



DESIGN STRESSES

f'_c	=	5,000	P.S.I.	(PRESTRESSED BEAMS)
f'_{cl}	=	4,000	P.S.I.	(PRESTRESSED BEAMS)
f'_c	=	3,500	P.S.I.	(CLASS X CONCRETE)
f'_s	=	270,000	P.S.I.	(PRESTRESSED STRANDS)
f'_{sl}	=	189,000	P.S.I.	(PRESTRESSED STRANDS)
f_y	=	60,000	P.S.I.	(REINFORCEMENT BARS)

LOADING HS 20-44 DESIGN SPECS.1996 AASHTO & 1997 THRU 2002 INTERIMS

EXISTING STRUCTURE NO.015-3180 - SINGLE SPAN CONCRETE DECK BEAM BRIDGE WITH TIMBER ABUTMENTS, SKEWED 0 DEGREES. REMOVAL OF EXISTING STRUCTURES - 1 EACH.

-  - CHANNEL EXCAVATION
-  - COFFERDAM EXCAVATION (2 @ 18x54)

GENERAL NOTES

SEE PLAN AND PROFILE SHEET FOR BORING LOCATION

BORING DATA IS SHOWN ONLY AS A GUIDE TO BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION

SEE SHEET NO.8 FOR BORING DATA.

BORING #2 INDICATES SAND EXISTS AT A DEPTH OF ABOUT 1 FOOT BELOW THE BOTTOM OF THE FOOTING, WITH CLAY ABOVE.

WE WILL CONSTRUCT ONE COFFERDAM AND EVALUATE THE SOIL CONDITIONS TO DETERMINE WHETHER A SECOND COFFERDAM WILL BE NECESSARY.

NO BACKFILL SHALL BE PLACED BEHIND THE PROPOSED ABUTMENTS UNTIL THE SUPER STRUCTURE IS DOWELLED IN PLACE. SEE ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS.

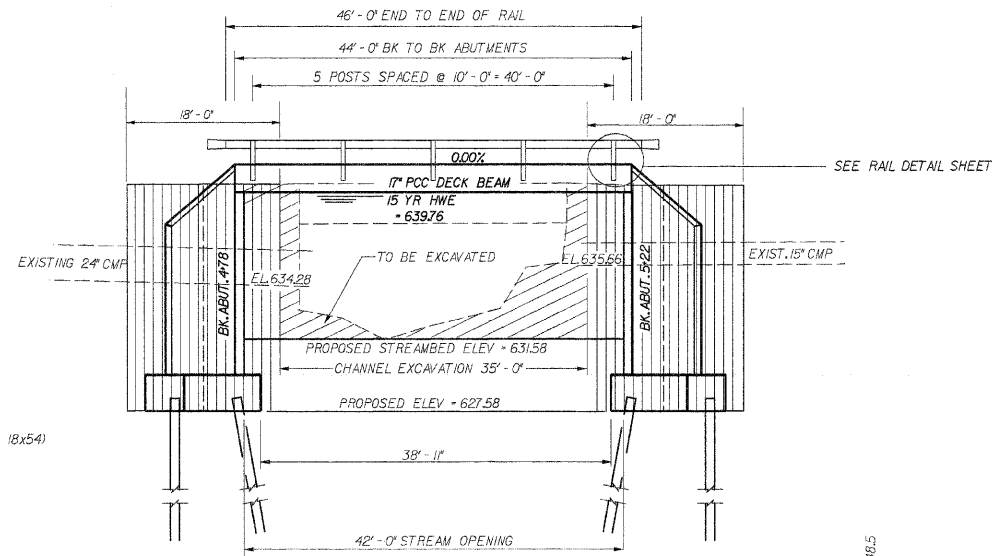
REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M53 GRADE 60

LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER

BENCHMARK ELEV.638.88 RR SPIKE IN POWER POLE 20' RT. STA 5+72

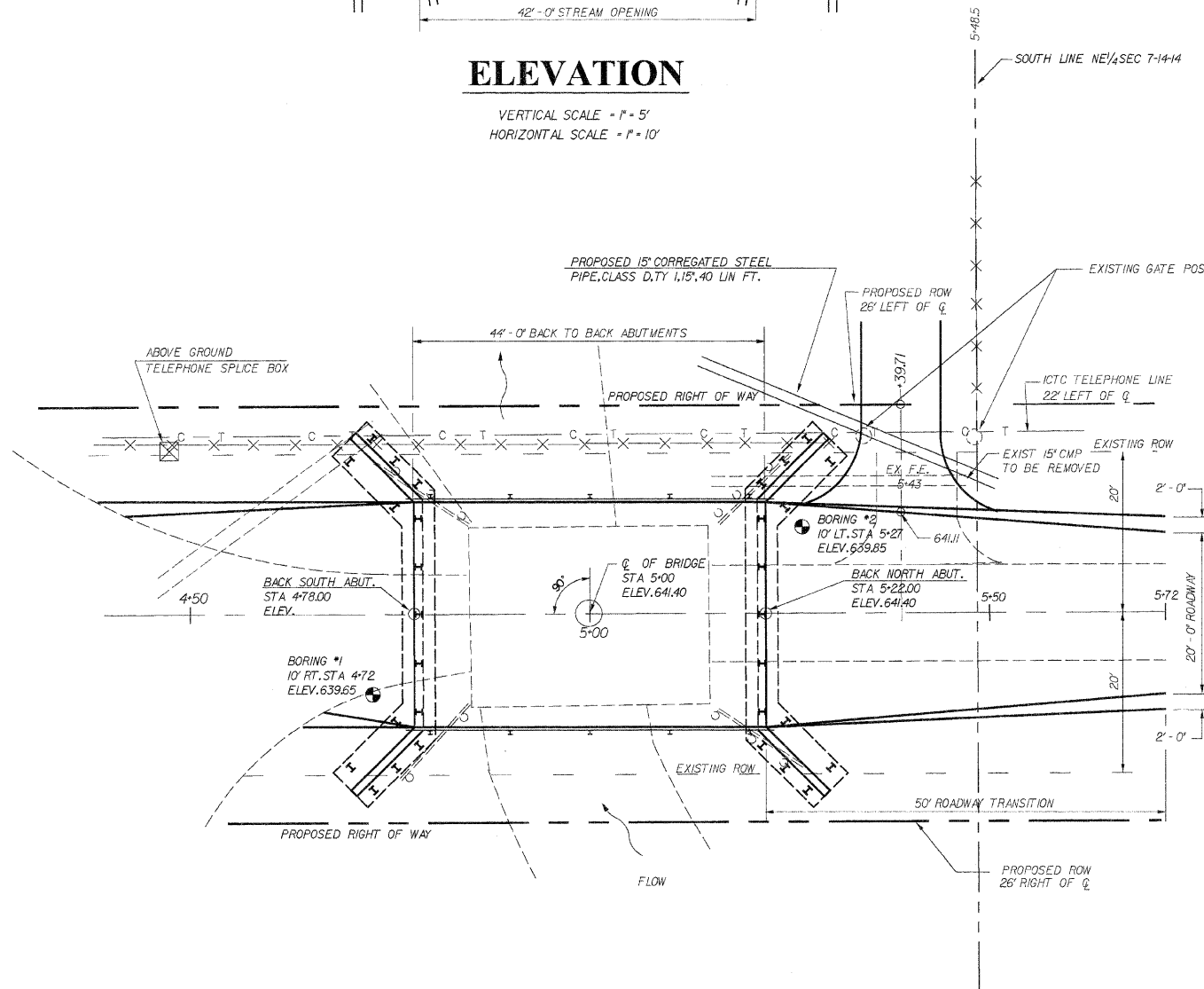
CHANNEL EXCAVATION SHALL EXTEND TO PROPOSED RIGHT OF WAY LINES.

IF RIPRAP IS NEEDED IT WILL BE PLACED AS DIRECTED BY ENGINEER



ELEVATION

VERTICAL SCALE = 1" = 5'
HORIZONTAL SCALE = 1" = 10'



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ.FT.	1232		1232
CONCRETE STRUCTURES	CU.YD.		926	926
REINFORCEMENT BARS	POUND		4950	4950
STEEL RAILING, TYPE S-1	FOOT	92		92
NAME PLATES	EACH	1		1
FURISHING STEEL PILES HP 10 X 42	FOOT		1392	1392
DRIVING PILES	FOOT		1392	1392
TEST PILE, STEEL HP 10 X 42	EACH		1	1
CHANNEL EXCAVATION	CU.YD.		175	175
STONE DUMPED RIPRAP, CLASS A-4	TON		50	50
COFFERDAM EXCAVATION	CU.YD.		817	817
REMOVAL OF EXISTING STRUCTURES	EACH	1		1
COFFERDAMS	EACH		2	2

WATERWAY INFORMATION

PROPOSED LOW GRADE = 640.25 @ STA 7+00

FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ.FT.		NAT. H.W.E.	HEAD - FOOT		HEADWATER EL.	
			EXISTING	PROP.		EXIST.	PROP.	EXIST.	PROP.
DESIGN	15	842	136	308	639.76	0.39	0.33	640.15	640.09
BASE	100	1257	136	308	640.36	0.28	0.70	640.64	641.06
OVERTOPPING	EXIST 15 YR OTR FLOW = 358 CFS PROPOSED OTR FLOW = 0 CFS								
MAX.CALC.	EXIST 100 YR OTR FLOW = 831 CFS PROPOSED OTR FLOW = 209 CFS								

SEC.06-03123-00-BR BUILT 200 EAST OAKLAND ROAD DIST. COLES COUNTY
LOADING HS 20 BROS-029 (281) STR.NO.015-3421

NAME PLATE DETAIL
(SEE STANDARD 515001)



"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."
Robert L. McClintock Date: 12-14-07
Robert L. McClintock ILL.S.E.# 3137 License Expires 11-13-08

GENERAL PLAN & ELEVATION	SEC.06-03123-00-BR EAST OAKLAND ROAD DIST. COLES COUNTY		DRN SDE DATE 4/10/07 REV.12/12/07 SCALE 1" = 10' APPR.	McCLINTOCK CIVIL ENGINEERING SERVICE 404 SHAW STREET, PARSONS, IL 61944 PHONE (201) 466-6100
	SHEET 4 OF 13 JOB NO. 3137-729-06			