

BENCHMARK INFORMATION

BENCHMARK "A"
SET CHISELED "□" AT NORTH CORNER OF EXISTING STRUCTURE
ELEVATION: 851.32

BENCHMARK "B"
SET COTTON SPINDLE IN SOUTH FACE OF POWER POLE W/TRANSFORMER
±360' SE OF BRIDGE. NORTH ROW DAMEIER RD. NEAR HOUSE #11200
ELEVATION: 861.44

BENCHMARK "C"
SET COTTON SPINDLE IN SOUTH FACE OF 1ST POWER POLE NW OF
BRIDGE. SOUTH ROW DAMEIER RD. NEAR HOUSE #11208
ELEVATION: 862.78

EXISTING STRUCTURE:
SIMPLE SPAN PRECAST PRESTRESSED CONCRETE
DECK BRIDGE ON TIMBER PILING WITH CLOSED
TIMBER BACKING ABUTMENTS AND WINGS ±44'
LONG

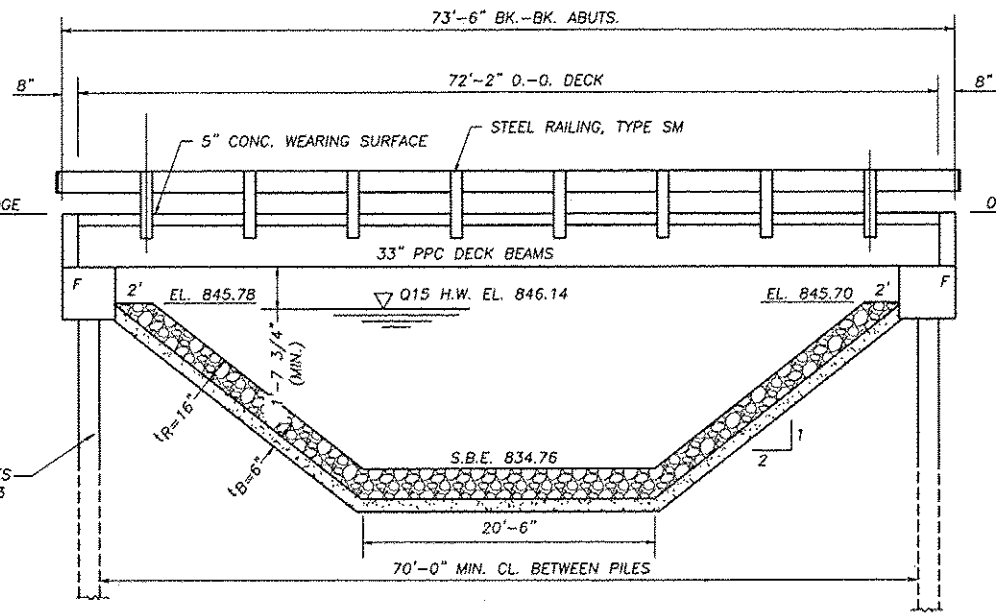
SALVAGE:
ALL ITEMS DEEMED SALVAGABLE
BY THE ENGINEER SHALL BE
STOCKPILED ON THE RIGHT
OF WAY.

FAS ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	STEPHENSON	16	4

ILLINOIS PROJECT BROS-0177(044)
* 12-08122-00-BR
CONTRACT NO. 85590

GENERAL NOTES

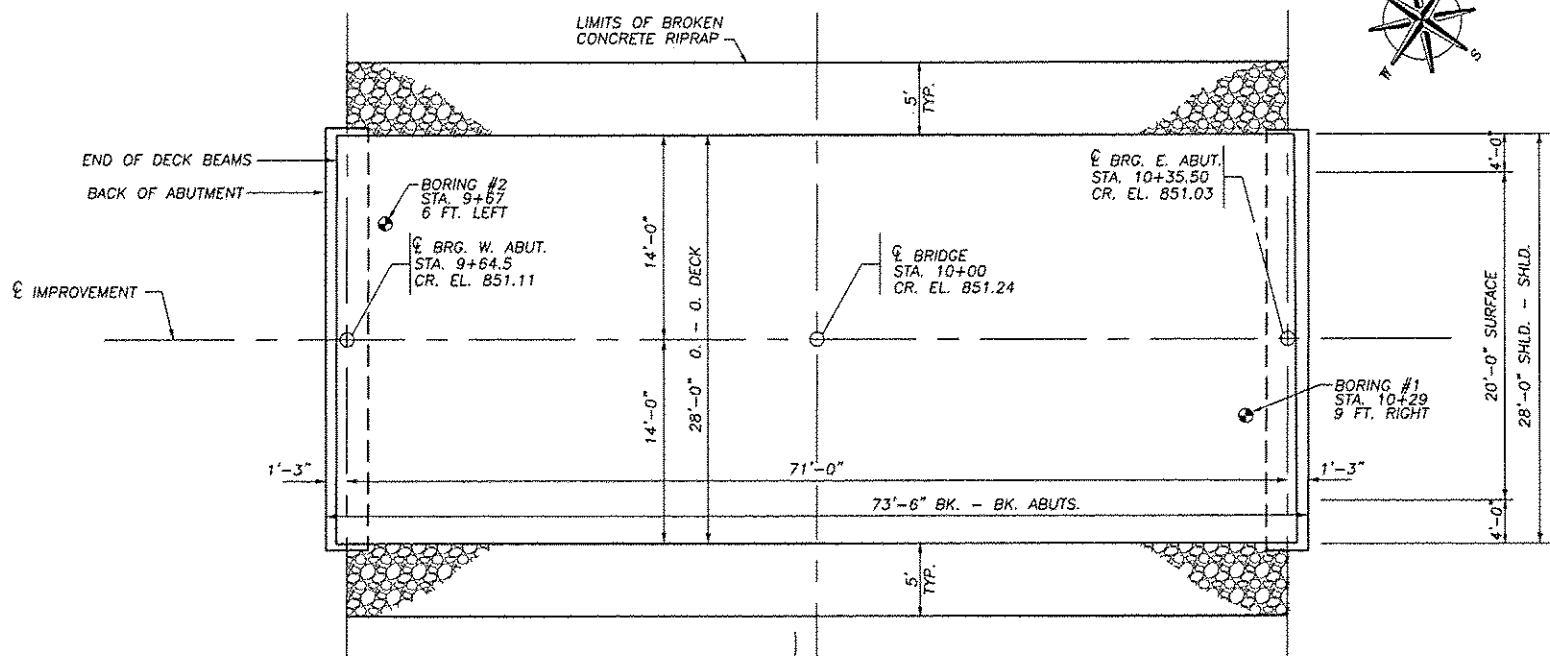
SEE SPECIAL PROVISIONS FOR REMOVAL OF EXISTING STRUCTURE.
AFTER THE EXISTING STRUCTURE IS REMOVED ANY SHAPING REQUIRED
IN THE CHANNEL UNDER THE BRIDGE TO CONFORM TO THE ELEVATION
VIEW SHALL BE CONSIDERED INCIDENTAL TO REMOVAL OF THE EXISTING
STRUCTURE.
BACKFILLING OF ABUTMENTS SHALL NOT BE DONE UNTIL 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.



ELEVATION

BILL OF MATERIAL

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
CONCRETE STRUCTURES	CU. YD.		29.2	29.2
REINFORCEMENT BARS, EPOXY COATED	POUND	2920	4230	7150
PRECAST PRESTRESSED CONCRETE DECK BEAMS (33")	SQ. FT.	2021		2021
PROTECTIVE COAT	SQ. YD.	281		281
FURNISHING STEEL PILES, HP 12X53	FOOT	555		555
DRIVING PILES	FOOT	555		555
TEST PILE STEEL HP 12X53	EACH		2	2
NAME PLATES	EACH			1
REMOVAL OF EXISTING STRUCTURES	EACH			1
STEEL RAILING, TYPE SM	FOOT	146		146
CONCRETE WEARING SURFACE, 5"	SQ. YD.	224.5		224.5
BRIDGE DECK GROOVING	SQ. YD.	224.5		224.5
STONE RIPRAP CLASS A4	SQ. YD.		311	311
FILTER FABRIC	SQ. YD.		336	336



PLAN

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. (CONC. WEARING SURF.)
 $f'_s = 270,000$ 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.)

SCOTT A. BROWN
 LICENSED STRUCTURAL ENGINEER
 ENGINEER NO. 081-005981
 EXPIRES 11-30-2014
 DATE 4/11/2013
 SCOTT A. BROWN
 DIXON, ILLINOIS
 ILLINOIS LICENSED STRUCTURAL
 ENGINEER NO. 081-005981
 EXPIRES 11-30-2014

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. 089-3287
 GENERAL PLAN AND ELEVATION
 SECTION 12-08122-00-BR
 STEPHENSON COUNTY

WATERWAY INFORMATION

Drainage Area = 7.12 sq. miles Low Grade Elev. = 849.32 at Roadway Sta. 11+50

Flood Frequency Year	Q (cfs)	Opening Sq. Ft.		Natural H.W.E.	Head-Ft.		Headwater El.	
		Existing	Proposed		Existing	Proposed	Existing	Proposed
Design 15	1549	447	487	846.03	0.12	0.11	846.15	846.14
Base 100	2490	510	583	846.97	0.84	0.58	847.81	847.55

BRANCH OF YELLOW CREEK
 BUILT 2013 BY
 STEPHENSON COUNTY
 SECTION 12-08122-00-BR
 STATION 10+00
 STR. NO. 089-3287 LOADING HL-93

LETTERING FOR NAME PLATE
 SEE STD. 515001

LOADING HL 93

REVISIONS

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GENERAL PLAN AND ELEVATION
 OF
 WEST DAMEIER ROAD BRIDGE
 FOR
 STEPHENSON COUNTY

SHEET TITLE
GPE

JOB NUMBER
 2120191

DATE
 4/01/2013

SHEET NO.
4 of 16