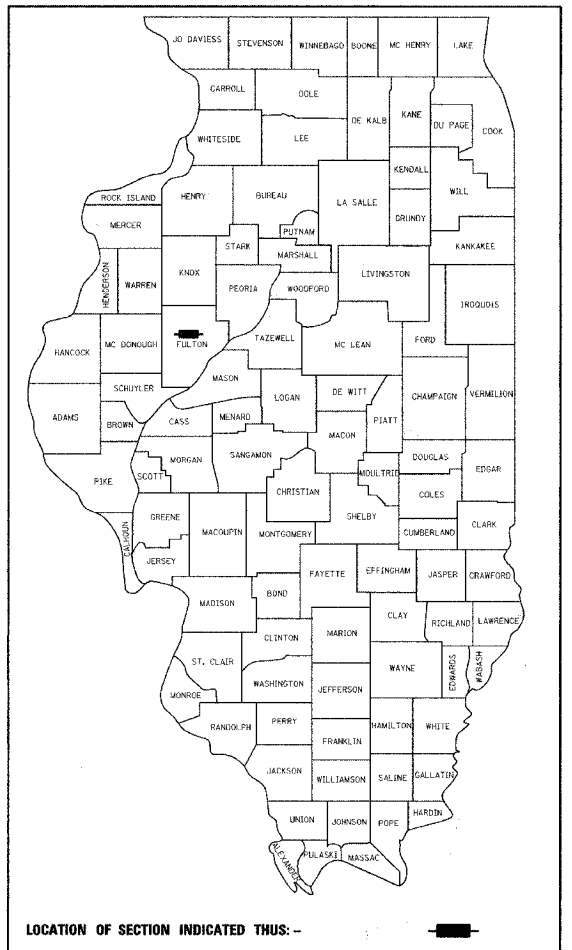


| FAP ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|---------|----------|------------------|-----------|
| 622 | (128BR) | FULTON | 19 | 1 |
| FED. ROAD DIST. NO. | | ILLINOIS | FED. AID PROJECT | |

CONTRACT NO. 68483
 CATALOG NO. 033064-00D
 D-94-074-05



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROPOSED HIGHWAY PLANS

**FAP ROUTE 622 (IL RTE 97)
 SECTION (128BR)I
 PROJECT NO. BHF-0622(007)
 FULTON COUNTY
 DECK BEAM REPLACEMENT
 C-94-074-05**

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 TYPICAL SECTIONS
- 5 GENERAL SITE PLAN
- 6 RESURFACING DETAIL (BRIDGE APPROACH TAPERBUTT JOINT)
- 7-8 STAGE CONSTRUCTION PLANS
- 9 WIDE LOAD SIGN LOCATION
- 10-19 BRIDGE PLANS

STANDARDS

- 420401-05
- 630001-06
- 630301-03
- 631031-05
- 631032-02
- 635006-02
- 635011-01
- 701306-01
- 701321-08
- 701326-02
- 702001-06
- 704001-02
- 780001-01
- 781001-02

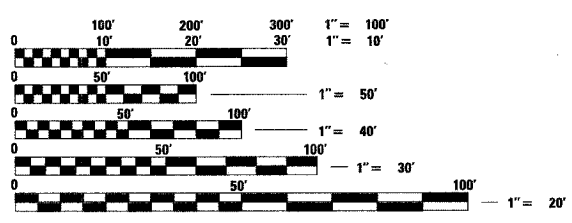
COMMITMENTS

NONE

SCALES { PLAN = 1"=30'
 PROFILE HORIZ. = 1"=30'
 PROFILE VERT. = 1"=5'
 CROSS SECTIONS = 1"=10' HORIZ.
 1"=5' VERT.

DESCRIPTION OF WORK

THE PROPOSED IMPROVEMENTS CONSIST OF REMOVAL OF THE EXISTING BRIDGE SUPERSTRUCTURE AND REPLACING WITH PRECAST, PRESTRESSED CONCRETE DECK BEAMS, CONCRETE WEARING SURFACE AND OTHER APPURTENANT ITEMS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO SATISFACTORILY CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND PROVISIONS STATED HEREIN.

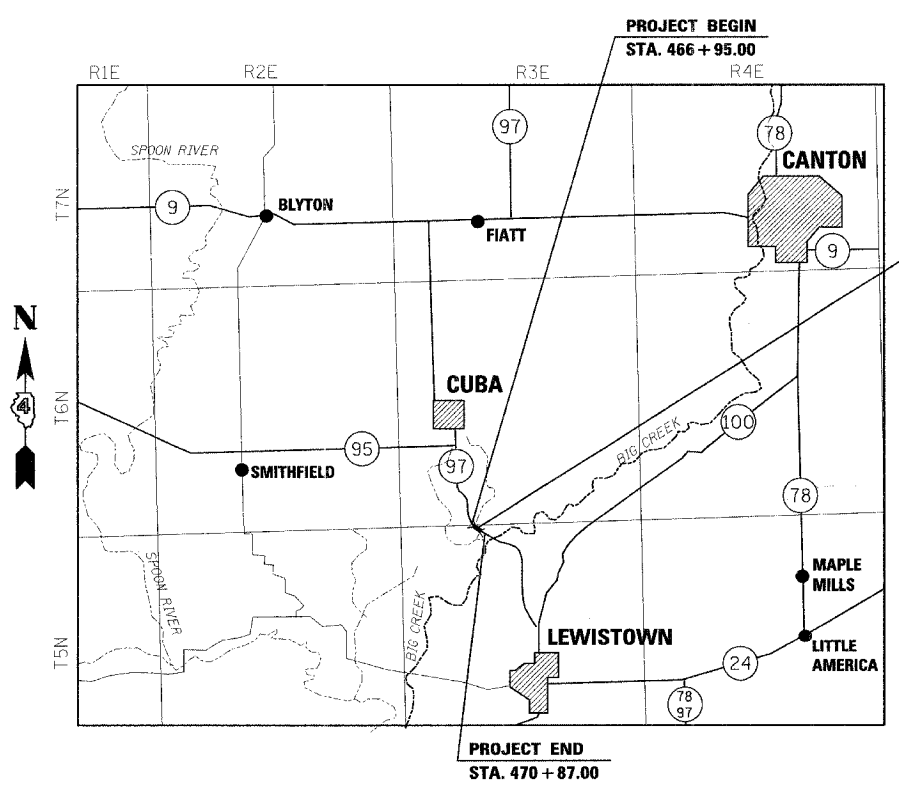


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 68483

LENGTH OF PROJECT
 GROSS LENGTH: 392 FT=0.074 MILES
 NET LENGTH: 392 FT=0.074 MILES



BRIDGE OVER BIG CREEK
 STA. 468 + 35.85 TO STA. 468 + 67.98
 S.N. 029-0026
 2003 ADT = 1800
 2020 ADT = 2074

QA/QC BITUMINOUS SUPERPAVE PROJECT

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS**

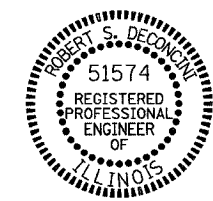
SUBMITTED Aug 25 2006

DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER
Robert S. DeConcini

PASSED October 13, 2006
Mike Hine
 ENGINEER OF DESIGN AND ENVIRONMENT

APPROVED October 13, 2006
Milton R. Sees, P.E.
 DIRECTOR, DIVISION OF HIGHWAYS

**PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS**



Robert S. DeConcini 8/4/06
 ROBERT S. DECONCINI, P.E. DATE
 LICENSE NO. 062-51574 EXPIRES 11-30-2007

PREPARED BY:
TWM THOUVENOT, WADE & MOERCHEN, INC.

PLOT DATE: *DATE-TIME*

PROJECT ENGINEER: JAMES MILLER
 SQUAD CONTACT: (309) 671-3451

| FAP ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO |
|----------------------|----------|---------|--------------|----------|
| 622 | (128BRI) | FULTON | 19 | 2 |
| STA. | | TO STA. | | |
| EXISTING CONDITIONS: | | | | |
| CONTRACT NO.68483 | | | | |

GENERAL NOTES

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION, AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS, OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGE HIS OPERATIONS IN ORDER THAT THE UTILITY'S OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER.

THE ENGINEER AND OWNER FURTHER DO NOT WARRANT THAT ALL UTILITIES HAVE BEEN ILLUSTRATED ON THESE DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTACTING J.U.L.I.E. FOR FIELD VERIFICATION OF ALL UTILITIES ON THE SITE PRIOR 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 MARKERS AND MONUMENTS UNTIL THE OWNER AND AN AUTHORIZED SURVEYOR OR AGENT, HAVE WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE AREA LOCATED WITHIN THE CONSTRUCTION LIMIT LINES, AS SHOWN PER PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

IT IS INTENDED THAT ANY CULVERTS DAMAGED BY OR REMOVED BY THE CONTRACTOR OTHER THAN THOSE NOTED ON THE PLANS TO BE REMOVED WILL HAVE TO BE REMOVED AND/OR REPLACED AT THE CONTRACTOR'S SOLE EXPENSE.

ALL STORM SEWER AND CULVERT PIPE TO BE REMOVED WHICH THE ENGINEER DEEMS FIT FOR RE-USE SHALL BE SALVAGED IN ACCORDANCE WITH ARTICLES 501.02 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL OTHER STORM SEWER AND CULVERT PIPE SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03.

ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE THICKNESS OF THE BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR THE BASE COURSE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

NO VIBRATORY ROLLER WILL BE ALLOWED.

THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION.

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY ALSO BE OBTAINED BY CALLING J.U.L.I.E. AND FOR NON-J.U.L.I.E. MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

- ILLINOIS-AMERICAN WATER COMPANY
- CHARTER COMMUNICATIONS
- SBC COMMUNICATIONS
- AMEREN CILCO/CIPS

(MEMBERS OF J.U.L.I.E. (800) 892-0123 ARE INDICATED BY * NONMEMBERS OF J.U.L.I.E. MUST BE NOTIFIED INDIVIDUALLY)

FARM ACCESS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW FARMERS AND RESIDENTS ACCESS TO FIELDS AND RESIDENCES DURING VARIOUS STAGES OF CONSTRUCTION IF ACCESS CANNOT BE ATTAINED BY OTHER ROADS.

UTILITIES - LOCATIONS/INFORMATION ON PLANS

UNLESS NOTED OTHERWISE, THE LOCATION OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. SOME UTILITY LOCATIONS ARE SHOWN AS FUTURE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

STEEL PLATE BEAM GUARD RAIL REMOVAL

CONTRACTOR TO ONLY REMOVE THE AMOUNT OF GUARD RAIL NECESSARY TO ALLOW INSTALLATION AND RE-CONNECTION OF THE NEW TERMINALS.

BUTT JOINT CUTTING TIME RESTRICTION

BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE BITUMINOUS SURFACE COURSE.

NAME PLATE RELOCATION

NAME PLATES THAT WILL BE REMOVED AS A RESULT OF THIS WORK SHALL BE RELOCATED ON THE STEEL BRIDGE RAIL, TYPE SM AS DIRECTED BY THE ENGINEER. THE COST OF REMOVING AND REPLACING THE NAME PLATE(S), INCLUDING ALL NECESSARY FASTENERS, WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

COMMITMENTS:

NONE

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

| MIXTURE USE(S): | SURFACE (1 1/2" TO 2" LIFT) | BINDER COURSE (3 1/2" LIFT) |
|--|--------------------------------|--------------------------------|
| AC/PG | PG 64-22 | PG 64-22 |
| RAP % (MAX) | 15% | 25% |
| DESIGN AIR VOIDS | 4.2% @ N=50 | 4.2% @ N=50 |
| MIX COMPOSITION (GRADATION MIXTURE) | IL 9.5 OR 12.5 | IL 19.0 |
| FRICITION AGG | Mixture D | N.A. |

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN.

| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL NOTES F.A.P. RTE 622 SECTION (128BRI) FULTON COUNTY |
|-----------|------|---|
| NAME | DATE | |
| | | SCALE: NONE DATE: 06/24/2006 DRAWN BY: KBF CHECKED BY: BWP |
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PLOT DATE: *DATE-TIME*

PROJECT:
DATE-TIME:
JOB-SPEC:
REF:

SUMMARY OF QUANTITIES

| | | | | |
|----------------------|----------|---------|--------------|-----------|
| FAP ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 622 | (128BR)I | FULTON | 19 | 3 |
| STA. | | TO STA. | | |
| EXISTING CONDITIONS: | | | | |
| CONTRACT NO. 68483 | | | | |

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | | | | |
|-----------------------|---|--------|------------------|------------------------|---------|--|--|--|--|
| CODE NO | ITEM | UNIT | | 1000 FED 80% STATE 20% | X080-2A | | | | |
| 20200500 | EARTH EXCAVATION (WIDENING) | CU YD | 107 | 107 | | | | | |
| 40600100 | BITUMINOUS MATERIALS (PRIME COAT) | GALLON | 57 | 57 | | | | | |
| 40600300 | AGGREGATE (PRIME COAT) | TON | 1.2 | 1.2 | | | | | |
| 40600980 | BITUMINOUS SURFACE REMOVAL - BUTT JOINT | SQ YD | 266 | 266 | | | | | |
| 50101500 | REMOVAL OF EXISTING SUPERSTRUCTURES | EACH | 1 | 1 | | | | | |
| 50300260 | BRIDGE DECK GROOVING | SQ YD | 144 | 144 | | | | | |
| 50300300 | PROTECTIVE COAT | SQ YD | 151 | 151 | | | | | |
| 50400305 | PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH) | SQ FT | 1355 | 1355 | | | | | |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 2050 | 2050 | | | | | |
| 50901005 | STEEL BRIDGE RAIL, TYPE SM | FOOT | 75 | 75 | | | | | |
| 51500100 | NAME PLATES | EACH | 1 | 1 | | | | | |
| 59000100 | EPOXY CRACK SEALING | FOOT | 14 | 14 | | | | | |
| * 63100087 | TRAFFIC BARRIER TERMINAL, TYPE 6A | EACH | 4 | 4 | | | | | |
| * 63100167 | TRAFFIC BARRIER TERMINAL TYPE 1, SPECTAL (TANGENT) | EACH | 2 | 2 | | | | | |
| 63200305 | STEEL PLATE BEAM GUARD RAIL REMOVAL | FOOT | 175 | 175 | | | | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 4 | 4 | | | | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | | | | |
| 70100405 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 | EACH | 1 | 1 | | | | | |
| 70100460 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 | L SUM | 1 | 1 | | | | | |
| 70106500 | TEMPORARY BRIDGE TRAFFIC SIGNALS | EACH | 1 | 1 | | | | | |
| 70106700 | TEMPORARY RUMBLE STRIP | EACH | 6 | 6 | | | | | |
| 70300100 | SHORT-TERM PAVEMENT MARKING | FOOT | 168 | 168 | | | | | |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 3208 | 3208 | | | | | |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 1174 | 1174 | | | | | |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 452 | 452 | | | | | |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 452 | 452 | | | | | |
| * 78005110 | EPOXY PAVEMENT MARKING - LINE 4" | FOOT | 3208 | 3208 | | | | | |
| 78200410 | GUARDRAIL MARKERS, TYPE A | EACH | 4 | 4 | | | | | |
| 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 2 | 2 | | | | | |

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | | | | |
|-----------------------|--|-------|------------------|------------------------|---------|--|--|--|---------|
| CODE NO | ITEM | UNIT | | 1000 FED 80% STATE 20% | X080-2A | | | | SFTY-3N |
| X0301512 | GUARDRAIL AGGREGATE EROSION CONTROL | TON | 9 | 9 | | | | | |
| X0325305 | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5") | SQ FT | 20 | 20 | | | | | |
| X3560100 | BITUMINOUS CONCRETE BASE COURSE WIDENING, 6" | SQ YD | 645 | 645 | | | | | |
| X4066424 | BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50 | TON | 70 | 70 | | | | | |
| X4066614 | BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50 | TON | 30 | 30 | | | | | |
| X5030305 | CONCRETE WEARING SURFACE, 5" | SQ YD | 151 | 151 | | | | | |
| * X7200200 | WIDE LOAD SIGNING | L SUM | 1 | 1 | | | | | |
| Z0002600 | BAR SPLICERS | EACH | 36 | 36 | | | | | |
| Z0030250 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 | EACH | 2 | | | | | | 2 |
| Z0030350 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3 | EACH | 2 | | | | | | 2 |

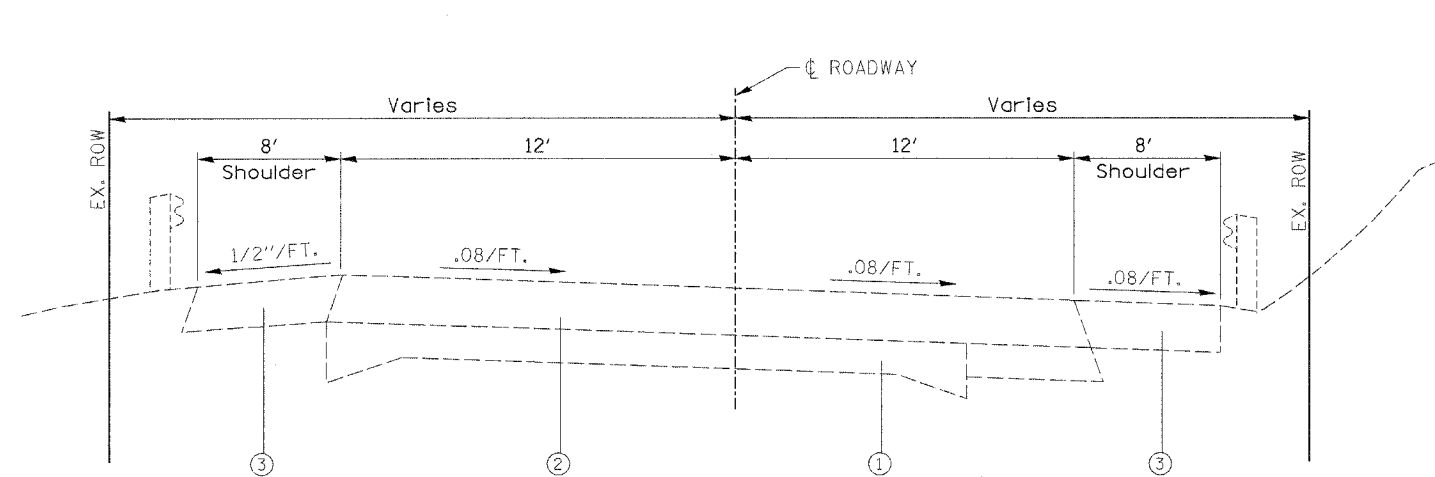
* SPECIALTY ITEM

| REVISIONS | |
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| NAME | DATE |
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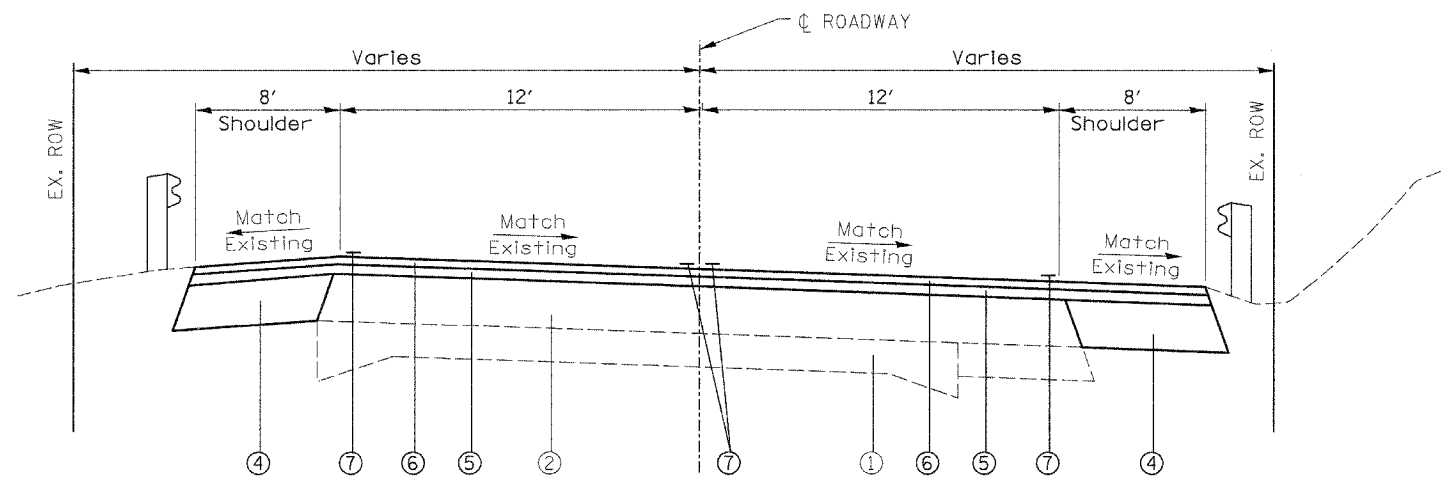
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
F.A.P. RTE. 622
SECTION (128BR)I
FULTON COUNTY

SCALE: NONE
DATE: 06/24/2006

DRAWN BY: KBF
CHECKED BY: BWP



EXISTING TYPICAL SECTION
F.A.P. 622 (IL 97)



PROPOSED TYPICAL SECTION
F.A.P. 622 (IL 97)

- LEGEND**
- ① EXISTING P.C.C. PAVEMENT
 - ② EXISTING BITUMINOUS CONCRETE SURFACE
 - ③ EXISTING 6" AGGREGATE SHOULDERS
 - ④ BITUMINOUS CONCRETE BASE COURSE WIDENING, 6"
 - ⑤ PROPOSED BITUMINOUS CONCRETE BINDER COURSE SUPERPAVE, IL 19.0, N 50 - VARIABLE DEPTH (1" MINIMUM)
 - ⑥ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX "D", N 50 - 1 1/2 "
 - ⑦ PROPOSED PAVEMENT MARKING

| REVISIONS | |
|-----------|------|
| NAME | DATE |
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ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS
F.A.P. RTE. 622
SECTION (128BR)I
FULTON COUNTY

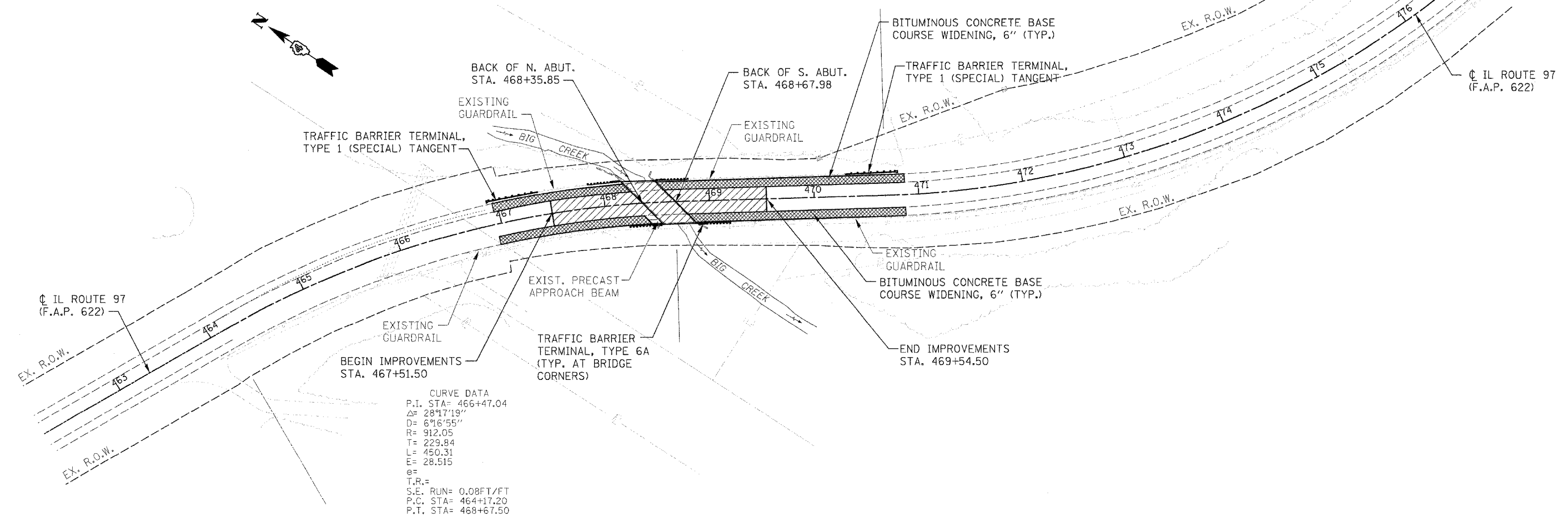
SCALE: NONE
DATE: 06/24/2006

DRAWN BY: KBF
CHECKED BY: BWP

| FAP ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------|--------|--------------|-----------|
| 622 | (128BR)I | FULTON | 19 | 5 |

EXISTING CONDITIONS:
CONTRACT NO. 68483

CURVE DATA
P.I. STA= 473+85.33
Δ= 38°50'15"
D= 6°22'11"
R= 899.43'
T= 317.09'
L= 609.72'
E= 54.25'
e=
T.R.=
S.E. RUN= 0.08FT/FT
P.C. STA= 470+68.24
P.T. STA= 476+77.96



CURVE DATA
P.I. STA= 466+47.04
Δ= 28°17'19"
D= 6°16'55"
R= 912.05'
T= 229.84'
L= 450.31'
E= 28.515'
e=
T.R.=
S.E. RUN= 0.08FT/FT
P.C. STA= 464+17.20
P.T. STA= 468+67.50

| STATION TO STATION | BITUMINOUS MATERIALS PRIME COAT (GALLON) | AGGREGATE PRIME COAT (TON) | BITUMINOUS SURFACE REMOVAL BUTT JOINT (SQ. YD.) | BIT. CONC. SURFACE COURSE SUPERPAVE MIX D (TON) | BINDER COURSE SUPERPAVE N50 (TON) |
|-----------------------|--|----------------------------|---|---|-----------------------------------|
| 467+51.50 - 468+35.85 | 28.4 | 0.6 | 133 | 34.5 | 14.7 |
| 468+67.98 - 469+54.50 | 28.8 | 0.6 | 133 | 34.9 | 15.2 |
| TOTAL: | 57.2 | 1.2 | 266 | 69.4 | 29.9 |

| STATION TO STATION | WIDTH (FEET) | AREA (SQ. YD.) | EXCAVATION DEPTH (INCHES) | EARTH EXCAVATION WIDENING (CU. YD.) |
|--------------------------------|--------------|----------------|---------------------------|-------------------------------------|
| 466+95.00 LT. TO 468+25.87 LT. | 8 | 116.3 | 6 | 19.4 |
| 468+49.68 LT. TO 470+87.00 LT. | 8 | 211.0 | 6 | 35.2 |
| 466+95.00 RT. TO 468+44.25 RT. | 8 | 132.7 | 6 | 22.1 |
| 468+79.26 RT. TO 470+87.00 RT. | 8 | 184.7 | 6 | 30.8 |
| TOTAL: | | | | 107.4 |

| STATION TO STATION | WIDTH (FEET) | AREA (SQ. YD.) |
|--------------------------------|--------------|----------------|
| 466+95.00 LT. TO 468+25.87 LT. | 8 | 116.3 |
| 468+49.68 LT. TO 470+87.00 LT. | 8 | 211.0 |
| 466+95.00 RT. TO 468+44.25 RT. | 8 | 132.7 |
| 468+79.26 RT. TO 470+87.00 RT. | 8 | 184.7 |
| TOTAL: | | 645 |

| STATION TO STATION | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT (EACH) | TRAFFIC BARRIER TERMINAL, TYPE 6A (EACH) | SPBGR REMOVAL (FOOT) | GUARDRAIL MARKERS T-A (EACH) | TERMINAL MARKER DIRECT APPLIED (EACH) |
|-------------------------------|---|--|----------------------|------------------------------|---------------------------------------|
| 466+91.83 LT. - 467+16.83 LT. | | | 25 | | |
| 467+85.58 LT. - 468+16.83 LT. | | 1 | 31.25 | 1 | |
| 466+66.83 LT. - 467+16.83 LT. | 1 | | | | 1 |
| 468+48.94 LT. - 468+80.19 LT. | | 1 | 31.25 | 1 | |
| 470+61.44 LT. - 470+86.44 LT. | | | 25 | | |
| 470+61.44 LT. - 471+11.44 LT. | 1 | | | | 1 |
| 468+13.37 RT. - 468+44.62 RT. | | 1 | 31.25 | 1 | |
| 468+88.10 RT. - 469+19.35 RT. | | 1 | 31.25 | 1 | |
| TOTAL: | 2 | 4 | 175 | 4 | 2 |

| STATION TO STATION | SHORT TERM PAVEMENT MARKINGS (FOOT) | TEMPORARY PAVEMENT MARKING LINE 4" (FT.) | WORK ZONE PAVEMENT MARKING REMOVAL (SQ. FT.) | EPOXY PAVEMENT MARKING LINE 4" (FOOT) | | PAVEMENT MARKING REMOVAL (SQ. FT.) |
|--|-------------------------------------|--|--|---------------------------------------|-------------|------------------------------------|
| | | | | WHITE | YELLOW | |
| 464+75.00 C. TO 472+77.00 C. | 168 | | 56 | | | 535 |
| 464+75.00 RT. TO 472+77.00 RT. | | | | 802 | | 267 |
| 464+75.00 LT. TO 472+77.00 LT. | | | | 802 | | 267 |
| 464+75.00 RT. TO 472+77.00 RT. (STAGE 1 & 2) | | 1604 | | | | 535 |
| 464+75.00 LT. TO 472+77.00 LT. (STAGE 1 & 2) | | 1604 | | | | 535 |
| STOP BAR (2 LOCATIONS) | | | | | | 48 |
| SUB TOTAL: | | | | 1604 | 1604 | |
| TOTAL: | 168 | 3208 | 1174 | 3208 | 1069 | |

| NAME | DATE |
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ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL SITE PLAN AND SCHEDULES
F.A.P. RTE. 622
SECTION (128BR)I
FULTON COUNTY

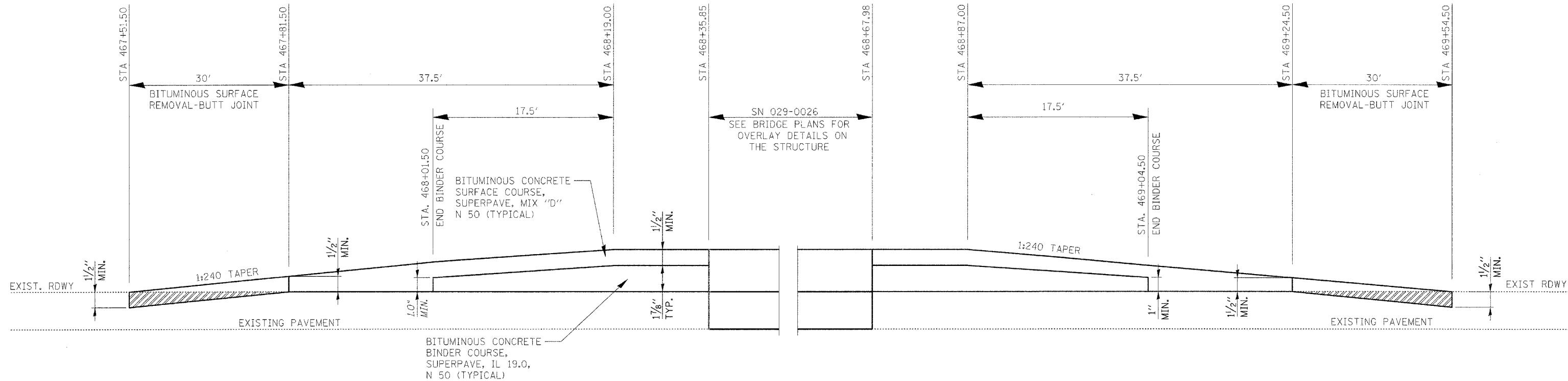
SCALE: NONE
DATE: 03/24/2006

DRAWN BY: KBF
CHECKED BY: BWP

NOTES:
 FULL-DEPTH SAW CUTS ARE REQUIRED FOR ALL REMOVAL ITEMS AND THAT THE COST FOR SUCH IS INCLUDED IN THE REMOVAL ITEM.

'ROAD CONSTRUCTION AHEAD' SIGNS ARE REQUIRED ON ALL INTERSECTING ROADS AND HIGHWAYS. THE COST FOR SUCH IS INCLUDED IN THE APPLICABLE TRAFFIC CONTROL PAY ITEM.

| FIP ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO |
|----------------------|----------|--------|--------------|----------|
| 622 | (128BR)I | FULTON | 19 | 6 |
| STA. | TO STA. | | | |
| EXISTING CONDITIONS: | | | | |
| CONTRACT NO. 68483 | | | | |



SECTION

| REVISIONS | |
|-----------|------|
| NAME | DATE |
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE APPROACH RESURFACING
 DETAIL (TAPER/BUTT JOINT)
 F.A.P. RTE. 622
 SECTION (128BR)I
 FULTON COUNTY

SCALE: NONE
 DATE: 06/24/2006
 DRAWN BY: KBF
 CHECKED BY: BWP

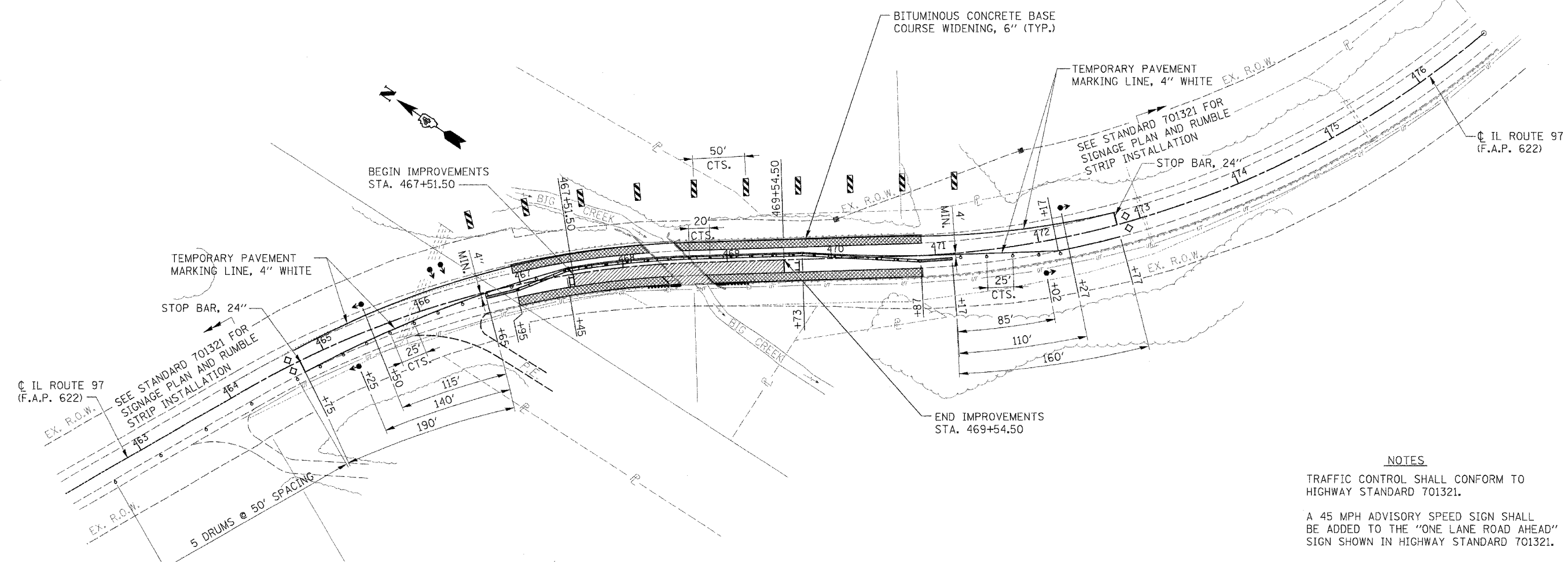
DATE
 DATE TIME
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 REF.

STAGE I TRAFFIC CONTROL

CURVE DATA
 P.I. STA= 473+85.33
 $\Delta = 38^{\circ}50'15''$
 $D = 6^{\circ}22'11''$
 $R = 899.49'$
 $T = 317.09'$
 $L = 609.72'$
 $E = 54.25'$
 $e =$
 $T.R. =$
 $S.E. RUN = 0.08 FT/FT$
 $P.C. STA = 470+68.24$
 $P.T. STA = 476+77.96$

| F.A.P. ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------|----------|--------|--------------|-----------|
| 622 | (128BR)I | FULTON | 19 | 7 |

STA. TO STA.
 EXISTING CONDITIONS:
 CONTRACT NO. 68483



CURVE DATA
 P.I. STA= 466+47.04
 $\Delta = 28^{\circ}17'19''$
 $D = 6^{\circ}16'55''$
 $R = 912.05'$
 $T = 229.84'$
 $L = 450.31'$
 $E = 28.515'$
 $e =$
 $T.R. =$
 $S.E. RUN = 0.08 FT/FT$
 $P.C. STA = 464+17.20$
 $P.T. STA = 468+67.50$

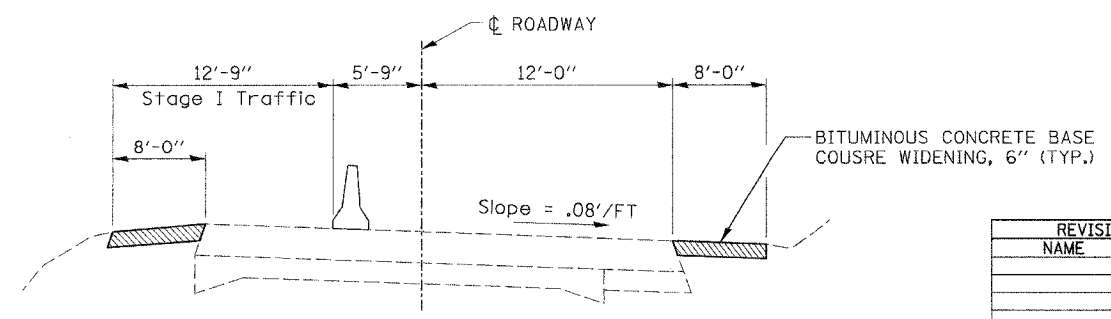
NOTES

TRAFFIC CONTROL SHALL CONFORM TO HIGHWAY STANDARD 701321.

A 45 MPH ADVISORY SPEED SIGN SHALL BE ADDED TO THE "ONE LANE ROAD AHEAD" SIGN SHOWN IN HIGHWAY STANDARD 701321.

CONTRACTOR TO ADJUST TRAFFIC CONTROL AS NECESSARY TO MAINTAIN ACCESS TO ALL PRIVATE AND FIELD ENTRANCES.

PRIOR TO INSTALLING TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGING OPERATIONS, CONSTRUCT BITUMINOUS BASE COURSE WIDENING LT USING TRAFFIC CONTROL AND PROTECTION STANDARD 701326



STAGE I TYPICAL SECTION
 LOOKING SOUTH

- SYMBOLS**
- DRUM WITH STEADY BURNING LIGHT
 - ⬆ TRAFFIC SIGNAL
 - ◇ INDUCTION LOOP DETECTOR
 - ▨ DOUBLE VERTICAL PANEL
 - ◇ TYPE C BIDIRECTIONAL REFLECTOR
 - STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
 - ▬ TEMPORARY CONCRETE BARRIER
 - ▨ IMPACT ATTENUATOR TEMP., (FULLY REDIRECTIVE), TEST LEVEL 2
 - ⊥ TYPE III BARRICADE
 - ▨ WORK AREA

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 STAGE I TRAFFIC CONTROL
 STANDARD 701321

F.A.P. RTE. 622
 SECTION (128BR)I
 FULTON COUNTY

SCALE: NONE
 DATE: 06/24/2006

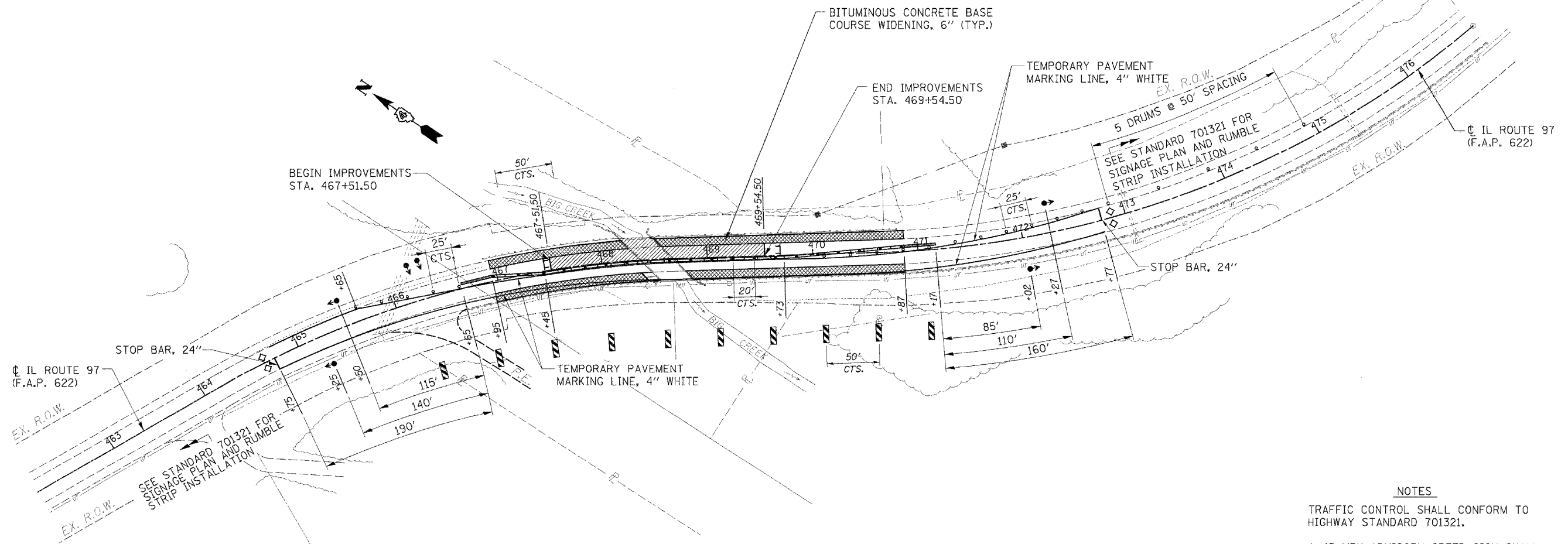
DRAWN BY: KBF
 CHECKED BY: BWP

DATE-TIME
 DATE-TIME
 DATE-TIME
 DATE-TIME
 DATE-TIME

STAGE II TRAFFIC CONTROL

CURVE DATA
 P.I. STA= 473+85.33
 Δ= 38°50'15"
 D= 6°22'11"
 R= 899.49'
 T= 317.09'
 L= 609.72'
 E= 54.25'
 e=
 T.R.=
 S.E. RUN= 0.08FT/FT
 P.C. STA= 470+68.24
 P.T. STA= 476+77.96

| F.A.P. ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------------------|---------|--------|--------------|-----------|
| 622 | (128BR) | FULTON | 19 | 8 |
| STA. TO STA. | | | | |
| EXISTING CONDITIONS: | | | | |
| CONTRACT NO. 68483 | | | | |



NOTES

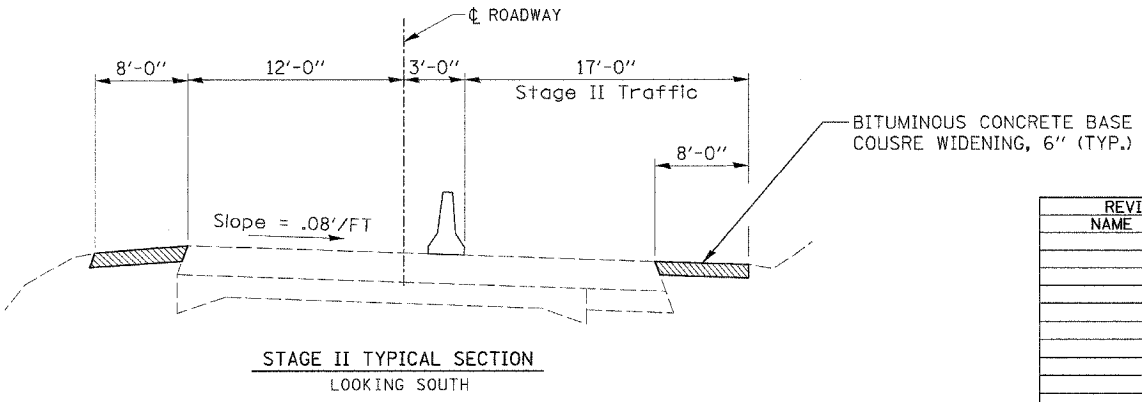
TRAFFIC CONTROL SHALL CONFORM TO HIGHWAY STANDARD 701321.

A 45 MPH ADVISORY SPEED SIGN SHALL BE ADDED TO THE "ONE LANE ROAD AHEAD" SIGN SHOWN IN HIGHWAY STANDARD 701321.

CONTRACTOR TO ADJUST TRAFFIC CONTROL AS NECESSARY TO MAINTAIN ACCESS TO ALL PRIVATE AND FIELD ENTRANCES.

PRIOR TO INSTALLING TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGING OPERATIONS, CONSTRUCT BITUMINOUS BASE COURSE WIDENING RT USING TRAFFIC CONTROL AND PROTECTION STANDARD 701326

CURVE DATA
 P.I. STA= 466+47.04
 Δ= 28°17'19"
 D= 6°16'55"
 R= 912.05'
 T= 229.84'
 L= 450.31'
 E= 28.515'
 e=
 T.R.=
 S.E. RUN= 0.08FT/FT
 P.C. STA= 464+17.20
 P.T. STA= 468+67.50



- SYMBOLS**
- DRUM WITH STEADY BURNING LIGHT
 - ⬆️ TRAFFIC SIGNAL
 - INDUCTION LOOP DETECTOR
 - ▨ DOUBLE VERTICAL PANEL
 - ◇ TYPE C BIDIRECTIONAL REFLECTOR
 - STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
 - ▬ TEMPORARY CONCRETE BARRIER
 - ▨ IMPACT ATTENUATOR TEMP., (FULLY REDIRECTIVE), TEST LEVEL 2
 - ⊥ TYPE III BARRICADE
 - ▨ WORK AREA

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |
| | |
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| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 STAGE II TRAFFIC CONTROL
 STANDARD 701321

F.A.P. RTE. 622
 SECTION (128BR)
 FULTON COUNTY

SCALE: NONE
 DATE: 06/24/2006

DRAWN BY: KBF
 CHECKED BY: BWP

DATE: 06/24/2006
 TIME: 10:00 AM
 DRAWN BY: KBF
 CHECKED BY: BWP

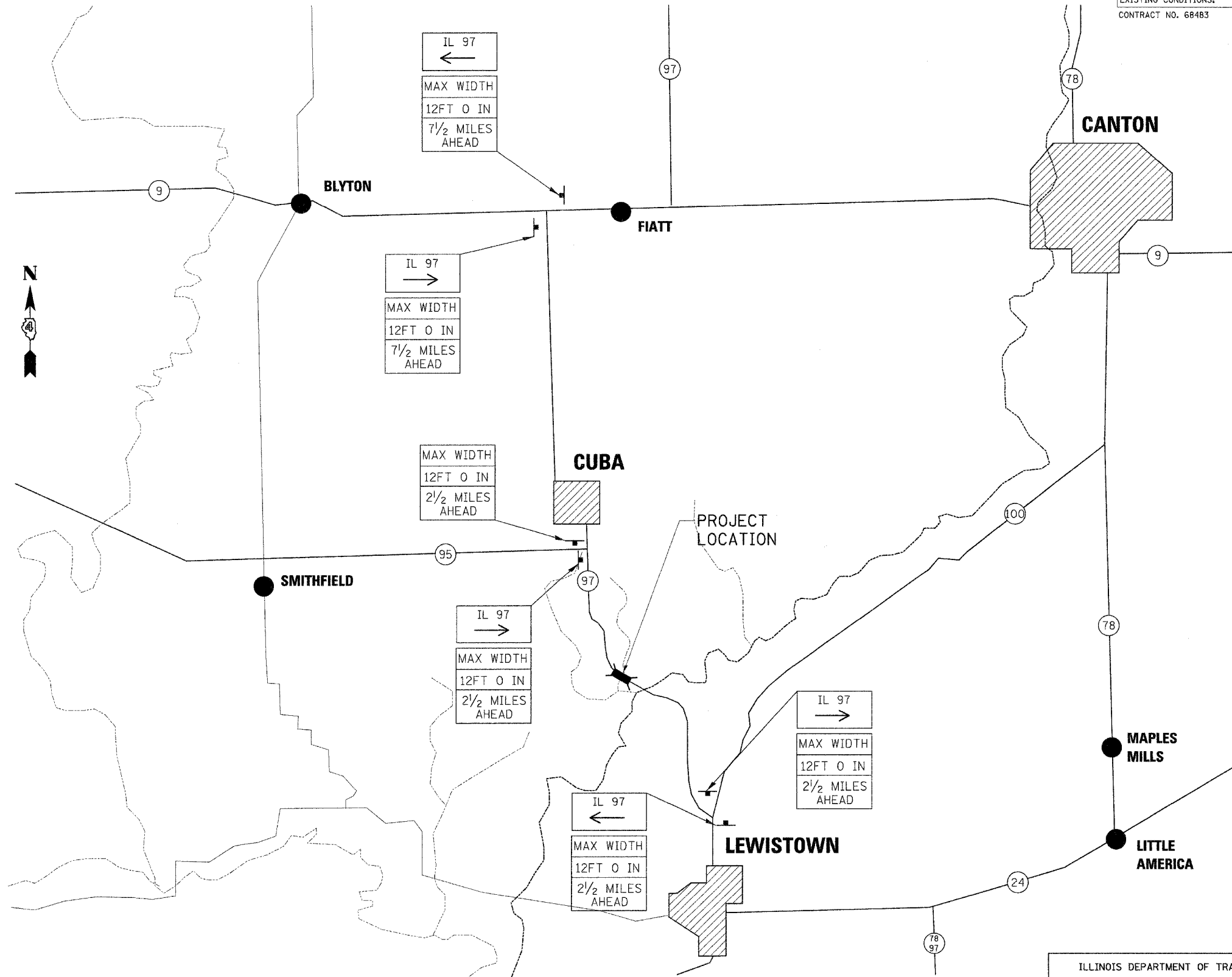
PLOT DATE: *DATE-TIME*

| | | | | |
|----------------------|----------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 622 | (128BR)I | FULTON | 19 | 9 |
| STA. | | TO STA. | | |
| EXISTING CONDITIONS: | | | | |
| CONTRACT NO. 68483 | | | | |

Notes

- All signs required will be supplied to the contractor by I.D.O.T.
- The contractor shall furnish the posts AND erect signs at the locations shown on this sheet, as directed by the R.E./R.T. The posts shall remain the property of the contractor.
- The contractor shall give Illinois Department of Transportation, Bureau of Operations two weeks notice for signs. The contractor shall pick up the signs at the T.M. building in Peoria, AND return them upon completion of the contract.
- The above noted work shall be paid for at the contract unit price, Lump Sum, for Wide Load Signing AND no other compensation will be allowed.
- Sign spacing will be 400' or to fit field conditions.
- The height to the bottom of the lowest sign shall not be less than 6' and a minimum of 4' from the edge of sign to edge of pavement.

| | | |
|-----------|-----------|------|
| PLAN | SUBMITTED | DATE |
| NOTE BOOK | REVISIONS | |
| NO. | NO. | |
| | DATE | |



SIGNS REQUIRED

| | | | |
|--|-----|------------|-----|
| MAX WIDTH 12FT 0 IN 7 1/2 MILES AHEAD | (2) | IL 97 → | (2) |
| MAX WIDTH 12FT 0 IN 2 1/2 MILES AHEAD | (4) | IL 97 ← | (3) |

BRIDGE DECK REPLACEMENT
IL RT 97

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
WIDE LOAD SIGN LOCATION

F.A.P. RTE. 622
SECTION (128BR)I
FULTON COUNTY

SCALE: NONE
DATE: 06/24/2006

DRAWN BY: KBF
CHECKED BY: BWP

DATE: 06/24/2006
DRAWN BY: KBF
CHECKED BY: BWP

Existing Structure- S.N. 029-0026 was originally built in 1928 and rebuilt in 1978 as S.B.I. RTE 95, section 128-BR at Sta. 468+53.4. The structure consists of simple span PPC-deck beams on closed abutments on pile supported footings. The bk. to bk. abutment length is 31'-7 1/8" and the out to out bridge width is 42'-0". The existing superstructure is to be removed and replaced. Stage construction shall be used during construction.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-----------------------|----------|----------|------------------|-------|
| ROUTE NO. | SECTION | COUNTY | SHEET NO. | SHEET |
| F.A.P. 622 | (128BR)I | FULTON | 19 | 10 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT | |

SHEET NO. 1
10 SHEETS

Contract #68483

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

All construction joints shall be bonded. The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be performed by the producer and included with the cost of the beam. The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber. The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

If the contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats the following shall be done: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

No instream work will be allowed on this project.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications - 17th ed.

LOADING HS20-44

Allow 50#/Sq. Ft. for Future Wearing Surface

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'c = 5,000 psi (Concrete Wearing Surface)
fy = 60,000 psi (reinforcement)

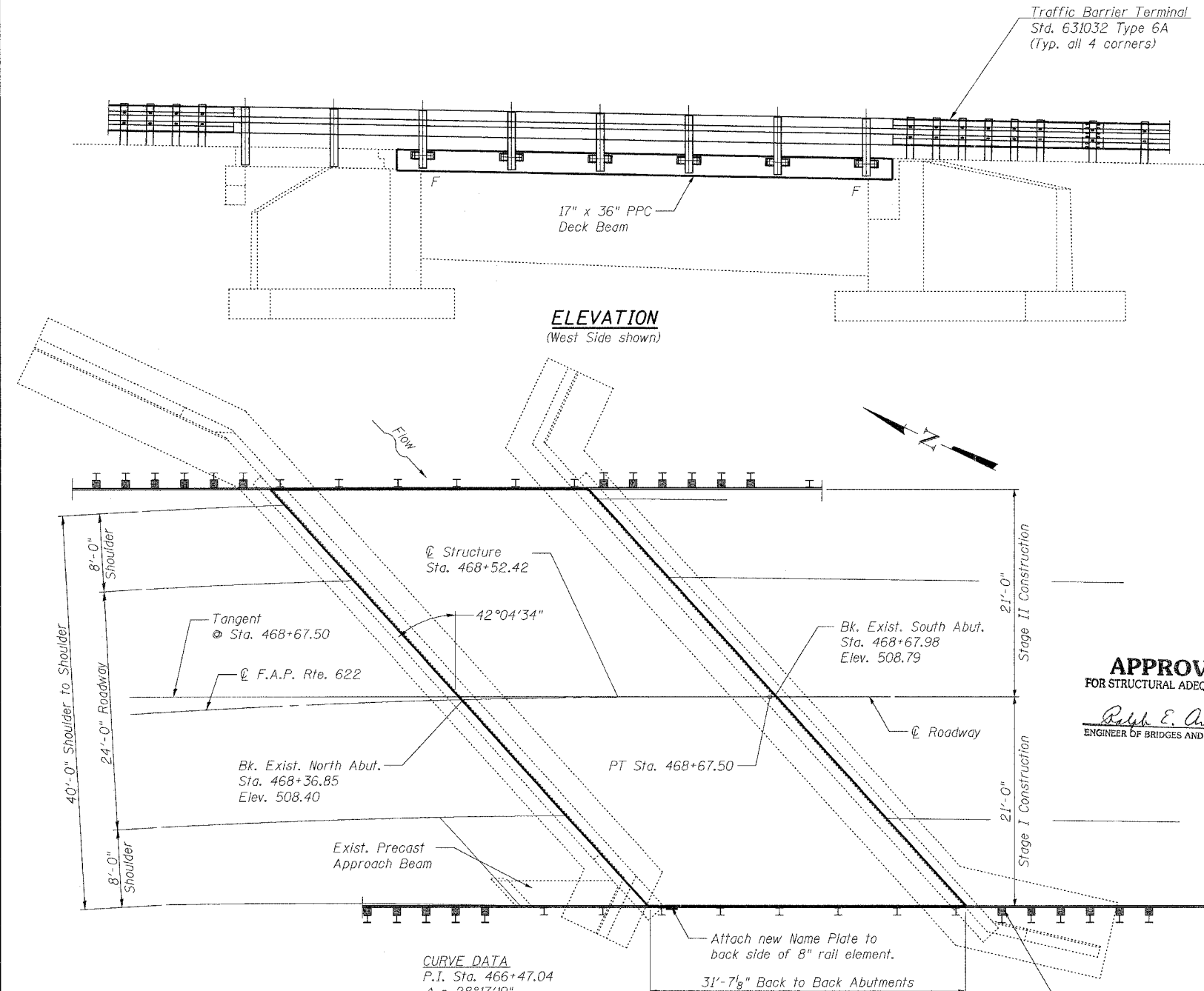
PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" φ Low Relaxation Strands)
f'si = 201,960 psi (1/2" φ Low Relaxation Strands)

INDEX OF SHEETS

1. Plan and Elevation
2. Stage Construction
3. Temporary Concrete Barrier
4. Superstructure
5. Superstructure Details
6. Concrete Overlay Details
7. Type SM Steel Bridge Rail Side Mounted
8. Bridge Rail Details
9. Abutment Concrete Repair
10. Bar Splicer Assembly Details

Salvage- No Salvage

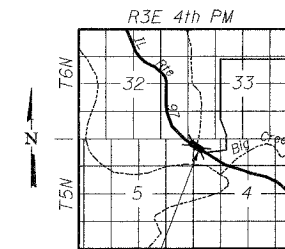


ELEVATION
(West Side shown)

PLAN

CURVE DATA
P.I. Sta. 466+47.04
Δ = 28°17'19"
D = 6°16'55"
T = 229.84'
L = 450.31'
R = 912.05'
E = 28.515'
S = 0.08'/'
P.C. Sta. 464+17.20
P.T. Sta. 468+67.50

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

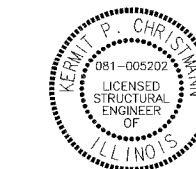


LOCATION SKETCH

STATION 468+52.42
REBUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 622
SEC. (128BR)I
LOADING HS20
STR. NO. 029-0026

NAME PLATE
See Std. 515001

Existing Name Plate shall be cleaned and relocated adjacent to new Name Plate. Cost included with Name Plates.



Expires: 11/30/06

Kermit P. Christman

TOTAL BILL OF MATERIAL

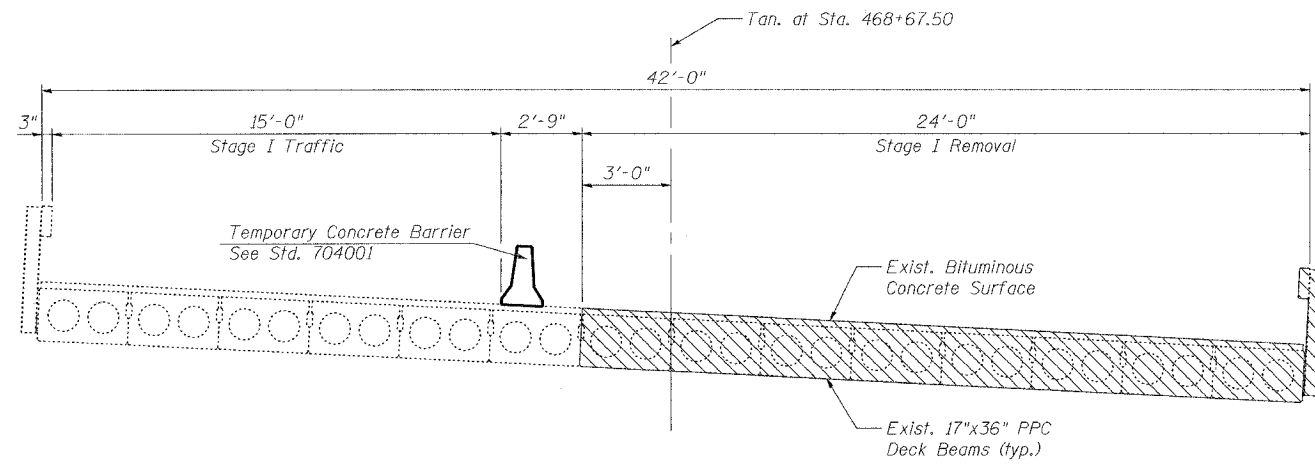
| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|---------|-------|-----|-------|
| Removal of Existing Superstructures | Each | 1 | | 1 |
| Bridge Deck Grooving | Sq. Yd. | 144 | | 144 |
| Protective Coat | Sq. Yd. | 151 | | 151 |
| Precast Prestressed Concrete Deck Beams (17" Depth) | Sq. Ft. | 1355 | | 1355 |
| Reinforcement Bars, Epoxy Coated | Pound | 2050 | | 2050 |
| Steel Bridge Rail, Type SM | Foot | 75 | | 75 |
| Name Plates | Each | 1 | | 1 |
| Epoxy Crack Sealing | Foot | | 14 | 14 |
| Structural Repair of Concrete (Depth equal to or less than 5") | Sq. Ft. | | 20 | 20 |
| Concrete Wearing Surface, 5" | Sq. Yd. | 151 | | 151 |
| Bar Splicers | Each | 36 | | 36 |

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)I
FULTON COUNTY
SN 029-0026

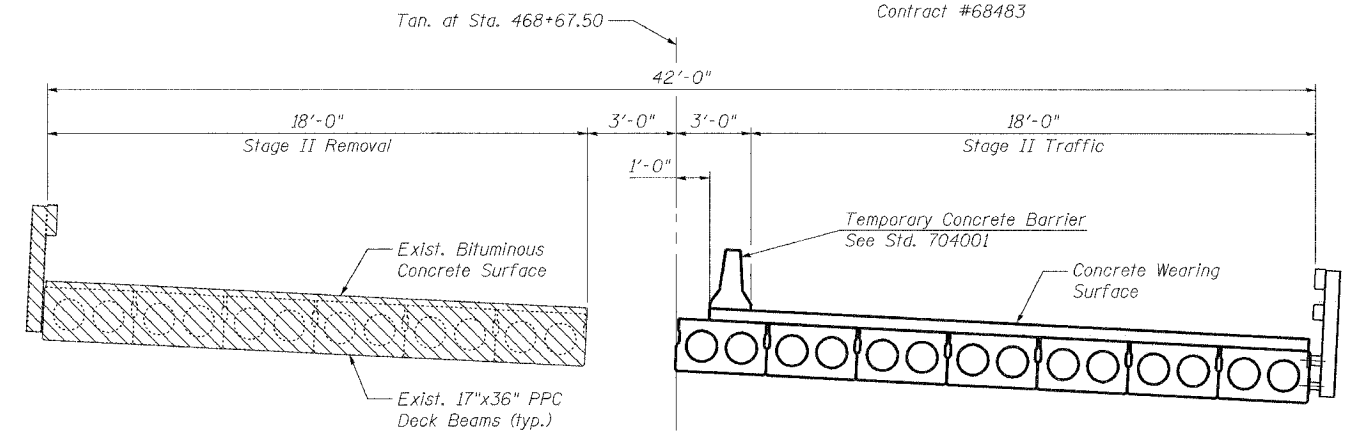
| | |
|--------------|---|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE 890 OLD COLLINSVILLE RD. SPRINGFIELD, ILLINOIS 62268 TEL: (618) 624-4888 FAX: (618) 624-6688 E-MAIL: COWI@TWM-INC.COM |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

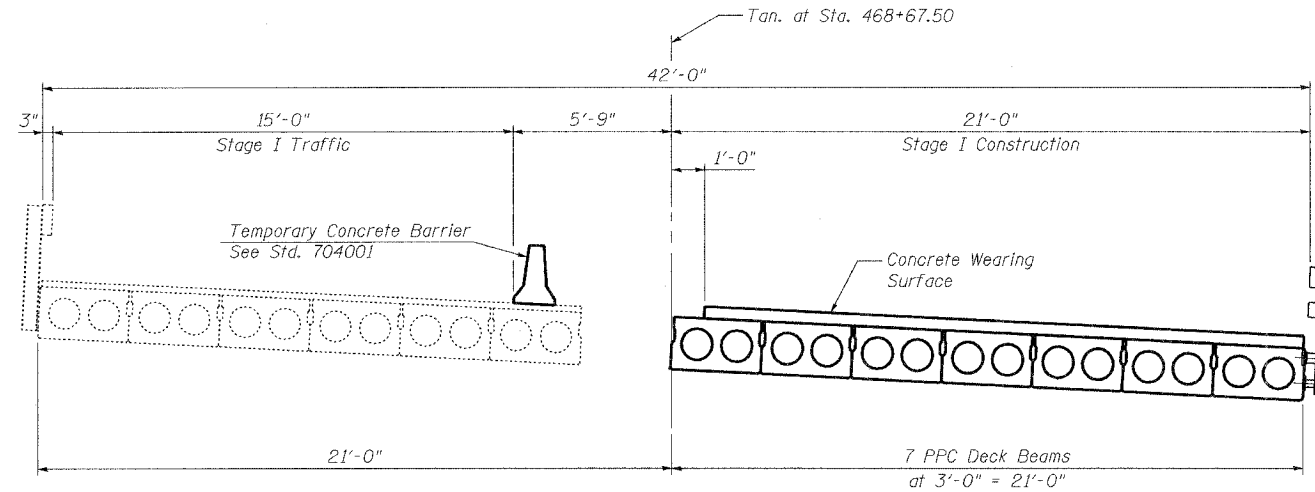
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| ROUTE NO. | SECTION | COUNTY | SHEET NO. | SHEET | SHEET NO. 2 |
| F.A.P. 622 | (128BR) | FULTON | 19 | 11 | 10 SHEETS |
| FED. AID DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | Contract #68483 | | |



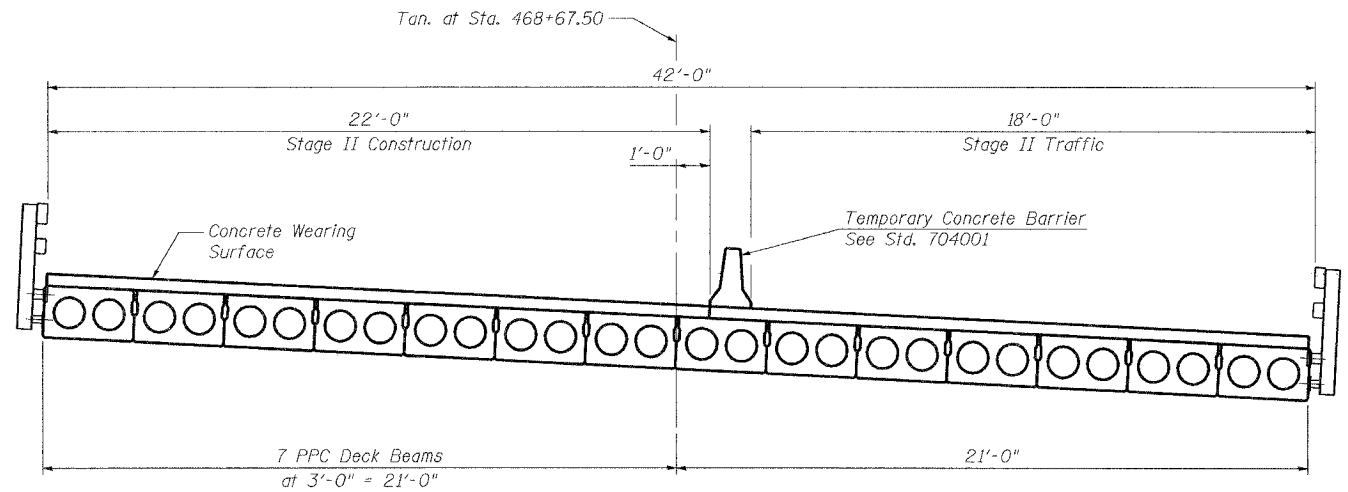
STAGE I REMOVAL
(Looking Upstation)



STAGE II REMOVAL
(Looking Upstation)



STAGE I CONSTRUCTION
(Looking Upstation)



STAGE II CONSTRUCTION
(Looking Upstation)

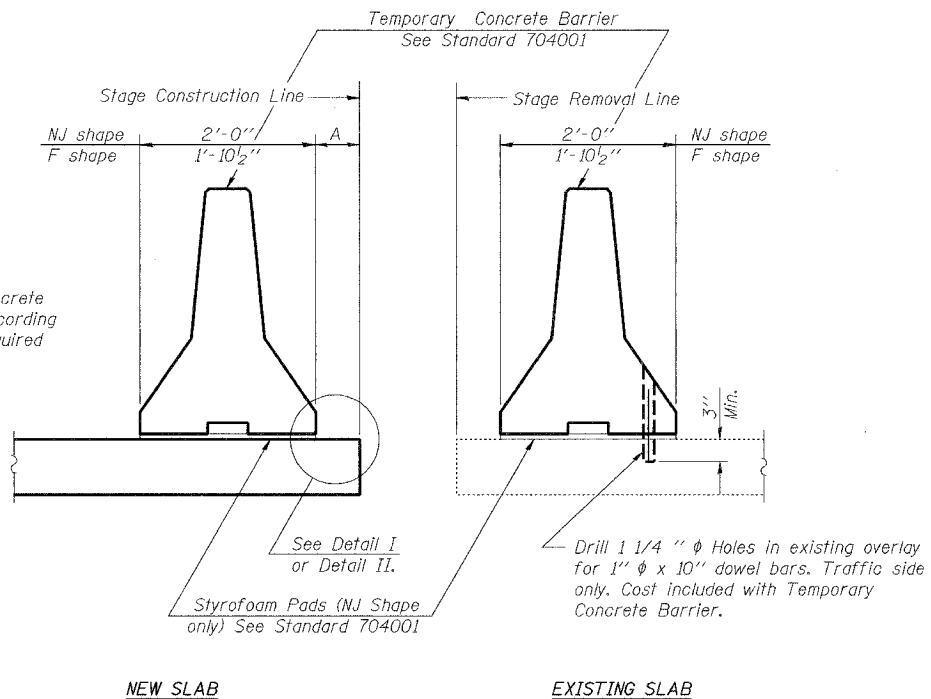
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| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE 4940 OLD COLLINGSVILLE RD. SHAMOCK, ILLINOIS 62276 TEL. (618) 624-6488 FAX (618) 624-6088 E-MAIL: cor@twm-inc.com |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

STAGE CONSTRUCTION
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)
FULTON COUNTY
SN 029-0026

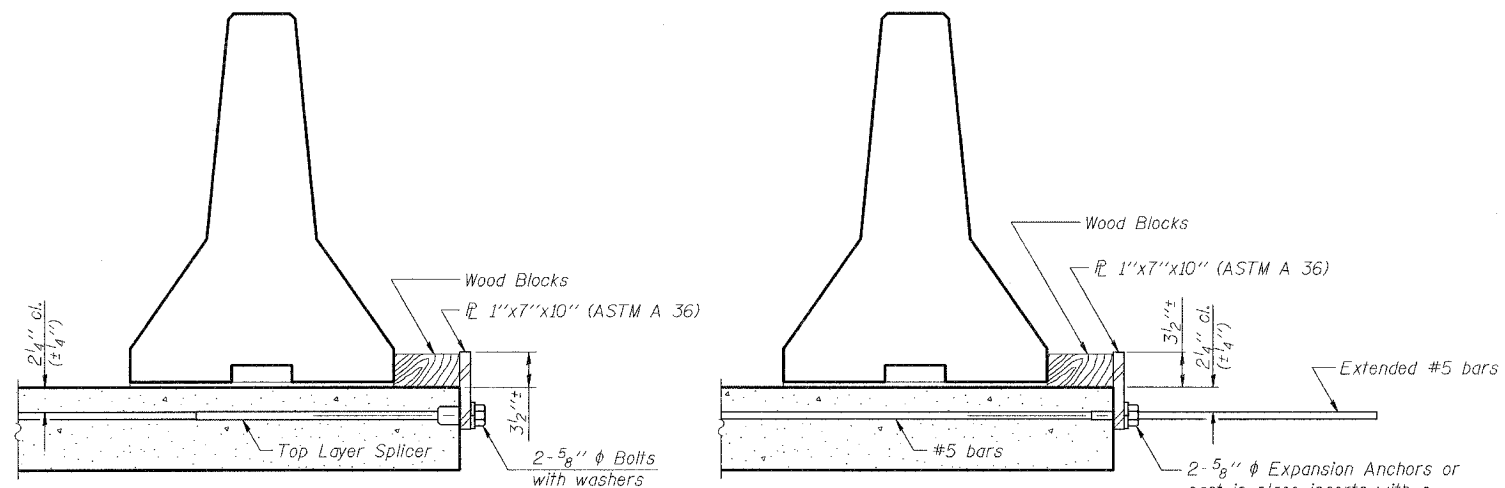
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|----------------------|----------|------------------|-----------------|-------|-------------|
| ROUTE NO. | SECTION | COUNTY | SHEET NO. | SHEET | SHEET NO. 3 |
| F.A.P. 622 | (128BR) | FULTON | 19 | 12 | 10 SHEETS |
| FED. AID DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | Contract #68483 | | |

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



SECTIONS THRU SLAB

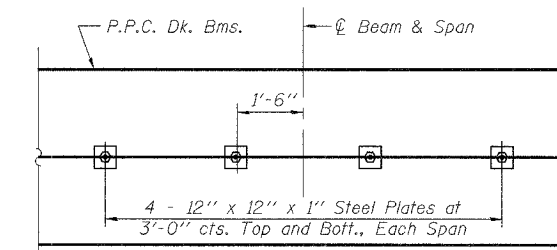


DETAIL I

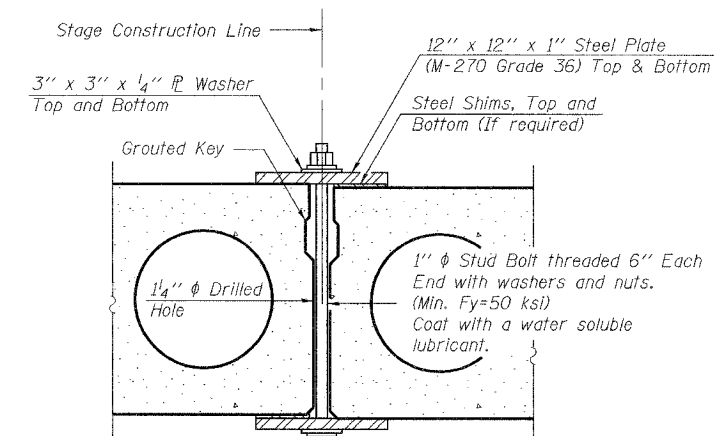
The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.

DETAIL II

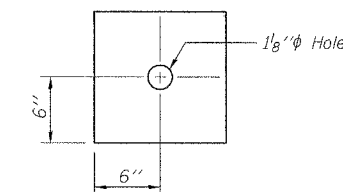
The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



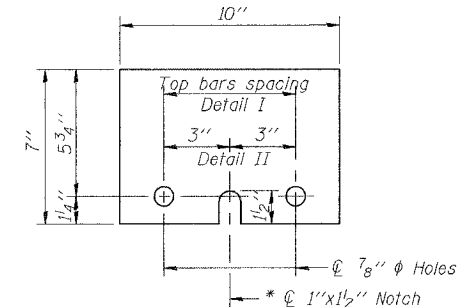
PLAN



SECTION



CLAMPING PLATE



1" x 7" x 10"

* Required only with Detail II

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

See Special Provisions for Stage Construction of Precast Prestressed Concrete Deck Beams. Cost included with "Precast Prestressed Concrete Deck Beams" (17" Depth). See Stage Construction Details for traffic lanes.

TEMPORARY CONCRETE BARRIER
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)
FULTON COUNTY
SN 029-0026

| | |
|--------------|--|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE 5940 OLD COLLINSVILLE RD. SPANISH LAKE, ILLINOIS 62226 TEL. (618) 624-4488 FAX (618) 624-6688 E-MAIL: CORP@TWP-INC.COM |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

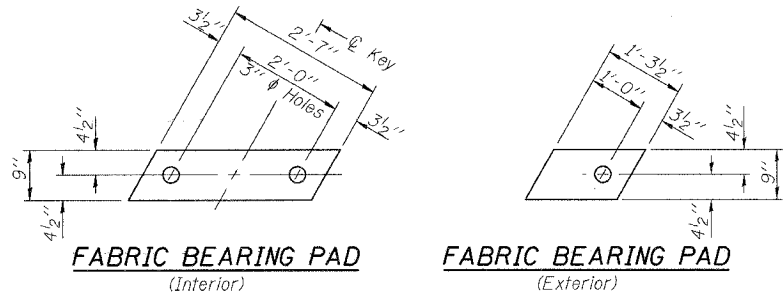
R-27

10-22-04

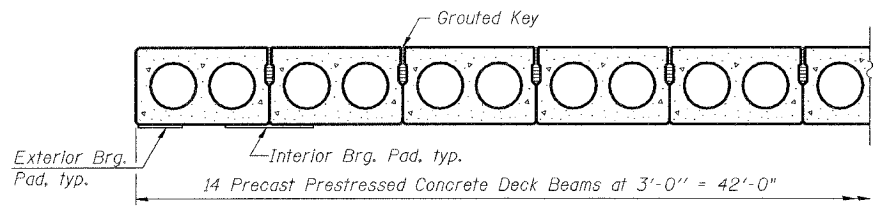
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-----------------------|----------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| F.A.P. 622 | (I28BR)I | FULTON | 19 | 13 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | |

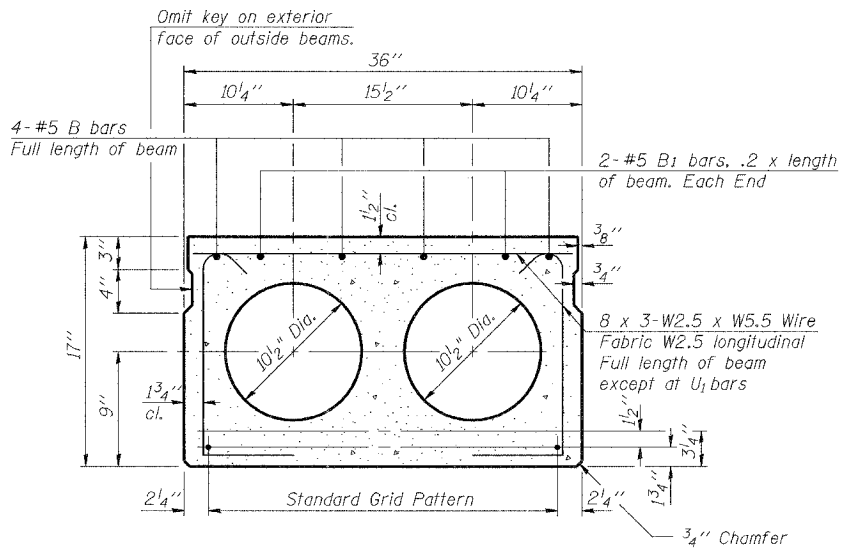
Contract #68483



FIXED

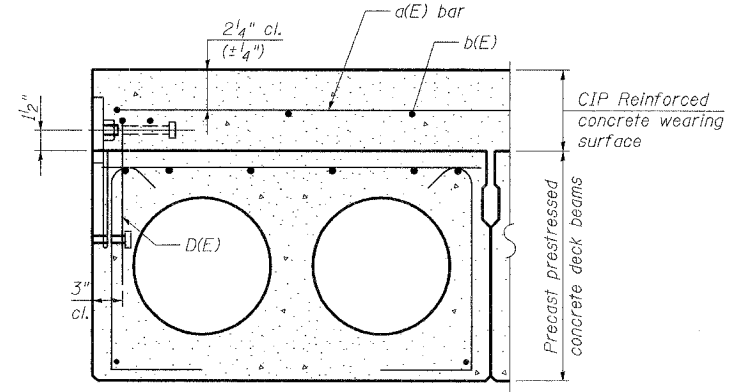


PARTIAL CROSS SECTION

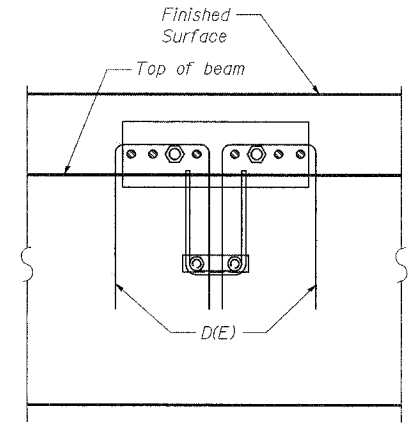


TYPICAL SECTION

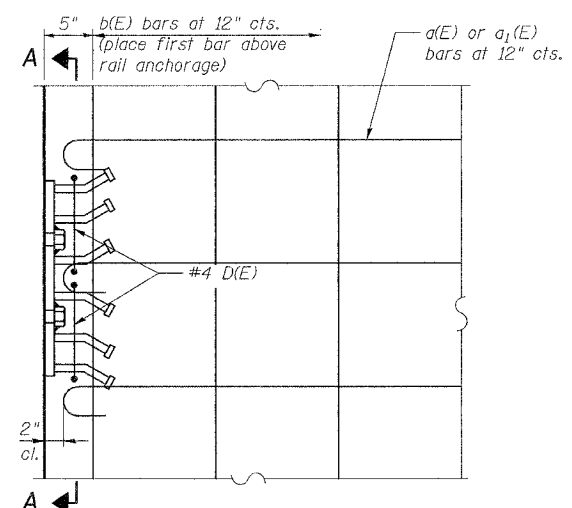
1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
6-Strands 1 3/4" up, 2-Strands 3/4" up
Note: Place strands symmetrically about ϕ of beam.



CROSS SECTION



SECTION A-A

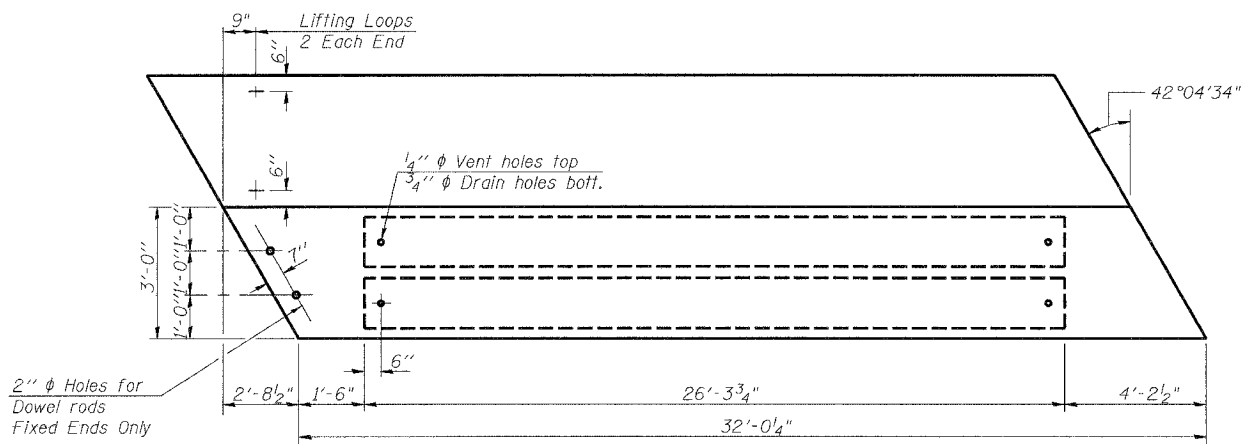


PLAN

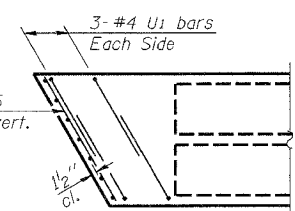
Notes:
The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.

NOTES

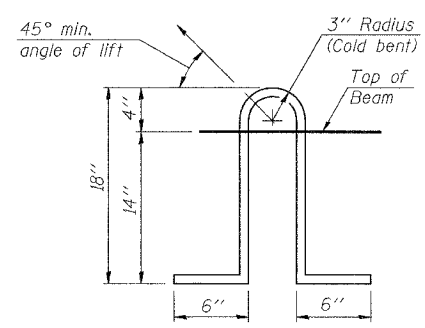
Prestressed steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - 1/2" ϕ -270 ksi strands, as shown. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Post shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'_{ci} , shall be 4,000 psi.



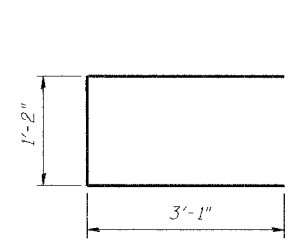
PLAN



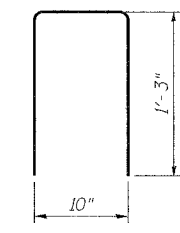
END PLAN



LIFTING LOOP DETAIL



BAR U1



D(E) BAR

BILL OF MATERIAL

| | | |
|---|---------|------|
| Precast Prestressed Concrete Deck Beams (17" Depth) | Sq. Ft. | 1355 |
|---|---------|------|

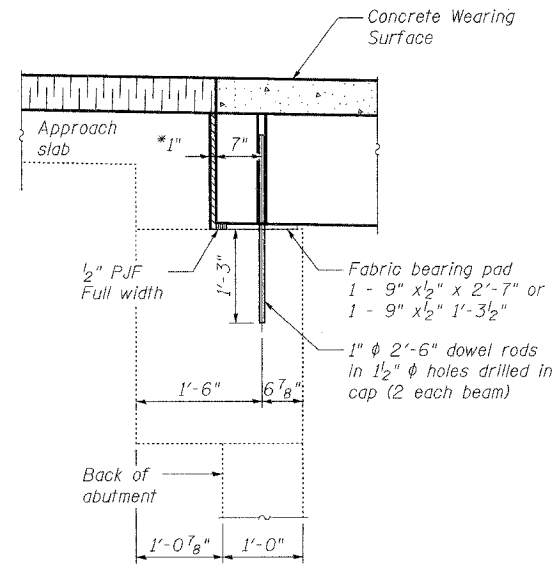
SUPERSTRUCTURE
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (I28BR)I
FULTON COUNTY
SN 029-0026

| | |
|--------------|---|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. |
| CHECKED ALN | ENGINEERS • SURVEYORS • PLANNERS |
| DRAWN KBF | 1700 W. MONROE ST. SUITE 200 SPRINGFIELD, ILLINOIS 62761 TEL: (618) 624-4468 FAX: (618) 624-6688 E-MAIL: CORP@TWI-INC.COM |
| CHECKED KPC | |

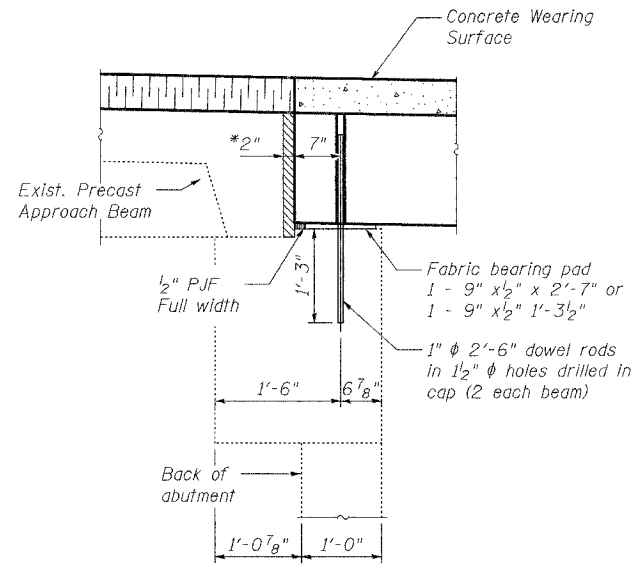
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-----------------------|----------|------------------|--------|-----------|--------------------------|
| ROUTE NO. | SECTION | COUNTY | SHEETS | SHEET NO. | SHEET NO. 5 10 SHEETS |
| F.A.P. 622 | (I28BR) | FULTON | 19 | 14 | |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | | |

Contract #68483



SECTION THRU NORTH AND SOUTH ABUTMENTS



SECTION THRU NORTH ABUTMENT
(At Precast Approach Beam)

Notes:

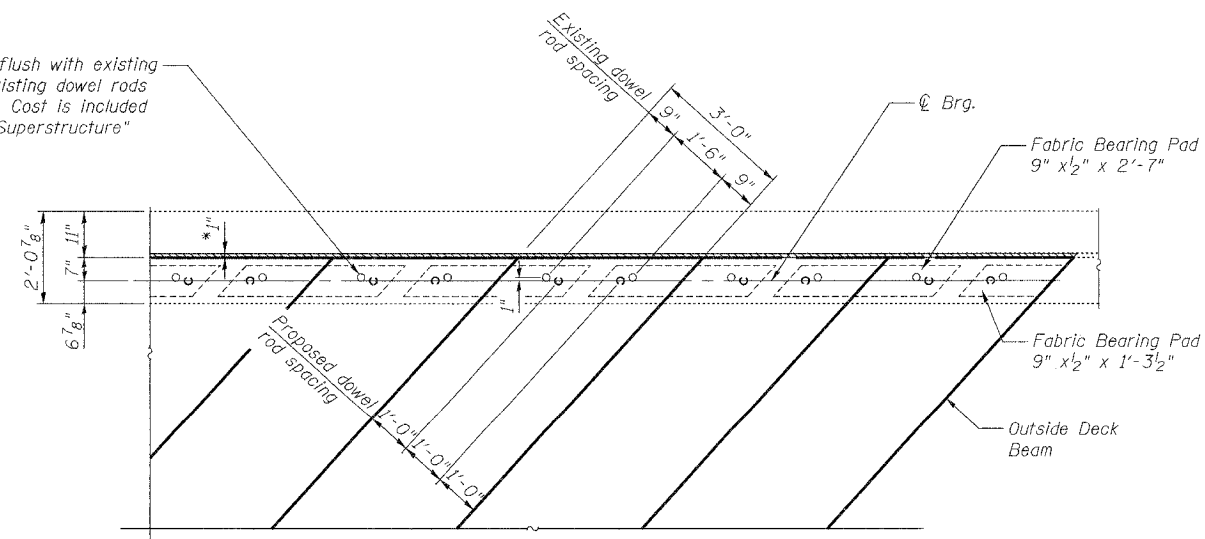
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting shear keys.

Dowel rods drilled in cap are included in the Precast Prestressed Concrete Deck Beams (17" depth).

All horizontal dimensions are at right angles to beam ends. See Sheet 4 of 10 for bearing pad details.

*Joint shall be filled with non-shrink grout. Dimension may vary to accommodate tolerance in beam lengths.

Burn existing dowel rods flush with existing abutment surface. Grind existing dowel rods smooth and set with epoxy. Cost is included with "Removal of Existing Superstructure"



PARTIAL PLAN

SUPERSTRUCTURE DETAILS
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (I28BR)
FULTON COUNTY
SN 029-0026

| | |
|--------------|---|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE 4940 OLD COLLINGSVILLE RD. SHAWNEE, ILLINOIS 62226 TEL. (618) 624-6688 FAX (618) 624-6688 E-MAIL: CORTW@twm.com |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

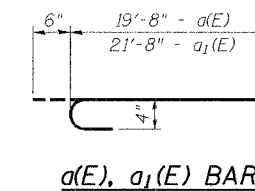
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|-----------------------|----------|------------------|--------------|-----------|-------------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. 6 |
| F.A.P. 622 | (128BR1) | FULTON | 19 | 15 | 10 SHEETS |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | | |

Contract #68483

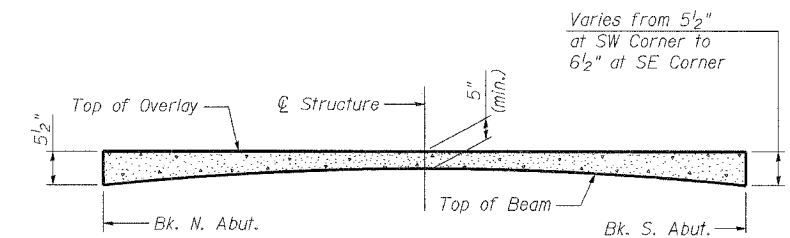
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| a(E) | 32 | 4 | 20'-2" | C |
| a ₁ (E) | 32 | 4 | 22'-2" | C |
| a ₂ (E) | 4 | 5 | 26'-3" | C |
| a ₃ (E) | 4 | 5 | 29'-2" | C |
| b(E) | 43 | 4 | 31'-11" | C |
| Concrete Wearing Surface, 5" | | | Sq. Yd. | 151 |
| Reinforcement Bars, Epoxy Coated | | | Sq. Ft. | 2050 |

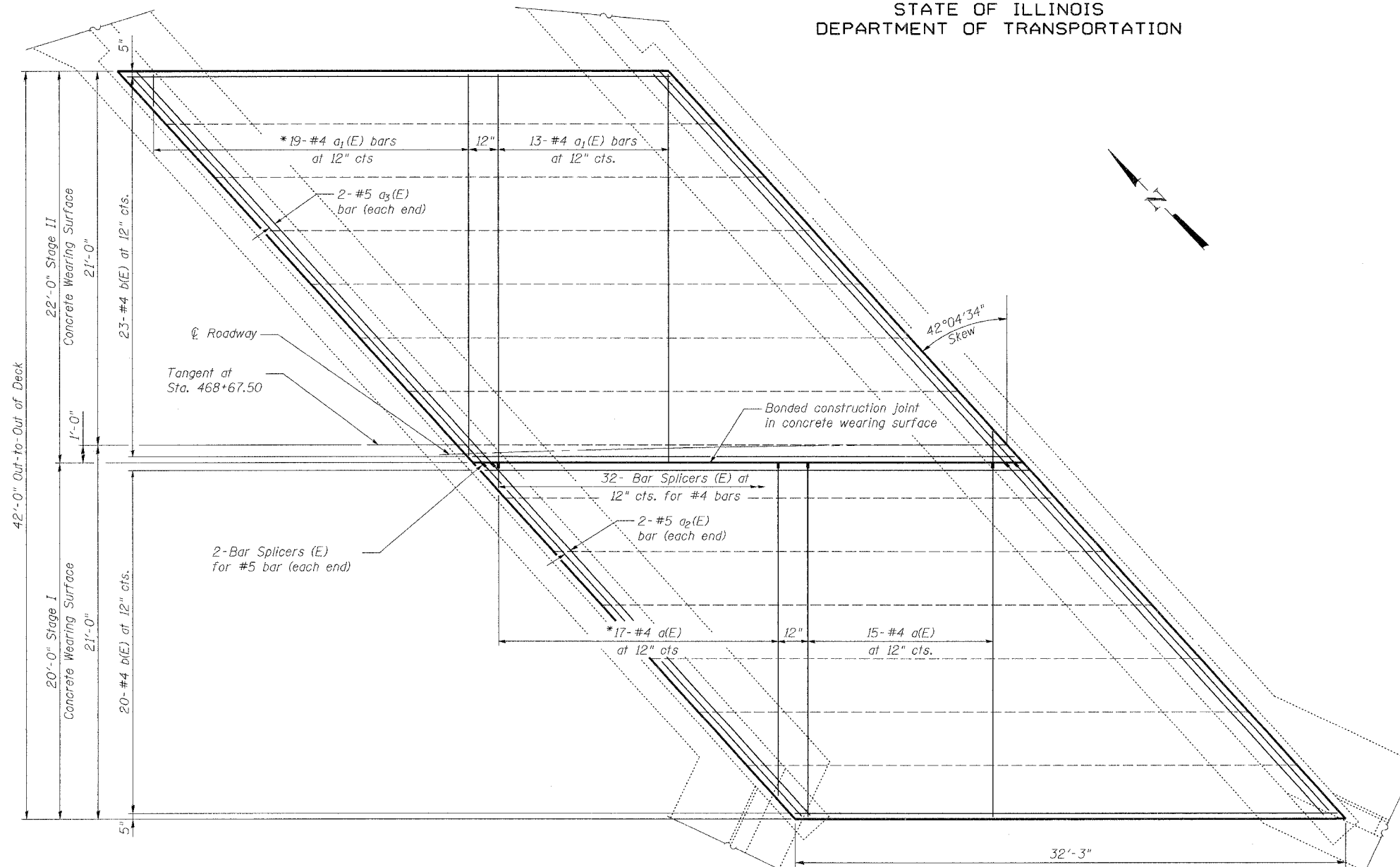
Reinforcement bars designated (E) shall be epoxy coated



a(E), a₁(E) BAR

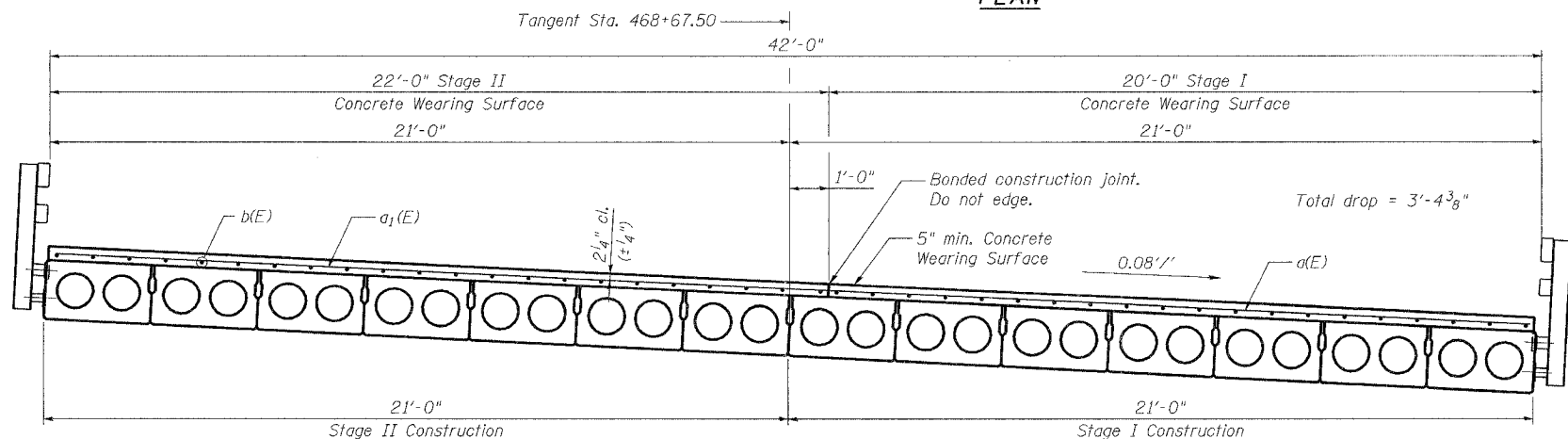


REINFORCED CONCRETE WEARING SURFACE PROFILE



PLAN

* Order a(E) and a₁(E) bars full length. Cut to fit skew and use remainder of bars in opposite end. Ensure hooked end is placed adjacent to outer edge of fascia beam.



DECK CROSS SECTION
(Looking Upstation)

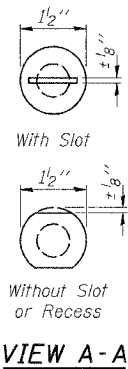
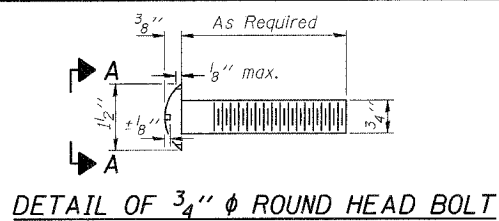
| | |
|--------------|--|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE 3940 OLD COLLINSVILLE RD. SPRINGFIELD, ILLINOIS 62726 TEL: (618) 624-6688 FAX: (618) 624-6688 E-MAIL: GW@TWM-INC.COM |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

CONCRETE OVERLAY DETAILS
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR1)
FULTON COUNTY
SN 029-0026

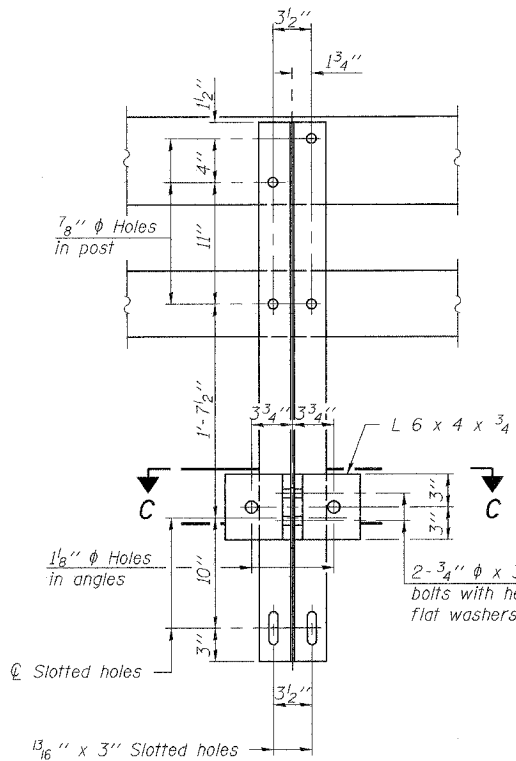
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-----------------------|----------|----------|------------------|-------|-----------|
| ROUTE NO. | SECTION | COUNTY | SHEETS | SHEET | SHEET NO. |
| F.A.P. 622 | (128BR)I | FULTON | 19 | 16 | 10 SHEETS |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT | | |

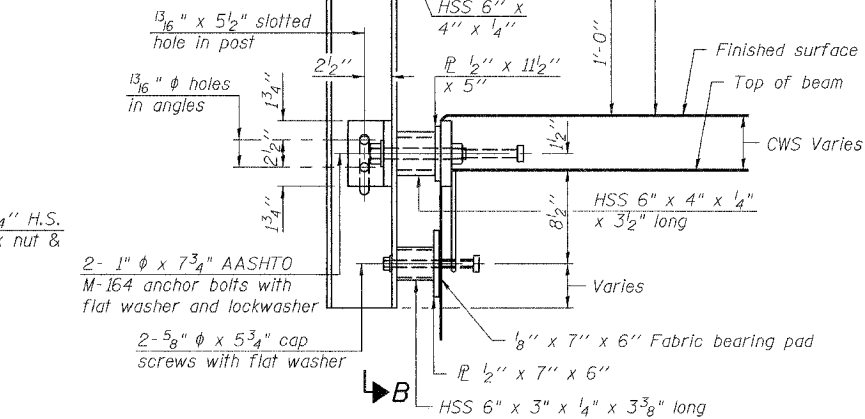
Contract #68483



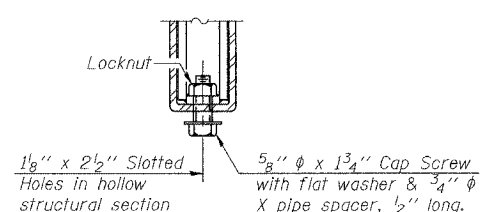
4-3/4" ϕ x 6" Round Head Bolts
(With slot or approved recess in head) with locknut & flat washer.
7/8" ϕ holes in hollow structural section may be drilled in the field.



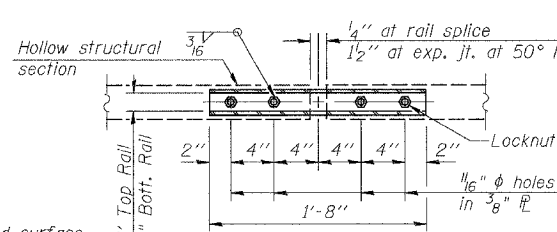
SECTION B-B



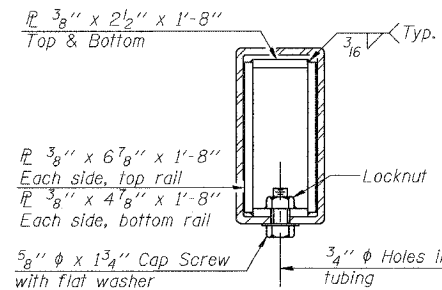
SECTION AT RAIL POST



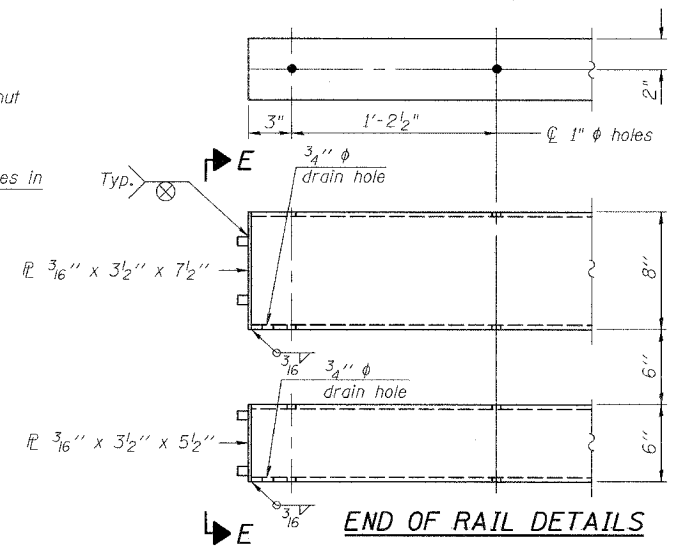
RAIL SPLICE CONNECTION
AT EXPANSION JT.



PLAN-BOTT. SPLICE R
TYPICAL



SECTION AT
RAIL SPLICE



END OF RAIL DETAILS

NOTES

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

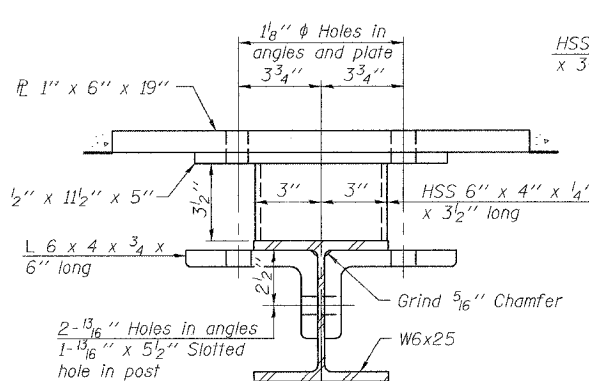
All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Bridge Rail, Type SM.

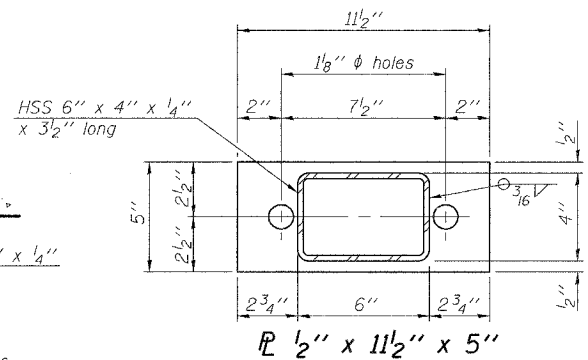
All field drilled holes shall be coated with an approved zinc rich paint before erection.

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 Bridge Rail, Type SM.

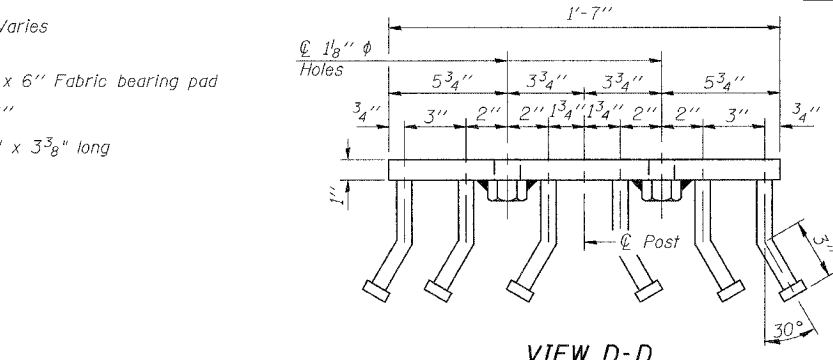
The 3/4" ϕ high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1" ϕ high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" ϕ cap screws in bottom of posts shall be tightened to a snug fit only.



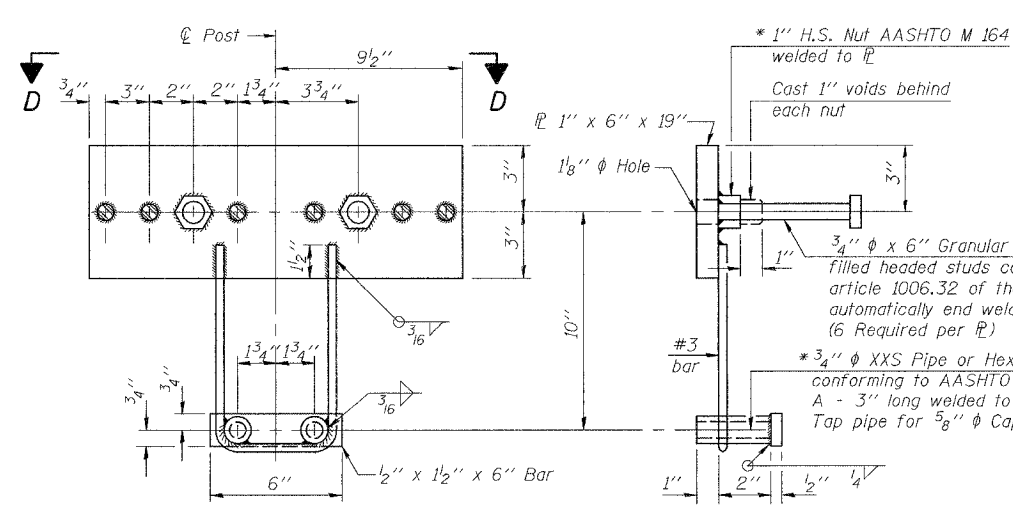
SECTION C-C



SECTION AT RAIL POST



VIEW D-D



ANCHOR DEVICE

* Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

BILL OF MATERIAL

| Item | Unit | Quantity |
|----------------------------|------|----------|
| Steel Bridge Rail, Type SM | Foot | 75 |

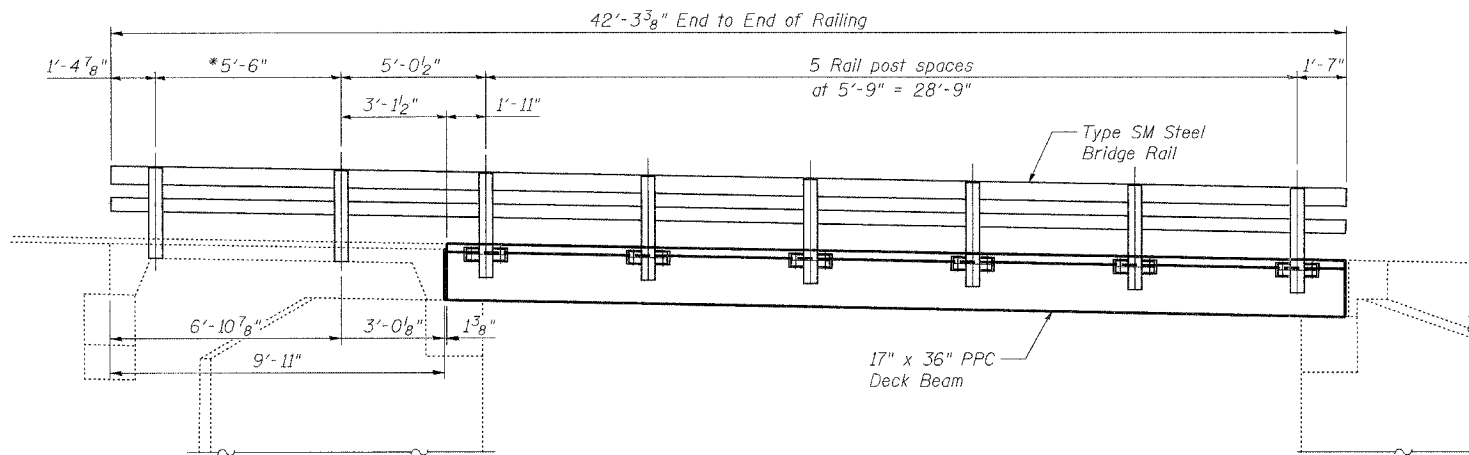
TYPE SM
STEEL BRIDGE RAIL SIDE MOUNTED
WITH CONCRETE WEARING SURFACE
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)I
FULTON COUNTY
SN 029-0026

| | |
|--------------|---|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS & SURVEYORS & PLANNERS CORPORATE OFFICE 4940 OLD COLLINSVILLE RD. SPANDEX, ILLINOIS 62226 TEL (618) 624-4198 FAX (618) 624-6688 E-MAIL: CORP@TWMINC.COM |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

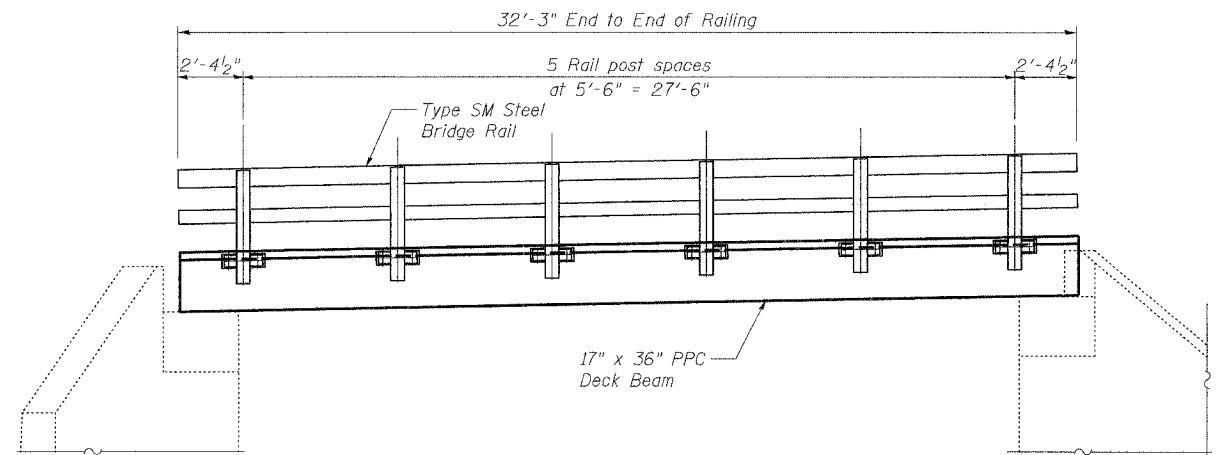
| ROUTE NO. | SECTION | COUNTY | SHEET NO. | TOTAL SHEETS |
|-----------------------|----------|----------|------------------|--------------|
| F.A.P. 622 | (128BR)I | FULTON | 19 | 17 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT | |

SHEET NO. 8
10 SHEETS
Contract #68483

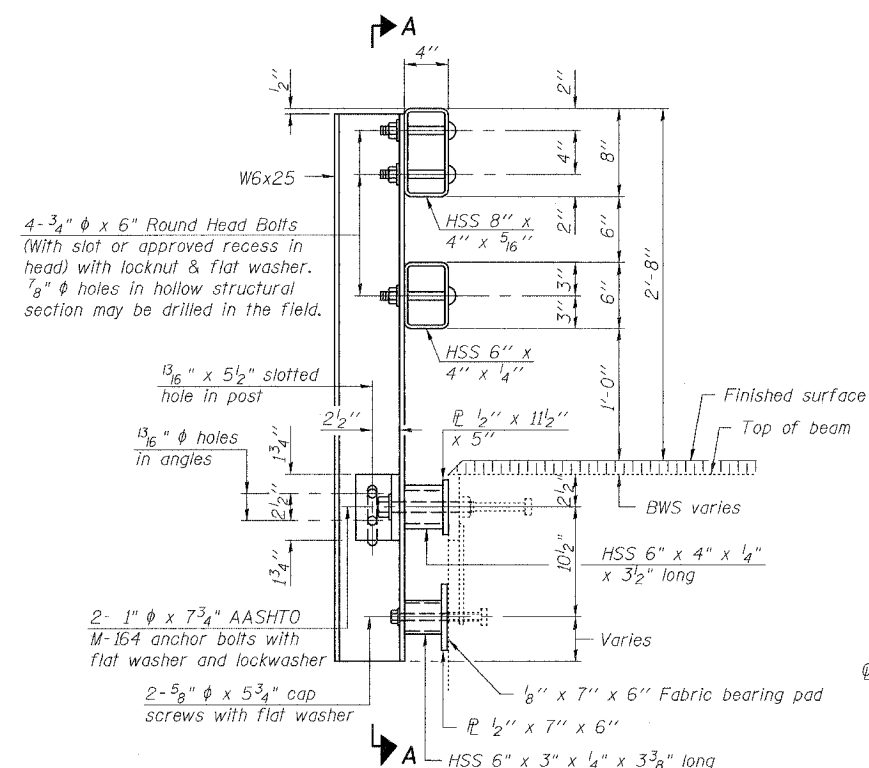


WEST BRIDGE RAIL ELEVATION
(Looking East)

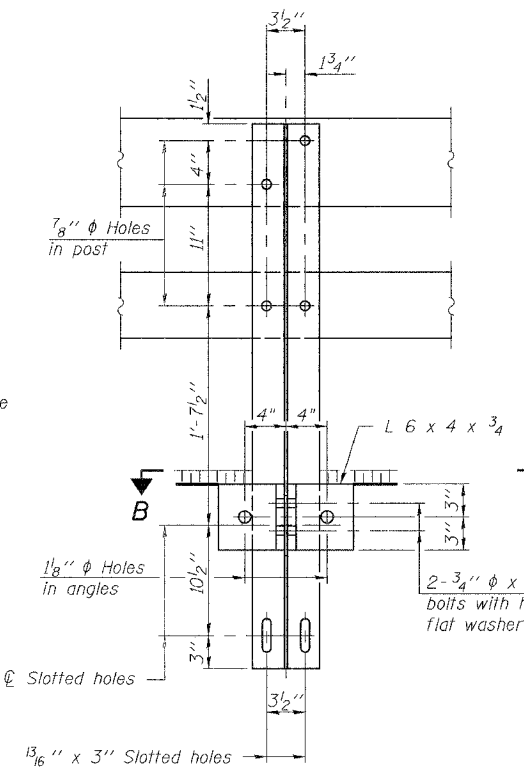
* Attach posts to existing anchor devices in precast approach beams. Field verify prior to fabrication of Type SM Steel Bridge Rail.



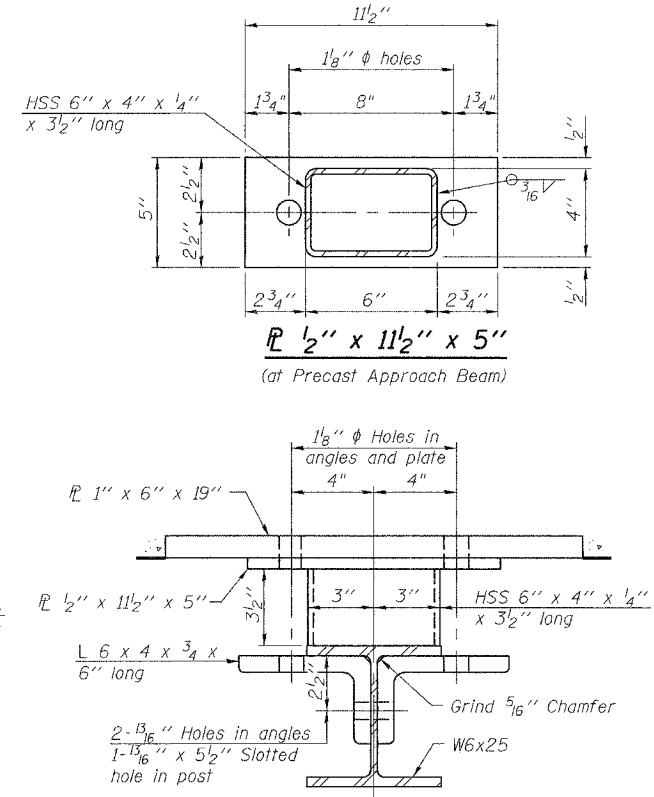
EAST BRIDGE RAIL ELEVATION
(Looking West)



SECTION AT RAIL POST - PRECAST APPROACH BEAM



SECTION A-A
(at Precast Approach Beam)



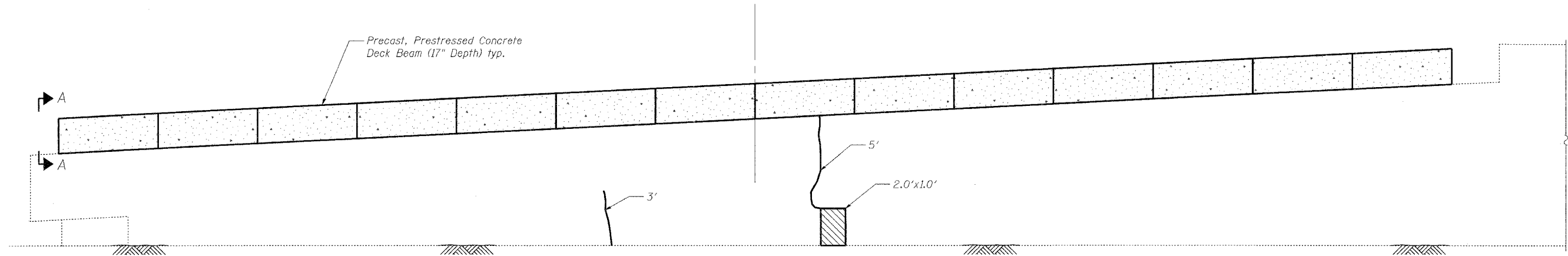
SECTION B-B
(at Precast Approach Beam)

BRIDGE RAIL DETAILS
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)I
FULTON COUNTY
SN 029-0026

| | |
|--------------|---|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE: 4940 OLD COLLINGSVILLE RD. SHAWNEE, ILLINOIS 62226 TEL. (618) 624-4888 FAX (618) 624-6688 E-MAIL: corp@twm-inc.com |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

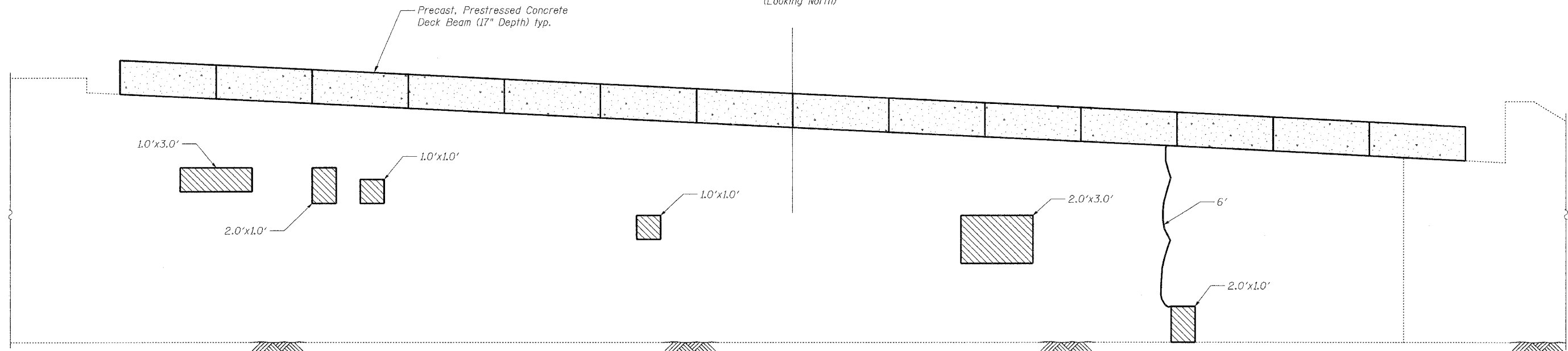
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|--------------------|---------|--------|-------|-------|-----------|
| ROUTE NO. | SECTION | COUNTY | SHEET | SHEET | SHEET NO. |
| F.A.P. 622 | (128BR) | FULTON | 19 | 18 | 9 |
| FULTON DIST. NO. 7 | | | | | 10 SHEETS |
| Contract #68483 | | | | | |



NORTH ABUTMENT ELEVATION

(Looking North)

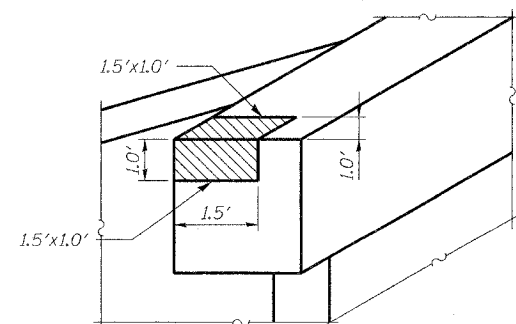


SOUTH ABUTMENT ELEVATION

(Looking South)


BILL OF MATERIAL

| | | |
|---|---------|----|
| Structural Repair of Concrete (Depth Equal to or less than 5") | Sq. Ft. | 20 |
| Epoxy Crack Sealing | Foot | 14 |



ELEVATION

West End of North Abutment

| | |
|--------------|---|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS  CORPORATE OFFICE 4940 OLD COLLINGSVILLE RD. SPRINGFIELD, ILLINOIS 62226 TEL. (618) 624-4888 FAX (618) 624-6688 E-MAIL: COWI@twm-inc.com |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |

ABUTMENT CONCRETE REPAIR
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)
FULTON COUNTY
SN 029-0026

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-----------------------|----------|------------------|-------|-------|--------------|
| ROUTE NO. | SECTION | COUNTY | SHEET | SHEET | SHEET NO. 10 |
| F.A.P. 622 | (128BR) | FULTON | 19 | 19 | 10 SHEETS |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | | |

Contract #68483

NOTES

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

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

| BAR SPLICER ASSEMBLIES | | | |
|------------------------|---------------------------------|------------------------------|---------------------------------------|
| Bar Size to be Spliced | Splicer Rod or Dowel Bar Length | Strength Requirements | |
| | | Min. Capacity kips - tension | Min. Pull-Out Strength kips - tension |
| #4 | 1'-8" | 14.7 | 5.9 |
| #5 | 2'-0" | 23.0 | 9.2 |
| #6 | 2'-7" | 33.1 | 13.3 |
| #7 | 3'-5" | 45.1 | 18.0 |
| #8 | 4'-6" | 58.9 | 23.6 |
| #9 | 5'-9" | 75.0 | 30.0 |
| #10 | 7'-3" | 95.0 | 38.0 |
| #11 | 9'-0" | 117.4 | 46.8 |

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

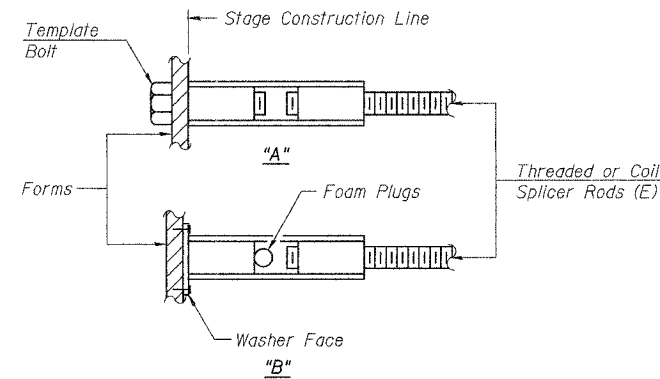
Wire Connector



WELDED SECTIONS

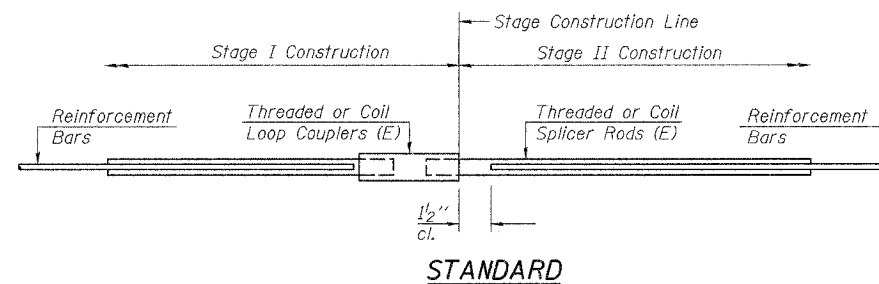
BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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



| Bar Size | No. Assemblies Required | Location |
|----------|-------------------------|--------------------------|
| 4 | 32 | Concrete Wearing Surface |
| 5 | 2 | North end of deck |
| 5 | 2 | South end of deck |

BAR SPLICER ASSEMBLY DETAILS
ILLINOIS ROUTE 97 OVER
BIG CREEK TRIBUTARY
F.A.P. RTE 622 SECTION (128BR)
FULTON COUNTY
SN 029-0026

| | |
|--------------|--|
| DESIGNED BWP | THOUVENOT, WADE & MOERCHEN, INC. ENGINEERS • SURVEYORS • PLANNERS CORPORATE OFFICE 4940 OLD COLLINGSVILLE RD. CHAMPAIGN, ILLINOIS 62520 TEL. (618) 624-4488 FAX (618) 624-6688 E-MAIL: CORP@TWM-INC.COM |
| CHECKED ALN | |
| DRAWN KBF | |
| CHECKED KPC | |