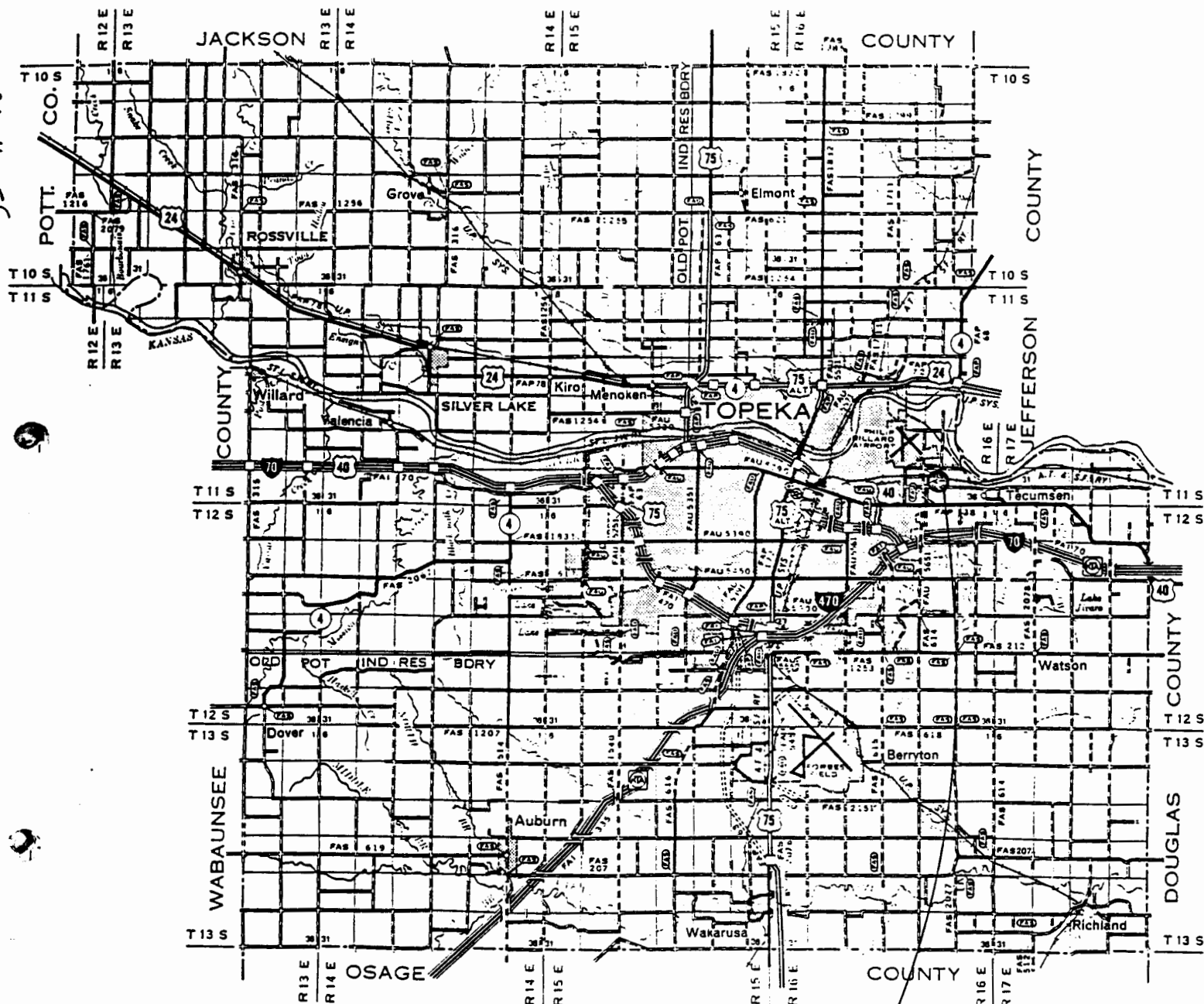


35-11-16E NE SE NW



GEOTECHNICAL UNIT
GEOLOGY SECTION

BRIDGE FOUNDATION GEOLOGY REPORT

004-089 K-3362-04
Br. No. 26.47

West bound Oakland Expressway
over the Shunganunga Creek and A.T. & S.F. Railroad

SHAWNEE COUNTY

GENERAL HIGHWAY MAP SHAWNEE COUNTY KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

SCALE
1986

KANSAS DEPARTMENT OF TRANSPORTATION



1. ROUTE-COUNTY NO. <u>004-089</u>	7. SOUNDING NO. <u>3</u>	2. SHEET <u>01</u> OF <u>02</u>
2. BRIDGE STA. <u>521+02.60</u>	4. PROJECT NO. <u>K-3364-04</u>	3. BRIDGE NO. <u>26.46</u>
3. DESCRIPTION <u>K-4 over Shunganunga Creek</u>		5. HOLE STA. <u>514+46, RE 18</u> of Project
4. GEOLOGIST <u>Sunderland</u>	6. VERTICLE SCALE <u>1"=10'</u>	7. DATE <u>September 1993</u>
5. DRILLER <u>Shull</u>	8. RIG <u>B-61</u>	9. ELEVATION TOP OF HOLE <u>890.6</u>
6. GROUND WATER ELEV. <u>877.2</u>	10. TOTAL DEPTH OF HOLE <u>39.4</u>	11. ELEVATION TOP OF ROCK <u>884.2</u>

BIT TYPE & H.W.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							 	ELEV.
			0°	890.6				
Casing	Mantle		6.4	884.2				
	Ozawie Mbr.		11.3	879.3	Limestone, weathered, broken, vuggy. lower 10' better ls. mostly unweathered			
19 mond	Tecumseh Frm.	2			shale, gray, firm gray. thin limy stringers. locally sandy shale zones.	1.8		875.5
		3		870		10.7		870.5
		4				6.6		867.5
		5				13.2		864.2
		6		860		12.8		858.2
		7				30.4		852.5
		39.4		851.2	total Depth			

Sounding 3 Core Descriptions

004-089-K-3362-04

02/02

Core 1

64-112

Cored 4⁸Recov. 4⁸

64-82

Limestone, broken, weathered, orangish

Fossiliferous

82-90

Limestone, very weathered, soft, yellow-buff

Very Vuggy

90-102

Limestone, weathered, broken, slabby

102-112

Limestone, unweathered, light gray, hard

Core 2

112-162

Cored 5⁰Recov. 5⁰

112-113

Limestone, gray

113-146

Shale, gray, Firm

146-147

Ls, stringer

147-162

Shale, gray

Sample 1

125-131

Shale, gray, firm

Core 3

162-212

Cored 5⁰Recov. 5⁰

162-212

Shale, gray, firm

Sample 2

193-201

Shale, gray, firm

Core 4

212-247

Cored 3⁵Recov. 3⁵

212-247

Shale, gray, firm

Sample 3

225-230

" " "

Core 5

247-297

Cored 5⁰Recov. 5⁰

247-297

Shale, gray Firm

Sample 4

258-264

" " "

Core 6

297-347

Cored

Recov.

297-347

Shale, gray, firm

Sample 5

319-324

" " "

Core 7

347-394

Cored 4⁷Recov. 4⁷

347-397

Shale, gray, firm

Sample 6

371-381

" " "

Core Hole #3

Oakland Express way over Shunganunga Creek
Sampled by Sunderland

Sta. 5/4 + 46, Rt 18

Elev

Near Abut 1

↑
Zawkie
Limestone
*
Tecumseh
Shale
↓

890.6	0 ⁰ -6 ⁴	very silty clay
884.2	6 ⁴ -8 ²	Limestone, weathered but hard, orangish-buff very Fossiliferous.
	8 ² -9 ⁰	Limestone, weathered, soft, yellow-buff very Muggy, Fossiliferous
	9 ⁰ -10 ²	Limestone, weathered, yellow-buff, broken, slabby, Fossiliferous
	10 ² -11 ³	Limestone, light gray, hard
879.3	11 ³ -14 ⁶	Shale, gray, grades to greenish-gray, Firm
	14 ⁶ -14 ⁷	ls stringer
	14 ⁷ -39 ⁴	Shale, gray, clayey to sandy in some some zones
851.2	39 ⁴	S/S

core 1 6⁴-11²core 2 11²-16²core 3 16²-21²core 4 21²-24⁷core 5 24⁷-29⁷core 6 29⁷-39⁷core 7 34⁷-39⁴Sample 1 12⁵-13¹Sample 2 19³-20¹Sample 3 22⁵-23⁰Sample 4 25⁸-26⁹Sample 5 31⁹-32⁴Sample 6 37⁷-38¹¹

KANSAS DEPARTMENT OF TRANSPORTATION

Report of sample of Geology CoresLaboratory No. 93-3633Date Rep'td. September 23, 1993Date Rec'd. September 15, 1993Specification No. - - Quantity - - -Source of material ProjectSample from ProjectSubmitted by John Jimenez, Lawrence Geology OfficeIdentification marks Tags with samplesProject or POV 4-89 K-3362-01, Shunganunga Creek, Shawnee County, District 1Type of construction Bridge Core Hole #3

TEST RESULTS

Sample No.	Station	Dist.ft. CL	Depth ft.	Description	Qu. t.s.f.	Sample p.c.f. by Dry Wt.	Moisture (% of Dry Wt.)
1	514+46	18 Rt	125-131	Shale, gray	1.752	116.6	17.2
2	"	"	193-201	" "	10.748	128.4	10.7
3	"	"	225-230	" "	6.598	125.7	12.5
4	"	"	258-264	" "	13.196	129.3	11.6
5	"	"	319-324	" "	12.819	129.7	11.5
6	"	"	377-381	" "	30.402	133.0	10.2

All Samples are Tecumseh shale

cc: L.S. Ingram
L.A. Rockers
J. Jimenez
J.J. Brennan
Soil Section
File

Reported by James J. BrennanTitle James J. Brennan, Soils Engineer