

PHASE IA/IB ARCHEOLOGICAL INVESTIGATION

Oak Woods Subdivision Chester

Town of Chester, Orange County, New York

October 2020

Prepared by:

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36CFR61 Archeological Consultants

MANAGEMENT SUMMARY

SHPO Project Review Number:

Involved State and Federal Agencies: NYSDEC

Phase of Survey: Phase IA/IB

Location Information: Camp Monroe Road, Town of Chester, Orange Co., NY

Survey Area (Metric & English)

Number of Acres Surveyed: 26.9 ac (10.8 ha) Number of Square meters & Feet excavated:

USGS 7.5 Minute Quadrangle Map: 1981 Monroe, NY

Archeological Survey Overview

Number and Interval of Shovel Tests: 127

Number and Size of Units:

Results of Archeological Survey

Number and name of historic sites identified: 0 Number and name of prehistoric sites identified: 0

Results of Architectural Survey

Number of buildings/structures/cemeteries adjacent to Project Area: 1

Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts: 0

Report Author: Jim Turner, MA, RPA, Principal Investigator

Date of Report: October 2020

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PHASE IA LITERATURE REVIEW AND SENSITIVITY ASSESSMENT

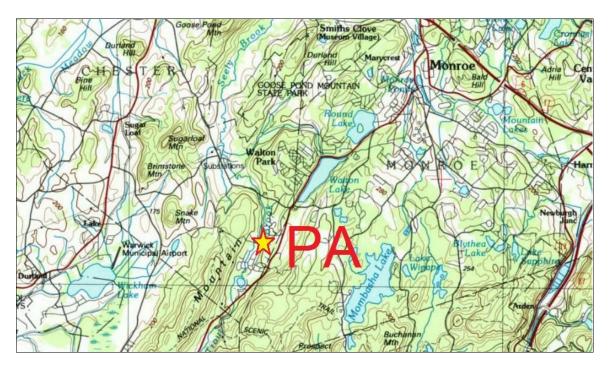
INTRODUCTION

STRATA Cultural Resource Management was contacted on May 14, 2020 by Jon Dahlgren of Tim Miller Associates, Inc. to conduct a Phase IA/IB Archeological Investigation on a ±26.9-acre property (SBL 15-1-27.9) in the Town of Chester, Orange County, New York.

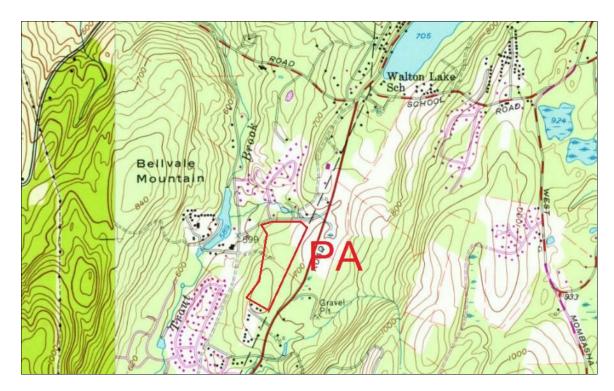
PROJECT INFORMATION

The ± 26.9 -acre property lies to the south of the intersections of Camp Monroe Road and Pickerel Road. The property is proposed to be developed into a 6-lot residential subdivision (Maps 1-4; Photos 1-17). Trout Brook lies approximately 1,000ft (300m) downslope to the west; the present lake is man-made. Elevations within the Project Area (PA) range from approximately 714 feet (218 m) above mean sea level (AMSL) on a hilltop within the proposed Open Space to approximately 620 feet (189 m) AMSL at the northwest corner of the Project Area. Two Army Corps of Engineers (ACOE) wetlands exist within the PA including one primarily contained with Lot 4, the largest of the proposed subdivision lots.

Slightly more than half of the property (± 14.3 acres) has been designated Open Space with no proposed impacts. The Area of Potential Effect (APE) is considered to be approximately 8 acres consisting primarily of house, septic and driveway disturbances as well as some flatter portions that could be potentially landscaped. Map ## depicts the portions of the property containing steep slopes (>12%) although the proposed subdivision has been reorganized as shown on the previous project maps.



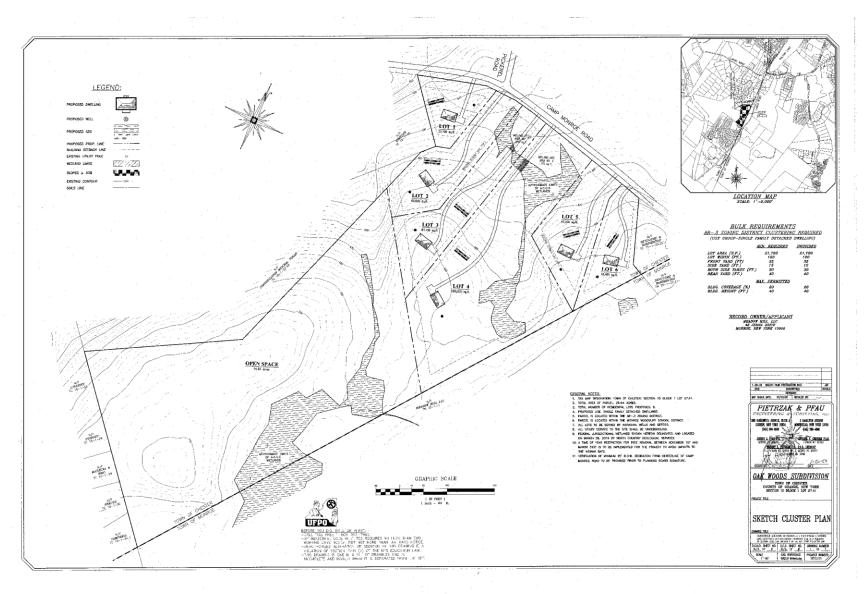
Map 1: 1986 Project Area on USGS 1:100000 Topographic Quadrangle (Middletown, NY).



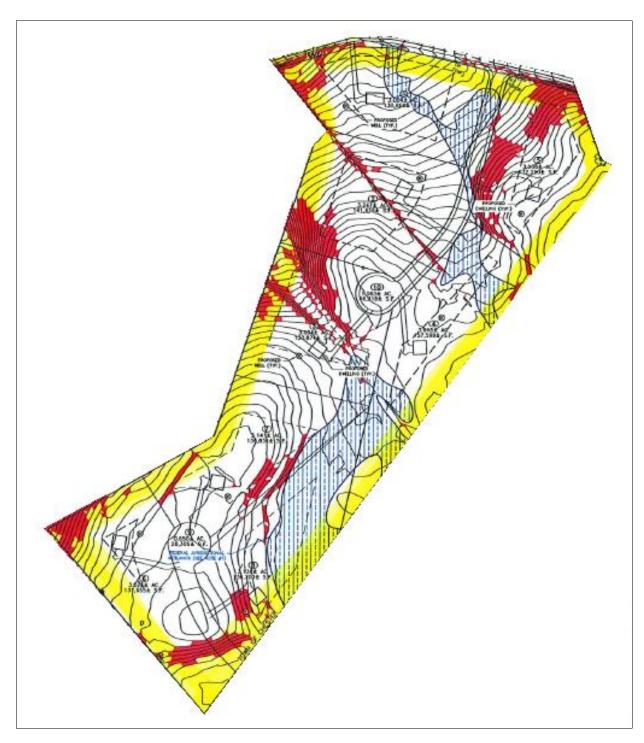
Map 2: 1981 USGS 7.5' Topographic Quadrangle (Monroe, NY).



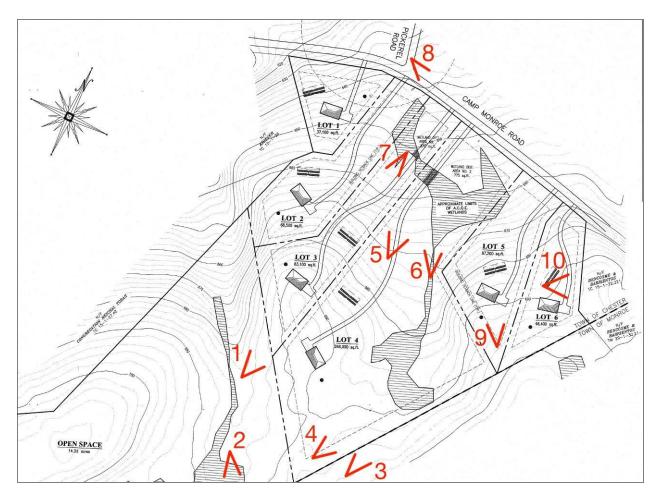
Figure 1: Aerial view of Project Area south of Camp Monroe Road.



Map 3: Project map showing subdivision lots at right and Open Space at left.



Map 4: Project map showing steep slopes in red (>12%



Map 5: Project map showing report photo angles.



Photo 1: View north toward Lot 3 with proposed house site on top of rise.



Photo 2: View southeast of drainage through Open Space parcel with stone wall as edge of Project Area.



Photo 3: View northeast showing stone wall along property boundary following Monroe/Chester line.



Photo 4: View northeast along property line at stone wall at edge of Lot 4.



Photo 5: View north showing ground conditions in Lot 4 with wetlands at rear.



Photo 6: View north of small drainage through wetlands in Lot 4.



Photo 7: View south of spring emerging from below a large boulder in Lot 3.

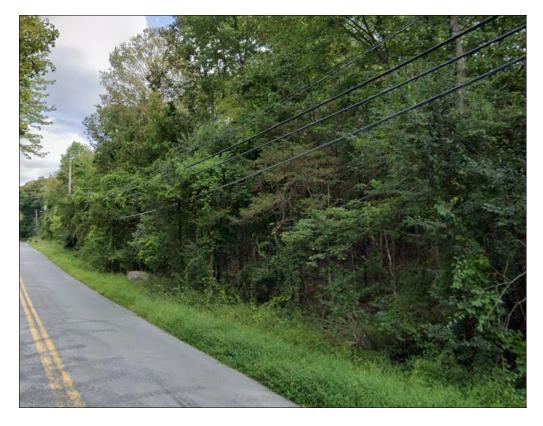


Photo 8: View east along Camp Monroe Road in vicinity of Pickerel Road intersection.



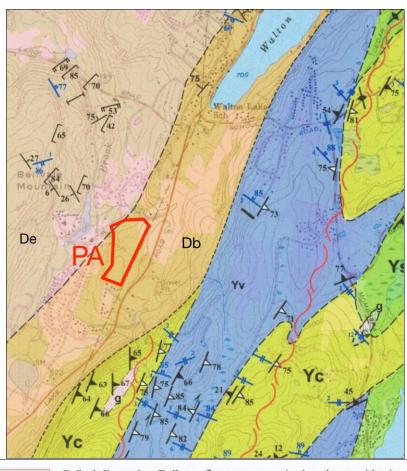
Photo 9: View northwest showing site of historic artifact scatter with shovel in original positive STP 101.

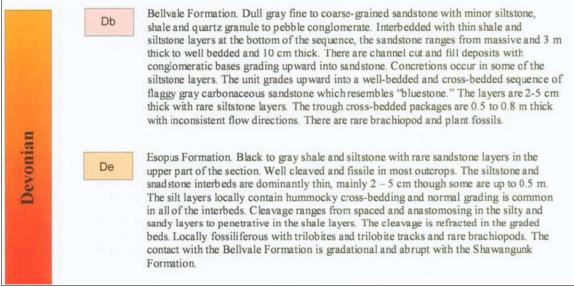


Photo 10: View northeast toward edge of PA and private residence adjacent to Lot 6.

Bedrock and Surficial Geology

The Project Area lies within the Devonian-aged Bellvale Formation consisting of dull gray shale, siltstone, sandstone and quartz. It lies near the boundary of the Esopus Formation where the contact between the two is gradational. The surficial geology of the Project Area consists of glacial till.





Map 6: Bedrock Geologic Map of the Monroe, New York 7.5' Quadrangle (NYS Geological Survey).

Soils and Drainage

Soils within the Project Area consist primarily of Riverhead sandy loam (\mathbf{RhB} , \mathbf{C}) with a small area of Mardin gravelly silt loam (\mathbf{MdC}) at the southern end of the Project Area along Camp Monroe Road (Map 7) (USDA 1994).



Map 7: Project Area soils (http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx).

Table 1: Project Area soils (USDA 1994).

Name	Soil Horizon Depth	Color	Texture, Inclusions	Slope %	Drainage	Description
Erie gravelly silt loam (ErA, ErB)	A 0-10 in (0-25 cm) B 10-18 (25-45 cm) C 18-45 (45-158 cm)	Dk Br Gr Br Ol Br	Gravelly silt loam Channery silt loam Channery silt loam	0-8%	Somewhat poorly drained	Glacial till deposits in uplands
Mardin gravelly silt loam (MdB, C)	A 0-8 in (0-20 cm) B 8-15 in (20-38 cm) C 15-20 in (38-51 cm) D 20-60 in (51-152 cm)	Dk Br Yl Br Pale Br Ol Br	Gravelly silt loam Gravelly silt loam Gravelly silt loam Channery silt loam	3-15%	Moderately well drained	Glacial till deposits in uplands
Riverhead sandy loam (RhB, C)	A 0-9 in (0-23 cm) B 9-16 in (23-40 cm) C 16-23 in (40-58 cm) D 23-30 in (58-137 cm) E 30-60 in (137-178 cm)	Br YI Br OI Br YI Br OI Br	Sandy loam Fine sandy loam Fine sandy loam Loamy sand Sand and gravel	3-15%	Well drained	Glacial outwash deposits

Current Conditions and Previous Disturbance

The Project Area is currently a wooded upland area. A large stone wall follows the eastern property line between the town lines of Chester and Monroe. Two small drainages empty the slopes draining to the west where they empty into Trout Brook. The forest is relatively young second growth while a rough woods road follows the western edge of the property. No significant surface disturbance was observed during the Site visit.

LITERATURE REVIEW

Site File Search

A site file search conducted at the Office of Parks, Recreation and Historic Preservation (OPRHP) identified no New York State Museum sites and one OPRHP site within 1,000 feet of the Project Area. The Trout Brook Estates Prehistoric Finds Site (USN A07102.000083) lies approximately 1,000 feet north of the Project Area. This site was based on reports from a local resident that prehistoric artifacts had been unearthed during construction of the Trout Brook Estates housing development. Grinding stones and stone implements have been found in the area.

National Register Listed and Eligible Properties

There are no National Register Listed or Eligible properties within 1,000' of the Project Area.

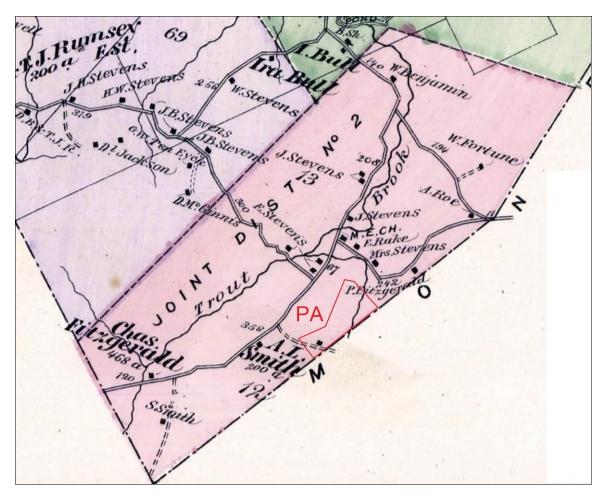
Previous surveys

Three previous surveys have been conducted within one mile of the Project Area although no corresponding reports are available on the CRIS website. The survey was performed by Phil LaPorta in 2006 as a Phase IA/IB for the proposed Chester Golf Club Subdivision (03PR05430). On the north face of Bellvale Mountain approximately 4,000 feet from the Project Area and extending northeast from there are located a number of prehistoric quarry and quarry support areas. Hammerstones, anvils, wedges and other implements were identified. Lithic materials included chert, quartzite and dolomite. While similar sites might be expected in the vicinity of the Project Area it should be noted as shown in Map 6 above that the Project Area lies near the boundary of the Bellvale and Esopus Formations and may not contain the same resources that were being quarried on the far side of the mountain.

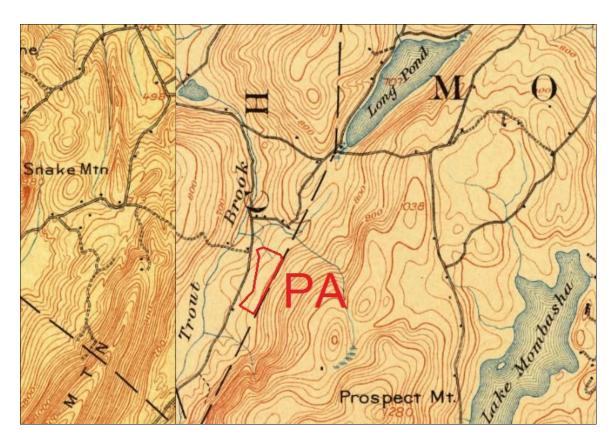
The two remaining previous surveys were Phase IA/IB investigations conducted by STRATA, LLC adjacent to the current Project Area. These were the Meadow Hills Subdivision Chester (19PR04792) and Meadow Hills Subdivision Monroe (19PR04788) containing 4.8 and 13 acres, respectively. No cultural resources were identified and no further work was recommended.

Historic Map Review

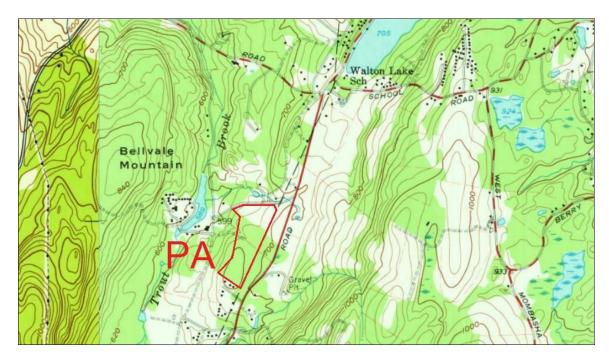
Three historic maps were consulted for insight into the history of the Project Area. These consisted of the 1875 *Map of Orange County, New York* as well as the 1902 and 1957 USGS topo maps (Maps 8-10). The 1875 map depicts a documented structure within the Project Area although outside of the APE in the proposed Open Space. The structure appears to have disappeared by the 20th Century and no visible remains were observed during the Site Visit. In 1875 Camp Monroe did not exist and a different road lay further north which connected to Trout Brook Road at the Methodist Church. The 1902 map also does not depict Camp Monroe Road indicating the road was built later in the 20th Century.



Map 8: 1875 Map of Orange County, New York (Andreas, Baskin and Burr).



Map 9: 1902 USGS 15' Topographic Quadrangle (Schunemunk, NY).



Map 10: 1957 USGS 7.5' Topographic Quadrangle (Monroe, NY).

SENSITIVITY ASSESSMENT

Prehistoric Sensitivity

The Project Area is considered to have a high sensitivity for the presence of prehistoric cultural remains. The location is near several known precontact sites and lies within close proximity to Trout Brook which would have been useful to Native populations as a potable water source as well as an attractive hunting ground and resource procurement area.

Historic Sensitivity

The Project Area is considered to have low sensitivity for the presence of historic cultural remains. Historic maps show no structures present within the Project Area indicating a low potential for buried remains and trash middens.

TESTING RECOMMENDATIONS

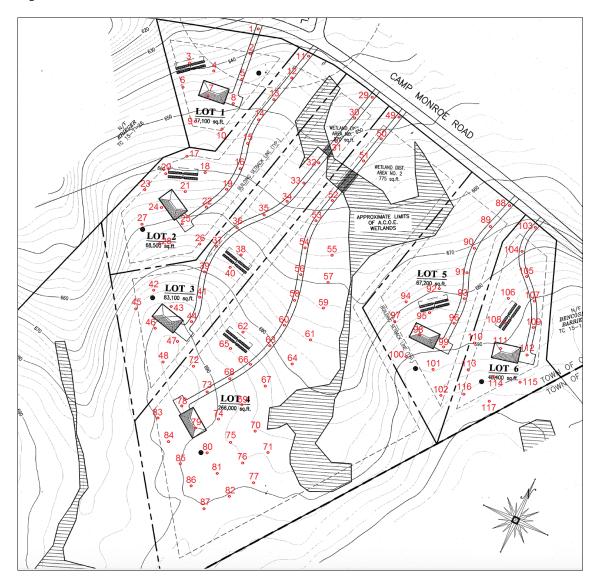
Subsurface archeological testing is recommended for all portions of the Project Area that are proposed for development and potential disturbance excluding those areas of steep slope exceeding 12%.

PHASE IB FIELD INVESTIGATION

The Phase IB Field Investigation was conducted during May, 2019. Shovel testing was performed by Kris Mierisch, Field Technician and Jim Turner, the Principal Investigator. Weather was seasonably warm with some rain during the testing period. Ground visibility was excellent.

Shovel Testing Results

A total of 117 shovel test pits (STPs) were laid out within the Project Area (Map 11). Testing began with linear transects of tests placed at 50-foot intervals within the APE of each proposed lot with additional testing in Lot 4 to the west of the wetlands. A small spring was observed in the vicinity of STP 32 flowing out from under a large boulder. A single whiteware sherd was recovered from STP 101 near the proposed house site in Lot 5. A series of radial tests were dug at 1m and 3m intervals at the cardinal directions around the original STP 101 with a second set of radials excavated to the northwest in response to higher artifact densities in this direction. A total of twelve small ceramic sherds were recovered as well as a brass button back and a shard of window glass. None of the artifacts were diagnostic and no date range estimate can be made for the collection.



Map 11: Shovel testing locations within the Project Area.

The artifact assemblage contained within STP 101 and its associated radials suggests the presence of a small low-density scatter of indeterminate age (Table 2). All of the ceramic sherds were small with each of them weighing less than a gram apiece. None of the surrounding STPs on the original 50-foot interval produced any additional artifacts indicating a limited areal extent. The sparse artifact collection does not offer any research potential and does not appear eligible for the State/National Registers.

RECOMMENDATIONS

The Phase IA Literature Review and Sensitivity Assessment indicated a high sensitivity for precontact cultural resources and a low sensitivity for historic cultural resources. The Phase IB Archeological Fieldwork did not identify any significant cultural resources within the Project Area. Therefore, no further testing is recommended and the Oak Woods Subdivision Chester should be deemed to have **No Effect**.

Table 2: Phase IB Artifact Catalog

STP#	Level	Count	Material	Artifact Summary	Dimensions	Weight	Description
101	1	1	ceramic	sherd	1.3 x 0.9 x 0.3 cm	0.3 g	whiteware with blue
101 N1m	1	1	ceramic	sherd	1.1 x 0.5 x 0.3 cm	0.2 g	whiteware with blue
101 N3m	1	1	ceramic	sherd	1.4 x 1.1 x 0.2 cm	0.4 g	whiteware with bllue
		1	ceramic	sherd	1.2 x 1.2 x 0.2 cm	0.3 g	whiteware
		1	glass	window fragment	2.1 x 1.5 x 0.25 cm	1.0 g	aqua
101 NW1m	1	1	ceramic	rim sherd	1.5 x 1.4 x 0.3 cm	0.9 g	whiteware with blue banded transfer border
101 NW3m	1	1	ceramic	sherd	0.9 x 0.8 x 0.2 cm	<0.1 g	whiteware with blue
101 E1m	1	1	ceramic	sherd	0.9 x 0.6 x 0.1 cm	<0.1 g	whiteware with blue
		2	ceramic	sherds	1.2 x 1.1 x 0.3 cm	0.4 g	whiteware
					1.4 x 1.0 x 0.2 cm	0.4 g	
		1	ceramic	sherd	1.2 x 1.0 x 0.3 cm	0.3 g	redware with lead glaze
101 W1m	1	1	brass	button back	2.8 x 0.6 cm	5.1 g	
101 W3m	1	1	ceramc	sherd	0.9 x 0.7 x 0.3 cm	0.3 g	whiteware with brown transfer
		1	ceramc	sherd	1.2 x 1.1 x 0.3 cm	0.4 g	redware

Excavator: Kris

Project name: Oak Woods Subdivision IB Mierisch RPA Date: July 2020

STP#	Depth (cm)	Soil Description	Cultural Material	Bag # / Notes
	1 0-20	Brown Silty loam with gravels	NCM	1 nodule of natural chert
	20-31.5	Yellowish brown silty clay loam with gravels	NCM	
:	2 0-30	Brown Silty loam with gravels	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
;	3 0-24	Brown Silty loam with gravels	NCM	
	24-38	Yellowish brown silty loam with gravels	NCM	
	1 0-24	Brown Silty loam with gravels	NCM	
	24-38	Yellowish brown silty loam with gravels	NCM	
	5 0-26	Brown Silty loam with gravels	NCM	
	26-38	Yellowish brown silty loam with gravels	NCM	
(6 0-25	Brown Silty loam with gravels	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
	7 0-23	Brown Silty loam with gravels	NCM	
	23-38	Yellowish brown silty clay with gravels	NCM	
	3 0-12	Brown Silty loam with gravels	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
,	9 0-23	Brown Silty loam with gravels	NCM	
	23-36	Yellowish brown silty loam with gravels		

^{**}Please leave one blank space between shovel tests**

10	0-23	Brown Silty loam with gravels	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
	IN/A	Dark grayish brown silty loam with	INCIVI	TOOK OBSTRUCTION
11	0-20	gravels	NCM	Adjacent to natural spring
	N/A	Rock Obstruction	NCM	Rock Obstruction
		Dark grayish brown silty loam with		
12	0-30	gravels	NCM	Very rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
13	0-17	Dark grayish brown silty loam with gravels	NCM	Very rocky
	17-20	Yellowish brown silty loam with gravels	NCM	Very rocky
	N/A	Rock Obstruction		Rock Obstruction
		Dark grayish brown silty loam with		
14	0-18	gravels	NCM	Very rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
15	0-12	Dark grayish brown silty loam with gravels	NCM	Very rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
		Dark grayish brown silty loam with		
16	0-13	gravels	NCM	Extremely rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
17	0-29	Dark grayish brown silty loam with gravels	NCM	Very rocky
	29-33	Yellowish brown silty loam with gravels	NCM	Very rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
		Dark grayish brown silty loam with		
18	0-28	gravels	NCM	Very rocky
	28-35	Yellowish brown silty loam with gravels	NCM	
19	0-25	Dark grayish brown silty loam with gravels	NCM	Very rocky
	25-32	Yellowish brown	NCM	Very rocky
		Dark grayish brown silty loam with		
20	0-31	gravels	NCM	Very rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction

^{**}Please leave one blank space between shovel tests**

21	0-28	Dark grayish brown silty loam with gravels	NCM	Rocky
	28-37	Yellowish brown silty loam with gravels	NCM	Rocky
	20-31		INCIVI	rocky
		Dark grayish brown silty loam with		
22	0-26	gravels	NCM	Rocky
	26-31	Yellowish brown silty loam with gravels	NCM	Rocky
		Dark grayish brown silty loam with		j
23	0-27	gravels	NCM	Rocky
	27-34	Yellowish brown silty loam with gravels	NCM	Rocky
		Dark grayish brown silty loam with		
24	0-24	gravels	NCM	Rocky
	04.00	Vallauriah hyayya ailtu laaga yrith ayayyala	NOM	Dooley
	24-30	Yellowish brown silty loam with gravels	NCM	Rocky
25	0.00	Dark grayish brown silty loam with gravels	NCM	Rocky
25	0-23	graveis	NCIVI	Rocky
	23-30	Yellowish brown silty loam with gravels	NCM	Rocky
	23-30	Tellowish brown silty loan with graves	INCIVI	Much softer soil, higher
26	0-25	Brown silty loam	NCM	elevation
20	25-36	Yellowish brown silty loam	NCM	
	20 00		110	Much softer soil, higher
27	0-33	Brown silty loam	NCM	elevation
	33-44	Yellowish brown silty loam	NCM	
		,		Much softer soil, higher
28	0-25	Brown silty loam	NCM	elevation
	25-38	Yellowish brown silty loam	NCM	
29	0-20	Dark grayish brown silty clay loam	NCM	Adjacent to road
	20-30.5	Light grayish brown silty clay	NCM	
30	0-15	Dark grayish brown silt loam	NCM	Very rocky
	N/A	Rock Obstruction	NCM	
31	N/A	N/A	NCM	Not Dug, Wet and Rocl
	N/A	N/A	NCM	Not Dug, Wet and Rocl
	N/A	N/A	NCM	Not Dug, Wet
	0-20	Dark grayish brown silt loam	NCM	Damp and rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
35	0-18	Dark grayish brown silt loam	NCM	Damp and rocky
	N/A	Rock Obstruction	NCM	Rock Obstruction
_		.	l	Rocky, slightly climbing
36	0-15	Dark grayish brown silt loam	NCM	elevation
	N/A	Rock Obstruction	NCM	Rock Obstruction
37	0-27	Brown silty loam	NCM	
2.5	27-37	Yellowish brown silty loam	NCM	
38	0-23	Brown silty loam	NCM	
00	23-35	Yellowish brown silty loam	NCM	
39	0-28	Brown silty loam	NCM	Dools Obstact Co.
	N/A	Rock Obstruction	NCM	Rock Obstruction

^{**}Please leave one blank space between shovel tests**

40	0-30	Brown silty loam	NCM	
	30-33	Yellowish brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
41	0-43	Brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
42	0-30	Brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
43	0-33	Brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
44	0-24	Dark grayish brown silty loam	NCM	
	24-30	Light grayish brown silty loam	NCM	
45	0-30	Brown silty loam with gravels	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
46	0-41	Grayish brown silty loam	NCM	
	41-51	Yellowish brown silty loam with gravels	NCM	
47	0-30	Grayish brown silty loam	NCM	Wetland-like soil
		Yellowish brown and orange-brown		
	30-43	silty loam with gravels	NCM	Wetland-like soil
48	0-25	Grayish brown silty loam	NCM	Wetland-like soil
		Yellowish brown and orange-brown		
	25-36	silty loam with gravels	NCM	Wetland-like soil
49	0-20	Grayish brown silty loam	NCM	Wetland-like soil
	N/A	Rock Obstruction	NCM	Rock Obstruction
50	0-15	Grayish brown silty loam	NCM	Wetland-like soil
	N/A	Rock Obstruction	NCM	Rock Obstruction
	N/A	N/A	NCM	Not Dug, Wet and Rock
	N/A	N/A	NCM	Not Dug, Wet and Rock
	N/A	N/A	NCM	Not Dug, Wet and Rock
54	0-15	Grayish brown silty loam	NCM	Wetland-like soil
	N/A	Rock Obstruction	NCM	Rock Obstruction
	0-10	Grayish brown silty loam	NCM	Wetland-like soil
	N/A	Rock Obstruction	NCM	Rock Obstruction
56	0-23	Dark grayish brown silt loam	NCM	Wetland-like soil
F.7	23-33	Light gray clay	NCM	Wetland-like soil
	N/A	N/A	NCM	Not Dug, Wet and Rock
58	0-18	Dark grayish brown silt loam	NCM	Wetland-like soil Wetland-like soil
50	18-28	Light gray clay Brown silt loam	NCM	vvetiand-like soii
59	0-8		NCM	Rock Obstruction
	N/A	Rock Obstruction	NCM	Rock Obstruction
60	0-8	Grayish brown silty loam	NCM	Rock Obstruction
	N/A	Rock Obstruction	NCM	
	N/A	N/A	NCM	Not Dug, Wet and Rock
62	0-20 20-30	Brown silty loam Light grayish brown silty loam	NCM NCM	Excessively drained Excessively drained
60		Brown silty sandy loam	NCM	Excessively drained
63	0-28 N/A	Rock Obstruction	NCM NCM	Rock Obstruction
6.4		Very dark grayish brown silty loam	NCM	Poorly drained
64	0-23	Very light gray silty clay loam	NCM NCM	r oony urameu
G.F.	23-33 0-30	Brown silty loam	NCM NCM	
05	0-30	DIOWIT SIRY IOAITI	INOIVI	L

^{**}Please leave one blank space between shovel tests**

	30-41	Yellowish brown silty loam	NCM	
66	0-28	Very dark grayish brown silty loam	NCM	
	28-38	Gray brown silty clay loam	NCM	
67	0-15	Brown silty loam	NCM	
	15-25	Light yellowish brown silty loam	NCM	
68	0-20	Brown silty loam	NCM	Excessively drained
	20-30	Light yellowish brown silty loam	NCM	Excessively drained
69	0-15	Brown silty loam	NCM	Excessively drained
	15-25	Light yellowish brown silty loam	NCM	Excessively drained
70	0-30	Brown silty loam	NCM	
	30-41	Light yellowish brown silty loam	NCM	
71	0-25	Brown silty loam	NCM	
	25-36	Light yellowish brown silty loam	NCM	
72	0-28	Brown silty loam	NCM	Excessively drained
	28-41	Light yellowish brown silty loam	NCM	Excessively drained
73	0-30	Brown silty loam	NCM	Excessively drained
	30-41	Light yellowish brown silty loam	NCM	Excessively drained
74	0-30	Brown silty loam	NCM	Excessively drained
	30-41	Light yellowish brown silty loam	NCM	Excessively drained
75	0-30	Brown silty loam	NCM	Excessively drained
	30-41	Light yellowish brown silty loam	NCM	Excessively drained
76	0-25	Brown silty loam	NCM	Excessively drained
	25-36	Light yellowish brown silty loam	NCM	Excessively drained
77	0-20	Brown silty loam	NCM	Excessively drained
	20-30	Light yellowish brown silty loam	NCM	Excessively drained
78	0-15	Brown silty loam	NCM	Excessively drained
	15-28	Light yellowish brown silty loam	NCM	Excessively drained
79	0-18	Brown silty loam	NCM	Excessively drained
	18-28	Light yellowish brown silty loam	NCM	Excessively drained
80	0-25	Brown silty loam	NCM	Excessively drained
	25-36	Light yellowish brown silty loam	NCM	Excessively drained
81	0-30	Brown silty loam	NCM	Excessively drained
	30-41	Light yellowish brown silty loam	NCM	Excessively drained
82	0-20	Brown silty loam	NCM	Excessively drained
	20-30	Light yellowish brown silty loam	NCM	Excessively drained
83	0-15	Very dark grayish brown silty loam	NCM	Poorly drained
	45.00	Var light calls sigh basses sitted as	1014	De auli i dualia a d
	15-30	Very light yellowish brown silty loam	NCM	Poorly drained
84	0-18	Very dark grayish brown silty loam	NCM	Poorly drained
	40.00	Very light yellowish brown silty loam	NOM	Poorly drained
0.5	18-30	Very dark grayish brown silty loam	NCM	Poorly drained Poorly drained
85	0-15	Very dark grayish brown silly loan	NCM	Poorly drained
	15-33	Very light yellowish brown silty loam	NCM	Poorly drained
86	0-13	Very dark grayish brown silty loam	NCM	Poorly drained
- 00	0-10	Voly dank grayion brown silty loain	INOIVI	1 Johny didiliou
	13-25	Very light yellowish brown silty loam	NCM	Poorly drained
87	0-13	Very dark grayish brown silty loam	NCM	Poorly drained
- 57	0 10	1 , 2	1.13111	
	13-25	Very light yellowish brown silty loam	NCM	Poorly drained
		i y ng y namen a a a mi anty roam		,

^{**}Please leave one blank space between shovel tests**

88	0-36	Brown silty loam	NCM	Very dry, near roadside
	36-46	Light yellowish brown silty loam	NCM	Very dry, near roadside
89	0-30	Brown silty loam	NCM	
	30-41	Light yellowish brown silty loam	NCM	
90	N/A	N/A	NCM	Not Dug, hillside slope
	0-30	Brown silty loam	NCM	,
	30-46	Light yellowish brown silty loam	NCM	
92	0-41	Brown silty loam	NCM	
	41-51	Light yellowish brown silty loam	NCM	
93	0-33	Brown silty loam	NCM	
	33-43	Light yellowish brown silty loam	NCM	
94	0-15	Brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
95	0-25	Brown silty loam	NCM	
	25-36	Light yellowish brown silty loam	NCM	
96	0-28	Brown silty loam	NCM	
	28-38	Light yellowish brown silty loam	NCM	
97	0-25	Brown silty loam	NCM	
	25-36	Light yellowish brown silty loam	NCM	
98	0-30	Brown silty loam	NCM	
	30-41	Light yellowish brown silty loam	NCM	
99	0-18	Brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
100	0-15	Brown silty loam	NCM	
	N/A	Rock Obstruction	NCM	Rock Obstruction
101	0-20	Brown silty loam	1 whiteware sherd.	
	20-30	Light yellowish brown silty loam	NCM	
101 N1	0-20	Brown silty loam	1 whiteware sherd.	
	20-33	Rock Obstruction	NCM	
101 N3	0-22	Brown silty loam	2 whiteware sherds	
	22-35	Light yellowish brown silty loam		
101 NW1	0-20	Brown silty loam	1 whiteware sherd.	
	20-39	Light yellowish brown silty loam		
101 NW3	N/A	Brown silty loam	1 whiteware sherd.	
		Light yellowish brown silty loam		
101 E1	0-15	Light yellowish brown silty loam	3 whiteware sherds,	
	15-25	Brown silty loam	1 redware sherd	
101 E3	0-25	Brown silty loam	NCM	
	25-36	Light yellowish brown silty loam	NCM	
101 S1	0-15	Brown silty loam	NCM	
•	Rock	Light yellowish brown silty loam	NCM	
101 S3	0-20	Brown silty loam	NCM	
	20-30	Light yellowish brown silty loam	NCM	
101 W1	0-20	Brown silty loam	1 brass button	
	20-30	Yellowish brown silty loam	NCM	
101 W3	0-25	Brown silty loam	1 whiteware sherd, 1 redware sherd	
	25-36	Yellowish brown silty loam	NCM	i

^{**}Please leave one blank space between shovel tests**

		D 36 1		Very rocky, excessively
110	0-20	Brown silty loam	NCM	drained
	N/A	Rock Obstruction	NCM	Rock Obstruction
				Very rocky, excessively
	0-20	Brown silty loam	NCM	drained
	0-20	Brown silty loam	NCM	
	Rock	Rock Obstruction	NCM	Rock Obstruction
103	N/A	N/A	NCM	Not Dug, hillside slope
104	0-15	Light yellowish brown silty loam	NCM	Dry, rocky hillside
	15-25	Brown silty loam	NCM	Excessively drained
105	0-25	Brown silty loam	NCM	Excessively drained
	25-36	Light yellowish brown silty loam	NCM	Excessively drained
106	0-15	Brown silty loam	NCM	Excessively drained
	Rock	Rock Obstruction	NCM	Rock Obstruction
107	0-20	Brown silty loam	NCM	Excessively drained
	20-30	Light yellowish brown silty loam	NCM	Excessively drained
		,		Very rocky, excessively
108	0-20	Brown silty loam	NCM	drained
				Very rocky, excessively
	20-30	Yellowish brown silty loam	NCM	drained
				Very rocky, excessively
109	0-25	Brown silty loam	NCM	drained
				Very rocky, excessively
	25-36	Yellowish brown silty loam	NCM	drained
				Very rocky, excessively
110	0-20	Brown silty loam	NCM	drained
	N/A	Rock Obstruction	NCM	Rock Obstruction
				Very rocky, excessively
111	0-20	Brown silty loam	NCM	drained
				Very rocky, excessively
	20-30	Yellowish brown silty loam	NCM	drained
				Very rocky, excessively
112	0-13	Brown silty loam	NCM	drained
	N/A	Rock Obstruction	NCM	Rock Obstruction
				Very rocky, excessively
113	0-13	Brown silty loam	NCM	drained
	N/A	Rock Obstruction	NCM	Rock Obstruction
				Very rocky, excessively
114	0-10	Brown silty loam	NCM	drained
	N/A	Rock Obstruction	NCM	Rock Obstruction
115	0-20	Very dark grayish brown silty loam	NCM	Wetland-like soil

^{**}Please leave one blank space between shovel tests**