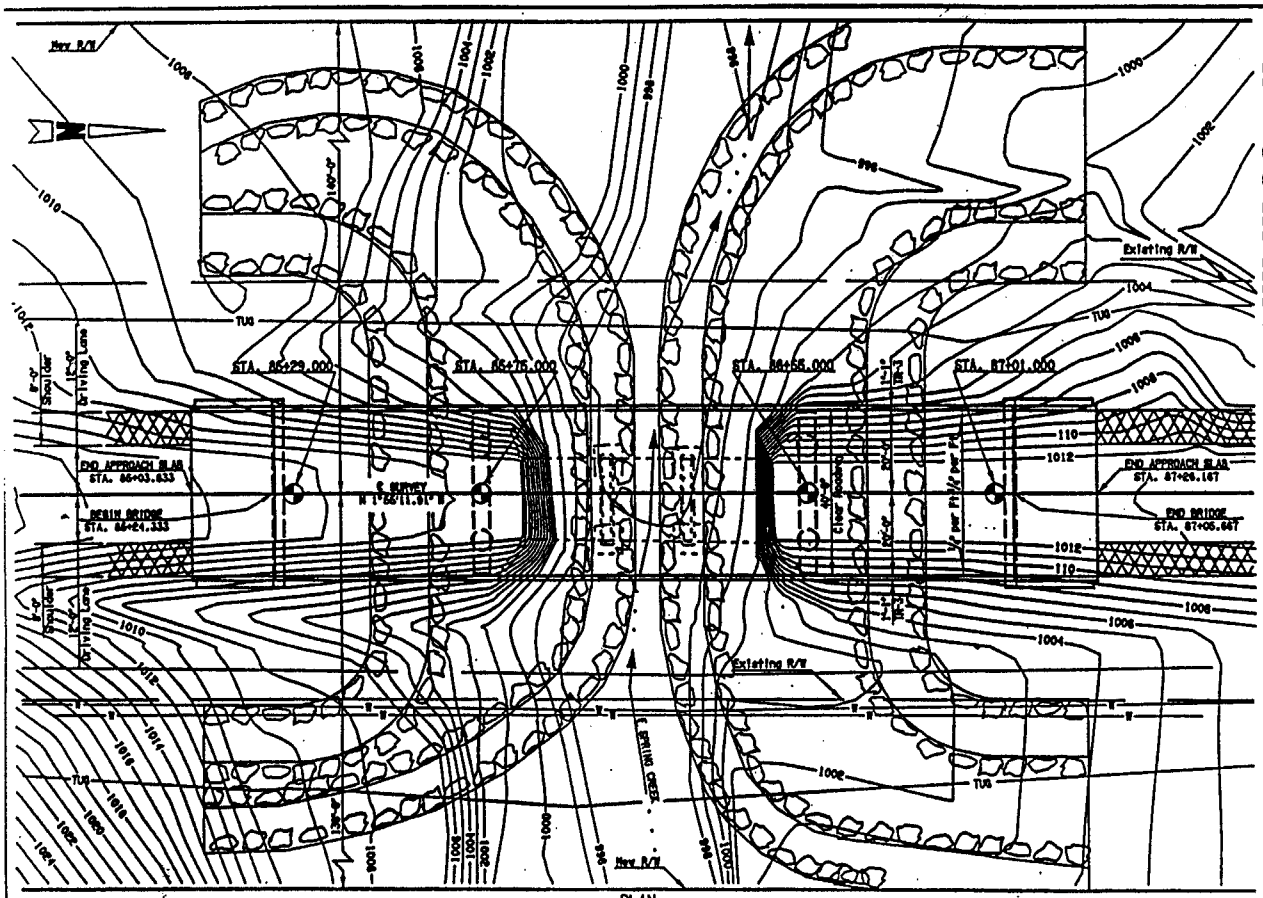
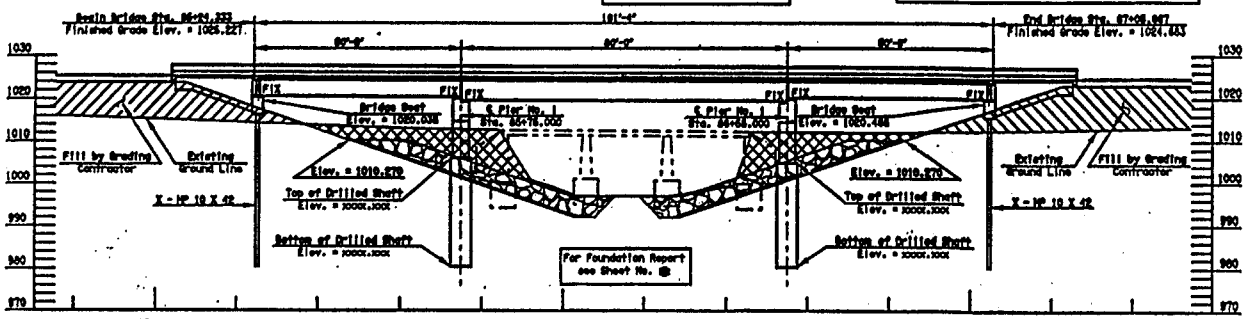


PLAN

BM - PK Spike in the East side of 8-14" Sycamores on North side of Spring Creek 120' Lt. Sta. 86+98 Elev = 1000.29

For Drains at End of Bridge see Sheet No. ●

BM - PK Spike in the East Root of a 48" Elm 150' Lt. Sta. 91+08 Elev = 1023.46



For Foundation Report see Sheet No. ●

ELEVATION

FOUNDATION DATA

ABUTMENTS HP 10 X 42 PILING		ABUTMENT NO. 1 & 2
Factored Pile Reaction	=	xxx Tons/Pile
Required Ultimate Pile Capacity	=	xxx Tons/Pile

PIERS

		PIER NO. 1	PIER NO. 2
Drilled Shaft Diameter	=	X'-X"	X'-X"
Factored Reaction	=	xxxx Tons/Shaft	xxxx Tons/Shaft
Nominal Unit Bearing Resistance	=	xxxx Tons/Shaft	xxxx Tons/Shaft
Bearing Resistance Factor	=	x.x	x.x
Factored Bearing Resistance	=	xxxx Tons/Shaft	xxxx Tons/Shaft
Nominal Unit Friction Resistance	=	xxx Tons/Shaft	xxx Tons/Shaft
Friction Resistance Factor	=	x.x	x.x
Factored Friction Resistance	=	xxxx Tons/Shaft	xxxx Tons/Shaft
Depth of Rock Neglected for Friction	=	X'-X"	X'-X"
Total Factored Resistance	=	xxxx Tons/Shaft	xxxx Tons/Shaft

LOAD AND RESISTANCE FACTOR DESIGN

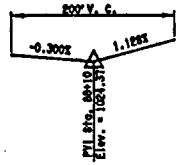
DESIGN DATA

Class AA Concrete	f'c	= xx P.S.I.
Class A Concrete	f'c	= xx P.S.I.
Reinforcing Steel	fy	=xxx P.S.I.
Structural Steel ASTM (Grade 345W)	fy	=xxx P.S.I.

Loading: HL-93 or Oklahoma Overload Truck and 20 psf Future Wearing Surface

Design: AASHTO LRFD Bridge Design Specifications, 2nd Edition with 1999-2000 Interims ANSI/AASHTO/AWS D1.5 Bridge Welding Code

LFD Operating Rating: HS xx.x



UTILITIES

All Water Lines owned by:
Coke Water Works, Coke, OK
All Telephone Lines owned by:
Salina Spavinaw Telephone Co., Salina, OK
All Electric Lines owned by:
Northeast Oklahoma Electric Co-op, Vinita, OK

HYDRAULIC DATA

D.A.	= 10.67 sq. mi.
Q25	= 5850 cfs
V25	= 9.86 fps
CHW25	= 1007.74 ft
Q50	= 7380 cfs
V50	= 10.46 fps
CHW50	= 1008.94 ft
Q100	= 8990 cfs
V100	= 10.80 fps
CHW100	= 1010.27 ft
Q500	= 13490 cfs
V500	= 13.80 fps
CHW500	= 1012.40 ft

VERTICAL CURVE DATA

ITEMIZED QUANTITIES

ITEM	UNIT	ABUTMENT	SUPER-STRUCTURE	APPROACH SLABS	PIERS	TOTAL
Approach Slabs	S.Y.			0		0
Prestressed Concrete Beams (Type IV)	L.F.		0			0
Prestressed Concrete Beams (Type III)	L.F.	0	0			0
Substructure Excavation Common	C.Y.					0
Concrete Rail (TR-3)	L.F.		0	0		0
Structural Steel	LB.		0			0
Class AA Concrete	C.Y.		0			0
Class A Concrete	C.Y.	0			0	0
Reinforcing Steel	LB.	0	0			0
Epoxy Coated Reinforcing Steel	LB.	0	0		0	0
Piles, Furnished HP 10 x 42	L.F.	0				0
Piles, Driven HP 10 x 42	L.F.	0				0
6" Perforated Pipe Underdrain Round	L.F.	0				0
6" Non-Perforated Pipe Underdrain Round	L.F.	0				0
8'-0" Drilled Shaft	L.F					0
Granular Backfill	C.Y.	0				0
Water Repellent Visually Inspected	S.Y.		0	0	0	0
Type I-A Plain Rip Rap	TON	0				0
Type I-A Filter Blanket	TON	0				0

SH-412A OVER SPRING CREEK DELAWARE COUNTY
BRIDGE "A"

GENERAL PLAN AND ELEVATION

CONSTRUCT 50'-80'-50' P.C. BEAM SPANS
X 40'-0" CLEAR ROADWAY WITH TR-3 TRAFFIC RAILS
℄ STA. 86+15.000 ALONG ℄ SURVEY

Design	N/A	N/A
Detail	RAS	8/01
Check	DS	8/01
Speed SAMARIPA		
Dep. MAJORS		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 13407(04) SHEET NO. 18

OKR2011897
OKLAHOMA DEPARTMENT OF TRANSPORTATION
SPRING CREEK
STATE HIGHWAY 412-A BRIDGE REPLACEMENT
ENCLOSURE 3 OF 4