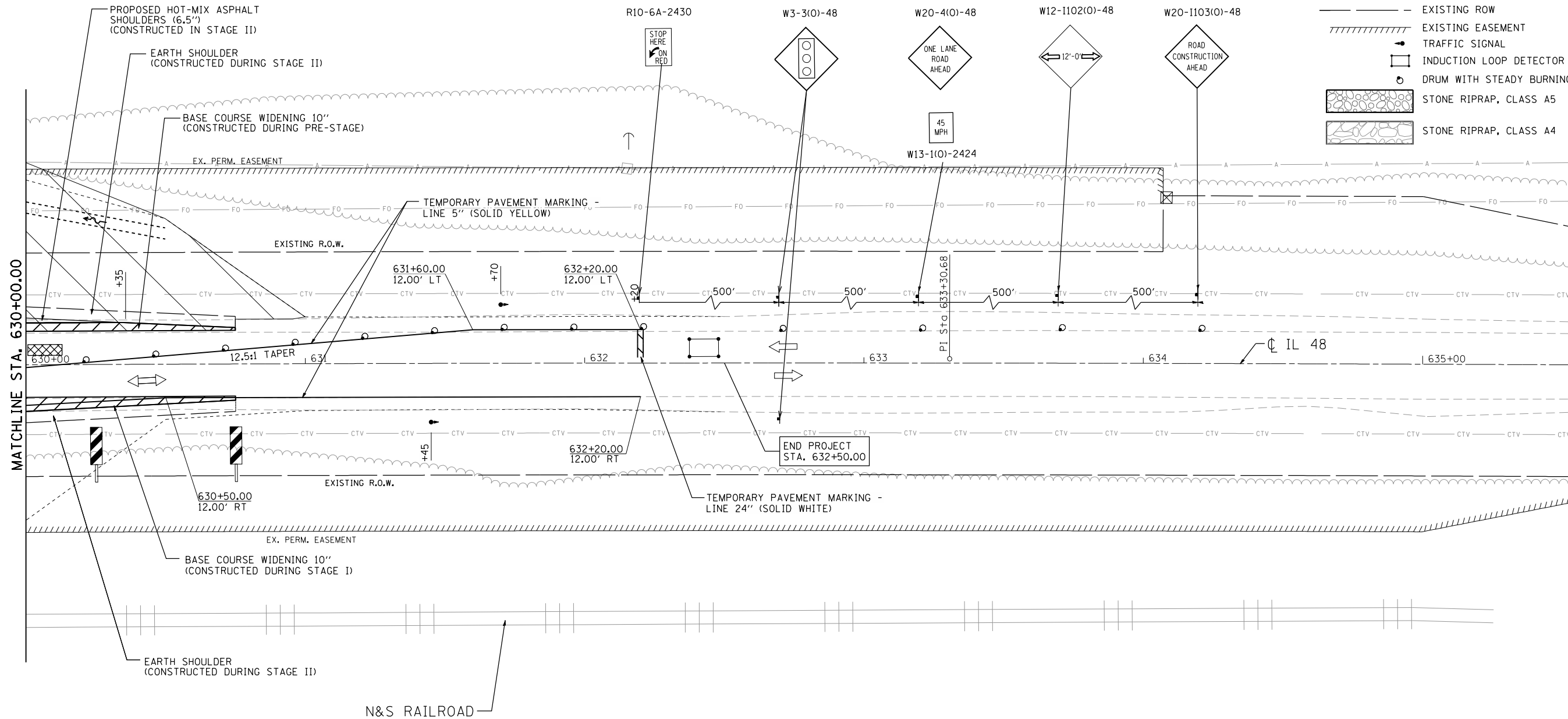
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

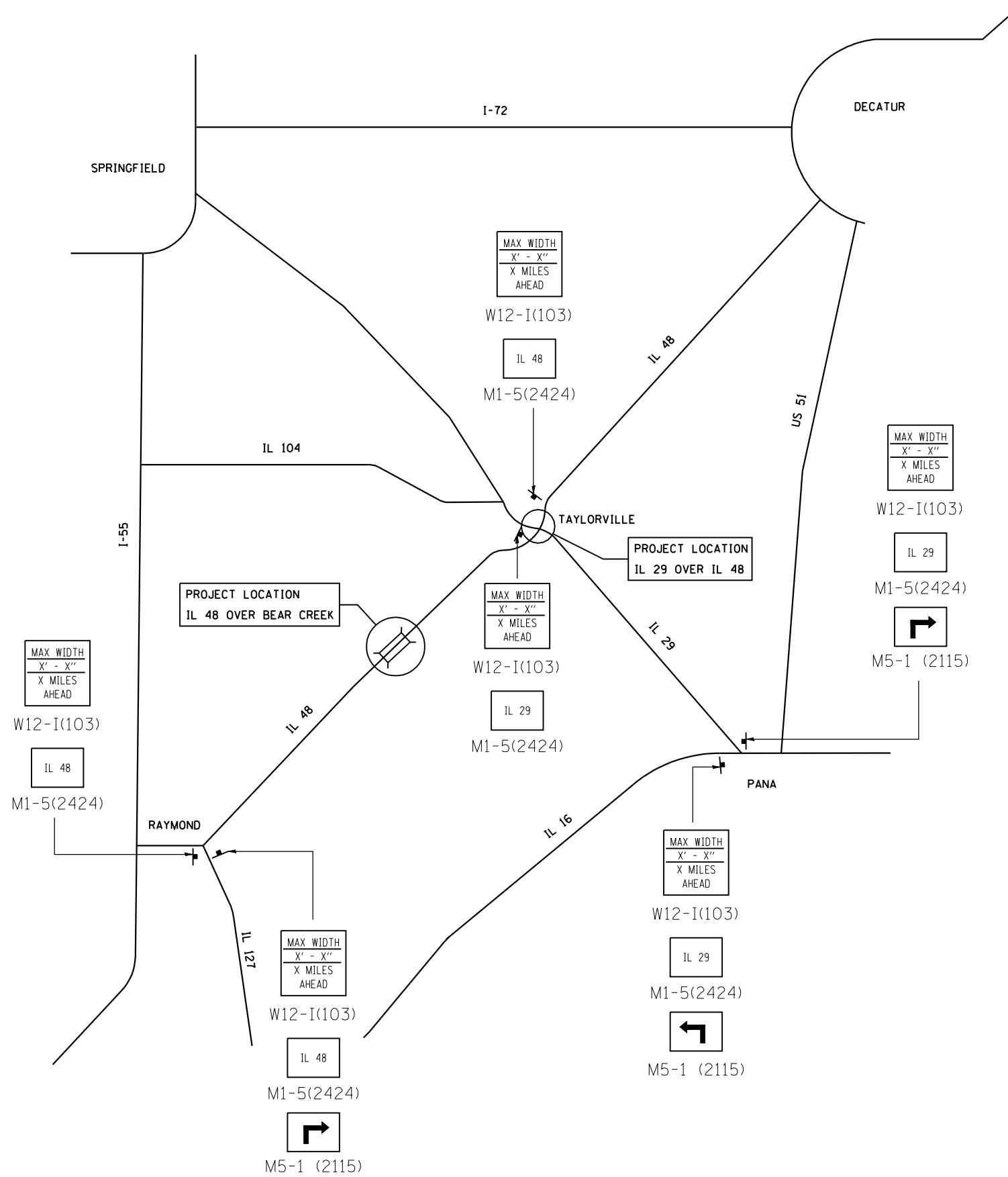
TRAFFIC CONTROL PLAN - STAGE II
IL 48 OVER BEAR CREEK
 SCALE: 1" = 20' SHEET 2 OF 3 SHEETS STA. 624+50 TO STA. 630+00

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|--------------|-----------|---------------------------|-----------|
| • 75(IL 29) & 714(IL 48) | (4)I, 136B-1 | CHRISTIAN | 97 | 23 |
| CONTRACT NO. 72A61 | | | ILLINOIS FED. AID PROJECT | |

LEGEND

-  BASE COURSE WIDENING 10"
-  WORK AREA
-  DIRECTION OF TRAFFIC
-  SIGN
-  PAVEMENT REMOVAL
-  STRUCTURE REMOVAL
-  DOUBLE VERTICAL PANEL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  EXISTING ROW
-  EXISTING EASEMENT
-  TRAFFIC SIGNAL
-  INDUCTION LOOP DETECTOR
-  DRUM WITH STEADY BURNING LIGHT
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4





| | | |
|-------------------------------------|------------|---------|
| USER NAME = g.jameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-SIGNING.dwg | CHECKED - | REVISED |
| PLOT SCALE = 125.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |



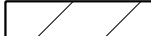

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

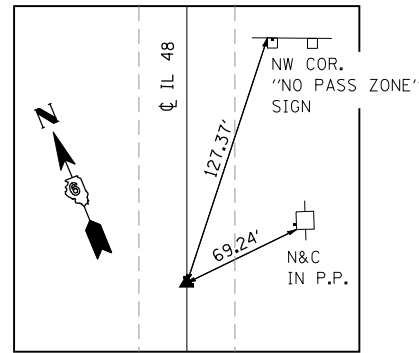
**WIDTH RESTRICTION SIGNING PLAN
IL 48 OVER BEAR CREEK**

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|-----------|--------------------|-----------|
| • | (4)1, 136B-1 | CHRISTIAN | 97 | 25 |
| • 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

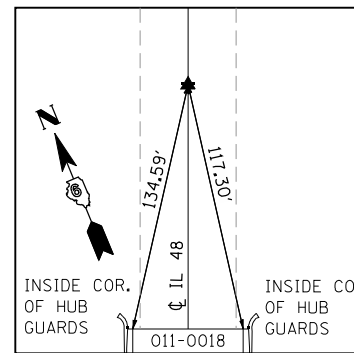
LEGEND

-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4
-  TREE REMOVAL, ACRES
-  TREE REMOVAL (OVER 15 UNITS DIAMETER)



CONTROL POINT #1

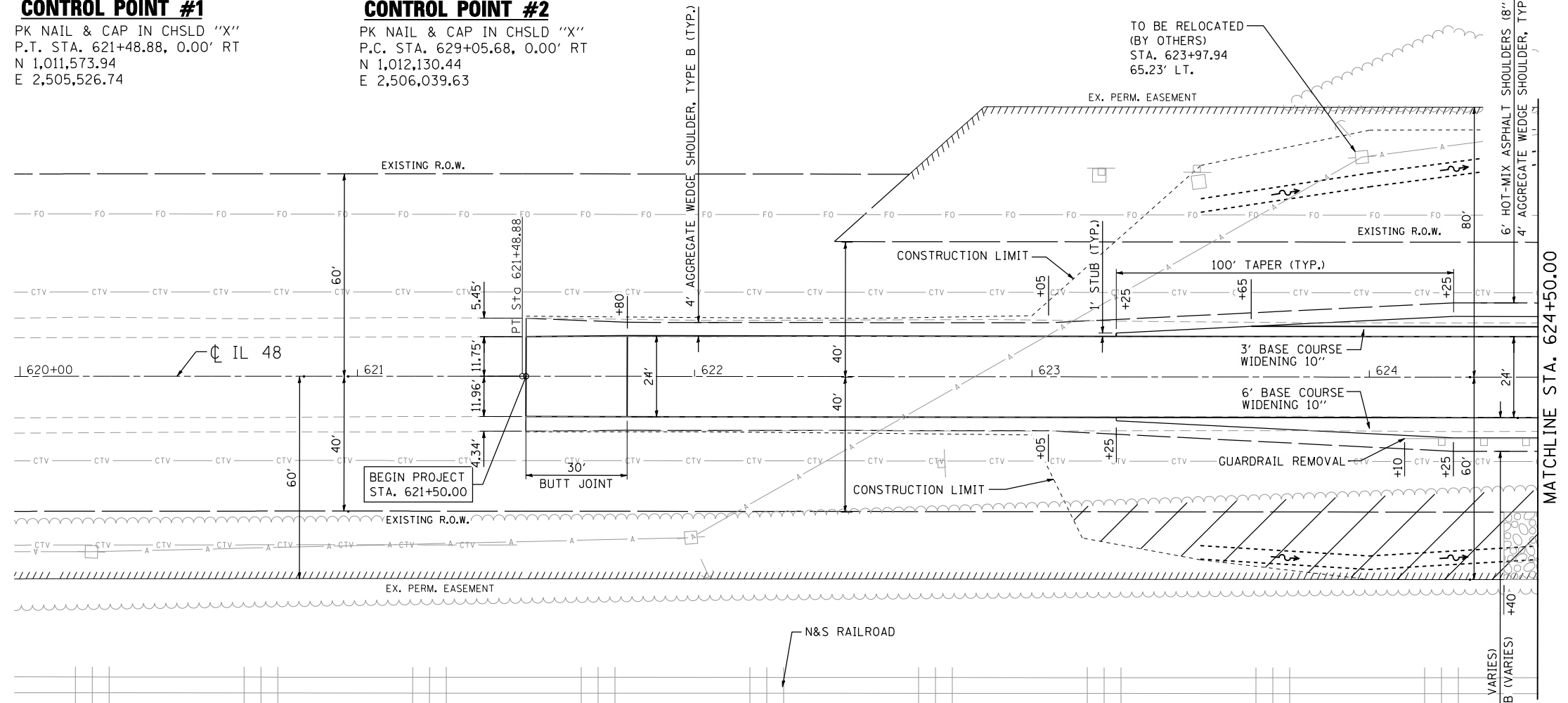
PK NAIL & CAP IN CHSLD "X"
 P.T. STA. 621+48.88, 0.00' RT
 N 1,011,573.94
 E 2,505,526.74



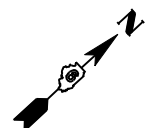
CONTROL POINT #2

PK NAIL & CAP IN CHSLD "X"
 P.C. STA. 629+05.68, 0.00' RT
 N 1,012,130.44
 E 2,506,039.63

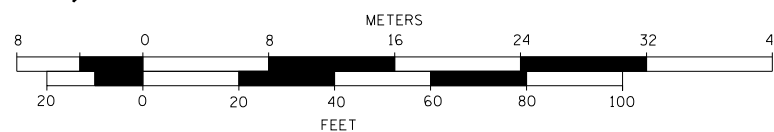
| | | |
|---------------|-----------|------|
| PLAN | SURVEYED | DATE |
| NOTE BOOK NO. | BY | |
| | CHECKED | |
| | PLOTTED | |
| | FILE NAME | |



MATCHLINE STA. 624+50.00



GRAPHIC SCALE



EXIST. CURVE 4
 PI STA. = 617+28.00
 $\Delta = 0^\circ 51' 26''$ (RT)
 $D = 0^\circ 06' 07''$
 $R = 56,258.05'$
 $T = 420.90'$
 $L = 841.78'$
 $E = 1.57'$
 P.C. STA. = 613+07.10
 P.T. STA. = 621+48.88

design firm
no. 184001036



| | | |
|----------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-PLAN.dgn | CHECKED - | REVISED |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

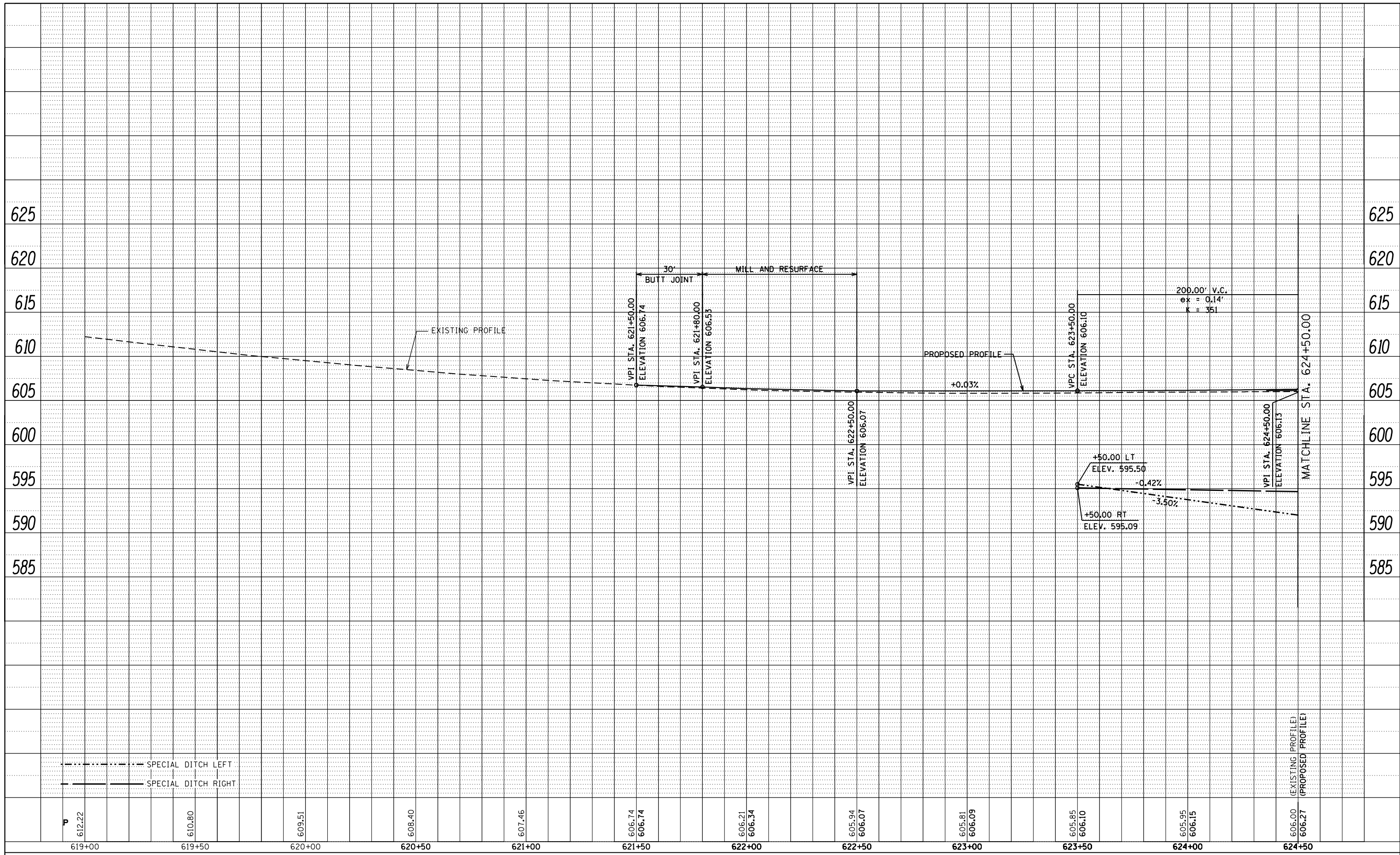
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | |
|----------------------------------|---------------------|
| PLAN SHEET | |
| IL 48 OVER BEAR CREEK | |
| SCALE: 1" = 20' | SHEET 1 OF 3 SHEETS |
| STA. 620+00.00 TO STA. 624+50.00 | |

| | | | | |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4), 136B-1 | CHRISTIAN | 97 | 26 |
| • 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

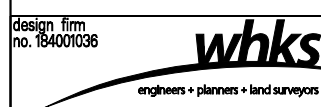
| | | | |
|------|-----------------------------|----|------|
| PLAN | SURVEYED | BY | DATE |
| | PLOTTED | | |
| | GRADES CHECKED | | |
| | STRUCTURE NOTATIONS CHECKED | | |
| | NOTE BOOK NO. | | |
| | CADD FILE NAME | | |

| | | | |
|---------|-----------------------------|----|------|
| PROFILE | SURVEYED | BY | DATE |
| | PLOTTED | | |
| | GRADES CHECKED | | |
| | STRUCTURE NOTATIONS CHECKED | | |
| | NOTE BOOK NO. | | |
| | CADD FILE NAME | | |



----- SPECIAL DITCH LEFT
 ----- SPECIAL DITCH RIGHT

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------|--|--------|--|--------|--|--------|--|--------|--|------------------|--|------------------|--|------------------|--|------------------|--|------------------|--|------------------|--|------------------|
| P | 612.22 | | 610.80 | | 609.51 | | 608.40 | | 607.46 | | 606.74 606.74 | | 606.21 606.34 | | 605.94 606.07 | | 605.81 606.09 | | 605.85 606.10 | | 605.95 606.15 | | 606.00 606.27 |
| | 619+00 | | 619+50 | | 620+00 | | 620+50 | | 621+00 | | 621+50 | | 622+00 | | 622+50 | | 623+00 | | 623+50 | | 624+00 | | 624+50 |



| | | |
|-------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-PROFILE.dgn | CHECKED - | REVISED |
| PLOT SCALE = 40,0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |



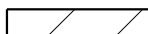

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

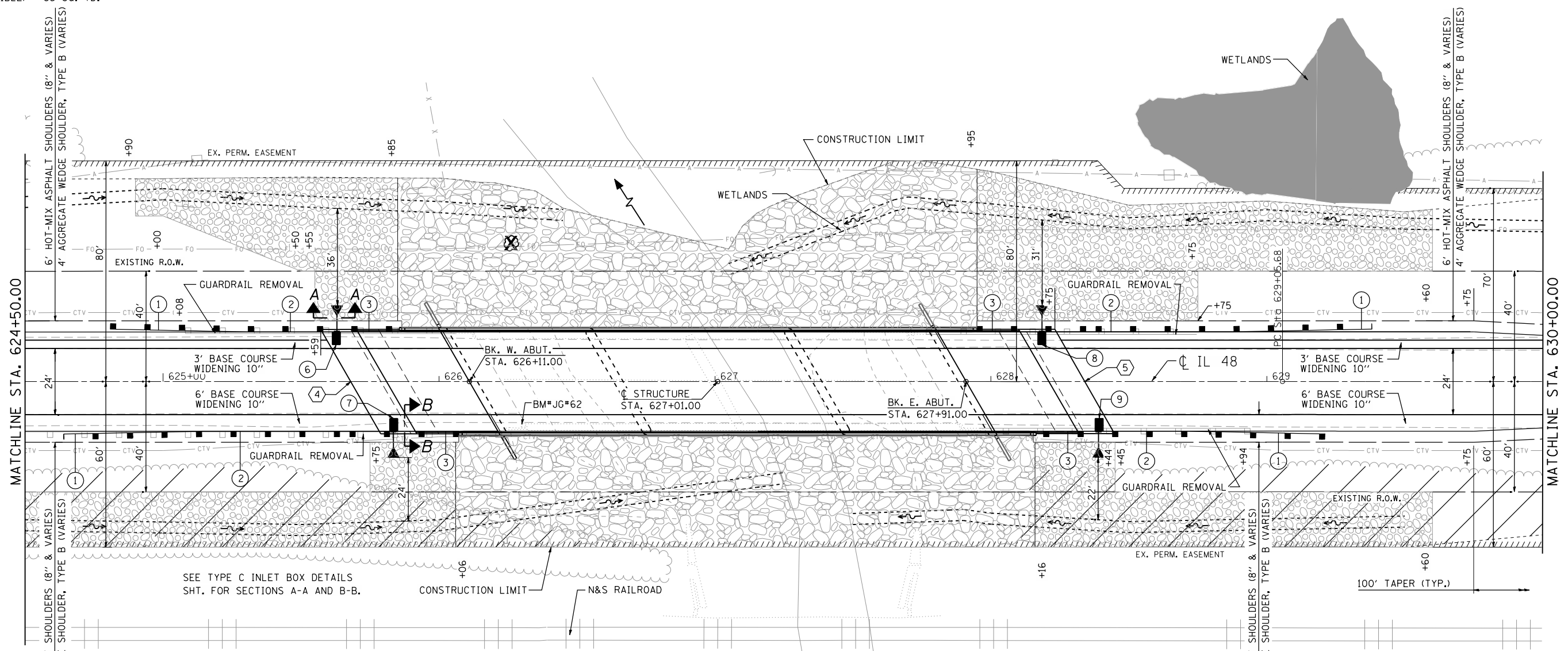
PROFILE
IL 48 OVER BEAR CREEK
 SCALE: 1" = 20' SHEET 1 OF 3 SHEETS STA. 621+50 TO STA. 624+50

| | | | | |
|----------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | (4), 136B-1 | CHRISTIAN | 97 | 27 |
| * 75 (IL 29) & 714 (IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

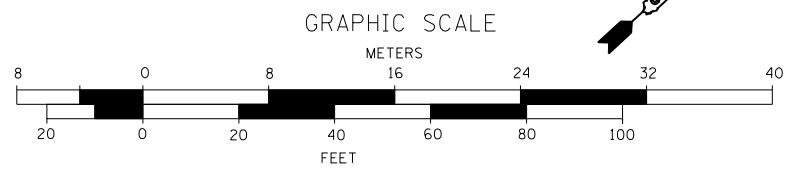
- ① TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT
- ② STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POST
- ③ TRAFFIC BARRIER TERMINAL, TYPE 6
- ④ STA. 625+68 TO STA. 625+81
BRIDGE APPROACH CONNECTOR PAVEMENT (FLEXIBLE) = 35 SQ. YD.
- ⑤ STA. 628+21 TO STA. 628+34
BRIDGE APPROACH CONNECTOR PAVEMENT (FLEXIBLE) = 35 SQ. YD.
- ⑥ STA. 625+63.00, 18' LT.
TYPE C INLET BOX, STANDARD 609006 = 1 EACH
RIM = 606.50
PIPE DRAINS 12" = 8 FOOT
METAL END SECTIONS 12" = 1 EACH
INV. = 606.00 (27.5' LT.)
- ⑦ STA. 625+83.50, 18' RT.
TYPE C INLET BOX, STANDARD 609006 = 1 EACH
RIM = 606.86
PIPE DRAINS 12" = 9 FOOT
METAL END SECTIONS 12" = 1 EACH
INV. = 604.25 (28.5' RT.)
- ⑧ STA. 628+18.50, 18' LT.
TYPE C INLET BOX, STANDARD 609006 = 1 EACH
RIM = 606.61
PIPE DRAINS 12" = 7 FOOT
METAL END SECTIONS 12" = 1 EACH
INV. = 604.00 (27' LT.)
- ⑨ STA. 628+39.00, 18' RT.
TYPE C INLET BOX, STANDARD 609006 = 1 EACH
RIM = 606.80
PIPE DRAINS 12" = 7 FOOT
METAL END SECTIONS 12" = 1 EACH
INV. = 604.25 (27' RT.)

LEGEND

-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4
-  TREE REMOVAL, ACRES
-  TREE REMOVAL (OVER 15 UNITS DIAMETER)

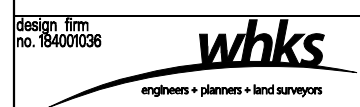


| | | |
|---------------|-----------|------|
| PLAN | SURVEYED | DATE |
| | PLOTTED | BY |
| | CHECKED | |
| | ALIGNED | |
| | FILED | |
| NOTE BOOK NO. | FILE NAME | |



EXIST. CURVE 5
 PI STA. = 633+30.68
 $\Delta = 0^\circ 49' 15''$ (RT)
 $D = 0^\circ 05' 48''$
 $R = 59,327.82'$
 $T = 425.00'$
 $L = 849.99'$
 $E = 1.52'$
 P.C. STA. = 629+05.68
 P.T. STA. = 637+55.67

BM *JG*62
 STA. 626+30, 15.5' RT.
 CHISELED "□" SE CORNER OF BRIDGE
 ELEV. 607.04



| | | |
|----------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-PLAN.dgn | CHECKED - | REVISED |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

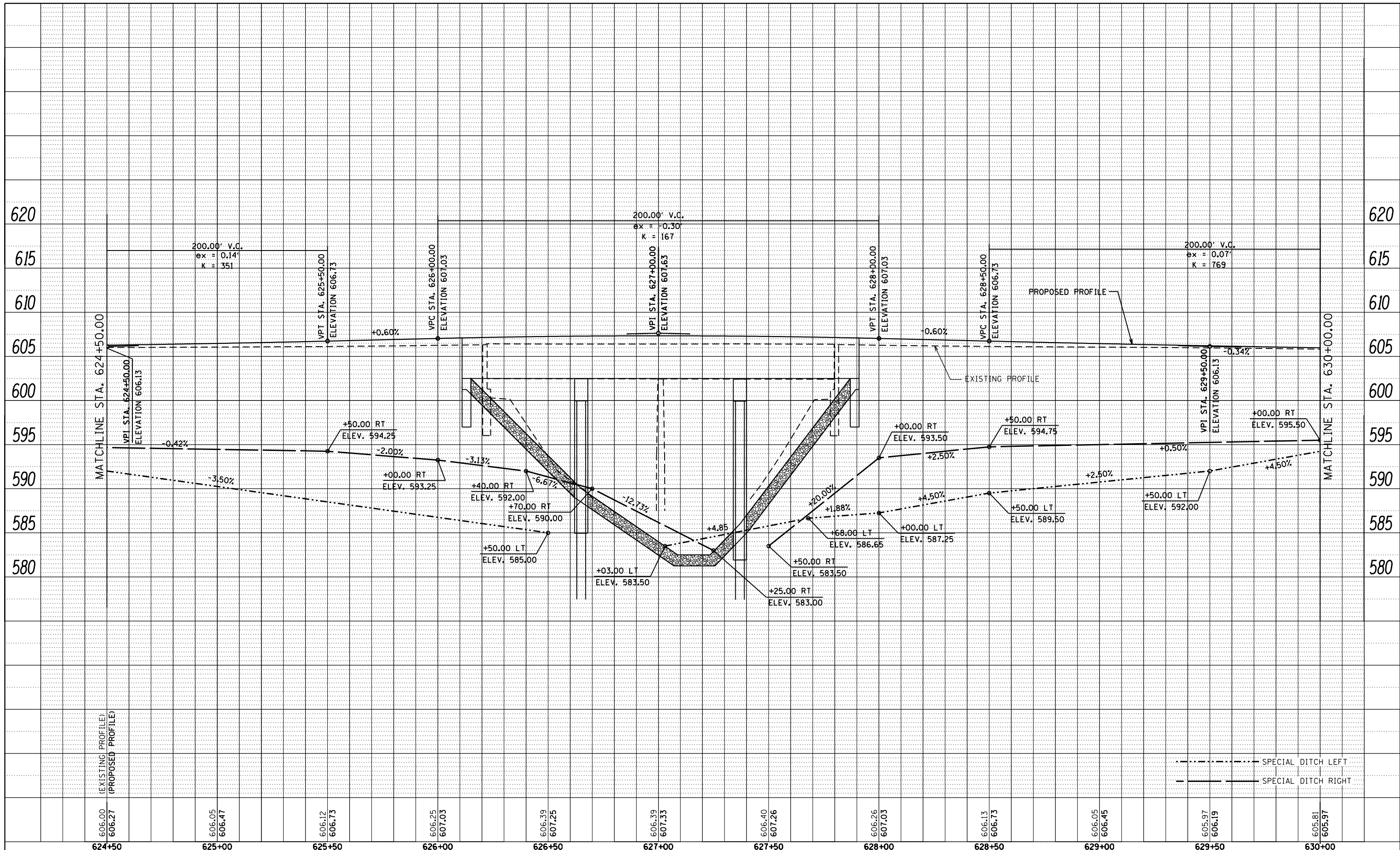
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET
IL 48 OVER BEAR CREEK**
 SCALE: 1" = 20' SHEET 2 OF 3 SHEETS STA. 624+50.00 TO STA. 630+00.00

| | | | | |
|---------------------------|--------------|-----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • 75(IL 29) & 714(IL 48) | (4)I, 136B-1 | CHRISTIAN | 97 | 28 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72A61 | |

| | | | |
|------|-----------|----|------|
| PLAN | SURVEYED | BY | DATE |
| | PLOTTED | | |
| | CHECKED | | |
| | AT | | |
| | NO. | | |
| | FILE NAME | | |

| | | | |
|---------|-----------|----|------|
| PROFILE | SURVEYED | BY | DATE |
| | PLOTTED | | |
| | CHECKED | | |
| | AT | | |
| | NO. | | |
| | FILE NAME | | |



| | | | | | | | | | | | |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 606.00 606.27 | 606.05 606.47 | 606.12 606.73 | 606.25 607.03 | 606.39 607.25 | 606.39 607.33 | 606.40 607.26 | 606.26 607.03 | 606.13 606.73 | 606.05 606.45 | 605.97 606.19 | 605.81 605.97 |
| 624+50 | 625+00 | 625+50 | 626+00 | 626+50 | 627+00 | 627+50 | 628+00 | 628+50 | 629+00 | 629+50 | 630+00 |

design firm
no. 184001036

USER NAME = gjameson
FILE NAME = D672A61-SHT-PROFILE.dgn
PLOT SCALE = 48.0000 "/> IN.
PLOT DATE = 8/16/2013

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROFILE
IL 48 OVER BEAR CREEK

| | | | | |
|----------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | (4), 136B-1 | CHRISTIAN | 97 | 29 |
| * 75 (IL 29) & 714 (IL 48) | | CONTRACT NO. 72A61 | | |



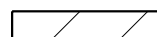

SCALE: 1" = 20'

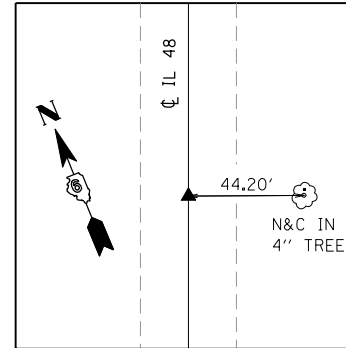
SHEET 2 OF 3 SHEETS

STA. 624+50 TO STA. 630+00

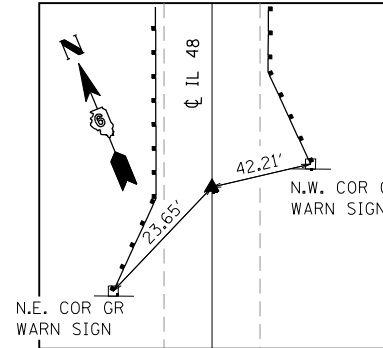
ILLINOIS FED. AID PROJECT

LEGEND

-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4
-  TREE REMOVAL, ACRES
-  TREE REMOVAL (OVER 15 UNITS DIAMETER)

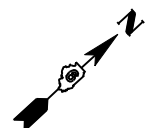
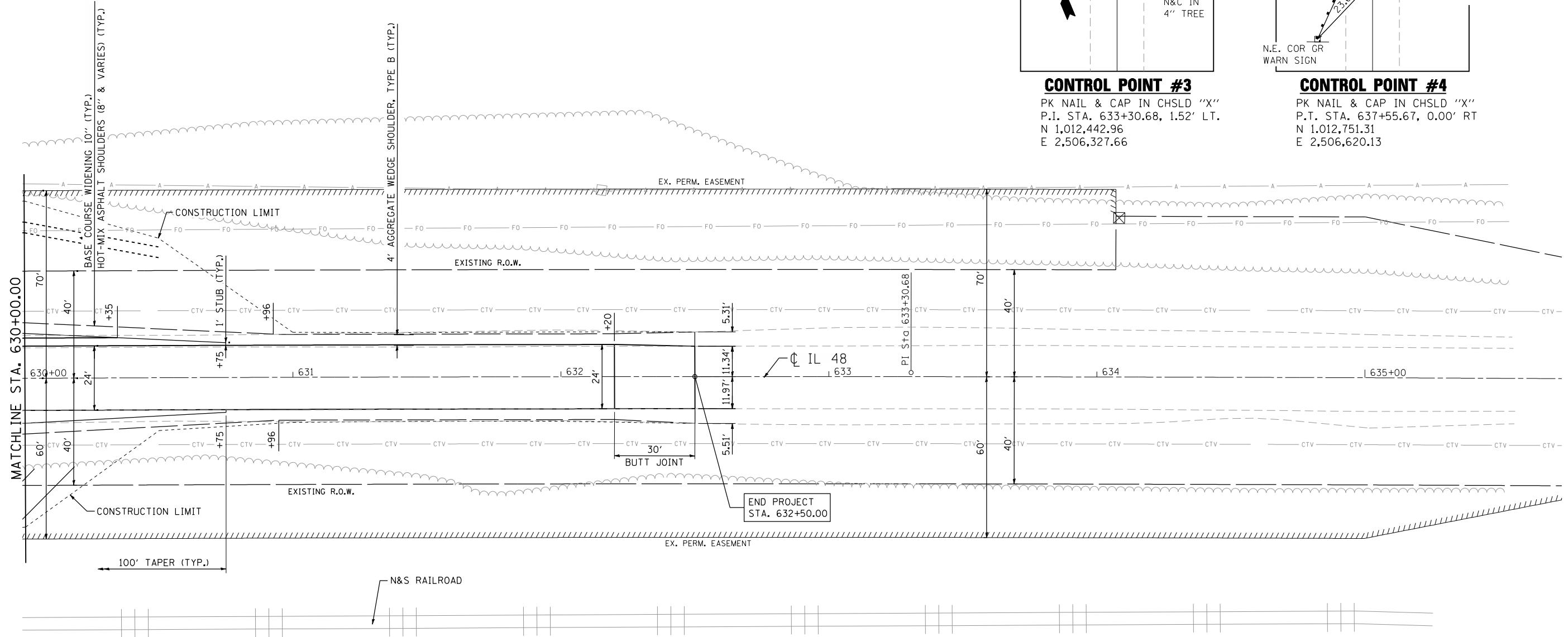


CONTROL POINT #3
 PK NAIL & CAP IN CHSLD "X"
 P.I. STA. 633+30.68, 1.52' LT.
 N 1,012,442.96
 E 2,506,327.66

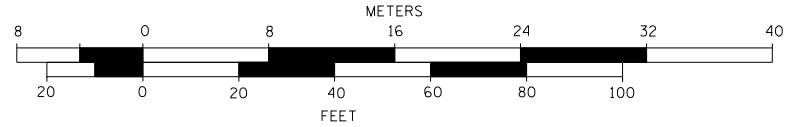


CONTROL POINT #4
 PK NAIL & CAP IN CHSLD "X"
 P.T. STA. 637+55.67, 0.00' RT
 N 1,012,751.31
 E 2,506,620.13

| | | |
|-----------|-----------|------|
| PLAN | SURVEYED | DATE |
| NOTE BOOK | BY | |
| NO. | CHECKED | |
| | AT | |
| | FILE NAME | |

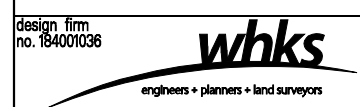


GRAPHIC SCALE



EXIST. CURVE 5
 PI STA. = 633+30.68
 $\Delta = 0^\circ 49' 15''$ (RT)
 $D = 0^\circ 05' 48''$
 $R = 59,327.82'$
 $T = 425.00'$
 $L = 849.99'$
 $E = 1.52'$
 P.C. STA. = 629+05.68
 P.T. STA. = 637+55.67

BM #JG#64
 STA. 635+64, 20.5' LT.
 CHISELED "X" IN CENTER OF CONC. H.W.
 ELEV. 609.29



| | | |
|----------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-PLAN.dgn | CHECKED - | REVISED |
| PLOT SCALE = 40,0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

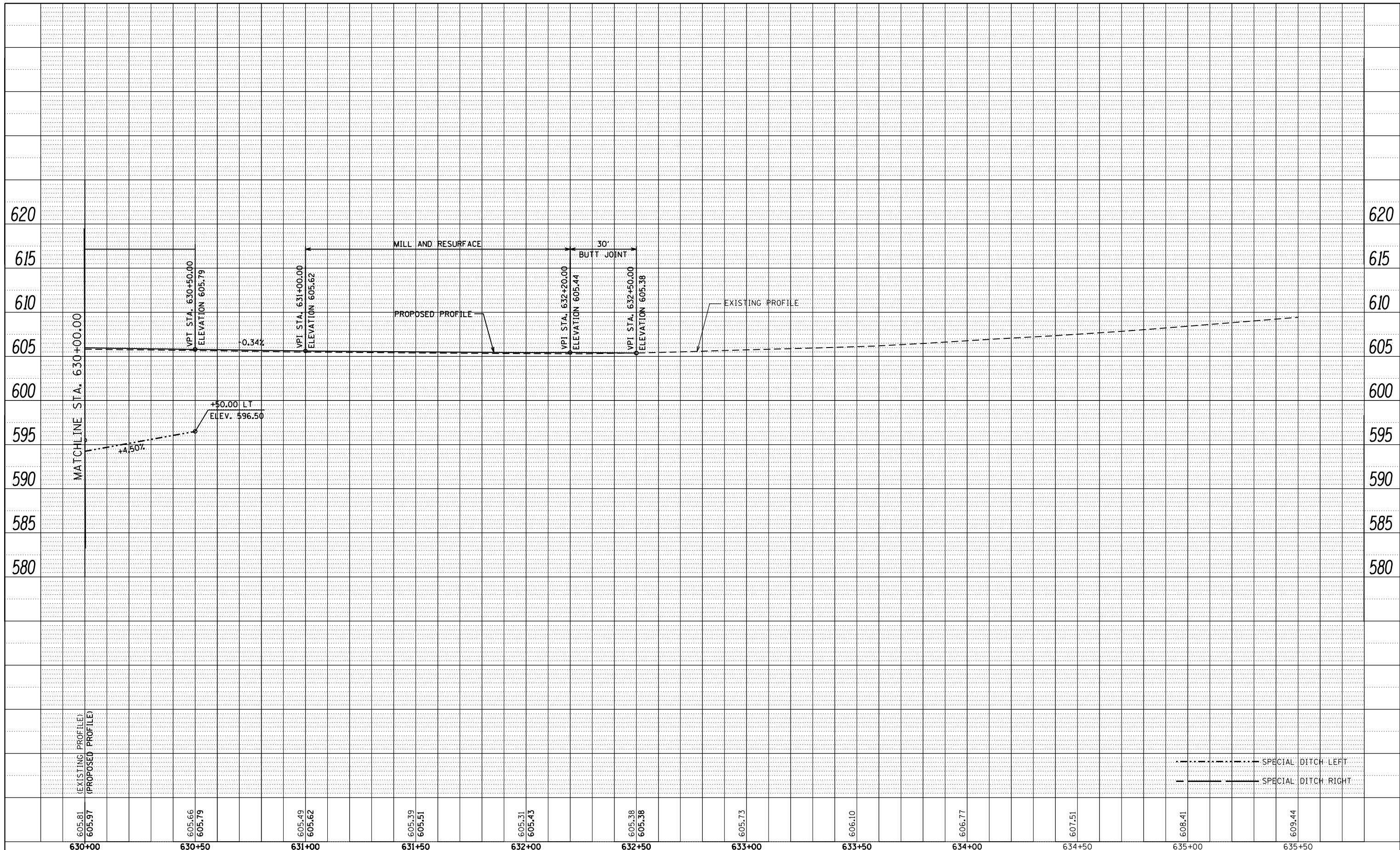
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET
 IL 48 OVER BEAR CREEK**
 SCALE: 1" = 20' SHEET 3 OF 3 SHEETS STA. 630+00.00 TO STA. 635+00.00

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|-----------|--------------------|-----------|
| • | (4)I, 136B-1 | CHRISTIAN | 97 | 30 |
| • 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

| | | | |
|------|--------------------|----|------|
| PLAN | SURVEYED | BY | DATE |
| | PLOTTED | | |
| | GRADES CHECKED | | |
| | STRUCTURE NOTATION | | |
| | NO. _____ | | |
| | NOTE BOOK | | |
| | NO. _____ | | |
| | CADD FILE NAME | | |

| | | | |
|---------|--------------------|----|------|
| PROFILE | SURVEYED | BY | DATE |
| | PLOTTED | | |
| | GRADES CHECKED | | |
| | STRUCTURE NOTATION | | |
| | NO. _____ | | |
| | NOTE BOOK | | |
| | NO. _____ | | |
| | CADD FILE NAME | | |



| | | | | | | | | | | | |
|------------------|------------------|------------------|------------------|------------------|------------------|--------|--------|--------|--------|--------|--------|
| 605.81 605.97 | 605.66 605.79 | 605.49 605.62 | 605.39 605.51 | 605.31 605.43 | 605.38 605.38 | 605.73 | 606.10 | 606.77 | 607.51 | 608.41 | 609.44 |
| 630+00 | 630+50 | 631+00 | 631+50 | 632+00 | 632+50 | 633+00 | 633+50 | 634+00 | 634+50 | 635+00 | 635+50 |



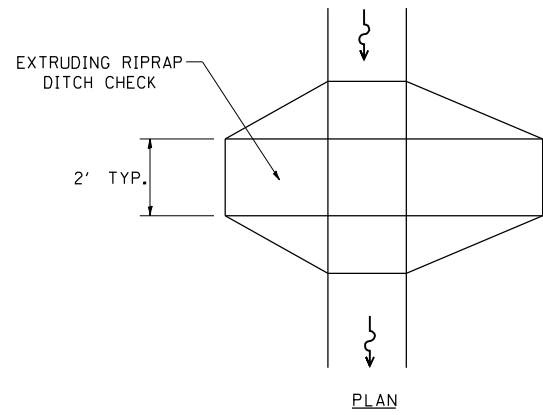
| | | |
|-------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-PROFILE.dgn | CHECKED - | REVISED |
| PLOT SCALE = 40,0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

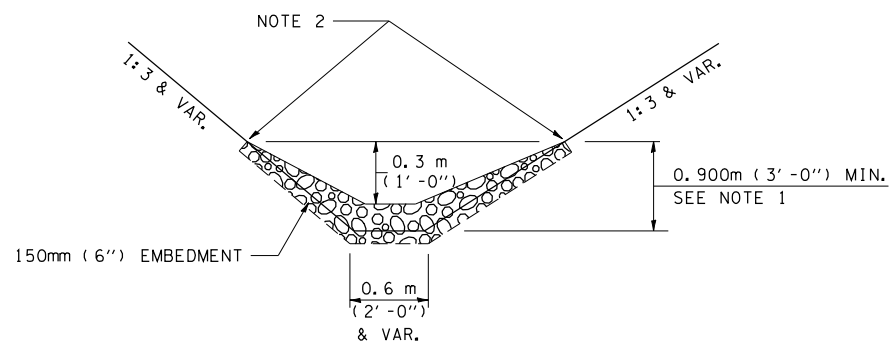
**PROFILE
IL 48 OVER BEAR CREEK**

SCALE: 1" = 20' SHEET 3 OF 3 SHEETS STA. 630+00 TO STA. 632+50

| | | | | |
|----------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4), 136B-1 | CHRISTIAN | 97 | 31 |
| • 75 (IL 29) & 714 (IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |



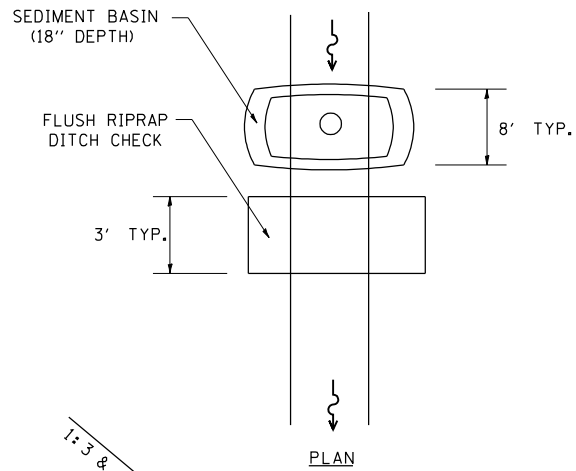
PLAN



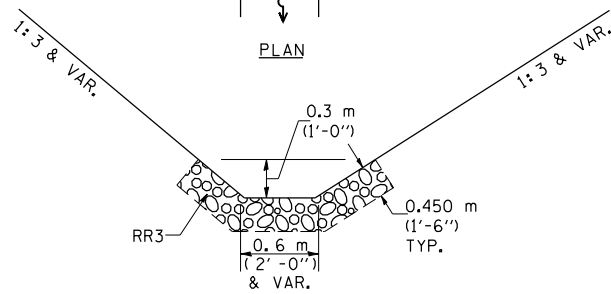
ELEVATION

OPTION 1

(EXTRUDING DITCH CHECK)
RECOMMENDED FOR AREAS
W/ RIPRAP DITCH LINING



PLAN



ELEVATION

OPTION 2

(FLUSH DITCH CHECK)
RECOMMENDED FOR AREAS
W/O RIPRAP DITCH LINING

STONE DUMPED RIPRAP DITCH CHECK

OPTIONS 1 & 2 OR
AS DIRECTED BY THE ENGINEER

NOTE 1: RIPRAP SHALL EXTEND FAR ENOUGH UP THE SLOPES TO ALLOW 0.3m (1') OVERTOPPING TO AVOID ERODING AROUND THE EDGES OF THE RIPRAP.

NOTE 2: ENDS SHALL BE TIED INTO SLOPES.

| LEGEND FOR STORM WATER POLLUTION PREVENTION PLAN | |
|--|----------|
| ITEM | SYMBOL |
| AGGREGATE DITCH CHECKS | |
| INLET PIPE PROTECTION | |
| PERIMETER EROSION BARRIER | |
| SEDIMENT BASINS | |
| EARTH EXCAVATION FOR EROSION CONTROL AGGREGATE (EROSION CONTROL) | |
| PRESERVE EXISTING TREES, WOODLANDS, AND UNDERSTORY (OUTSIDE CONSTRUCTION LIMITS) | |
| ITEM PLACED AT BEGINNING OF CONSTRUCTION (Requirement) | * ITEM * |
| ITEM PLACED AS DIRECTED BY ENGINEER (When required by situation) | ITEM |
| DIRECTION OF OVERLAND FLOW | |

GENERAL NOTES:
All items shall be constructed as shown on this sheet, on Standard 280001, and as directed by the Engineer.

| | | | |
|--|--|----------------------|--------------------------|
| FILE NAME = | USER NAME = g_jameson | DESIGNED - | REVISED - AUG 2007 (JCN) |
| I:\jobs\1dot.d-6\7537_ptb 158-028\7537.0 | cadd\cadd sheets\D672A61-SHT-SWPPP.dgn | DRAWN - CADD | REVISED - OCT 2010 (JCN) |
| SWPPLAN.DGN | PLOT SCALE = 40.000' / IN. | CHECKED - JCN | REVISED - MAY 2012 (JPM) |
| | PLOT DATE = 8/16/2013 | DATE - APRIL 5, 1999 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|--|-------------------------|
| STORM WATER POLLUTION PREVENTION PLAN | |
| SCALE: NTS | SHEET NO. 1 OF 4 SHEETS |
| STA. | TO STA. |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------------------|--------------------|--------------|-----------|
| * | (4)1, 136B-1 | CHRISTIAN | 97 | 32 |
| | 75(IL 29) & 714(IL 48) | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

STORM WATER POLLUTION PREVENTION PLAN

Route: FAP 75 and FAP 174 Marked: IL 29 and IL 48
 Section: 4I, (136)B-1 Project No.:
 Bear Creek County: Christian Contract No.: 72A61
 Starting Station: Sta. 621+50.00 (Longitude: 1,011,574.7644 Latitude: 2,505,527.5009)
 Ending Station: Sta. 632+50.00 (Longitude: 1,012,382.9503 Latitude: 2,506,273.7129)

SITE DESCRIPTION

Description of Construction Activity:

1. The proposed project consists of the removal and replacement of the bridge carrying IL 48 over Bear Creek, approximately 1.0 mile southwest of Palmer and the bridge carrying IL 29 over IL 48 approximately 0.1 miles east of the IL 48 ramp in Taylorville in Christian County. The project will be constructed on the existing alignments and will include reconstruction and resurfacing of approximately 0.20 miles of IL 48.
2. Additional construction activities consist of HMA base course widening, HMA resurfacing, HMA and aggregate shoulders, ditch grading, embankment, topsoil placement, channel grading, slope wall removal, slope protection with riprap and other miscellaneous work to complete improvements.

Description of Intended Sequence of Major Construction Activities Which Will Disturb Earth and Lead to Possible Erosion for Major Portions of the Construction Site:

1. Tree removal will be completed to clear approximately 0.47 acres of wooded land.
2. Excavation will be completed along the project to grade out for proposed roadway ditches and waterways.
3. Embankment will be completed in fill areas to raise the existing ground elevation to meet the proposed roadway foreslopes and backslopes.
4. Placement, maintenance, removal and proper clean-up of temporary erosion control items, such as temporary ditch checks, perimeter erosion barrier and temporary seeding.
5. Placement of permanent erosion control items, such as riprap ditch lining, erosion control blanket and seeding.
6. Final grading, paving and other miscellaneous items.

This plan has been prepared to comply with the provision of the NPDES Permit Number ILR10 _____ issued by the Illinois Environmental Protection Agency for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Royan L. Amiskell
 (Signature)

08/16/13
 (Date)

Royan Four Engineers
 (Title)

Note: The above boxed in area will be filled out by IDOT - Construction after the award of the contract to obtain the required NPDES permit.

The following plan was established and included in these plans to direct the Contractor in the placement of temporary erosion control systems and to provide a storm water pollution prevention plan for compliance under NPDES. The Contractor shall abide to all requirements within this plan as part of the contract.

The purpose of this plan is to prevent / minimize siltation within the construction zone and to eliminate sediments from entering and leaving the construction zone by utilizing proper temporary erosion control systems and providing ground cover within a reasonable time.

Certain items, as shown in this plan and referenced by the legend, shall be placed by the Contractor at the beginning of construction. Other items shall be placed by the Contractor as directed by the Engineer on a case by case situation resulting from the Contractor's sequence of activities, time of the year, and expected weather conditions.

The Contractor shall place permanent erosion control systems and seeding within a reasonable amount of time; therefore, reducing the amount of area being open to the possibility of erosion and reducing the amount of temporary erosion control systems and temporary seeding. The Resident Engineer will determine if temporary erosion control systems shown in the plan can be deleted, the size of the proposed ditch checks, the proper method of installation, and if any additional temporary erosion control systems shall be added which are not included in this plan. The Contractor shall perform all work as directed by the Engineer and as shown in special details and in Standard 280001 of the plans.

All disturbed areas having high potential for erosion, as determined by the Engineer, shall be temporarily seeded or permanently seeded by October 1st of each construction year and shall not be reopened until after the winter shutdown period.

Area of Construction Site:

The total drainage area entering and including the construction site, at Bear Creek, is estimated to be approximately 48.7 square miles in which 3.4 acres will be disturbed by excavation, grading or other activities.

Other Reports, Studies and Plans which Aid in the Development of this Storm Water Pollution Prevention Plan as Referenced Documents:

1. Estimated run-off coefficients are contained in the project drainage study.
2. Information on the soils within the site was obtained from field reviews which were utilized for proposed placement of the temporary erosion control systems.
3. Site maps indicating drainage patterns and approximate slopes were contained in the project design report, USGS drainage maps, project drainage study and project plan documents were all utilized for proposed placement of the temporary erosion control systems.

Drainage Tributaries Receiving Water from this Construction Site:

The receiving water is Bear Creek. Bear Creek flows into the South Fork Sangamon River, to the Sangamon River and then into the Illinois River near Beardstown.

| | | | | | | | | | | |
|--|---------------------------------------|----------------------|--------------------------|---|--|----------------|-------------------------|-----------|-----------------|---------------------------|
| FILE NAME * | USER NAME * g.joneson | DESIGNED - | REVISED - AUG 2007 (JCN) | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STORM WATER POLLUTION PREVENTION PLAN | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| I:\jobs\idot.d\6\7637 pfb 158-826\7637.0 | load\load sheets\672661-SHT-SWPPP.dgn | DRAWN - CADD | REVISED - OCT 2010 (JCN) | | | * | (4)I, 136B-1 | CHRISTIAN | 97 | 33 |
| Default\SWPPLAN.DGN | PLOT SCALE = 48,000' / IN. | CHECKED - JCN | REVISED - MAY 2012 (JPM) | | | * | 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 |
| | PLOT DATE = 8/16/2013 | DATE - APRIL 5, 1999 | REVISED - | | | SCALE: NTS | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA. | ILLINOIS FED. AID PROJECT |

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

Description of Stabilization Practices at the Beginning of Construction:

1. The area between the existing and proposed right-of-way/temporary easement boundaries and limits of the project will be improved and managed for the purposes of controlling erosion within the area, reducing water flow by temporary diversion and minimizing siltation into the construction zone, and establishing vegetative cover which will become permanent vegetation and act as an erosion barrier. Work at the beginning of construction will consist of the following:
 - (a) Areas of existing vegetation (woods and grasslands) outside the proposed construction slope limits shall be identified for preserving and shall be protected from mowing, brush cutting, tree removal and other activities which would be detrimental to their maintenance and development.
 - (b) Dead, diseased, or unsuitable vegetation within the site shall be removed as directed by the Engineer, along with required tree removal.
 - (c) As soon as reasonable access is available (such as trees cleared) to all locations where water drains away from the project, sediment basins, riprap ditch checks, temporary ditch checks, and/or erosion control fence shall be installed as called out in this plan and directed by the Engineer.
 - (d) Bare and sparsely vegetated ground in highly erodible areas as determined by the Engineer shall be temporarily seeded at the beginning of construction where no construction activities are immediately expected as stated in the special provision "Temporary Erosion and Sediment Control".
 - (e) Immediately after tree removal is completed in certain areas which are highly erodible areas as determined by the Engineer, the areas shall be temporarily seeded where no construction activities are immediately expected as stated in the special provision "Temporary Erosion and Sediment Control".
 - (f) At locations where a significant amount of water drains into the construction zone from outside areas (adjacent landowners), erosion control fence, temporary ditch checks, or riprap ditch checks will be utilized to locally divert water, reduce flow rates, and collect outside siltation inside the right-of-way line. Erosion control items will not be allowed to be installed to cause flooding to upstream private property which could cause crop damages or other undesirable conditions.
2. Establishment of these temporary erosion control measures will have additional benefits to the project. Desirable grass seed will become established in these areas and will spread seeds onto the construction site until permanent seeding/mowing and overseeding can be complete.
3. A third benefit of these filter areas is that they will begin to provide a screen and buffer. They will help protect the construction site from winds and excess sun and mitigate construction noise and dust.

Description of Stabilization Practices During Construction:

1. During roadway construction, areas outside the construction slope limits as outlined previous herein shall be protected from damaging effects of construction. The Contractor shall not use this area for staging (except as designated on the plans or directed by the Engineer), parking of vehicles or construction equipment, storage of materials, or other construction related activities.
 - (a) Within the construction zone, critical areas which have high flows of water as determined by the Engineer shall remain undisturbed until full scale construction is underway to prevent unnecessary soil erosion.
 - (b) Top soil and earth stockpiles shall be temporarily seeded if they are to remain unused for more than fourteen days.
 - (c) As the Contractor constructs a portion of roadway in a fill section, he/she shall follow the following steps as directed by the Engineer:
 - i. Place temporary erosion control systems at locations where water leaves and enters the construction zone
 - ii. Temporary seed highly erodible areas outside the construction slope limits
 - iii. Construct roadside ditches and provide temporary erosion control systems
 - iv. Temporary divert water around proposed culvert locations
 - v. Build necessary embankment at culvert locations and then excavate and place culvert
 - vi. Continue building up the embankment to the proposed grade while at the same time place permanent erosion control such as riprap ditch lining and conduct final shaping to the slopes
 - (d) The Contractor shall immediately follow major earth moving operations with final grading equipment. After the major earth spread operation has moved to a new location, final grading shall be completed within fourteen days. If grading is not completed within fourteen days, all major earth moving operations will be stopped, as directed by the Engineer, until disturbed areas are final graded and seeded.
 - (e) Excavated areas and embankments shall be permanently seeded when final graded. If not, they shall be temporarily seeded as stated in the special provision "Temporary Erosion and Sediment Control".

(f) Construction equipment shall be stored and fueled only at designated locations. All necessary measures shall be taken to contain any fuel or pollution run-off in compliance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.

(g) Qualified Personnel shall inspect the project at least every seven days and within 24 hours of the end of a storm that is 0.5 inch or greater as noted in BDE 2342.

(h) Sediment collected during construction by the various temporary erosion control systems shall be disposed of on the site on a regular basis as directed by the Engineer.

(i) The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning. The costs of this removal shall be included in the unit bid price for the various temporary erosion control pay items. No additional compensation will be allowed.

Description of Structural Practices After Final Grading:

1. Temporary erosion control systems shall be left in place with proper maintenance until permanent erosion control is in place and working properly and all proposed turf areas seeded and established with a proper stand.
2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up, and disturbed turf reseeded. Temporary riprap ditch checks will be allowed to remain in place where approved by the Engineer.

Maintenance after Construction:

1. Construction is complete after acceptance is received at the final inspection.
2. Areas will be inspected on a regular basis by IDOT District 6 Bureau of Operations.
3. Maintenance crews will perform regular mowings to aid in keeping weeds down and establishing a good roadside seed stand.
4. Maintenance crews will also aid in any ditch lining maintenance or in any drainage problems.
5. All maintenance will be conducted at times when weather conditions will not cause site damage.

DOCUMENTATION

1. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with Section 4.b. shall be made and retained as part of the plan for at least three years after the date of inspection. The report shall be signed in accordance with part VI.G of the general permit.
2. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incident of Noncompliance (ION)" report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI.G. of the general permit. The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 2200 Churchill Road, P.O. Box 19276
 Springfield, IL 62794-9276
 Attn: Compliance Assurance Section

| | | | | | | | | | | | | |
|--|--|----------------------|--------------------------|---|--|-------------------------|--------------------|---------------------------|---------|--------|-----------------|--------------|
| FILE NAME = | USER NAME = g_jameson | DESIGNED - | REVISED - AUG 2007 (JCN) | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STORM WATER POLLUTION PREVENTION PLAN | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| I:\jobs\idot.d-6\7537_ptb 158-028\7537.0 | cadd\cadd sheets\D672461-SHT-SWPPP.dgn | DRAWN - CADD | REVISED - OCT 2010 (JCN) | | • | (4), 136B-1 | CHRISTIAN | 97 | 34 | | | |
| SWPPLAN.DGN | PLOT SCALE = 40,000' / IN. | CHECKED - JCN | REVISED - MAY 2012 (JPM) | | • | 75(IL 29) & 714(IL 48) | CONTRACT NO. 72A61 | ILLINOIS FED. AID PROJECT | | | | |
| Default | PLOT DATE = 8/16/2013 | DATE - APRIL 5, 1999 | REVISED - | | SCALE: NTS | SHEET NO. 3 OF 4 SHEETS | STA. TO STA. | | | | | |

CONTRACTOR CERTIFICATION STATEMENT

This certification statement is part of the Storm Water Pollution Plan for the project described below in accordance with NPDES Permit No. ILR10 _____, issued by the Illinois Environmental Protection Agency on _____.

Route: FAP 75 AND FAP 174 Marked: IL 29 AND IL 48
 Section: 4I, 136B-1 Project No.: _____
 County: CHRISTIAN Contract No.: 72A61

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in the SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

Signature _____ Date _____
 Title _____
 Name of Firm _____ Contractor
 Street Address _____ Subcontractor
 City, State, Zip _____
 Phone Number _____

Note: The above boxed in area shall be filled out by the Contractor after the award of the contract to obtain the required NPDES Permit from IEPA. This is a requirement for this contract.

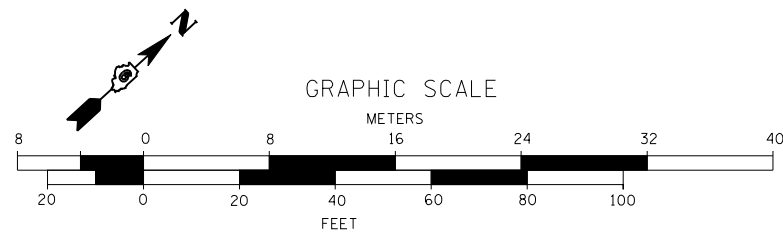
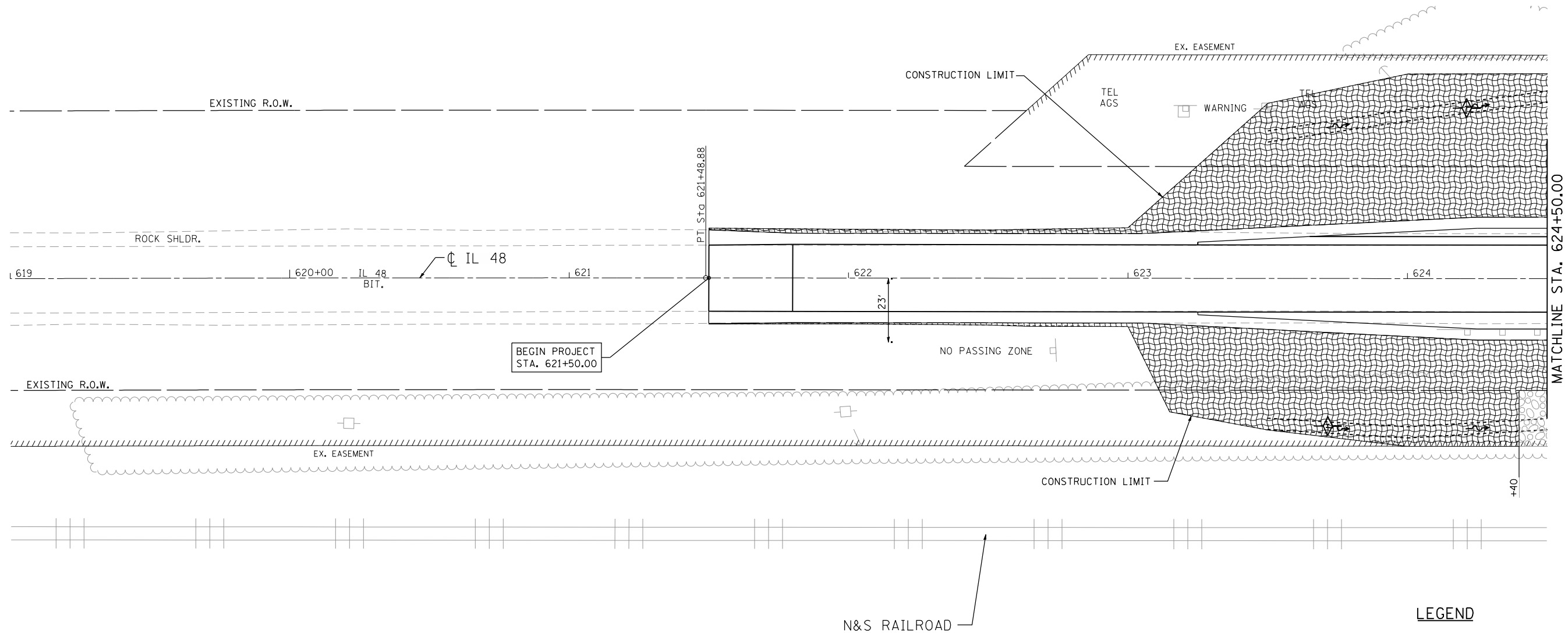
| | | | |
|--|--|----------------------|--------------------------|
| FILE NAME = | USER NAME = g_jameson | DESIGNED - | REVISED - AUG 2007 (JCN) |
| I:\jobs\1dot.d-6\7537_ptb 158-028\7537.0 | cadd\cadd sheets\D672A61-SHT-SWPPP.dgn | DRAWN - CADD | REVISED - OCT 2010 (JCN) |
| Default | SWPPLAN.DGN | CHECKED - JCN | REVISED - MAY 2012 (JPM) |
| | PLOT SCALE = 40.000' / IN. | DATE - APRIL 5, 1999 | REVISED - |
| | PLOT DATE = 8/16/2013 | | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STORM WATER POLLUTION
PREVENTION PLAN**

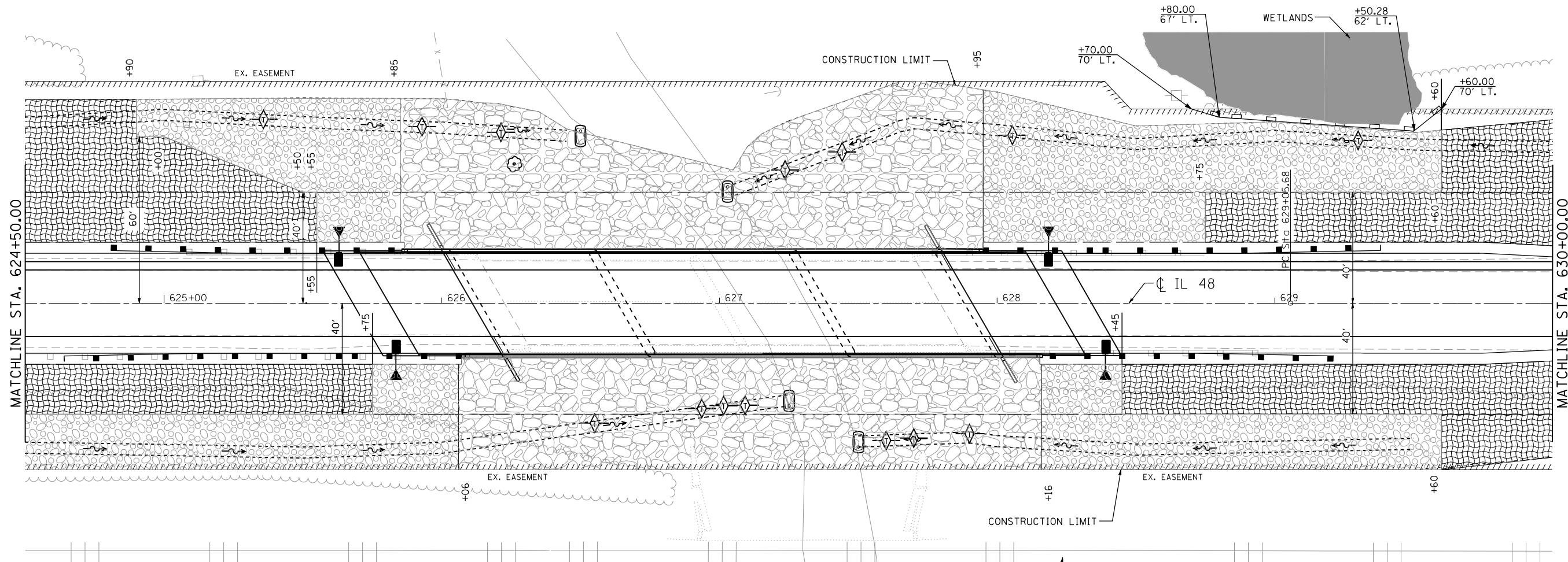
SCALE: NTS SHEET NO. 4 OF 4 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|-----------|--------------------|-----------|
| * | (4)I, 136B-1 | CHRISTIAN | 97 | 35 |
| * 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |



LEGEND





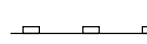

| | |
|--|-----------------------------|
| | SEEDING, CLASS 2 |
| | STONE RIPRAP, CLASS A5 |
| | STONE RIPRAP, CLASS A4 |
| | AGGREGATE (EROSION CONTROL) |
| | PERIMETER EROSION BARRIER |
| | SEDIMENT BASIN |

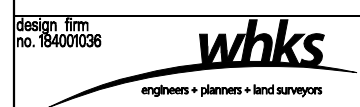
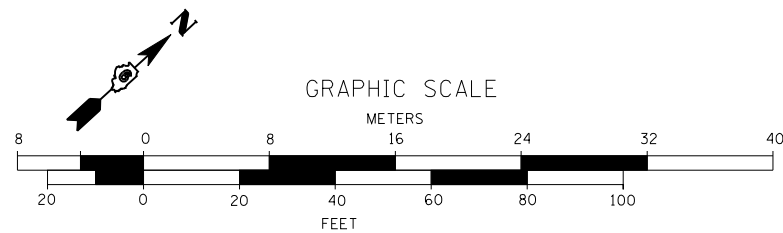


NOTES:
 SEDIMENT BASINS DIMENSIONS:
 LENGTH = 20'
 WIDTH = 4'
 DEPTH = 3'

N&S RAILROAD

LEGEND

-  SEEDING, CLASS 2
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4
-  AGGREGATE (EROSION CONTROL)
-  PERIMETER EROSION BARRIER
-  SEDIMENT BASIN



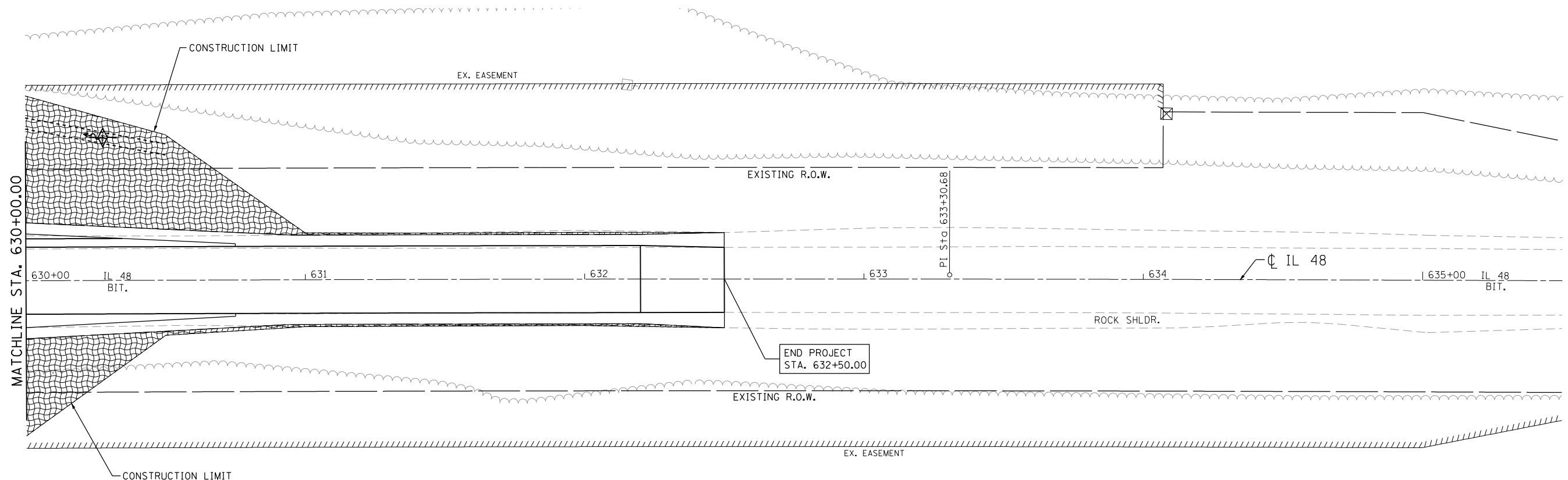
| | | |
|----------------------------------|------------|-----------|
| USER NAME = gjameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-ER05.dgn | CHECKED - | REVISED - |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS
 IL 48 OVER BEAR CREEK**

SCALE: 1" = 20' SHEET 2 OF 3 SHEETS STA. 624+50 TO STA. 630+00





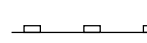

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|-----------|--------------------|-----------|
| 75(IL 29) & 714(IL 48) | (4)I, 136B-1 | CHRISTIAN | 97 | 37 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72A61 | |

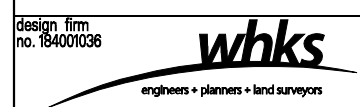
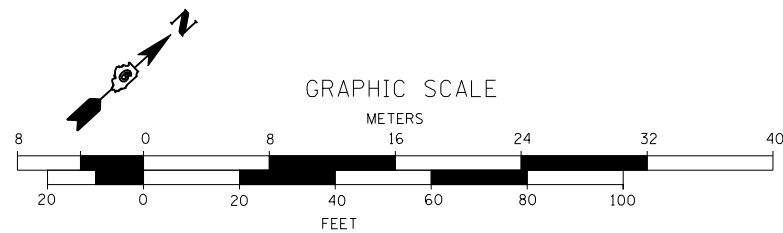


MATCHLINE STA. 630+00.00

END PROJECT
STA. 632+50.00

LEGEND

-  SEEDING, CLASS 2
-  STONE RIPRAP, CLASS A5
-  STONE RIPRAP, CLASS A4
-  AGGREGATE (EROSION CONTROL)
-  PERIMETER EROSION BARRIER
-  SEDIMENT BASIN



| | | |
|----------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-ER05.dgn | CHECKED - | REVISED |
| PLOT SCALE = 40,0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

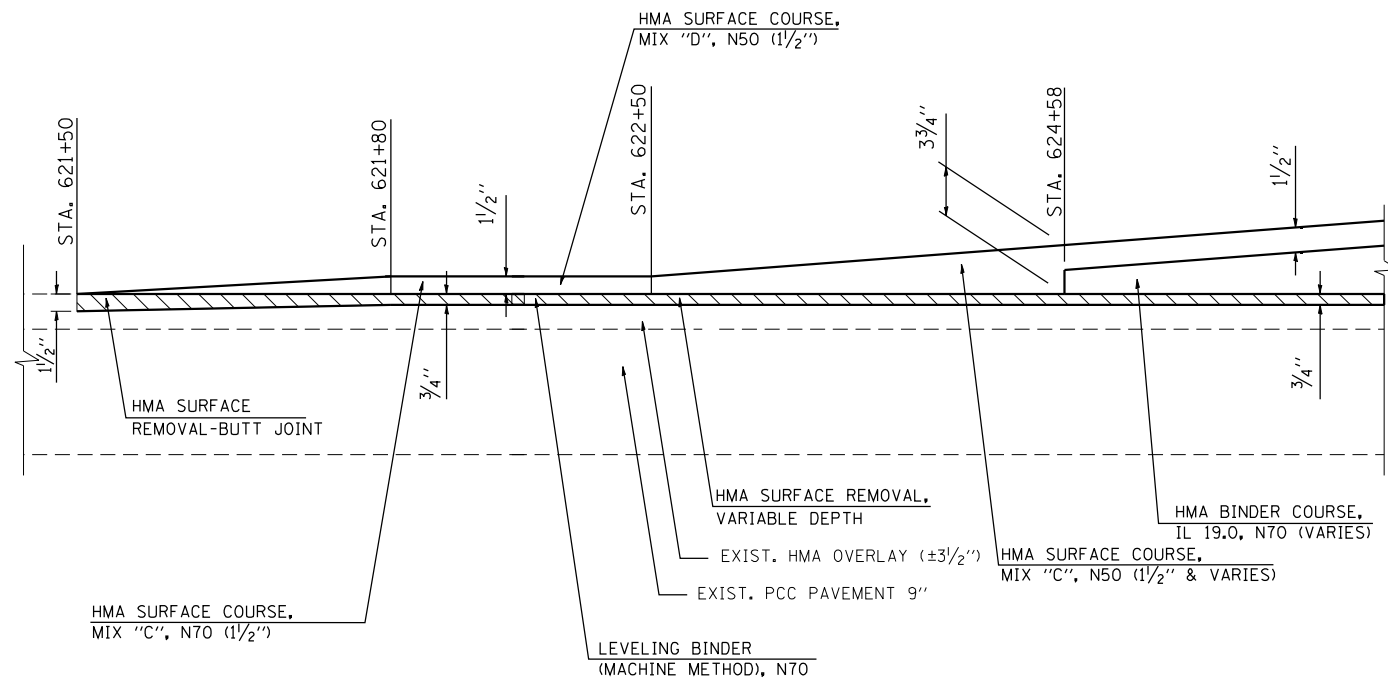
**EROSION CONTROL PLANS
IL 48 OVER BEAR CREEK**

SCALE: 1" = 20' SHEET 3 OF 3 SHEETS STA. 630+00 TO STA. 632+50

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|--------------|--------------------|--------------|-----------|
| * | (4)I, 136B-1 | CHRISTIAN | 97 | 38 |
| * 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |

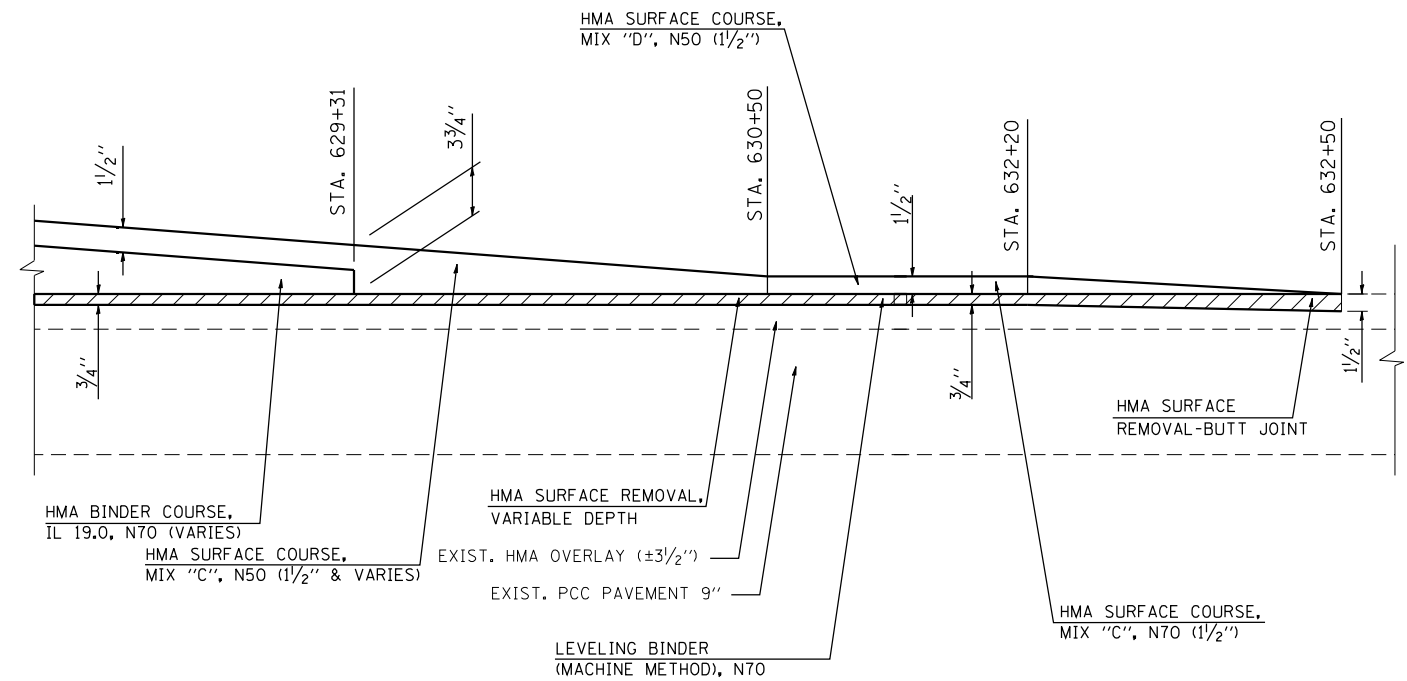
ILLINOIS FED. AID PROJECT

| | | | |
|---------------|-----------|----|------|
| PLAN | SURVEYED | BY | DATE |
| NOTE BOOK NO. | PLOTTED | | |
| | CHECKED | | |
| | FILE NAME | | |



BUTT JOINT DETAIL

STA. 621+50 TO STA. 624+58



BUTT JOINT DETAIL

STA. 629+31 TO STA. 632+50

design firm
no. 184001036



| | | |
|-----------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-BUTTJOINT | CHECKED - | REVISED |
| PLOT SCALE = 1/8" = 1' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

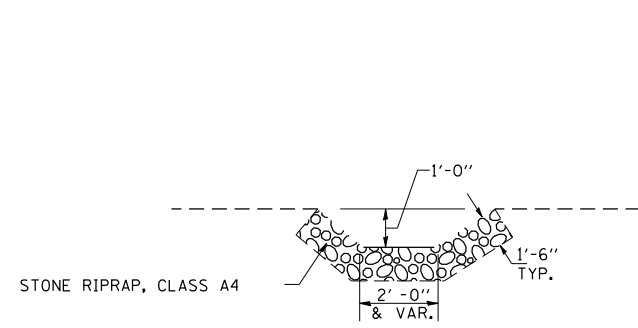
**BUTT JOINT DETAILS
IL 48 OVER BEAR CREEK**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. 621+50.00 TO STA. 632+50.00

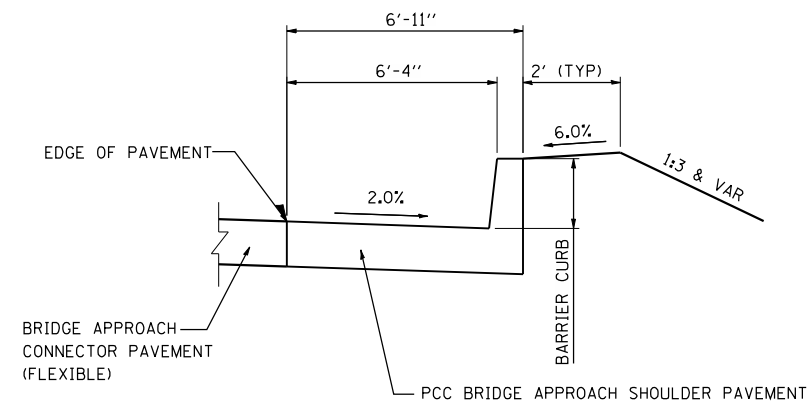
| | | | | |
|---------------------------|--------------|-----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4)1, 136B-1 | CHRISTIAN | 97 | 39 |
| • 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

NOTES :

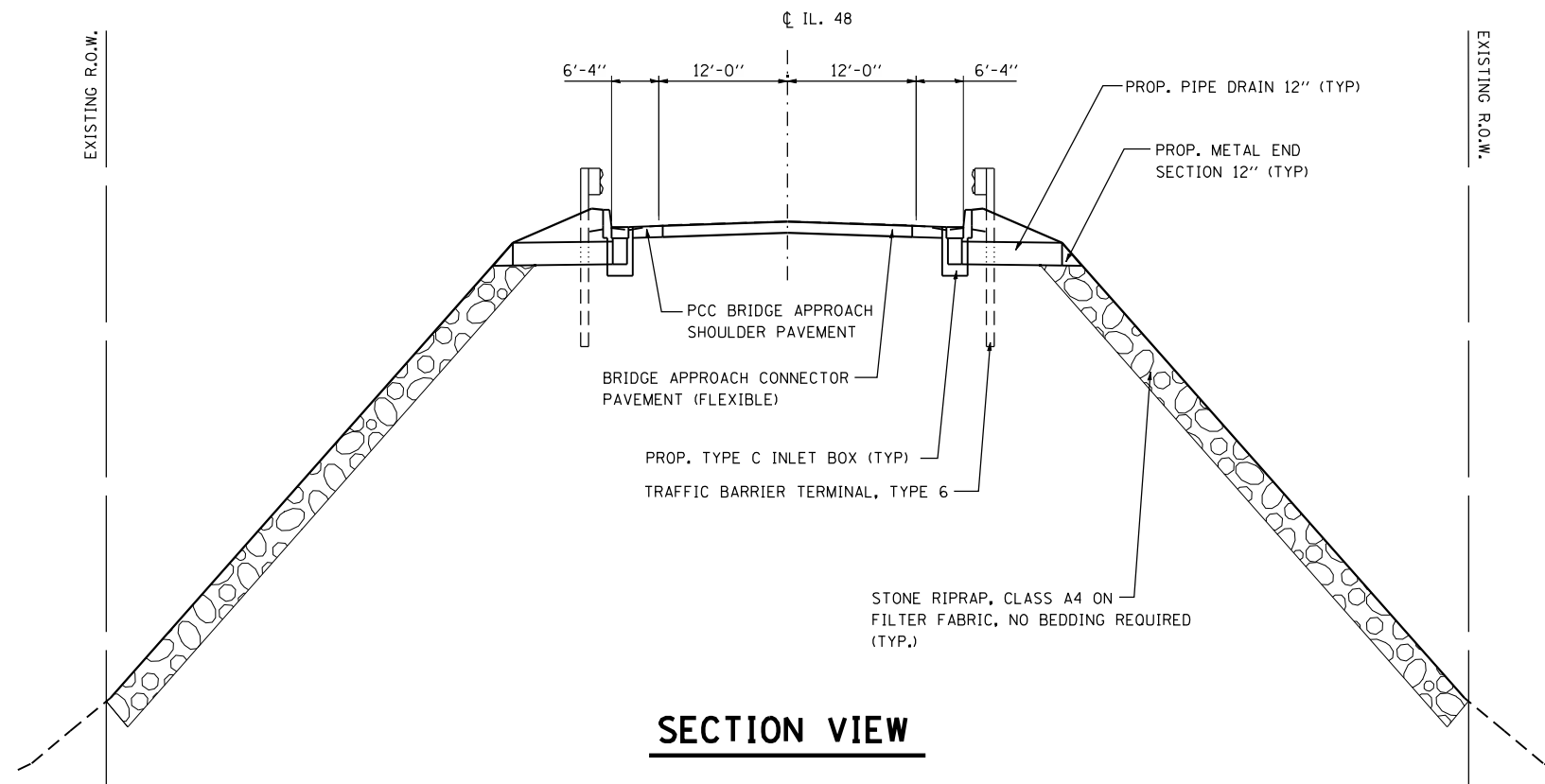
1. DIMENSIONS AND ELEVATIONS ARE APPROXIMATE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING MATERIAL.
2. ALL SAW CUTS NECESSARY TO COMPLETE THE WORK DETAIL, SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED.



SECTION A-A



SECTION B-B



SECTION VIEW

| | | |
|-----------|-----------|------|
| PLAN | SURVEYED | DATE |
| NOTE BOOK | PLOTTED | |
| NO. | CHECKED | |
| | BY | |
| | FILE NAME | |

| | | |
|------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-BOX DETAIL | CHECKED - | REVISED |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|-----------|--------------------|-----------|
| • 75(IL 29) & 714(IL 48) | (4), 136B-1 | CHRISTIAN | 97 | 40 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72A61 | |

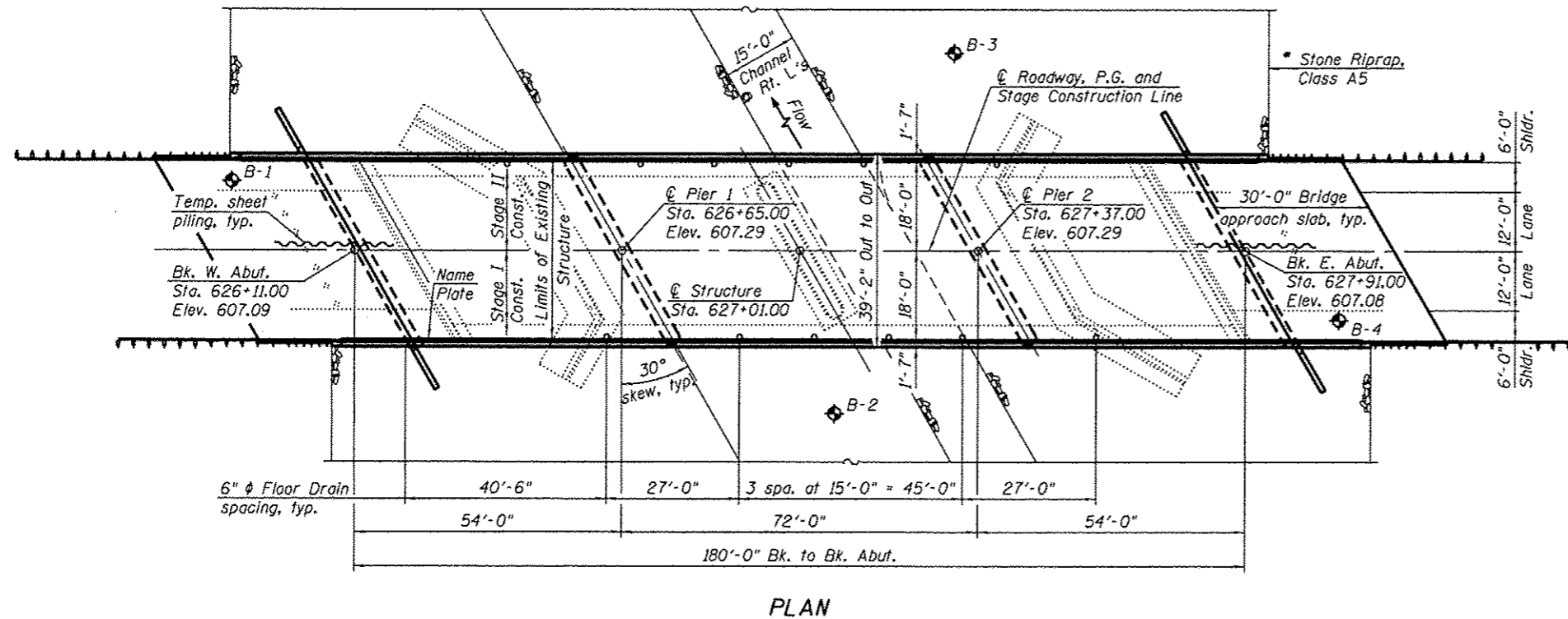
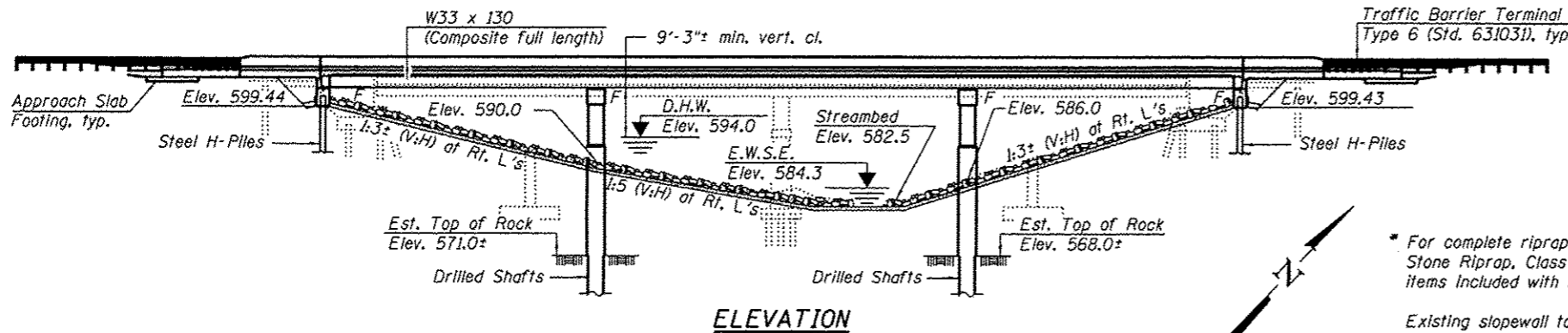
Bench Mark: Chiseled "□" SE corner of bridge. Sta. 626+30, 15.5' Rt., Elev. 607.04.

Existing Structure: S.N. 011-0018 originally built in 1930 as S.B.I. 48, Section 136B and rehabilitated in 1962 as S.B.I. 48, Section 136BR. The existing structure consists of a two span steel continuous multi-beam structure on open stub abutments on concrete piles and a solid wall pier on timber piles. 160'-0" bk. to bk. of abutments and 35'-8" out to out bridge width. The structure is to be removed and replaced. Traffic to be maintained utilizing stage construction.

No Salvage

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
- 5.-6. Top of Slab Elevations
7. West Approach Top of Slab Elevations
8. East Approach Top of Slab Elevations
9. Superstructure
10. Superstructure Details
11. Diaphragm Details
- 12.-13. Bridge Approach Slab Details
14. Framing Plan
15. Structural Steel Details
16. West Abutment
17. East Abutment
18. Pier 1
19. Pier 2
20. Bar Splicer Assembly and Mechanical Splicer Details
21. HP Pile Details
- 22.-25. Boring Logs
- 26.-31. Existing Bridge Plans



DESIGN SCOUR ELEVATION TABLE

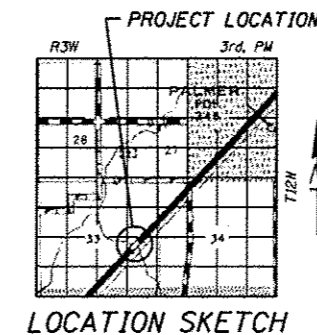
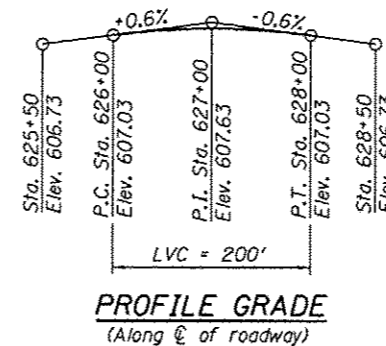
| W. Abut. | Pier 1 | Pier 2 | E. Abut. |
|----------|--------|--------|----------|
| 599.44 | 575.9 | 575.2 | 599.43 |

WATERWAY INFORMATION

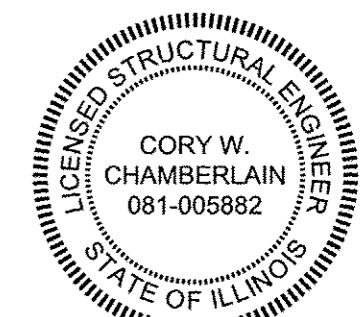
| Flood | Freq. Yr. | C.F.S. | Opening Sq. Ft. | | Nat. H.W.E. | Head - Ft. | | Headwater El. | |
|------------|-----------|--------|-----------------|-------|-------------|------------|-------|---------------|-------|
| | | | Exist. | Prop. | | Exist. | Prop. | Exist. | Prop. |
| 0 | | | 620 | 680 | 593.2 | 1.1 | 1.4 | 594.3 | 594.5 |
| 10 | 3,050 | | 620 | 680 | 593.2 | 1.1 | 1.4 | 594.3 | 594.5 |
| 50 | 4,770 | | 710 | 775 | 594.0 | 1.4 | 1.4 | 595.4 | 595.5 |
| 100 | 5,510 | | 740 | 810 | 594.3 | 1.5 | 1.5 | 595.8 | 595.8 |
| Base | 7,290 | | 810 | 875 | 594.9 | 1.6 | 1.6 | 596.6 | 596.6 |
| Max. Calc. | | | | | | | | | |

STATION 627+01.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 714 SEC. (4); 136B-1
LOADING HL-93
STRUCTURE NO. 011-0514

NAME PLATE
See Std. 515001



APPROVED
For Structural Adequacy Only
Cory W. Chamberlain
Engineer of Bridges & Structures



Cory W. Chamberlain 9-26-13
Expires: 11/30/2014

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.126 g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.268 g
Soil Site Class = C



Michael T. Haley 9-26-13
Expires: 11/30/2014
Applies to sheets 18 and 19.

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 48 OVER BEAR CREEK
F.A.P. RTE. 714 - SEC. (4); 136B-1
CHRISTIAN COUNTY
STATION 627+01.00
STRUCTURE NO. 011-0514

GENERAL NOTES

Fasteners shall be ASTM A325 Type 3, Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.
 Calculated weight of Structural Steel = 161,150 lbs.
 All structural steel shall be AASHTO M 270 Grade 50W.
 No field welding is permitted except as specified in the contract documents.
 Reinforcement bars designated (E) shall be epoxy coated.
 Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 Structural steel shall only be painted to a distance equal to the depth of embedment into the concrete diaphragm plus 1'-6". Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 Slipforming of the parapets is not allowed.

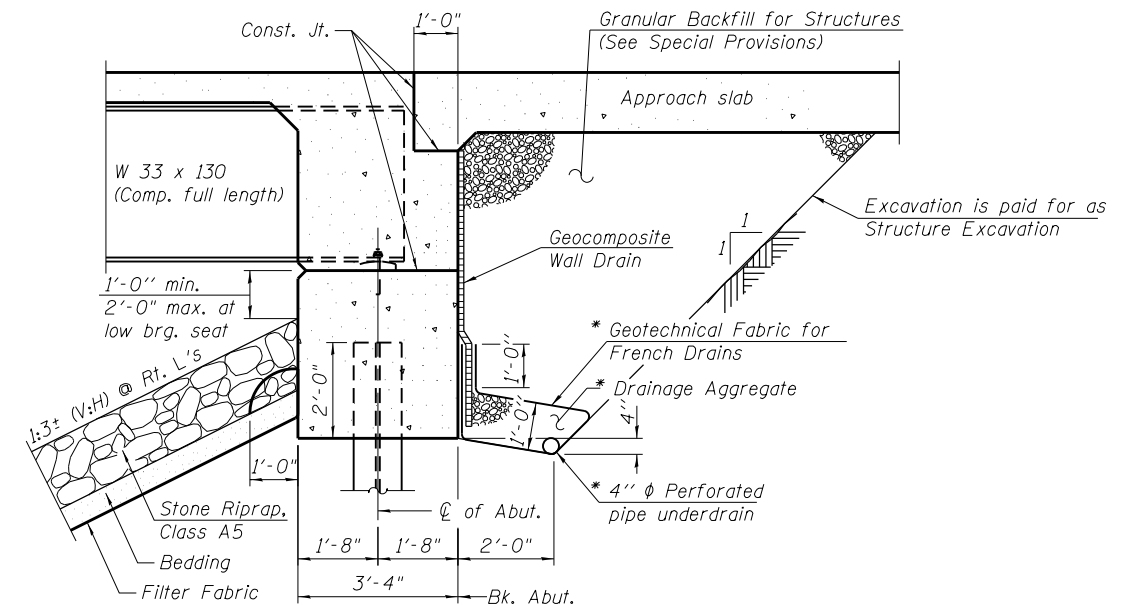
Temporary Sheet Piling Notes:

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.
 The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
 The existing abutment corbel may be removed at the stage construction line to accommodate the Stage I Temporary Sheet Piling. Cost included with Removal of Existing Structures.

** The existing approach bent cap and timber piling may interfere with installation of the temporary sheet piling. The Contractor shall make necessary approved adjustments in the field to accommodate the temporary sheet piling as shown on the plans. Cost included with Temporary Sheet Piling.

TOTAL BILL OF MATERIAL

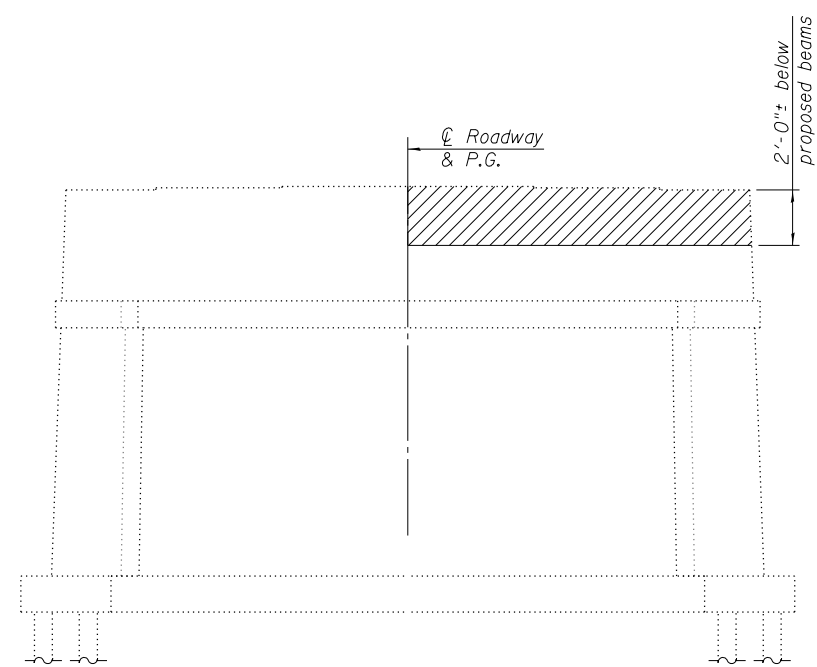
| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|---------|--------|--------|---------|
| Removal of Existing Structures | Each | | 1 | 1 |
| Structure Excavation | Cu. Yd. | | 313 | 313 |
| Floor Drains | Each | 12 | | 12 |
| Concrete Structures | Cu. Yd. | | 172.6 | 172.6 |
| Concrete Superstructure | Cu. Yd. | 368.9 | | 368.9 |
| Bridge Deck Grooving | Sq. Yd. | 902 | | 902 |
| Protective Coat | Sq. Yd. | 1,132 | | 1,132 |
| Furnishing and Erecting Structural Steel | L. Sum | 1 | | 1 |
| Stud Shear Connectors | Each | 5,202 | | 5,202 |
| Reinforcement Bars | Pound | | 24,980 | 24,980 |
| Reinforcement Bars, Epoxy Coated | Pound | 92,750 | 25,330 | 118,080 |
| Bar Splicers | Each | 809 | 286 | 1,095 |
| Mechanical Splicers | Each | | 112 | 112 |
| Furnishing Steel Piles HP 12 x 53 | Foot | | 380 | 380 |
| Driving Piles | Foot | | 380 | 380 |
| Test Pile Steel HP 12 x 53 | Each | | 2 | 2 |
| Name Plates | Each | 1 | | 1 |
| Drilled Shaft in Soil | Cu. Yd. | | 64.3 | 64.3 |
| Drilled Shaft in Rock | Cu. Yd. | | 13.7 | 13.7 |
| Anchor Bolts, 1" | Each | 48 | | 48 |
| Geocomposite Wall Drain | Sq. Yd. | | 84 | 84 |
| Granular Backfill for Structures | Cu. Yd. | | 144 | 144 |
| Temporary Sheet Piling | Sq. Ft. | | 782 | 782 |
| Pipe Underdrains for Structures, 4" | Foot | | 158 | 158 |



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

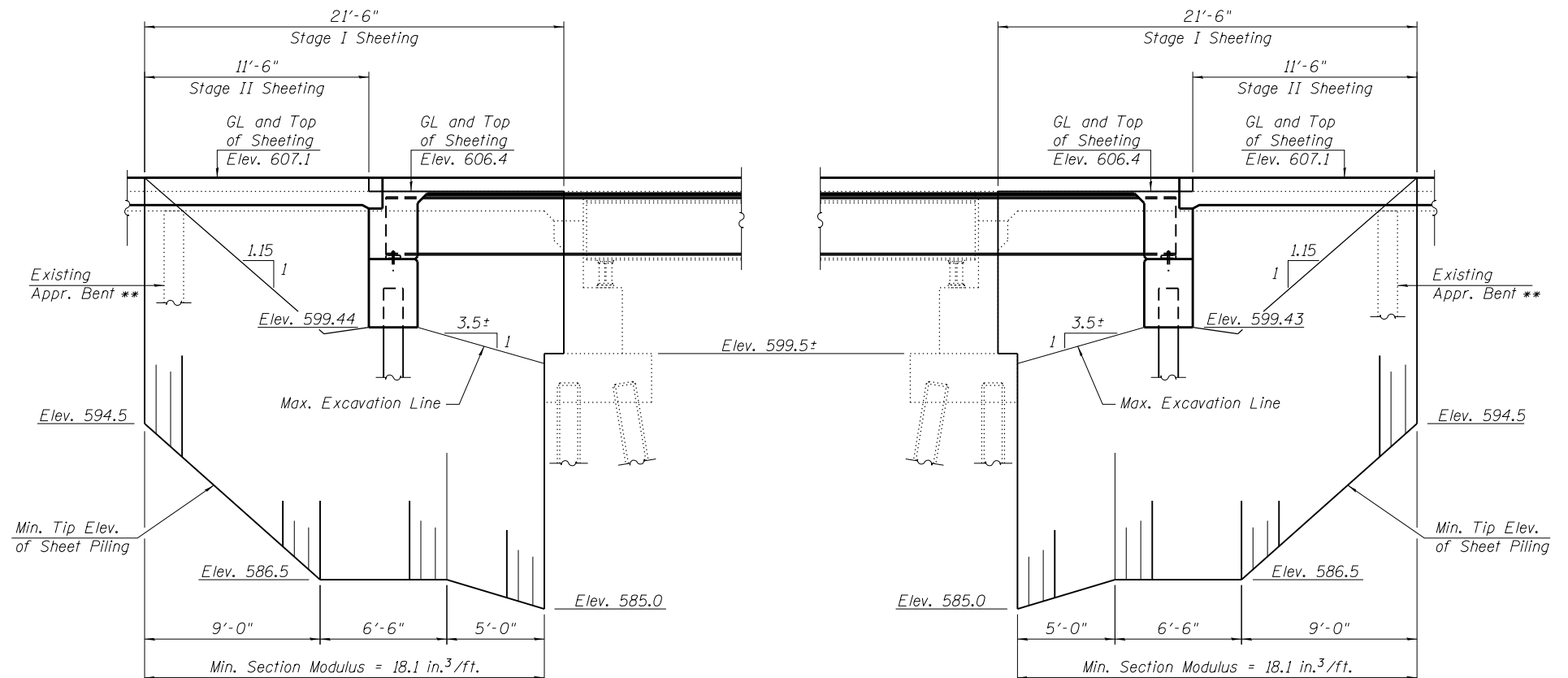
* Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

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

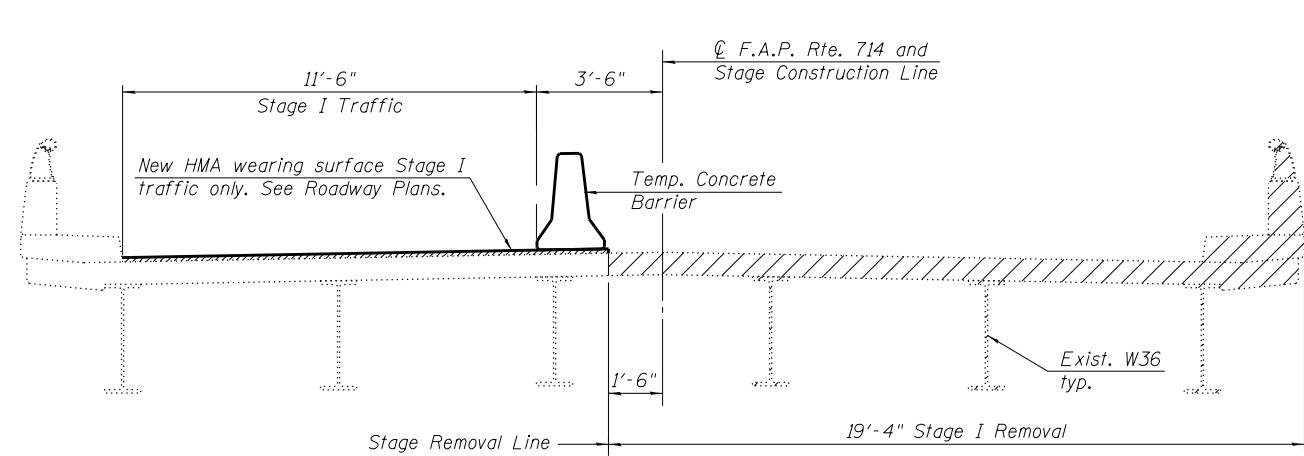


PIER STAGE I REMOVAL
(Looking East)

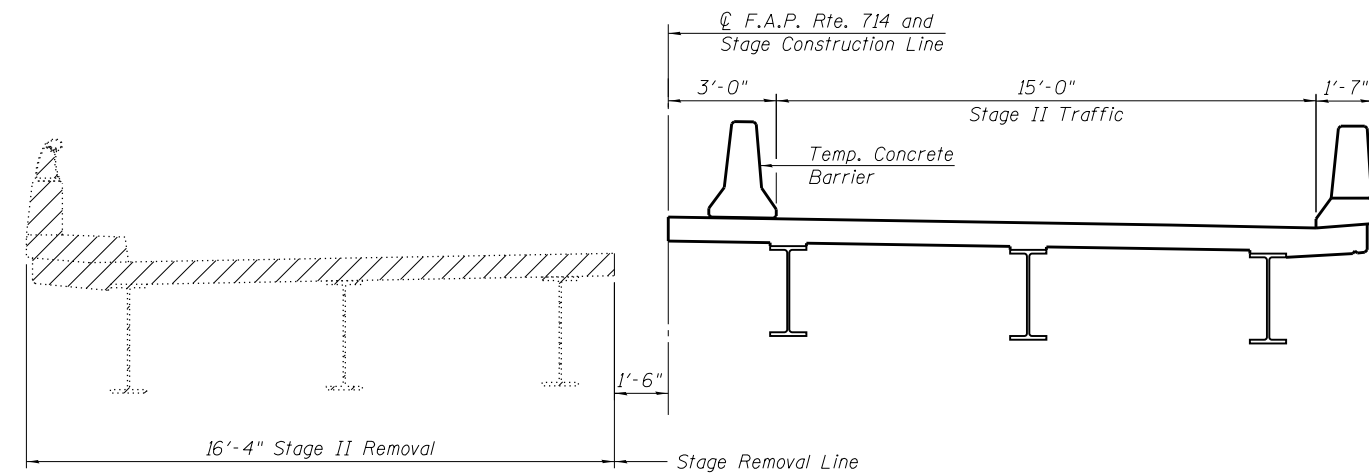
Hatched area indicates concrete removal. Cost included in Removal of Existing Structures. Remaining pier to be removed with Stage II Removal.



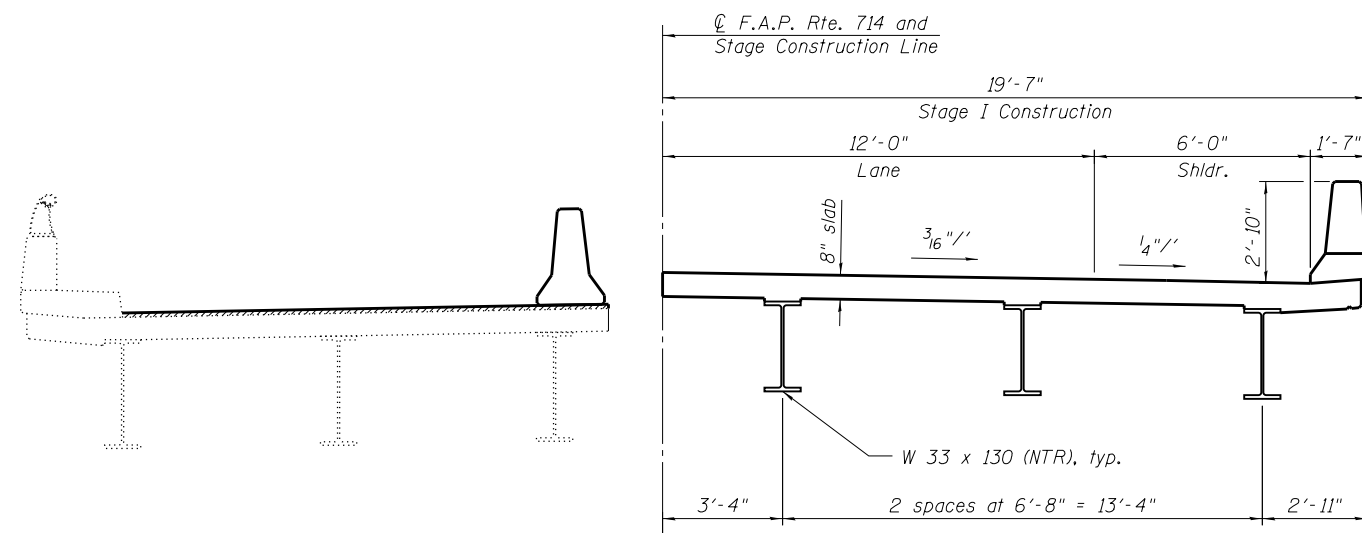
TEMPORARY SHEET PILING
(Looking North)



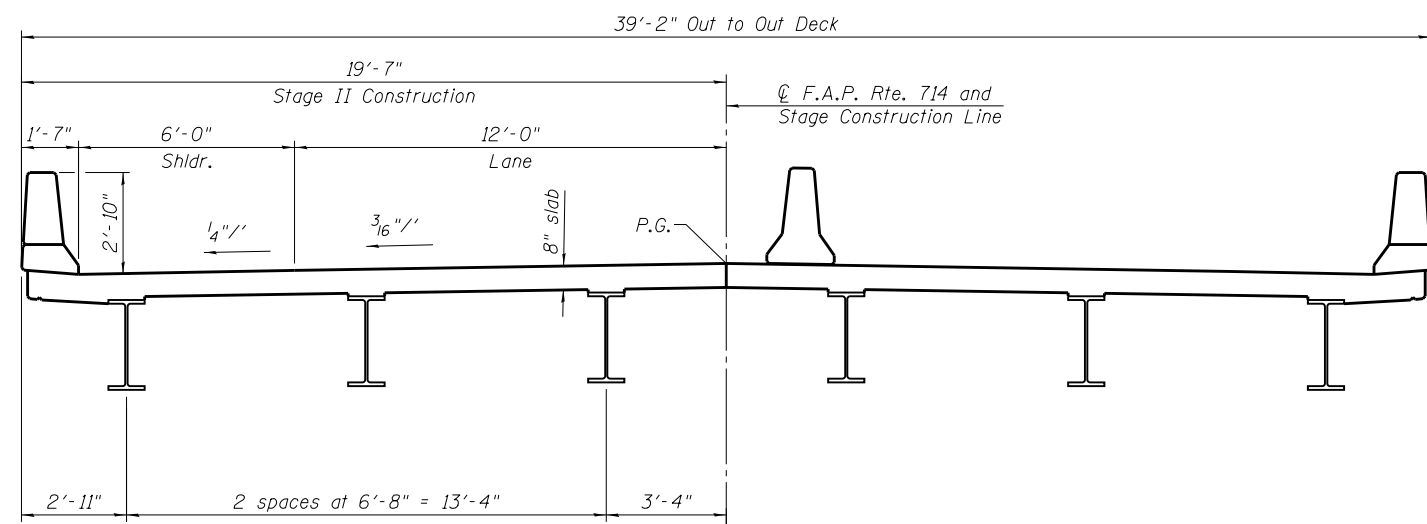
STAGE I REMOVAL
(Looking East)



STAGE II REMOVAL
(Looking East)



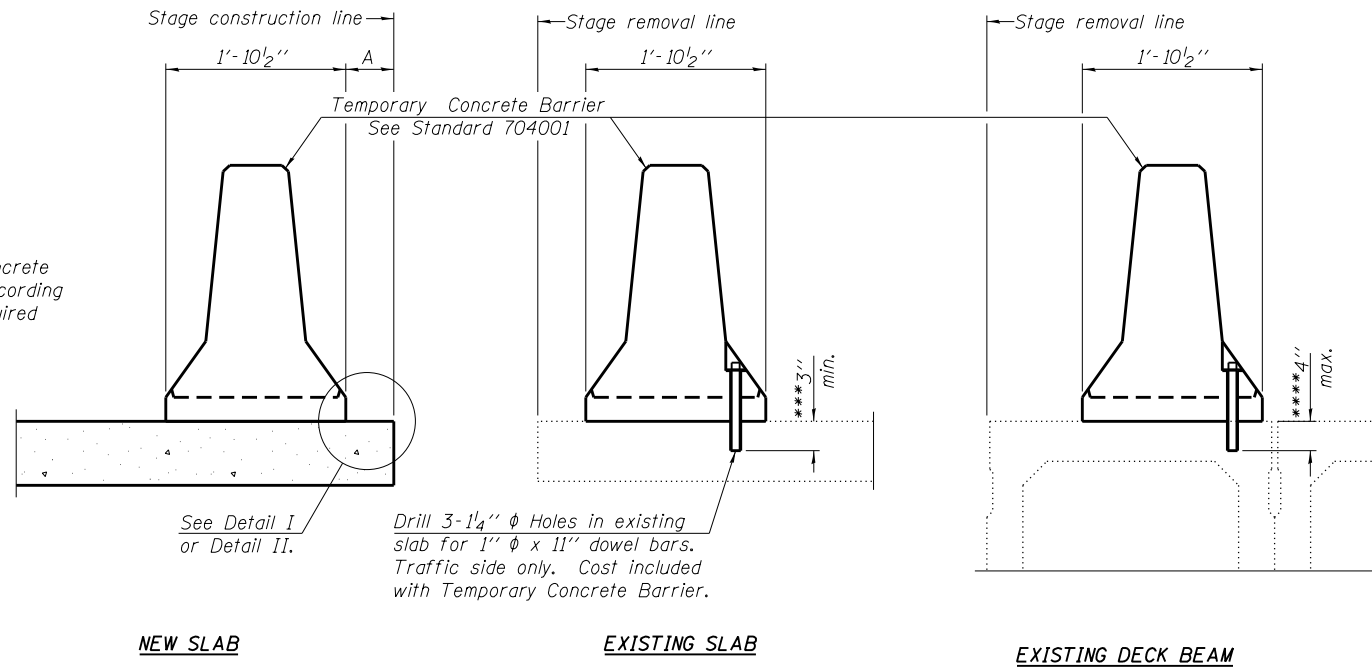
STAGE I CONSTRUCTION
(Looking East)



STAGE II CONSTRUCTION
(Looking East)

Notes:
Hatched area indicates Removal of Existing Structures.
For details of Temporary Concrete Barrier, see Sheet 4 of 31.

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".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

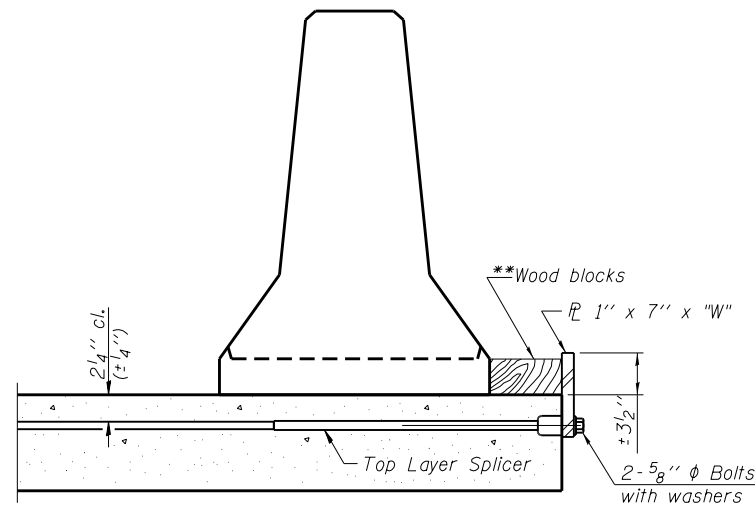
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the top layer of couplers with 2- $\frac{5}{8}$ " ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the concrete slab or concrete wearing surface with 2- $\frac{5}{8}$ " ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

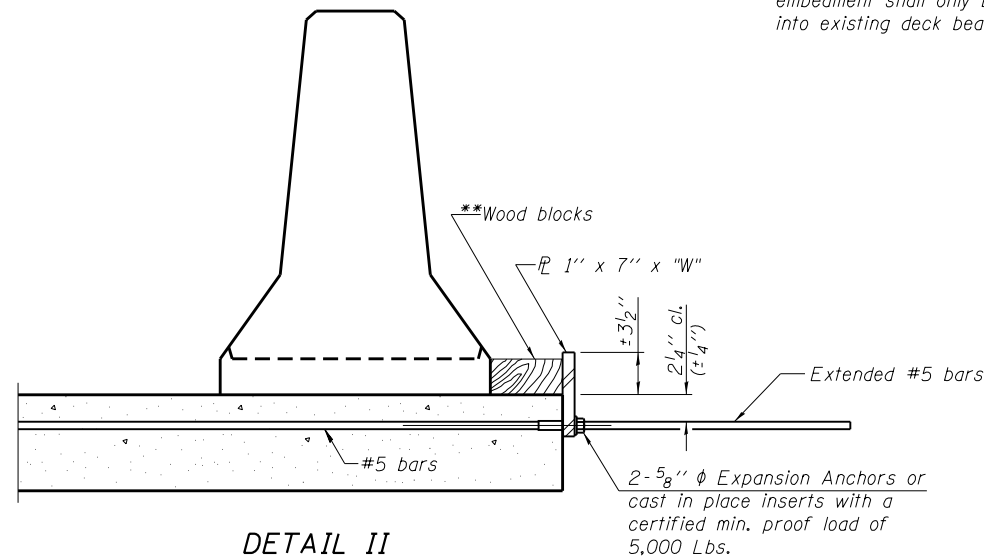
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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.

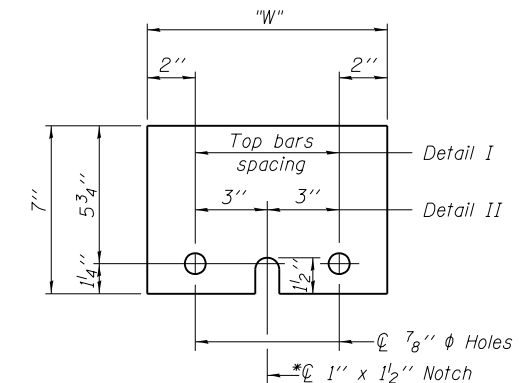
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{L} 1" x 7" x "W"

* 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.

"W" = Top bars spacing + 4"

Note:

For pay item Temporary Concrete Barrier, see Roadway Plans.

R-27

7-1-10



| | | |
|---------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' / 1/4" | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

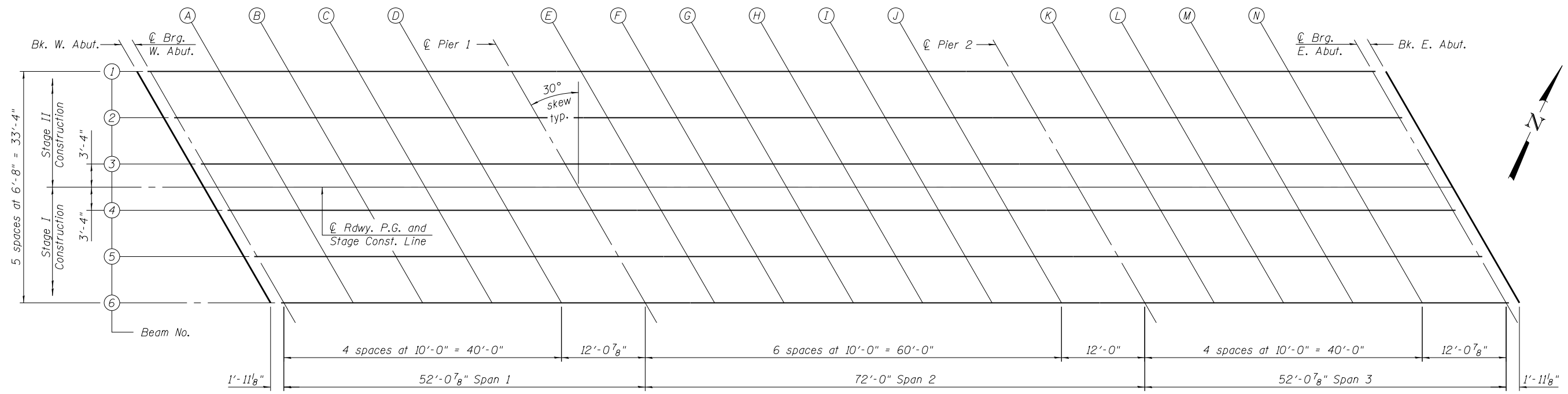
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 011-0514**

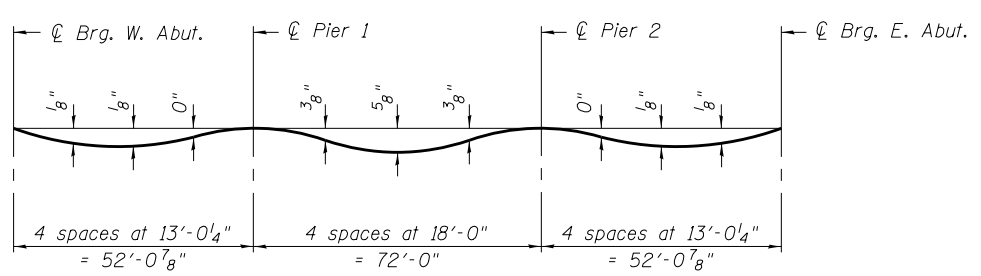
SHEET NO. 4 OF 31 SHEETS

| | | | | |
|-------------|--------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4)I; 136B-1 | CHRISTIAN | 97 | 44 |
| • | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |

ILLINOIS FED. AID PROJECT

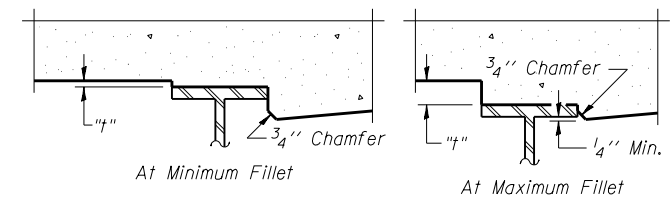


PLAN



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 and 6 of 31.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 5 and 6 of 31, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+01.38 | -16.67 | 606.75 | 606.75 |
| ⊕ Brg. W. Abut. | 626+03.30 | -16.67 | 606.77 | 606.77 |
| A | 626+13.30 | -16.67 | 606.82 | 606.83 |
| B | 626+23.30 | -16.67 | 606.87 | 606.89 |
| C | 626+33.30 | -16.67 | 606.91 | 606.93 |
| D | 626+43.30 | -16.67 | 606.95 | 606.95 |
| ⊕ Pier 1 | 626+55.38 | -16.67 | 606.99 | 606.99 |
| E | 626+65.38 | -16.67 | 607.01 | 607.02 |
| F | 626+75.38 | -16.67 | 607.03 | 607.06 |
| G | 626+85.38 | -16.67 | 607.04 | 607.09 |
| H | 626+95.38 | -16.67 | 607.05 | 607.09 |
| I | 627+05.38 | -16.67 | 607.04 | 607.08 |
| J | 627+15.38 | -16.67 | 607.04 | 607.06 |
| ⊕ Pier 2 | 627+27.38 | -16.67 | 607.02 | 607.02 |
| K | 627+37.38 | -16.67 | 607.00 | 607.01 |
| L | 627+47.38 | -16.67 | 606.98 | 606.99 |
| M | 627+57.38 | -16.67 | 606.95 | 606.96 |
| N | 627+67.38 | -16.67 | 606.91 | 606.92 |
| ⊕ Brg. E. Abut. | 627+79.46 | -16.67 | 606.86 | 606.86 |
| Bk. E. Abut. | 627+81.38 | -16.67 | 606.85 | 606.85 |

BEAM 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+05.23 | -10.00 | 606.90 | 606.90 |
| ☉ Brg. W. Abut. | 626+07.15 | -10.00 | 606.92 | 606.92 |
| A | 626+17.15 | -10.00 | 606.97 | 606.98 |
| B | 626+27.15 | -10.00 | 607.01 | 607.03 |
| C | 626+37.15 | -10.00 | 607.06 | 607.07 |
| D | 626+47.15 | -10.00 | 607.09 | 607.09 |
| ☉ Pier 1 | 626+59.23 | -10.00 | 607.12 | 607.12 |
| E | 626+69.23 | -10.00 | 607.15 | 607.16 |
| F | 626+79.23 | -10.00 | 607.16 | 607.19 |
| G | 626+89.23 | -10.00 | 607.17 | 607.22 |
| H | 626+99.23 | -10.00 | 607.17 | 607.22 |
| I | 627+09.23 | -10.00 | 607.17 | 607.21 |
| J | 627+19.23 | -10.00 | 607.16 | 607.18 |
| ☉ Pier 2 | 627+31.23 | -10.00 | 607.14 | 607.14 |
| K | 627+41.23 | -10.00 | 607.12 | 607.13 |
| L | 627+51.23 | -10.00 | 607.10 | 607.11 |
| M | 627+61.23 | -10.00 | 607.06 | 607.08 |
| N | 627+71.23 | -10.00 | 607.02 | 607.04 |
| ☉ Brg. E. Abut. | 627+83.31 | -10.00 | 606.97 | 606.97 |
| Bk. E. Abut. | 627+85.23 | -10.00 | 606.96 | 606.96 |

BEAM 3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+09.08 | -3.33 | 607.03 | 607.03 |
| ☉ Brg. W. Abut. | 626+11.00 | -3.33 | 607.04 | 607.04 |
| A | 626+21.00 | -3.33 | 607.09 | 607.10 |
| B | 626+31.00 | -3.33 | 607.14 | 607.15 |
| C | 626+41.00 | -3.33 | 607.17 | 607.19 |
| D | 626+51.00 | -3.33 | 607.21 | 607.21 |
| ☉ Pier 1 | 626+63.08 | -3.33 | 607.24 | 607.24 |
| E | 626+73.08 | -3.33 | 607.26 | 607.27 |
| F | 626+83.08 | -3.33 | 607.27 | 607.30 |
| G | 626+93.08 | -3.33 | 607.28 | 607.32 |
| H | 627+03.08 | -3.33 | 607.28 | 607.33 |
| I | 627+13.08 | -3.33 | 607.27 | 607.31 |
| J | 627+23.08 | -3.33 | 607.26 | 607.28 |
| ☉ Pier 2 | 627+35.08 | -3.33 | 607.24 | 607.24 |
| K | 627+45.08 | -3.33 | 607.22 | 607.22 |
| L | 627+55.08 | -3.33 | 607.19 | 607.20 |
| M | 627+65.08 | -3.33 | 607.15 | 607.17 |
| N | 627+75.08 | -3.33 | 607.11 | 607.12 |
| ☉ Brg. E. Abut. | 627+87.16 | -3.33 | 607.05 | 607.05 |
| Bk. E. Abut. | 627+89.08 | -3.33 | 607.04 | 607.04 |

☉ ROADWAY, P.G. AND STAGE CONSTRUCTION LINE

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+11.00 | 0.00 | 607.09 | 607.09 |
| ☉ Brg. W. Abut. | 626+12.92 | 0.00 | 607.10 | 607.10 |
| A | 626+22.92 | 0.00 | 607.15 | 607.16 |
| B | 626+32.92 | 0.00 | 607.20 | 607.21 |
| C | 626+42.92 | 0.00 | 607.23 | 607.25 |
| D | 626+52.92 | 0.00 | 607.26 | 607.27 |
| ☉ Pier 1 | 626+65.00 | 0.00 | 607.29 | 607.29 |
| E | 626+75.00 | 0.00 | 607.31 | 607.33 |
| F | 626+85.00 | 0.00 | 607.32 | 607.36 |
| G | 626+95.00 | 0.00 | 607.33 | 607.38 |
| H | 627+05.00 | 0.00 | 607.33 | 607.38 |
| I | 627+15.00 | 0.00 | 607.32 | 607.36 |
| J | 627+25.00 | 0.00 | 607.31 | 607.33 |
| ☉ Pier 2 | 627+37.00 | 0.00 | 607.29 | 607.29 |
| K | 627+47.00 | 0.00 | 607.26 | 607.27 |
| L | 627+57.00 | 0.00 | 607.23 | 607.24 |
| M | 627+67.00 | 0.00 | 607.20 | 607.21 |
| N | 627+77.00 | 0.00 | 607.15 | 607.17 |
| ☉ Brg. E. Abut. | 627+89.08 | 0.00 | 607.09 | 607.09 |
| Bk. E. Abut. | 627+91.00 | 0.00 | 607.08 | 607.08 |

BEAM 4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+12.92 | 3.33 | 607.05 | 607.05 |
| ☉ Brg. W. Abut. | 626+14.84 | 3.33 | 607.06 | 607.06 |
| A | 626+24.84 | 3.33 | 607.11 | 607.12 |
| B | 626+34.84 | 3.33 | 607.15 | 607.17 |
| C | 626+44.84 | 3.33 | 607.19 | 607.20 |
| D | 626+54.84 | 3.33 | 607.22 | 607.22 |
| ☉ Pier 1 | 626+66.92 | 3.33 | 607.25 | 607.25 |
| E | 626+76.92 | 3.33 | 607.26 | 607.28 |
| F | 626+86.92 | 3.33 | 607.27 | 607.31 |
| G | 626+96.92 | 3.33 | 607.28 | 607.32 |
| H | 627+06.92 | 3.33 | 607.28 | 607.32 |
| I | 627+16.92 | 3.33 | 607.27 | 607.31 |
| J | 627+26.92 | 3.33 | 607.26 | 607.27 |
| ☉ Pier 2 | 627+38.92 | 3.33 | 607.23 | 607.23 |
| K | 627+48.92 | 3.33 | 607.21 | 607.21 |
| L | 627+58.92 | 3.33 | 607.17 | 607.19 |
| M | 627+68.92 | 3.33 | 607.14 | 607.15 |
| N | 627+78.92 | 3.33 | 607.09 | 607.10 |
| ☉ Brg. E. Abut. | 627+91.00 | 3.33 | 607.03 | 607.03 |
| Bk. E. Abut. | 627+92.92 | 3.33 | 607.02 | 607.02 |

BEAM 5

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+16.77 | 10.00 | 606.97 | 606.97 |
| ☉ Brg. W. Abut. | 626+18.69 | 10.00 | 606.98 | 606.98 |
| A | 626+28.69 | 10.00 | 607.02 | 607.03 |
| B | 626+38.69 | 10.00 | 607.06 | 607.08 |
| C | 626+48.69 | 10.00 | 607.10 | 607.11 |
| D | 626+58.69 | 10.00 | 607.12 | 607.13 |
| ☉ Pier 1 | 626+70.77 | 10.00 | 607.15 | 607.15 |
| E | 626+80.77 | 10.00 | 607.16 | 607.18 |
| F | 626+90.77 | 10.00 | 607.17 | 607.21 |
| G | 627+00.77 | 10.00 | 607.17 | 607.22 |
| H | 627+10.77 | 10.00 | 607.17 | 607.22 |
| I | 627+20.77 | 10.00 | 607.16 | 607.20 |
| J | 627+30.77 | 10.00 | 607.15 | 607.16 |
| ☉ Pier 2 | 627+42.77 | 10.00 | 607.12 | 607.12 |
| K | 627+52.77 | 10.00 | 607.09 | 607.09 |
| L | 627+62.77 | 10.00 | 607.06 | 607.07 |
| M | 627+72.77 | 10.00 | 607.02 | 607.03 |
| N | 627+82.77 | 10.00 | 606.97 | 606.98 |
| ☉ Brg. E. Abut. | 627+94.85 | 10.00 | 606.90 | 606.90 |
| Bk. E. Abut. | 627+96.77 | 10.00 | 606.89 | 606.89 |

BEAM 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 626+20.62 | 16.67 | 606.86 | 606.86 |
| ☉ Brg. W. Abut. | 626+22.54 | 16.67 | 606.87 | 606.87 |
| A | 626+32.54 | 16.67 | 606.91 | 606.92 |
| B | 626+42.54 | 16.67 | 606.95 | 606.96 |
| C | 626+52.54 | 16.67 | 606.98 | 606.99 |
| D | 626+62.54 | 16.67 | 607.00 | 607.01 |
| ☉ Pier 1 | 626+74.62 | 16.67 | 607.03 | 607.03 |
| E | 626+84.62 | 16.67 | 607.04 | 607.05 |
| F | 626+94.62 | 16.67 | 607.04 | 607.08 |
| G | 627+04.62 | 16.67 | 607.05 | 607.09 |
| H | 627+14.62 | 16.67 | 607.04 | 607.09 |
| I | 627+24.62 | 16.67 | 607.03 | 607.06 |
| J | 627+34.62 | 16.67 | 607.01 | 607.03 |
| ☉ Pier 2 | 627+46.62 | 16.67 | 606.98 | 606.98 |
| K | 627+56.62 | 16.67 | 606.95 | 606.95 |
| L | 627+66.62 | 16.67 | 606.91 | 606.92 |
| M | 627+76.62 | 16.67 | 606.87 | 606.89 |
| N | 627+86.62 | 16.67 | 606.82 | 606.83 |
| ☉ Brg. E. Abut. | 627+98.70 | 16.67 | 606.75 | 606.75 |
| Bk. E. Abut. | 628+00.62 | 16.67 | 606.74 | 606.74 |

NORTH EDGE OF SHOULDER

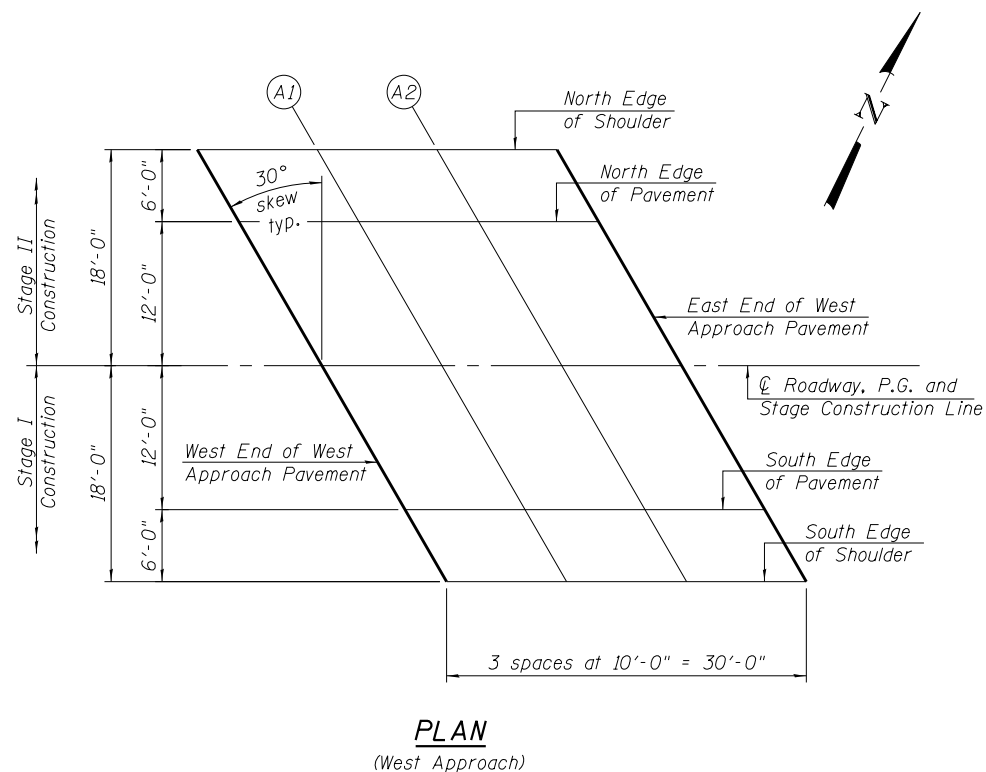
| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End W. Appr. Pav't. | 625+71.76 | -18.00 | 606.55 |
| A1 | 625+81.76 | -18.00 | 606.61 |
| A2 | 625+91.76 | -18.00 | 606.67 |
| E. End W. Appr. Pav't. | 626+01.76 | -18.00 | 606.73 |

NORTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End W. Appr. Pav't. | 625+75.22 | -12.00 | 606.69 |
| A1 | 625+85.22 | -12.00 | 606.75 |
| A2 | 625+95.22 | -12.00 | 606.81 |
| E. End W. Appr. Pav't. | 626+05.22 | -12.00 | 606.87 |

☉ ROADWAY, PROFILE GRADE AND STAGE CONSTRUCTION LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End W. Appr. Pav't. | 625+82.15 | 0.00 | 606.92 |
| A1 | 625+92.15 | 0.00 | 606.98 |
| A2 | 626+02.15 | 0.00 | 607.04 |
| E. End W. Appr. Pav't. | 626+12.15 | 0.00 | 607.10 |



SOUTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End W. Appr. Pav't. | 625+89.08 | 12.00 | 606.78 |
| A1 | 625+99.08 | 12.00 | 606.84 |
| A2 | 626+09.08 | 12.00 | 606.89 |
| E. End W. Appr. Pav't. | 626+19.08 | 12.00 | 606.95 |

SOUTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End W. Appr. Pav't. | 625+92.54 | 18.00 | 606.67 |
| A1 | 626+02.54 | 18.00 | 606.73 |
| A2 | 626+12.54 | 18.00 | 606.79 |
| E. End W. Appr. Pav't. | 626+22.54 | 18.00 | 606.84 |

NORTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End E. Appr. Pav't. | 627+79.46 | -18.00 | 606.83 |
| A3 | 627+89.46 | -18.00 | 606.78 |
| A4 | 627+99.46 | -18.00 | 606.72 |
| E. End E. Appr. Pav't. | 628+09.46 | -18.00 | 606.66 |

NORTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End E. Appr. Pav't. | 627+82.92 | -12.00 | 606.94 |
| A3 | 627+92.92 | -12.00 | 606.88 |
| A4 | 628+02.92 | -12.00 | 606.83 |
| E. End E. Appr. Pav't. | 628+12.92 | -12.00 | 606.77 |

☉ ROADWAY, PROFILE GRADE AND STAGE CONSTRUCTION LINE

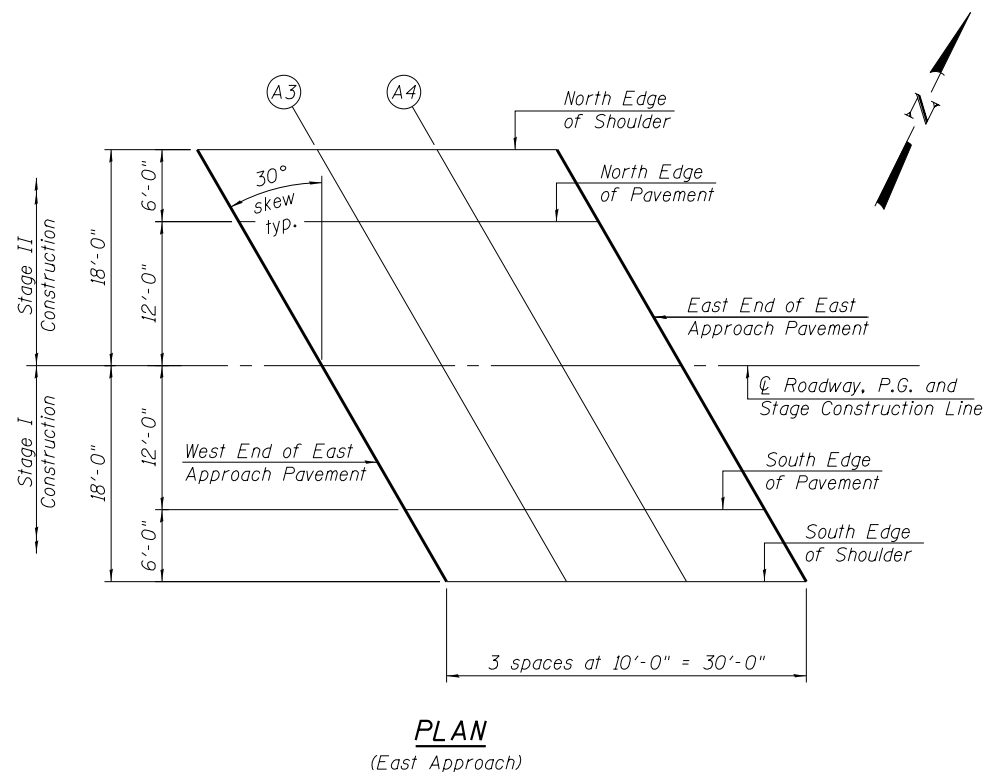
| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End E. Appr. Pav't. | 627+89.85 | 0.00 | 607.09 |
| A3 | 627+99.85 | 0.00 | 607.03 |
| A4 | 628+09.85 | 0.00 | 606.97 |
| E. End E. Appr. Pav't. | 628+19.85 | 0.00 | 606.91 |

SOUTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End E. Appr. Pav't. | 627+96.78 | 12.00 | 606.86 |
| A3 | 628+06.78 | 12.00 | 606.80 |
| A4 | 628+16.78 | 12.00 | 606.74 |
| E. End E. Appr. Pav't. | 628+26.78 | 12.00 | 606.68 |

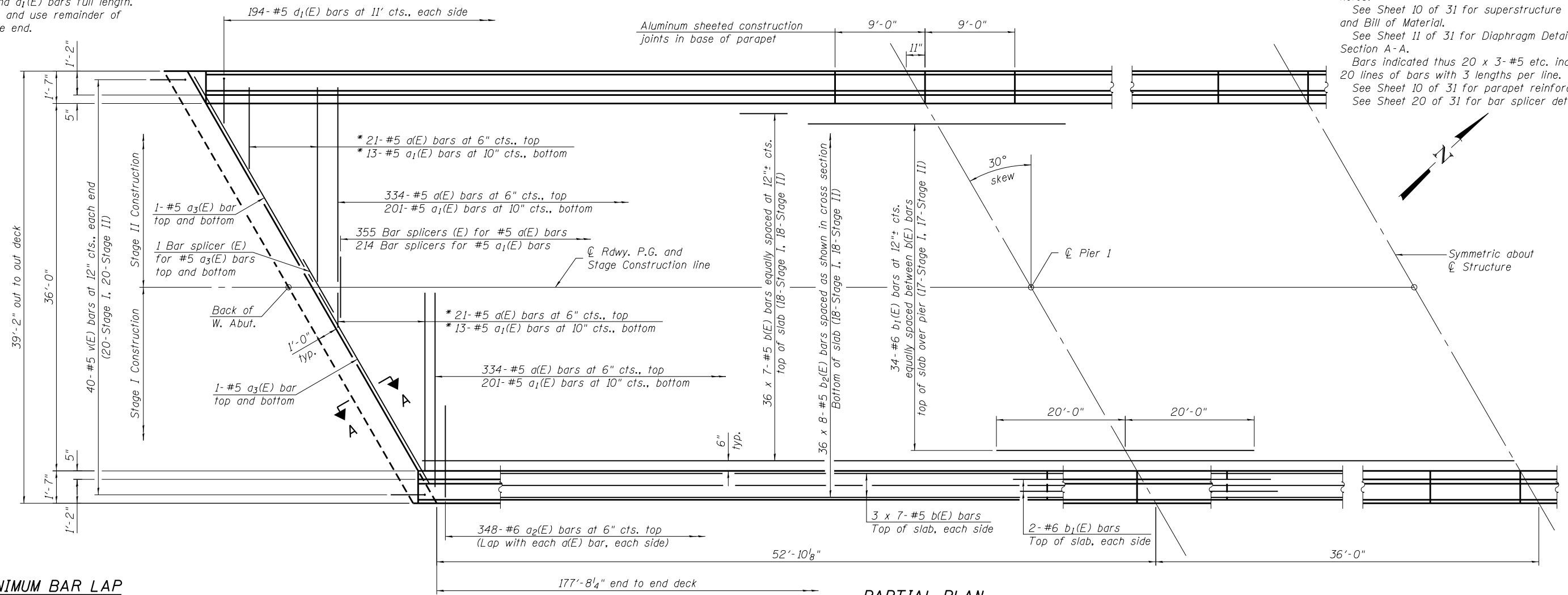
SOUTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|------------------------|-----------|--------|------------------------------|
| W. End E. Appr. Pav't. | 628+00.24 | 18.00 | 606.72 |
| A3 | 628+10.24 | 18.00 | 606.66 |
| A4 | 628+20.24 | 18.00 | 606.60 |
| E. End E. Appr. Pav't. | 628+30.24 | 18.00 | 606.54 |



PLAN
(East Approach)

* Order a(E) and a₁(E) bars full length.
Cut to fit skew and use remainder of
bars in opposite end.

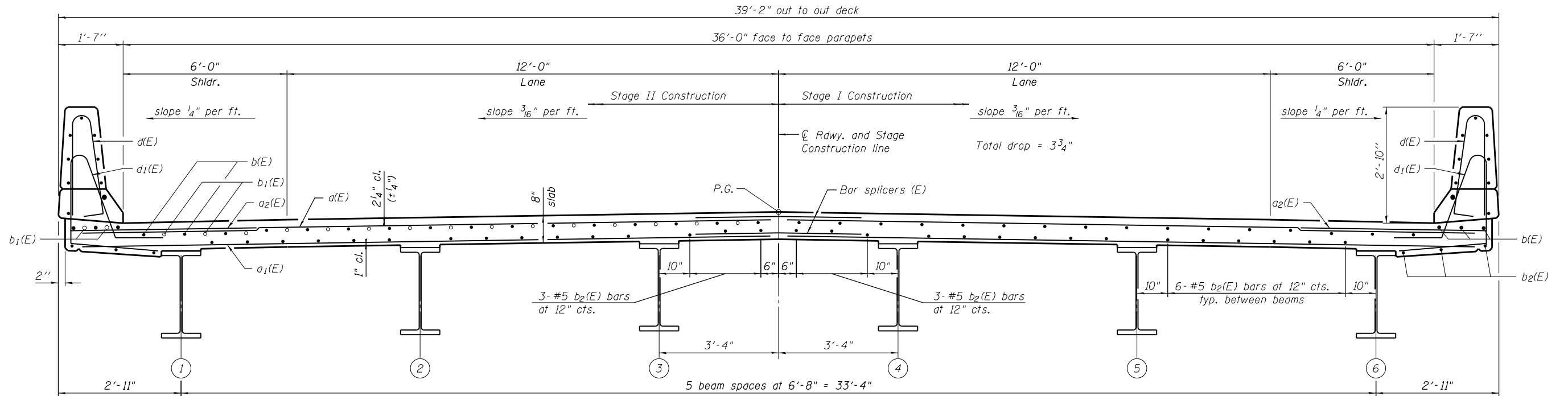


Notes:
See Sheet 10 of 31 for superstructure details
and Bill of Material.
See Sheet 11 of 31 for Diaphragm Details and
Section A-A.
Bars indicated thus 20 x 3-#5 etc. indicates
20 lines of bars with 3 lengths per line.
See Sheet 10 of 31 for parapet reinforcement.
See Sheet 20 of 31 for bar splicer details.

MINIMUM BAR LAP

#5 bar = 2'-7"

PARTIAL PLAN



NEAR PIER

CROSS SECTION
(Looking East)

NEAR MIDSPAN

Design firm
no. 184001036



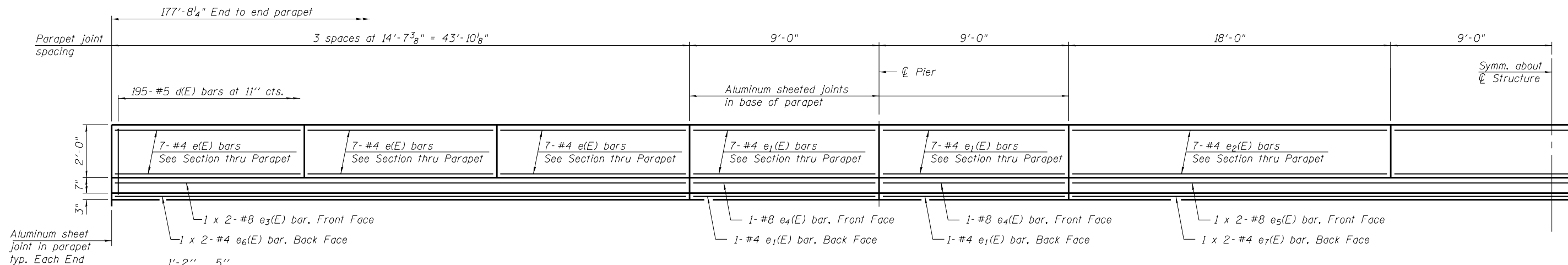
| | | |
|--------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1" = 10' | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

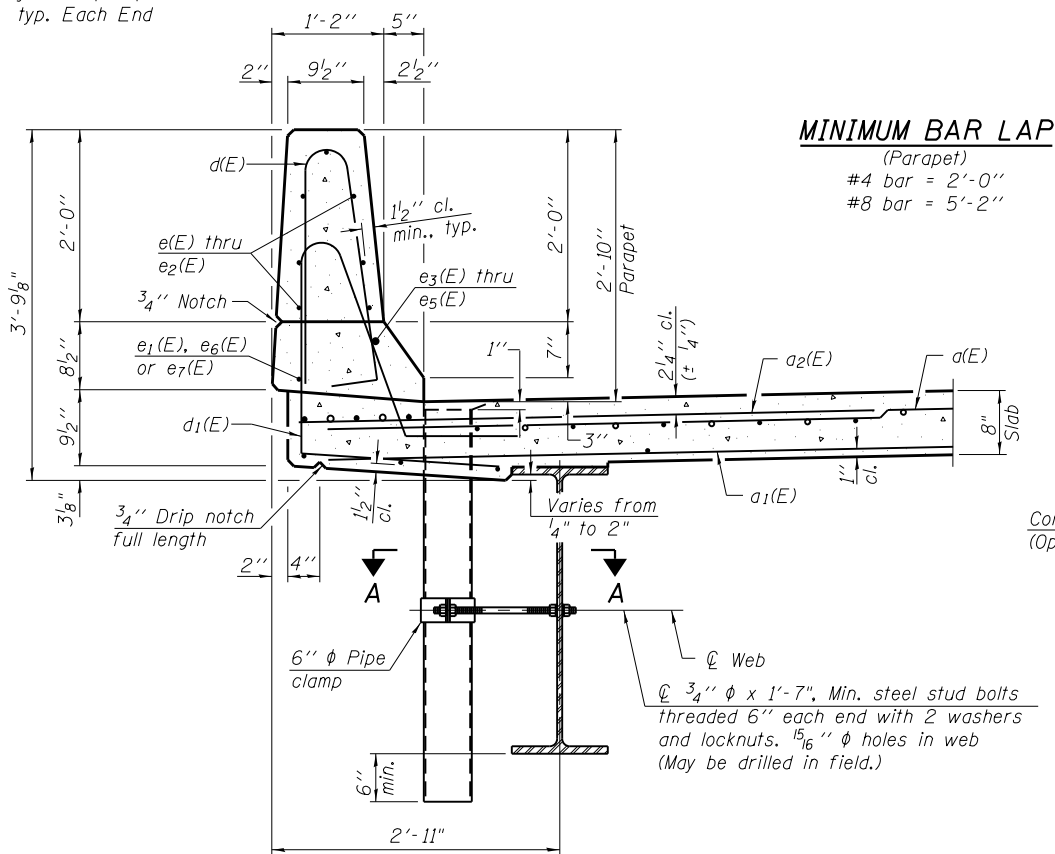
SUPERSTRUCTURE
STRUCTURE NO. 011-0514

SHEET NO. 9 OF 31 SHEETS

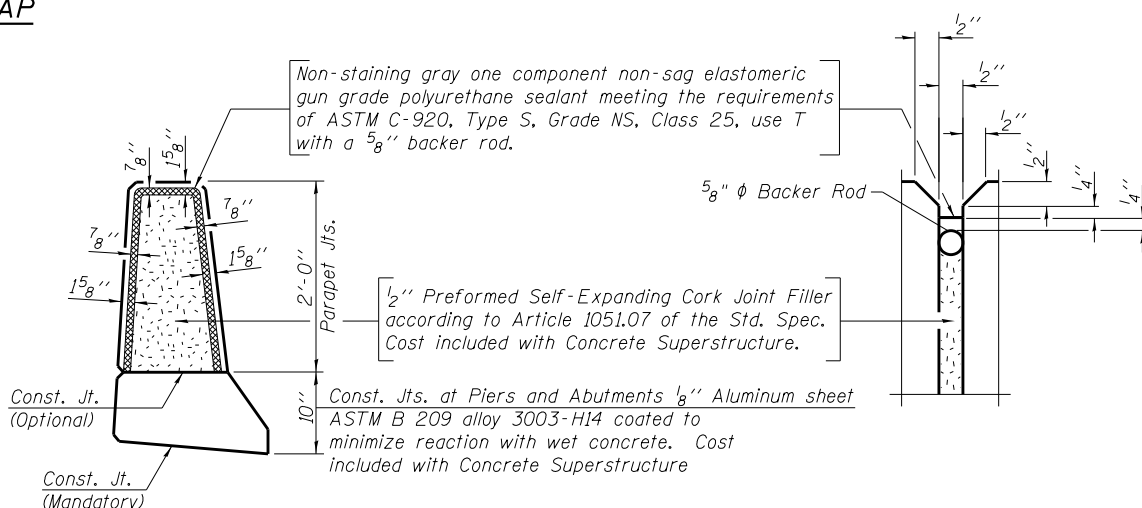
| | | | | |
|----------------------------|--------------|-----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • 75 (IL 27) & 714 (IL 48) | (4)I; 136B-1 | CHRISTIAN | 97 | 49 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72A61 | |



INSIDE ELEVATION OF PARAPET

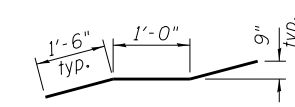


MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"

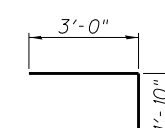


PARAPET JOINT DETAILS

Notes:
Drains shall be located clear of all diaphragms.
Floor drains need not be painted.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

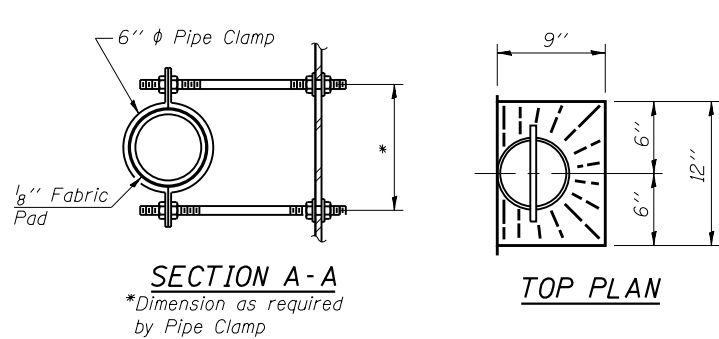


BAR m4(E)

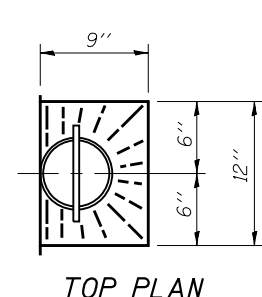


BAR s(E)

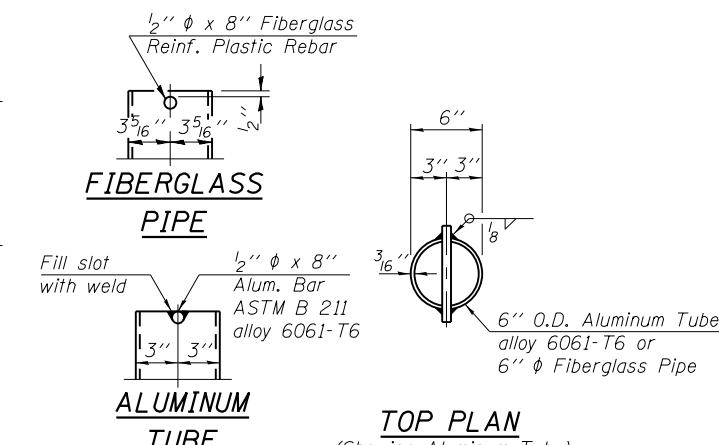
SECTION THRU PARAPET



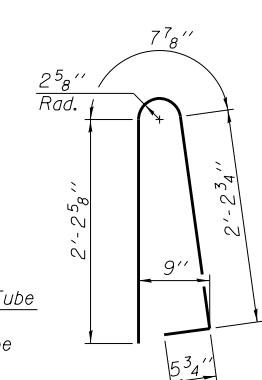
SECTION A-A
*Dimension as required by Pipe Clamp



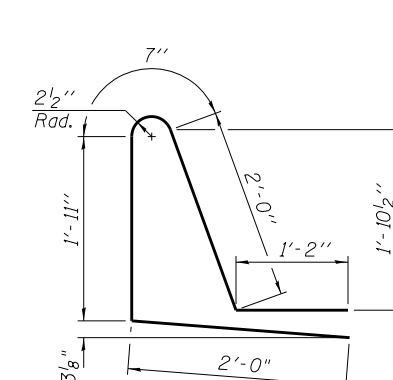
TOP PLAN



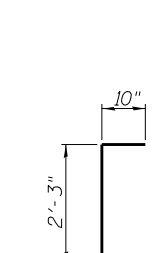
TOP PLAN
(Showing Aluminum Tube)



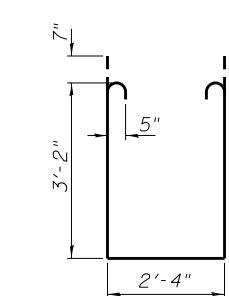
BAR d(E)



BAR d1(E)



BAR v(E)

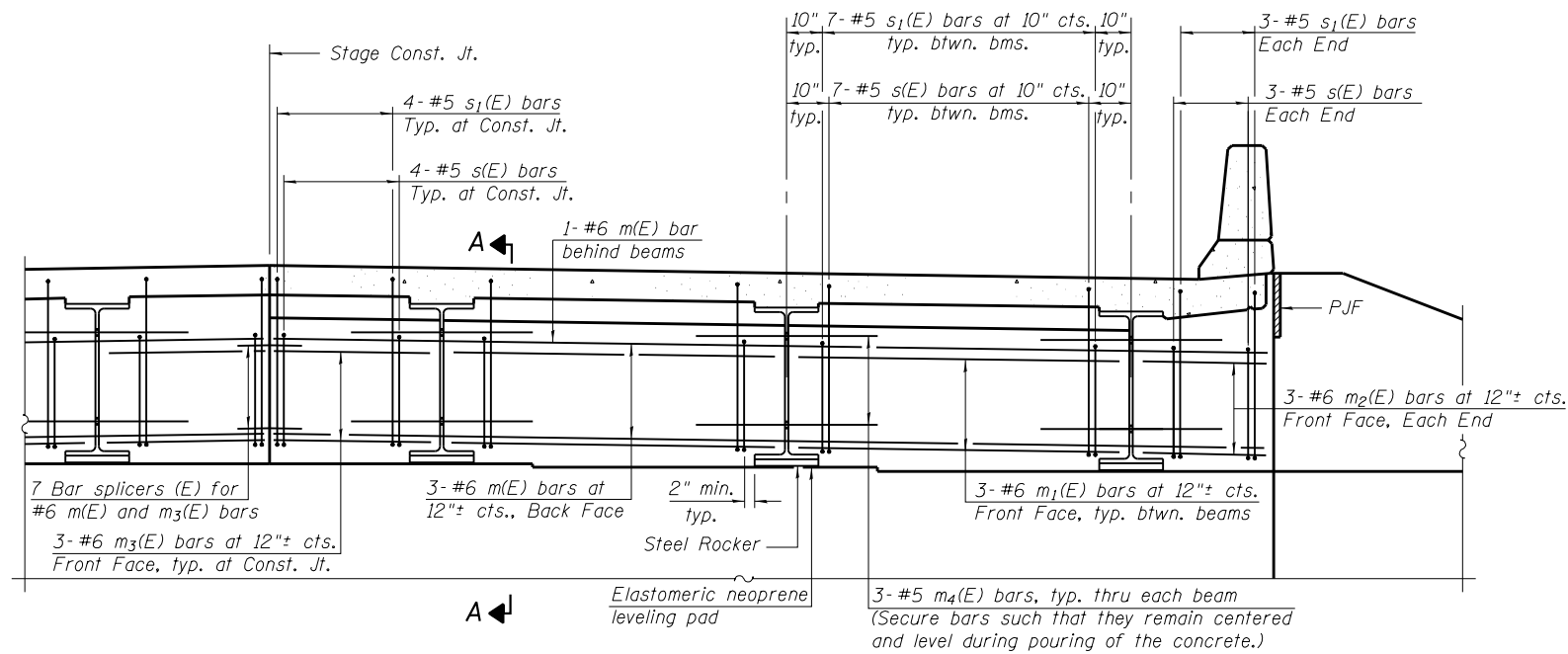


BAR s1(E)

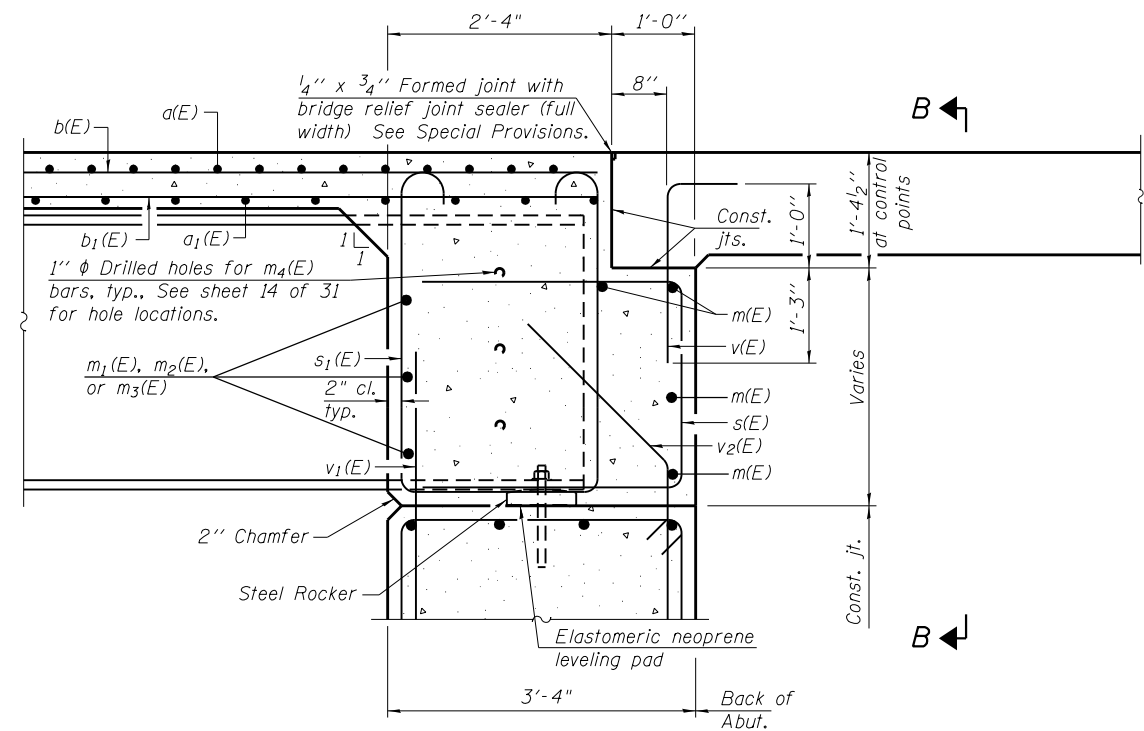
SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| a(E) | 710 | #5 | 19'-1" | — |
| a1(E) | 428 | #5 | 18'-9" | — |
| a2(E) | 696 | #6 | 6'-6" | — |
| a3(E) | 8 | #5 | 22'-3" | — |
| b(E) | 294 | #5 | 27'-7" | — |
| b1(E) | 76 | #6 | 40'-0" | — |
| b2(E) | 288 | #5 | 24'-6" | — |
| d(E) | 390 | #5 | 5'-7" | ⌒ |
| d1(E) | 388 | #5 | 7'-8" | ⌒ |
| e(E) | 84 | #4 | 14'-4" | — |
| e1(E) | 64 | #4 | 8'-9" | — |
| e2(E) | 42 | #4 | 17'-9" | — |
| e3(E) | 8 | #8 | 24'-5" | — |
| e4(E) | 8 | #8 | 8'-9" | — |
| e5(E) | 4 | #8 | 29'-6" | — |
| e6(E) | 8 | #4 | 22'-10" | — |
| e7(E) | 4 | #4 | 27'-11" | — |
| m(E) | 16 | #6 | 22'-3" | — |
| m1(E) | 24 | #6 | 7'-4" | — |
| m2(E) | 12 | #6 | 3'-0" | — |
| m3(E) | 12 | #6 | 3'-6" | — |
| m4(E) | 36 | #5 | 4'-0" | — |
| s(E) | 84 | #5 | 7'-10" | ⌒ |
| s1(E) | 84 | #5 | 9'-10" | ⌒ |
| v(E) | 80 | #5 | 3'-1" | ⌒ |
| Concrete Superstructure | | Cu. Yd. | 250.9 | |
| Bridge Deck Grooving | | Sq. Yd. | 672 | |
| Protective Coat | | Sq. Yd. | 861 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 61,010 | |
| Bar Splicers | | Each | 587 | |

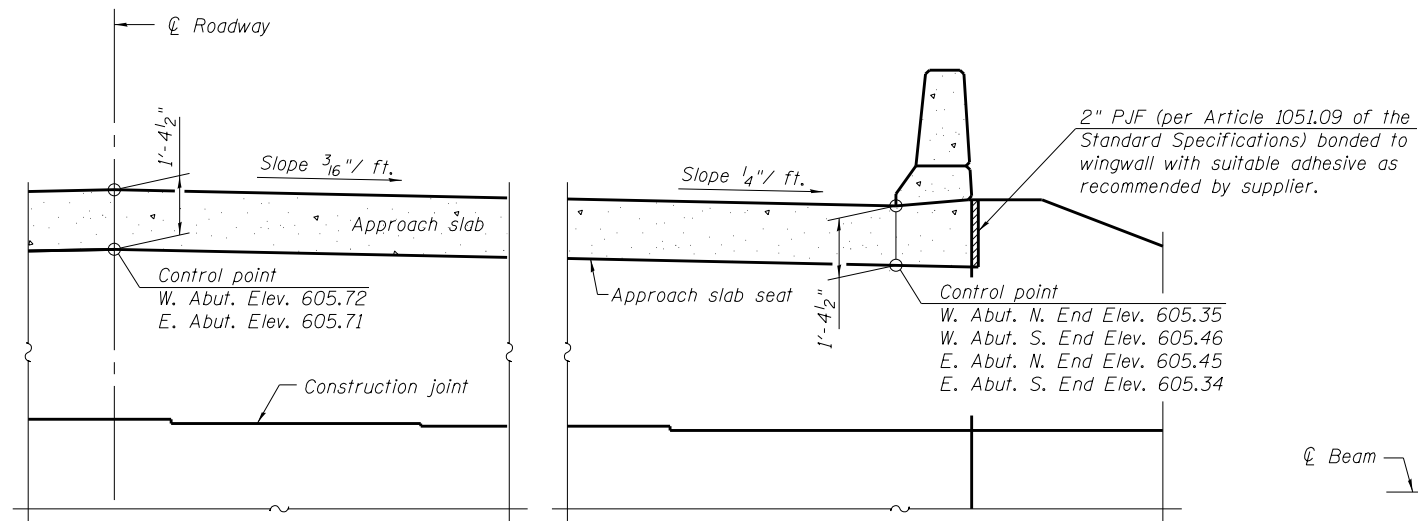
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



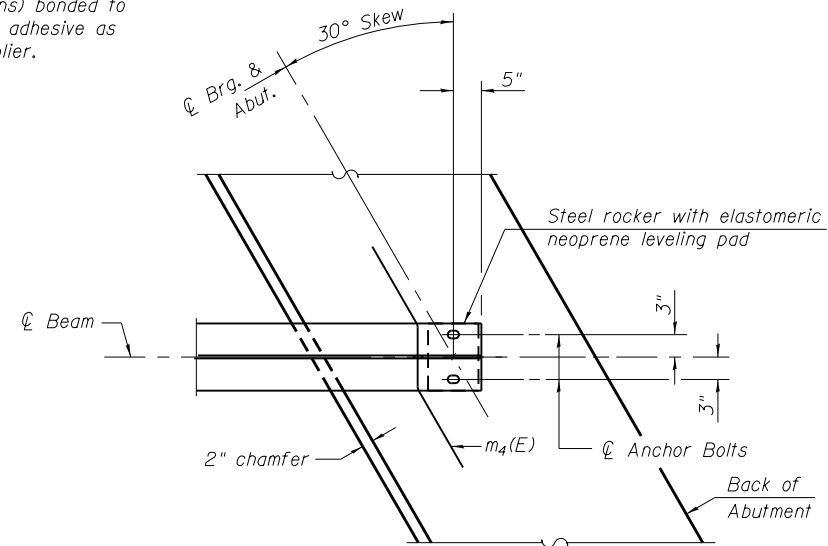
DIAPHRAGM ELEVATION AT ABUTMENT



SECTION A-A
(at Rt. L's)



SECTION B-B

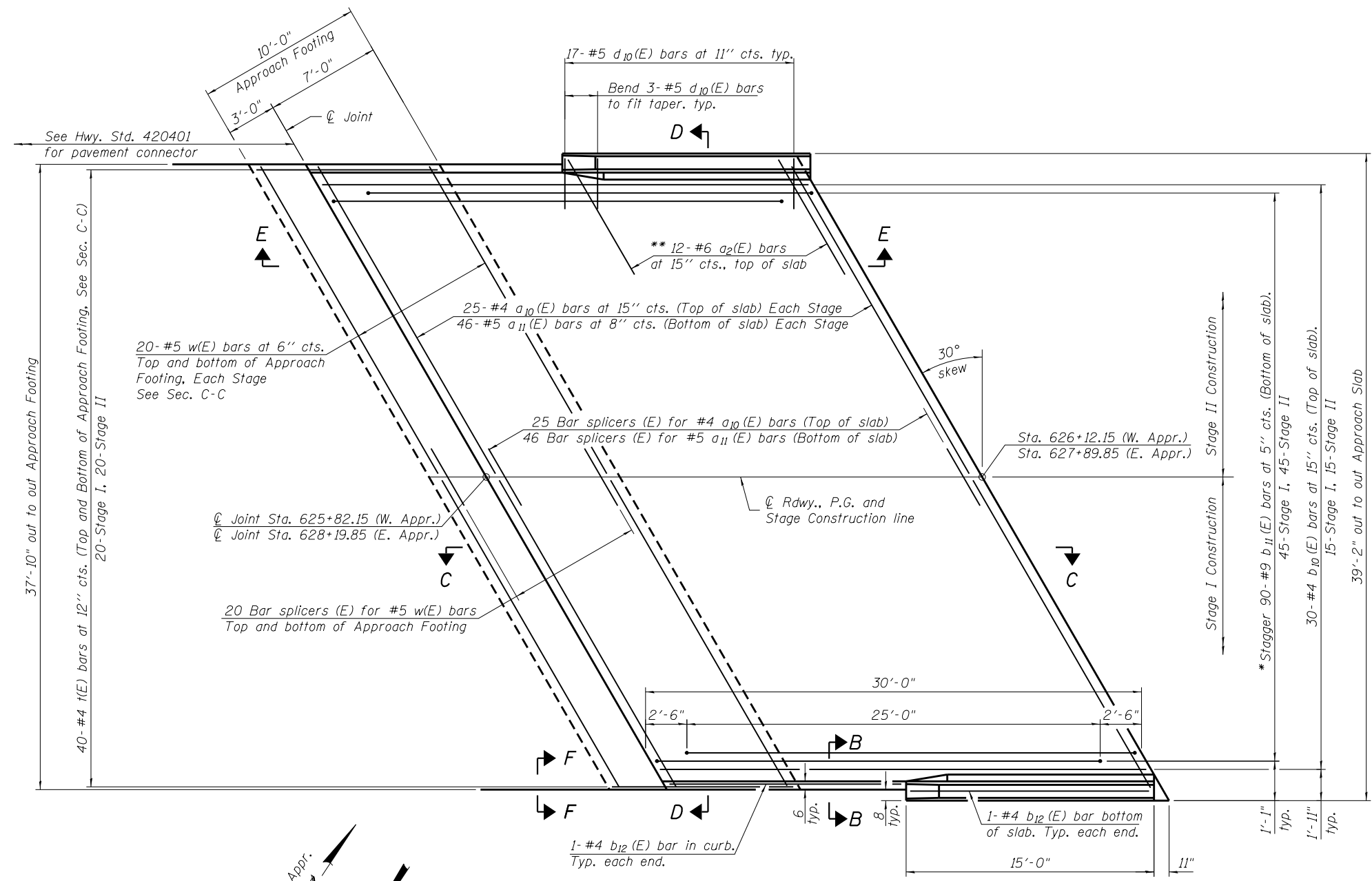


PARTIAL PLAN AT ABUTMENT
(Showing bottom flange of beam)

Notes:
 Reinforcement bars in diaphragm are billed with superstructure on Sheet 10 of 31.
 Concrete in diaphragm is included with Concrete Superstructure on Sheet 10 of 31.
 For details of bars s(E), s1(E) and v(E) see Sheet 10 of 31.
 The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 The approach slab seat shall have a constant slope determined from the control points shown.
 For bearing details see Sheet 15 of 31.

Notes:
 See Sheet 13 of 31 for Sections C-C & D-D and View E-E.
 $a_{10}(E)$ and $a_{11}(E)$ bar spacings measured along \varnothing Rdwy.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be $1\frac{1}{2}$ " for installation purposes.

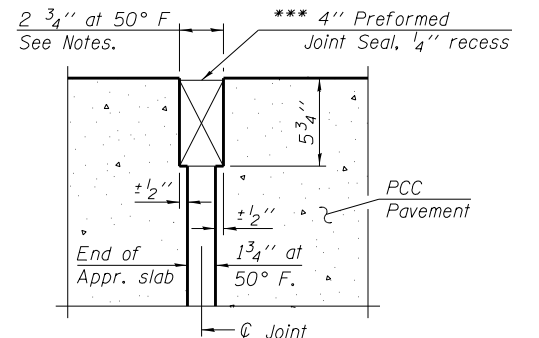
*** Cost included with Concrete Superstructure.



* Tilt #9 $b_{11}(E)$ bars as required to maintain clearance.
 ** Space between $a_{10}(E)$ bars, typ. each parapet.

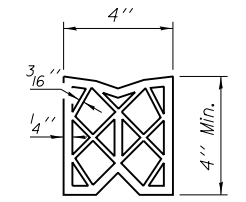
PLAN

(West Approach Slab Shown, East Approach Slab Similar)

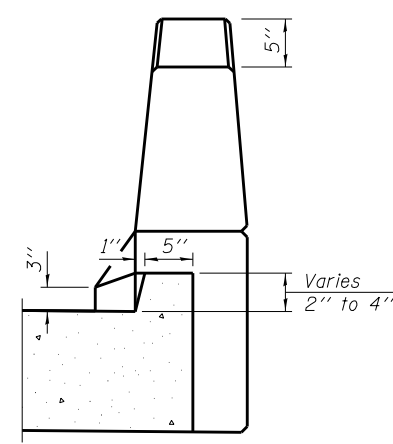


RIGID PAVEMENT

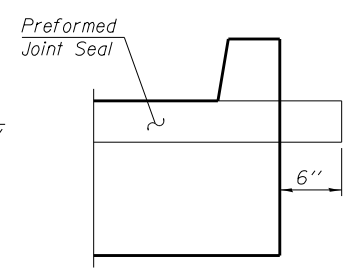
DETAIL A



PREFORMED JOINT SEAL

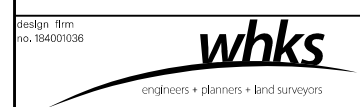


VIEW B-B



VIEW F-F

(Sheet 1 of 2)



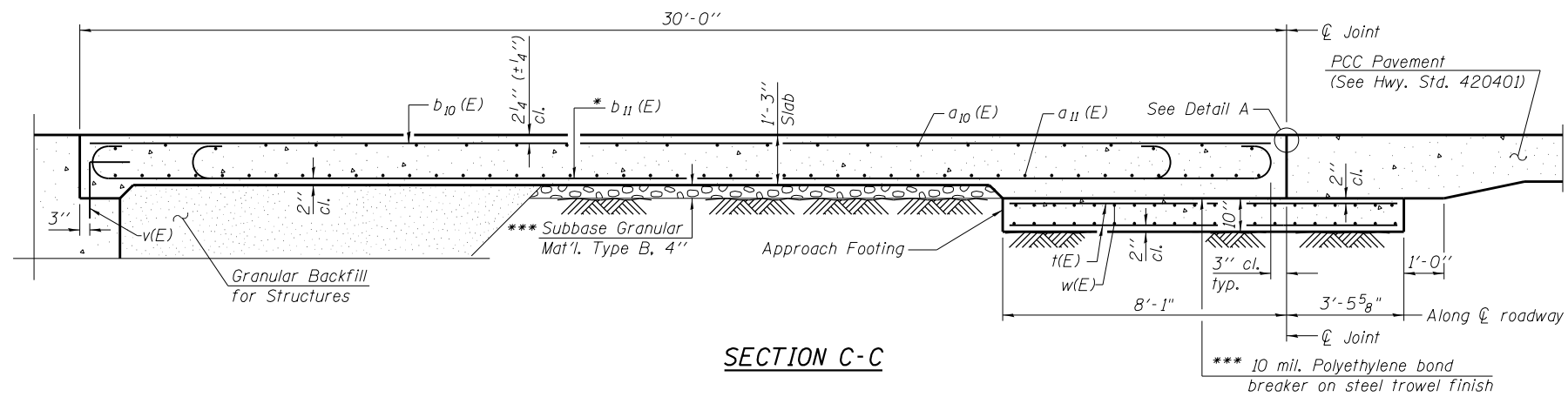
| | | |
|---------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' / 1/8" | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

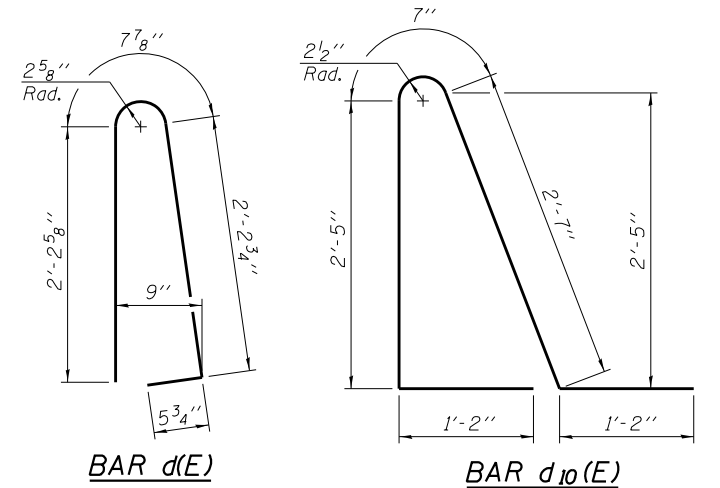
**BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 011-0514**

SHEET NO. 12 OF 31 SHEETS

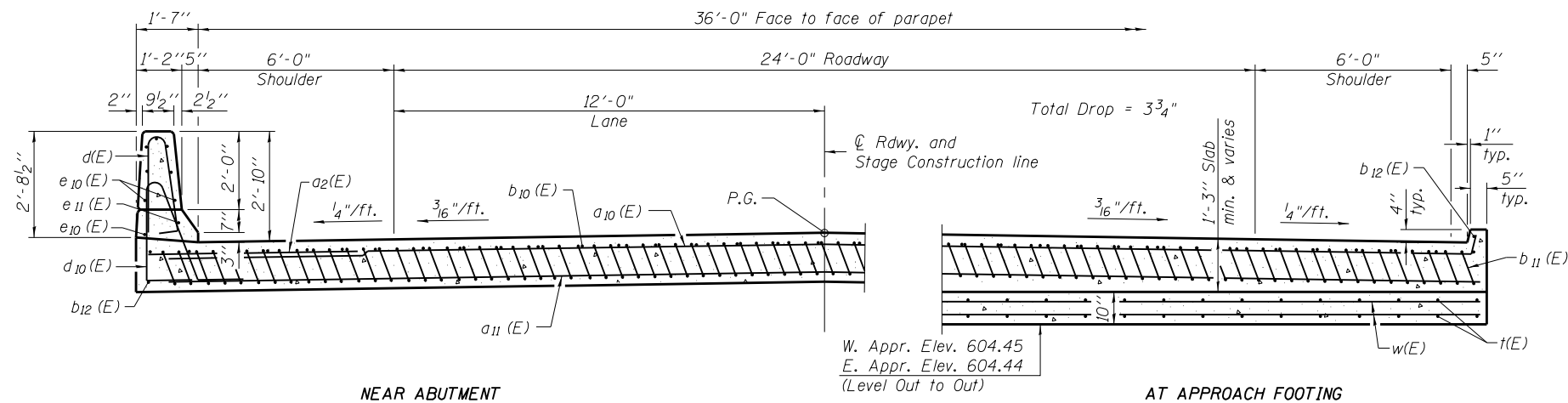
| | | | | |
|---------------------------|--------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4)I; 136B-1 | CHRISTIAN | 97 | 52 |
| • | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |



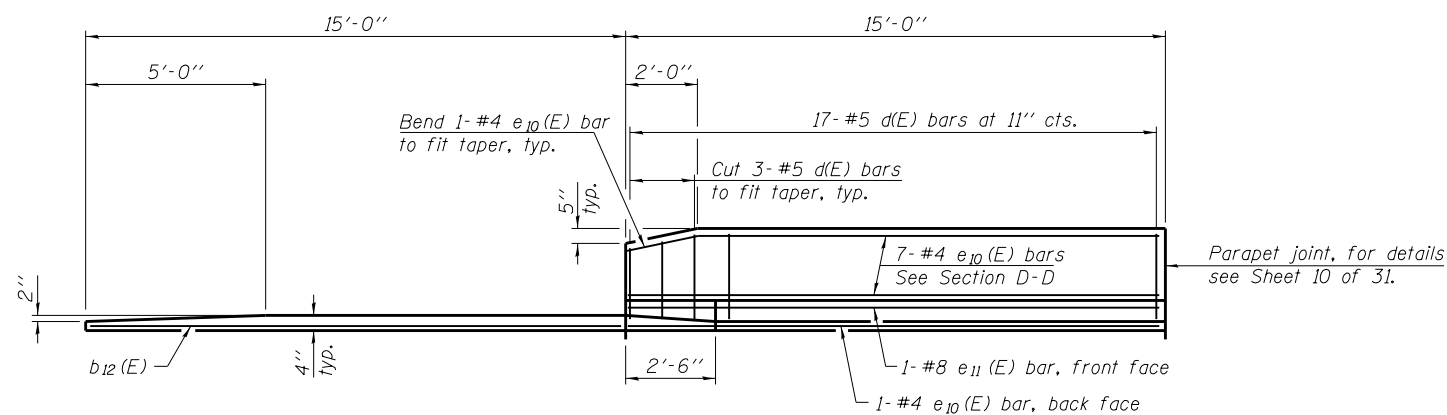
Notes:
 See Sheet 12 of 31 for Detail A and View B-B.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see Sheet 10 of 31.
 For bar splicer details, see Sheet 20 of 31.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see Sheet 2 of 31.
 For additional parapet details, see Sheet 10 of 31.



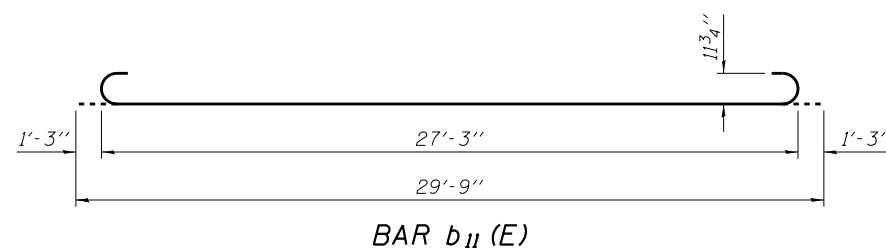
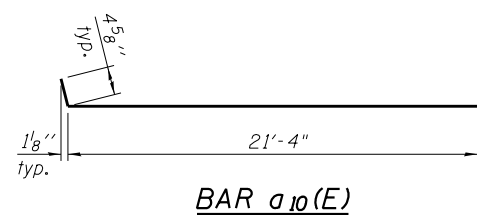
* Tilt #9 b₁₁(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.



SECTION D-D
 (See Plan for dimensions not shown)



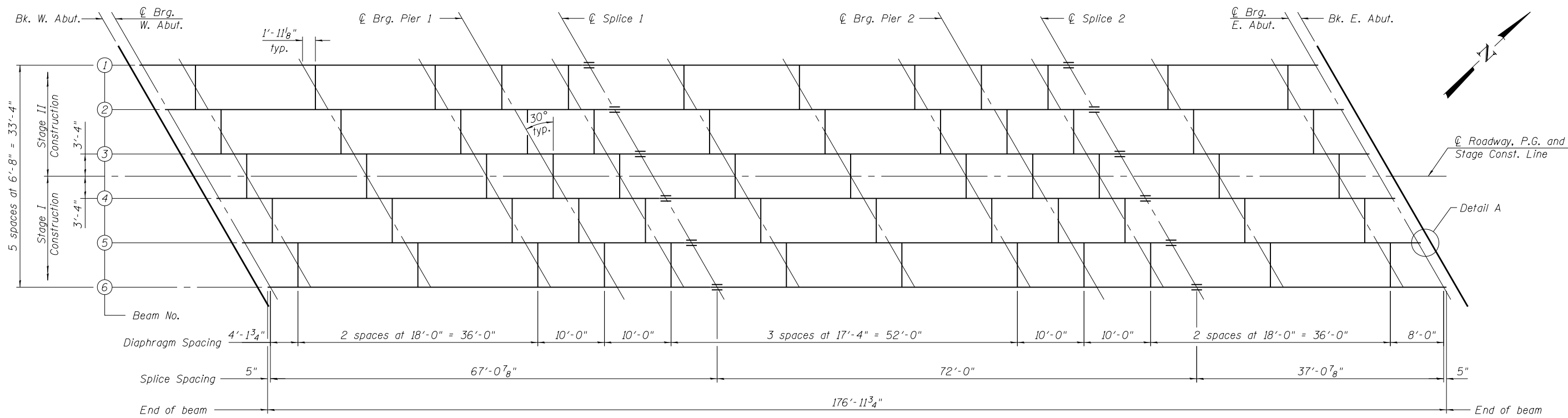
VIEW E-E



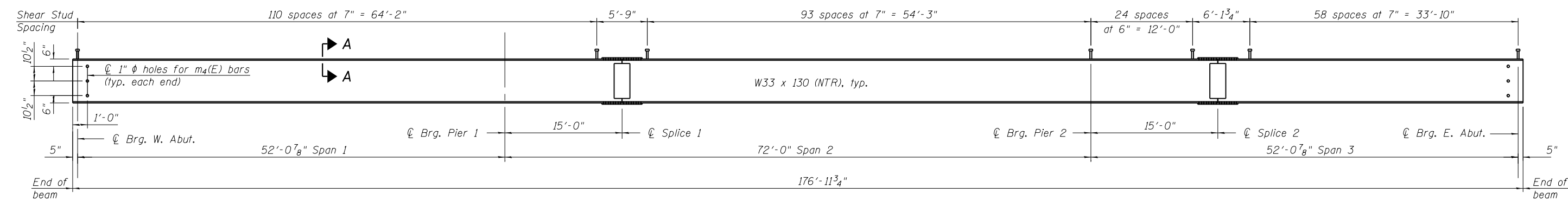
TWO APPROACHES
 BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|--------|-------|
| a ₂ (E) | 48 | #6 | 6'-6" | — |
| a ₁₀ (E) | 100 | #4 | 21'-9" | — |
| a ₁₁ (E) | 184 | #5 | 21'-6" | — |
| b ₁₀ (E) | 60 | #4 | 29'-8" | — |
| b ₁₁ (E) | 180 | #9 | 29'-9" | — |
| b ₁₂ (E) | 8 | #4 | 14'-8" | — |
| d(E) | 68 | #5 | 5'-7" | — |
| d ₁₀ (E) | 68 | #5 | 7'-11" | — |
| e ₁₀ (E) | 32 | #4 | 14'-8" | — |
| e ₁₁ (E) | 4 | #8 | 14'-8" | — |
| t(E) | 160 | #4 | 11'-2" | — |
| w(E) | 160 | #5 | 21'-6" | — |
| Concrete Structures | | Cu. Yd. | 27.0 | |
| Concrete Superstructure | | Cu. Yd. | 118.0 | |
| Bridge Deck Grooving | | Sq. Yd. | 230 | |
| Protective Coat | | Sq. Yd. | 271 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 31,740 | |
| Bar Splicers | | Each | 222 | |

(Sheet 2 of 2)



FRAMING PLAN



BEAM ELEVATION

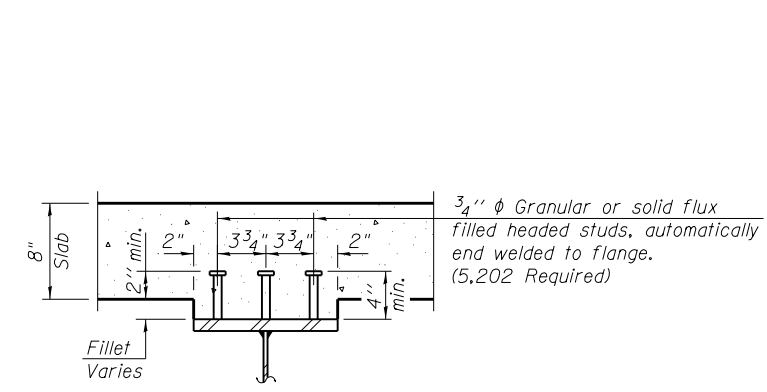
*** TOP OF BEAM ELEVATIONS**

| Location | ℄ Brg. W. Abut. | ℄ Pier 1 | ℄ Splice 1 | ℄ Pier 2 | ℄ Splice 2 | ℄ Brg. E. Abut. |
|----------|-----------------|----------|------------|----------|------------|-----------------|
| Beam 1 | 606.05 | 606.22 | 606.27 | 606.23 | 606.22 | 606.14 |
| Beam 2 | 606.20 | 606.36 | 606.40 | 606.35 | 606.34 | 606.25 |
| Beam 3 | 606.32 | 606.47 | 606.51 | 606.45 | 606.43 | 606.33 |
| Beam 4 | 606.34 | 606.48 | 606.52 | 606.44 | 606.42 | 606.31 |
| Beam 5 | 606.26 | 606.38 | 606.42 | 606.33 | 606.30 | 606.19 |
| Beam 6 | 606.15 | 606.26 | 606.29 | 606.19 | 606.16 | 606.04 |

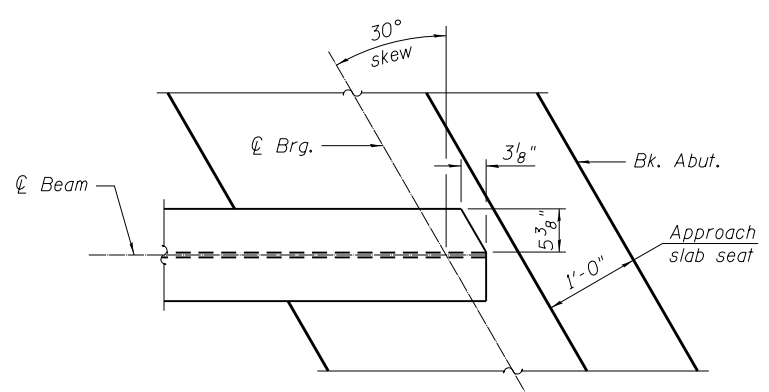
* For Fabrication Only.

Notes:

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2. See Sheet 15 of 31 for Interior Diaphragm and Splice Details. See Sheet 15 of 31 for Anchor Bolt Placement.

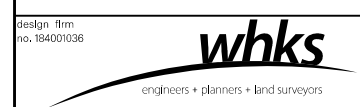


SECTION A-A



DETAIL A

Note:
Top flange only to be clipped as dimensioned above. Detail typical for all beams at both abutments. E. Abut. shown, W. Abut. similar.



| | | |
|---------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' / 1in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

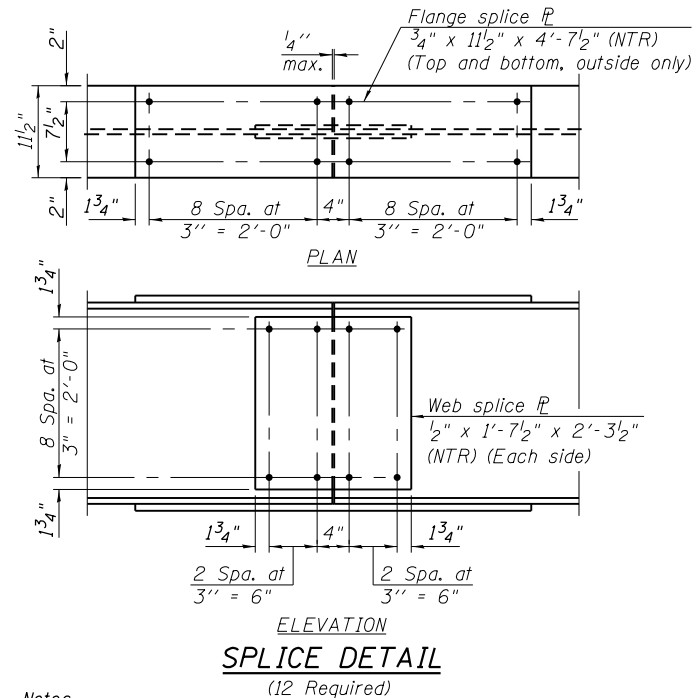
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN
STRUCTURE NO. 011-0514**

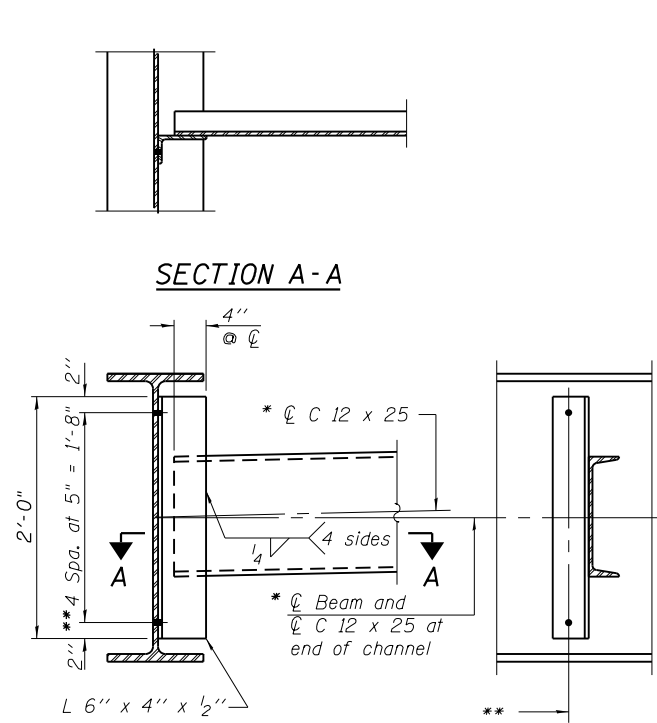
SHEET NO. 14 OF 31 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------------------|--------------------|--------------|-----------|
| • | (4)I; 136B-1 | CHRISTIAN | 97 | 54 |
| • | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |

ILLINOIS FED. AID PROJECT



Notes:
 All splices are symmetrical about \bar{C} splice.
 H.S. bolts shall be $7/8" \phi$ AASHTO M164/ASTM A325 Type 3.
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

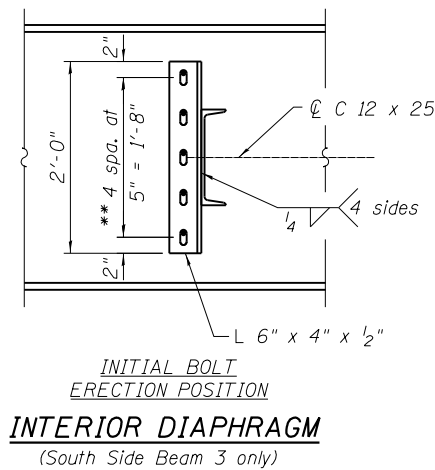


INTERIOR DIAPHRAGM
(60 Required)

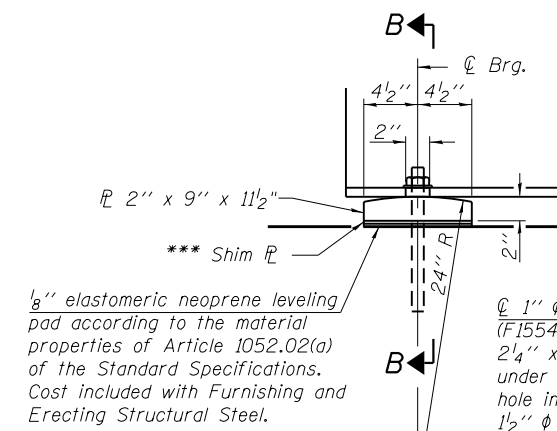
Notes:
 Two hardened washers required for each set of oversized or slotted holes.
 * Alternate C 12 x 30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
 The alternate, if utilized, shall be provided at no additional cost to the Department.
 ** $3/4" \phi$ H.S. bolts, $15/16" \phi$ holes typ., except $3/4" \phi$ H.S. bolts $13/16" \times 17/8"$ slots provided on south side of Beam 3 to accommodate differential displacement between Beams 3 and 4 for Stage Construction.
 Bolts in slots shall be finger tight until Stage II Construction is complete.
 Position slots so bolts start at one end with no concrete load and finish near the opposite end under deck load, allowing maximum displacement without laterally stressing main members.

| INTERIOR GIRDER MOMENT TABLE | | | | |
|------------------------------|--------------------|------------------------|------------|-----------|
| | | 0.4 Sp. 1 or 0.6 Sp. 3 | Pier 1 & 2 | 0.5 Sp. 2 |
| I_s | (in ⁴) | 6710 | 6710 | 6710 |
| $I_c(n)$ | (in ⁴) | 18650 | | 18650 |
| $I_c(3n)$ | (in ⁴) | 13636 | | 13636 |
| $I_c(cr)$ | (in ⁴) | | 9404 | |
| S_s | (in ³) | 406 | 406 | 406 |
| $S_c(n)$ | (in ³) | 610.3 | | 610.3 |
| $S_c(3n)$ | (in ³) | 550.1 | | 550.1 |
| $S_c(cr)$ | (in ³) | | 474.7 | |
| DC1 | (k/') | 0.835 | 0.835 | 0.835 |
| M _{DC1} | (k) | 139 | 332 | 209 |
| DC2 | (k/') | 0.150 | 0.150 | 0.150 |
| M _{DC2} | (k) | 25 | 60 | 37 |
| DW | (k/') | 0.300 | 0.300 | 0.300 |
| M _{DW} | (k) | 49 | 121 | 74 |
| $M_{\xi} + IM$ | (k) | 560 | 566 | 616 |
| M_u (Strength I) | (k) | 1259 | 1662 | 1497 |
| $\phi_r M_n$ | (k) | 3176 | | 3111 |
| f_s DC1 | (ksi) | 4.1 | 9.8 | 6.2 |
| f_s DC2 | (ksi) | 0.5 | 1.5 | 0.8 |
| f_s DW | (ksi) | 1.1 | 3.1 | 1.6 |
| f_s ($\xi + IM$) | (ksi) | 11.0 | 14.3 | 12.1 |
| f_s (Service II) | (ksi) | 20.0 | 33.0 | 24.3 |
| $0.95R_n F_y F$ | (ksi) | 47.5 | 47.5 | 47.5 |
| f_s (Total)(Strength I) | (ksi) | | 43.8 | |
| $\phi_r F_n$ | (ksi) | | 50.0 | |
| V_r | (k) | 24.9 | 24.9 | 24.9 |

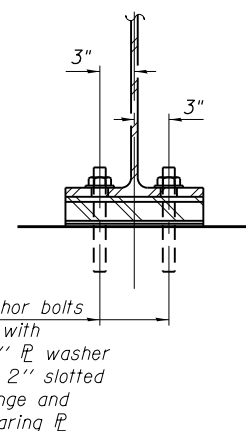
| INTERIOR GIRDER REACTION TABLE | | | |
|--------------------------------|---------------------|------------|-------|
| | W. Abut. & E. Abut. | Pier 1 & 2 | |
| R _{DC1} | (k) | 16.2 | 58.2 |
| R _{DC2} | (k) | 2.8 | 10.5 |
| R _{DW} | (k) | 5.5 | 21.0 |
| $R_{\xi} + IM$ | (k) | 72.6 | 100.1 |
| R _{Total} | (k) | 97.1 | 189.8 |



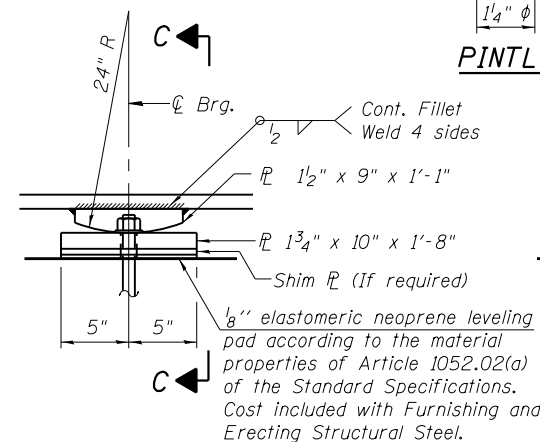
INTERIOR DIAPHRAGM
(South Side Beam 3 only)



FIXED BEARING AT ABUTMENT
(12 Required)

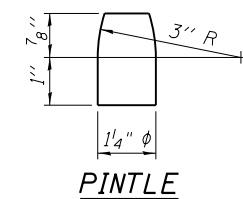


SECTION B-B

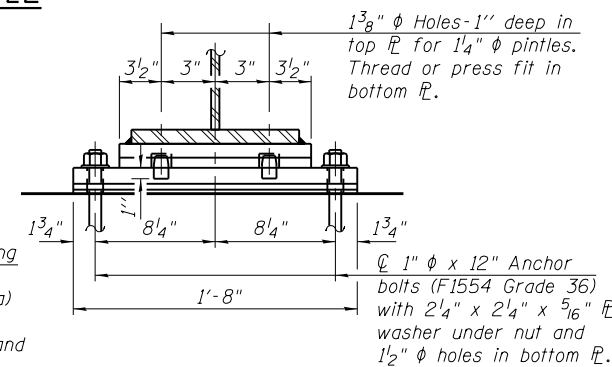


ELEVATION

FIXED BEARING AT PIER
(12 Required)



PINTLE



SECTION C-C

BILL OF MATERIAL

| Item | Unit | Total |
|------------------|------|-------|
| Anchor Bolts, 1" | Each | 48 |

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) in uncracked sections due to short-term composite live loads (in⁴ and in³).

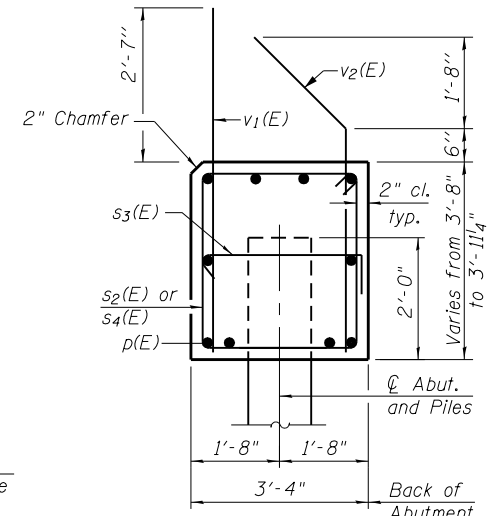
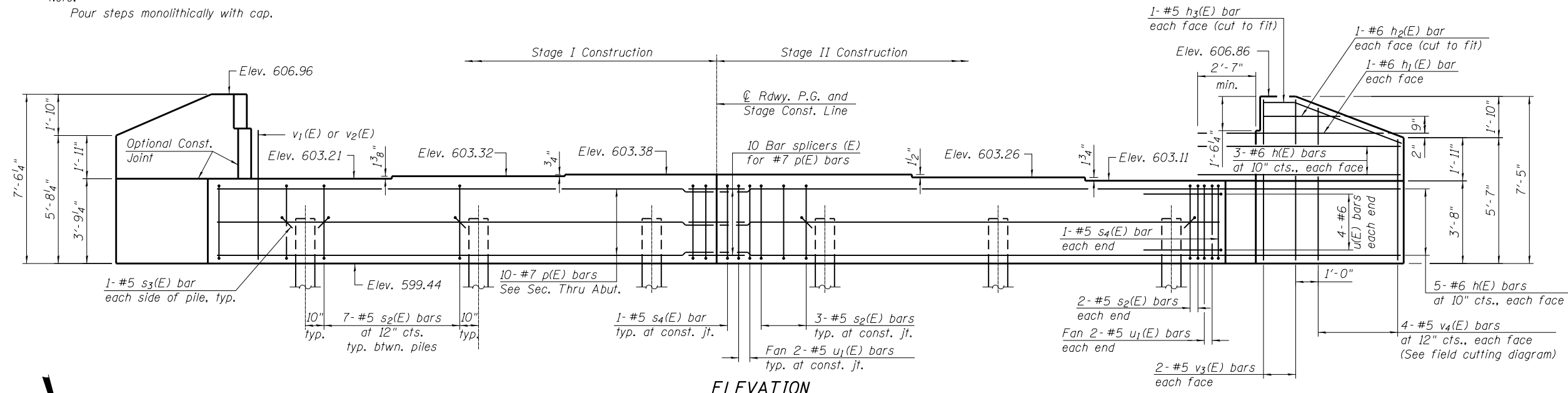
$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in⁴ and in³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in⁴ and 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.).
 $M_{\xi} + IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{\xi} + IM$
 $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
 f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
 M_{DC1} / S_{nc}
 f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
 $M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.
 f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
 $M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.
 f_s ($\xi + IM$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
 $M_{\xi} + IM / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.
 f_s (Service II): Sum of stresses as computed below (ksi).
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (\xi + IM)$
 $0.95R_n F_y F$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
 f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
 $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s (\xi + IM)$
 $\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
 V_r : Maximum factored shear range in span computed according to Article 6.10.10.

Notes:
 Anchor bolts shall be ASTM F1554 All-Thread (or an Engineer approved alternate material) of the Grade(s) and Diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts 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 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on Bearing Details.
 All plates, shapes and pintles shall conform to the requirements of AASHTO M270 Grade 50W.
 *** Provide 1/4 inch x 9 inch x 11 1/2 inch Shim \bar{C}
 @ Beam 3 (W. Abut.) and
 @ Beam 4 (E. Abut.)

Note:
Four steps monolithically with cap.



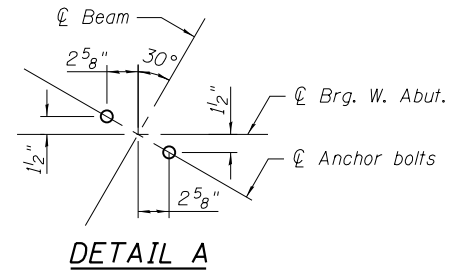
SEC. THRU ABUT.

Dimensions at right angles to abutment.

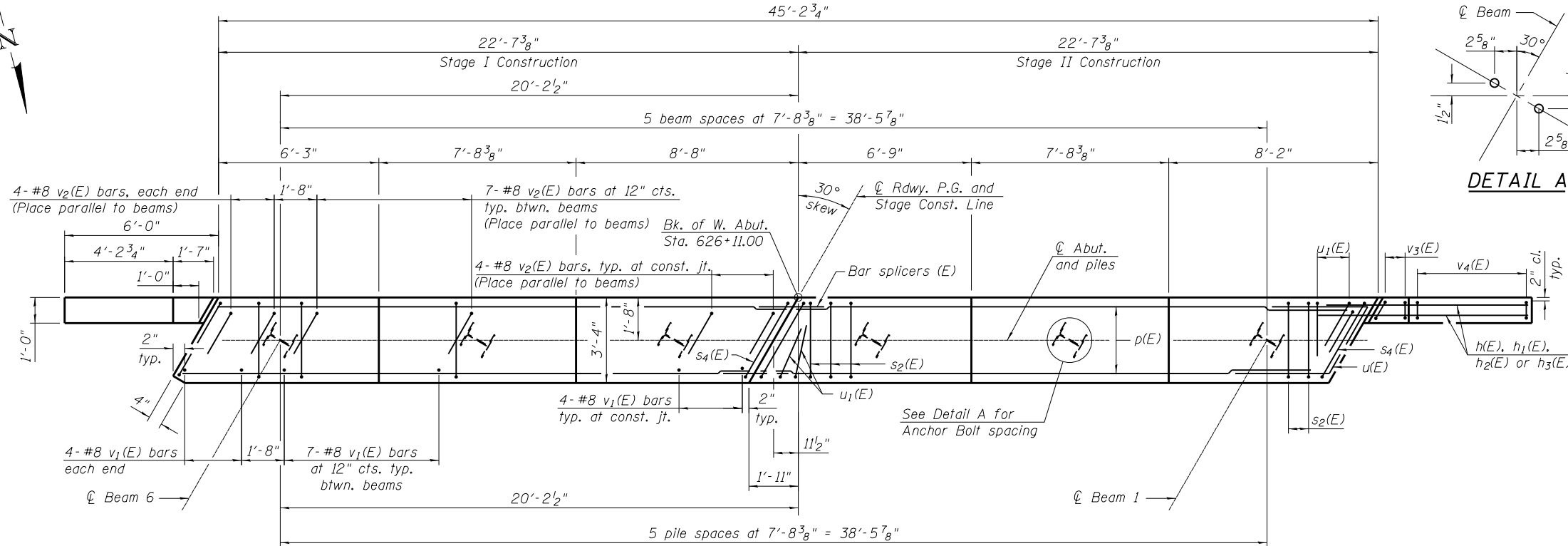
ELEVATION

BILL OF MATERIAL

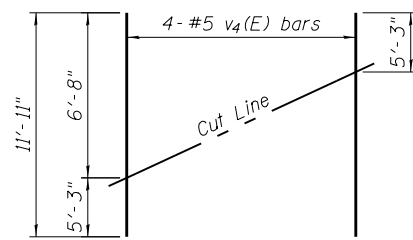
| Bar | No. | Size | Length | Shape |
|-----------------------------------|-----|---------|---------|-------|
| h(E) | 32 | #6 | 8'-5" | |
| h1(E) | 4 | #6 | 7'-10" | |
| h2(E) | 4 | #6 | 3'-2" | |
| h3(E) | 4 | #5 | 5'-9" | |
| p(E) | 20 | #7 | 22'-3" | |
| s2(E) | 38 | #5 | 13'-7" | |
| s3(E) | 12 | #5 | 4'-0" | |
| s4(E) | 4 | #5 | 14'-5" | |
| u(E) | 8 | #6 | 11'-1" | |
| u1(E) | 8 | #5 | 8'-4" | |
| v1(E) | 44 | #8 | 6'-1" | |
| v2(E) | 44 | #8 | 6'-4" | |
| v3(E) | 8 | #5 | 7'-1" | |
| v4(E) | 8 | #5 | 11'-11" | |
| Structure Excavation | | Cu. Yd. | 137 | |
| Concrete Structures | | Cu. Yd. | 24.3 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 3,880 | |
| Bar Splicers | | Each | 10 | |
| Furnishing Steel Piles HP 12 x 53 | | Foot | 190 | |
| Driving Piles | | Foot | 190 | |
| Test Pile Steel HP 12 x 53 | | Each | 1 | |



DETAIL A

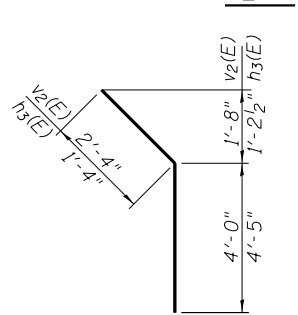


PLAN

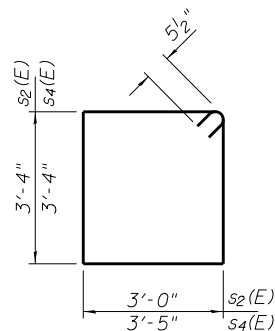


FIELD CUTTING DIAGRAM

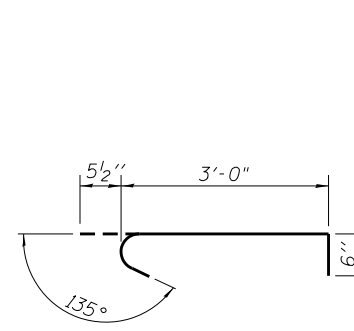
Order v4(E) full length. Cut as shown and use remainder of bars in opposite face.



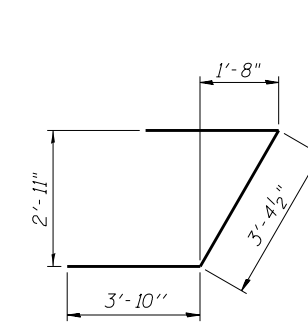
BAR v2(E) & h3(E)



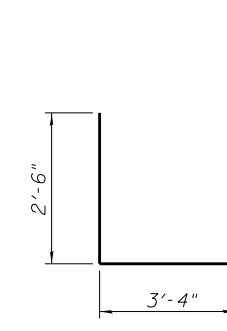
BAR s2(E) & s4(E)



BAR s3(E)



BAR u(E)

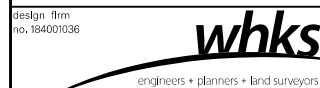


BAR u1(E)

For details of piles, see Sheet 21 of 31.
For details of bar splicers, see Sheet 20 of 31.
Space reinforcement in cap to miss anchor bolts.

PILE DATA

Type: Steel HP 12 x 53
Nominal Required Bearing: 419k
Factored Resistance Available: 230k
Est. Length: 38 ft.
No. Production Piles: 5
No. Test Piles: 1



| | | |
|--------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1" / 16' | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

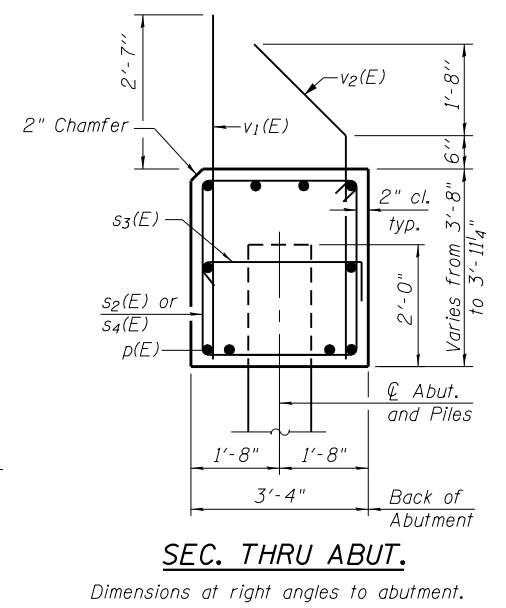
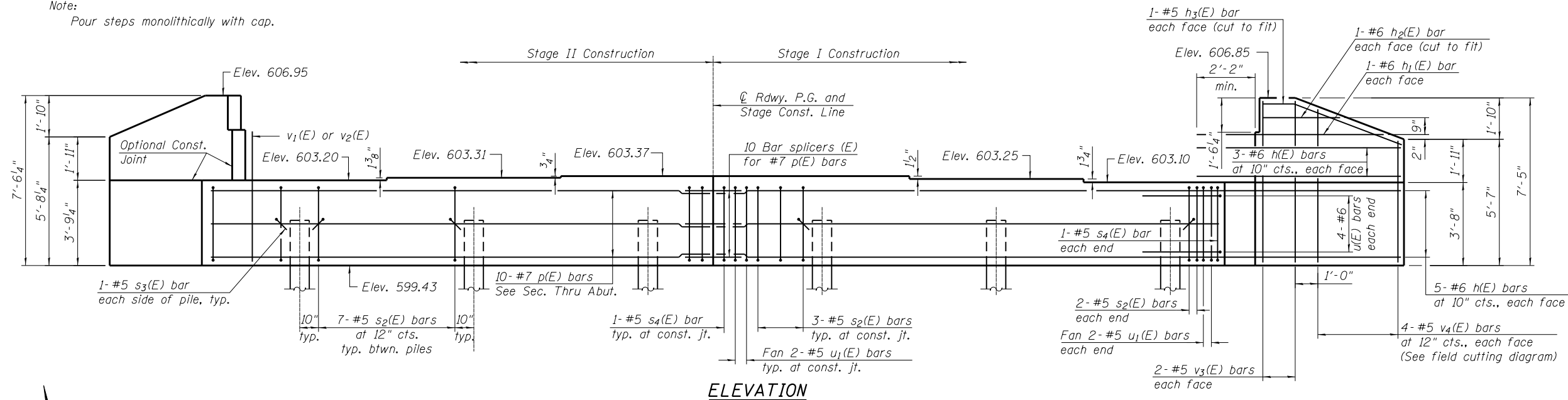
WEST ABUTMENT
STRUCTURE NO. 011-0514

SHEET NO. 16 OF 31 SHEETS

| | | | | |
|-------------|--------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | (4)I; 136B-1 | CHRISTIAN | 97 | 56 |
| | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |

ILLINOIS FED. AID PROJECT

Note:
Pour steps monolithically with cap.



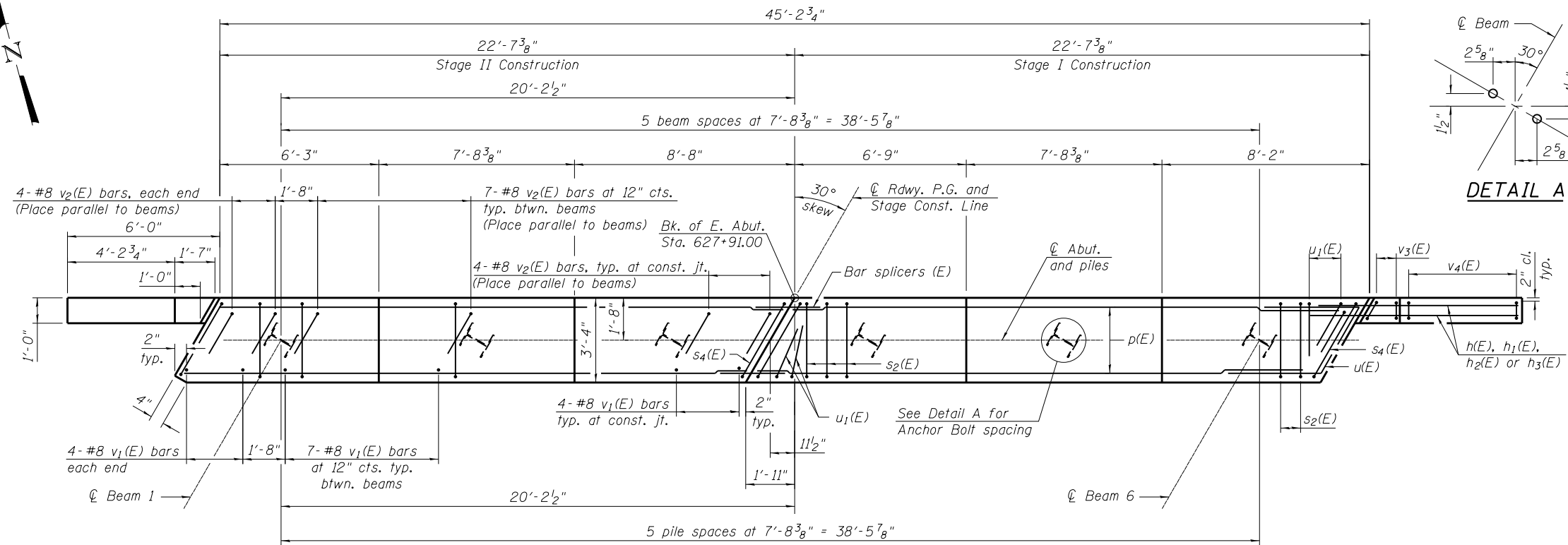
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|-----------------------------------|-----|---------|---------|-------|
| h(E) | 32 | #6 | 8'-5" | |
| h1(E) | 4 | #6 | 7'-10" | |
| h2(E) | 4 | #6 | 3'-2" | |
| h3(E) | 4 | #5 | 5'-9" | |
| p(E) | 20 | #7 | 22'-3" | |
| s2(E) | 38 | #5 | 13'-7" | |
| s3(E) | 12 | #5 | 4'-0" | |
| s4(E) | 4 | #5 | 14'-5" | |
| u(E) | 8 | #6 | 11'-1" | |
| u1(E) | 8 | #5 | 8'-4" | |
| v1(E) | 44 | #8 | 6'-1" | |
| v2(E) | 44 | #8 | 6'-4" | |
| v3(E) | 8 | #5 | 7'-1" | |
| v4(E) | 8 | #5 | 11'-11" | |
| Structure Excavation | | Cu. Yd. | 137 | |
| Concrete Structures | | Cu. Yd. | 24.3 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 3,880 | |
| Bar Splicers | | Each | 10 | |
| Furnishing Steel Piles HP 12 x 53 | | Foot | 190 | |
| Driving Piles | | Foot | 190 | |
| Test Pile Steel HP 12 x 53 | | Each | 1 | |

For details of piles, see Sheet 21 of 31.
For details of bar splicers, see Sheet 20 of 31.
Space reinforcement in cap to miss anchor bolts.

ELEVATION

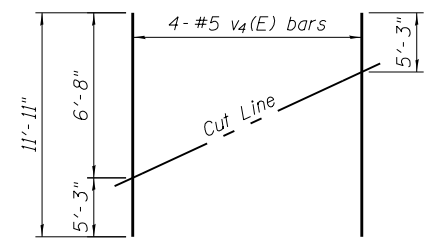
DETAIL A



PLAN

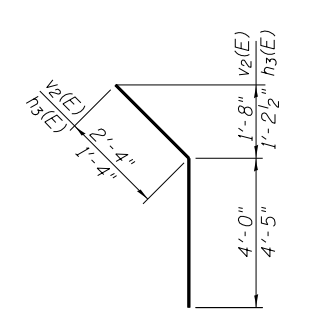
PILE DATA

Type: Steel HP 12 x 53
Nominal Required Bearing: 419k
Factored Resistance Available: 230k
Est. Length: 38 ft.
No. Production Piles: 5
No. Test Piles: 1

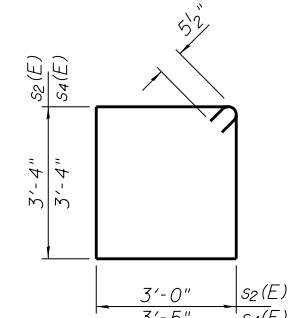


FIELD CUTTING DIAGRAM

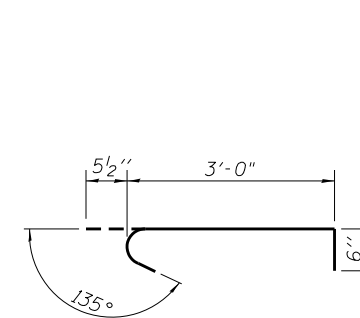
Order v4(E) full length. Cut as shown and use remainder of bars in opposite face.



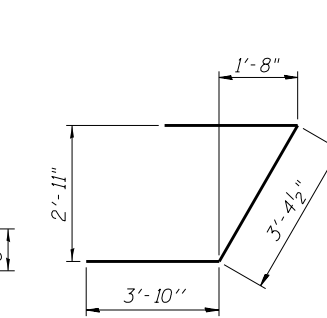
BAR v2(E) & h3(E)



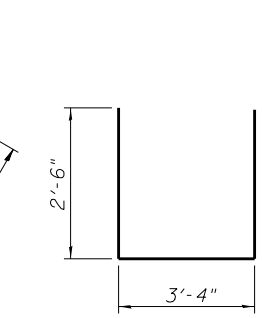
BAR s2(E) & s4(E)



BAR s3(E)



BAR u(E)



BAR u1(E)

Design firm
no. 184001036



| | | |
|---------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' = 1/4" | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

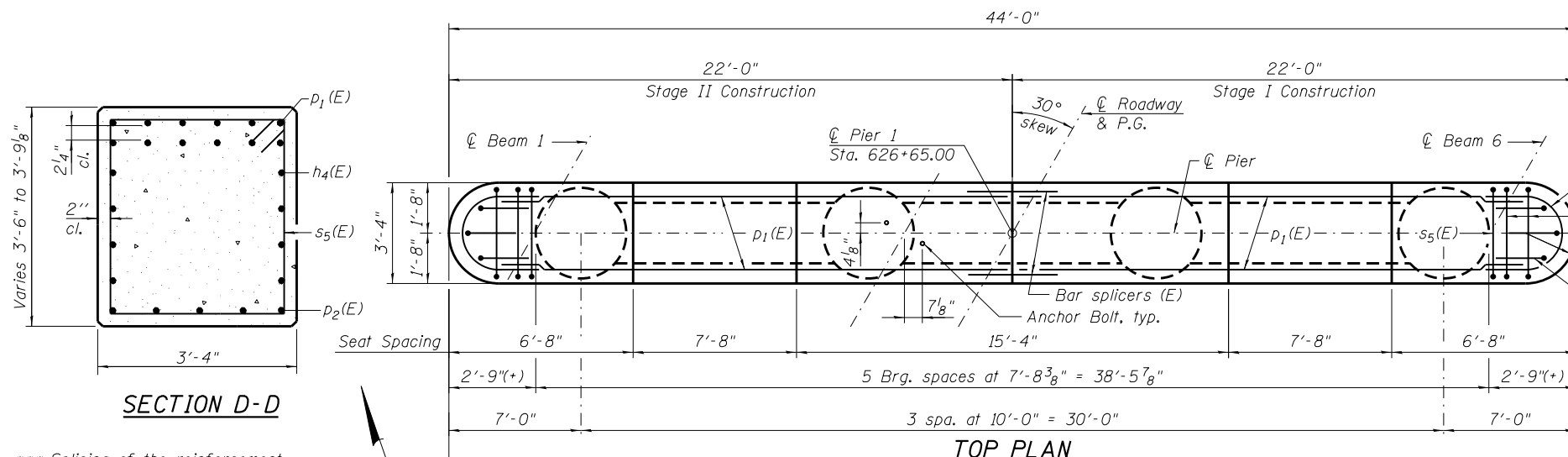
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 011-0514

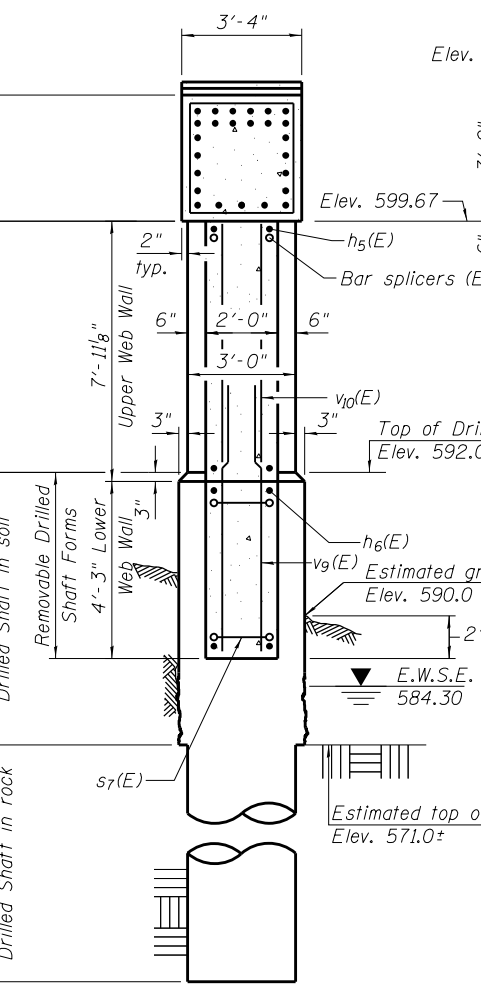
SHEET NO. 17 OF 31 SHEETS

| | | | | |
|-------------|--------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | (4)I; 136B-1 | CHRISTIAN | 97 | 57 |
| | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |

ILLINOIS FED. AID PROJECT

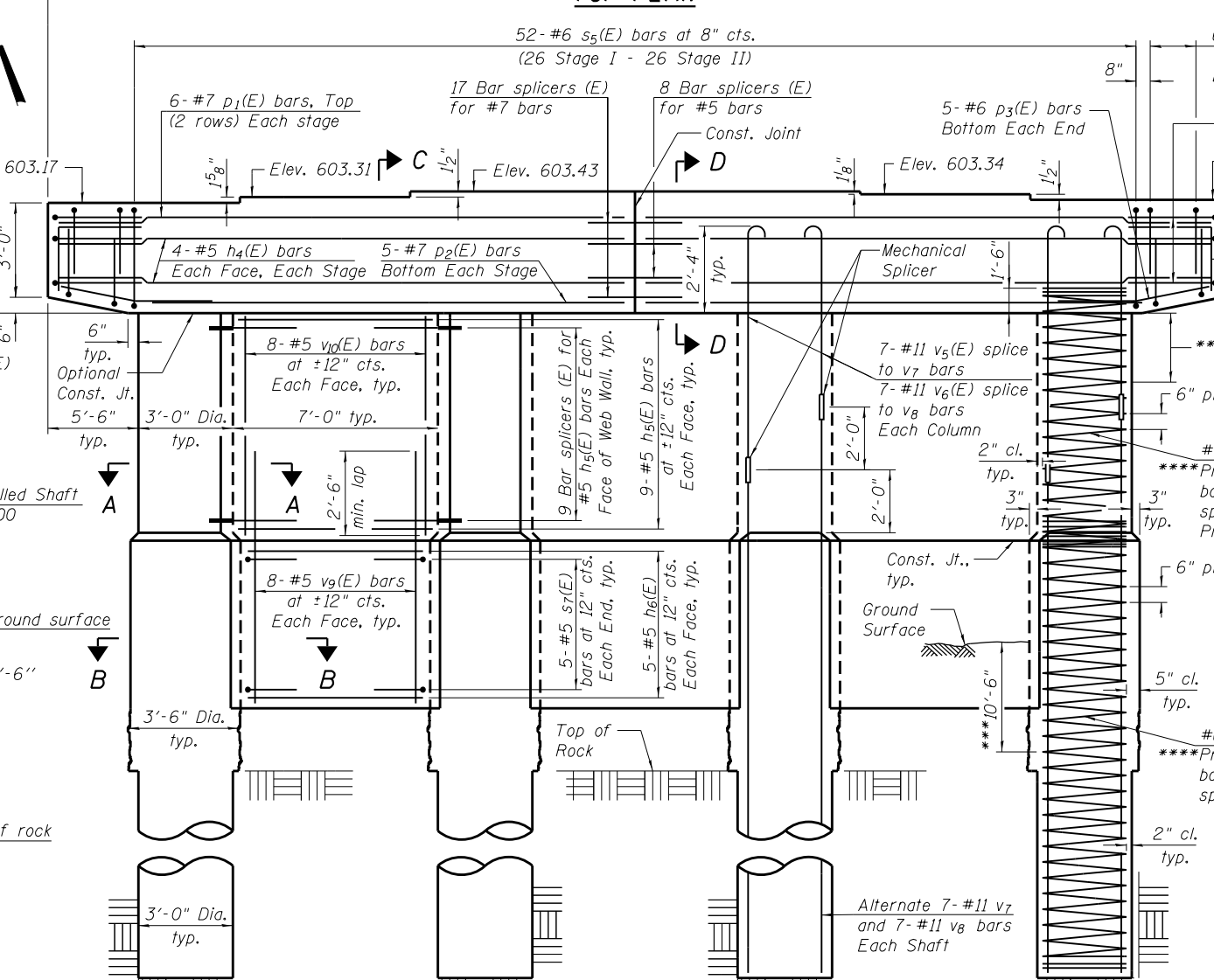


*** Splicing of the reinforcement will not be allowed in this region.
 **** Allowable substitution: Provide 1/2" extra turns top and bottom with 135° standard hook into core at ends of spiral.

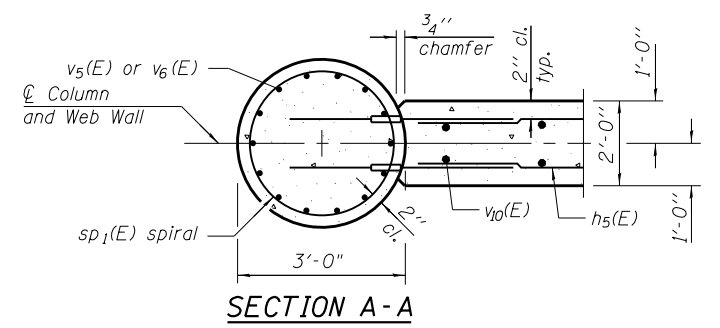


SECTION D-D

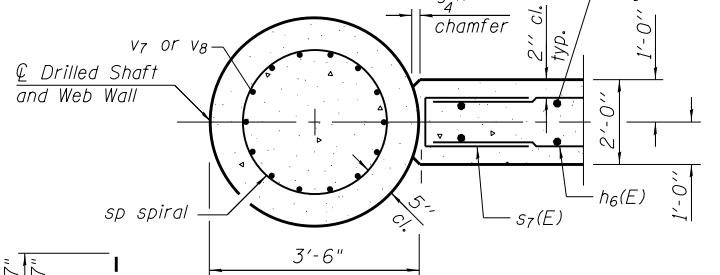
Note:
 Shafts must be poured the same day as the rock socket excavation.
 Contractor may elect to eliminate the use of Mechanical Splicers and use one length of v5(E) bars.
 Upper and lower webwalls at the stage construction line shall be constructed during stage II construction.



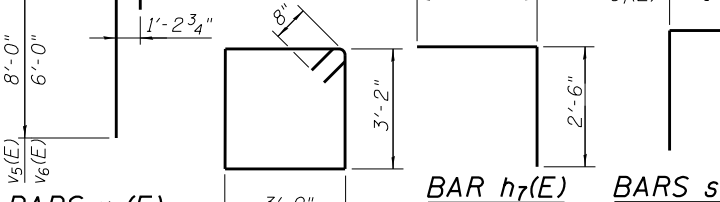
ELEVATION (Looking North)



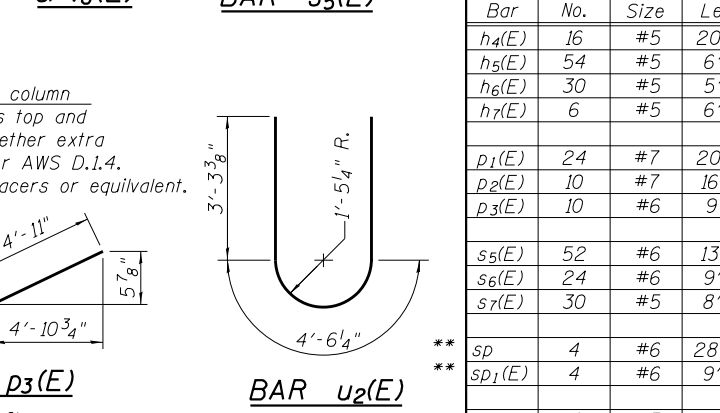
SECTION A-A



SECTION B-B



BARS v5(E) & v6(E), BAR h7(E), BARS s6(E) & s7(E)



BAR p3(E), BAR u2(E)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| h4(E) | 16 | #5 | 20'-2" | — |
| h5(E) | 54 | #5 | 6'-8" | — |
| h6(E) | 30 | #5 | 5'-8" | — |
| h7(E) | 6 | #5 | 6'-6" | └ |
| p1(E) | 24 | #7 | 20'-2" | — |
| p2(E) | 10 | #7 | 16'-8" | — |
| p3(E) | 10 | #6 | 9'-1" | └ |
| s5(E) | 52 | #6 | 13'-8" | □ |
| s6(E) | 24 | #6 | 9'-0" | └ |
| s7(E) | 30 | #5 | 8'-2" | └ |
| sp | 4 | #6 | 28'-10" | ≡ |
| sp1(E) | 4 | #6 | 9'-2" | ≡ |
| u2(E) | 12 | #5 | 11'-1" | └ |
| v5(E) | 28 | #11 | 9'-7" | └ |
| v6(E) | 28 | #11 | 7'-7" | └ |
| v7 | 28 | #11 | 30'-10" | — |
| v8 | 28 | #11 | 32'-10" | — |
| v9(E) | 48 | #5 | 6'-7" | — |
| v10(E) | 48 | #5 | 7'-7" | — |
| Structure Excavation | | Cu. Yd. | 20 | |
| Concrete Structures | | Cu. Yd. | 45.6 | |
| Reinforcement Bars | | Pound | 12,490 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 8,510 | |
| Bar Splicers | | Each | 133 | |
| Drilled Shaft in Soil | | Cu. Yd. | 30.0 | |
| Drilled Shaft in Rock | | Cu. Yd. | 8.4 | |
| Mechanical Splicers | | Each | 56 | |

- Construction Sequence for Web Wall:
- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
 - Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
 - If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
 - Construct Columns.
 - Construct upper web walls.

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

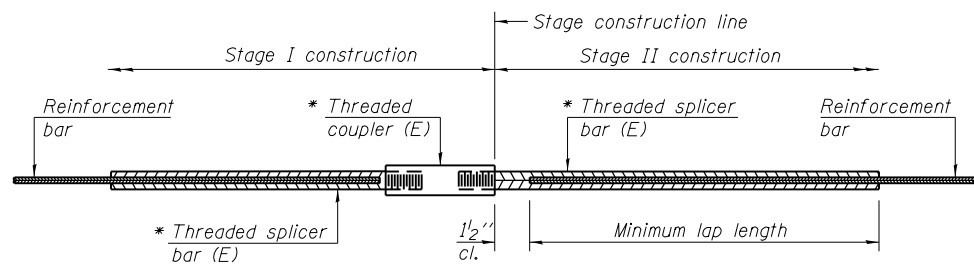
| | | |
|---------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - RPW | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - TBP | REVISED |
| PLOT SCALE = 0:2.0000 1' = 1/8" | DRAWN - AJF | REVISED |
| PLOT DATE = 9/26/2013 | CHECKED - MTH | REVISED |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 1
 STRUCTURE NO. 011-0514
 SHEET NO. 18 OF 31 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|--------------------|--------------|-----------|
| * | (41); 136B-1 | CHRISTIAN | 97 | 58 |
| * 75 (IL27) & 714 (IL 48) | | CONTRACT NO. 72A61 | | |

ILLINOIS FED. AID PROJECT



STANDARD BAR SPLICER ASSEMBLY

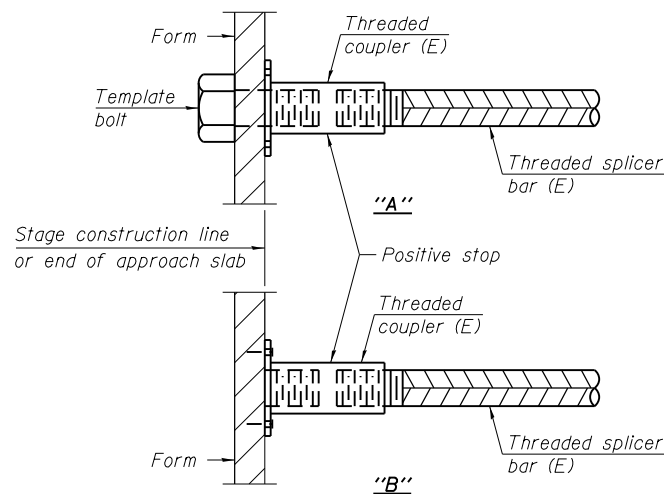
| Minimum Lap Lengths | | | | | | |
|------------------------|---------|---------|---------|---------|---------|---------|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 | Table 6 |
| 3, 4 | 1'-5" | 1'-11" | 2'-1" | 2'-4" | 2'-7" | 2'-11" |
| 5 | 1'-9" | 2'-5" | 2'-7" | 2'-11" | 3'-3" | 3'-8" |
| 6 | 2'-1" | 2'-11" | 3'-1" | 3'-6" | 3'-10" | 4'-5" |
| 7 | 2'-9" | 3'-10" | 4'-2" | 4'-8" | 5'-2" | 5'-10" |
| 8 | 3'-8" | 5'-1" | 5'-5" | 6'-2" | 6'-9" | 7'-8" |
| 9 | 4'-7" | 6'-5" | 6'-10" | 7'-9" | 8'-7" | 9'-8" |

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

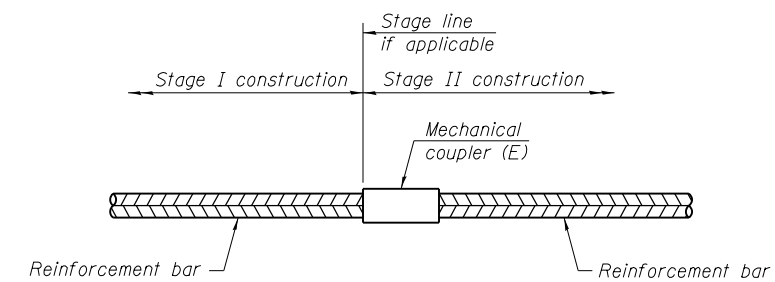
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|--------------------|----------|-------------------------|------------------------------|
| Deck | #5 | 573 | 3 |
| Abutment Diaphragm | #6 | 14 | 4 |
| Approach | #4 | 50 | 4 |
| Approach Footing | #5 | 92 | 3 |
| Abutment | #7 | 20 | 4 |
| Pier Cap | #5 | 16 | 4 |
| Pier Cap | #7 | 34 | 4 |
| Pier Web Wall | #5 | 216 | 4 |



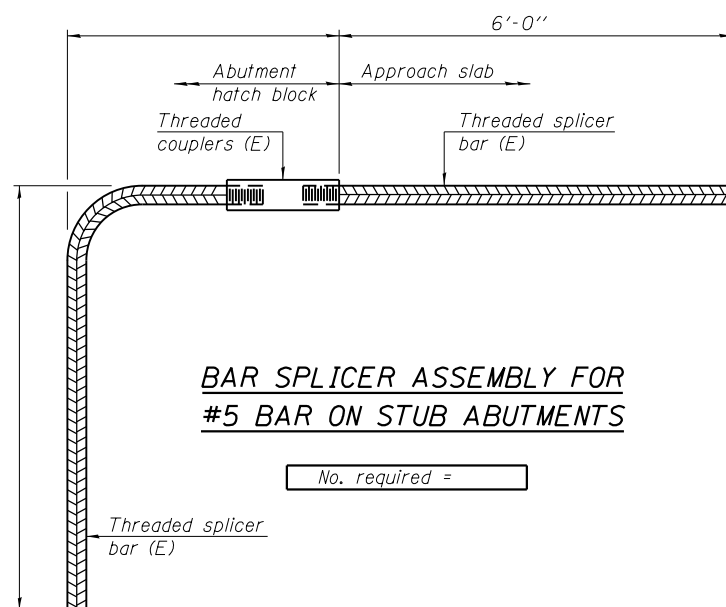
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
| Pier | #11 | 112 |
| | | |
| | | |
| | | |



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

8-31-12



| | | |
|---------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' / 1in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

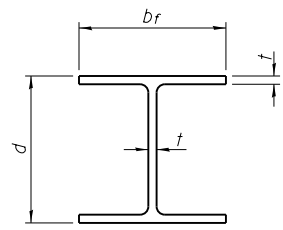
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 011-0514

SHEET NO. 20 OF 31 SHEETS

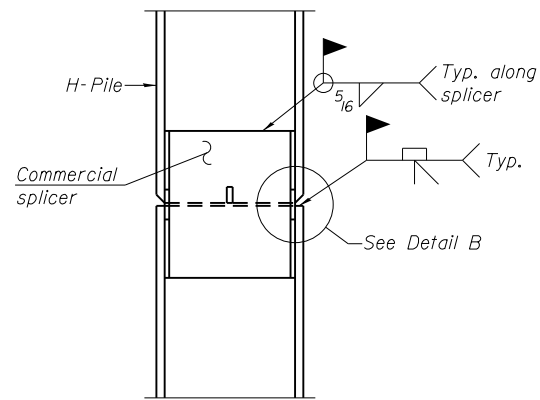
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------------------|--------------|--------------|-----------|
| • | (4)I; 136B-1 | CHRISTIAN | 97 | 60 |
| • | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. | 72A61 | |

ILLINOIS FED. AID PROJECT

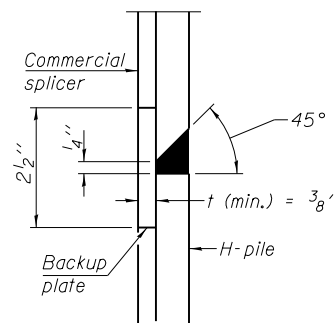


STEEL PILE TABLE

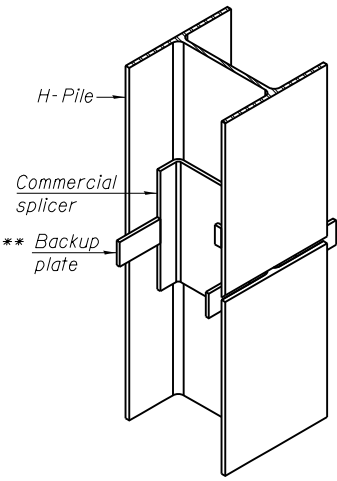
| Designation | Depth d | Flange width br | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 1 3/16" | 30" |
| x102 | 14" | 14 3/4" | 1/16" | 30" |
| x89 | 13 7/8" |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



ELEVATION

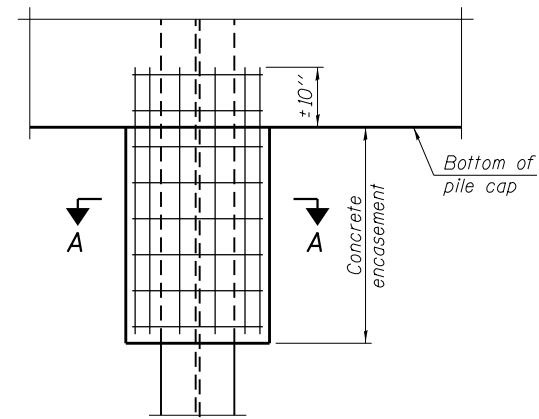


DETAIL "B"



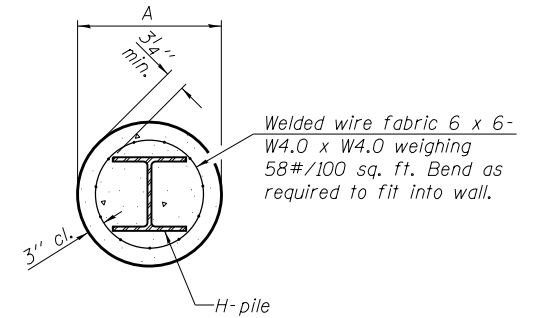
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



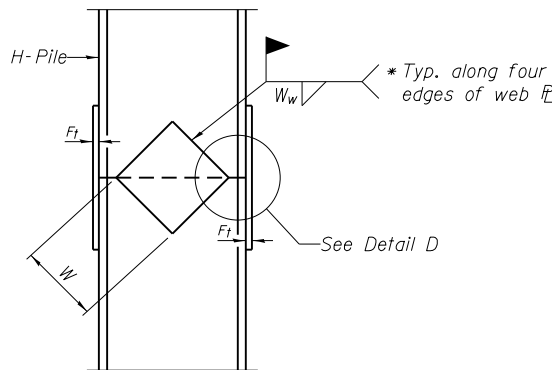
ELEVATION

PILE ENCASEMENT



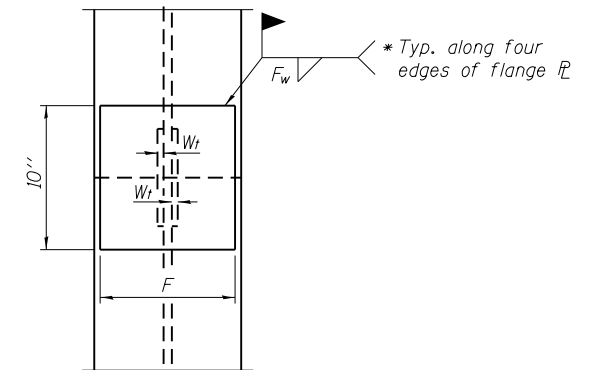
SECTION A-A

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

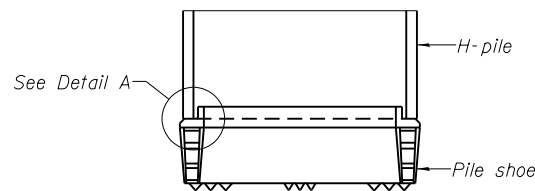


ELEVATION

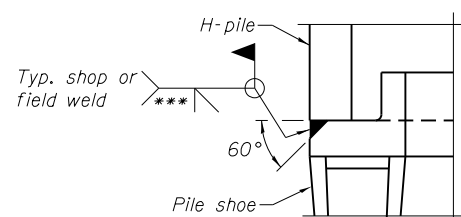
DETAIL D



END VIEW

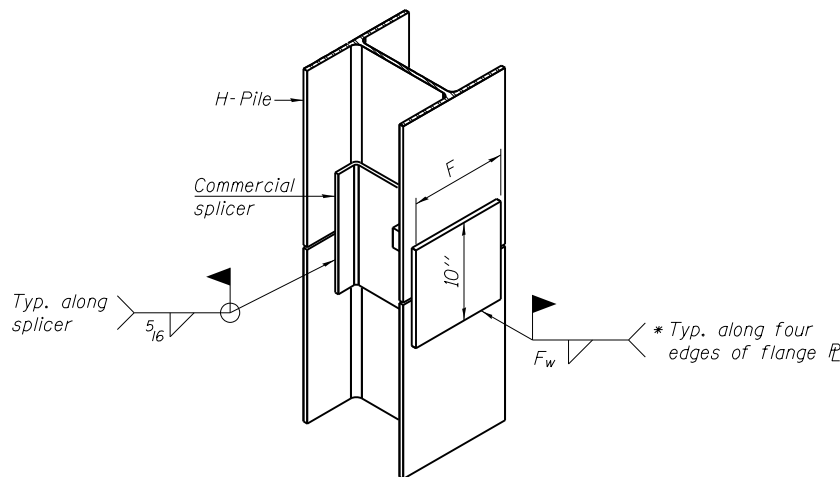


ELEVATION



DETAIL A

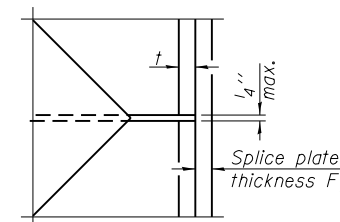
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



WELDED PLATE FIELD SPLICE

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

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

F-HP 1-27-12



| | | |
|--------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1" / 16' | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 011-0514

SHEET NO. 21 OF 31 SHEETS

| | | | | |
|----------------------------|--------------|-----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | (4)I; 136B-1 | CHRISTIAN | 97 | 61 |
| * 75 (IL 27) & 714 (IL 48) | | | CONTRACT NO. 72A61 | |

ILLINOIS FED. AID PROJECT



Illinois Department
of Transportation
Division of Highways
District 6

SOIL BORING LOG

Page 1 of 1

Date 12/14/12

ROUTE RT 48 DESCRIPTION IL 48 over Bear Creek LOGGED BY M. Tappan

SECTION 4 (I): 136B-1 LOCATION SE 1/4, SEC. 33, TWP. 12N, RNG. 3W, 3 PM

COUNTY Christian Co. DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 011-0514
Station 627+01

BORING NO. 2 S. Pier
Station 627+08
Offset 33.0ft RT
Ground Surface Elev. 587.6 ft

Surface Water Elev. 584.0 ft
Stream Bed Elev. 583.0 ft

Groundwater Elev.:
First Encounter 581.1 ft
Upon Completion Cored ft
After 120 Hrs. 585.6 ft

| DEPTH (ft) | SOIL DESCRIPTION | BLU (ft) | UCS (tsf) | MOIST (%) |
|------------|--|----------|-----------|-----------|
| 0 | Dark Gray Very Moist SILTY CLAY LOAM | 0 | | |
| 0 | | 0 | .30 | 29 |
| 0 | | 0 | B | |
| 584.10 | Light Brown and Dark Gray Wet SILTY CLAY | 0 | | |
| 0 | | 0 | .20 | 33 |
| 0 | | 0 | B | |
| 589.60 | Gray Dirty Fine SAND | 0 | | |
| 0 | | 0 | | |
| 579.10 | Light Brown and Light Blue Gray Wet SILTY CLAY | 0 | | |
| 0 | | 0 | .30 | 23 |
| 0 | | 0 | B | |
| 576.60 | Gray Dirty Fine SAND | 0 | | |
| 0 | | 0 | | |
| 0 | | 1 | | |
| 0 | | 0 | | |
| 0 | | 0 | | |
| -15 | | 0 | | |
| 0 | | 5 | | |
| 570.60 | Gray Poorly Indurated Micaceous SHALE | 4 | 4.5* | 12 |
| 569.60 | | 10 | P | |
| | Borehole continued with rock coring. | | | |
| -20 | | | | |

File Name: S:\SOLIS\GINT\FILES\CHRISTIAN\011-0514 BEAR CREEK\GPI Data Template\DOT\BPT_11_GDT Date Printed: 3/13/13
Latitude: 39.20.000N Longitude: 89.25.524W Datum: NAD83 Job Number: D-95-550-06

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced By Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

Note:
S. Pier in Boring Logs refers to Pier 1 in plans.



Illinois Department
of Transportation
Division of Highways
District 6

ROCK CORE LOG

Page 1 of 1

Date 12/14/12

ROUTE RT 48 DESCRIPTION IL 48 over Bear Creek LOGGED BY M. Tappan

SECTION 4 (I): 136B-1 LOCATION SE 1/4, SEC. 33, TWP. 12N, RNG. 3W, 3 PM

COUNTY Christian Co. CORING METHOD Water

STRUCT. NO. 011-0514
Station 627+01

BORING NO. 2 S. Pier
Station 627+08
Offset 33.0ft RT
Ground Surface Elev. 587.6 ft

CORING BARREL TYPE & SIZE NQ2WL

Core Diameter 2 in
Top of Rock Elev. 570.60 ft
Begin Core Elev. 568.60 ft

| DEPTH (ft) | RECOVERY (%) | ROQ (%) | CORE TIME (min/ft) | STRENGTH (tsf) |
|------------|--------------|---------|--------------------|----------------|
| 0 | | | | |
| 0 | 76 | 34 | | |
| 128.4 | | | | |
| 563.00 | 100 | 82 | | |
| 155.5 | | | | |
| 245.5 | 98 | 76 | | |
| 554.60 | 100 | 96 | | |
| 271.3 | | | | |
| 548.60 | | | | |

ROCK CORE 011-0514 BEAR CREEK\GPI Data Template\DOT\BPT_11_GDT 3/13/13

Color pictures of the cores Yes, On File
Cores will be stored for examination until 5 Years after Construction
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
RQD is the ratio of the total length of sound core specimens >4" to total length of core run BBS, form 138 (Rev. 8-99)



| | | |
|-----------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000" = 1' / in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 011-0514

SHEET NO. 23 OF 31 SHEETS

| | | | | |
|-------------|--------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | (4)I; 136B-1 | CHRISTIAN | 97 | 63 |
| | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |

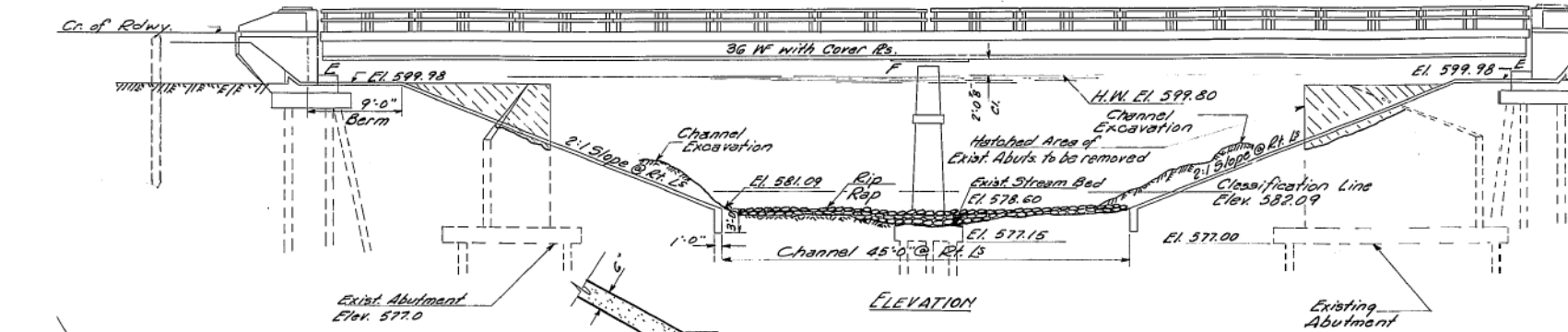
ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

| | | | | |
|-----------|---------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| S.A. 48 | 136 BR | Christian | 26 | 6 |
| F.A. | | | | |

SHEET NO. 1
8 SHEETS

B.N. #3 Cut in S.W. Wingwall Weibach R.R. Bridge 66' Rt. Sta. 626.90 Elev. 599.72
Existing Structure: R.C. Girder 2 Spans @ 40' on R.C. Pier & Abutments on Piles.
Entire Superstructure and part of abutments to be removed. Existing pier shall remain in place.
Use part of old structure to rip-rap around pier as directed by the Engineer.
Channel excavation by Bridge Contractor, to Elev. 581.0 within R.O.W. limits.

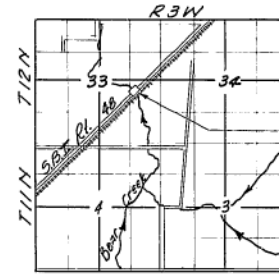


APPROACH PILE DATA
Type: Creosoted
Capacity 15 Tons
No. Req'd. 14
Est. Length 20 Ft.

WATERWAY INFORMATION

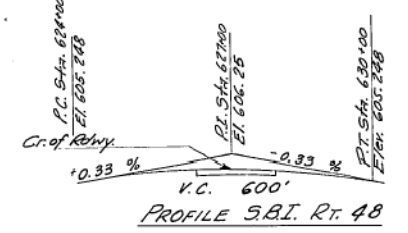
Drainage Area 28,800 Acres = 45.0^{sq} Mi.
Character Level, Rolling, Cultivated
Required Opening 30 Hr. Av. 1400 Sq. Ft.
Present opening 925 Sq. Ft.
Proposed opening 1444 Sq. Ft.

GENERAL NOTES
Class X Concrete shall be used throughout except in endposts and pier.
Class A Concrete shall be used in the pier.
Handrail Concrete shall be used in the end posts.
Sloped wall shall be reinforced with welded wire fabric 6"x6" mesh, #4 wires, weighing 58# per sq. ft.
Layout of sloped walls may be varied to suit ground conditions in the field as directed by the engineer.
Rivets 3/4" open holes, 1/2" unless noted.
Railings shall be adjusted to true alignment after curbs have been poured.
All rockers, bolsters, bearing plates, lead plates, pintles, and anchor bolts shall be fabricated and set in accordance with Article 31.15 of the Standard Specifications and are included in quantity of Structural Steel. Est. Wt. = 5070#
Expansion guards are included in quantity of Structural Steel. Est. Wt. = 1770#
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint.
See Articles 56.1 to 56.5 inclusive of the Standard Specifications.
All paint shall be furnished and applied by the contractor.
The contractor shall drive 1" test pile in a permanent location at the West Abutment before ordering the remaining piles.
All cover plates and beams to which cover plates are welded shall conform to the Specifications for Structural Steel for Welding ASTM designation A-373.

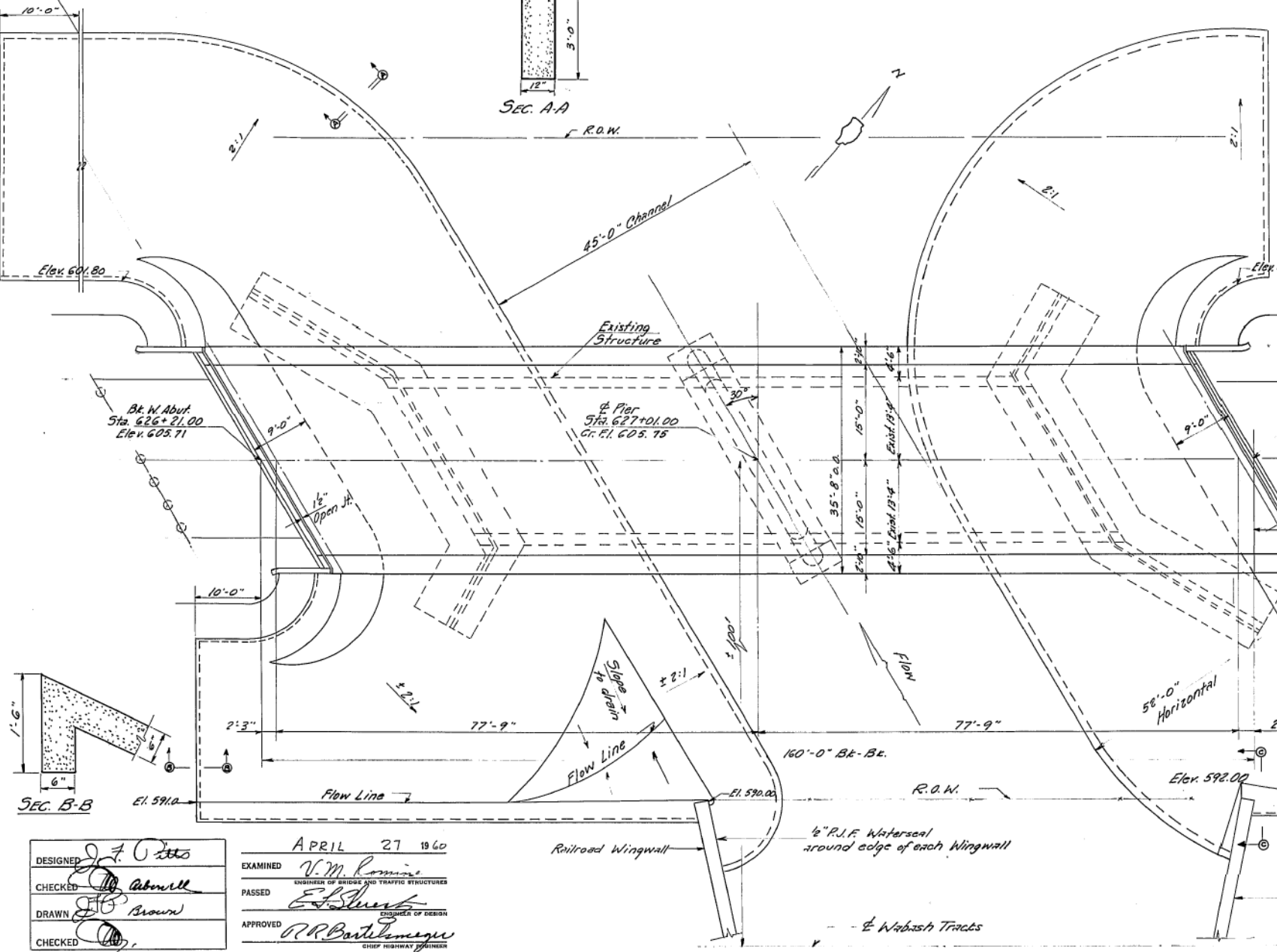


LOCATION PLAN

DESIGN STRESSES
f_c = 1400 psi. Super.
v.c. = 75 psi. Figs.
f_s = 20,000 psi. Reinf.
f_s = 18,000 psi. Struat.
n = 10
Loading H 20-S16-44



PROFILE S.B.I. RT. 48



PLAN

STATION 627+01
BUILT 196 BY
STATE OF ILLINOIS
SBI 48 SEC. 136 BR
FA PROJ. F-160 (18)
LOADING H 20-S16

NAME PLATE
(See Std 213)

TOTAL BILL OF MATERIAL

| ITEM | SUPER | SUB | TOTAL |
|----------------------------------|----------|---------|---------|
| Rem. Exist. Struct. | Each | | 1 |
| Expansion Bolts 3/4" | Each | 70 | 70 |
| * Class A Exc. Struct. | Cu. Yds. | | 150 |
| * Class B Exc. Struct. | Cu. Yds. | | 100 |
| F & E Str. Steel | Lbs. | 209,670 | 209,670 |
| Handrail Concrete | Cu. Yds. | 2.3 | 2.3 |
| Class A Concrete | Cu. Yds. | 45.4 | 45.4 |
| Class X Concrete | Cu. Yds. | 156.8 | 245.5 |
| Reinforcement Bars Lbs. | | 6950 | 37,680 |
| F & E Metal Handrail | Lin. Ft. | 316 | 316 |
| Fur. Untr. Pile up 30' | Lin. Ft. | | 96 |
| Eur. Creos. Pile up 20' L.W. Ft. | | | 280 |
| Drive Timber Pile | Lin. Ft. | | 376 |
| Fur. Conc. Piles | Lin. Ft. | | 403 |
| Test Pile Conc. | Each | | 1 |
| Drive Conc. Pile | Lin. Ft. | | 403 |
| Name Plates | Each | | 1 |
| Temp. Bridge Complete | Each | | 1 |
| Sloped Wall | Sq. Yds. | | 1990 |

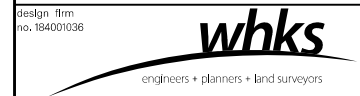
PROJ. F-160 (18)
GENERAL PLAN & ELEVATION
BEAR CREEK
SBI RT 48 SEC. 136-BR
CHRISTIAN COUNTY
STA. 627+01.00

DESIGNED: J. J. O'Neil
CHECKED: J. J. O'Neil
DRAWN: J. J. O'Neil
CHECKED: J. J. O'Neil

APRIL 27 1960
EXAMINED: V. M. Romine
PASSED: E. J. Smith
APPROVED: R. R. Bartelme
CHIEF HIGHWAY ENGINEER

Rev. 8-31-60 Approach Piles Added.
8-16-60 Removed from Elev. 580 Cu Yds. Embankment and 650 Cu Yds. Borrow Excavation from each Abut. - Total Bill of Material; removed Borrow Excavation, 1300 Cu. Yds. and Broken Concrete Rip-Rap - 190 Sq. Yds. *Rev. 5/16/62 Quantity of Reinf. Bars increased.*

FOR INFORMATION ONLY



| | | |
|----------------------------------|----------------|---------|
| USER NAME = OPERATOR | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' = 1 in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
STRUCTURE NO. 011-0514

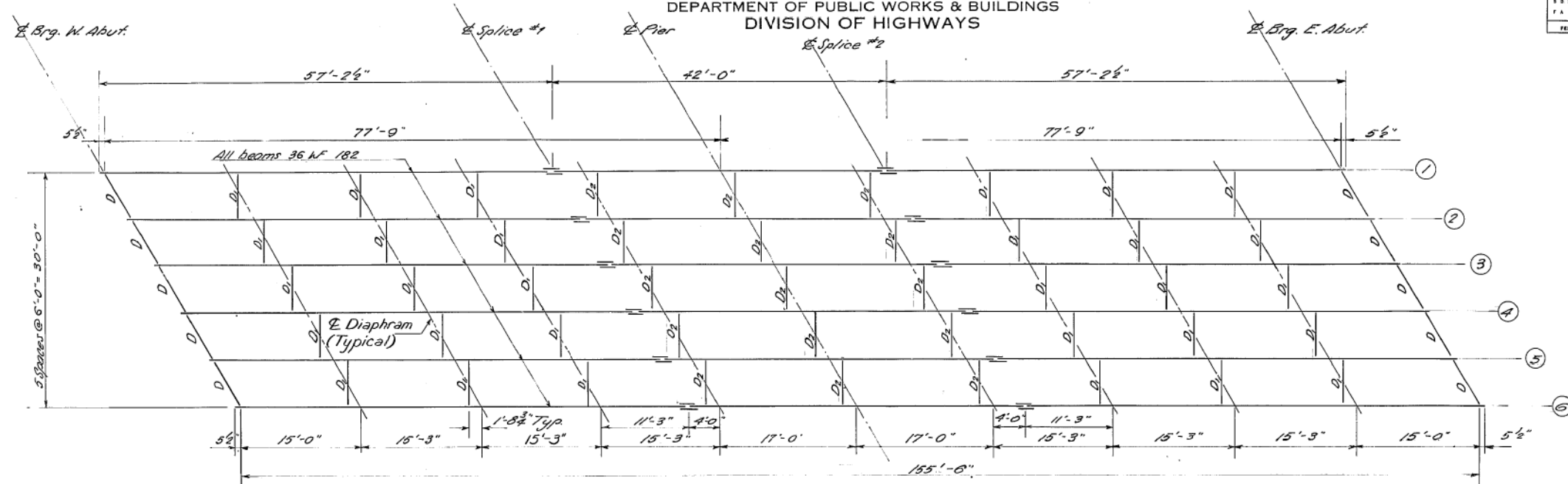
SHEET NO. 26 OF 31 SHEETS

| | | | | |
|-------------|--------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | (41); 136B-1 | CHRISTIAN | 97 | 66 |
| | 75 (IL 27) & 714 (IL 48) | CONTRACT NO. 72A61 | | |

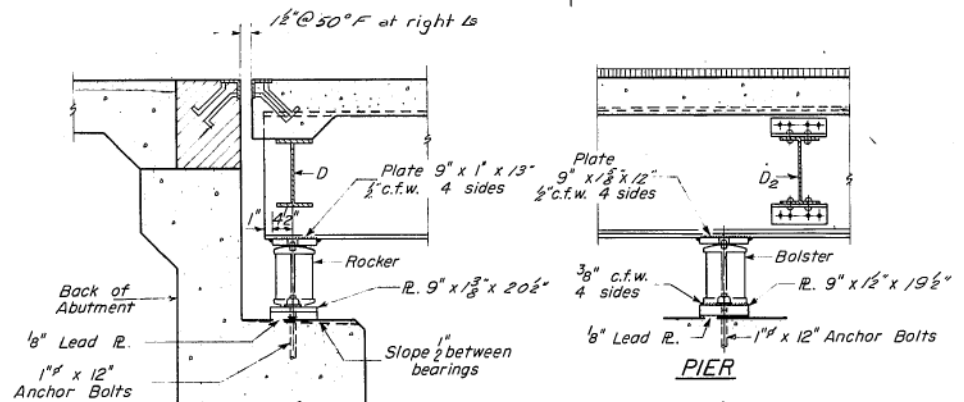
ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

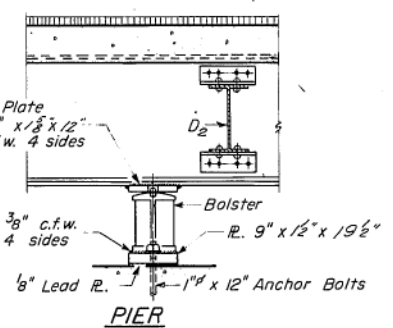
| | | | | |
|-------------------------|---------|-----------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 48 | 136BR | Christian | 26 | 8 |
| SHEET NO. 8 OF 8 SHEETS | | | | |



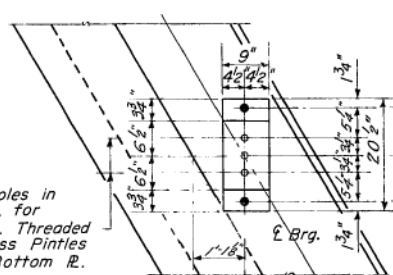
STRUCTURAL STEEL LAYOUT



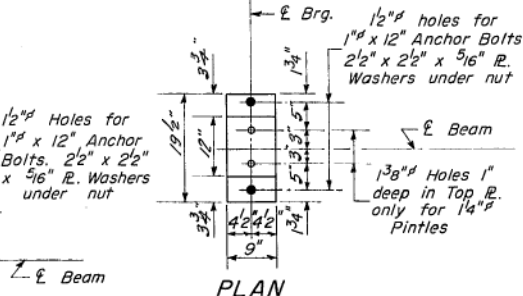
SECTION AT ABUTMENT



PIER

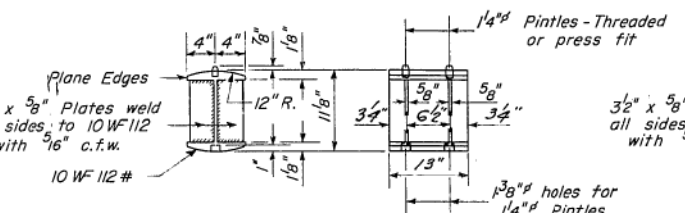


PLAN

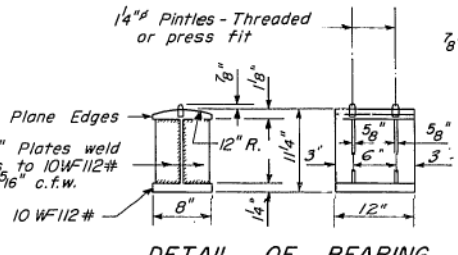


PLAN

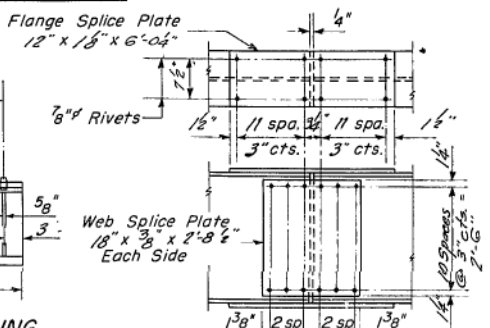
DETAIL OF PINTLE



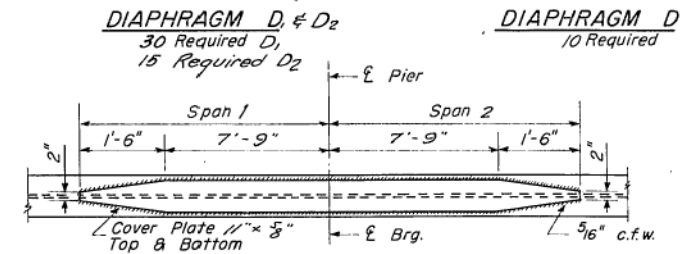
DETAIL OF BEARING AT ABUTMENTS



DETAIL OF BEARING AT PIER



DETAIL OF SPLICE

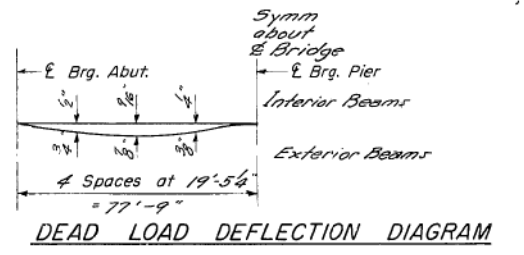


DIAPHRAGM D1 & D2

DIAPHRAGM D



DETAIL OF COVER PLATES



DEAD LOAD DEFLECTION DIAGRAM

ELEVATION TOP OF BEAMS

| BEAM | & Brg. W. Abut. | & Splice 1 | & Pier | & Splice 2 | & Brg. E. Abut. |
|------|-----------------|------------|--------|------------|-----------------|
| 1 #6 | 604.90 | 604.90 | 604.90 | 604.90 | 604.90 |
| 2 #5 | 605.02 | 605.02 | 605.02 | 605.02 | 605.02 |
| 3 #4 | 605.08 | 605.08 | 605.08 | 605.08 | 605.08 |

| | |
|----------|---------------|
| DESIGNED | J. F. Otto |
| CHECKED | W. A. Sausman |
| DRAWN | W. A. Sausman |
| CHECKED | W. A. Sausman |

| | |
|---------------|-----------------|
| APRIL 27 1960 | |
| EXAMINED | V. M. Roszinski |
| PASSED | E. J. Shurt |
| APPROVED | R. R. Benthley |

I-2-R Re-drawn 9-23-59

STRUCTURAL STEEL
S.B.I. RT. 48 Sec. 136-BR
CHRISTIAN COUNTY
STATION 627+01.00

FOR INFORMATION ONLY



| | | |
|----------------------------------|----------------|---------|
| USER NAME = *OPERATOR* | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' = 1 in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

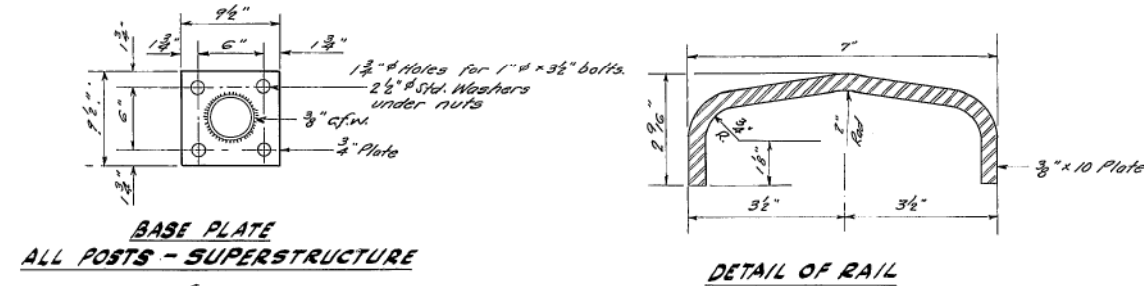
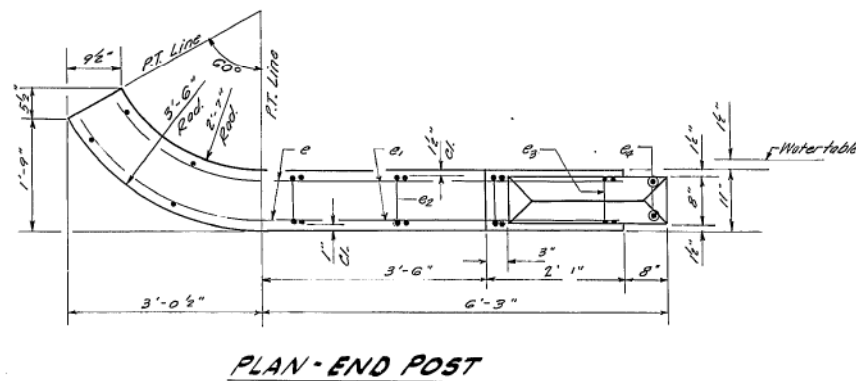
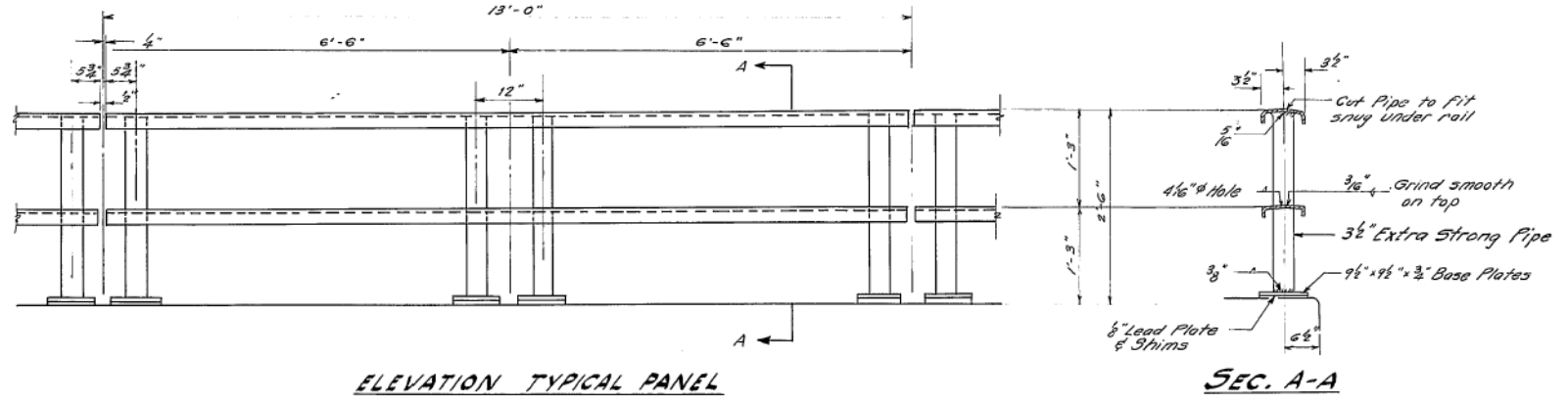
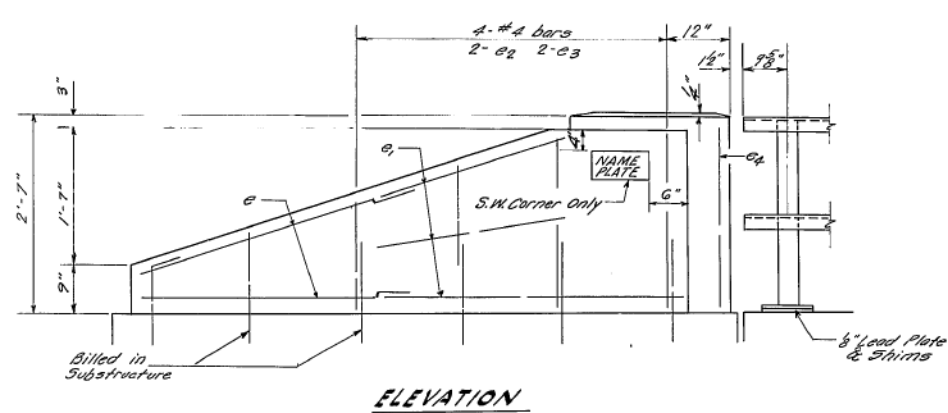
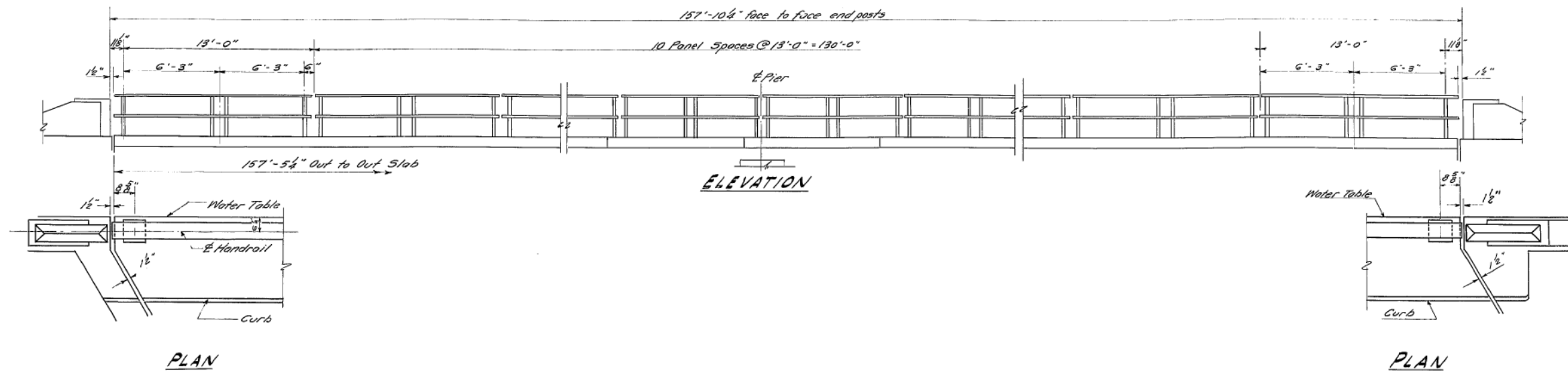
EXISTING BRIDGE PLANS
STRUCTURE NO. 011-0514

SHEET NO. 28 OF 31 SHEETS

| | | | | |
|---------------------------|--------------|-----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 75 (IL 27) & 714 (IL 48) | (4)I; 136B-1 | CHRISTIAN | 97 | 68 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72A61 | |

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

| | | | | |
|-----------------------|----------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| S. & L. 48 P.A. | 136BR | Christian | 26 | 9 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | 8 SHEETS |



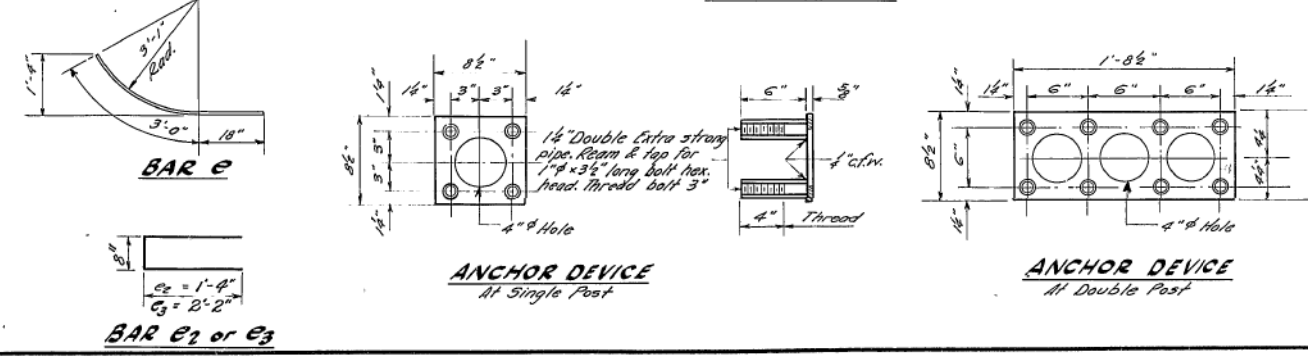
BILL OF MATERIAL

| | | |
|--------------------|----------|-----|
| Handrail Concrete | Cu. Yd. | 2.3 |
| Reinforcement Bars | Lbs. | 190 |
| Metal Handrail | Lin. Ft. | 316 |

GENERAL NOTES
All End Posts shall be Handrail Concrete
Provide 1- 1/8" shim and 2- 1/2" shims for 50% of the Posts.
For Connection Details for Bent Plate Rail Panels see Sh. 4A.

BILL OF REINFORCEMENT

| Bar | No. | Size | Length | Shops |
|-----|-----|------|--------|-------|
| e | 16 | #4 | 4'-6" | |
| e1 | 24 | #4 | 5'-6" | |
| e2 | 8 | #4 | 3'-4" | |
| e3 | 8 | #4 | 5'-0" | |
| e4 | 8 | #4 | 2'-3" | |

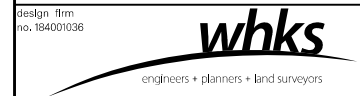


HANDRAIL
SBI RT. 48 SEC. 136 BR
CHRISTIAN COUNTY
Sta. 627+01

DESIGNED: J.F. Panko
CHECKED: J. Abornell
DRAWN: B. Bunn
CHECKED: [Signature]

APRIL 27 1960
EXAMINED: V.M. Romine
PASSED: P.S. Shurt
APPROVED: P.R. Bartelme

FOR INFORMATION ONLY



| | | |
|---------------------------------|----------------|---------|
| USER NAME = \$OPERATOR\$ | DESIGNED - TJZ | REVISED |
| FILE NAME = 0110514-72A61.dgn | CHECKED - CWC | REVISED |
| PLOT SCALE = 0:2.0000 1' = 1/4" | DRAWN - DLH | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - TJZ | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
STRUCTURE NO. 011-0514
SHEET NO. 29 OF 31 SHEETS

| | | | | |
|---------------------------|--------------------------|------------------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | (4)I; 136B-1 | CHRISTIAN | 97 | 69 |
| | 75 (IL 27) & 714 (IL 48) | CHRISTIAN COUNTY | CONTRACT NO. 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

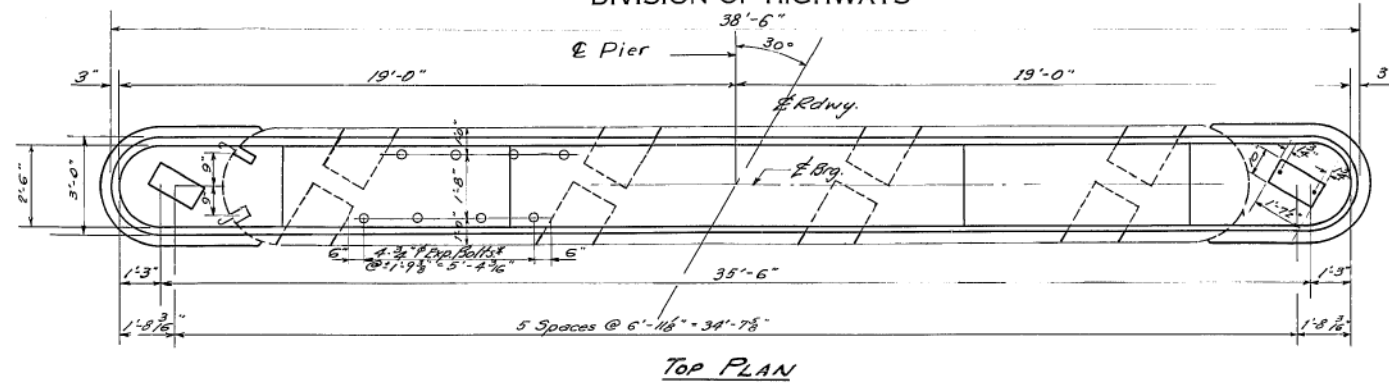
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

| | | | | |
|-----------------------|----------|-----------|------------------|-----------|
| ROUTE NO. | DISTRICT | COUNTY | TOTAL SHEETS | SHEET NO. |
| S.B.I. 48 P.A. | 136BR | Christian | 26 | 11 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT | |

SHEET NO. 5
8 SHEETS

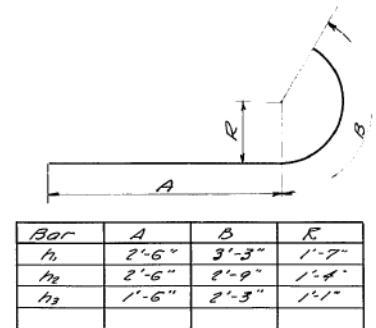
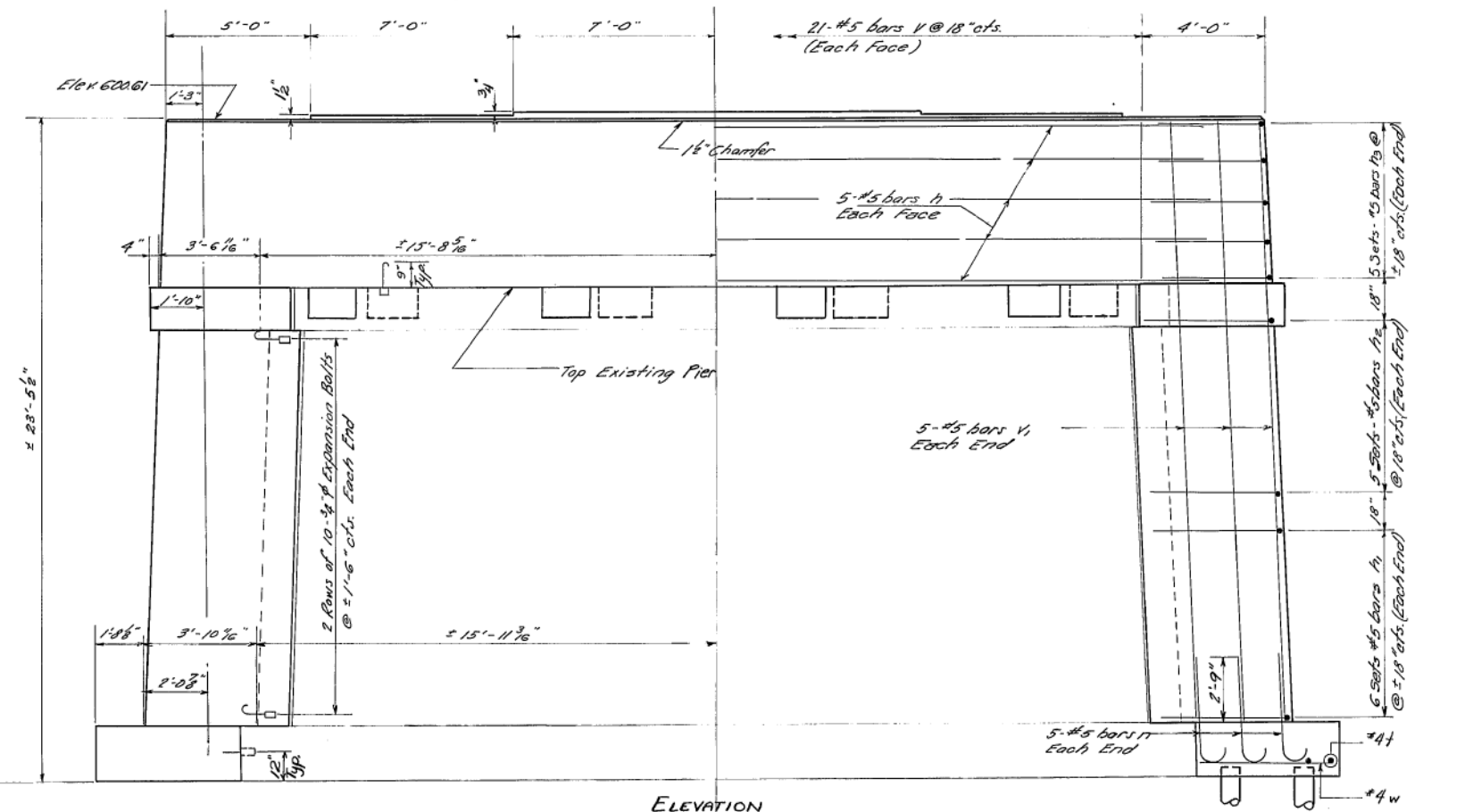
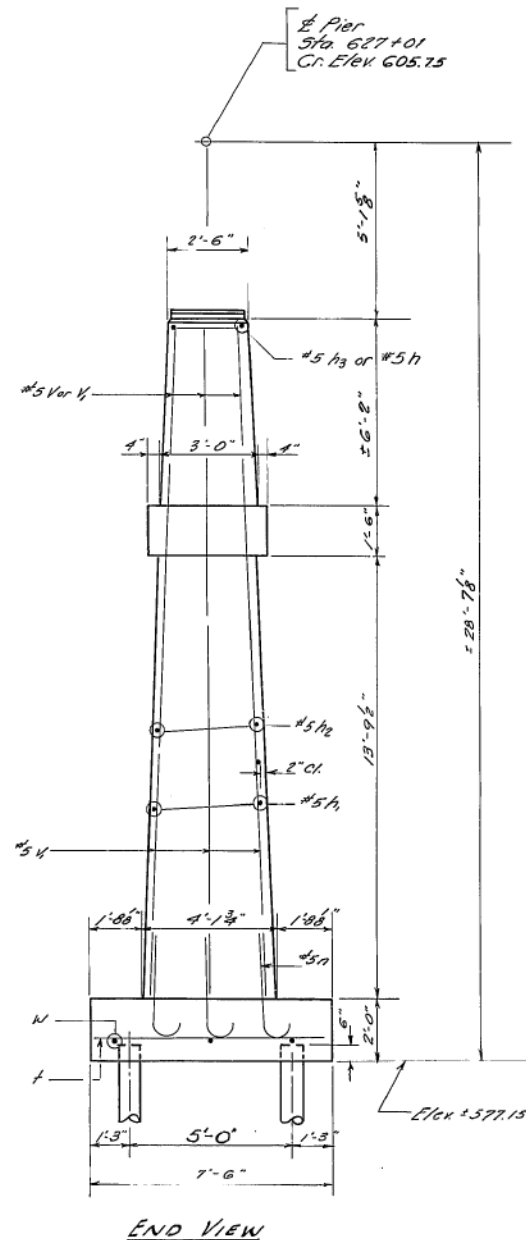
FILE DATA

Type: Untreated Timber
Capacity: 20 Tons
Lof. Length: 12 Ft.
No. Ropes: 8



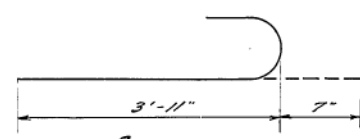
Note: All existing beam pockets shall be scraped, cleaned, and filled with concrete

*Typical spacing of expansion bolts between beam pockets, top of existing pier. See Standard 2126-1 for Expansion Bolt Details. Hooked bolt shall extend 9" into new concrete



| Bar | A | B | R |
|-----|-------|-------|-------|
| h1 | 2'-6" | 3'-3" | 1'-7" |
| h2 | 2'-6" | 2'-9" | 1'-4" |
| h3 | 1'-6" | 2'-3" | 1'-1" |

BARs h1, h2, & h3



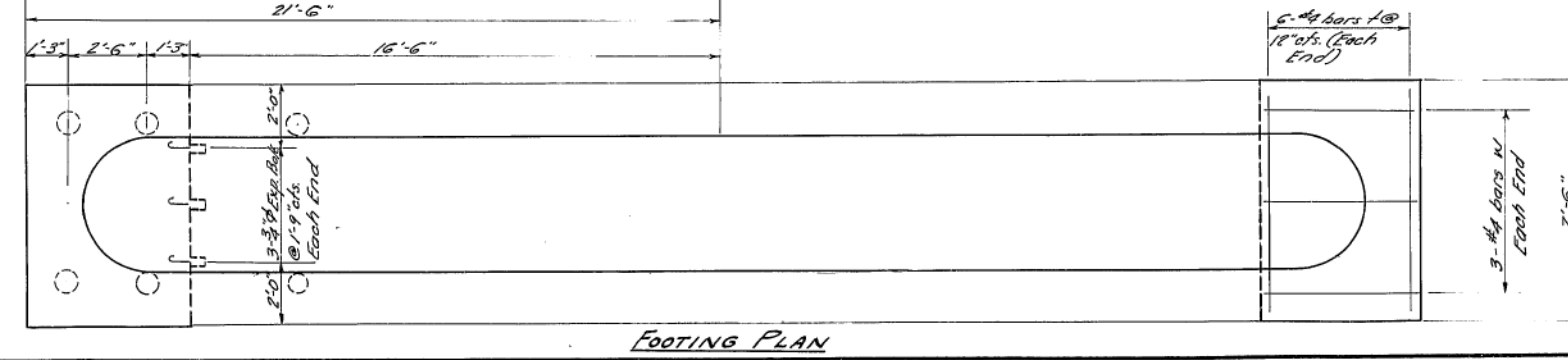
BAR-n

| Bar | No. | Size | Length | Shape |
|-----|-----|------|--------|-------|
| h1 | 20 | #5 | 18'-0" | — |
| h2 | 24 | #5 | 5'-9" | — |
| h3 | 20 | #5 | 5'-3" | — |
| h3 | 20 | #5 | 3'-9" | — |
| n | 10 | #5 | 4'-6" | — |
| t | 18 | #4 | 7'-3" | — |
| v | 42 | #5 | 5'-9" | — |
| v | 10 | #5 | 21'-3" | — |
| w | 6 | #4 | 4'-9" | — |

| Material | Quantity | Unit |
|------------------------|----------|----------|
| Class A Concrete | 45.4 | Cu. Yds. |
| Reinforcement Bars | 1300 | Lbs. |
| Expansion Bolts (3/4") | 70 | Each |
| Untreated Timber Piles | 96 | Lin. Ft. |

PIERS
S.B.I. Rt. 48 - Sec. 136 BR
CHRISTIAN COUNTY
STA. 627+01

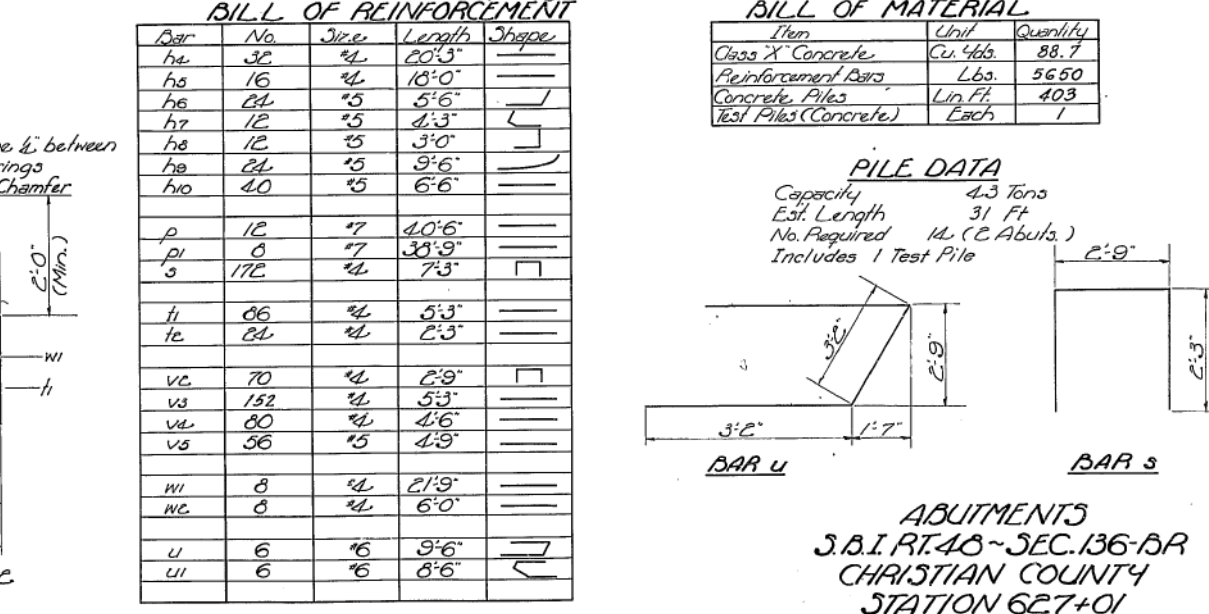
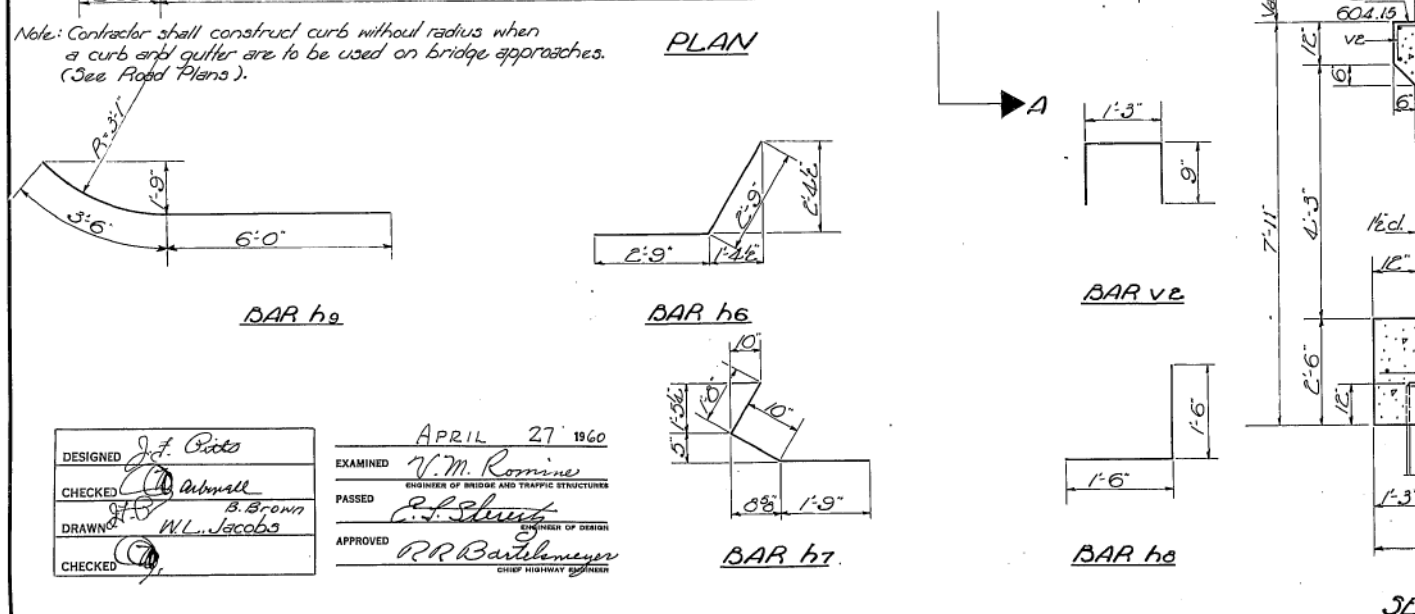
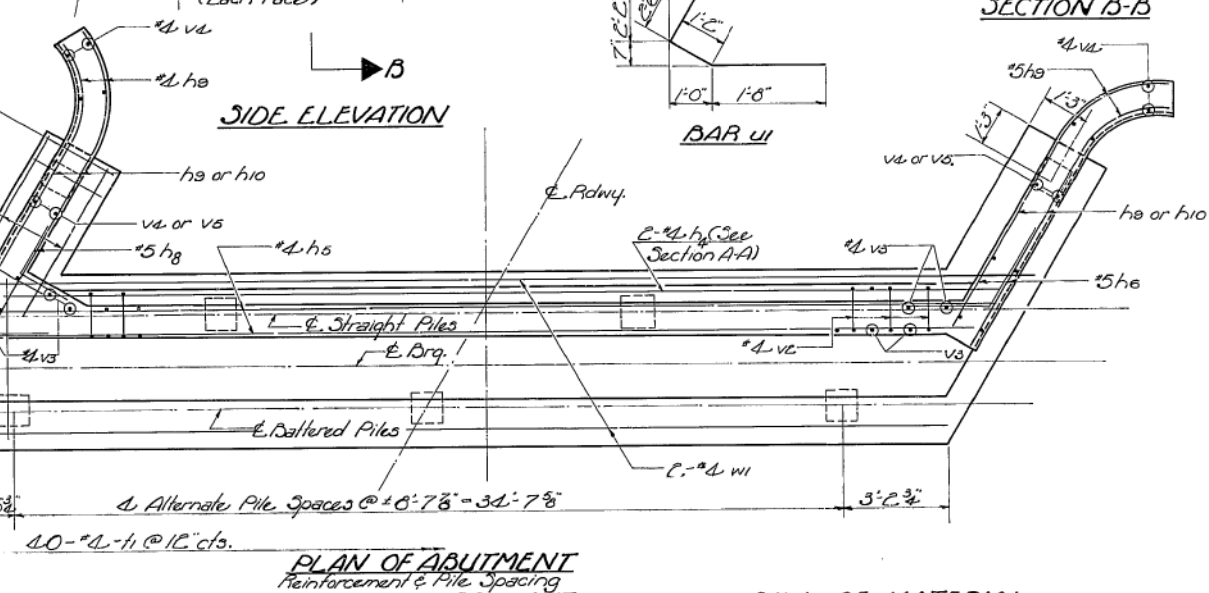
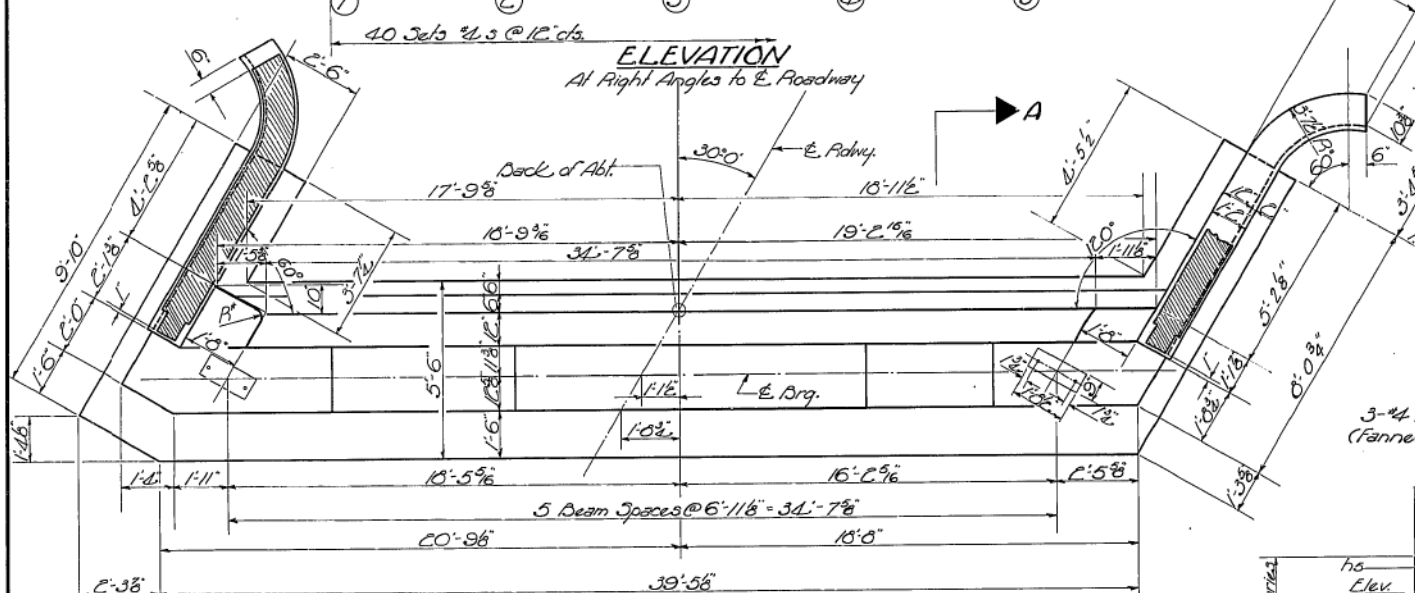
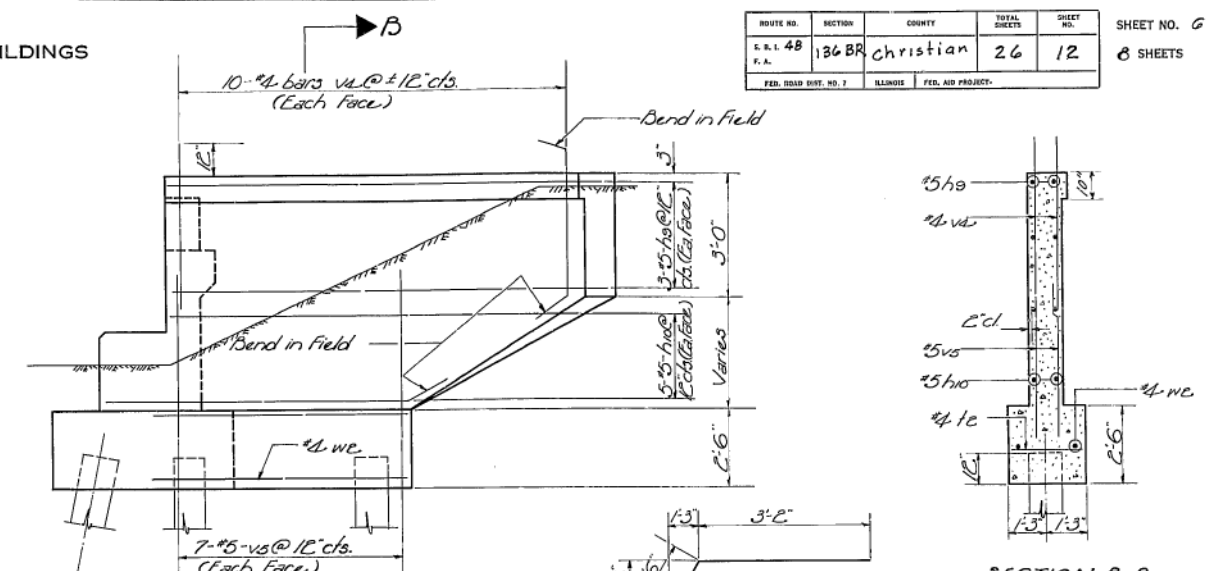
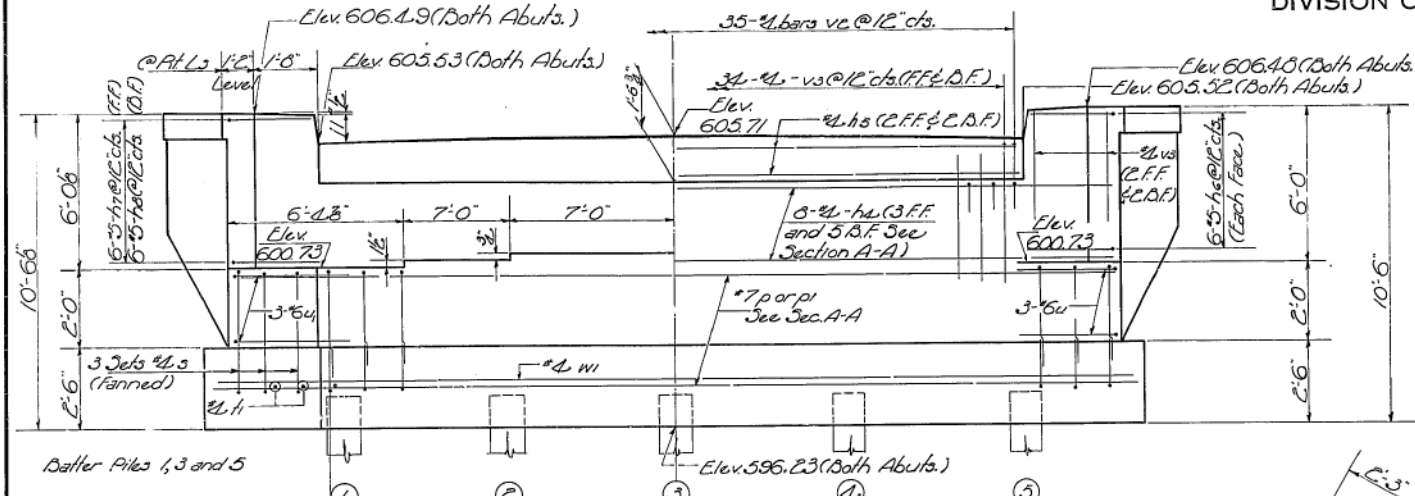
DESIGNED: J. F. Pitts
CHECKED: J. C. Brown
DRAWN: J. C. Brown
APPROVED: R.R. Bartchmeyer
APRIL 27 1960
EXAMINED: V.M. Roman
PASSED: C.P. Shurtz



FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

| | | | | | |
|-----------------------|----------|------------------|--------------|-----------|-------------------------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. 6 8 SHEETS |
| U.S. 48 | 136 BR | CHRISTIAN | 26 | 12 | |
| F.A. | | | | | |
| FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT | | | |



PLAN OF ABUTMENT
Reinforcement & Pile Spacing

BILL OF REINFORCEMENT

| Bar | No. | Size | Length | Shape |
|-----|-----|------|--------|-------|
| h9 | 32 | #4 | 20'-3" | |
| h8 | 16 | #4 | 18'-0" | |
| h6 | 24 | #5 | 5'-6" | |
| h7 | 12 | #5 | 4'-3" | |
| h8 | 12 | #5 | 3'-0" | |
| h9 | 24 | #5 | 9'-6" | |
| h10 | 40 | #5 | 6'-6" | |
| p | 12 | #7 | 40'-6" | |
| pl | 0 | #7 | 38'-9" | |
| s | 172 | #4 | 7'-3" | |
| ti | 06 | #4 | 5'-3" | |
| te | 24 | #4 | 2'-3" | |
| vc | 70 | #4 | 2'-9" | |
| vs | 152 | #4 | 5'-3" | |
| va | 80 | #4 | 4'-6" | |
| vs | 56 | #5 | 4'-3" | |
| wi | 8 | #4 | 21'-9" | |
| wc | 0 | #4 | 6'-0" | |
| u | 6 | #6 | 9'-6" | |
| ui | 6 | #6 | 8'-6" | |

BILL OF MATERIAL

| Item | Unit | Quantity |
|-----------------------|----------|----------|
| Class X Concrete | Cu. Yds. | 88.7 |
| Reinforcement Bars | Lbs. | 5650 |
| Concrete Piles | Lin. Ft. | 403 |
| Test Piles (Concrete) | Each | 1 |

PILE DATA

Capacity 4.3 Tons
Est. Length 31 Ft
No. Required 14 (2 Abuts.)
Includes 1 Test Pile

Note: Contractor shall construct curb without radius when a curb and gutter are to be used on bridge approaches. (See Road Plans).

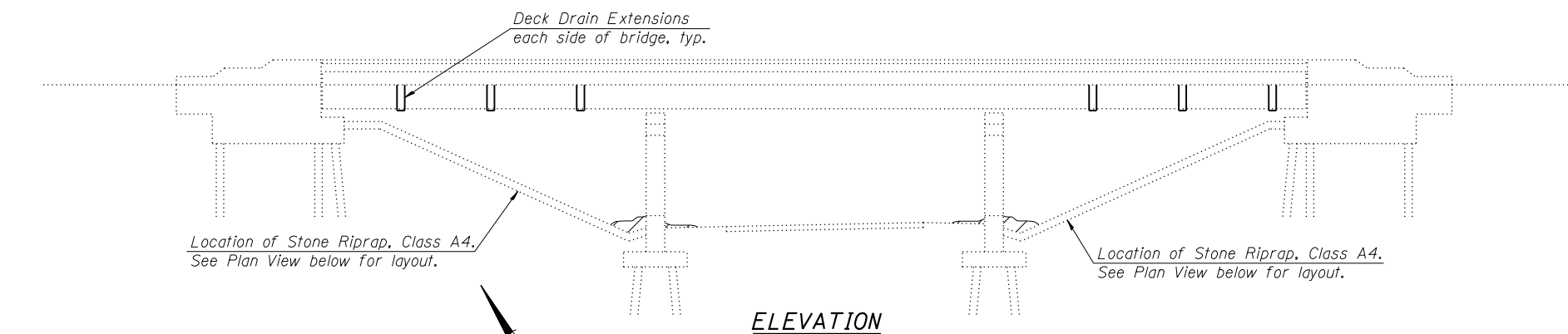
DESIGNED J.F. Gatto
CHECKED B. Brown
DRAWN W.L. Jacobs
APPROVED P.R. Barthelmeier

EXAMINED V.M. Romine
PASSED P.S. Shurt
APPROVED P.R. Barthelmeier

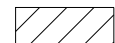

APRIL 27 1960

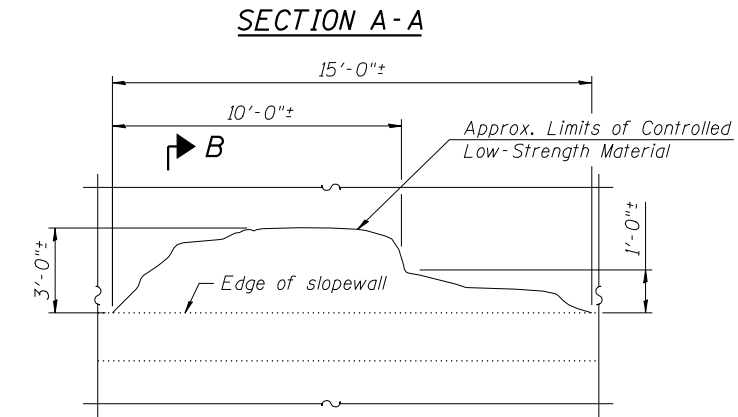
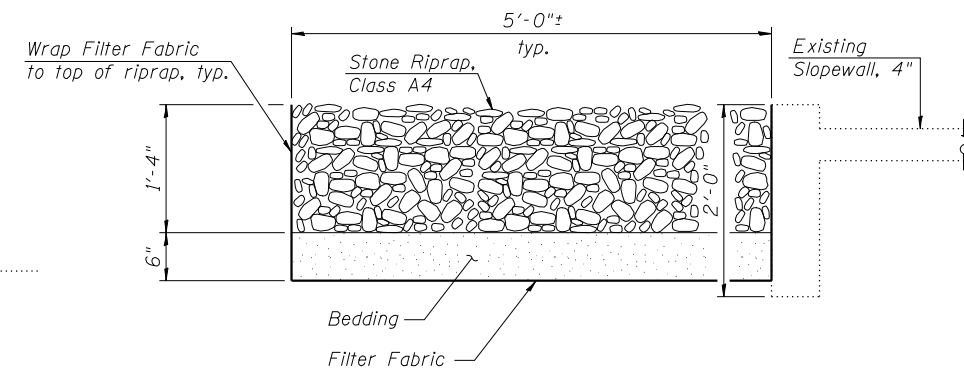
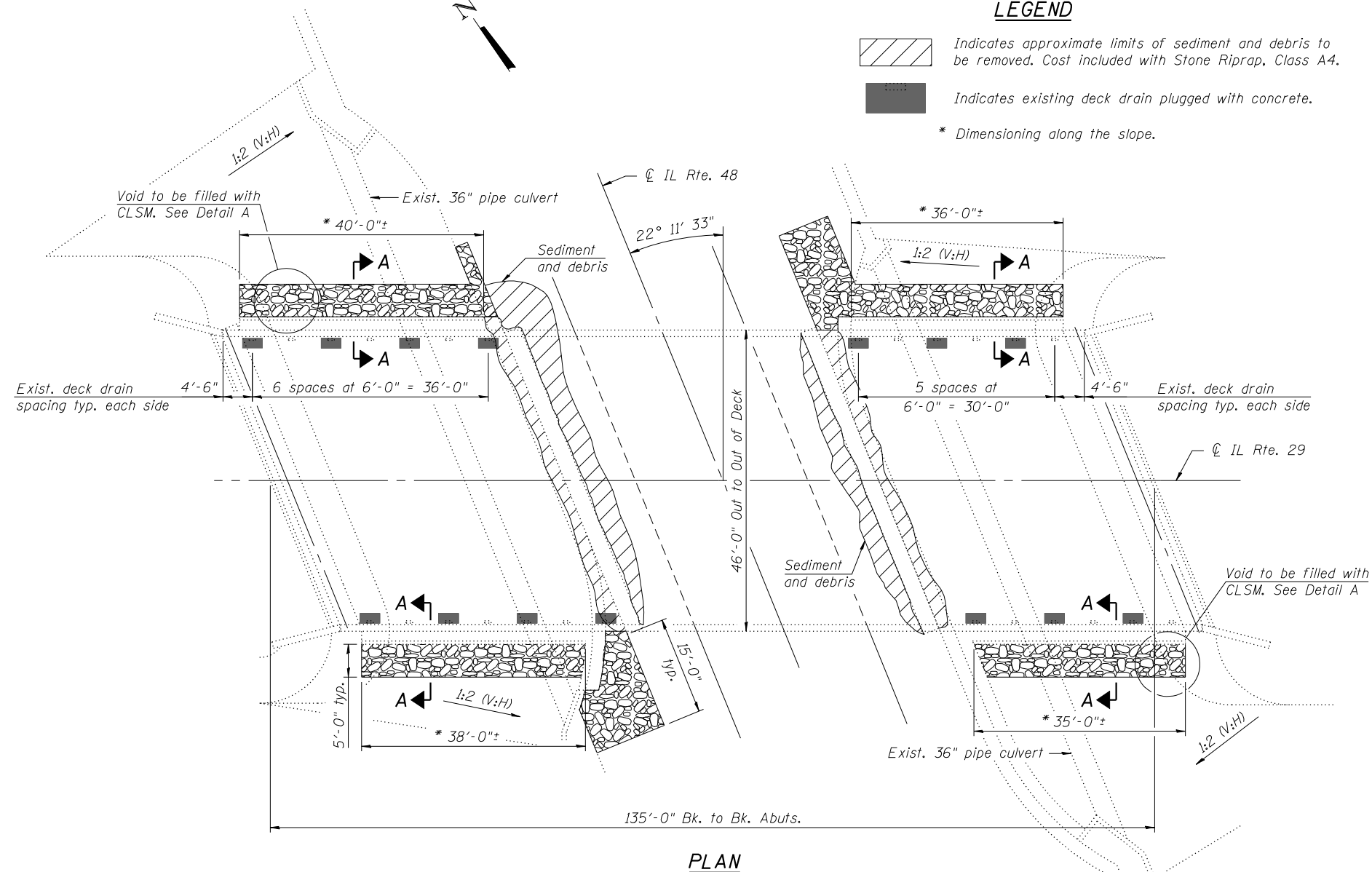
FOR INFORMATION ONLY

Scope of Work: Repair erosion along the edge of existing slopewalls, install riprap and remove sediment and debris from IL 48 roadway and from behind piers. Install Deck Drain Extensions, clean existing deck drains and remove debris from shoulders of IL 29.

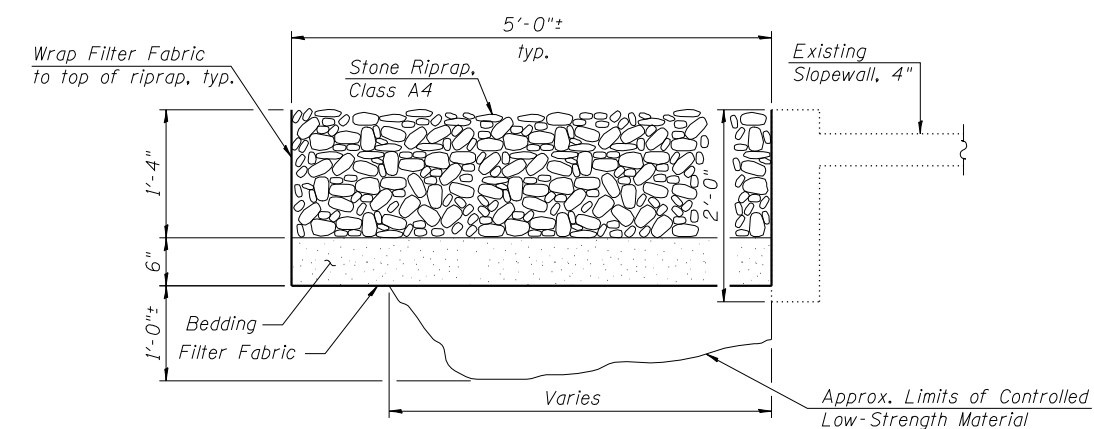


LEGEND

-  Indicates approximate limits of sediment and debris to be removed. Cost included with Stone Riprap, Class A4.
-  Indicates existing deck drain plugged with concrete.
- * Dimensioning along the slope.



Stone Riprap, Class A4 not shown for clarity.

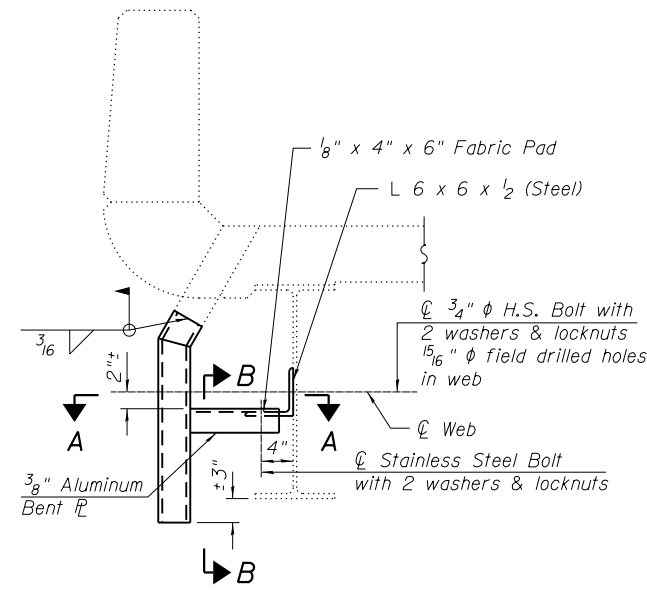


Notes:

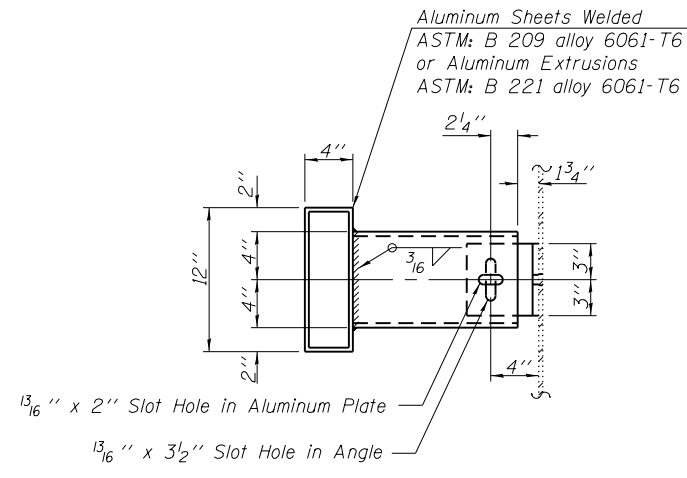
- Layout of Slope Protection System may be varied to suit ground conditions in the field or as directed by the Engineer.
- Quantities are estimated based on field dimensioning. Field verify location and quantities prior to ordering and installing material.
- Install Controlled Low-Strength Material prior to installation of the Filter Fabric and Stone Riprap, Class A4.
- Contractor shall remove all debris from shoulders of the bridge deck and clean out all bridge deck drains not plugged with concrete. Cost included with Deck Drain Extensions.
- For Deck Drain Extension Details, see sheet 72A of 97.

BILL OF MATERIAL

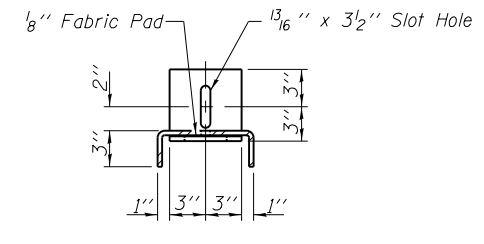
| ITEM | UNIT | TOTAL |
|----------------------------------|---------|-------|
| Stone Riprap, Class A4 | Sq. Yd. | 113 |
| Filter Fabric | Sq. Yd. | 197 |
| Controlled Low-Strength Material | Cu. Yd. | 3.0 |
| Deck Drain Extensions | Each | 12 |



SECTION AT DRAIN



SECTION A-A

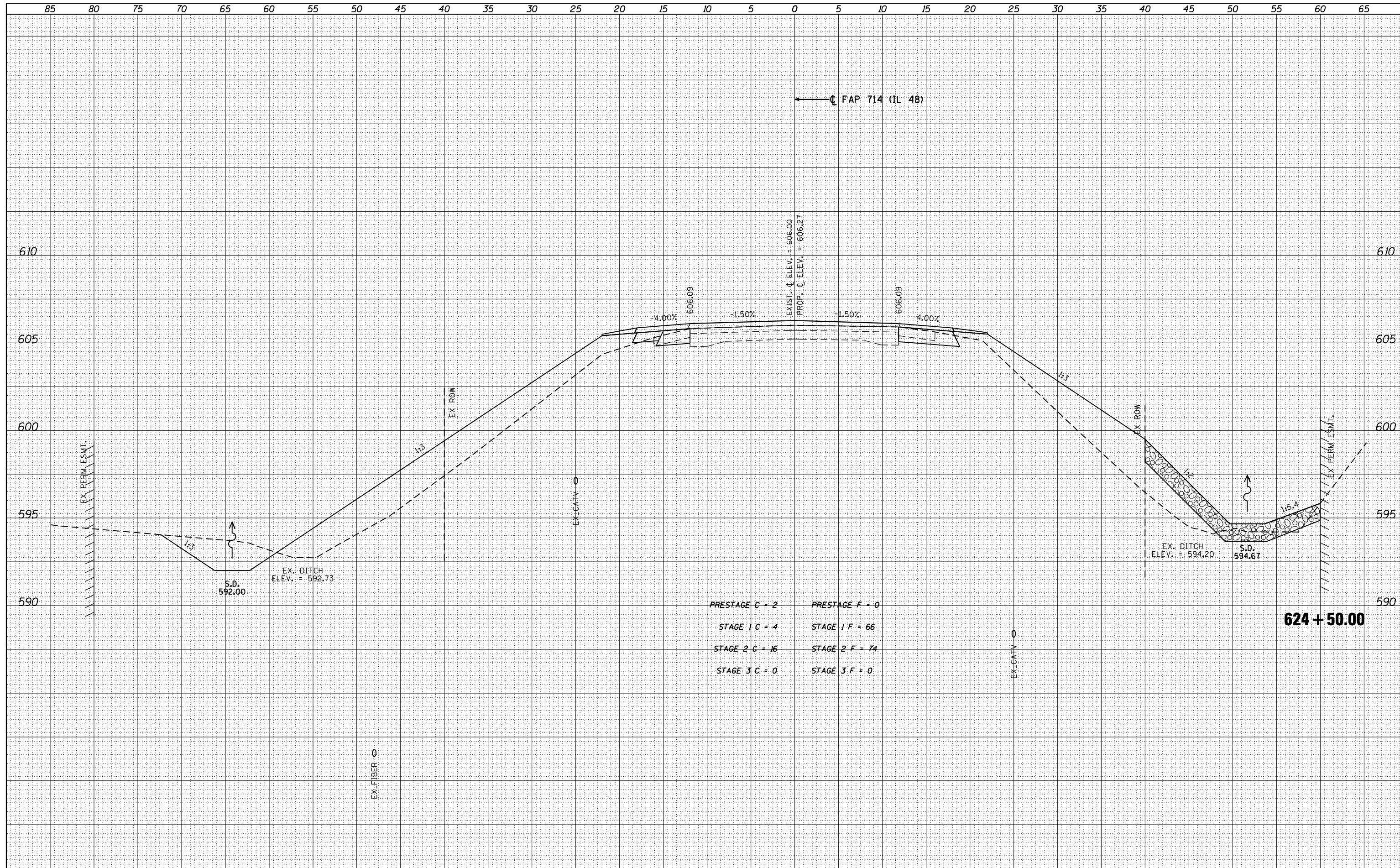


SECTION B-B

Note:
Removal and disposal of existing Drain Extensions is included in the cost of "Deck Drain Extensions".

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

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



PRESTAGE C = 2 PRESTAGE F = 0
 STAGE 1 C = 4 STAGE 1 F = 66
 STAGE 2 C = 16 STAGE 2 F = 74
 STAGE 3 C = 0 STAGE 3 F = 0

design firm
no. 184001036

engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|---------|
| USER NAME = g_jameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

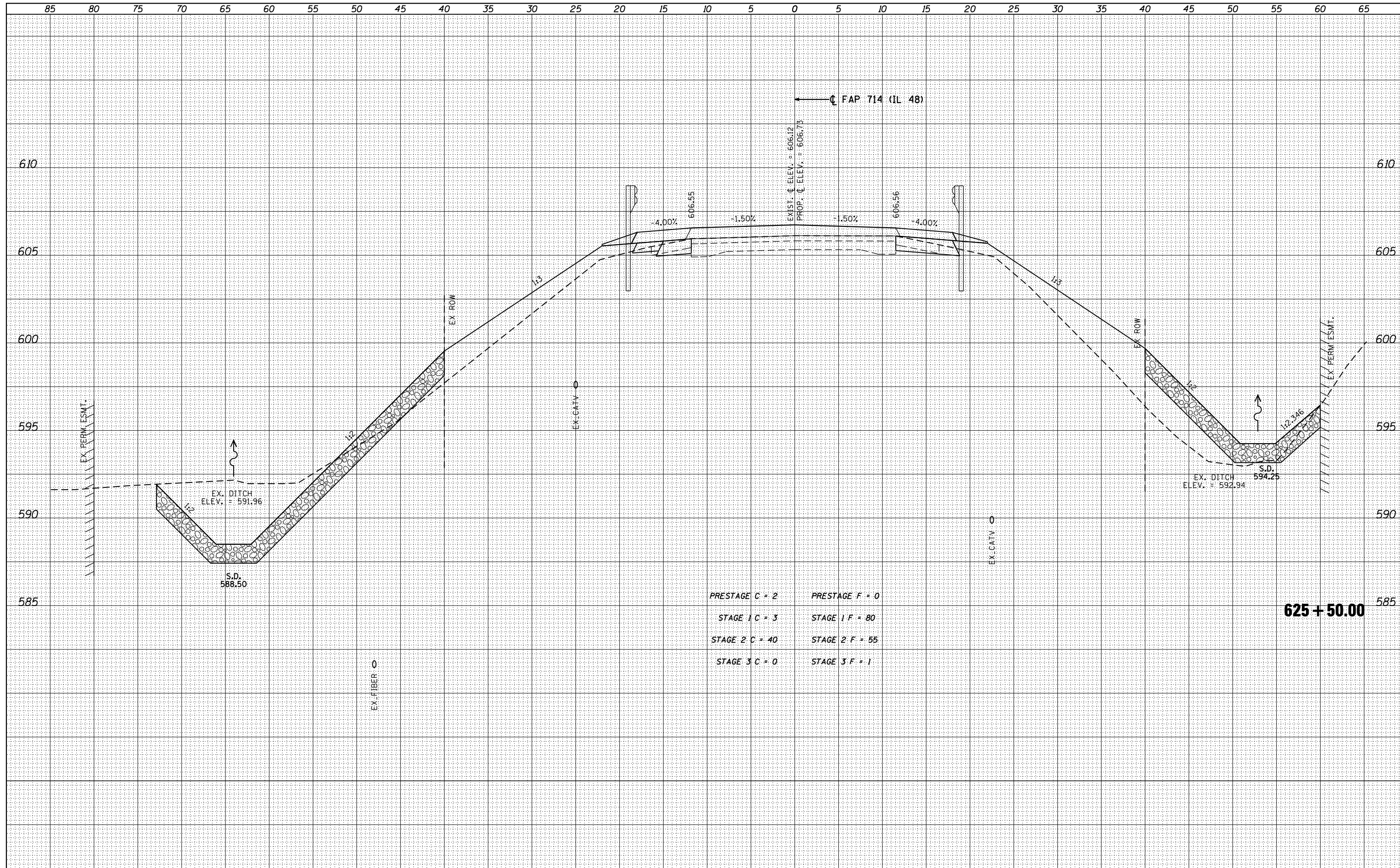
**CROSS SECTIONS
IL 48 OVER BEAR CREEK**

SCALE: 1" = 5' SHEET 8 OF 25 SHEETS STA. 624+50.00 TO STA. 624+50.00

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|-------------|--------------------|--------------|-----------|
| • 75(IL 29) & 714(IL 48) | (4), 136B-1 | CHRISTIAN | 97 | 80 |
| | | CONTRACT NO. 72A61 | | |

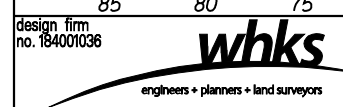
| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| NO. | |

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| NO. | |



PRESTAGE C = 2 PRESTAGE F = 0
 STAGE 1 C = 3 STAGE 1 F = 80
 STAGE 2 C = 40 STAGE 2 F = 55
 STAGE 3 C = 0 STAGE 3 F = 1

625 + 50.00



| | | |
|--------------------------------------|------------|-----------|
| USER NAME = g_jameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED - |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |

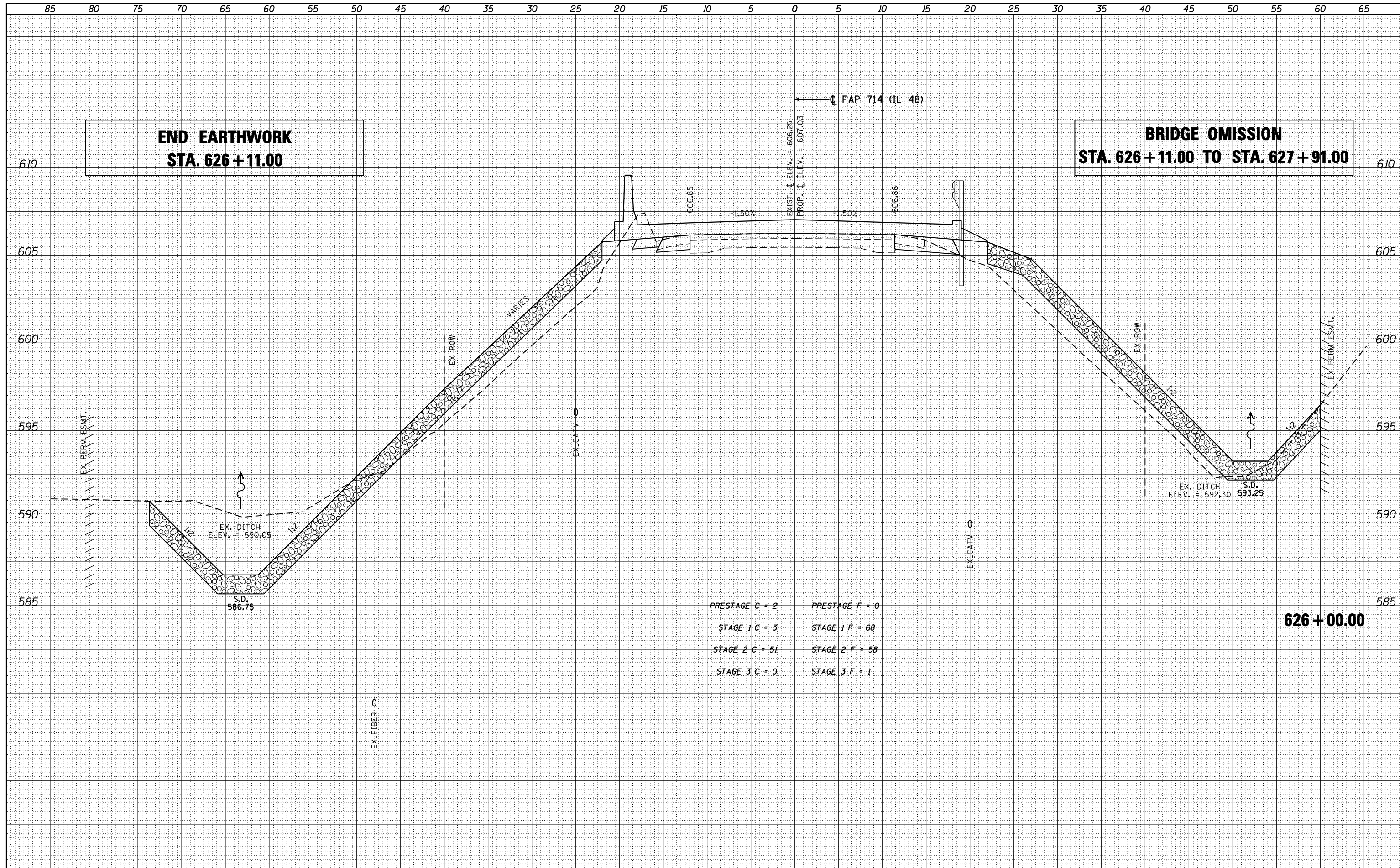
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
IL 48 OVER BEAR CREEK**
 SCALE: 1" = 5' SHEET 10 OF 25 SHEETS STA. 625+50.00 TO STA. 625+50.00

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------------------|--------------|-----------|
| • 75(IL 29) & 714(IL 48) | (4), 136B-1 | CHRISTIAN | 97 | 82 |
| | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 FINL SURVEY NO. _____

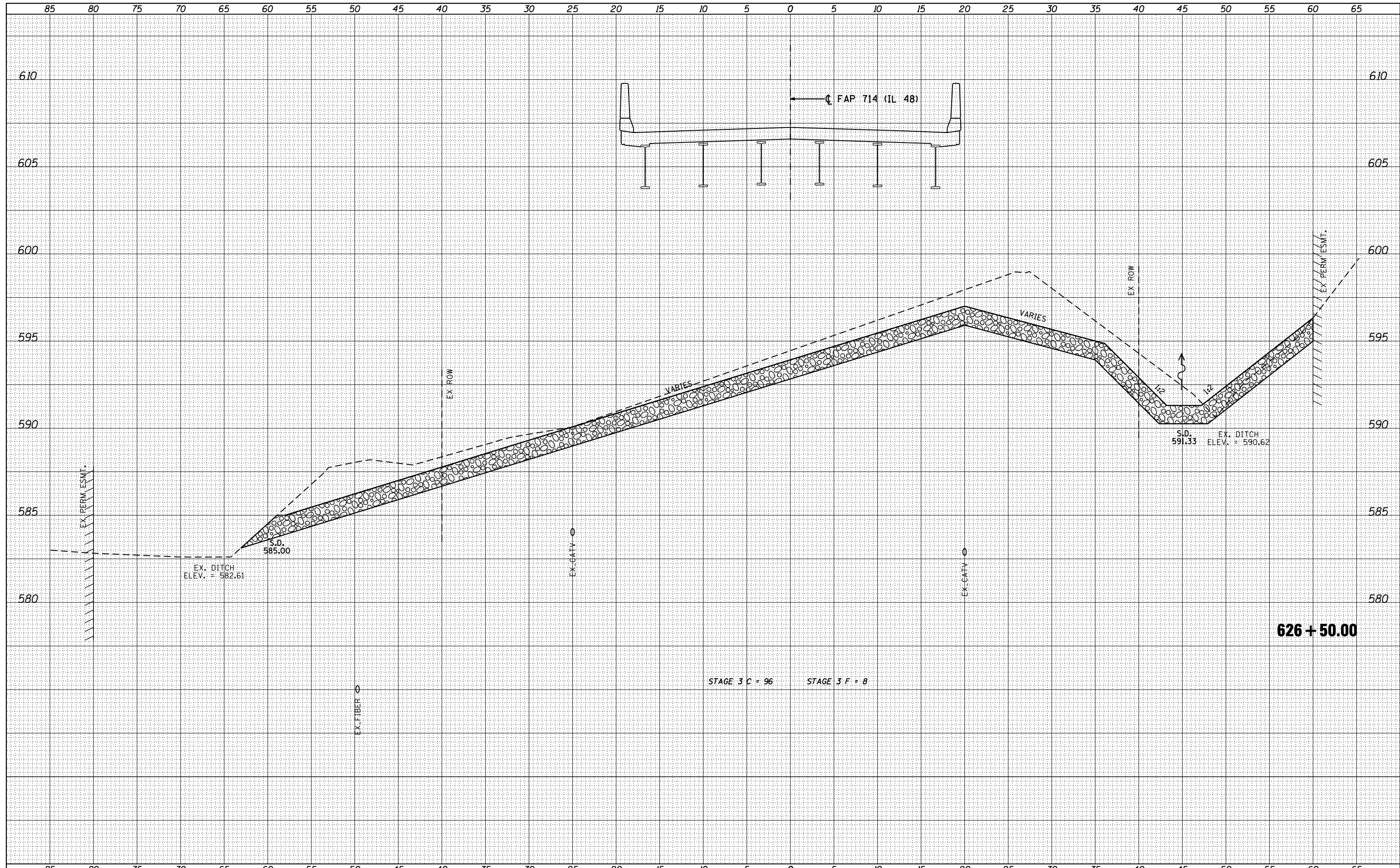
DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____



PRESTAGE C = 2 PRESTAGE F = 0
 STAGE 1 C = 3 STAGE 1 F = 68
 STAGE 2 C = 51 STAGE 2 F = 58
 STAGE 3 C = 0 STAGE 3 F = 1

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| NO. | |

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| NO. | |



design firm
no. 184001036

engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|-----------|
| USER NAME = g.jameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED - |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

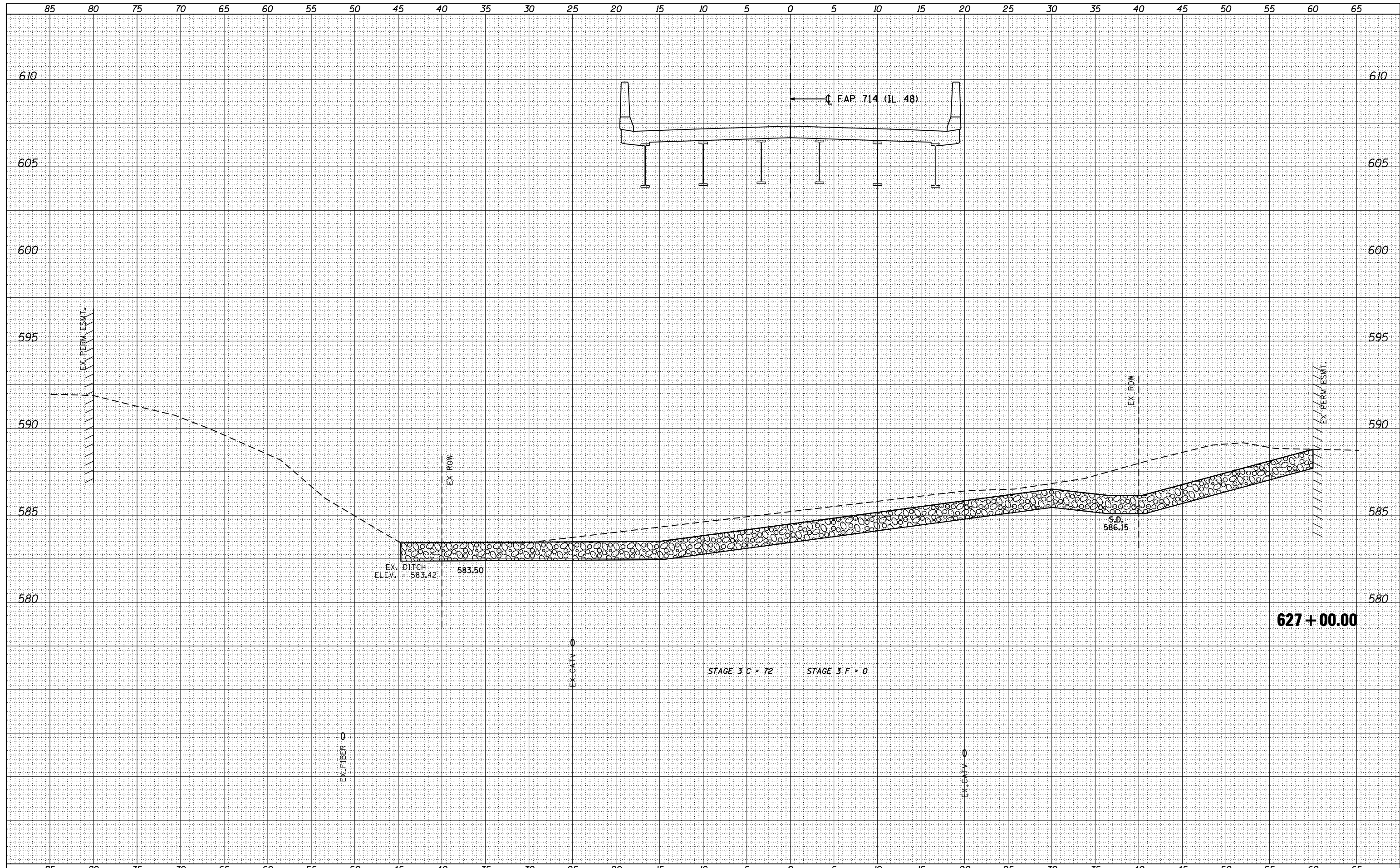
**CROSS SECTIONS
IL 48 OVER BEAR CREEK**

SCALE: 1" = 5' SHEET 12 OF 25 SHEETS STA. 626+50.00 TO STA. 626+50.00

| | | | | |
|---------------------------|------------------------|-----------|--------------|--------------------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4), 136B-1 | CHRISTIAN | 97 | 84 |
| • | 75(IL 29) & 714(IL 48) | | | CONTRACT NO. 72A61 |
| ILLINOIS FED. AID PROJECT | | | | |

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

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



design firm
no. 184001036

engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|---------|
| USER NAME = g.jameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

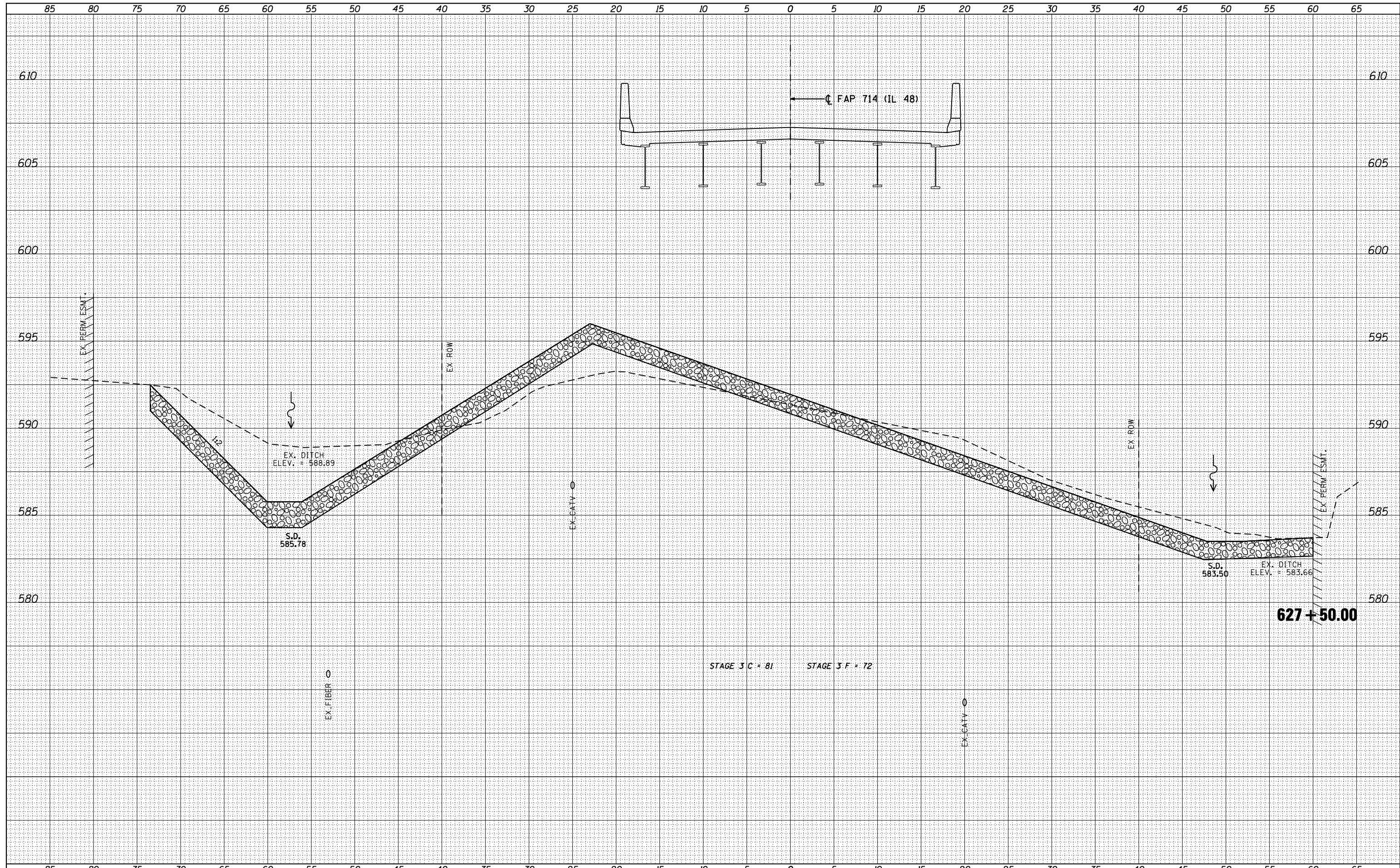
**CROSS SECTIONS
IL 48 OVER BEAR CREEK**

SCALE: 1" = 5' SHEET 13 OF 25 SHEETS STA. 627+00.00 TO STA. 627+00.00

| | | | | |
|---------------------------|------------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4), 136B-1 | CHRISTIAN | 97 | 85 |
| • | 75(IL 29) & 714(IL 48) | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

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

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



design firm
no. 184001036

engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|-----------|
| USER NAME = g.jameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED - |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
IL 48 OVER BEAR CREEK**

SCALE: 1" = 5'

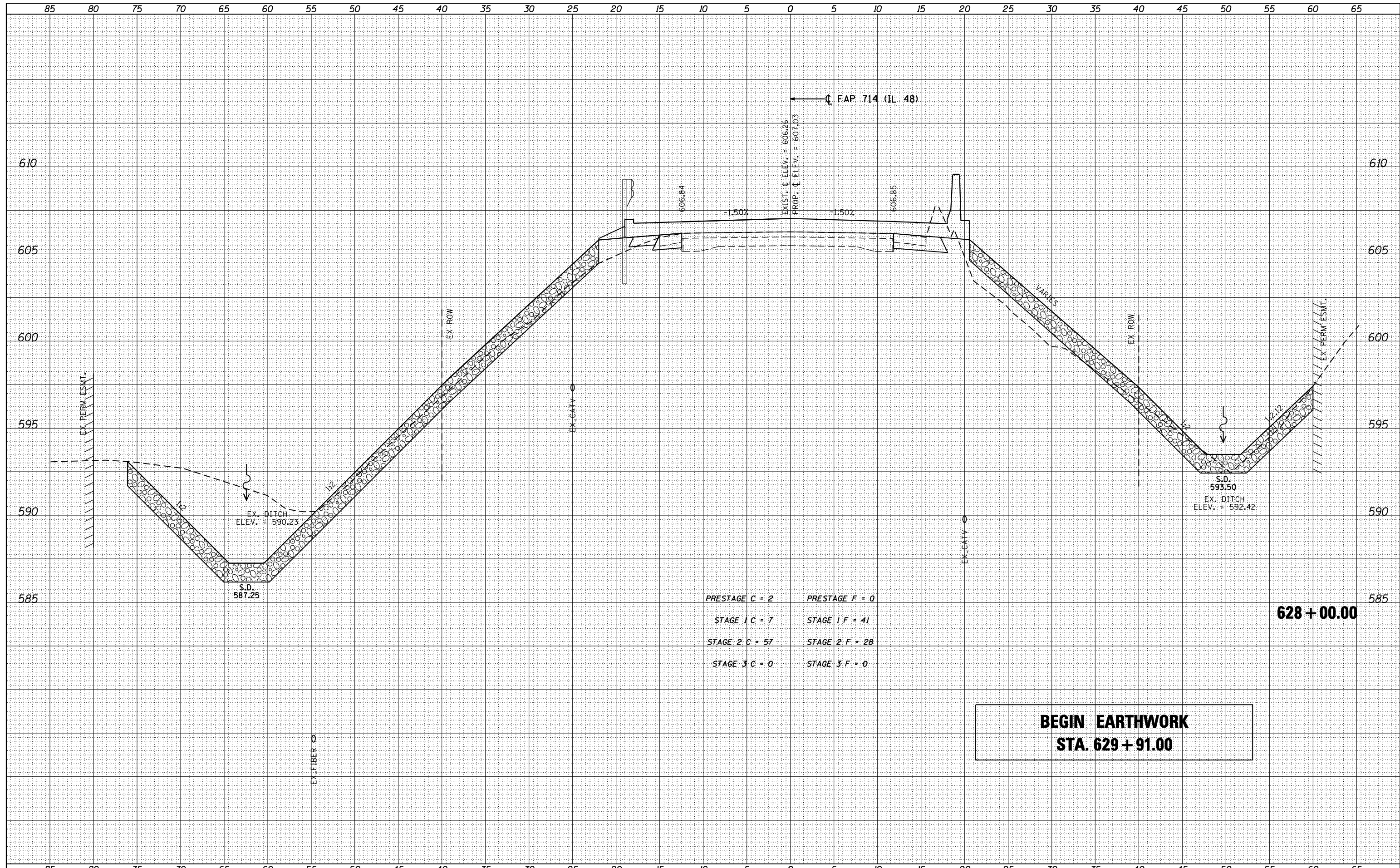
SHEET 14 OF 25 SHEETS

STA. 627+50.00 TO STA. 627+50.00

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|--------------|-----------|---------------------------|-----------|
| • 75(IL 29) & 714(IL 48) | (4)1, 136B-1 | CHRISTIAN | 97 | 86 |
| CONTRACT NO. 72A61 | | | ILLINOIS FED. AID PROJECT | |

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

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



PRESTAGE C = 2 PRESTAGE F = 0
 STAGE 1 C = 7 STAGE 1 F = 41
 STAGE 2 C = 57 STAGE 2 F = 28
 STAGE 3 C = 0 STAGE 3 F = 0

**BEGIN EARTHWORK
 STA. 629+91.00**

design firm
no. 184001036

engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|---------|
| USER NAME = g.jameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

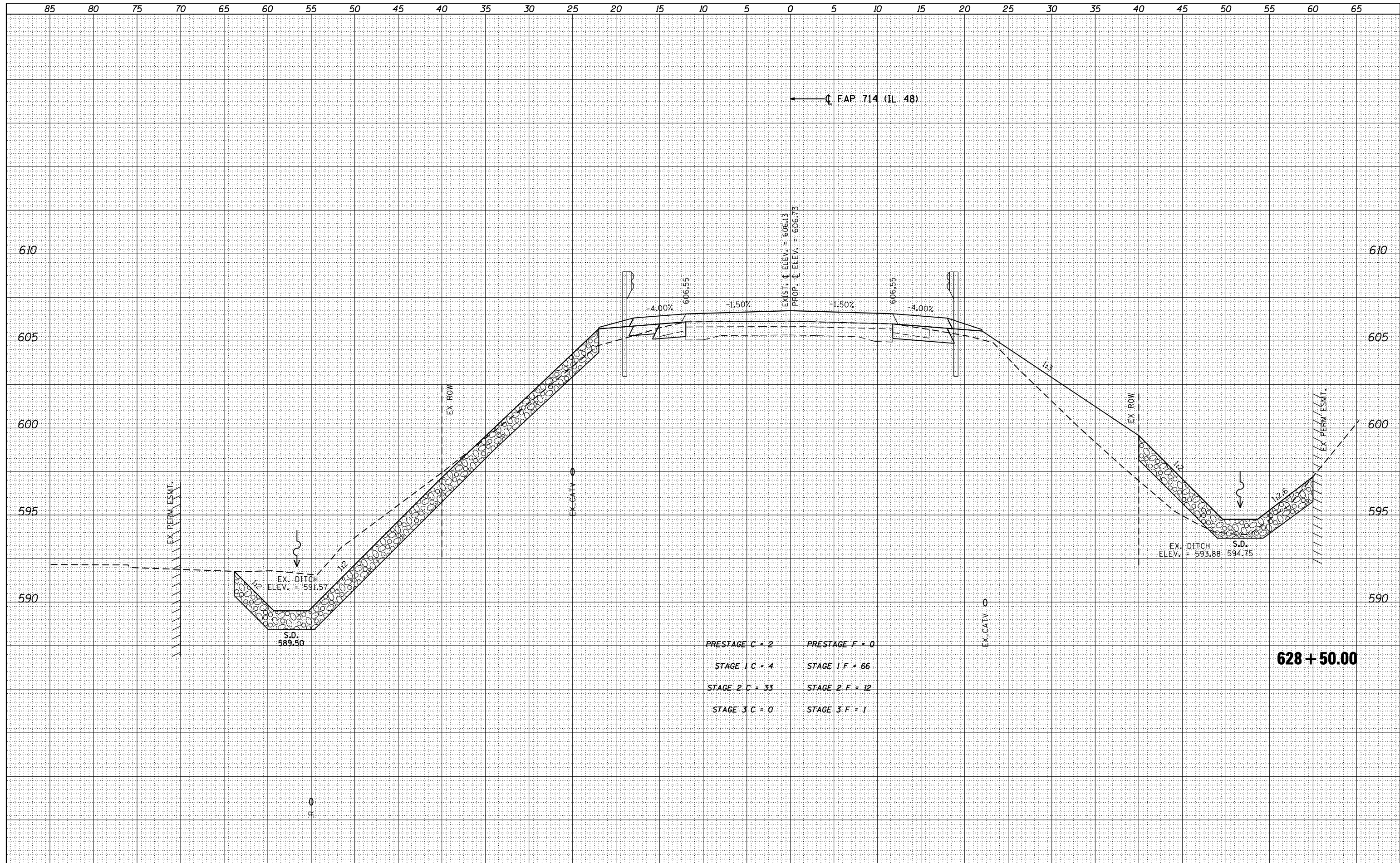
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | |
|----------------------------------|-----------------------|
| CROSS SECTIONS | |
| IL 48 OVER BEAR CREEK | |
| SCALE: 1" = 5' | SHEET 15 OF 25 SHEETS |
| STA. 628+00.00 TO STA. 628+00.00 | |

| | | | | |
|---------------------------|--------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (41), 136B-1 | CHRISTIAN | 97 | 87 |
| • 75(IL 29) & 714(IL 48) | | CONTRACT NO. 72A61 | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| FINISH | |
| NO. | |

| | |
|----------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| ORIGINAL | |
| NO. | |



PRESTAGE C = 2 PRESTAGE F = 0
 STAGE 1 C = 4 STAGE 1 F = 66
 STAGE 2 C = 33 STAGE 2 F = 12
 STAGE 3 C = 0 STAGE 3 F = 1

628 + 50.00

design firm
no. 184001036
whks
engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

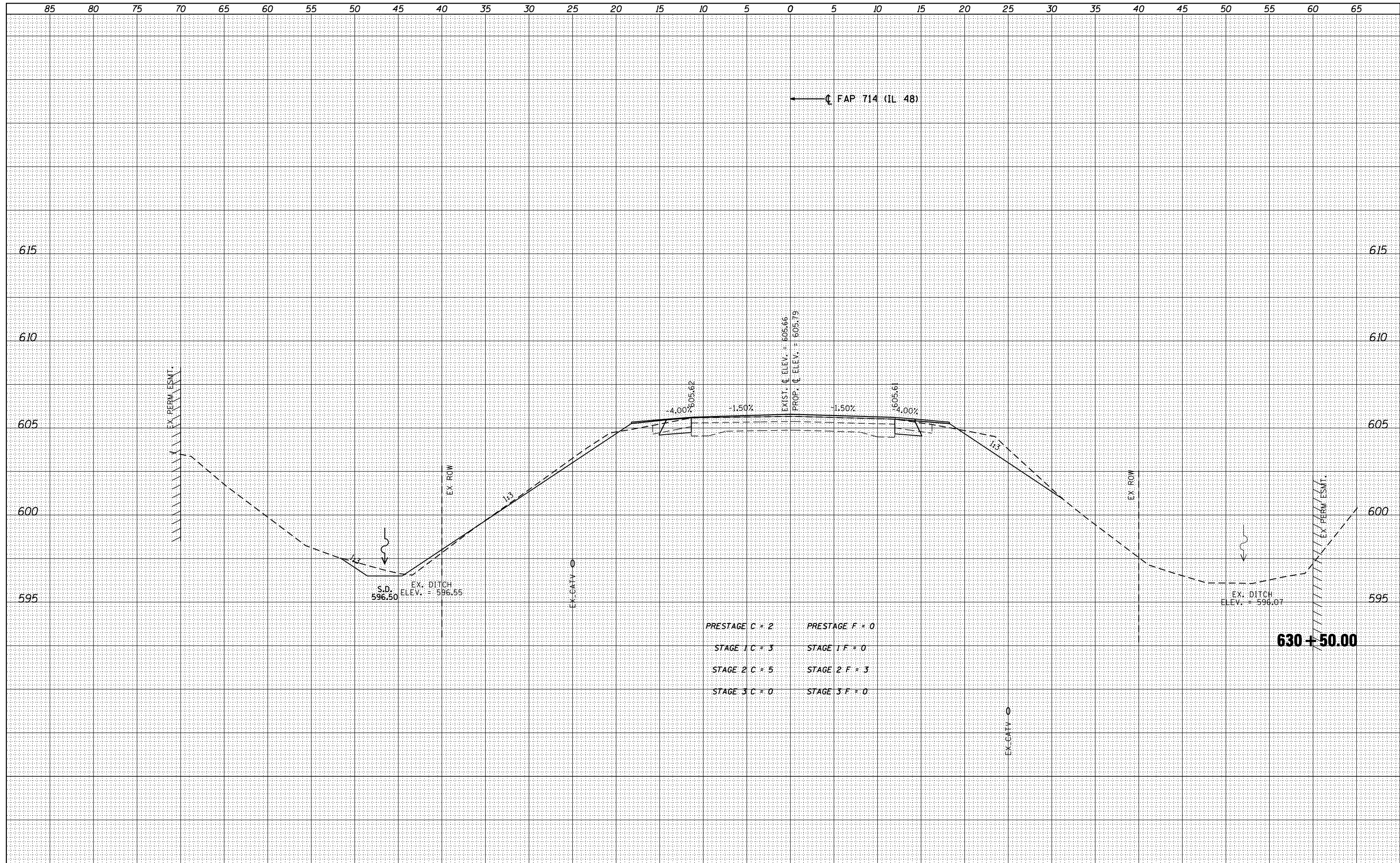
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 48 OVER BEAR CREEK
SCALE: 1" = 5' SHEET 16 OF 25 SHEETS STA. 628+50.00 TO STA. 628+50.00

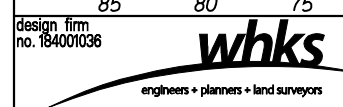
| | | | | |
|---------------------------|--------------|--------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • 75(IL 29) & 714(IL 48) | (4)1, 136B-1 | CHRISTIAN | 97 | 88 |
| | | CONTRACT NO. | 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

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

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



PRESTAGE C = 2 PRESTAGE F = 0
 STAGE 1 C = 3 STAGE 1 F = 0
 STAGE 2 C = 5 STAGE 2 F = 3
 STAGE 3 C = 0 STAGE 3 F = 0



| | | |
|--------------------------------------|------------|-----------|
| USER NAME = g.jameson | DESIGNED - | REVISED - |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED - |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

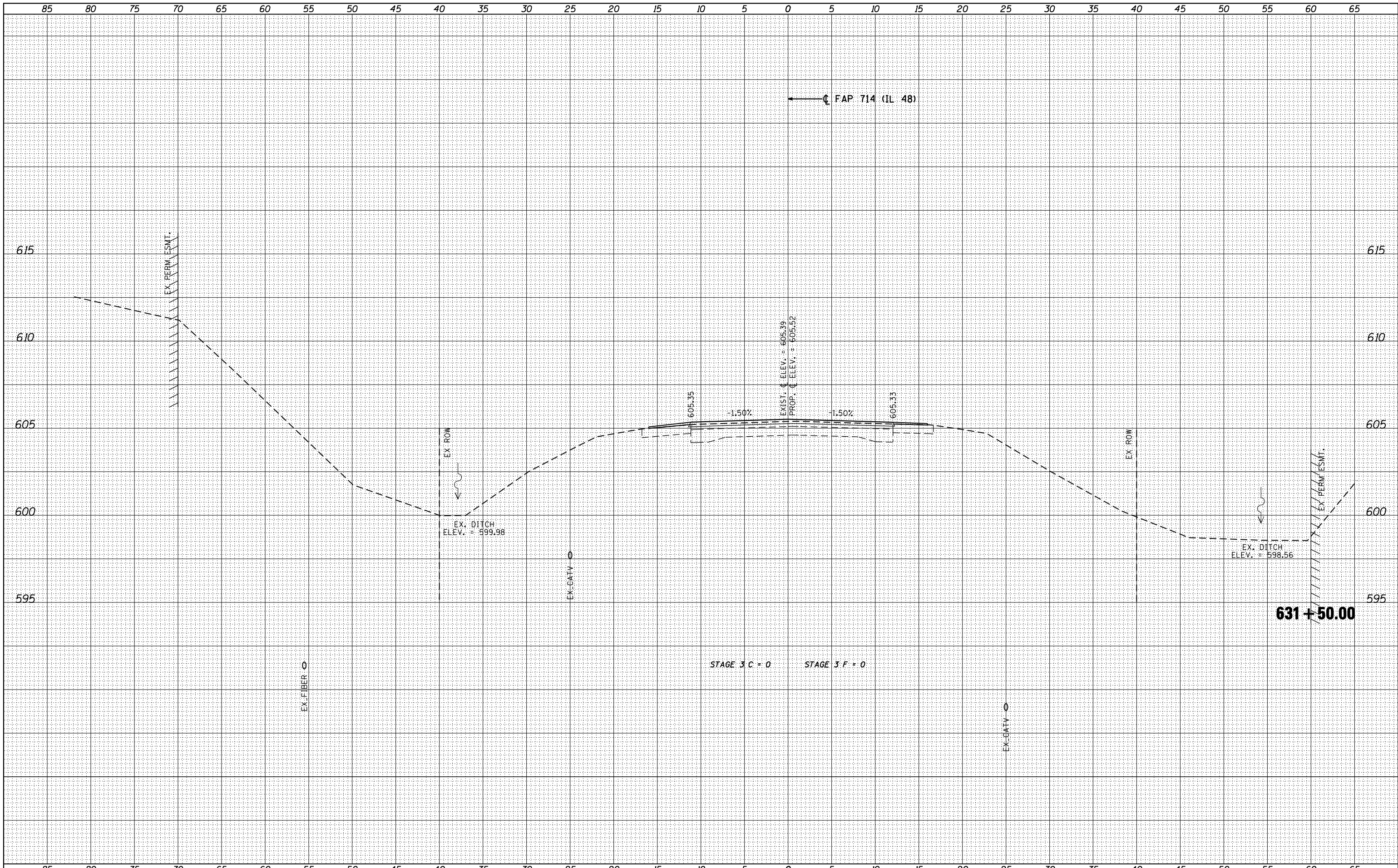
CROSS SECTIONS
IL 48 OVER BEAR CREEK

SCALE: 1" = 5' SHEET 20 OF 25 SHEETS STA. 630+50.00 TO STA. 630+50.00

| | | | | |
|--------------------------|-------------|-----------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • 75(IL 29) & 714(IL 48) | (4), 136B-1 | CHRISTIAN | 97 | 92 |
| CONTRACT NO. 72A61 | | | ILLINOIS FED. AID PROJECT | |

| | |
|----|------|
| BY | DATE |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| | |
|----|------|
| BY | DATE |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |



design firm
no. 184001036

engineers • planners • land surveyors

| | | |
|--------------------------------------|------------|---------|
| USER NAME = g_jameson | DESIGNED - | REVISED |
| FILE NAME = D672A61-SHT-XSC-IL48.dwg | CHECKED - | REVISED |
| PLOT SCALE = 10.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/16/2013 | CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 48 OVER BEAR CREEK
SCALE: 1" = 5'
SHEET 22 OF 25 SHEETS
STA. 631+50.00 TO STA. 631+50.00

| | | | | |
|---------------------------|------------------------|--------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | (4), 136B-1 | CHRISTIAN | 97 | 94 |
| • | 75(IL 29) & 714(IL 48) | CONTRACT NO. | 72A61 | |
| ILLINOIS FED. AID PROJECT | | | | |

