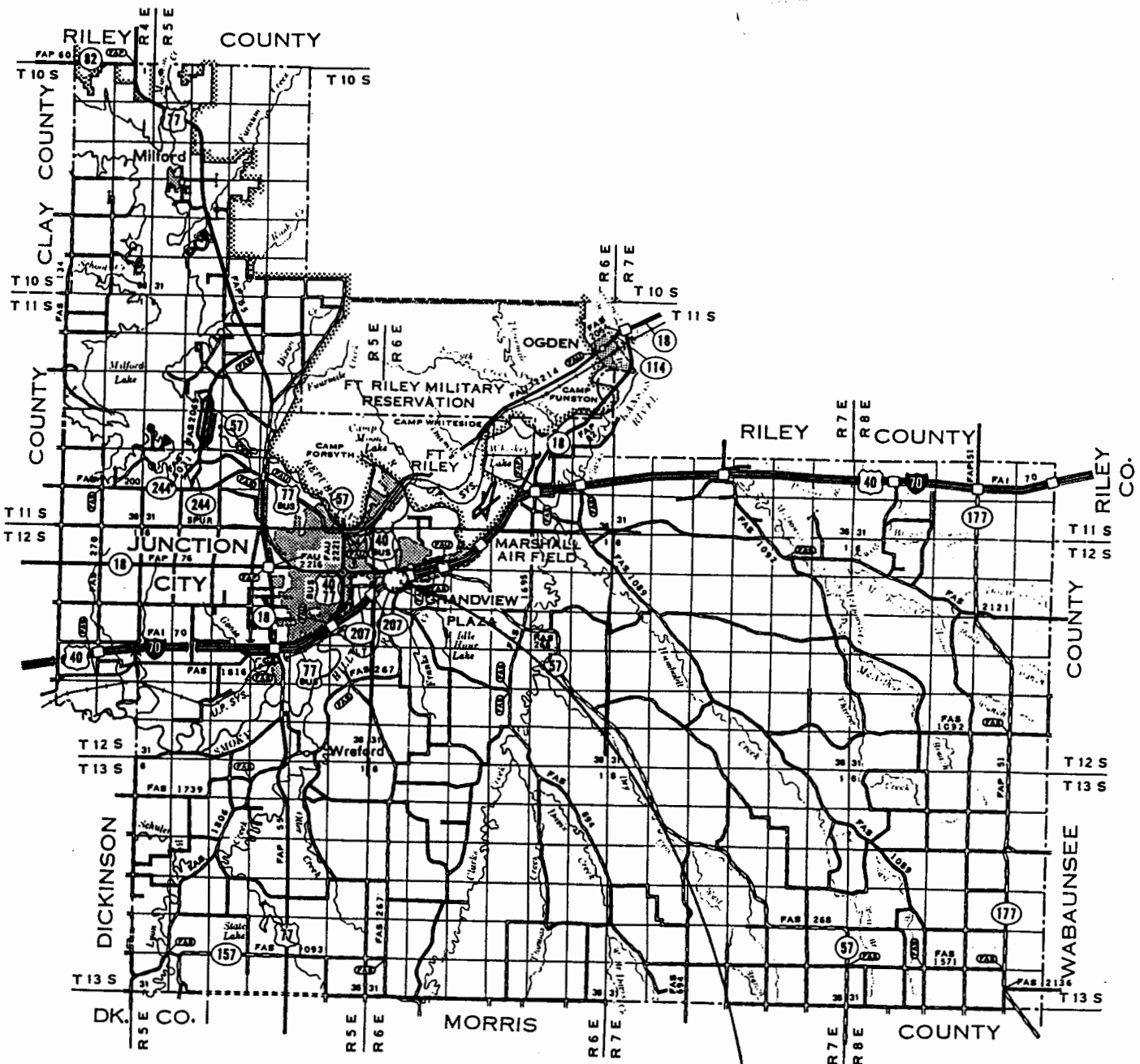


NOT SAMPLE



NE-7-125-6E

LEGEND

ROADS AND ROADWAY FEATURES		ROAD SYSTEM DESIGNATION	
PRIMITIVE ROAD	.....	FEDERAL-AID INTERSTATE HIGHWAY SYSTEM	.....
UNIMPROVED ROAD	.....	FEDERAL-AID PRIMARY HIGHWAY SYSTEM	.....
GRADED AND DRAINED ROAD	.....	FEDERAL-AID SECONDARY HIGHWAY SYSTEM	.....
SOIL SURFACED ROAD	.....	INTERSTATE NUMBERED HIGHWAY	.....
GRAVEL OR STONE ROAD - NOT GRADED OR DRAINED	.....	U.S. NUMBERED HIGHWAY	.....
GRAVEL OR STONE ROAD - GRADED AND DRAINED	.....	STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY	.....
GRAVEL OR STONE ROAD WITH STABILIZED SURFACE	.....	END OF DESIGNATED SYSTEM OR MARKED ROUTE	.....
BITUMINOUS ROAD - LOW TYPE	.....	
PAVED ROAD	.....	
DIVIDED HIGHWAY	.....	
HIGHWAY WITH FULL CONTROL OF ACCESS AND INTERCHANGE	.....	

BRIDGE FOUNDATION GEOLOGY REPORT

70-31 K-2611-02
 Bridge No. 9.16, Sta. 588+96.25
 Eastbound I-70 over Smoky Hill River
 Geary County

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Geary PROJECT NO. 70-31-K-2611-02 BRIDGE NO. 9.16

DESCRIPTION I-70 over Smoky Hill River STA. 508+08, R. 22' L. Proj.

GEOLOGIST Alex Kotyontz VERTICAL SCALE 1" = 10' DATE 3-28-1989

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
						Pier # 2 & 3			
					1066	T.H. El. 1061.7			
		/ / / / /				Silt, tan.			
				10°	1051.7				1051.7
				1050				
					1040	Sand, fine-coarse			
				32°	1030	1029.7			
		o o o o o				Sand & Gravel			
				39°	1022.7				
		o o o o o			1020	Gravel			
				43°	1018.2				
		o o o o o			1018.0	Ls. hard,			
					1017.2	sh., limy, black			
		o o o o o			1014.3	Ls., hard, dense,			
					1013.7	sh., limy, dk. gray.			
		o o o o o			1013.0	Ls.			
					1010	sh., limy, ls. nodules, gray-dk. gray			
					1008.1	ls. band at bottom.			
		o o o o o			1006.1	sh., limy, maroon with green bands			
					1004.2	sh., limy, w/ gypsum at bottom, green-gray.			
		o o o o o			1002.3	Ls., hard, dense, lt. gray.			
					1000	Ls., shaly, hard, dense, dk. gray.			
		o o o o o			995.2				
					991.4	sh., limy, hard, gray-dk. gray with ol gypsum band.			
					990				

A I I U V I U M

Hooser Middleburg Mbr.

Eiss Mbr.



1000' (0) to 1005' (5) 1005' (10) to 1010' (15) 1010' (20) to 1015' (25) 1015' (30) to 1020' (35) 1020' (40) to 1025' (45) 1025' (50) to 1030' (55) 1030' (60) to 1035' (65) 1035' (70) to 1040' (75) 1040' (80) to 1045' (85) 1045' (90) to 1050' (95) 1050' (100) to 1055' (105) 1055' (110) to 1060' (115) 1060' (120) to 1065' (125)

Ref. #1	80	BPT	1018.2
#1	Qu. 592		L.S.F.
#2	Qu. 592		L.S.F.
	Qu. 592		L.S.F.
	Qu. 592		L.S.F.
#3	Qu. 206		L.S.F.
	Qu. 206		L.S.F.
#4	Qu. 134.4		L.S.F.
#5	Qu. 1006.2		L.S.F.
#6	Qu. 1003.7		L.S.F.
	Qu. 1003.7		L.S.F.
#7	Qu. 412		L.S.F.
	Qu. 412		L.S.F.

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Geary PROJECT NO. 70-31-K-2611-02 BRIDGE NO. 9.16

DESCRIPTION I-70 over Smoky Hill River STA. 588+08, Rt. 22' E Proj.

GEOLOGIST _____ VERTICAL SCALE _____ DATE _____

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
Searns Mbr.	Eiss Mbr.		Core # 7 988.6 (988.6 - 988.6)	46 [±]	995.2	Ls., shaly, hard, dense			
				70 [±]	990.4	sh., limy			
				71.3	990.4	Ls., shaly, grayish white-tannish			
				73 [±]	988.6	gray	8 [#]	Qu. 74.6	test.
				76 [±]	985.7	sh., limy, gray-grayish green dt. maroon in middle.	988.1		
Searns Mbr.	Eiss Mbr.		Core # 1 1018.2 (1018.2 - 1014.2)	980	Core #1, 43 [±] -47 [±] (1018.2 - 1014.2)				
					Cut 4 [°] Rec. 4 [°]				
					R.O.D. 74%				
					Core Rec. 100%				
					Core #2, 47 [±] -52 [±] (1014.2 - 1009.2)				
	Cut 5 [°] Rec. 5 [°]								
	R.O.D. 64%								
	Core Rec. 100%								
	Core #3, 52 [±] -57 [±] (1009.2 - 1004.2)								
	Cut 5 [°] Rec. 4 [°]								
	R.O.D. 57%								
	Core Rec. 98%								
	Core #4, 57 [±] -61 [±] (1004.2 - 1000.2)								
	Cut 4 [°] Rec. 3 [°]								
	R.O.D. 79%								
	Core Rec. 95%								
	Core #5, 61 [±] -66 [±] (1000.2 - 995.2)								
	Cut 5 [°] Rec. 5 [°]								
	R.O.D. 65%								
	Core Rec. 100%								

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY *Georg* PROJECT NO. *70-31-K-2611-02* BRIDGE NO. *9.16*

DESCRIPTION *I-70 over Smoky Hill River* STA. *588+08, Rt. 22' E Proj.*

GEOLOGIST _____ VERTICAL SCALE _____ DATE _____

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
						<p><i>Core #6, 66⁵ - 71⁵ (995.2 - 990.2)</i></p> <p><i>Cut 5⁰ Rec. 4⁶</i></p> <p><i>R.O.D. 8%</i></p> <p><i>Core Rec. 92%</i></p>			
						<p><i>Core #7, 71⁵ - 76⁰ (990.2 - 985.7)</i></p> <p><i>Cut 4⁵ Rec. 4⁴</i></p> <p><i>R.O.D. 27%</i></p> <p><i>Core Rec. 98%</i></p>			