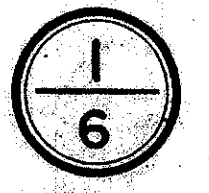


K13

LAKI-90

**SOIL PROFILE**  
**LAKE COUNTY**  
**LAK-1-10.38**  
**STATE HIGHWAY TESTING**  
**LABORATORY**  
O. S. U. CAMPUS, COLUMBUS 10, OHIO



NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

**LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 99 SAMPLES TESTED**

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Sandy silt	A-4 (8)	A-4a	8	6	10	44	32	27	9	16	5
Silt	A-4 (9)	A-4b	6	3	4	61	26	28	5	16	7
Silt and clay	A-6 (9)	A-6a	12	4	6	38	40	34	13	18	36
Silty clay	A-6 (10)	A-6b	23	3	4	35	35	38	17	18	9
Clay	A-7-6 (12)	A-7-6	8	3	3	35	51	44	19	22	17
Overburden	VISUAL CLASSIFICATION										
Weathered shale	VISUAL CLASSIFICATION										
Shale	VISUAL CLASSIFICATION										

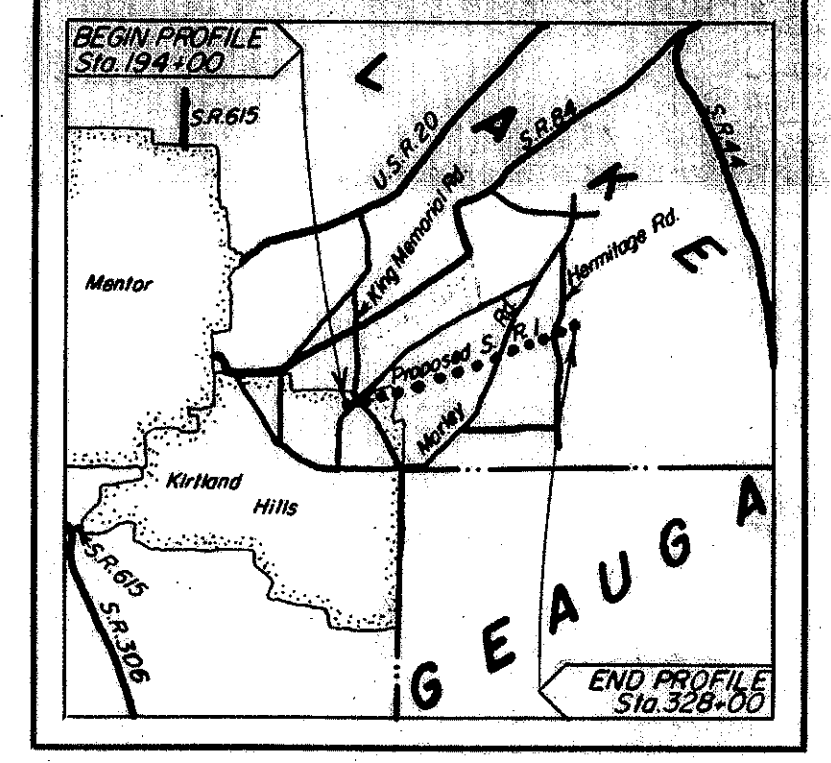
  

Auger boring-plan view.	Sod and/or Topsoil=X=Approximate depth.
Drive sample-core boring-plan view.	Berm material
Auger boring plotted to vertical scale only.	W Free water
Water content nearly equal to or greater than liquid limit.	Indicates a non-plastic material with high water content.
Number of blows for "Standard Penetration" test. X=number of blows for the first 6 inches. Y=number of blows for the second 6 inches.	

NOTE: Figures beside borings indicate water content in percent, eg. 21

Samples Tested  
Lab. Nos. So.  
17192-17206 incl.; 18014-18015 incl.  
18034-18050 incl.; 56815-56828 incl.  
56838-56843 incl.; 57010-57011 incl.  
58346-58349 incl.; 58397-58399 incl.  
59565-59566 incl.; 68679-68682 incl.  
68685-68699 incl.; 68779-68789 incl.  
72001-72003 incl.; 72643.

**FED. NO. I-90-1 (25)29**



**LOCATION MAP**  
Recon.-H.C.H., J.S.M./R.C.C.-3-29-57  
Auger-R.W.H., C.A.S., C.A.C.-1-3-8-57; 7-16 to 18-57  
Core-R.L.S., C.S.C.-2-20-21-57; 8-28 to 9-4-57  
Drafting-G.V.T., R.V.S., J.H.W., M.J.H., L.N.L., K.M.M.-8-6-57

**REVISION DRAFTING**  
Recon.P.A.H.-4-8-59  
Auger-J.R.G., B.D.L.-4-9 to 15-59  
Drafting-L.N.L.-7-17-59

REVISED JULY 17, 1959

**SUMMARY OF SOIL TEST DATA**  
NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.  
\*Denotes sample taken at or near grade.

STATION & OFFSET	DEPTH FROM-TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.	STATION & OFFSET	DEPTH FROM-TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.	STATION & OFFSET	DEPTH FROM-TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.																																																																																																																																																																																											
194+50 CL	0.2-4.0 4.0-7.0 7.0-12.0 12.0-17.0	0 8 9 9	1 3 3 3	2 3 3 3	41 57 9 7	56 29 9 7	34 28 7 7	11 11 7 7	21 11 7 7	A-6a A-4b Visual* Visual*	281+00 CL	0.2-2.0 2.0-4.0 4.0-9.0 9.0-9.5	18 17 8 8	4 1 2 1	5 2 4 3	35 46 28 33	38 34 27 29	116 15 13 14	24 13 7 14	16 14	A-6b A-6a Visual* Visual	20+00 CL	0.5-4.0 4.0-10.0	0 0	1 1	4 4	49 46	39 17	16 17	16 17	A-6b* Visual	23+00 12* Lt.	0.6-5.0 5.0-8.0	14 14	11 11	9 9	35 31	33 13	13 10	18 10	A-6a* Visual	26+10 CL	0.6-5.0 5.0-9.0	0 7	2 4	10 10	41 47	41 16	26 7	26 7	A-7-6* Visual	28+60 8* Lt.	3.0-7.0									6	Visual*	29+00 26* Lt.	0.6-9.0 9.0-12.0									15 20	Visual Visual	32+00 12* Rt.	0.6-10.0 10.0-13.5	50 8	3 3	6 6	20 21	35 18	15 18	A-6b Visual	35+00 12* Rt.	0.8-7.0 7.0-12.0 12.0-14.0	8 8 8	4 4 4	9 9 9	38 41 31	11 17 11	17 11 6	A-6a Visual Visual	36+00 17* Rt.	0.6-5.0 5.0-10.0	4 0	3 3	8 5	46 47	39 45	34 32	14 12	26 19	A-6a A-6a*	39+00 10* Lt.	0.6-5.0 5.0-9.0 9.0-10.0	0 0 0	0 0 0	0 0 0	43 43 23	18 18 11	11 11 7	A-4b* Visual Visual	27+00 10* Lt.	1.0-10.0 10.0-13.0	7 14	1 3	5 8	34 40	53 29	51 11	24 16	26 16	A-7-6 A-6a	30+00 10* Lt.	7.0-10.0									8	Visual	33+00 10* Lt.	12.0-14.0	24	1	2	55	18	34	16	18	A-6b	36+00 10* Rt.	1.0-7.0	8	10	13	42	27	26	9	18	A-4a	39+50 12* Lt.	0.4-8.0 8.0-10.0	26 23	5 1	5 3	29 33	35 40	42 35	21 15	17 12	A-7-6* A-6a	22+00 12* Rt.	5.0-6.0	0	2	2	29	67	44	21	22	A-7-6	26+00 12* Lt.	0.6-7.0 7.0-12.0	0 0	0 0	0 0	43 57	43 18	11 11	A-7-6 Visual	33+00 12* Rt.	0.6-4.0	0	1	0	45	54	42	19	20	A-7-6	36+00 12* Lt.	1.0-7.0 7.0-10.0	17 17	10 10	9 9	35 29	32 15	18 7	A-6a Visual	277+00 CL	0.4-2.0 2.0-8.5 6.5-9.0	0 11 1	1 1 1	31 39	43 48	18 16	24 18	16 8	A-7-6 A-7-6 Visual*