

FAS ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	DEKALB	26	16

ILLINOIS PROJECT BRS-
* 99-00103-01-BR
BRIDGE SHEET 1 OF 10

EXISTING STRUCTURE:

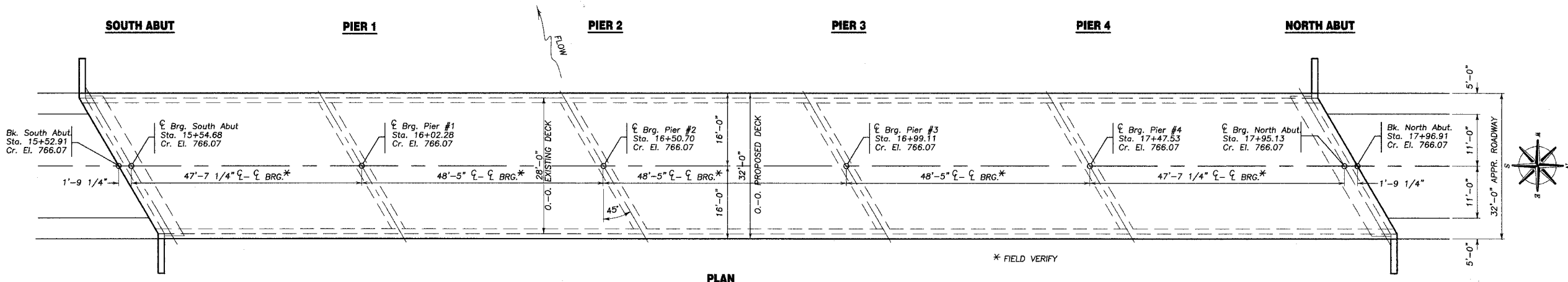
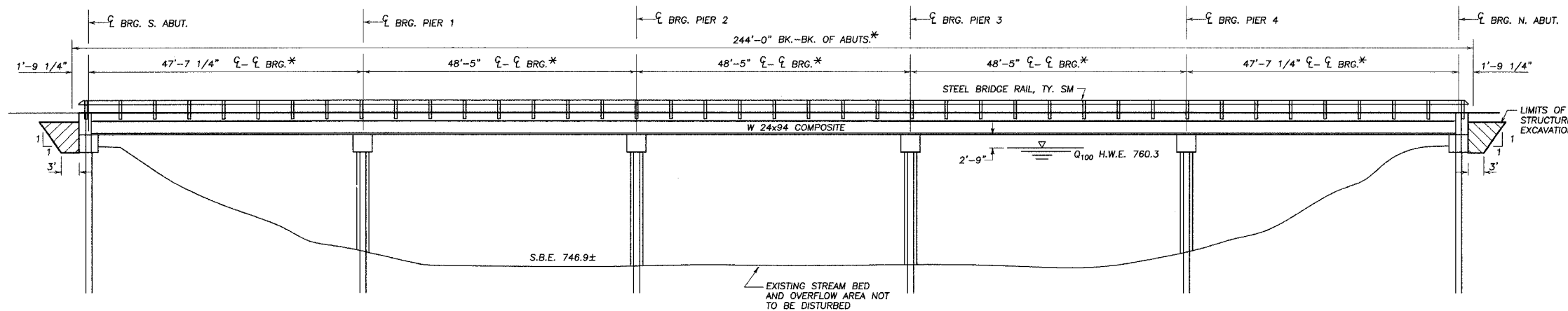
A FIVE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE SUPPORTED ON PILE BENT PIERS AND SPILL THRU PILE BENT ABUTMENTS ON STEEL PILING. 244'-0" BK.-BK. ABUTMENTS 45° SKEW RT. AHEAD

SALVAGE

EXISTING BEAMS - SEE SPECIAL PROVISIONS

BENCHMARKS:

B.M.#1 RR SPIKE FOUND IN 3RD P.P. SOUTH OF EXISTING STRUCTURE EAST SIDE OF ROAD EL. 764.85
B.M.#2 RR SPIKE FOUND IN 1ST P.P. SOUTH OF EXISTING STRUCTURE EAST SIDE OF ROAD EL. 758.30
B.M.#3 CHISELED "□" TOP OF CONCRETE WINGWALL @ S.E. CORNER OF EXISTING STRUCTURE EL. 764.11



GENERAL NOTES

COMPLETE PLANS FOR THE EXISTING STRUCTURE ARE AVAILABLE FROM THE DEKALB COUNTY HIGHWAY OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS PRIOR TO CONSTRUCTION TO FAMILIARIZE HIMSELF WITH DETAILS OF THE EXISTING STRUCTURE.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF STEEL BEAMS AND MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY USED AT THE UNIT PRICE BID FOR THE WORK.

CALCULATED WEIGHT OF STRUCTURAL STEEL:

162182 POUNDS AASHTO M270 GRADE 50W (BEAMS, DIAPHRAGMS & SPLICES)

4211 POUNDS ASSHTO M270 GRADE 36 (PLATES, BEARINGS, SIDE RETAINERS, & MISC.)

ALL WELDING, EXCEPT FIELD WELDING OF CONSTRUCTION ACCESSORIES AS APPROVED BY THE ENGINEER, SHALL BE PERFORMED DURING SHOP FABRICATION.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

AASHTO M270 GRADE 50W BEAMS SHALL ONLY BE PAINTED AT THE ENDS FOR A LENGTH OF 2 FEET. THOSE AREAS SHALL BE PRIMED IN THE SHOP WITH AN INORGANIC ZINC RICH PRIMER PER AASHTO M300, TYPE 1. NO FIELD PAINTING OF THE STEEL BEAMS WILL BE REQUIRED. ALL WEATHERING STEEL (BEAMS AND DIAPHRAGM ASSEMBLIES) SHALL BE CLEANED AS SPECIFIED IN THE SPECIAL PROVISION FOR "SURFACE PREPARATION AND PAINTING REQUIREMENTS FOR WEATHERING STEEL."

THE INORGANIC ZINC RICH PRIMER/ ACRYLIC/ ACRYLIC PAINT SYSTEM SHALL BE USED FOR THE SHOP PAINTING OF NEW BEARING PLATES ONLY. THE COLOR OF ACRYLIC FINISH SHALL BE REDDISH BROWN.

THE CONTRACTOR SHALL MAKE ALLOWANCE FOR THE DEFLECTION OF FORMS, SHRINKAGE AND SETTLEMENT OF FALSEWORK, IN ADDITION TO ALLOWANCE FOR DEAD LOAD DEFLECTION.

REMOVAL OF EXISTING CONCRETE SUPERSTRUCTURES SHALL INCLUDE THE REMOVAL OF THE EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS AND RAIL IN ACCORDANCE WITH THE APPLICABLE PARTS OF SECTION 501 OF THE STANDARD SPECIFICATIONS.

REMOVAL OF THE EXISTING CONCRETE DECK BEAMS SHALL BE ACCOMPLISHED BY ANY METHOD THE CONTRACTOR ELECTS TO USE BUT MUST CONFORM TO ALL REQUIREMENTS OF THE U.S. ARMY CORPS OF ENGINEERS PERMIT CONDITIONS ALONG WITH ANY OTHER AGENCY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL CONCRETE OR DEBRIS THAT FALLS INTO THE RIVER AS A RESULT OF ANY CONSTRUCTION OPERATION IF REQUIRED BY THE ARMY CORPS OF ENGINEERS PERMIT.

THE CONTRACTOR SHALL COORDINATE THE WORK REQUIRED TO REMOVE AND REATTACH THE EXISTING UTILITIES ATTACHED TO THE EXISTING SUPERSTRUCTURE. EXISTING TELEPHONE CABLE SHALL BE DETACHED FROM THE EXISTING STRUCTURE AND BE REATTACHED TO THE NEW STRUCTURE IN ACCORDANCE WITH REQUIREMENTS OF THE UTILITY COMPANY. ALL SHOP DRAWINGS FOR ATTACHING THE UTILITY TO THE NEW SUPERSTRUCTURE SHALL BE APPROVED BY THE ENGINEER.

PROTECTIVE COAT HAS BEEN INCLUDED FOR THE TOP OF DECK AND THE EAST AND WEST EDGE OF THE DECK TO THE DRIPNOTCH.

CONCRETE REMOVAL INCLUDES THE WINGWALLS AS SHOWN ON BRIDGE SHEET 9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO INSURE THAT THE PORTION OF THE EXISTING ABUTMENT THAT IS TO REMAIN IS NOT DAMAGED. REMOVAL SHALL BE IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 501 OF THE STANDARD SPECIFICATIONS.

FOR UTILITY INFORMATION, CALL J.U.L.I.E. 800-892-0123.

SO. BR. KISHWAUKEE RIVER
BUILT 2005 BY
DEKALB COUNTY
SECTION 99-00103-01-BR
STA. 16+74.91
STR. NO. 019-3040 LOADING HS 20

LETTERING FOR NAME PLATE

SEE STD. 515001
SET ADJACENT TO EXISTING NAME PLATE

SALVAGE

EXISTING BRIDGE NAME PLATE SHALL BE CAREFULLY REMOVED AND RECAST ADJACENT TO THE NEW NAMEPLATE.

EXISTING BRIDGE RAIL TUBE SECTIONS AND THE APPROACH GUARDRAIL SHALL BE REMOVED AND STOCKPILED ON THE RIGHT OF WAY FOR THE COUNTY TO PICK UP.

DESIGN STRESSES

$f'_c = 3500$ P.S.I.

$f_y = 60,000$ P.S.I. (REINFORCEMENT)

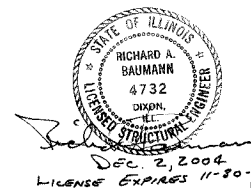
$f_y = 36,000$ P.S.I. (STRUCTURAL STEEL, PLATES & ANGLES)
(AASHTO M270, GRADE 36)

$f_y = 36,000$ P.S.I. (HARDWARE)

$f_y = 50,000$ P.S.I. (STRUCTURAL STEEL, BEAMS, DIAPHRAGMS & SPLICES)
(AASHTO M270, GRADE 50W)

DESIGN SPECIFICATIONS 2002 AASHTO
INTERIM SPECIFICATIONS.
(ALLOWED FOR 25 P.S.F. FOR FUTURE WEARING SURFACE.)

LOADING HS 20-44



I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING 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".

THIS SHEET REVISED 12-02-04

BILL OF MATERIAL

BRIDGE

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
CONCRETE REMOVAL	CU. YD.		2.1	2.1
STRUCTURE EXCAVATION	CU. YD.		44	44
CONTROLLED LOW STRENGTH MATERIAL, MIX 2	CU. YD.		44	44
CONCRETE STRUCTURES	CU. YD.		19.2	19.2
CONCRETE SUPERSTRUCTURES	CU. YD.	235.5		235.5
BRIDGE DECK GROOVING	SQ. YD.	868		868
PROTECTIVE COAT	SQ. YD.	958		958
FURNISHING AND ERECTING STRUCTURAL STEEL	L.SUM	1		1
STUD SHEAR CONNECTORS	EACH	3348		3348
STEEL BRIDGE RAIL, TYPE SM	FOOT	488		488
REINFORCEMENT BARS (EPOXY COATED)	POUND	54,800	4080	58,880
ELASTOMERIC BEARING ASSEMBLY TYPE 1	EACH	12		12
FORMED CONCRETE REPAIR (DEPTH GREATER THAN 5 INCHES)	SQ. FT.		120	120
NAME PLATES	EACH			1

GENERAL PLAN AND ELEVATION
SECTION 99-00103-01-BR
KIRKLAND ROAD
DEKALB COUNTY
S.N. 019-3040