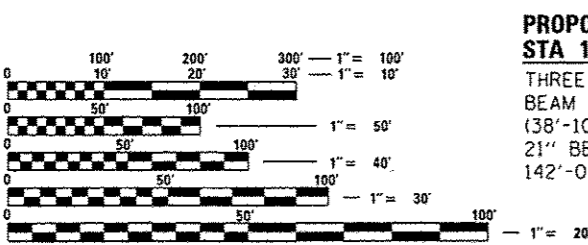


| T.R. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|----------------|----------|--------------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 1 |
| FED. ROAD DIST. NO. | | ILLINOIS | CONTRACT NO. 93674 | |

| INDEX OF SHEETS | |
|-----------------|--|
| SHEET NO. | DESCRIPTION |
| 1 | COVER SHEET |
| 2 | STANDARDS, GENERAL NOTES & SUMMARY OF QUANTITIES |
| 3 | TYPICAL SECTIONS, DETAILS & CONTROL POINT TIES |
| 4 | SCHEDULE OF QUANTITIES |
| 5 | PLAN AND PROFILE |
| 6 | TRAFFIC CONTROL PLAN |
| 7 | STORM WATER POLLUTION PREVENTION PLAN |
| 8-10 | RIGHT-OF-WAY PLATS |
| 11-13 | CROSS SECTIONS |
| 14-31 | BRIDGE PLANS |

IDOT HIGHWAY STANDARDS
SEE STANDARDS, GENERAL NOTES & SUMMARY OF QUANTITIES
SHEET 2

**SANGAMON COUNTY
HIGHWAY DEPARTMENT**
STATE OF ILLINOIS / DEPARTMENT OF TRANSPORTATION
PLANS FOR:
**PROPOSED
HIGHWAY BRIDGE PROGRAM**
T.R. 164 (WESLEY CHAPEL ROAD)
SECTION 12-10119-01-BR
PROJECT BROS-0167 (072)
SANGAMON COUNTY - CURRAN ROAD DISTRICT
C-96-220-13
R 6 W, 3rd P.M.



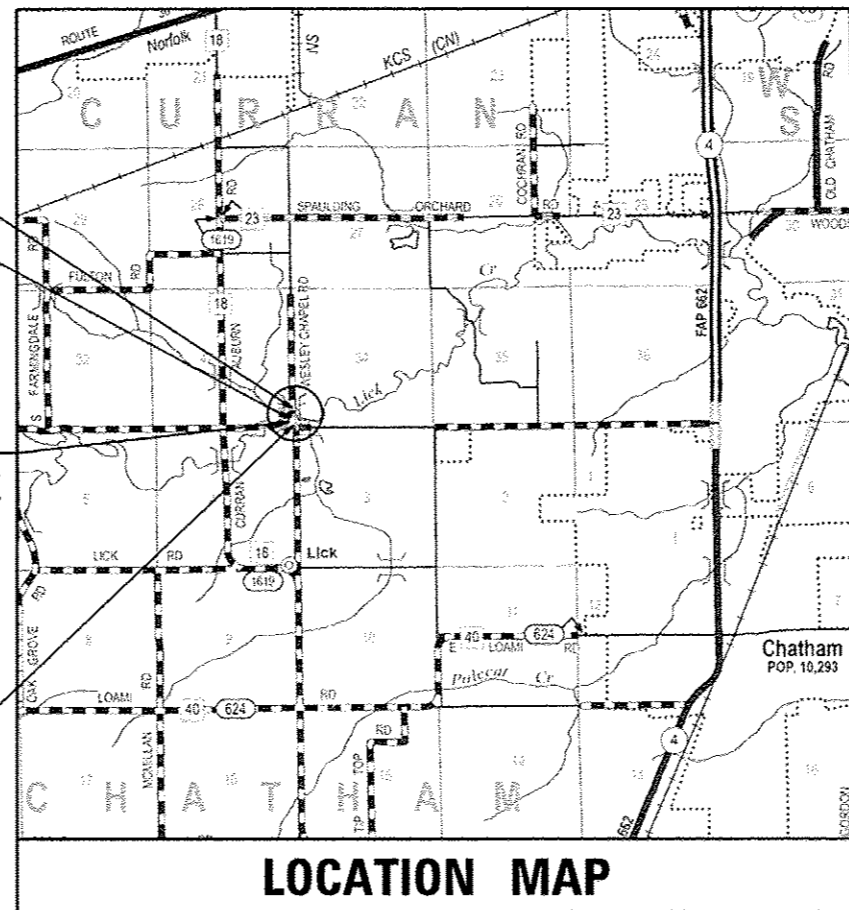
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

**END IMPROVEMENT
STA. 18+30.00**

EXISTING STRUCTURE No. 084-3104
THREE SPAN W21 STEEL BEAM BRIDGE WITH CONCRETE DECK AND STEEL BRIDGE RAILING SUPPORTED ON TIMBER PILES WITH CLOSED TIMBER ABUTMENTS AND WINGWALLS.

**PROPOSED STRUCTURE No. 084-3504
STA 15+13.00 - SPECIAL BRIDGE DESIGN**
THREE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE ON PILE BENT ABUTMENTS AND PIERS. (38'-10" SPAN 1, 50'-0" SPAN 2, 50'-0" SPAN 3) 21" BEAM DEPTH, 27'-0" CLEAR WIDTH, 142'-0" BACK TO BACK OF ABUTMENTS. SKEW = 0°

**BEGIN IMPROVEMENT
STA. 12+00.00**



APPROXIMATE SCALE: 0 1 2 MILES
NET LENGTH OF PROJECT = 630.00 FEET = 0.119 MILES
HIGHWAY CLASSIFICATION = LOCAL ROAD
CURRENT ADT: 250 - 400
DESIGN SPEED: 40 MPH

PROJECT ENGINEER: BRIAN WRIGHT P.E., SANGAMON COUNTY HIGHWAY DEPT., (217) 535-3070

CONTRACT NO. 93674

CALL J.U.L.I.E. (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS)
48 Hours (2 working days) Before You Dig.
TOLL FREE: 1 (800) 892-0123 OR 811

QEI 2351 SOUTH DIRKSEN PARKWAY
SPRINGFIELD, ILLINOIS 62703
217-670-0563 (P) / 217-679-2204 (F)
www.quiggengineering.com

QEI PROJECT: 13-31

DAVID BOOHER
062-043769
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

David Booher
DAVID BOOHER, ILLINOIS P.E. 062-043769
EXPIRES 11/30/2017

SANGAMON COUNTY HIGHWAY DEPARTMENT
SUBMITTED Nov. 3 2016
Mark Parnell
ROAD COMMISSIONER, CURRAN TOWNSHIP
SUBMITTED November 3 2016
J. R. [Signature]
SANGAMON COUNTY ENGINEER
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**
Nov 4 2016
[Signature]
DISTRICT 6 ENGINEER OF LOCAL ROADS & STREETS
November 9 2016
[Signature]
DISTRICT 6 ENGINEER OF CONSTRUCTION
Nov 4 2016
[Signature]
REGION FOUR ENGINEER

Releasing For Bid Based on Limited Review

11/04/2016
DATE

IDOT HIGHWAY STANDARDS (SEE PROPOSAL)

| | |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 515001-03 | NAME PLATE FOR BRIDGES |
| 542401-02 | METAL END SECTIONS FOR PIPE CULVERTS |
| 701901-06 | TRAFFIC CONTROL DEVICES |
| 725001-01 | OBJECT AND TERMINAL MARKERS |
| 782006 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS |
| BLR 21-9 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |
| BLR 23-4 | TRAFFIC BARRIER TERMINAL TYPE 1 |
| BLR 24-2 | MAIL BOX TURNOUT FOR LOCAL ROADS |
| BLR 26-3 | STEEL PLATE BEAM GUARDRAIL 29" HEIGHT |
| BLR 27-1 | TRAFFIC BARRIER TERMINAL TYPE 5A |

UTILITY CONTACTS

| NAME / ADDRESS OF UTILITY | TYPE | LOCATION |
|---|----------|---------------------------|
| DAN HELD SOUTH SANGAMON WATER COMMISSION (217) 381-2206 DHELD@WOODARDCURRAN.COM | WATER | STA 12+00 TO STA 18+30 |
| CHARLOTTE WALSCHEGER AMEREN ILLINOIS (217) 753-5183 | ELECTRIC | STA 12+00 TO STA 18+30 |
| CHARLES JENKINS FRONTIER (217) 243-0211 CHARLES.JENKINS@FTR.COM | PHONE | STA 12+00 TO STA 18+30 |

GENERAL NOTES

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

ALL DISTURBED EARTH SURFACES WITHIN THE LIMITS OF THE RIGHT-OF-WAY AND EASEMENTS SHALL BE SEEDED AS DIRECTED BY THE ENGINEER.

RATES OF APPLICATIONS

| ITEM | RATE OF APPLICATION |
|-----------------------------------|---------------------|
| SEEDING CLASS 2 (SEE ART 250.07) | = 200 LBS / ACRE |
| NITROGEN FERTILIZER NUTRIENT | = 90 LBS / ACRE |
| PHOSPHORUS FERTILIZER NUTRIENT | = 90 LBS / ACRE |
| POTASSIUM FERTILIZER NUTRIENT | = 90 LBS / ACRE |
| TEMPORARY EROSION CONTROL SEEDING | = 100 LBS / ACRE |
| STONE RIPRAP | = 1.50 TONS / CU YD |
| AGGREGATE SURFACE | = 2.05 TONS / CU YD |

| IDOT SPECIAL | SPECIALTY ITEM | CODE NO. | ITEM | UNIT | TOTAL QUANTITY |
|--------------|----------------|----------|---|-------|----------------|
| | | 20100110 | TREE REMOVAL (6 TO 15 UNITS DIAMETER) | UNIT | 362 |
| | | 20100210 | TREE REMOVAL (OVER 15 UNITS DIAMETER) | UNIT | 244 |
| | | 20100500 | TREE REMOVAL, ACRES | ACRE | 0.25 |
| | | 20101100 | TREE TRUNK PROTECTION | EACH | 11 |
| | | 20200100 | EARTH EXCAVATION | CU YD | 1,241 |
| | | 20300100 | CHANNEL EXCAVATION | CU YD | 418 |
| | | 20400800 | FURNISHED EXCAVATION | CU YD | 64 |
| | | 25000200 | SEEDING, CLASS 2 | ACRE | 0.75 |
| | | 25100630 | EROSION CONTROL BLANKET | SQ YD | 3,104 |
| | | 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 65 |
| | | 28000305 | TEMPORARY DITCH CHECKS | FOOT | 184 |
| | | 28000400 | PERIMETER EROSION BARRIER | FOOT | 735 |
| | | 40200800 | AGGREGATE SURFACE COURSE, TYPE B | TON | 778 |
| | | 50100100 | REMOVAL OF EXISTING STRUCTURES | EACH | 1 |
| | | 50200100 | STRUCTURE EXCAVATION | CU YD | 50 |
| | | 50200300 | COFFERDAM EXCAVATION | CU YD | 279 |
| | | 50201121 | COFFERDAM (TYPE 2) (LOCATION - 1) | EACH | 1 |
| | | 50201122 | COFFERDAM (TYPE 2) (LOCATION - 2) | EACH | 1 |
| | | 50300225 | CONCRETE STRUCTURES | CU YD | 127 |
| | | 50300265 | SEAL COAT CONCRETE | CU YD | 93 |
| | | 50300280 | CONCRETE ENCASMENT | CU YD | 4.2 |
| | | 50400405 | PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH) | SO FT | 3,776 |
| | | 50500505 | STUD SHEAR CONNECTORS | EACH | 52 |
| | | 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 12540 |
| | X | 50900205 | STEEL RAILING, TYPE S1 | FOOT | 285 |
| | | 51201610 | FURNISHING STEEL PILES HP12X63 | FOOT | 1,881 |
| | | 51202305 | DRIVING PILES | FOOT | 1,881 |
| | | 51203610 | TEST PILE STEEL HP12X63 | EACH | 2 |
| | | 51500100 | NAME PLATES | EACH | 1 |
| | | 58300100 | PORTLAND CEMENT MORTAR FAIRING COURSE | FOOT | 1173 |
| | X | 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | FOOT | 37.5 |
| | X | 63100075 | TRAFFIC BARRIER TERMINAL, TYPE 5A | EACH | 2 |
| | | 63200310 | GUARDRAIL REMOVAL | FOOT | 310 |
| | | 67100100 | MOBILIZATION | LSUM | 1 |
| | | 70101830 | TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21 | LSUM | 1 |
| | X | 72501000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 4 |
| | X | 78200005 | GUARDRAIL REFLECTORS, TYPE A | EACH | 4 |
| | X | LR631020 | TRAFFIC BARRIER TERMINAL, TYPE 1 | EACH | 2 |
| | | X2810208 | STONE RIPRAP, CLASS A4 (SPECIAL) | TON | 399 |
| | | Z0029602 | TEMPORARY SIGNING | EACH | 2 |

FILE NAME : S:\Projects\2812 JOB\11-31 Sangamon Co. - Manasson Rd over Lick Creek\CD00\CD00 Sheets\0693674-sh1-Std-GN.S00.dgn
 MODEL : Default
 PLOT DRIVER : IDOT_BW.ctb



| | | |
|--|-----------------|-----------|
| USER NAME : amcswell | DESIGNED : TKW | REVISED : |
| FILE NAME : 0693674-sh1-Std-GN.S00.dgn | DRAWN : TKW | REVISED : |
| PLOT SCALE : 28.8000 / in. | CHECKED : LMS | REVISED : |
| PLOT DATE : 11/3/2016 | DATE : DEC 2015 | REVISED : |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STANDARDS, GENERAL NOTES &
SUMMARY OF QUANTITIES**

SHEET NO. 1 OF 1 SHEETS STA. 12+00.00 TO STA. 18+30.00

| | | | | |
|---------------------------|----------------|----------|--------------|-----------|
| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 164 | 12-10119-01-BR | SANGAMON | 31 | 2 |
| CONTRACT NO. 93674 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| TREE REMOVAL (6 TO 15 UNITS DIAMETER) | | | |
|---------------------------------------|--------|---------|---------------------------------|
| STATION | OFFSET | LT / RT | 20100110 TREE REMOV 6-15 (UNIT) |
| TR 164 | | | |
| 12+71 | 32 | LT | 8 |
| 12+86 | 32 | LT | 6 |
| 12+97 | 32 | LT | 12 |
| 12+99 | 32 | LT | 12 |
| 13+10 | 33 | LT | 6 |
| 13+66 | 25 | LT | 12 |
| 13+68 | 25 | LT | 12 |
| 13+84 | 24 | LT | 15 |
| 13+85 | 22 | LT | 12 |
| 13+92 | 23 | LT | 15 |
| 13+98 | 26 | LT | 8 |
| 13+99 | 21 | LT | 10 |
| 14+18 | 25 | LT | 12 |
| 14+24 | 26 | LT | 12 |
| 14+25 | 22 | LT | 12 |
| 14+25 | 20 | LT | 12 |
| 14+35 | 17 | LT | 8 |
| 14+57 | 26 | RT | 15 |
| 14+60 | 21 | LT | 15 |
| 14+63 | 24 | LT | 12 |
| 14+63 | 23 | LT | 12 |
| 14+65 | 33 | RT | 15 |
| 14+73 | 21 | RT | 8 |
| 14+81 | 18 | RT | 10 |
| 15+49 | 21 | RT | 12 |
| 15+58 | 28 | RT | 12 |
| 15+63 | 29 | RT | 8 |
| 15+70 | 21 | RT | 15 |
| 15+72 | 19 | RT | 12 |
| 15+81 | 28 | RT | 8 |
| 15+82 | 21 | RT | 12 |
| 15+88 | 22 | RT | 12 |
| TOTAL | | | 362 |

| TREE TRUNK PROTECTION | | | |
|-----------------------|--------|---------|---------------------------------------|
| STATION | OFFSET | LT / RT | 20101100 TREE TRUNK PROTECTION (EACH) |
| TR 164 | | | |
| 12+15 | 28 | LT | 1 |
| 14+65 | 30 | LT | 1 |
| 14+68 | 28 | LT | 1 |
| 14+73 | 22 | LT | 1 |
| 14+66 | 44 | RT | 1 |
| 14+67 | 40 | RT | 1 |
| 14+67 | 40 | RT | 1 |
| 14+67 | 41 | RT | 1 |
| 14+69 | 43 | RT | 1 |
| 14+70 | 44 | RT | 1 |
| 14+85 | 29 | RT | 1 |
| TOTAL | | | 11 |

| PERIMETER EROSION BARRIER | | | |
|---------------------------|---------|---|-----|
| STATION TO STATION | LT / RT | 28000400 PERIMETER EROSION BARRIER (FOOT) | |
| TR 164 | | | |
| 13+58 | 14+87 | LT | 135 |
| 15+53 | 16+35 | LT | 100 |
| 16+55 | 18+30 | LT | 180 |
| 15+40 | 18+30 | RT | 320 |
| TOTAL | | | 735 |

| PAVING SCHEDULE | | | | | | | |
|-----------------|----|----------|---------|-----------------------|--------------|--------------|---|
| STA | TO | STA | LT / RT | AREA FROM CAD (SQ FT) | DEPTH (INCH) | WIDTH (FOOT) | 40200800 AGGREGATE SURFACE COURSE, TY B (TON) |
| TR 164 | | | | | | | |
| 12+00.00 | | 18+30.00 | LT & RT | 961 | 8 | | 48.6 |
| 12+50.00 | | 17+80.00 | LT & RT | | 8 | 22 | 590.2 |
| 17+80.00 | | 18+30.00 | LT & RT | 1020 | 8 | | 51.6 |
| MANSION RD | | | | | | | |
| 16+48.00 | | | LT | 1725 | 8 | | 87.3 |
| TOTALS | | | | | | | 777.7 |
| USE | | | | | | | 778 |

| SEEDING, CLASS 2 | | | | | | | |
|--------------------|---------|---------------------|-----------|--------------|---------------------------------|----------------------------------|------|
| STATION TO STATION | LT / RT | SEEDED AREA (SQ FT) | SLOPE (%) | SLOPE FACTOR | SEED AREA ADJ FOR SLOPE (SQ FT) | 25000200 SEEDING, CLASS 2 (ACRE) | |
| TR 164 | | | | | | | |
| 12+00 | 14+98 | LT | 5,441 | 40.00 | 1,077,033 | 5,860 | 0.14 |
| 12+00 | 15+00 | RT | 7,628 | 40.00 | 1,077,033 | 8,216 | 0.19 |
| 15+03 | 16+35 | LT | 1,400 | 33.00 | 1,053,043 | 1,474 | 0.04 |
| 15+08 | 18+30 | RT | 6,294 | 33.00 | 1,053,043 | 6,628 | 0.16 |
| 16+55 | 18+30 | LT | 5,458 | 33.00 | 1,053,043 | 5,748 | 0.14 |
| TOTAL | | | | | | 0.75 | |

| TEMPORARY SIGNING | | | |
|-------------------|--------|---------|-----------------------------------|
| STATION | OFFSET | LT / RT | 20029602 TEMPORARY SIGNING (EACH) |
| TR 164 | | | |
| 15+65 | 30 | RT | 1 |
| 16+50 | 40 | RT | 1 |
| TOTAL | | | 2 |

| TREE REMOVAL (OVER 15 UNITS DIAMETER) | | | |
|---------------------------------------|--------|---------|---------------------------------------|
| STATION | OFFSET | LT / RT | 20100210 TREE REMOVAL OVER 15" (UNIT) |
| TR 164 | | | |
| 13+42 | 24 | LT | 24 |
| 14+13 | 23 | RT | 18 |
| 14+15 | 23 | RT | 18 |
| 14+45 | 21 | RT | 36 |
| 14+53 | 21 | RT | 40 |
| 14+62 | 24 | LT | 24 |
| 14+82 | 21 | RT | 18 |
| 14+85 | 21 | RT | 24 |
| 15+56 | 26 | LT | 24 |
| 15+57 | 24 | LT | 18 |
| TOTAL | | | 244 |

| EROSION CONTROL BLANKET | | | | | | | |
|-------------------------|---------|-------|-----------|--------------|-----------|--|-------|
| STATION TO STATION | LT / RT | SO FT | SLOPE (%) | SLOPE FACTOR | ADJ SO FT | 25100630 EROSION CONTROL BLANKET (SQ YD) | |
| TR 164 | | | | | | | |
| 12+00 | 14+98 | LT | 5,441 | 40.00 | 1,077,033 | 5,860 | 651.2 |
| 12+00 | 15+00 | RT | 7,628 | 40.00 | 1,077,033 | 8,216 | 912.9 |
| 15+03 | 16+35 | LT | 1,400 | 33.00 | 1,053,043 | 1,474 | 163.9 |
| 15+08 | 18+30 | RT | 6,294 | 33.00 | 1,053,043 | 6,628 | 736.5 |
| 16+55 | 18+30 | LT | 5,458 | 33.00 | 1,053,043 | 5,748 | 638.7 |
| TOTAL | | | | | | 3,104 | |

| GUARDRAIL SCHEDULE | | | | | | | | |
|--------------------|----------|--------------------------------------|-----------------------------------|---------------------------------|-----------------------------------|--------------------------------------|------------------------------------|---|
| STATION TO STATION | LT / RT | 63000001 SPBGR TY A 6FT POSTS (FOOT) | 63100075 TRAF BAR TERM T5A (EACH) | LR631020 TRAF BAR TRM T1 (EACH) | 63200310 GUARDRAIL REMOVAL (FOOT) | 72501000 TERMINAL MARKER - DA (EACH) | 78200005 CRDRAIL REF TYPE A (EACH) | |
| TR 164 | | | | | | | | |
| 13+54.00 | 13+79.00 | RT | | 1 | | 1 | | |
| 13+79.00 | 14+04.00 | RT | 25.0 | | | | 2 | |
| 14+04.00 | 14+17.25 | RT | | 1 | | | | |
| 14+23.97 | 15+78.56 | RT | | | 155 | | | |
| 15+84.00 | | RT | | | | 1 | | |
| 14+42.00 | | LT | | | | 1 | | |
| 14+23.34 | 15+78.41 | LT | | | 155 | | | |
| 15+84.00 | 15+97.17 | LT | | 1 | | | | |
| 15+97.17 | 16+08.66 | LT | 12.5 | | | | 2 | |
| 16+08.66 | 16+28.75 | LT | | | 1 | | | |
| TOTALS | | | 37.5 | 2 | 2 | 310 | 4 | 4 |

| TEMPORARY EROSION CONTROL SEEDING | | | | | | | |
|-----------------------------------|---------|---------------------|-----------|--------------|---------------------------------|--|-------|
| STATION TO STATION | LT / RT | SEEDED AREA (SQ FT) | SLOPE (%) | SLOPE FACTOR | SEED AREA ADJ FOR SLOPE (SQ FT) | 28000250 TEMPORARY EROSION CONTROL SEEDING (POUND) | |
| TR 164 | | | | | | | |
| 12+00 | 14+98 | LT | 5,441 | 40.00 | 1,077,033 | 5,860 | 13.46 |
| 12+00 | 15+00 | RT | 7,628 | 40.00 | 1,077,033 | 8,216 | 18.87 |
| 15+03 | 16+35 | LT | 1,400 | 33.00 | 1,053,043 | 1,474 | 3.39 |
| 15+08 | 18+30 | RT | 6,294 | 33.00 | 1,053,043 | 6,628 | 15.22 |
| 16+55 | 18+30 | LT | 5,458 | 33.00 | 1,053,043 | 5,748 | 13.20 |
| TOTAL | | | | | | 65 | |

| EARTHWORK SCHEDULE | | | | | | | | | | |
|------------------------|-----------------------------------|-------------------------------------|---|--------------------|--|-------|-----|-------|-------|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | | | | | |
| LOCATION | 20200100 EARTH EXCAVATION (CU YD) | 20300100 CHANNEL EXCAVATION (CU YD) | EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%) (CU YD) | EMBANKMENT (CU YD) | EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) 20400800 (CU YD) | | | | | |
| TR 164 | | | | | | | | | | |
| STA 12+00 TO STA 18+30 | 1,241 | 418 | 1,140 | 1,204 | -64 | | | | | |
| TOTALS | | | | | | 1,241 | 418 | 1,140 | 1,204 | -64 |

| TREE REMOVAL, ACRES | | | | |
|---------------------|---------|-------|-----------------------------|--------|
| STATION TO STATION | LT / RT | SO FT | 20100500 TREE REMOVAL ACRES | (ACRE) |
| TR 164 | | | | |
| 11+75 | 14+54 | RT | 6151 | 0.15 |
| 15+70 | 18+00 | RT | 2923 | 0.07 |
| TOTAL | | | | 0.25 |

| TEMPORARY DITCH CHECKS | | | | | |
|------------------------|---------|---------------|--------------------|--|-----|
| STATION TO STATION | LT / RT | LENGTH (FOOT) | DITCH CHECK (EACH) | 28000305 TEMPORARY DITCH CHECKS (FOOT) | |
| TR 164 | | | | | |
| 12+25 | 14+40 | LT | 8 | 11 | 88 |
| 12+20 | 14+40 | RT | 8 | 11 | 88 |
| 17+90 | | LT | 8 | 1 | 8 |
| TOTAL | | | | | 184 |

- COLUMN 1 - LOCATION FROM PLANS (SEE GEOPAK EARTHWORK CALCULATIONS FOR STATION BY STATION BREAKDOWN)
- COLUMN 2 - CUT QUANTITIES FROM CROSS SECTIONS.
- COLUMN 3 - ESTIMATED AMOUNT OF MATERIAL DETERMINED TO BE CUT FROM EXISTING CHANNEL
- COLUMN 4 - ADJUSTED EARTH EXCAVATION QUANTITIES (CHANNEL EXC. 50%) THAT ARE TO BE USED AS FILL MATERIAL IN EMBANKMENT
- COLUMN 5 - FILL QUANTITIES FROM CROSS SECTIONS
- COLUMN 6 - MATERIAL TO WASTE (+) OR OFF-SITE MATERIAL NEEDED (-) (FURNISHED EXCAVATION)

FILE NAME : S:\Projects\2013\J085103-31 Sangamon Co. - Mansion Rd over Lick Creek\LR00\CADD Sheets\05050500-4ht-Schedule.dgn
 MODEL :
 PLOT DRIVER : DDPL04.plt



USER NAME : smaxwell
 FILE NAME : 0693674-4ht-Schedule.dgn
 PLOT SCALE : 1/8"=1'-0"
 PLOT DATE : 11/3/2016

DESIGNED - TKW
 DRAWN - TKW
 CHECKED - LMS
 DATE - DEC 2015

REVISED -
 REVISED -
 REVISED -
 REVISED -

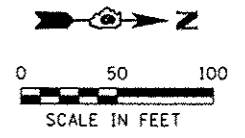
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SHEET NO. 1 OF 1 SHEETS STA. 12+00.00 TO STA. 18+30.00

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|----------|--------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 4 |
| CONTRACT NO. 93674 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Existing Structure No. 084-3104
Three Span steel beam bridge with
concrete deck supported on timber
piers with closed timber abutments
and wingwalls.



PROJECT BEGINS
STA 12+00.00

PROJECT ENDS
STA 18+30.00

PR CURVE 1 DATA
P.I. STA. 11+94.46
 $\Delta = 89^\circ 17' 05''$ (RT)
 $D = 54^\circ 34' 03''$
 $R = 105.00'$
 $T = 103.70'$
 $L = 163.62'$
 $E = 42.57'$
 $e = 4.0\%$
 $T.R. = 22'$
S.E. RUN = 59'
P.C. STA. 10+90.76
P.T. STA. 12+54.39

PR CURVE 2 DATA
P.I. STA. 99+04.68
 $\Delta = 42^\circ 53' 34''$ (RT)
 $D = 23^\circ 52' 24''$
 $R = 240.00'$
 $T = 94.28'$
 $L = 179.67'$
 $E = 17.85'$
 $TR =$
S.E. RUN =
P.C. STA. 98+10.40
P.T. STA. 99+90.07

LEGEND

INDICATES WETLAND IMPACT AREA
TOTAL IMPACT - 0.016 ACRES

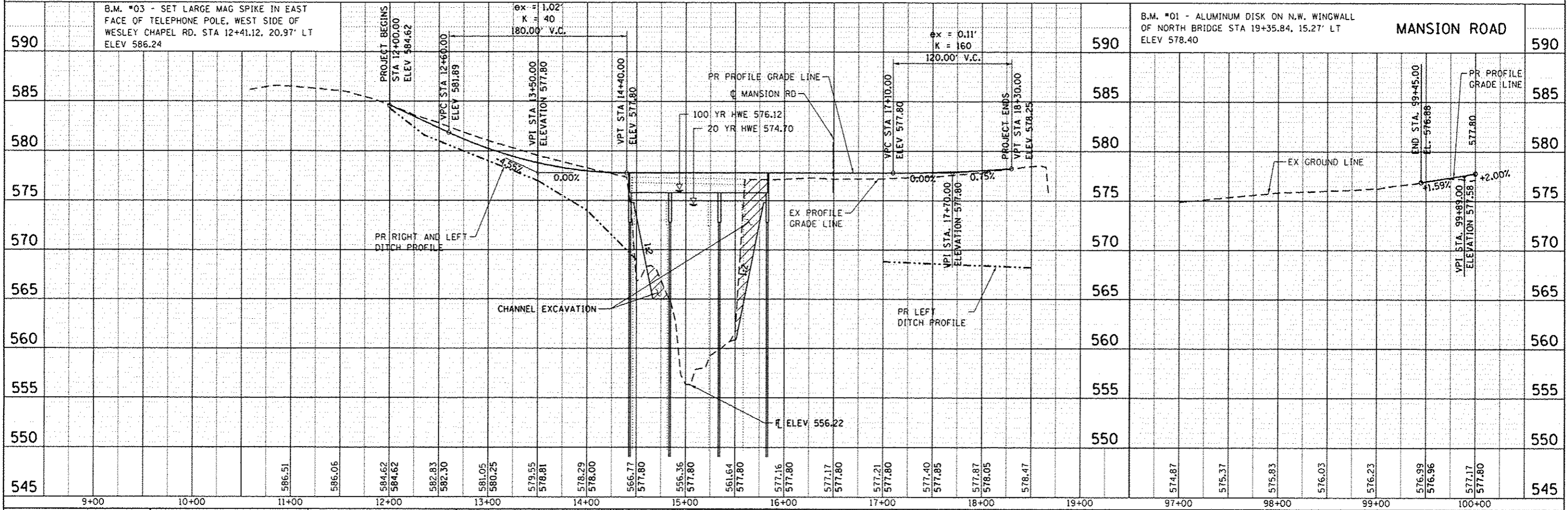
ALL SIGNAGE WORK TO BE DONE BY OTHERS.

TRANSITION FROM EXISTING ROADWAY
SECTION AT STA 12+00 TO PROPOSED
ROADWAY SECTION AT STA 12+50

STA 15+13.00 - SPECIAL BRIDGE DESIGN
THREE SPAN PRECAST PRESTRESSED CONCRETE DECK
BEAM BRIDGE ON PILE BENT ABUTMENTS AND PIERS.
(38'-10" SPAN 1, 50'-0" SPAN 2, 50'-0" SPAN 3)
21" BEAM DEPTH, 27'-0" CLEAR WIDTH,
142'-0" BACK TO BACK OF ABUTMENTS
SKEW = 0°

SWAMPY HOLLOW LLC.
P.I.N. 21-34-300-003

TRANSITION FROM PROPOSED ROADWAY
SECTION AT STA 17+80 TO EXISTING
ROADWAY SECTION AT STA 18+30



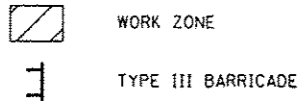
FILE NAME : 0693674-shr-PlanPr-f.dgn
PLOT DRIVER : IBDT\Bkplntrf9



| | | |
|--------------------------------------|-----------------|-----------|
| USER NAME : smaxwell | DESIGNED - SCD | REVISED - |
| FILE NAME : 0693674-shr-PlanPr-f.dgn | DRAWN - SCD | REVISED - |
| PLOT SCALE : 1/80.0000 1" = 100' | CHECKED - LMS | REVISED - |
| PLOT DATE : 11/3/2016 | DATE - DEC 2015 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | | | | |
|-----------------------------|--|-------------------------|----------------|--------------------------------|--------------|--------------------|
| PLAN & PROFILE | | T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| TR 164 (WESLEY CHAPEL ROAD) | | 164 | 12-10119-01-BR | SANGAMON | 31 | 5 |
| SCALE: 1" = 50' | | SHEET NO. 1 OF 1 SHEETS | | STA. 12+00.00 TO STA. 18+30.00 | | CONTRACT NO. 93674 |
| ILLINOIS FED. AID PROJECT | | | | | | |



SPAULDING ORCHARD RD

CURRAN RD

TR 164
WESLEY CHAPEL RD

MANSION RD

MANSION RD

LICK CREEK

TR 164
WESLEY CHAPEL RD

ROAD CLOSED
1.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
M5-1L

ROAD CLOSED
1.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
M5-1L

ROAD CLOSED
1.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
M5-1R

ROAD CLOSED
TO THRU TRAFFIC
R11-4

ROAD CLOSED
R11-2

ROAD CLOSED
TO THRU TRAFFIC
R11-4

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
M5-1L

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
M5-1R

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
M5-1R

ROAD CLOSED
AHEAD
W20-3

ROAD CLOSED
AHEAD
W20-3

ROAD CLOSED
TO THRU TRAFFIC
R11-4

TRAFFIC CONTROL NOTES

1. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
2. ALL WARNING SIGNS SHALL HAVE MINIMUM DIMENSIONS OF 48" X 48" AND HAVE A BLACK LEGEND ON AN ORANGE REFLECTORIZED BACKGROUND.
3. ALL WORK ZONE SIGNS ARE REQUIRED TO MEET REQUIREMENTS OF ARTICLE 1106.01 OF THE STANDARD SPECIFICATIONS.
4. TWO TYPE A LOW INTENSITY FLASHING LIGHTS SHALL BE USED ON EACH APPROACH IN ADVANCE OF THE WORK AREA, ONE LIGHT SHALL BE INSTALLED ABOVE EACH BARRICADE. IF ONLY ONE BARRICADE IS REQUIRED, THE OTHER LIGHT SHALL BE INSTALLED ABOVE THE FIRST ADVANCE WARNING SIGN.
5. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
6. SEE STANDARDS 701901 AND BLR-21 FOR ADDITIONAL DETAILS.

FILE NAME = S:\Projects\2013\JOB\13-01 Sangamon Co - Mansion Rd over Lick Creek\ROAD\CADD\Sheet\0693674-shr-staging.dgn
 MODEL = Default
 PLOT DRIVER = IDOT.Bkpltrfg



USER NAME = smaxwell
 FILE NAME = D693674-shr-staging.dgn
 PLOT SCALE = 40.0000 / in.
 PLOT DATE = 11/3/2016

| | | | |
|------------|----------|-----------|--|
| DESIGNED - | TKW | REVISED - | |
| DRAWN - | TKW | REVISED - | |
| CHECKED - | LMS | REVISED - | |
| DATE - | DEC 2015 | REVISED - | |

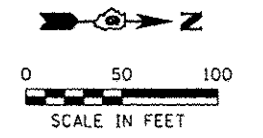
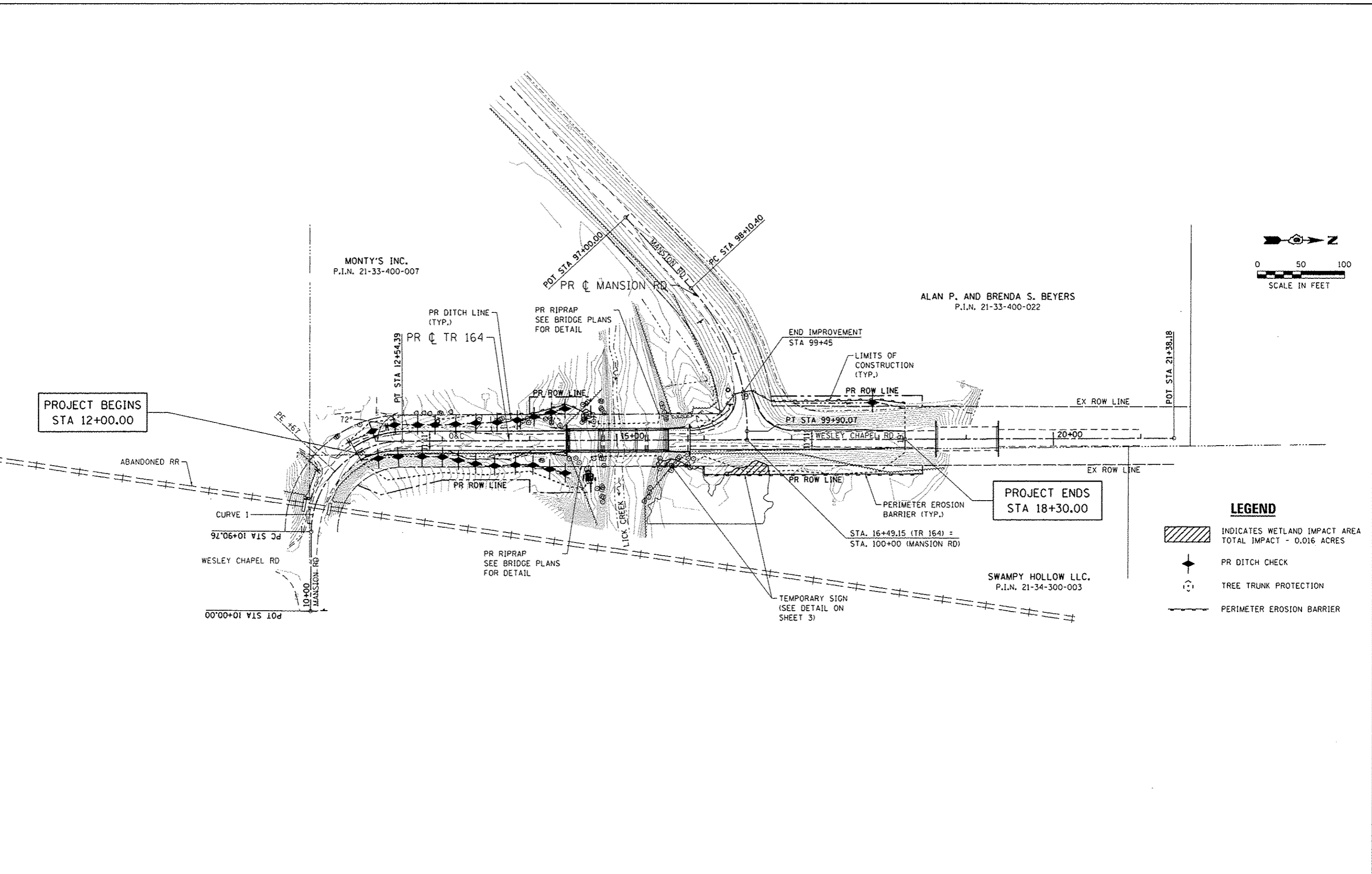
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
 TR 164





SHEET NO. 1 OF 1 SHEETS STA. 12+00.00 TO STA. 18+30.00

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|----------|---------------------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 6 |
| CONTRACT NO. 93674 | | | ILLINOIS FED. AID PROJECT | |

FILE NAME : S:\Projects\2013\JOBS\13-3\ Sangamon Co - Mansion Rd over Lick Creek\1000\1000 Sheets\0693674-ah-EROS.dgn
 MODEL : Default
 PLOT DRIVER : 1007_Bkplotf9



LEGEND

-  INDICATES WETLAND IMPACT AREA
TOTAL IMPACT - 0.016 ACRES
-  PR DITCH CHECK
-  TREE TRUNK PROTECTION
-  PERIMETER EROSION BARRIER



| | | |
|---------------------------------|-----------------|-----------|
| USER NAME : amaxwell | DESIGNED : TKW | REVISED : |
| FILE NAME : 0693674-ah-EROS.dgn | DRAWN : TKW | REVISED : |
| PLOT SCALE : 100.0000 ' / 1" | CHECKED : LMS | REVISED : |
| PLOT DATE : 11/3/2016 | DATE : DEC 2015 | REVISED : |

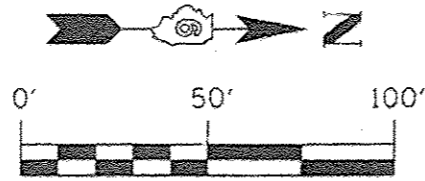
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION
 PREVENTION PLAN - TR 164
 SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. 12+00.00 TO STA. 18+30.00

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|----------|--------------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 7 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 93674 | |

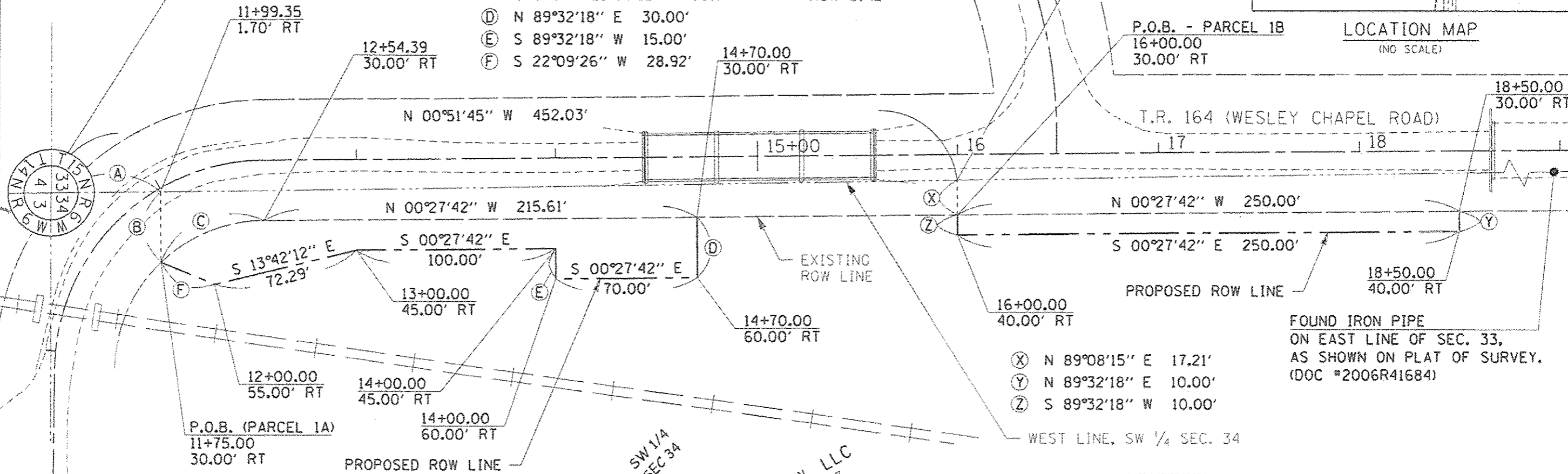
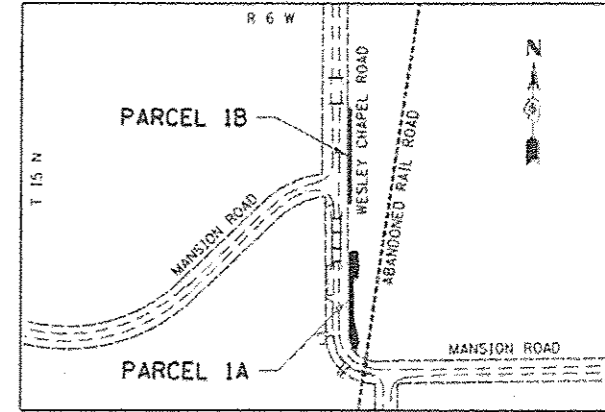
☉ CURVE DATA

P.I. STA. 11+94.46
 $\Delta = 89^\circ 17' 05''$ (RT)
 $D = 54^\circ 34' 03''$
 $R = 105.00'$
 $T = 103.70'$
 $L = 163.62'$
 $E = 42.57'$
 P.C. STA. 10+90.76
 P.T. STA. 12+54.39



P.O.C. (PARCELS 1A & 1B)
 FOUND IRON PIPE
 S.W. COR. OF THE
 S.W. 1/4 OF SEC. 34,
 T. 15 N., R. 6 W., 3rd P.M.
 (DOC #812855)

- Ⓐ N 00°51'45" W 54.83'
- Ⓑ N 89°08'15" E 34.87'
- Ⓒ ARC 56.71', RADIUS = 75.00',
CHORD N 22°07'18" W 55.36'
- Ⓓ N 89°32'18" E 30.00'
- Ⓔ S 89°32'18" W 15.00'
- Ⓕ S 22°09'26" W 28.92'



FOUND IRON PIPE
 ON EAST LINE OF SEC. 33,
 AS SHOWN ON PLAT OF SURVEY.
 (DOC #2006R41684)

- ⓧ N 89°08'15" E 17.21'
- Ⓨ N 89°32'18" E 10.00'
- Ⓩ S 89°32'18" W 10.00'

NOTES:
 BEARINGS ARE BASED ON ILLINOIS STATE PLANE COORDINATES,
 WEST ZONE, NAD 83 / 2011 ADJ.
 ALL STATIONS AND OFFSETS ARE FROM PROPOSED CENTERLINE.
 FIELD WORK COMPLETED SEPTEMBER 24, 2013

THIS IS TO STATE THAT I, EDWARD D. STEWART, AN ILLINOIS PROFESSIONAL
 LAND SURVEYOR, HAVE PREPARED THE RIGHT OF WAY PLAT SHOWN HEREON.
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM
 STANDARDS FOR A BOUNDARY SURVEY.

Edward D. Stewart
 EDWARD D. STEWART
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3414
 LICENSE EXPIRATION DATE : 11/30/2016
 DATE: August 31, 2016

SWAMPY HOLLOW, LLC
 P.I.N. 21-34-300-003



| PARCELS 1A & 1B | |
|-----------------------------------|--------------------------------|
| SWAMPY HOLLOW, LLC | |
| TOTAL HOLDING | = 17.870 ACRES± |
| PROPOSED ROW REQUIRED - PARCEL 1A | = 0.129 ACRES± (5,604 SQ FT±) |
| PROPOSED ROW REQUIRED - PARCEL 1B | = 0.057 ACRES± (2,500 SQ FT±) |
| AREA IN EXISTING ROW | = 0.000 ACRES± |
| TOTAL ROW AREA REQUIRED | = 0.186 ACRES± (8,104 SQ. FT±) |
| REMAINDER | = 17.684 ACRES± |

A PART OF THE SOUTHWEST QUARTER OF
 SEC. 34, T. 15 N., R. 6 W, 3rd P.M.
 SANGAMON COUNTY, ILLINOIS

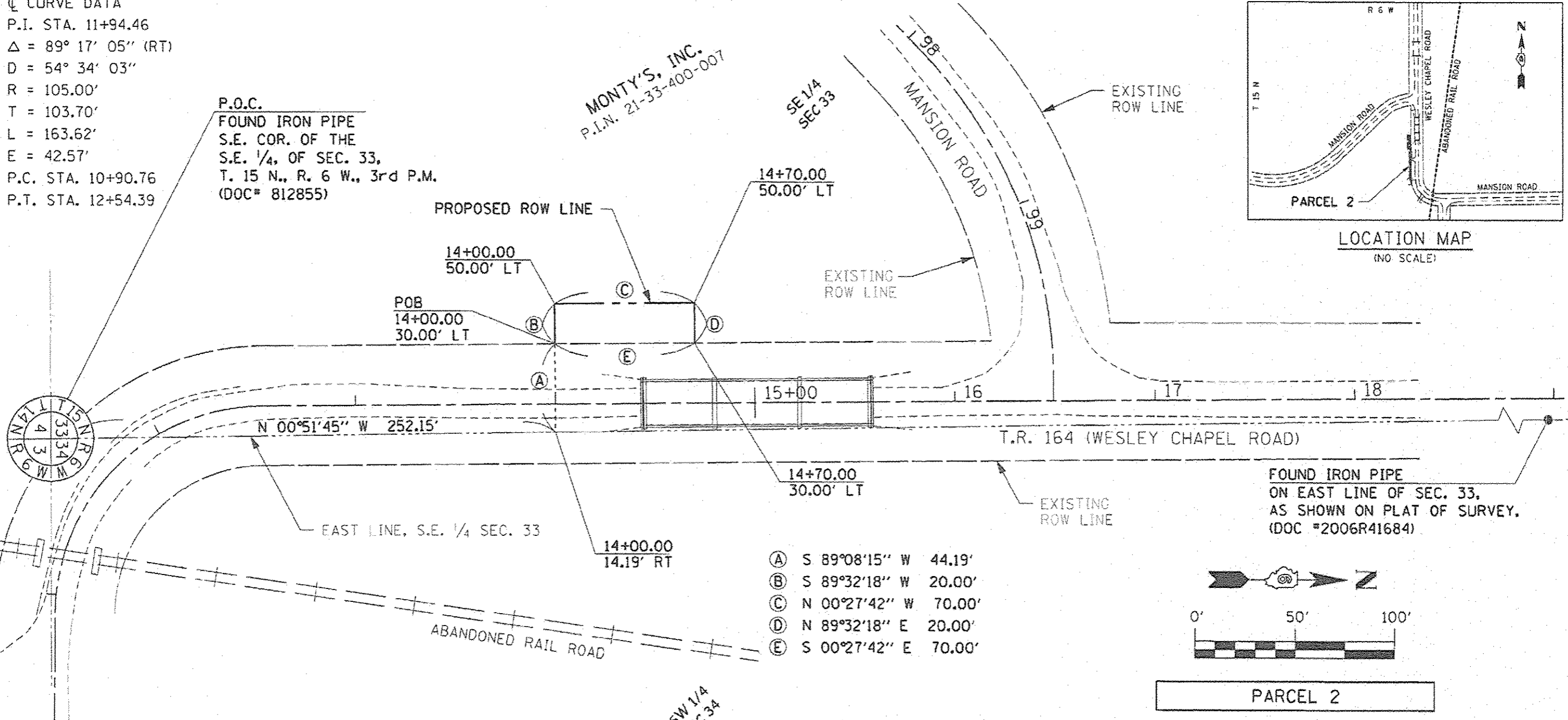
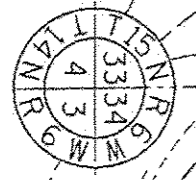
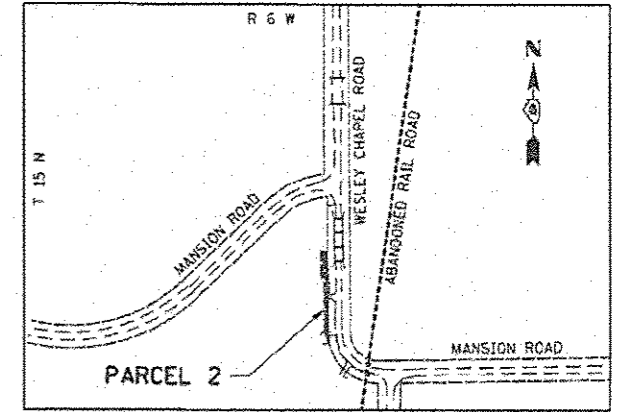
SHEET 8, CONTRACT 93674
 QEI
 QUIGG ENGINEERING INC
 2301 SOUTH DIRKSEN PARKWAY
 SPRINGFIELD, ILLINOIS 62703
 217-476-0563 (P) / 217-639-2264 (F)
 DESIGN REGISTRATION NUMBER: 184-094721
 www.quiggeengineering.com

| | | | | | | | | |
|--------------------|---------------------|---------------|------------|--|-----------------|-------------------------|--------------------------------------|------|
| FILE NAME: 811ELLS | USER NAME: *USERS* | DESIGNED: JGF | REVISED: - | ILLINOIS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLAT | ROUTE: T.R. 164 | SECTION: 12-10119-01-BR | COUNTY: SANGAMON | JOB# |
| | PLAT SCALE: *SCALE* | DRAWN: JGF | REVISED: - | | SECTION: 34 | T 15 N, R 6 W, 3rd P.M. | PROJECT # | |
| | PLAT DATE: *DATE* | CHECKED: - | REVISED: - | | SCALE: 1" = 50' | SHEET No. 1 OF 1 SHEETS | STATION 11+75.00 TO STATION 18+50.00 | |
| | | DATE: - | REVISED: - | | | | | |

C CURVE DATA
 P.I. STA. 11+94.46
 $\Delta = 89^\circ 17' 05''$ (RT)
 $D = 54^\circ 34' 03''$
 $R = 105.00'$
 $T = 103.70'$
 $L = 163.62'$
 $E = 42.57'$
 P.C. STA. 10+90.76
 P.T. STA. 12+54.39

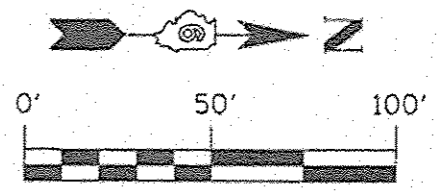
P.O.C.
 FOUND IRON PIPE
 S.E. COR. OF THE
 S.E. 1/4, OF SEC. 33,
 T. 15 N., R. 6 W., 3rd P.M.
 (DOC# 812855)

MONTY'S, INC.
 P.L.N. 21-33-400-007



FOUND IRON PIPE
 ON EAST LINE OF SEC. 33,
 AS SHOWN ON PLAT OF SURVEY.
 (DOC #2006R41684)

- (A) S 89°08'15" W 44.19'
- (B) S 89°32'18" W 20.00'
- (C) N 00°27'42" W 70.00'
- (D) N 89°32'18" E 20.00'
- (E) S 00°27'42" E 70.00'



PARCEL 2

MONTY'S, INC.

| | | |
|-------------------------|---|------------------------------|
| TOTAL HOLDING | = | 3.500 ACRES± |
| PROPOSED ROW REQUIRED | = | 0.032 ACRES± (1,400 SQ FT±) |
| AREA IN EXISTING ROW | = | 0.000 ACRES± |
| TOTAL ROW AREA REQUIRED | = | 0.032 ACRES± (1,400 SQ. FT±) |
| REMAINDER | = | 3.468 ACRES± |

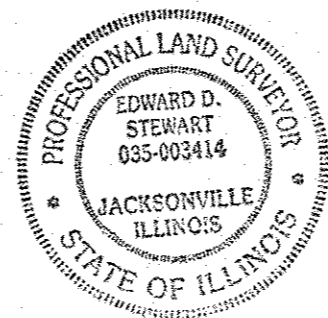
NOTES:
 BEARINGS ARE BASED ON ILLINOIS STATE PLANE COORDINATES,
 WEST ZONE, NAD 83 / 2011 ADJ.
 ALL STATIONS AND OFFSETS ARE FROM PROPOSED CENTERLINE.
 FIELD WORK COMPLETED SEPTEMBER 24, 2013

THIS IS TO STATE THAT I, EDWARD D. STEWART, AN ILLINOIS PROFESSIONAL
 LAND SURVEYOR, HAVE PREPARED THE RIGHT OF WAY PLAT SHOWN HEREON.
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM
 STANDARDS FOR A BOUNDARY SURVEY.

Edward D. Stewart

NOVEMBER 3, 2016
 DATE

EDWARD D. STEWART
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3414
 LICENSE EXPIRATION DATE : 11/30/2016



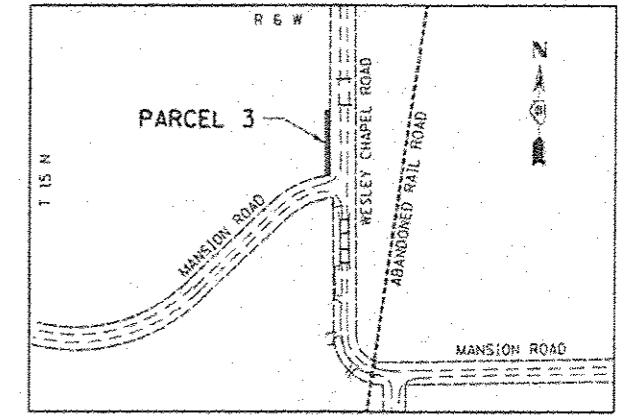
A PART OF THE SOUTHEAST QUARTER OF
 SEC. 33, T. 15 N., R. 6 W., 3rd P.M.
 SANGAMON COUNTY, ILLINOIS

SHEET 9, CONTRACT 93674
 QUIGG ENGINEERING INC.
 2351 SOUTH DIRKSEN PARKWAY
 SPRINGFIELD, ILLINOIS 62703
 317-678-9585 (F) / 217-779-2304 (T)
 DESIGN REGISTRATION NUMBER: 134-004721
 www.quiggengineering.com

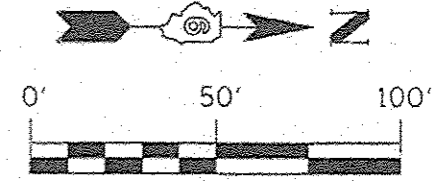
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|-----------------------------------|----------------------|----------------|-----------|--|-----------------|-------------------------|--------------------------------------|------|
| FILE NAME : 2133400007-Montys.dgn | USER NAME : estewart | DESIGNED - JGF | REVISED - | ILLINOIS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLAT | ROUTE: T.R. 164 | SECTION 12-10119-01-BR | COUNTY: SANGAMON | JOB# |
| | | DRAWN - JGF | REVISED - | | SECTION: 33 | T 15 N. R 6 W, 3rd P.M. | PROJECT # | |
| | | CHECKED - | REVISED - | | SCALE: 1" = 50' | SHEET No. 1 OF 1 SHEETS | STATION 12+25.00 TO STATION 14+70.00 | |
| | | DATE - | REVISED - | | | | | |

ALAN P. & BRENDA S. BEYERS
P.I.N. 21-33-400-022

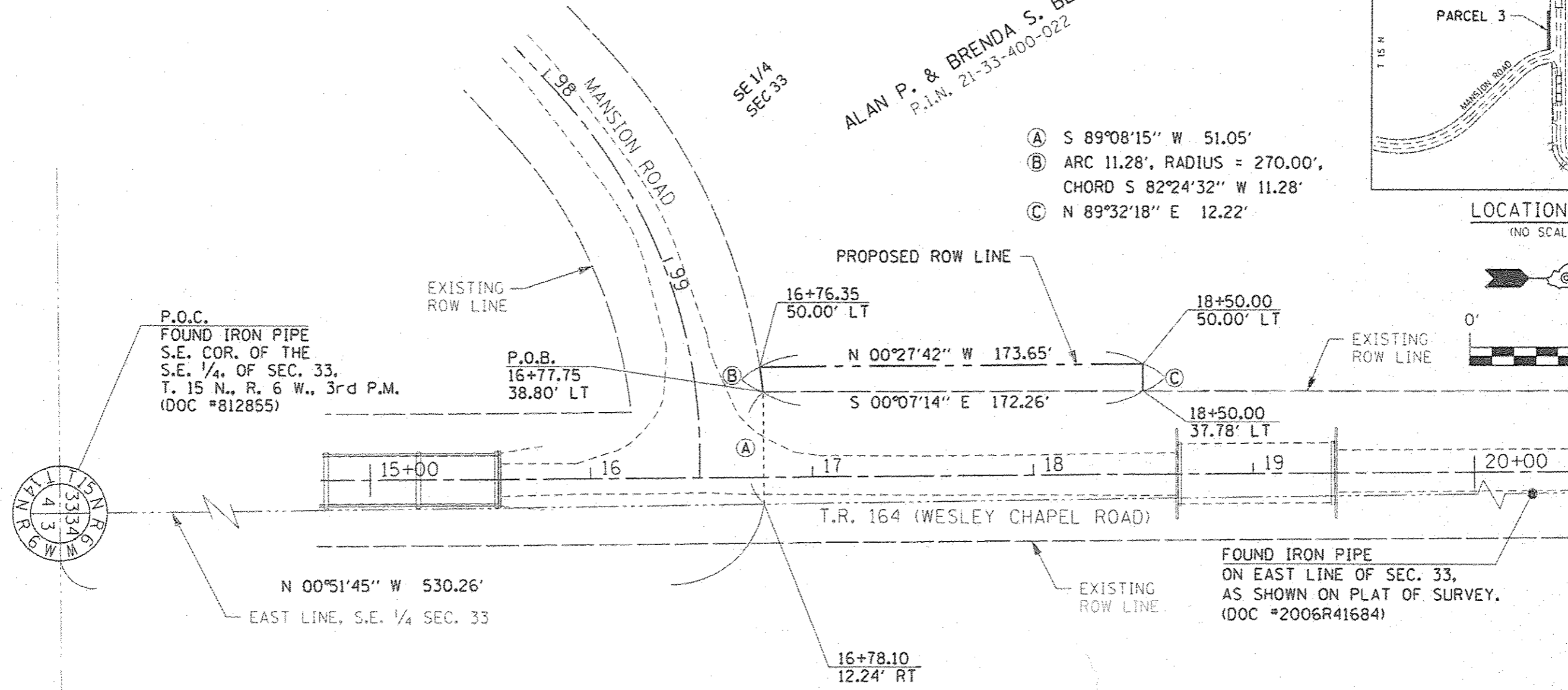
SE 1/4
SEC 33



LOCATION MAP
(NO SCALE)

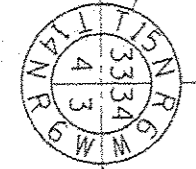


- Ⓐ S 89°08'15" W 51.05'
- Ⓑ ARC 11.28', RADIUS = 270.00',
CHORD S 82°24'32" W 11.28'
- Ⓒ N 89°32'18" E 12.22'



P.O.C.
FOUND IRON PIPE
S.E. COR. OF THE
S.E. 1/4 OF SEC. 33,
T. 15 N., R. 6 W., 3rd P.M.
(DOC #812855)

P.O.B.
16+77.75
38.80' LT



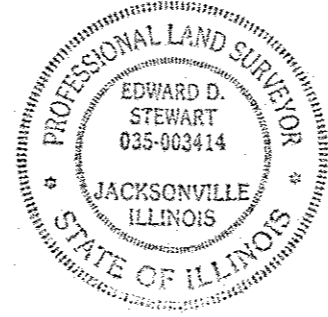
FOUND IRON PIPE
ON EAST LINE OF SEC. 33,
AS SHOWN ON PLAT OF SURVEY.
(DOC #2006R41684)

NOTES:
BEARINGS ARE BASED ON ILLINOIS STATE PLANE COORDINATES,
WEST ZONE, NAD 83 / 2011 ADJ.
ALL STATIONS AND OFFSETS ARE FROM PROPOSED CENTERLINE.
FIELD WORK COMPLETED SEPTEMBER 24, 2013

THIS IS TO STATE THAT I, EDWARD D. STEWART, AN ILLINOIS PROFESSIONAL
LAND SURVEYOR, HAVE PREPARED THE RIGHT OF WAY PLAT SHOWN HEREON.
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM
STANDARDS FOR A BOUNDARY SURVEY.

Edward D. Stewart
EDWARD D. STEWART
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3414
LICENSE EXPIRATION DATE : 11/30/2016

August 31, 2016
DATE



PARCEL 3

ALAN P. & BRENDA S. BEYERS

| | | |
|-------------------------|---|--------------------------------|
| TOTAL HOLDING | = | 14.440 ACRES ± |
| PROPOSED ROW REQUIRED | = | 0.046 ACRES ± (2,024 SQ FT ±) |
| AREA IN EXISTING ROW | = | 0.000 ACRES ± |
| TOTAL ROW AREA REQUIRED | = | 0.046 ACRES ± (2,024 SQ. FT ±) |
| REMAINDER | = | 14.394 ACRES ± |

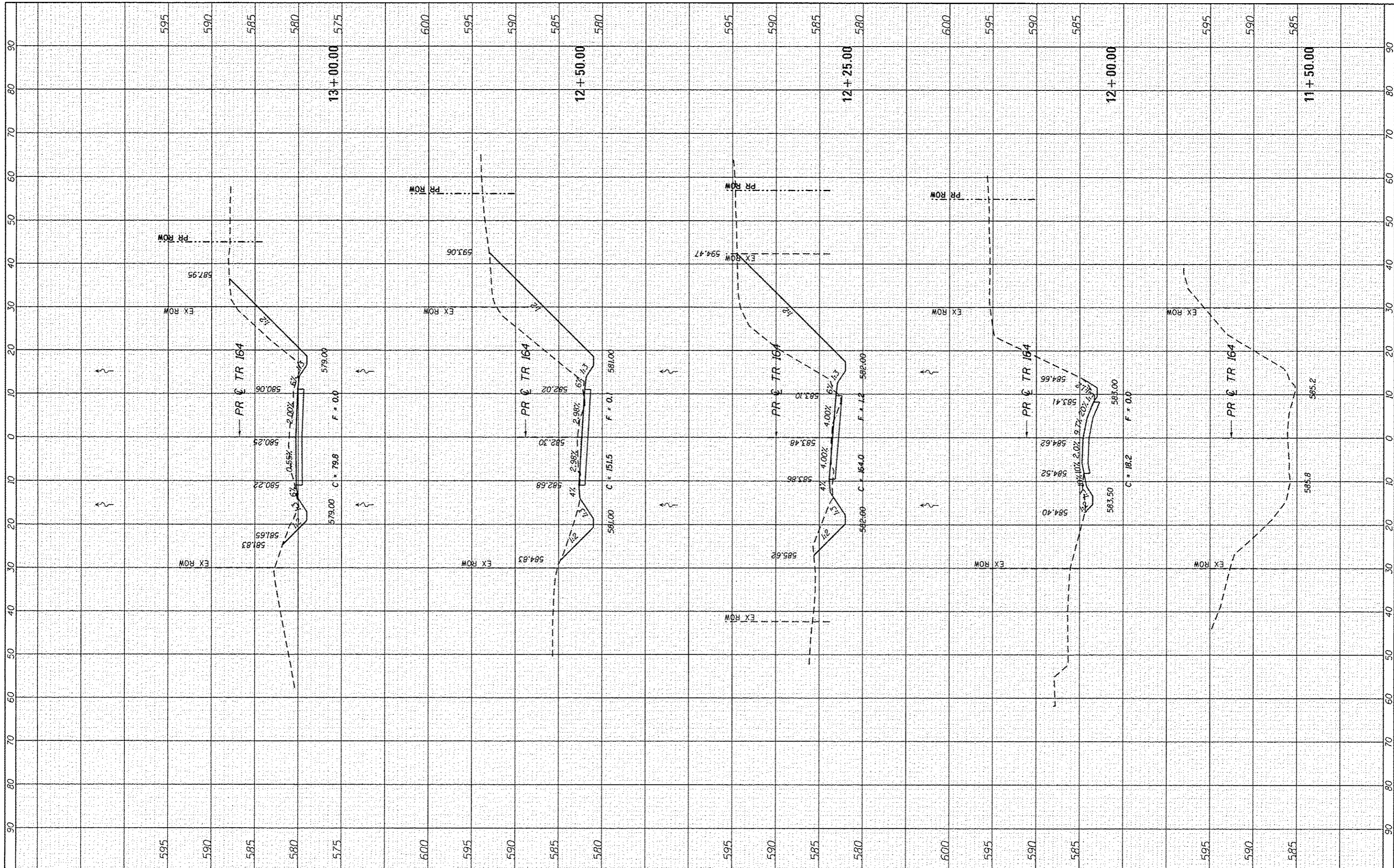
A PART OF THE SOUTHEAST QUARTER OF
SEC. 33, T. 15 N., R. 6 W., 3rd P.M.
SANGAMON COUNTY, ILLINOIS

SHEET 10, CONTRACT 93674
QUIGG ENGINEERING INC.
2351 SOUTH DIRKSEN PARKWAY
SPRINGFIELD, ILLINOIS 62793
217-670-0563 (P) / 217-679-2204 (F)
DESIGN REGISTRATION NUMBER: IS4-004721
www.quiggengineering.com

| | | | | | | | |
|-------------|---------------------|----------------|-----------|--|-------------------------|--------------------------------------|------|
| FILE NAME : | USER NAME : BUSERS | DESIGNED : JGF | REVISED : | ROUTE: T.R. 164 | SECTION 12-10119-01-BR | COUNTY: SANGAMON | JOB# |
| #FILES : | | DRAWN : JGF | REVISED : | SECTION: 33 | T 15 N, R 6 W, 3rd P.M. | PROJECT # | |
| | PLAT SCALE : NSCALE | CHECKED : | REVISED : | SCALE: 1" = 50' | SHEET No. 1 OF 1 SHEETS | STATION 16+75.35 TO STATION 18+50.00 | |
| | PLAT DATE : SDATE | DATE : | REVISED : | ILLINOIS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLAT | | | |

| | |
|------------------|------|
| FINAL SURVEY | DATE |
| SKIPPED SURVEY | DATE |
| PLOTTED SURVEY | DATE |
| TEMPLATE SURVEY | DATE |
| NOTE BOOK SURVEY | DATE |
| AREAS CHECKED | DATE |

| | |
|------------------|------|
| FINAL SURVEY | DATE |
| SKIPPED SURVEY | DATE |
| PLOTTED SURVEY | DATE |
| TEMPLATE SURVEY | DATE |
| NOTE BOOK SURVEY | DATE |
| AREAS CHECKED | DATE |



FILE NAME * 0693674-sh1-XS_TR164.dgn
 #MODELNAME*

| | | |
|-----------------------------|------------|-----------|
| USER NAME * shawell | DESIGNED - | REVISED - |
| PLOT SCALE * 20.0000' / in. | DRAWN - | REVISED - |
| PLOT DATE * 11/3/2016 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

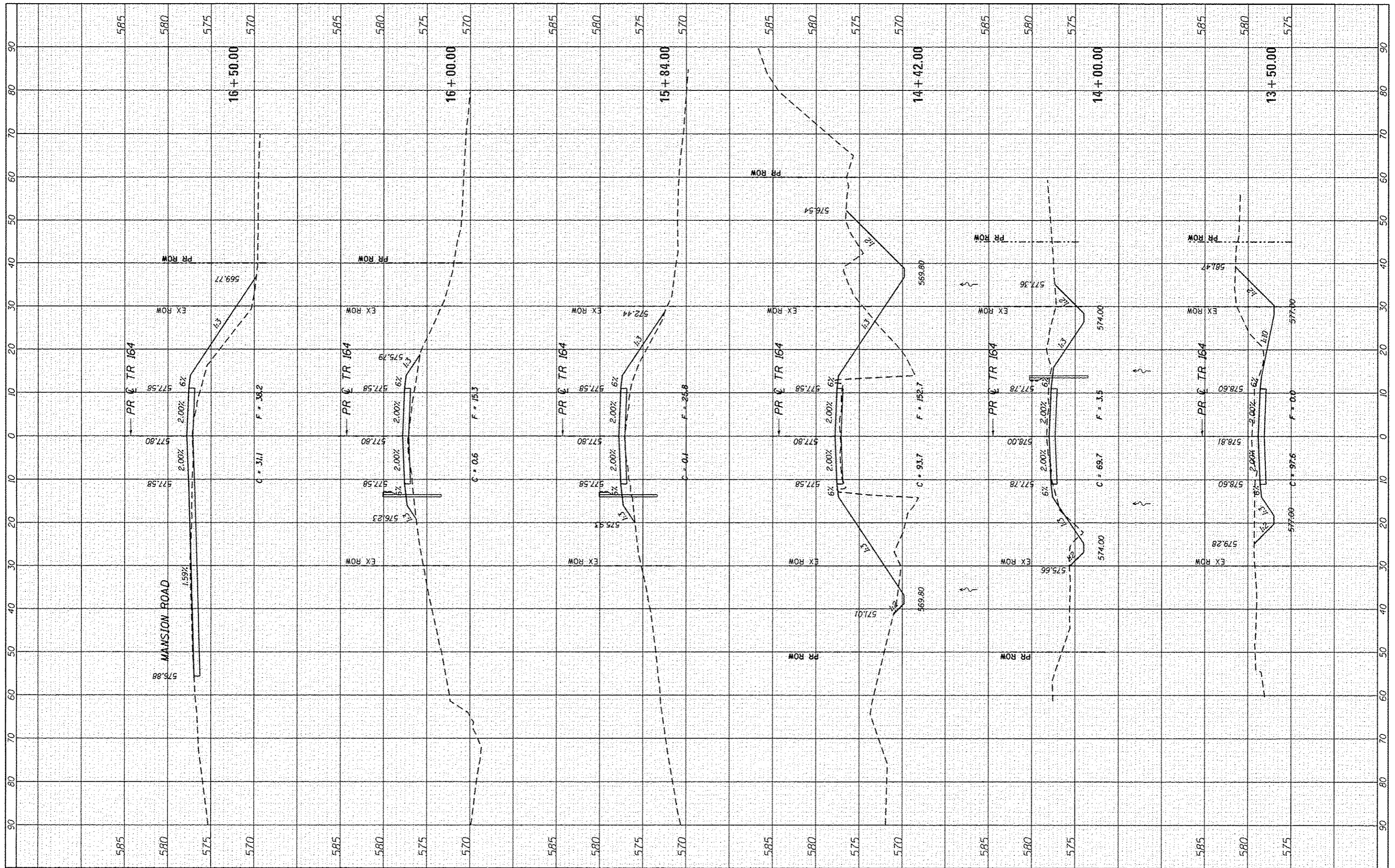
**CROSS SECTIONS
TR 164 (WESLEY CHAPEL / MANSION ROAD)**

SCALE: SHEET 1 OF 3 SHEETS STA. 11+50.00 TO STA. 13+00.00

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|----------|--------------|--------------------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 11 |
| | | | | CONTRACT NO. 93674 |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|---------------|------|
| FINAL SHEET | DATE |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| NO. | |

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



FILE NAME : 0693674-sht-XS-TR164.dgn
 USER NAME : smowell
 PLOT SCALE : 20,000 / in.
 PLOT DATE : 11/3/2016

| | |
|------------|-----------|
| DESIGNED - | REVISED - |
| DRAWN - | REVISED - |
| CHECKED - | REVISED - |
| DATE - | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 TR 164 (WESLEY CHAPEL/MANSION ROAD)
 SCALE: SHEET 2 OF 3 SHEETS STA. 13+50.00 TO STA. 16+50.00

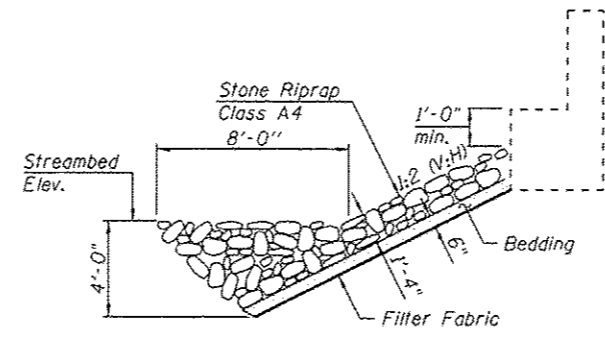
| | | | | |
|--------------------|----------------|----------|---------------------------|-----------|
| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 164 | 12-10119-01-BR | SANGAMON | 31 | 12 |
| CONTRACT NO. 93674 | | | ILLINOIS FED. AID PROJECT | |

GENERAL NOTES

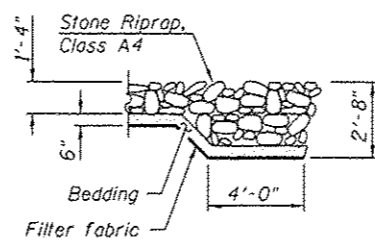
1. Reinforcement Bars shall conform to the requirements of ASTM A 706, Grade 60.
2. Reinforcement Bars designated (E) shall be Epoxy Coated.
3. Layout of Slope Protection System may be varied in the field to suit ground conditions as directed by the Engineer.
4. The Contractor shall drive Test Piles to 110% of the nominal required bearing specified in the production location at substructures specified or approved by the Engineer before ordering the remainder of piles.
5. Backfill behind the Abutments shall be placed after the Superstructure is in place.
6. All proposed construction activities shall be in accordance with Nationwide Permit Number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act.
7. Seal Coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in Seal Coat thickness shall be submitted to the Engineer for approval with the Cofferdam design.
8. Construction Permits: This project has been approved for construction under Statewide Permit No. 12, as issued by the Department of Natural Resources/ Office of Water Resources.

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|-------|-------|--------|--------|
| Removal Of Existing Structures | Each | | | 1 |
| Stone Riprap, Class A4 (Special) | Ton | | 399 | 399 |
| Structure Excavation | Cu Yd | | 50 | 50 |
| Concrete Structures | Cu Yd | | 127 | 127 |
| Concrete Encasement | Cu Yd | | 4.2 | 4.2 |
| Precast Prestressed Concrete Deck Beams (21" Depth) | Sq Ft | 3,776 | | 3,776 |
| Reinforcement Bars, Epoxy Coated | Pound | | 12,540 | 12,540 |
| Steel Railing, Type S1 | Foot | 285 | | 285 |
| Stud Shear Connectors | Each | | 52 | 52 |
| Furnishing Steel Piles Hp12x63 | Foot | | 1,881 | 1,881 |
| Driving Piles | Foot | | 1,881 | 1,881 |
| Test Pile Steel Hp12x63 | Each | | 2 | 2 |
| Name Plates | Each | 1 | | 1 |
| Seal Coat Concrete | Cu Yd | | 93 | 93 |
| Cofferdam Excavation | Cu Yd | | 279 | 279 |
| Cofferdam (Type 2) Location 1 (Pier 1) | Each | | 1 | 1 |
| Cofferdam (Type 2) Location 2 (Pier 2) | Each | | 1 | 1 |
| Portland Cement Mortar Fairing Course | Foot | 1,173 | | 1,173 |



SECTION A-A



SECTION B-B

DESIGN SCOUR ELEVATION TABLE

| Design Scour Elevation (Ft.) | S. Abut. | Pier 1 | Pier 2 | N. Abut. |
|------------------------------|----------|--------|--------|----------|
| | 572.77 | 550.22 | 550.22 | 572.77 |

WATERWAY INFORMATION TABLE

| Flood Year | | 0 | Waterway Opening Sq. Ft. | | Nat. Head - Ft. | | Headwater Elev. | | |
|-------------|-------|--------|--------------------------|-------|-----------------|-------|-----------------|--------|--------|
| | Freq. | C.F.S. | Exist. | Prop. | H.W.E. Exist. | Prop. | Exist. | Prop. | |
| Design | 20 | 7,325 | 1,320 | 1,472 | 574.70 | 0.15 | 0.01 | 574.85 | 574.69 |
| Base | 100 | 10,800 | 1,320 | 1,616 | 576.12 | 0.91 | 0.44 | 577.03 | 576.56 |
| Overtopping | | | | | | | | | |
| Max. Calc. | 500 | 14,500 | 1,320 | 1,616 | 577.93 | 1.35 | 0.96 | 579.28 | 578.89 |

Drainage Area = 99.10 Sq. Mi. Existing Low Grade Elev. 577.09 @ Sta. 15+00
Proposed Low Grade Elev. 577.80 @ Sta. 16+00

LICK CREEK
BUILT 20... BY
SANGAMON COUNTY
SEC. 12-10119-01-BR
TR 164 STA. 15+13.00
LOADING HL-93
STR. NO. 084-3504

NAME PLATE

See Std. 515001

See sheet 1 of 18 for Location of Sec. A-A and B-B.

FILE NAME = S:\Projects\2013\085N13-01_Sangamon Co. - Mazon Rd over Lick Creek\LOAD\CA00 Sheets\0843504-06\084-082-Data.dgn
MODEL = Default
PLOT DRIVER = TDI12V.plt



USER NAME = smaxwell
PLOT SCALE =
PLOT DATE = 11/3/2016

| | |
|------------|---------|
| DESIGNED - | REVISED |
| CHECKED - | REVISED |
| DRAWN - | REVISED |
| CHECKED - | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

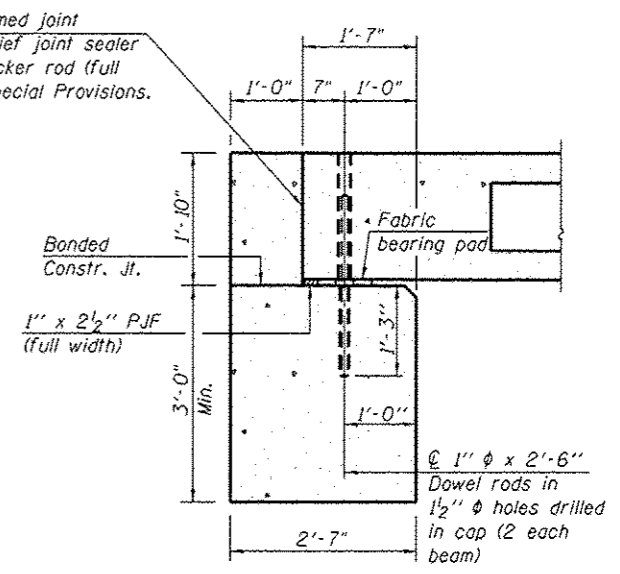
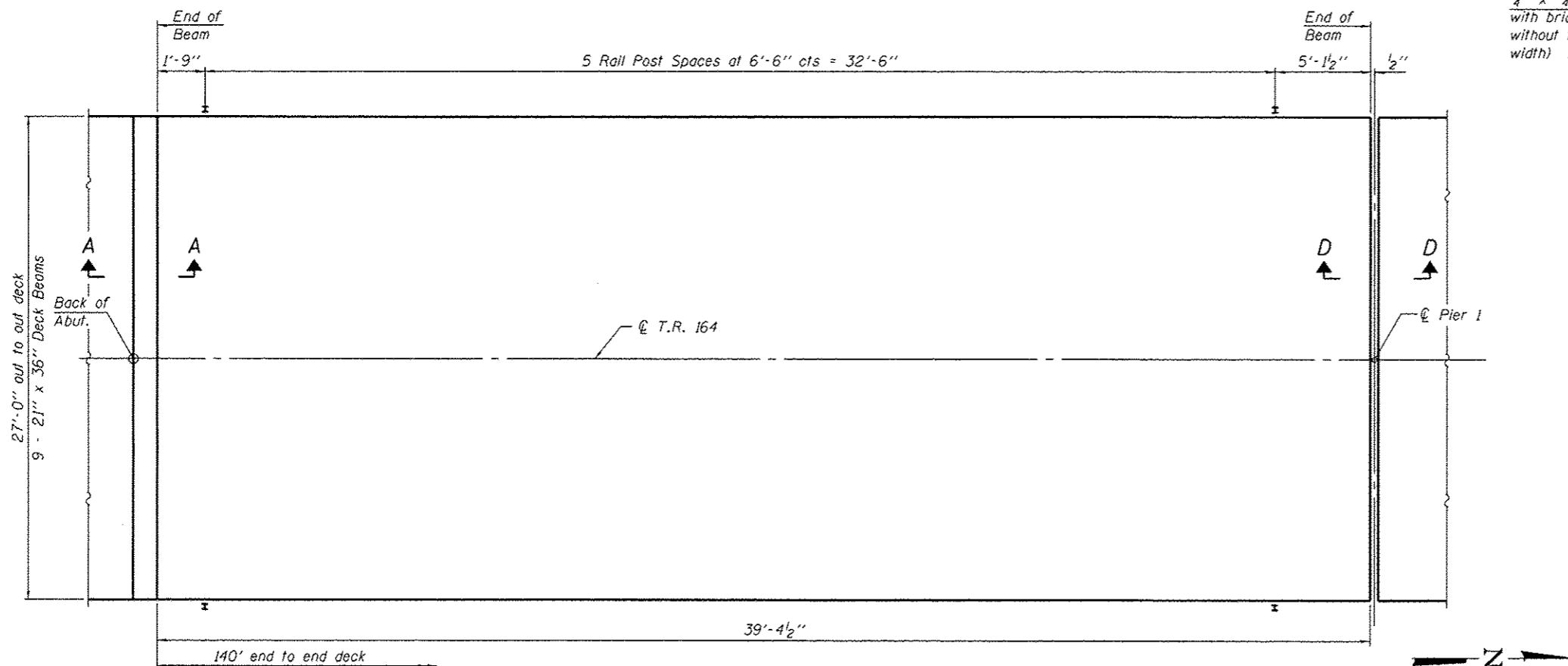
GENERAL DATA
STRUCTURE NO. 084-3504

SHEET NO. 2 OF 18 SHEETS

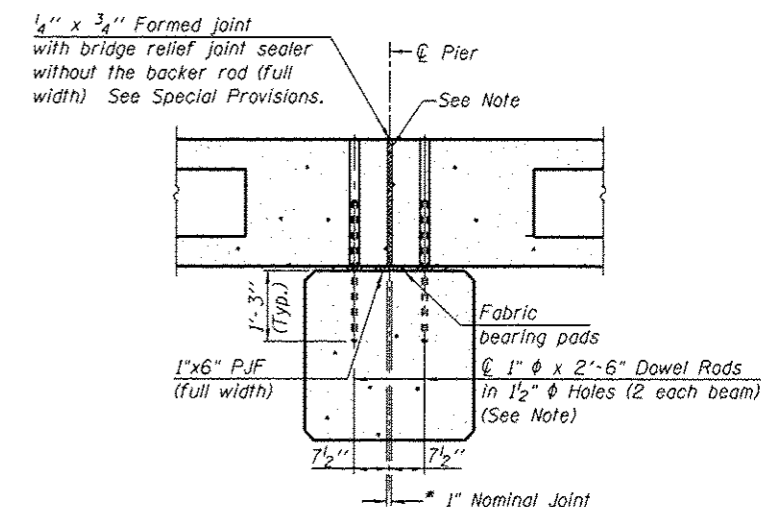
| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|----------|--------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 15 |

CONTRACT NO. 93674
ILLINOIS FED. AID PROJECT

FILE NAME : S:\Projects\2013\J085\13-21_Sangamon Co - Mennon Rd over Lick Creek\ADD\CAD Sheets\084-3504-06\03674-003-Superstructure.dgn
 MODEL : D:\PLOT
 PLOT DRIVER : 1001.Bhp1c1c9

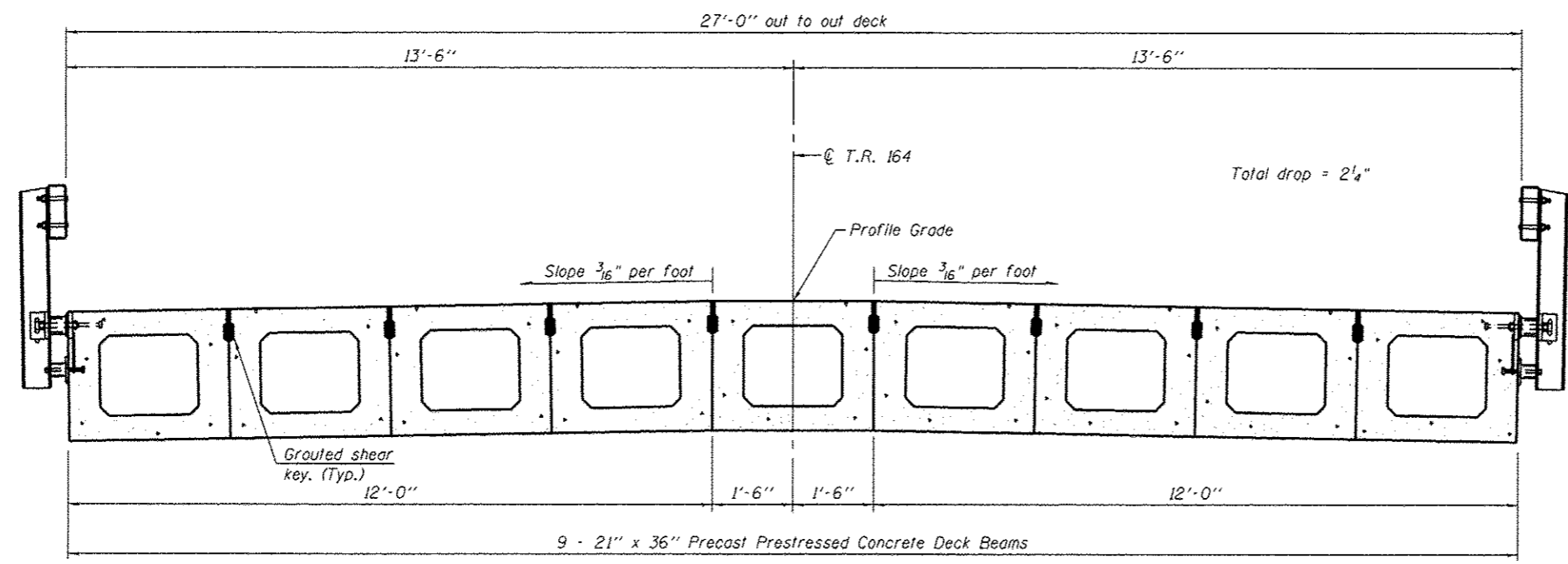


SECTION A-A
(Dimensions are at Rt. L's)



SECTION D-D
(Dimensions are at Rt. L's)

*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



CROSS SECTION

Note:
 See sheets 4 & 5 of 18 for Deck Beam Details. Fabric Bearing Pads and Bill of Material. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys. Cost included in "PPC Deck Beams (21" depth)".

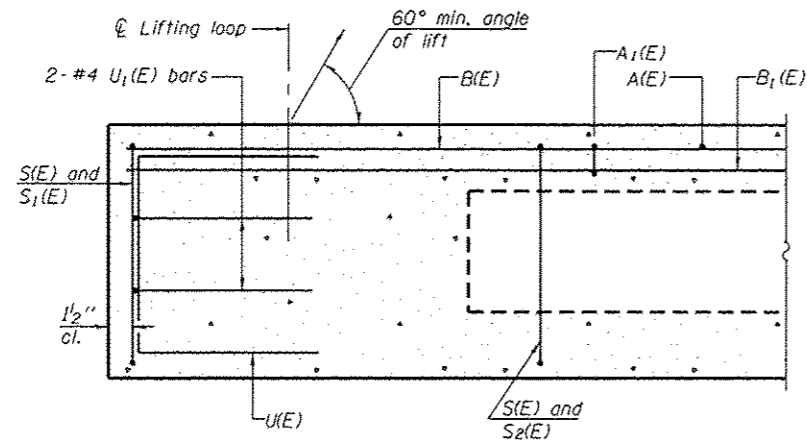


| | | |
|-----------------------|------------|---------|
| USER NAME : smorrell | DESIGNED - | REVISED |
| PLOT SCALE : | CHECKED - | REVISED |
| PLOT DATE : 11/3/2016 | DRAWN - | REVISED |
| | CHECKED - | REVISED |

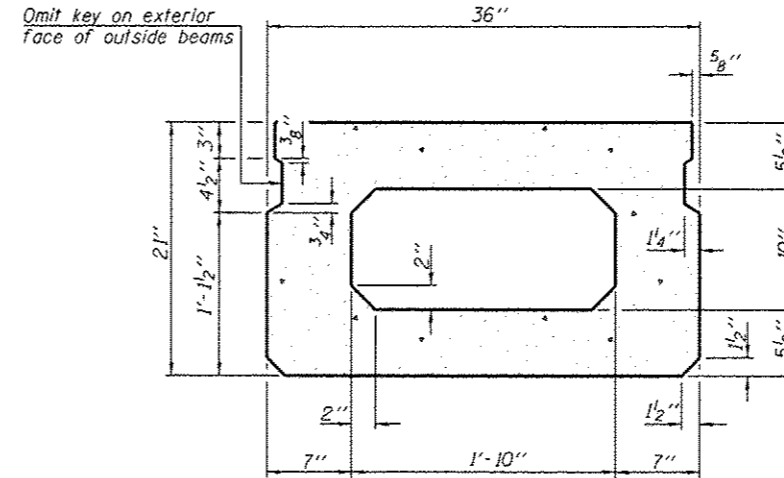
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE SPAN 1
 STRUCTURE NO. 084-3504
 SHEET NO. 3 OF 18 SHEETS

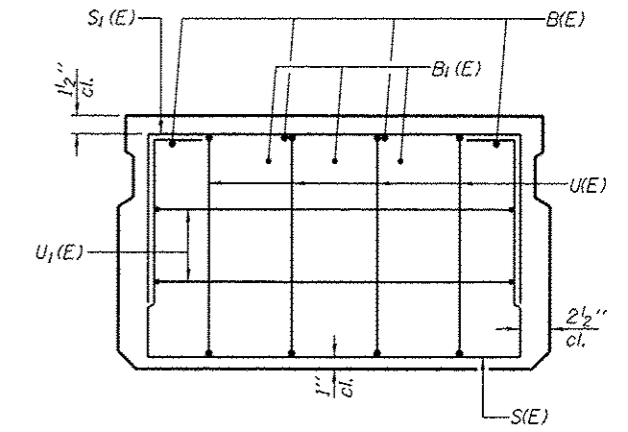
| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|----------|---------------------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 16 |
| CONTRACT NO. 93674 | | | ILLINOIS FED. AID PROJECT | |



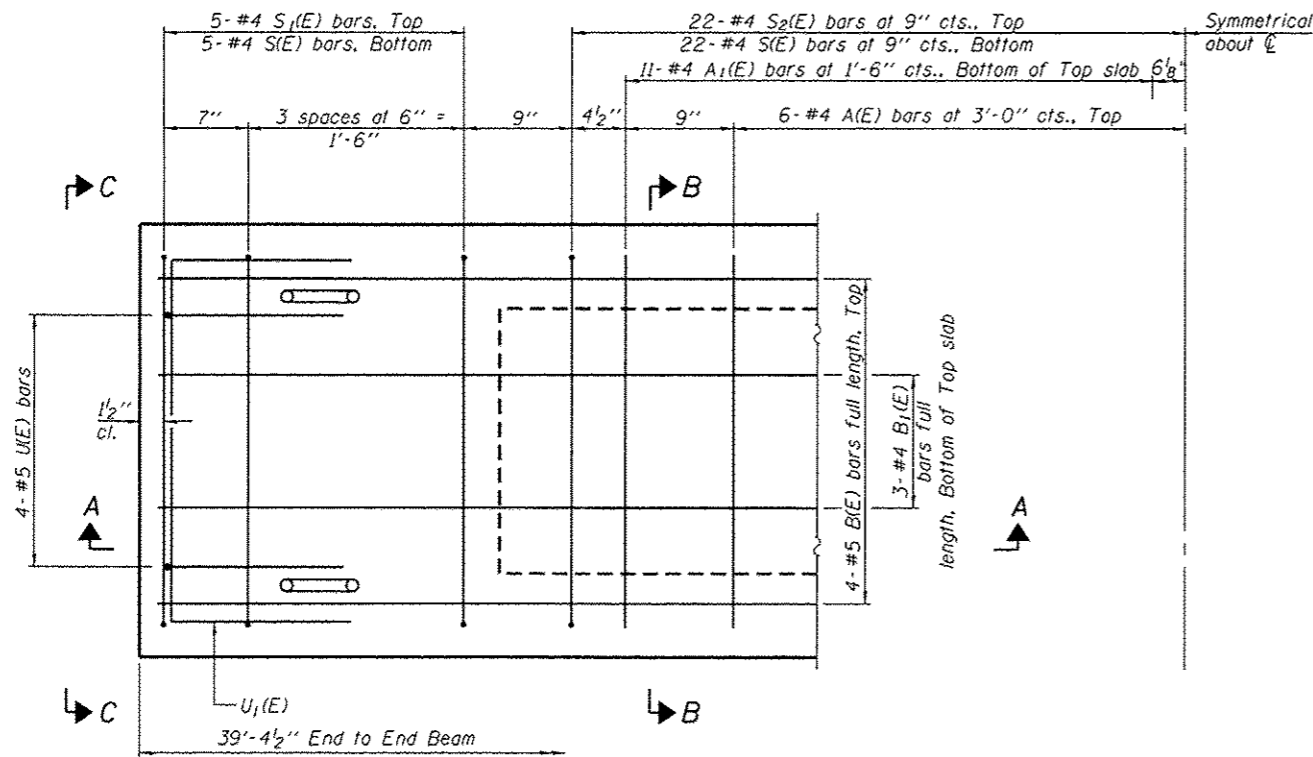
SECTION A-A



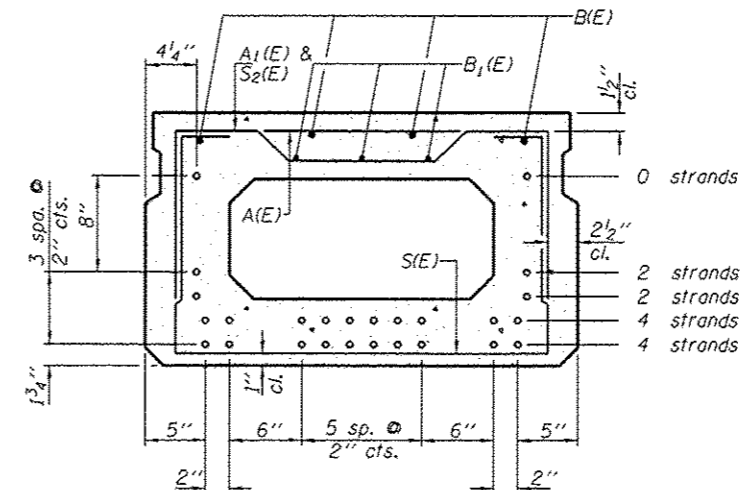
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



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

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

BAR LIST
ONE BEAM ONLY
(For information only)

| Bar | No. | Size | Length | Shape |
|-------|-----|------|---------|-------|
| A(E) | 11 | #4 | 2'-7" | — |
| A1(E) | 22 | #4 | 2'-10" | — |
| B(E) | 8 | #5 | 20'-10" | — |
| B1(E) | 6 | #4 | 20'-7" | — |
| S(E) | 53 | #4 | 6'-5" | □ |
| S1(E) | 10 | #4 | 4'-11" | □ |
| S2(E) | 43 | #4 | 5'-2" | □ |
| U(E) | 8 | #5 | 4'-0" | □ |
| U1(E) | 4 | #4 | 5'-0" | □ |

Note: See sheet 5 of 18 for additional details and Bill of Material.

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP

#4 bar = 1'-11"
#5 bar = 2'-6"

FILE NAME : S:\Projects\2013_J085113-31_Sangamon Co - Menston Rd over Lick Creek\1000\CAD Sheets\B13594-084-DeckBeamDetail1\Span1.dgn
 PLOT DATE : 11/3/2015
 PLOT DRIVER : TDDT.BW.plt

PD-2136-0

6-8-15



| | | |
|-----------------------|------------|---------|
| USER NAME : smaxwell | DESIGNED - | REVISED |
| PLOT SCALE * | CHECKED - | REVISED |
| PLOT DATE : 11/3/2015 | DRAWN - | REVISED |
| | CHECKED - | REVISED |

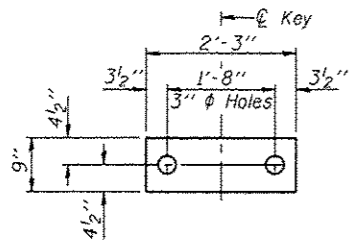
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 36" PPC DECK BEAMS SPAN 1
STRUCTURE NO. 084-3504

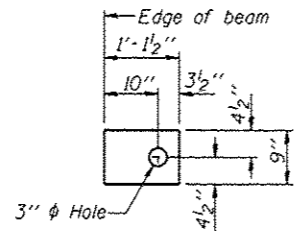
SHEET NO. 4 OF 18 SHEETS

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|----------|--------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 17 |

CONTRACT NO. 93674
ILLINOIS FED. AID PROJECT



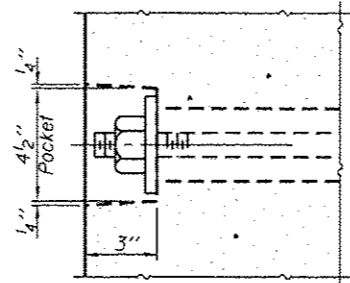
FABRIC BEARING PAD
(Interior)



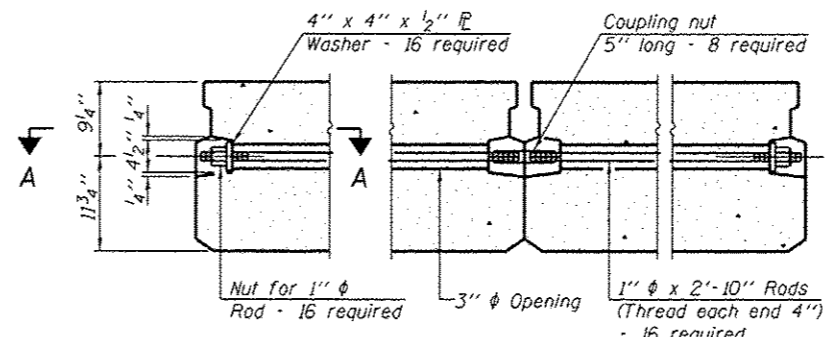
FABRIC BEARING PAD
(Exterior)

FIXED

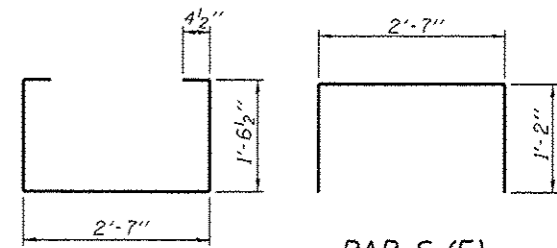
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



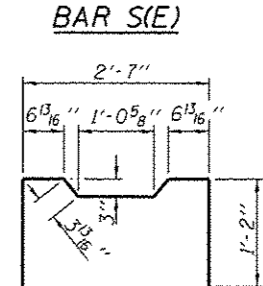
SECTION A-A



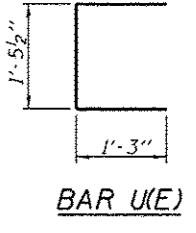
TYPICAL TRANSVERSE TIE ASSEMBLY



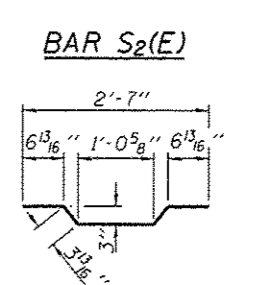
BAR S₁(E)



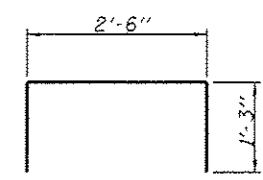
BAR S(E)



BAR U(E)

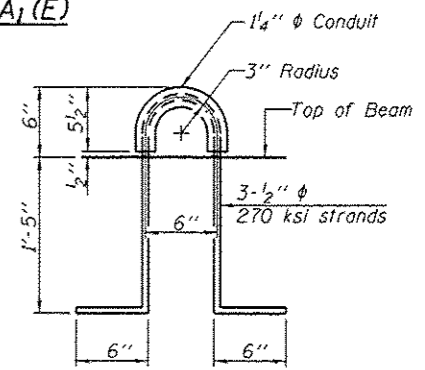


BAR S₂(E)

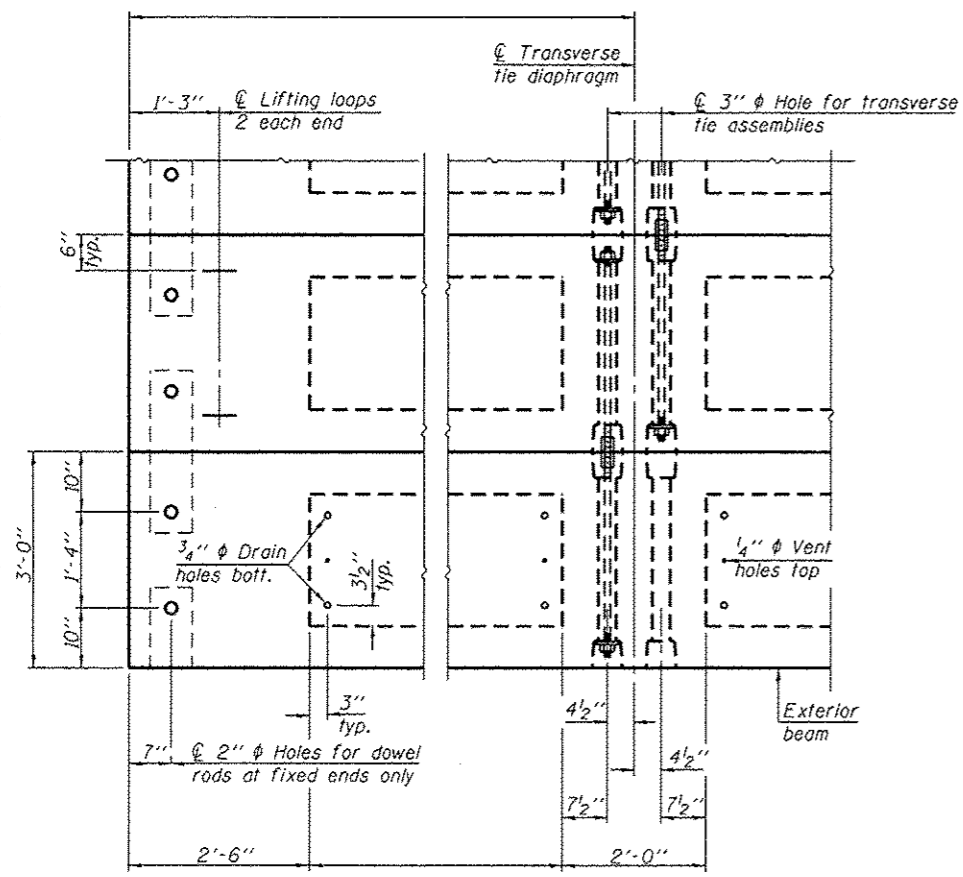


BAR U₁(E)

BAR A₁(E)



LIFTING LOOP DETAIL



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

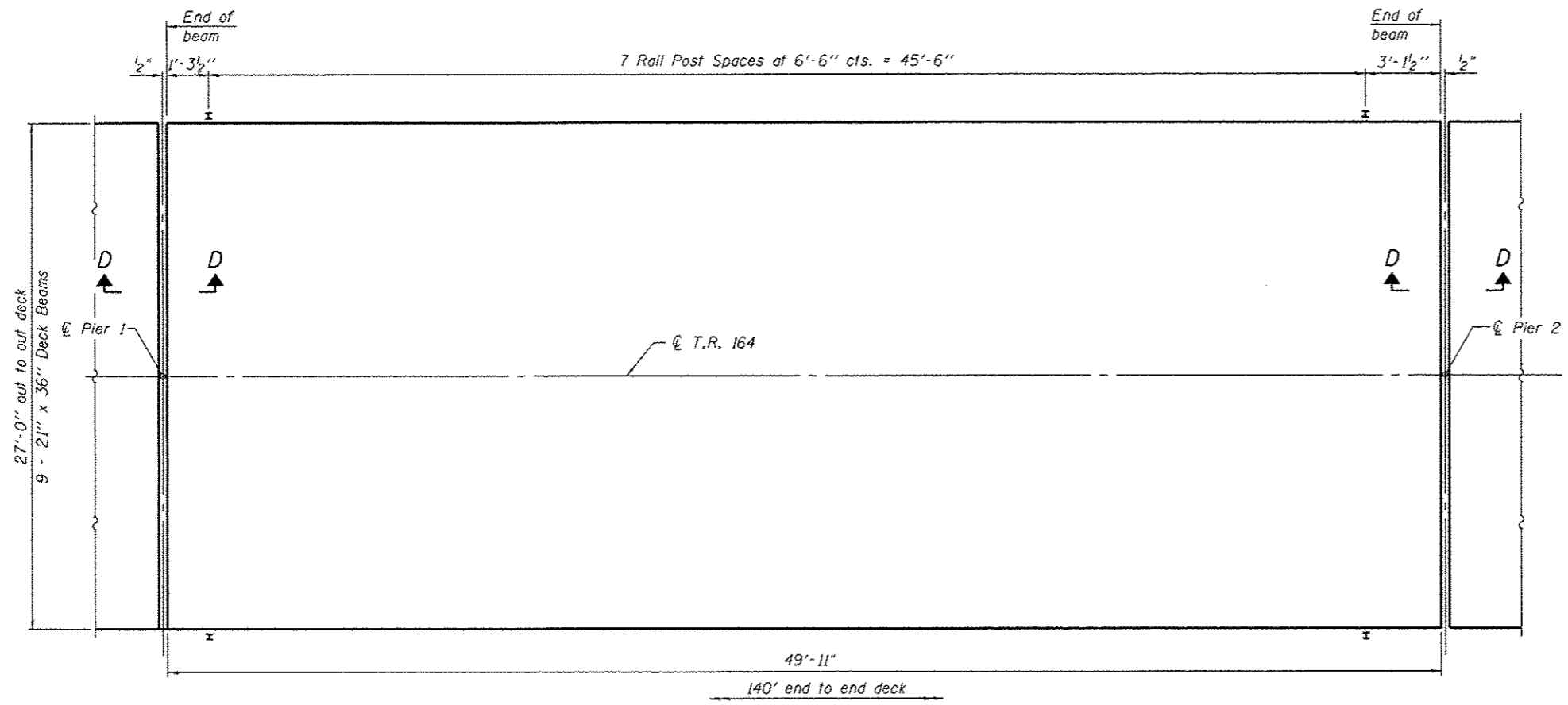
BILL OF MATERIAL

| Span | Material | Unit | Quantity |
|--------|---|---------|----------|
| Span 1 | Precast Prestressed Concrete Deck Beams (21" depth) | Sq. Ft. | 1,063 |
| Span 1 | Portland Cement Mortar Fairing Course | Foot | 342 |

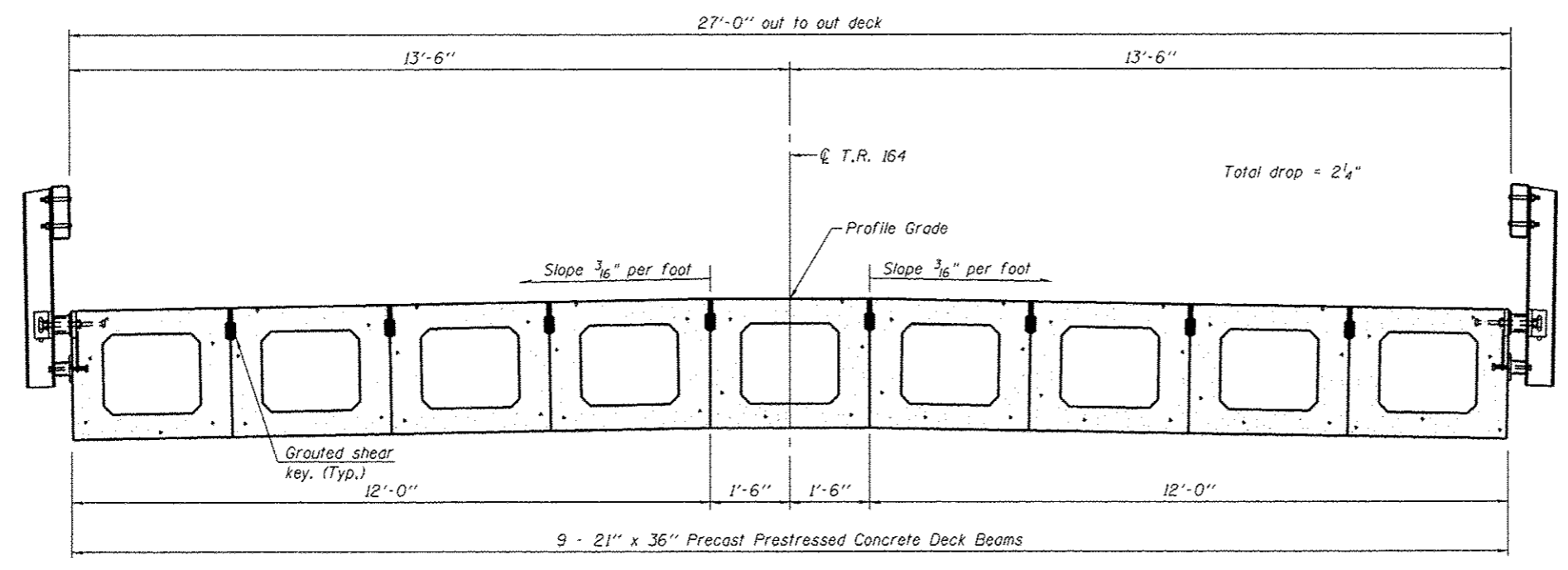
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PLOT DRIVER = T001.BWplotter

PD-2136-0D 7-1-10

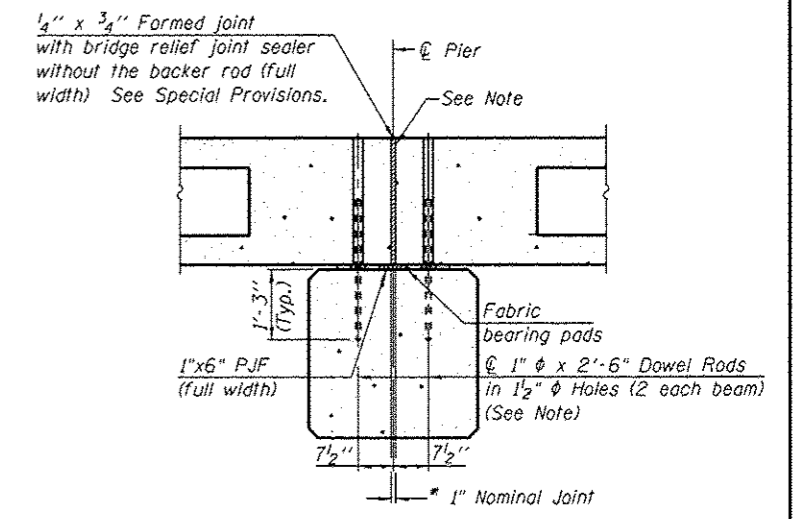
| | | | | | | | | | | |
|------------------------------|---|---|--|---|--|---------------|------------------------|-----------------|-----------------|--------------|
| <p>QUIGG ENGINEERING INC</p> | USER NAME : amaxwell PLOT SCALE : PLOT DATE : 11/3/2016 | DESIGNED - CHECKED - DRAWN - CHECKED - | REVISED REVISED REVISED REVISED | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | 21"x36" PPC DECK BEAM DETAILS SPAN 1 STRUCTURE NO. 084-3504 SHEET NO. 5 OF 18 SHEETS | T.R. RTE. 164 | SECTION 12-10119-01-BR | COUNTY SANGAMON | TOTAL SHEETS 31 | SHEET NO. 18 |
| | CONTRACT NO. 93674 | | | | | | | | | |
| | ILLINOIS FED. AID PROJECT | | | | | | | | | |



PLAN



CROSS SECTION



SECTION D-D

(Dimensions are at Rt. L's)
 *1\"/>

Note:
 See sheets 7 & 8 of 18 for Deck Beam Details, Fabric Bearing Pads and Bill of Material. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys. Cost included in "PPC Deck Beams (21\"/>

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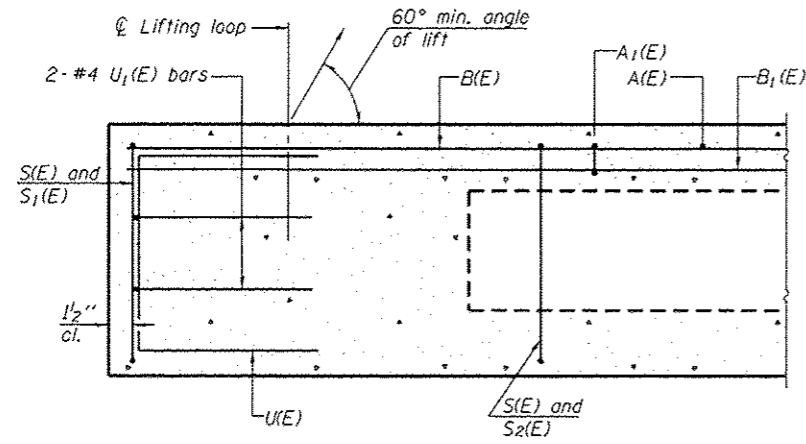


| | | |
|-----------------------|------------|---------|
| USER NAME = smaxwell | DESIGNED - | REVISED |
| PLOT SCALE = | CHECKED - | REVISED |
| PLOT DATE = 11/3/2016 | DRAWN - | REVISED |
| | CHECKED - | REVISED |

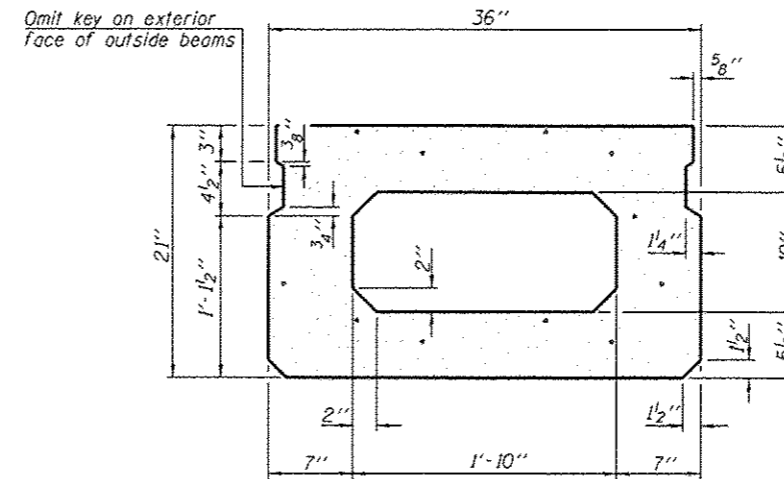
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE SPAN 2
STRUCTURE NO. 084-3504
 SHEET NO. 6 OF 18 SHEETS

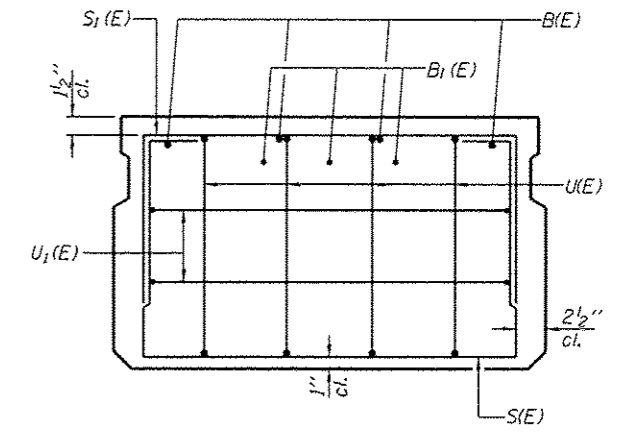
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| T.R. RTE. 164 | SECTION 12-10119-01-BR | COUNTY SANGAMON | TOTAL SHEETS 31 | SHEET NO. 19 |
| CONTRACT NO. 93674 | | | ILLINOIS FED. AID PROJECT | |



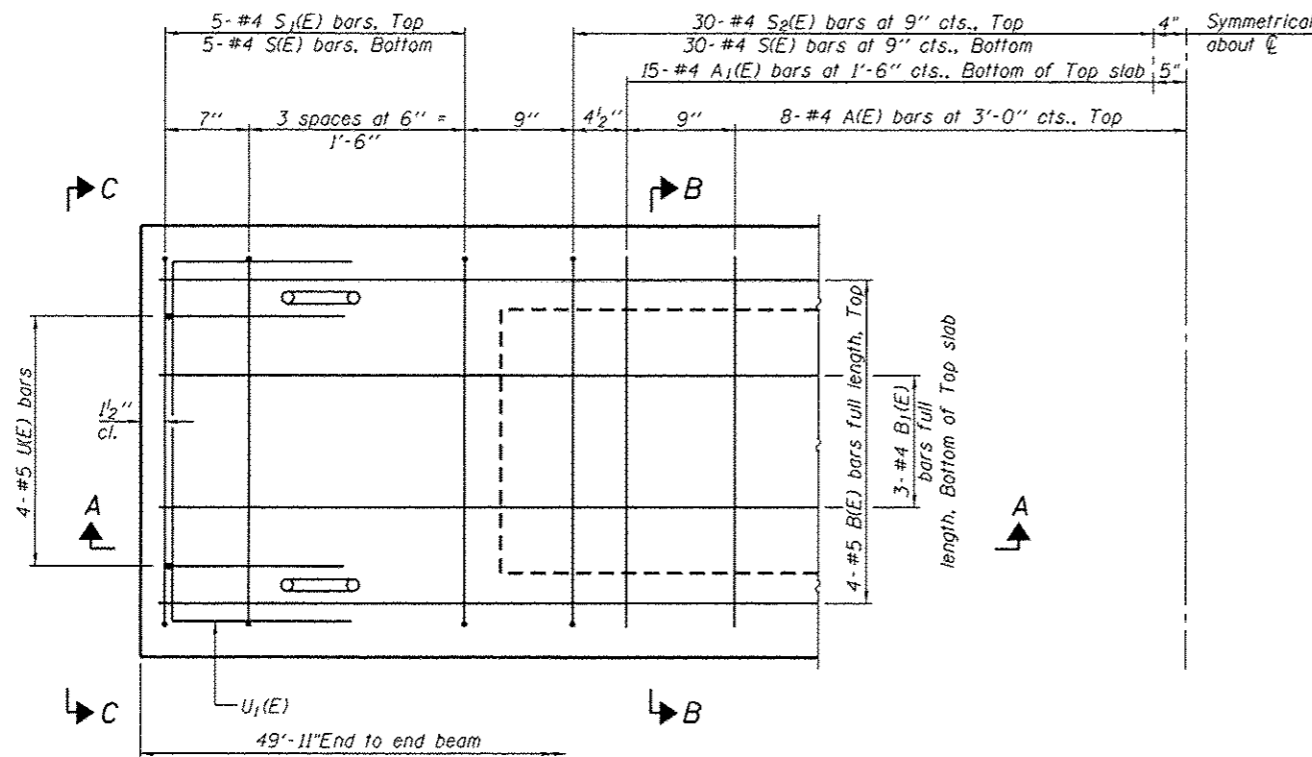
SECTION A-A



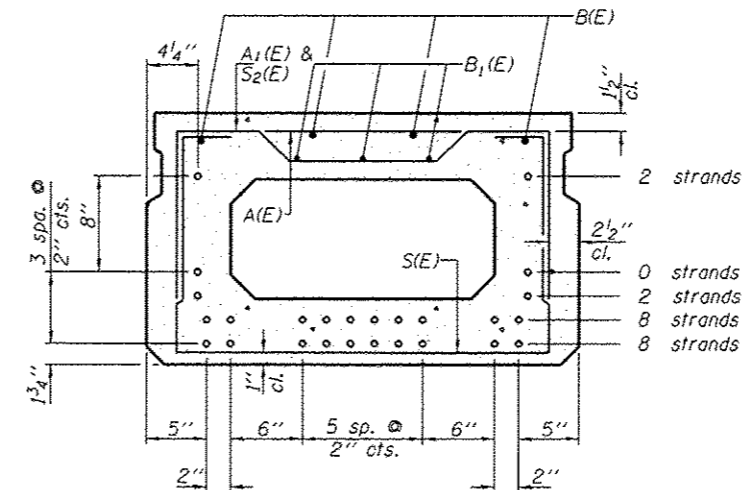
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



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

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

BAR LIST
ONE BEAM ONLY
(For information only)

| Bar | No. | Size | Length | Shape |
|-------|-----|------|---------|-------|
| A(E) | 15 | #4 | 2'-7" | — |
| A1(E) | 30 | #4 | 2'-10" | — |
| B(E) | 8 | #5 | 26'-1" | — |
| B1(E) | 6 | #4 | 25'-10" | — |
| S(E) | 69 | #4 | 6'-5" | U |
| S1(E) | 10 | #4 | 4'-11" | U |
| S2(E) | 59 | #4 | 5'-2" | U |
| U(E) | 8 | #5 | 4'-0" | U |
| U1(E) | 4 | #4 | 5'-0" | U |

Note: See sheet 8 of 18 for additional details and Bill of Material.

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

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PD-2136-0

6-8-15



QUIGG ENGINEERING INC

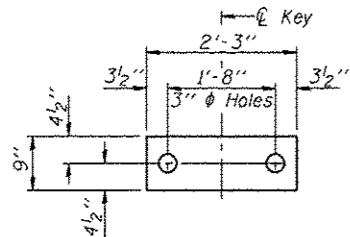
| | | | | | |
|------------|-----------|----------|---|---------|---|
| USER NAME | smoee11 | DESIGNED | - | REVISED | - |
| PLOT SCALE | | CHECKED | - | REVISED | - |
| PLOT DATE | 11/3/2016 | DRAWN | - | REVISED | - |
| | | CHECKED | - | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

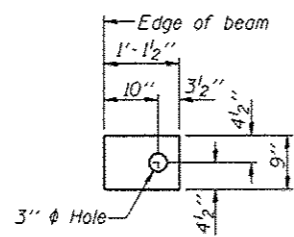
21" x 36" PPC DECK BEAMS SPAN 2
STRUCTURE NO. 084-3504

SHEET NO. 7 OF 18 SHEETS

| | | | | |
|--------------------|----------------|----------|---------------------------|-----------|
| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 164 | 12-10119-01-8R | SANGAMON | 31 | 20 |
| CONTRACT NO. 93674 | | | ILLINOIS FED. AID PROJECT | |



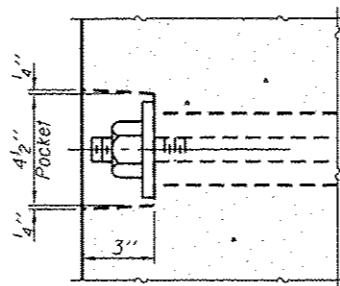
FABRIC BEARING PAD
(Interior)



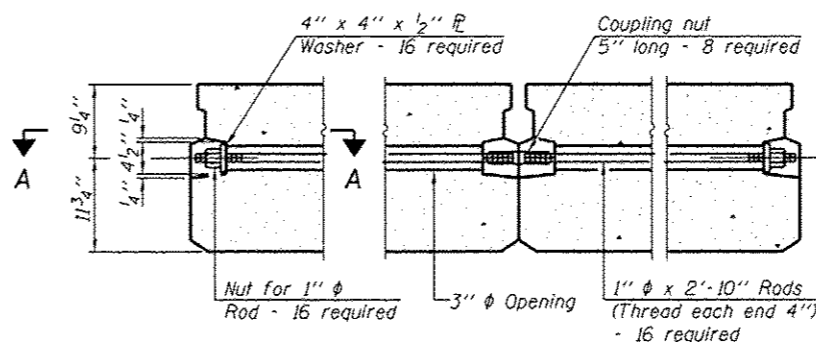
FABRIC BEARING PAD
(Exterior)

FIXED

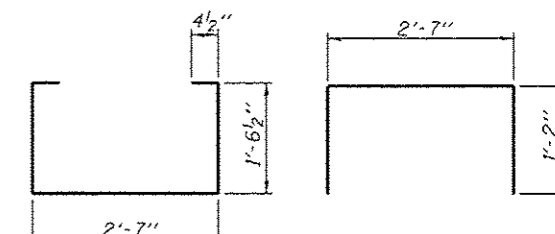
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



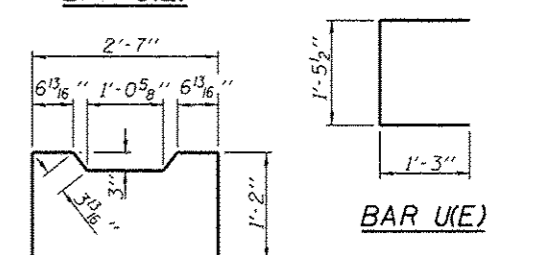
SECTION A-A



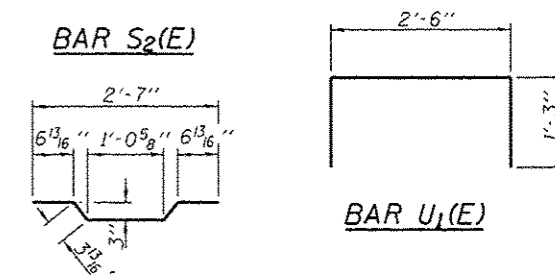
TYPICAL TRANSVERSE TIE ASSEMBLY



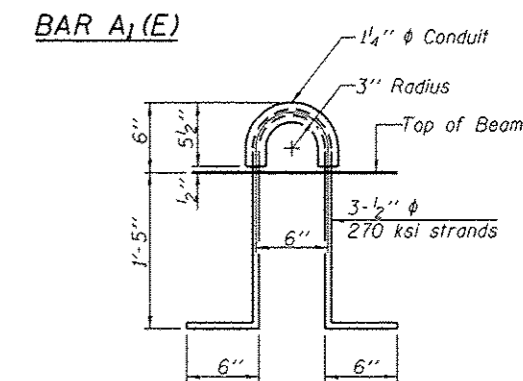
BAR S(E) BAR S₁(E)



BAR U(E)

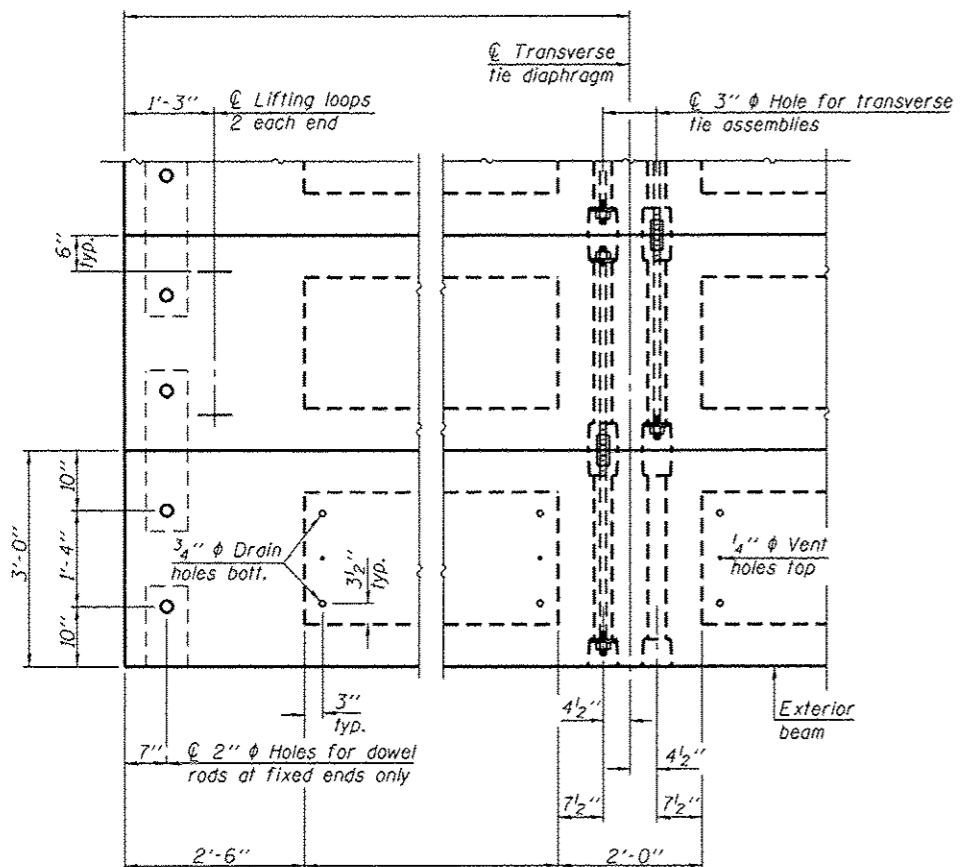


BAR S₂(E) BAR U₁(E)



BAR A₁(E)

LIFTING LOOP DETAIL



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be lightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place. Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). Two 5/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

| Span | Material | Unit | Quantity |
|--------|---|---------|----------|
| Span 2 | Precast Prestressed Concrete Deck Beams (21" Depth) | Sq. Ft. | 1,348 |
| Span 2 | Portland Cement Mortar Fairing Course | Foot | 427 |

FILE NAME : S:\Projects\2813_JOB5\13-31_Sangamon Co - Menston Rd over Lick Creek\CADD\CADD Sheets\8843584-0813674-088-DeckBeamDetails2span2.dgn
 MODEL : Default
 PLOT DRIVER : 1007.BW.plt

PD-2136-0D 7-1-10



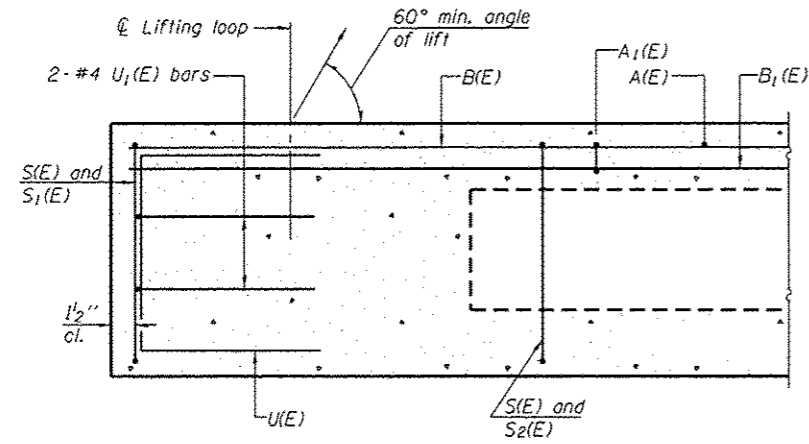
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|-----------------------|------------|-----------|
| USER NAME : smaxwell | DESIGNED - | REVISED - |
| PLOT SCALE : | CHECKED - | REVISED - |
| PLOT DATE : 11/3/2016 | DRAWN - | REVISED - |
| | CHECKED - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

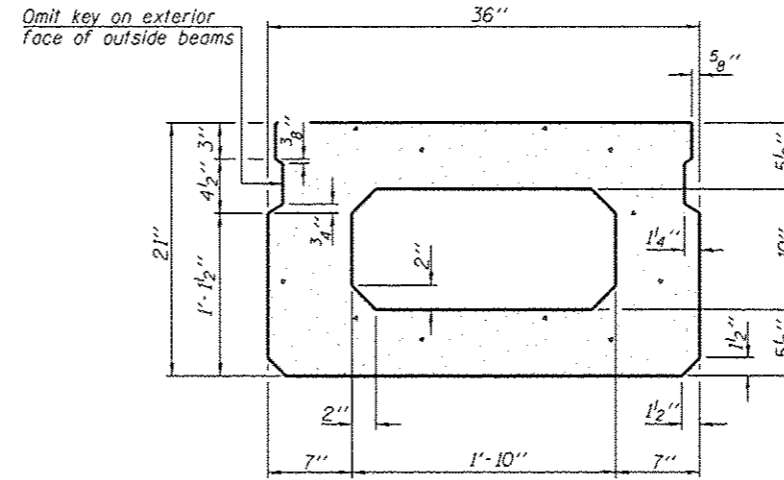
21" x 36" PPC DECK BEAM DETAILS SPAN 2
STRUCTURE NO. 084-3504

SHEET NO. 8 OF 18 SHEETS

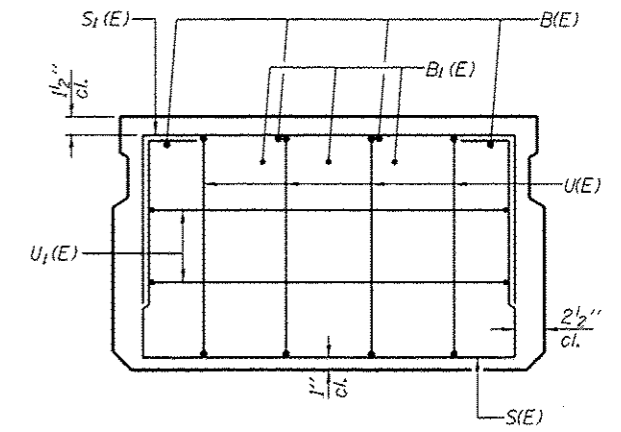
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|---------------------------|------------------------|-----------------|-----------------|--------------------|
| T.R. RTE. 164 | SECTION 12-10119-01-BR | COUNTY SANGAMON | TOTAL SHEETS 31 | SHEET NO. 21 |
| | | | | CONTRACT NO. 93674 |
| ILLINOIS FED. AID PROJECT | | | | |



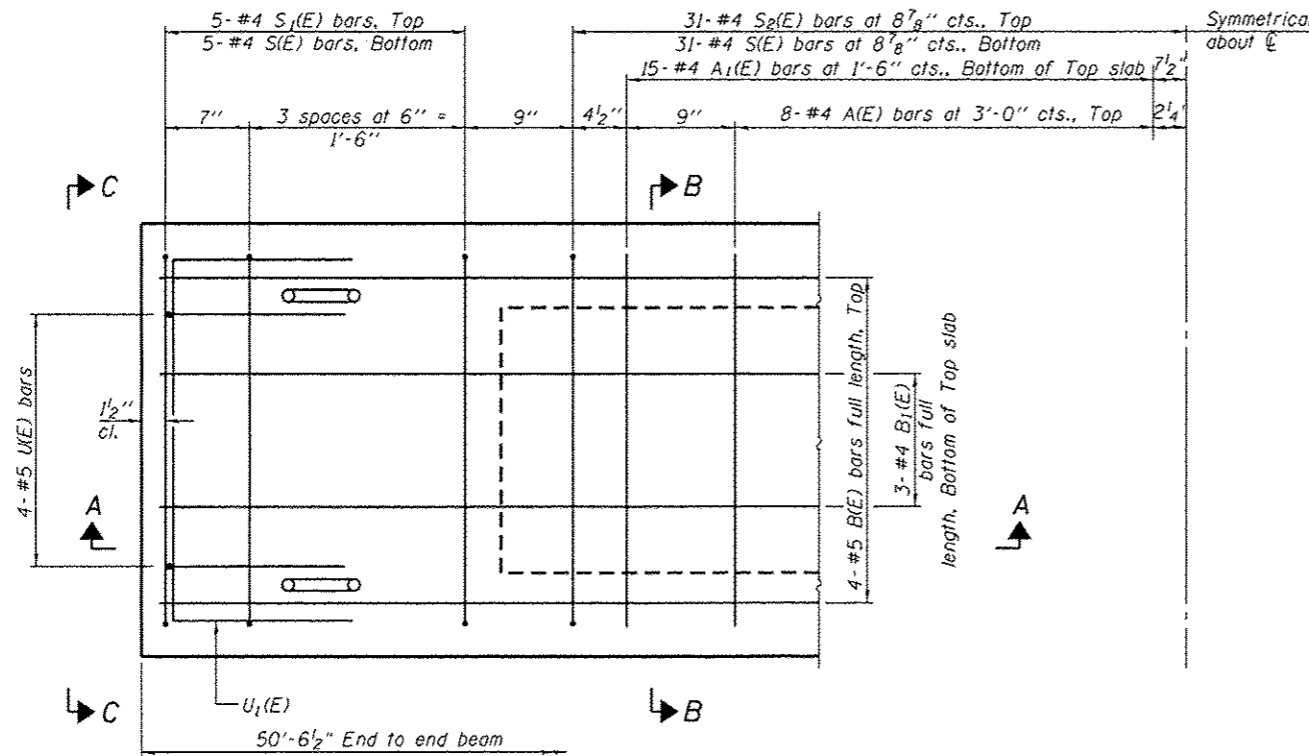
SECTION A-A



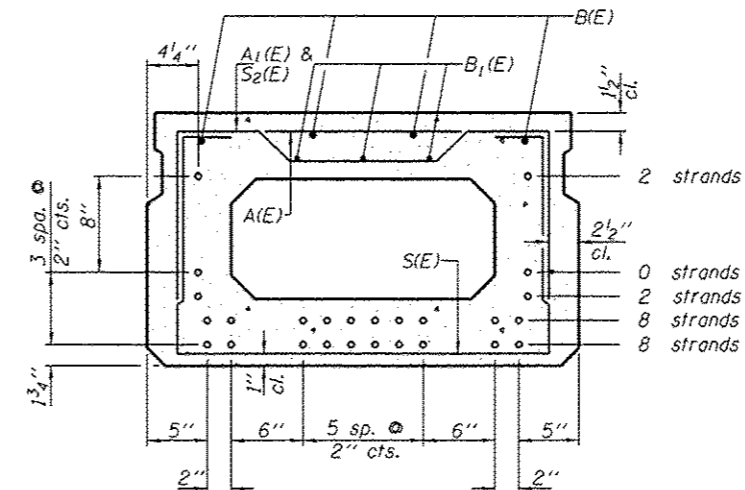
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



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

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

BAR LIST
ONE BEAM ONLY
(For information only)

| Bar | No. | Size | Length | Shape |
|-------|-----|------|--------|-------|
| A(E) | 16 | #4 | 2'-7" | — |
| A1(E) | 30 | #4 | 2'-10" | — |
| B(E) | 8 | #5 | 26'-5" | — |
| B1(E) | 6 | #4 | 26'-2" | — |
| S(E) | 71 | #4 | 6'-5" | □ |
| S1(E) | 10 | #4 | 4'-11" | □ |
| S2(E) | 61 | #4 | 5'-2" | □ |
| U(E) | 8 | #5 | 4'-0" | □ |
| U1(E) | 4 | #4 | 5'-0" | □ |

Note: See sheet 11 of 18 for additional details and Bill of Material.

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

FILE NAME = S:\Projects\2013_085\13-31_Sangamon Co - Mansson Rd over Lusk Creek\CAD\CAD Sheets\0843504-08513674-01B-DeckBeamDetails\Span3.dgn
MODEL = Default
PLOT DRIVER = IDOT.BWPlotter

PD-2136-0

6-8-15



QUIGG ENGINEERING INC

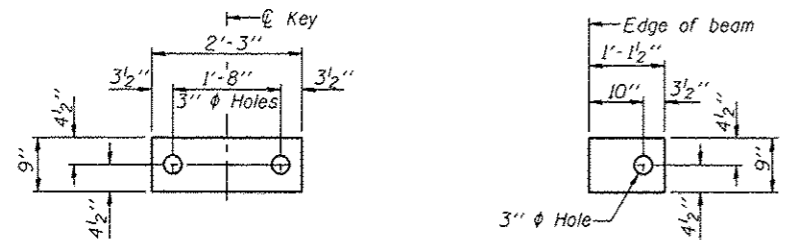
| | | | | | |
|------------|-------------|----------|---|---------|--|
| USER NAME | * smaxwell | DESIGNED | - | REVISED | |
| PLOT SCALE | * | CHECKED | - | REVISED | |
| PLOT DATE | * 11/3/2016 | DRAWN | - | REVISED | |
| | | CHECKED | - | REVISED | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 36" PPC DECK BEAMS SPAN 3
STRUCTURE NO. 084-3504

SHEET NO. 10 OF 18 SHEETS

| | | | | |
|---------------------------|----------------|----------|--------------------|-----------|
| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 164 | 12-10119-01-BR | SANGAMON | 31 | 23 |
| | | | CONTRACT NO. 93674 | |
| ILLINOIS FED. AID PROJECT | | | | |

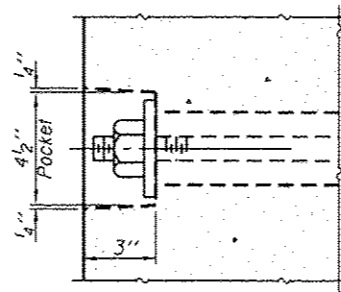


FABRIC BEARING PAD
(Interior)

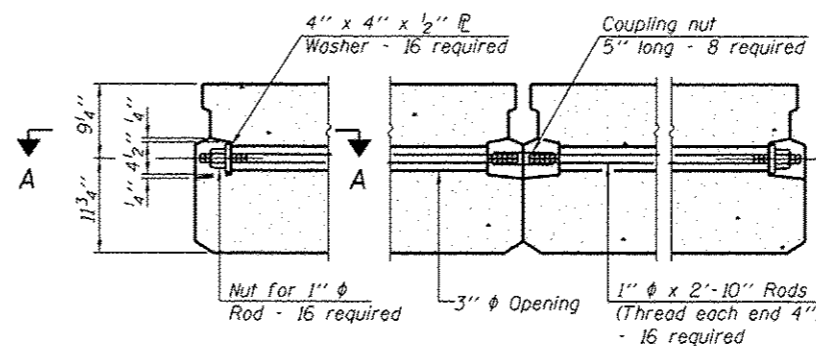
FABRIC BEARING PAD
(Exterior)

FIXED

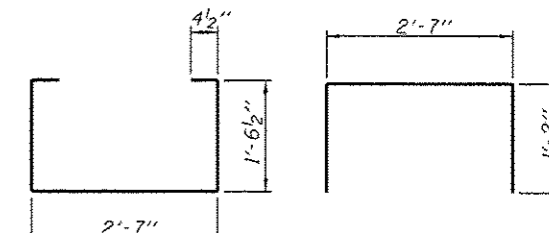
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

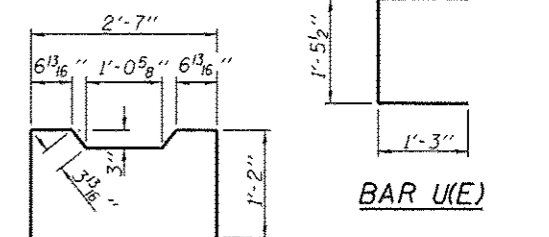


TYPICAL TRANSVERSE TIE ASSEMBLY



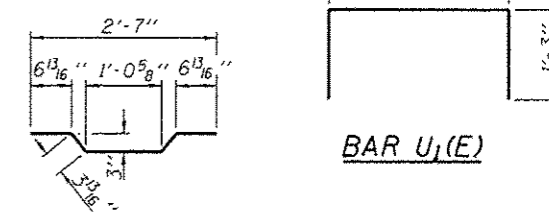
BAR S1(E)

BAR S1(E)



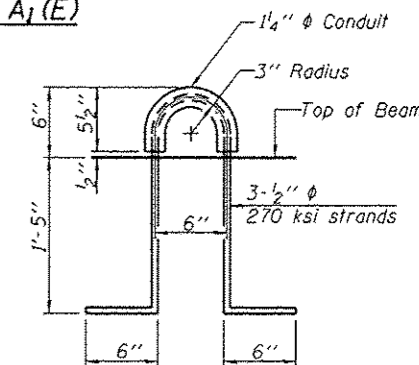
BAR S2(E)

BAR U1(E)

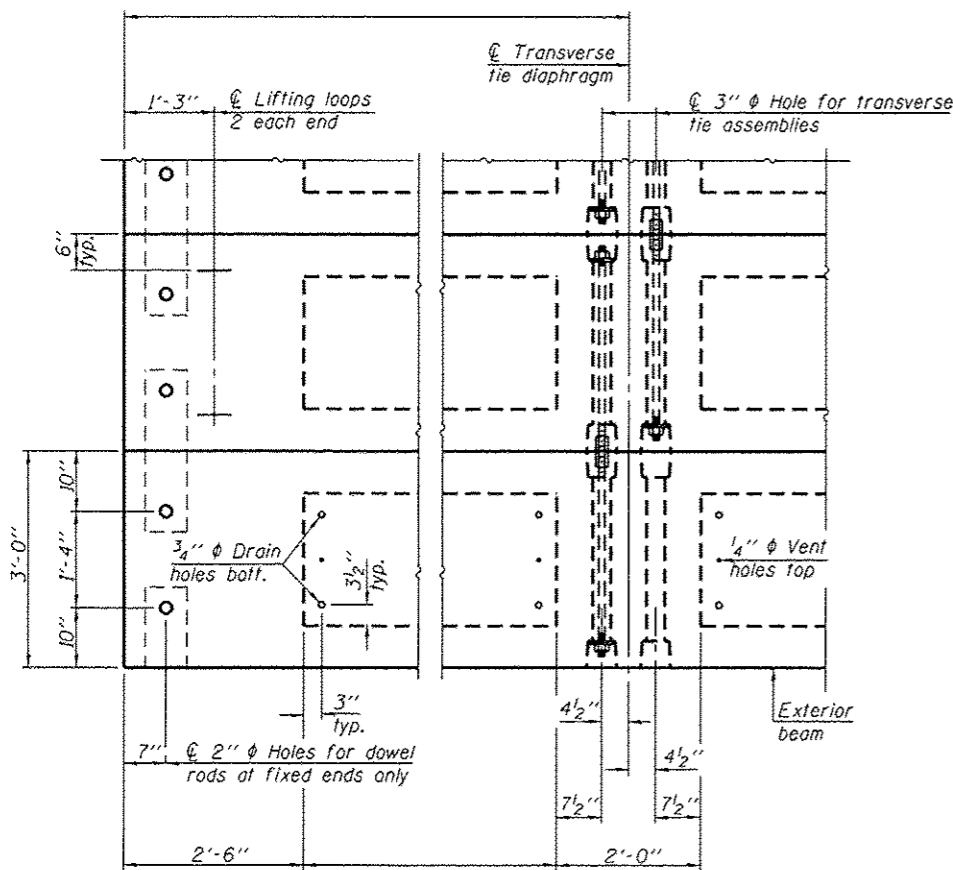


BAR A1(E)

BAR U1(E)



LIFTING LOOP DETAIL



PLAN VIEW

NOTES

Note: Connect beams in pairs with the transverse tie configuration shown.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
Two 5/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
Compressive strength of prestressed concrete at release, f'cl, shall be 5000 psi.

BILL OF MATERIAL

| Span | Material | Unit | Quantity |
|--------|---|---------|----------|
| Span 3 | Precast Prestressed Concrete Deck Beams (21" Depth) | Sq. Ft. | 1,365 |
| Span 3 | Portland Cement Mortar Fairing Course | Foot | 404 |

FILE NAME : S:\Projects\2013 Jobs\13-31 Sangamon Co - Hannston Rd over Lick Creek\CA000\CA000 Sheets\0843504-0693874-011-DeckBeam-Details\25span3.dgn
MODEL : Default
PLOT DRIVER : 100T_BW.ctb

PD-2136-0D

7-1-10



QUIGG ENGINEERING INC

| USER NAME | DESIGNED | REVISIONS |
|-----------|----------|-----------|
| smoxwell | - | REVISIONS |
| | CHECKED | REVISIONS |
| | DRAWN | REVISIONS |
| | CHECKED | REVISIONS |

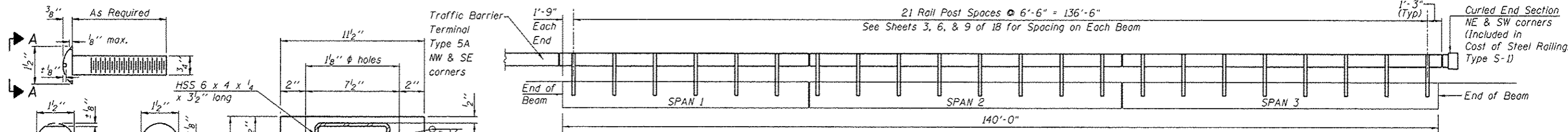
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 36" PPC DECK BEAM DETAILS SPAN 3
STRUCTURE NO. 084-3504

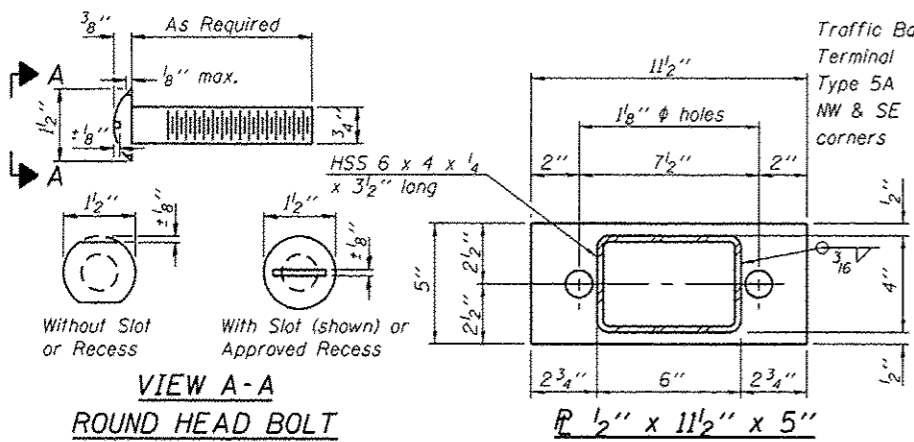
SHEET NO. 11 OF 18 SHEETS

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|----------|--------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 24 |

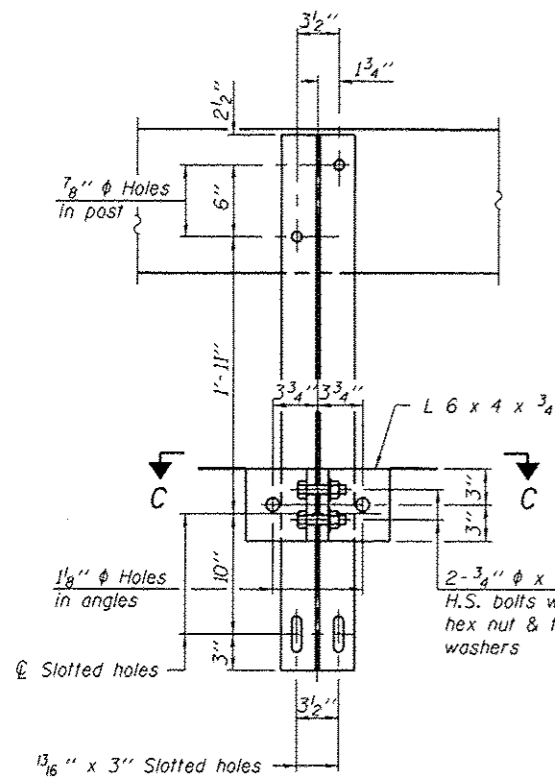
CONTRACT NO. 93674
[ILLINOIS] FED. AID PROJECT



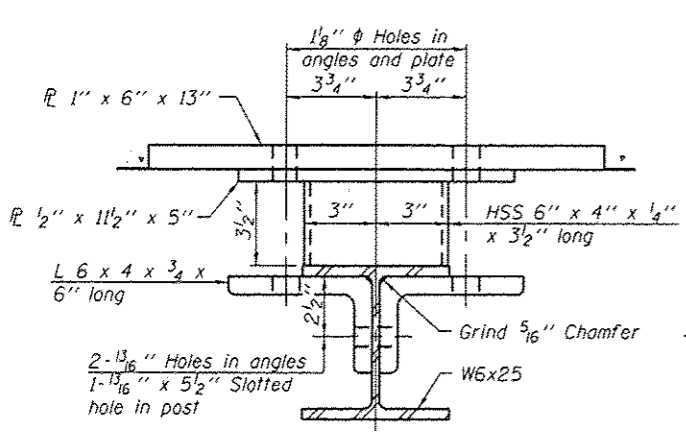
ELEVATION
Looking West



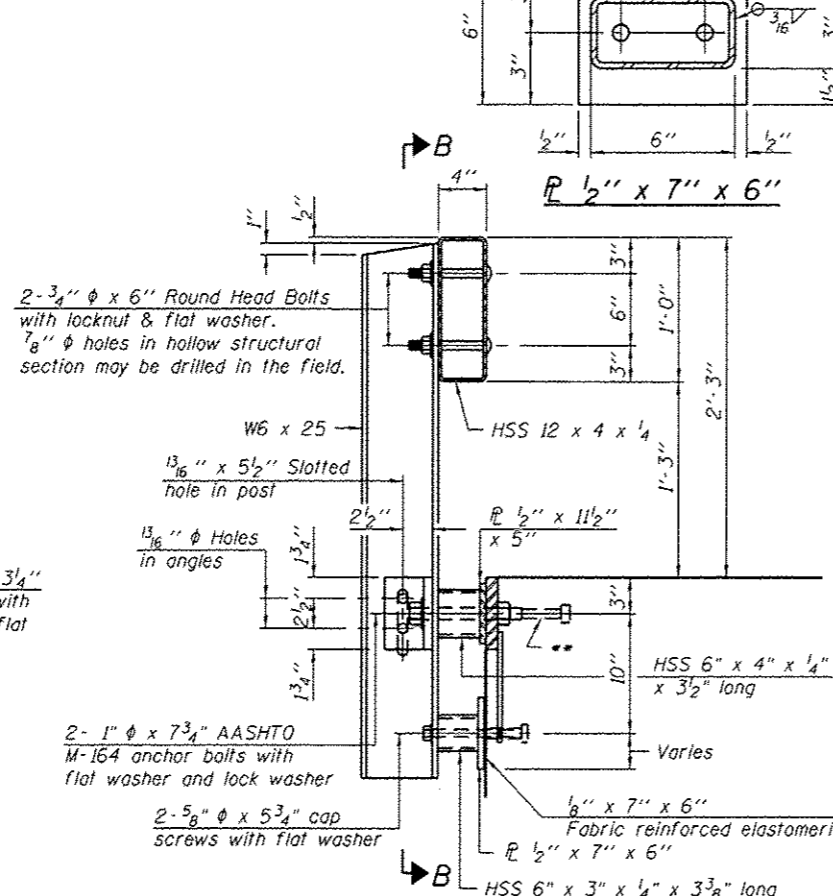
VIEW A-A
ROUND HEAD BOLT



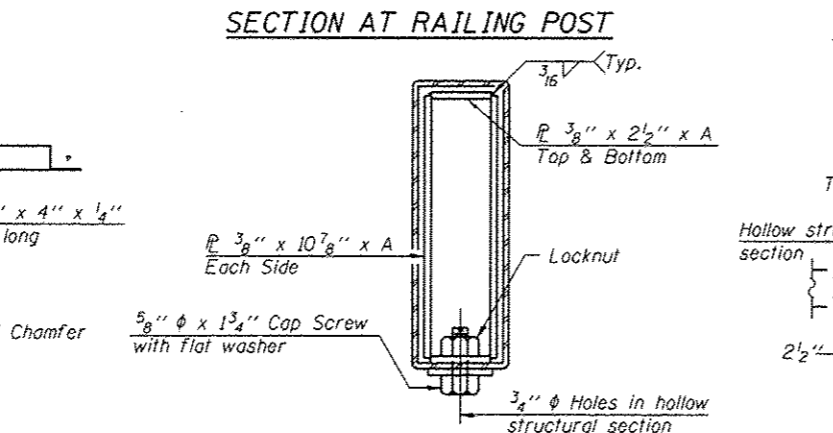
SECTION B-B



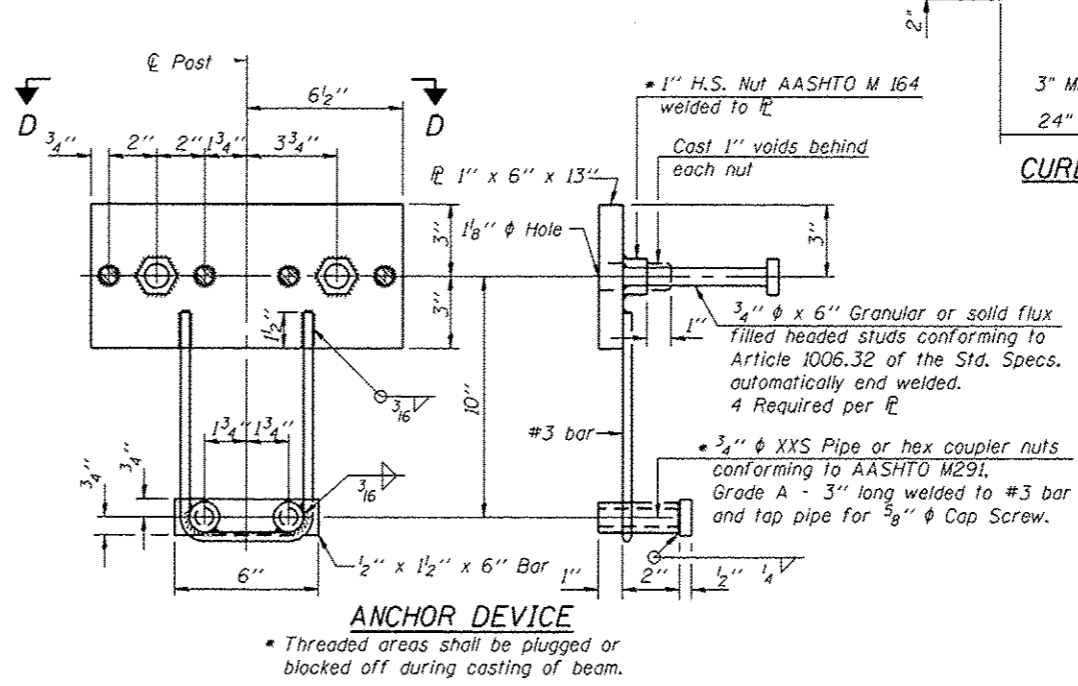
SECTION C-C



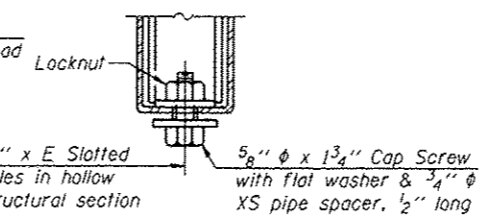
SECTION AT RAILING POST



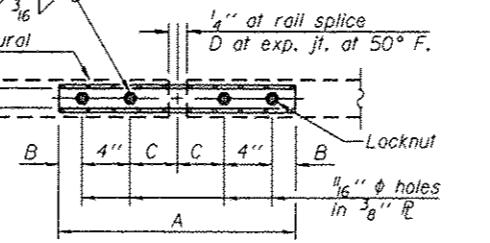
SECTIONS AT RAIL SPLICE



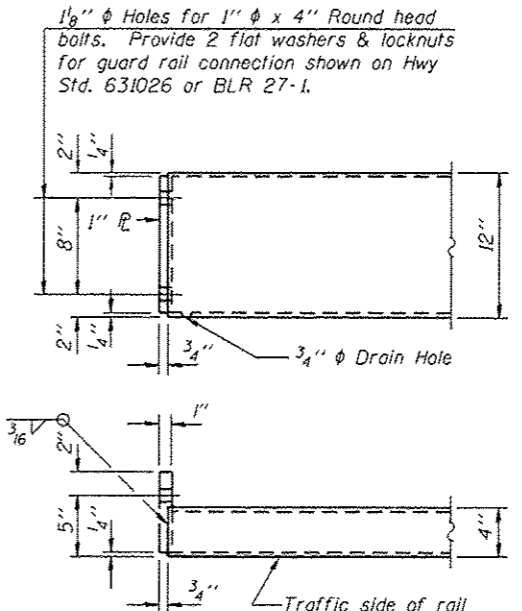
ANCHOR DEVICE



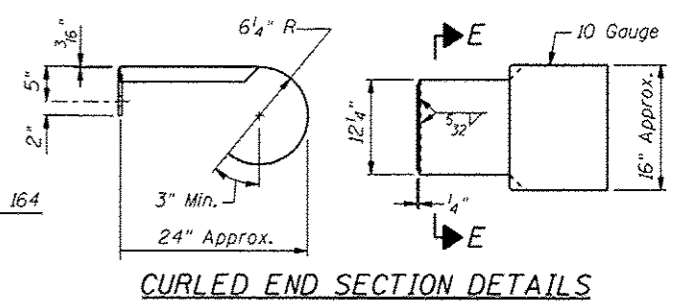
RAIL SPLICE CONNECTION AT EXPANSION JT.



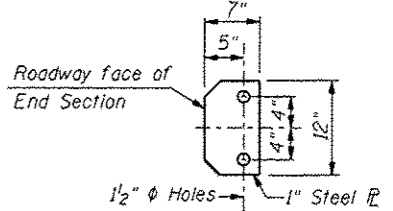
PLAN-BOTT. SPLICE R TYPICAL



END OF RAIL DETAILS

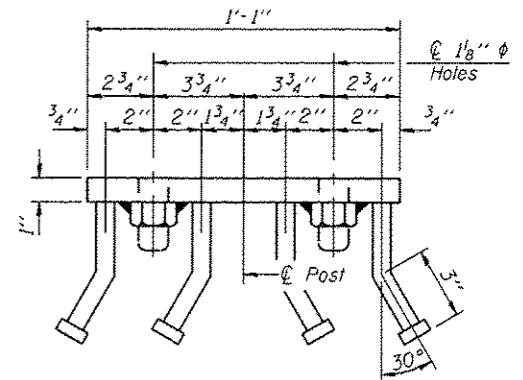


CURLED END SECTION DETAILS



SECTION E-E

Notes:
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



VIEW D-D

BILL OF MATERIAL

| Item | Unit | Quantity |
|-------------------------|------|----------|
| Steel Railing, Type S-1 | Foot | 285 |

R-23A 1-12-15 (10'-9" Maximum Post Spacing)



| USER NAME | DESIGNED | REVISION |
|-----------|----------|----------|
| smowell | - | - |
| | CHECKED | REVISION |
| | DRAWN | REVISION |
| | CHECKED | REVISION |

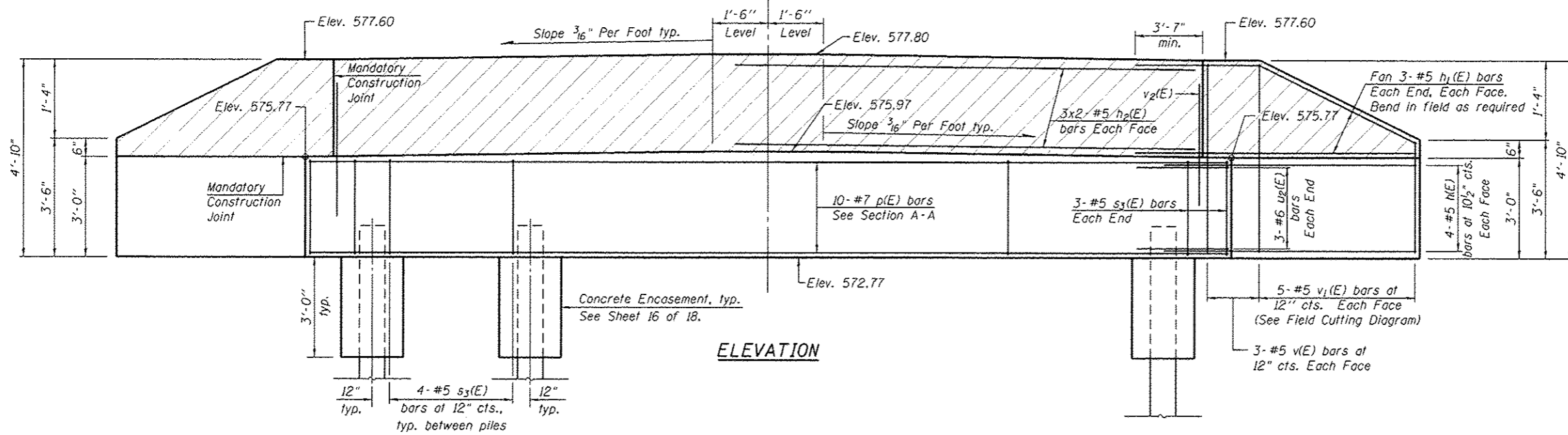
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE S-1
STRUCTURE NO. 084-3504
SHEET NO. 12 OF 18 SHEETS

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|----------|--------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 25 |

CONTRACT NO. 93674
ILLINOIS FED. AID PROJECT

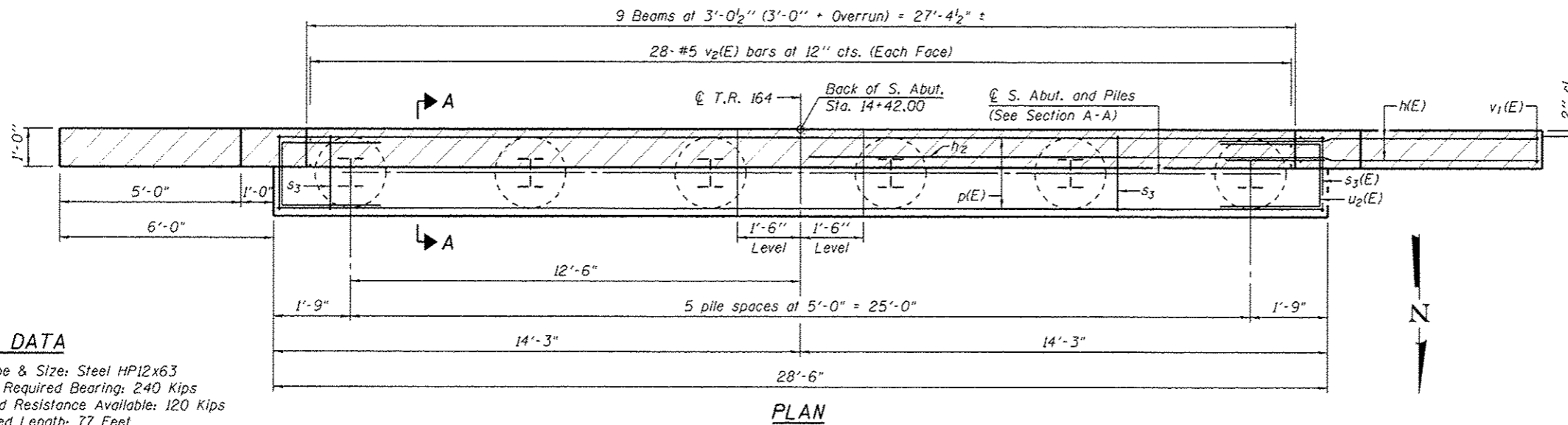
FILE NAME = S:\Projects\2013 Jobs\12-31 Sangamon Co - Memorial Rd over Lick Creek\CRDD\CADD Sheets\084-3504-06-03-12-Rev1.dgn
MODEL = Default
PLOT DRIVER = IDOT.BWplotter



BILL OF MATERIAL S. ABUT.

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|----------|-------|
| M(E) | 16 | #5 | 9'-8" | |
| h ₁ (E) | 12 | #5 | 9'-10" | |
| h ₂ (E) | 12 | #5 | 15'-6" | |
| p(E) | 10 | #7 | 28'-2" | |
| s ₃ (E) | 26 | #5 | 10'-10" | |
| u ₂ (E) | 6 | #6 | 11'-2" | |
| v(E) | 12 | #5 | 4'-6" | |
| v ₁ (E) | 10 | #5 | 7'-8" | |
| v ₂ (E) | 56 | #5 | 3'-4" | |
| Item | | Unit | Quantity | |
| Structure Excavation | | Cu. Yd. | 25.0 | |
| Concrete Structures | | Cu. Yd. | 12.4 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 1,780 | |
| Furnishing Steel Piles HP12x63 | | Foot | 462 | |
| Driving Piles | | Foot | 462 | |
| Stud Shear Connector | | Each | 12 | |
| Concrete Encasement | | Cu. Yd. | 2.1 | |

ELEVATION



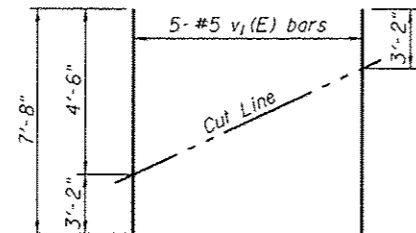
PLAN

PILE DATA

Pile Type & Size: Steel HP12x63
 Nominal Required Bearing: 240 Kips
 Factored Resistance Available: 120 Kips
 Estimated Length: 77 Feet
 Number of Production Piles: 6

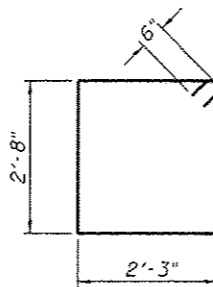
NOTES

- The hatched portion of the wingwalls, above the construction joint, and the backwall shall be cast after the beams are in place.
- Space reinforcement in cap to miss dowel rods.
- For details of Piles and Concrete Encasement, see sheet 16 of 18.
- Bars indicated thus: 3x2-#5 etc. indicates 3 lines of bars with 2 lengths per line.

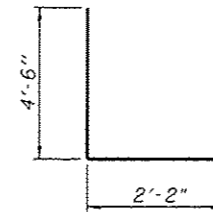


FIELD CUTTING DIAGRAM

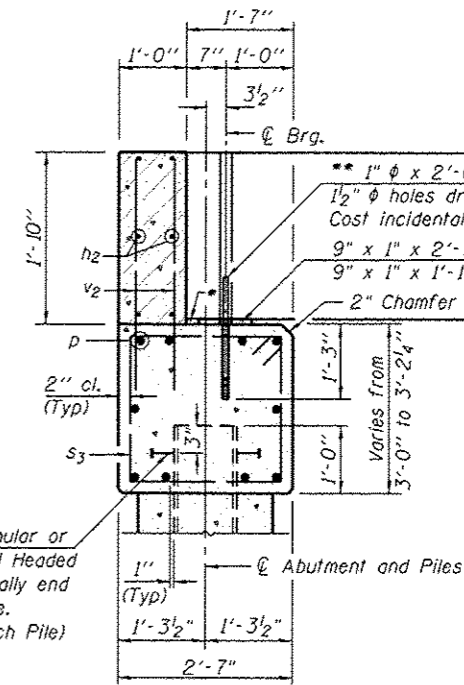
Order v₁(E) bars full length. Cut as shown and use remainder of bars in opposite face.



BAR s₃(E)



BAR u₂(E)



SECTION A-A

(Dimensions are at Rt. L's)

- 1" x 2 1/2" P.J.F. (Full Width)
- Dowel Rods to be grouted after beams are in place and prior to grouting the shear keys.

MINIMUM BAR LAP

- #5 bar = 3'-7"
- #6 bar = 4'-4"

FILE NAME = S:\Projects\2013_1085\13-31_Sangamon Co - Memorial Rd over Lick Creek\CADD\CADD Sheets\084-3504-013-S.AbutLg
 MODEL = Default
 PLOT DRIVER = 1001_Bkplcfig

AD-1721-0

7-1-10



| | | | | | |
|------------|-------------|----------|---|---------|--|
| USER NAME | * amaxwell | DESIGNED | - | REVISED | |
| PLOT SCALE | * | CHECKED | - | REVISED | |
| PLOT DATE | * 11/3/2016 | DRAWN | - | REVISED | |
| | | CHECKED | - | REVISED | |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT
 STRUCTURE NO. 084-3504

SHEET NO. 13 OF 18 SHEETS

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|----------|--------------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 26 |
| | | | CONTRACT NO. 93674 | |
| ILLINOIS FED. AID PROJECT | | | | |

PILE DATA

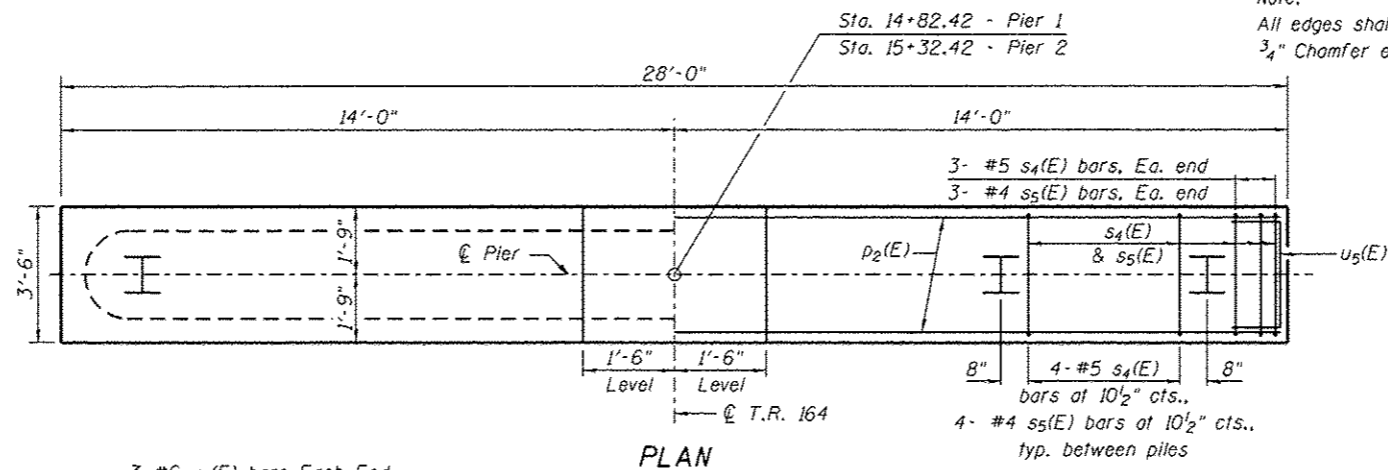
PIER 1

Pile Type & Size: HP12x63
 Nominal Required Bearing: 424 kips
 Factored Resistance Available: 233 kips
 Estimated Length: 78 Feet
 Number of Production Piles: 6
 Number of Test Piles: 1

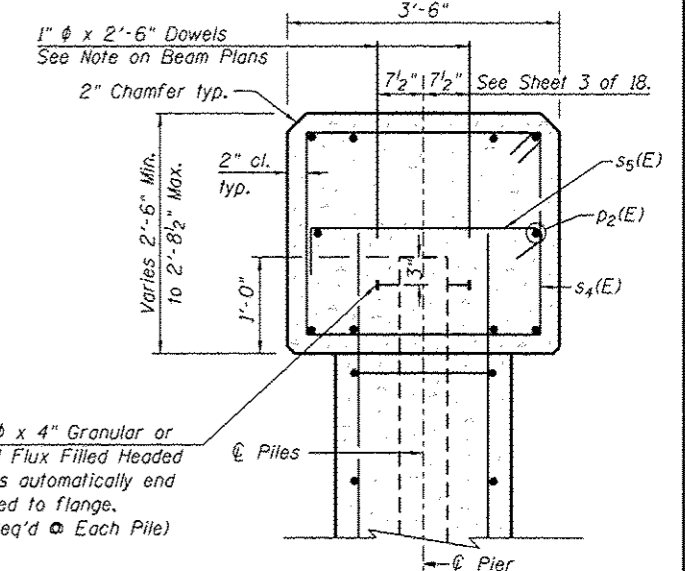
PIER 2

Pile Type & Size: HP12x63
 Nominal Required Bearing: 424 kips
 Factored Resistance Available: 233 kips
 Estimated Length: 78 Feet
 Number of Production Piles: 7

See sheet 16 of 18 for HP Pile Details.



Note:
 All edges shall have standard 3/4" Chamfer except as noted.



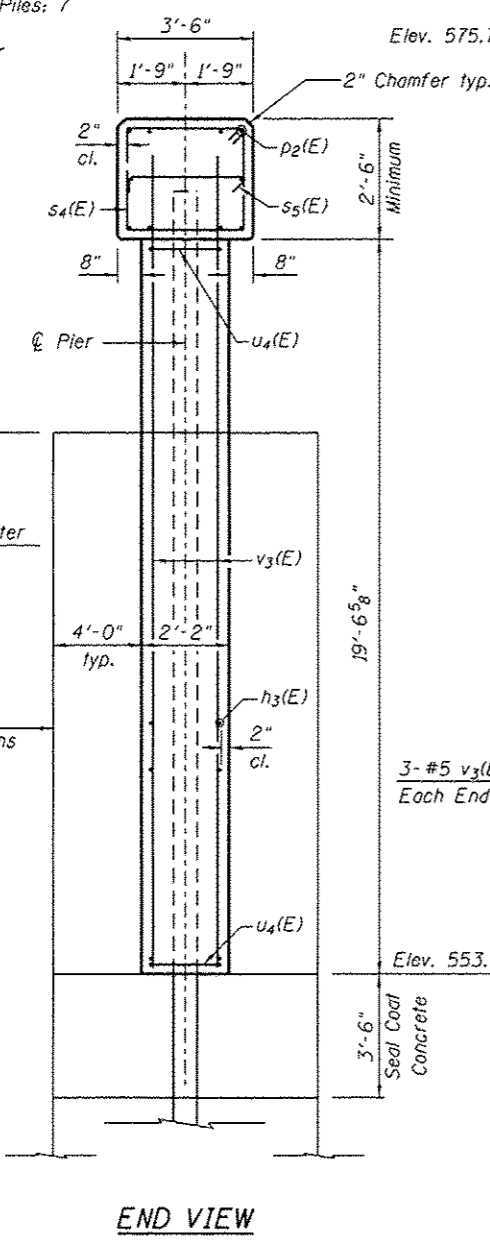
SECTION THRU PIER CAP

MINIMUM BAR LAP

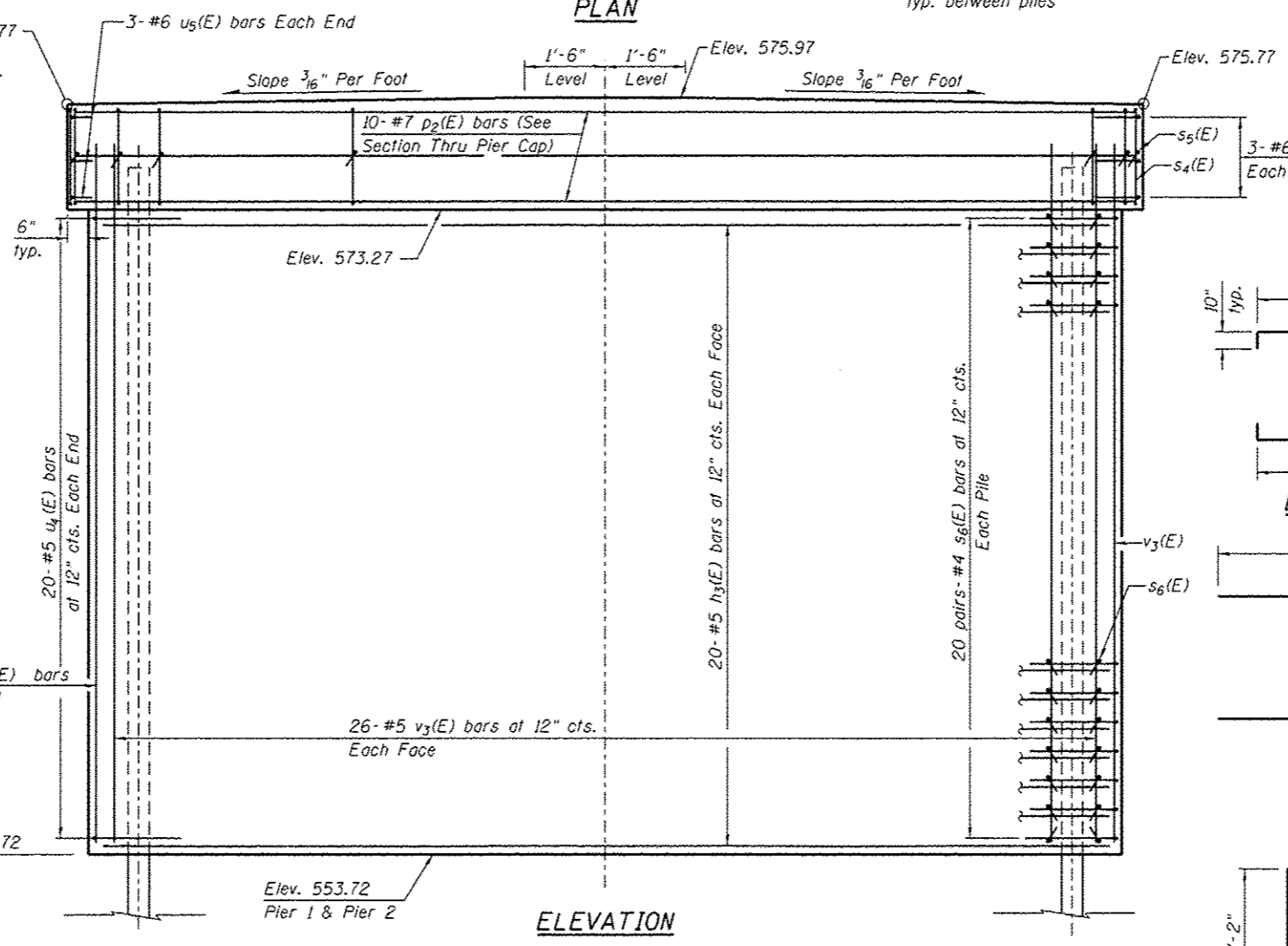
#5 bar = 3'-7"
 #6 bar = 4'-4"

BILL OF MATERIAL - TWO PIERS

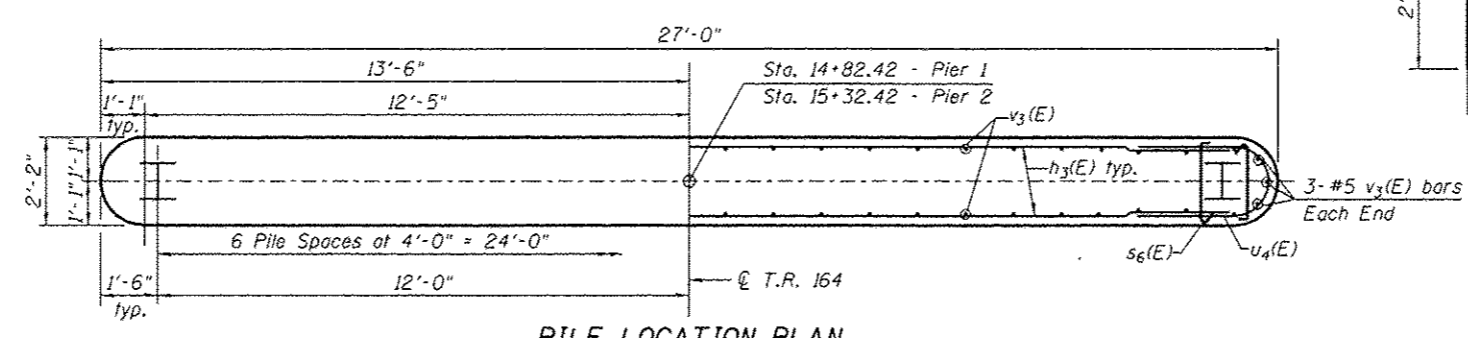
| Bar | No. | Size | Length | Shape | |
|----------------------------------|-----|------|--------|---------|----------|
| h3(E) | 80 | #5 | 25'-0" | — | |
| p2(E) | 20 | #7 | 27'-8" | — | |
| s4(E) | 60 | #5 | 11'-8" | □ | |
| s5(E) | 60 | #4 | 4'-3" | — | |
| s6(E) | 560 | #4 | 2'-11" | — | |
| u4(E) | 80 | #5 | 11'-8" | — | |
| u5(E) | 12 | #6 | 11'-9" | — | |
| v3(E) | 116 | #5 | 21'-4" | — | |
| Item | | | | Unit | Quantity |
| Reinforcement Bars, Epoxy Coated | | | | Pound | 8,980 |
| Concrete Structures | | | | Cu. Yd. | 102.2 |
| Furnishing Steel Piles | | | | | |
| HP12x63 | | | | Foot | 1,014 |
| Driving Piles | | | | Foot | 1,014 |
| Test Pile Steel HP12x63 | | | | Each | 1 |
| Stud Shear Connector | | | | Each | 28 |
| Cofferdam Excavation | | | | Cu. Yd. | 279 |
| Seal Coat Concrete | | | | Cu. Yd. | 93 |
| Cofferdam (Type 2) (Location 1) | | | | Each | 1 |
| Cofferdam (Type 2) (Location 2) | | | | Each | 1 |



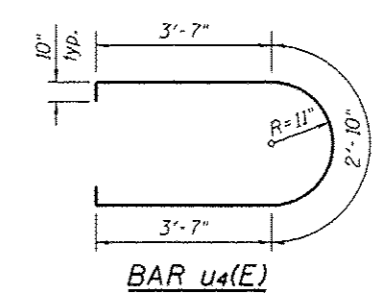
END VIEW



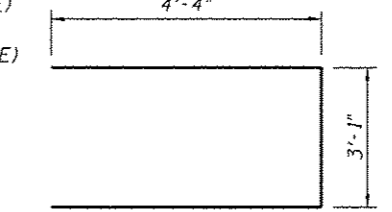
ELEVATION



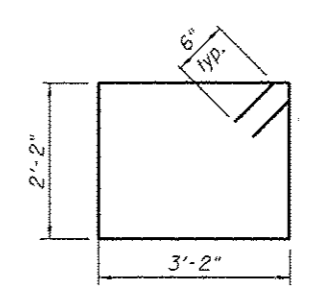
PILE LOCATION PLAN



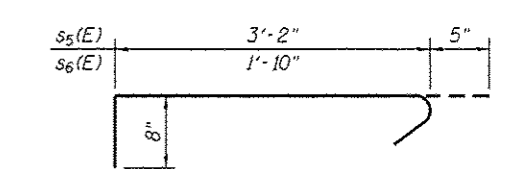
BAR u4(E)



BAR u5(E)



BAR s4(E)



BAR s5(E) & s6(E)

FILE NAME : S:\Projects\2013\J085113-01 Sangamon Co - Mountain Rd over Lick Creek\LOAD\LOAD Sheets\0843504-093674-015-Piers 1 & 2.dgn
 MODEL : 0843504-093674-015-Piers 1 & 2.rvt
 PLOT DRIVER : T001.ctb



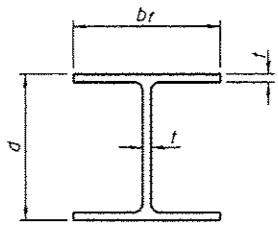
| | | |
|-----------------------|------------|---------|
| USER NAME : smaxwell | DESIGNED - | REVISED |
| PLOT SCALE : | CHECKED - | REVISED |
| PLOT DATE : 11/3/2016 | DRAWN - | REVISED |
| | CHECKED - | REVISED |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIERS 1 & 2
 STRUCTURE NO. 084-3504**

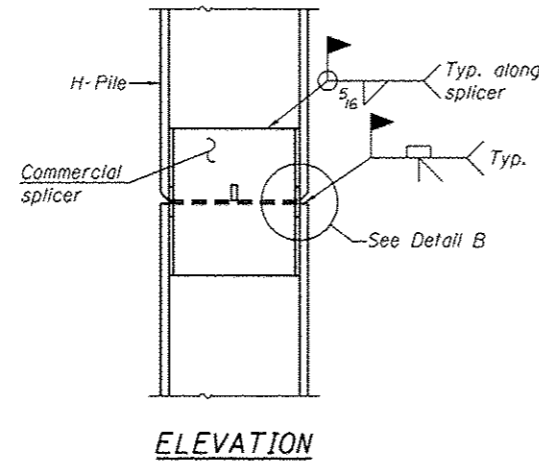
| | | | | |
|--------------------|------------------------|-----------------|---------------------------|--------------|
| T.R. RTE. 164 | SECTION 12-10119-01-BR | COUNTY SANGAMON | TOTAL SHEETS 31 | SHEET NO. 28 |
| CONTRACT NO. 93674 | | | ILLINOIS FED. AID PROJECT | |

SHEET NO. 15 OF 18 SHEETS

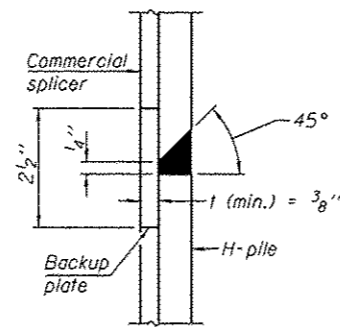


STEEL PILE TABLE

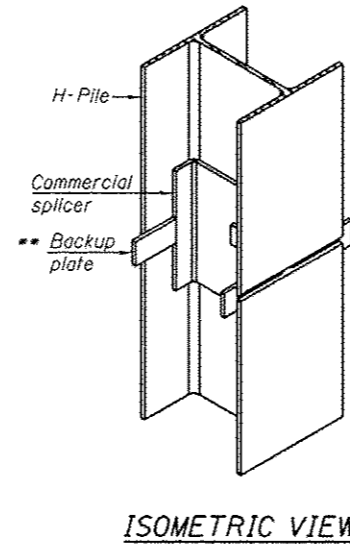
| Designation | Depth d | Flange width br | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 13/16" | 30" |
| x102 | 14" | 14 3/4" | 1/16" | 30" |
| x89 | 13 7/8" | 14 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 3/8" | 7/16" | 18" |



ELEVATION

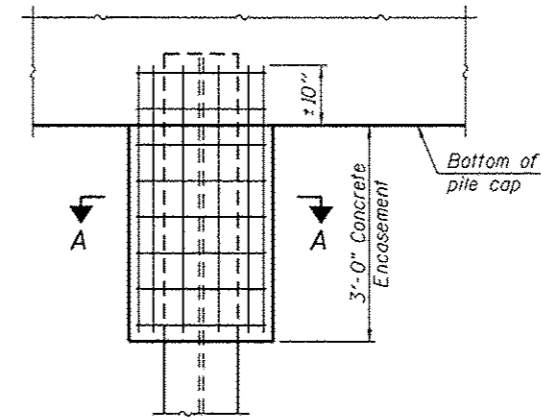


DETAIL "B"



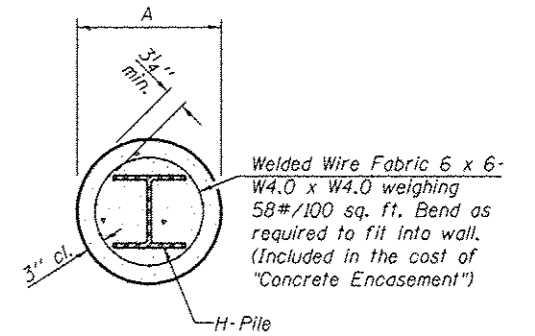
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



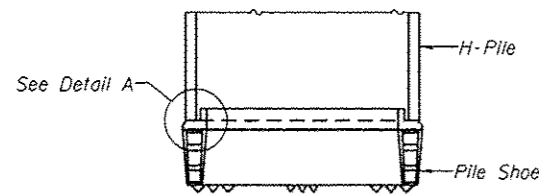
ELEVATION

PILE ENCASEMENT

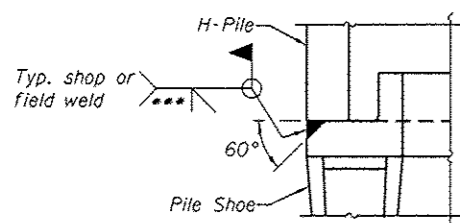


SECTION A-A

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

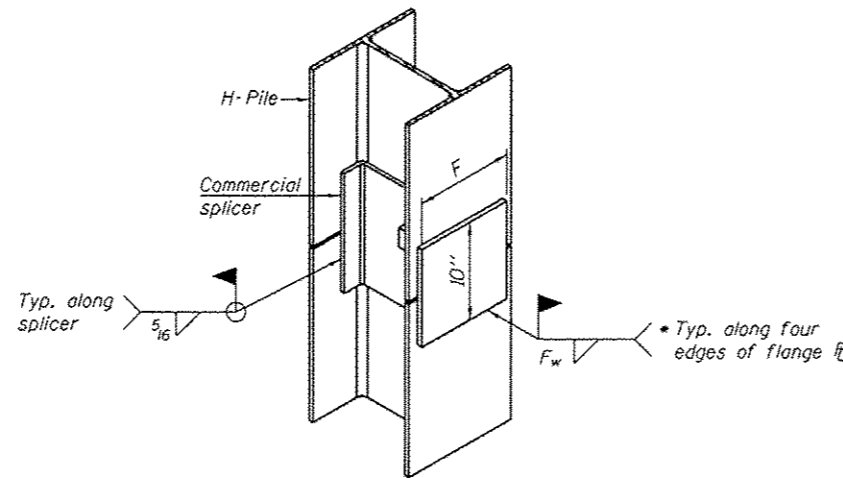


ELEVATION



DETAIL A

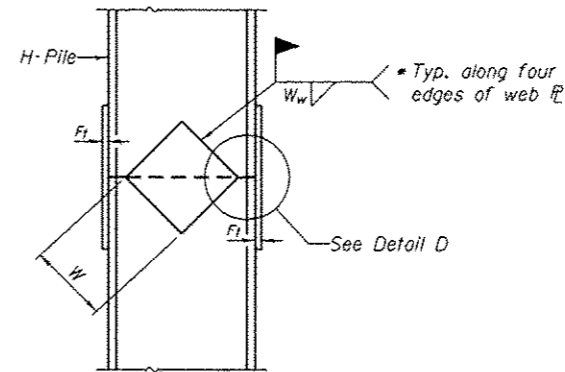
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

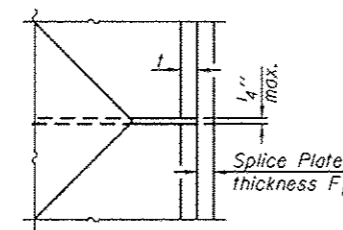
WELDED COMMERCIAL SPLICE ALTERNATE

- * 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.).



ELEVATION

DETAIL D



WELDED PLATE FIELD SPLICE

| Designation | F | F _t | F _w | W | W _t | W _w |
|-------------|---------|----------------|----------------|--------|----------------|----------------|
| HP 14x117 | 12 1/2" | 1" | 7/8" | 7 3/4" | 5 8/8" | 1/2" |
| x102 | 12 1/2" | 7/8" | 3/4" | 7 3/4" | 5 8/8" | 1/2" |
| x89 | 12 1/2" | 3/4" | 1/16" | 7 3/4" | 5 8/8" | 1/2" |
| x73 | 12 1/2" | 5/8" | 9/16" | 7 3/4" | 5 8/8" | 1/2" |
| HP 12x84 | 10" | 7/8" | 1/16" | 6 1/2" | 5 8/8" | 1/2" |
| x74 | 10" | 7/8" | 1/16" | 6 1/2" | 5 8/8" | 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 in accordance with AASHTO M270, Grade 50.

FILE NAME : S:\Projects\2013 Jobs\13-31 Sangamon Co - Mansson Rd over Luck Creek\CADD Sheets\0843504-06\03574-B16-PileDetails.dgn
 MODEL : Default
 PLOT DRIVER : T001_Bhp.ctb

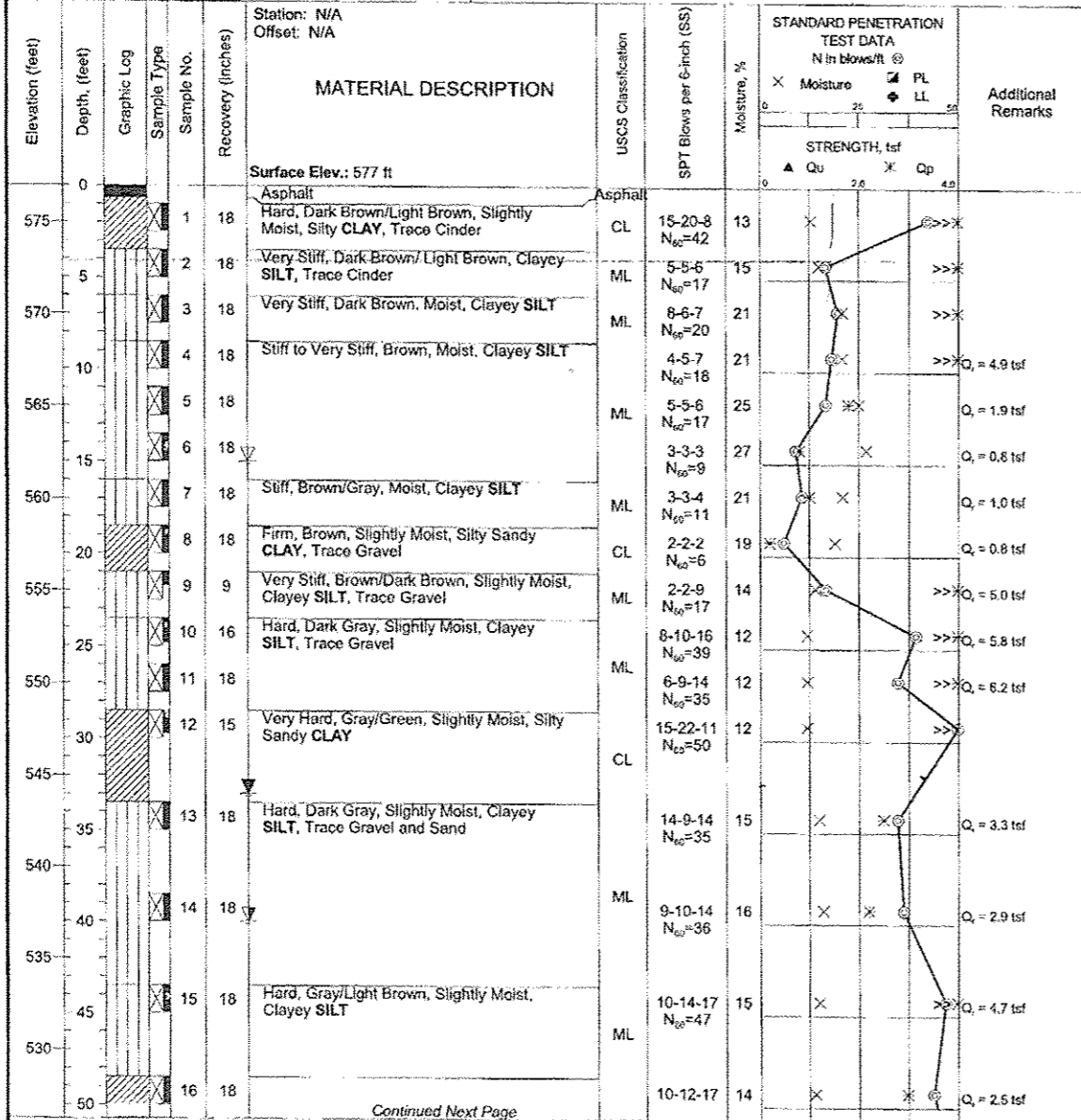


Professional Service Industries, Inc.
480 North Street
Springfield, IL 62704
Telephone: (217) 544-6663
Fax: (217) 544-6148

LOG OF BORING B-1

Sheet 1 of 2

| | | |
|---|------------------------------------|---------------------------|
| PSI Job No.: 00201509-1 | Drilling Method: Hollow Stem Auger | WATER LEVELS |
| Project: Wesley Chapel Road Bridge | Sampling Method: 2-in SS | While Drilling 15.0 feet |
| Location: Wesley Chapel Road Sangamon County, Illinois | Hammer Type: Automatic; ETR = 91% | Upon Completion 33.0 feet |
| | Boring Location: STA. 14+38 8' LT | Cave-In 40.0 feet |



| | | | |
|---------------------------|---|---|---|
| Completion Depth: 94.0 ft | Sample Types: Auger Cutting, Split-Spoon, Rock Core | Shelby Tube, Hand Auger, Calif. Sampler, Texas Cone | Latitude: 39.699121° Longitude: -89.761679° Drill Rig: CME 55 Remarks: N ₆₀ denotes the normalization to 60% efficiency as described in ASTM D4633. |
|---------------------------|---|---|---|

The stratification lines represent approximate boundaries. The transition may be gradual.

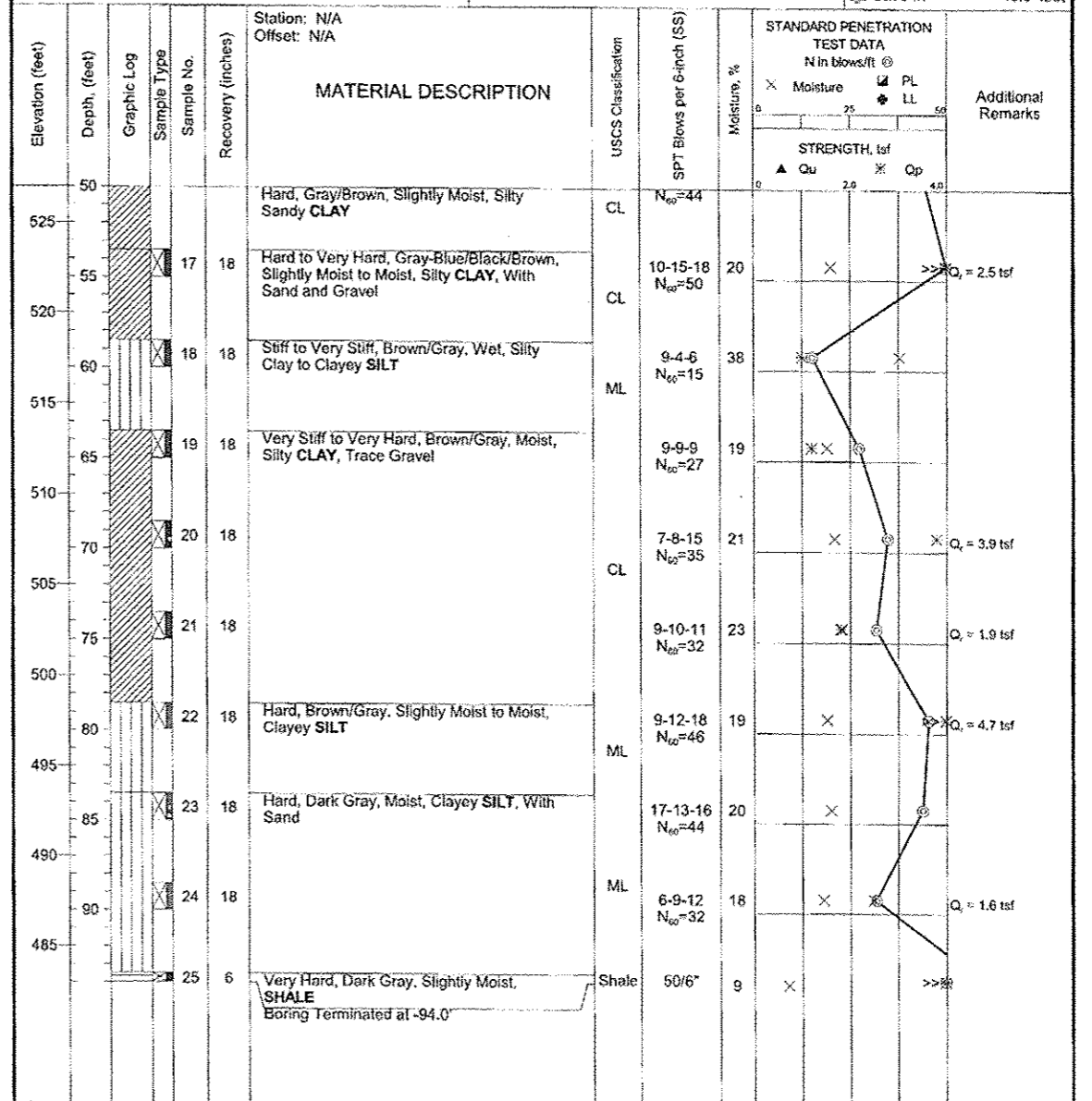


Professional Service Industries, Inc.
480 North Street
Springfield, IL 62704
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LOG OF BORING B-1

Sheet 2 of 2

| | | |
|---|------------------------------------|---------------------------|
| PSI Job No.: 00201509-1 | Drilling Method: Hollow Stem Auger | WATER LEVELS |
| Project: Wesley Chapel Road Bridge | Sampling Method: 2-in SS | While Drilling 15.0 feet |
| Location: Wesley Chapel Road Sangamon County, Illinois | Hammer Type: Automatic; ETR = 91% | Upon Completion 33.0 feet |
| | Boring Location: STA. 14+38 8' LT | Cave-In 40.0 feet |



| | | | |
|---------------------------|---|---|---|
| Completion Depth: 94.0 ft | Sample Types: Auger Cutting, Split-Spoon, Rock Core | Shelby Tube, Hand Auger, Calif. Sampler, Texas Cone | Latitude: 39.699121° Longitude: -89.761679° Drill Rig: CME 55 Remarks: N ₆₀ denotes the normalization to 60% efficiency as described in ASTM D4633. |
|---------------------------|---|---|---|

The stratification lines represent approximate boundaries. The transition may be gradual.

FILE NAME = S:\Projects\2013_JOB\113-31_Sangamon Co - Mantion Rd over Lick Creek\CADD\SHEETS\BRK\594-0653674-017-Borings.dgn
MODEL = Default
PLOT DRIVER = TDT.BWgplotf



QUIGG ENGINEERING INC

| | | |
|----------------------|-------------|------------|
| USER NAME: smorval | DESIGNED: - | REVISED: - |
| PLOT SCALE: - | CHECKED: - | REVISED: - |
| PLOT DATE: 11/3/2015 | DRAWN: - | REVISED: - |
| | CHECKED: - | REVISED: - |

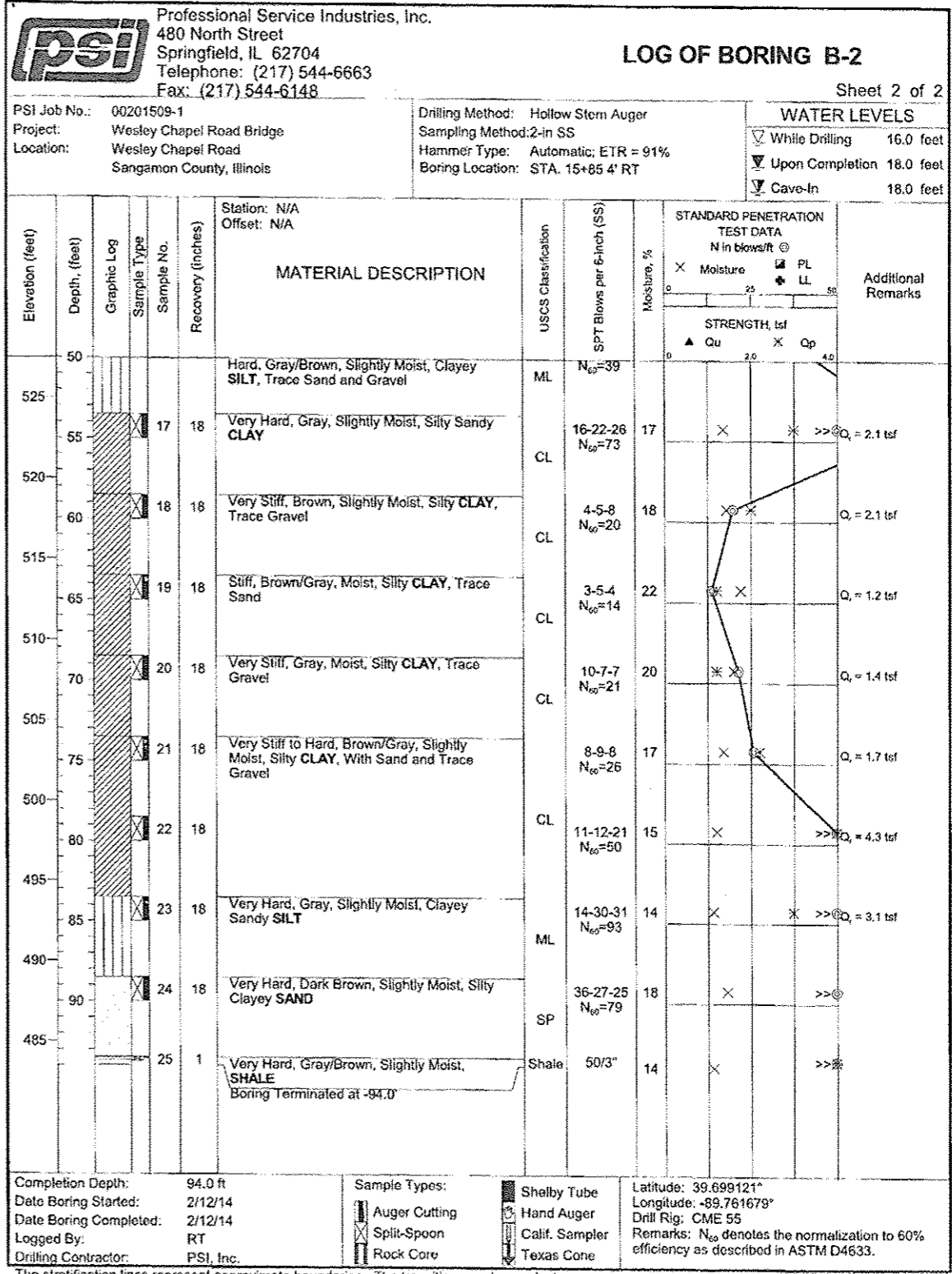
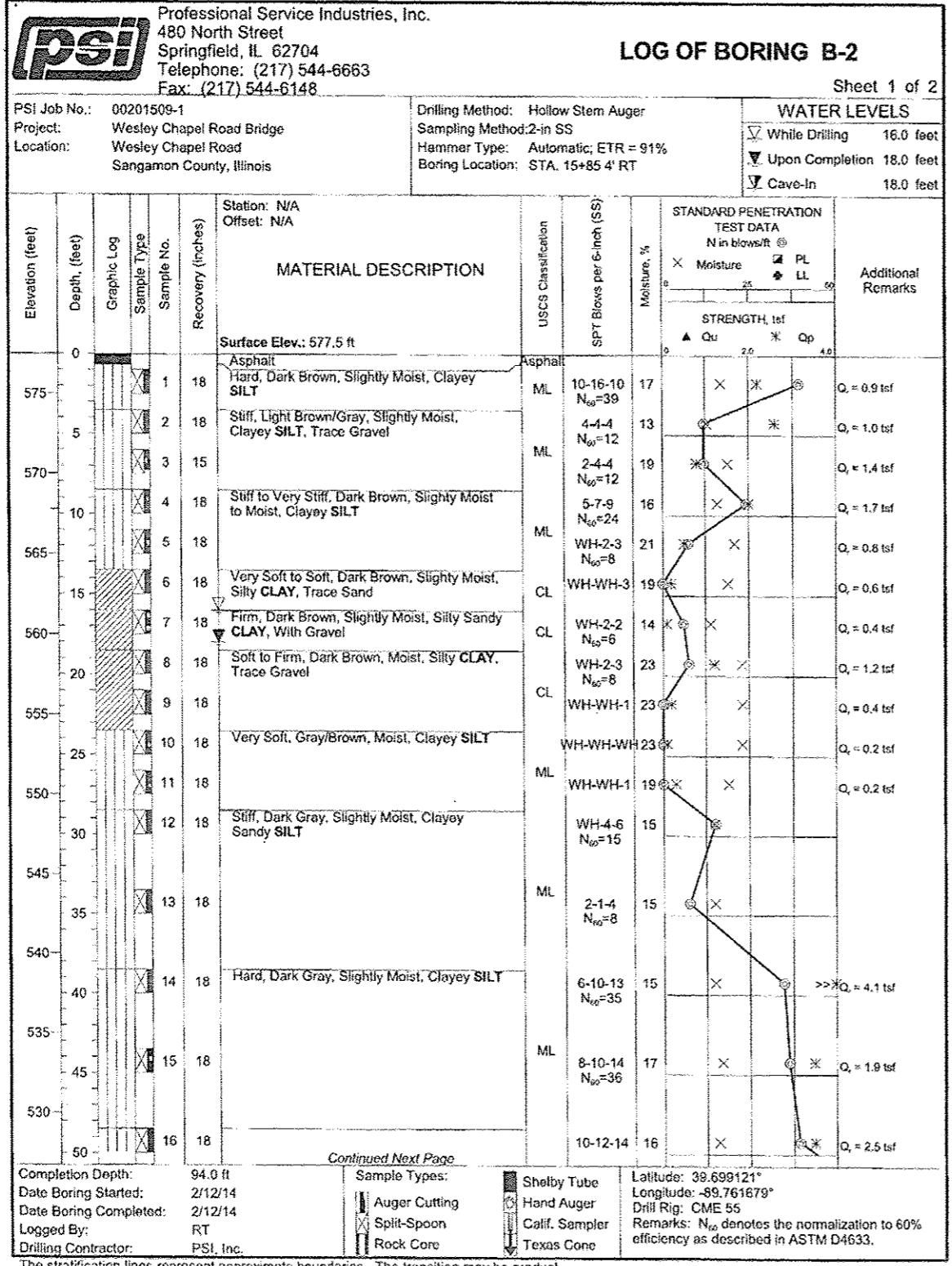
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOG B-1
STRUCTURE NO. 084-3504

SHEET NO. 17 OF 18 SHEETS

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|----------|--------------|-----------|
| 164 | 12-10119-01-BR | SANGAMON | 31 | 30 |
| CONTRACT NO. 93674 | | | | |

ILLINOIS FED. AID PROJECT



FILE NAME = S:\Projects\2013 Jobs\11-31 Sangamon Co - Manassah Rd over Lick Creek\1000\CAD Sheets\0843504-0893874-BIB-Borings.dgn
 MODEL = D:\AutoCAD\2013\11-31 Sangamon Co - Manassah Rd over Lick Creek\1000\CAD Sheets\0843504-0893874-BIB-Borings.dwg
 PLOT DRIVER = T001:DWGPlotter