

**EXISTING STRUCTURE: S.N. 071-3304**

A Four Span (4x53') Precast Prestressed Concrete Deck Beams on Solid Stem Encased Pile Bent Piers and Pile Bent Abutments At Sta. 41+00, Skewed 0°, To Be Rehabilitated.  
 Section 89-15118-00-BR (Ogle County)  
 Section 89-02121-00-BR (Winnebago County)

**Bench Mark:** Railroad Spike in Power Pole

Lt. Sta. 35+90  
 Elev. 743.48

**Bench Mark:** Top of Disk #0C-264

Northeast Wingwall  
 Elev. 736.31

**Bench Mark:** Top of 3/4" I.P.

24' Lt. Sta. 46+00  
 Elev. 738.50

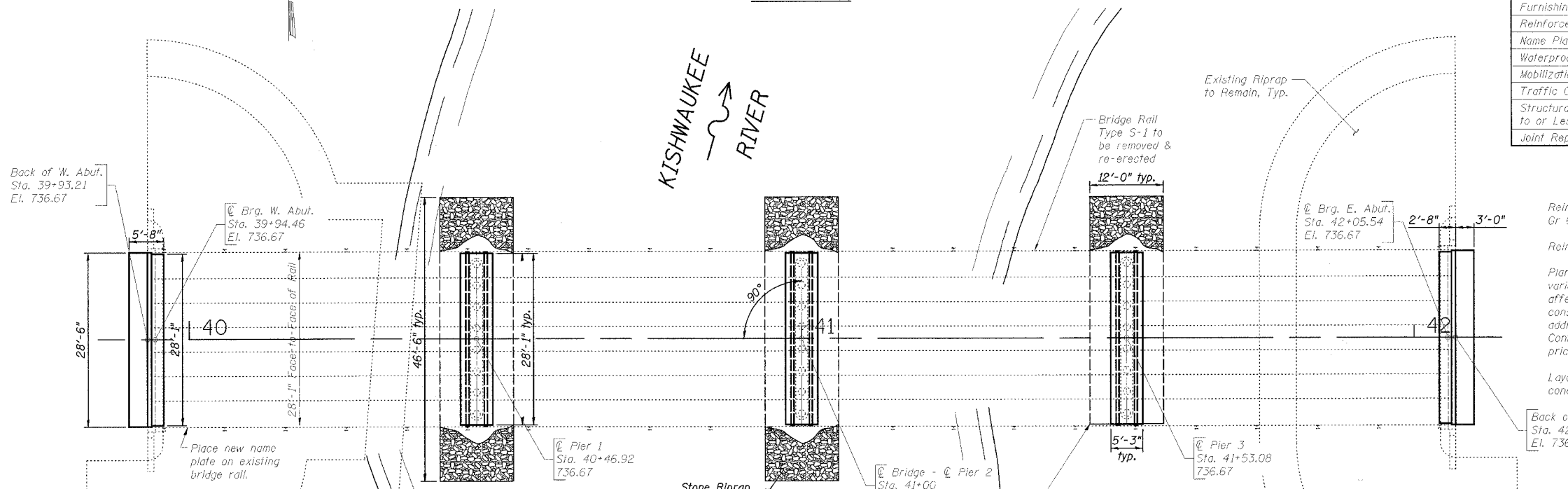
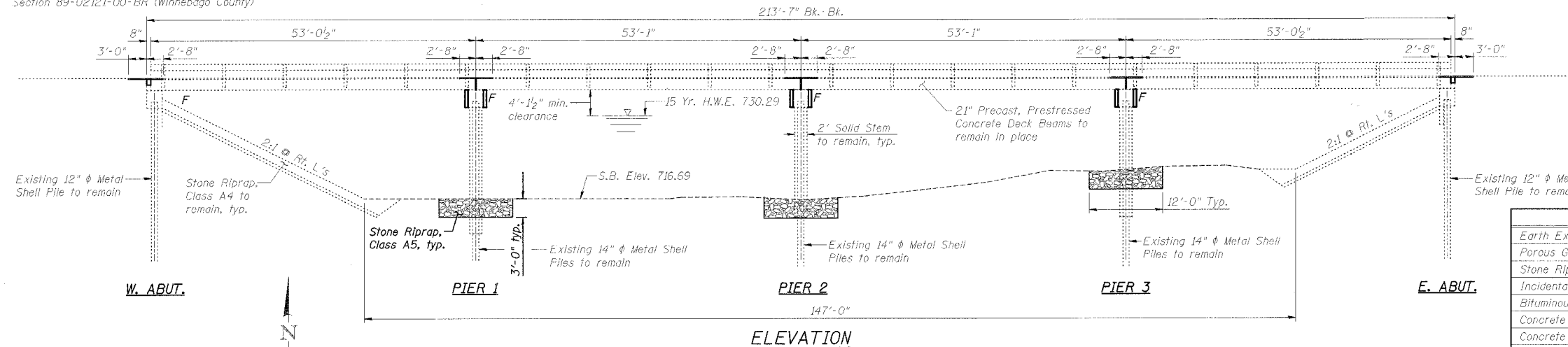
ROUTE	SECTION	COUNTY	DATE	SHEET
TR 61A	06-15118-01-BR 06-02121-01-BR	OGLE WINNEBAGO	5	3
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT: BHOS-14(16.4)	

SOUTH BRANCH KISHWAUKEE RIVER  
 REHABILITATION 2008 BY  
 SECTION 06-15118-01-BR (OGLE CO.)  
 SECTION 06-02121-01-BR (WINNEBAGO CO.)  
 TR 61A STA. 41+00  
 F.A. PROJ. BHOS-14(16.4)  
 STR. NO. 071-3304 LOADING HS20

**NAME PLATE LETTERING**  
 Refer to Std. 515001

**BILL OF MATERIALS - BRIDGE**

Item	Unit	Sub.	Super.	Total
Earth Excavation	Cu. Yd.	---	5	5
Porous Granular Embankment	Cu. Yd.	---	3	3
Stone Riprap, Class A5	Sq. Yd.	156	---	156
Incidental Hot-Mix Asphalt Surfacing	Ton	---	21	21
Bituminous Concrete Removal	Sq. Yd.	---	66	66
Concrete Removal	Cu. Yd.	1.1	---	1.1
Concrete Structures	Cu. Yd.	10.0	---	10.0
Furnishing and Erecting Structural Steel	L. Sum	1	---	1
Reinforcement Bars, Epoxy Coated	Pound	1,190	---	1,190
Name Plates	Each	---	1	1
Waterproofing Membrane System	Sq. Yd.	---	66	66
Mobilization	L. Sum	---	---	1
Traffic Control and Protection	L. Sum	---	---	1
Structural Repair of Concrete (Depth Equal to or Less Than 5 inches)	Sq. Ft.	2.8	---	2.8
Joint Repair	Each	---	3	3



**GENERAL NOTES:**

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

**WATERWAY INFORMATION**

DRAINAGE AREA	414 Sq. Mi.
DESIGN DISCHARGE (15 YR.)	9,500 C.F.S.
EXISTING OPENING	1,400 Sq. Ft.
REQUIRED OPENING	1,870 Sq. Ft.
PROPOSED OPENING	1,870 Sq. Ft.
CREATED HEAD (15 YR.)	< 0.5'
100 YR. DISCHARGE	15,300 C.F.S.
CREATED HEAD (100 YR.)	< 1.0'
HIGH WATER ELEV. (100 YR.)	733.09 Ft.

**DESIGN SPECIFICATIONS**

Design In Accordance With 2002 A.A.S.H.T.O.  
 Standard Specifications - 17th Edition

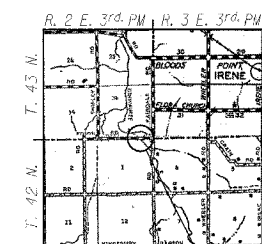
**DESIGN STRESSES**

FIELD UNITS  
 $f_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)



Brian K. Converse  
 DATE: 3/11/2008  
 EXPIRES 11/30/08

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



Bridge Site  
**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**  
**EDSON ROAD (TR 61A) OVER**  
**SOUTH BRANCH KISHWAUKEE RIVER**  
**STA. 41+00 (S.N. 071-3304)**  
**SECTION 06-15118-01-BR**  
**MONROE ROAD DISTRICT**  
**OGLE COUNTY**  
**SECTION 06-02121-01-BR**  
**CHERRY VALLEY ROAD DISTRICT**  
**WINNEBAGO COUNTY**

**WILLET, HOFMANN & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS  
 Land Surveying - Transportation - Structural - Environmental - Architecture

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Designed By: M. A. Small  
 Date: 4/07  
 Checked By: B. K. Converse  
 Date: 4/07  
 Drawn By: F. D. Lachat  
 Date: 4/07

WHA # 1092D06