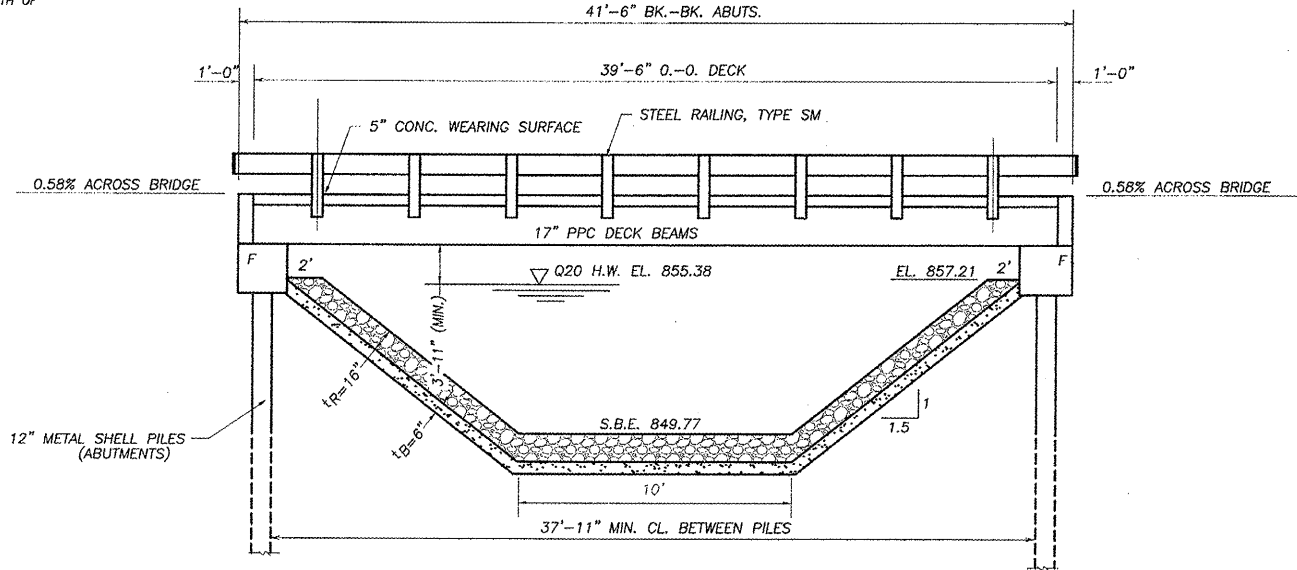


PAS ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
178	*	LEE	14	6
ILLINOIS PROJECT BRS-0178(105)				
* 11-00317-00-BR				
CONTRACT NO. 85560				

BENCHMARK INFORMATION

B.M. "A" - SET R.R. SPIKE IN WEST FACE OF FIRST POWER POLE NORTH OF STRUCTURE, EAST SIDE OF ROAD. ELEV=858.48
 B.M. "B" - SET CHISELED "C" AT NORTH END OF WEST HEADWALL OF EXISTING STRUCTURE. ELEV=860.89
 B.M. "C" - SHIP SPIKE IN WEST FACE OF 1ST. POWER POLE SOUTH OF STRUCTURE, EAST SIDE OF ROAD. ELEV=857.23



GENERAL NOTES

SEE SPECIAL PROVISIONS FOR REMOVAL OF EXISTING STRUCTURE.
 AFTER THE EXISTING STRUCTURE IS REMOVED ANY SHAPING REQUIRED IN THE CHANNEL UNDER THE BRIDGE TO CONFORM TO THE ELEVATION VIEW SHALL BE CONSIDERED INCIDENTAL TO REMOVAL OF THE EXISTING STRUCTURE.
 BACKFILLING OF ABUTMENTS SHALL NOT BE DONE UNTIL THE DECK BEAMS ARE IN PLACE AND THE DOWELS ARE GROUTED AND CURED.
 A PROTECTIVE COAT HAS BEEN INCLUDED FOR THE TOP OF THE DECK AND OUTSIDE FACES OF THE OUTSIDE BEAMS.

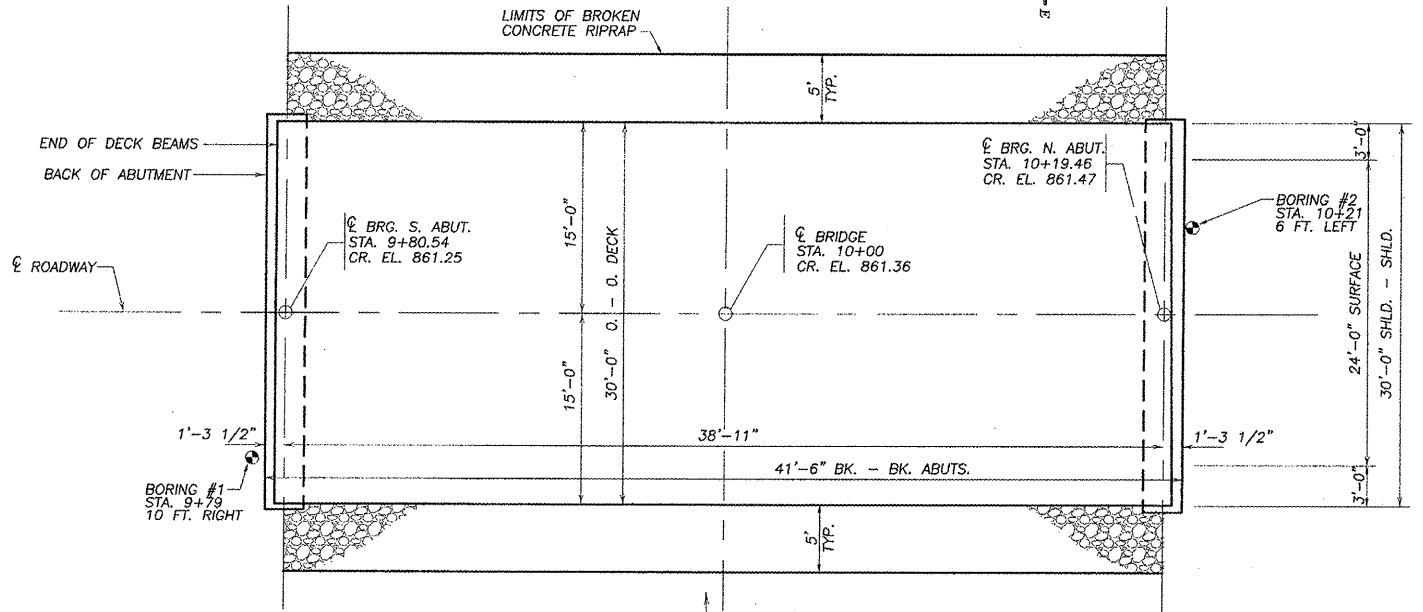
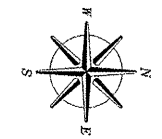
EXISTING STRUCTURE:
 DOUBLE BARREL BOX CULVERT
 10' SPAN X 8' RISE

SALVAGE:
 ALL ITEMS DEEMED SALVAGABLE BY THE ENGINEER SHALL BE STOCKPILED ON THE RIGHT OF WAY.

BILL OF MATERIAL BRIDGE

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
CONCRETE STRUCTURES	CU. YD.		30.0	30.0
REINFORCEMENT BARS, EPOXY COATED	POUND	1698	4190	5888
PRECAST PRESTRESSED CONCRETE DECK BEAMS (17")	SQ. FT.	1185		1185
PROTECTIVE COAT	SQ. YD.	155.2		155.2
FURNISHING METAL SHELL PILES, 12" X 0.250	FOOT	308		308
DRIVING PILES	FOOT	308		308
TEST PILE METAL SHELLS	EACH		2	2
NAME PLATES	EACH			1
REMOVAL OF EXISTING STRUCTURES	EACH			1
STEEL RAILING, TYPE SM	FOOT	84		84
CONCRETE WEARING SURFACE, 5"	SQ. YD.	131.7		131.7
BRIDGE DECK GROOVING	SQ. YD.	131.7		131.7
BROKEN CONCRETE RIPRAP	SQ. YD.		160	160
FILTER FABRIC	SQ. YD.		160	160

ELEVATION



PLAN

WATERWAY INFORMATION

Drainage Area = 5.98 sq. miles		Low Grade Elev. = 861.29		at Roadway Sta. 10+00					
Flood Year	Frequency (cfs)	Existing	Proposed	Natural H.W.E.	Head-Ft. Existing	Headwater El. Proposed			
Design	20	611	99	103	855.38	0.72	0.50	856.10	855.88
Base	100	868	112	122	856.05	1.25	0.91	857.30	856.96
Overtopping									
Max Calc.	500	1110			856.47	1.91	1.40	858.38	857.87

BRANCH OF WILLOW CREEK
 BUILT 2012 BY
 LEE COUNTY
 SECTION 11-00317-00-BR
 STATION 10+00
 STR. NO. 052-3513 LOADING HL-93

LETTERING FOR NAME PLATE
 SEE STD. 515001

DESIGN STRESSES

PRESTRESSED UNITS **FIELD UNITS**
 f'c = 6000 P.S.I. f'c = 3500 P.S.I.
 f'ci = 5000 P.S.I. RELEASE fy = 60,000 P.S.I. (REINFORCEMENT)
 f's = 270,000 P.S.I. Fy = 36,000 P.S.I. (HARDWARE)
 f'si = 201,960 P.S.I.
 DESIGN SPECIFICATIONS: 2007 AASHTO SPECIFICATIONS
 (ALLOWED FOR 25 P.S.F. FOR FUTURE WEARING SURFACE.)

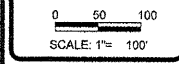
LOADING HL 93



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

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF THE STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES".

S.N. 052-3513
 GENERAL PLAN AND ELEVATION
 SECTION 11-00317-00-BR
 LEE COUNTY



REVISION	DATE

wendler
 CONSULTING SOLUTIONS
 ENGINEERS, SURVEYORS & PLANNERS
 WWW.WENDLERGS.COM Phone: 815.398.2281
 Illinois Professional Design Firm No. 18-002849

GENERAL PLAN AND ELEVATION
 OF
 PAW PAW ROAD BRIDGE
 FOR
 LEE COUNTY

SHEET TITLE

GPE

JOB NUMBER
 2110221

DATE
 03/29/2012

SHEET NO.

6 of 14