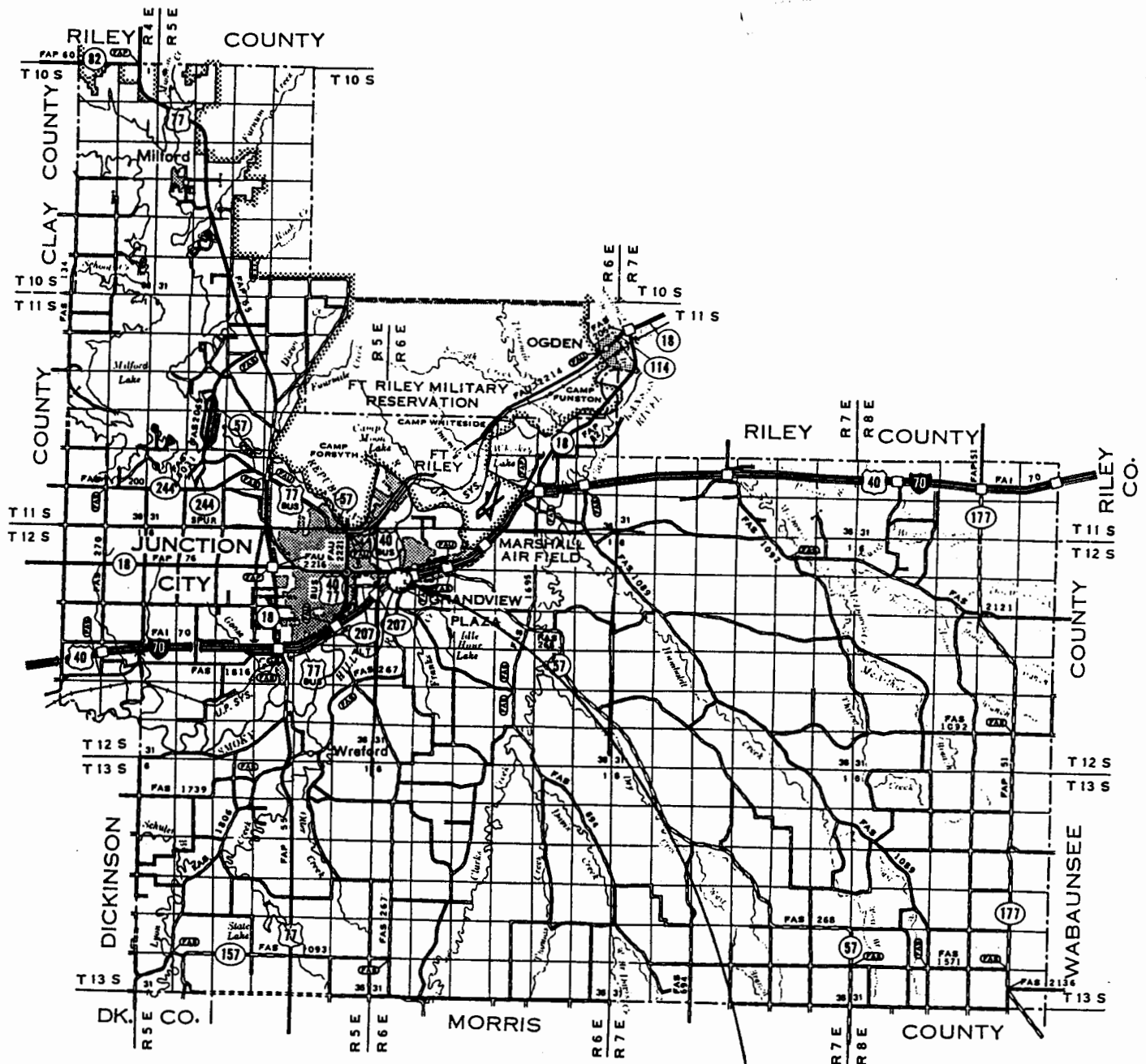


NOT SAMPLE



NE-7-12S-6E

LEGEND

ROADS AND ROADWAY FEATURES	
PRIMITIVE ROAD.....	=====
UNIMPROVED ROAD.....	=====
GRADED AND DRAINED ROAD.....	=====
SOIL SURFACED ROAD.....	=====
GRAVEL OR STONE ROAD.....	=====
NOT GRADED OR DRAINED.....	=====
GRAVEL OR STONE ROAD.....	=====
GRADED AND DRAINED.....	=====
GRAVEL OR STONE ROAD WITH.....	=====
STABILIZED SURFACE.....	=====
BITUMINOUS ROAD-LOW TYPE.....	=====
PAVED ROAD.....	=====
DIVIDED HIGHWAY.....	=====
HIGHWAY WITH FULL CONTROL OF.....	=====
ACCESS AND INTERCHANGE.....	=====

ROAD SYSTEM DESIGNATION	
FEDERAL-AID INTERSTATE HIGHWAY SYSTEM.....	=====
FEDERAL-AID PRIMARY HIGHWAY SYSTEM.....	=====
FEDERAL-AID SECONDARY HIGHWAY SYSTEM.....	=====
INTERSTATE NUMBERED HIGHWAY.....	=====
U.S. NUMBERED HIGHWAY.....	=====
STATE HIGHWAY SYSTEM OR.....	=====
STATE NUMBERED HIGHWAY.....	=====
END OF DESIGNATED SYSTEM OR.....	=====
MARKED ROUTE.....	=====

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 TRANSPORTATIONCOUNTY *Geary* PROJECT NO. *70-31-K-2611-02* BRIDGE NO. *9.16*DESCRIPTION *70 over Smoky Hill River* STA. *590+67, Rt. 25' E. Proj.*GEOLOGIST *Alex Kotyontz* VERTICAL SCALE *1" = 10'* DATE *3-13-1989*

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 #4 T.H. El. 1053.9			
	<i>Alluvium</i>			<i>95</i>	<i>1043.7</i>	<i>silt, tan.</i>		<i>Pushed</i>	<i>1043.7</i>
				<i>180</i>	<i>1035.9</i>	<i>Sand & gravel</i>			
	<i>Early Creek</i>			<i>209</i>	<i>1033.0</i>	<i>Wtd. sh, limy, green</i>		<i>Ref. 70</i>	<i>1032.7</i>
				<i>228</i>	<i>1031.1</i>	<i>Ls. dense, hard,</i>	<i>S#1</i>	<i>Qu. 5.60 t.s.f.</i>	
				<i>260</i>	<i>1027.9</i>	<i>sh, clay, olive green - lt. gray.</i>	<i>S#2</i>	<i>Qu. 4.11 t.s.f.</i>	
				<i>263</i>	<i>1027.4</i>	<i>Ls., hard, lt. gray.</i>		<i>1028.1</i>	
				<i>279</i>	<i>1026.9</i>	<i>sh, clayey, tannish gray. (Disturbed)</i>	<i>S#3</i>	<i>Qu. 5.20 t.s.f.</i>	
				<i>283</i>	<i>1025.7</i>	<i>Ls., hard, dense, tannish gray. (Disturbed)</i>		<i>1024.2</i>	
				<i>336</i>	<i>1020.3</i>	<i>sh, limy, maroon, with grayish green bands. (Disturbed)</i>			
				<i>361</i>	<i>1017.8</i>	<i>sh, limy, grayish green - gray (Disturbed)</i>	<i>S#4</i>	<i>Qu. 4.77 t.s.f.</i>	
				<i>367</i>	<i>1017.7</i>	<i>Ls., hard, tannish gray.</i>		<i>1016.1</i>	
				<i>371</i>	<i>1016.8</i>	<i>sh, limy, black.</i>	<i>S#5</i>	<i>Qu. 4.28 t.s.f.</i>	
				<i>409</i>	<i>1013.5</i>	<i>Ls., dense, hard, tannish gray - lt. gray.</i>		<i>1013.9</i>	
				<i>415</i>	<i>1012.4</i>	<i>sh, limy, gray.</i>			
				<i>419</i>	<i>1012.0</i>	<i>Ls., shaly, tannish gray.</i>	<i>S#6</i>	<i>Qu. 10.8 t.s.f.</i>	
				<i>438</i>	<i>1005.1</i>	<i>sh, silty, limy, tannish gray, maroon, dk. gray with ls. bands.</i>	<i>S#7</i>	<i>1008.4</i>	
				<i>504</i>	<i>1003.5</i>	<i>sh, limy, greenish gray.</i>	<i>S#8</i>	<i>Qu. 8.49 t.s.f.</i>	
				<i>523</i>	<i>1001.4</i>	<i>Ls., hard, dense, lt. gray white.</i>	<i>S#9</i>	<i>1005.3</i>	
				<i>536</i>				<i>Qu. 4.52 t.s.f.</i>	
				<i>586</i>	<i>995.3</i>	<i>Ls., shaly, gypsum nodules lower 03</i>		<i>1002.2</i>	
				<i>603</i>	<i>990.7</i>	<i>sh, limy, gray, upper 01 gypsum & lower 02 contains gypsum nodules gray & maroon.</i>	<i>S#10</i>	<i>Qu. 13.7 t.s.f.</i>	<i>990.0</i>
				<i>610</i>	<i>987.9</i>	<i>Ls., shaly, grayish green white</i>	<i>S#11</i>	<i>Qu. 16.7 t.s.f.</i>	
				<i>676</i>	<i>986.3</i>	<i>sh, limy, gray.</i>	<i>S#12</i>	<i>988.8</i>	
								<i>Qu. 80.5 t.s.f.</i>	
								<i>986.3</i>	
					<i>980</i>				

KANSAS DEPARTMENT OF TRANSPORTATIONCOUNTY *Georgy*PROJECT NO. *70-31-K-2611-02* BRIDGE NO. *9-16*

DESCRIPTION

STA. *590+27.25' & 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.
						Core #1, 21 ² - 23 ⁶ (1032.4 - 1030.3) Cut 2 ⁴ Rec. 2 ² R.O.D. 20 % Core Rec. 92 %			
						Core #2, 23 ⁶ - 28 ⁶ (1030.3 - 1025.3) Cut 5 ² Rec. 4 ² R.O.D. 55 % Core Rec. 84 %			
						Core #3, 28 ⁶ - 33 ⁶ (1025.3 - 1020.3) Cut 5 ² Rec. 5 ² R.O.D. 90 % Core Rec. 100 %			
						Core #4, 33 ⁶ - 38 ⁶ (1020.3 - 1015.3) Cut 5 ² Rec. 4 ² R.O.D. 62 % Core Rec. 100 %			
						Core #5, 38 ⁶ - 43 ⁶ (1015.3 - 1010.3) Cut 5 ² Rec. 5 ² R.O.D. 61 % Core Rec. 100 %			
						Core #6, 43 ⁶ - 48 ⁶ (1010.3 - 1005.3) Cut 5 ² Rec. 4 ² R.O.D. 82 % Core Rec. 96 %			
						Core #7, 48 ⁶ - 53 ⁶ (1005.3 - 1000.3) Cut 5 ² Rec. 3 ² R.O.D. 46 % Core Rec. 72 %			
						Core #8, 53 ⁶ - 58 ⁶ (1000.3 - 995.3) Cut 5 ² Rec. 2 ² R.O.D. 0 % Core Rec. 54 %			

KANSAS DEPARTMENT OF TRANSPORTATIONCOUNTY *Geary*

PROJECT NO.

BRIDGE NO.

DESCRIPTION

STA.

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.
						<i>Core #9, 58'-62' (995.3 - 991.3)</i> <i>Cut 4' Rec. 3'</i> <i>R.O.D.</i> <i>Core Rec. 98%</i> <i>Core #10, 62'-67' (991.3 - 986.3)</i> <i>Cut 5' Rec. 4'</i> <i>R.O.D. 42%</i> <i>Core Rec. 98%</i>			