

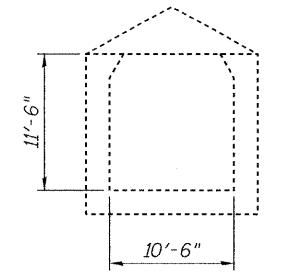
Benchmark: TBM #2, Railroad spike in timber pile at northwest corner of North Abutment, S.N. 087-0019, Elev. 522.31

EXISTING STRUCTURE: S.N. 087-0019, Covered span originally constructed in 1868, wood truss with 103 foot span, 14'-6" out-out width, concrete piers. Approach spans use steel beams with wood deck, timber pile bent piers and abutments.

Existing approach spans shall be removed and replaced.

No salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



END ELEVATION  
COVERED BRIDGE

GENERAL NOTES

Treated timber shall be according to Sections 507 and 1007 of the Standard Specifications. Wood members shall be visually graded No. 2 Southern Pine or No. 2 Douglas Fir-Larch, or approved equivalent. Members shall be surfaced on all sides (S4S), except the 3"x10" members shall be rough-sawn. Member thickness and width shown on the plans are actual (not nominal) dimensions.

Treated timber piles shall be according to Sections 512 and 1007.08 of the Standard Specifications, except the piles shall have a nominal diameter as specified on the plans (10"). The tops of all piles shall be protected with galvanized flashing according to Article 512.13.

Hardware shall be according to Sections 507.07 and 1006.17 of the Standard Specifications. Holes for all hardware shall be predrilled to avoid splitting. Wood screws (except lag screws) shall have a flat-countersunk head, and shall be "rolled thread" with a constant root diameter to simplify predrilling (not "cut thread" with a tapered diameter).

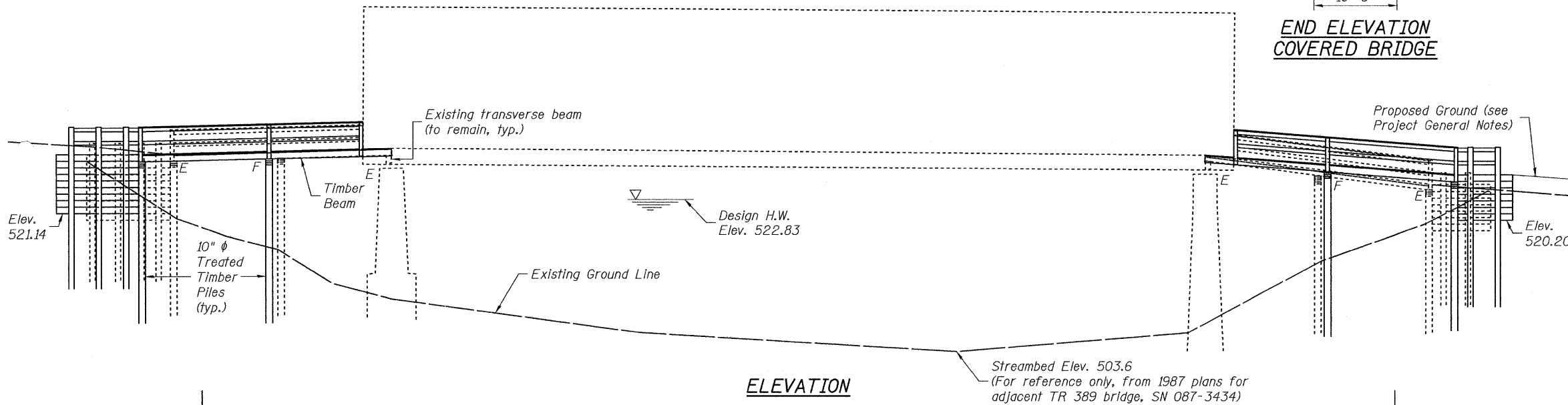
Tapered shims shall be made of a composite material, with a minimum thickness of about 1/16", as supplied by Nelson Shim Company or Glazlock Shims Inc., or approved equivalent. Multiple shims may be necessary to obtain desired slope and/or width.

The existing electrical and water lines on and adjacent to the structure shall be located and maintained or adjusted during construction. See Special Provisions.

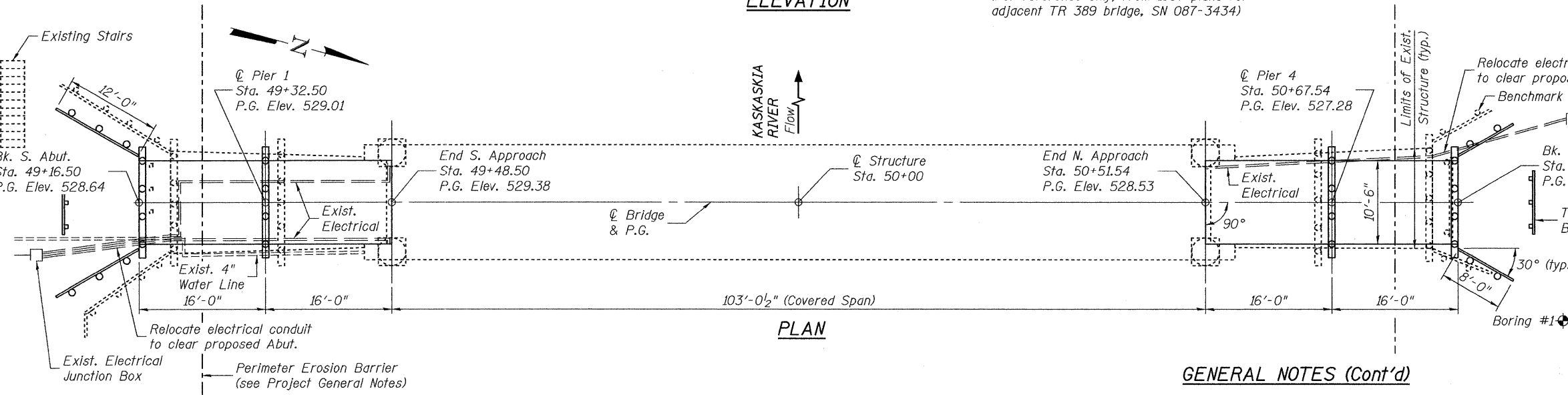
The Contractor shall submit a demolition plan to the Engineer for approval, detailing the proposed methods of demolition and the amount, location(s) and type(s) of equipment to be used.

The existing historic covered bridge shall be protected during construction, and shall not be used for construction equipment, or material storage, without approval of the Engineer.

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.



ELEVATION



PLAN

INDEX OF SHEETS

Sheet No.	Description
1	General Plan/Elev, General Notes & Bill of Mat'l
2-3	Superstructure
4	South Abutment
5	North Abutment
6	Geotextile Retaining Wall
7	Piers 1 & 4
8-12	Soil Borings

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Structures	Each	1	--	1
Structure Excavation	Cu Yd	--	123	123
Treated Timber	F.B.M.	3229	2067	5296
Hardware	Pound	116	66	182
Furnishing Treated Piles 20.1 To 38 Feet	Foot	--	616	616
Driving Piles	Foot	--	616	616
Test Pile Timber	Each	--	4	4
Pile Shoes	Each	--	26	26
Adjusting Water Service Lines	Foot	32	14	46
Relocate Existing Electrical System	L Sum	1	--	1
Geotextile Retaining Wall	Sq Ft	--	327	327

GENERAL NOTES (Cont'd)

Considering the relatively soft soils indicated by the boring at the north abutment, the Contractor shall keep heavy construction equipment (crane, dump truck, etc.) a minimum of 15 feet from the excavation limits at both abutments.

LOADING

Pedestrian (85 psf)

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

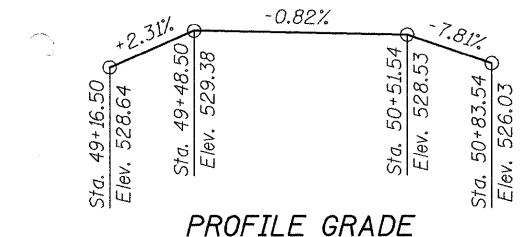
DESIGN STRESSES

FIELD UNITS

Per AASHTO Table 8.4.1.1.4-1  
For Southern Pine, No. 2:  
F<sub>bo</sub> = 1,050 psi (10" wide)  
For Douglas Fir-Larch, No. 2:  
F<sub>bo</sub> = 900 psi (10" wide)

SEISMIC DATA

Not Applicable



PROFILE GRADE

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

Relph E. Anderson (P.E.)  
ENGINEER OF BRIDGES AND STRUCTURES

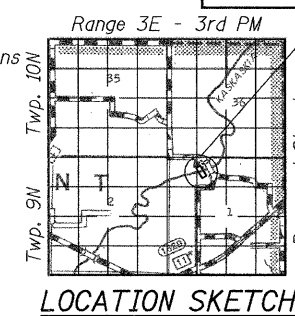
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	Pier 1	Pier 4	N. Abut.
	521.1	513.0	512.0	520.2

WATERWAY INFORMATION\*\*

\*\* For Reference only, Info from 1987 plans for TR 389 bridge (SN 087-3434), located approx. 150' upstream.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	15	10558	1952	2231	522.83	0	0.12	522.83	522.95
Base	100	13313	2048	2342	523.47	0	0.38	523.47	523.85
Max. Calc.	500	15574	2122	2430	523.97	0.16	0.62	524.13	524.59



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
THOMPSON MILL COVERED BRIDGE OVER  
KASKASKIA RIVER  
STRUCTURE NO. 087-0019

SHEET	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1 OF 12	389A	D-7 Bridge Appr. 2009-1	SHELBY	14	3
		STA. 50+00		CONTRACT NO.	74337
				ILLINOIS FED. AID PROJECT	

Johnson, Depp & Quisenberry  
CONSULTING ENGINEERS  
Springfield, Illinois

DESIGNED: JDQ DRAWN: SJS  
CHECKED: DCD CHECKED: DCD

Signed: David Depp  
Date: 2-10-2009  
Lic. Expires: 11-30-2010



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