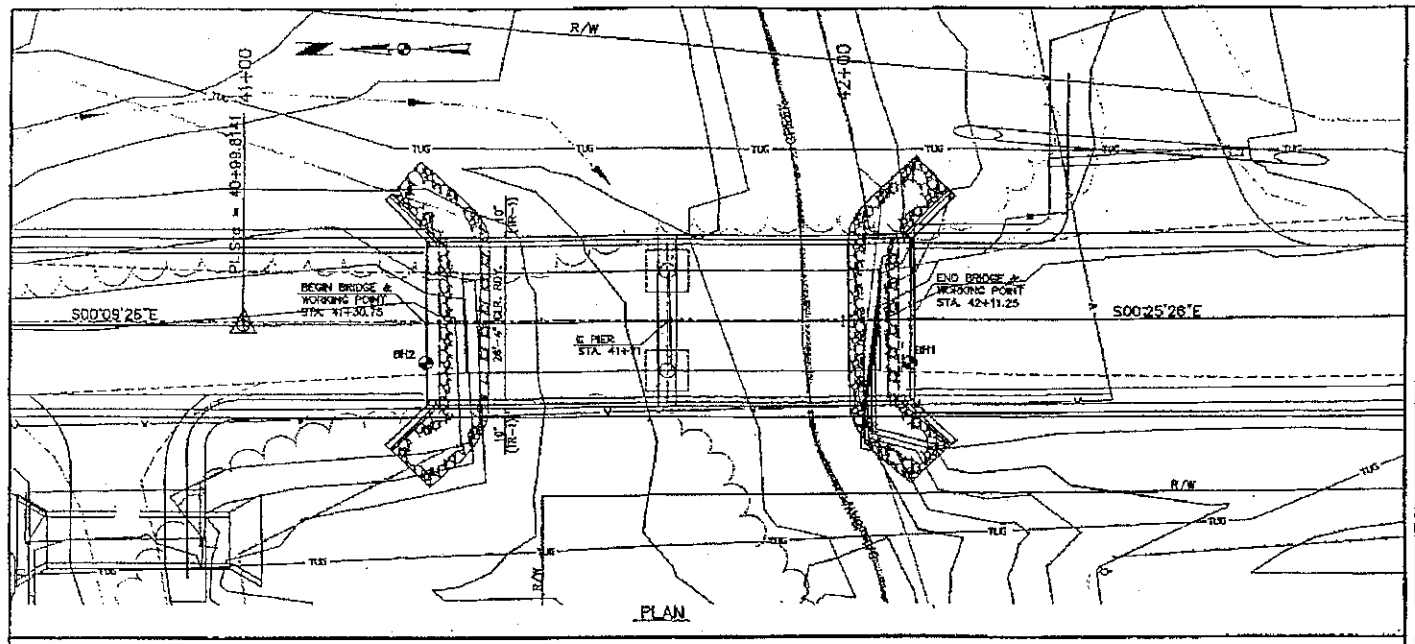


DESIGN DATA

	LFD ①	SLD ②
CLASS AA CONCRETE	f'c = 3500 psi	f'c = 1000 psi
CLASS A CONCRETE	f'c = 3000 psi	f'c = 1000 psi
REINF STEEL (GR 60)	fy = 60000 psi	fy = 24000 psi

① PIERS
② SUPERSTRUCTURE AND ABUTMENTS

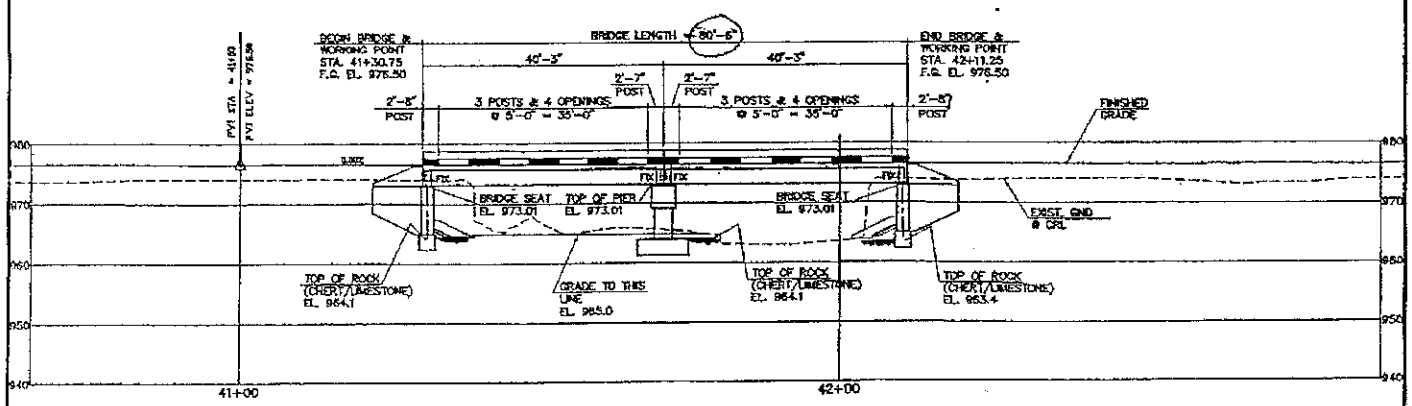
LOADING: HS20
DESIGN: 14th EDITION OF AASHTO AND ADOT SPECIFICATIONS

FOUNDATION PRESSURE
PIER: ALLOWABLE BEARING = 5.0 tsf
DESIGN LOAD PER SHAFT = 164 tons
BEARING PRESSURE = 2.3 tsf
ABUTMENTS: ALLOWABLE BEARING = 5.0 tsf
DESIGN LOAD = 170 tons
BEARING PRESSURE = 1.3 tsf

SUMMARY OF QUANTITIES

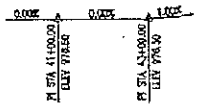
ITEM NO	DESCRIPTION	UNIT	ABUTS	PIERS	SUPERSTR	TOTAL
501(B)	SUBSTR EXCAV COMMON	CY	85.00	23.00		108.00
501(C)	SUBSTRUCTURE EXCAVATION ROCK	CY	12.00	14.00		26.00
501(E)	SELECT BACKFILL	CY	200.00			200.00
503(B)	PRESTRESSED CONCRETE DOUBLE TEE	LF			316.00	316.00
504(E)	CONCRETE RAIL (TR1)	LF			161.00	161.00
506(A)	CLASS AA CONCRETE	CY			56.80	56.80
506(B)	CLASS A CONCRETE	CY	74.80	28.10		102.70
511(A)	REINFORCING STEEL (GRADE 60)	LBS	8576.00	2982.00	5808.00	16476.00
601(A-1)	TYPE I-A FLUSH RIPRAP	TON	110.00			110.00
601(A-2)	TYPE I-A FILTER BLANKET	TON	45.00			45.00
613(F)	6" PERFORATED PIPE	LF	62.00			62.00

* INCLUDES 748 LBS OF SR BARS IN SUPERSTRUCTURE TRAFFIC RAIL



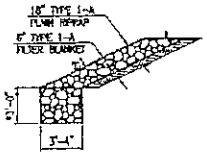
HYDRAULIC DATA

DRAINAGE AREA	=	7.38 SQ MI
Q50-Q25	=	4465 CFS
V50	=	7.4 FPS
Q2 ELEV	=	975.50
Q50	=	5510 CFS
V50	=	8.26 FPS
Q50 HW ELEV	=	976.50
Q100	=	6634 CFS
V100	=	8.61 FPS
Q100 HW ELEV	=	977.13



GRADE DATA

SUMMARY OF RIP RAP		
LOCATION	RIP RAP TON	FILTER TON
ABUT NO. 1	55.00	22.50
ABUT NO. 2	55.00	22.50
TOTAL	110.00	45.00



RIPRAP DETAIL
* OR TO TOP OF ROCK

2-40.25" DBL. TEE SPANS 26'-4" CLR. RDY
w/CONC TRAFFIC RAILS (TR-1)
℄ STA. 41+71.00

Holloway, Updike and Bellen, Inc.	SCALE: Horiz: 1"=10' Vert: 1"=10'	GENERAL PLAN AND ELEVATION	SALLISAW CREEK BRIDGE Project No. OH-0836-0006	Drawn: RR Check: DH	Date: November 2002 Sheet: 8

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OKR2012982
CHEROKEE NATION
SALLISAW CREEK
BRIDGE REPLACEMENT
ENCLOSURE 3 OF 6