TEST BORING RECORD

BORING NUMBER: B-51
DATE DRILLED: 8-23-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
498.8	0.0					
	1.0	TOPSOIL				
495		FILL, brown silty clay with rock fragments and trace of bricks and organic debris	3	9	33	
			6	11	12	C 7.0', 8-26-77
490	7.5	PROBABLE FILL, brown silty clay with trace of fine sand and organic debris	8.5	12	20	
	10.0	Very stiff brown silty CLAY with trace of fine sand and rock fragments (CH)	11	14	25	
485						
			16	16	29	
480	19.6	Boring Terminated @ 19.6', 8-23-77	19.5	0	100/1	
475						

NOTE: Boring dry at cave-in depth of 7.0', 8-26-77.

TEST BORING RECORD

BORING NUMBER: B-52
DATE DRILLED: 8-23-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
498.5	0.0					
	1.0	TOPSOIL				
495		PROBABLE FILL, brown silty clay to clayey silt with rock fragments and trace of organic debris	3	10	24	
			6	12	5	100% water loss at 5.0'; installed casing to 10.0'; no water loss below 10.0'.
490			8.5	11	14	
	10.0	Very stiff brown silty CLAY (CH)	11	14	19	
485						14.2', 8-30-77
			16	18	22	
480	17.8	Hard gray LIMESTONE with calcite seams	17.7	0	* 100 NX 100 RQD	* 100/1
475	22.8	Boring Terminated @ 22.8', 8-23-77				

NOTE: Installed observation well to depth of 22.8'.

Date	Water Depth
8-26	14.7'
8-30	14.2'
9-1	13.4'
10-11	15.4'

TEST BORING RECORD

BORING NUMBER: B-53
DATE DRILLED: 8-24-77 to 8-25-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
503.9	0.0					
	0.7	ASPHALT & GRAVEL SURFACE				
500		Firm to stiff brown silty CLAY with stains (CH)	3	18	6	
	6.5	Stiff tan clayey SILT (ML)	6	15	9	
495			8	18	9	
	9.5	Very stiff gray clayey SILT with shale fragments (ML)	11	17	26	11.0', 8-26-77
490	13.0	DECOMPOSED SHALE, dark gray silt				
			16	16	85/5	
485			20	4	100/6	
						C 22.4', 8-26-77
480	25.0	Moderately soft to moderately hard dark gray fractured SHALE; few calcite seams; evidence of shear movement (healed joints)	25	0	* 100 NX 36 RQD	* 50/0
475	30.0	Boring Terminated @ 30.0', 8-25-77				
470						

TEST BORING RECORD

BORING NUMBER: B-54
DATE DRILLED: 8-24-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
500.2	0.0					
	1.0	TOPSOIL				
		Very stiff to stiff brown silty CLAY (CH) with trace of fine sand and rock fragments	3	10	18	
495			6	12	19	
			8.5	14	12	
490			11	9	12	11.2', 9-1-77
485	14.9	Hard dark gray LIMESTONE with trace of calcite seams; slightly fractured; evidence of shear movement (healed joints)	14.8	0	* 100 NX 66 RQD	* 100/1
480	19.9	Boring Terminated @ 19.9', 8-24-77				
475						

NOTE: Installed observation well to depth of 15.7'.

Date	Water Depth
8-26	5.8
8-30	10.0
9-1	11.2
10-11	14.3

TEST BORING RECORD

BORING NUMBER: B-55
DATE DRILLED: 8-25-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
501.4	0.0					
	0.7	TOPSOIL				
500		Stiff to firm clayey SILT with shale fragments and fine sand (ML)	3	18	12	
495			6	18	9	
			8	18	11	
490			11	18	8	
485			16	18	5	
	18.5	Firm gray silty CLAY with limestone fragments (CH)				C 18.0', 8-26-77; 100% water loss @ 18.5'
480			21	18	7	
	22.3	Boring Terminated @ 22.3', 8-25-77	22.3	0	50/0	
475						

NOTE: Boring dry at cave-in depth of 18.0', 8-26-77

TEST BORING RECORD

BORING NUMBER: B-56
DATE DRILLED: 8-18-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
505	0.0					
	1.0	TOPSOIL				
		Very stiff brown silty CLAY (CH)	3	13	38	
500	5.0	Very stiff brown silty CLAY with trace of rock fragments (CH)	6	14	20	
			8.5	16	26	
495	9.5	Very hard brown to gray silty CLAY with limestone fragments (CH)	10	6	100/6 *	* 100/2
	10.6	Hard gray LIMESTONE with calcite seams; evidence of shear movement (healed joints)	10.5	0	100 NX 77 RQD	
490	15.6	Boring Terminated @ 15.6', 8-18-77				
485						

TEST BORING RECORD

BORING NUMBER: B-57
DATE DRILLED: 8-25-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
499	0.0					
	1.0	TOPSOIL				
495		Stiff to very stiff brown silty CLAY; trace of roots at 10.0'; limestone fragments from 10.0' (CH)	3	13	15	
		(Possible alluvium)	6	6	15	
490			8.5	4	18	
			11	10	18	
485						
			16	14	18	
480	20.2	Hard gray LIMESTONE with calcite seams; fractured; thin voids or mud seams; mud seam or void from 23.8' to 24.2'	20	0	* 72 NX 18 RQD	* 100/2; C 22.0', 8-26-77
475	25.2	Boring Terminated @ 25.2', 8-25-77				
470						

NOTE: Boring dry at cave-in depth of 22.0', 8-26-77. 100% water loss at 22.2'

TEST BORING RECORD

BORING NUMBER: B-58
DATE DRILLED: 8-25-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
498.9	0.0					
	0.5	TOPSOIL				
		PROBABLE FILL; brown clay with gravels and wood debris	3	2	7	
495			6	0	10	
490	6.5	Stiff tan silty CLAY with trace of limestone fragments; with many limestone fragments at 16.0' (CH)	8	12	10	
			11	18	10	
485						
	16.6	Hard gray LIMESTONE boulder or ledge with few calcite seams	16 / 16.6	18 / 0	87 * / **	*50/0; ** 100NX; 100 RQD
480	18.6	Stiff tan silty CLAY with limestone fragments (CH)	21	18	10	C 22.5', 8-26-77
475			25	6	100/0	
	25.5	Hard gray LIMESTONE with few calcite seams; evidence of shear movement (healed joints)			100 NX 100 RQD	
470	30.5	Boring Terminated @ 30.5', 8-25-77				
465						

NOTE: Boring dry at cave-in depth of 22.5', 8-26-77

TEST BORING RECORD

BORING NUMBER: B-59
DATE DRILLED: 8-25-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
490.3	0.0					
	1.0	TOPSOIL				1.0', 8-26-77
		Brown silty CLAY with fine sand and rock fragments, possible fill (CH)	3	18	12	C 2.5', 8-26-77
485			6	17	37	
	7.0	Very stiff brown silty CLAY with rock fragments (CH)	8.5	12	23	
480			11	14	16	
			13.4	0	100/1	
475	13.5	Boring Terminated @ 13.5', 8-25-77				

TEST BORING RECORD

BORING NUMBER: B-60
DATE DRILLED: 8-25-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
500.3	0.0					
	1.0	TOPSOIL				
		Hard brown clayey SILT with shale fragments and fine sand (ML)	3	13	30	2.3', 8-26-77; C 4.3', 8-26-77
495	5.5	DECOMPOSED SHALE, gray silt with fine sand	6	10	100/11	
			7.5	2	100/3	
490	10.2	Boring Terminated @ 10.2', 8-25-77	10	0	100/2	

TEST BORING RECORD

BORING NUMBER: B-61
DATE DRILLED: 8-30-77 to 8-31-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
498.7	0.0					
	1.0	TOPSOIL				
495		Soft brown silty CLAY with trace of fine sand (CH)	3	7	4	
	5.0					4.0' 6.0' Recovered 20"
		Very stiff brown silty CLAY with trace of fine sand and rock fragments (CH)	8	12	20	
490						
		(Possible boulder at 11.0')	11	14	100/11 *	* 100/0
485	12.6	Hard gray LIMESTONE with calcite seam	12.5	0	100 NX 61 RQD	
480	17.0	Very stiff to hard brown silty CLAY with rock fragments and fine sand (CH)	21	14	21	
475						
			26	10	34	
470	28.0	Boring Terminated @ 28.0', 8-31-77	27.9	0	100/1	

TEST BORING RECORD

BORING NUMBER: B-62
DATE DRILLED: 8-24-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
497.8	0.0					
	0.5	TOPSOIL				
495		Stiff to firm brown to gray silty CLAY with trace of rock fragments (CH)	3	10	11	
						5.0', 8-26-77
			6	18	5	
490			8	18	8	C 8.2', 8-26-77
	9.0	Very stiff brown silty CLAY with trace of rock fragments (CH)	11 / 12	12 / 0	22 / *	* 50/0
485	12.0	Boring Terminated @ 12.0', 8-24-77				

TEST BORING RECORD

BORING NUMBER: B-63
DATE DRILLED: 8-24-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
497.5	0.0					
	0.8	TOPSOIL				
495		PROBABLE FILL, brown silty clay with fine sand and trace of organics	3	12	9	
	4.0	Stiff brown silty CLAY with fine rock fragments (CH)	6	12	9	
490			8	18	11	
485			11	18	10	
	15.0 / 15.3	Hard gray LIMESTONE boulder or ledge	15	0	50/0	100% water loss @ 15.3'
480		Stiff brown silty CLAY (CH)				
475			21	18	9	
	23.5	Hard gray LIMESTONE with calcite seams, mud seam from 24.7' to 25.4'	23.5	0	* 78 NX 75 RQD	* 50/0; 25.0', 8-30-77
470						
465	29.5	Boring Terminated @ 29.5', 8-24-77				

NOTE: Installed observation well to 30.0'

Date	Water Depth
8-26	25.3
8-30	25.0
9-1	25.0
10-11	25.5

TEST BORING RECORD

BORING NUMBER: B-64
DATE DRILLED: 8-26-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
489.5	0.0					
	0.9	TOPSOIL				
		Firm brown clayey SILT with trace of gravels and roots, possible fill (ML)	3	10	6	
485	4.0	Very stiff brown clayey SILT with gravels and fine sand (ML)	6	18	17	
	6.5	Very stiff brown silty CLAY with limestone fragments (CH)	8	3	27 *	* 50/0
480	9.0	Hard light gray LIMESTONE with possible voids or mud seam from 10.5' to 12.5'	9	0	60 NX 44 RQD	
475	14.0	Boring Terminated @ 14.0', 8-26-77				

TEST BORING RECORD

BORING NUMBER: B-65
DATE DRILLED: 8-31-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
488.6	0.0					
	1.0	TOPSOIL				
485		Stiff brown to gray silty CLAY with rock fragments and trace of fine sand (CH)	3	15	9	
	5.0	Hard gray sandy CLAY with many limestone fragments (CH)				5.0' 7.0' Bent Tube, No Recovery
480			8	7	100/7 *	* 100/1
	9.6	Hard gray LIMESTONE with calcite seams; Possible voids or mud seams from 11.3' to 12.0' and from 13.5'	9.5	0	53 NX 28 RQD	
475					*	* 100/1
	14.6	Hard gray LIMESTONE with calcite and pitting; Possible void or mud seam from 16.2' to 17.2'	14.6	0	47 NX **	** 18 RQD
470	17.2	Hard gray LIMESTONE with calcite; Possible void or mud seam from 19.5'	17.6	3	* 44 NX 26 RQD	* 100/1
465	22.4	Boring Terminated @ 22.4', 8-31-77				

NOTE: Installed observation well to depth of 16.0'

Date	Water Depth
9-1	6.7
10-11	13.7

TEST BORING RECORD

BORING NUMBER: B-66
DATE DRILLED: 8-31-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
487.8	0.0					
	1.0	TOPSOIL				
485		Very stiff brown silty CLAY with rock fragments and fine sand (CH)	3	12	16	
						5.0' 5.8' Recovered 9"
480		(fractured limestone from 7.5' to 9.5')	7.5	4	100/4	
			11	14	22	
475						
	15.2	Boring Terminated @ 15.2', 8-31-77	15	0	100/2	

TEST BORING RECORD

BORING NUMBER: B-67
DATE DRILLED: 9-1-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
481.2	0.0					
480	1.0	TOPSOIL				
		Stiff brown to gray silty CLAY with trace of fine sand and rock fragments (CH)	3	13	10	
		with fractured limestone from 6.3'				4.0' 5.5' Recovered 18"
475			6 / 7	8 / 0	100/4 *	* 100/1
	7.1	Hard gray LIMESTONE with calcite seams; possible voids or mud seam from 9.0' to 11.0' 11.5' to 12.0' and 13.5' to 16.0'			40 NX 27 RQD	
470						
465						16.0', 9-1-77
	17.1	Boring Terminated @ 17.1', 9-1-77				

TEST BORING RECORD

BORING NUMBER: B-68
DATE DRILLED: 9-1-77

ELEV.	STRATUM DEPTH	VISUAL SOIL DESCRIPTION	D	SR	N or CR	REMARKS
481.3	0.0					
480	1.0	TOPSOIL				
		Very stiff brown to gray silty CLAY with trace of fine sand and rock fragments (CH)	3	14	17	
475			6	16	17	
	7.0	Very stiff to stiff brown silty CLAY with trace of fine sand (CH)	8.5	18	16	
470			11	12	12	
	14.0	Firm brown silty CLAY with trace of fine sand and rock fragments (CH)				
465			16	16	7	
460			21	18	7	100% water loss @ 22.0'
	23.6	Boring Terminated @ 23.6', 9-1-77	23.5	0	100/1	

K - Soil Symbols
D - Sample Depths
N - Penetration in blows per foot (ASTM - D-1586)
CR - % Core Recovery, NX or BX designates bit size (ASTM D-2113)

N or CR
SR - Sample Spoon Recovery in inches
S - Symbols Described Below
Undisturbed Sample (ASTM D-1587)
Water Level, time of boring
Water Level
Loss of Water
C Caved Depth of Boring

JOB NUMBER: W-7-1726B

VA HOSPITAL
MARTINSBURG, WEST VIRGINIA

LAW ENGINEERING
MCLEAN, VIRGINIA

NO.	DATE	DESCRIPTION

REVISIONS

SHEET TITLE: TEST BORING RECORDS

BLDG. NO.: UTILITIES

PROJECT TITLE: REPLACEMENT HOSPITAL-PHASE II 200 BED DOMICILIARY 120 BED NURSING HOME-UTILITIES

DRAWN: LNS | CHECKED: JBK | DATE: 14 JUNE 78

GATES / LBC&W / BMA
ARCHITECTS ENGINEERS PLANNERS
100 NORTH PITT STREET
ALEXANDRIA, VIRGINIA 22314

DRAWING NUMBER: B8
DWG. 8 OF 9

PROJECT NUMBER: 613 - 012

APPROVED: PROJECT DIRECTOR

VETERANS ADMINISTRATION

LOCATION: VAC MARTINSBURG, WEST VIRGINIA

THREE INCHES EQUALS ONE FOOT — ONE AND ONE HALF INCHES EQUALS ONE FOOT — ONE INCH EQUALS ONE FOOT — THREE QUARTER INCH EQUALS ONE FOOT — ONE HALF INCH EQUALS ONE FOOT — THREE EIGHTH INCH EQUALS ONE FOOT — ONE QUARTER INCH EQUALS ONE FOOT — ONE EIGHTH INCH EQUALS ONE FOOT

VA FORM 08-6231, FEB 1973

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B.8