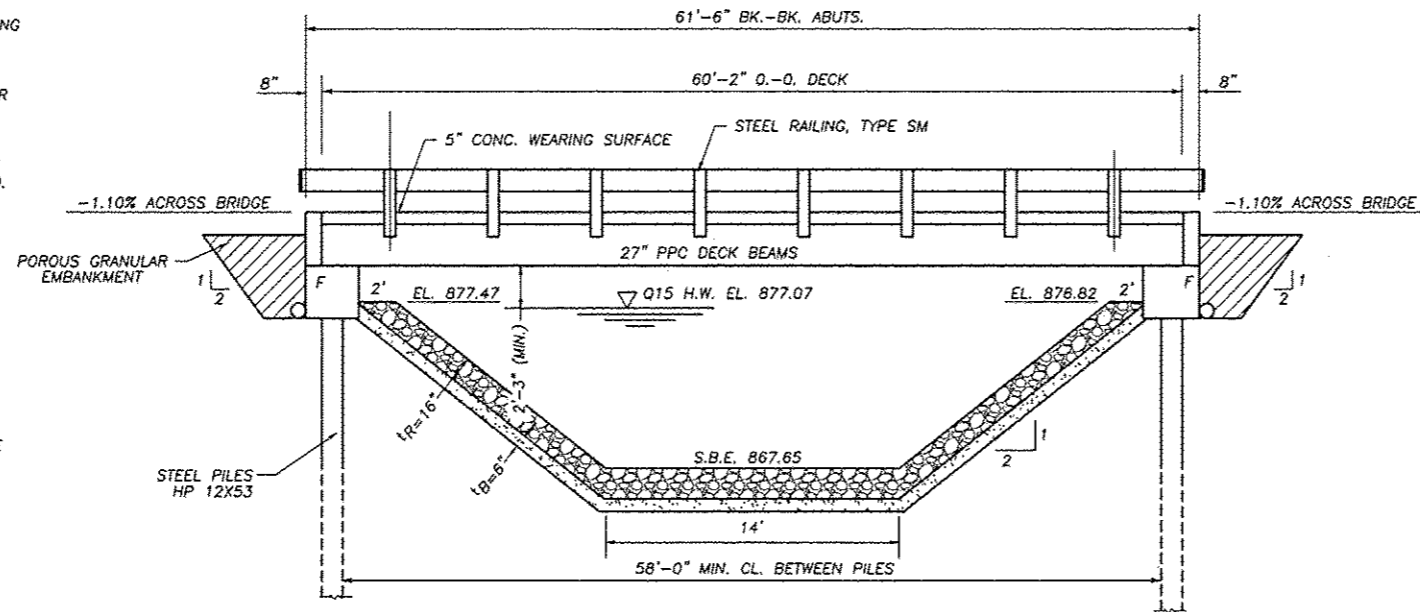


BENCHMARK INFORMATION

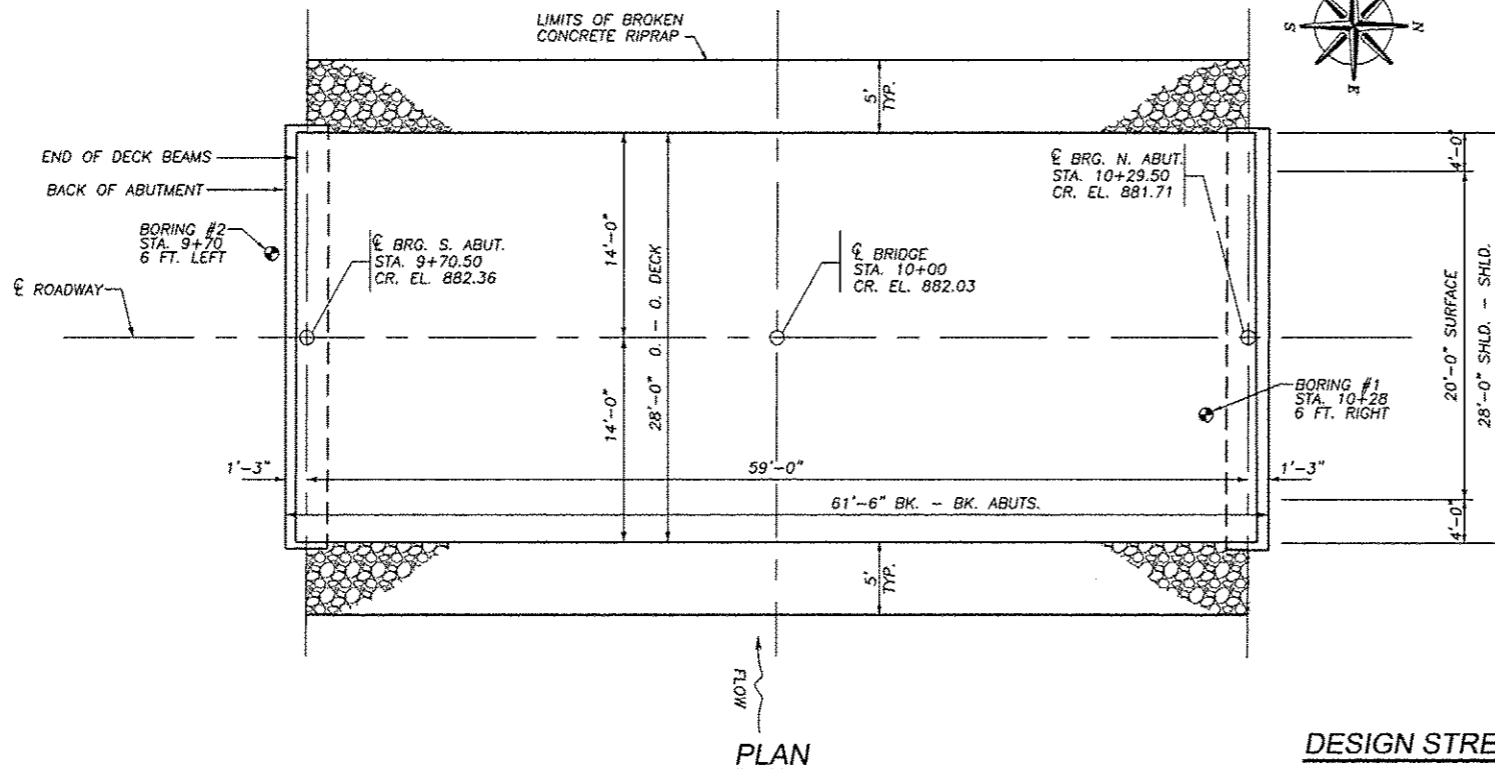
BM"A": SET CHISELED "c" @ NORTHWEST CORNER OF EXISTING STRUCTURE. ELEV. 882.00
 BM"B": SET COTTON SPINDLE IN EAST FACE OF FIRST POWER POLE NORTH OF BRIDGE - WEST R.O.W. OF REES RD. ELEV. 876.51
 BM"C": SET COTTON SPINDLE IN NORTHWEST FACE OF FIRST POWER POLE SOUTH OF BRIDGE - WEST R.O.W. OF REES RD. ELEV. 883.93

EXISTING STRUCTURE:
 SIMPLE SPAN PRECAST PRESTRESSED CONCRETE DECK BRIDGE ON TIMBER PILING WITH CLOSED TIMBER BACKING ABUTMENTS AND WINGS

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



ELEVATION



PLAN

WATERWAY INFORMATION

Flood		Frequency Year	Q (cfs)	Opening Sq. Ft.		Natural H.W.E.	Head-Ft.		Headwater El.	
				Existing	Proposed		Existing	Proposed	Existing	Proposed
Design		15	972	225	328	877.02	0.58	0.05	877.58	877.07
Base		100	1610	261	382	877.75	1.07	0.28	878.82	878.03

BRANCH OF YELLOW CREEK
 BUILT 2013 BY
 STEPHENSON COUNTY
 SECTION 12-03120-00-BR
 STATION 10+00
 STR. NO. 089-3286 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 $f'_c = 5000$ P.S.I. (CONCRETE WEARING SURFACE)
 $f'_s = 270,000$ P.S.I. $f_y = 60,000$ P.S.I. (REINFORCEMENT)
 $f'_{si} = 201,960$ P.S.I. $F_y = 36,000$ P.S.I. (HARDWARE)
 DESIGN SPECIFICATIONS: 2010 AASHTO SPECIFICATIONS
 (ALLOWED FOR 50 P.S.F. FOR FUTURE WEARING SURFACE.)

LOADING HL 93

FAS ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	STEPHENSON	14	4

ILLINOIS PROJECT BROS-0177(045)
 * 12-03120-00-BR
 CONTRACT NO. 85587

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.

BILL OF MATERIAL

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
CONCRETE STRUCTURES	CU. YD.		28.1	28.1
REINFORCEMENT BARS, EPOXY COATED	POUND	2410	4140	6550
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27")	SQ. FT.	1685		1685
PROTECTIVE COAT	SQ. YD.	230		230
FURNISHING STEEL PILES, HP 12X53	FOOT	350		350
DRIVING PILES	FOOT	350		350
TEST PILE STEEL HP 12X53	EACH		1	1
NAME PLATES	EACH			1
REMOVAL OF EXISTING STRUCTURES	EACH			1
STEEL RAILING, TYPE SM	FOOT	124		124
CONCRETE WEARING SURFACE, 5"	SQ. YD.	187.2		187.2
BRIDGE DECK GROOVING	SQ. YD.	187.2		187.2
STONE DUMPED RIPRAP, CLASS A5	SQ. YD.		266	266
FILTER FABRIC	SQ. YD.		266	266



Richard A. Baumann
 RICHARD A. BAUMANN
 STERLING, ILLINOIS
 ILLINOIS LICENSED STRUCTURAL
 ENGINEER NO. 081-004732
 EXPIRES 11-30-2014
 DATE 3-24-13

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. 089-3286
GENERAL PLAN AND ELEVATION
 SECTION 12-03120-00-BR
 STEPHENSON COUNTY

REVISIONS

NO.	DATE	DESCRIPTION

DATE	BY	FOR

wendler
 GEOTECHNICAL SOLUTIONS
 engineers - surveyors - scientists
 www.wendlergis.com ph: 815.288.2261
 Michael Professional Design Firm No. 18-000868

GENERAL PLAN AND ELEVATION
 OF
NORTH REES ROAD BRIDGE
 FOR
STEPHENSON COUNTY

SHEET TITLE

GPE

JOB NUMBER
2120077

DATE
03/25/2013

SHEET NO.
4 of 14