

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(48B)I	PEORIA	29	1

D-94-062-05

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

F.A.P. 317 (U.S. ROUTE 24)
SECTION (48B)I
PROJECT NO. BHF-0317(073)
PEORIA COUNTY
C-94-071-05

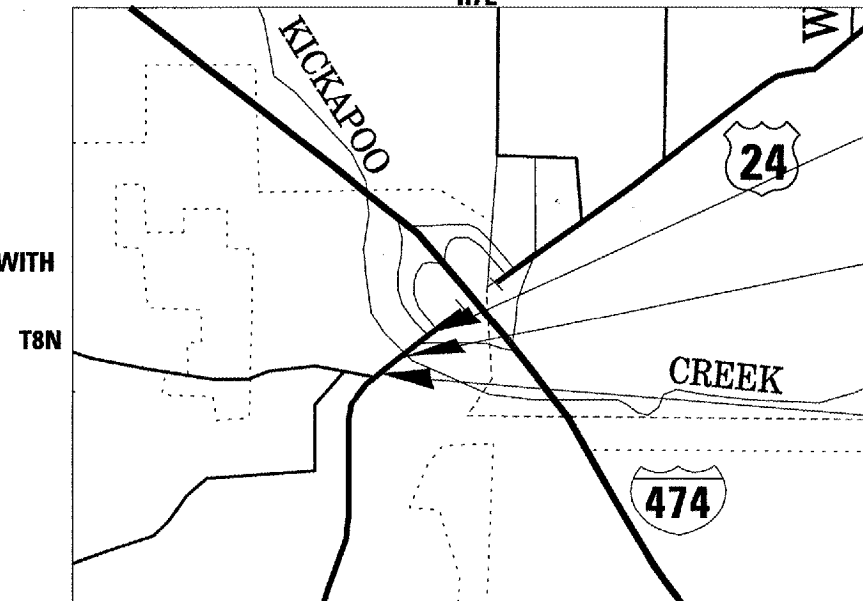
INDEX OF SHEETS

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2. SUMMARY OF QUANTITIES, TYPICAL SECTIONS
GENERAL NOTES, COMMITMENTS
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- 5.-12. MAINTENANCE OF TRAFFIC STAGING
- 13.-28. BRIDGE PLANS
29. PLAN, ELEVATION & REPAIR DETAILS
(FOR INFORMATION ONLY)

HIGHWAY STANDARDS:

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 483001-03 PCC SHOULDER
- 515001-02 NAME PLATE FOR BRIDGES
- 606001-03 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701426-02 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS ≥ 45 MPH
- 701601-04 URBAN LANE CLOSURE MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 702001-06 TRAFFIC CONTROL DEVICES
- 704001-03 TEMPORARY CONCRETE BARRIER

SUPERSTRUCTURE REPLACEMENT OF SPANS 1 & 2 OVER KICKAPOO CREEK
R7E



LOCATION MAP
NOT TO SCALE

END IMPROVEMENTS
STA. 187 + 40.65

REPLACEMENT OF PPC DECK
BEAM SUPERSTRUCTURE ON
SPANS 1 & 2 ON S.N. 072-0134

BEGIN IMPROVEMENTS
STA. 185 + 29

CLASS II
POSTED SPEED 45
ADT 28,800
TRUCK 9%

Prepared By



Foth
Foth Infrastructure & Environment, LLC

7500 N. HARKER DRIVE
PEORIA, ILLINOIS 61615
PHONE: (309) 691-5300
FAX: (309) 691-1892
DESIGN FIRM REGISTRATION NO. 184-004913

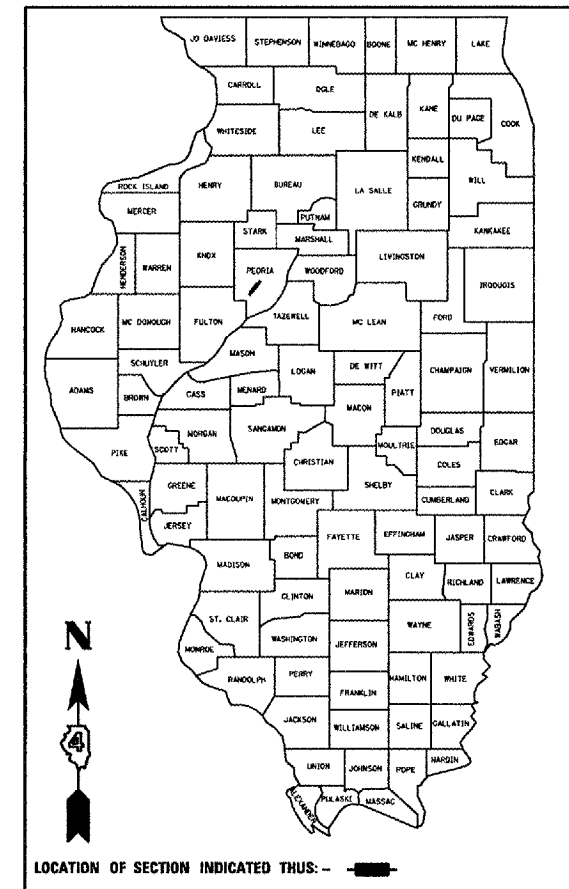
JAMES F. SCHMUDDER
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
NO. 36931 EXPIRES 11-30-07
DATE 4-16-07

0 50' 100' 1" = 50' MAINTENANCE OF TRAFFIC STAGING

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. 68480
DISTRICT 4- PROJ. ENG.: JIM MILLER PH. NO. 671-3451



LOCATION OF SECTION INDICATED THUS: —■—

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *April 16, 2007*

Michael R. Sepp
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Eric E. Horn
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2007
Michael R. Sepp
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	TOTAL
F.A.P. 317	(48B)	PEORIA	29	2
FED. ROAD DIST. NO. 7	ILLINOIS	RES. BID PROJECT		

D-94-062-05

SUMMARY OF QUANTITIES

80% FED.
20% ST.
X080

PAY ITEM	DESCRIPTION	UNITS	TOTAL
40603540	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, M3xD, N70	TON	160
44000153	HOT-MIX ASPHALT SURFACE REMOVAL, 1"	SQ YD	854
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	79
44000920	BITUMINOUS CONCRETE SHOULDER REMOVAL	SQ YD	3
48300100	PORTLAND CEMENT CONCRETE SHOULDERS 6"	SQ YD	15
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	134
50300300	PROTECTIVE COAT	SQ YD	375
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	5530
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	6332
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9927
50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	220
51500100	NAME PLATES	EACH	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	224
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	1040
60607400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.24	FOOT	79
67100100	MOBILIZATION	L SUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	11099
70300550	PAVEMENT MARKING TAPE, TYPE III 8"	FOOT	501
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	652
70400100	TEMPORARY CONCRETE BARRIER	FOOT	876
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1457
*78005110	EPOXY PAVEMENT MARKING-LINE 4"	FOOT	4970
*78005130	EPOXY PAVEMENT MARKING-LINE 6"	FOOT	1618
*78005140	EPOXY PAVEMENT MARKING-LINE 8"	FOOT	440
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	51
*Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	144
*Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2
*Z0030340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	4
X0325756	CONNECTOR FOR TYPE L ALUMINUM RAILING	EACH	22

* SPECIALTY ITEM

MIXTURE USE(S):	SURFACE COURSE	LEVELING BINDER
AC/PG:	SBS 76-22	SBS 76-22
RAPZ	0%	0%
DESIGN AIR VOIDS	4.2% @ N=70	4.0% @ N=50
MIXTURE COMPOSITION:	IL 9.5 OR 12.5	IL 4.75
(GRADATION MIXTURE)		
FRICITION AGGREGATE:	MIXTURE D	N.A.

GENERAL NOTES

The locations 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 best information available, but they are not guaranteed. Unless elevations are shown --- all utility locations shown are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

All elevations shown on the plans are established from U.S.G.S. mean sea level datum.

Some aggregate compositions produce inconsistent results when burned in the ignition oven. The Engineer will determine whether the ignition oven or AC nuclear gauge will be required after the aggregate sources have been identified.

Sign locations may vary from the stations shown on the plans in accordance with directions from the Engineer at the time of construction. Sign locations may be adjusted in the field to avoid any found utilities.

All post locations shall be verified with the Bureau of Operations, Traffic Section, before installation.

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the contractor will be paid for the quantity actually furnished based upon the unit bid for the work.

Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

COMMITMENTS

None

SUMMARY OF QUANTITIES,
GENERAL NOTES, COMMITMENTS
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED - JRG
CHECKED - JFS
DRAWN - ACJ
CHECKED - JRG/JFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	SECTION	SHEET
F.A.P. 317	(48B)1	PEORIA	29	3
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

D-94-062-05

COMBINATION CURB AND GUTTER REMOVAL	
LOCATION	FOOT
EB U.S. 24 RIGHT STA. 185+29 TO STA. 186+07	79
TOTAL	79

BITUMINOUS CONCRETE SHOULDER REMOVAL	
LOCATION	SO YD
EB U.S. 24 RIGHT STA. 185+76 TO STA. 185+90	3
TOTAL	3

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.24	
LOCATION	FOOT
EB U.S. 24 RIGHT STA. 185+29 TO STA. 186+07	79
TOTAL	79

PORTLAND CEMENT CONCRETE SHOULDERS 6"	
LOCATION	SO YD
EB U.S. 24 RIGHT STA. 185+52 TO STA. 186+05	15
TOTAL	15

WORK ZONE PAVEMENT MARKING REMOVAL	
LOCATION	SQ FT
E.B.	
STA. 173+70 TO STA. 176+00	19
STA. 183+75 TO STA. 187+50	125
STA. 182+50 TO STA. 187+50	167
STA. 187+50 TO STA. 187+60	3
W.B.	
STA. 183+15 TO STA. 186+14	25
STA. 183+15 TO STA. 186+14	100
STA. 187+50 TO STA. 189+90	80
STA. 187+50 TO STA. 191+50	133
TOTAL	652

TRAFFIC CONTROL AND PROTECTION	
LOCATION	L SUM
STA. 173+70 TO STA. 201+50	1
TOTAL	1

EPOXY PAVEMENT MARKING - LINE 4"	
LOCATION	FOOT
SOLID WHITE	
E.B.	
STA. 173+70 TO STA. 181+20	750
STA. 182+50 TO STA. 191+50	900
W.B.	
STA. 183+15 TO STA. 191+50	835
SOLID YELLOW	
E.B.	
STA. 173+70 TO STA. 181+20	750
STA. 182+50 TO STA. 191+50	900
W.B.	
STA. 183+15 TO STA. 191+50	835
TOTAL	4970

EPOXY PAVEMENT MARKING - LINE 6"	
LOCATION	FOOT
SKIP-WHITE	
E.B.	
STA. 173+70 TO STA. 181+20	750
STA. 182+50 TO STA. 191+50	450
W.B.	
STA. 183+15 TO STA. 191+50	418
TOTAL	1618

EPOXY PAVEMENT MARKING - LINE 8"	
LOCATION	FOOT
SOLID WHITE	
E.B.	
STA. 178+00 TO STA. 180+40	240
W.B.	
STA. 183+15 TO STA. 184+15	200
TOTAL	440

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	
LOCATION	TON
E.B. STA. 185+29 TO STA. 186+29	38
W.B. STA. 185+29 TO STA. 186+29	34
STA. 186+29 TO STA. 187+40 (BRIDGE)	88
TOTAL	160

HOT-MIX ASPHALT SURFACE REMOVAL, 1"	
LOCATION	SO. YD.
E.B. STA. 185+29 TO STA. 186+29	446
W.B. STA. 185+29 TO STA. 186+29	408
TOTAL	854

STAGING PAY ITEMS (Sheets 5-10)						
	TEMP CONC BARRIER	REL TEMP CONC BARRIER	IMP ATTN TEMP NRD TL2	IMP ATTN REL NRD TL2	PAVT MARK TAPE T3 4	PAVT MARK TAPE T3 8
	FOOT	FOOT	EACH	EACH	FOOT	FOOT
STAGE 1						
Sheet 5	423		1		2858	200
Sheet 6	164		1		2001	
STAGE 2						
Sheet 7	275	425		1	1514	
Sheet 8	14	160		1	1102	301
STAGE 3						
Sheet 9		566		1	1959	
Sheet 10		306		1	1665	
TOTAL	876	1457	2	4	11099	501

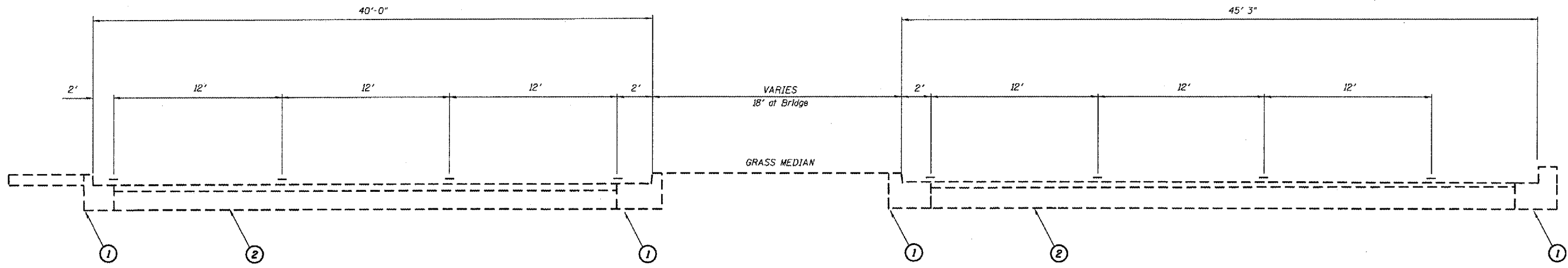
DESIGNED - JRG
CHECKED - JFS
DRAWN - ACJ
CHECKED - JRG/JFS

SCHEDULE OF QUANTITIES
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET
F.A.P. 317	(488)I	PEORIA	29	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

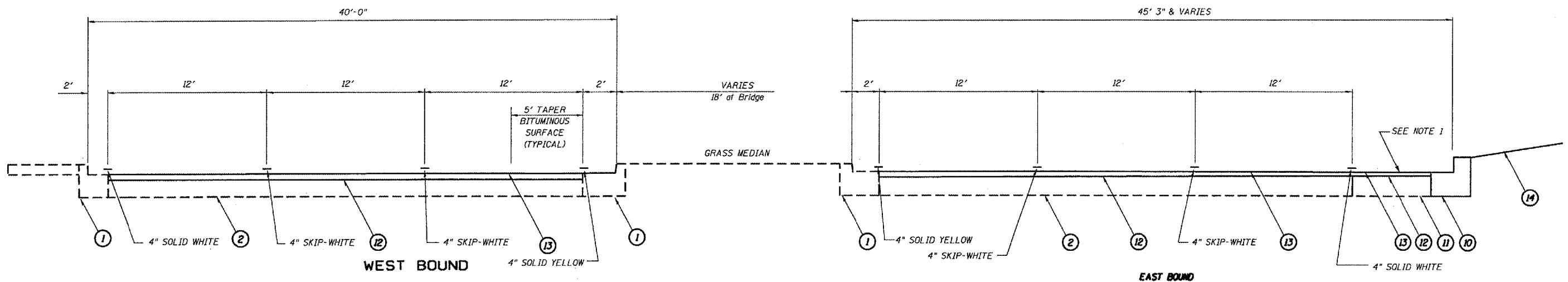
D-94-062-05



EXISTING ROADWAY TYPICAL SECTION

EAST AND WEST OF BRIDGE
STA. 173+70 TO 183+15 SIMILAR
STA. 183+15 TO STA. 191+50 EASTBOUND
STA. 183+15 TO STA. 191+50 WESTBOUND

- ① Existing Combination Concrete Curb & Gutter, Type B-9.24
- ② Existing Pavement With Bituminous Overlay Surface
- ⑩ Proposed Combination Concrete Curb & Gutter, Type B-9.24 Sta. 185+29 to Sta. 186+07
- ⑪ Proposed Portland Cement Concrete Shoulders, 6"
- ⑫ Proposed Hot-Mix Asphalt Surface Removal, 1"
- ⑬ Proposed Hot-Mix Asphalt Surface Course, Mix D, N70, (1 1/2" thickness & varies)
- ⑭ Earth Backfill (incidental)



PROPOSED TYPICAL SECTION

STA. 185+29 TO STA. 186+29
TAPER SURFACE COURSE FROM 1"
AT STA. 185+29 TO 1 1/2" AT STA. 185+49

NOTE 1
EXISTING CONCRETE SHOULDERS SHALL BE MILLED AND SHALL BE PAID FOR AS HOT-MIX ASPHALT SURFACE REMOVAL, 1"

TYPICAL ROADWAY SECTION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	148DI	PEORIA	29	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
0-94-062-05				

TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
EB U.S. 24 STA. 184+70 TO STA. 187+50	280
WB U.S. 24 STA. 186+07 TO STA. 187+50	143
TOTAL	423

IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 2	
LOCATION	EACH
EB U.S. 24 STA. 184+50 TO STA. 184+70	1
TOTAL	1

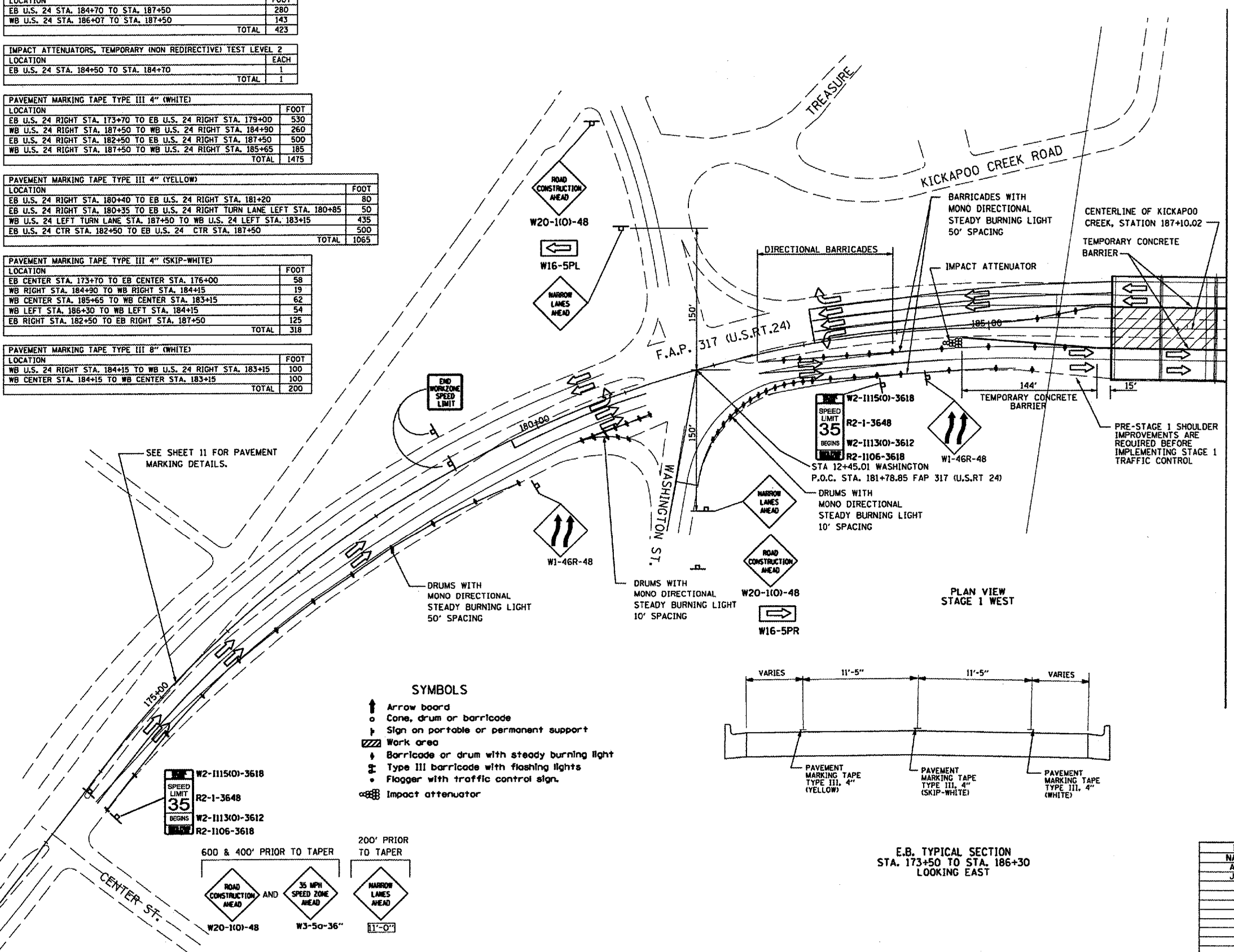
PAVEMENT MARKING TAPE TYPE III 4" (WHITE)	
LOCATION	FOOT
EB U.S. 24 RIGHT STA. 173+70 TO EB U.S. 24 RIGHT STA. 179+00	530
WB U.S. 24 RIGHT STA. 187+50 TO WB U.S. 24 RIGHT STA. 184+90	260
EB U.S. 24 RIGHT STA. 182+50 TO EB U.S. 24 RIGHT STA. 187+50	500
WB U.S. 24 RIGHT STA. 187+50 TO WB U.S. 24 RIGHT STA. 185+65	185
TOTAL	1475

PAVEMENT MARKING TAPE TYPE III 4" (YELLOW)	
LOCATION	FOOT
EB U.S. 24 RIGHT STA. 180+40 TO EB U.S. 24 RIGHT STA. 181+20	80
EB U.S. 24 RIGHT STA. 180+35 TO EB U.S. 24 RIGHT TURN LANE LEFT STA. 180+85	50
WB U.S. 24 LEFT TURN LANE STA. 187+50 TO WB U.S. 24 LEFT STA. 183+15	435
EB U.S. 24 CTR STA. 182+50 TO EB U.S. 24 CTR STA. 187+50	500
TOTAL	1065

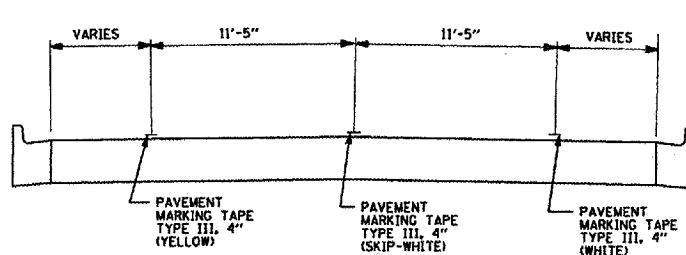
PAVEMENT MARKING TAPE TYPE III 4" (SKIP-WHITE)	
LOCATION	FOOT
EB CENTER STA. 173+70 TO EB CENTER STA. 176+00	58
WB RIGHT STA. 184+30 TO WB RIGHT STA. 184+15	15
WB CENTER STA. 185+65 TO WB CENTER STA. 183+15	62
WB LEFT STA. 186+30 TO WB LEFT STA. 184+15	54
EB RIGHT STA. 182+50 TO EB RIGHT STA. 187+50	125
TOTAL	318

PAVEMENT MARKING TAPE TYPE III 8" (WHITE)	
LOCATION	FOOT
WB U.S. 24 RIGHT STA. 184+15 TO WB U.S. 24 RIGHT STA. 183+15	100
WB CENTER STA. 184+15 TO WB CENTER STA. 183+15	100
TOTAL	200

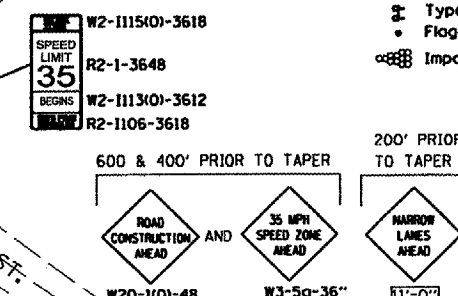
SEE SHEET 11 FOR PAVEMENT MARKING DETAILS.



PLAN VIEW STAGE 1 WEST



- SYMBOLS**
- ↑ Arrow board
 - Cone, drum or barricade
 - ⊥ Sign on portable or permanent support
 - ▨ Work area
 - ⊥ Barricade or drum with steady burning light
 - ⊥ Type III barricade with flashing lights
 - Flogger with traffic control sign.
 - ⊥ Impact attenuator



IMPORTANT: SEE SHEET 12 FOR PRE-STAGE 1 SHOULDER IMPROVEMENTS.

FLOW OF TRAFFIC:
U.S. RT. 24

E.B. - FROM STA. 176+00 TO STA. 181+00, THE LEFT AND CENTER LANES SHALL BE THROUGH TRAFFIC. AS TRAFFIC CROSSES THE INTERSECTION WITH WASHINGTON, THESE TWO THROUGH LANES WILL TRANSITION FROM THE LEFT TO THE RIGHT AS THEY APPROACH THE BRIDGE.

SEE SHEET 6 FOR W.B. FLOW TRAFFIC.

- STANDARDS:**
- USE STANDARD 701601 OR 701426 DURING THE SETUP OF STAGE 1 TRAFFIC CONTROL.
 - STAGE 1 TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE AS SHOWN ON THESE PLANS AND PER STANDARD 701601.
 - ALL TRAFFIC CONTROL MEASURES SHOWN IN STANDARD 701601 AND ON THE STAGE 1 DIAGRAMS WILL BE PAID UNDER TRAFFIC CONTROL AND PROTECTION.
 - USE STANDARD 701601 DURING TEMPORARY LANE CLOSURES WHEN LOADING/UNLOADING TRUCKS.
- NOTE:**
- ANY EQUIPMENT, SUCH AS CRANES OR EXCAVATORS, USED TO LOAD OR UNLOAD TRUCKS, SHALL REMAIN BEHIND THE TEMPORARY CONCRETE BARRIERS AT ALL TIMES.
 - EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGING PAVEMENT SHALL BE REMOVED. THIS SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.
 - STANDARD 701601 MAY BE USED DAILY IN EACH DIRECTION ACCORDING TO THE FOLLOWING SCHEDULE:
- E.B. 8:30 AM TO 3:30 PM
W.B. REMOVED BY 3:30 PM

REVISIONS	
NAME	DATE
ACJ	6/30/06
JBA	11/13/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC STAGE 1

F.A.P. 317 (U.S. RTE. 24)

STRUCTURE 072-0134

PEORIA COUNTY, ILLINOIS

STATION 187+10.02

SCALE: VERT. DATE HORIZ. DATE

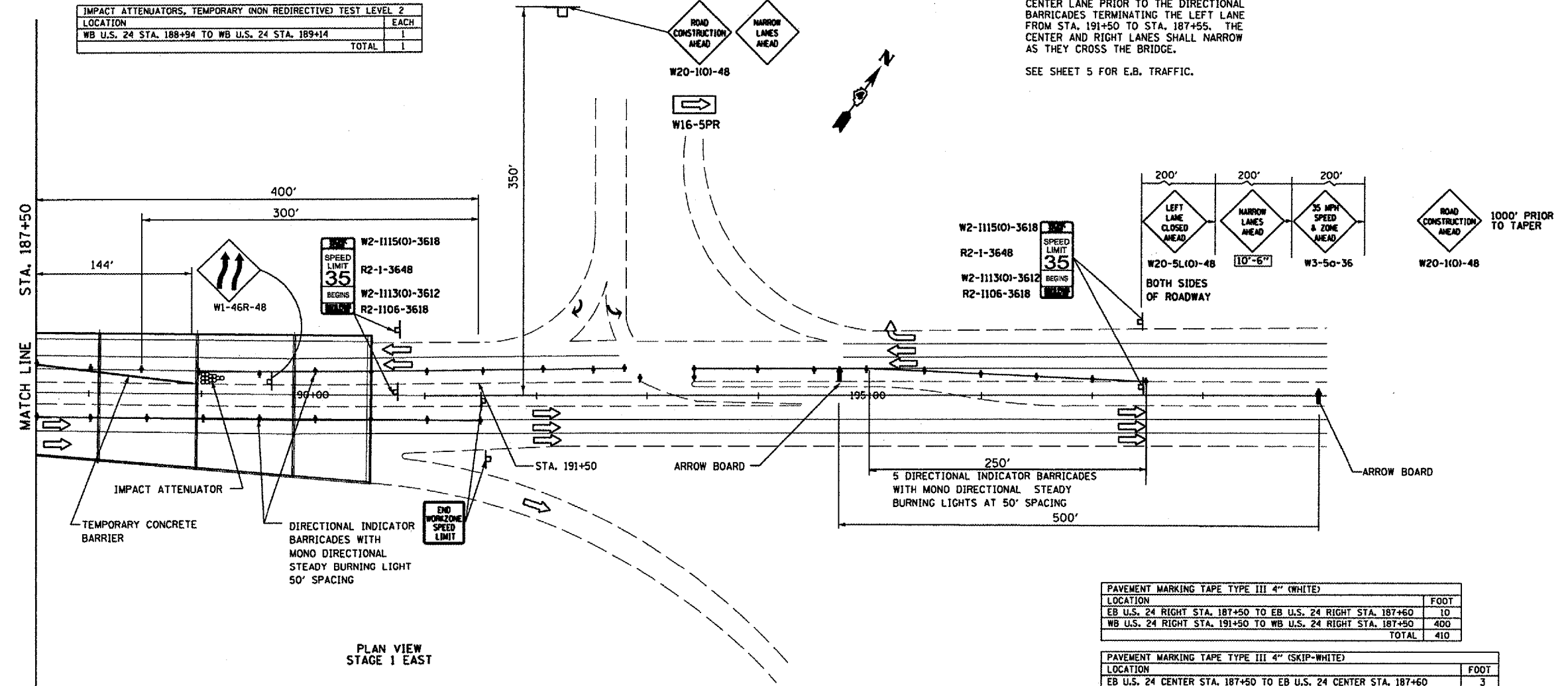
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CHECKED BY JRC/JFS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	NO.
317	148BI	PEORIA	29	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
D-94-062-05				

TEMPORARY CONCRETE BARRIER		FOOT
LOCATION		
WB U.S. 24 STA. 187+50 TO WB U.S. 24 STA. 188+94		144
EB U.S. 24 STA. 187+50 TO EB U.S. 24 STA. 187+70		20
	TOTAL	164

IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 2		EACH
LOCATION		
WB U.S. 24 STA. 188+94 TO WB U.S. 24 STA. 189+14		1
	TOTAL	1

FLOW OF TRAFFIC:
 U.S. RT. 24
 W.B. - FROM STA. 197+50 TO STA. 195+50, THE LEFT LANE SHALL MERGE INTO THE CENTER LANE PRIOR TO THE DIRECTIONAL BARRICADES TERMINATING THE LEFT LANE FROM STA. 191+50 TO STA. 187+55. THE CENTER AND RIGHT LANES SHALL NARROW AS THEY CROSS THE BRIDGE.
 SEE SHEET 5 FOR E.B. TRAFFIC.

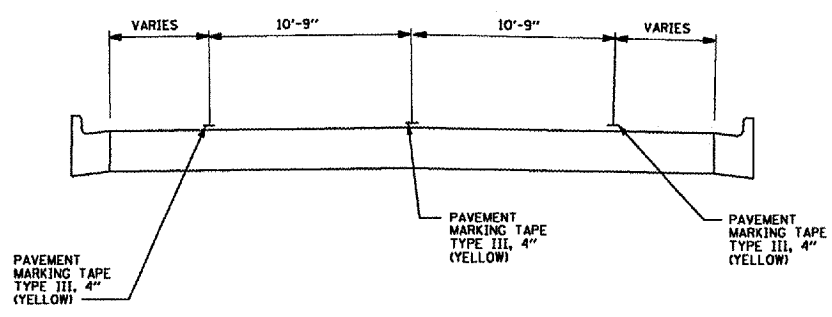


PLAN VIEW
 STAGE 1 EAST

PAVEMENT MARKING TAPE TYPE III 4" (WHITE)		FOOT
LOCATION		
EB U.S. 24 RIGHT STA. 187+50 TO EB U.S. 24 RIGHT STA. 187+60		10
WB U.S. 24 RIGHT STA. 191+50 TO WB U.S. 24 RIGHT STA. 187+50		400
	TOTAL	410

PAVEMENT MARKING TAPE TYPE III 4" (SKIP-WHITE)		FOOT
LOCATION		
EB U.S. 24 CENTER STA. 187+50 TO EB U.S. 24 CENTER STA. 187+60		3
WB U.S. 24 CENTER STA. 195+00 TO WB U.S. 24 CENTER STA. 187+50		188
	TOTAL	191

PAVEMENT MARKING TAPE TYPE III 4" (YELLOW)		FOOT
LOCATION		
EB U.S. 24 LEFT STA. 187+50 TO EB U.S. 24 LEFT STA. 191+50		400
WB U.S. 24 LEFT STA. 197+50 TO WB U.S. 24 LEFT STA. 187+50		1000
	TOTAL	1400



W.B. TYPICAL SECTION
 STA. 191+50 TO STA. 187+50
 LOOKING WEST

- SYMBOLS**
- ↑ Arrow board
 - Cone, drum or barricade
 - ⊥ Sign on portable or permanent support
 - ▨ Work area
 - ⊕ Barricade or drum with steady burning light
 - ⊕ Type III barricade with flashing lights
 - Flagger with traffic control sign.
 - ⊕ Impact attenuator

REVISIONS	
NAME	DATE
ACJ	6/30/06
JBA	11/14/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 MAINTENANCE OF TRAFFIC STAGE 1
 F.A.P. 317 (U.S. RTE. 24)
 STRUCTURE 072-0134
 PEORIA COUNTY, ILLINOIS
 STATION 187+10.02
 SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY JLP
 CHECKED BY JRG/JFS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(48B)	PEORIA	29	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
D-94-062-05				

RELOCATE TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
EB U.S. 24 STA. 185+42 TO EB U.S. 24 STA. 187+50	208
EB U.S. 24 STA. 185+42 TO EB U.S. 24 STA. 186+17	75
WB U.S. 24 STA. 186+08 TO WB U.S. 24 STA. 187+50	142
TOTAL	425

TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
EB U.S. 24 STA. 186+17 TO EB U.S. 24 STA. 187+50	133
WB U.S. 24 STA. 186+08 TO WB U.S. 24 STA. 187+50	142
TOTAL	275

RELOCATE IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 2	
LOCATION	EACH
EB U.S. 24 STA. 185+22 AND STA. 185+42	1
TOTAL	1

PAVEMENT MARKING TAPE TYPE III 4" (WHITE)	
LOCATION	FOOT
WB CENTER STA. 186+14 TO WB CENTER STA. 184+50	164
WB RIGHT STA. 186+14 TO WB RIGHT STA. 183+15	299
TOTAL	463

PAVEMENT MARKING TAPE TYPE III 4" (SKIP-WHITE)	
LOCATION	FOOT
WB U.S. 24 LEFT STA. 185+30 TO WB U.S. 24 LEFT STA. 184+15	29
TOTAL	29

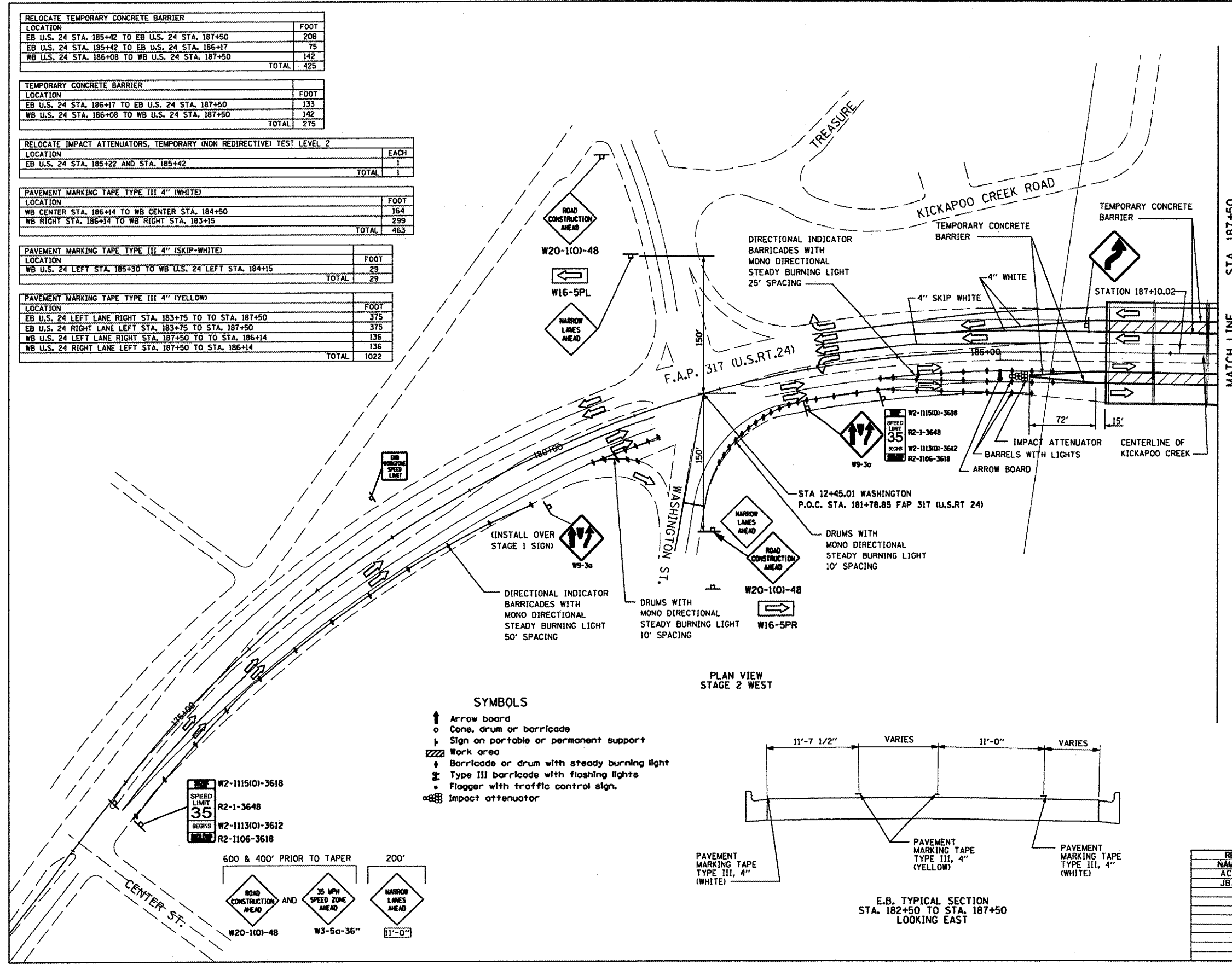
PAVEMENT MARKING TAPE TYPE III 4" (YELLOW)	
LOCATION	FOOT
EB U.S. 24 LEFT LANE RIGHT STA. 183+75 TO TO STA. 187+50	375
EB U.S. 24 RIGHT LANE LEFT STA. 183+75 TO STA. 187+50	375
WB U.S. 24 LEFT LANE RIGHT STA. 187+50 TO TO STA. 186+14	136
WB U.S. 24 RIGHT LANE LEFT STA. 187+50 TO STA. 186+14	136
TOTAL	1022

FLOW OF TRAFFIC:
 U.S. RT. 24
 E.B. - FROM STA.176+00 TO STA. 180+00, THE LEFT AND CENTER LANES SHALL BE THROUGH TRAFFIC, AS TRAFFIC CROSSES THE INTERSECTION WITH WASHINGTON, THESE TWO THROUGH LANES WILL SPLIT AS THEY APPROACH THE BRIDGE.
 SEE SHEET 8 FOR W.B. FLOW OF TRAFFIC.

STANDARDS:
 USE STANDARD 701601 OR 701426 DURING THE SETUP OF STAGE 2 TRAFFIC CONTROL.
 STAGE 2 TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE AS SHOWN ON THESE PLANS AND PER STANDARD 701601.
 ALL TRAFFIC CONTROL MEASURES SHOWN IN STANDARD 701601 AND ON THE STAGE 2 DIAGRAMS WILL BE PAID UNDER TRAFFIC CONTROL AND PROTECTION .
 USE STANDARD 701601 DURING TEMPORARY LANE CLOSURES WHEN LOADING/UNLOADING TRUCKS.

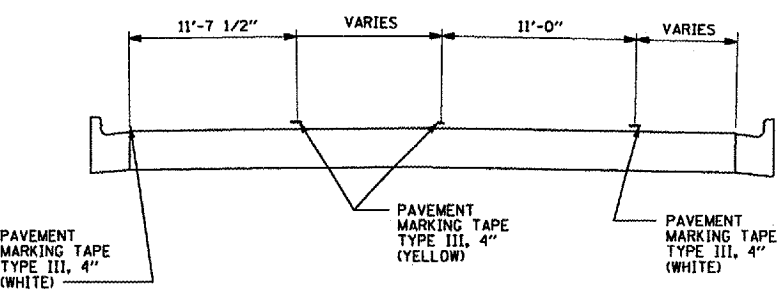
NOTE:
 1. ANY EQUIPMENT, SUCH AS CRANES OR EXCAVATORS, USED TO LOAD OR UNLOAD TRUCKS, SHALL REMAIN BEHIND THE TEMPORARY CONCRETE BARRIERS AT ALL TIMES.
 2. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGING PAVEMENT SHALL BE REMOVED. THIS SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.
 3. STANDARD 701601 MAY BE USED DAILY IN EACH DIRECTION ACCORDING TO THE FOLLOWING SCHEDULE:

E.B. 8:30 AM TO 3:30 PM
 W.B. REMOVED BY 3:30 PM



PLAN VIEW
 STAGE 2 WEST

- SYMBOLS**
- ↑ Arrow board
 - Cone, drum or barricade
 - ⊥ Sign on portable or permanent support
 - ▨ Work area
 - ⊕ Barricade or drum with steady burning light
 - ⊗ Type III barricade with flashing lights
 - ⊙ Flagger with traffic control sign
 - ⊞ Impact attenuator



E.B. TYPICAL SECTION
 STA. 182+50 TO STA. 187+50
 LOOKING EAST

REVISIONS	
NAME	DATE
ACJ	6/30/06
JBA	11/14/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 MAINTENANCE OF TRAFFIC STAGE 2
 F.A.P. 317 (U.S. RTE. 24)
 STRUCTURE 072-0134
 PEORIA COUNTY, ILLINOIS
 STATION 187+10.02
 SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY JLP
 CHECKED BY JRG/JFS

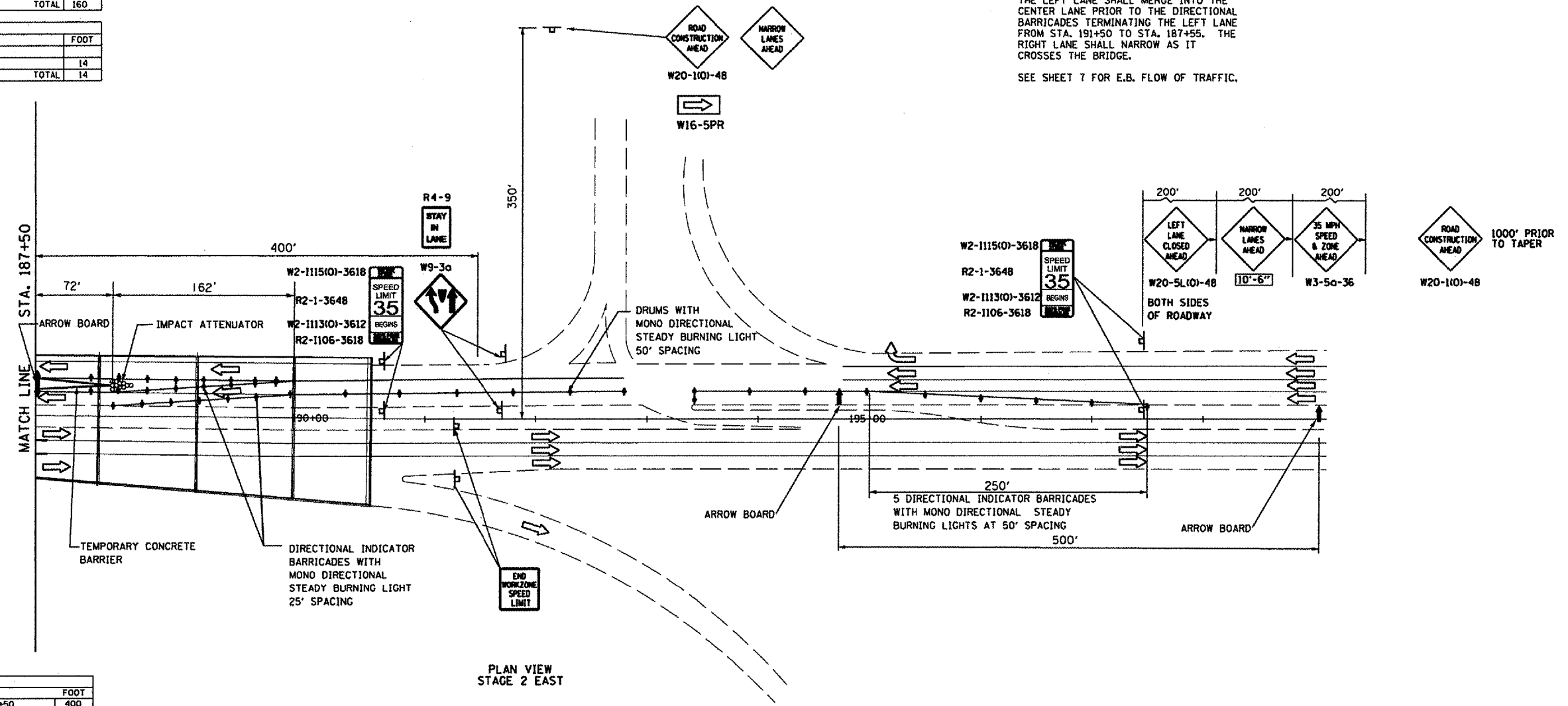
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	148D1	PEORIA	29	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
D-94-062-05				

RELOCATE TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
STAGE 2	
EB U.S. 24 STA. 187+50 TO EB U.S. 24 STA. 187+67	20
WB U.S. 24 STA. 187+50 TO WB U.S. 24 STA. 188+20	140
TOTAL	160

RELOCATE IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 2	
LOCATION	EACH
EB U.S. 24 STA. 188+20 AND STA. 188+40	1
TOTAL	1

TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
STAGE 2	
EB U.S. 24 STA. 187+50 TO EB U.S. 24 STA. 187+67	14
TOTAL	14

FLOW OF TRAFFIC:
 U.S. RT. 24
 W.B. - FROM STA. 197+50 TO STA. 195+90,
 THE LEFT LANE SHALL MERGE INTO THE
 CENTER LANE PRIOR TO THE DIRECTIONAL
 BARRICADES TERMINATING THE LEFT LANE
 FROM STA. 191+50 TO STA. 187+55. THE
 RIGHT LANE SHALL NARROW AS IT
 CROSSES THE BRIDGE.
 SEE SHEET 7 FOR E.B. FLOW OF TRAFFIC.



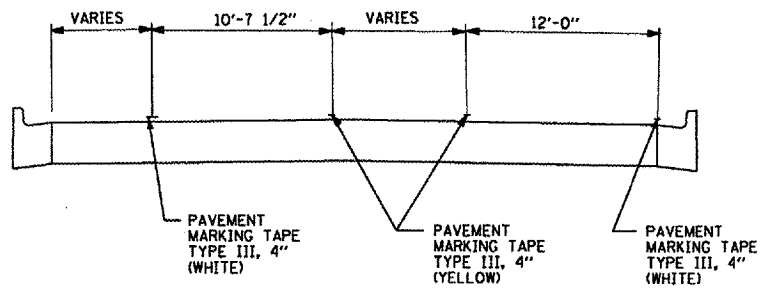
PLAN VIEW
STAGE 2 EAST

PAVEMENT MARKING TAPE TYPE III 4" (WHITE)	
LOCATION	FOOT
WB U.S. 24 RIGHT LANE, RIGHT STA. 191+50 TO STA. 187+50	400
WB U.S. 24 LEFT LANE, LEFT STA. 189+84 TO STA. 187+50	234
TOTAL	634

PAVEMENT MARKING TAPE TYPE III 4" (YELLOW)	
LOCATION	FOOT
WB U.S. 24 RIGHT LANE, LEFT STA. 189+84 TO STA. 187+50	234
WB U.S. 24 LEFT LANE, RIGHT STA. 189+84 TO STA. 187+50	234
TOTAL	468

PAVEMENT MARKING TAPE TYPE III 8" (WHITE)	
LOCATION	FOOT
WB U.S. 24 RIGHT LANE, LEFT STA. 192+85 TO STA. 189+84	301
TOTAL	301

- SYMBOLS**
- ↑ Arrow board
 - Cone, drum or barricade
 - ⊢ Sign on portable or permanent support
 - ▨ Work area
 - ⊕ Barricade or drum with steady burning light
 - ⊕ Type III barricade with flashing lights
 - ⊕ Flagger with traffic control sign
 - ⊕ Impact attenuator



W.B. TYPICAL SECTION
STA. 190+00 TO STA. 187+50
LOOKING WEST

REVISIONS	
NAME	DATE
ACJ	6/30/06
JBA	11/14/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 MAINTENANCE OF TRAFFIC STAGE 2
 F.A.P. 317 (U.S. RTE. 24)
 STRUCTURE 072-0134
 PEORIA COUNTY, ILLINOIS
 STATION 187+10.02
 SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY JLP
 CHECKED BY JRG/JFS

CONTRACT NO. 68480				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(48B)	PEORIA	29	9
STA. TO STA.				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
D-94-062-05				

NOTE: SOME TEMPORARY CONCRETE BARRIER USED IN STAGE 2 IN THE EAST BOUND LANES WILL BE RELOCATED TO WEST BOUND LANES FOR STAGE 3.

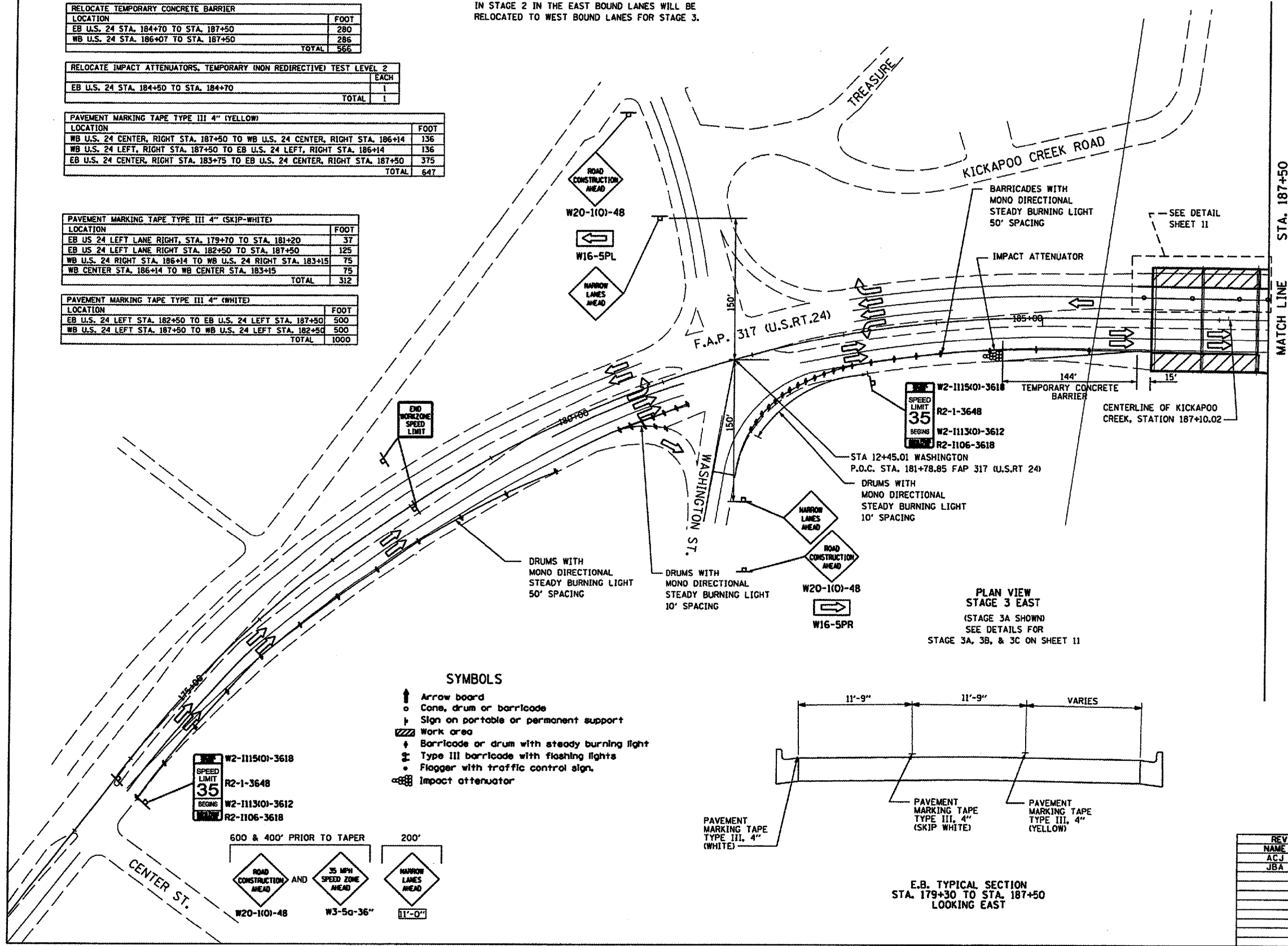
RELOCATE TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
EB U.S. 24 STA. 184+70 TO STA. 187+50	280
WB U.S. 24 STA. 186+07 TO STA. 187+50	286
TOTAL	566

RELOCATE IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 2	
LOCATION	EACH
EB U.S. 24 STA. 184+50 TO STA. 184+70	1
TOTAL	1

PAVEMENT MARKING TAPE TYPE III 4" (YELLOW)	
LOCATION	FOOT
WB U.S. 24 CENTER, RIGHT STA. 187+50 TO WB U.S. 24 CENTER, RIGHT STA. 186+14	136
WB U.S. 24 LEFT, RIGHT STA. 187+50 TO EB U.S. 24 LEFT, RIGHT STA. 186+14	136
EB U.S. 24 CENTER, RIGHT STA. 183+75 TO EB U.S. 24 CENTER, RIGHT STA. 187+50	375
TOTAL	647

PAVEMENT MARKING TAPE TYPE III 4" (SKIP-WHITE)	
LOCATION	FOOT
EB US 24 LEFT LANE RIGHT, STA. 179+70 TO STA. 181+20	37
EB US 24 LEFT LANE RIGHT STA. 182+50 TO STA. 187+50	125
WB U.S. 24 RIGHT STA. 186+14 TO WB U.S. 24 RIGHT STA. 183+15	75
WB CENTER STA. 186+14 TO WB CENTER STA. 183+15	75
TOTAL	312

PAVEMENT MARKING TAPE TYPE III 4" (WHITE)	
LOCATION	FOOT
EB U.S. 24 LEFT STA. 182+50 TO EB U.S. 24 LEFT STA. 187+50	500
WB U.S. 24 LEFT STA. 187+50 TO WB U.S. 24 LEFT STA. 182+50	500
TOTAL	1000

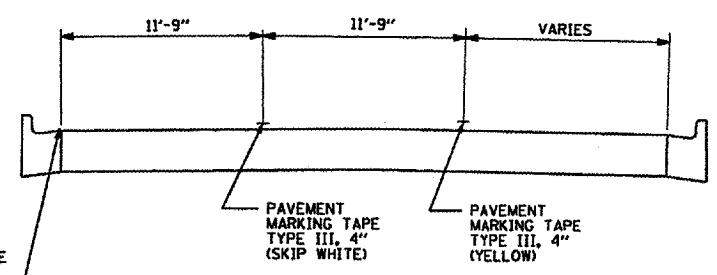


FLOW OF TRAFFIC:
 U.S. RT. 24
 E.B. - FROM STA. 176+00 TO STA. 181+00, THE LEFT AND CENTER LANES SHALL BE THROUGH TRAFFIC.
 SEE SHEET 10 FOR W.B. FLOW OF TRAFFIC.

STANDARDS:
 USE STANDARD 701601 OR 701426 DURING THE SETUP OF STAGE 3 TRAFFIC CONTROL.
 STAGE 3 TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE AS SHOWN ON THESE PLANS AND PER STANDARD 701601.
 (ALL TRAFFIC CONTROL MEASURES SHOWN IN STANDARD 701601 AND ON THE STAGE 3 DIAGRAMS WILL BE PAID UNDER TRAFFIC CONTROL AND PROTECTION).
 USE STANDARD 701601 DURING TEMPORARY LANE CLOSURES WHEN LOADING/UNLOADING TRUCKS.

NOTE:
 1. ANY EQUIPMENT, SUCH AS CRANES OR EXCAVATORS, USED TO LOAD OR UNLOAD TRUCKS, SHALL REMAIN BEHIND THE TEMPORARY CONCRETE BARRIERS AT ALL TIMES.
 2. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGING PAVEMENT SHALL BE REMOVED. THIS SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.
 3. STANDARD 701601 MAY BE USED DAILY IN EACH DIRECTION ACCORDING TO THE FOLLOWING SCHEDULE:
 E.B. 8:30 AM TO 3:30 PM
 W.B. REMOVED BY 3:30 PM

- SYMBOLS**
- ↑ Arrow board
 - Cone, drum or barricade
 - ⊥ Sign on portable or permanent support
 - ▨ Work area
 - ⊥ Barricade or drum with steady burning light
 - ⊥ Type III barricade with flashing lights
 - ⊥ Flogger with traffic control sign.
 - ⊥ Impact attenuator



REVISIONS	
NAME	DATE
ACJ	6/30/06
JBA	11/14/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 MAINTENANCE OF TRAFFIC STAGE 3
 F.A.P. 317 (U.S. RTE. 24)
 STRUCTURE 072-0134
 PEORIA COUNTY, ILLINOIS
 STATION 187+10.02

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY JLP
 CHECKED BY JRG/JFS

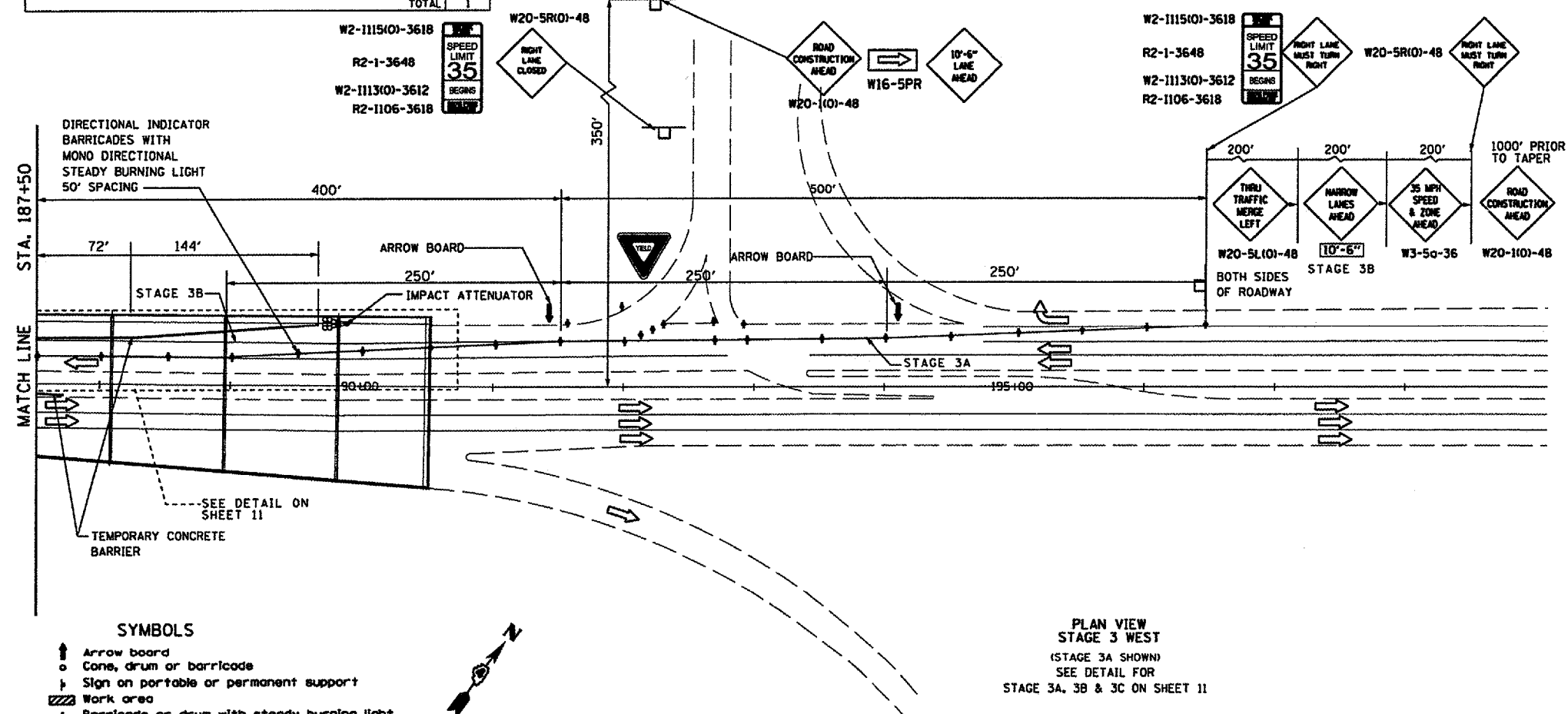
CONTRACT NO. 68480			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
317	(48B)	PEORIA	29 10
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
D-94-062-05			

RELOCATE TEMPORARY CONCRETE BARRIER	
LOCATION	FOOT
STAGE 3A	
EB U.S. 24 STA. 187+50 TO STA. 187+70	20
WB U.S. 24 STA. 187+50 TO STA. 189+64	214
STAGE 3B	
WB U.S. 24 STA. 187+50 TO STA. 188+22	72
TOTAL	306

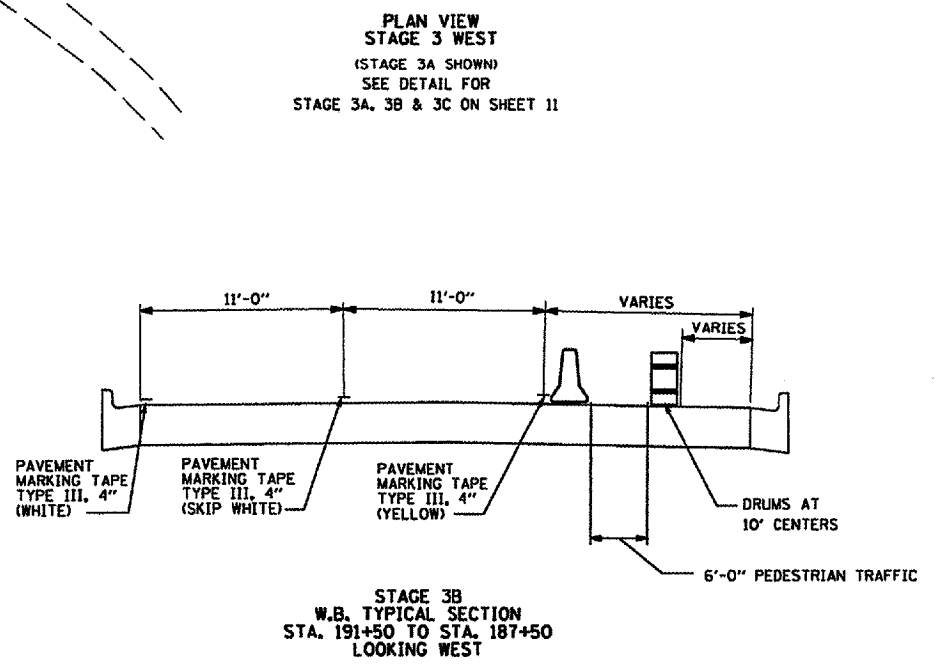
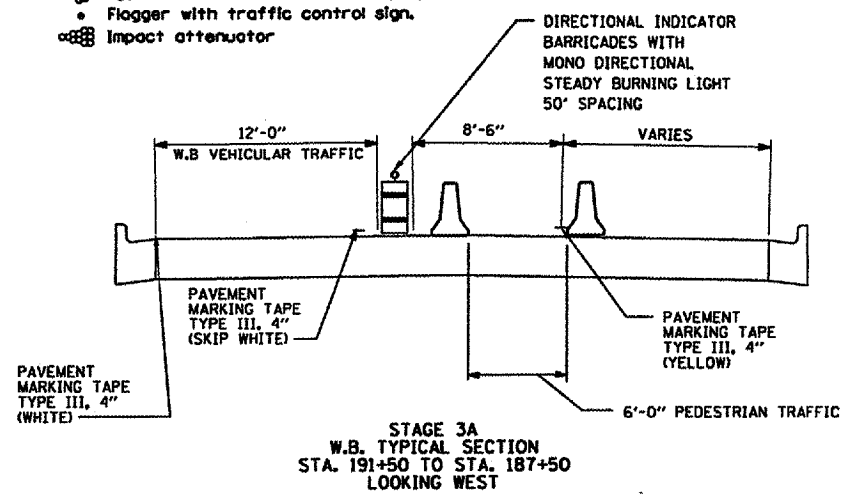
RELOCATE IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 2	
LOCATION	EACH
EB U.S. 24 STA. 189+66 TO STA. 189+86	1
TOTAL	1

PAVEMENT MARKING TAPE TYPE III 4" (WHITE)	
LOCATION	FOOT
EB U.S. 24 RIGHT LANE, RIGHT STA. 187+50 TO STA. 187+60	10
WB U.S. 24 RIGHT LANE, RIGHT STA. 192+80 TO STA. 187+50	530
WB U.S. 24 RIGHT LANE, RIGHT STA. 196+50 TO STA. 193+30	320
WB U.S. 24 RIGHT LANE, RIGHT STA. 191+50 TO STA. 187+50	400
TOTAL	1260

PAVEMENT MARKING TAPE TYPE III 4" (YELLOW)	
LOCATION	FOOT
EB U.S. 24 LEFT LANE, LEFT STA. 191+50 TO STA. 187+50	400
WB U.S. 24 LEFT LANE, LEFT STA. 187+50 TO STA. 187+55	5
TOTAL	405



- SYMBOLS**
- ↑ Arrow board
 - Cone, drum or barricade
 - ▬ Sign on portable or permanent support
 - ▨ Work area
 - ⊕ Barricade or drum with steady burning light
 - ⊕ Type III barricade with flashing lights
 - ⊕ Flagger with traffic control sign.
 - ⊕ Impact attenuator



WB STAGE 3A

STAGE 3A PROVIDES ONE WEST BOUND TRAFFIC LANE AND USES THE OTHER LANE FOR PEDESTRIAN TRAFFIC WHILE THE BEAMS THAT SUPPORT THE PROPOSED SIDEWALK ARE BEING INSTALLED. E.B. TRAFFIC USES STAGE 3 TRAFFIC STAGING. IN ADVANCE OF THE EAST BOUND (E.B.) I-74 ENTRANCE RAMP, THE RIGHT LANE WILL BE INDICATED AS AN "EXIT ONLY" LANE. THRU-TRAFFIC IN THE RIGHTMOST THRU-LANE APPROACHING FROM THE EAST WILL BE DIRECTED INTO THE CENTER LANE; THEN THE CENTER LANE TRAFFIC WILL BE DIRECTED INTO THE LEFT LANE. PEDESTRIAN TRAFFIC WILL REMAIN ON THE EXISTING SIDEWALK AS LONG AS POSSIBLE. AT THE CONSTRUCTION SITE, THE PEDESTRIAN TRAFFIC WILL BE DIRECTED TO USE THE CENTER TRAFFIC LANE OF THE BRIDGE USING SIGNAGE, DRUMS OR BARRICADES, TEMPORARY CONCRETE BARRIERS AND CAUTION TAPE AS NEEDED TO INDICATE A SAFE PATH THROUGH THE CONSTRUCTION AREA AND TO PROVIDE A SAFE SEPARATION WITH THE TRAFFIC. THE PATH SHALL BE MOVED OR TEMPORARILY CLOSED TO ACCOMMODATE DELIVERY OF MATERIAL AND EQUIPMENT TO THE CONSTRUCTION SITE.

DURING DAYLIGHT HOURS, THE PEDESTRIAN SIDEWALK CAN BE CLOSED FOR PERIODS OF TIME FOR CONSTRUCTION ACTIVITY SUCH AS DELIVERING OF BEAMS. AN EXTRA FLAGGER IS REQUIRED ON THE WEST END OF THE SITE TO CONTROL PEDESTRIAN TRAFFIC WHEN THE SIDEWALK IS CLOSED FOR PEDESTRIANS, PEDESTRIANS WILL BE ALLOWED TO CROSS THE BRIDGE WITH LESS THAN FIVE (5) MINUTES DELAY BY TEMPORARILY SHUTTING DOWN ALL WEST BOUND TRAFFIC USING STANDARD 701601-04.

W.B. STAGE 3B

STAGE 3B PROVIDES TWO WEST BOUND (WB) TRAFFIC LANES AND USES THE NEW BRIDGE BEAMS FOR PEDESTRIAN TRAFFIC AFTER THE SIDEWALK BEAMS ARE INSTALLED BUT PRIOR TO THE CAST-IN-PLACE CONCRETE FOR THE SIDEWALK IS READY FOR FOOT TRAFFIC. EAST BOUND (EB) TRAFFIC USES STAGE 3 TRAFFIC STAGING. FOR WB TRAFFIC, TCB AND DRUMS/BARRICADES WILL BE RELOCATED FOR TRAFFIC AS SHOWN ON THE DETAILS SO THE RIGHT LANE IN ADVANCE OF THE I-74 RAMP IS INDICATED AS AN "EXIT ONLY" LANE. THRU-TRAFFIC IN THE RIGHTMOST THRU-LANE APPROACHING FROM THE EAST WILL BE DIRECTED INTO THE CENTER LANE. PEDESTRIAN TRAFFIC WILL REMAIN ON THE EXISTING SIDEWALK AS LONG AS POSSIBLE. AT THE CONSTRUCTION SITE, THE PEDESTRIAN TRAFFIC WILL BE DIRECTED TO USE PORTION OF THE NEW BRIDGE DECK USING SIGNAGE, DRUMS OR BARRICADES, TEMPORARY RAILING AND CAUTION TAPE AS NEEDED TO PROVIDE AND INDICATE A SAFE PATH FOR PEDESTRIANS. THE PATH SHALL BE MOVED OR TEMPORARILY CLOSED TO ACCOMMODATE DELIVERY OF MATERIAL AND EQUIPMENT TO THE CONSTRUCTION SITE.

WB STAGE 3C

STAGE 3C PROVIDES TWO WEST BOUND (WB) TRAFFIC LANES AND USES THE NEWLY CONSTRUCTED SIDEWALK FOR PEDESTRIAN TRAFFIC. EAST BOUND (EB) TRAFFIC USES STAGE 3 TRAFFIC STAGING. TRAFFIC CONTROL PROTECTION DEVICES PROVIDED FOR IN STAGE 3B FOR WB TRAFFIC WILL REMAIN IN PLACE. PEDESTRIAN TRAFFIC WILL USE THE EXISTING AND NEWLY CONSTRUCTED SIDEWALK. THE CONTRACTOR SHALL USE DRUM, CONES OR BARRICADE, TEMPORARY RAILING AND CAUTION TAPE AS NECESSARY TO SEPARATE THE PEDESTRIAN TRAFFIC FROM THE CONSTRUCTION ACTIVITIES AS REQUIRED FOR SAFETY. THE SIDEWALK MAY BE TEMPORARILY CLOSED TO ACCOMMODATE DELIVERY OF MATERIAL AND EQUIPMENT TO THE CONSTRUCTION SITE.

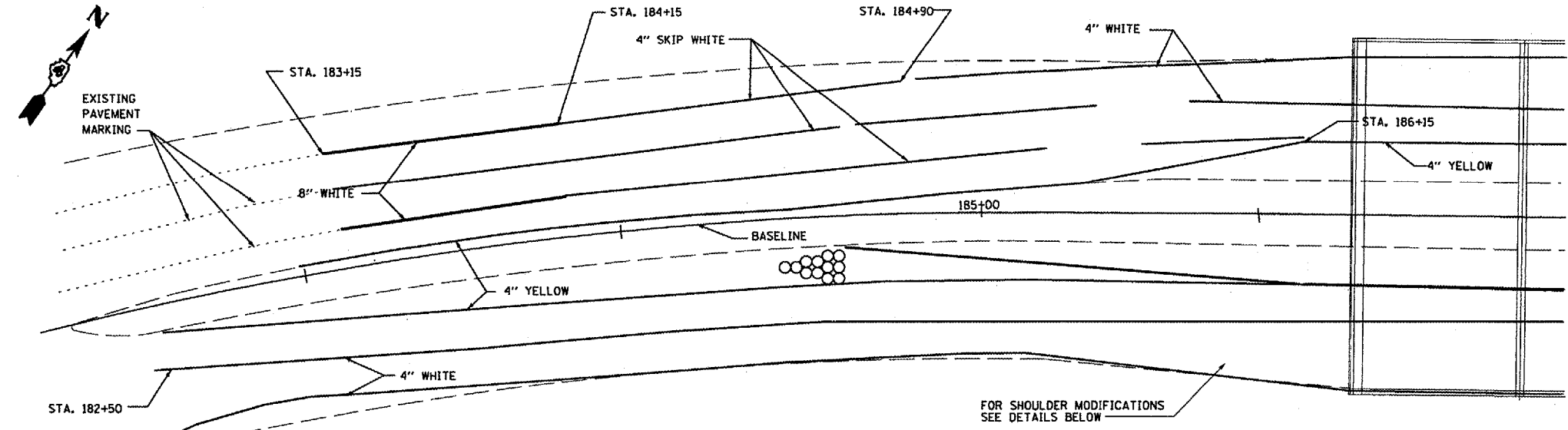
REVISIONS	
NAME	DATE
ACJ	6/30/06
JBA	11/14/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
MAINTENANCE OF TRAFFIC STAGE 3
 F.A.P. 317 (U.S. RTE. 24)
 STRUCTURE 072-0134
 PEORIA COUNTY, ILLINOIS
 STATION 187+10.02

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY JLP
 CHECKED BY JRG/JFS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	148DI	PEORIA	29	12
STA. 182+00		TO STA. 187+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
D-94-062-05				



NOTE:

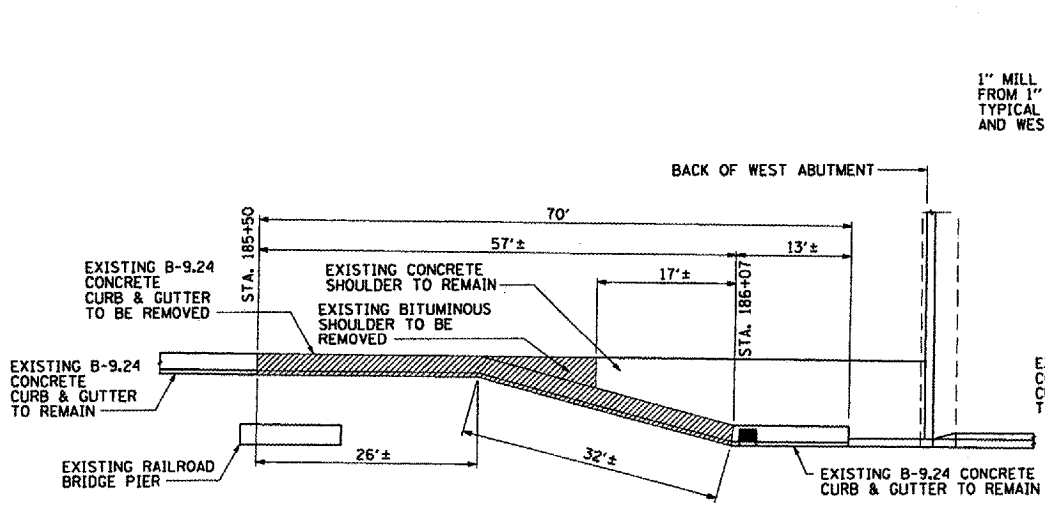
- EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGING PAVEMENT SHALL BE REMOVED. THIS SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.

PAVEMENT MARKING DETAILS
PLAN VIEW STA. 182+00 TO STA. 187+50

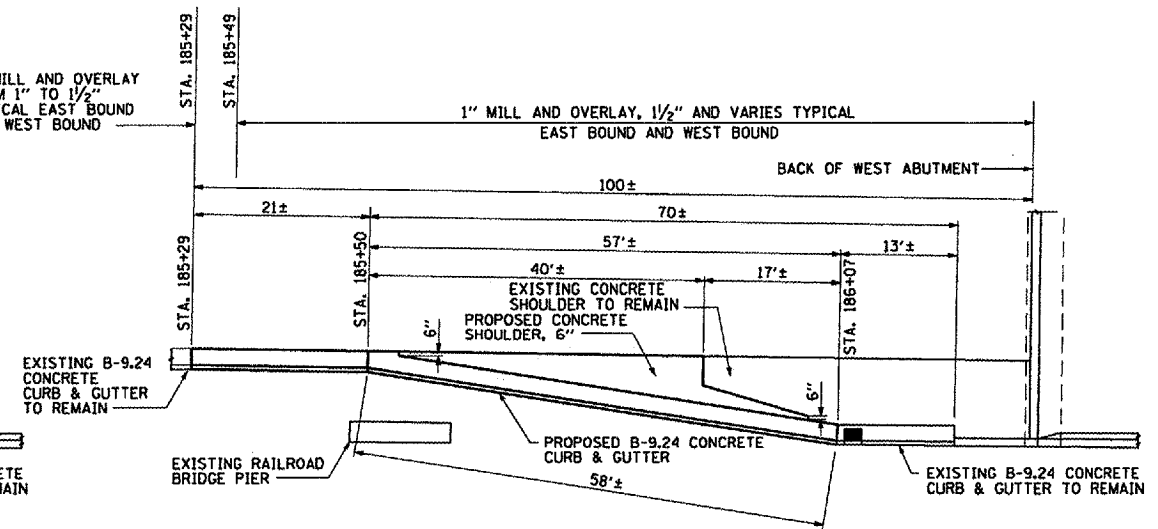
DETAILS APPLY TO
STAGE 1 ONLY
STAGE 2 & 3 SIMILAR

NOTES:

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.24 SHALL MATCH EXISTING AND SHALL CONFORM TO STANDARD 606001.
- AN EXPANSION JOINT PER STANDARD 606001 IS REQUIRED AT THE INLET APRON OR IN THE NEW CURB WITHIN FOUR FEET OF THE EXISTING INLET.
- PORTLAND CEMENT CONCRETE SHOULDERS 6" SHALL BE CONSTRUCTED PER STANDARD 483001.
- TIE BARS INTO THE EXISTING PAVEMENT AND INTO THE NEW GUTTER ARE REQUIRED PER THE SIZE AND SPACING OF STANDARD 606001. TIES ARE INCLUDED IN THE COST OF THE PCC SHOULDER.
- ALL WORK SHALL BE DONE PRE-STAGE 1 USING TRAFFIC CONTROL STANDARD 701601. COST FOR PRE-STAGE 1 TRAFFIC CONTROL IS INCLUDED IN THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION".
- GRADE OF THE PROPOSED GUTTER SHALL BE SET USING EXISTING CONDITIONS. SURFACE OF THE PROPOSED CONCRETE SHOULDER SHALL BE SET TO ALLOW FOR THE SURFACE OVERLAY.



SHOULDER MODIFICATION DEMOLITION DETAILS
STA. 185+50 TO STA. 186+07



SHOULDER MODIFICATION PAVING DETAILS
STA. 185+29 TO STA. 186+29

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
MAINTENANCE OF TRAFFIC STAGE 1, 2, & 3
PAVEMENT MARKING DETAILS
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02
SCALE: VERT. _____
HORIZ. _____
DATE _____ DRAWN BY ACJ/JBA
CHECKED BY JRG

PLOT DATE: 4/16/2007
 FILE NAME: G:\data\5589\80\Work D-48-7\080\pavement.dgn
 USER: JRG

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 317	(48B)	PEORIA	29	13
SHEET NO. 1				
16 SHEETS				
D-94-062-05				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

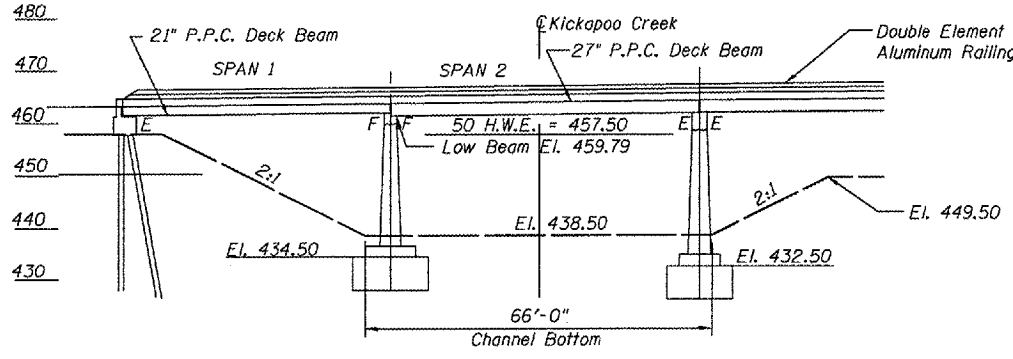
GENERAL NOTES

U.S.C. & G.S. B.M.-1: EL 461.910 Bartonville, on S. side of W end of State Hwy. Bridge over Kickapoo Creek, on top of parapet of concrete abutment chiseled square (Sanitary District B.M.)

Existing structure consists of 1 span 21" PCC deck, 1 span 27" PCC deck beam & 3 spans of cast in place deck on 36" beams.

Salvage existing aluminum railing & reinstall.

Staging: See sheets 2-5.



PARTIAL ELEVATION

- INDEX OF SHEETS
1. GENERAL PLAN AND ELEVATION
 - 2-4. STAGE 1-3 REMOVAL AND CONSTRUCTION
 5. STAGING DETAILS
 6. TYPICAL BRIDGE SECTION
 7. PARAPET, MEDIAN, AND SIDEWALK DETAILS
 8. PARAPET AND RAILING LAYOUT
 9. 21" BEAM DETAILS SPAN 1
 10. 27" BEAM DETAILS SPAN 2
 11. BEAM TYPES
 12. MISCELLANEOUS DETAILS
 13. PREFORMED JOINT STRIP SEAL
 14. TYPE L ALUMINUM RAILING
 15. ANCHOR BOLT DETAILS
 16. TEMPORARY CONCRETE BARRIER

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures

- 1.) 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.
- 2.) Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. (IL Modified).
- 3.) Expansion guards which are not cast in the precast unit shall be fabricated and erected according to Article 503.10(c) of the Standard specifications and are included in Preformed Joint Strip Seal.
- 4.) 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 or work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- 5.) Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
- 6.) No in-stream work will be allowed on this project.
- 7.) Existing name plate shall be cleaned and relocated adjacent to new name plate. Cost incidental to "Name Plates".
- 8.) Note Deleted.
- 9.) Note Deleted.
- 10.) 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 min. of 24 hrs. prior to grouting the shear keys.
- 11.) The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements 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 applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.
- 12.) 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.
- 13.) Expansion joint plates and attached bars shall be AASHTO M 270 Grade 50.
- 14.) Contractor shall provide the necessary support for the existing Telephone Duct Bank suspended from the existing median throughout the project. It shall be the Contractor's responsibility to call out additional inserts required in Beams 18 & 19 to accommodate this support.
- 15.) Reinforcement bars designated (E) shall be epoxy coated.
- 16.) The existing steel wide flange beams (2) used as temporary carrier beams under span 1 shall remain the property of the state. In addition, the steel "shear key clamping" plate and existing transverse ties shall remain the property of the state. All said materials shall be delivered by the contractor to the IDOT building maintenance yard located on Camp Street in East Peoria, Illinois. Phone #309-699-3822. Costs are included with removal of existing super structure.

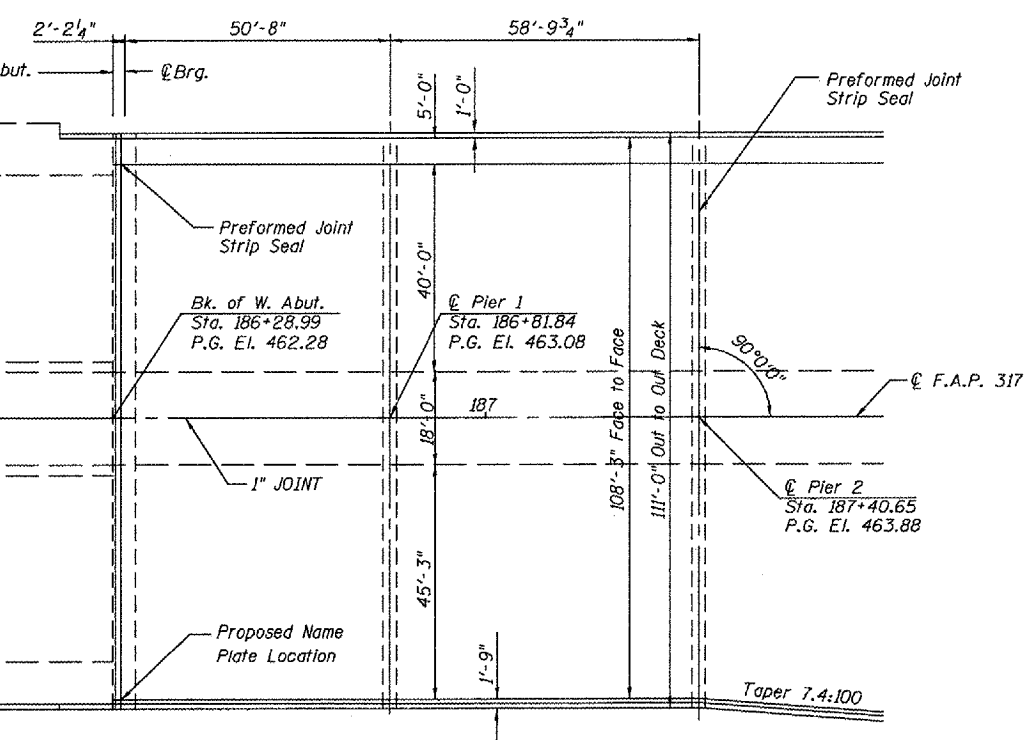
LOADING HS20-44
(Existing structure designed for 25#/sq. ft. for Future Wearing Surface.)

SPECIFICATIONS
2002 AASHTO (2002 INTERIMS)

SPECIFICATIONS
f'c = 5,000 psi (precast)
f'ci = 4,000 psi (precast)
f'c = 3500 psi (cast-in-place)
f's = 270,000 psi (strands)
f'si = 201,960 psi (strands)
f'y = 60,000 psi (reinf. bars)

SEISMIC DATA 1990
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.048g
Site Coefficient (S) = 1.2

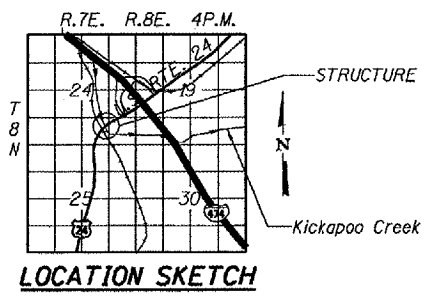
DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS



PARTIAL PLAN

KICKAPOO CREEK
STATION 187+10.02
BUILT 200... BY
STATE OF ILLINOIS
F.A.P. 317 SEC. (48B)1
LOADING HS20
STR. NO. 072-0134

NAME PLATE
See Std. 515001

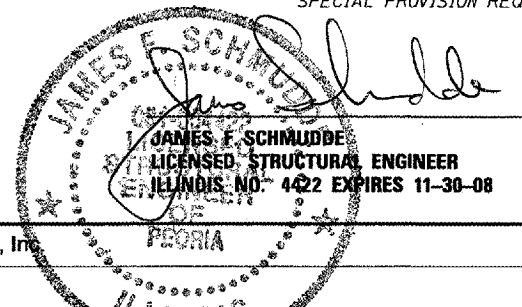


LOCATION SKETCH

TOTAL BILL OF MATERIAL

PAY ITEM	DESCRIPTION	UNITS	TOTAL
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NTO	TON	88
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	134
50300300	PROTECTIVE COAT	SQ YD	375
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	5530
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	6332
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9927
*50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	220
51500100	NAME PLATES	EACH	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	224
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	1040
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	51
*20001900	ASBESTOS BEARING PAD REMOVAL	EACH	144
*	CONNECTOR FOR TYPE L ALUMINUM RAILING	EACH	22

* SPECIAL PROVISION REQUIRED

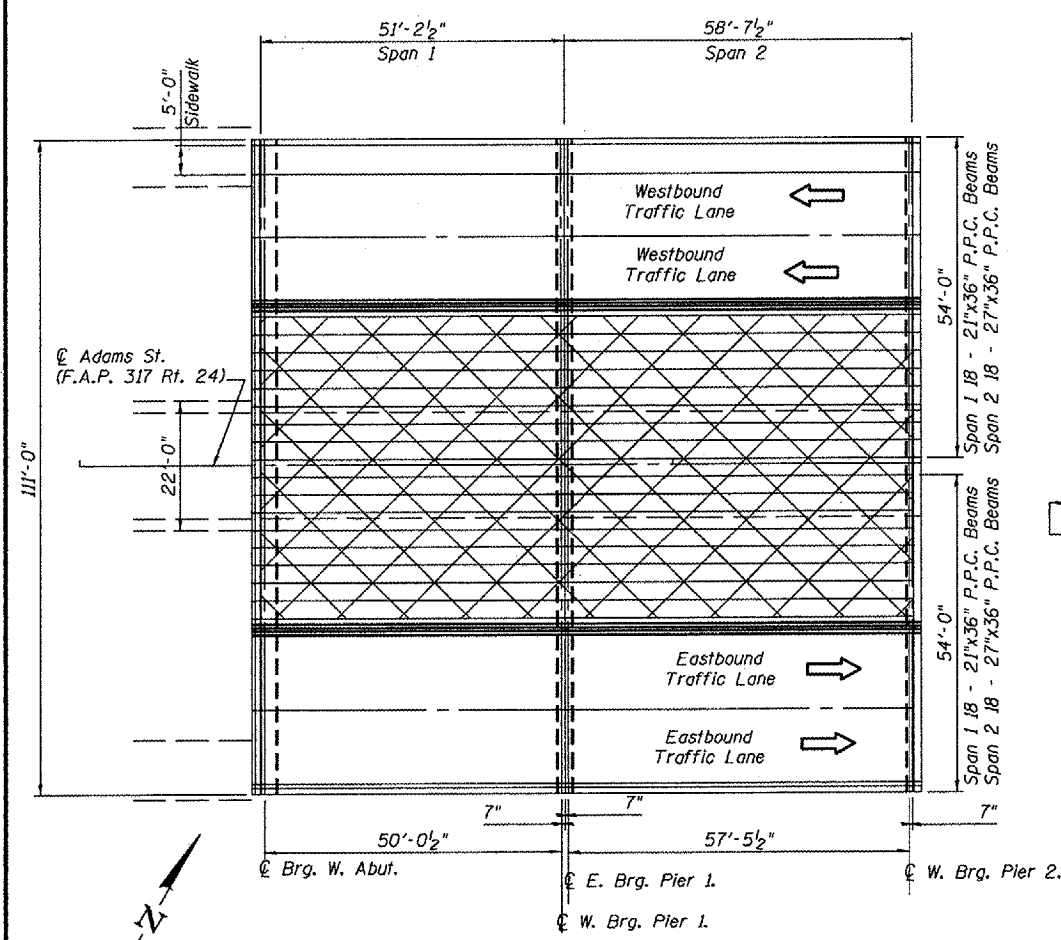


5-10-07
DATE

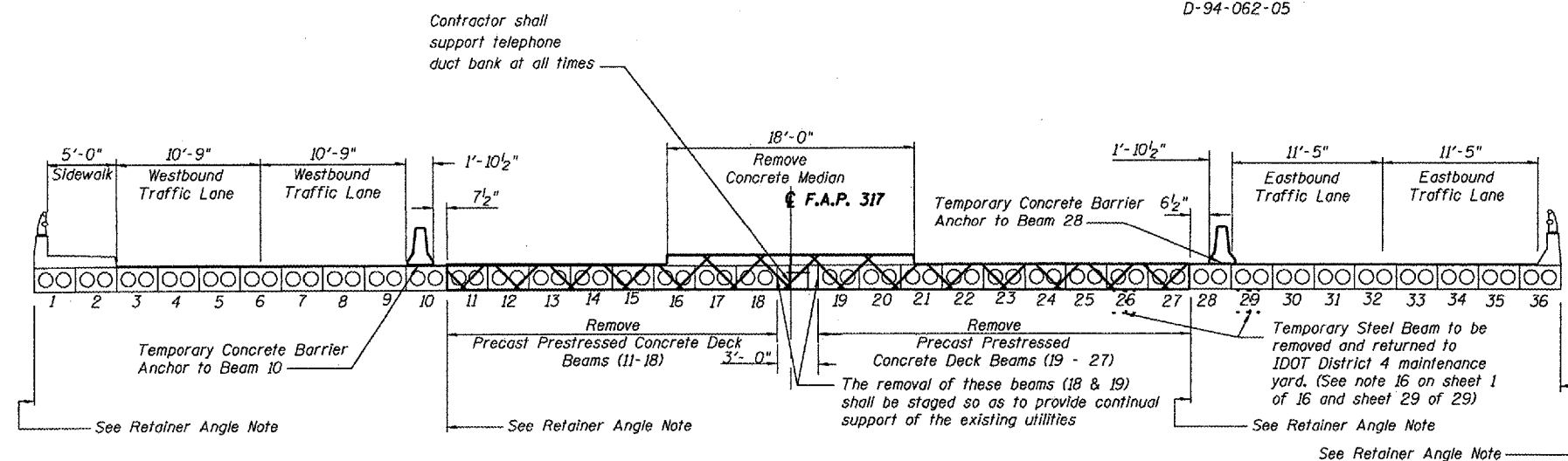
GENERAL PLAN AND ELEVATION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 317	SECTION (48B)1	COUNTY PEORIA	SHEETS 29	"OF" 14	SHEET NO. 2 16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT D-94-062-05		



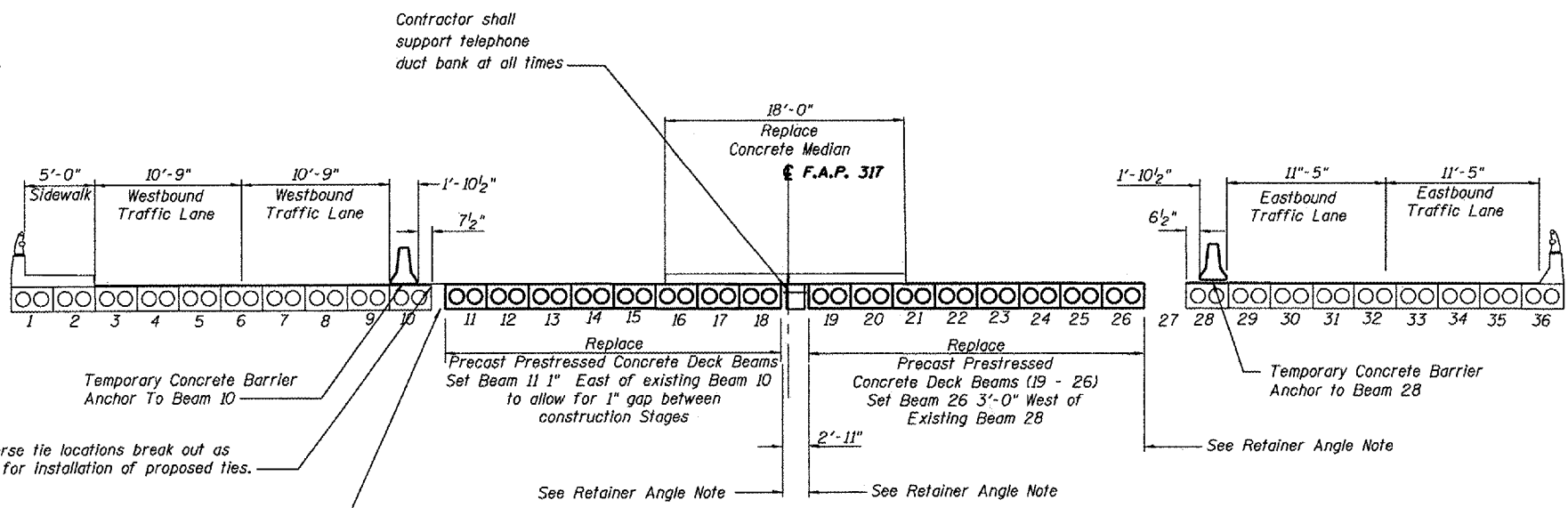
PARTIAL PLAN VIEW EXISTING SPAN 1 & SPAN 2



**REMOVAL
SPAN 1 SHOWN SPAN 2 SIMILAR
STAGE 1
LOOKING EAST**

NOTE:
At Pier 1, burn existing dowel rods flush with surface of existing pier cap. Grind existing dowel rods smooth and seal with epoxy prior to placement of Stage 1 PPC Deck Beams. Cost is included with Removal of Existing Superstructures.

Retainer Angle Note:
Retainer angles are required where shown at Abutment and Pier 2. See details on sheet 5.



**PROPOSED CONSTRUCTION
SPAN 1 SHOWN SPAN 2 SIMILAR
STAGE 1
LOOKING EAST**

At transverse tie locations break out as necessary for installation of proposed ties.

1" Gap between New Beam 11 and Existing Beam 10. Use steel wedges at Abutment and Pier 2 in lieu of retainer angle

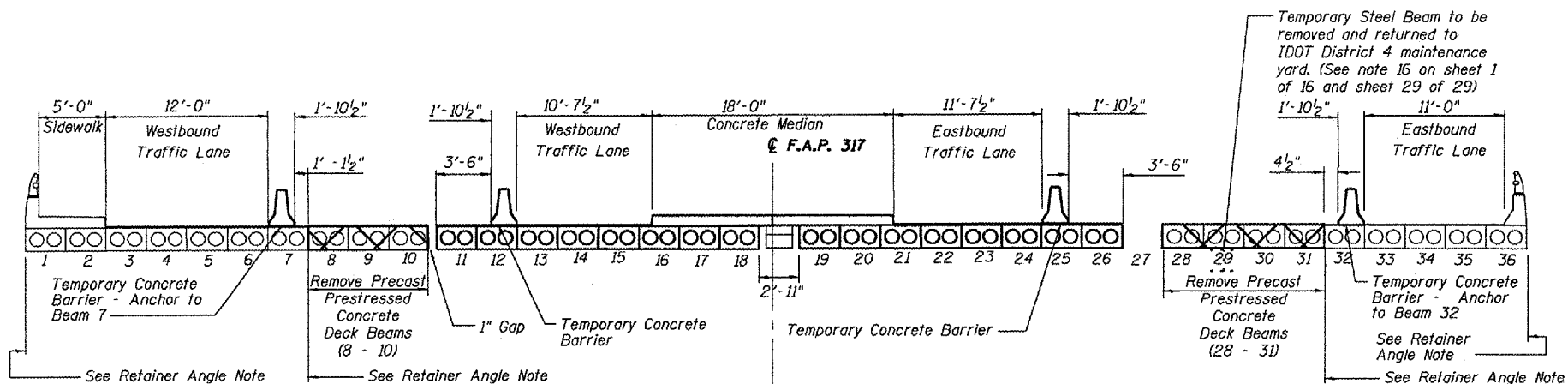
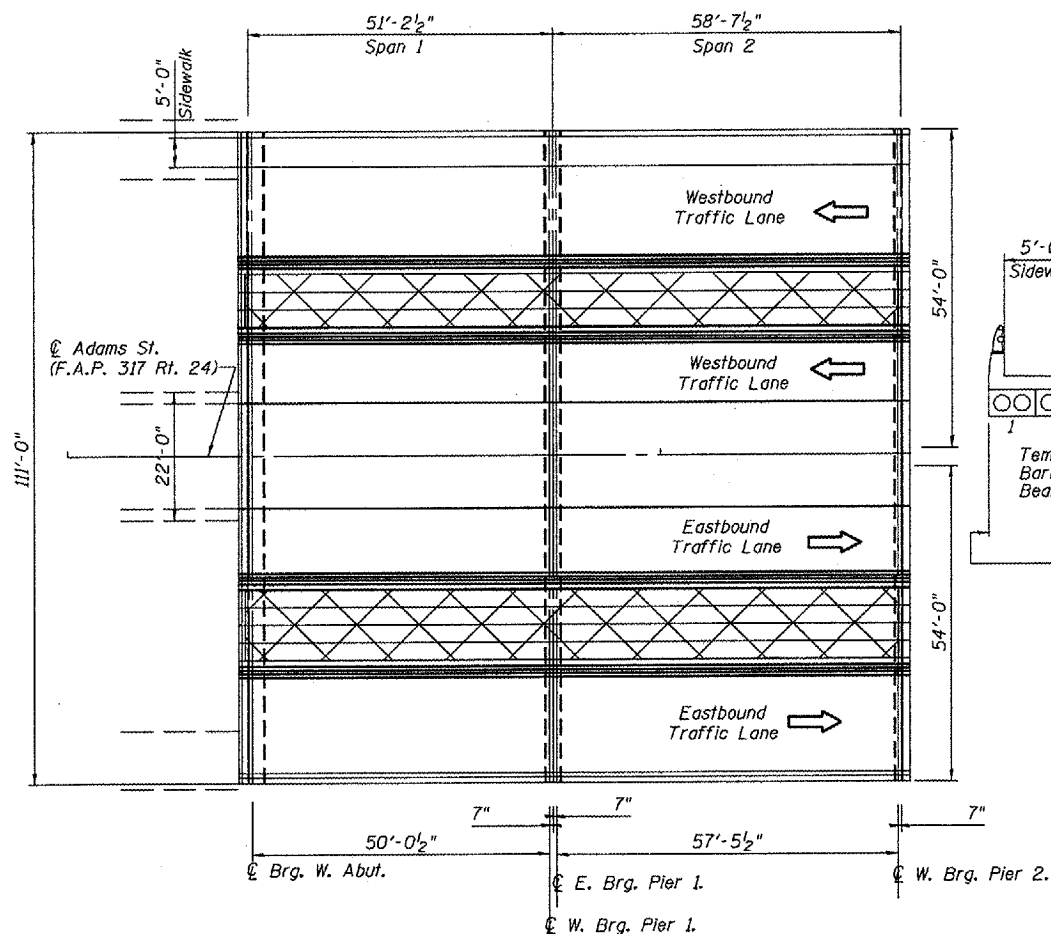
DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS

**STAGE 1 REMOVAL AND CONSTRUCTION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 317	SECTION (488)1	COUNTY PEORIA	SHEETS 29	NO. 15	SHEET NO. 3 16 SHEETS
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D-94-062-05



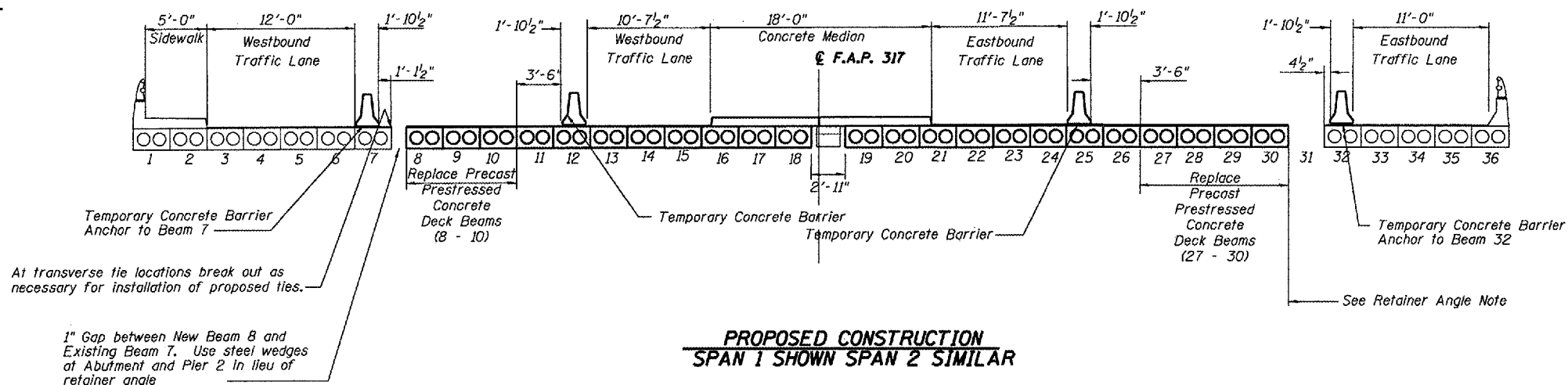
NOTE:
At Pier 1, burn existing dowel rods flush with surface of existing pier cap. Grind existing dowel rods smooth and seal with epoxy prior to placement of Stage 2 PPC Deck Beams. Cost is included with Removal of Existing Superstructures.

REMOVAL
SPAN 1 SHOWN SPAN 2 SIMILAR

STAGE 2
LOOKING EAST

Retainer Angle Note:
Retainer angles are required where shown at Abutment and Pier 2. See details on sheet 5.

PARTIAL PLAN VIEW SPAN 1 & SPAN 2



PROPOSED CONSTRUCTION
SPAN 1 SHOWN SPAN 2 SIMILAR

STAGE 2
LOOKING EAST

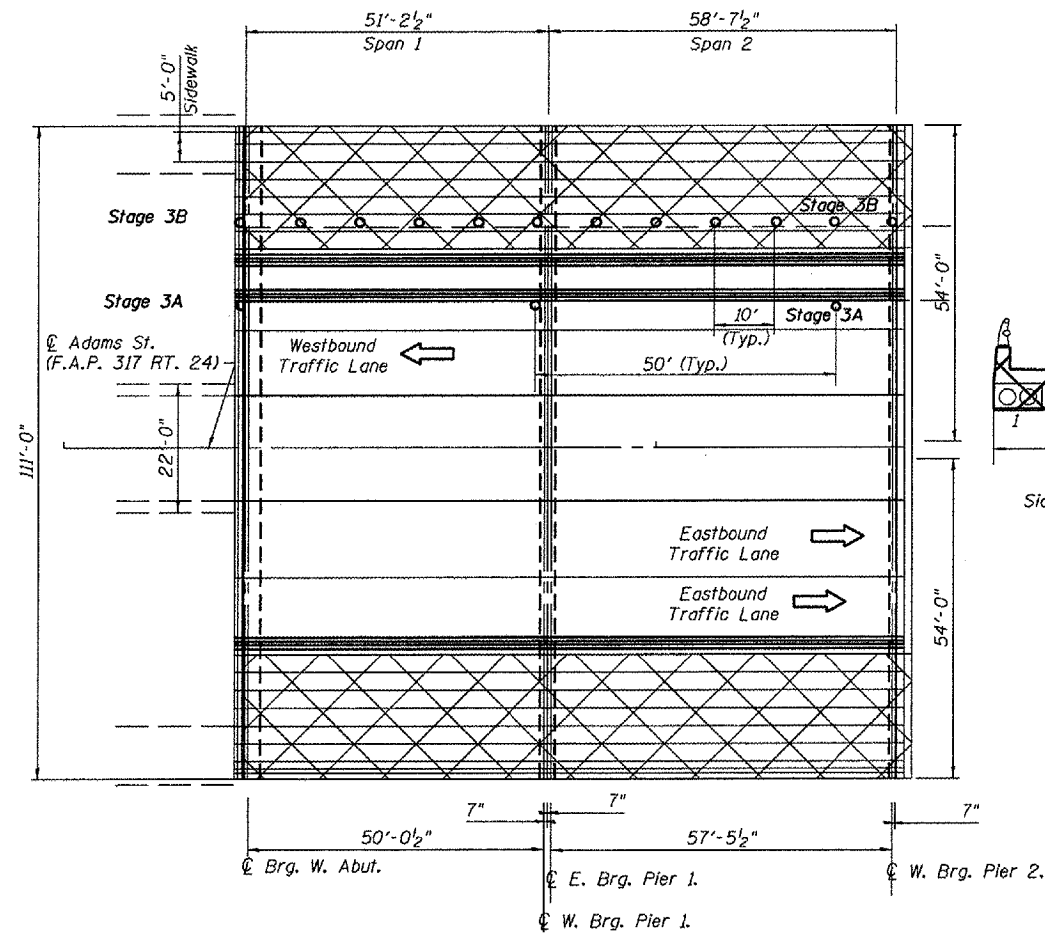
STAGE 2 REMOVAL AND CONSTRUCTION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 317	SECTION (48B)1	COUNTY PEORIA	SHEET NO. 29	PAGE 16	SHEET NO. 4 16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

D-94-062-05



**PARTIAL PLAN VIEW SPAN 1 & SPAN 2
STAGE 3A SHOWN**

STAGE 3A

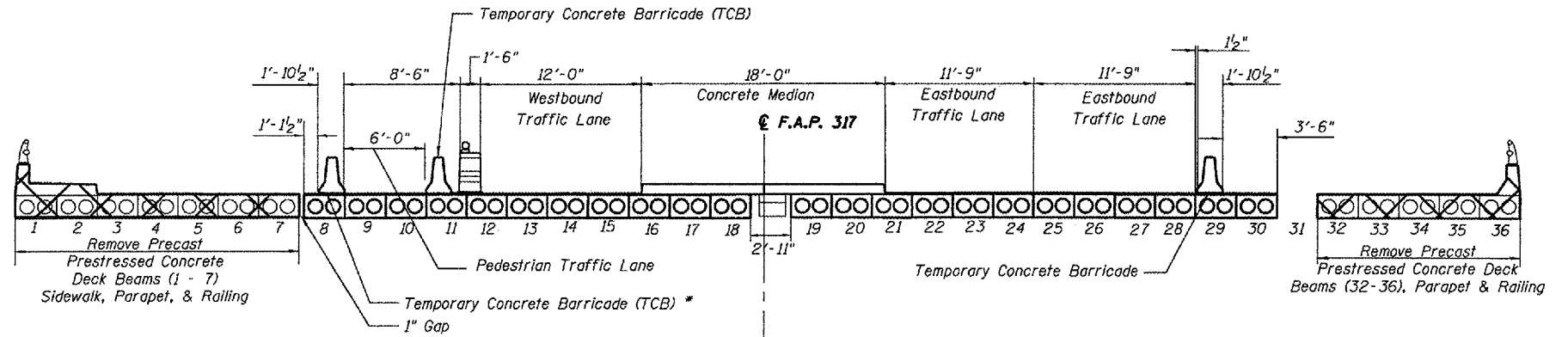
During removal and replacement of Beams 1 thru 7, Contractor shall reduce W.B. traffic to one (1) 12' lane utilizing Temporary Concrete Barriers (TCB) to accommodate pedestrian traffic

STAGE 3B

Upon removal and replacement of Beams 1a thru 7, Contractor shall add drums to the north edge of beam 6, placing pedestrian traffic between the drums and the TCB, and return W.B. traffic to two (2) 11'-0" lanes.

STAGE 3C

Contractor shall direct pedestrian traffic to use the sidewalk upon completion of cast in place concrete sidewalk, parapet and railing.



**REMOVAL
SPAN 1 SHOWN SPAN 2 SIMILAR**

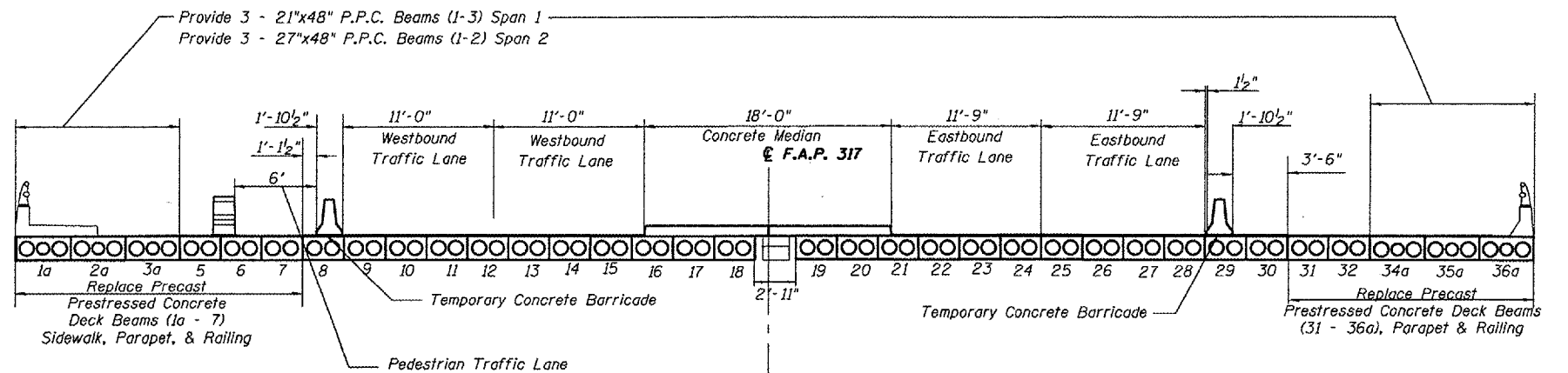
* Contractor shall restrain the TCB by either Detail 1 shown on sheet 16 or by leaving Beam 7 in place until the new beam is delivered, and installed.

NOTE:
At Pier 1, burn existing dowel rods flush with surface of existing pier cap. Grind existing dowel rods smooth and seal with epoxy prior to placement of PPC Deck Beams during Stage 3. Cost is included with Removal of Existing Superstructures.

**STAGE 3
LOOKING EAST**

Retainer Angle Note:

Retainer angles are required where shown at Abutment and Pier 2. See details on sheet 5.



**PROPOSED CONSTRUCTION
SPAN 1 SHOWN SPAN 2 SIMILAR**

**STAGE 3
LOOKING EAST**

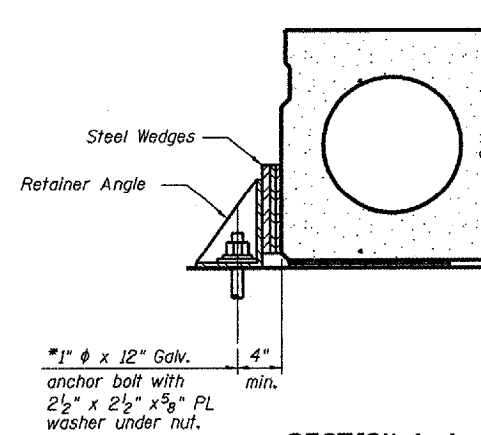
**STAGE 3 REMOVAL AND CONSTRUCTION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02**

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS

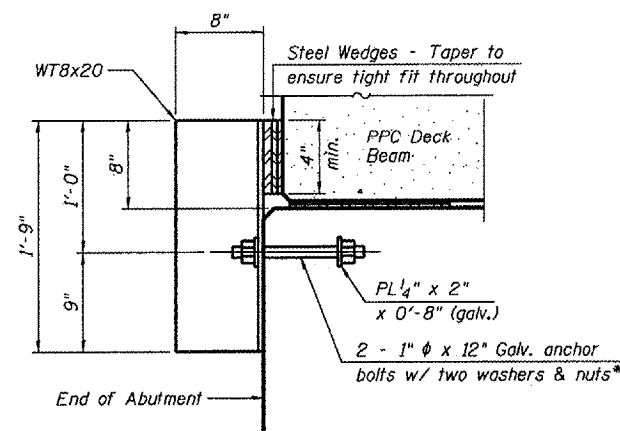
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 317	SECTION (48B)I	COUNTY PEORIA	SHEETS 29	SHEET 17	SHEET NO. 5 16 SHEETS
FED. ROAD DIST. NO. ?		ILLINOIS	FED. AID PROJECT		

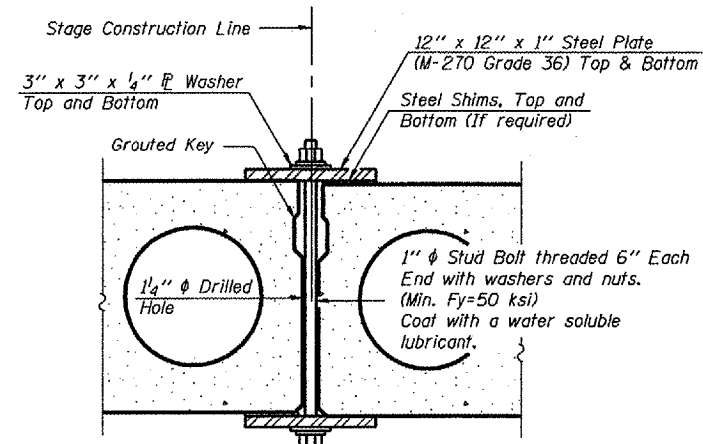
D-94-062-05



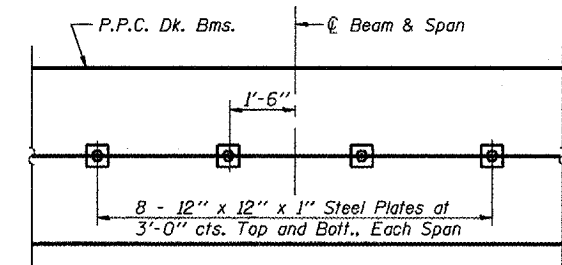
SECTION A-A



SECTION B-B



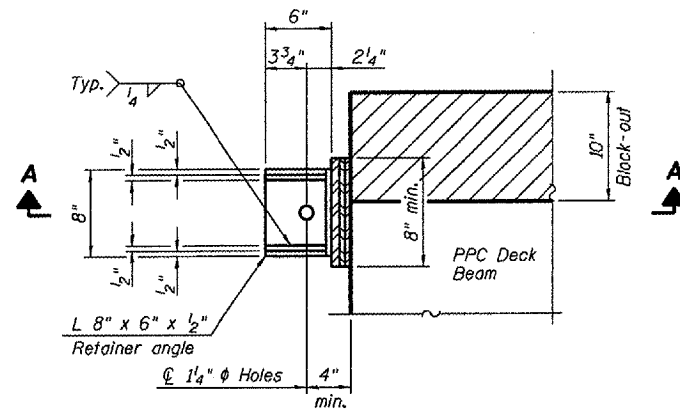
SECTION



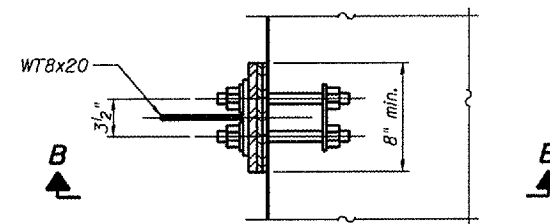
PLAN

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". See Stage Construction Details for traffic lanes.

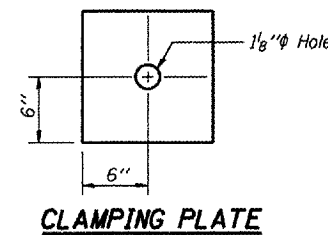


RETAINER ANGLE PLAN

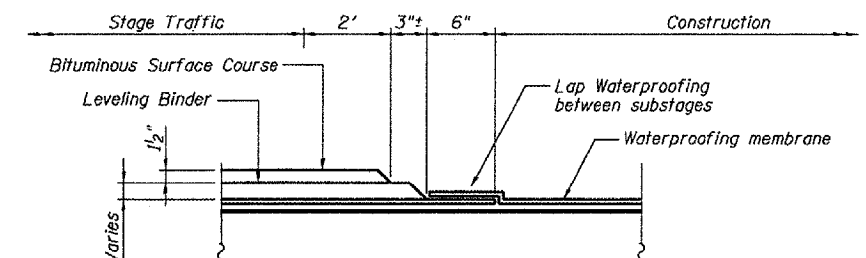


ALTERNATE RETAINER ANGLE PLAN

Similar Retainer Detail may be required under median if utilities conflict with installation of an angle retainer.



CLAMPING PLATE



LAP DETAIL FOR BITUMINOUS SURFACE

RETAINER ANGLE DETAILS AT EXPANSION JOINT

* Anchor bolts may be cast into the concrete or approved threaded rod may be placed in drilled holes and grouted in place. Cost of retainer, all steel wedges, and accessories are included with Precast Prestressed Concrete Deck Beams.

Note:

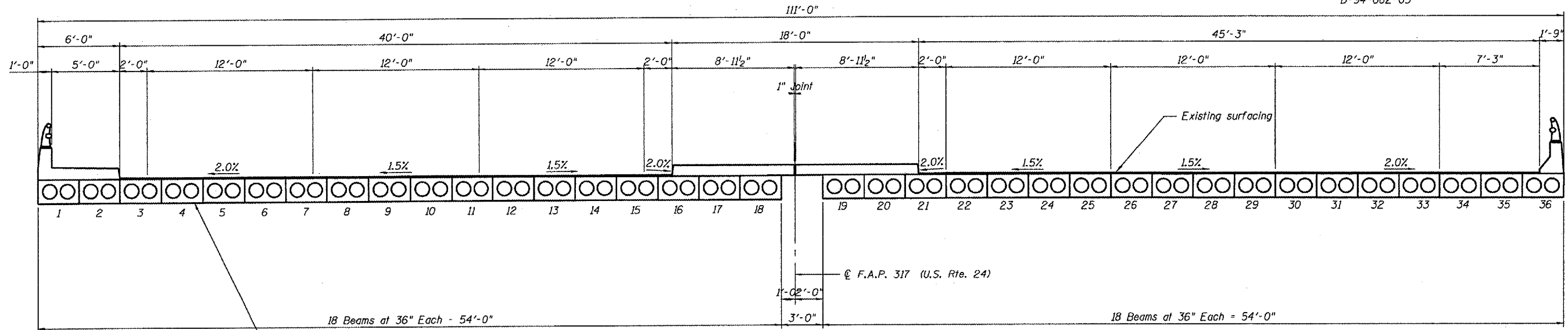
After block-outs are poured and cured, the retainer angles shall be removed. Anchor bolts for outside retainer angles may be left in place. For temporary inside retainer angles, remove retainer angle, burn off anchor bolts flush with cap, grind smooth, and seal with epoxy prior to placement of Stage 2 and Stage 3 PPC Deck Beams.

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

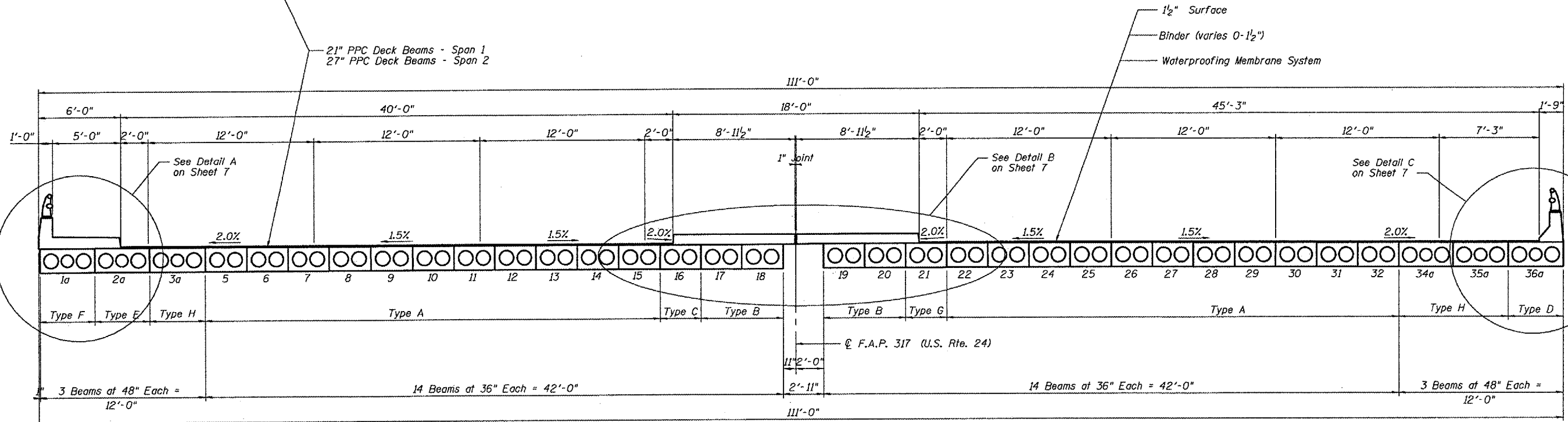
STAGING DETAILS
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 317	SECTION (480)I	COUNTY PEORIA	SHEET NO. 29	OF 18	SHEET NO. 6 16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT D-94-062-05		



**EXISTING TYPICAL SECTION
LOOKING E.B.**



**PROPOSED TYPICAL SECTION
LOOKING E.B.**

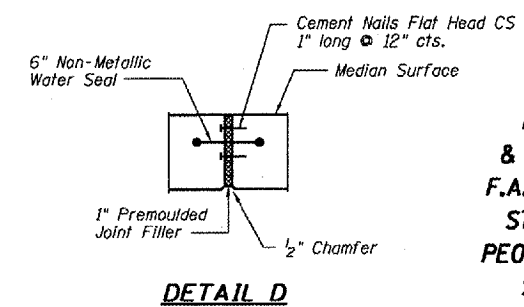
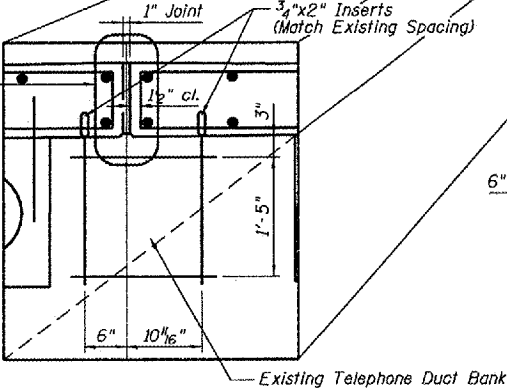
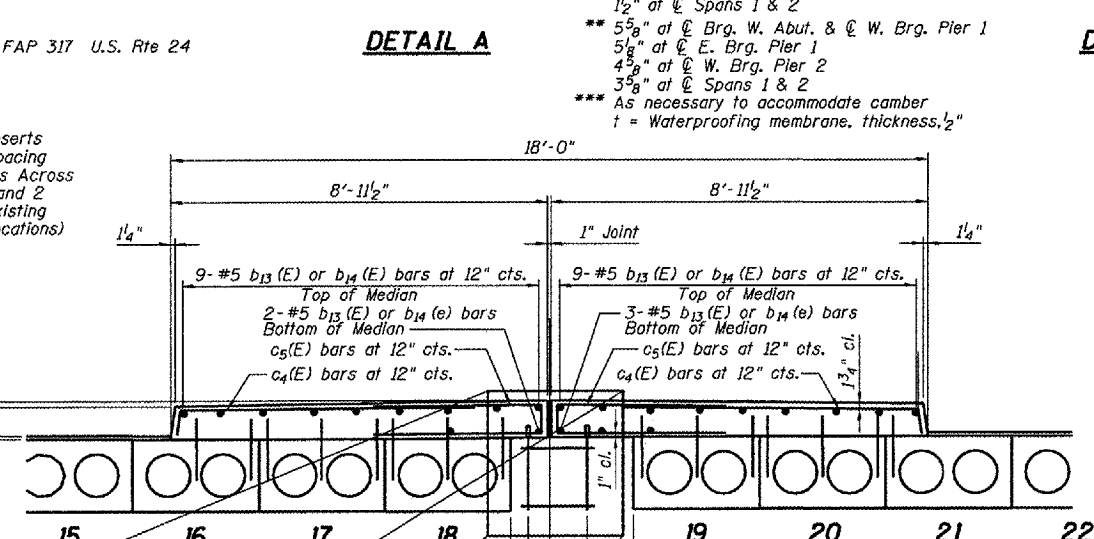
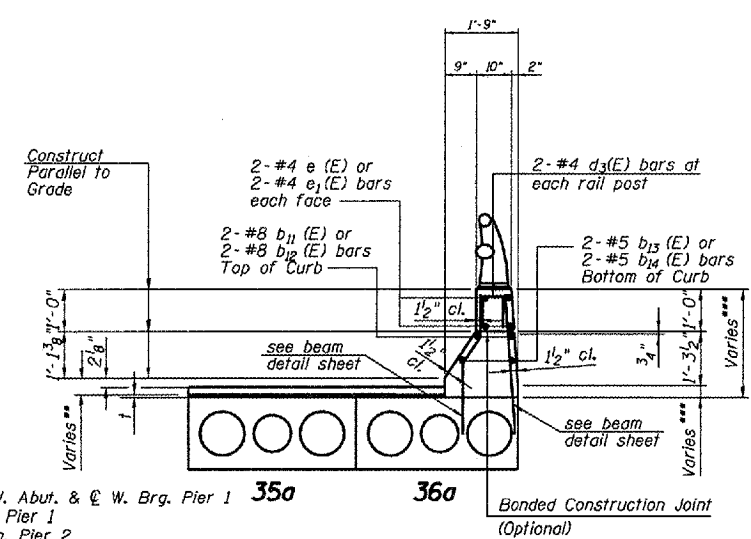
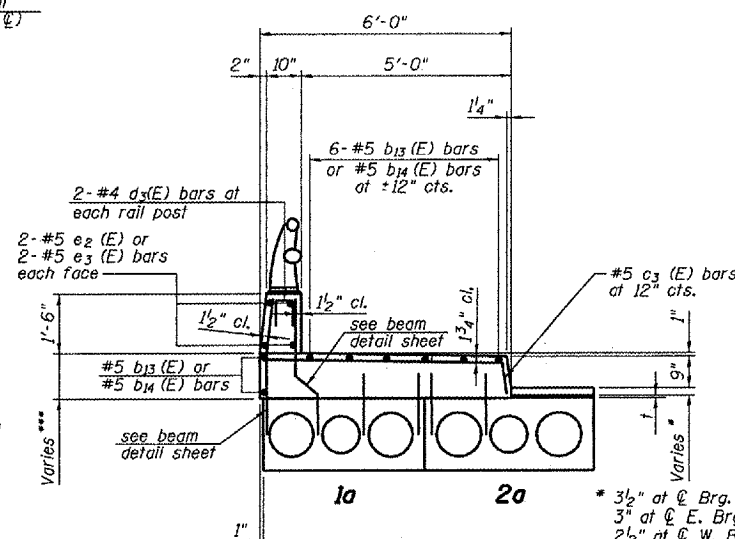
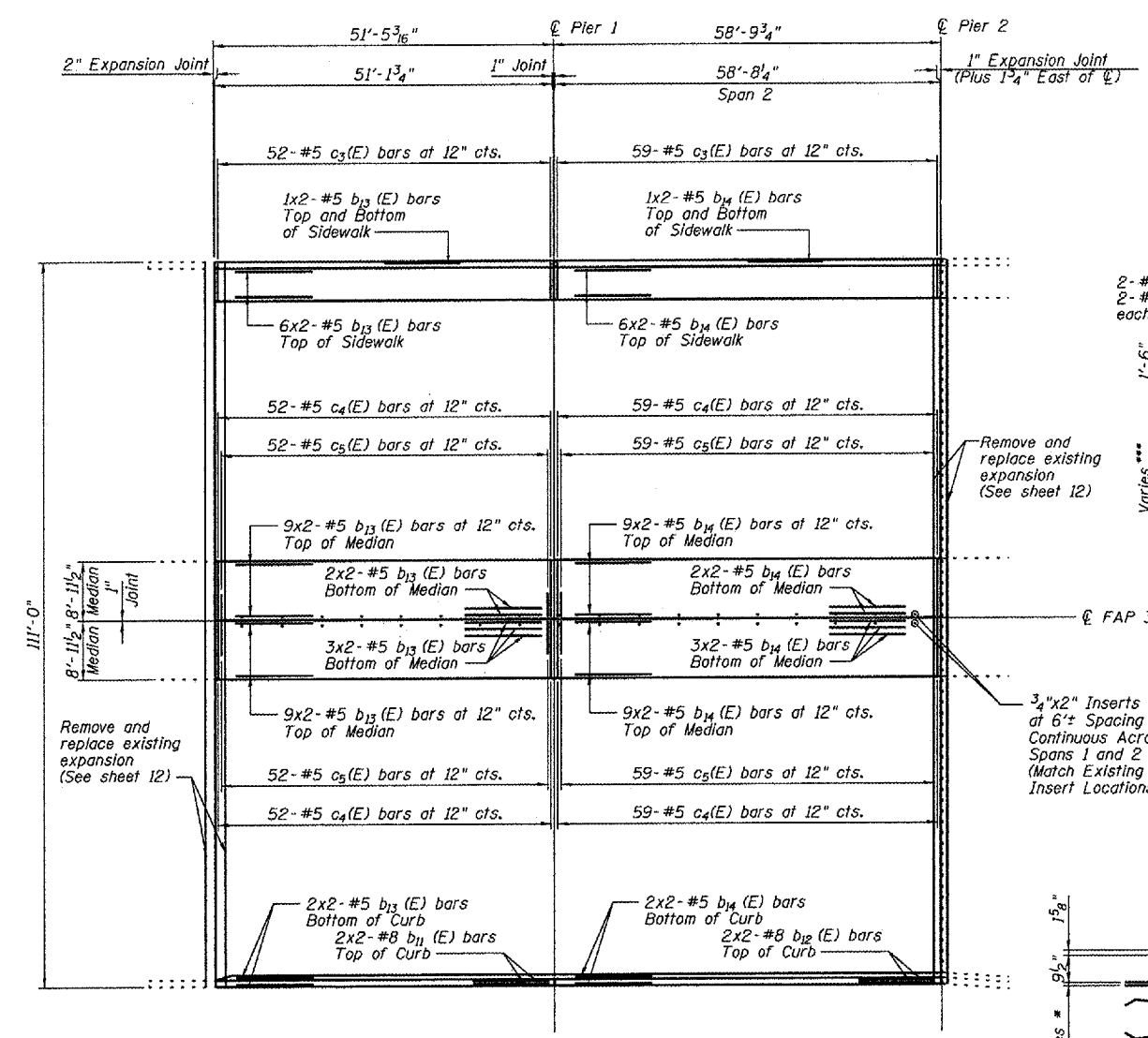
Deck beam numbers 4 & 33 intentionally missing

**TYPICAL BRIDGE SECTION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02**

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS

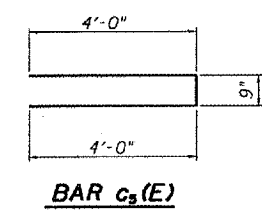
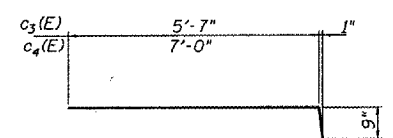
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	NO.	SHEET NO.
F.A.P. 317	(48B1)	PEORIA	29	19	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:			
D-94-062-05					



REINFORCEMENT BAR SPLICE SCHEDULE

Bar Size	Splice Length
#4	1'-4"
#5	1'-8"
#8	3'-5"



BILL OF MATERIALS

Bar	No.	Size	Length	Shape	
b11(E)	4	#8	27'-2"	—	
b12(E)	4	#8	31'-0"	—	
b13(E)	66	#5	26'-4"	—	
b14(E)	66	#5	30'-1"	—	
c3(E)	111	#5	6'-4"	—	
c4(E)	222	#5	7'-9"	—	
c5(E)	222	#5	8'-9"	—	
Reinforcement Bars (Epoxy Coated)				lb.	9,127
Conc. Superstructure				Cu. Yd.	131
Protective Coat				Sq. Yd.	375

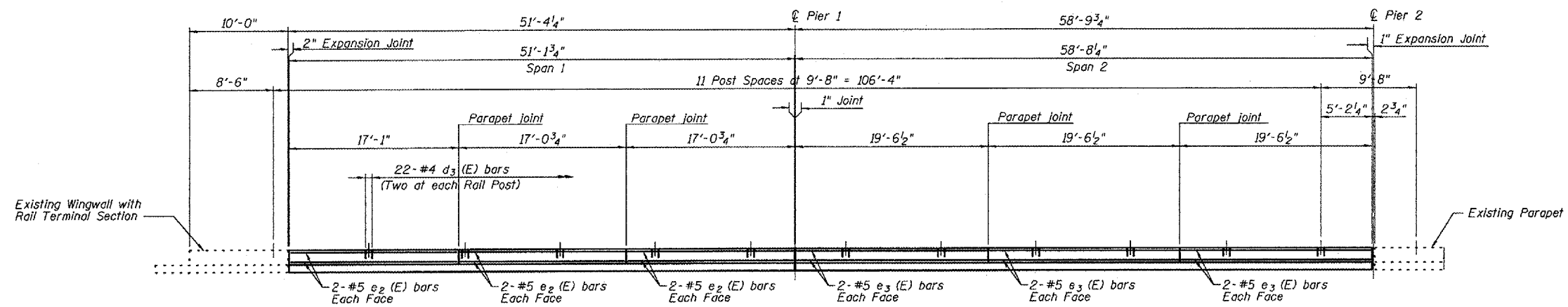
PARAPET, MEDIAN & SIDEWALK DETAILS
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED - JRG
CHECKED - JFS
DRAWN - JBA
CHECKED - JRG

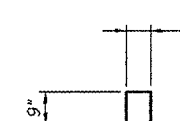
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 317	SECTION (488)1	COUNTY PEORIA	SHEETS 29	SHEET NO. 20	SHEET NO. 8 16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

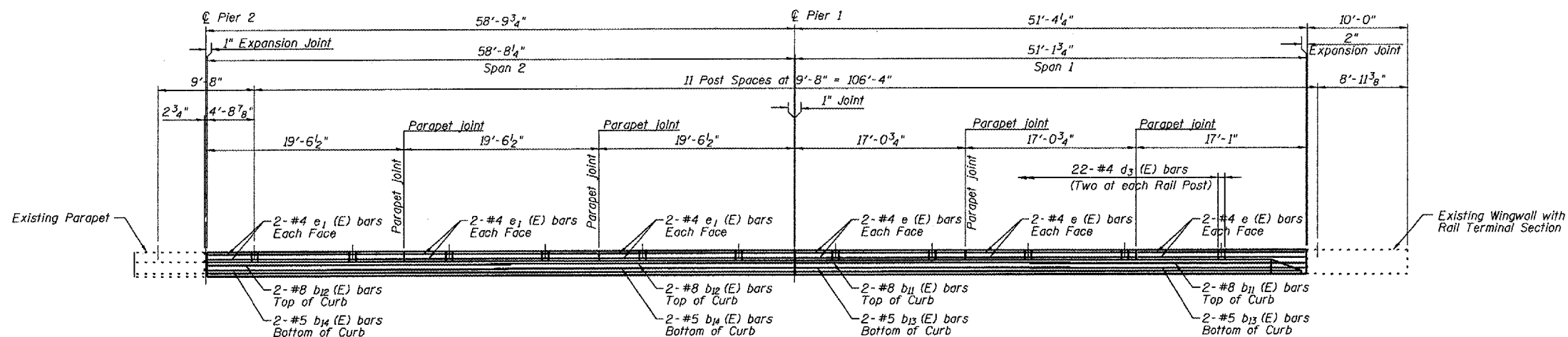
D-94-062-05



ELEVATION VIEW - NORTH PARAPET
Looking North



BAR d₃



ELEVATION VIEW - SOUTH PARAPET
Looking South

BILL OF MATERIALS

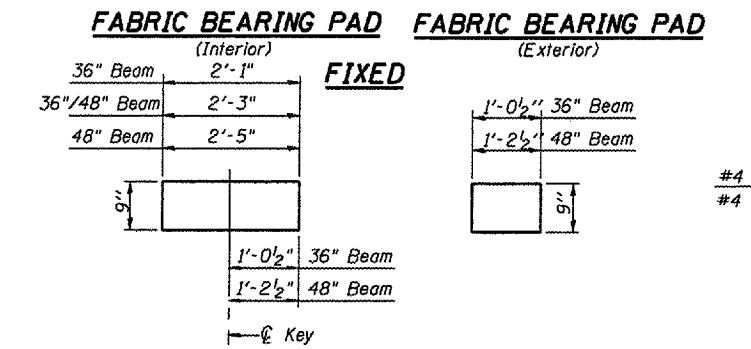
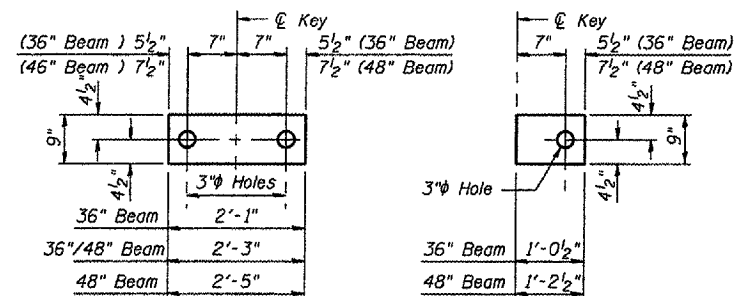
Bar	No.	Size	Length	Shape	
e(E)	12	#4	16'-9"	—	
e ₁ (E)	12	#4	19'-3"	—	
e ₂ (E)	12	#5	16'-9"	—	
e ₃ (E)	12	#5	19'-3"	—	
d ₃ (E)	44	#4	2'-1"	□	
Reinforcement Bars (Epoxy Coated)				lb.	800

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- JBA
CHECKED	- JRG

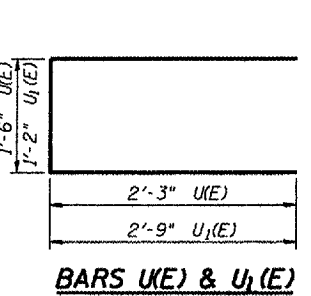
**PARAPET AND
RAILING LAYOUT**
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

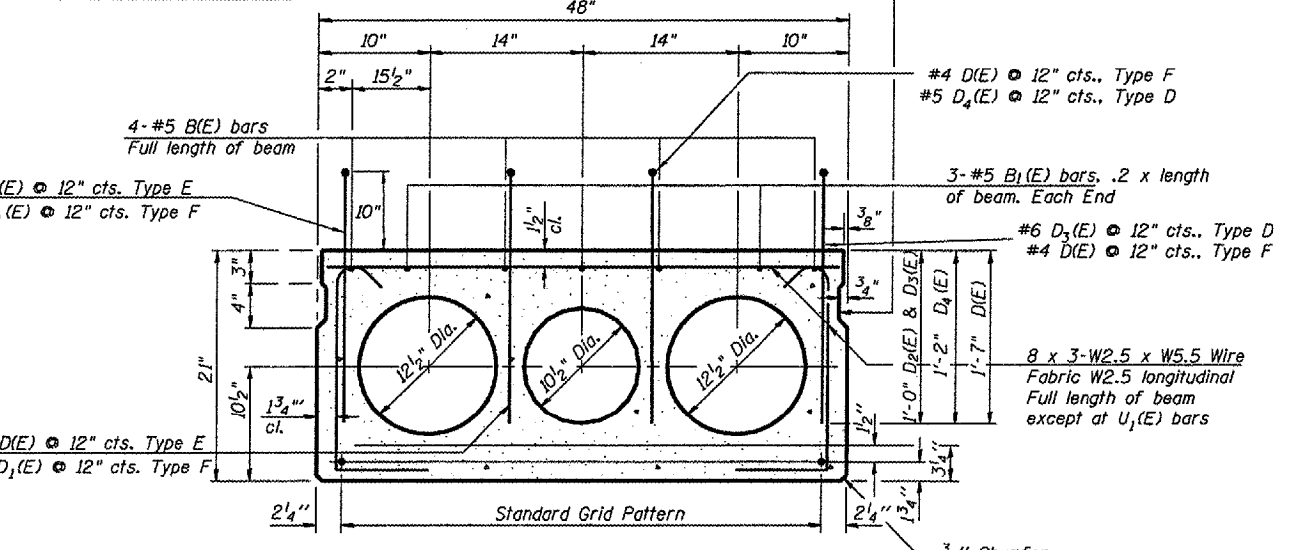
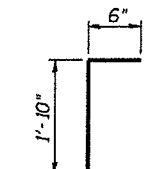
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 317	(48B)	PEORIA	29	21
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
D-94-062-05		#4 D(E) @ 12" cts. Type B, C		



SHIM NOTE:
Provide two (2) 1/8" thick fabric Shim Pads for all beams.
1'-0 1/2" x 9" - 32 locations
1'-2 1/2" x 9" - 8 locations



BARS D(E)



21"x48" TYPICAL SECTION
1/2" φ Strands, Each Strand Stressed to 30,900 Lbs.
6-Strands 1 3/4" up, 10-Strands 3/4" up, 2-Strands 6" up

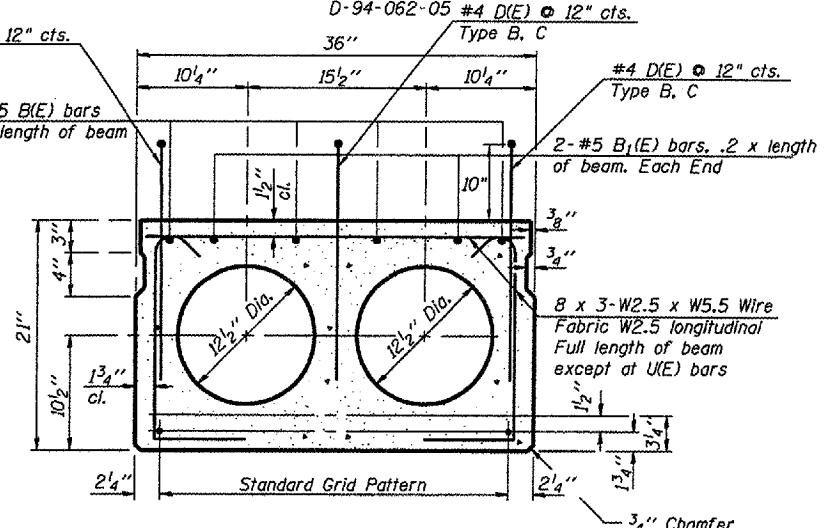
BAR LIST

No. Beams	Beam Type A	Beam Type B	Beam Type C	Beam Type D	Beam Type E	Beam Type F	Beam Type G	Beam Type H	Size	Length	Shape
	22	4	1	1	1	1	1	3			
B (E)	4	4	4	4	4	4	4	4	#5	50'-11"	—
B ₁ (E)	4	4	4	6	6	6	4	6	#5	10'-3"	—
U (E)	12	12	12						#4	5'-6"	—
U ₁ (E)				12	12	12		12	#4	7'-0"	—
D(E)		153	102		102	102	51		#4	2'-4"	—
D ₁ (E)						51			#6	4'-2"	—
D ₂ (E)							51		#4	3'-5"	—
D ₃ (E)				51					#4	3'-2"	—
D ₄ (E)				51					#5	3'-7"	—
E (E)	6	6	6	8	8	6	6	8	#5	2'-10"	—

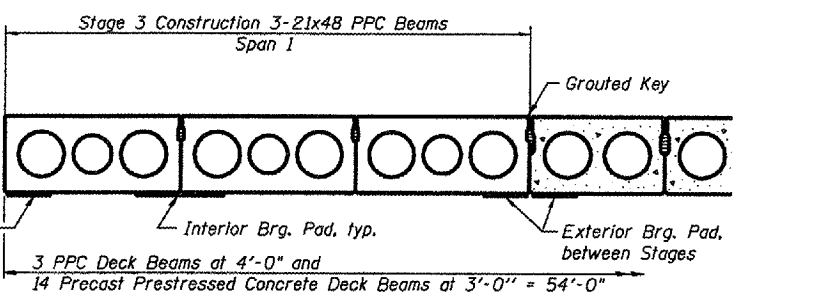
* FOR ONE BEAM ONLY
Bar E(E) shown on Sheet 12
Beam types are shown on Sheet 6

NOTES (SHEET 9, 10, 11)

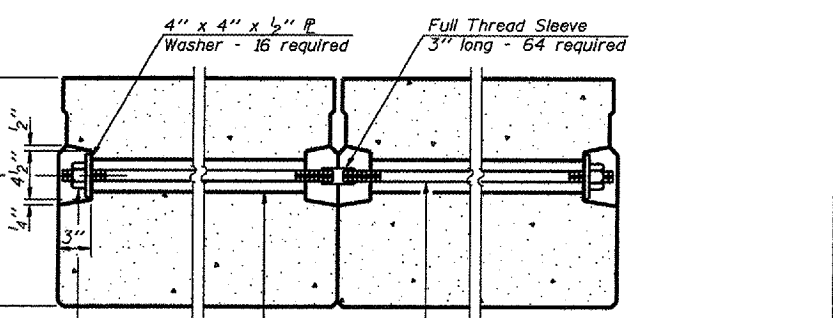
- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
- The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- Lifting loops shall be 3 - 1/2" φ-270 ksi strands, as shown.
- The 1" φ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
- Non prestressing steel shall conform to AASHTO A706 Grade 60. (IL Modified)
- 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 Pad shall be provided for each bearing.
- Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the 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 section 1021 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Required Release Strength, f'ci, shall be 4000 p.s.i.
- The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Prestressed Concrete Products.



21"x36" TYPICAL SECTION
1/2" φ Strands, Each Strand Stressed to 30,900 Lbs.
7-Strands 1 3/4" up, 6-Strands 3/4" up, 2-Strands 9" up



3 PPC Deck Beams at 4'-0" and
14 Precast Prestressed Concrete Deck Beams at 3'-0" = 54'-0"



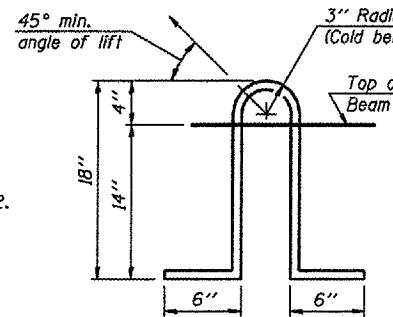
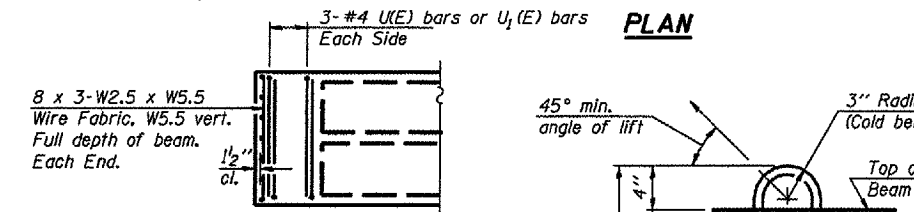
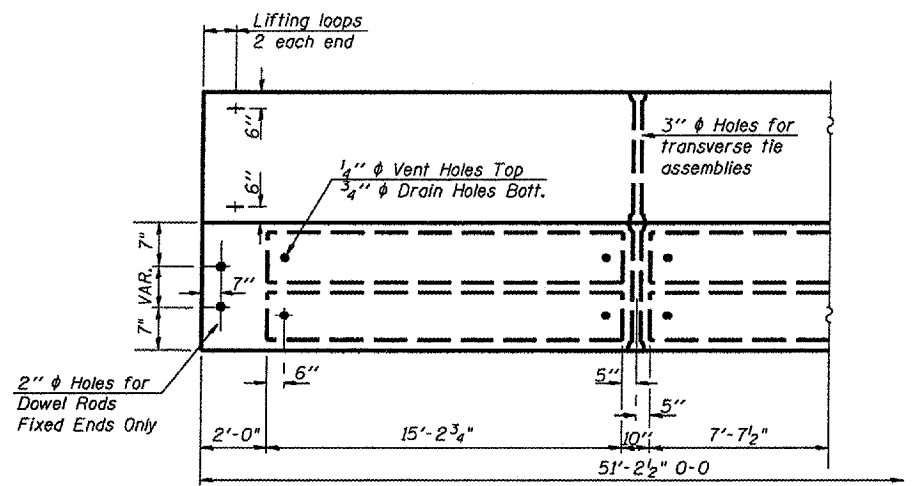
4" x 4" x 1/2" P Washer - 16 required
Full Thread Sleeve 3" long - 64 required
Nut for 1" φ Rod - 16 required
3" φ Opening
1" φ x 2'-11" Rods - 56 required
1" φ x 3'-11" Rods - 12 required
(Thread each end 4")

TYPICAL TRANSVERSE TIE ASSEMBLY

BILL OF MATERIAL

Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	5,530
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21" BEAM DETAILS SPAN 1
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02



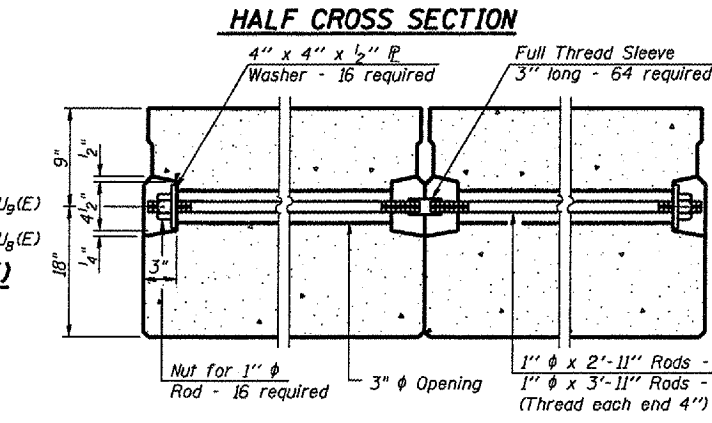
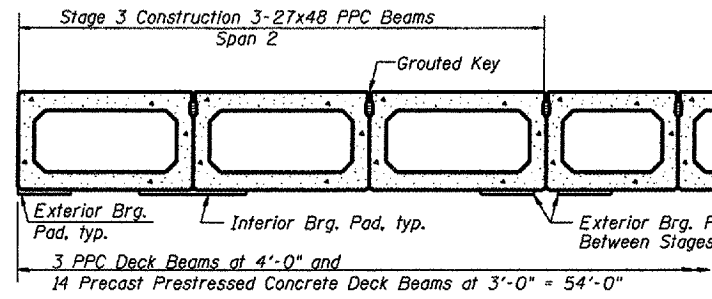
DESIGNED	- JRG
CHECKED	- MJB
DRAWN	- ACJ
CHECKED	- JRG/JFS

PD-3-S 10-22-04

ROUTE NO.	SECTION	COUNTY	SHEETS	DATE	SHEET NO.
F.A.P. 317	(488)1	PEORIA	28	22	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

D-94-062-05

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TYPICAL TRANSVERSE TIE ASSEMBLY

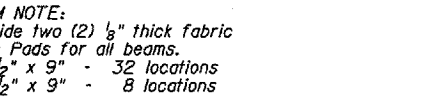
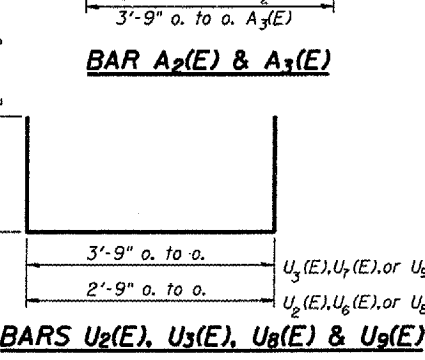
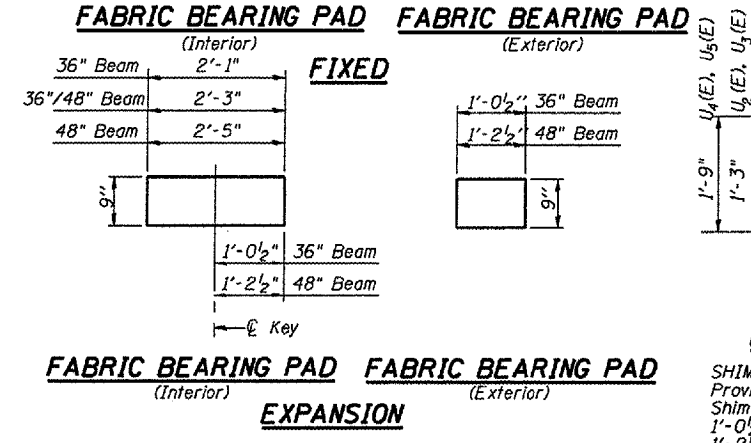
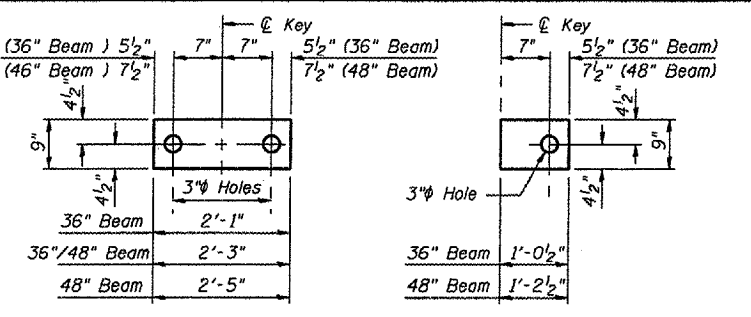
* BAR LIST

No. Beams	Beam Type A	Beam Type B	Beam Type C	Beam Type D	Beam Type E	Beam Type F	Beam Type G	Beam Type H	Size	Length	Shape
A ₁ (E)	118	118	118	118	118	118	118	118	#3	2'-8"	—
A ₂ (E)	54	54	54				54		#4	6'-1"	—
A ₃ (E)				67	67	67	67		#4	7'-1"	—
B ₂ (E)	2	2	2	5	5	5	2	5	#5	58'-4"	—
B ₃ (E)	8	8	8	8	8	8	8	8	#5	11'-8"	—
B ₄ (E)	2	2	2	4	4	4	2	4	#5	58'-4"	—
C(E)	5	5	5	5	6	6	6	5	#5	3'-0"	—
U ₂ (E)	46	46	46				46		#3	34'-0"	—
U ₃ (E)	8	8	8				8		#4	4'-0"	—
U ₄ (E)				59	59	59		59	#3	5'-6"	—
U ₅ (E)				8	8	8		8	#4	5'-6"	—
D(E)		116	58		58	58	58		#4	2'-4"	—
D ₂ (E)							58		#6	3'-5"	—
D ₃ (E)				58					#4	3'-2"	—
D ₅ (E)		58	58		58	58			#4	2'-4"	—
D ₆ (E)						58			#6	4'-2"	—
D ₇ (E)				58					#5	3'-7"	—
E ₁ (E)	6	6	6	8	8	8	6	8	#5	2'-6"	—

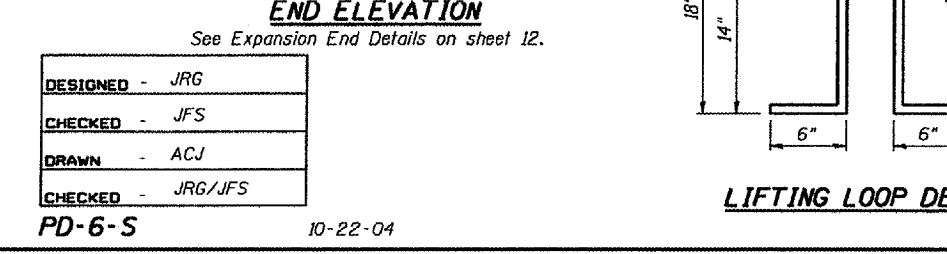
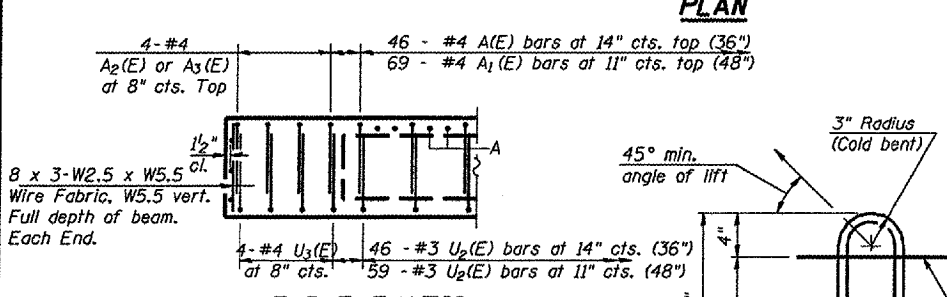
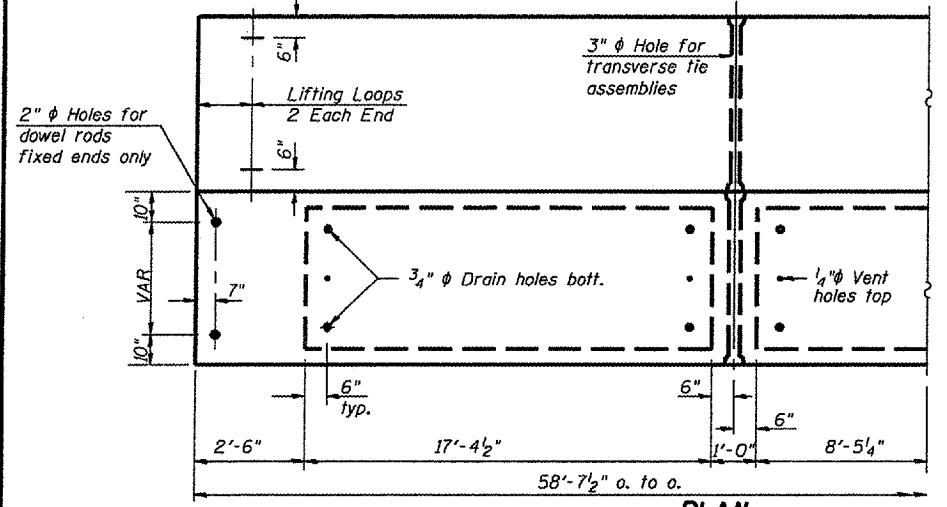
* FOR ONE BEAM ONLY Bars C(E) and E₁(E) shown on Sheet 12

NOTES

1. See sheet 9 for notes.

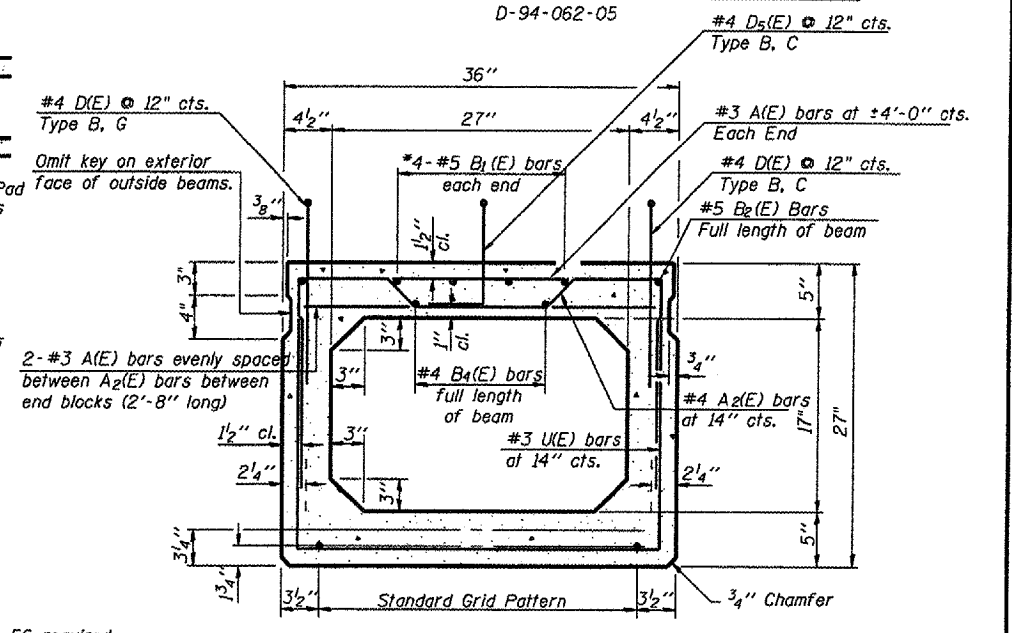


SHIM NOTE: Provide two (2) 1/8" thick fabric Shim Pads for all beams. 1'-0 1/2" x 9" - 32 locations 1'-2 1/2" x 9" - 8 locations



DESIGNED	JRG
CHECKED	JFS
DRAWN	ACJ
CHECKED	JRG/JFS

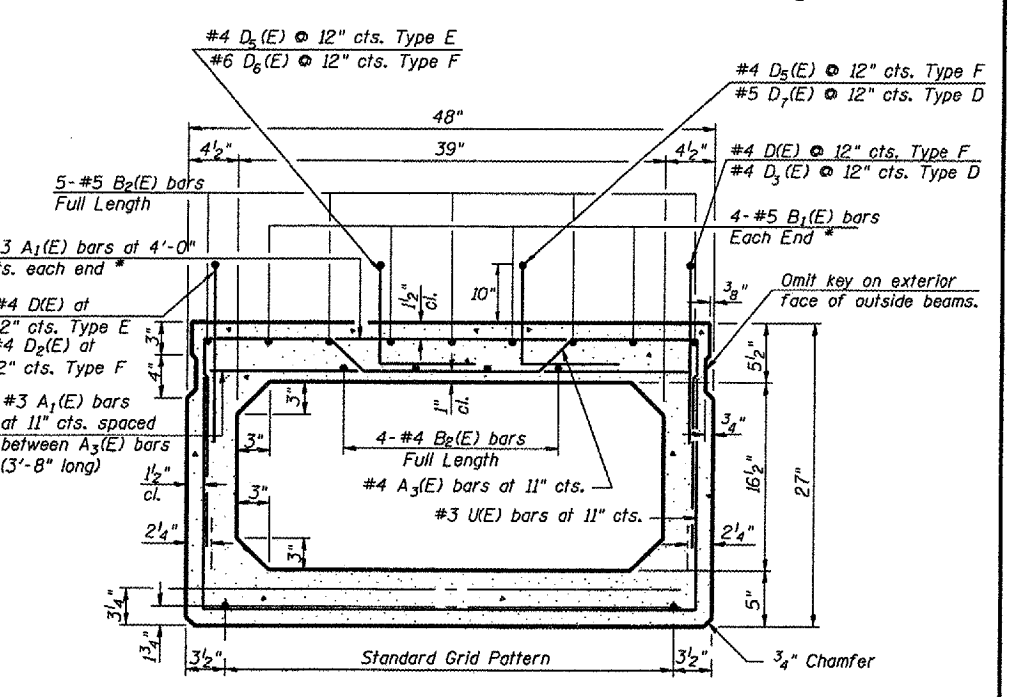
PD-6-S 10-22-04



27"x36" TYPICAL SECTION

3/2" φ Strands, Each Strand Stressed to 30,900 Lbs. 8-Strands 1 3/4" up, 4-Strands 3/4" up

Note: Place strands symmetrically about centerline of beam.



27"x48" TYPICAL SECTION

3/2" φ Strands, Each Strand Stressed to 30,900 Lbs. 13-Strands 1 3/4" up, 4-Strands 3/4" up

Note: Place strands symmetrically about centerline of beam.

BILL OF MATERIAL

Precast Prestressed Concrete Deck Beams (27" Depth)	50 FT	6,332
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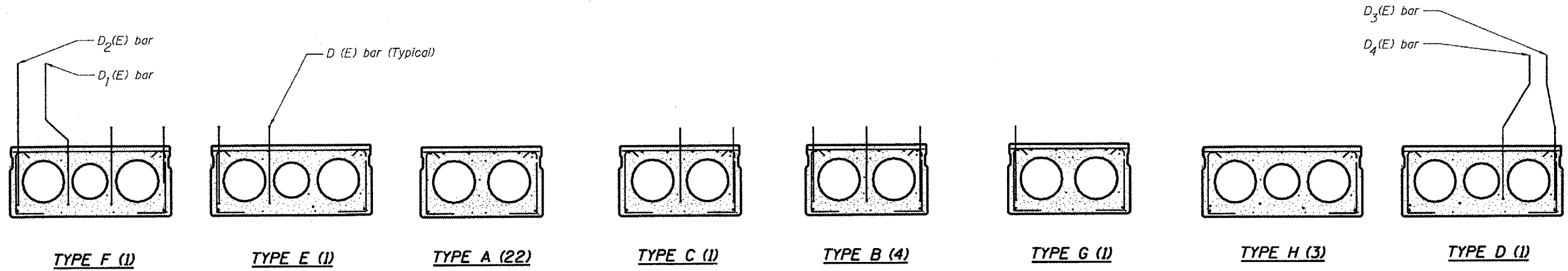
27" BEAM DETAILS SPAN 2
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

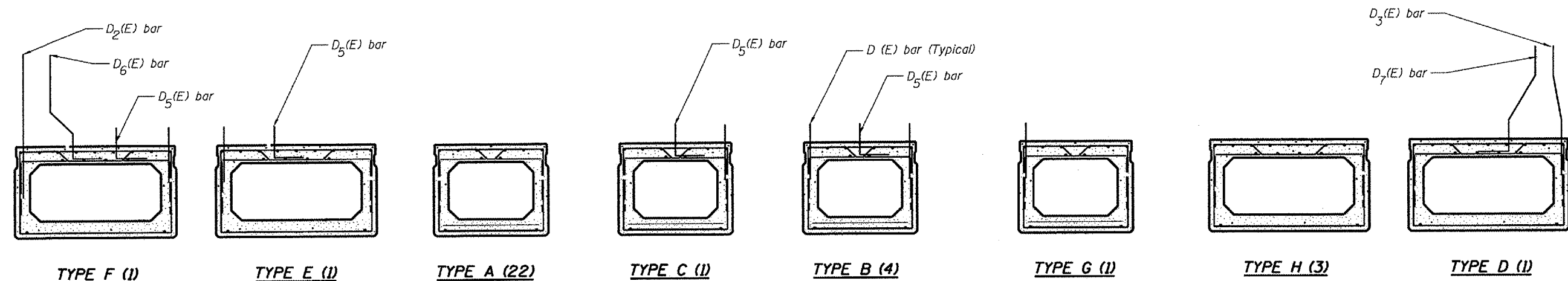
ROUTE NO. F.A.P. 317	SECTION (488)	COUNTY PEORIA	SHEET 29	DATE 23
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

SHEET NO. 11
16 SHEETS

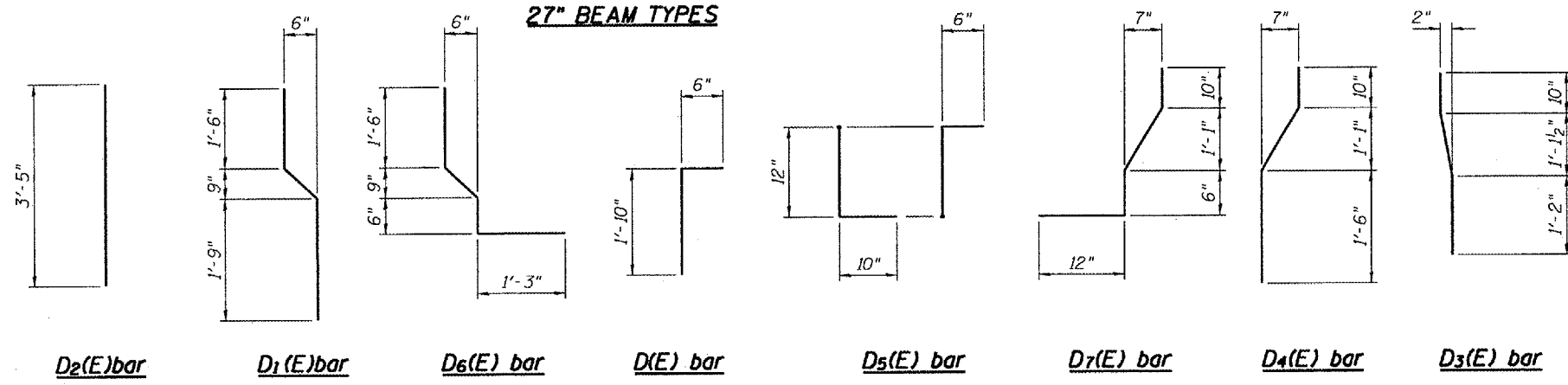
D-94-062-05



21" BEAM TYPES



27" BEAM TYPES



BEAM TYPES
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

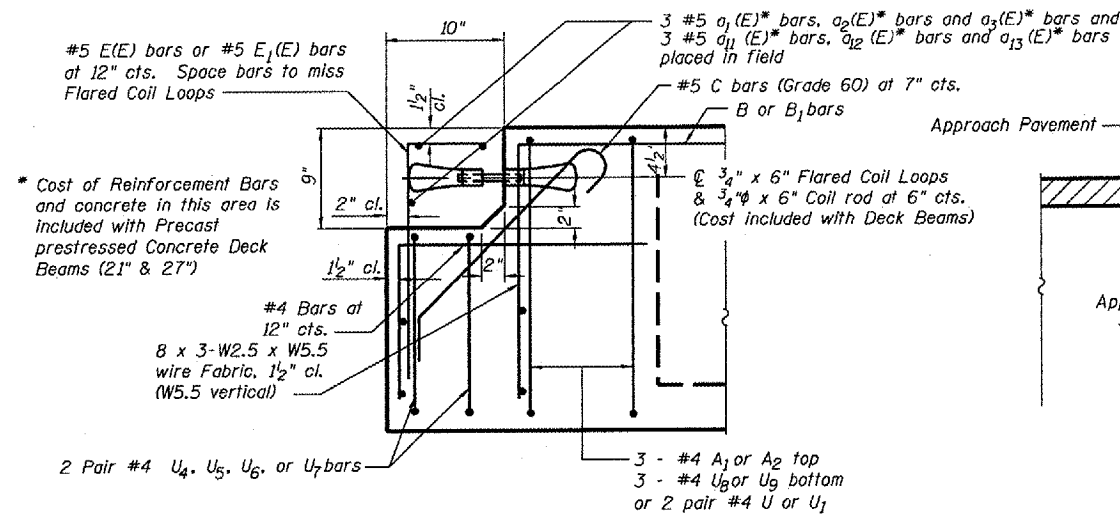
DESIGNED	-	JRG
CHECKED	-	JFS
DRAWN	-	ACJ
CHECKED	-	JRG/JFS

PD-3-S

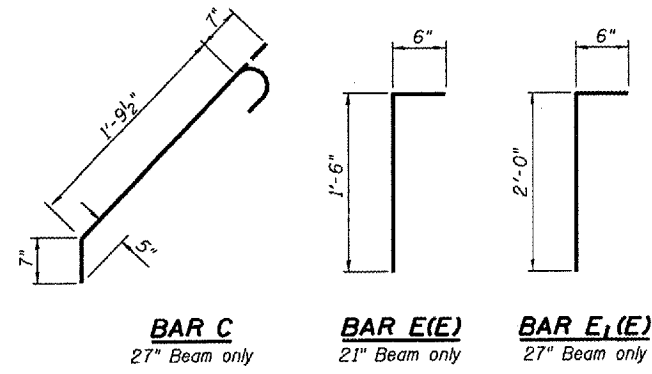
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
F.A.P. 317	(4881)	PEORIA	29 24	12
FED. ROAD DIST. NO. 7	ALTERN.	FED. AID PROJECT		16 SHEETS

D-94-062-05



END OF BEAM (EXP. END)
West Bound Beams 1A, 2A, 3A, 5 thru 18
East Bound Beams 19 thru 32, 34A, 35A, 36A



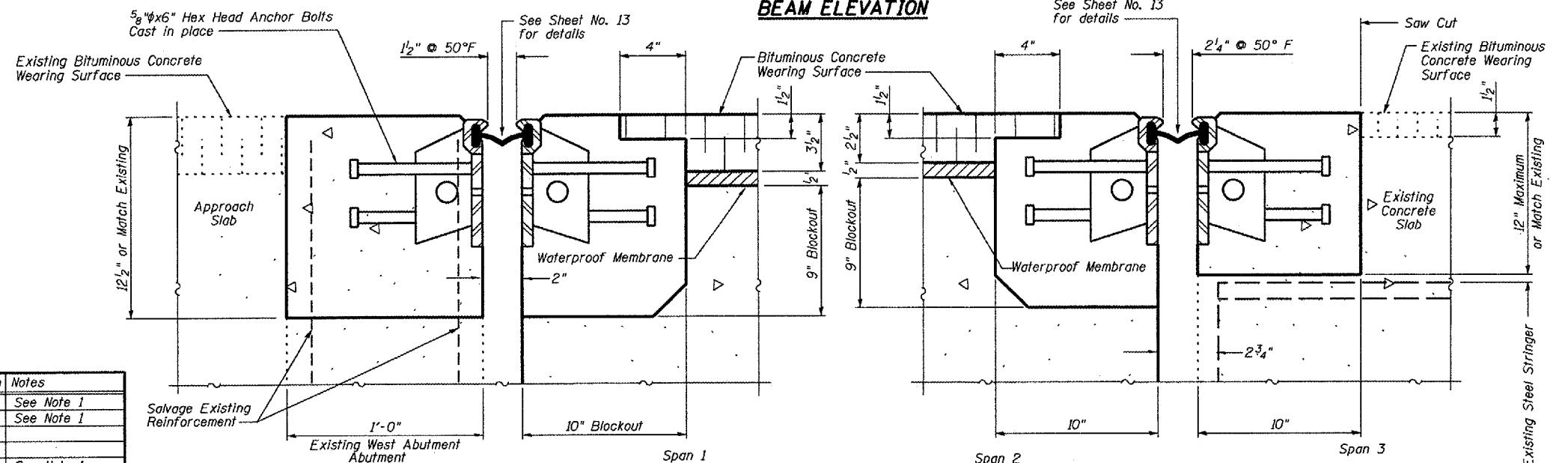
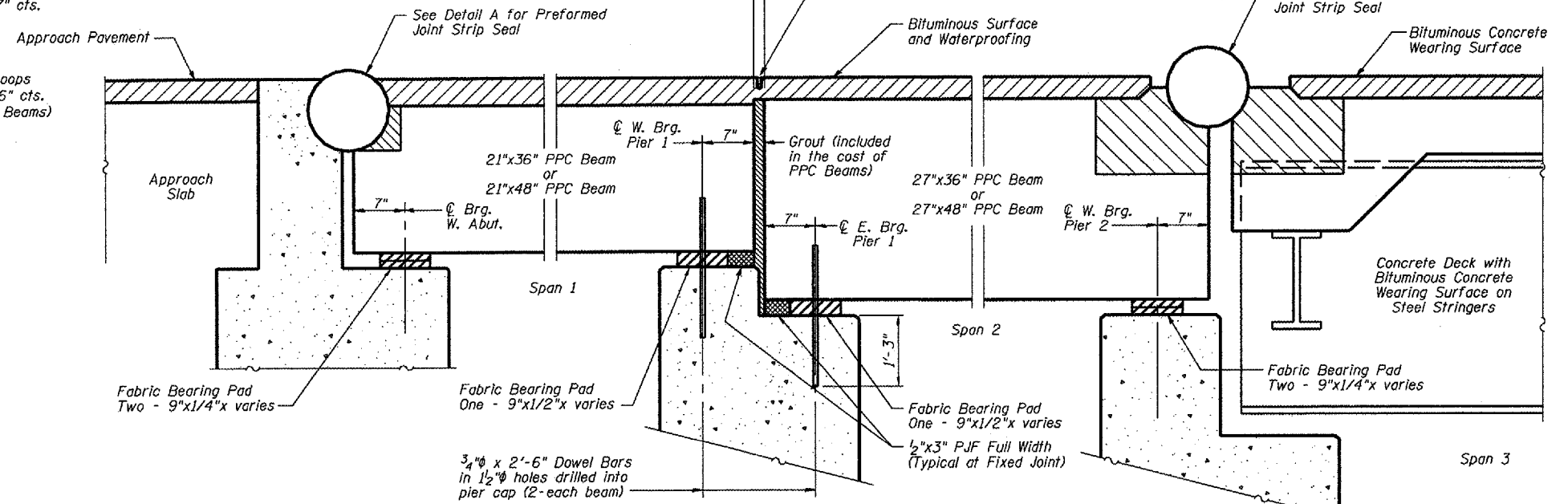
Bar E(E) is shown on the Bar List on sheet 9.
Bar C and Bar E₁(E) are shown on the Bar List on sheet 10.

BAR LIST*

Location	Bar	No.	Size	Length	Shape	Bar Lap Location	Notes
Stage 1 - Westbound	a ₁ (E)	6	#5	23'-10"	—	none	See Note 1
Stage 2 - Westbound	a ₂ (E)	6	#5	10'-9"	—	Beam 11	See Note 1
Stage 3 - Westbound	a ₃ (E)	6	#5	22'-9"	—	Beam 8	
Stage 1 - Eastbound	a ₁₁ (E)	6	#5	23'-10"	—	none	See Note 1
Stage 2 - Eastbound	a ₁₂ (E)	6	#5	15'-6"	—	Beam 26	See Note 1
Stage 3 - Eastbound	a ₁₃ (E)	6	#5	18'-0"	—	Beam 31	

NOTE:
1. The blockouts in Beams 11 and 26 shall have 1 linear foot of the concrete for the expansion device placed during Stage 1 and 2 linear feet of concrete placed during Stage 2 to allow for bar splices in the "a (E)" bars. Similarly, Beam 8 shall have 1 linear foot of concrete placed during Stage 2 and the remainder placed during Stage 3.

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS



NOTE:
Demolition of the existing joint seal along with portions of the existing abutment, sidewalk and median are included in the Preformed Joint Strip Seal.

NOTE:
Demolition of the existing joint seal along with portions of the existing asphalt surface and concrete deck, sidewalk and median are included in the Preformed Joint Strip Seal.

MISCELLANEOUS DETAILS
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

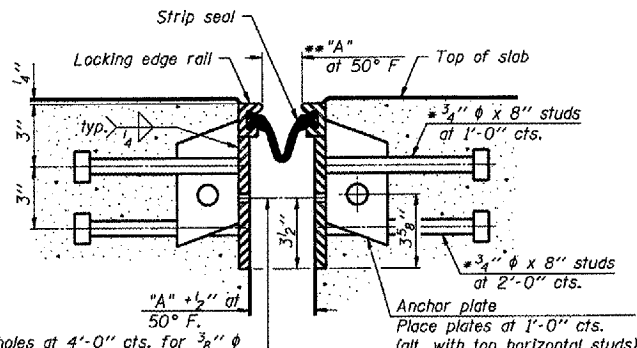
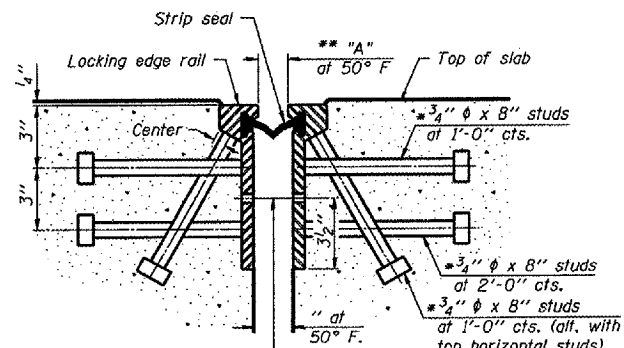
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 317	(48B)	PEORIA	29	25

D-94-062-05

16 SHEETS

- * Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.
- ** Abutment: L = 51.2 feet A = 7/8", use A = 1/2"
- ** Pier 2: L = 58.7 + 68.4 + 87 = 214.1 feet A = 1 7/8", use A = 2 1/4"



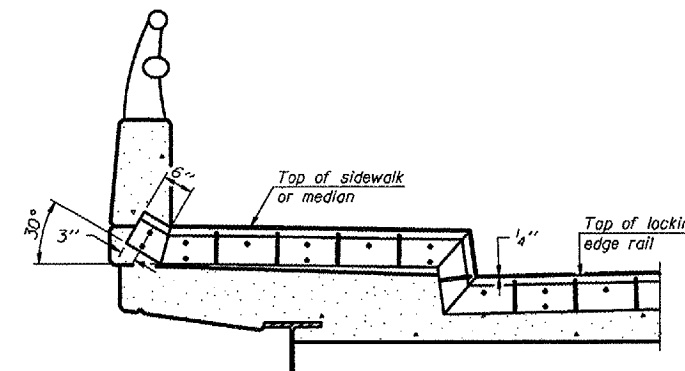
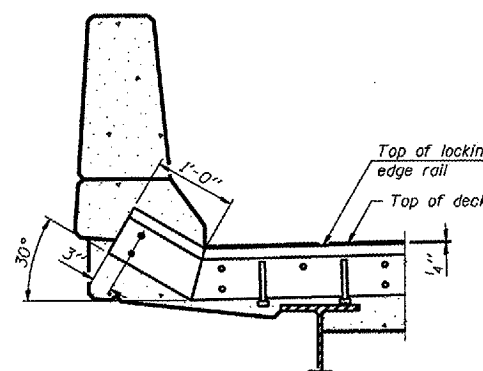
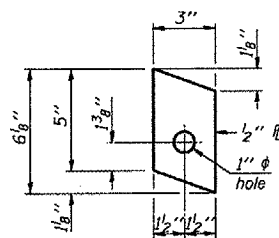
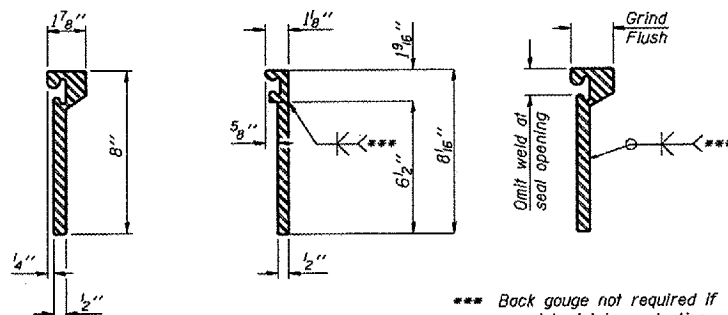
7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches. The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints. The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications; shop painting will not be allowed.

SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL **WELDED RAIL**

*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

LOCKING EDGE RAILS

AT PARAPET

AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	224

DESIGNED
CHECKED
DRAWN
CHECKED

EJ-SSJ

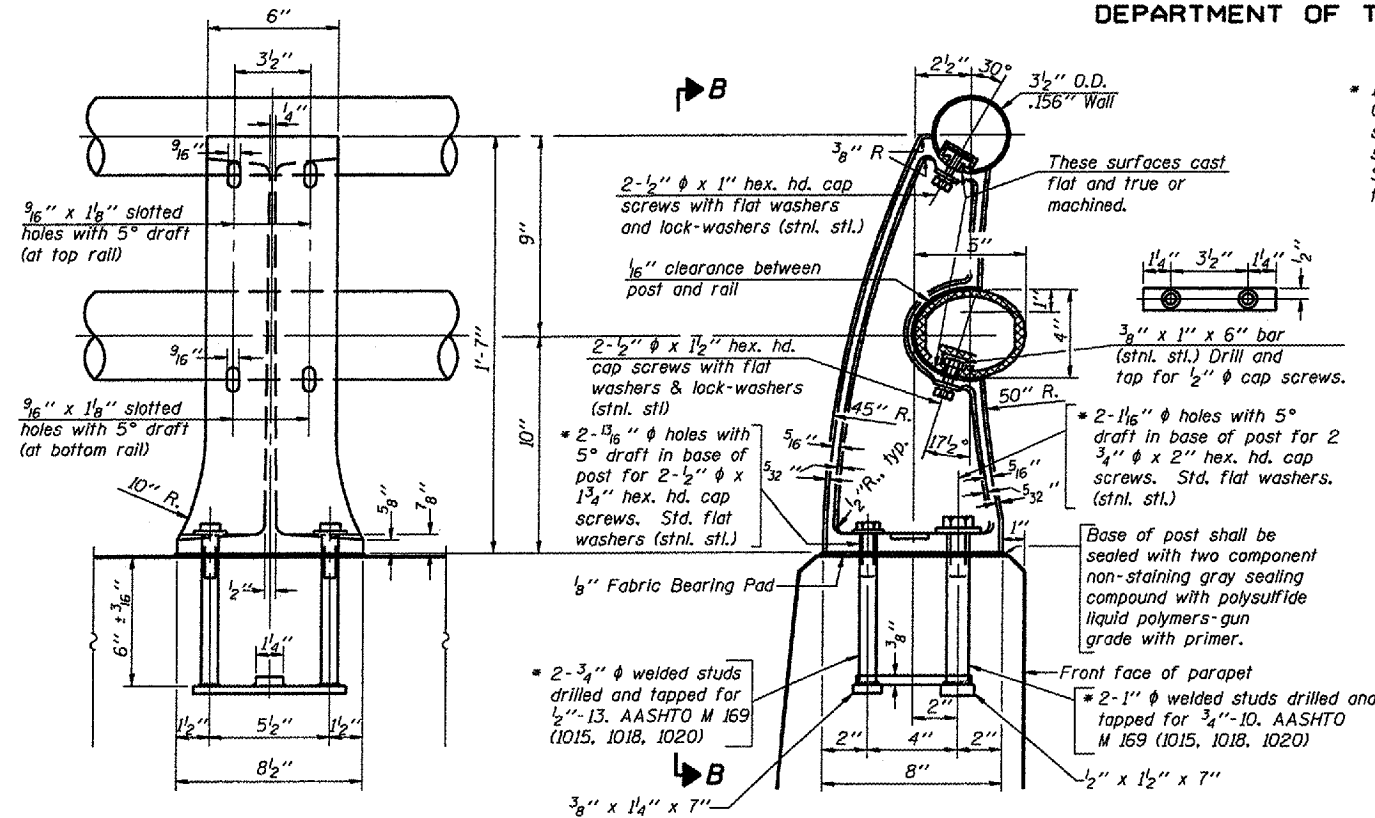
11-1-06

PREFORMED JOINT STRIP SEAL
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

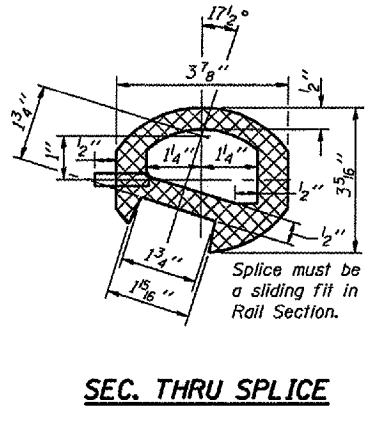
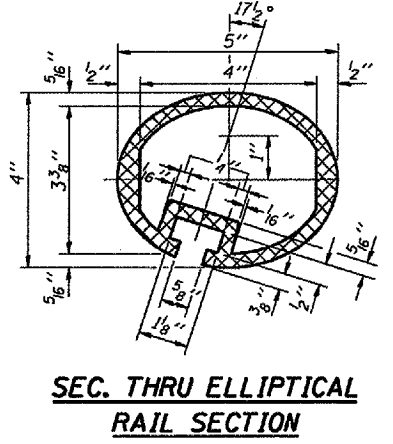
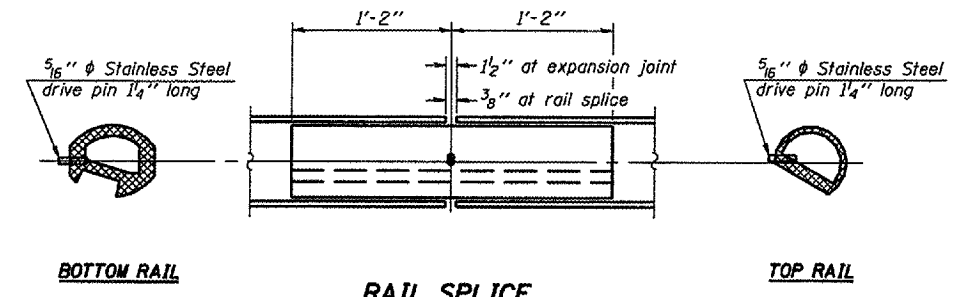
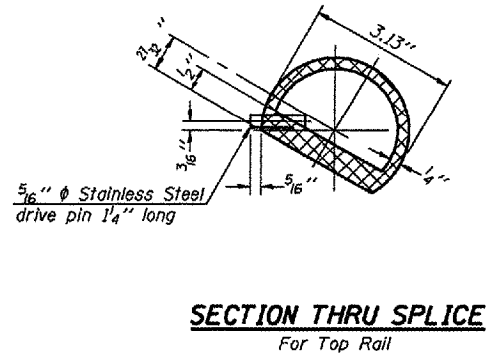
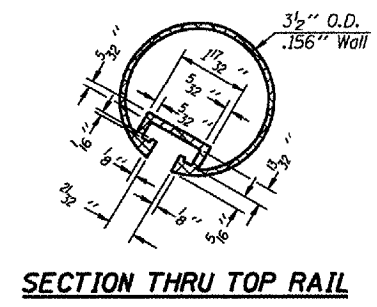
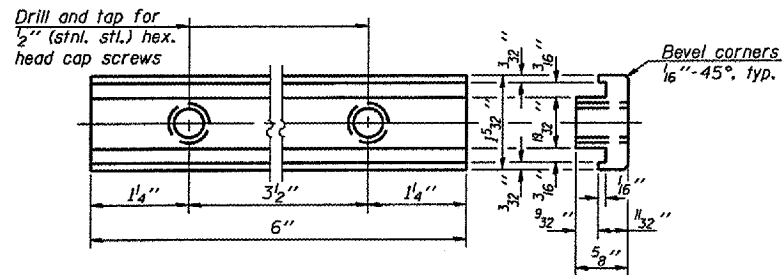
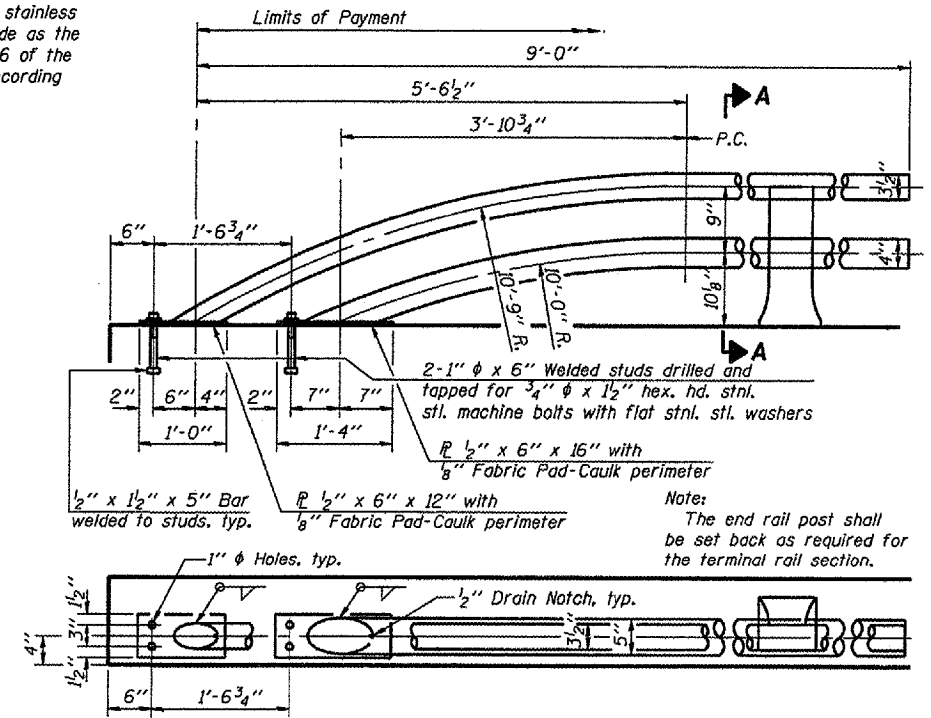
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	"OF"	SHEET NO. 14
F.A.P. 317	(48B)I	PEORIA	29	26	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

D-94-062-05



* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



BILL OF MATERIAL

Item	Unit	Quantity
Connector for each Type L Aluminum Railing	Each	22
Removing and re-erecting existing Railing	Foot	220

Notes:

All Posts shall be normal to parapet.

All joints in rail shall be spliced per detail.

Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.

See sheet 8 of 16 for rail post spacing.

Existing railing shall be removed & re-erected, and will be paid for at the contract price per foot for removing & re-erecting existing railing.

TYPE L ALUMINUM RAILING
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED - JRG
CHECKED - JFS
DRAWN - ARA
CHECKED - JRG
R-20

11-1-06 (7'-0" to 10'-0" Post spacing)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

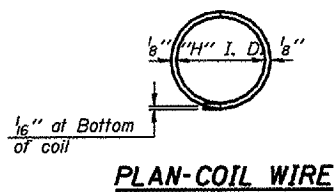
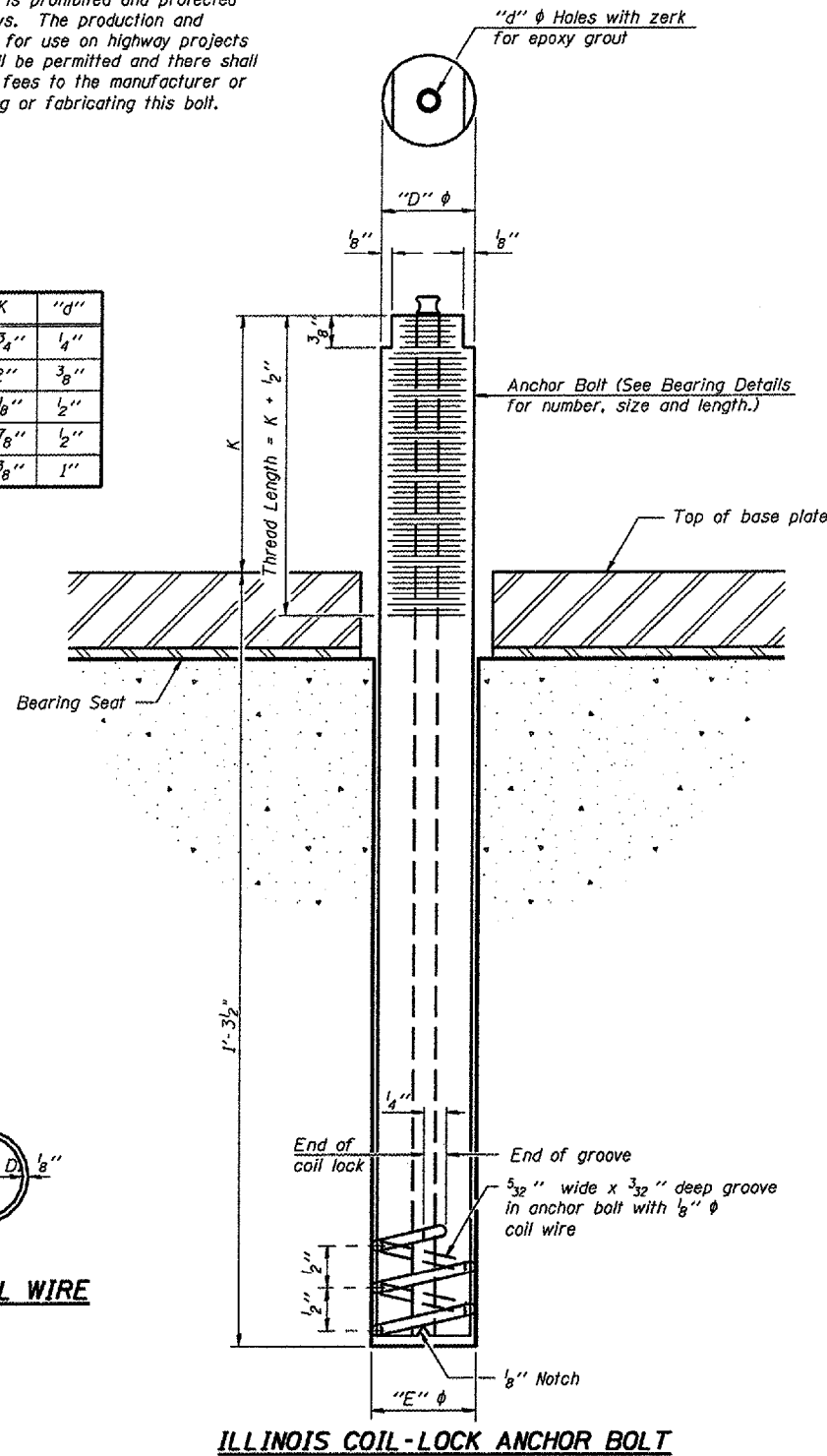
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 317	(488)I	PEORIA	29	15
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

D-94-062-05

16 SHEETS

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

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

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

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

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

ALTERNATE ANCHOR BOLTS

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

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

Location	Type
Pier 2	A307
Abutment	A307

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

GENERAL NOTES

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

ANCHOR BOLT DETAILS
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED - JRG
CHECKED - JFS
DRAWN - ARA
CHECKED - JRG

ABB-1

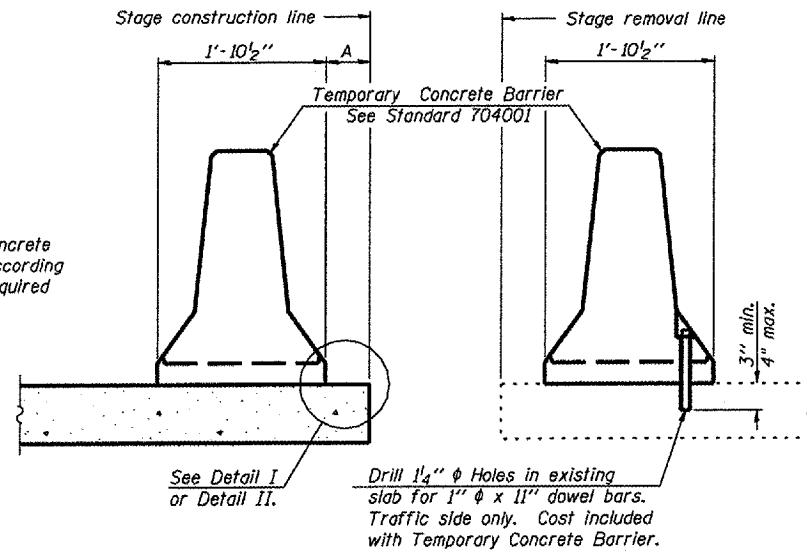
10-22-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	"OF"	SHEET NO.
F.A.P. 317	(48B)1	PEORIA	29	28	16
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

D-94-062-05

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".



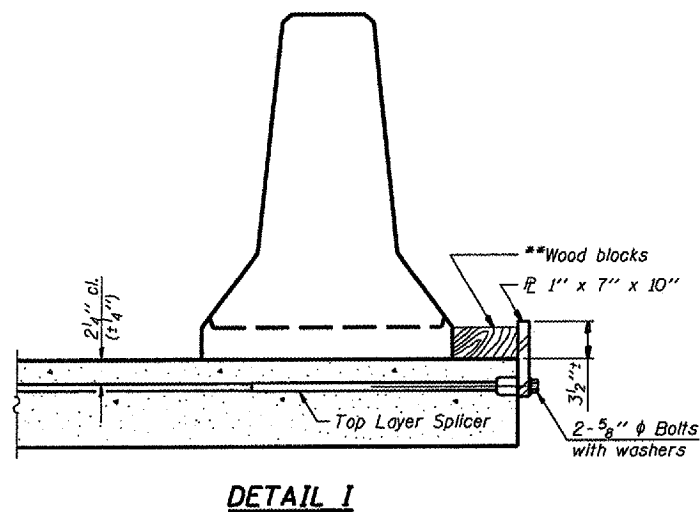
NEW SLAB

EXISTING SLAB

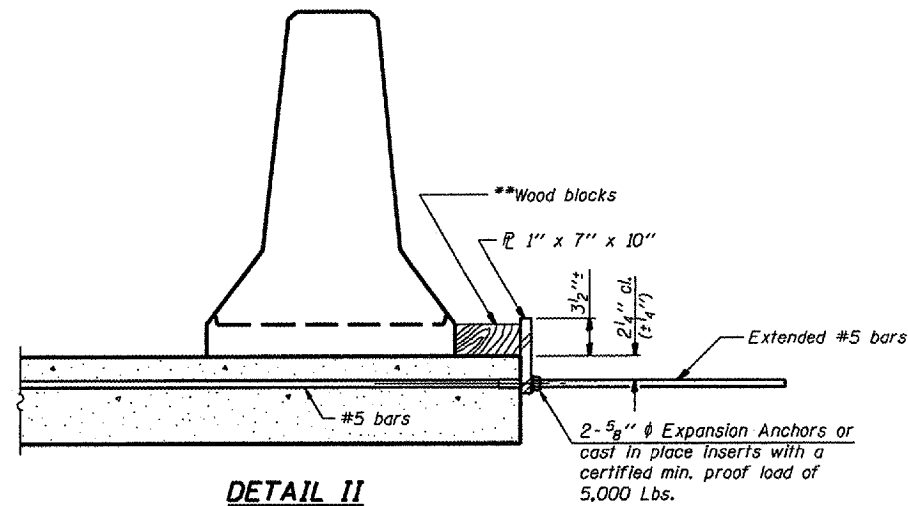
SECTIONS THRU SLAB

NOTES

- Detail I - With Bar Splicer or Couplers:**
Connect one (1) 1"x7"x10" steel \bar{r} to the top layer of couplers with 2- $\frac{5}{8}$ " ϕ bolts screwed to coupler at approximate \bar{c} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:**
Connect one (1) 1"x7"x10" steel \bar{r} to the concrete slab with 2- $\frac{5}{8}$ " ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{c} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 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.

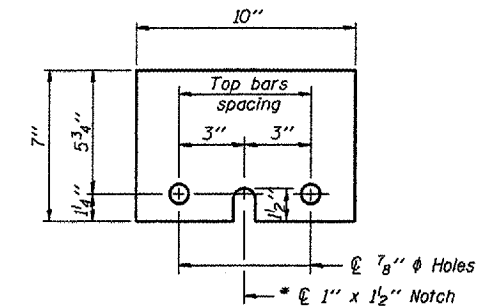


DETAIL I



DETAIL II

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



STEEL RETAINER \bar{r} 1" x 7" x 10"

* Required only with Detail II

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02

DESIGNED -	JRG
CHECKED -	JFS
DRAWN -	ARA
CHECKED -	JRG

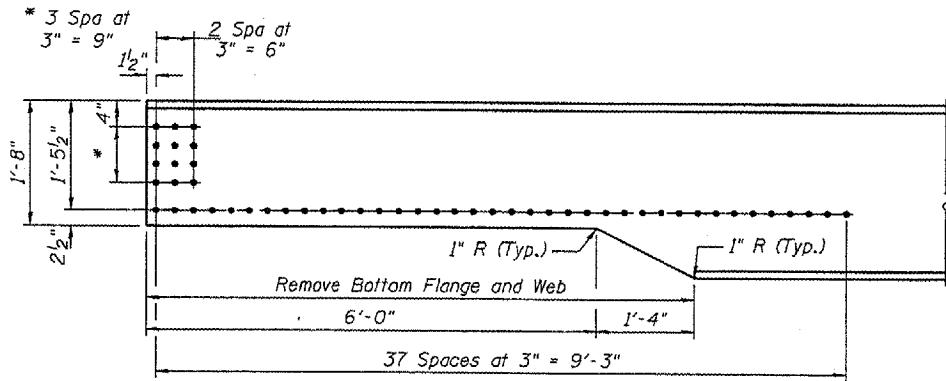
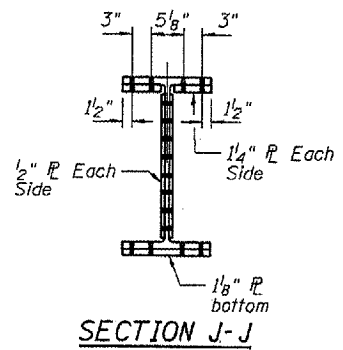
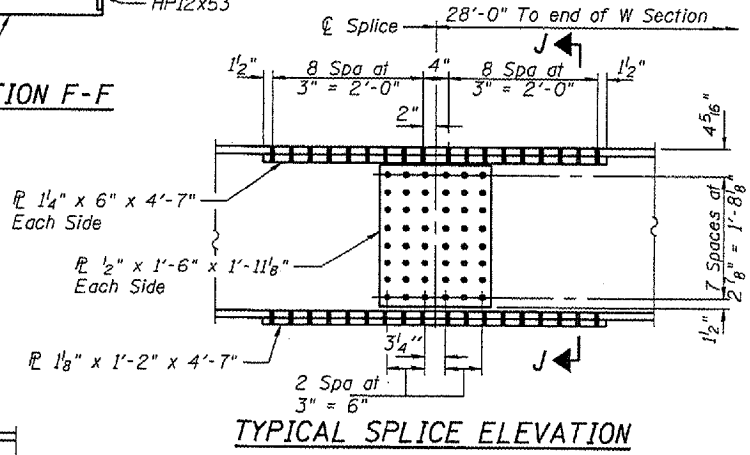
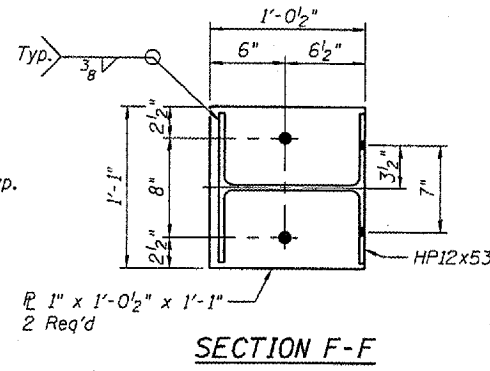
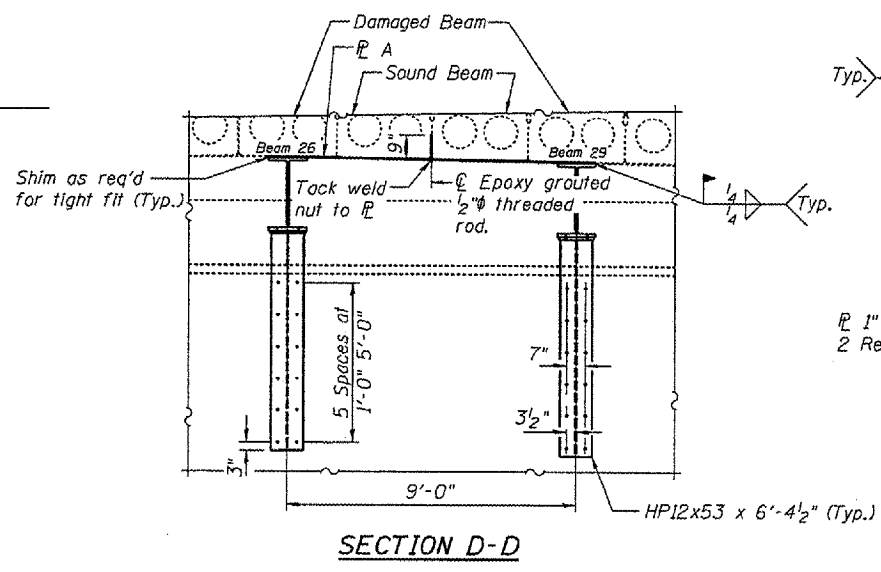
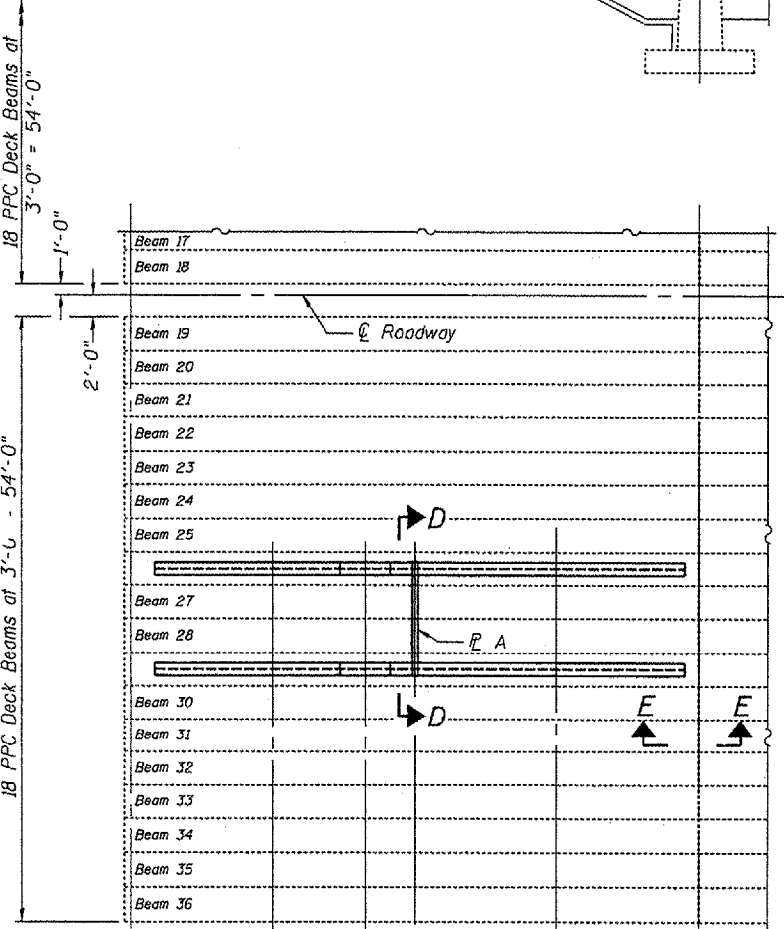
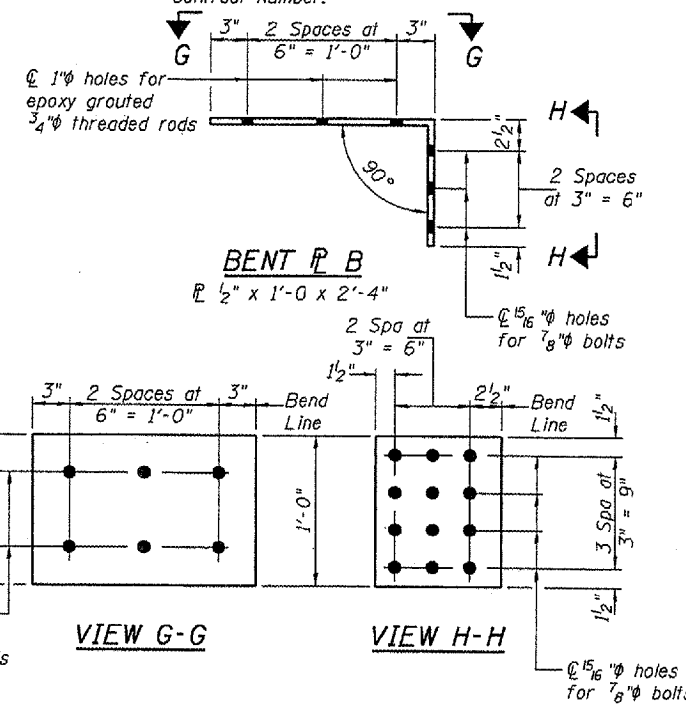
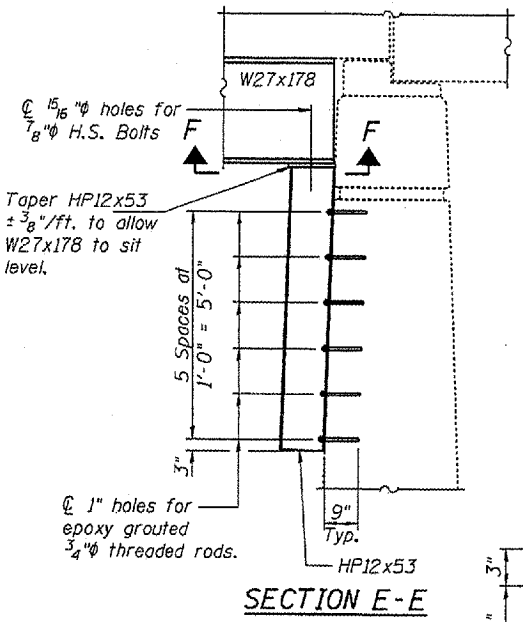
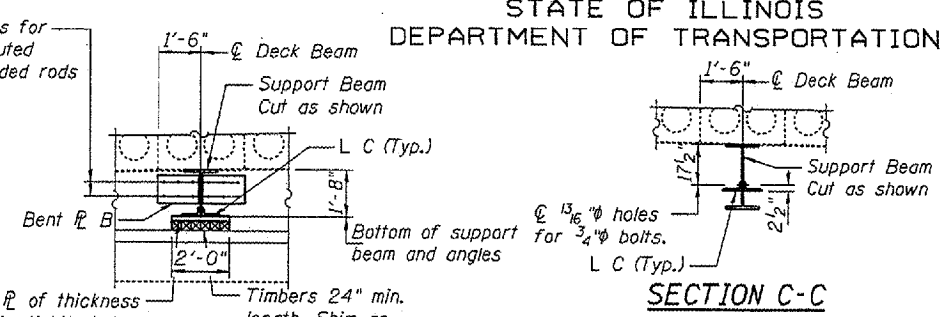
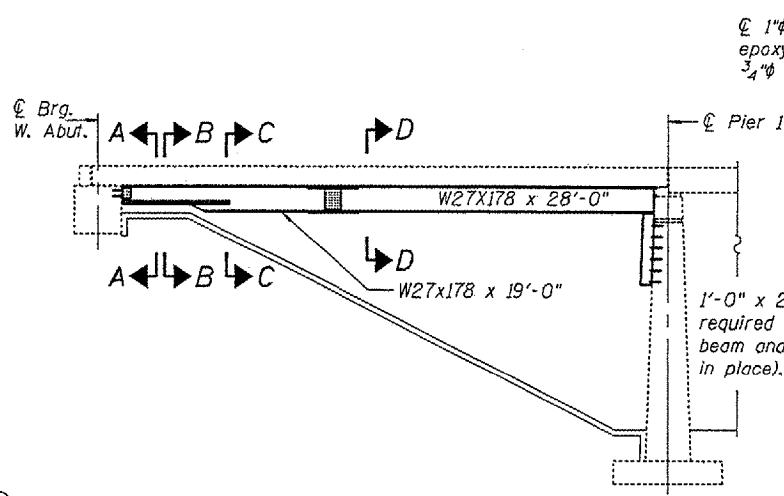
R-27

11-1-06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 1
		Peoria	29	29	1 SHEETS

Contract Number: ---



GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
See Section 584 of the Std. Specs. for "Epoxy Grouting of Threaded Rods".
The cost of epoxy grouting threaded rods shall be included with Furnishing and Erecting Structural Steel.
Fasteners shall be high strength bolts. Bolts 3/4", open holes 13/16", unless otherwise noted.
Fasteners shall be high strength bolts. Flange splice holes shall be 15/16" for 7/8" bolts. Web splice holes shall be 13/16" for 3/4" bolts.

FOR INFORMATION ONLY

PLAN, ELEVATION AND REPAIR DETAILS
F.A.I. RT. 474
PEORIA COUNTY
SN 072-0134

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	21250

DESIGNED	D.A.B.	EXAMINED	
CHECKED	A.J.B.	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN	Drew Christopher		ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	D.A.B. A.J.B.		

Expires: November 30, 2008