

AMERICAN ENGINEERING TESTING, INC.
SUBSURFACE BORING LOG

AET JOB NO: 19-00528 LOG OF BORING NO. B-1 (p. 1 of 1)
PROJECT: Sheridan VA Boiler Upgrade; Sheridan, WY

DEPTH IN FEET	SURFACE ELEVATION: 105.2 MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL % #200
1	FILL, Clayey Gravel with Sand, brown, coal fragments present (GC)	FILL	35	M	MC	18				
2										
4	LEAN CLAY, mottled tan to grey, very stiff to hard, trace sand and gravel present (CL)	TERRACE DEPOSITS	15	M	MC	18	19			
5										
6			31	M	MC	18	20			
7										
10	WELL GRADED SAND tan, dense (SW)		30	M	MC	18				
11										
13			31	M	MC	18				
14										
16			33	M	MC	18				
Bottom of Boring										

DEPTH	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
15.0	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
		3/8/17	14:10	15.0	--	--	--	None

BORING COMPLETED: 3/8/17
DR: BT LG: ES Rig: RC-1
03/2011 01-DHR-060

AMERICAN ENGINEERING TESTING, INC.
SUBSURFACE BORING LOG

AET JOB NO: 19-00528 LOG OF BORING NO. B-2 (p. 1 of 1)
PROJECT: Sheridan VA Boiler Upgrade; Sheridan, WY

DEPTH IN FEET	SURFACE ELEVATION: 99.4 MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL % #200
1	TOPSOIL LEAN CLAY, mottled tan to grey, stiff to hard, coal present at surface (CL)	TOPSOIL TERRACE DEPOSITS	10	M	MC	18				
2										
3			31	M	MC	18	15			
4										
6	SANDY GRAVEL with SILT tan, very dense (GW)		61	M	MC	18	5			
7										
8			50.2	M	MC	8	3			
9										
10			50.2	M	MC	8				
11										
13			50.4	M	MC	10				
14										
16			50.4	W	MC	10				
Bottom of Boring										

DEPTH	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
15.0	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
		3/8/17	10:40	15.0	--	--	--	14.8

BORING COMPLETED: 3/8/17
DR: BT LG: ES Rig: RC-1
03/2011 01-DHR-060

AMERICAN ENGINEERING TESTING, INC.
SUBSURFACE BORING LOG

AET JOB NO: 19-00528 LOG OF BORING NO. B-3 (p. 1 of 1)
PROJECT: Sheridan VA Boiler Upgrade; Sheridan, WY

DEPTH IN FEET	SURFACE ELEVATION: 97.4 MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL % #200
1	TOPSOIL FILL, Lean Clay, black, coal present (CL)	TOPSOIL FILL (Bunker Wash) TERRACE DEPOSITS	24	M	MC	18				
2										
3	LEAN CLAY, mottled tan to grey, hard (CL)		69	M	MC	18	3			
4										
6	SANDY GRAVEL with SILT tan, very dense (GW)		61	M	MC	18	2			
7										
8			50.4	M	MC	10	4			
9										
10			50.4	M	MC	10				
11										
13			74	W	MC	18				
14										
16			50.4	W	MC	8				
Bottom of Boring										

DEPTH	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
15.0	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
		3/8/17	09:40	15.0	--	--	--	12.7

BORING COMPLETED: 3/8/17
DR: BT LG: ES Rig: RC-1
03/2011 01-DHR-060

AMERICAN ENGINEERING TESTING, INC.
SUBSURFACE BORING LOG

AET JOB NO: 19-00528 LOG OF BORING NO. B-4 (p. 1 of 1)
PROJECT: Sheridan VA Boiler Upgrade; Sheridan, WY

DEPTH IN FEET	SURFACE ELEVATION: 99.6 MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL % #200
1	FILL, Clayey Gravel with Sand, dark brown (GC)	FILL	31	M	MC	18				
2										
3	LEAN CLAY, tan to grey, stiff to very stiff (CL)	TERRACE DEPOSITS	16	M	MC	18	17			
4										
6			13	M	MC	18	22			
7										
8	SANDY GRAVEL with SILT tan, very dense (GW)		51	M	MC	18	4			
9										
10			88.9	M	MC	10	3			
11										
13			97.9	W	MC	10				
14										
16			50.4	W	MC	8				
Bottom of Boring										

DEPTH	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
15.0	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
		3/8/17	11:55	15.0	--	--	--	12.9

BORING COMPLETED: 3/8/17
DR: BT LG: ES Rig: RC-1
03/2011 01-DHR-060

AMERICAN ENGINEERING TESTING, INC.
SUBSURFACE BORING LOG

AET JOB NO: 19-00528 LOG OF BORING NO. B-5 (p. 1 of 1)
PROJECT: Sheridan VA Boiler Upgrade; Sheridan, WY

DEPTH IN FEET	SURFACE ELEVATION: 99.8 MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL % #200
1	FILL, Clayey Gravel with Sand, dark brown (GC)	FILL	30	M	MC	18				
2										
3			25	M	MC	18	11	29	17	
4										
6	LEAN CLAY, mottled tan to grey, very stiff to hard (CL)	TERRACE DEPOSITS	31	M	MC	18	20	106		
7										
8	SANDY GRAVEL with SILT tan, very dense (GW)		50.4	M	MC	9				
9										
10			50.3	M	MC	6	4			
11										
13			12	M	MC	18	15			
14										
16			45	W	MC	18				
Bottom of Boring										

DEPTH	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
15.0	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
		3/8/17	12:55	15.0	--	--	--	14.5

BORING COMPLETED: 3/8/17
DR: BT LG: ES Rig: RC-1
03/2011 01-DHR-060

AMERICAN ENGINEERING TESTING, INC.
SUBSURFACE BORING LOG

AET JOB NO: 19-00528 LOG OF BORING NO. B-6 (p. 1 of 1)
PROJECT: Sheridan VA Boiler Upgrade; Sheridan, WY

DEPTH IN FEET	SURFACE ELEVATION: 98.6 MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL % #200
1	TOPSOIL FILL, Lean Clay, black, coal fragments present (CL)	TOPSOIL FILL (Bunker Wash) TERRACE DEPOSITS	15	M	MC	18				
2										
3	LEAN CLAY, mottled tan to grey, very stiff to hard (CL)		23	M	MC	18	20	101	97	
4										
6			43	M	MC	18	26	107	41	17
7										
8	SANDY GRAVEL with SILT tan, very dense (GW)		80	M	MC	18	4			
9										
10			56	M	MC	18				
11										
13			62	W	MC	18				
14										
16			50.3	W	MC	6				
Bottom of Boring										

DEPTH	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
15.0	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
		3/8/17	08:30	15.0	--	--	--	12.0

BORING COMPLETED: 3/8/17
DR: BT LG: ES Rig: RC-1
03/2011 01-DHR-060

GEOTECHNICAL SUMMARY
A geotechnical study was conducted to determine the in situ soils within the Project Site. The majority of subsurface soils encountered within the borings consisted of about 1 to 3 1/2 feet of clayey gravels and lean clays with coal fragments fill overlying terrace deposits of stiff hard lean clays, dense well graded sand, and very dense sandy gravels. At the time of the field work, ground water was encountered in five of the 6 borings, at a depth of 12 to 14 1/2 feet below the existing surface. See plan sheet B1.00 for boring location map and the geotechnical report.

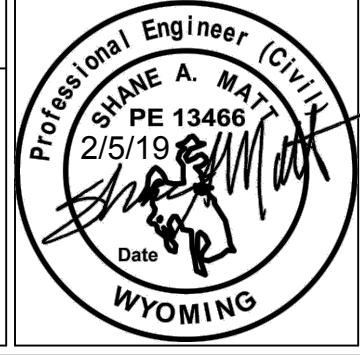
- Based on the recommendations outlined within the geotechnical report; the pavement sections for improvement, and surfacing recommendations, are listed below.
- 14" gravel surfacing for the coal delivery vehicle turnaround area expansion.
 - 8" concrete and 7" aggregate base course pavement section for improvements at the emergency coal dump area.
 - 8" concrete and 7" aggregate base course pavement section for the north and south approach entrances improvement.
 - 8" concrete and 7" aggregate base course pavement between the proposed coal delivery building/fines hopper and the coal storage bunker.
- Due to the potential for pavement deterioration from turning movements, concrete is recommended for all pavement improvements within the Project Site.

All paving, base materials, and construction requirements for pavement sections will conform to the geotechnical recommendations, the City of Sheridan Specifications, and the VA Site Development Design Manual. Subgrade shall conform to the recommendations outlined in the geotechnical report.

Note: Refer to geotechnical report in specifications for more information.

Revisions:	Initials	Date

CONSULTANTS:



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FOURFRONT DESIGN INC.

Drawing Title
BORING LOCATION MAP AND LOGS
Approved: Project Director

Project Title
BOILER UPGRADE PHASE 3
Location SHERIDAN, WY
Date 02/5/2019
Checked SM
Drawn JM

Project Number
666-16-117
Building Number
90
Drawing Number
B-100
Dwg. 3 of 35

CONSTRUCTION DOCUMENTS
Office of Construction and Facilities Management
Department of Veterans Affairs