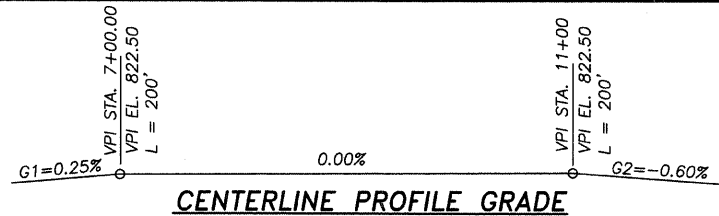


BENCHMARK INFORMATION

- B.M. A - FND "□" W/ MASONRY NAIL IN CENTER @ S.W. WINGWALL. ELEV = 822.04
- B.M. B - COTTON SPINDLE IN 1ST P.P. WEST OF STRUCTURE SOUTH SIDE OF ROAD. ELEV = 817.85
- B.M. B - COTTON SPINDLE IN 1ST P.P. EAST OF STRUCTURE SOUTH SIDE OF ROAD. ELEV = 817.38

FAS ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO
-	*	DEKALB	30	10

ILLINOIS PROJECT BROS-0037(045)
* 01-09114-01-BR - CONTRACT NO. 87364



GENERAL NOTES

THE UTILITIES SHOWN ON THE PLANS ARE SHOWN IN APPROXIMATE LOCATION ONLY. THE CONTRACTOR SHALL DETERMINE EXACT LOCATIONS OF ALL UTILITIES WITHIN THE PROJECT LIMITS BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITIES AND BY CONTACTING J.U.L.I.E. AT 1-800-892-0123. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITIES PRIOR TO CONSTRUCTION.

FASTENERS SHALL BE HIGH STRENGTH BOLTS, AASHTO M164, TYPE 3. BOLTS 7/8" INCH DIAMETER, OPEN HOLES 15/16 INCH DIAMETER, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 64443 POUNDS OF AASHTO M270 GRADE 50W BEAMS, DIAPHRAGMS, SPLICES, AND PIER BEARINGS. 4208 POUNDS AASHTO M270 GRADE 36 PLATES, WALERS, WING CHANNELS, SIDE RETAINERS, ANCHOR BOLTS, & MISC.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS 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.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE WIDE FLANGE BEAMS AND ALL SPLICE PLATE MATERIAL.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53, GRADE 60.

BACKFILL SHALL BE PLACED BEHIND THE ABUTMENTS AFTER THE SUPERSTRUCTURE HAS BEEN POURED AND THE FALSEWORK REMOVED. SEE ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS.

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

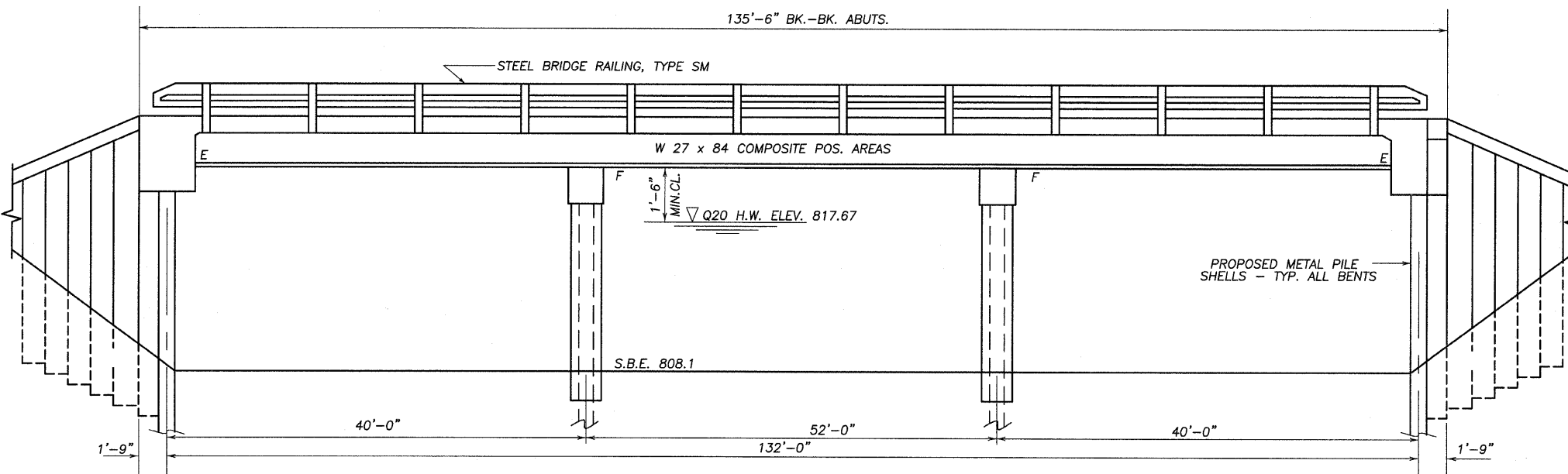
THE CROSS SECTIONS OF THE ENTIRE BRIDGE IS IN A CONSTANT SUPERELEVATION SO BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS. BEAMS SHALL BE SET PLUMB, SLOPE SHALL BE TAKEN OUT OVER THE FILLER.

THE CONTRACTOR SHALL DRIVE ONE TEST PILE IN A PERMANENT LOCATION AT EACH ABUTMENT, AND EACH PIER, AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

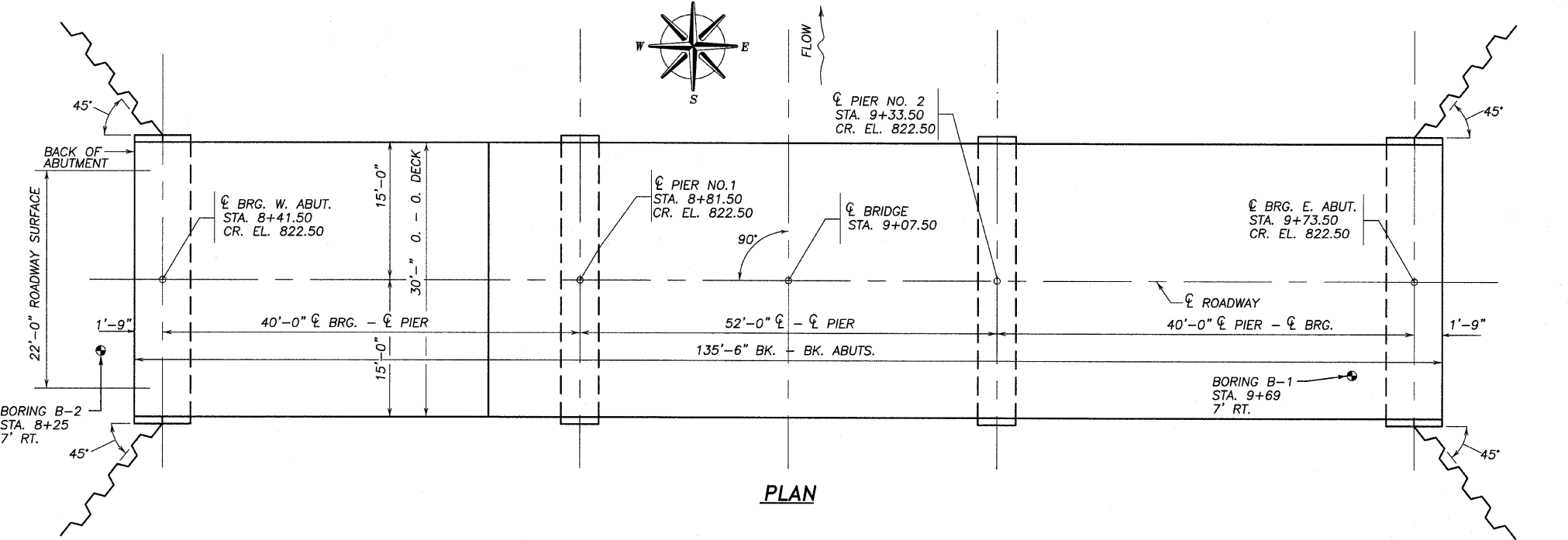
AASHTO M 270 GRADE 50W STRUCTURAL STEEL SHALL ONLY BE PAINTED, AT THE ENDS OF THE BEAMS, FOR A DISTANCE OF EQUAL TO THE DEPTH OF EMBEDMENT INTO THE CONCRETE CAP PLUS 3 INCHES. THOSE AREAS SHALL BE PRIMED IN THE SHOP WITH AN INORGANIC ZINC RICH PRIMER PER AASHTO M300, TYPE 1. NO FIELD PAINTING SHALL BE REQUIRED. ALL STRUCTURAL STEEL SHALL BE CLEANED AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "SURFACE PREPARATION AND PAINTING REQUIREMENTS FOR WEATHERING STEEL".

ALL CONSTRUCTION JOINTS SHALL BE BONDED.

FULL SIZE PLANS OF THE EXISTING STRUCTURE ARE AVAILABLE FOR VIEWING AT THE DEKALB COUNTY HIGHWAY DEPARTMENT.



ELEVATION



PLAN

BILL OF MATERIAL

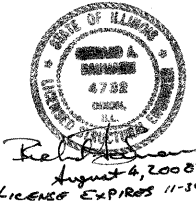
BRIDGE

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH	1		1
STEEL SHEET PILING	SQ. FT.		2457	2457
STRUCTURE EXCAVATION	CU. YD.			210
CONCRETE STRUCTURES	CU. YD.		71.2	71.2
CONCRETE SUPERSTRUCTURES	CU. YD.	130.8		130.8
BRIDGE DECK GROOVING	SQ. YD.	452		452
PROTECTIVE COAT	SQ. YD.	503		503
FURNISHING AND ERECTING STRUCTURAL STEEL	L.SUM	1		1
STUD SHEAR CONNECTORS	EACH	1775		1775
STEEL RAILING, TYPE SM	FOOT	271		271
REINFORCEMENT BARS (EPOXY COATED)	POUND	27230	8280	35510
DRIVING PILES	FOOT		980	980
FURNISHING METAL SHELL PILES - 12"Ø	FOOT		980	980
TEST PILE - METAL SHELL PILE - 12"Ø	EACH		4	4
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	10		10
NAME PLATES	EACH		1	1
HARDWARE	POUND		940	940

DESIGN STRESSES

- $f'_c = 3500$ P.S.I.
- $f_y = 60,000$ P.S.I. (REINFORCEMENT)
- $f_y = 50,000$ P.S.I. (STRUCTURAL STEEL) (AASHTO M270, GRADE 50W)
- $f_y = 36,000$ P.S.I. (STRUCTURAL STEEL) (AASHTO M270, GRADE 36)
- $F_y = 36,000$ P.S.I. (HARDWARE)

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



LOADING HS 20-44

WATERWAY INFORMATION

DRAINAGE AREA= 215.6 SQ.MI.		LOW GRADE ELEV. 821.35 AT STA. 13+50							
FLOOD	FREQ. YR.	Q. C.F.S.	OPENING SQ. FT. EXIST.	OPENING SQ. FT. PROP.	NAT. H.W.E.	HEAD-FT. EXIST.	HEAD-FT. PROP.	HEADWATER EL. EXIST.	HEADWATER EL. PROP.
DESIGN	20	4859	997	1294	817.48	0.17	0.19	817.65	817.67
BASE	100	6286	1107	1412	818.27	0.29	0.30	818.56	818.57
MAX. CALC.	500								

BUILT 2008 BY DEKALB COUNTY SECTION 01-09114-00-BR STA. 9+07.50 STR. NO. 019-4409 LOADING HS 20

LETTERING FOR NAME PLATE

SEE STD. 515001-02

GENERAL PLAN AND ELEVATION SECTION 01-09114-00-BR NORTH GROVE ROAD DEKALB COUNTY S.N. 019-4409