INDEX OF SHEETS

HIGHWAY STANDARDS

000001-05	635006-03
280001-04	635011-02
420401-07	701301-03
515001-03	701311-03
630001-08	701901-01
630301-05	780001-02
631031-07	781001-03
~~BLR 21-8~~ 701331-03	

GENERAL NOTES:

1. THE STANDARDS AND REVISION NUMBERS SHALL APPLY TO THIS PROJECT.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

3. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING BY CALLING J.U.L.I.E. AND BY NOTIFYING NON-J.U.L.I.E. MEMBERS INDIVIDUALLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
   - AMERENIP (GAS & ELECTRIC)
   - AT&T ILLINOIS
   - VILLAGE OF FAYETTEVILLE (WATER & SEWER)
   - VERIZON NORTH, INC.

   MEMBERS OF J.U.L.I.E. (800) 892-0123 OR 811 ARE INDICATED BY *.
   NON-MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

4. THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR I.T.S. UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND/OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

5. "ROAD ~~CLOSED~~ CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT EACH END OF THE PROJECT AND ALL INTERSECTING SIDE ROADS AND WILL BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS. ALL CONSTRUCTION SIGNS SHALL BE FLOURESCENT ORANGE, 48".

6. REMOVAL OF THE EXISTING BRIDGE APPROACH PAVEMENT SHALL BE INCLUDED IN THE COST OF "PAVEMENT REMOVAL".

7. MINIMAL CHANNEL EXCAVATION IS NECESSARY FOR PLACEMENT OF RIPRAP. THIS GRADING AND SHAPING SHALL BE INCLUDED IN THE COST OF "STONE RIPRAP, CLASS A4".

8. THE PROPOSED STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINAL IN THE NORTH WEST QUADRANT OF THE STRUCTURE SHALL COMPLY WITH THE DETAILS IN THE PLANS AND MANUFACTURER'S DETAILS IN ORDER TO MATCH THE EXISTING GUARDRAIL ELEMENTS THAT WERE ERECTED PRIOR TO JANUARY 1, 2007.

9. ~~CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON EITHER SIDE OF THE STRUCTURE TWO WEEKS PRIOR TO CLOSURE AND REMAIN FOR ONE WEEK AFTER CLOSURE.~~

10. ALL EXISTING RIGHT-OF-WAY LINES SHOWN ON THE PLAN SHEETS ARE GRAPHICAL REPRESENTATIONS AND SHALL NOT BE USED AS A MEANS TO ESTABLISH OWNERSHIP. IN ALL MATTERS RELATING TO RIGHT-OF-WAY, THE PLAT OF HIGHWAYS SHALL BE THE CONTROLLING DOCUMENT.

11. A TEMPORARY RUNAROUND WILL BE CONSTRUCTED BY OTHERS UNDER CONTRACT NO. 76C74. CLOSURE OF THIS STRUCTURE BY THE CONTRACTOR WILL NOT BE PERMITTED UNTIL SUCH TIME AS THE TEMPORARY RUNAROUND IS COMPLETE AND READY FOR TRAFFIC.

12. THE CONTRACTOR FOR CONTRACT NO. 76C74 SHALL MAINTAIN THE RUNAROUND AND REMOVE THE RUNAROUND WHEN THE PROPOSED STRUCTURE IS COMPLETE AND OPEN TO TRAFFIC.

13. THIS CONTRACT SHALL SUPPLY, INSTALL, MAINTAIN AND REMOVE TRAFFIC CONTROL AND PROTECTION, STANDARD 701331 UPON NOTIFICATION OF THE RESIDENT ENGINEER. ⚠1

14. "PAVEMENT MARKING REMOVAL" AND "THERMOPLASTIC PAVEMENT MARKING – LINE 4 INCH" HAVE BEEN ADDED TO THE PLANS FOR THE AREA AFFECTED BY THE RUNAROUND. APPROXIMATE STATIONS FROM 145+00 TO 147+00 AND FROM 152+00 TO 154+00. ⚠1

EROSION CONTROL NOTES

1. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER RECOMMENDED INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

2. STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER, AND SILT FENCES WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE, SILT PANELS, ROLLED EXCELSIOR, URETHANE FOAM/GEOTEXTILE (SILT WEDGES), EARTH MEDIAN AND/OR OTHER MATERIAL APPROVED BY THE EROSION AND SEDIMENT CONTROL COORDINATOR.

3. TEMPORARY DITCH CHECKS, AGGREGATE USES GRADING NO. 3 - REMOVE AT END OF CONSTRUCTION.

4. TEMPORARY SEEDING SHALL BE COMPLETED ON A WEEKLY BASIS ON EXPOSED GROUND AND SHALL BE PAID FOR AS "TEMPORARY EROSION CONTROL SEEDING" AND NO OTHER PAYMENT WILL BE PERMITTED. FOR CALCULATION PURPOSES, THREE APPLICATIONS OF TEMPORARY SEEDING WERE ASSUMED.

5. ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE

6. EROSION CONTROL BLANKET SHALL BE PLACED ON ALL SLOPES 2.5:1 AND STEEPER.

7. EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.

8. CLASS 2 SEEDING AND EROSION CONTROL BLANKET IS TO BE PLACED AS SOON AS EARTHWORK IS COMPLETED.

COMMITMENTS

NONE

PERTINENT INFORMATION

THE VILLAGE OF FAYETTEVILLE SHALL BE INFORMED 2 WEEKS PRIOR TO CLOSURE AND IMPLEMENTATION OF THE RUNAROUND. CONTACT BOARD PRESIDENT BRIAN FUNK AT 618-677-3343

AN APPROXIMATE AREA OF THE WETLAND LOCATED WITHIN THE PROJECT LIMITS IS SHOWN ON THE EROSION CONTROL SHEETS. THE ACTUAL WETLAND WILL BE STAKED BY I.N.H.S. PRIOR TO CONSTRUCTION. THERE IS AN ADDITIONAL AREA SHOWN AS WETLAND REMOVAL FOR PLACEMENT OF THE RIPRAP UNDERNEATH THE STRUCTURE. CARE SHALL BE TAKEN TO MINIMIZE IMPACTS TO THE WETLAND. IF ANY ADDITIONAL IMPACTS ARE ANTICIPATED, THE R.E. SHALL NOTIFY JENNIFER HUNT AT 618-346-3156 PRIOR TO IMPLEMENTING THE CONSTRUCTION ACTIVITY.

UPON OPENING THE STRUCTURE TO TRAFFIC, THE RESIDENT ENGINEER FOR THIS PROJECT SHALL CONTACT THE CONTRACTOR FOR CONTRACT NO. 76C74 AND NOTIFY HIM THAT THE RUNAROUND IS AVAILABLE FOR REMOVAL.

⚠1 Rev. 12-19-08

Rev

FILE NAME = c:\pw_work\PWIDOT\OWENBJ\dms51591\pln02205b.dgn	USER NAME = owenbj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
	PLOT SCALE = 50.0000 ' / IN.	DRAWN -	REVISED -		SCALE: / SHEET NO. OF SHEETS / STA. / TO STA.
	PLOT DATE = 11/26/2008	CHECKED -	REVISED -		
		DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421B-1	ST. CLAIR	56	2
		CONTRACT NO. 76885		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES			80% FEDERAL 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		X071-2A		
20100500	TREE REMOVAL, ACRES	ACRE	0.25	0.25		
20200100	EARTH EXCAVATION	CU YD	150	150		
20400800	FURNISHED EXCAVATION	CU YD	310	310		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	129	129		
25000200	SEEDING, CLASS 2	ACRE	0.5	0.5		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45		
25100115	MULCH, METHOD 2	ACRE	0.5	0.5		
25100630	EROSION CONTROL BLANKET	SQ YD	1040	1040		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150	150		
28000400	PERIMETER EROSION BARRIER	FOOT	1010	1010		
28100107	STONE RIPRAP, CLASS A4	SQ YD	1506	1506		
28200200	FILTER FABRIC	SQ YD	1506	1506		
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	276	276		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	55	55		
44000100	PAVEMENT REMOVAL	SQ YD	250	250		
48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	495	495		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1		
50104650	SLOPE WALL REMOVAL	SQ YD	860	860		
50200100	STRUCTURE EXCAVATION	CU YD	236	236		
50300100	FLOOR DRAINS	EACH	14	14		
50300225	CONCRETE STRUCTURES	CU YD	144.6	144.6		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	215.6	215.6		
50300260	BRIDGE DECK GROOVING	SQ YD	615	615		
50300280	CONCRETE ENCASEMENT	CU YD	10.6	10.6		
50300300	PROTECTIVE COAT	SQ YD	768	768		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1		
50500505	STUD SHEAR CONNECTORS	EACH	3843	3843		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	66440	66440		
50800515	BAR SPLICERS	EACH	80	80		
51201600	FURNISHING STEEL PILES HP12X53	FOOT	2049	2049		
51202305	DRIVING PILES	FOOT	2049	2049		
51203600	TEST PILE STEEL HP12X53	EACH	4	4		

SUMMARY OF QUANTITIES				80% FEDERAL 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
	CODE NO	ITEM	UNIT		X071-2A		
	51500100	NAME PLATES	EACH	1	1		
	52100520	ANCHOR BOLTS, 1"	EACH	56	56		
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	78	78		
	60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	139	139		
*	63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	437.5	437.5		
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3		
	63200310	GUARDRAIL REMOVAL	FOOT	753	753		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	11	11		
	67100100	MOBILIZATION	L SUM	1	1		
	~~70101830~~	~~TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21~~	~~L SUM~~	~~1~~	~~1~~		
	70100200	TRAFFIC CONTROL AND PROTECTION, STANDARD 701331	EACH	1	1		
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2		
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	485	485		
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	3	3		
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	10		
*	78200520	BARRIER WALL MARKERS, TYPE B	EACH	4	4		
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	4	4		
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3		
	X0321781	MECHANICAL SPLICE	EACH	48	48		
	~~X0324952~~	~~DETOUR SIGNING~~	~~L SUM~~	~~1~~	~~1~~		
	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	1		
	X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1	1		
@	Z0076600	TRAINEES	HOUR	500	500		
	78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	900	900		
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	300	300		

@ Y080 * Specialty Items △ Rev. 12-19-08 Rev.

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

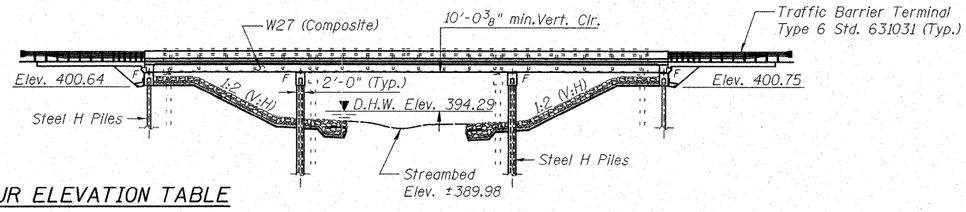
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421B-1	ST. CLAIR	56	3
		CONTRACT NO. 76885		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark 14: Cut "□" on bridge curb (NOT WINGWALL) at NE corner of IL15/IL4 bridge over Kaskaskia River (SN 082-0077), Elev. 406.80

Existing Structure: S.N. 082-0079 was built in 1946 under F.A. Rte 68, Section 421B at Sta. 149+50.00 as 3 spans, using continuous WF beams and a reinforced concrete deck supported by pile bent piers with precast concrete piles and closed abutments with precast concrete piles. The deck was constructed with a 7" thickness. In 1983, 1.5" of the deck was removed and replaced with a 3" concrete wearing surface. The O.-O. width is 30'-0" and the total structure length is 134'-11" Bk. to Bk. Abutments. Traffic will be detoured.

No salvage

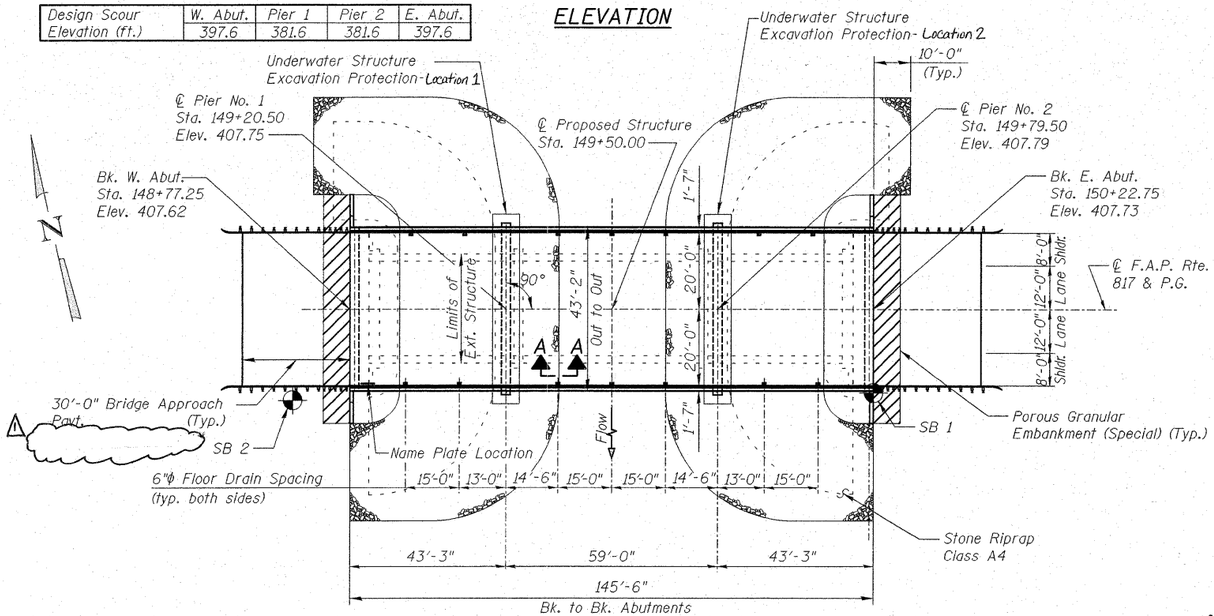
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



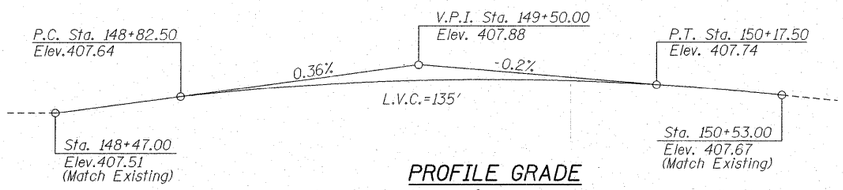
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	397.6	381.6	381.6	397.6

ELEVATION



PLAN



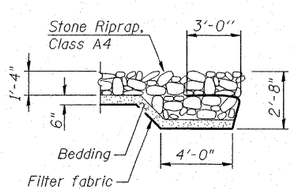
PROFILE GRADE
(Along ℄ Roadway)

WATERWAY INFORMATION

Drainage Area = 4.542 mi² — Low Grade Elev. 405.37 — ✪ Sta. 192+27.88

Flood	Freq. Yr.	Existing SN	Q C.F.S. Exist.	Q C.F.S. Prop.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	082-0077	56,548.93	56,498.17	12,483.10	12,483.10	394.29	0.36	0.36	394.65	394.65
		082-0078	4,107.07	4,099.66	2,069.39	2,069.39					
		082-0079	444.00	502.17	246.86	295.75					
		Total	61,100.00	61,100.00	14,799.35	14,848.24					
Base	100	082-0077	62,070.63	61,990.04	14,116.27	14,116.27	396.27	0.43	0.43	396.70	396.70
		082-0078	6,839.80	6,829.43	2,954.77	2,954.77					
		082-0079	889.57	980.53	401.69	456.53					
		Total	69,800.00	69,800.00	17,472.73	17,527.57					
Overtopping	N/A										
Max. Calc.	500	082-0077	83,325.14	83,158.48	18,330.75	18,330.75	401.29	0.81	0.81	402.10	402.10
		082-0078	17,283.78	17,244.13	5,265.36	5,265.36					
		082-0079	2,691.08	2,897.39	870.34	934.43					
		Total	103,300.00	103,300.00	24,466.45	24,530.54					
Scour	10	082-0077	41,485.46	41,485.45	8,443.08	8,443.08	389.30	0.21	0.21	389.51	389.51
		082-0078	114.54	114.55	88.91	88.91					
		082-0079	0.00	0.00	0.00	0.00					
		Total	41,600.00	41,600.00	8,531.99	8,531.99					

Note: Existing Velocity (ft/s) / Frequency (yr) for SN 082-0079: 0.00/10; 1.46/50; 1.90/100; 2.74/500
Proposed Velocity (ft/s) / Frequency (yr) for SN 082-0079: 0.00/10; 1.41/50; 1.86/100; 2.76/500
Note: Existing Low Beam Elevation (ft) for SN 082-0079: 404.69 US / 404.75 DS
Proposed Low Beam Elevation (ft) for SN 082-0079: 404.20 US / 404.20 DS
Note: SN 082-0077 carries IL4/IL15 over Kaskaskia River
SN 082-0078 carries IL4/IL15 over Kaskaskia River Overflow
SN 082-0079 carries IL4/IL15 over Kaskaskia River Overflow



SECTION A-A

STATION 149+50.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P RTE 817 SEC.421B-1
LOADING HL93
STRUCTURE NO. 082-0275

NAME PLATE
See Std. 515001

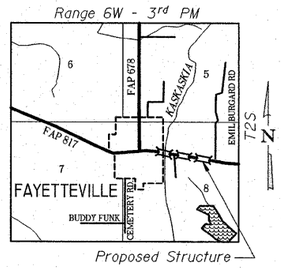
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications

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

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

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Bedrock Acceleration Coefficient (A) = 11.5%
Site Coefficient (S) = 1.5

INDEX OF DRAWINGS



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E Anderson (TDD)
ENGINEER OF BRIDGES AND STRUCTURES

WESLEY W. HERNDON 4923 STATE OF ILLINOIS EDWARDSVILLE REGISTERED STRUCTURAL ENGINEER
Expires 11-30-08
Wesley W. Herndon 9/30/08
WESLEY W. HERNDON, S.E. DATE
THIS SEAL IS FOR SHEETS 1-9 AND 15-28 OF 28

LICENSED STRUCTURAL ENGINEER MARY COOMBE BLOXDORF 4859 STATE OF ILLINOIS
Exp. 11-30-08
Mary Coombe Bloxdorf 9/25/08
MARY COOMBE BLOXDORF, P.E., S.E. DATE
THIS SEAL IS FOR SHEETS 10-14 of 28

DESIGNED	DB
CHECKED	RS
DRAWN	ER
CHECKED	WWH

Juneau Associates, Inc. P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
2100 State Street, Granite City, Illinois 62040, Phone:(618)877-1400, Fax:(618)452-5541
100 North Research Drive, Edwardsville, Illinois 62025, Phone: (618)659-0900/(618) 656-0800, Fax: (618)659-0941
Registered Professional Service Corporation License No. 184-003389

Rev. 12-31-08

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 4/15 OVER
KASKASKIA OVERFLOW
F.A.P. ROUTE 817 SEC 421B-1
ST. CLAIR COUNTY
STATION 149+50.00
STRUCTURE NO. 082-0275

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	817	421B-1	ST. CLAIR	56	20
	STRUCTURE NO. 082-0275		CONTRACT NO. 76885		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		