

PLANS FOR PROPOSED FEDERAL-AID BRIDGE REPLACEMENT & REHABILITATION PROGRAM

PLAN 1 INCH = 50 FEET
 PROFILE (HOR.) 1 INCH = 50 FEET
 PROFILE (VERT.) 1 INCH = 5 FEET
 CROSS SECTIONS 1 INCH = 5/10 FEET

SUMMARY OF QUANTITIES

ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD 173
20900110	POROUS GRANULAR BACKFILL	CU YD 176
35101400	AGGREGATE BASE CSE, TY B	TON 208
50100100	REMOVAL OF EXISTING STRUCTURE	EA. 1
50200100	STRUCTURE EXCAVATION	CU. YD. 293
50800205	REINFORCEMENT BARS, EPOXY COATED	LB. 13,350
54003000	CONCRETE BOX CULVERT	CU. YD. 83.6
67100100	MOBILIZATION	L SUM 1
X2501000	SEEDING CL 2, SPL.	ACRE 0.12
X7010216	TRAFFIC CONTROL & PROTECTION, SPL	L SUM 1

INDEX OF SHEETS

- INDEX OF SHEETS, SUMMARY OF QUANTITIES
- PLAN AND PROFILE, TYPICAL SECTION
- CROSS SECTIONS
- GENERAL PLAN AND ELEVATION

F.A.S. 78
SHANNON ROUTE
SECTION 10-00091-01-DR
CARROLL COUNTY
 PROJECT NO. ER-0078(109)
 CONTRACT NO. 85544
 JOB NO. C - 92-083-11

- STANDARDS:
- 280001-05 TEMPORARY EROSION CONTROL SYSTEMS
 - 701006-03 OFF-RD OPERATIONS, 2L, 2W 15' TO 24"
 - 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
 - 701901-01 TRAFFIC CONTROL DEVICES
 - 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
 - 728001-01 TELESCOPING STEEL SIGN SUPPORT
 - 729001-01 APPLS. OF TYPES A & B METAL POSTS
 - BLR 21-8 TYP. APPLICATION OF TRAFFIC CONTROL DEVICES
 - BLR 22-6 TYP. APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

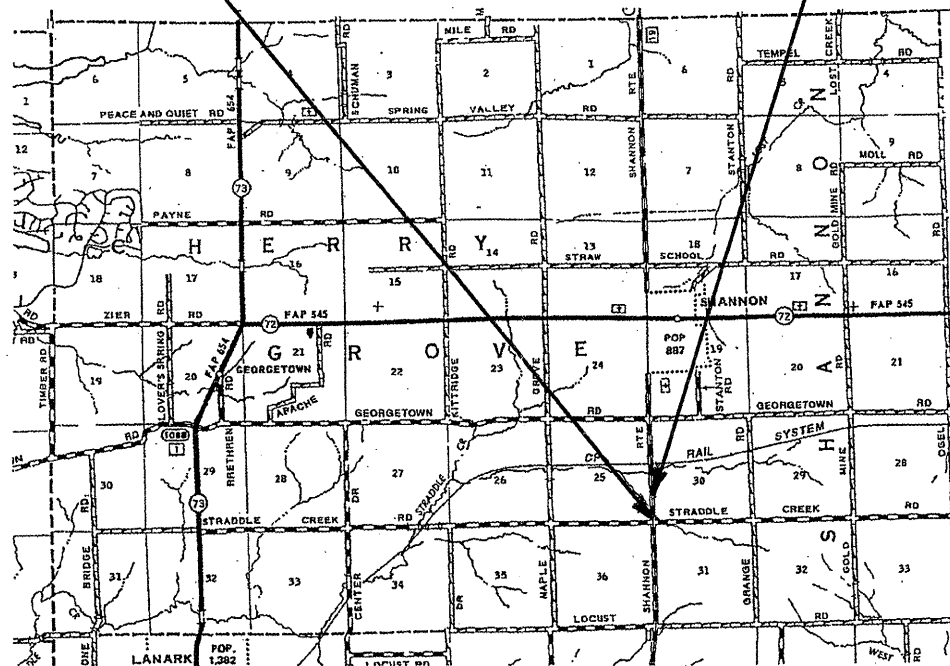
SECTION 10-00091-01-DR
 BEGINS AT STA. 0+00

R 6 E OF THE 4TH P.M.

SECTION 10-00091-01-DR
 ENDS AT STA. 6+00

SECTION 10-00091-01-DR

INCLUDES THE REMOVAL OF A 10' X 8' X 42' REINFORCED CONCRETE BOX CULVERT AND CONSTRUCTION OF A 10' X 8' X 52'-6" REINFORCED CONCRETE BOX CULVERT ALSO INCLUDED IS APPROACH ROADWAY CONSTRUCTION.



LOCATION MAP

NET LENGTH OF SECTION = 100 FT. = 0.019 MILE



Kevin B. Vandervooren
 6/24/2011
 Expires 11/30/2011

CONSTRUCTION TYPE CODE 0040

85544

"CALL J.U.L.I.E. BEFORE YOU DIG"
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

APPROVED JUNE 24 20 11
Kevin B. Vandervooren
 CARROLL COUNTY ENGINEER

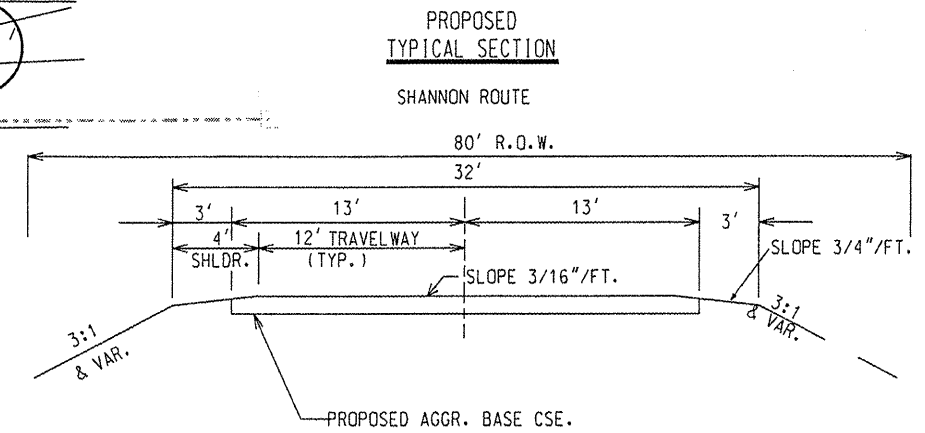
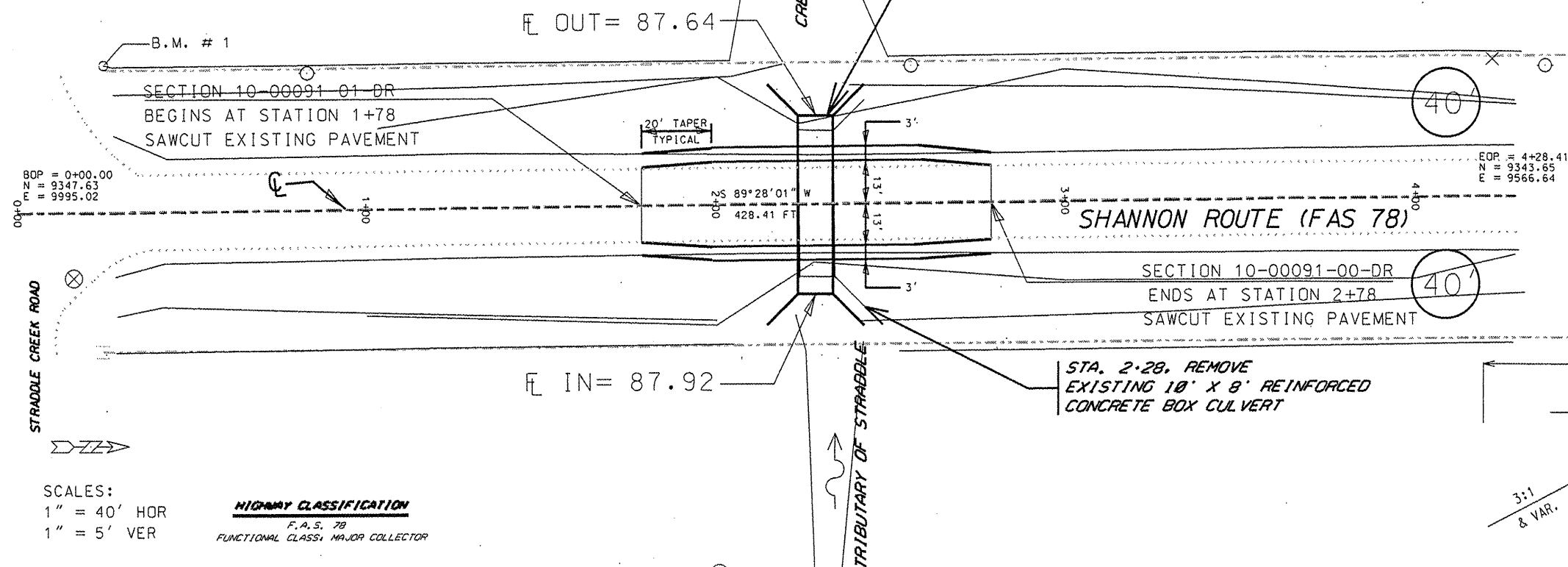
PASSED July 6 20 11
Jim L. P. [Signature]
 DISTRICT ENGINEER OF LOCAL ROADS AND STREETS

Releasing for Bid
 Based on Limited Review July 6 20 11
Gu S. [Signature]
 Deputy Director of Highways, Region 2 Engineer

B.M. # 1
 FORM PIN IN CORNER POST
 STA. 0+25.03, 41.49' LT.
 ELEV = 100.09 ASSUMED

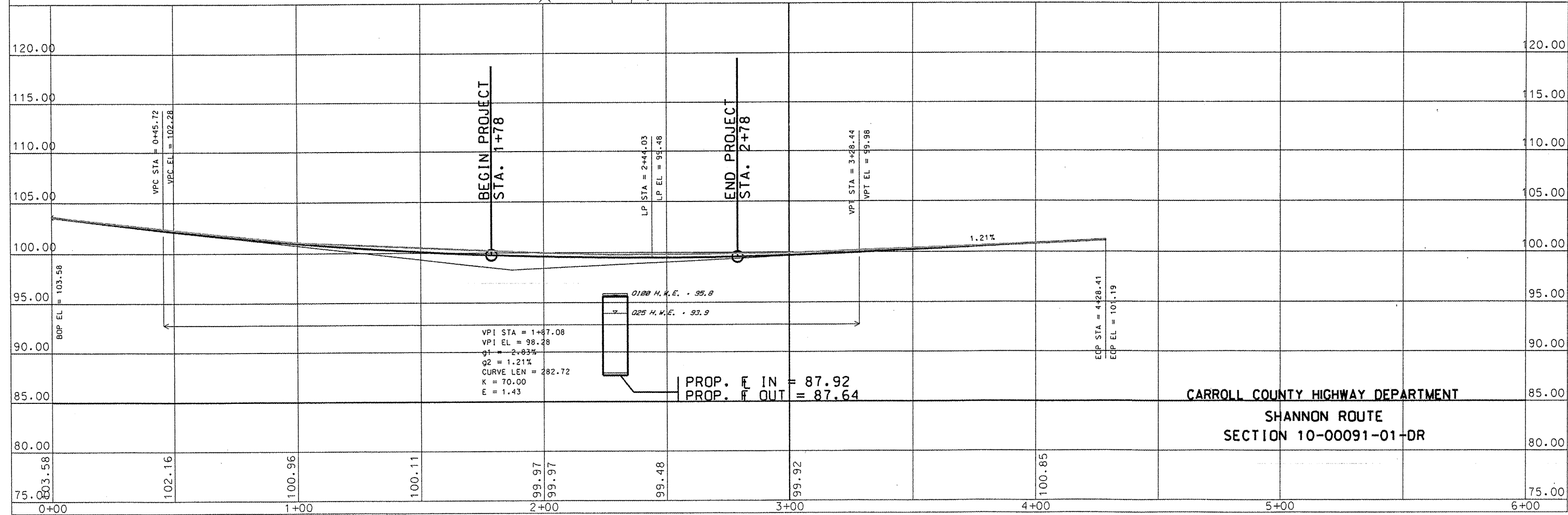
F.A.S. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	10-00091-01-DR	CARROLL	4	2
STA. TO STA.				
FED. AID DIST. NO.	ILLINOIS	FED. AID PROJECT		

85544

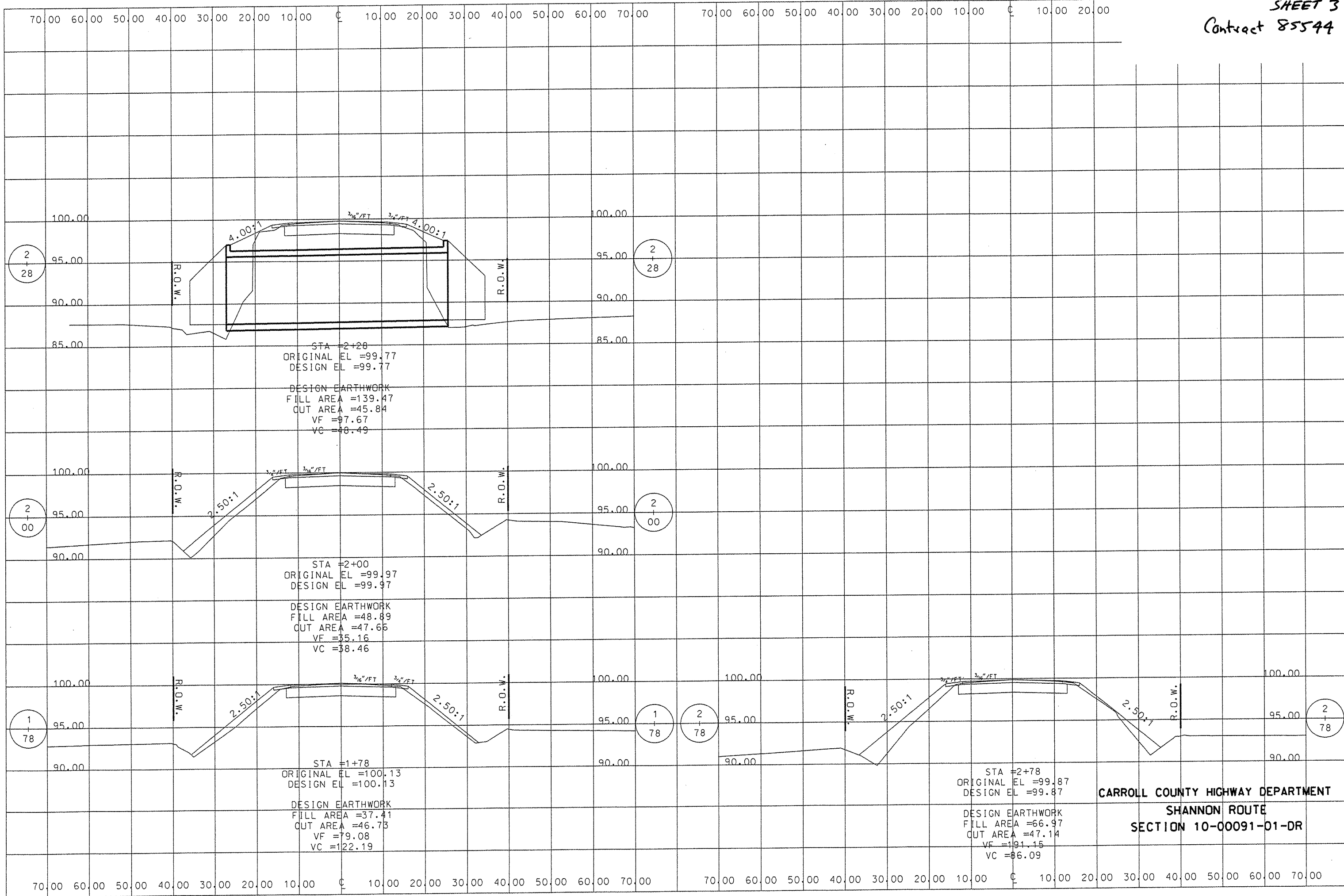


SCALES:
 1" = 40' HOR
 1" = 5' VER

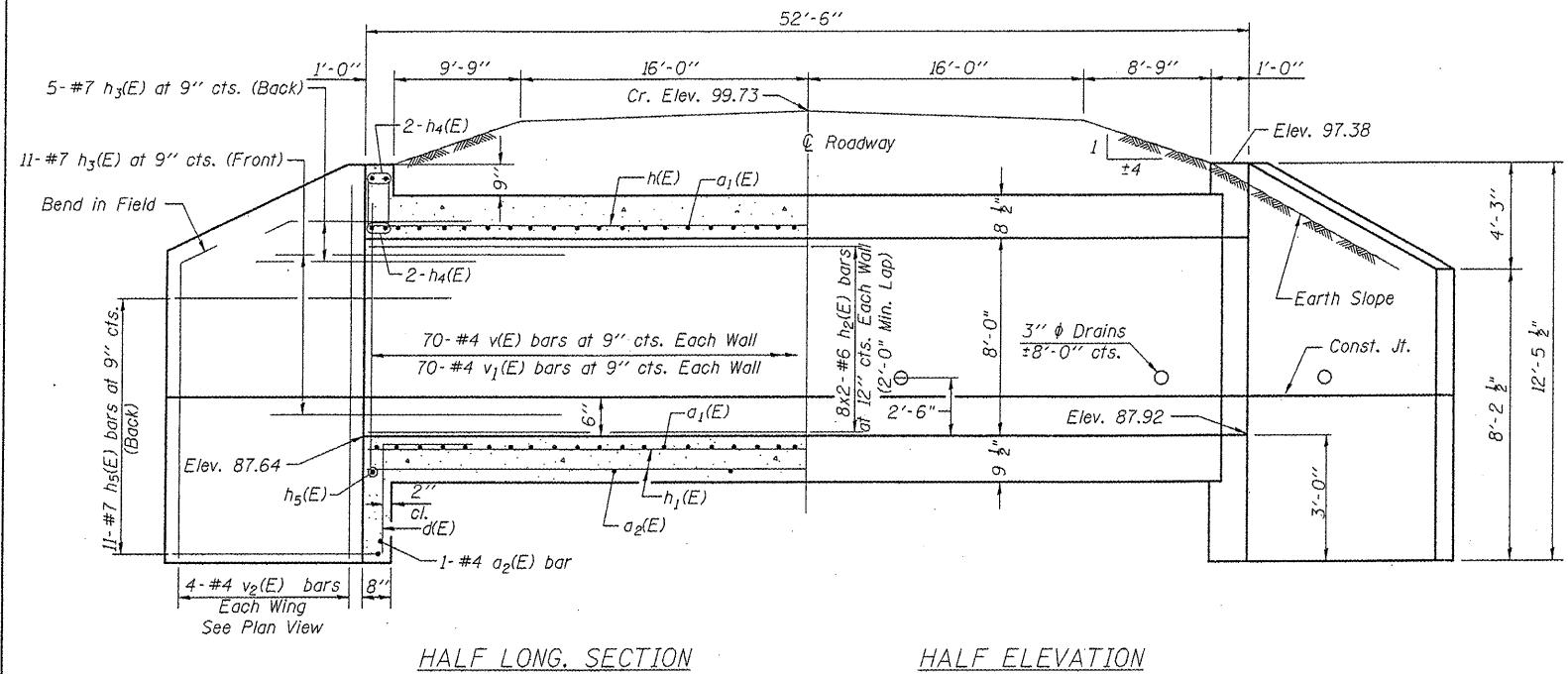
HIGHWAY CLASSIFICATION
 F.A.S. 78
 FUNCTIONAL CLASS: MAJOR COLLECTOR



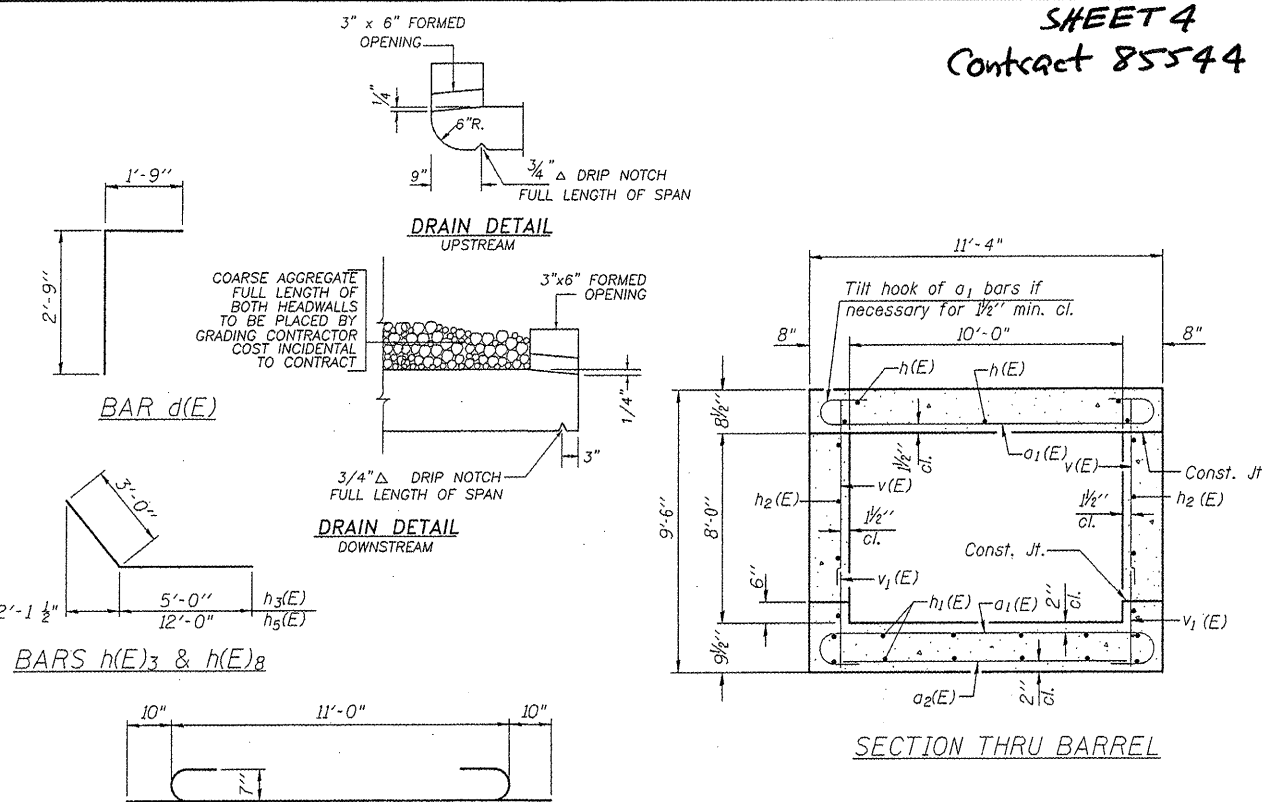
CARROLL COUNTY HIGHWAY DEPARTMENT
 SHANNON ROUTE
 SECTION 10-00091-01-DR



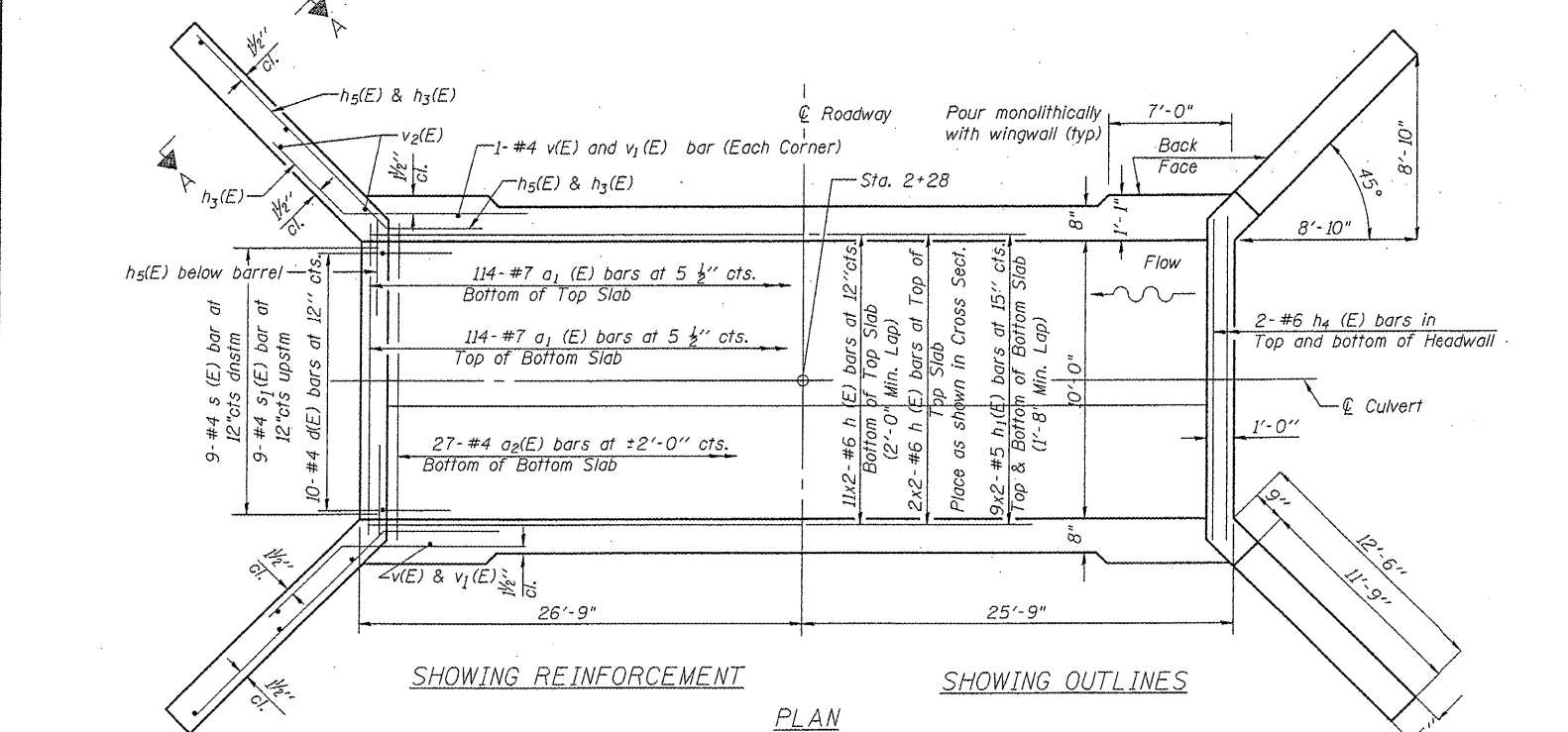
CARROLL COUNTY HIGHWAY DEPARTMENT
SHANNON ROUTE
SECTION 10-00091-01-DR



HALF LONG. SECTION HALF ELEVATION



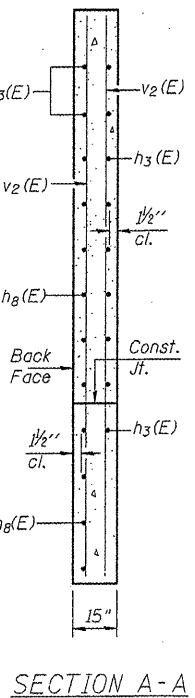
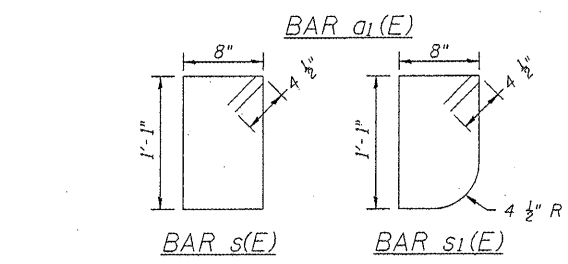
SECTION THRU BARREL



SHOWING REINFORCEMENT SHOWING OUTLINES

GENERAL NOTES

EXPOSED EDGES SHALL BE BEVELED 3/4".
 REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53, GRADE 60.
 AT LEAST 7 FEET OF BARREL SHALL BE POURED MONOLITHICALLY WITH WINGWALLS.
 FOR BACKFILLING AND EMBANKMENT, SEE STANDARD SPECIFICATIONS.
 A DEPOSIT OF GRAVEL OR BROKEN STONE SHALL BE PLACED BEHIND DRAIN HOLES, IN ACCORDANCE WITH ARTICLE 503.12 OF THE STANDARD SPECIFICATIONS. A DOUBLE LAYER OF GEOTECHNICAL FABRIC SHALL BE PLACED AGAINST THE DRAIN HOLE AND AROUND THE DEPOSIT TO PREVENT LEAKAGE OF BACKFILL MATERIAL THROUGH THE 3" DIAMETER OPENING. FILTER FABRIC SHALL BE IN ACCORDANCE WITH SECTION 282 OF THE STANDARD SPECIFICATIONS, WITH THE EXCEPTION THAT UNDER METHOD OF MEASUREMENT AND BASIS OF PAYMENT THIS ITEM WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BOX CULVERT.
 WINGWALL REINFORCEMENT SHALL BE BENT OR CUT TO FIT.
 BARS INDICATED THUS 11 x 2 - #6 ETC. INDICATES 11 LINES OF BARS WITH 2 LENGTHS PER LINE.



SECTION A-A

WENDLER ENGINEERING SERVICES, INC.
 Illinois Professional Design Firm No. 184-000848

 RICHARD A. BAUMANN
 DIXON, ILLINOIS
 ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-004732
 EXPIRES 11-30-2012

DESIGN STRESSES
 $f_y = 60,000$ psi
 $f'_c = 3,500$ psi
 Design Specifications: 2008 AASHTO

LOADING HL-93

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	228	#7	12'-8"	C
a2(E)	29	#4	11'-0"	—
d(E)	20	#4	4'-6"	—
h(E)	26	#6	27'-0"	—
h1(E)	36	#5	26'-10"	—
h2(E)	32	#6	27'-0"	—
h3(E)	64	#7	8'-0"	—
h4(E)	8	#6	11'-0"	—
h5(E)	48	#7	15'-0"	—
s(E)	9	#4	4'-3"	□
s1(E)	9	#4	4'-2"	□
v(E)	144	#4	8'-0"	—
v1(E)	144	#4	2'-3"	—
v2(E)	16	#4	12'-3"	—
Concrete Box Culverts	Cu. Yd.		83.6	
Reinforcement Bars Epoxy coated	Pound		13350	

MIN. BAR LAP

BAR	BARREL	WINGWALL
#4	1'-4"	1'-8"
#5	1'-8"	2'-2"
#6	2'-0"	2'-7"
#7	2'-9"	3'-5"
#8	3'-8"	4'-6"

SECTION 10-00091-01-DR
 SHANNON ROUTE (FAS 78)
 CARROLL COUNTY