



OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	21899(04)			

REVISIONS

DESCRIPTION	DATE
Updated Details	08/22/2016

SCALE 1" = 25'

LOAD AND RESISTANCE FACTOR DESIGN DATA

Class AA Concrete	f'c = 4,000 p.s.i.
Class A Concrete	f'c = 3,000 p.s.i.
Reinforcing Steel (Grade 60)	fy = 60,000 p.s.i.
Structural Steel (M270, GR. 50W)	fy = 50,000 p.s.i.
Structural Steel (Piling) (M270, GR. 50)	fy = 50,000 p.s.i.
Stainless Steel A240 (Type 316)	fy = 30,000 p.s.i.

Loading: HL93 or Oklahoma Overload Truck and 20 p.s.f. Future Wearing Surface.

Design: AASHTO LRFD Bridge Design Specifications, 6th Edition with current Interims.

ANSI/AASHTO/AWS: D1.5 Bridge Welding Code
ANSI/AASHTO/AWS: D1.6 Structural Welding Code - Stainless Steel

LFD Operating Rating: 1.73
(Operating Rating shown is for the Prestressed Concrete Beams only)

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STANDARDS

FSHP-42-2-00E
HP1-2-00E
PUD-3-2

FOUNDATION DATA

ABUTMENTS (HP 10X42 PILING)

	ABUTMENT NO. 1	ABUTMENT NO. 2
① FACTORED PILE REACTION (TONS)	= 52.7	= 52.7
PILE LENGTHS (FT.)	= 24.00	= 30.00

PIERS (60" DIAMETER DRILLED SHAFTS)

	PIER NOS. 1 & 3	PIER NO. 2
MINIMUM DEPTH INTO ROCK (FT.)	= 13.0	= 16.0
DEPTH OF ROCK NEG'D FOR FRICTION (FT.)	= 3.00	= 3.00
UNIT BEARING RESISTANCE (TSF)	= 30.0	= 28.0
BEARING RESISTANCE FACTOR	= 0.50	= 0.50
FACTORED BEARING RESISTANCE (TONS)	= 295	= 275
UNIT FRICTION RESISTANCE (TSF)	= 6.30	= 7.30
FRICTION RESISTANCE FACTOR	= 0.55	= 0.55
FACTORED FRICTION RESISTANCE (TONS)	= 760	= 995
TOTAL FACTORED RESISTANCE (TONS)	= 1055	= 1270
TOTAL FACTORED REACTION (TONS)	= 632	= 863

① All abutment piling shall be driven through compacted fill. Piling shall be driven to point bearing on solid foundation material at the approximate elevation shown on the plans. If the axial load resistance is not obtained at this elevation, piling shall continue until the axial load resistance is obtained. The length of the steel piling shown on the plans is for estimating purposes only.

NOTE:
See Sheet Nos. 112 - 115 for Top & Bottom Pier Drilled Shaft Elevations

For Foundation Report, See Sheet Nos. 103-105

145TH OVER I-44 TULSA & ROGERS COUNTIES	DESIGN	MJY	1/13
BRIDGE "A"	DETAIL	MJY	1/13
GENERAL PLAN AND ELEVATION	CHECK	BRT	2/13
STRUCTURE STA. 106+92.02 (SKEW 0°)			
CONSTRUCT 32'-110'-110'-32' SPANS W/			
AASHTO TYPE III & AASHTO TYPE IV P.C. BEAM			
52'-0" CLEAR ROADWAY W/ 7'-0" SIDEWALKS			
AND 42" F-SHAPED PARAPETS			

GARVER

- BM#106 #6 REBAR SET FLUSH WITH GROUND
81.15' RT. (A001) STA. 783+08.99 EL. 701.77'
- BM#108 CHISELED "X" ON SIGN CONCRETE BASE
71.40' RT. (A001) STA. 779+93.40 EL. 700.60'
- BM#107 FOUND CITY OF TULSA
ALUM. "ADS" CAP STAMPED "RESET 7"
131.82' LT. (A005) STA. 100+42.33 EL. 710.26'
- BM#125 FOUND ODOT BRASSCAP SET BY
UNKNOWN PERSONS ON BRIDGE BACKWALL
14.43' LT. (A005) STA. 107+76.40 EL. 720.92'
- BM#126 #6 REBAR SET FLUSH WITH GROUND
14.97' LT. (A005) STA. 113+63.74 EL. 706.67'

