

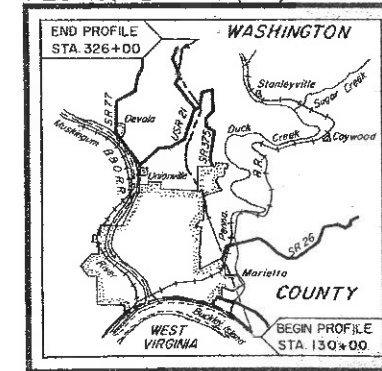
Revised 1/20/64

SOIL PROFILE
WASHINGTON COUNTY
WAS - 77 - 2.46
OHIO STATE HIGHWAY
TESTING LABORATORY
 1620 W. BROAD ST., COLUMBUS 23, OHIO

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44

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.

FED. NO. I-77-1 (12) 02



LOCATION MAP

Recon - J.S.M. - 7/16/62
 Auger - T.R.S.; C.E.G. - 7/21/62 to 8/30/62
 Drilling - Core - E.E.S.; H.W.H.; J.R.V.; W.C.; C.A.P. - 8/6/62 to 9/2
 Drafting - D.A.; R.P.W.; S.J.H.; R.D.S. - 1/20/62
 REVISION
 Drafting - L.N.L. - 1/20/64

LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 741 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% G. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Stone fragments with sand and silt	A-2-U(0)	A-2-U	50	1	10	15	11	20	7	11	11
Stone fragments with sand, silt, and clay	A-2-E(0)	A-2-E	55	5	2	11	10	31	12	16	2
Sandy silt	A-3(U)	A-3a	22	11	10	37	23	30	7	12	41
Silt	A-3(E)	A-3b	1	1	0	52	37	20	7	10	11
Silt and clay	A-4(E)	A-4a	10	2	7	33	30	21	12	11	192
Silty clay	A-4(U)	A-4b	15	2	5	31	10	37	17	15	112
Elastic clay	A-5-E(12)	A-5-E	10	2	5	27	15	50	10	23	5
Clay	A-5-E(18)	A-5-E	7	1	3	20	0	15	22	10	55
Coal											VISUAL CLASSIFICATION
Coal glosson											VISUAL CLASSIFICATION
Clay bedrock											VISUAL CLASSIFICATION
Weathered indurated clay											VISUAL CLASSIFICATION
Weathered shale											VISUAL CLASSIFICATION
Weathered sandstone											VISUAL CLASSIFICATION
Indurated Clay											VISUAL CLASSIFICATION
Shale											VISUAL CLASSIFICATION
Sandstone											VISUAL CLASSIFICATION
Various other materials											VISUAL CLASSIFICATION

	Sand and/or Topsoil - Approximate depth.
	Perm. material.
	Auger boring - plan view.
	Drive sample and/or core boring - plan view.
	Auger boring plotted to vertical scale only.
	Drive sample and/or core boring plotted to vertical scale only.
	Number of blows for "Standard Penetration" test. * - number of blows for the first 5 inches. ** - number of blows for the second 5 inches.
	Water content nearly equal to or greater than liquid limit.
	Free water.
	Indicates broken rock interval.

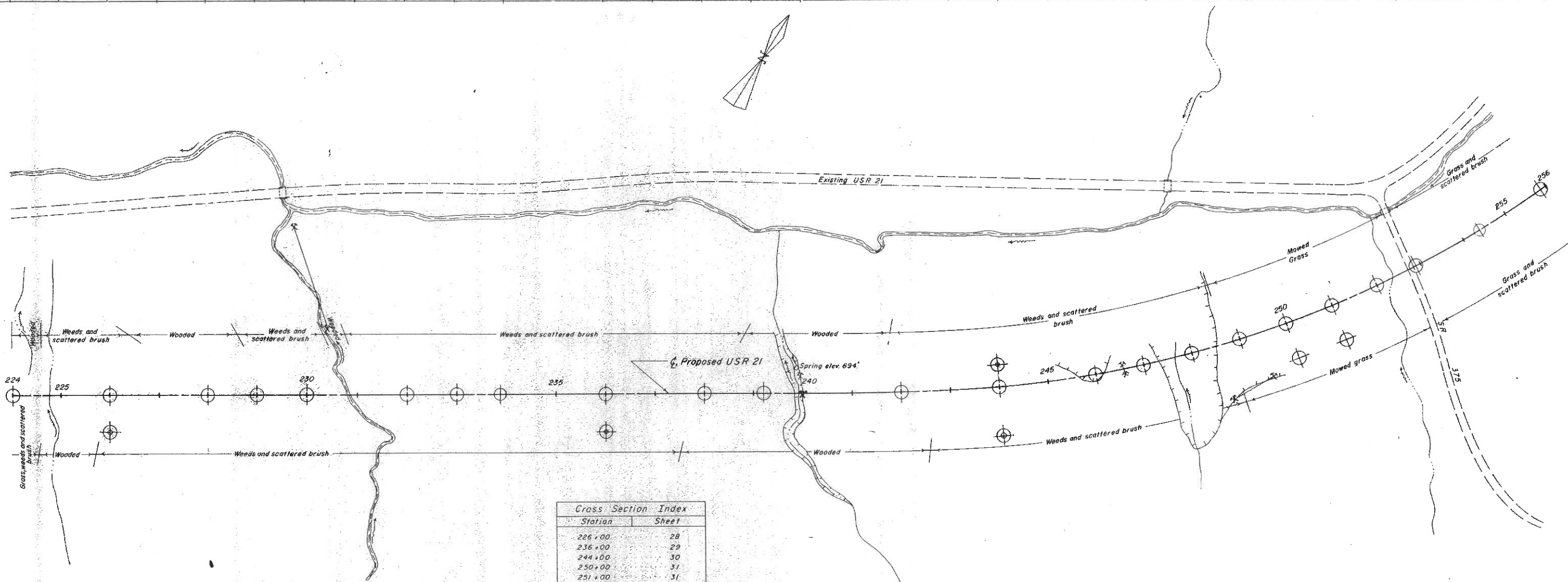
NOTE: Figures beside borings indicate water content in percent. e.g. 15

LINE	PROJECT INDEX		PLAN VIEW SHEET	FILE SHEET
	STATION TO	STATION		
Proposed HSP 21	120+00	160+00	5	6
Proposed HSP 21	160+00	192+00	7	7
Proposed HSP 21	192+00	221+00	8	8
Proposed HSP 21	221+00	256+00	10	11
Proposed HSP 21	256+00	270+00	12	12
Proposed HSP 21	270+00	320+00	13	13
Proposed HSP 21	320+00	326+00	15	15
SR 205	0+00	30+00	5	15
Relocated Existing HSP 21	0+00	130+00	12 & 13	16
Relocated Existing HSP 21	130+00	160+00	13 & 15	17
Ramp A	0+00	20+00	13	10
Ramp C	2+00	20+00	13 & 15	10
Top. Pa. 212 & SR 275 Connector	0+00	10+00	20	20

Revised 1/20/64

SUMMARY OF SOIL TEST DATA
 NOTE: HP 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	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	CLASS.	DESCRIPTION
131+00	0.0-5.0	28	0	2	36	34	33	13	14	A-6a *	
	5.0-9.0	0	0	3	47	50	34	13	13	A-6a	
132+00	0.0-3.0	25	9	10	23	33	26	11	15	A-6a	
	3.0-7.0	17	2	10	33	33	35	13	8	A-6a	
	7.0-10.0									Visual	Gray Weathered Shale
134+00	0.5-7.0									Visual *	Red Broken Clay Shale
	7.0-9.0									Visual	Brown Broken Siliceous Shale
135+50	0.5-3.0	0	0	2	23	30	47	23	16	A-7-6	
	3.0-7.5	0	1	14	50	35	25	7	8	A-6a	
	7.5-9.0	27	2	3	40	28	30	11	7	A-6a	
	9.0-15.0									Visual	Red Weathered Indurated Clay
	15.0-18.0									Visual	Light Gray Weathered Indurated Clay
	18.0-23.0									Visual *	Red Broken Shale
	23.0-27.0									Visual *	Red Broken Shale
137+00	0.0-6.5									Visual *	Red Broken Clay Shale
	6.5-8.0									Visual	Red Broken Siliceous Shale
	8.0-10.0									Visual	Red Broken Clay Shale
137+00	0.0-2.0	0	1	1	37	61	51	25	12	A-7-6	
	2.0-7.0									Visual	Red Broken Clay Shale
	7.0-13.0									Visual	Red Broken Clay Shale
	13.0-14.5									Visual	Brown Broken Sandstone
138+00	0.0-3.5	0	1	2	25	63	45	24	13	A-7-6	
	3.5-7.0									Visual	Reddish-Brown Weathered Indurated Clay
	7.0-9.0									Visual	Reddish-Brown Weathered Indurated Clay
	9.0-10.0									Visual	Light-Brown Broken Siliceous Shale
140+00	0.3-2.0	30	5	17	25	23	23	0	23	A-4a	
	2.0-4.0	19	2	2	19	13	31	11	7	A-6a	
140+00	0.3-4.0	33	3	5	14	20	31	11	13	A-2-c	
142+00	0.2-4.0	0	0	3	24	73	52	25	10	A-7-c	
	4.0-10.0	0	1	2	24	73	53	29	23	A-7-6	
	10.0-16.0									Visual	Light-Brown Broken Siliceous Shale
143+00	0.2-5.0									Visual	Red Weathered Indurated Clay
	5.0-10.0									Visual	Red Weathered Indurated Clay
	10.0-12.5									Visual	Light-Gray Weathered Indurated Clay
145+00	0.3-2.0	0	1	11	40	30	34	11	26	A-6a	
	2.0-6.0	0	3	7	43	37	36	11	17	A-6a	
	6.0-8.0	10	3	3	19	35	34	14	13	A-6a	
	8.0-11.0									Visual	Light-Gray Broken Weathered Siliceous Shale
145+00	0.2-4.0	0	3	17	31	49	42	21	17	A-7-c	
	4.0-9.0	0	1	4	40	46	38	13	11	A-6a	
	9.0-15.0	67	0	2	29	11	29	5	6	A-2-b	
	15.0-21.0	0	0	10	43	47	34	13	10	A-6a	
	21.0-25.0									Visual	Gray Weathered Shale
147+00	0.2-2.0	0	1	2	40	47	40	10	12	A-6b	
	2.0-5.0	0	1	3	50	41	31	11	10	A-6a *	
	5.0-10.0	51	0	2	31	16	30	11	7	A-6a *	
151+00	0.5-4.0	35	2	17	22	24	27	7	12	A-2a	
	4.0-9.0	0	0	3	37	60	40	27	16	A-7-6	
	9.0-13.0	0	0	1	39	60	35	15	11	A-6a	
	13.0-19.0									Visual	Light-Gray Weathered Indurated Clay
	19.0-25.0									Visual	Red Broken Indurated Clay
152+00	0.2-3.0	0	3	6	52	39	33	11	17	A-6a	
	3.0-5.0	45	2	5	23	25	34	11	24	A-6a	
	5.0-9.0									Visual	Brown Weathered Sandstone
	9.0-14.0									Visual	Red Weathered Indurated Clay
	14.0-19.0									Visual	Red Weathered Indurated Clay
	19.0-25.0									Visual	Red Weathered Indurated Clay
	25.0-30.0									Visual	Red Weathered Indurated Clay
154+00	0.4-3.0	0	1	26	39	34	26	10	13	A-2a	
	3.0-10.0	0	2	27	31	40	23	7	13	A-2a	
	10.0-12.0	32	1	6	32	29	20	11	14	A-6a	
	12.0-14.5	24	3	7	35	28	30	11	12	A-6a	
	14.5-16.0									Visual *	Gray Broken Shale
155+00	0.0-4.0	0	1	9	51	35	40	10	23	A-4b *	
157+00	0.0-4.0	18	3	13	26	40	30	11	14	A-6a *	
160+00	0.3-2.0	31	6	15	18	30	23	10	16	A-2a	
	2.0-7.0	23	1	3	25	47	37	14	12	A-6a	
	7.0-10.0									Visual	Black Coal
	10.0-16.0									Visual	Gray Broken Shale
	16.0-20.0									Visual	Gray Broken Shale
163+00	0.4-8.0	27	6	24	15	25	22	7	13	A-2a	
	8.0-9.5	24	2	4	43	27	26	3	10	A-2a	
	9.5-10.0									Visual	Gray Broken Shale
164+00	0.4-3.0	5	5	21	31	38	23	9	16	A-2a	
	3.0-5.0	14	0	25	22	29	25	9	16	A-2a	
	5.0-9.0	30	3	8	33	26	23	7	9	A-2a	
166+00	0.0-4.0	0	0	13	51	36	29	8	20	A-4b	
	4.0-7.0	33	2	15	23	27	30	11	30	A-6a	
	7.0-13.0	21	0	6	34	39	35	14	16	A-6a	
	13.0-18.0									Visual	Weathered Shale
167+00	0.0-3.0	0	3	12	40	45	34	14	29	A-6a	
	3.0-7.0	0	3	11	37	40	35	43	26	A-6a	
	7.0-12.0	48	3	4	29	19	27	6	5	A-2a	
	12.0-17.0									Visual	Weathered Shale
167+50	0.0-4.0	24	1	2	30	43	38	16	14	A-6b *	
	4.0-9.0	0	2	11	33	44	40	19	22	A-7-6	
	9.0-12.0	0	23	2	27	43	39	11	22	A-6a	
168+00	0.0-4.0	0	3	13	43	41	30	11	27	A-6a	
	4.0-11.0	35	5	6	30	24	29	11	23	A-6a	
	11.0-14.0	46	6	6	21	21	29	11	19	A-6a	
169+00	0.0-4.0									Visual	Brown Broken Sandstone
169+00	0.0-4.0	15	8	11	12	14	23	12	12	A-2-6	
	4.0-7.0									Visual	Red Broken Clay Shale
170+00	0.0-1.0	45	6	11	20	18	31	12	23	A-6a	
	1.0-3.5									Visual	Red and Gray Broken Clay Shale
171+00	0.3-3.0	25	2	7	31	34	37	11	12	A-6a	
	3.0-4.0	32	4	13	30	21	29	7	6	A-2a	
171+00	0.3-5.0	0	3	9	44	44	35	15	16	A-6a	
	5.0-7.0									Visual	Gray Broken Siliceous Shale
171+00	0.3-2.0	0	1	8	37	54	34	23	17	A-6b	
	2.0-6.0	60	3	16	16	9	13	26	8	A-2-b	
	6.0-8.5									Visual	Gray Broken Siliceous Shale
173+25	0.3-3.0									Visual *	Brown Broken Siliceous Shale
	3.0-7.0									Visual	Brown Broken Siliceous Shale
175+00	0.3-2.0	0	1	2	37	60	42	19	21	A-7-6	
	2.0-5.0	0	3	1	26	70	50	24	23	A-7-6	
	5.0-11.0	0	2	3	36	59	44	15	26	A-7-6	
177+00	0.3-2.0	0	0	1	25	74	53	23	23	A-7-6 *	
	2.0-5.5	19	2	8	29	42	35	16	13	A-6b	
179+00	0.3-3.0	13	5	12	35	35	36	17	12	A-6b	
	3.0-8.5									Visual	Red Broken Clay Shale
182+00	0.2-4.0	32	3	1	14	50	45	23	25	A-7-5 *	
	4.0-10.0	0	0	2	24	74	51	26	27	A-7-6 *	
	10.0-12.0	24	3	6	27	40	40	11	26	A-6a	
	12.0-15.0									Visual	Light-Brown Broken Siliceous Shale
185+00	0.2-3.0	0	1	1	54	44	33	15	14	A-6a *	
	3.0-5.0	55	3	2	8	32	50	31	20	A-7-6	
	5.0-10.0	0	1	3	32	64	44	13	23	A-7-5	
186+00	0.2-4.0	0	1	7	53	39	26	5	13	A-6b	
	4.0-9.0	72	3	2	10	13	35	11	15	A-6a	
	9.0-10.0									Visual	Brown Broken Siliceous Shale
187+00	0.3-3.5	0	2	0	54	36	30	9	27	A-4b	
	3.5-7.0									Visual	Brown Broken Siliceous Shale
	7.0-9.5										



Cross Section Index	
Station	Sheet
226+00	28
236+00	29
244+00	30
250+00	31
251+00	31

