

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19 BR-1	FORD	50	1

CONTRACT NO. 66697

P-93-051-04  
D-93-017-07

50  
+1  
51

**INDEX OF SHEETS**

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTIONS
5. SCHEDULE OF QUANTITIES
6. ALIGNMENT, TIES & BENCHMARKS
7. TRAFFIC CONTROL CONSTRUCTION STAGING NOTES AND DETAILS STAGE I
8. TRAFFIC CONTROL CONSTRUCTION STAGING I
9. TRAFFIC CONTROL CONSTRUCTION STAGING NOTES AND DETAILS STAGE II
10. TRAFFIC CONTROL CONSTRUCTION STAGING II
11. PLAN AND PROFILE
12. EROSION CONTROL, LANDSCAPING & PAVEMENT MARKING PLAN
13. RIGHT-OF-WAY PLAN
- 14-33. BRIDGE PLANS
- 34-40. EXISTING BRIDGE PLANS
- 41-42A. DETAILS
- 43-50. CROSS SECTIONS

**HIGHWAY STANDARDS**

- |           |   |
|-----------|---|
| 000001-04 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                  |
| 280001-03 | TEMPORARY EROSION CONTROL SYSTEMS                             |
| 420401-05 | BRIDGE APPROACH PAVEMENT                                      |
| 515001-02 | NAME PLATE FOR BRIDGES  |
| 542401    | METAL END SECTION FOR PIPE CULVERTS                           |
| 601101    | CONCRETE HEADWALL FOR PIPE DRAIN                              |
| 606001-03 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 609006-03 | BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)                       |
| 630001-07 | STEEL PLATE BEAM GUARDRAIL                                    |
| 630201-04 | PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL           |
| 630301-04 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS    |
| 631031-06 | TRAFFIC BARRIER TERMINAL, TYPE 6                              |
| 635006-02 | REFLECTOR AND TERMINAL MARKER PLACEMENT                       |
| 635011-01 | REFLECTOR MARKER AND MOUNTING DETAILS                         |
| 667101    | PERMANENT SURVEY MARKERS                                      |
| 701301-02 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                   |
| 701321-08 | LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER              |
| 701326-02 | LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH  |
| 702001-06 | TRAFFIC CONTROL DEVICES                                       |
| 704001-03 | TEMPORARY CONCRETE BARRIER                                    |
| 720001    | SIGN PANEL MOUNTING DETAILS                                   |
| 720006-01 | SIGN PANEL ERECTION DETAILS                                   |
| 780001-01 | TYPICAL PAVEMENT MARKINGS                                     |
| 781001-02 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS       |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
HIGHWAY IMPROVEMENT**

FAP ROUTE 693 (ILLINOIS ROUTE 9)

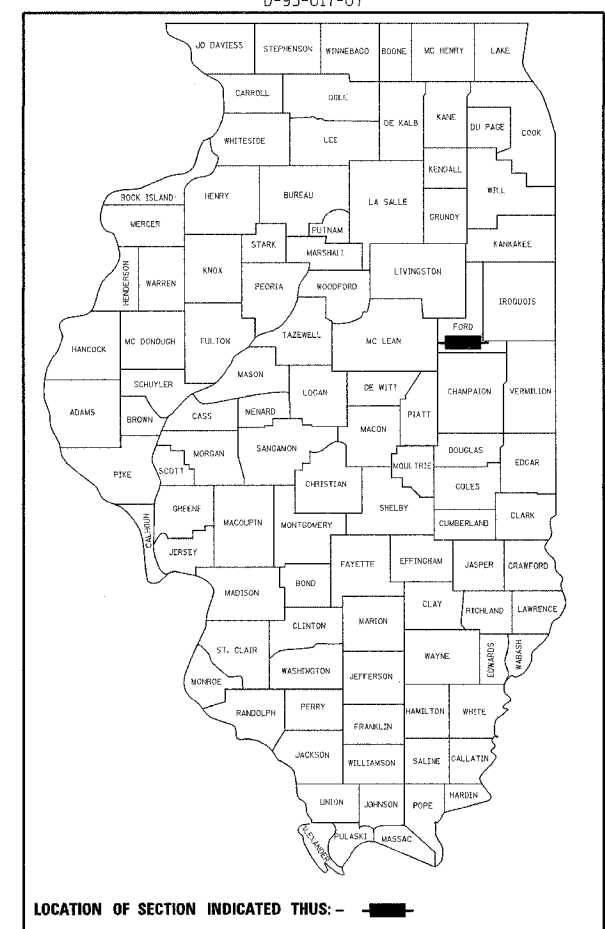
SECTION 19 BR-1  
PROJECT ACBRF-0693 (061)  
FORD COUNTY

C-93-024-07  
BRIDGE REPLACEMENT AT  
DRUMMER CREEK  
R 7 E

SECTION 19 BR-1  
S.N. 027-0006 (EXISTING)  
S.N. 027-0096 (PROPOSED)  
BRIDGE REPLACEMENT

END IMPROVEMENT  
STA. 813+00

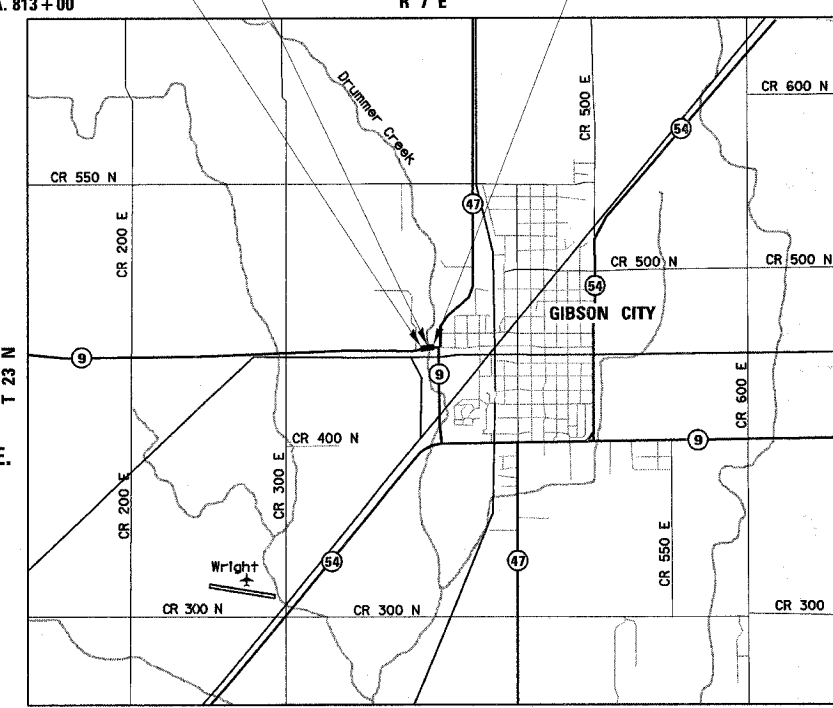
BEGIN IMPROVEMENT  
STA. 808+50



LOCATION OF SECTION INDICATED THUS: -

FUNCTIONAL CLASSIFICATION - RURAL MINOR ARTERIAL  
DESIGN SPEED = 30 MPH  
POSTED SPEED = 30 MPH  
2009 ADT = 2,450  
P.V. = 84.1% S.U. = 11.4% M.U. = 4.5%

**STRUCTURE NUMBER 027-0096 (STA 810+73.11)**  
REMOVE AND REPLACE THE EXISTING BRIDGE DECK, VAULTED ABUTMENT SLABS, APPROACH SLABS AND ALL JOINTS UTILIZING STAGED CONSTRUCTION. REMOVE AND REPLACE THE EXPANSION BEARINGS AT THE VAULTED ABUTMENTS. REPAIR SUBSTRUCTURE AND SLOPE WALLS. PERFORM ALL NECESSARY ROADWAY WORK TO COMPLETE THE BRIDGE REPAIRS, INCLUDING GUARDRAIL REMOVAL AND REPLACEMENT AND SHOULDER WIDENING AND CURB AND GUTTER REPLACEMENT AT ALL FOUR QUADRANTS OF THE BRIDGE.

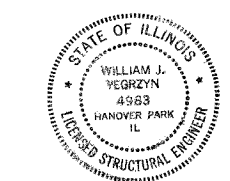


NE 1/4, SECTION 10, TWP. 23N. RANGE 7E, 3RD PM  
GROSS LENGTH = 450 FT. = 0.085 MI.  
NET LENGTH = 450 FT. = 0.085 MI.

**rjngroup** License # 184-000813  
200 West Front Street  
Wheaton, IL 60187  
Excellence through Ownership



8-7-07  
REGISTERED P.E. STATE OF ILLINOIS 11-30-07 EXPIRES



8-7-07  
REGISTERED P.E. STATE OF ILLINOIS 11-30-08 EXPIRES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED 8/16 20 07

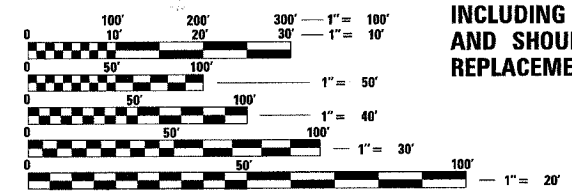
*Eric E. Haral*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 12, 20 07  
*Eric E. Haral*  
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

October 12, 20 07  
*Milton R. Seco, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

MICROFILMED \_\_\_\_\_  
REEL NUMBER \_\_\_\_\_  
AWARDED \_\_\_\_\_  
RESIDENT ENGINEER \_\_\_\_\_  
AS BUILT CHANGES WERE MADE  
ON THE FOLLOWING SHEETS \_\_\_\_\_



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

DISTRICT 3 NO. (815) 434-6131  
PROJECT ENGINEER: JOE KANNEL  
UNIT CHIEF: MICHELE LINDEMANN  
TOWNSHIP: DRUMMER

**CONTRACT NO. 66697**

8/16/2007 9:50:53 AM K:\I200206\Cadd\Design\I200206\_Cover.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19 BR-1	FORD	50	2
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		

CONTRACT NO. 66697

### GENERAL NOTES – ROADWAY

1. THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.
2. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
3. THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
4. THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE.

### GENERAL NOTES – TRAFFIC CONTROL & PROTECTION

1. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

### GENERAL NOTES – DRAINAGE & UTILITIES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED).
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
3. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
4. MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF IMPROVEMENT ARE:
  - AMEREN CIPS
  - EASTERN ILLINOIS ELECTRIC
  - AT&T
  - MEDIACOM
  - NICOR
  - GIBSON CITY
5. NON-MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF IMPROVEMENT ARE:
  - SOLAE COMPANY

### GENERAL NOTES – EROSION CONTROL

1. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE STATE STANDARDS FOR THE ENTIRE DURATION OF THE CONTRACT, OR UNTIL SUCH TIME AS DIRECTED BY THE ENGINEER.
2. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UTILTABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
3. THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

### GENERAL NOTES – MISCELLANEOUS

1. ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.
2. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION FROM THE DEPARTMENT.
3. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08	GAL / SQ YD OR
	0.375	GAL / SQ YD
AGGREGATE PRIME COAT	0.002	TONS / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

### COMMITMENTS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

REVIEWED BY: Rich Powell  
DISTRICT STUDIES & PLANS ENGINEER

DATE: 8-16-07

EXAMINED BY: Hubert D. ...  
DISTRICT CONSTRUCTION ENGINEER

James Z. ...  
DISTRICT MATERIALS ENGINEER

Bruce A. ...  
DISTRICT OPERATIONS ENGINEER

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.P. ROUTE 693 (IL-9)

**GENERAL NOTES**

SCALE: NO SCALE  
DATE: AUGUST 7, 2007

DRAWN BY: JMC  
CHECKED BY: DWB

PLOT SCALE: 1/20  
PLOT DATE: 8/9/2007  
PLOT TIME: 2:55:26 PM  
PLOT FILE: K:\1\2007\08\09\11\080906\_GenNotes.dgn  
MODEL NAME: Do Fault

SUMMARY OF QUANTITIES		UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
CODE #	PAY ITEM			1000-2A ROADWAY	X071-2A STRUCTURE #027-0096
20200100	EARTH EXCAVATION	CU YD	263	263	
20300100	CHANNEL EXCAVATION	CU YD	491	491	
20400800	FURNISHED EXCAVATION	CU YD	221	221	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	89.8		89.8
25000210	SEEDING, CLASS 2A	ACRE	0.1	0.1	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	9	9	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	9	9	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	9	9	
25100630	EROSION CONTROL BLANKET	SQ YD	450	450	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	10	10	
28000300	TEMPORARY DITCH CHECKS	EACH	2	2	
28000400	PERIMETER EROSION BARRIER	FOOT	751	751	
28100107	STONE RIPRAP, CLASS A4	SQ YD	1,162	212	950
28200200	FILTER FABRIC	SQ YD	1,162	212	950
31101000	SUB-BASE GRANULAR MATERIAL, TYPE B	TON	84	84	
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	142	142	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	61	61	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	99	99	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	72	72	
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	112	112	
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	112	112	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	36	36	
44000100	PAVEMENT REMOVAL	SQ YD	112	112	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	540	540	
44000500	COMBINATION CONCRETE CURB AND GUTTER REMOVAL	FOOT	311	311	
44000700	APPROACH SLAB REMOVAL	SQ YD	173	173	
48203023	HOT-MIX ASPHALT SHOULDERS 8"	SQ YD	370	370	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200100	STRUCTURE EXCAVATION	CU YD	229.4		229.4
50300225	CONCRETE STRUCTURES	CU YD	106.5		106.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	160.9		160.9
50300260	BRIDGE DECK GROOVING	SQ YD	447		447
50300280	CONCRETE ENCASEMENT	CU YD	18.6		18.6
50300300	PROTECTIVE COAT	SQ YD	699	91	608
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	2,232		2,232
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	44,800		44,800
50800515	BAR SPLICERS	EACH	540		540
51201105	FURNISHING METAL SHELL PILES 14"	FOOT	916		916
51202305	DRIVING PILES	FOOT	916		916
51203200	TEST PILE METAL SHELLS	EACH	2		2
51205200	TEMPORARY SHEET PILING	SQ FT	1,097		1,097
51500100	NAME PLATES	EACH	1		1
52100520	ANCHOR BOLTS, 1"	EACH	48		48
54215547	METAL END SECTIONS 12"	EACH	4	4	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	56		56

\* SPECIALTY ITEM

SUMMARY OF QUANTITIES		UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
CODE #	PAY ITEM			1000-2A ROADWAY	X071-2A STRUCTURE #027-0096
60100945	PIPE DRAINS 12"	FOOT	78	78	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	95		95
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B.6-24	FOOT	263	263	
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	4	4	
60900515	CONCRETE THRUST BLOCKS	EACH	4	4	
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	137.5	137.5	
63100085	TRAFFIC BARRIER TERMINAL, TYPE G	EACH	4	4	
63100167	TRAFFIC BARRIER TERMINAL TYPE I, SPECIAL (TANGENT)	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	426	426	
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	2	2	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	83	83	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2,788	2,788	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	189	189	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	325	325	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5	
78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	83.2	83.2	
78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1,788	1,788	
78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	90	90	
78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	278	278	
78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	64	64	
78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	34	34	
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	14	14	
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	3	3	
78200410	GUARDRAIL MARKERS - TYPE A	EACH	6	6	
78200520	BARRIER WALL MARKERS - TYPE B	EACH	4	4	
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	463	463	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	9	9	
XX003404	TEMPORARY PAVEMENT, 8"	SQ YD	52	52	
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1		1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1		1
X7016500	TEMPORARY BRIDGE TRAFFIC SIGNALS (SPECIAL)	EACH	1	1	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	32		32
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

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

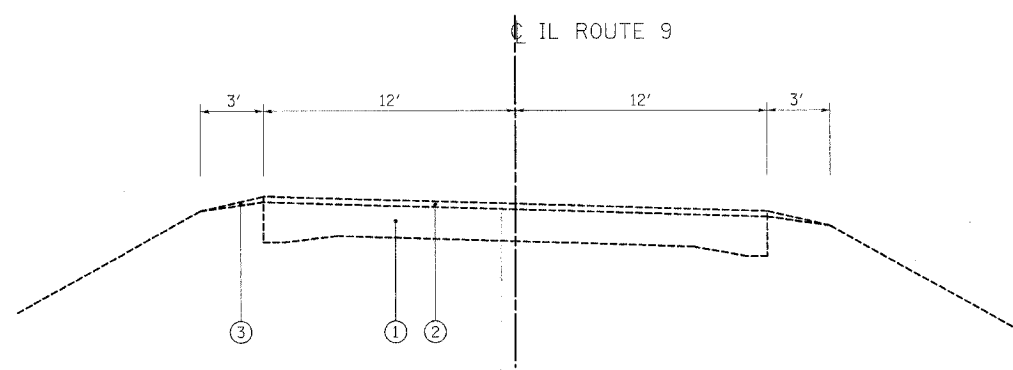
REVISIONS	
NAME	DATE

 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.P. ROUTE 693 (IL-9)

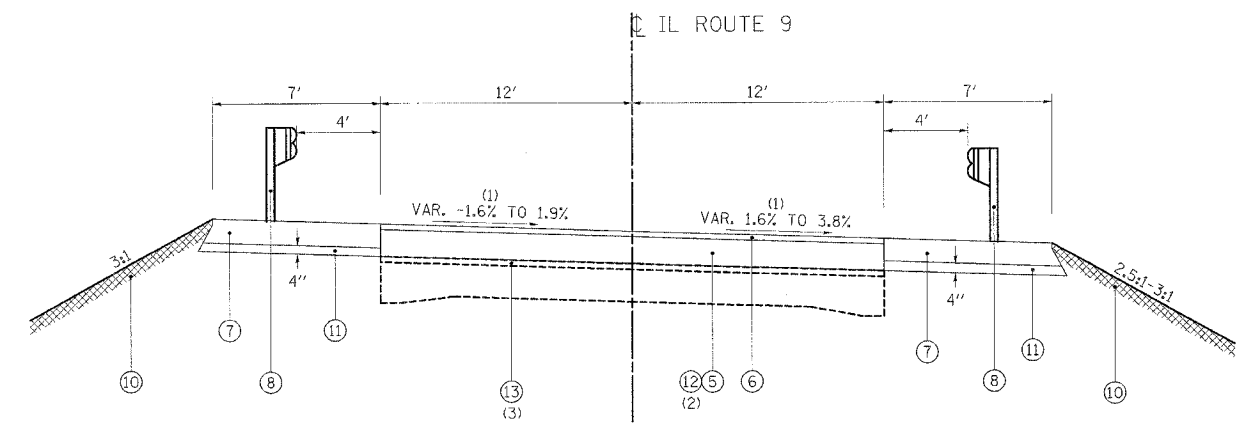
**SUMMARY OF QUANTITIES**

 SCALE: NOT TO SCALE  
 DATE: AUGUST 7, 2007

 DRAWN BY: BMH  
 CHECKED BY: DWB

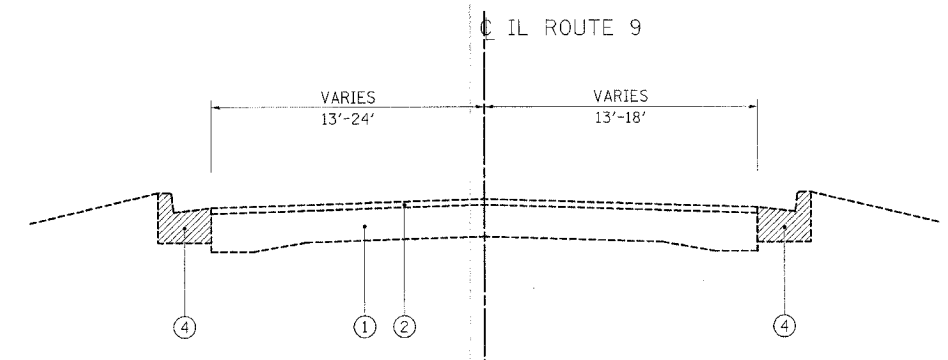


**EXISTING WEST APPROACH TYPICAL SECTION**  
STA. 811+70 TO STA. 813+00

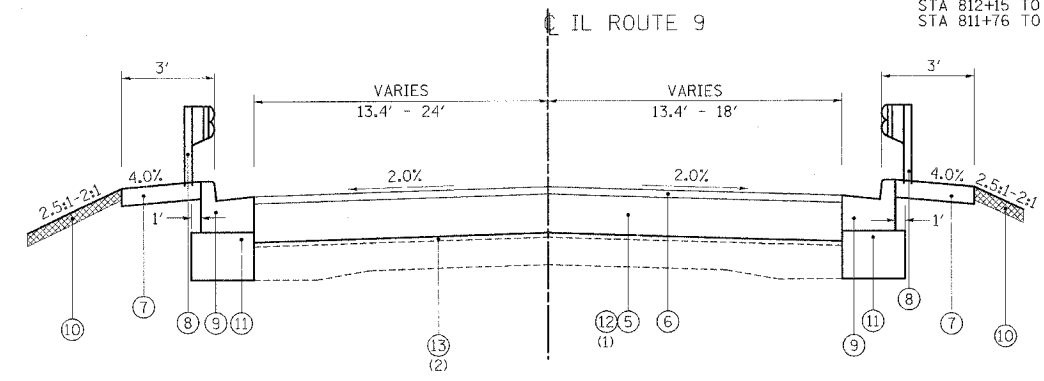


**PROPOSED WEST APPROACH TYPICAL SECTION**  
STA. 811+70 TO STA. 813+00

- NOTES: (1) SEE DETAIL SHEETS FOR PROPOSED ROADWAY ELEVATIONS  
(2) USE LEVEL BINDER STA 812+15 TO 813+00, RT STA 811+76 TO 813+00, LT  
(3) MILL EXISTING SURFACE STA 812+15 TO 813+00, RT STA 811+76 TO 813+00, LT



**EXISTING EAST APPROACH TYPICAL SECTION**  
STA. 808+50 TO STA. 809+76



**PROPOSED EAST APPROACH TYPICAL SECTION**  
STA. 808+50 TO STA. 809+76

- NOTES: (1) USE LEVEL BINDER STA 808+50 TO 809+05  
(2) MILL EXISTING SURFACE STA 808+50 TO 809+05

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

PG GRADE	HMA LEVEL BINDER PG58-22	HMA SURFACE PG64-22	HMA SHOULDER PG58-22	HMA BINDER PG58-22
MAX % RAP ALLOWABLE **	25%	15%	50%	25%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	3.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE		MIXTURE C		
DENSITY TEST METHOD	SATISFACTION OF ENGINEER	NUCLEAR / CORES	*	NUCLEAR / CORES

\* MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE, THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE OC/OA SPECIFICATION.  
\*\* IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

LEGEND

- ① EXISTING 10" P.C.C. PAVEMENT
- ② EXISTING HOT-MIX ASPHALT SURFACE COURSE
- ③ EXISTING AGGREGATE SHOULDER
- ④ EXISTING CONCRETE CURB AND GUTTER TYPE B-6.24 TO BE REMOVED
- ⑤ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50 VARIABLE DEPTH
- ⑥ 1/2", HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50
- ⑦ HOT-MIX ASPHALT SHOULDERS, 8"
- ⑧ PROPOSED GUARDRAIL
- ⑨ CONCRETE CURB AND GUTTER TYPE B 6-24 (TYP.)
- ⑩ VEGETATION SUSTAINING TOPSOIL, 4"
- ⑪ SUBBASE GRANULAR MATERIAL, TYPE B
- ⑫ LEVELING BINDER (MACHINE METHOD) N50 (VARIABLE DEPTH)
- ⑬ HOT MIX ASPHALT SURFACE REMOVAL, 2/4"

NOTE: REUSE EXISTING TOPSOIL WHENEVER POSSIBLE. WHEN EXISTING QUANTITY OF TOPSOIL IS NOT ADEQUATE, VEGETATION SUSTAINING TOPSOIL SHALL BE HAULED FROM OFF-SITE AND PAID FOR AS FURNISHED EXCAVATION.

PLOT SCALE: 1/20  
 PLOT DATE: 8/7/2007  
 PLOT TIME: 8:21:03 AM  
 PLOTTED BY: JFCS  
 MODEL NAME: Default

 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9)  <b>TYPICAL SECTIONS</b>  SCALE: NOT TO SCALE DATE: AUGUST 7, 2007 DRAWN BY: BMH CHECKED BY: DWB
	NAME	DATE	

### PAVEMENT MARKING SCHEDULE

LOCATION	TEMPORARY PAVEMENT MARKING LINE 4" (FOOT)	WORK ZONE PAVEMENT MARKING REMOVAL (SQ FT)	PAVEMENT MARKING REMOVAL (SQ FT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4" (FOOT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 6" (FOOT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 8" (FOOT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 12" (FOOT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 24" (FOOT)	POLYUREA PAVEMENT MARKING TYPE 1 - LETTERS & SYMBOLS (EACH)	RAISED REFLECTIVE PAVEMENT MARKER (EACH)	RAISED REFLECTIVE PAVEMENT MARKER BRIDGE (EACH)	SHORT TERM PAVEMENT MARKING (FOOT)
WESTBOUND												
STA. 809+76.00 TO STA. 815+00.00	524			524								
CENTERLINE												
STA. 807+70.00 TO STA. 810+06.00			120	740						6		74
STA. 807+70.00 TO STA. 811+40.00	740											
STA. 810+06.00 TO STA. 811+40.00			20		90					5	3	9
STA. 811+40.00 TO STA. 815+00.00	90											
EASTBOUND												
STA. 807+50.00 TO STA. 808+91.00	910		323			278	64	34	83.2	3		
STA. 809+76.00 TO STA. 815+00.00	524			524								
STAGE 1												
STA. 808+20.00 TO STA. 814+20.00		88										
STAGE 2												
STA. 808+25.00 TO STA. 814+20.00		73										
REMOVAL OF SHORT TERM PAVEMENT MARKING		28										
TOTAL	2,788	189	463	1,788	90	278	64	34	83.2	14	3	83

### PAVEMENT SCHEDULE

LOCATION	SUB-BASE GRANULAR MATERIAL TYPE B (TON)	BITUMINOUS MATERIALS (PRIME COAT) (GAL)	PROTECTIVE COAT (SQ YD)	BRIDGE APPROACH PAVEMENT (SQ YD)	BRIDGE APPROACH PAVEMENT (SPECIAL) (SQ YD)	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) (SQ YD)	HOT-MIX ASPHALT SHOULDERS, 8" (SQ YD)	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (TON)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (TON)	LEVELING BINDER (MACHINE METHOD) N50 (TON)	COMB. CONC. C & G, TYPE B-6.24 (FOOT)
WESTBOUND											
STA. 808+50.00 TO 810+06.00	17	18	19				63	20			55
STA. 808+50.00 TO 809+05.00		21	22						42	13	65
STA. 809+05.00 TO 809+70.00			2			10					6
STA. 809+70.00 TO 809+76.00				56							
STA. 809+76.00 TO 810+06.00			304								
STA. 810+06.00 TO 811+40.00					56						
STA. 811+40.00 TO 811+70.00						8					
STA. 811+70.00 TO 811+76.00		9						12			
STA. 811+76.00 TO 812+15.00		19					119		13		
STA. 812+15.00 TO 813+00.00							31	14			
STA. 811+40.00 TO 813+00.00	25										
EASTBOUND											
STA. 808+50.00 TO 810+06.00	16							24			66
STA. 808+50.00 TO 809+05.00		23	23						16		65
STA. 809+05.00 TO 809+70.00		23	23						45		6
STA. 809+70.00 TO 809+76.00			2			10					
STA. 809+76.00 TO 810+06.00				56							
STA. 810+06.00 TO 811+40.00			304								
STA. 811+40.00 TO 811+70.00					56						
STA. 811+70.00 TO 811+76.00						8					
STA. 811+76.00 TO 813+00.00		29							19		
STA. 811+40.00 TO 813+00.00	26						137	14			
TOTAL	84	142	699	112	112	36	370	72	99	61	263

### EARTHWORK SCHEDULE

LOCATION	(A) TOPSOIL STRIPPING (CU YD)	(B) SUITABLE EARTH EXCAVATION (CU YD)	(C) EARTH EXCAVATION ADJ FOR 25% SHRINKAGE (CU YD)	(D) EMBANKMENT (CU YD)	(E) EARTHWORK BALANCE (+) WASTE (-) SHORTAGE (CU YD)	FURNISHED EXCAVATION (CU YD)
STAGE 1	64	63	48	192	-144	144
STAGE 2	54	82	62	139	-77	77
TOTALS:	118	145				221

CODE NUMBER	PAY ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	253
20400800	FURNISHED EXCAVATION	CU YD	221

- EARTH EXCAVATION INCLUDES THE QUANTITY OF SUITABLE EARTH EXCAVATION AND TOPSOIL STRIPPING.
- TOPSOIL STRIPPING SHALL BE REUSED FOR VEGETATION SUSTAINING TOPSOIL WHENEVER POSSIBLE.

### PAVEMENT REMOVAL SCHEDULE

LOCATION	PAVEMENT REMOVAL (SQ YD)	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	APPROACH SLAB REMOVAL (SQ YD)	COMB. CONC. C & G REMOVAL (FOOT)
WESTBOUND				
STA. 808+50.00 TO 809+05.00		110		
STA. 809+70.00 TO 810+00.00			45	
STA. 811+00.00 TO 811+30.00			41.5	
STA. 811+35.00 TO 811+76.00	56			
STA. 812+15.00 TO 813+00.00		116		
STA. 808+39.00 TO 810+00.00				161
EASTBOUND				
STA. 808+50.00 TO 809+05.00		145		
STA. 809+70.00 TO 810+00.00			45	
STA. 811+00.00 TO 811+30.00			41.5	
STA. 811+35.00 TO 811+76.00	56			
STA. 811+76.00 TO 813+00.00		169		
STA. 808+50.00 TO 810+00.00				150
TOTAL	112	540	173	311

### GUARDRAIL SCHEDULE

LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A (FOOT)	TRAFFIC BARRIER TERMINAL, TYPE 6 (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) (EACH)	GUARDRAIL REMOVAL (FOOT)
WESTBOUND				
STA. 808+62.00 TO 810+06.00	50	1	1	115
STA. 811+40.00 TO 812+59.00	25	1	1	78
EASTBOUND				
STA. 808+87.00 TO 810+06.00	25	1	1	80
STA. 811+40.00 TO 812+72.00	37.5	1	1	153
TOTAL	137.5	4	4	426



200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.P. ROUTE 693 (IL-9)

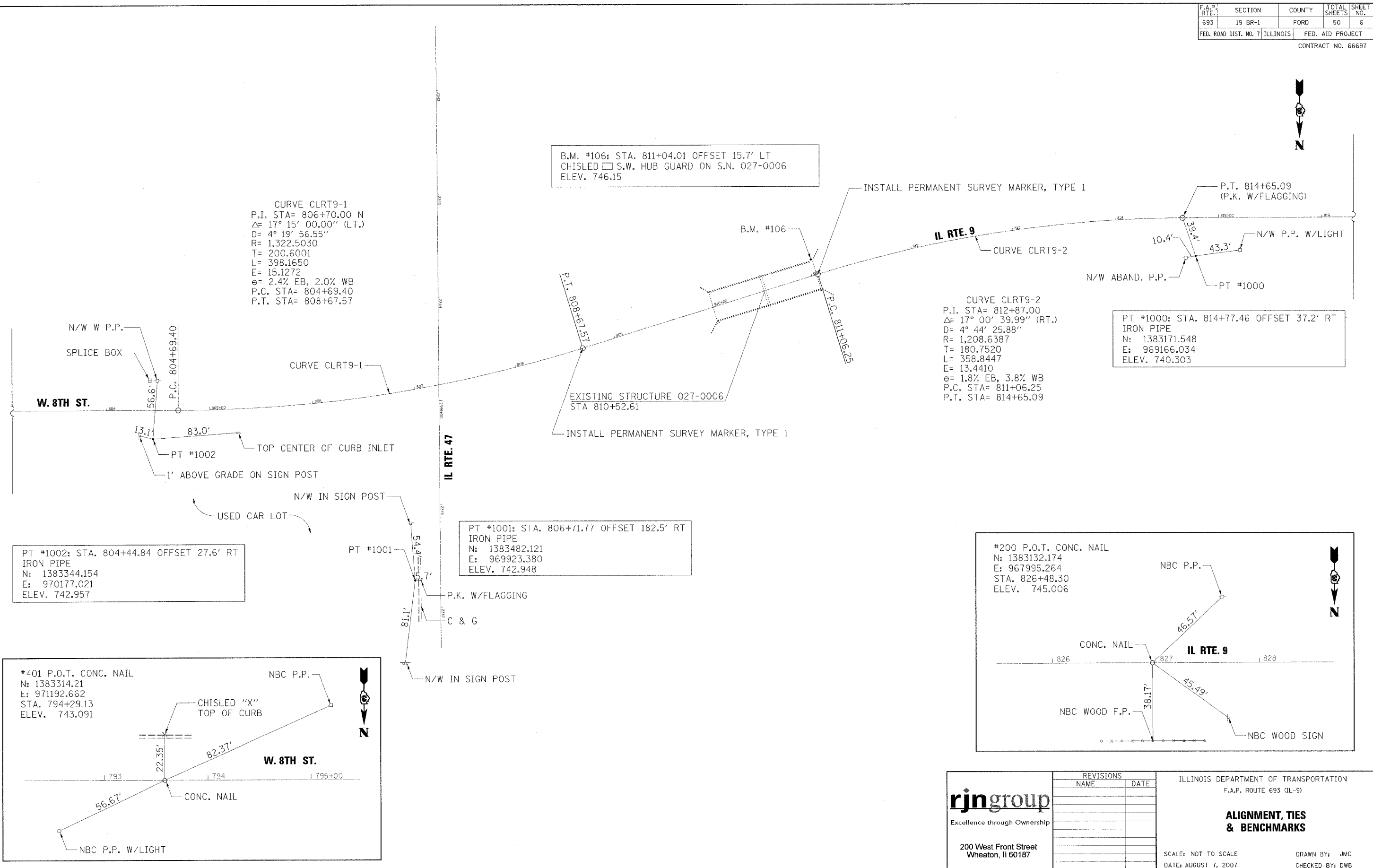
### SCHEDULE OF QUANTITIES

SCALE: NOT TO SCALE  
DATE: AUGUST 7, 2007

DRAWN BY: MTH  
CHECKED BY: DWB

PLOT SCALE: 1/80  
PLOT DATE: 8/29/2007  
PLOT TIME: 5:03:08 PM  
PLOT BY: JTR  
PLOT BY: JTR  
MODEL NAME: 693.DWG

F.A.P. RTE. 1	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19 BR-1	FORD	50	6
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
CONTRACT NO. 66697				



CURVE CLRT9-1  
P.I. STA= 806+70.00 N  
Δ= 17° 15' 00.00" (LT.)  
D= 4° 19' 56.55"  
R= 1,322.5030  
T= 200.6001  
L= 398.1650  
E= 15.1272  
e= 2.4% EB, 2.0% WB  
P.C. STA= 804+69.40  
P.T. STA= 808+67.57

CURVE CLRT9-2  
P.I. STA= 812+87.00  
Δ= 17° 00' 39.99" (RT.)  
D= 4° 44' 25.88"  
R= 1,208.6387  
T= 180.7520  
L= 358.8447  
E= 13.4410  
e= 1.8% EB, 3.8% WB  
P.C. STA= 811+06.25  
P.T. STA= 814+65.09

B.M. #106: STA. 811+04.01 OFFSET 15.7' LT  
CHISLED S.W. HUB GUARD ON S.N. 027-0006  
ELEV. 746.15

PT #1000: STA. 814+77.46 OFFSET 37.2' RT  
IRON PIPE  
N: 1383171.548  
E: 969166.034  
ELEV. 740.303

PT #1002: STA. 804+44.84 OFFSET 27.6' RT  
IRON PIPE  
N: 1383344.154  
E: 970177.021  
ELEV. 742.957

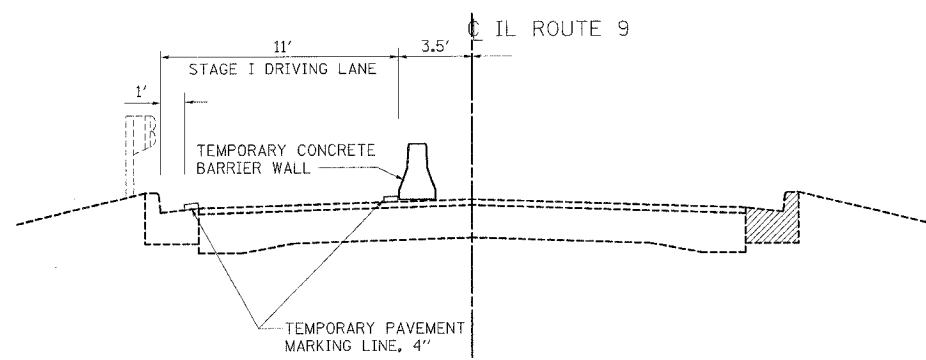
PT #1001: STA. 806+71.77 OFFSET 182.5' RT  
IRON PIPE  
N: 1383482.121  
E: 969923.380  
ELEV. 742.948

#200 P.O.T. CONC. NAIL  
N: 1383132.174  
E: 967995.264  
STA. 826+48.30  
ELEV. 745.006

#401 P.O.T. CONC. NAIL  
N: 1383314.21  
E: 971192.662  
STA. 794+29.13  
ELEV. 743.091

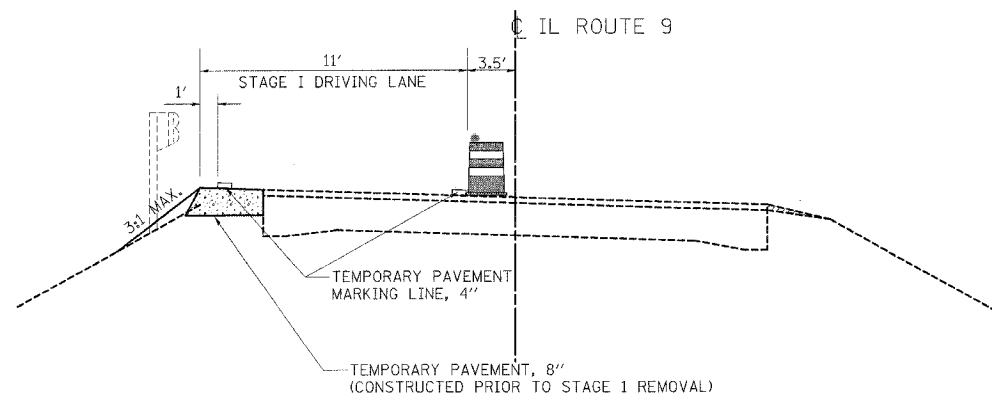
<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9)  <b>ALIGNMENT, TIES &amp; BENCHMARKS</b>  SCALE: NOT TO SCALE      DRAWN BY: JMC DATE: AUGUST 7, 2007      CHECKED BY: DWB

PLOT SCALE: 1"=40'  
PLOT DATE: 8/7/2007  
PLOT TIME: 8:20:24 AM  
PLOT BY: J. Tracey  
FILE: 20060807.dwg  
PLOT: 20060807.dwg



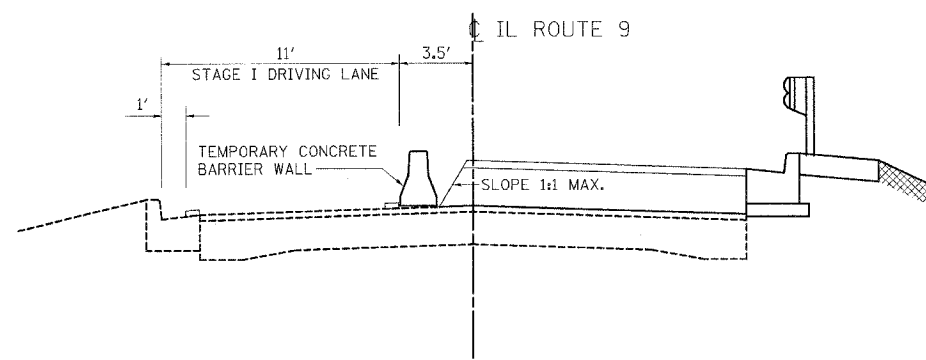
**STAGE I REMOVAL**

STA. 808+50 TO STA. 809+76



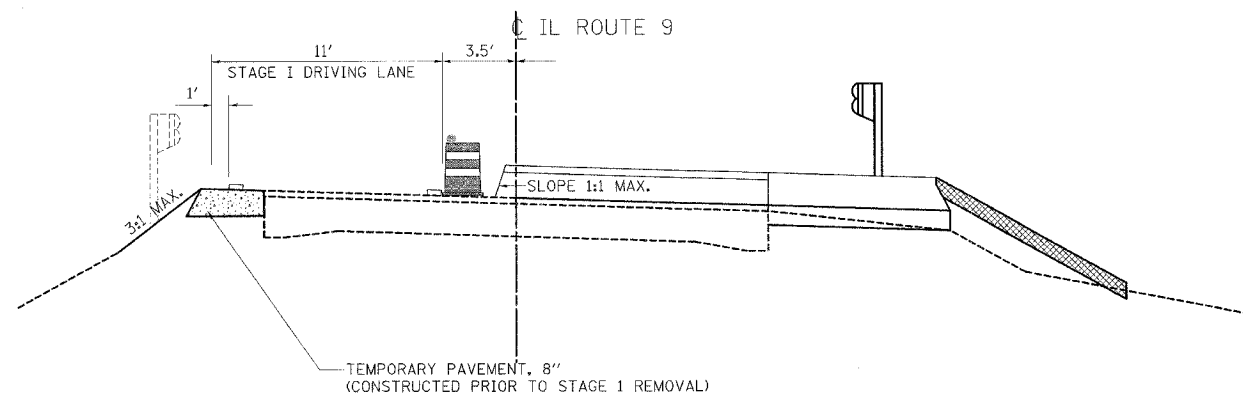
**STAGE I REMOVAL**

STA. 811+70 TO STA. 813+00



**STAGE I CONSTRUCTION**

STA. 808+50 TO STA. 809+76



**STAGE I CONSTRUCTION**

STA. 811+70 TO STA. 813+00

**STAGE I CONSTRUCTION**

1. CONSTRUCT TEMPORARY PAVEMENT
2. INSTALL TRAFFIC CONTROL PER STANDARD 701321 AND AS DETAILED IN THESE PLANS
3. REMOVE WESTBOUND PORTION OF EXISTING STRUCTURE
4. CONSTRUCT WESTBOUND PORTION OF STRUCTURE
5. CONSTRUCT WESTBOUND PAVEMENT, SHOULDER, AND CURB & GUTTER
6. INSTALL WB CUARDRAIL

PLOT SCALE: 1/80' = 1" / 2007  
 PLOT DATE: 8/29/2007 11:58 AM  
 PLOT BY: J. J. JOYCE  
 PLOTTED BY: J. JOYCE  
 MODEL NAME: DETAIL

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

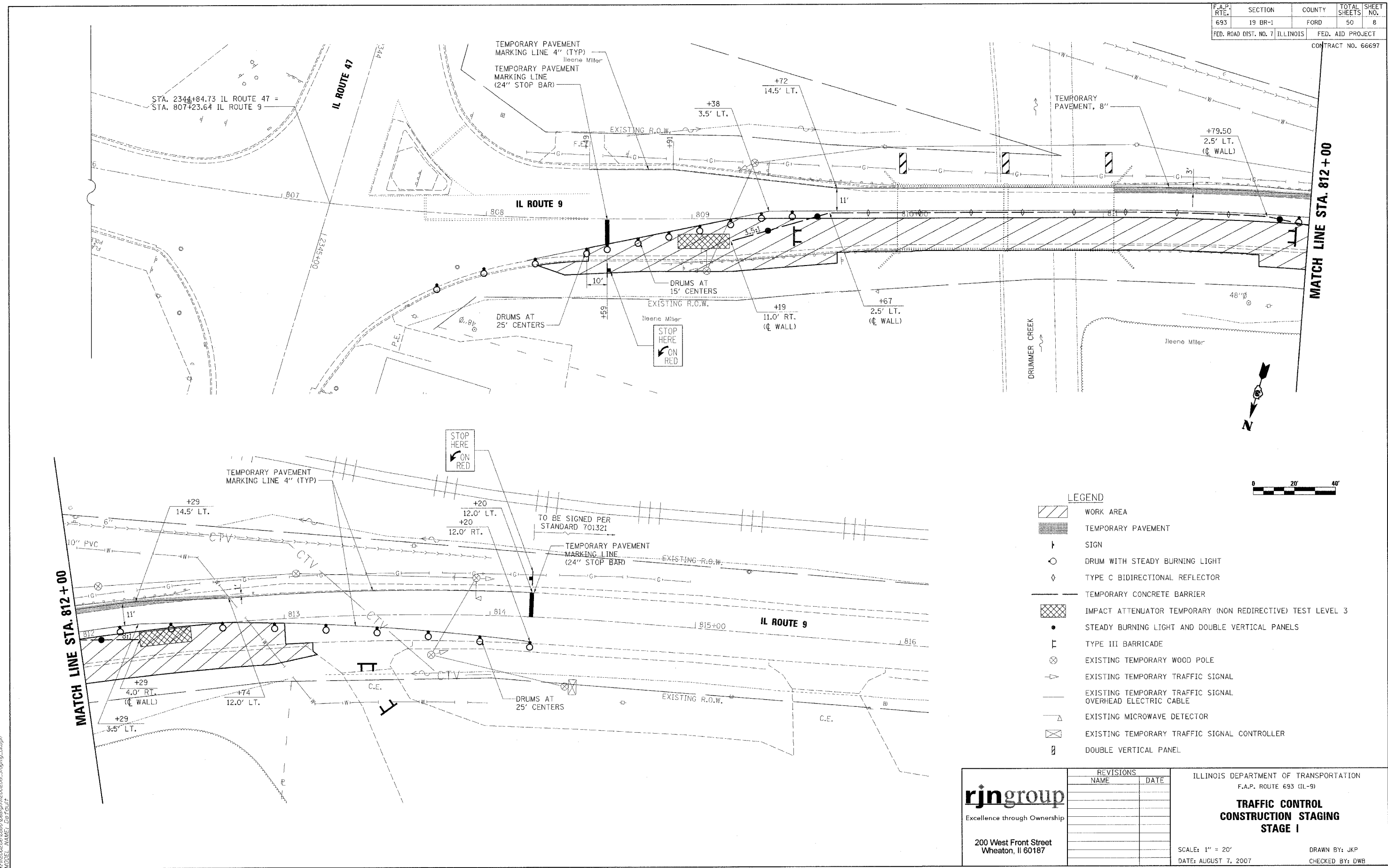
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.P. ROUTE 693 (IL-9)

**TRAFFIC CONTROL  
 CONSTRUCTION STAGING  
 NOTES & DETAILS**

SCALE: NOT TO SCALE  
 DATE: AUGUST 7, 2007

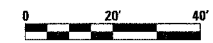
DRAWN BY: JKP  
 CHECKED BY: DWB

F.A.P. RTE. 693	SECTION 19 BR-1	COUNTY FORD	TOTAL SHEETS 50	SHEET NO. 8
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
CONTRACT NO. 66697				



**LEGEND**

- WORK AREA
- TEMPORARY PAVEMENT
- SIGN
- DRUM WITH STEADY BURNING LIGHT
- TYPE C BIDIRECTIONAL REFLECTOR
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR TEMPORARY (NON REDIRECTIVE) TEST LEVEL 3
- STEADY BURNING LIGHT AND DOUBLE VERTICAL PANELS
- TYPE III BARRICADE
- EXISTING TEMPORARY WOOD POLE
- EXISTING TEMPORARY TRAFFIC SIGNAL
- EXISTING TEMPORARY TRAFFIC SIGNAL OVERHEAD ELECTRIC CABLE
- EXISTING MICROWAVE DETECTOR
- EXISTING TEMPORARY TRAFFIC SIGNAL CONTROLLER
- DOUBLE VERTICAL PANEL



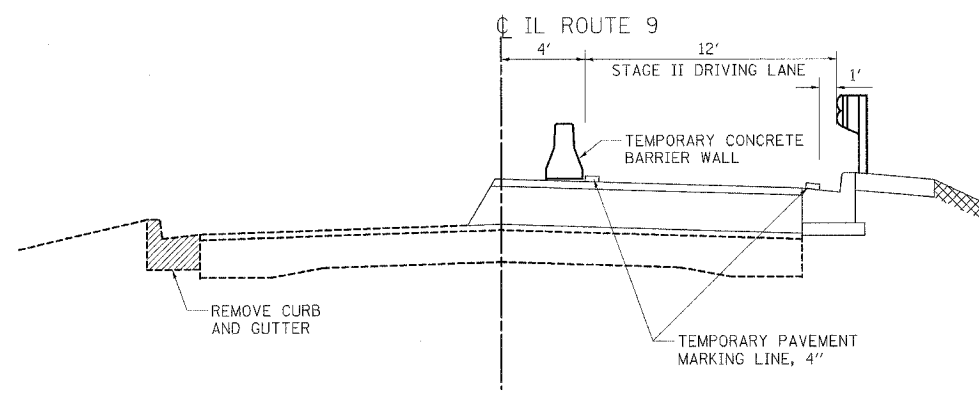
**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

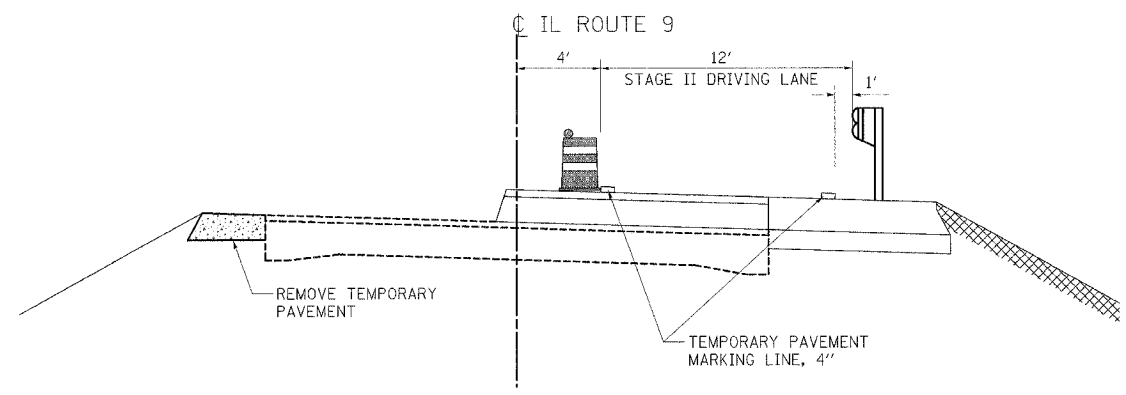
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.P. ROUTE 693 (IL-9)  
**TRAFFIC CONTROL  
CONSTRUCTION STAGING  
STAGE I**  
SCALE: 1" = 20'  
DATE: AUGUST 7, 2007  
DRAWN BY: JKP  
CHECKED BY: DWB

PLOT SCALE: H20  
PLOT DATE: 8/9/2007  
PLOT TIME: 11:54 AM  
PLOTTER: HP  
A:\2002\2006\66697\Design\11000206\_Stage10a.dwg  
MODEL NAME: De Fault

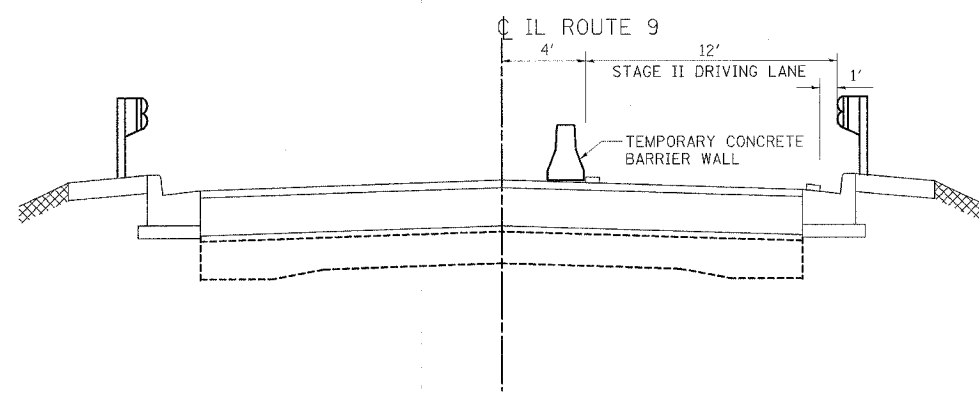




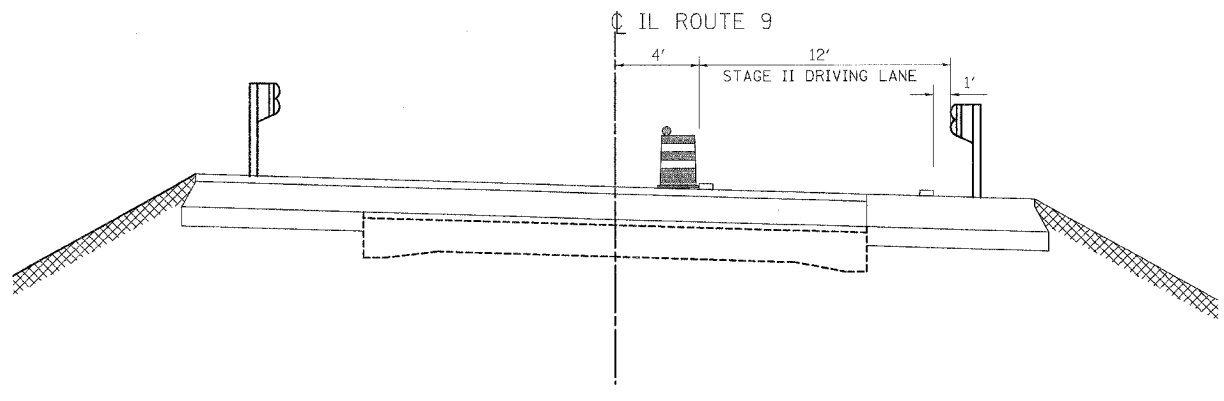
**STAGE II REMOVAL**  
STA. 808+50 TO STA. 809+76



**STAGE II REMOVAL**  
STA. 811+70 TO STA. 813+00



**STAGE II CONSTRUCTION**  
STA. 808+50 TO STA. 809+76



**STAGE II CONSTRUCTION**  
STA. 811+70 TO STA. 813+00

**STAGE II CONSTRUCTION**

1. RELOCATE TRAFFIC CONTROL PER STANDARD 701321 AND AS DETAILED IN THESE PLANS
2. REMOVE TEMPORARY PAVEMENT
3. REMOVE EASTBOUND PORTION OF EXISTING STRUCTURE
4. CONSTRUCT EASTBOUND PORTION OF STRUCTURE
5. CONSTRUCT EASTBOUND PAVEMENT, SHOULDER, AND CURB & GUTTER
6. INSTALL GUARDRAIL

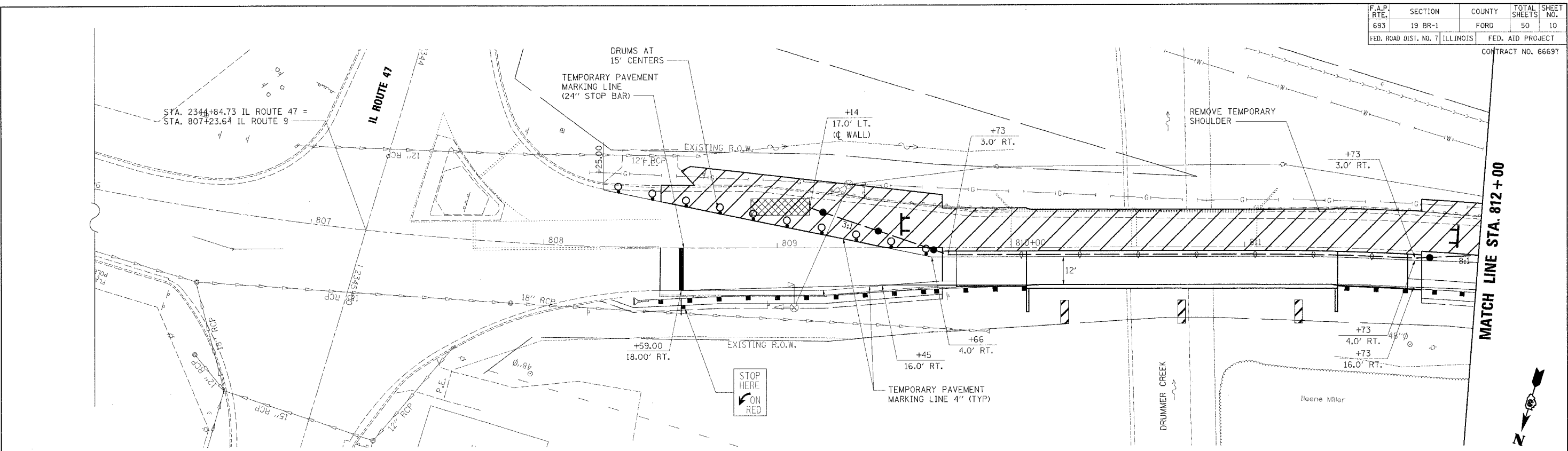
**STAGE III CONSTRUCTION**

1. TRAFFIC CONTROL PER STANDARD 701301
2. PLACE PERMANENT PAVEMENT MARKINGS ON EASTBOUND AND WESTBOUND LANES
3. LANDSCAPE RESTORATION

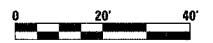
PLOT SCALE: 1/80  
 PLOT DATE: 8/7/2007  
 PLOT TIME: 8:20:56 AM  
 PLOTTER: HP DesignJet 5000  
 PLOTTER MODEL: 5000  
 MODEL NAME: 02-01

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b>		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9)  <b>TRAFFIC CONTROL CONSTRUCTION STAGING NOTES &amp; DETAILS</b> <b>STAGE II</b>
	NAME	DATE	
			SCALE: NOT TO SCALE
			DATE: AUGUST 7, 2007
			DRAWN BY: JTT
			CHECKED BY: DWB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19 BR-1	FORD	50	10
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
CONTRACT NO. 66697				

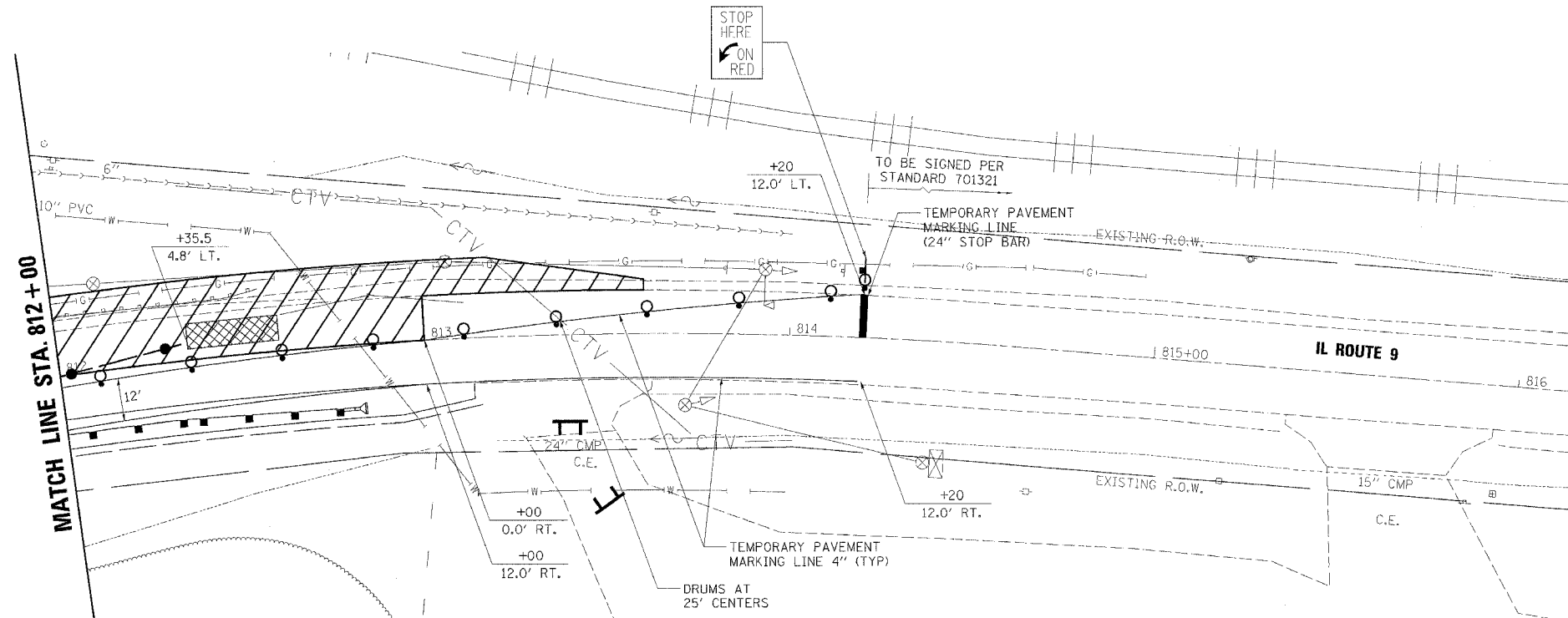


MATCH LINE STA. 812 + 00



**LEGEND**

- WORK AREA
- TEMPORARY PAVEMENT
- SIGN
- DRUM WITH STEADY BURNING LIGHT
- TYPE C BIDIRECTIONAL REFLECTOR
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR TEMPORARY (NON REDIRECTIVE) TEST LEVEL 3
- STEADY BURNING LIGHT AND DOUBLE VERTICAL PANELS
- TYPE III BARRICADE
- EXISTING TEMPORARY WOOD POLE
- EXISTING TEMPORARY TRAFFIC SIGNAL
- EXISTING TEMPORARY TRAFFIC SIGNAL OVERHEAD ELECTRIC CABLE
- EXISTING MICROWAVE DETECTOR
- EXISTING TEMPORARY TRAFFIC SIGNAL CONTROLLER
- DOUBLE VERTICAL PANEL



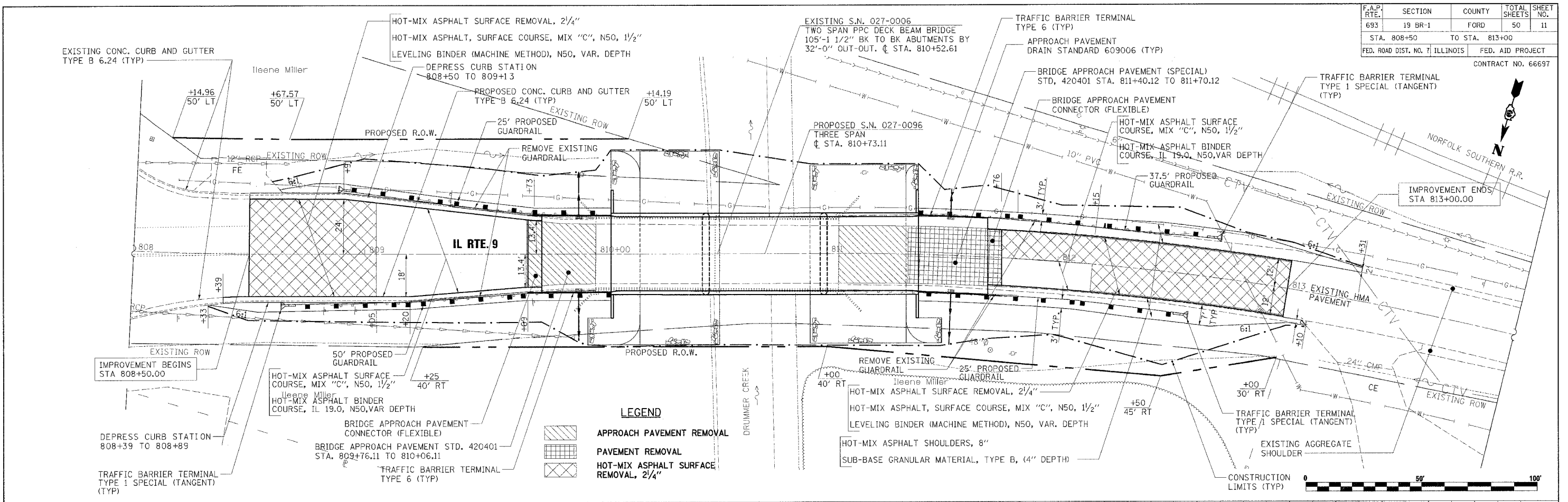
MATCH LINE STA. 812 + 00

PLOT SCALE: 1/20  
 PLOT DATE: 8/29/2007  
 PLOT BY: JTT  
 PLOTTED BY: JTT  
 MODEL NAME: C:\p01\1002206\_StageII.dwg

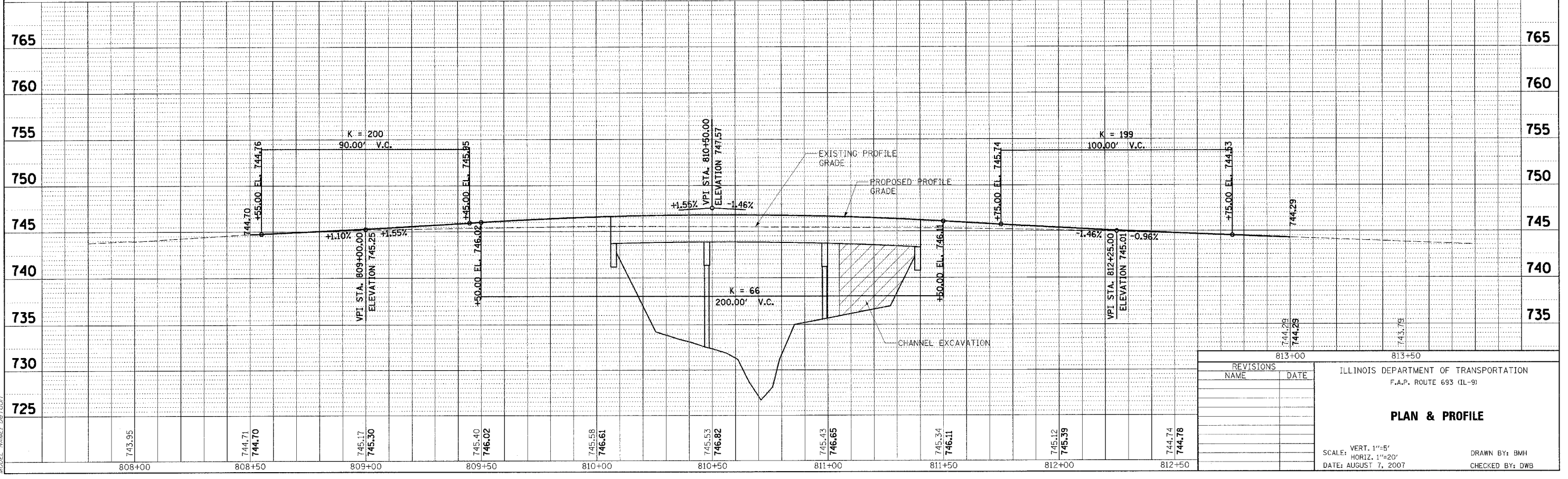
 Excellence through Ownership 200 West Front Street Wheaton, IL 60187	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9) <b>TRAFFIC CONTROL          CONSTRUCTION STAGING          STAGE II</b> SCALE: 1" = 20' DATE: AUGUST 7, 2007

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19 BR-1	FORD	50	11
STA. 808+50		TO STA. 813+00		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		CONTRACT NO. 66697

PLAN	SURVEY	DATE
NO. _____	BY _____	_____
NOTE BOOK _____	PLotted _____	_____
NO. _____	DATE _____	_____

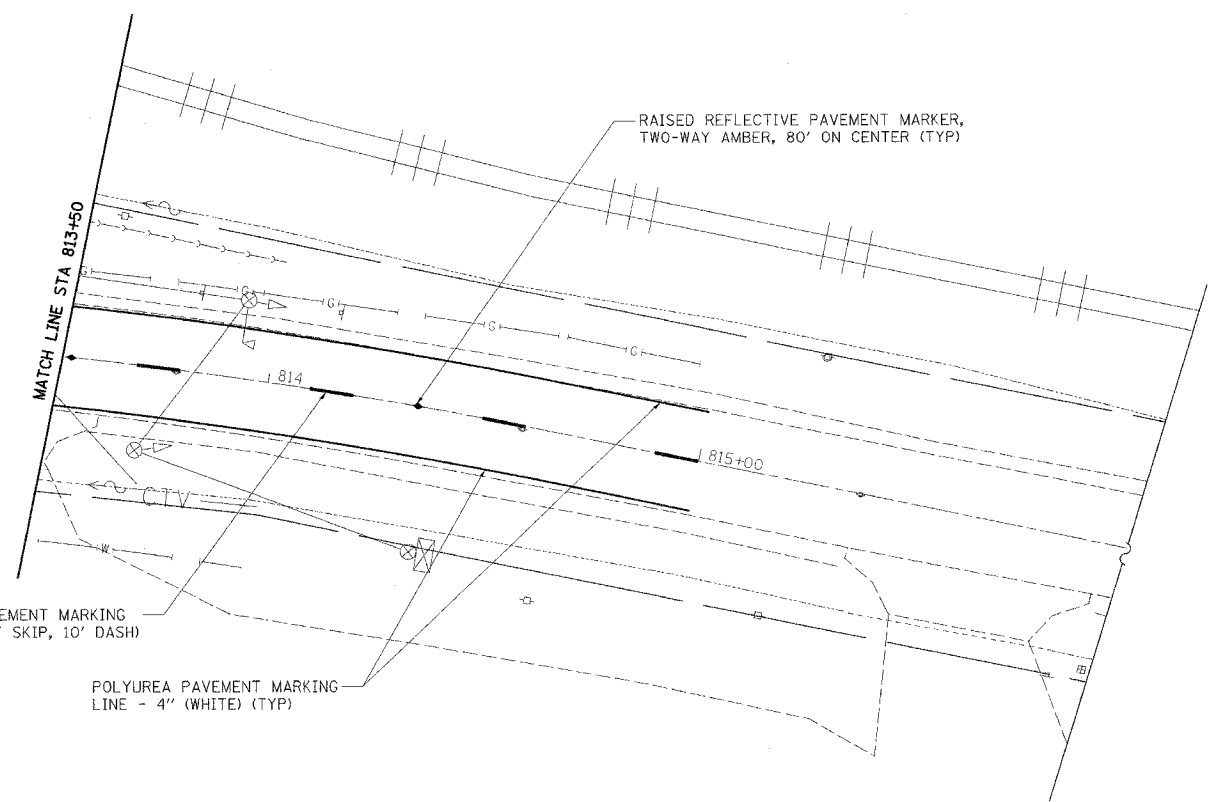
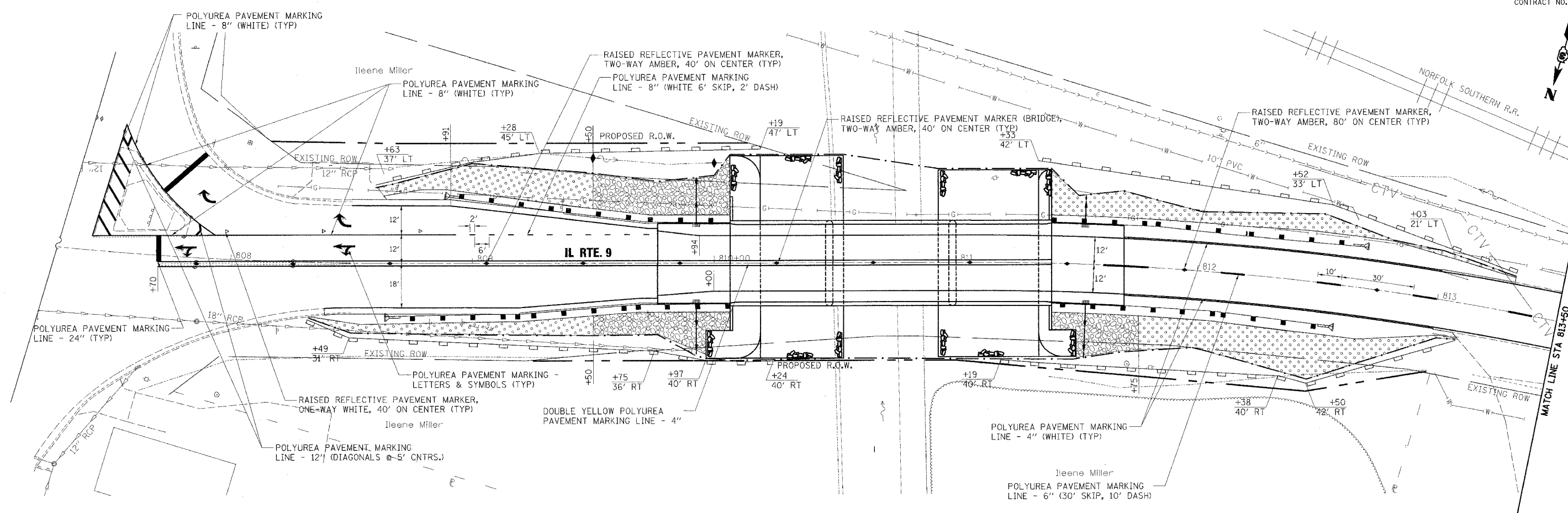


PROFILE	SURVEY	DATE
NO. _____	BY _____	_____
NOTE BOOK _____	PLotted _____	_____
NO. _____	DATE _____	_____

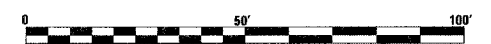


REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9)
NAME	DATE	
		<b>PLAN &amp; PROFILE</b>  SCALE: VERT. 1"=5' HORIZ. 1"=20' DATE: AUGUST 7, 2007 DRAWN BY: BMH CHECKED BY: DWB

PLOT SCALE: H20  
 PLOT DATE: 8/9/2007  
 PLOT TIME: 1:45:34 PM  
 PLOT BY: BMH  
 MODEL NAME: DetSUIT



- LEGEND**
- TEMPORARY DITCH CHECK
  - PERIMETER EROSION BARRIER
  - SEEDING CLASS 2A W/ EROSION CONTROL BLANKET
  - STONE RIPRAP, CLASS A4



PLOT SCALE: 1/20  
 PLOT DATE: 8/15/07  
 PLOTTED BY: J. Frisco  
 MODEL NAME: D6.FOUT

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

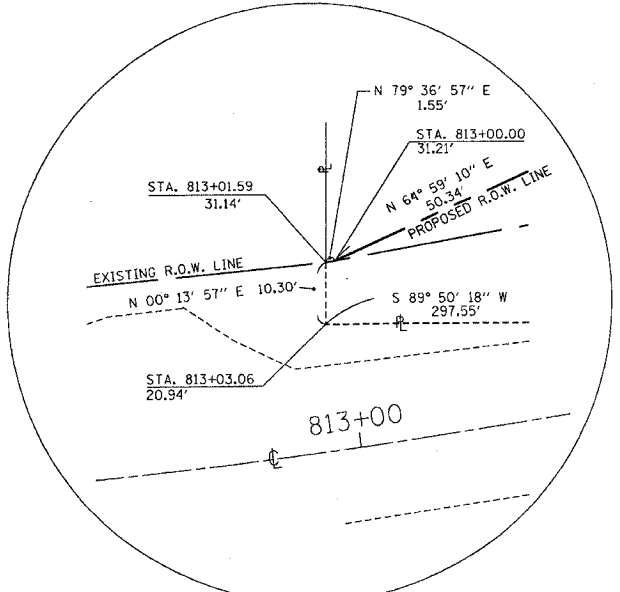
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.P. ROUTE 693 (IL-9)  
**EROSION CONTROL  
 LANDSCAPING & PAVEMENT  
 MARKING PLAN**  
 SCALE: 1" = 20'  
 DATE: AUGUST 7, 2007  
 DRAWN BY: JKP  
 CHECKED BY: DWB

N.E. 1/4 SEC. 10, T. 23 N., R. 7 E. OF THE 3RD P.M.

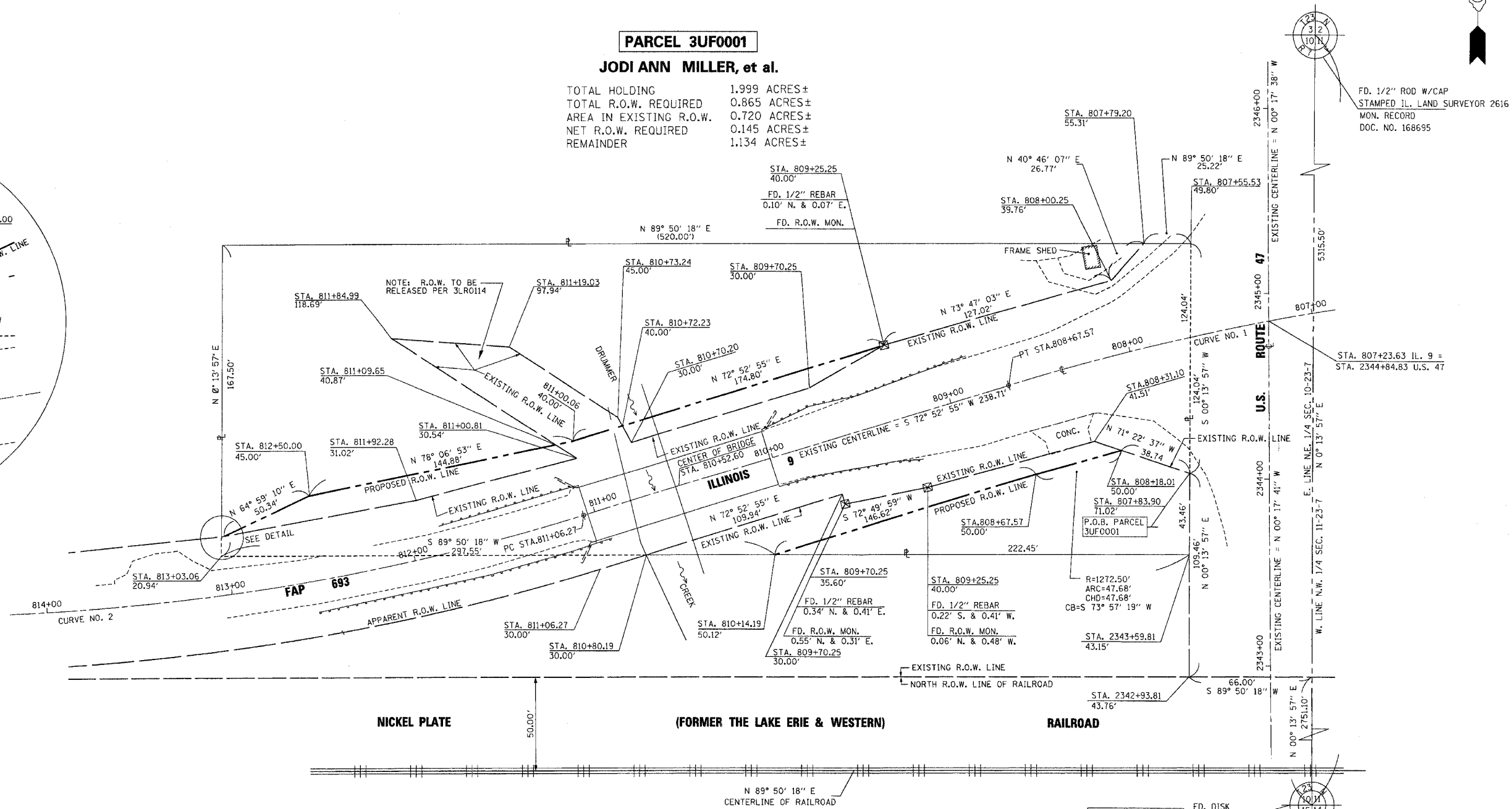
PARCEL 3UF0001

JODI ANN MILLER, et al.

TOTAL HOLDING 1.999 ACRES±  
 TOTAL R.O.W. REQUIRED 0.865 ACRES±  
 AREA IN EXISTING R.O.W. 0.720 ACRES±  
 NET R.O.W. REQUIRED 0.145 ACRES±  
 REMAINDER 1.134 ACRES±



DETAIL N.T.S.



FD. 1/2" ROD W/CAP  
 STAMPED IL. LAND SURVEYOR 2616  
 MON. RECORD  
 DOC. NO. 168695

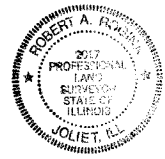
STA. 807+23.63 IL. 9 =  
 STA. 2344+84.83 U.S. 47

POC PARCEL 3UF0001  
 FD. DISK  
 MON. RECORD  
 DOC. NO. 199757

BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES  
 EAST ZONE (NAD 83)  
 SCALE: 1" = 30'

NO.	DATE	DESCRIPTION	BY
3	02/13/07	SET IRONS	M.C.M.
2	02/13/07	FIELD REVIEW	M.C.M.
1	12/18/06	PER REVIEW	M.C.M.
		ORIGINAL ISSUE	

I, ROBERT A. ROGINA, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF PROPOSED ILLINOIS RTE 9 WAS MADE BY ME OR UNDER MY DIRECTION AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.



DATE: Jan. 30, 2007

ROBERT A. ROGINA, I.L.S. 2017  
 LICENSE EXPIRES: 11/30/08

"THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY."

REVISED PARCEL 3UF0001

DATED: 8-20-07

GERRY L. WOLTERING  
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3491



EXPIRES 11-30-2008

CURVE NO. 1  
 P.I. STA= 806+70.00  
 Δ= 17°15'00"  
 D= 04°19'57"  
 R= 1322.50'  
 T= 200.60'  
 L= 398.17'  
 E= 15.13'  
 P.C. STA= 804+69.40  
 P.T. STA= 808+67.57

CURVE NO. 2  
 P.I. STA= 812+87.02  
 Δ= 17°00'40"  
 D= 04°14'26"  
 R= 1208.64'  
 T= 180.75'  
 L= 358.85'  
 E= 13.44'  
 P.C. STA= 811+06.27  
 P.T. STA= 814+65.12

RIGHT OF WAY PLANS	
ROUTE	FAP 693 (IL 9)
SECTION	19BR-1
PROJECT	
COUNTY	FORD
JOB NUMBER	R-93-009-06
STATION	807+00 TO 814+00
SHEET	1 OF 1 SCALE 1" = 30'

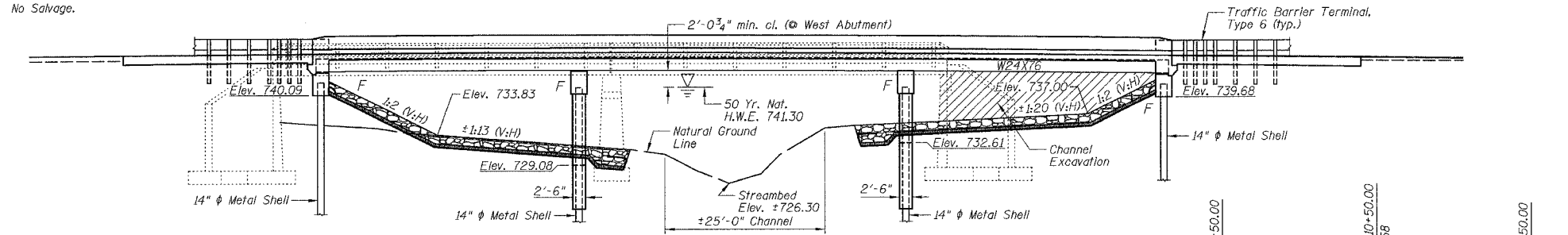
Benchmarks: "□" top of hub guard, Southwest corner of Structure, Elevation = 746.15 @ Sta. ±811+04/15.7' LT.

Existing Structure: SN 027-0006 was originally constructed in 1925 as a two span reinforced concrete thru girder bridge with closed concrete abutments and a solid shaft pier supported on untreated timber piles. In 1980, the substructure was widened and the superstructure was replaced with PPC deck beams. The back-to-back abutment dimension measures 105'-1 1/2" while the out-to-out width measures 32'-0". The structure is to be replaced using stage construction.

No Salvage.

POLY. NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO.
FAP 693	19BR-1	FORD	50	14	20 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

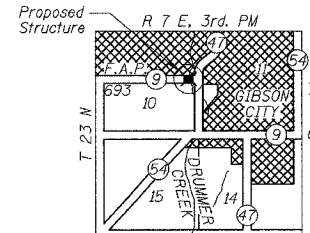
Contract #66697



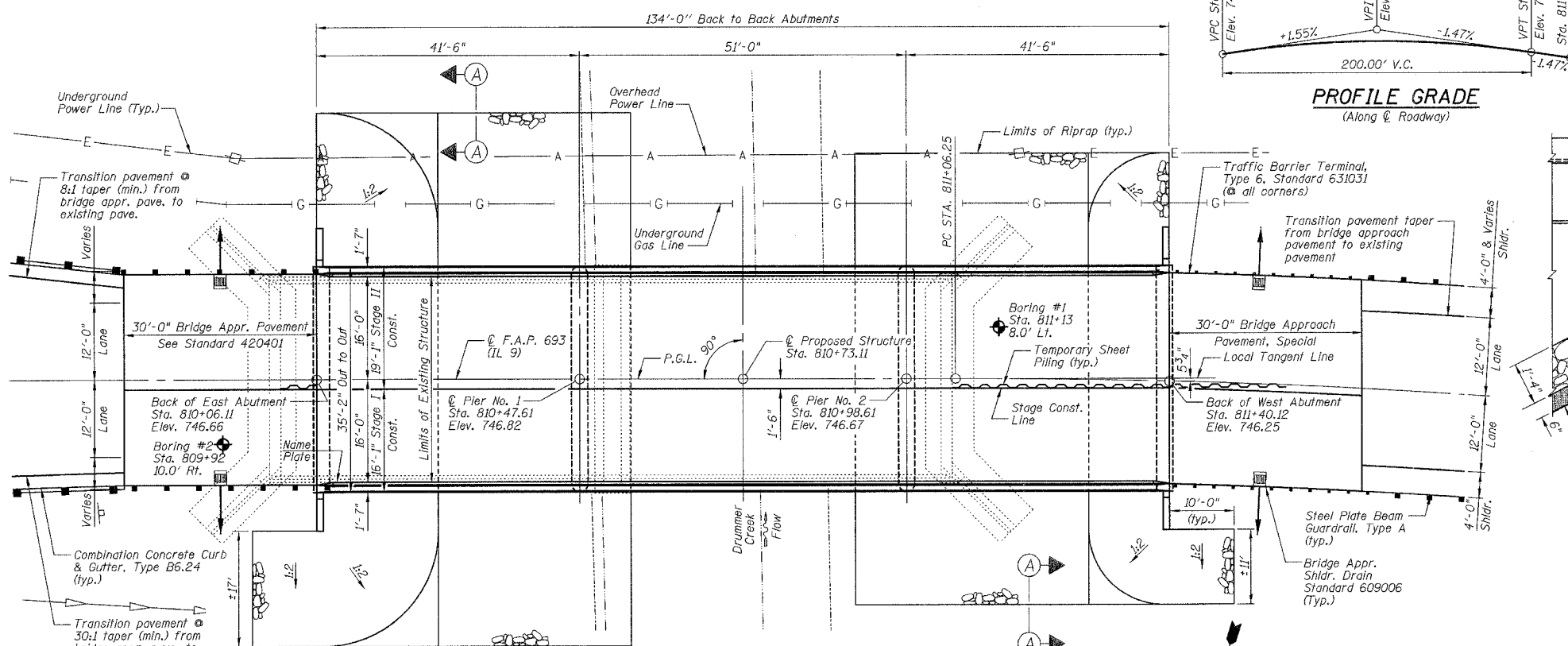
**ELEVATION**

STATION 810+73.11  
BUILT 2008 BY  
STATE OF ILLINOIS  
F.A.P. RT. 693 SEC. 19BR-1  
LOADING HS20  
STRUCTURE NO. 027-0096

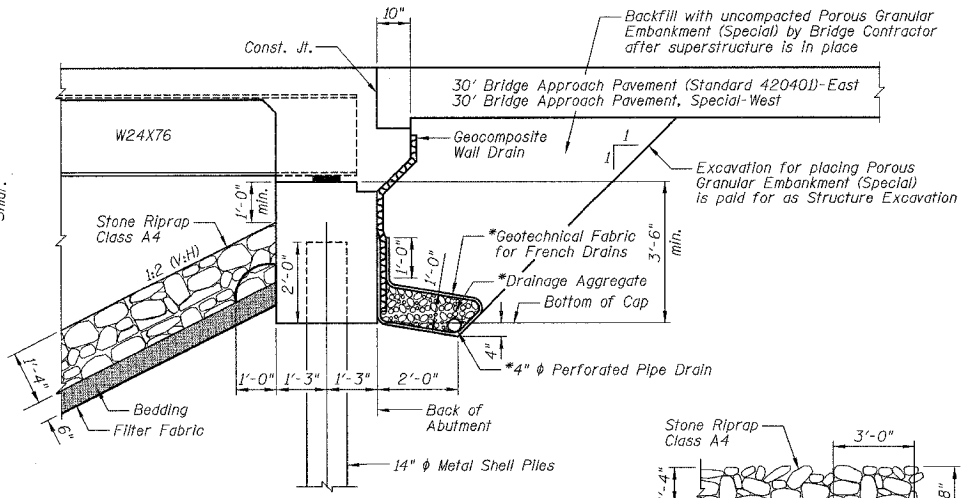
**NAME PLATE**  
See Std. 515001



**LOCATION SKETCH**

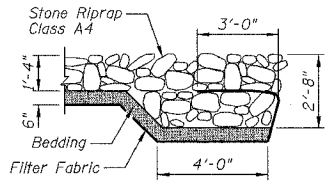


**PLAN**

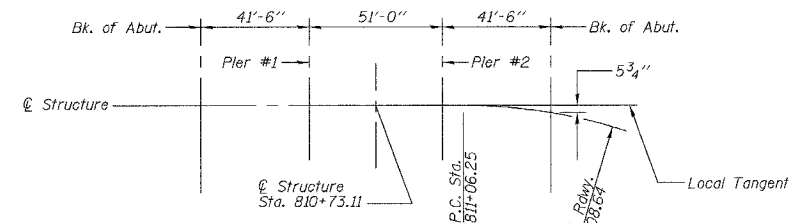


**PIPE UNDERDRAIN AND RIPRAP DETAIL**

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



**SECTION A-A**



**OFFSET SKETCH**

**WATERWAY INFORMATION**

Drainage Area = 19.92 Sq. Mi. Exist./Prop. Low Grade Elev. 742.58 ft. @ Sta. 817+00

Flood Yr.	Freq. Q	C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
10	1310	636	636	739.2	0.0	739.2
Design	50	2005	846	741.3	0.0	741.3
Base	100	2298	926	742.1	0.0	742.1
Overtopping	200	2647	977	742.6	0.1	742.7
Max. Calc.						

10 year velocity through Proposed Structure = 2.1 fps

**DESIGN SCOUR TABLE**

Location	East Abutment	Pier No. 1	Pier No. 2	West Abutment
Design Scour Elevation	740.09	728.00	731.50	739.68

**LOADING HS20-44**

Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

AASHTO 2002

**DESIGN STRESSES**

FIELD UNITS  
f'c = 3,500 psi (Cast-In-Place)  
fy = 60,000 psi (Reinforcement)  
fy = 50,000 psi (Structural Steel)  
- M270 Grade 50W

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.045  
Site Coefficient (S) = 1.0

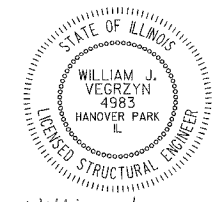
**HORIZONTAL CURVE DATA**

P.I. STA. = 812+87.00  
Δ = 17°00'40" (RT)  
D = 4°44'26"  
R = 1208.64'  
T = 180.75'  
L = 358.84'  
E = 13.44'  
S.E. RUN = N.C.  
P.C. STA. = 811+06.25  
P.T. STA. = 814+65.09

NOTE:  
See Roadway Plans for Curb & Gutter, Guardrail, Traffic Barrier Terminals, and Approach Shoulder Drains

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES



William J. Vegryz  
Expires 11-30-08



200 West Front Street  
Wheaton, IL 60187

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

GENERAL PLAN AND ELEVATION  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096

DATE: 8/7/2007  
DRAWN BY LCM  
CHECKED BY BLB

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 20 SHEETS
FAP 693	19BR-1	FORD	50	15	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #66697

### GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts  $\frac{1}{8}$  in. diameter, holes  $\frac{1}{16}$  in. diameter, unless otherwise noted.

Calculated weight of Structural Steel = 69,210 pounds.

All structural steel shall be AASHTO M 270 Grade 50W.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of  $\frac{1}{8}$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

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

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

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

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

### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Asbestos Bearing Pad Removal	Each	32		32
Structure Excavation	Cu. Yd.		229.4	229.4
Concrete Superstructure	Cu. Yd.	160.9		160.9
Concrete Structures	Cu. Yd.		106.5	106.5
Concrete Encasement	Cu. Yd.		18.6	18.6
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	2,232		2,232
Reinforcement Bars, Epoxy Coated	Pound	36,460	8,340	44,800
Furnishing Metal Shell Piles 14"x.312"	Foot		916	916
Driving Piles	Foot		916	916
Test Pile Metal Shells	Each		2	2
Anchor Bolts, 1"	Each		48	48
Name Plates	Each	1		1
Bridge Deck Grooving	Sq. Yd.	447		447
Protective Coat	Sq. Yd.	608		608
Bar Splicers	Each	460	80	540
Stone Riprap, Class A4	Sq. Yd.		950	950
Filter Fabric	Sq. Yd.		950	950
Porous Granular Embankment (Special)	Cu. Yd.		89.8	89.8
Geocomposite Wall Drain	Sq. Yd.		56	56
Pipe Underdrains for Structures, 4"	Foot		95	95
Underwater Structure Excavation Protection, Location 1	Each		1	1
Underwater Structure Excavation Protection, Location 2	Each		1	1
Temporary Sheet Piling	Sq. Ft.		1,097	1,097

### INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes and Total Bill of Material
3. Construction Staging and Temporary Sheet Pile Design
4. Top of Slab Elevations - I
5. Top of Slab Elevations - II
6. Top of East Approach Slab Elevations
7. Top of West Approach Slab Elevations
8. Superstructure
9. Superstructure Details
10. Diaphragm Details
11. Framing Plan
12. Structural Steel Details
13. Abutments
14. Piers
15. Metal Shell Piles
16. Bar Splicer Assembly Details
17. Temporary Concrete Barrier for Stage Construction
18. Cantilever Forming Brackets
19. Boring Logs - I
20. Boring Logs - II

**rjngroup**

Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND TOTAL BILL OF MATERIAL

IL RTE 9 OVER DRUMMER CREEK

FAP RTE 693 - SECTION 19BR-1

FORD COUNTY

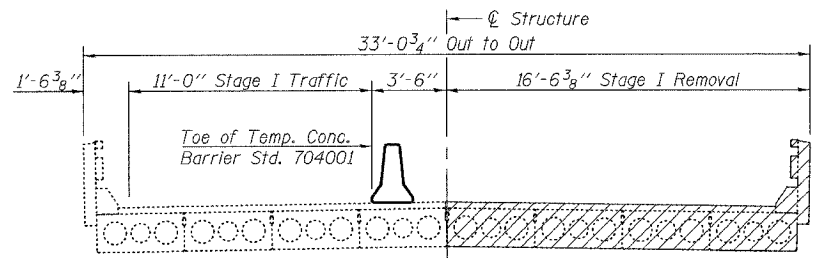
STATION 810+73.11

STRUCTURE NO. 027-0096

DATE: 8/7/2007

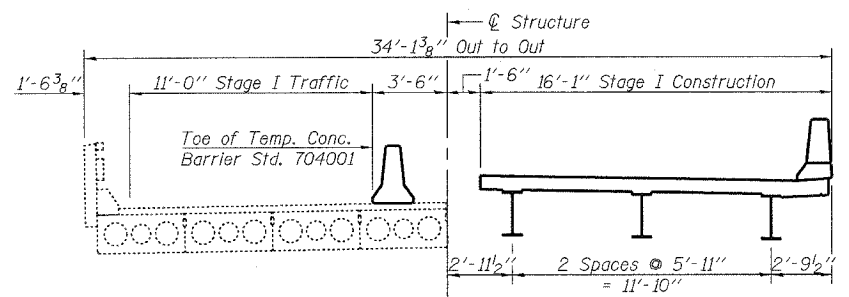
DRAWN BY LCM  
CHECKED BY BLB

Contract #66697



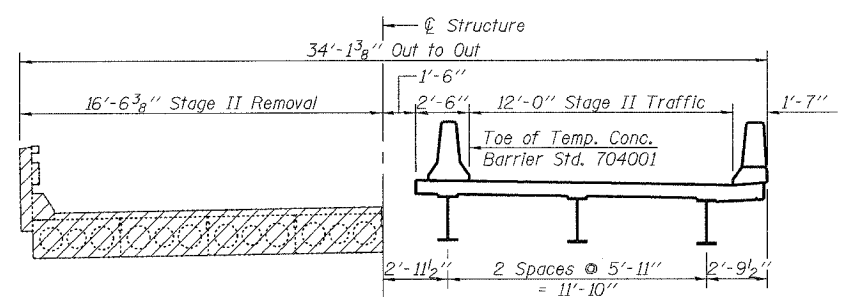
**CROSS SECTION - STAGE I REMOVAL**

(Looking West)



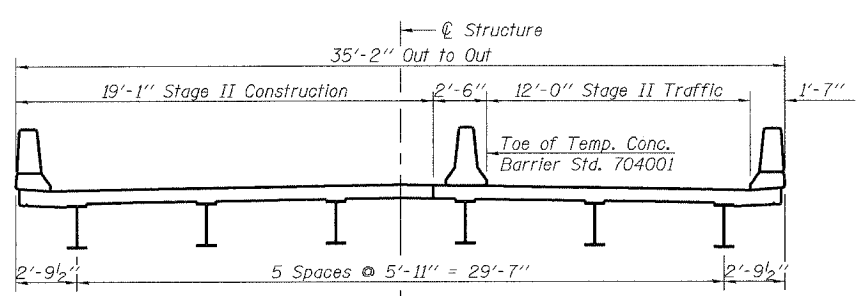
**CROSS SECTION - STAGE I CONSTRUCTION**

(Looking West)



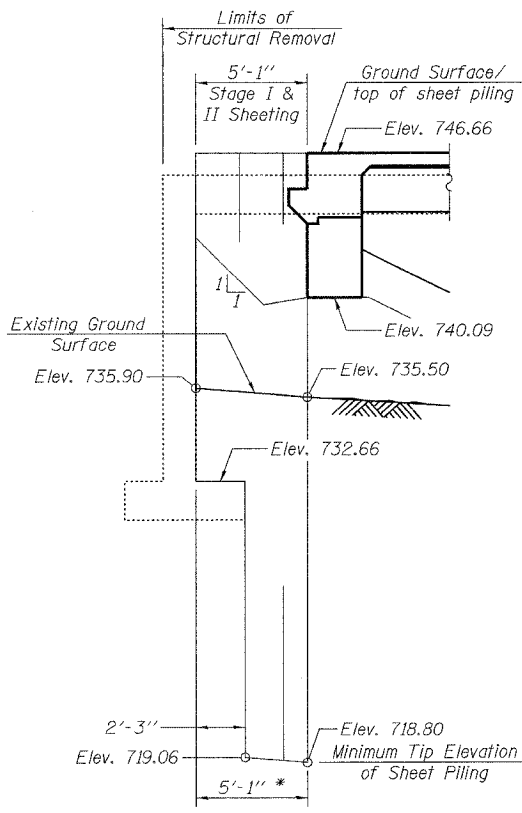
**CROSS SECTION - STAGE II REMOVAL**

(Looking West)



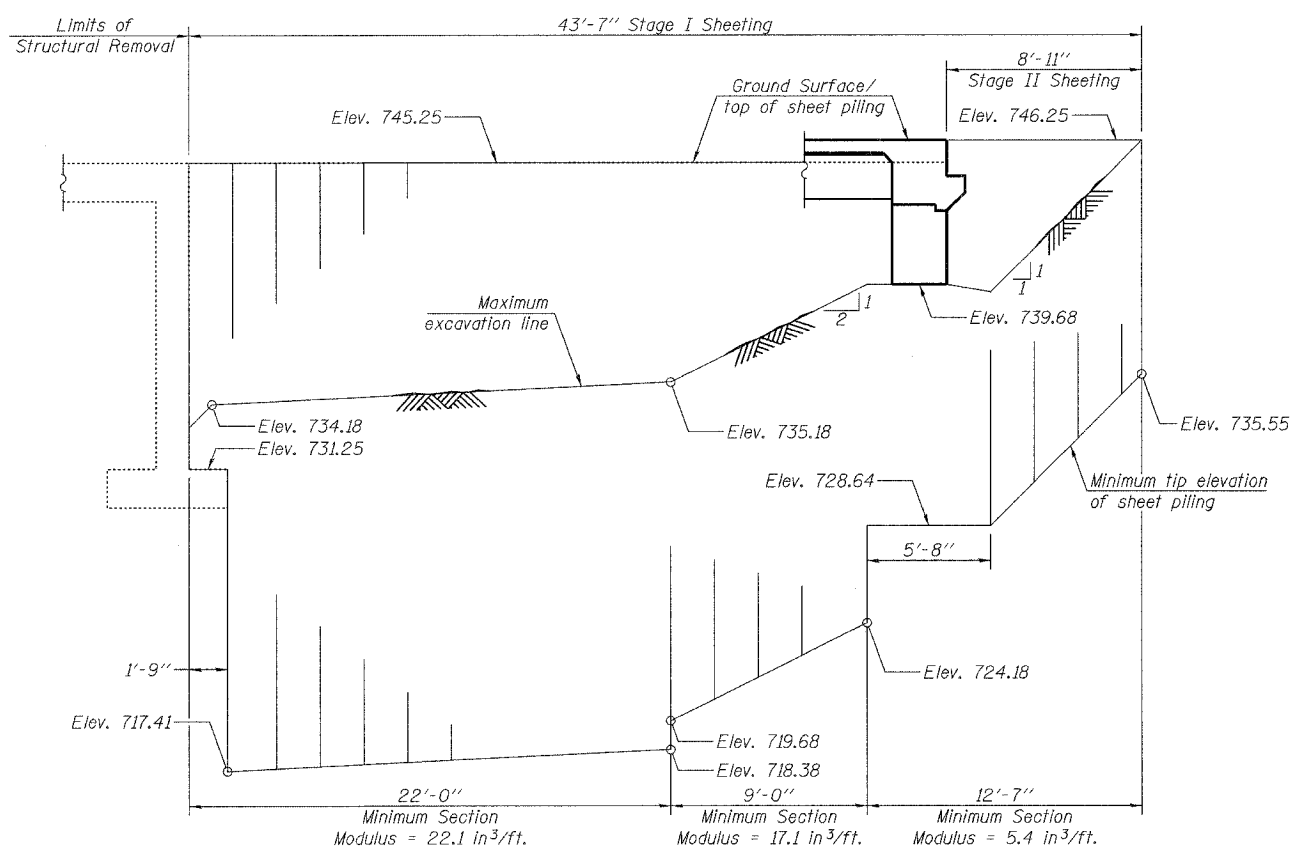
**CROSS SECTION - STAGE II CONSTRUCTION**

(Looking West)



**TEMPORARY SHEET PILING  
EAST ABUTMENT**

\* Minimum Section  
Modulus = 20.3 in<sup>3</sup>/ft.



**TEMPORARY SHEET PILING - WEST ABUTMENT**

**LEGEND:**

Removal of Existing Concrete Deck

**NOTES:**

Removal of Bituminous Wearing Surface and Existing Bridge Rail is included with Removal of Existing Structures.  
See Sheet 17 of 20 for Temporary Concrete Barrier Details.  
Pay Item for Temporary Concrete Barrier is included with Roadway Plans.  
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.  
The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

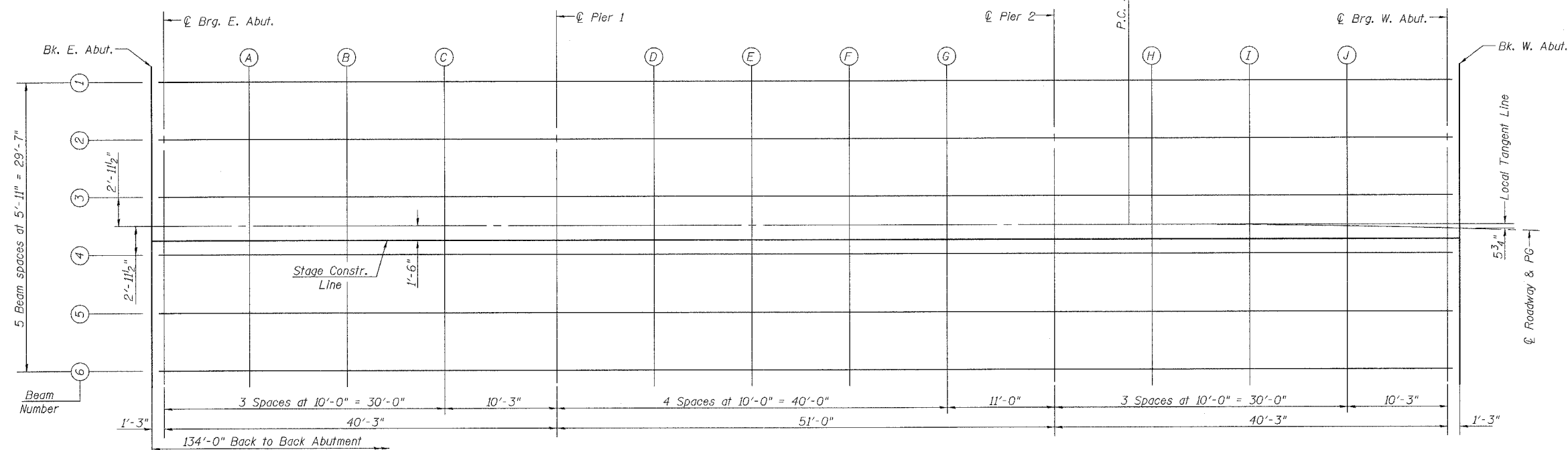
**BILL OF MATERIAL**

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	1097
Removal of Existing Structures	Each	1

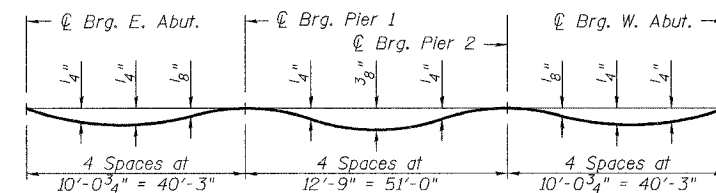
**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION  
CONSTRUCTION STAGING AND  
TEMPORARY SHEET PILE DESIGN  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096  
DATE: 8/7/2007  
DRAWN BY LCM  
CHECKED BY BLB





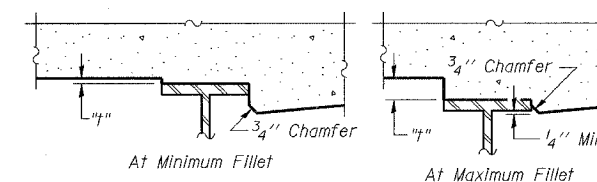
PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown to the left and on sheet 5 of 20. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown to the left and on sheet 5 of 20, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	-14.79	746.42	746.42
☉ Brg. E. Abut.	810+07.36	-14.79	746.42	746.42
A	810+17.36	-14.79	746.49	746.50
B	810+27.36	-14.79	746.53	746.55
C	810+37.36	-14.79	746.56	746.57
☉ Brg. Pier 1	810+47.61	-14.79	746.58	746.58
D	810+57.61	-14.79	746.58	746.59
E	810+67.61	-14.79	746.56	746.59
F	810+77.61	-14.79	746.53	746.56
G	810+87.61	-14.79	746.49	746.50
☉ Brg. Pier 2	810+98.61	-14.79	746.42	746.42
H	811+08.58	-14.79	746.34	746.35
I	811+18.46	-14.85	746.25	746.27
J	811+28.33	-15.00	746.14	746.16
☉ Brg. W. Abut.	811+38.46	-15.23	746.01	746.01
Bk. W. Abut.	811+39.69	-15.26	746.00	746.00

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	-8.88	746.52	746.52
☉ Brg. E. Abut.	810+07.36	-8.88	746.53	746.53
A	810+17.36	-8.88	746.59	746.61
B	810+27.36	-8.88	746.64	746.66
C	810+37.36	-8.88	746.67	746.68
☉ Brg. Pier 1	810+47.61	-8.88	746.68	746.68
D	810+57.61	-8.88	746.68	746.70
E	810+67.61	-8.88	746.67	746.70
F	810+77.61	-8.88	746.64	746.67
G	810+87.61	-8.88	746.59	746.61
☉ Brg. Pier 2	810+98.61	-8.88	746.53	746.53
H	811+08.59	-8.88	746.45	746.46
I	811+18.52	-8.94	746.36	746.38
J	811+28.44	-9.08	746.25	746.27
☉ Brg. W. Abut.	811+38.61	-9.31	746.12	746.12
Bk. W. Abut.	811+39.85	-9.35	746.10	746.10

**rjngroup**

Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - I  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096

DATE: 8/7/2007

DRAWN BY WJV  
CHECKED BY BLB

Contract #66697

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	-2.96	746.62	746.62
☉ Brg. E. Abut.	810+07.36	-2.96	746.62	746.62
A	810+17.36	-2.96	746.69	746.70
B	810+27.36	-2.96	746.73	746.75
C	810+37.36	-2.96	746.76	746.77
☉ Brg. Pier 1	810+47.61	-2.96	746.78	746.78
D	810+57.61	-2.96	746.78	746.79
E	810+67.61	-2.96	746.76	746.79
F	810+77.61	-2.96	746.73	746.76
G	810+87.61	-2.96	746.69	746.70
☉ Brg. Pier 2	810+98.61	-2.96	746.62	746.62
H	811+08.60	-2.96	746.54	746.55
I	811+18.58	-3.02	746.45	746.47
J	811+28.55	-3.16	746.34	746.36
☉ Brg. W. Abut.	811+38.77	-3.40	746.21	746.21
Bk. W. Abut.	811+40.02	-3.43	746.20	746.20

**☉ ROADWAY & PG**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	0.00	746.66	746.66
☉ Brg. E. Abut.	810+07.36	0.00	746.67	746.67
A	810+17.36	0.00	746.73	746.75
B	810+27.36	0.00	746.78	746.80
C	810+37.36	0.00	746.81	746.82
☉ Brg. Pier 1	810+47.61	0.00	746.82	746.82
D	810+57.61	0.00	746.82	746.84
E	810+67.61	0.00	746.81	746.84
F	810+77.61	0.00	746.78	746.81
G	810+87.61	0.00	746.73	746.75
☉ Brg. Pier 2	810+98.61	0.00	746.67	746.67
H	811+08.61	0.00	746.59	746.60
I	811+18.61	0.00	746.50	746.52
J	811+28.61	0.00	746.39	746.41
☉ Brg. W. Abut.	811+38.86	0.00	746.26	746.26
Bk. W. Abut.	811+40.11	0.00	746.25	746.25

**STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	1.50	746.64	746.64
☉ Brg. E. Abut.	810+07.36	1.50	746.65	746.65
A	810+17.36	1.50	746.71	746.72
B	810+27.36	1.50	746.75	746.77
C	810+37.36	1.50	746.78	746.79
☉ Brg. Pier 1	810+47.61	1.50	746.80	746.80
D	810+57.61	1.50	746.80	746.81
E	810+67.61	1.50	746.79	746.81
F	810+77.61	1.50	746.76	746.78
G	810+87.61	1.50	746.71	746.72
☉ Brg. Pier 2	810+98.61	1.50	746.64	746.64
H	811+08.61	1.50	746.57	746.57
I	811+18.62	1.44	746.48	746.50
J	811+28.64	1.29	746.37	746.39
☉ Brg. W. Abut.	811+38.89	1.06	746.25	746.23
Bk. W. Abut.	811+40.14	1.03	746.23	746.22

**BEAM 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	2.96	746.62	746.62
☉ Brg. E. Abut.	810+07.36	2.96	746.62	746.62
A	810+17.36	2.96	746.69	746.70
B	810+27.36	2.96	746.73	746.75
C	810+37.36	2.96	746.76	746.77
☉ Brg. Pier 1	810+47.61	2.96	746.78	746.78
D	810+57.61	2.96	746.78	746.79
E	810+67.61	2.96	746.76	746.79
F	810+77.61	2.96	746.73	746.76
G	810+87.61	2.96	746.69	746.70
☉ Brg. Pier 2	810+98.61	2.96	746.62	746.62
H	811+08.61	2.96	746.54	746.55
I	811+18.64	2.89	746.45	746.47
J	811+28.66	2.75	746.35	746.36
☉ Brg. W. Abut.	811+38.93	2.52	746.22	746.22
Bk. W. Abut.	811+40.18	2.48	746.21	746.21


**BEAM 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	8.88	746.52	746.52
☉ Brg. E. Abut.	810+07.36	8.88	746.53	746.53
A	810+17.36	8.88	746.59	746.61
B	810+27.36	8.88	746.64	746.66
C	810+37.36	8.88	746.67	746.68
☉ Brg. Pier 1	810+47.61	8.88	746.68	746.68
D	810+57.61	8.88	746.68	746.70
E	810+67.61	8.88	746.67	746.70
F	810+77.61	8.88	746.64	746.67
G	810+87.61	8.88	746.59	746.61
☉ Brg. Pier 2	810+98.61	8.88	746.53	746.53
H	811+08.62	8.87	746.45	746.46
I	811+18.70	8.81	746.36	746.38
J	811+28.77	8.67	746.25	746.27
☉ Brg. W. Abut.	811+39.09	8.43	746.13	746.13
Bk. W. Abut.	811+40.35	8.40	746.11	746.11

**BEAM 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	810+06.11	14.79	746.42	746.42
☉ Brg. E. Abut.	810+07.36	14.79	746.42	746.42
A	810+17.36	14.79	746.49	746.50
B	810+27.36	14.79	746.53	746.55
C	810+37.36	14.79	746.56	746.57
☉ Brg. Pier 1	810+47.61	14.79	746.58	746.58
D	810+57.61	14.79	746.58	746.59
E	810+67.61	14.79	746.56	746.59
F	810+77.61	14.79	746.53	746.56
G	810+87.61	14.79	746.49	746.50
☉ Brg. Pier 2	810+98.61	14.79	746.42	746.42
H	811+08.64	14.79	746.34	746.35
I	811+18.76	14.73	746.25	746.27
J	811+28.88	14.58	746.15	746.16
☉ Brg. W. Abut.	811+39.25	14.35	746.02	746.02
Bk. W. Abut.	811+40.52	14.31	746.01	746.01

K:\11280836\Structure\Final Plans\Final.dgn 8/2/2007

 Excellence through Ownership 200 West Front Street Wheaton, IL 60187	ILLINOIS DEPARTMENT OF TRANSPORTATION
	TOP OF SLAB ELEVATIONS - II IL RTE 9 OVER DRUMMER CREEK FAP RTE 693 - SECTION 198R-1 FORD COUNTY STATION 810+73.11 STRUCTURE NO. 027-0096 DATE: 8/7/2007 DRAWN BY WJV CHECKED BY BLB

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	809+76.11	-16.42	746.10
A	809+86.11	-16.42	746.21
B	809+96.11	-16.42	746.30
End E. Appr. Pav't.	810+06.11	-16.42	746.38

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	809+76.11	-12.00	746.20
A	809+86.11	-12.00	746.30
B	809+96.11	-12.00	746.40
End E. Appr. Pav't.	810+06.11	-12.00	746.47

**☉ ROADWAY & PG**

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	809+76.11	0.00	746.38
A	809+86.11	0.00	746.49
B	809+96.11	0.00	746.58
End E. Appr. Pav't.	810+06.11	0.00	746.66

**STAGE CONSTRUCTION LINE**

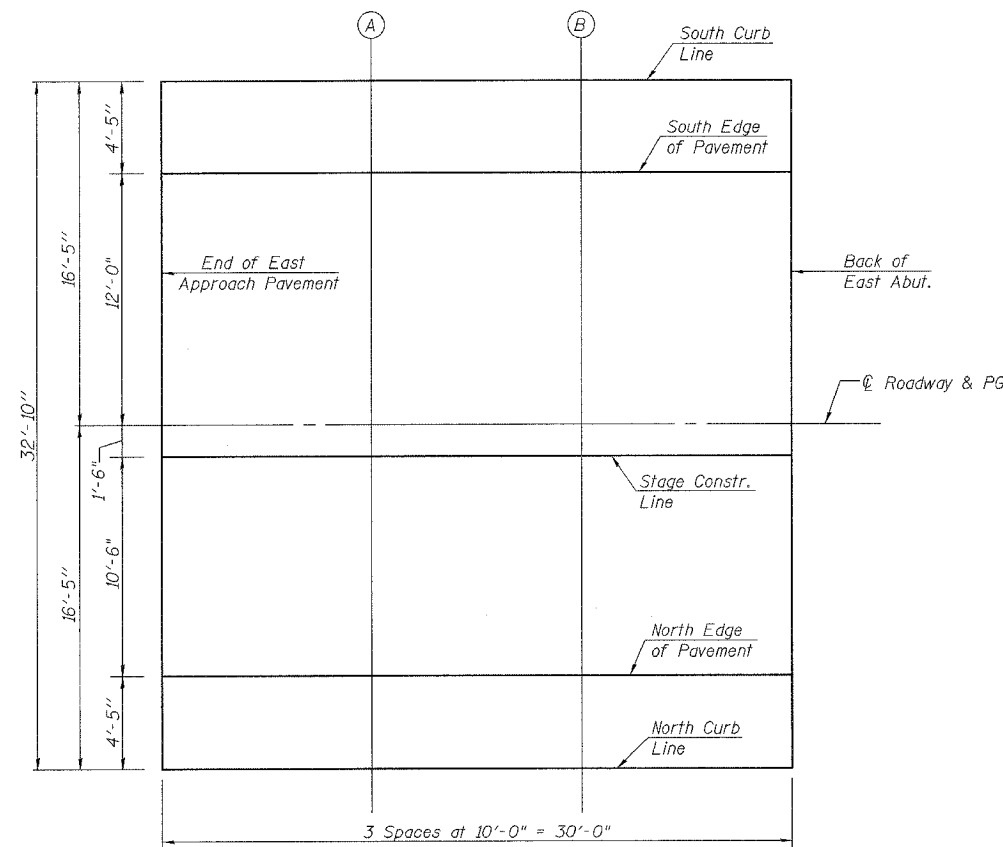
Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	809+76.11	1.50	746.36
A	809+86.11	1.50	746.47
B	809+96.11	1.50	746.56
End E. Appr. Pav't.	810+06.11	1.50	746.64

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	809+76.11	12.00	746.20
A	809+86.11	12.00	746.30
B	809+96.11	12.00	746.40
End E. Appr. Pav't.	810+06.11	12.00	746.47

**NORTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	809+76.11	16.42	746.10
A	809+86.11	16.42	746.21
B	809+96.11	16.42	746.30
End E. Appr. Pav't.	810+06.11	16.42	746.38



**PLAN**

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>TOP OF EAST APPROACH SLAB ELEVATIONS IL RTE 9 OVER DRUMMER CREEK FAP RTE 693 - SECTION 19BR-1 FORD COUNTY STATION 810+73.11 STRUCTURE NO. 027-0096</p>
	<p>DATE: 8/7/2007</p> <p>DRAWN BY: WJV CHECKED BY: BLB</p>

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	811+39.64	-16.90	745.97
A	811+49.51	-16.90	745.83
B	811+59.38	-16.90	745.68
End W. Appr. Pav't.	811+69.26	-16.90	745.54

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	811+39.78	-12.00	746.06
A	811+49.68	-12.00	745.93
B	811+59.59	-12.00	745.78
End W. Appr. Pav't.	811+69.51	-12.00	745.64

**Ø ROADWAY & PG**

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	811+40.11	0.00	746.25
A	811+50.12	0.00	746.11
B	811+60.12	0.00	745.96
End W. Appr. Pav't.	811+70.14	0.00	745.81

**STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	811+40.14	1.02	746.22
A	811+50.16	1.02	746.08
B	811+60.17	1.02	745.93
End W. Appr. Pav't.	811+70.19	1.02	745.78

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	811+40.45	12.00	746.06
A	811+50.56	12.00	745.91
B	811+60.67	12.00	745.77
End W. Appr. Pav't.	811+70.78	12.00	745.62

**NORTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	811+40.56	15.94	745.97
A	811+50.71	16.00	745.83
B	811+60.85	16.00	745.68
End W. Appr. Pav't.	811+70.99	16.00	745.53

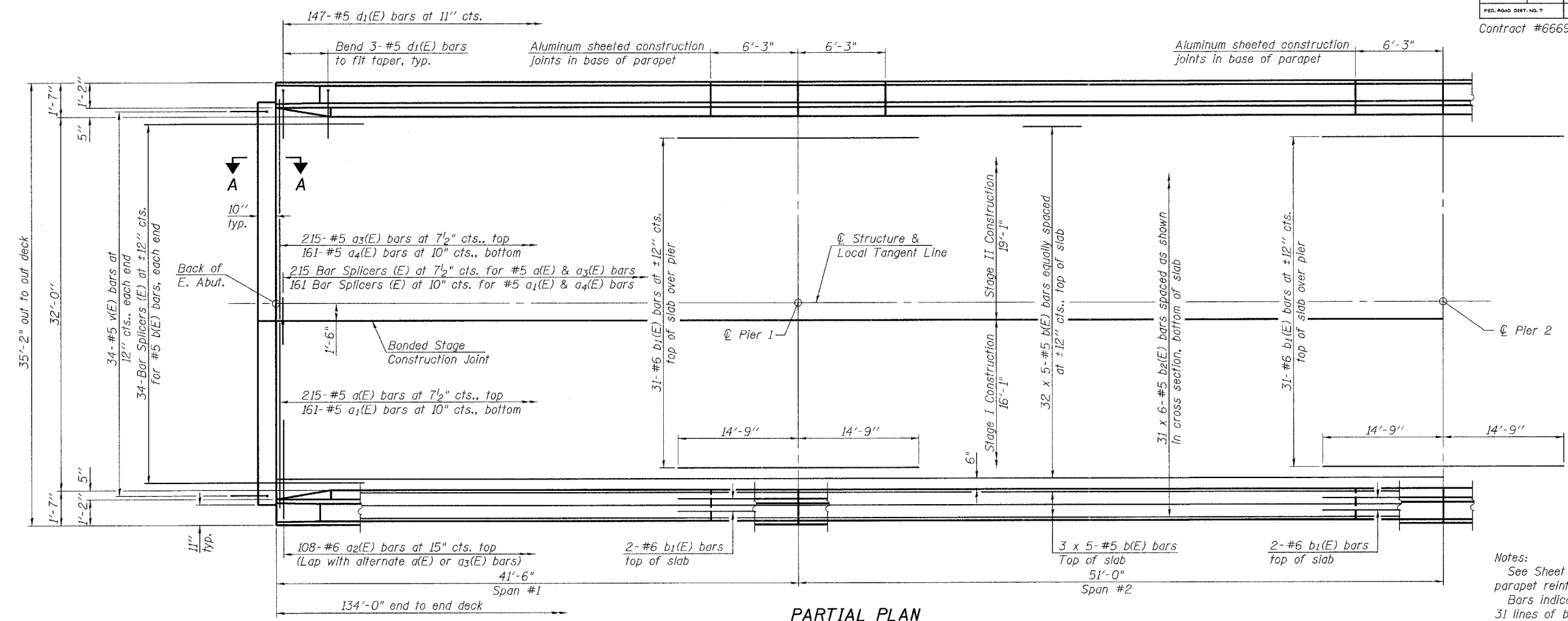


**PLAN**

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>TOP OF WEST APPROACH SLAB ELEVATIONS IL RTE 9 OVER DRUMMER CREEK FAP RTE 693 - SECTION 19BR-1 FORD COUNTY STATION 810+73.11 STRUCTURE NO. 027-0096</p>
	<p>DATE: 8/7/2007</p> <p>DRAWN BY: WJV CHECKED BY: BLB</p>

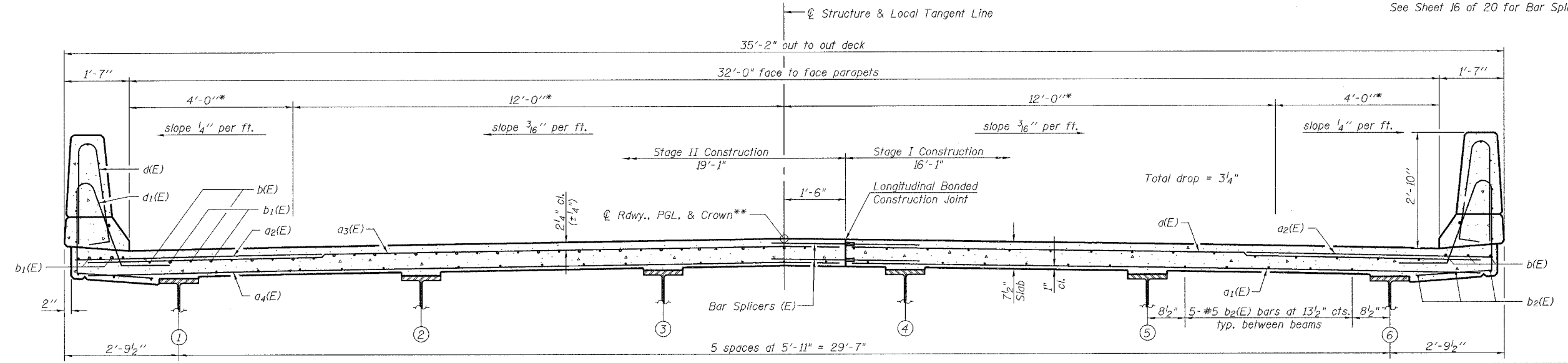
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 20 SHEETS
FAP 693	19BR-1	FORD	50	21	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #66697



**MIN. BAR LAP**  
#5 bar = 2'-2"

Notes:  
See Sheet 9 of 20 for superstructure details, parapet reinforcement and Bill of Material.  
Bars indicated thus 31 x 6- #5 etc. indicates 31 lines of bars with 6 lengths per line.  
See Sheet 10 of 20 for Section A-A.  
See Sheet 16 of 20 for Bar Splicer Details.

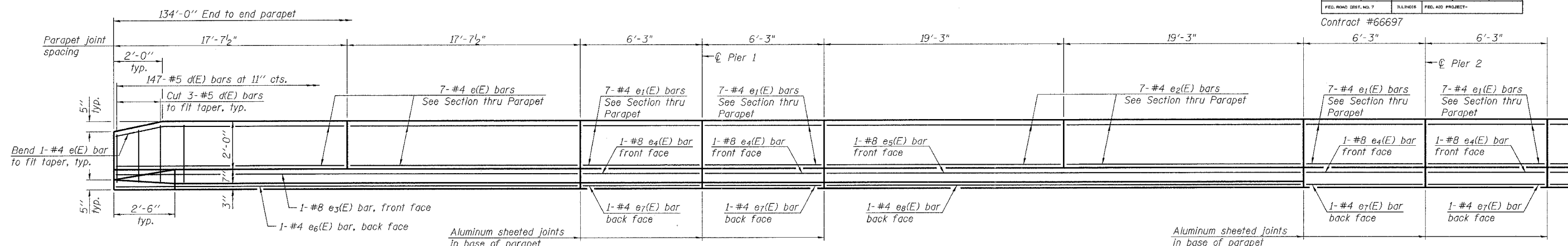


\*South shoulder width varies from 4'-0" at Sta. 811+06.25 to 4'-5¾" at the Back of the West Abutment.  
North shoulder width varies from 4'-0" at Sta. 811+06.25 to 3'-6¼" at the Back of the West Abutment.  
The two 12'-0" lanes shift accordingly.  
\*\*The distance from the centerline of structure to the centerline of roadway, PGL and crown varies from 0'-0" at Sta. 811+06.25 to 0'-5¾" (North) at the Back of the West Abutment.

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	ILLINOIS DEPARTMENT OF TRANSPORTATION
	<p>SUPERSTRUCTURE IL RTE 9 OVER DRUMMER CREEK FAP RTE 693 - SECTION 19BR-1 FORD COUNTY STATION 810+73.11 STRUCTURE NO. 027-0096</p>
	<p>DATE: 8/7/2007</p> <p>DRAWN BY WJV CHECKED BY BLB</p>

8/2/2007 K:\11208205\Structure\Final Plans\Final.dwg

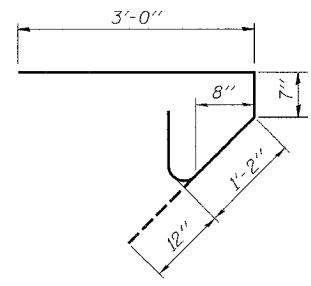
Contract #66697



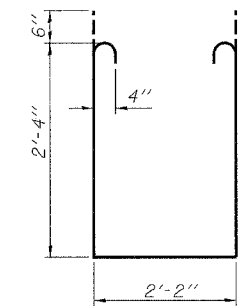
INSIDE ELEVATION OF PARAPET

SUPERSTRUCTURE BILL OF MATERIAL

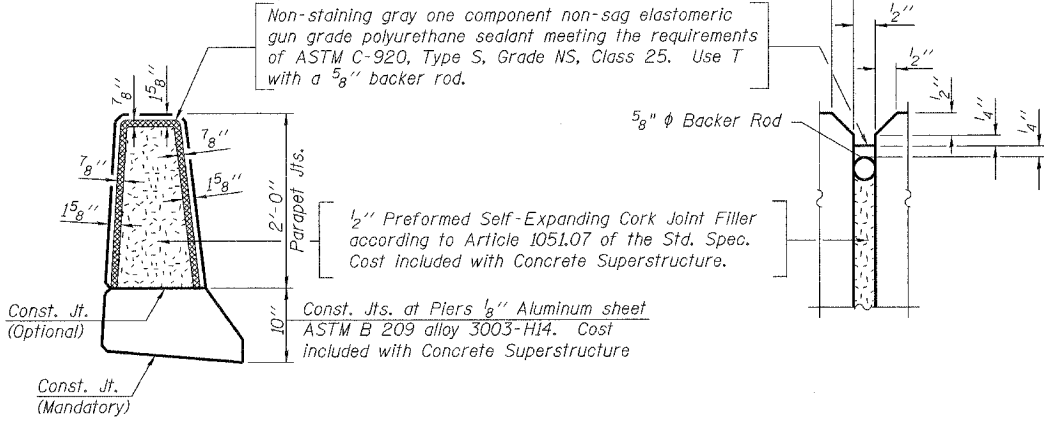
Bar	No.	Size	Length	Shape	
d(E)	215	#5	15'-8"	—	
a <sub>1</sub> (E)	161	#5	15'-0"	—	
a <sub>2</sub> (E)	216	#6	6'-0"	—	
a <sub>3</sub> (E)	215	#5	18'-8"	—	
a <sub>4</sub> (E)	161	#5	18'-0"	—	
b(E)	190	#5	28'-6"	—	
b <sub>1</sub> (E)	70	#6	29'-6"	—	
b <sub>2</sub> (E)	186	#5	24'-2"	—	
d(E)	294	#5	5'-6"	—	
d <sub>1</sub> (E)	294	#5	7'-7"	—	
e(E)	56	#4	17'-4"	—	
e <sub>1</sub> (E)	56	#4	6'-0"	—	
e <sub>2</sub> (E)	28	#4	19'-0"	—	
e <sub>3</sub> (E)	4	#8	35'-0"	—	
e <sub>4</sub> (E)	8	#8	6'-0"	—	
e <sub>5</sub> (E)	2	#8	38'-3"	—	
e <sub>6</sub> (E)	4	#4	35'-0"	—	
e <sub>7</sub> (E)	8	#4	6'-0"	—	
e <sub>8</sub> (E)	2	#4	38'-3"	—	
m(E)	4	#6	14'-11"	—	
m <sub>1</sub> (E)	6	#6	15'-10"	—	
m <sub>2</sub> (E)	12	#6	7'-2"	—	
m <sub>3</sub> (E)	8	#6	5'-8"	—	
m <sub>4</sub> (E)	4	#6	2'-6"	—	
m <sub>5</sub> (E)	2	#6	1'-3"	—	
m <sub>6</sub> (E)	2	#6	4'-2"	—	
m <sub>7</sub> (E)	4	#6	17'-11"	—	
m <sub>8</sub> (E)	6	#6	18'-10"	—	
m <sub>9</sub> (E)	12	#6	8'-2"	—	
s(E)	72	#5	5'-9"	—	
s <sub>1</sub> (E)	62	#4	7'-10"	—	
v(E)	68	#5	3'-4"	—	
Reinforcement Bars, Epoxy Coated				Pound	36,460
Concrete Superstructure				Cu. Yds.	160.9
Bar Splicers				Each	460



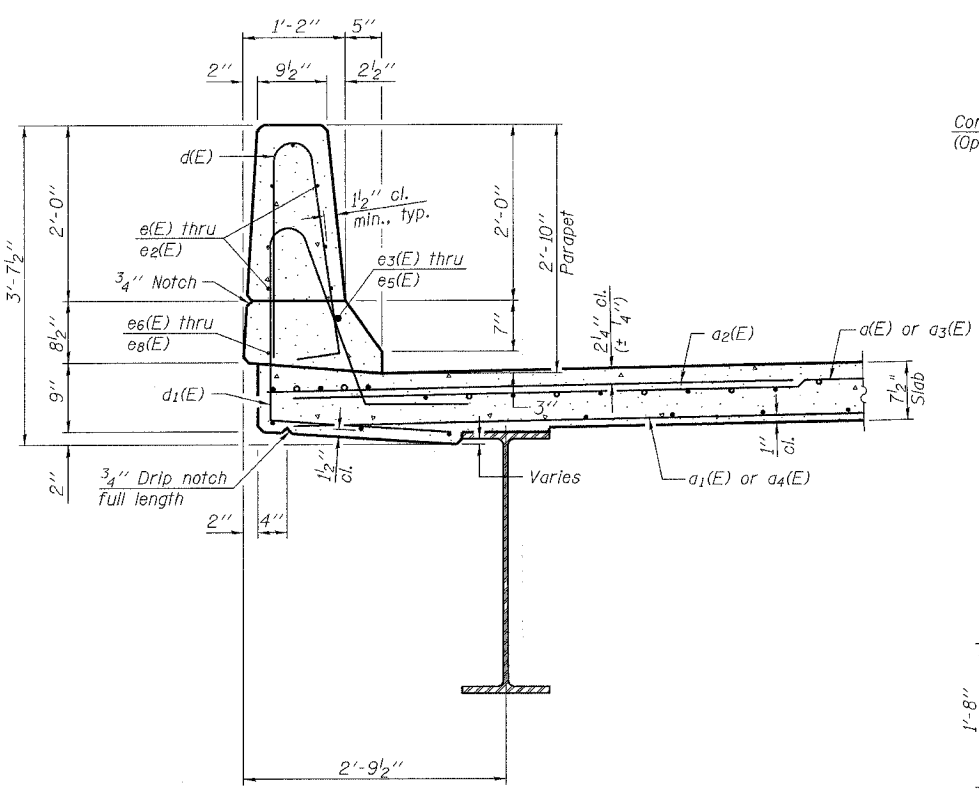
BAR s(E)



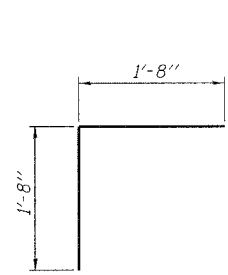
BAR s<sub>1</sub>(E)



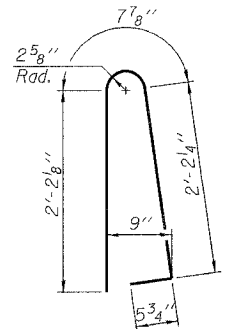
PARAPET JOINT DETAILS



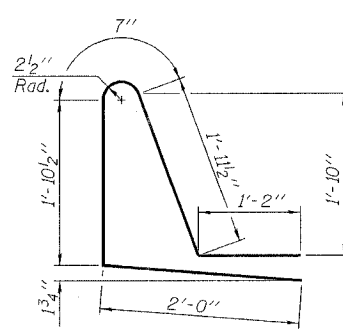
SECTION THRU PARAPET



BAR v(E)



BAR d(E)

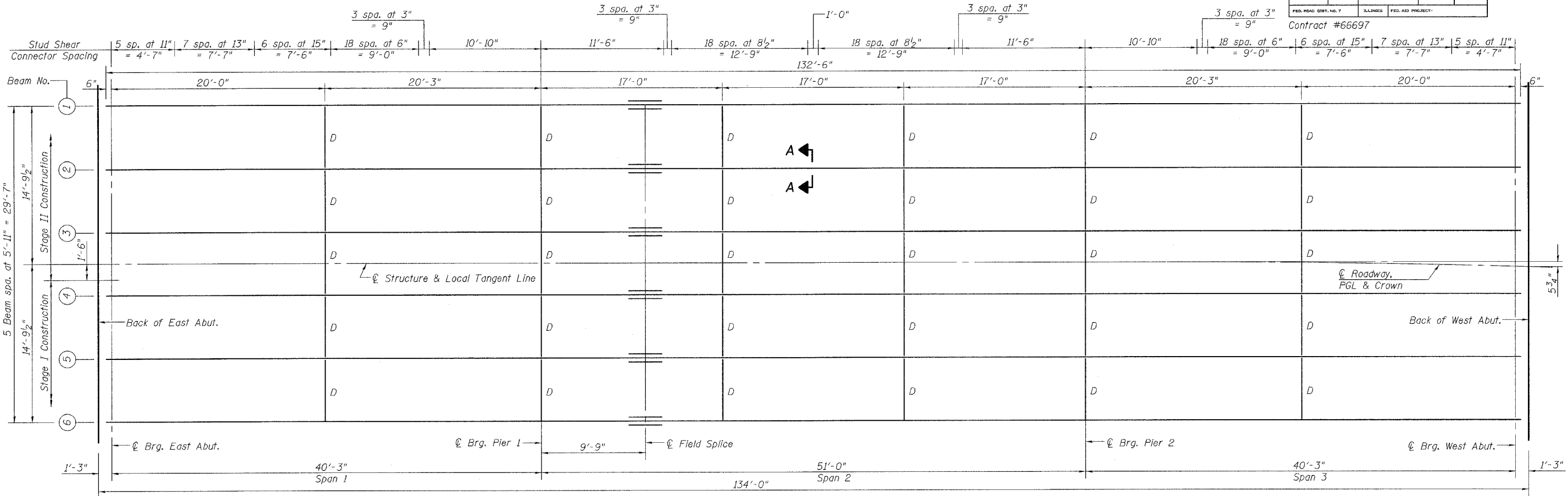


BAR d<sub>1</sub>(E)

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUPERSTRUCTURE DETAILS  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096  
DATE: 8/7/2007  
DRAWN BY: WJV  
CHECKED BY: BLB





**FRAMING PLAN**

All beams shall be W24x76 AASHTO M 270, Grade 50W (NTR)

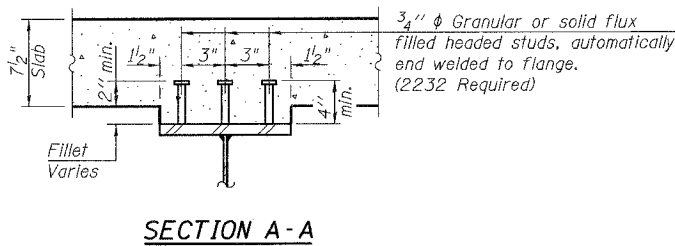
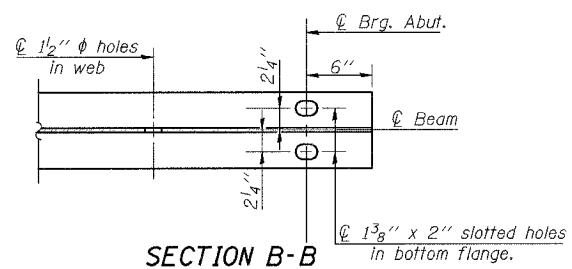
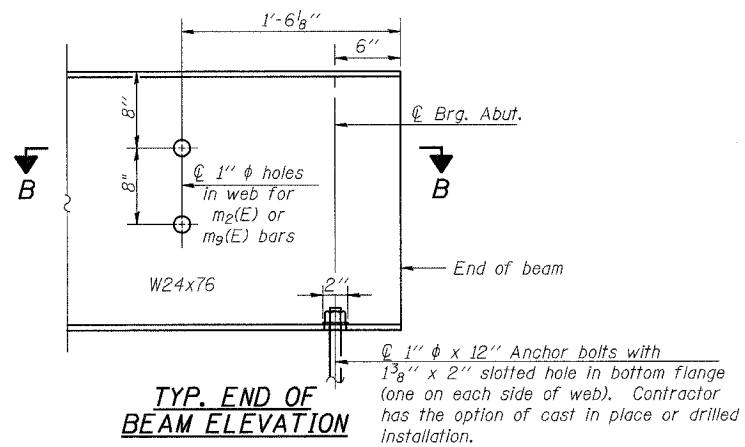
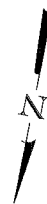
**TOP OF BEAM ELEVATIONS\***

Beam	Location	℄ Brg. E. Abut.	℄ Brg. Pier 1	℄ Splice	℄ Brg. Pier 2	℄ Brg. W. Abut.
Beam #1 Elev.		745.76	745.84	745.86	745.60	745.35
Beam #2 Elev.		745.86	745.94	745.96	745.70	745.45
Beam #3 Elev.		745.96	746.04	746.06	745.80	745.55
Beam #4 Elev.		745.96	746.04	746.06	745.80	745.56
Beam #5 Elev.		745.86	745.94	745.96	745.70	745.46
Beam #6 Elev.		745.76	745.84	745.86	745.60	745.36

\* Elevations are before any deflections and are to be used for fabrication only.

**NOTES**

- D denotes interior diaphragm.
- See Sheet 12 of 20 for Field Splice, Bearings, Diaphragm Details, and Moment and Reaction Tables.
- All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



**rjngroup**

Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

FRAMING PLAN  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096

DATE: 8/7/2007

DRAWN BY WJV  
CHECKED BY BLB



Contract #66697

	0.4 Sp. 1 or 0.6 Sp. 3	Pier #1 or Pier #2	0.5 Sp. 2
$I_s$	(in <sup>4</sup> ) 2100	2100	2100
$I_c(n)$	(in <sup>4</sup> ) 7124	-	7124
$I_c(3n)$	(in <sup>4</sup> ) 5255	-	5255
$S_s$	(in <sup>3</sup> ) 176	176	176
$S_c(n)$	(in <sup>3</sup> ) 291	-	291
$S_c(3n)$	(in <sup>3</sup> ) 262	-	262
$P$	(k/ft) 0.65	1.07	0.65
$M_P$	(k) 71.9	204.6	75.1
$s_P$	(k/ft) 0.42	-	0.42
$M_{sP}$	(k) 53.8	-	67.3
$M_L$	(k) 214.9	119.3	232.3
$M_{Imp}$	(k) 64.5	34.6	65.0
$S_3 [M_L + M_{Imp}]$	(k) 465.7	256.5	496.3
$M_a$	(k) 768.8	599.4	830.8
$M_u$	(k) 1141	-	1141
$f_s \text{ } \bar{P} \text{ non-comp}$	(ksi) 4.9	14.0	5.1
$f_s \text{ } \bar{P} \text{ (comp)}$	(ksi) 2.5	-	3.1
$f_s \text{ } S_3 [M_L + M_{Imp}]$	(ksi) 19.2	17.5	20.5
$f_s \text{ (Overload)}$	(ksi) 26.6	31.5	28.7
$f_s \text{ (Total)}$	(ksi) -	41.0	-
VR	(k) 40.5	-	35.4

	Abuts.	Piers
$R_P$	(k) 16.3	53.7
$R_L$	(k) 33.0	39.2
Imp.	(k) 9.9	11.4
$R_{Total}$	(k) 59.2	104.3

\* Compact section  
\*\* Braced non-compact and partially braced section

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

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

$M_P$ : Un-factored moment due to non-composite dead load (kip-ft.).

$s_P$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_{sP}$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

$M_L$ : Un-factored live load moment (kip-ft.).

$M_{Imp}$ : Un-factored moment due to impact (kip-ft.).

$M_a$ : Factored design moment (kip-ft.).

$1.3 [M_P + M_{sP} + \frac{5}{3} (M_L + M_{Imp})]$

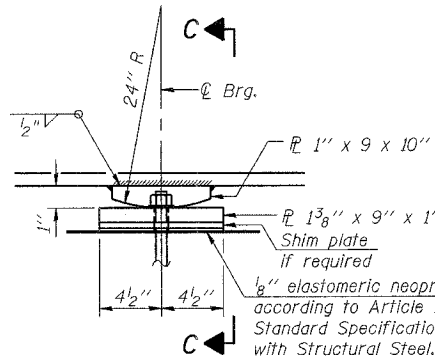
$M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

$f_s \text{ (Overload)}$ : Sum of stresses as computed from the moments below (ksi).  $M_P + M_{sP} + \frac{5}{3} (M_L + M_{Imp})$

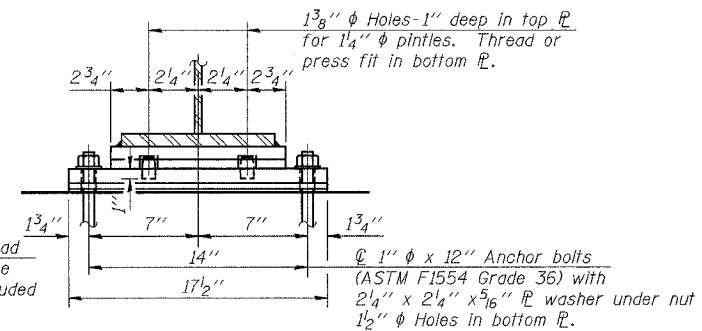
$f_s \text{ (Total)}$ : Sum of stresses as computed from the moments below on non-compact section (ksi).  $1.3 [M_P + M_{sP} + \frac{5}{3} (M_L + M_{Imp})]$

VR: Maximum  $L +$  impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

Beam No.	4	5	6
Shim Height	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "

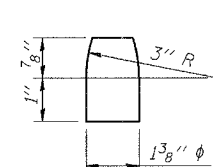


ELEVATION AT PIER

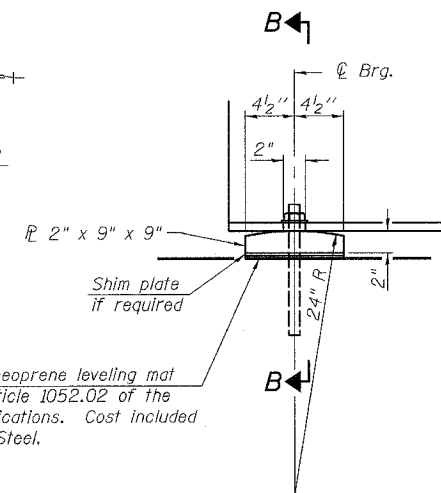


SECTION C-C

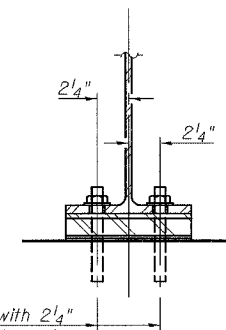
FIXED BEARING AT PIER



PINTLE



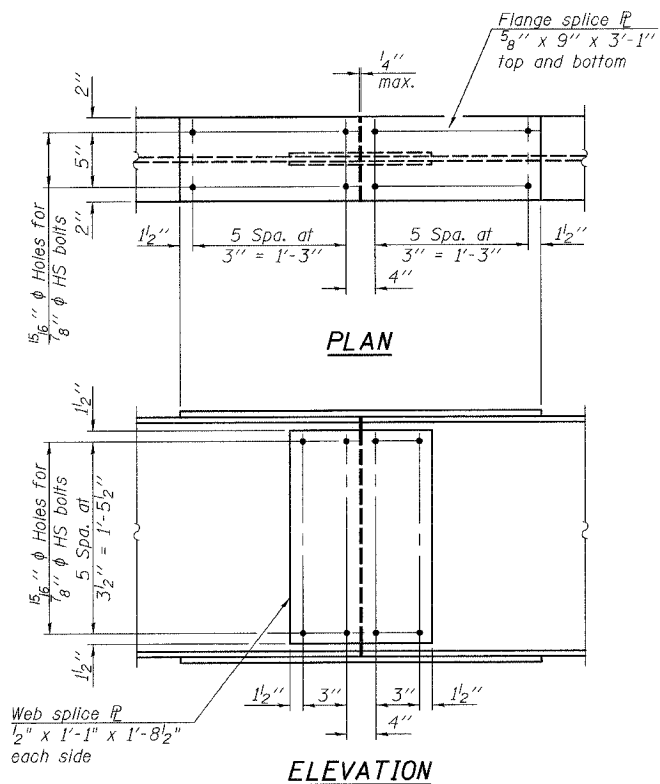
ELEVATION AT ABUTMENT



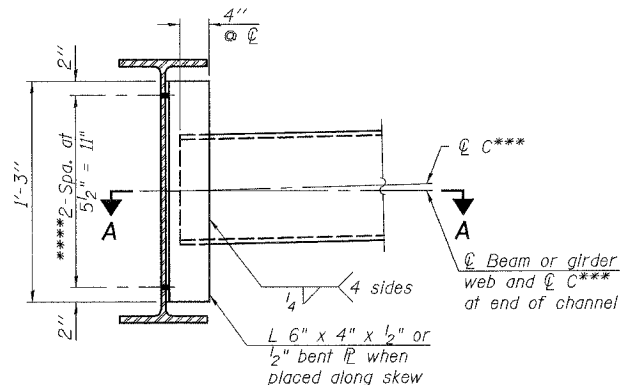
SECTION B-B

FIXED BEARING AT ABUTMENTS

Notes:  
Two  $\frac{1}{8}$ " adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.  
NTR is applicable to all splice materials, see notes on sheet 11 of 20.



SPLICE DETAIL  
(6 Required)

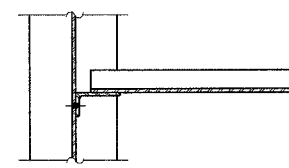


INTERIOR DIAPHRAGM

Note:  
Two hardened washers required for each set of oversized holes.

\*\*\* C12 x 25 or C12 x 30. Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

\*\*\*\*  $\frac{3}{4}$ "  $\phi$  HS bolts,  $\frac{15}{16}$ "  $\phi$  holes



SECTION A-A

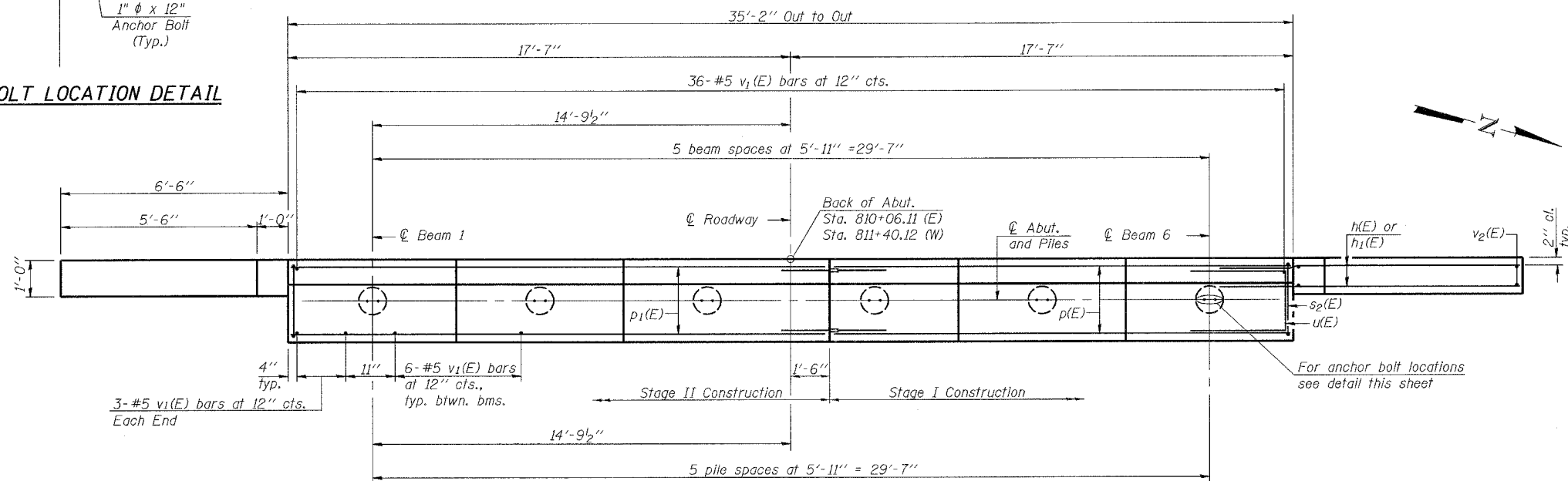
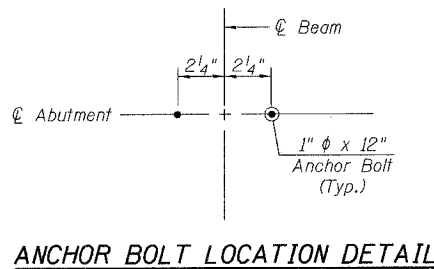
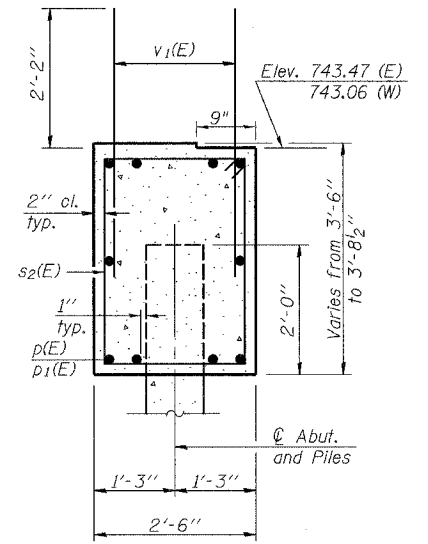
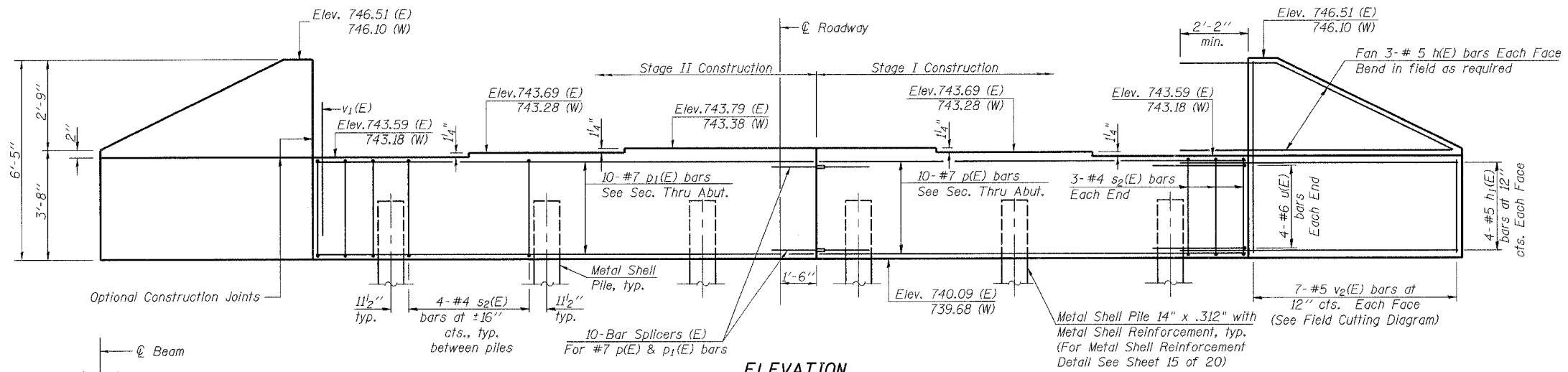
BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	48

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

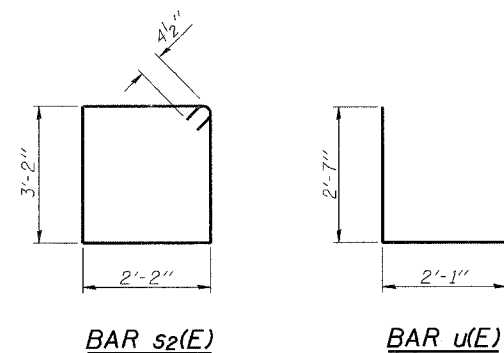
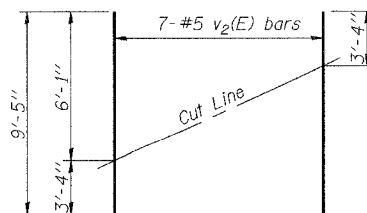
ILLINOIS DEPARTMENT OF TRANSPORTATION  
STRUCTURAL STEEL DETAILS  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096  
DATE: 8/7/2007  
DRAWN BY WJV  
CHECKED BY BLB

Contract #66697



**PILE DATA**

Type: Metal Shell-14 in. dia. x .312 in. walls  
 Nominal Required Bearing: 261 Kips  
 Allowable Resistance Available: 87 Kips  
 Est. Length: 36' (East Abutment), 27' (West Abutment)  
 No. Production Piles: 6 (East Abutment), 5 (West Abutment)  
 No. Test Piles: 1 (North Pile of West Abutment)



**BILL OF MATERIAL**  
(East and West Abutment)

Bar	No.	Size	Length	Shape	
h(E)	24	#5	9'-0"	—	
h <sub>1</sub> (E)	32	#5	8'-6"	—	
p(E)	20	#7	15'-9"	—	
p <sub>1</sub> (E)	20	#7	18'-9"	—	
s <sub>2</sub> (E)	52	#4	11'-5"	□	
u(E)	16	#6	7'-3"	—	
v <sub>1</sub> (E)	144	#5	4'-4"	—	
v <sub>2</sub> (E)	28	#5	9'-5"	—	
* Structure Excavation				Cu. Yd.	172.0
Concrete Structures				Cu. Yd.	28.5
Reinforcement Bars, Epoxy Coated				Pound	3,370
Furnishing Metal Shell Piles 14" x .312"				Foot	351
Driving Piles				Foot	351
Test Pile Metal Shells				Each	1
Bar Splicers				Each	20

\* Structure Excavation for W. Abut. = 103.7 Cu. Yd., E. Abut. = 68.3 Cu. Yd.

Notes: Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For bearing details and anchor bolt installation, see sheet 12 of 20.  
 For Bar Splicer details, see sheet 16 of 20.  
 For Pile Details, see sheet 15 of 20.

**rjngroup**

Excellence through Ownership

200 West Front Street  
 Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENTS  
 IL RTE 9 OVER DRUMMER CREEK  
 FAP RTE 693 - SECTION 19BR-1  
 FORD COUNTY  
 STATION 810+73.11  
 STRUCTURE NO. 027-0096

DATE: 8/7/2007

DRAWN BY JMT  
 CHECKED BY BLB

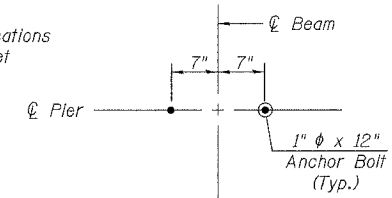
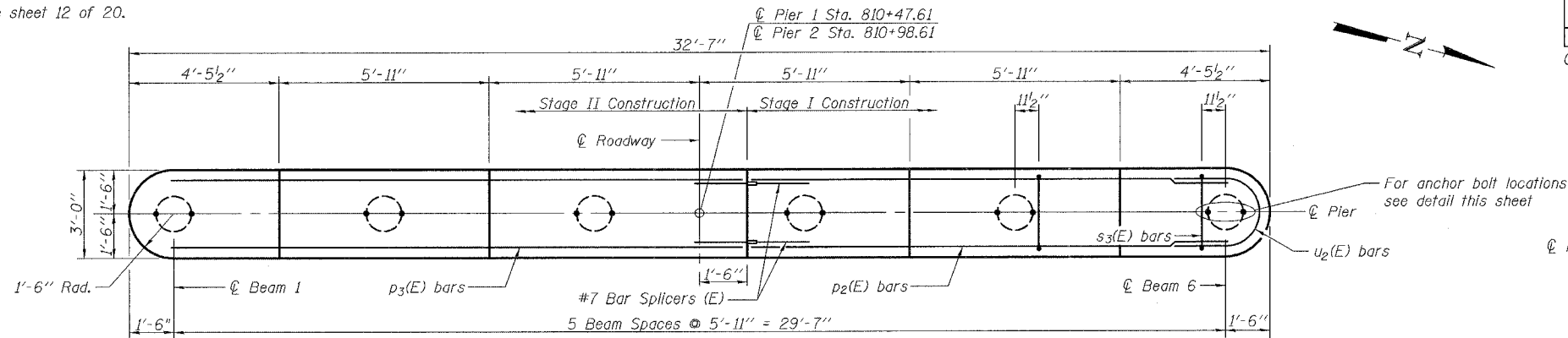
Notes: Space reinforcement in cap to miss anchor bolts.  
 Four steps monolithically with cap.  
 For bearing details and anchor bolt installation, see sheet 12 of 20.  
 All edges shall have standard  $\frac{3}{4}$ " chamfers.  
 For Bar Splicer details, see sheet 16 of 20.  
 For Pile Details, see sheet 15 of 20.

**PILE DATA**

Type: Metal Shell-14 in. dia. x .312 in. walls  
 Nominal Required Bearing: 372 Kips (Pier 1),  
 357 Kips (Pier 2)  
 Allowable Resistance Available: 124 Kips (Pier 1),  
 119 Kips (Pier 2)  
 Est. Length: 53' (Pier 1), 50' (Pier 2)  
 No. Production Piles: 5 (Pier 1), 6 (Pier 2)  
 No. Test Piles: 1 (South Pile of Pier 1)

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14 20 SHEETS
FAP 693	19BR-1	FORD	50	27	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #66697

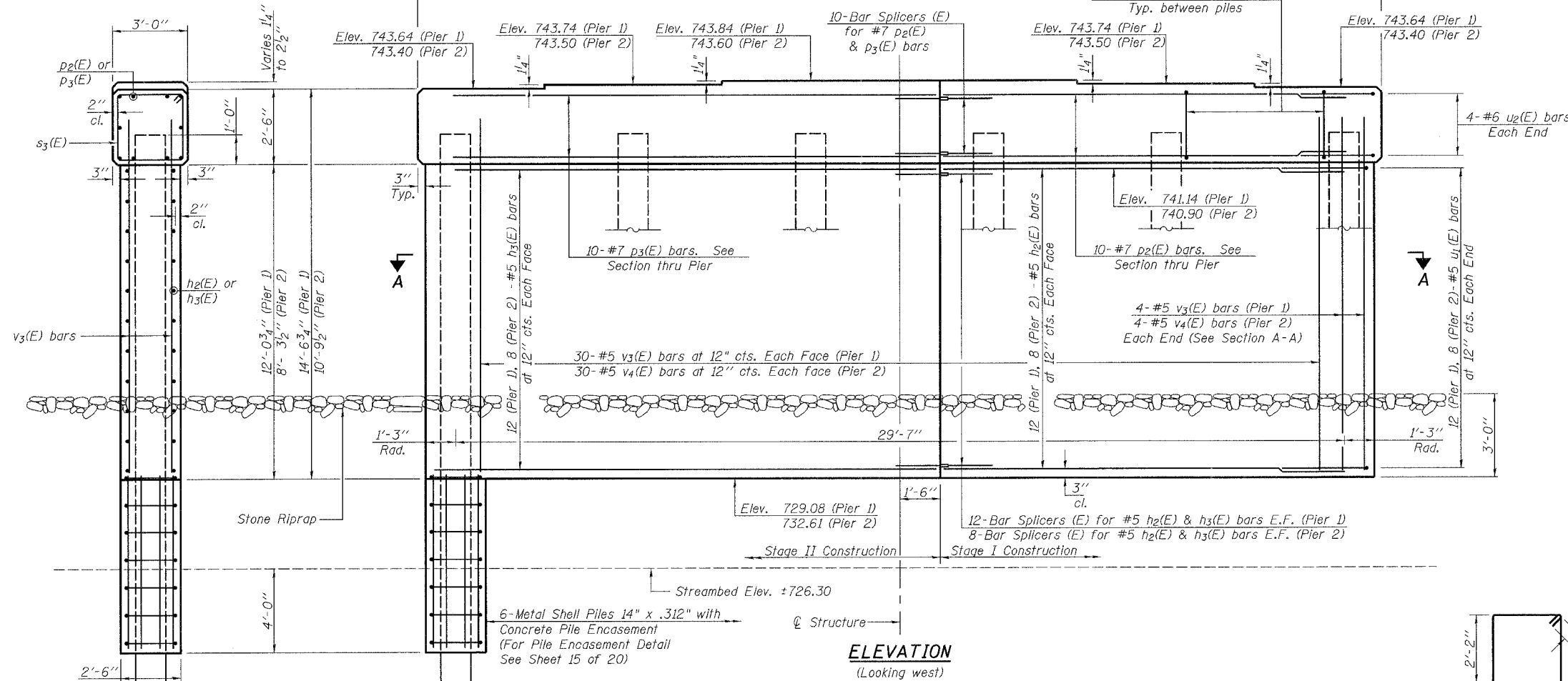


**ANCHOR BOLT LOCATION DETAIL**

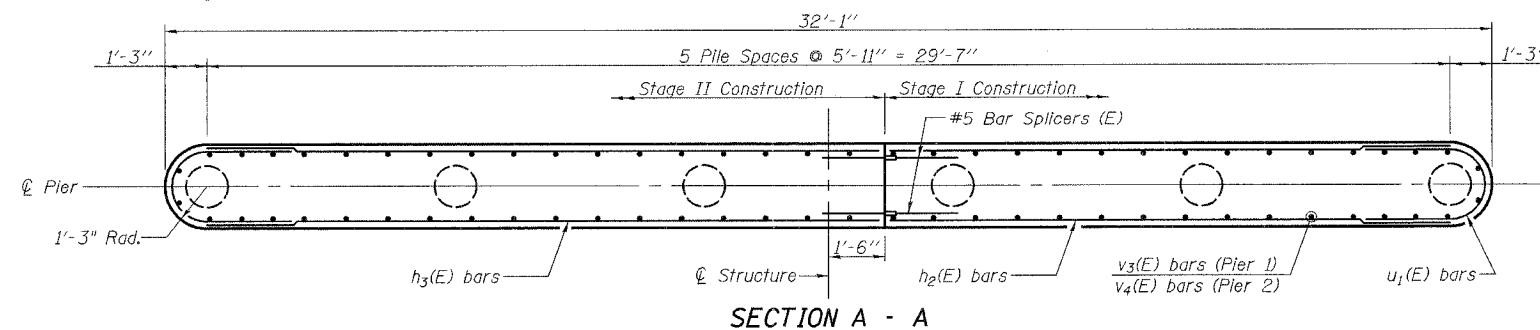
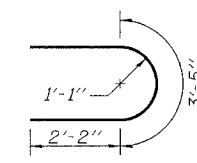
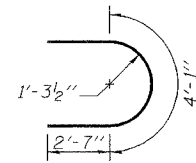
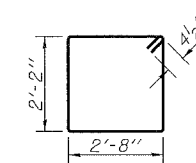
**BILL OF MATERIAL**  
(2 Piers)

Bar	No.	Size	Length	Shape	
h2(E)	40	#5	13'-2"	—	
h3(E)	40	#5	16'-2"	—	
p2(E)	20	#7	13'-2"	—	
p3(E)	20	#7	16'-2"	—	
s3(E)	50	#4	10'-5"	□	
u1(E)	40	#5	7'-9"	U	
u2(E)	16	#6	9'-3"	U	
v3(E)	68	#5	13'-6"	—	
v4(E)	68	#5	9'-9"	—	
* Structure Excavation				Cu. Yd.	57.4
Concrete Structures				Cu. Yd.	78.0
Concrete Encasement				Cu. Yd.	18.6
Reinforcement Bars, Epoxy Coated				Pound	4,970
Furnishing Metal Shell Piles 14" x .312"				Foot	565
Driving Piles				Foot	565
Test Pile Metal Shells				Each	1
Bar Splicers				Each	60
Underwater Structure Excavation Protection, Location 1				Each	1
Underwater Structure Excavation Protection, Location 2				Each	1

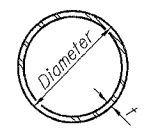
\* Structure Excavation for Pier 1 = 27.7 Cu. Yd., Pier 2 = 29.7 Cu. Yd.



**END VIEW**

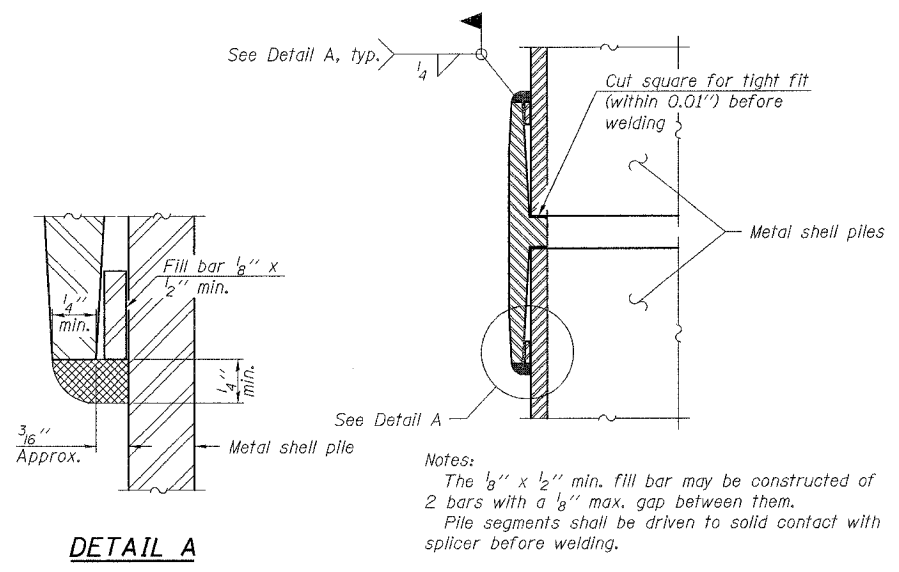


<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>PIERS          IL RTE 9 OVER DRUMMER CREEK          FAP RTE 693 - SECTION 19BR-1          FORD COUNTY          STATION 810+73.11          STRUCTURE NO. 027-0096</p>
	<p>DATE: 8/7/2007</p>
	<p>DRAWN BY JMT          CHECKED BY BLB</p>

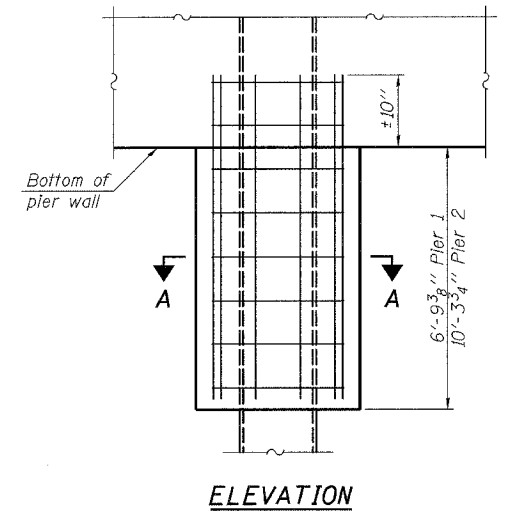


**METAL SHELL PILE TABLE**

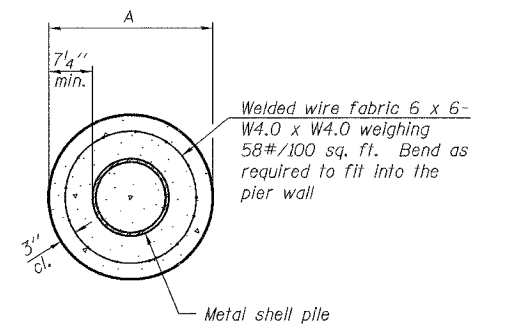
Designation	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)	Encasement diameter A
PP12	0.179"	22.60	0.0274	30"
PP12	0.250"	31.37	0.0267	30"
PP14	0.250"	36.71	0.0368	30"
PP14	0.312"	45.61	0.0361	30"



**WELDED COMMERCIAL SPLICE**



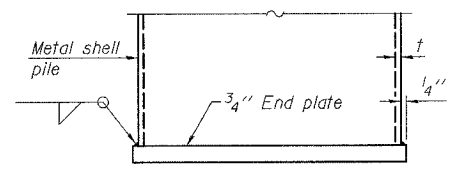
**ELEVATION**



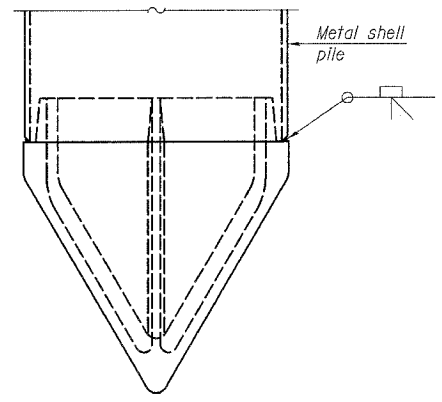
**SECTION A-A**

Notes:  
See Metal Shell Pile Table for dimension "A".  
Forms for encasement may be omitted when soil conditions permit.

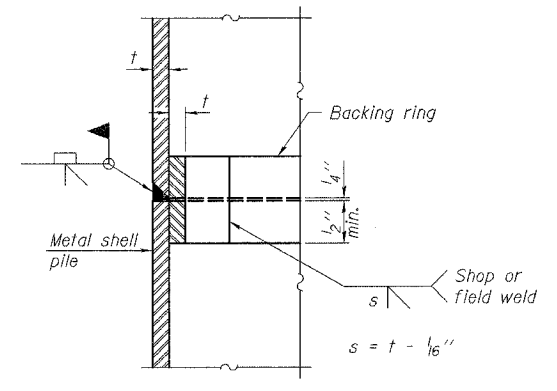
**CONCRETE ENCASUREMENT AT PIERS**



**END PLATE ATTACHMENT**

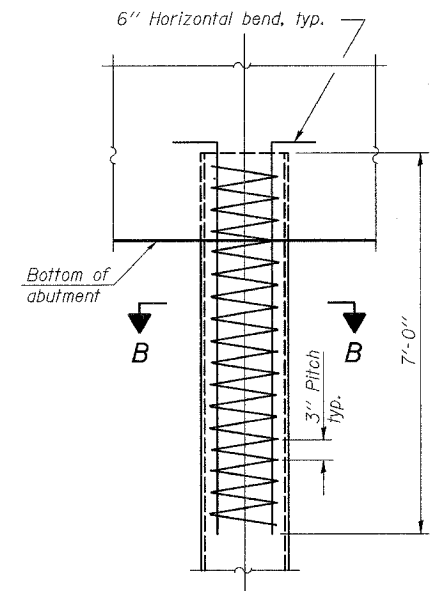


**METAL SHELL PILE SHOE ATTACHMENT**

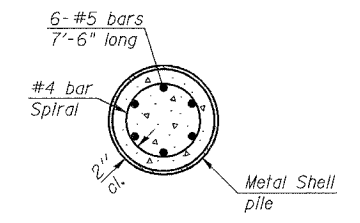


**COMPLETE PENETRATION WELD SPLICE**

Backing ring made from pile shell. Remove segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**



**SECTION B-B**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**

Note:  
The metal shell piles shall be according to ASTM A 252 Grade 3.

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION  
METAL SHELL PILES  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096  
DATE: 8/7/2007  
DRAWN BY WJV  
CHECKED BY BLB

Contract #66697

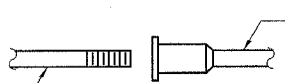
**NOTES**

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

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

BAR 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	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

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



**ROLLED THREAD DOWEL BAR**



**\*\* ONE PIECE**

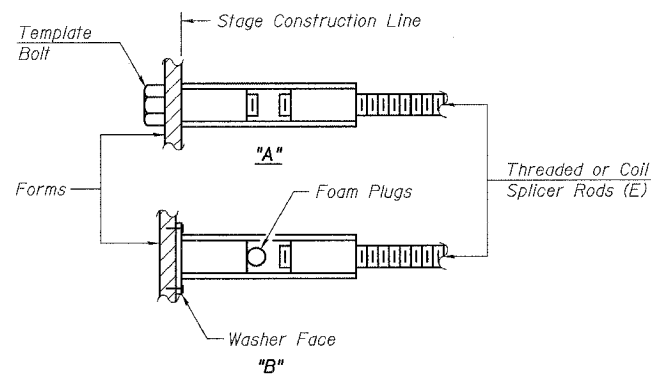
Wire Connector



**WELDED SECTIONS**

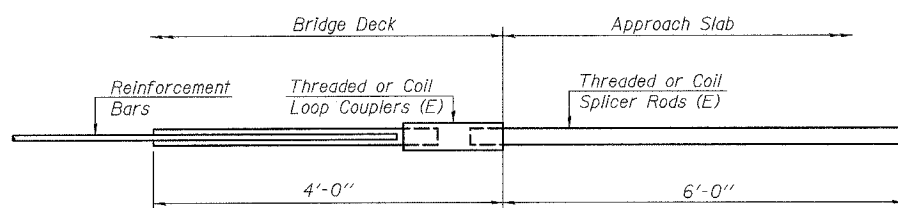
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



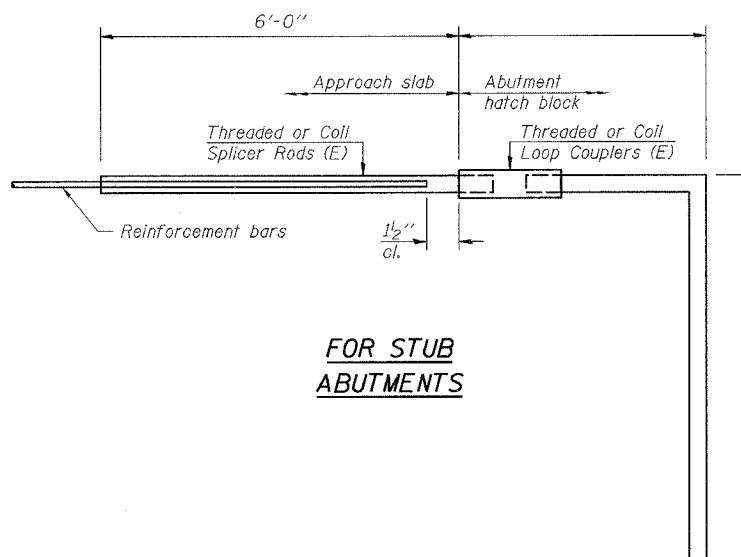
**INSTALLATION AND SETTING METHODS**

"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.



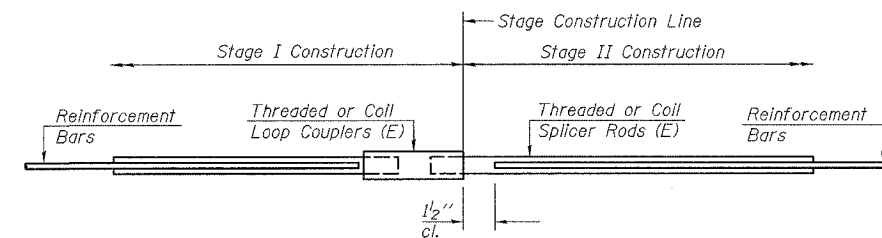
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 68



**FOR STUB ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



**STANDARD**

Bar Size	No. Assemblies Required	Location
#5	376	Deck
#6	16	Diaphragms
#7	20	Abutments
#7	20	Piers
#5	40	Piers

**rjngroup**

Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS  
 IL RTE 9 OVER DRUMMER CREEK  
 FAP RTE 693 - SECTION 19BR-1  
 FORD COUNTY  
 STATION 810+73.11  
 STRUCTURE NO. 027-0096

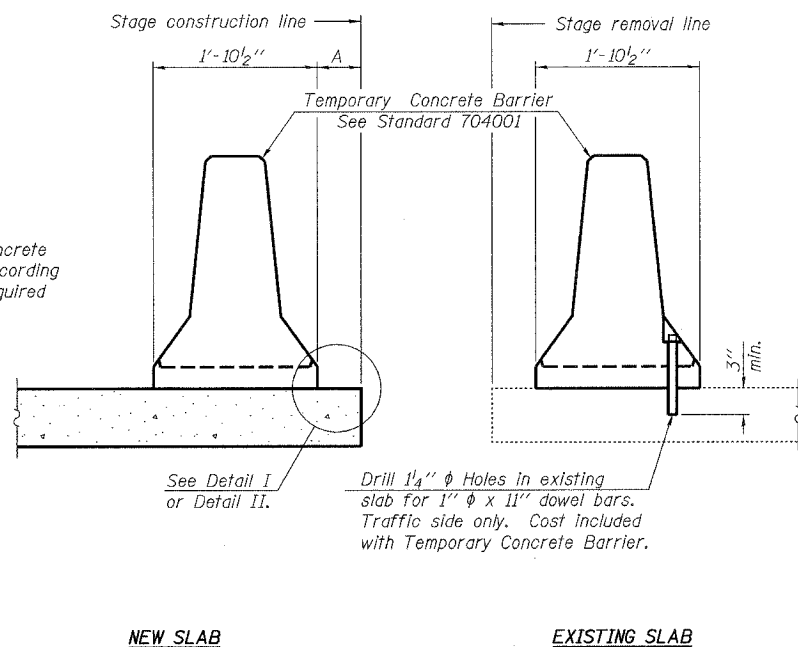
DATE: 8/7/2007

DRAWN BY WJV  
 CHECKED BY BLB

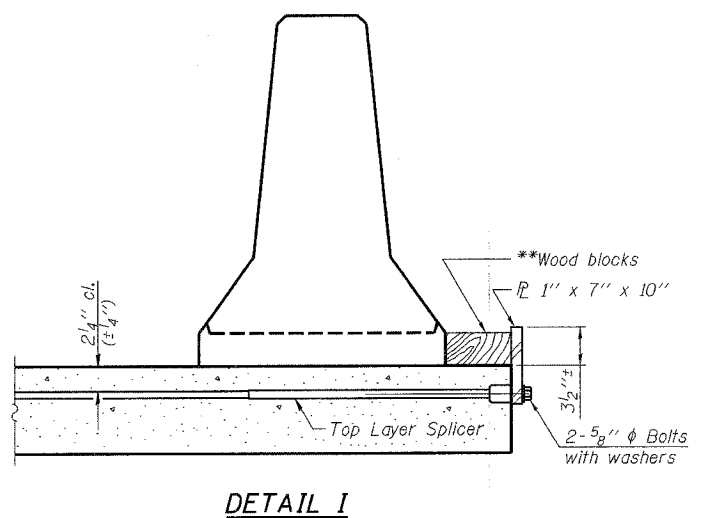
ROUTE NO.	SECTION	COUNTY	FORM SHEETS	SHEET NO.	SHEET NO. 17 20 SHEETS
FAP 693	19BR-1	FORD	50	30	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #66697

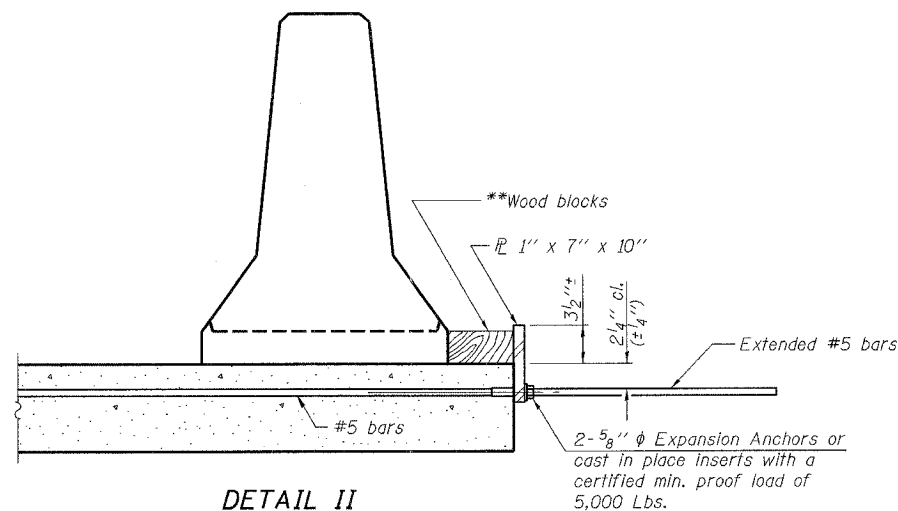
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



**SECTIONS THRU SLAB**



**DETAIL I**

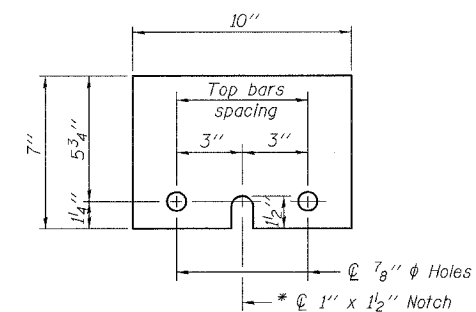


**DETAIL II**

\*\* 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.

**NOTES**

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



**STEEL RETAINER  $\bar{L}$  1" x 7" x 10"**

\* Required only with Detail II

**rjngroup**

Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION  
TEMPORARY CONCRETE BARRIER  
FOR STAGE CONSTRUCTION  
IL RTE 9 OVER DRUMMER CREEK  
FAP RTE 693 - SECTION 19BR-1  
FORD COUNTY  
STATION 810+73.11  
STRUCTURE NO. 027-0096

DATE: 8/7/2007

DRAWN BY WJV  
CHECKED BY BLB

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 18 20 SHEETS
FAP 693	19BR-1	FORD	50	31	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

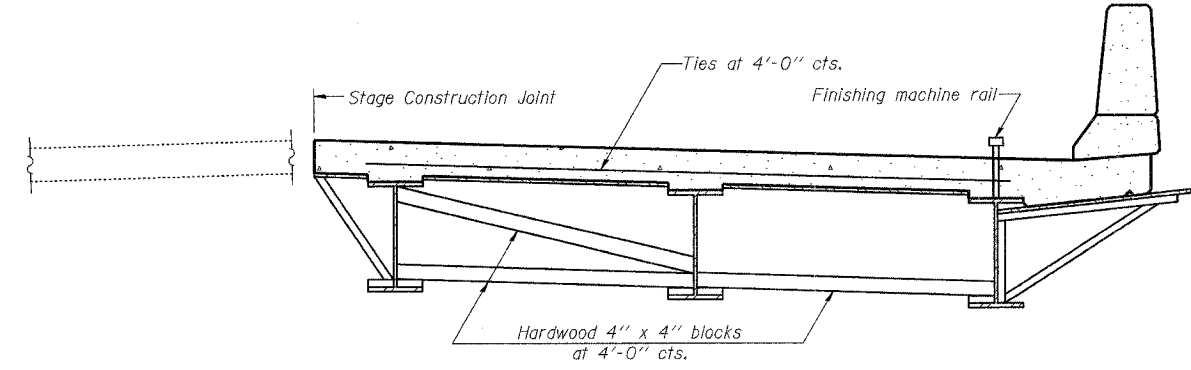
Contract #66697

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

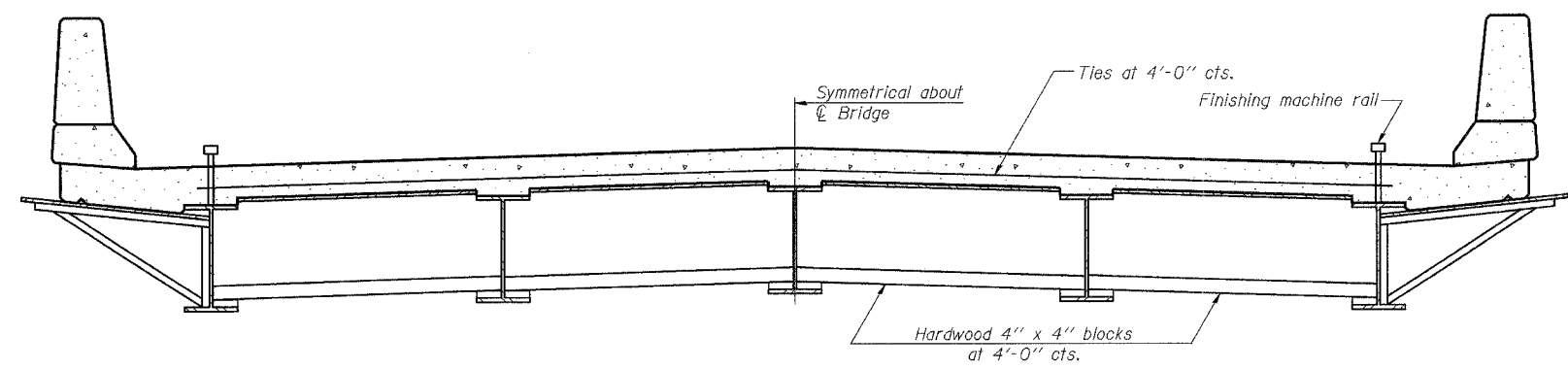
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR  
STAGE CONSTRUCTION**



**FORM BRACES FOR  
STANDARD CONSTRUCTION**

K:\112802260 Structure\Final Plans\Final.dgn 8/2/2007

SB-1

11-1-06

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	ILLINOIS DEPARTMENT OF TRANSPORTATION
	<p>CANTILEVER FORMING BRACKETS IL RTE 9 OVER DRUMMER CREEK FAP RTE 693 - SECTION 19BR-1 FORD COUNTY STATION 810+73.11 STRUCTURE NO. 027-0096</p> <p>DATE: 8/7/2007</p>
	<p>DRAWN BY WJV CHECKED BY BLB</p>





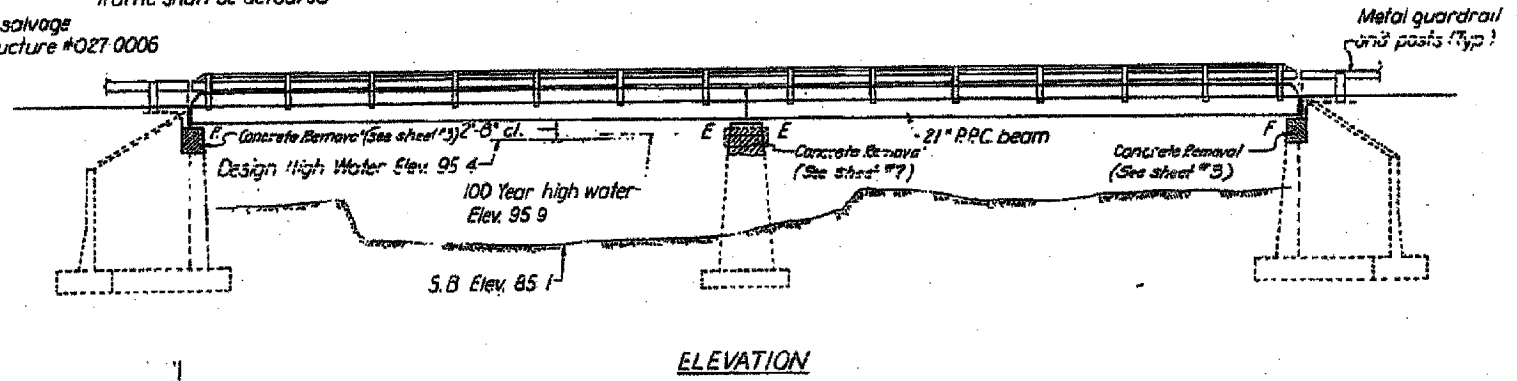


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

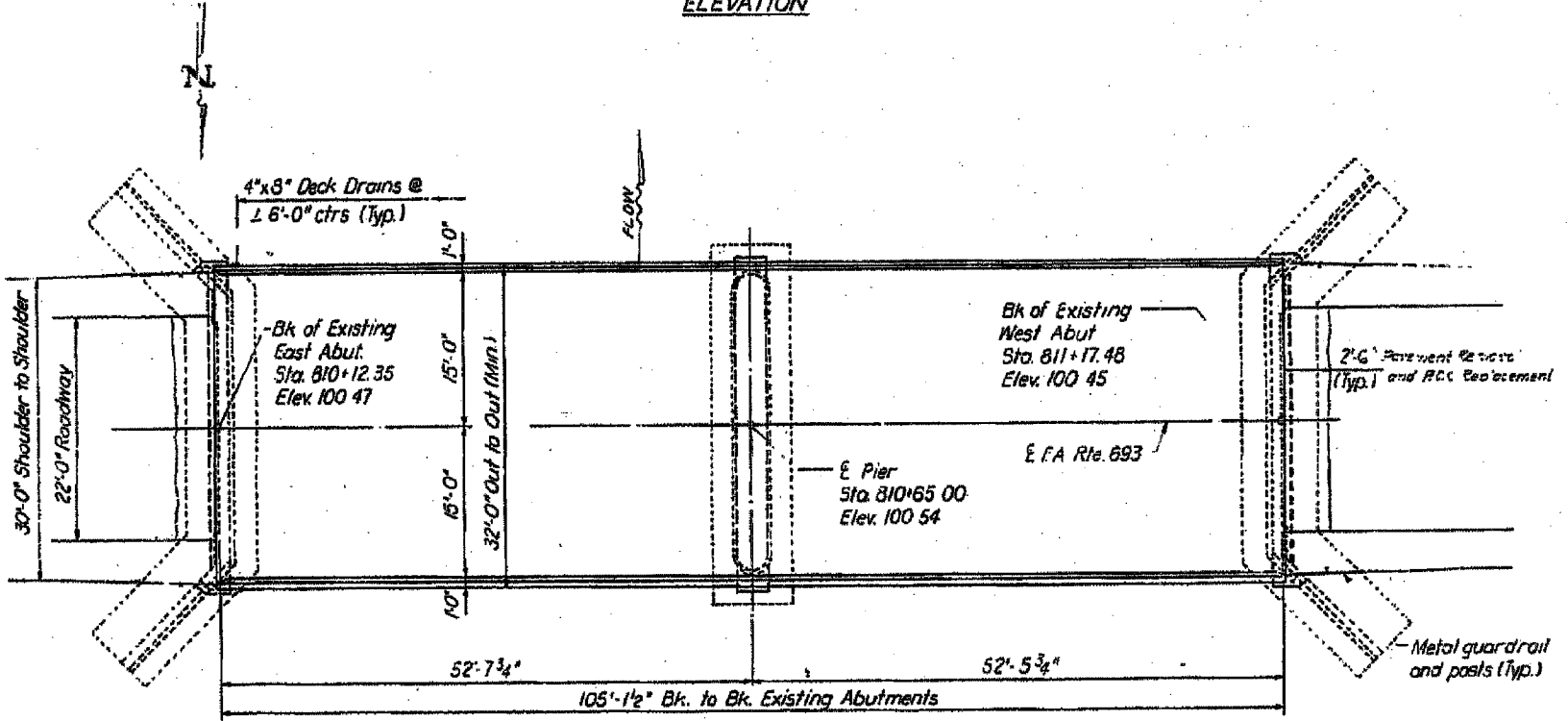
PROJECT NO.	19-015	SECTION	FORD 42	20	SHEET NO.	7	TOTAL SHEETS	7
-------------	--------	---------	---------	----	-----------	---	--------------	---

Benchmark: B.M. #1"x" chisel on N.E. wingwall, 16.5 Ft. Rt. Sta. 810+10, Elev. 100.00. Existing structure built as S.B. Route 9, Section 19B in 1925. R.C. thru-griders on R.C. closed abutments and pier. Out to Out 26'-5" and Bk to Bk 106'-3". The Contractor shall remove the existing superstructure, widen the substructure and provide a new superstructure. Traffic shall be detoured.

No salvage  
Structure #027-0006



ELEVATION



PLAN

**GENERAL NOTES**

All structural steel shall be shop primed with two coats of zinc rich epoxy chromate primer.

Expansion joints which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

The top surface of the beams shall be finished in accordance with Article 902.05 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

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

Expansion bolts shall consist of self-drilling expansion anchors and 1/2" x 1" bolts.

Reinforcement bars shall conform to the requirements of Article 503.07 of the Standard Specifications.

Column White Concrete shall be covered by the same concrete, shall be used. The concrete for precast prestressed concrete shall be Class 4 Concrete for beams and Class 3 Concrete for decks.

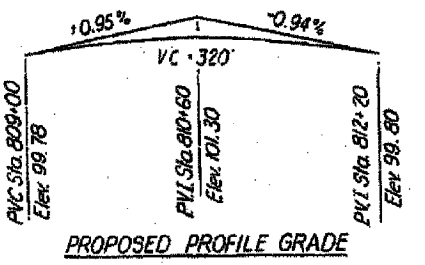
**TOTAL BILL OF MATERIAL**

Item	Unit	Quantity	Sub	Total
Remove of Existing Superstructure	Each	1		1
21" Concrete Surface Class 4	Sq. Yds.	42		42
Concrete Removal	Cu. Yds.	18		18
Reinforcement Bars	Pounds	490	3970	3960
Expansion Bolts 1/2" x 1"	Each	153		153
Protective Coat	Sq. Ft.	35		35
Class 4 Concrete	Sq. Yds.	25.6		25.6
P.C. Deck Slabs (21")	Sq. Ft.	3368		3368
P.C. Mortar Jointing Case	Lt. Ft.	737		737
Prefabricated Jt. Seal (1")	Lt. Ft.	32		32
Waterproofing Membrane System	Sq. Ft.	555		555
Name Plates	Each	1		1
Structural Steel	Pounds	2240		2240
Steel Bolting Type 1	Lt. Ft.	21		21
Pavement Slabs 2'-6" x 10' x 8" (Typ.)	Sq. Yds.	12		12

STATION 810+65  
REBUILT BY  
STATE OF ILLINOIS  
F.A. RT. 693 SEC. 19 BR  
LOADING HS 20  
STR. NO.

NAME PLATE  
See Sp. 213

\*Structure Number to be verified by District



DESIGNED: Patrick M. Petro  
CHECKED: C. A. Holzman  
DRAWN: SU  
CHECKED: C. A. H.

EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]

**PRECAST PRESTRESSED UNITS**

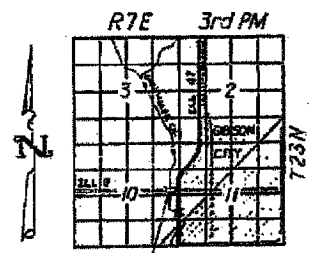
- f<sub>c</sub> = 5,000 psi
- f<sub>ci</sub> = 4,000 psi
- f<sub>s</sub> = 270,000 psi (1/2" Strands)
- f<sub>si</sub> = 189,000 psi (1/2" Strands)

**FIELD UNITS**

- f<sub>c</sub> = 3,500 psi
- f<sub>y</sub> = 60,000 psi (Reinforcement)
- f<sub>s</sub> = 20,000 psi (Structural)

**WATERWAY INFORMATION**

- Drainage Area: 19.5 Sq. Miles
- Required Opening: 780 Sq. Ft.
- Design Discharge (100 Year): 2000 cfs.
- Created Head for Design Flood: 0.0 Ft.
- 100 Year Discharge: 2290 cfs.
- Created Head (100 Yr. Flood): 0.02 Ft.
- LOADING HS 20-44 (NEW CONSTRUCTION)
- Design Specifications: 1977 AASHTO
- Allow 25#1 sq. ft. for future wearing surface.
- \* 1978 and 1979 Interim Specifications as applicable.

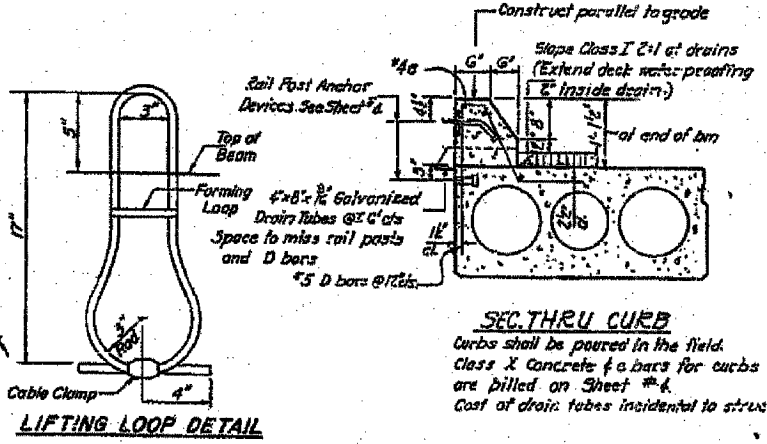
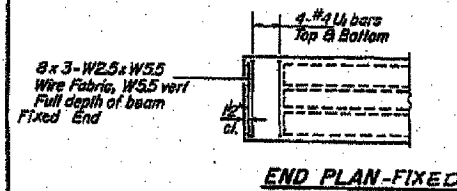
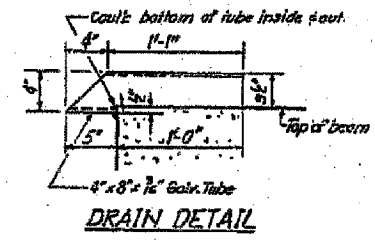
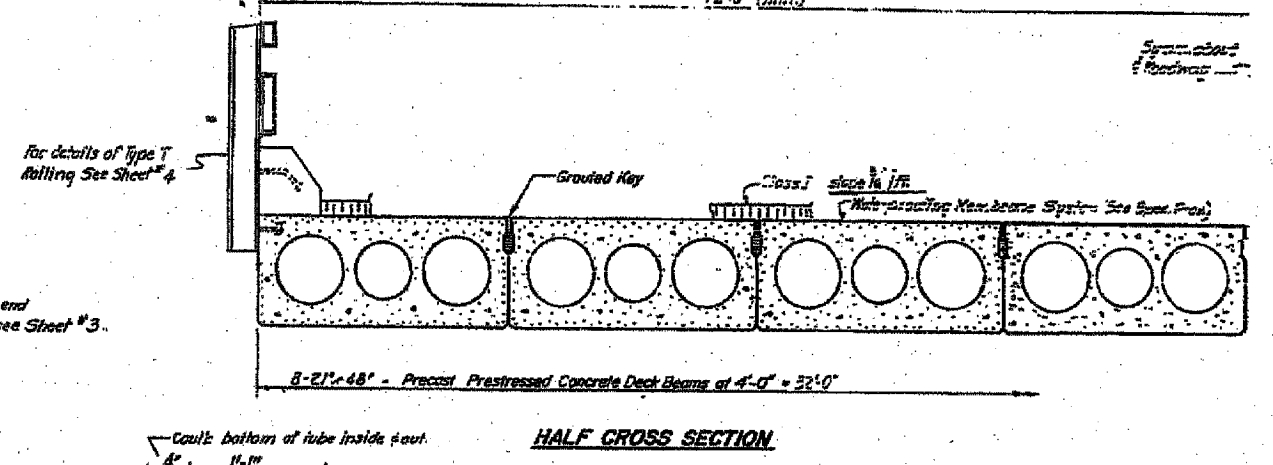
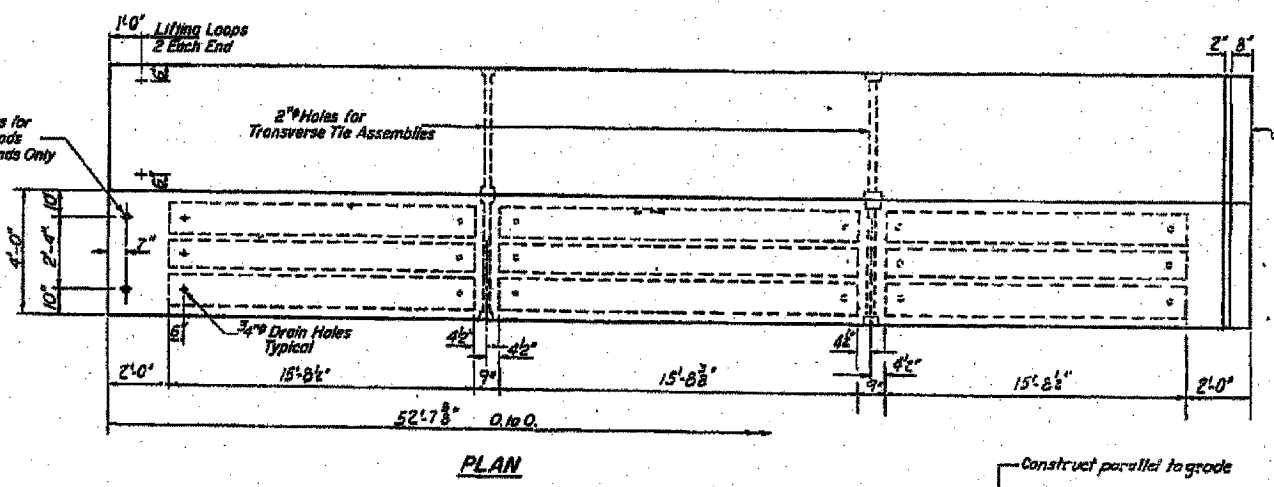
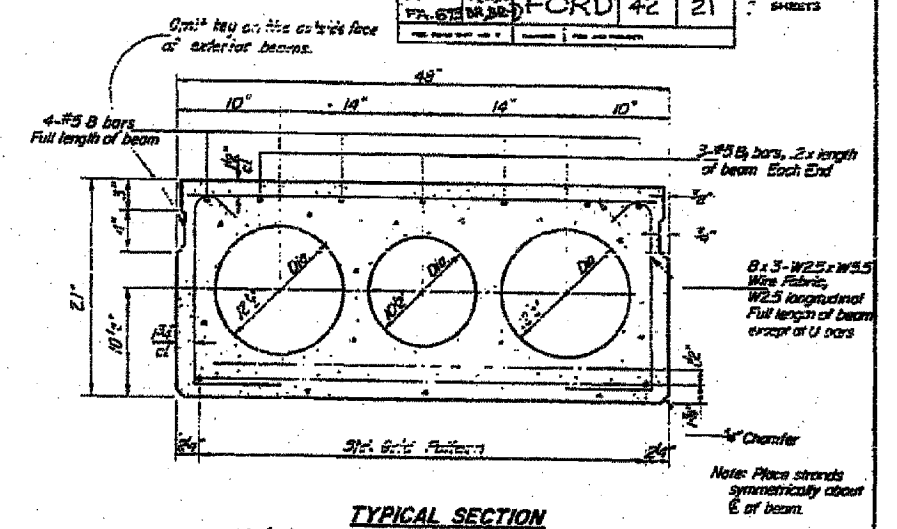
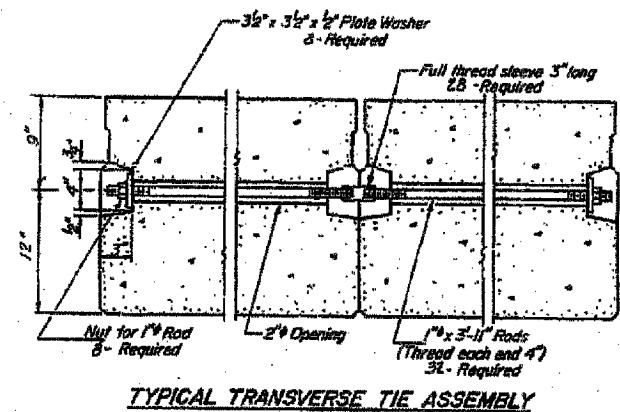
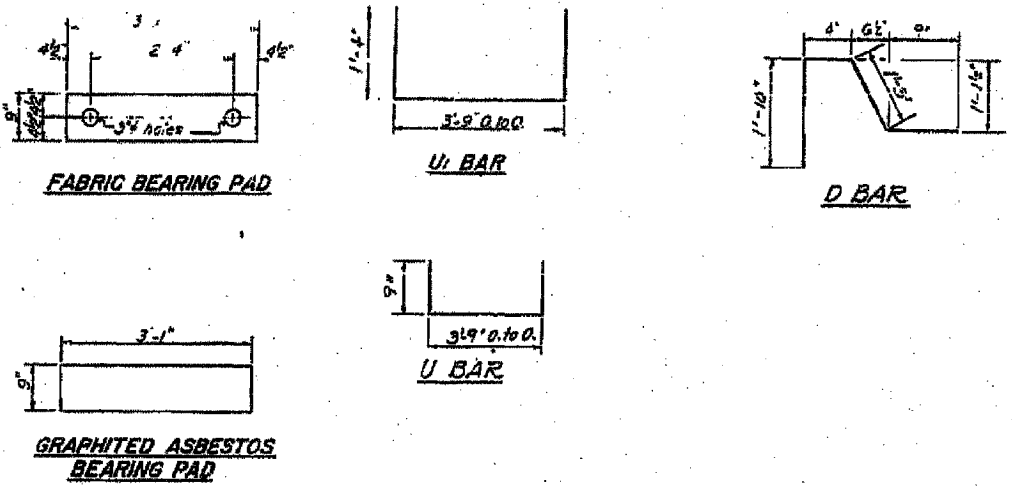


Proposed Reconstruction LOCATION SKETCH

GENERAL PLAN AND ELEVATION  
F.A. ROUTE 693 OVER DRUMMER CREEK  
F.A. ROUTE 693 SECTION 19 BR  
FORD COUNTY  
STATION 810+65

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	75(1,2)	FORD 42	21	SHEET NO. 2
DATE	PA-672 (10-28-53)			SHEETS



**NOTES**

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 5/8" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 5/8" diameter, 6 x 25 cross wire rope with fiber core and shall have a minimum ultimate tensile strength of 40,000 lbs.

The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Fasteners that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the sub-structure and the anchor dowels shall be grouted in place.

Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
g	G	#3	52'-0"	
Precast Prestressed Concrete Deck Beams		Sq. Ft	3323	
Class X Concrete		Cu. Yd.	1-3	
Reinforcement Bars		Pounds	280	

DESIGNED: Patrick M. Petrone  
CHECKED: C. A. Holzman  
DRAWN: Anna V. ...  
CHECKED: C. A. H.

EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]

SEP 11 1979

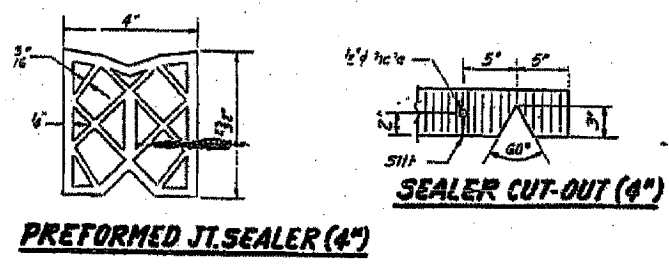
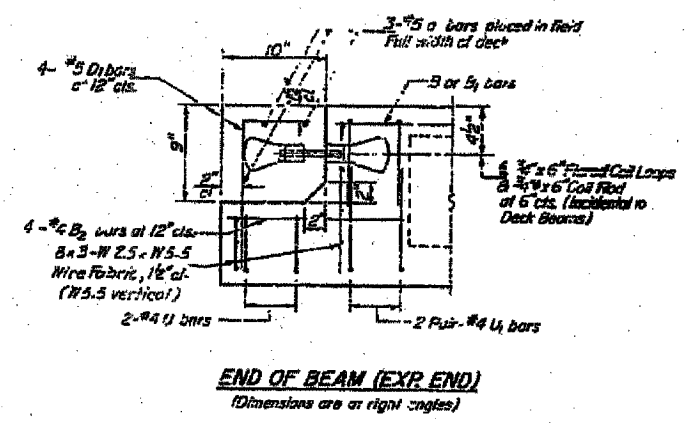
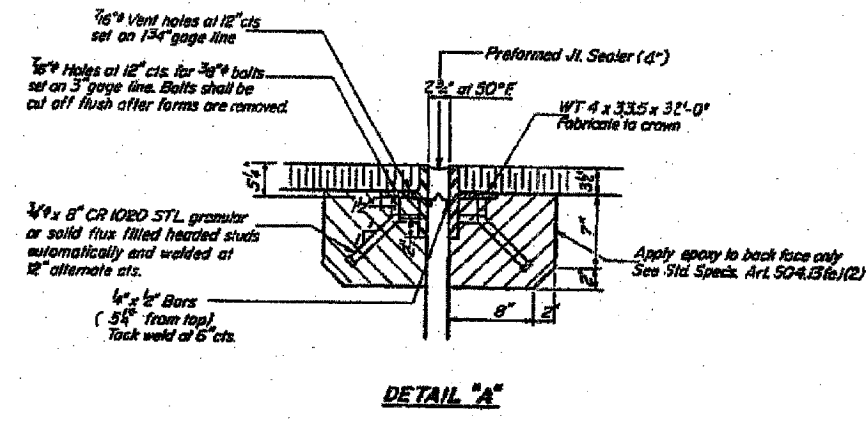
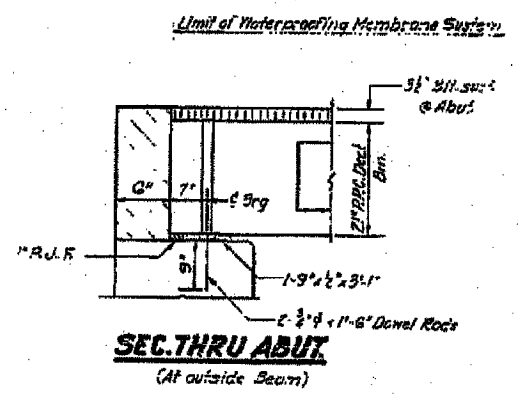
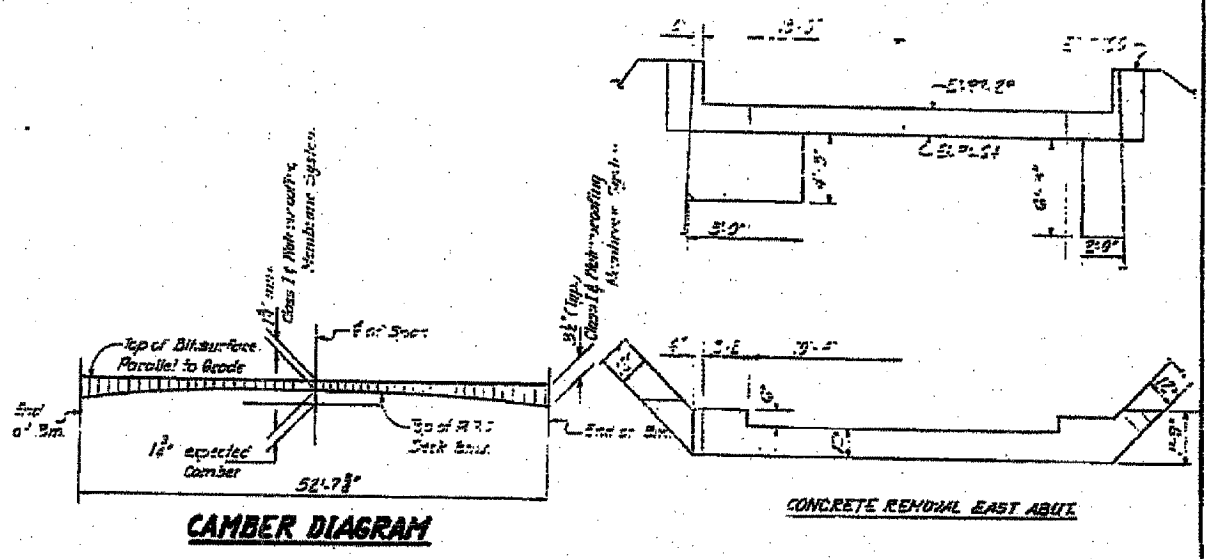
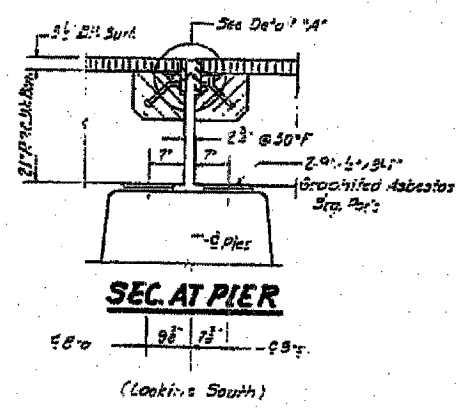
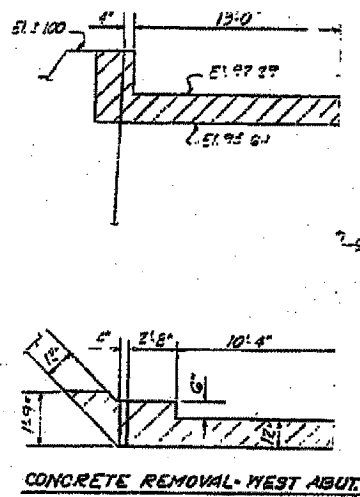
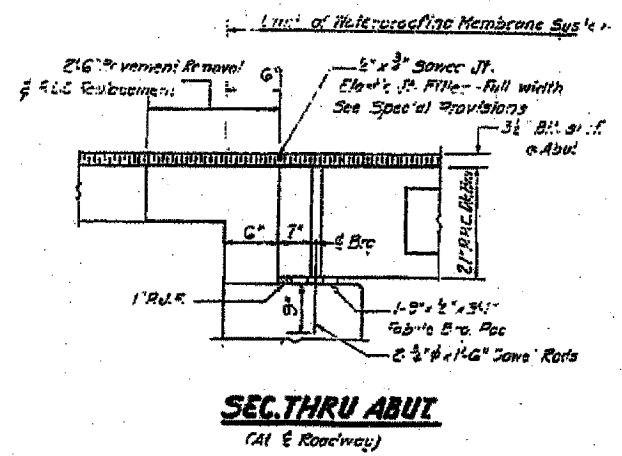
PD-4-S 8-1-78

Cost of reinforcement and accessories cast into the beams, of bearing pods, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for Precast Prestressed Concrete Deck Beams.

**SUPERSTRUCTURE**  
**F.A.R.L. 633 SEC. 13 BR**  
**FORD COUNTY**  
**STA. 210+65.00**

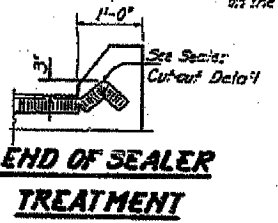
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT	FORD	42	22
DATE			
BY			
CHECKED			



NOTE: Dimensions are at right angles.  
Hatched areas to be poured after beams have been erected and joints grouted.  
Ends of beams shall be aligned at the expansion joints. Any lined variation in the beam lengths shall be placed at the fixed joint.  
See End of Beam Detail for reinforcement.

Hatched area quantities on beam are billed with superstructure sheet #2 on the abutment are billed with abutment sheet #6 #7.



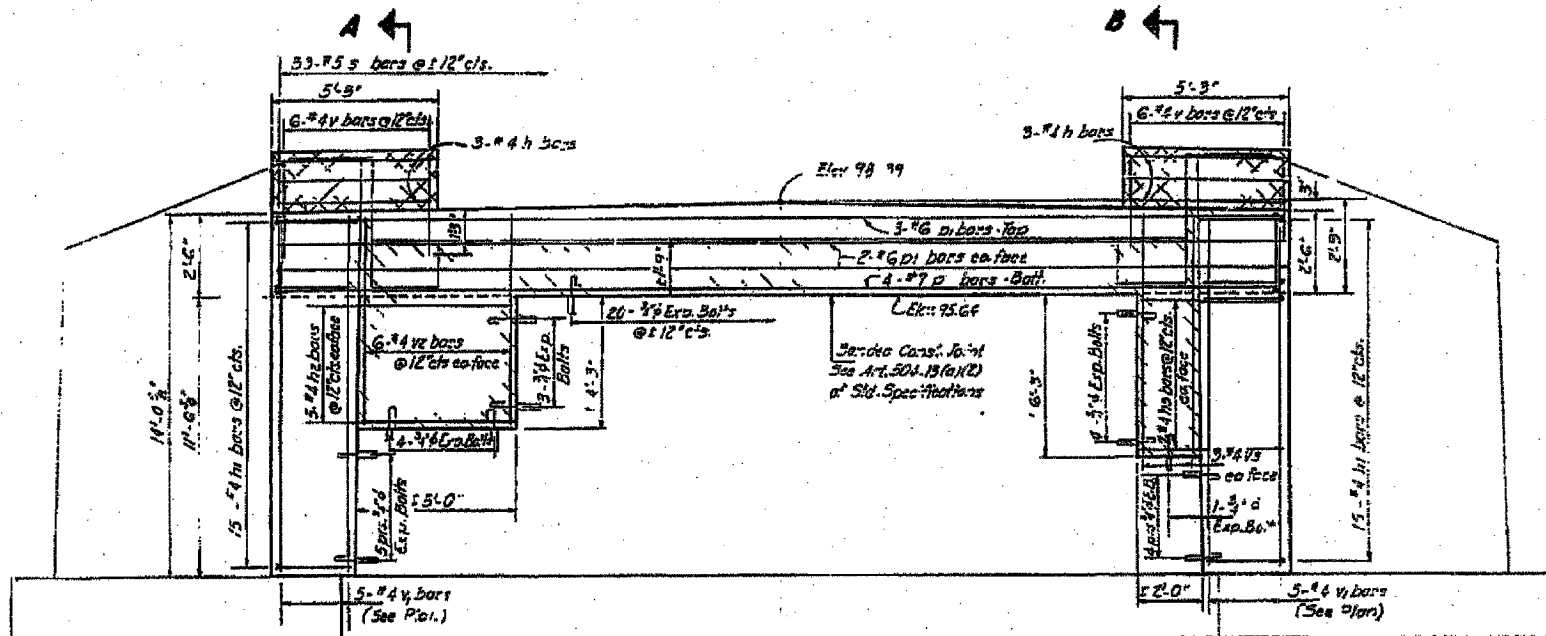
DESIGNED	Patrick M. Patino	EXAMINED	SEP 11 1979
CHECKED	C.A. Holzner	PASSED	
DRAWN	Ann B. ...	APPROVED	
CHECKED	C.A.H.		

**SUPERSTRUCTURE-DETAILS**  
**F.A.R.I. 693 SEC. 19 BR**  
**FORD COUNTY**  
**STA. 810+65.00**



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

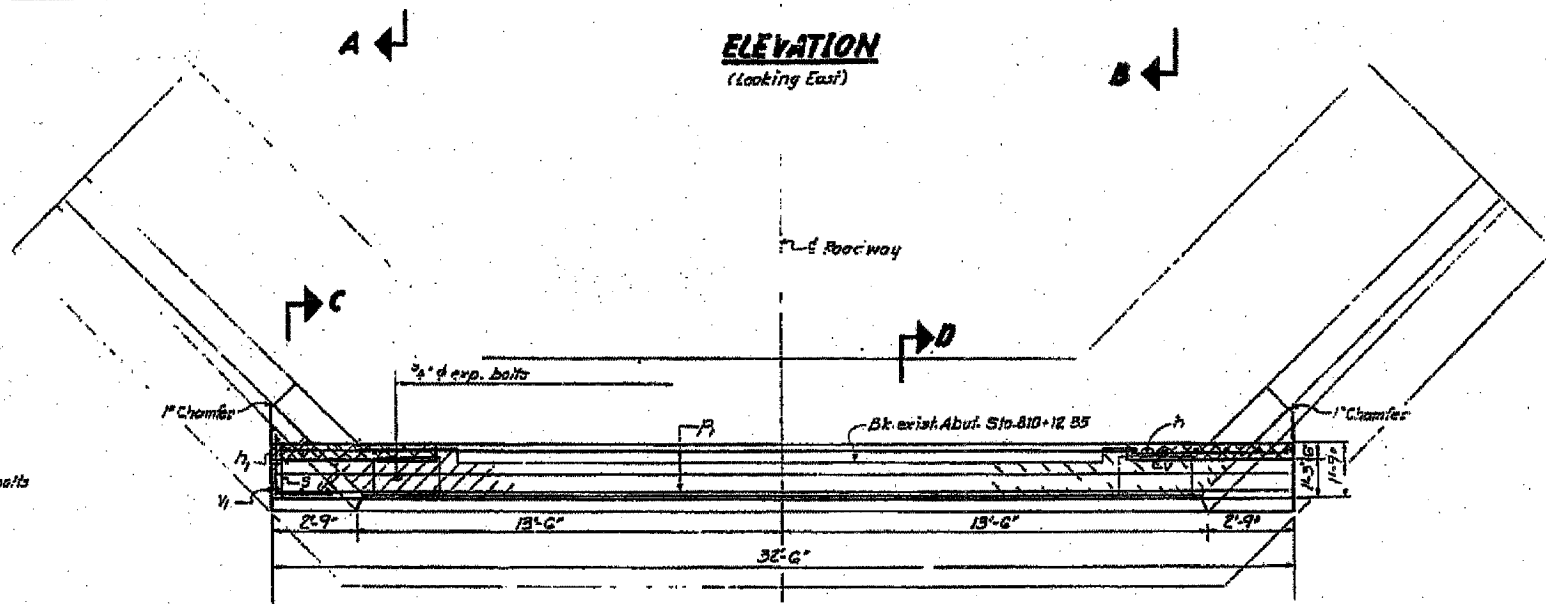
DATE	BY	CHKD	APP'D	SHEET NO.
10/23/80	SM	SM	SM	24
PROJECT: FORD 42				SHEETS



**ELEVATION**  
(Looking East)

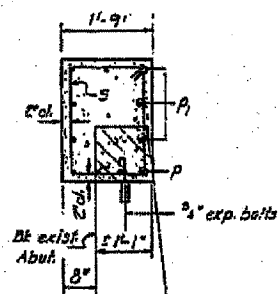
**SEC. A-A**

**SEC. B-B**

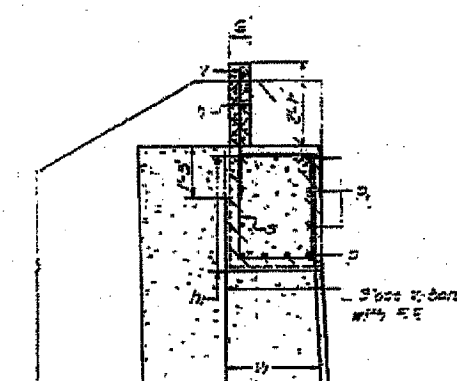


**PLAN**

**SEC. C-C**



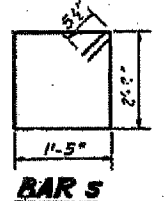
**SEC. D-D**



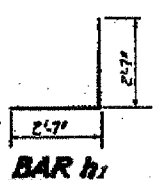
**BILL OF MATERIAL**

Sec	No.	Size	Length	Shape
1	2	#4	3'-0"	—
2	30	#4	3'-2"	—
3	20	#4	7'-0"	—
4	14	#4	4'-0"	—
5	4	#7	3'-3"	—
6	7	#6	3'-3"	—
7	33	#5	4'-1"	□
8	12	#4	3'-2"	—
9	20	#4	13'-9"	—
10	2	#4	6'-0"	—
11	6	#4	8'-0"	—
Concrete Removal	1	Cu. Yds.	5	—
Class A Concrete	1	Cu. Yds.	11.0	—
Reinforcement Bars Brand	1	288	—	—
Expansion Bolts (#3)	1	Each	50	—

Notes:  
Hatched areas indicate Concrete Removal.  
Reinforcement in existing area shall be cleaned and incorporated into the new construction.  
Cuts hatched area shall be poured after beams are in place.  
Expansion bolts shall be anchored in sound concrete.  
All edges shall have standard 3/4" chamfers except as noted.  
For Concrete Removal sketch see sheet #3.



**BAR S**



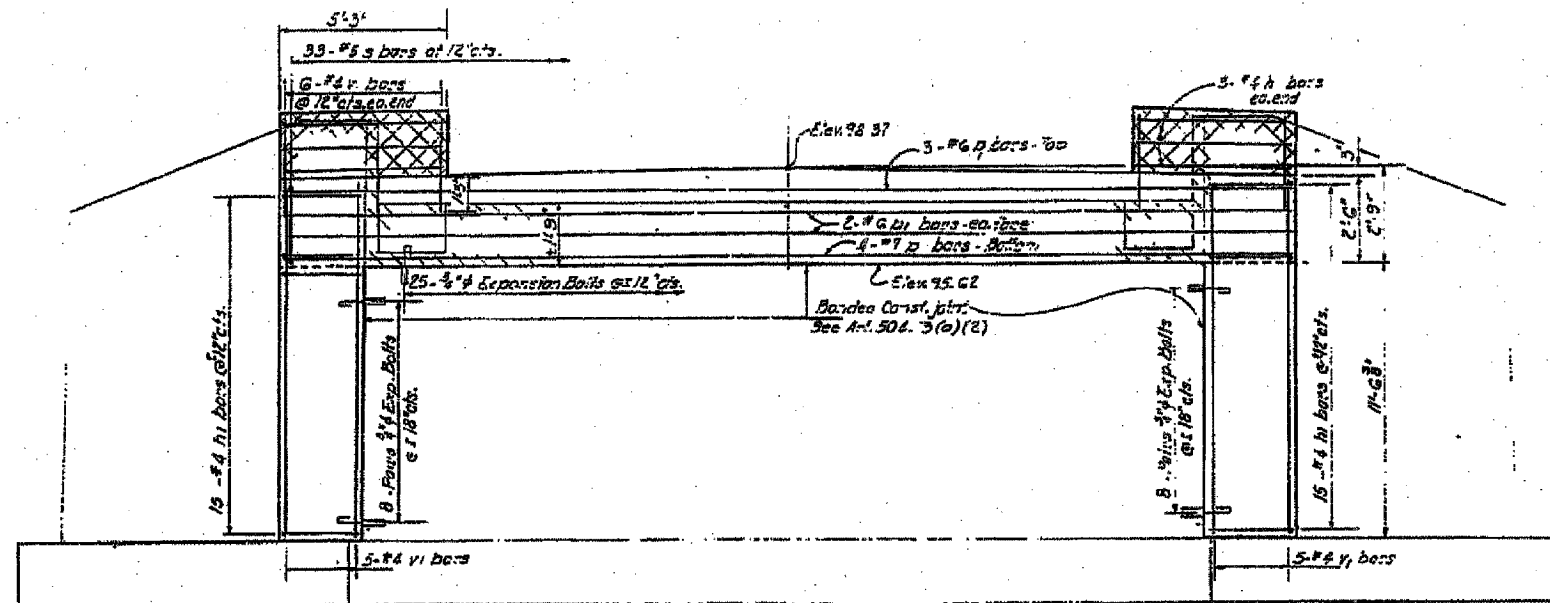
**BAR h1**

DESIGNED: Patrick M. Peter  
CHECKED: E.A. Hodgson  
DRAWN: Simon M. ...  
CHECKED: E.A.H.  
EXAMINED: ...  
PASSED: ...  
APPROVED: ...

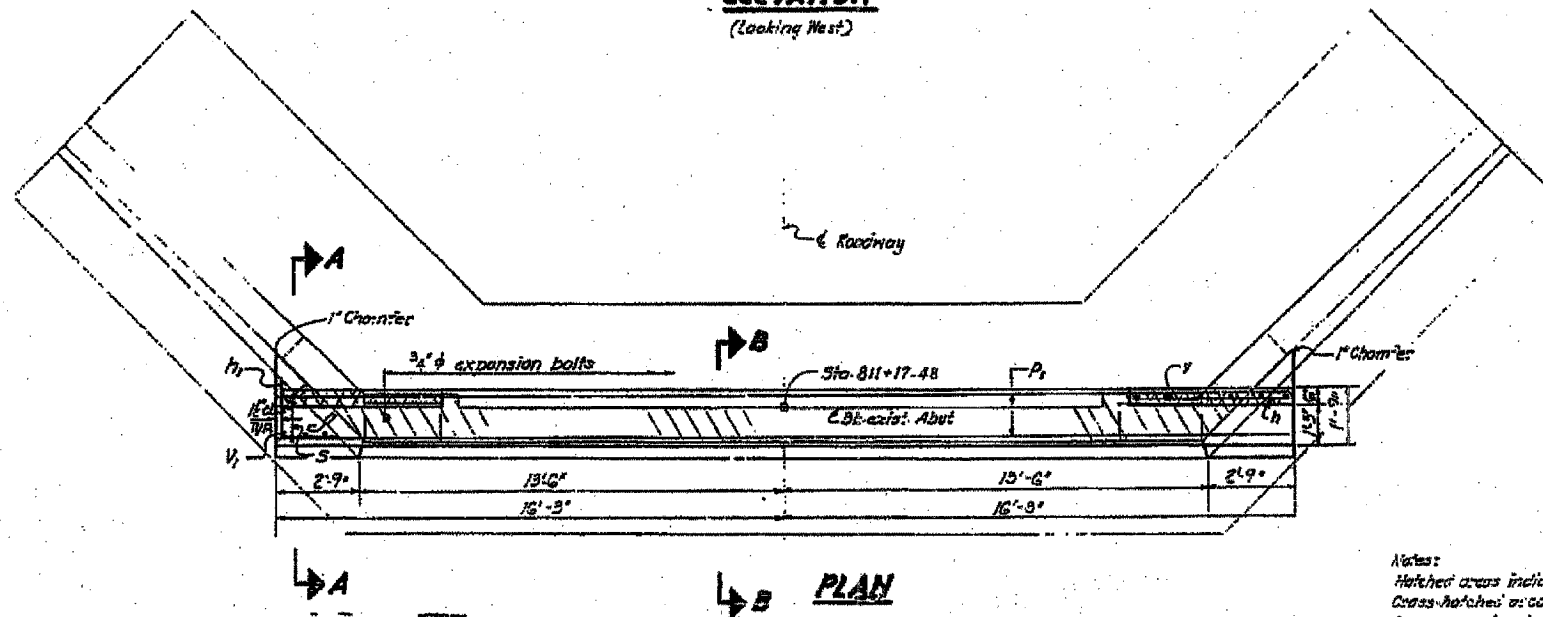
**EAST ABUTMENT**  
**FAH 693 SEC. 19 BR**  
**FORD COUNTY**  
**STA. 810+65+80**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

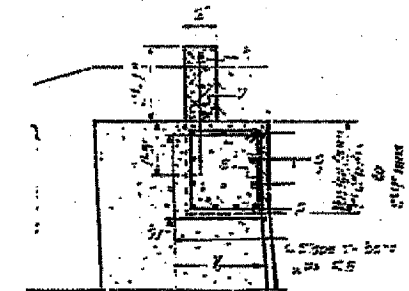
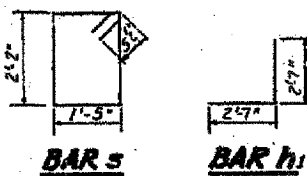
PROJECT NO.	19025	SHEET NO.	25
DATE	BRAND	FORD	42
SHEETS			



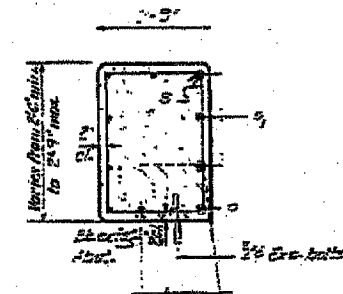
**ELEVATION**  
(Looking West)



**PLAN**



**SEC. A-A**



**SEC. B-B**

**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
1	#6	5'-6"	
2	#6	2'-9"	
3	#6	2'-9"	
4	#7	3'-5"	
5	#7	3'-5"	
6	#7	3'-5"	
7	#4	13'-0"	
8	#4	16'-3"	
9	#4	15'-6"	
10	#4	2'-9"	
Concrete Removal 112.182			
Class X Concrete 26.16			
Reinforcement Bars Poured 1720			
Expansion Bolts (90) Each 57			

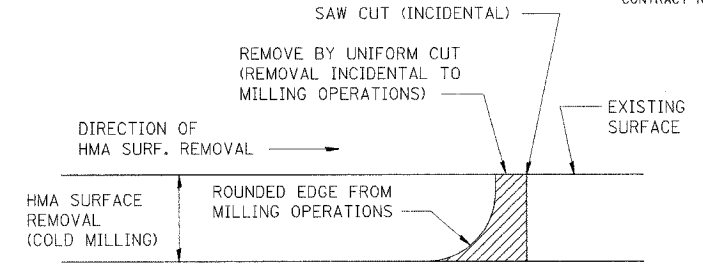
Notes:  
Hatched areas indicate Concrete Removal.  
Cross-hatched areas shall be poured after  
bars are in place.  
All edges shall have standard chamfers  
except as noted.  
Expansion bolts shall be anchored in base  
concrete.  
For Concrete Removal slash see sheet #3.

DESIGNED	Richard M. Pelt	EXAMINED	Sept. 11 1959
CHECKED	E.A. Hoffman	PASSED	
DRAWN	Lincoln	APPROVED	
CHECKED	E.A.H.		

**NEXT ABUTMENT**  
**EARLY 1960**  
**FORD COUNTY**  
**STA. 80+00**

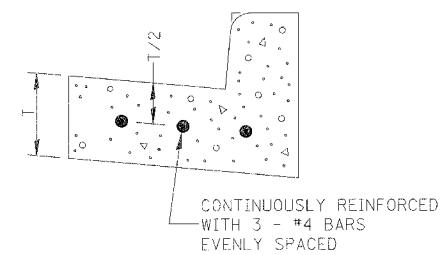






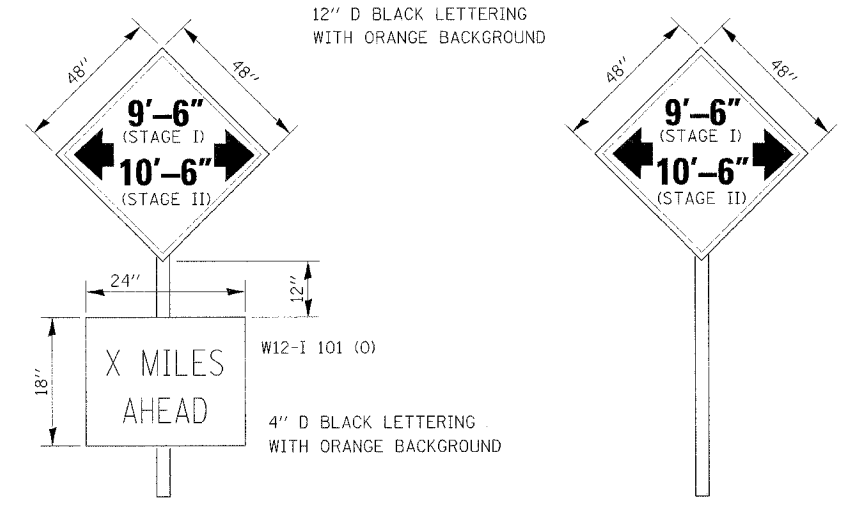
NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

**HOT-MIX ASPHALT DETAIL AT BUTT JOINTS**



REINFORCEMENT SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CC&G.

**REINFORCEMENT DETAIL FOR COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24**



- LOCATIONS:
- IL 9 EASTBOUND WEST OF PROJECT
  - WEST 8TH STREET WESTBOUND EAST OF IL 47
  - IL 47 NORTHBOUND AND SOUTHBOUND WITH DIRECTIONAL ARROWS

TO BE POST MOUNTED AS SHOWN ELSEWHERE IN THE PLANS.

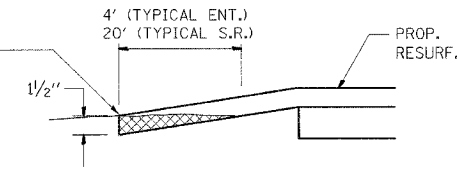
THE ENGINEER WILL NOTIFY DISTRICT 3 BUREAU OF OPERATIONS 14 CALENDAR DAYS PRIOR TO INSTALLING ANY TRAFFIC CONTROL DEVICES THAT WILL RESTRICT THE PAVEMENT WIDTH.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO MEET THIS REQUIREMENT.

COST OF SUPPLYING, INSTALLING, MAINTAINING AND REMOVING WIDTH RESTRICTION SIGNS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION PAY ITEMS.

**WIDTH RESTRICTION SIGNING DETAILS**

THE COST OF REMOVAL AT EXISTING HMA OR P.C.C. LOCATIONS SHALL BE PAID FOR PER SQ. YD. BY THE APPROPRIATE PAY ITEM. REMOVAL AT EXISTING AGG. LOCATIONS SHALL BE INCIDENTAL TO THE HOT-MIX ASPHALT. A-3 LOCATIONS SHALL BE FEATHER TAPERED.



**DETAIL A**

EASTBOUND LANES  
e = NC (2.0%)

WESTBOUND LANES  
e = NC (2.0%)

IL-9 Sta.	Side Slope	EB Lane EOP	Lane Width Offset Lt.	CL	Lane Width Offset Rt.	WB Lane EOP	Side Slope	
808+50	2.20%	744.17	24.00	744.70	18.00	744.30	2.20%	BEGIN CONSTRUCTION
808+75	2.00%	744.51	24.00	744.99	18.00	744.63	2.00%	
809+00	2.00%	744.84	22.84	745.30	18.00	744.94	2.00%	
809+25	2.00%	745.26	19.61	745.65	17.53	745.30	2.00%	
809+50	2.00%	745.69	16.38	746.02	15.18	745.72	2.00%	
809+75	1.56%	746.15	13.40	746.36	13.40	746.15	1.56%	
809+76.11	1.56%	746.16	13.40	746.37	13.40	746.16	1.56%	APPROACH PAVEMENT

EASTBOUND LANES

WESTBOUND LANES

Transition from 1.56% to -1.80% over 129.88'  
NC = 1.56%  
12' LANE

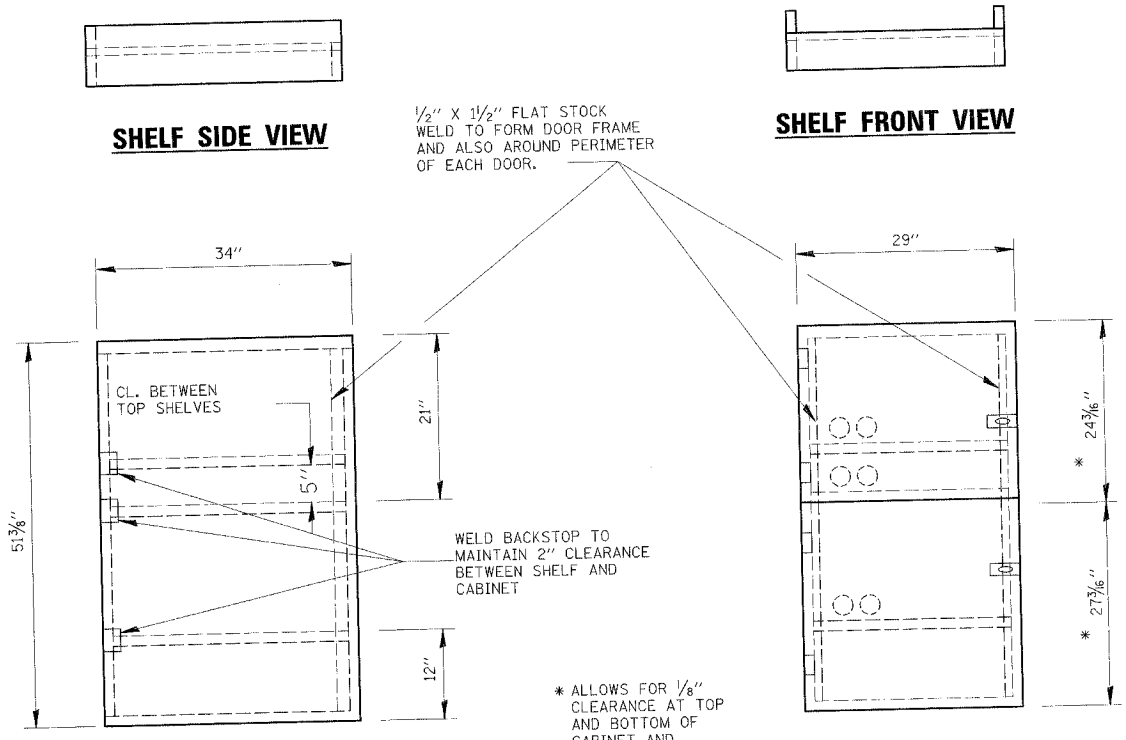
Transition from 1.56% to 3.60% over 129.88'  
NC = 1.56%  
12' LANE

IL-9 Sta.	Side Slope	EB Lane EOP	Lane Width Offset Lt.	CL	Lane Width Offset Rt.	WB Lane EOP	Side Slope	
811+70.12	1.56%	745.63	12.00	745.82	12.00	745.63	1.56%	APPROACH PAVEMENT
811+75	1.43%	745.57	12.00	745.74	12.00	745.54	1.64%	
812+00	0.78%	745.30	12.00	745.39	12.00	745.15	2.03%	
812+25	0.14%	745.05	12.00	745.07	12.00	744.78	2.43%	
812+50	-0.51%	744.84	12.00	744.78	12.00	744.44	2.82%	
812+75	-1.16%	744.67	12.00	744.53	12.00	744.14	3.21%	
813+00	-1.80%	744.51	12.00	744.29	12.00	743.86	3.60%	END OF CONSTRUCTION

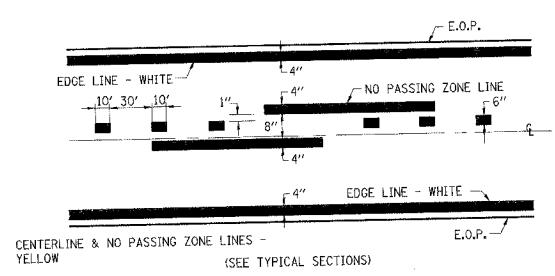
**PROPOSED ROADWAY ELEVATIONS**

PLOT SCALE: 1:20  
 PLOT DATE: 8/8/2007  
 PLOT TIME: 5:56:13 AM  
 PLOTTER: HPGLASER/HPGLASER  
 MODEL NAME: DeFault

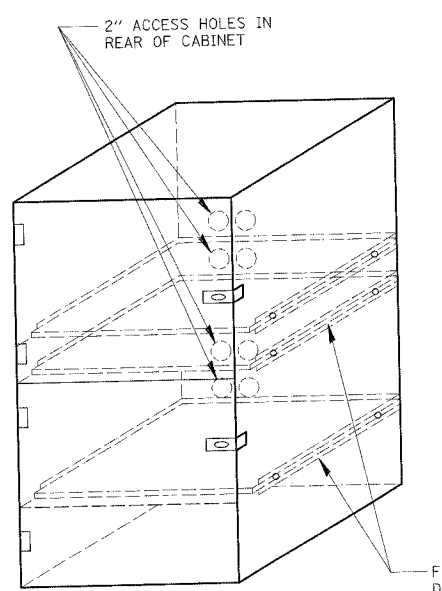
<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9)  <b>DETAILS</b>  SCALE: NOT TO SCALE DATE: AUGUST 7, 2007
	NAME	DATE	
		DRAWN BY: JMC CHECKED BY: DWB	



**SIDE VIEW** **FRONT VIEW**

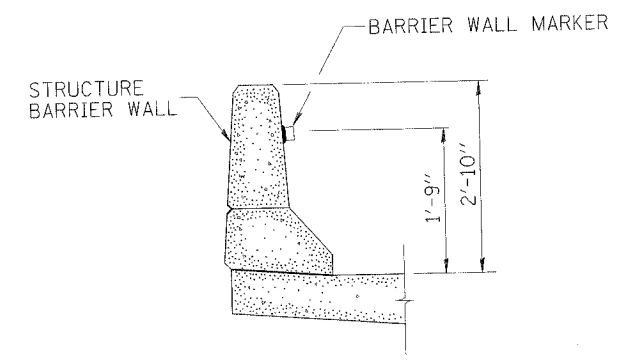


**PAVEMENT MARKING**



**LOCKABLE COMPUTER CABINET**

- NOTES:
1. USE 16 GAUGE STEEL FOR CABINET.
  2. THE TOP SHELF SHALL SLIDE IN OR OUT WITH THE TOP DOOR OPEN.
  3. ALL HINGES AND HASPS WILL BE WELDED TO THE CABINET.
  4. ALL EDGES SHALL BE GROUND SMOOTH.
  5. TWO (2" DIA.) ACCESS HOLES WILL BE REQUIRED FOR EACH SHELF.
  6. CABINET SHALL BE PAINTED WITH TWO COATS OF FLAT PAINT.
  7. 2 EACH MATCHING KEY PADLOCKS, WITH 3 KEYS PROVIDED, MASTER MODEL 3 T OR EQUIVALENT.
  8. 4 EACH PLAIN STEEL, NON-REMOVABLE PIN, NO HOLE 4"x4" SQUARE CORNER HINGES TO BE WELDED ON.
  9. 2 EACH EXTRA HEAVY, PLAIN STEEL, FIXED STAPLE, NO HOLE, 7 1/4" HASPS TO BE WELDED ON.



**BARRIER WALL MARKER**

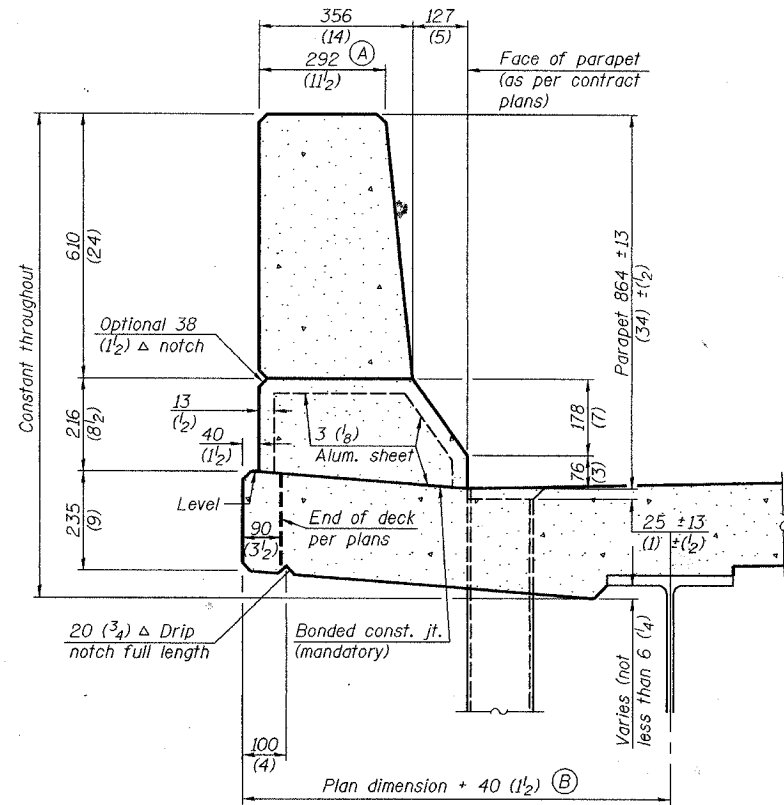
PLOT SCALE: 1/20  
 PLOT DATE: 8/29/2007  
 PLOT TIME: 10:54:14  
 PLOTTED BY: Jrcasey  
 4:\projects\2007\cadd\cases\112020206-Distal\_02.dwg  
 MODEL NAME: Distal

 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS NAME      DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 693 (IL-9)  <b>DETAILS</b>  SCALE: NOT TO SCALE DATE: AUGUST 7, 2007 DRAWN BY: JMC CHECKED BY: DWB
	(Empty revision table)	

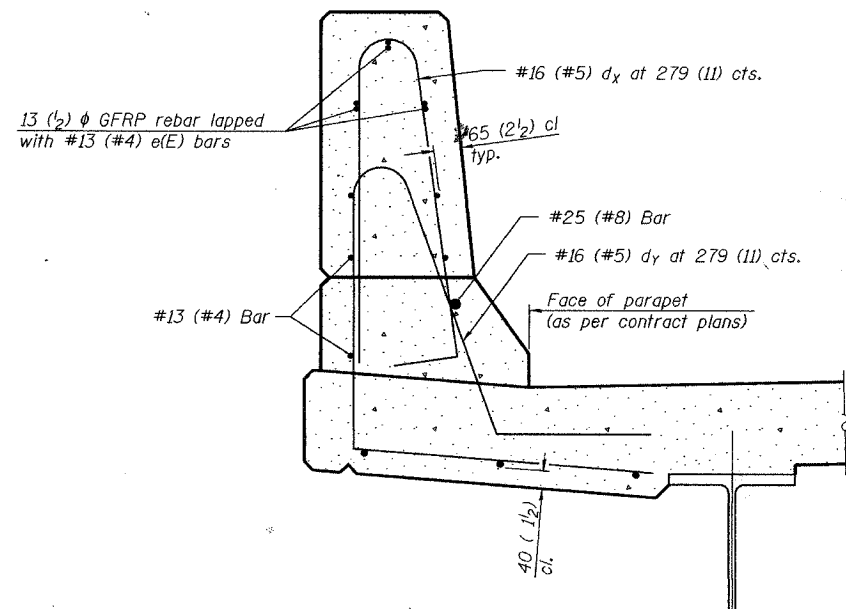
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAP ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.	SHEET NO.
693	1982-1	FORD		42A	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

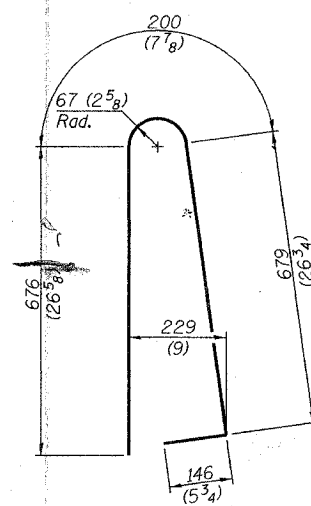
Contract # 66697



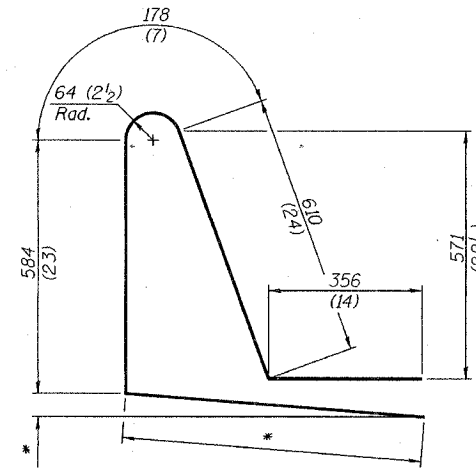
**SECTION**  
(Showing dimensions)



**SECTION**  
(Showing required reinforcement)



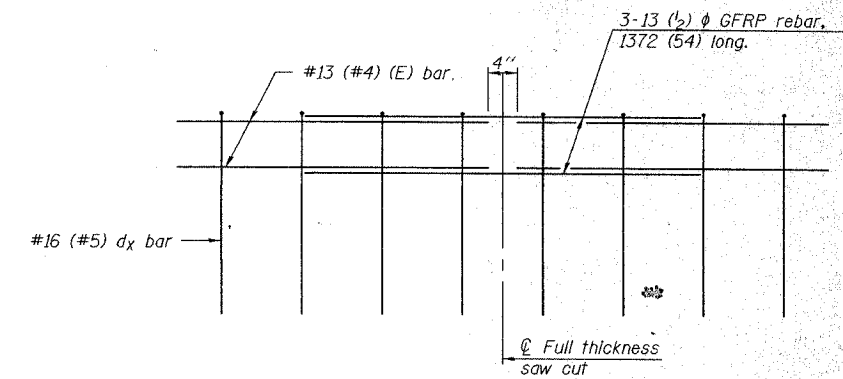
**BAR dx(e)**



**BAR dx(e)**  
\* Per contract plans

**GENERAL NOTES**

All dimensions shall remain the same as shown on contract plans, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B= 0.0422 m<sup>3</sup>/m (.0165 cu. yds./ft.) of parapet. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all other locations. Adjust/add joint locations to maintain 3 to 6 meter (10 to 20 foot) spacing.



**GFRP REBAR STIFFENING DETAIL**  
(Place as shown in parapet section)

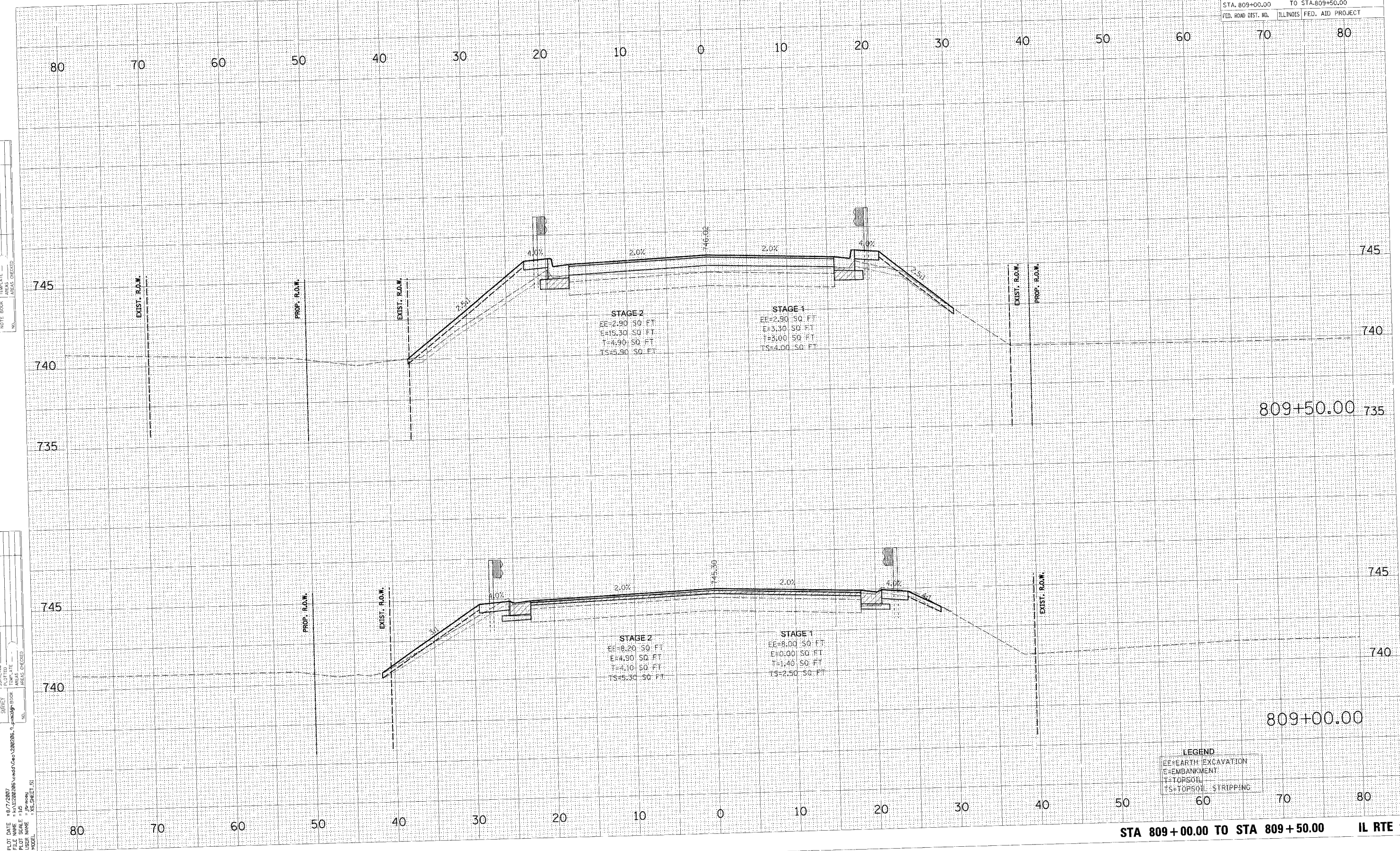
**CONCRETE PARAPET  
SLIPFORMING OPTION**



CONTRACT NO. 66697				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19BR-1	FORD	50	44
STA. 809+00.00		TO STA. 809+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DATE	
BY	
DESIGNED	
SURVEY	
FLIPPED	
NOTE BOOK	
TEMPLATE	
AREAS	
DRAWN	
NO.	

DATE	
BY	
DESIGNED	
SURVEY	
FLIPPED	
NOTE BOOK	
TEMPLATE	
AREAS	
DRAWN	
NO.	



PLOT DATE = 8/7/2007  
 FILE NAME = H:\112002065\road\112002065.dwg  
 PLOT SCALE = 1/8" = 1'-0"  
 MODEL = XS\_SHEET\_1.dwg

LEGEND

EE	EARTH EXCAVATION
E	EMBANKMENT
T	TOPSOIL
TS	TOPSOIL STRIPPING

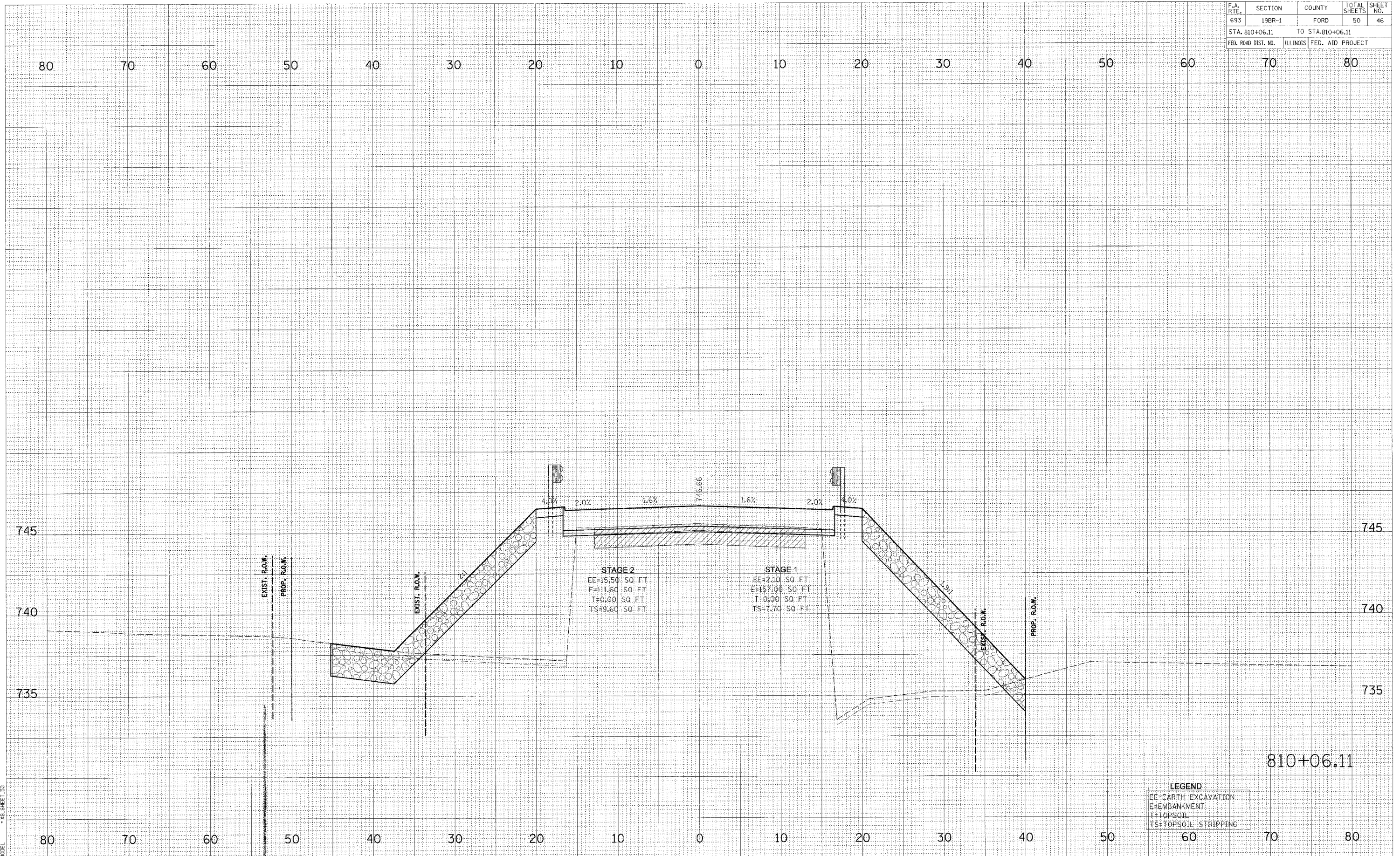


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19BR-1	FORD	50	46
STA. 810+06.11		TO STA. 810+06.11		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	DATE
AS SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
AS SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

PLOT DATE = 8/7/2007  
FILE NAME = K:\11202295\cond\Gen\200206\_9.dwg  
PLOT SCALE = 1"=40'  
MODEL = 15 SHEET 53



810+06.11

**LEGEND**

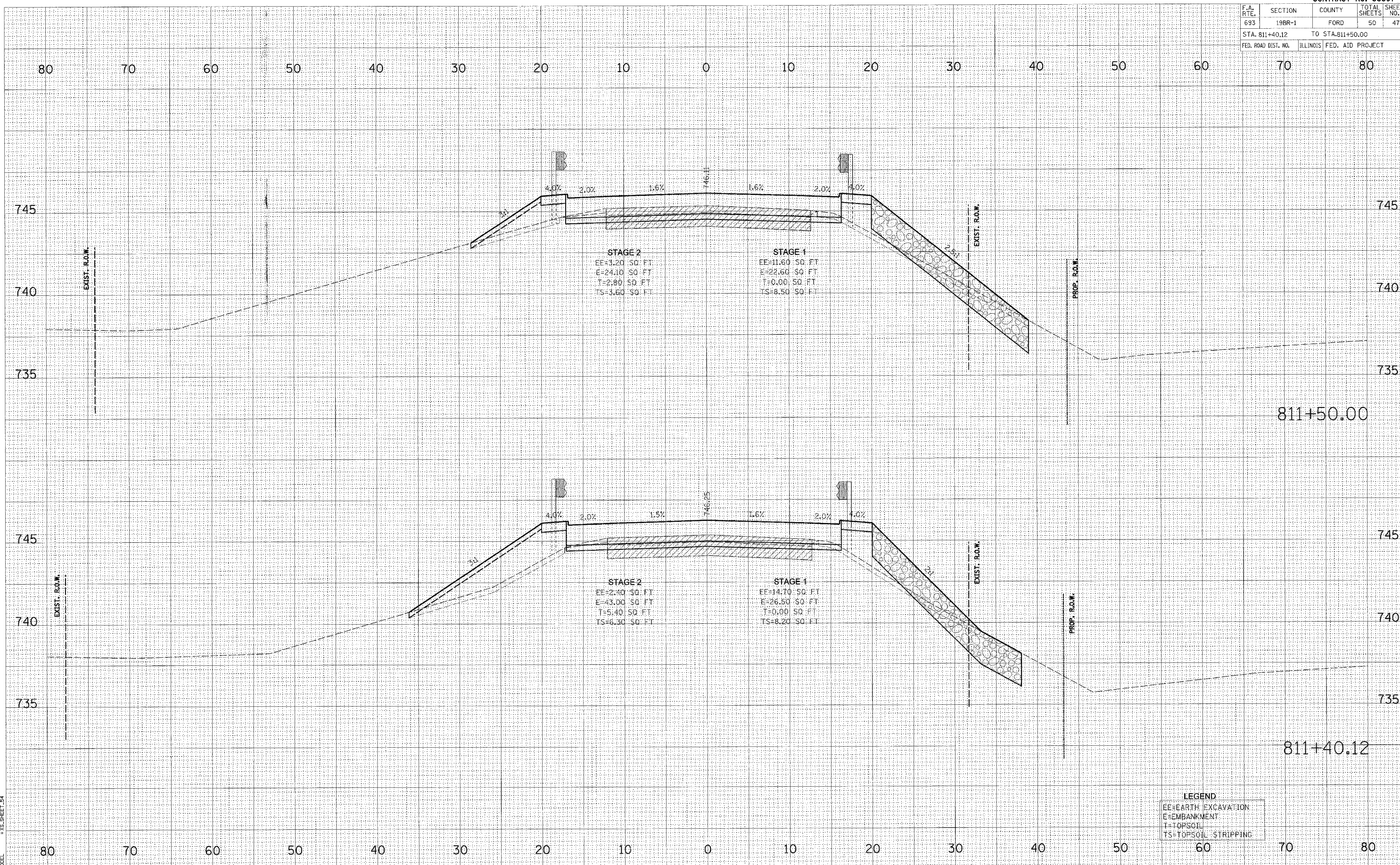
EE	EARTH EXCAVATION
E	EMBANKMENT
T	TOPSOIL
TS	TOPSOIL STRIPPING

CONTRACT NO. 66697			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
693	19BR-1	FORD	50
STA. 811+40.12		TO STA. 811+50.00	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

DATE	BY
SPICED	
PLOTTED	
NOTE BOOK	
TEMP. ARE	
AREAS CHECKED	
NO.	

DATE	BY
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
TEMP. AREAS	
CHECKED	
NO.	

PLOT DATE = 6/9/2007  
 FILE NAME = I:\112002\86\acdd\geo\282206\_9\p\282206\_9.dwg  
 PLOT SCALE = 1/8" = 1'-0"  
 MODEL = 3D SURVEY\_54



LEGEND	
EE	EARTH EXCAVATION
E	EMBANKMENT
T	TOPSOIL
TS	TOPSOIL STRIPPING







F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19BR-1	FORD	50	50
STA. 813+50.00		TO STA. 814+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY	REVISIONS	DATE
NOTE BOOK	PLOTTED	
AREAS	TEMPLATE	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	REVISIONS	DATE
NOTE BOOK	PLOTTED	
AREAS	TEMPLATE	
NO.	AREAS CHECKED	

PLOT DATE = 9/7/2007  
 FILE NAME = H:\11200206\Acad\Geo\200206\_9\p02091.BC00  
 PLOT SCALE = 1/8" = 1'-0"  
 MODEL = 1/8" = 1'-0" SHEET 57

