

Chapter 16. Site 18Cv481 (GAI Site 8)

Phase Ib and Phase II

Location: Old Bay Farm Section, Area 7

Site Type: Late nineteenth to Early twentieth Century Domestic Site

Site Size: 40x45 meters (130x150 feet)

Recommendations: Not NRHP Eligible/No Additional Work Recommended

Site Setting

GAI conducted Phase Ib survey and Phase II National Register site evaluation at Site 18Cv481 (GAI Site 8). Site 18Cv481, an historic domestic artifact scatter, lies at the northern edge of a fallow field on a broad ridgetop above Goldstein Branch in the project's Old Bay Farm Section, Area 7 (Photograph 16-1, Figure 16-1). Woodlands lie to the north of the site and two finger-like projections of the field extend west and south. The site measures approximately 130x150 feet (40x45 meters or 0.43 acres).



Photograph 16-1. Site 18Cv481 in Fallow Field, Facing East

Phase Ib Investigation

During the Phase Ib survey, GAI excavated 22 STPs at 15-meter intervals, followed by radial shovel testing around 10 positive STPs (Figure 16-2). Based on Phase Ib shovel testing, soils within the site consist of an Ap-B soil horizon sequence with disturbances limited to cultivation. As described for STP 111, the soil profile includes a 17-cm-thick yellowish-brown loam Ap horizon and a light yellowish-brown sandy loam B horizon (Figure 16-3). Historic artifacts were recovered from the Ap horizon.

Phase Ib investigations resulted in 16 positive STPs producing 36 historic artifacts (Table 16-1) consisting largely of kitchen-related ceramics (whiteware, earthenware, yellowware and pearlware) and container glass (aqua, amethyst, amber and clear). A few pieces of architectural debris (tinted window glass) and two clay pipe fragments were also recovered. Temporally diagnostic artifacts include pearlware (1780-1830), yellowware (1830-1900) and plain whiteware (1830-present). One fragment of sun-colored amethyst bottle glass (1880-1915) was also recovered. These specimens suggest a nineteenth to early-twentieth century temporal affiliation. Review of the 15-Minute USGS Drum Point Quadrangle (1905) indicates a structure in the general vicinity of Site 18Cv481, suggesting that this was a domestic site (Figure 16-4).

Table 16-1. Site 18Cv481, Phase Ib Pattern Analysis

Class	Sub-Class	Total
Kitchen	Bottles/Jars	8
	Ceramics	22
	Kitchen Total	30
Architecture	Window Glass	4
Tobacco Pipes	White Ball Clay	2
Total		36

Site 18Cv481 was recommended for Phase II testing to evaluate its eligibility for listing to the NRHP. GAI's Phase Ib Draft Interim Report (Munford and Hyland 2007) recommended systematic STPs excavation at 15-ft intervals to further refine site boundaries, followed by excavation of eight test units distributed within the boundaries of the site. These recommendations were approved by MHT in a June 7, 2007 letter (see Appendix A). Phase II investigations followed a Phase II Scope of Work submitted to MACTEC on October 20, 2007) (see Appendix B).

Phase II Methods

Phase II investigations included background research, field excavations, and laboratory analysis. The Phase II study was designed to accomplish the following project goals: (1) interpret the cultural affiliation and function of the site; (2) identify the horizontal and vertical site limits; (3) determine site integrity; (4) assess the site research potential; and (5) evaluate site significance as defined by eligibility for listing on the National Register of Historic Places. Phase II fieldwork included excavation of 97 STPs and 7 test units (Figure 16-5). Fieldwork was conducted from April 1-10, 2008.

Archival Research

Archival research, which included deed and probate record investigations, was used to create a chain-of-title for this site (Table 16-2). The present owner of the parcel of land that contains this site (Calvert Cliffs Nuclear Power Plant, Inc.) acquired it from the Baltimore Gas & Electric Company. The Baltimore Gas & Electric Company had owned this land since November 6, 1985, when the company, through Bankers Trust Company, purchased it from Gorman P. Pardoe, et ux. (Calvert County Deeds, Liber 351, folio 542). The transfer of this parcel also involved a court case, which appeared on the Calvert County Court's docket as Gorman P. Pardoe vs. Baltimore Gas & Electric Company, Civil Action # CA-85-447. On April 25, 1973, Gorman P. Pardoe, et ux., acquired the property from James W. Pardoe, who had purchased two separate parcels and combined them for sale to Gorman (Calvert County Deeds, Liber 155, folio 720). In two deeds (Calvert County Deeds, Liber AWR 1, folio 158, and Liber AWR 6, folio 517), James W. Pardoe acquired these parcels in 1943 and 1946.

Table 16-2
Site 18Cv481 Chain-of-Title

Date of Instrument	Grantee/Defendant	Grantor/Complainant	Conveyance Reference	Comments
July 1, 2000	Calvert Cliffs Nuclear Power Plant, Inc.	Baltimore Gas and Electric Company	Liber KPS 1282, folio 246	
November 6, 1985	Baltimore Gas and Electric Company	Gorman P. Pardoe, et ux.	Liber 351, folio 542	
November 12, 1964	Gorman P. Pardoe, et ux.	James W. Pardoe	Liber 155, folio 720	
May 21, 1946	James W. Pardoe	Harry B. Trueman	Liber AWR 6, folio 517	Adjoins Bennie C. Dowell, Louis L. Goldstein, James W. Pardoe
November 2, 1943	James W. Pardoe	Samuel C. Cox	Liber AWR 1, folio 158	
March 29, 1904	Lucy Johnson	Robert J. Sorrell	Liber GWD 4, folio 385	
September 21, 1870	Richard Sorrell	Thomas R. Grover	Liber SS 2, folio 59	

The first transaction was between James W. Pardoe and Samuel C. Cox on November 2, 1943, which followed a public sale on October 27, 1942, prompted by default on tax payment by the heirs of Lucy Johnson (Samuel C. Cox was Treasurer of Calvert County). This 10-acre parcel adjoined the lands of Thomas Lott and Olivia Johnson (Calvert County Deeds, Liber AWR 1, folio 158). Lucy Johnson acquired the property on March 29, 1904, from Robert J. Sorrell (Calvert County Deeds, Liber GWD 4,

folio 385). The USGS map of Drum Point quadrangle depicts a structure in this location in 1905 (see Figure 16-4), which was likely present when Lucy Johnson acquired the property.

Robert J. Sorrell had inherited this land from his father, Richard Sorrell, and his inheritance was confirmed by Thomas R. Grover, administrator on the estate of Samuel Pardoe, his father, on September 21, 1870 (Calvert County Deeds, Liber SS2, folio 59).

The second tract included 15 acres known as the Gideon Johnson Tract. James W. Pardoe acquired it from Harry B. Trueman on May 21, 1946. The Gideon Johnson Tract adjoined land owned by Bennie C. Dowell, Louis L. Goldstein, James W. Pardoe (Calvert County Deeds, Liber AWR 6, folio 517).

Unfortunately for researchers, none of the deeds provided a text description of buildings. Furthermore, there are no references to instruments transferring the property farther back than 1870. Calvert County courthouse fires limit the success of further inquiry.

Phase II Fieldwork

Prior to field excavation, a grid measuring 180 ft north/south and 180 ft east/west was established across the site by GAI surveyors. Hubs were placed in four transects (N20, N80, N140, and N200) at 60-ft intervals (E0, E60, E120 and E180). The field investigation began with the systematic excavation of STPs at 15-ft (4.6-m) intervals. STPs measured approximately 50 cm in diameter and were excavated in natural layers. This was followed by the excavation of larger excavation units that typically measured 5x5 ft (1.5x1.5 m) or 3x3 ft (0.9x0.9 m) in size. The units were judgmentally placed based on the density of artifacts from STP excavations and the need to test different areas within the site. The STPs and units were excavated into the sterile "B" soil horizon. The bottom of each STP and unit was carefully cleaned and examined.

Phase II STP Excavations

Phase II field investigation began with the excavation of 97 STPs at 15-foot (5-meter) intervals across the site (see Figure 16-4). Distributions of artifacts from STPs provide information on site limits and show general patterns of site usage. On domestic sites, higher frequencies of artifacts are generally found near the house and yard area and in refuse deposits, while lesser quantities are found on the fringe of the habitation area and lightly scattered across fields. Shovel test artifact distributions were plotted on site maps and the distribution of artifacts were, in part, used to guide the placement of subsequent test units.

Shovel tests yielded a low density (1 to 9 artifacts per shovel test) of artifacts from 43 positive STPs, totaling 142 artifacts. The distribution of Phase II STP artifacts revealed three low density clusters (Figure 16-6). Cluster 1 fell within the northwest quadrant of the site; Cluster 2 in the southwest to south-central portion of the site; and Cluster 3 within the southeastern quadrant.

High concentrations of architecture-related remains may reflect the location of former structures, burn piles, or demolition debris piles. The site lacked a concentration of architectural artifacts, with only one STP producing more than one artifact of this class of material (Figure 16-7, top). Map research indicates a house in the site location in the early-twentieth century. The low quantity of architectural remains from the Phase II STP excavations is unexpected, since map research indicates a structure in the site area in 1905.

The distribution of kitchen remains can reflect trash disposal locations and activity areas around the house. There were four STPs (all in Cluster 2) that produced five or more kitchen-related artifacts (Figure 16-7, bottom). The low-density scatter of mostly kitchen-related artifacts is more indicative of a field scatter or an outdoor workspace than a domestic site.

Phase II Test Unit Excavations

GAI excavated seven test units of varying sizes, totaling 127 square feet (11.8 square meters), to further investigate localities of higher artifact densities (Clusters 1-3) and explore for cultural features (see Figure 16-6). The number of proposed test units was reduced from eight to seven due to low artifact recoveries. Test unit excavations produced 756 artifacts. One test unit (TU2) yielded two

artifacts from subsoil; however, plow scars were identified within this excavation level (Photograph 16-2). No cultural features were identified during test unit excavations.



Photograph 16-2. Site 18Cv481, Plan View of TU 2 Showing Excavated Plow Scars, View to East

Test unit excavation confirmed that this previously cultivated field exhibited an Ap-Bt soil horizon sequence within eroded soils (i.e., the topsoil has been eroded/removed and the upper portion of the subsoil has been plowed) across the site. The Ap horizon in test units varied from approximately 0.6-1.0 ft (18-30 cm) thick (Table 16-3). Plow scars were observed at the Ap/Bt interface in all of the units.

Table 16-3. Site 18Cv481, Test Unit Summary Information

TU #	Provenience	Size (ft)	Sq ft	No. of Levels	Stratigraphy	Artifact Count
1	N95 E85	5x5	25	4	Ap, brown silty loam, 0-0.9'	222
				2	Bt, strong brown silty clay, 0.9'+	0
2	N90 E65	5x5	25	4	Ap, dark yellowish-brown silty loam, 0-0.8'	292
				2	Bt, yellowish-brown silty clay, 0.8'+	2
3	N130 E66	5x5	25	2	Ap, dark yellowish-brown silty loam, 0-0.7'	46
				2	Bt, yellowish-brown silty clay, 0.7'+	0
4	N145 E50	5x5	25	3	Ap, yellowish-brown silty loam, 0-0.85'	83
				1	Bt, yellowish-brown silty clay, 0.85'+	0
5	N100 E120	3x3	9	3	Ap, yellowish-brown silty loam, 0-0.9'	55
				1	Bt, strong brown silty clay, 0.9'+	0
6	N150 E130	3x3	9	2	Ap, dark yellowish-brown sandy loam, 0-0.6'	3
				1	Bt1, yellowish-brown to dark yellowish-brown sandy clay, compact, 0.6+	0
				1	Bt2, brownish yellow sandy clay, very compact	0
7	N160 E60	3x3	9	3	Ap, yellowish-brown silty loam, 0-1.0	53
				1	Bt, strong brown silty loam, 1.0+	0
Totals			127 sq ft			756

Cluster 1

Test units 3, 4 and 7 were placed within Cluster 1 (see Figure 16-5). Test Unit 3 was placed in a level area within the northwest quadrant of the site. The depth of the plowzone varied from 0.3-0.6 ft in depth (Figure 16-8, top). The low density of artifacts ($n=46$) and low quantity of architectural-related materials was unexpected given that excavation of nearby STP N125 E 60 yielded six artifacts. Artifacts from this unit include nails, window glass, bottle glass, and ceramics.

TU 4 was placed in a level portion of the site near an ornamental shrub. The soil stratigraphy of Test Unit 4 consists of 0.85-ft thick plowzone of yellowish-brown silty loam overlying sterile, strong brown clayey loam subsoil (Figure 16-8, bottom). Excavation of Test Unit 4 produced 83 artifacts, including nails, window glass, brick, bottle glass, ceramics, button, medicine bottle, shell, and a pipe bowl fragment.

TU 7 had a plowzone measuring nearly one-foot thick overlying sterile subsoil (Figure 16-9) and yielded 53 artifacts, including window glass, brick, bottle glass, ceramics, and a white ball clay pipe fragment.

Cluster 2

Test Units 1 and 2 were placed in Cluster 2 area (see Figure 16-4). Excavations at TU 1 revealed a brown silty loam plowzone approximately 0.9 ft thick overlying strong brown silty clay subsoil (Figure 16-10, top). This excavation produced 222 artifacts including nails, window glass, bricks, bottle glass, ceramics, button, lamp chimney glass, pipe bowl fragment, and unidentified items. The variety of bottle glass colors (amber, aqua, clear, cobalt, light blue, olive, and sun colored amethyst) indicates pieces from numerous bottles.

Excavations at nearby TU 2 documented dark yellowish-brown silty loam plowzone (measuring 0.8 ft thick) overlying yellowish-brown silty clay (subsoil) (Figure 16-10, bottom). This 5x5-ft unit produced more artifacts (*n*= 294) than any other unit. The types of artifacts from TU 2 were similar to those recovered from TU 1, except for the lack of cobalt blue bottle glass and lamp chimney glass. A prehistoric lithic, a clothing rivet, and medicine bottle glass were also found in TU 2.

Cluster 3

Test Unit 5 was located in a level area near an STP (N120 E95) that yielded the highest quantity of artifacts of any STP (five bottle glass, two ceramics, one window glass, and one shell artifact). The plowzone varied from about 0.6-0.9 feet in depth (Figure 16-11, top). Test Unit 5 produced 55 artifacts. The assemblage includes window glass, bottle glass, ceramics, and tobacco pipe bowl.

Northeast Quadrant

Test Unit 6 was placed in the northeast quadrant near STP N140 E135, which produced three artifacts (one brick and two bottle glass). This 3x3-ft unit, located in a topographic depression, had an irregular plowzone depth varying from 0.3-0.75 ft bgs (Figure 16-11, bottom). Excavations at Test Unit 6 produced only 3 artifacts (one oyster shell, one bottle glass, and one whiteware).

Phase I/II Artifact Analysis

Phase Ib investigations produced 34 historic artifacts and Phase II excavations yielded 885 for a total of 921 artifacts. One prehistoric lithic was recovered. There were 12 pieces of metal and plastic that could not be identified that were placed in an “unidentified” category. The remaining artifacts fell within eight historic artifact functional groups (Table 16-4).

**Table 16-4
Site 18Cv481 Pattern Analysis**

Class	Sub-Class	STP/ Other	TU 1	TU 2	TU 3	TU 4	TU 5	TU 6	TU 7	Total	%
Architecture	Brick, Block	4	5	2		1			2	14	1.5%
	Nails, Spikes, Etc.	1	4	4	3				2	14	1.5%
	Window Glass	8	12	5	1	7	5		3	41	4.5%
	Plumbing Fixtures		1							1	0.1%
Architecture Total		13	22	11	4	8	5		7	70	7.6%
Clothing	Clothing Fasteners	2	1	1		1				5	0.5%
	Clothing Related-Other			1						1	0.1%
Clothing Total		2	1	2		1				6	0.7%
Faunal Total	Shell	4	2	8		1		1		16	1.7%
Furnishings Total	Lighting		1							1	0.1%
Kitchen	Bottles/Jars	58	101	137	19	34	14	1	11	375	40.7%
	Ceramics	76	82	115	23	36	35	1	33	401	43.5%
	Decorative Table Glass	1		1						2	0.2%

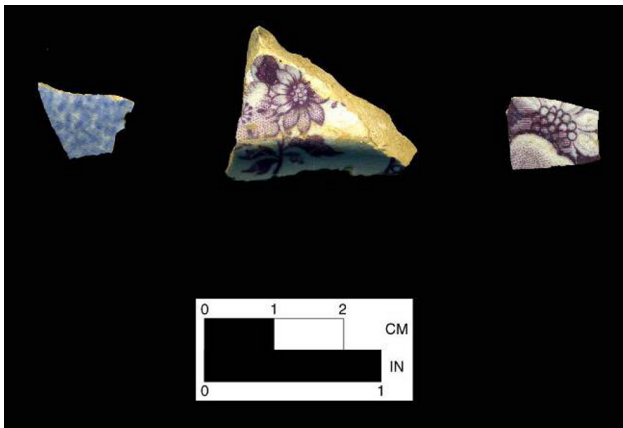
Class	Sub-Class	STP/ Other	TU 1	TU 2	TU 3	TU 4	TU 5	TU 6	TU 7	Total	%
	Kitchen Total	135	183	253	42	70	49	2	44	778	84.5%
Personal Total	Pharmaceutical			2		1				3	0.3%
Prehistoric Total	Lithic			1						1	0.1%
Tobacco Pipes Total	White Ball Clay	6	12	13		1	1		1	34	3.7%
Unidentifiable Total	Indeterminate	5	1	4		1			1	12	1.3%
	Total	165	222	294	46	83	55	3	53	921	100.0%
	%	17.9%	24.1%	31.9%	5.0%	9.0%	6.0%	0.3%	5.8%	100.0%	

Pattern Analysis

The kitchen group consists of artifacts that represent the remains of food preparation, service, and consumption. A total of 778 artifacts (84.5% of the site assemblage) fell within the kitchen group (see Table 16-4). This group was divided into three subclasses and included 375 bottles and jars, 401 ceramics, and 2 decorative table glassware.

The bottle glass assemblage includes 39 beer bottle, 19 soda bottle, and 316 bottle/jar pieces. Beer bottles were made from amber glass. The soda bottles were aqua colored glass. The remaining container glass pieces were separated by color and include 22 amethyst, 1 amber, 185 aqua, 18 blue, 6 light blue, 57 clear, 3 cobalt, 3 green, and 21 olive glass.

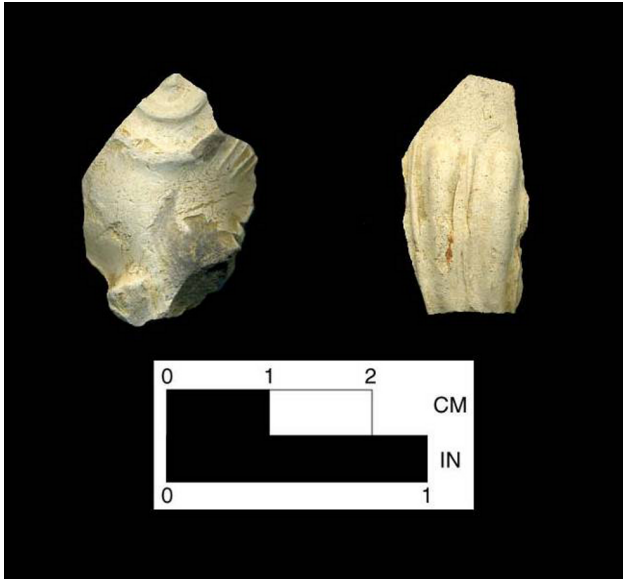
There were 401 kitchen-related ceramic artifacts. Seventy-five percent ($n=301$) of the ceramic assemblage is plain (undecorated) whiteware. Plain ceramics are generally less expensive than decorated wares. Decorated whiteware types include black, blue, brown, purple, and red transfer prints ($n=15$), blue and green hand-painted ($n=4$), edge decorated ($n=3$), sponge decorated ($n=2$), and annular ($n=3$) varieties (Photograph 16-3). There were also five whiteware sherds with blue or purple decoration of unknown type. The remaining types of ceramics represented include undecorated ironstone ($n=16$), undecorated porcelain ($n=8$), redware ($n=2$), stoneware ($n=14$), and yellowware (plain= 19 and annular= 1).



Photograph 16-3. Site 18Cv481, Sample of Decorated Whiteware Sherds (FS 27, 62, 65)

The architecture group includes construction materials, such as brick, nails, plaster, mortar, and window glass. Only 70 architectural-related items, including nails ($n=14$), window glass ($n=42$), and brick ($n=14$), were recovered. Architecture-related artifacts comprise 7.6% of all artifacts recovered during fieldwork (see Table 16-4). All of the nails were too corroded to provide evidence of manufacturing method.

The faunal group remains include animal bones, teeth, and shell that can be used to construct information about foodways. There were 16 oyster shell pieces recovered from the investigation (see Table 16-4)—too small a sample to reconstruct the food consumption patterns of the occupants.



Tobacco group remains include tobacco pipe and bowl fragments, ash trays, and lighters. White ball clay pipe pieces ($n=34$) were common at the site. The tobacco assemblage included three pipe stems and 31 pipe bowls. Seven of the pipe bowls were decorated (Photograph 16-4).

Photograph 16-4. Site 18Cv481, Sample of White Ball Clay Pipe Fragments (FS 62)

Small quantities of artifacts were represented in the remaining groups (see Table 16-4). Activities group includes a variety of materials (toys, tools, writing items, musical instruments, hardware, machine parts) and stable items (horse tack); one marble fell within the activities group.

The clothing group is comprised of artifacts related to clothing, accessories, and items used in the construction and/or repair of apparel. Clothing-related artifacts include five (glass, metal, and plastic) buttons and one clothing rivet.

Furnishings group consists of furniture hardware, lighting, figurines and other household furnishings. One lamp chimney glass fell within this group.

Personal group artifacts represent items that are individually owned or relate to personal hygiene, adornments, and medicine. Three medicine bottles fell within the personal group.

The functional group percentages of artifacts at Site 18Cv481 are atypical for a domestic site, which characteristically produces moderate to high quantities of both architecture and kitchen remains (range of 33-64% architecture artifacts and 34-61% kitchen artifacts) (cf. Ball 1984). The pattern that most closely fits with the artifact patterning at Site 18Cv481 is Ball's (1984:29-30) open refuse pattern, which he describes as secondary deposition that may include sheet refuse deposits in fields or refuse dumps.

The archaeological remains appear to conflict with the USGS 15' map, which clearly depicts a structure in this general area in 1905. According to Kirsti Uunila (personal communication July 15, 2008), when the power plant property was acquired, the new landowners demolished standing structures and hauled the demolition debris away and, in some cases, fill was hauled in and deposited in locations within the property. If the house that once occupied the site area was demolished and the demolition debris removed using mechanical equipment, then this might explain the smaller than expected frequency of architecture remains (and the lack of the historic A or Ap horizon at the site) resulting in an open refuse pattern.

Dating Analysis

The artifact assemblage contained 382 temporally diagnostic ceramic and glass artifacts (Table 16-5). These artifacts yielded a mean date of 1894 and a terminus post quem (TPQ) date of 1903 for the assemblage. This corresponds with the map research which depicts a house in this location in 1905. Plastic buttons and pieces of modern plastic were also recovered, suggesting twentieth-century activities.

Table 16-5
Site 18Cv481 Dating Analysis

Ware Type/Object	Decoration/Manufacturing Tech	Count	Begin Date	End Date	Reference
ironstone	plain	16	1840	1970	Wetherbee 1980
whiteware	annular	3	1830	1860	Price 1979; Mullins 1988
whiteware	hand painted	4	1840	1860	Lofstrum et al. 1982; Majewski & O'Brien 1984
whiteware	plain	294	1830	1970	Price 1979; Noël Hume 1980
whiteware	shell edge, blue	3	1830	1891	Lofstrum et al. 1982; Miller & Hunter 1990
whiteware	spongeware, blue	2	1830	1870	Robacker & Robacker 1978
whiteware	transfer print, blue	2	1828	1860	Majewski & O'Brien 1984; Mullins 1988
whiteware	transfer print, purple	6	1830	1860	Lofstrum et al. 1982
whiteware	transfer print, other colors	7	1828	1850	Majewski & O'Brien 1984
yellowware	annular	1	1827	1922	Brown 1982
yellowware	plain	19	1830	1900	Ketchum 1987
beer bottle	crown finish, machine made	1	1903	1970	Leif 1965:14
bottle glass	sun colored amethyst	23	1880	1915	Miller and Pacey 1985
prescription bottle	applied lip, patent finish	1	1820	1870	Deiss 1981
Total Count		382			

Mean Date: 1894

TPQ: 1903

Summary and Evaluation

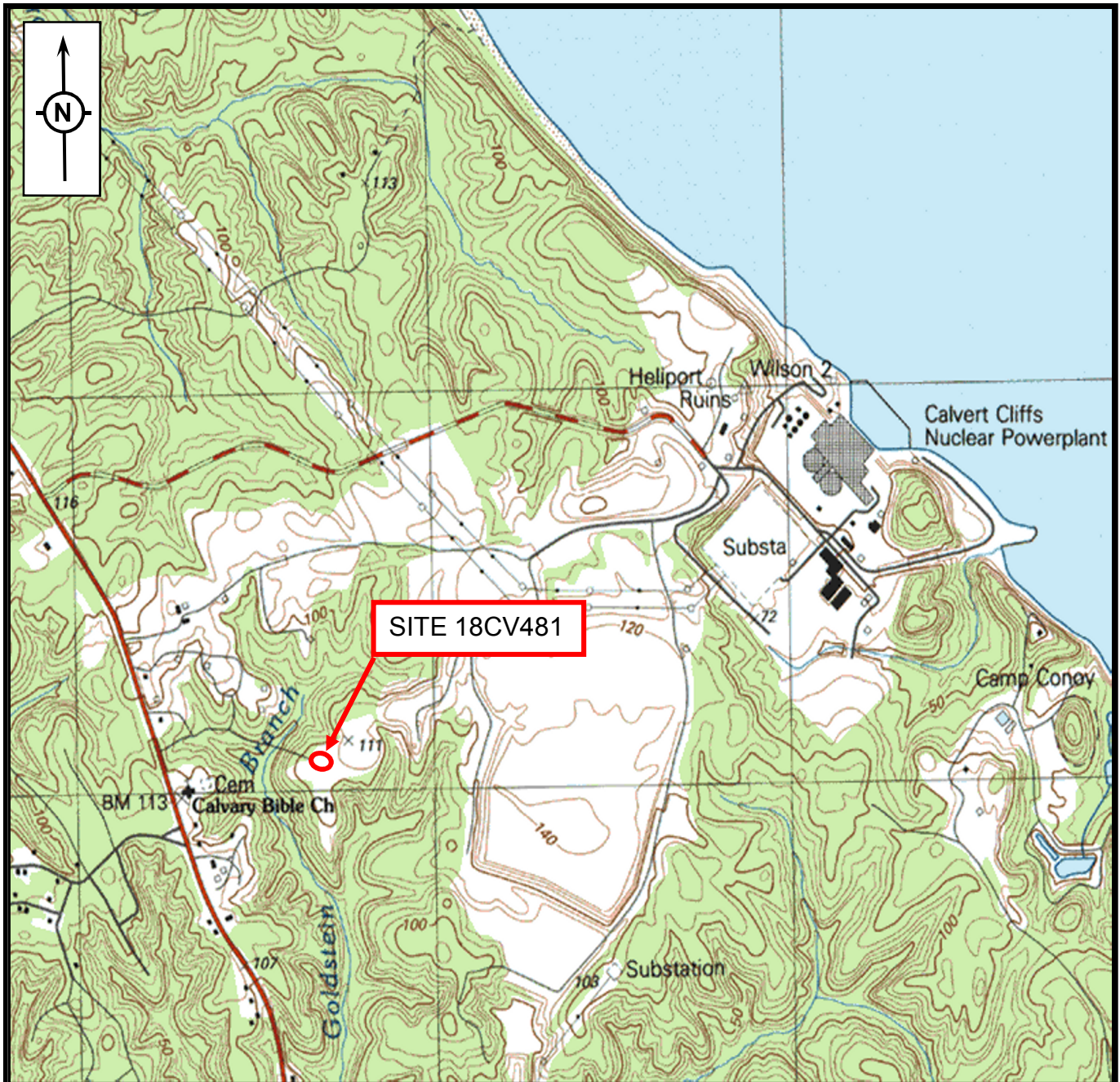
Site 18Cv481 is a late-nineteenth to early-twentieth-century domestic artifact scatter located on a broad ridgetop in the Old Bay Farm section of the project area. This site measures approximately 130x150 feet (40x45 meters). No features were identified at the site. A total of 921 artifacts were recovered from Phase I/II investigations, all but two from the plowzone. The two remaining artifacts were recovered from the upper Bt level with plow scars present.

Map research indicates a structure in the site vicinity in 1905. No evidence of structural features was identified. The artifact pattern (high percentage of kitchen artifacts and low percentage of architecture debris) is more indicative of a secondary refuse scatter than a domestic site. The current Ap horizon is part of the Bt horizon that was plowed, indicating that the A horizon has either eroded away or was removed during an effort to remove the demolition debris from the structure. Based on research and analysis, the remains of the house that once stood at this location was likely removed using mechanical equipment.

The site lacks integrity and does not possess the potential to address important questions relating to the history of this region. Based on the results of Phase I/II field investigations and archival research, GAI recommends that Site 18Cv481 is Not Eligible for listing on the National Register under Criterion D. Accordingly, GAI recommends no further investigations of this site.

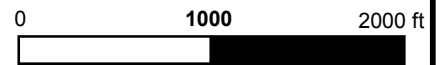
Site 18Cv481 Recommendations


Site 18Cv481 consists of the remains of a late-nineteenth to early-twentieth century domestic site on a broad ridgetop above Goldstein Branch. GAI recommends that Site 18Cv481 is not eligible to the National Register under Criterion D. GAI further recommends that the proposed project be allowed to proceed as planned with no additional archaeological testing in this locality.

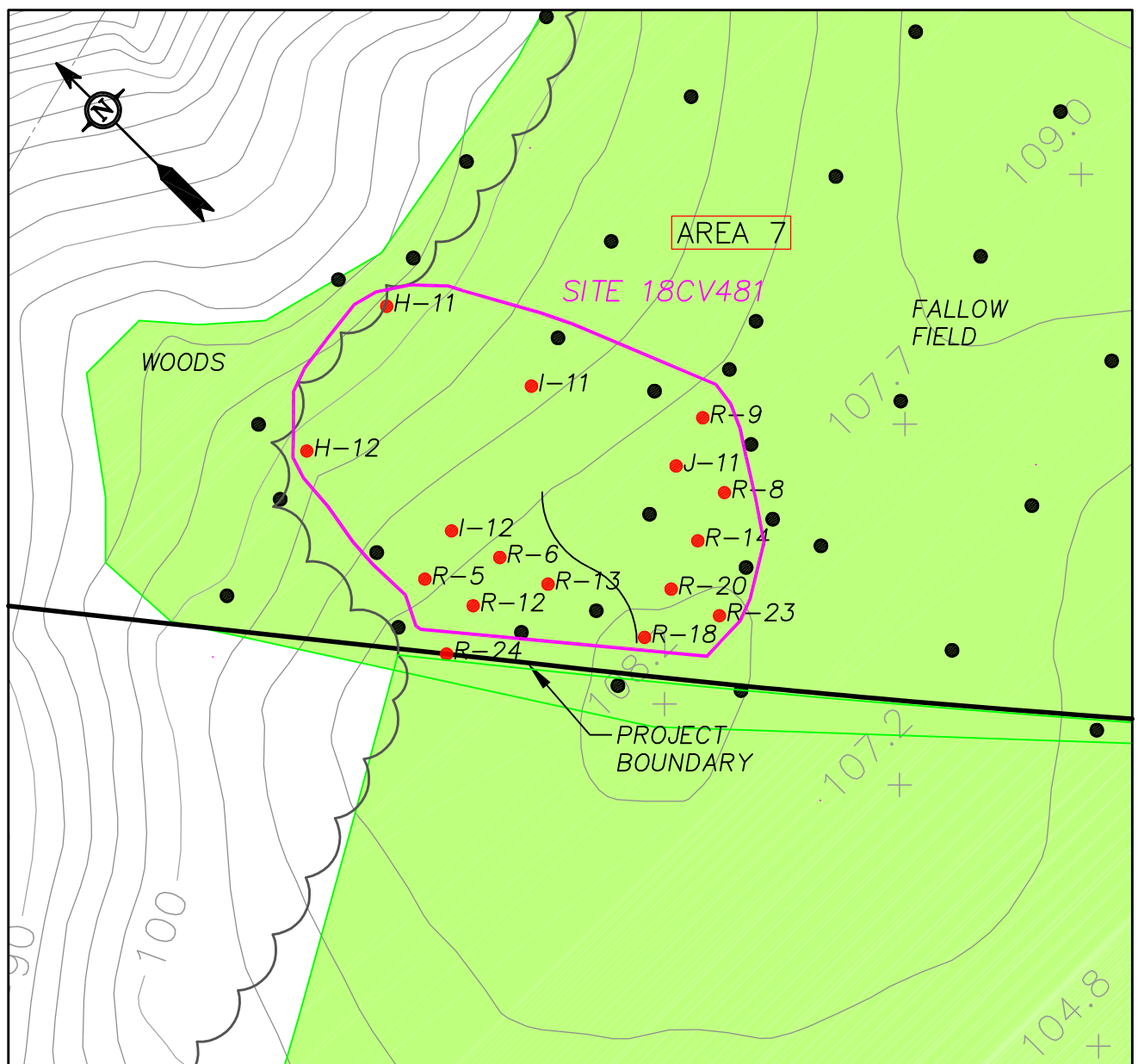


SOURCE: 1987 USGS 7.5-MINUTE COVE POINT, MD

Scale



 gai consultants	FIGURE 16-1 SITE 18CV481 LOCATION	DWN TJN CHKD BAM
	CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND	APPD. BAM DATE 3/7/07
		SCALE AS NOTED
		DRAWING NUMBER C080212.00

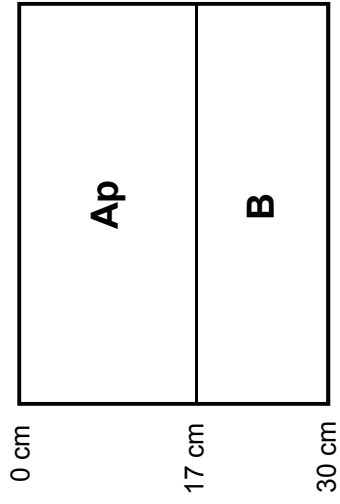


LEGEND:

- SITE BOUNDARY
- △ ISOLATED FIND
- NEGATIVE STP
- POSITIVE STP (HISTORIC)
- POSITIVE STP (PREHISTORIC)
- POSITIVE STP (HISTORIC/PREHISTORIC)
- F-1 STP IDENTIFICATION

<p>FIGURE 16-2 SITE 18CV481 SHOWING PHASE 1B TESTING LOCATIONS</p>	DWN. <u>RSE</u>	CHKD. <u>---</u>	SCALE:
	APPD. <u>---</u>	DATE <u>---</u>	1"=50'
<p>CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND</p>		<p>DRAWING NUMBER C060570-10-001-00-A-A006</p>	
		REV	

STP I-11



Ap – Yellowish brown (10YR5/4) loam

B – Light yellowish brown (10YR6/4) sand loam

Meter Scale



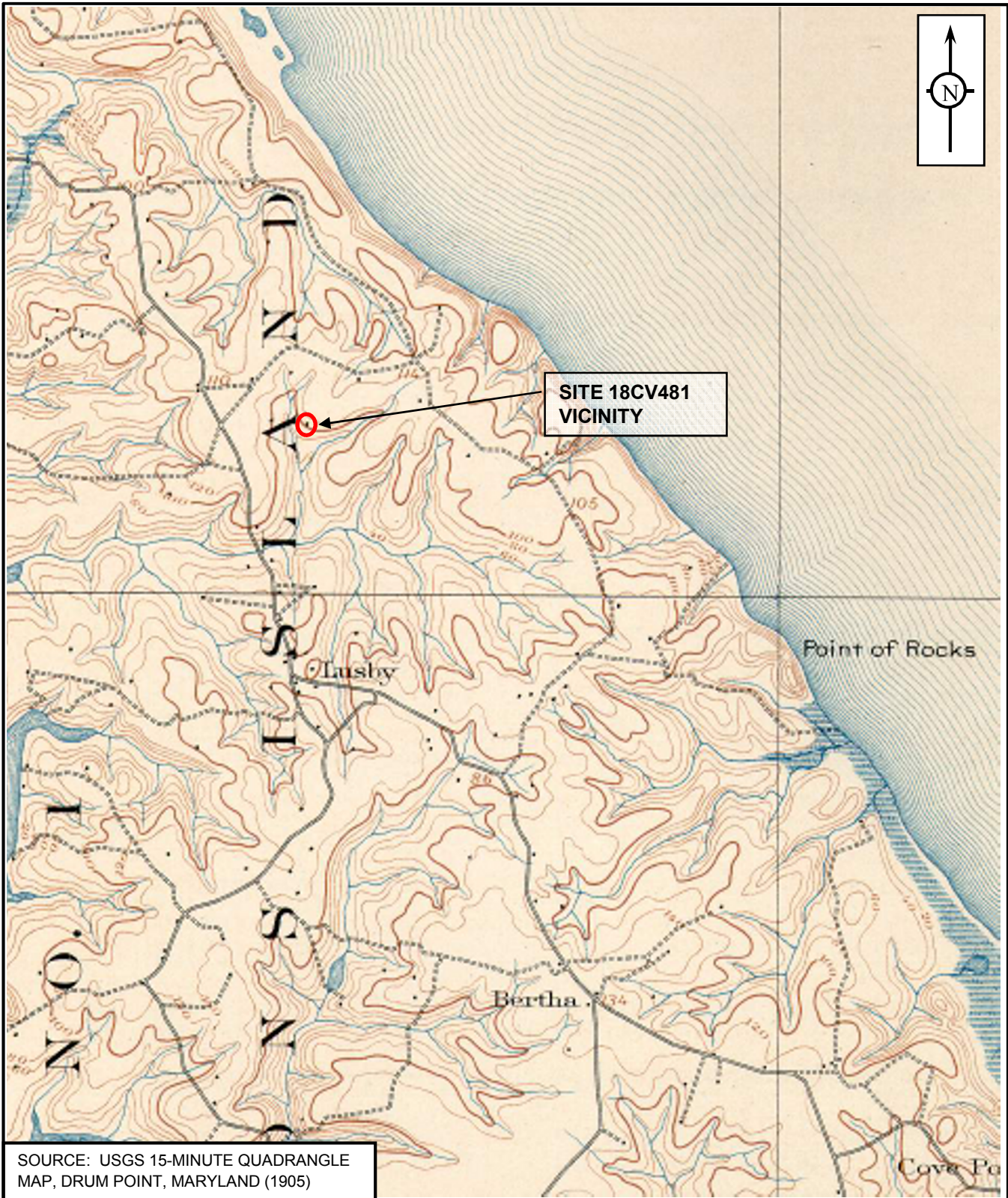
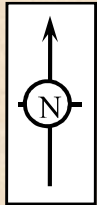
DWN	SJS	CHKD	BAM
APPD.	BAM	DATE	2/20/07
SCALE	As noted		
DRAWING NUMBER	C060570.10.010		

FIGURE 16-3. 18CV481: REPRESENTATIVE PHASE Ib SHOVEL TEST PROFILE (STP I-11)

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND



gai consultants

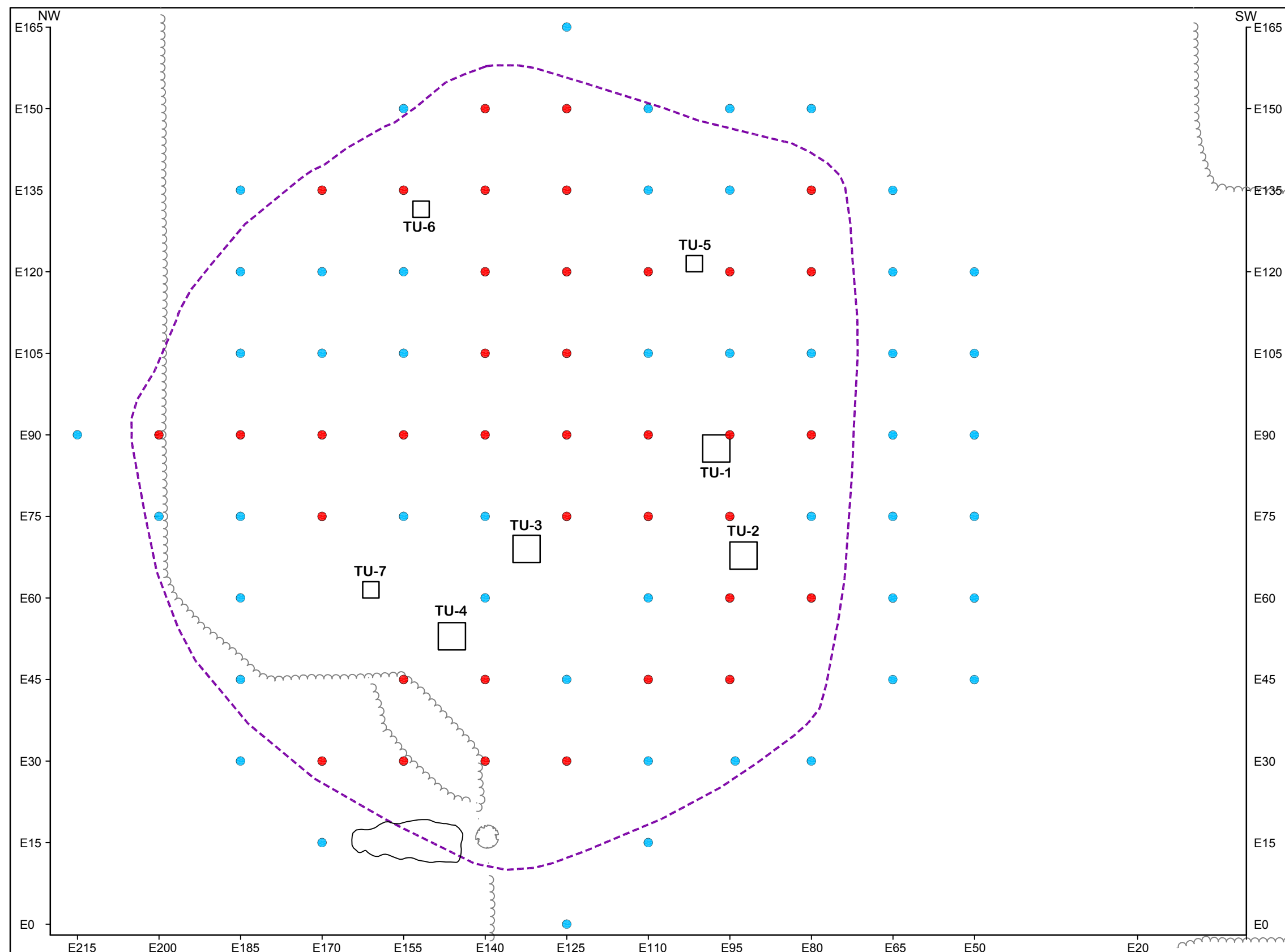
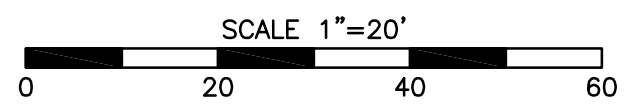
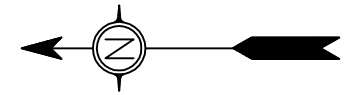


SOURCE: USGS 15-MINUTE QUADRANGLE MAP, DRUM POINT, MARYLAND (1905)



FIGURE 16-4
SITE 18CV481 AND VICINITY IN 1905
CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MD

SITE 18CV481
STP PLAN



LEGEND

- TEST UNIT-(TU)
- SHOVEL TEST PIT (STP)-NEGATIVE
- SHOVEL TEST PIT (STP)-POSITIVE (HISTORIC)
- SITE BOUNDARY
- TREE



FIGURE 16-5
SITE 18CV482
STP PLAN
PHASE II TESTING LOCATIONS
CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

DWN. IP	CHKD. -	SCALE:
APPD. -	DATE 7/28/08	1"=20'
DRAWING NUMBER		
C080212-00-000-00-C-B000		
		△ REV

PLOTTER FILE: ENV COLOR

DISTRIBUTION OF ALL ARTIFACTS

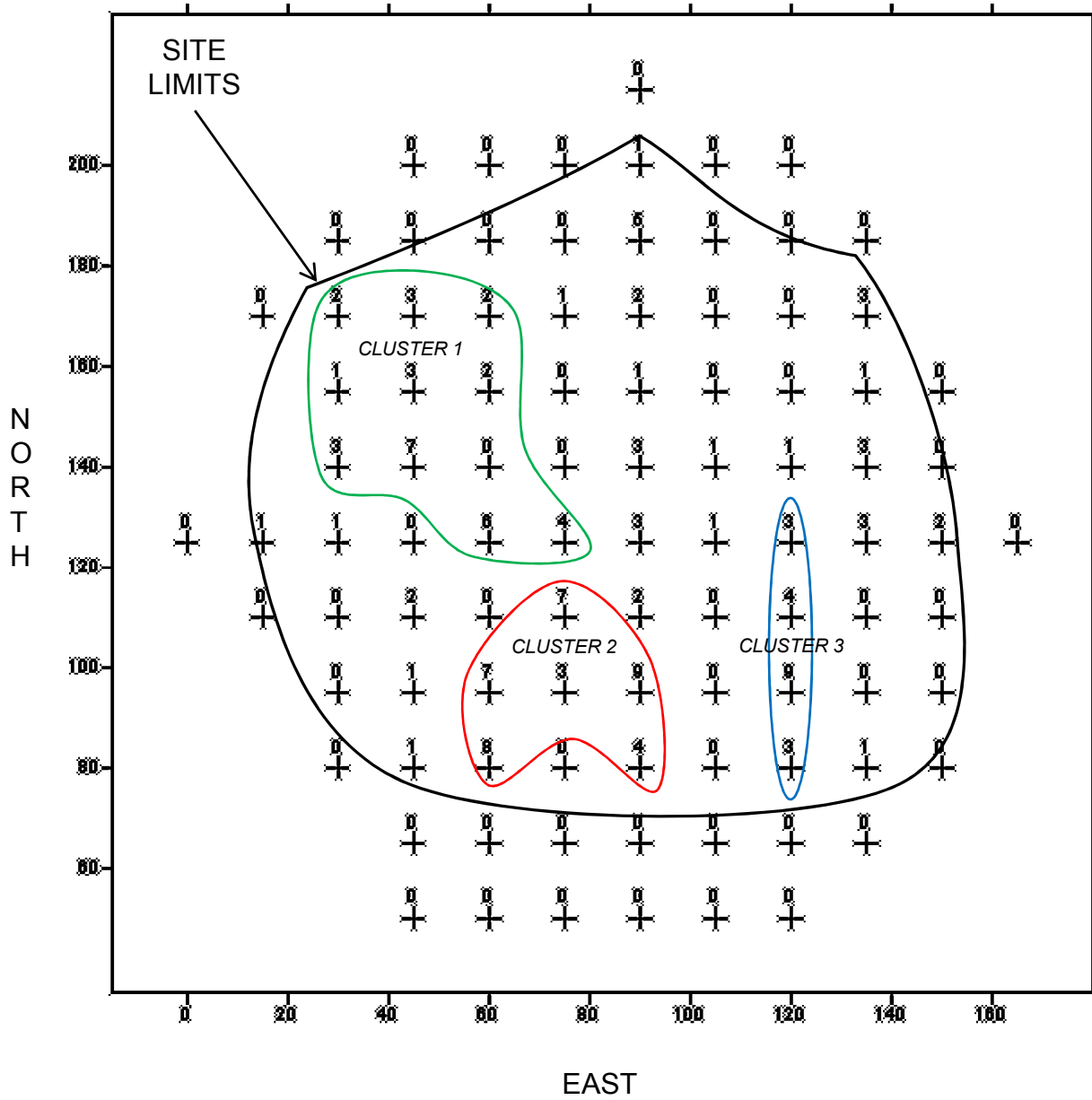


FIGURE 16-6: SITE 18CV481, DISTRIBUTION OF ALL ARTIFACTS

**CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND**

DWN SJS CHKD LF

APPD. DATE 7/21/07

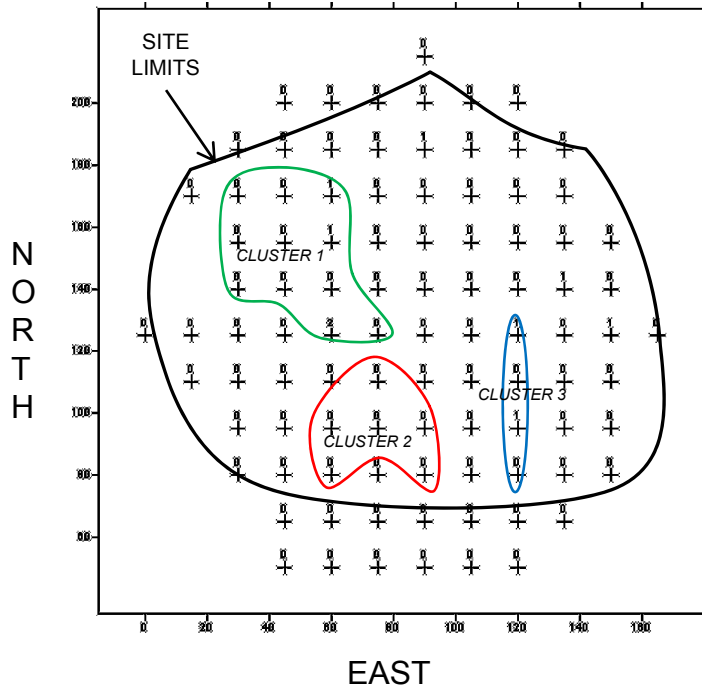
SCALE As noted

DRAWING NUMBER C080212.00



gai consultants

DISTRIBUTION OF ARCHITECTURE ARTIFACTS



DISTRIBUTION OF KITCHEN ARTIFACTS

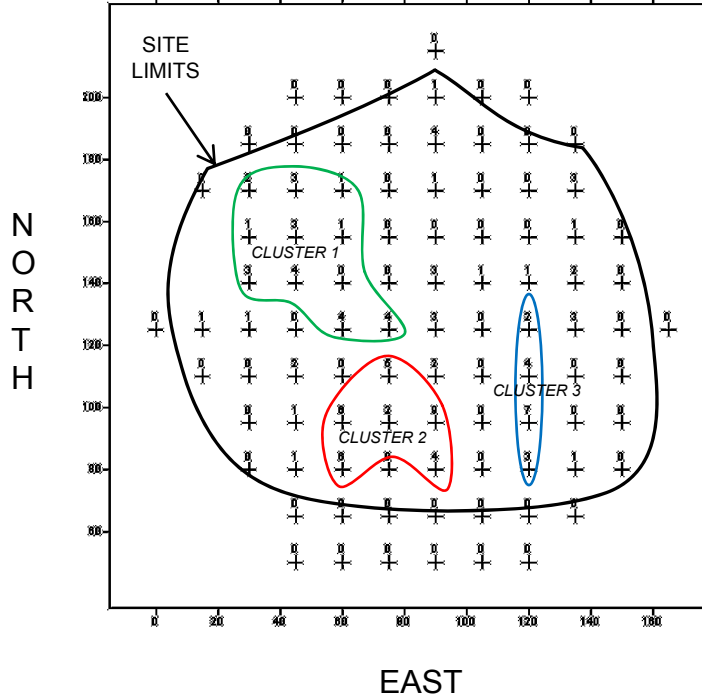


FIGURE 16-7: SITE 18CV481, DISTRIBUTION OF ARCHITECTURE (TOP) AND KITCHEN (BOTTOM) ARTIFACTS

DWN SJS CHKD LF

APPD. DATE 7/21/07

SCALE As noted

DRAWING NUMBER C080212.00



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**CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND**

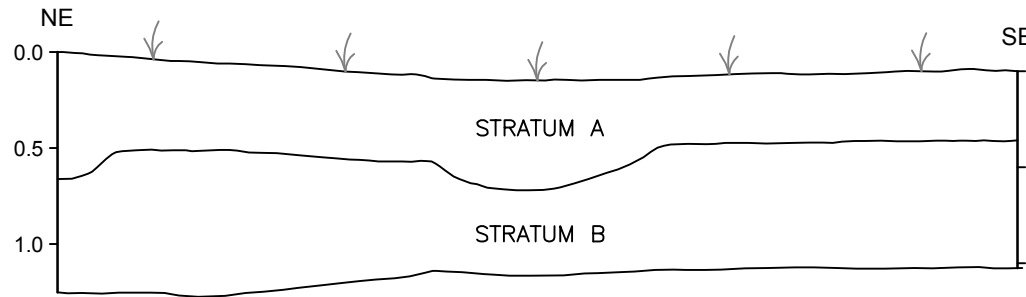
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SITE 18CV481

TEST UNIT 3 WEST PROFILE

EXCAVATION
LEVELS

1
2
3
4

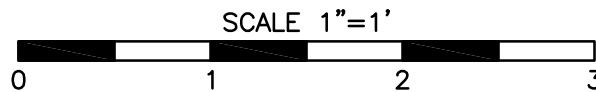


SOIL
HORIZONS

Ap
Bt

STRATUM A = (10YR 4/4) DARK YELLOWISH BROWN, SILTY LOAM

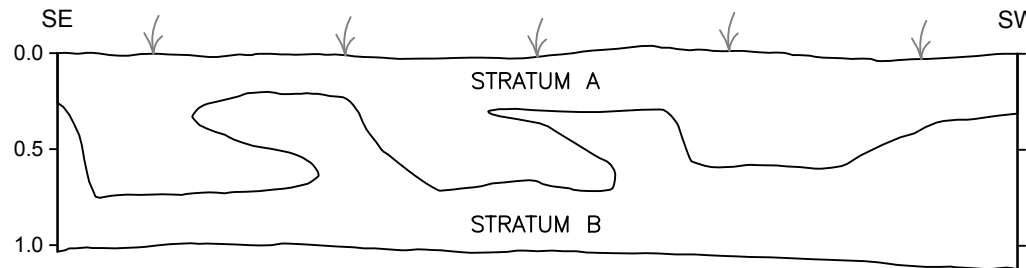
STRATUM B = (10YR 5/6) YELLOWISH BROWN, CLAY LOAM



TEST UNIT 4 SOUTH PROFILE

EXCAVATION
LEVELS

1
2
3
4



SOIL
HORIZONS

Ap
Bt

STRATUM A = (10YR 5/4) YELLOWISH BROWN, SILTY LOAM

STRATUM B = (7.5YR 5/8) STRONG BROWN, CLAY LOAM

LEGEND

GROUND SURFACE



FIGURE 16-8 SITE 18CV481 TEST UNIT 3 WEST PROFILE (TOP) AND TEST UNIT 4 SOUTH PROFILE (BOTTOM)	DWN. <u>IP</u>	CHKD. <u>—</u>	SCALE:
	APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=1'</u>
CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND	DRAWING NUMBER C080212-00-000-00-C-A000		
			 REV

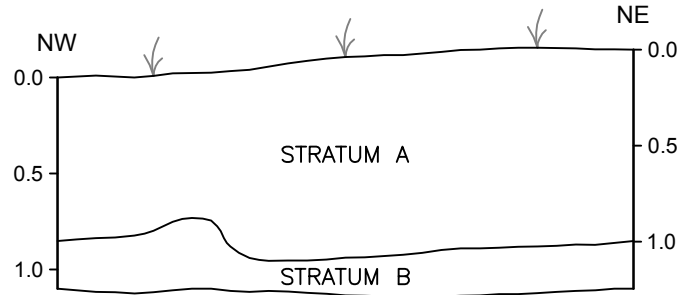
SITE 18CV481

TEST UNIT 7

NORTH PROFILE

EXCAVATION LEVELS

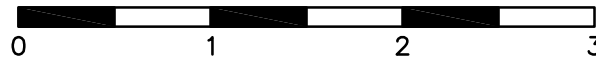
1
2
3
4



SOIL HORIZONS

Ap
Bt

SCALE 1"=1'



STRATUM A = (10YR 5/4) YELLOW BROWN, SILTY LOAM

STRATUM B = (7.5YR 5/6) STRONG BROWN, SILTY LOAM

LEGEND

  GROUND SURFACE



FIGURE 16-9

SITE 18CV481
TEST UNIT 7
NORTH PROFILE

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

DWN. <u>JL</u>	CHKD. <u>—</u>	SCALE:
APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=1'</u>

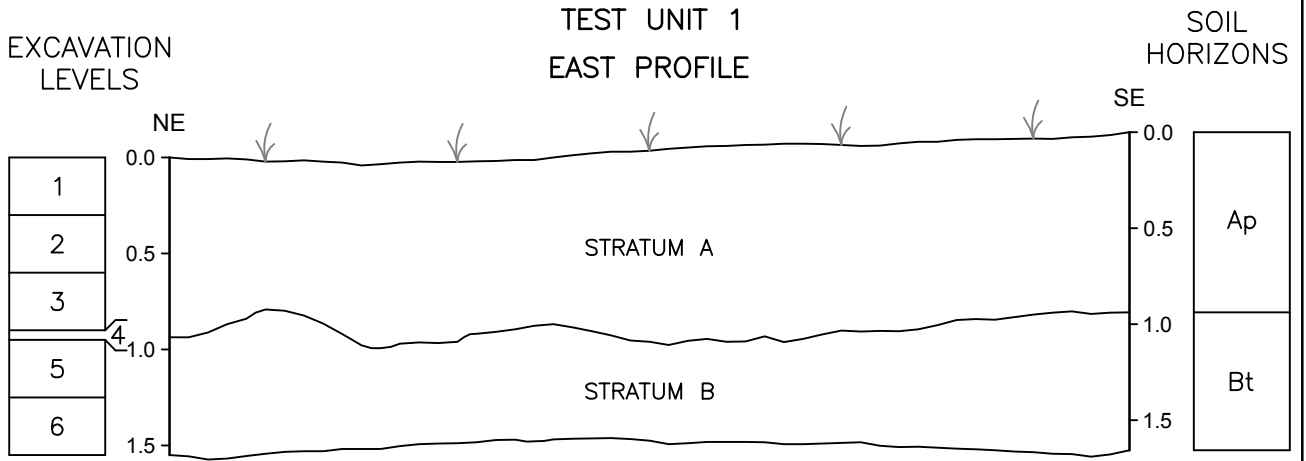
DRAWING NUMBER

C080212-00-000-00-C-A000



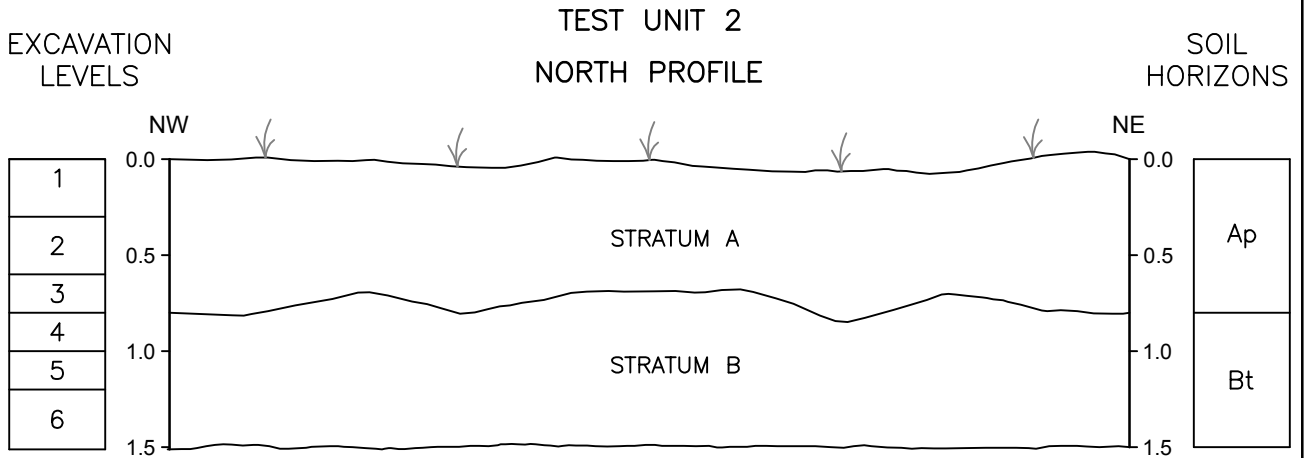
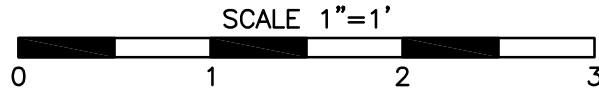
GAI CAD FILE: P:\PIT\2008\C080212.00\Cadd\Dwg\Worksheet\Worksheet-Plans\Profiles\Worksheet-Test Units-01.dwg 7/28/2008

SITE 18CV481



STRATUM A = (10YR 5/3) BROWN, SILTY LOAM

STRATUM B = (7.5YR 5/6) STRONG BROWN, SILTY CLAY



STRATUM A = (10YR 4/4) DARK YELLOWISH BROWN, SILTY LOAM

STRATUM B = (10YR 5/6) YELLOWISH BROWN, SILTY CLAY

LEGEND

GROUND SURFACE



<p>FIGURE 16-10 SITE 18CV481 TEST UNIT 1 EAST PROFILE (TOP) AND TEST UNIT 2 NORTH PROFILE (BOTTOM)</p>	DWN. <u>JL</u>	CHKD. <u>—</u>	SCALE:
	APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=1'</u>
<p>CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND</p>	DRAWING NUMBER C080212-00-000-00-C-A000		
			 REV

Chapter 17. Site 18Cv482 (GAI Site 9)

Phase Ib and Phase II

Location: Old Bay Farm Section, Area 5

Site Type: Late nineteenth Century Domestic Site

Site Size: 45x55 meters (150x180 feet)

Recommendations: Not NRHP Eligible/No additional Work Recommended

Site Setting

GAI conducted a Phase Ib survey and a Phase II National Register site evaluation of Site 18Cv482 (GAI Site 9). Site 18Cv482 is located on a wooded ridge above a tributary of Goldstein Branch and south of Road B, in the Old Bay Farm Section, Area 5, immediately west of a low wetland created during construction of the existing CCNPP facility (Figure 17-1, Photograph 17-1). The site is relatively level; however, the western portion of the site becomes increasingly steep, sloping into a tributary of Johns Creek. The site measures 150x180 feet (45x55 meters) and is bisected by an old NW-S-trending (logging?) road bed. An old fence line with remnants of barbed wire follows the northeast side of the road and a hand-dug ditch (or rut from logging operations) parallels the southwest side of the road.



Photograph 17-1. Overview of Site 18Cv482 with Line of Pine Trees Marking Edge of Old Road Trace, View to Southwest

Phase Ib Investigations

Phase Ib investigations, performed in 2006-2007, consisted of systematic 15-meter shovel testing followed by radial and close-interval (5-meter) shovel testing within the site area (Figure 17-2). Of the 56 STPs excavated in the site vicinity, 14 positive STPs produced 64 historic artifacts. Phase Ib survey defined site dimensions of 45x30 meters (150x100 ft)

Shovel tests exposed an A-B or Ao-A-B soil horizon sequence. As described for STP G5, the profile includes a 12-cm-thick very dark grayish-brown sandy loam A horizon above a light olive-brown sandy loam B horizon (Figure 17-3). Historic artifacts were recovered from the A horizon. No cultural features were identified.

Artifact Analysis

Phase Ib investigations produced 64 artifacts, that consist predominantly of kitchen-related specimens ($n=41$), along with architectural debris (brick and window glass) ($n=21$) (Table 17-1). Bottle glass includes aqua, amethyst, amber, and clear fragments.

The artifact assemblage includes 18 temporally diagnostic fragments of ceramic and bottle glass. Temporally diagnostic ceramics consist of transfer printed whiteware (1828-1860), hand-painted whiteware (1840-1860) and plain whiteware (1830-present). Diagnostic glass consists of single specimen of blown-in-mold aqua glass (1800-1870). These specimens indicate that the assemblage likely dates to the mid-nineteenth to early-twentieth century.

Table 17-1
Site 18Cv482, Phase Ib Pattern Analysis

Class	Sub-Class	Total
Kitchen	Bottles/Jars	25
	Ceramics	16
Kitchen Total		41
Architecture	Brick, Block	13
	Window Glass	8
Architecture Total		21
Faunal	Shell	2
Total		64

Site 18Cv482 was recommended for Phase II testing to evaluate its eligibility for listing to the NRHP. GAI's Phase Ib Draft Interim Report (Munford and Hyland 2007) recommended systematic STP excavation at 15-ft intervals to further refine site boundaries followed by excavation of test units distributed within the site boundaries. These recommendations were approved by MHT in a June 7, 2007 letter (see Appendix A). Phase II investigations follow a Phase II Scope of Work submitted to MACTEC on October 20, 2008 (see Appendix B).

Phase II Introduction/Methods

Phase II investigations included background research, field excavations, and laboratory analysis. The Phase II study was designed to: (1) interpret the cultural affiliation and function of the site; (2) identify the horizontal and vertical site limits; (3) determine site integrity; (4) assess the site research potential; and (5) evaluate site significance as defined by eligibility for listing on the National Register of Historic Places. Phase II fieldwork was conducted April 5-30, 2008.

Prior to field excavation, a grid was established across the site by GAI surveyors, covering an area 180 ft north/south and 180 ft east/west. Hubs were placed at 60-ft intervals within four transects (N 60, N120, N150, and N180), and at 60-ft intervals (E100, E160, E220, and E280).

The field investigation began with the systematic excavation of shovel test pits (STPs) at 15-ft (4.6-m) intervals. The shovel test pits measured approximately 50 cm in diameter and were excavated in natural layers, followed by the excavation of larger excavation units judgmentally placed to test different areas within the site. The STPs and units were excavated into the sterile B soil horizon. The bottom of each STP and unit was carefully cleaned and examined.

Phase II Archival Research

Site 18Cv482 is located within the same parcel of land as Site 18Cv480 (see Chapter 15) in the current project area. Their ownership histories are identical during the tenure of (Goodman and Belle) Goldstein ownership, which began in the early-twentieth century. Prior to purchase by the Goldsteins, the parcel consisted of two separate tracts: Locust Grove (also known as The Home Place) and the Wilson Farm. The boundaries between these two farms have disappeared over time and are not illustrated in court records. Furthermore, the Goldsteins purchased other parcels that they subsumed into a single farm. Assigning a site singularly to either farm would be a dubious assertion at best, based, as it would be, on unwarranted assumptions made without clear supporting documentation. Therefore, they are described jointly here.

Archival research, which included deed and probate record investigations, can establish a link between these sites and the Somervell family (prominent local slaveholders in the nineteenth century) and the Dare family (prominent in the eighteenth century) (Table 17-2). Calvert Cliffs Nuclear Power Plant, Inc. acquired the parcel of land that contains this site from Baltimore Gas and Electric Company on July 1, 2000 (Calvert County Deeds, Liber KPS 1282, Folio 246). Baltimore Gas and Electric Company had owned this land since May 26, 1967 when purchased from Belle Goldstein, Herbert Goldstein, et ux., et

al. (Calvert County Deeds, Liber JLB 90, folio 532). Belle Goldstein, widow of Goodman Goldstein, acquired this parcel on November 12, 1964, from Allen S. Handen and David A. Harkness (Calvert County Deeds, Liber JLB69, folio 467).

Table 17-2
Site 18Cv482 Chain-of-Title

Date of Instrument	Grantee/Defendant	Grantor/Complainant	Conveyance Reference	Comments
July 1, 2000	Calvert Cliffs Nuclear Power Plant, Inc.	Baltimore Gas and Electric Company	Liber KPS 1282, folio 246	
May 26, 1967	Baltimore Gas and Electric Company	Belle Goldstein, Herbert Goldstein, et. ux., et al.	Liber JLB 90, folio 532	
November 12, 1964	Belle Goldstein	Allen S. Handen and David A. Harkness, Trustees	Liber JLB 69, folio 467	
February 10, 1928	Goodman Goldstein	Industrial Development Company	Liber AAH 19, folio 156	
June 1, 1926	Industrial Development Company	Goodman Goldstein, et. ux.	Liber AAH 14, folio 208	
October 16, 1925	Goodman Goldstein	Frederick C. H. Wessel	Liber AAH 13, folio 338	Locust Grove
May 10, 1920	Frederick C. H. Wessel	John W. Breeden	Liber AAH 4, folio 375	Locust Grove
February 11, 1916	Goodman Goldstein	Thomas Van Claggett, John B. Gray, and Arthur Dowell	Liber GWD 16, folio 351	Wilson Tract
March 8, 1915	John W. Breeden	James Locks, et ux.	Liber GWD 15, folio 392	Locust Grove
1915	Carol V.A. Wilson	Elizabeth S. Lee	Calvert County Circuit Court, Equity Case #546, Wilson v. Lee, et al.	Maryland State Archives, CR 41,629
July 28, 1892	James Locks, et ux.	Joseph S. Wilson, et ux.	Liber TBT 1, folio 109	Locust Grove
February 9, 1892	Joseph S. Wilson	Morris C. Mengis, et ux.	Liber JS 3, folio 495	Locust Grove
November 14, 1891	Morris C. Mengis	Joseph S. Wilson	Liber JS 3, folio 493	Locust Grove, being a portion of the real estate of which Margaret E. Somervell died, seized & possessed
1883	Charles T. Somervell, Margaret E. Somervell, Llewelly Somervell, Mary P. Turner, and Margaret E. Turner	Alexander Somervell, Jr., and William C. Somervell	Calvert County Circuit Court, Equity Case #39, Somervell v. Somervell	Maryland State Archives, CR 41,591
1883	Charles T. Somervell, Margaret E. Somervell, and William C. Somervell	Alexander Somervell, Jr.	Calvert County Circuit Court, Equity Case #8, Somervell v. Somervell	Maryland State Archives, CR 41,591

A complete discussion of land transactions for this parcel is presented under Site 18Cv480 (see Chapter 15). Unlike Site 18Cv480, research failed to identify any map indicating a structure at the location of Site 18Cv482, suggesting that this site was either occupied for a brief period or is the location of a farm outbuilding or activity area.

Phase II STP Excavations

The field investigation began with the excavation of 131 shovel test pits (STPs) at 15-ft (4.6-m) intervals (Figure 17-4). The goals of this close-interval testing were to identify site limits, provide information on soil stratigraphy and artifact distribution, and identify potential features and activity areas. Distributions of artifacts from STPs provide information on site limits and show general patterns of site usage. On domestic sites, higher frequencies of artifacts are generally found near the house and yard area and in refuse deposits, while lesser quantities are found on the fringe of the habitation area and lightly scattered across fields. Shovel test artifact distributions were plotted on site maps and the distribution of artifacts were, in part, used to guide the placement of subsequent test units.

Based on Phase II shovel testing results, site dimensions were expanded to 45x55 meters (150x180 ft). STP excavations provide information on site limits and show general patterns of site usage. Fifty-nine positive STPs produced a total of 229 artifacts—all but five yielded a low density of artifacts (<10 per shovel test). The distribution of all artifacts from Phase II STP excavations revealed two low-density artifact clusters (Figure 17-5): Cluster 1 on the southwest side of the old road, and Cluster 2 northeast from the road to the edge of the ridgetop. Only three STPs yielded five or more architecture related artifacts: two within Cluster 1 and one in Cluster 2 (Figure 17-6, top). The STP at N150 E145 produced 32 architecture-related artifacts, indicating a possible structure area.

The distribution of kitchen remains can reflect trash disposal locations and activity areas around the house. Six STPs produced five or more kitchen-related artifacts, including two STPs in Cluster 1 and four STPs in Cluster 2 (Figure 17-6, bottom).

Phase II Test Units

GAI excavated 11 test units of varying sizes, totaling 151 square feet (14 square meters), to further investigate structural remains, possible features, yard areas, and localities of higher artifact density. Test unit excavations produced 5,936 artifacts and sampled two cultural features. Test unit discussions are grouped below, based on placement.

Table 17-3
Site 18Cv482 Test Unit Summary Information

TU #	Location	Size (ft)	Sq ft	No. of Levels	Stratigraphy	Artifact Count
1	N155 E143	5x5	25	3 1	Ap, dark-brown to dark yellowish-brown sandy loam Bt, dark yellowish-brown silty clay	1,129
2	N170 E160	5x5	25	3	A, dark yellowish-brown silty loam Bt, yellowish-brown silty clay	21
3	N200 E165	5x5	25	2 1 2	A, brown silty sandy loam F-1, brown silty sandy loam mottled with yellowish-brown silty sand Bt, mottled yellowish-brown silty sand and sandy loam	663
4	N205 E152	5x5	25	1 2 2	A, dark-brown sandy loam F-3 and F-3a (same depths), F-3 has dark-brown sandy loam, F-3a has black sandy loam Bt, yellowish-brown sandy clay	2636
5	N170 E135	3x3	9	3 2	Ap, yellowish-brown silty sandy loam Bt, yellowish-brown sandy clay loam	56
6	N194.6 E131.6	3x3	9	1 2	A, dark-brown sandy loam Bt, dark yellowish-brown to yellowish-brown sandy clay	3
7	N170 E185	3x3	9	2 1	Ap, brown silt loam Bt, light yellowish-brown silty clay	9

TU #	Location	Size (ft)	Sq ft	No. of Levels	Stratigraphy	Artifact Count
8	N160 E147	1x3	3	2 2	Ap, dark-brown sandy loam Bt, yellowish-brown sandy loam to dark yellowish-brown silty clay	68
9	N155 E140	3x1	3	2 1 1	Ap, brown silty loam to sandy loam (plow scars in L-2) BE, yellowish-brown sandy loam Bt, dark yellowish-brown silty clay	538
10	N160 E144	3x3	9	2 1 1	Ap, Dark-brown sandy loam BE, yellowish-brown sandy loam Bt, dark yellowish-brown silty clay	409
11	N150 E147	3x3	9	3 1	Ap, brown silty loam Bt, string brown silty clay laom	404
Totals			151 sq ft			5,936

GAI excavated 11 test units (3 sq ft to 25 sq ft) at Site 18Cv482. The initial test units were located within and near STP artifact Clusters 1 and 2.

Cluster 1: Test Units 1, 8, 9, 10, and 11

Five test units (Test Units 1, 8, 9, 10, and 11) were excavated within Cluster 1. These units exhibited plow scars at the plowzone/subsoil interface (Figure 17-7). In some locations, the plow scars had concentrations of brick and other artifacts and, as a result, were excavated as Feature 2 and Feature 4 until they were identified as plow scars.

Excavations of Test Unit 1 (N154.7 E142.8), placed near STP N150 E145, produced a high concentration of mortar, brick, and window glass from the northern 40% of the unit. This part of the unit was excavated as Feature 2 (and later interpreted as two plow scars). A darker stain in the southwest corner at the plowzone/subsoil interface was excavated as Feature 4; this also turned out to be a plow scar. A few rocks in the northeast corner were left in place at this time.

Test Unit 1 yielded 1,129 artifacts, most of which were architecture- or kitchen-related artifacts. There were 965 architectural-related artifacts, including 764 bricks, 61 nails, 101 pieces of mortar, 37 window glass, and 2 wood pieces (Table 17-4). Based on the artifact assemblage, Test Unit 1 was thought to be situated near a structure.

Table 17-4
Site 18Cv482, Cluster 1: Test Units 1, 8, 9, 10, and 11, Artifact Assemblages

Class	Sub-Class	Object	TU 1	TU 8	TU 9	TU 10	TU 11	Total	%
Activities	Machine Parts/Hardware	lock, metal		1		1	1	3	0.1%
		screw					1	1	0.0%
		hardware, metal				1		1	0.0%
Architecture	Brick, Block	brick	763	15	409	114	31	1332	52.3%
		brick, half bat	1			3	3	7	0.3%
		brick, whole					1	1	0.0%
	Mortar, Cement	mortar	101	10	62	145	68	386	15.1%
	Nails, Spikes, Etc.	nail, cut	42	9	11	22	41	125	4.9%
		nail, wire	4		2	2	6	14	0.5%
nail, indeterminate		15	2	1	9	7	34	1.3%	
Roofing Materials	slate			2			2	0.1%	

Class	Sub-Class	Object	TU 1	TU 8	TU 9	TU 10	TU 11	Total	%
	Window Glass	window glass	37	10	6	23	208	284	11.1%
	Wood	wood fragment	2					2	0.1%
Arms			1		1			2	0.1%
	Ammunition	lead bullet, brass casing			1			1	0.0%
		shot gun shell	1					1	0.0%
Clothing			5			7	2	14	0.5%
	Clothing Fasteners	button and rivet, copper/brass	1					1	0.0%
		button, glass	4			4	2	10	0.4%
		button, shell				2		2	0.1%
		rivet for clothing, metal				1		1	0.0%
Faunal			14		5	10	2	31	1.2%
	Bone	bone	1				1	2	0.1%
	Shell	shell, fragment	13		5	10	1	29	1.1%
Furnishings	Lighting	lamp glass	17		1	15	5	38	1.5%
Kitchen			116	19	23	57	27	242	9.5%
	Bottles/Jars	beer bottle	8	2		1		11	0.4%
		bottle glass	101	16	22	53	24	216	8.5%
		soda bottle	1					1	0.0%
	Ceramics	earthenware			1			1	0.0%
		porcelain					1	1	0.0%
		whiteware	4	1		2	2	9	0.4%
	Decorative Table Glass	decorative glass	2					2	0.1%
						1		1	0.0%
	Glassware-Other	glassware				1		1	0.0%
Personal					12	1		13	0.5%
	Jewelry	copper jewelry fragment			12			12	0.5%
	Pharmaceutical	Pharmaceutical bottle				1		1	0.0%
Unidentifiable			11	2	3		2	18	0.7%
	Indeterminate	metal	11	2	2		2	17	0.7%
		plastic			1			1	0.0%
		Totals	1129	68	538	409	404	2548	100.0%
		%	44.3%	2.7%	21.1%	16.1%	15.9%	100.0%	

Due to the high concentrations of architectural remains in Test Unit 1, additional units (Test Units 8, 9, 10 and 11) were excavated in the TU 1 vicinity to search for structural features (see Figure 17-7). Test Unit 8 excavations documented a plowzone over subsoil. There were also some tabular rocks in both the northwest and southwest corners (Figure 17-8). Excavations of this unit produced 68 artifacts (see Table 17-4).

Test Unit 9 excavations identified plow scars extending into the B horizon (see Figure 17-7). Test Unit 9 excavations produced 538 artifacts, including 409 brick fragments (see Table 17-4).

Test Unit 10 encountered an intact stone foundation wall corner (Feature 5) that matched in situ rocks in Test Unit 1 and Test Unit 8 (see Figure 17-8). The stone foundation extended into subsoil (Figure 17-9). Plow scars (Feature 2) were evident at the plowzone (Ap2)/subsoil (Bt) interface (see Figure 17-7). Test Unit 10 excavations produced 409 artifacts (see Table 17-4), predominately architectural-related (23 window glass, 33 nails, 117 brick fragments, and 145 mortar).

Test Unit 11 was placed two feet east of STP N150 E145 (which produced 32 architectural-related artifacts). Plow scars were visible at the plowzone/subsoil interface (see Figure 17-7). Although there was no evidence of cultural features, Test Unit 11 excavations yielded 404 artifacts, including 208 window glass (see Table 17-4).

Cluster 2: Test Units 3 and 4



Cluster 2, extending from the old logging road northeast over the edge of the ridgetop, produced high quantities of kitchen-related artifacts and low to moderate amounts of architecture associated remnants. Two test units (Test Unit 3 and Test Unit 4) were excavated within this cluster to search for features and/or activity areas. Both test units were located on the slope near the edge of the ridgetop (Photograph 17-2).

Photograph 17-2. Excavations on Test Unit 3 (right) and Test Unit 4 (left), View to North

Excavation of Test Unit 3 revealed a concentration of oyster shell and artifacts (Feature 1) in mottled fill beneath the A horizon on the southern (uphill) side (Figure 17-10). Feature 1, situated between the Ao/A horizon and subsoil (Figure 17-11), may represent the A horizon during historic occupation of the site, or a midden created by the occupants disposing of refuse in this location. Excavation of Test Unit 3 produced 663 artifacts (Table 17-5). The most common artifact was shell ($n=425$).

Table 17-5
Site 18Cv482, Cluster 2: Test Units 3 and 4, Artifact Assemblages

Class	Sub-Class	Object	TU 3	TU 4	Total	%
Activities				91	91	2.8%
	Cans/Tins	tin can, fragment		68	68	2.1%
	Machine Parts/Hardware	machine part, metal		4	4	0.1%
		wire, metal		18	18	0.5%
	Misc.Small Hardware	washer, metal		1	1	0.0%
Architecture			102	448	550	16.7%
	Brick, Block	brick	67	107	174	5.3%
	Door Parts	door parts metal		2	2	0.1%
		hinge, metal		1	1	0.0%
	Mortar, Cement	cement building block		1	1	0.0%
		mortar, fragment	14	16	30	0.9%
	Nails, Spikes, Etc.	nail, cut		60	60	1.8%
		nail, wire		3	3	0.1%
		nail, indeterminate		2	2	0.1%
	Window Glass	window glass	21	256	277	8.4%
Clothing				7	7	0.2%
	Clothing Fasteners	button, glass		1	1	0.0%
		button, metal		2	2	0.1%
		button, pewter		1	1	0.0%

Class	Sub-Class	Object	TU 3	TU 4	Total	%
		button, shell		1	1	0.0%
	Clothing Related-Other	safety pin, metal		1	1	0.0%
	Shoe Parts	eyelet, metal		1	1	0.0%
Faunal			425	1166	1591	48.2%
	Shell	shell	425	1166	1591	48.2%
Furnishings	Lighting	lamp glass		14	14	0.4%
Kitchen			136	879	1015	30.8%
	Bottles/Jars	beer bottle	10	54	64	1.9%
		bottle glass	94	382	476	14.4%
		decorative glass		2	2	0.1%
	Ceramics	earthenware		27	27	0.8%
		pearlware		1	1	0.0%
		redware		2	2	0.1%
		refined earthenware		1	1	0.0%
		stoneware		49	49	1.5%
		whiteware	32	334	366	11.1%
	Decorative Table Glass	decorative glass		27	27	0.8%
Personal				5	5	0.2%
	Hygiene	comb, plastic		1	1	0.0%
	Pharmaceutical	pharmaceutical bottle		2	2	0.1%
		prescription bottle		2	2	0.1%
Tobacco Pipes				2	2	0.1%
	Smoking Related-Other	stoneware, buff, pipe		1	1	0.0%
	White Ball Clay	white ball clay pipe		1	1	0.0%
Unidentifiable	Indeterminate	metal, indeterminate		24	24	0.7%
Grand Total			663	2636	3299	100.0%
%			20.1%	79.9%	100.0%	

Test Unit 4 was excavated northwest and slightly downslope of Test Unit 3 and exposed Features 3 and 3a (see Figure 17-10). The surface of TU 4 consisted of feature fill overlaying the Bt horizon. (Both features were visible after leaf litter was cleared.) This unit lacked a historic Ao horizon, which is likely the result of erosion or earth-moving activities at the site. Soil color clearly distinguished the two features. Feature 3 was comprised of dark-brown sandy loam. Feature 3a consists of black sandy loam (Figure 17-12). Test Unit 4 excavations yielded 2,636 artifacts (see Table 17-5), the most common being shell ($n=1,166$), bottle glass ($n=438$) and ceramics ($n=414$).

Yard Area - Test Units 2, 5, 6, and 7

Four test units (Test Units 2, 5, 6, and 7) were excavated in yard areas around the foundation remnant. Test Unit 2, located on the ridgetop northeast of Cluster 1, exposed a 0.8'-thick plowzone over sterile subsoil (Figure 17-13). The nearby ground surface displayed heavy equipment tracks, indicating that this part of the site may have been disturbed. The Ap horizon was comprised of a deflated, plowed, BE/Bt horizon, confirming that the historic A horizon was removed through erosion, logging, earth moving or other disturbance. No features were identified, and only 21 artifacts were recovered (Table 17-6).

Table 17-6
Site 18Cv482, Yard Area: Test Units 2, 5, 6 and 7, Artifact Assemblages

Class	Sub-Class	Ware Type/Object	TU 2	TU 5	TU 6	TU 7	Total	%
Architecture			7	33			40	44.9%
	Brick, Block	brick fragment		8			8	9.0%
	Nails, Spikes, Etc.	nail, indeterminate	1	7			8	9.0%
	Window Glass	window glass	6	18			24	27.0%
Clothing				1		1	2	2.2%
	Clothing Fasteners	button, glass		1			1	1.1%
	Shoe Parts	grommet, metal				1	1	1.1%
Faunal	Shell	shell		4		5	9	10.1%
Furnishings	Lighting	lamp glass				1	1	1.1%
Kitchen			13	18	3	2	36	40.4%
	Bottles/Jars	bottle glass	7	16	1	2	26	29.2%
	Ceramics	redware		1			1	1.1%
		stoneware	3				3	3.4%
		whiteware	3	1	2		6	6.7%
Tobacco Pipes	Stoneware	stoneware pipe- buff	1				1	1.1%
		Totals	21	56	3	9	89	100.0%
		%	23.6%	62.9%	3.4%	10.1%	100.0%	

Test Unit 5, on the sideslope northwest of Cluster 2, revealed a 0.7'-thick plowzone over sterile subsoil. Like Test Unit 2, the Ap horizon for Test Unit 5 was comprised of a deflated, plowed, BE/Bt horizon, indicating that the historic A horizon was removed (Figure 17-14). Excavation recovered 56 artifacts (see Table 17-6). No features were identified.

Test Unit 6, on a bench north-northwest of Cluster 1, revealed a profile consisting of a modern Ao-BE-Bt horizon sequence (Figure 17-15). This unit is lacking a plowed soil horizon, which is likely the result of erosion or earth-moving activities at the site. Excavations produced 3 artifacts (see Table 17-6). No features were identified.

Test Unit 7 was located on a probable logging road along the ridgetop, where soil stratigraphy revealed a plowzone horizon overlying sterile subsoil (Figure 17-16). The Ap horizon was comprised of a deflated, plowed, BE/Bt horizon, indicating that the historic A horizon was removed, probably during construction of the road. Only 9 artifacts were identified (see Table 17-6). No features were identified.

Phase II Soils and Geomorphology

GAI's Senior Soils Scientist examined a sample of test unit excavations, documenting that soils across much of the site area were disturbed (possibly from logging activities). Soil profiles consisted of an organic layer (Ao horizon) over subsoil (BE or Bt horizon). The road bed within the site appears to have been constructed with heavy machinery, removing the historic-era A horizon. There is a fairly prominent straight rut to the southwest and parallel to the road, which also disturbed part of the site. Two small loci within the site appeared to have intact soils. In the south locus, unit excavations exposed an Ap-BE-Bt horizon sequence--the only area within the site where a plowzone was identified. In the north locus, just off the crest of the hilltop on the northeast side of the road, unit excavations exposed an A-BE-Bt horizon sequence. In the north locus, the A horizon included an organic-rich sheet midden with shell and nineteenth-century artifacts covered by duff or an Ao Horizon.

Test units 1, 8, and 10 (associated with Cluster 1, were examined in a block excavation exposing Feature 5. The east wall profiles of TU 1 and TU 8 were similar. These walls revealed a soil profile consisting of an Ap-BE-Bt horizon sequence to a depth of 1.5 feet (see Appendix E). Plow scars were evident at the base of the Ap horizon and the crew reported plow scars in the plan view. The BE

horizon was only present in small pockets between the plow scars. The Bt horizon was found across the entire wall and on the floor of the units. The exposed soil profile indicates several clues as to the history of this portion of the site. First, the well-developed Bt horizon indicates a mature soil requiring at least 2,000 years, and probably more like 8,000-10,000 years, to form. The site is well drained with no standing water or wetlands. The lack of an upper B horizon (BE) and E horizon, except for a few small pockets, indicates that this portion of the site has been eroded, probably the result of 200-300+ years of cultivation. Similar profiles are found on many of the ridgetops within the Calvert Cliffs Nuclear Power Plant property.

Phase II Features

Phase II excavations identified two cultural features (Feature 1/3/3a and Feature 5) (see Figure 17-10). Upon excavation, Features 2 and 4 were identified as plow scars and are not discussed below.

Feature 1/3/3a

Feature 1/3/3a appears to be a sheet midden that developed in the A Horizon during occupation of the site. This midden is located on the hillslope just below the top of the ridge, which would have provided a convenient location for refuse discard. Test Units 3 and 4 sampled this midden deposit.

In Test Unit 4, the midden (designated as Features 3 and 3a) was visible on the ground surface and extended down to subsoil. The lack of an Ao soil horizon above the feature indicates that erosion continues to wash away sediments at this location. Feature 3 (dark-brown sandy loam) was distinguished from Feature 3a (black sandy loam) based on soil color. The type of refuse discarded at this location likely brought about the differences in soil colors.

The midden identified in nearby Test Unit 3 (Feature 1) is also overlying the B horizon (subsoil); however, the ground on the north side of the unit rises slightly, which permitted an Ao horizon to form. The soil matrix for Feature 1 was brown silty sandy loam with shell (see Figure 17-11).

A total of 2,322 artifacts were recovered from excavations within these midden deposits (Feature 1/3/3a) (Table 17-7). The most common types of artifact included shell ($n=1,030$), bottle glass ($n=390$), and ceramics ($n=347$). There were 382 temporally diagnostic artifacts from the midden sample that yielded a mean date of 1901 and a TPQ date of 1880 (Table 17-8), suggesting a late-nineteenth century date for the midden deposits.

Table 17-7
Site 18Cv482, Feature 1/3/3a, Artifact Assemblages

Class	Sub-Class	Ware Type/Object	F1	F3	F3A	Total	%
Activities				50	40	90	3.9%
	Cans/Tins	tin can, fragment		43	25	68	2.9%
	Machine Parts/Hardware	machine part, metal			4	4	0.2%
		wire, metal		7	11	18	0.8%
Architecture			27	212	159	398	17.1%
	Brick, Block	brick	13	50	46	109	4.7%
	Mortar, Cement	cement building block		1		1	0.0%
		mortar, fragment	14	8	8	30	1.3%
	Nails, Spikes, Etc.	nail, cut		22	34	56	2.4%
		nail, wire		3		3	0.1%
		nail, indeterminate		2		2	0.1%
	Window Glass	window glass		126	71	197	8.5%

Class	Sub-Class	Ware Type/Object	F1	F3	F3A	Total	%
Clothing				1	5	6	0.3%
	Clothing Fasteners	button, glass		1		1	0.0%
		button, metal			2	2	0.1%
		button, pewter			1	1	0.0%
		button, shell			1	1	0.0%
	Shoe Parts	eyelet, metal			1	1	0.0%
Faunal	Shell	shell	128	374	528	1030	44.4%
Furnishings	Lighting	lamp glass		10	4	14	0.6%
Kitchen			12	566	178	756	32.6%
	Bottles/Jars	beer bottle		28	20	48	2.1%
		bottle glass	11	236	93	340	14.6%
		decorative glass		2		2	0.1%
	Ceramics	earthenware		17	4	21	0.9%
		paste		2		2	0.1%
		pearlware			1	1	0.0%
		redware		2		2	0.1%
		refined earthenware		1		1	0.0%
		stoneware		2		2	0.1%
		stoneware, buff		35	2	37	1.6%
		stoneware, gray		1		1	0.0%
		whiteware	1	223	56	280	12.1%
	Decorative Table Glass	decorative glass		17	2	19	0.8%
Personal				2	2	4	0.2%
	Pharmaceutical	pharmaceutical bottle		2		2	0.1%
		prescription bottle			2	2	0.1%
Tobacco Pipes				1	1	2	0.1%
	Smoking Related-Other	stoneware, buff, pipe		1		1	0.0%
	White Ball Clay	white ball clay pipe			1	1	0.0%
Unidentifiable	Indeterminate	metal, indeterminate		14	8	22	0.9%
Grand Totals			167	1230	925	2322	100.0%
%			7.2%	53.0%	39.8%	100.0%	

Table 17-8
Site 18Cv482, Feature 1/3/3a, Dating Analysis

Ware Type/Object	Decoration/Manufacturing Tech	Color	Count	Begin Date	End Date	Reference
bottle glass		sun colored amethyst	37	1880	1915	Miller & Pacey 1985
bottle glass	applied lip; double ring finish	amber	1	1820	1870	Deiss 1981
bottle glass	blown in mold	clear, aqua	4	1800	1870	Deiss 1981
bottle glass	patent finish	clear, aqua	4	1860	1935	Jones & Sullivan 1989
bottle glass	tooled lip	clear	2	1870	1915	Deiss 1981; Jones & Sullivan 1935
bottle glass	straight brandy finish; applied lip	aqua	1	1820	1870	Deiss 1981

Ware Type/Object	Decoration/Manufacturing Tech	Color	Count	Begin Date	End Date	Reference
pearlware	shell edge	blue	1	1780	1830	South 1977
whiteware	hand painted	various colors	15	1840	1860	Price 1979; Noël Hume 1980
whiteware	plain	plain	257	1830	2008	Price 1979; Noël Hume 1980
whiteware	shell edge	blue	1	1830	1891	Lofstrum et al. 1982; Miller & Hunter 1990
whiteware	transfer print	brown	1	1828	1850	Majewski & O'Brien 1984
nail, cut			55	1790	1890	Nelson 1968
nail, wire			3	1880	2008	Nelson 1968; IMAC 1984
			382			

Mean Date: 1901
 TPQ: 1880

Feature 5



Feature 5 is a stone foundation wall corner that was identified in Test Units 1, 8, and 9 (Photograph 17-3; see Figure 17-8). The exposed northwest foundation wall measures 3 ft in length, while the length of the southwest foundation wall measures 3.8 ft. The width of the stone foundation varied from 1.2 -1.8 ft. A tile probe was used to trace the foundation wall outside of the excavation units. The foundation appears to extend approximately three more feet in each direction before the probe failed to strike any stones. It appears that (mechanical) earth-moving activities displaced the remainder of the foundation.

Photograph 17-3. Overview of Feature 5, View to Northeast

The foundation was approximately one-foot high and the base of the foundation extended 0.7 ft into subsoil. The top of this dry-laid stone wall was capped by mortar (see Figure 17-7), some of which was displaced by plowing activities. This area contained a substantial number of brick fragments. A course of bricks may have been mortared in place, capping the stone foundation.

There was no evidence of a builder’s trench in the subsoil. Plow scars appeared both inside and outside of the Feature 5 southwest wall corner (see Figure 17-7). (The lack of plow scars on the exterior of the northwest wall may indicate that the plow struck the inside of the foundation and lifted up over the wall and, as a result, did not plow into subsoil on that side of the foundation.)

Excavation of the soil matrix of Feature 5 produced 221 artifacts (Table 17-9). There were 125 pieces of mortar and 88 brick fragments, which corresponds with the interpretation of the foundation construction discussed above.

Table 17-9
Site 18Cv482, Feature 5 Artifact Assemblage

Class	Sub-Class	Object	Feat 5 Total	%
Architecture			213	96.4%
	Brick, Block	brick	88	39.8%
	Mortar, Cement	mortar	125	56.6%
Clothing			1	0.5%
	Clothing Fasteners	rivet, metal	1	0.5%
Faunal	Shell	shell	2	0.9%
Kitchen	Bottles/Jars	bottle glass	5	2.3%
Totals			221	100.0%

Phase I/II Artifact Analysis

Phase Ib and II artifact assemblages were combined for purposes of artifact analysis. Phase Ib investigations producing 64 historic artifacts and Phase II excavations yielded 6,161 artifacts for a total of 6,225 artifacts. Artifacts generally fell within 10 historic artifact functional groups. One prehistoric lithic was recovered. In addition, 42 pieces of metal and plastic could not be identified and were placed in an “unidentified” category.

Recovered artifacts consist largely of shell ($n=1,649$), kitchen ceramics ($n=530$) and bottle glass ($n=900$). Architectural-related items included nails ($n=262$), window glass ($n=640$), brick ($n=1,545$), and mortar ($n=420$). There were smaller quantities of other types of artifacts.

Pattern Analysis

The kitchen group consists of artifacts that represent the remains of food preparation, service, and consumption. A total of 1,463 artifacts (23.5% of the site assemblage) fell within the kitchen group (Table 17-10). This group was divided into five subclasses, including bottles and jars, ceramics, and table glass, tumbler, and other glassware.

Table 17-10
Site 18Cv482, Phase I/II Pattern Analysis

Class	Sub-Class	Grand Total	%
Activities	Cans/Tins	68	1.1%
	Machine Parts/Hardware	23	0.4%
	Misc. Small Hardware	3	0.0%
	Activities Total	94	1.5%
Architecture	Brick, Block	1545	24.8%
	Door Parts	3	0.0%
	Mortar, Cement	420	6.7%
	Nails, Spikes, Etc.	262	4.2%
	Roofing Materials	2	0.0%
	Window Glass	640	10.3%
	Wood	2	0.0%
Architecture Total		2874	46.2%

Class	Sub-Class	Grand Total	%
Arms	Ammunition	2	0.0%
Arms Total		2	0.0%
Clothing	Clothing Fasteners	20	0.3%
	Clothing Related-Other	1	0.0%
	Shoe Parts	2	0.0%
	Clothing Total	23	0.4%
Faunal	Bone	2	0.0%
	Shell	1649	26.5%
	Faunal Total	1651	26.5%
Furnishings	Lighting	55	0.9%
Kitchen	Bottles/Jars	900	14.5%
	Ceramics	530	8.5%
	Decorative Table Glass	31	0.5%
	Glassware-Other	1	0.0%
	Tumblers, Stemware	1	0.0%
	Kitchen Total	1463	23.5%
Personal	Hygiene	1	0.0%
	Personal-Other	12	0.2%
	Pharmaceutical	5	0.1%
	Personal Total	18	0.3%
Tobacco Pipes	Smoking Related-Other	1	0.0%
	Stoneware	1	0.0%
	White Ball Clay	1	0.0%
	Tobacco Pipes Total	3	0.0%
Unidentifiable	Indeterminate	42	0.7%
	Grand Total	6,225	100.0%
	%	100.0%	

The architecture group includes construction materials, such as brick, nails, plaster, mortar, and window glass. A total of 2,874 architectural-related items including 262 nails, 640 window glass, 420 mortar, 1,545 brick, 3 door parts, 2 roofing material, and 2 wood pieces were recovered. Architecture-related artifacts comprise 46.2% of all artifacts recovered during fieldwork (see Table 17-10).

The faunal group remains include animal bones, teeth, and shell that can be used to construct information about foodways. There were 1,649 shell pieces recovered, and two bones (see Table 17-10).

Tobacco group remains include tobacco pipe and bowl fragments, ash trays, and lighters. The tobacco assemblage included one ball clay pipe bowl, one stoneware bowl, and smoking-related "other" (Photograph 17-4).

Small quantities of artifacts were represented in the remaining groups (see Table 17-7). There were two bullet fragments, which fell within the arms group. Fifty-five pieces of lamp chimney glass were present were placed within the furnishing group.



Photograph 17-4. Sample of Stoneware Pipe Fragment and White Ball Clay Pipe Bowl Fragment (FS 62)

Activities group includes a variety of materials (toys, tools, writing items, musical instruments, hardware, machine parts), and stable items, such as horse tack. Ninety-four activities related artifacts were identified including tin cans, machine parts, and miscellaneous small hardware.

The clothing group is comprised of artifacts that are related to clothing, accessories, and items used in the construction and/or repair of apparel. There were 23 clothing items, including fasteners, shoe parts and one other clothing item.

Personal group artifacts represent items that are individually owned or relate to personal hygiene, adornments, and medicine. There were 18 artifacts placed in the personal group including one comb, twelve copper jewelry pieces, and five medicine bottles.

Dating Analysis

A total of 724 temporally diagnostic artifacts were used to date the site (Table 17-11). Based on these artifacts, the TPQ and mean date for the site is 1880. Maps from 1862 and 1905 fail to indicate a structure in this site location. Based on cartographic research and temporally diagnostic artifacts recovered from the excavation, this site was briefly occupied during the last quarter of the nineteenth century.

**Table 17-11
Site 18Cv482, Phase I/II Dating Analysis**

Ware Type/Object	Decoration/Manufacturing Tech	Color	Count	Begin Date	End Date	Reference
bottle glass		sun colored amethyst	61	1880	1915	Miller & Pacey 1985
canning jar lid liner		white opaque	1	1869	1950	Toulouse 1971:345
bottle glass	applied lip; double ring finish	amber	1	1820	1870	Deiss 1981
bottle glass	blown in mold	aqua, clear	14	1800	1870	Deiss 1981
bottle glass	patent finish, wide mouth; possible tooled lip	clear	1	1870	1915	Deiss 1981; Jones & Sullivan 1935
bottle glass	straight brandy finish; applied lip	aqua	1	1820	1870	Deiss 1981
Pharmaceutical bottle	patent finish	aqua	4	1860	1935	Jones & Sullivan 1989
prescription bottle	prescription finish; tooled lip finish	aqua	1	1870	1915	Deiss 1981
ironstone	plain		1	1840	1970	Wetherbee 1980
pearlware	shell edge	blue	1	1780	1830	South 1977
whiteware	plain		390	1830	1970	Price 1979; Noël Hume 1980
whiteware	shell edge	blue	2	1830	1891	Lofstrum et al. 1982; Miller & Hunter 1990

Ware Type/Object	Decoration/Manufacturing Tech	Color	Count	Begin Date	End Date	Reference
whiteware	hand painted	various colors	23	1840	1860	Price 1979; Noël Hume 1980
whiteware	transfer print	blue	9	1828	1860	Majewski & O'Brien 1984; Mullins 1988
whiteware	transfer print	other colors	4	1828	1850	Majewski & O'Brien 1984; Mullins 1988
nail, cut			193	1790	1890	Nelson 1968
nail, wire			17	1880	1970	Nelson 1968; IMAC 1984
Total			724			

Mean Date: 1880

TPQ 1880

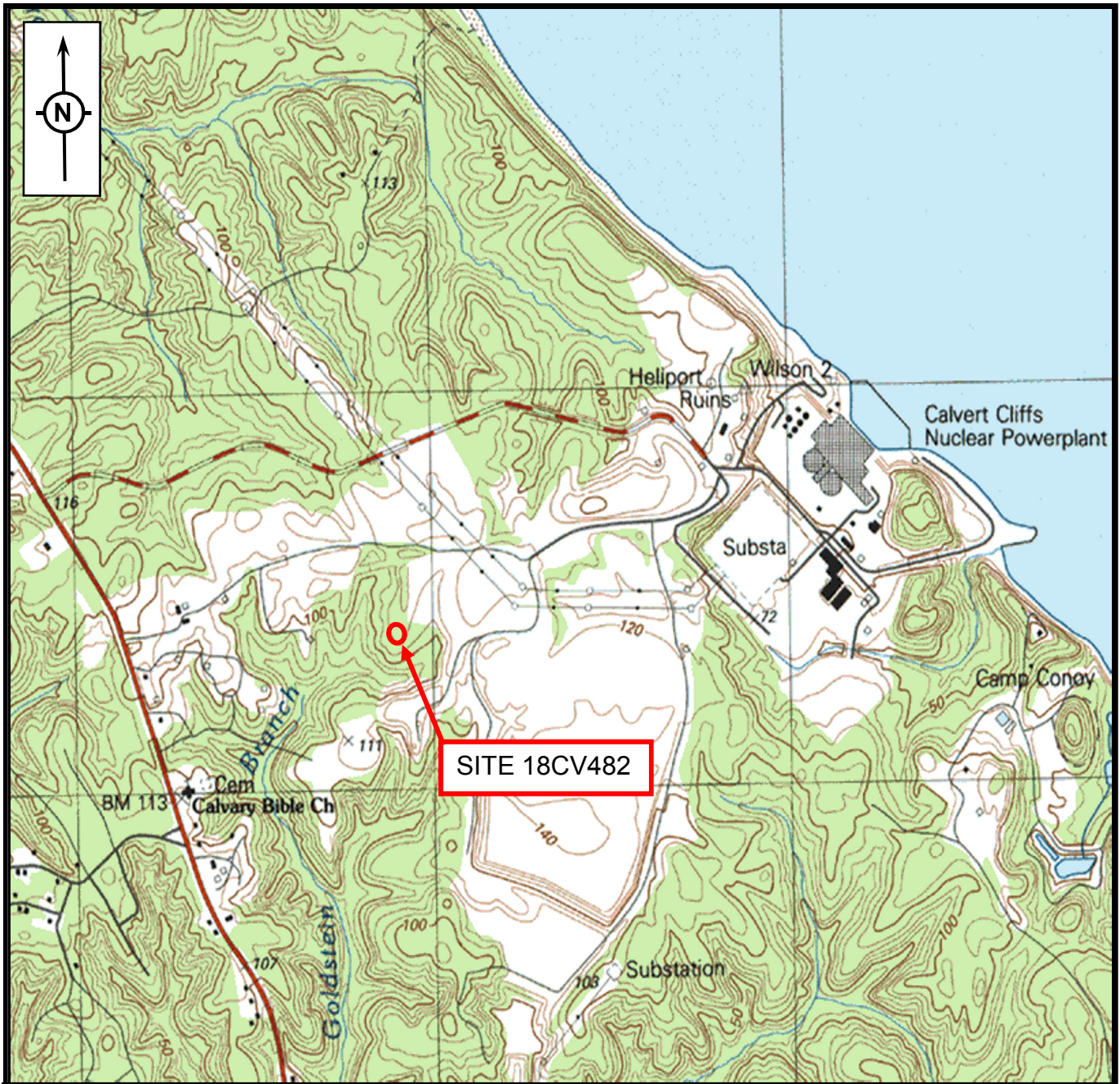
Summary and Evaluation

Site 18Cv482 is a late-nineteenth-century domestic habitation site located on a wooded ridge above a tributary of Goldstein Branch and south of Road B, in the project area's Old Bay Farm Section. The site measures 150x180 feet (46x55 meters). Fifty-six STPs excavated during Phase Ib investigations yielded 64 artifacts. GAI excavated 131 STPs at 15-foot (5-meter) intervals followed by excavation of 11 test units to evaluate the site. Two features were identified: Feature 1/3/3a, a sheet midden located just off the edge of the ridgetop, and Feature 5, the corner of a dry-laid stone foundation. No builder's trench was identified for the stone foundation.

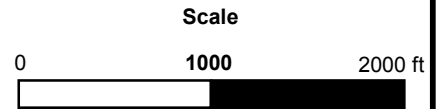
Much of the site area was disturbed by plowing. Some time afterward, mechanical earth-moving activities further disturbed portions of the site, including the area around the former structure location. The site lacks integrity and does not possess the potential to address important questions relating to the history of this region. Based on the results of Phase II field investigations and archival research, GAI recommends that Site 18Cv482 is Not Eligible for listing in the National Register of Historic Places under Criterion D. Accordingly, GAI recommends no further investigations of this site.


Site 18Cv482 Recommendations

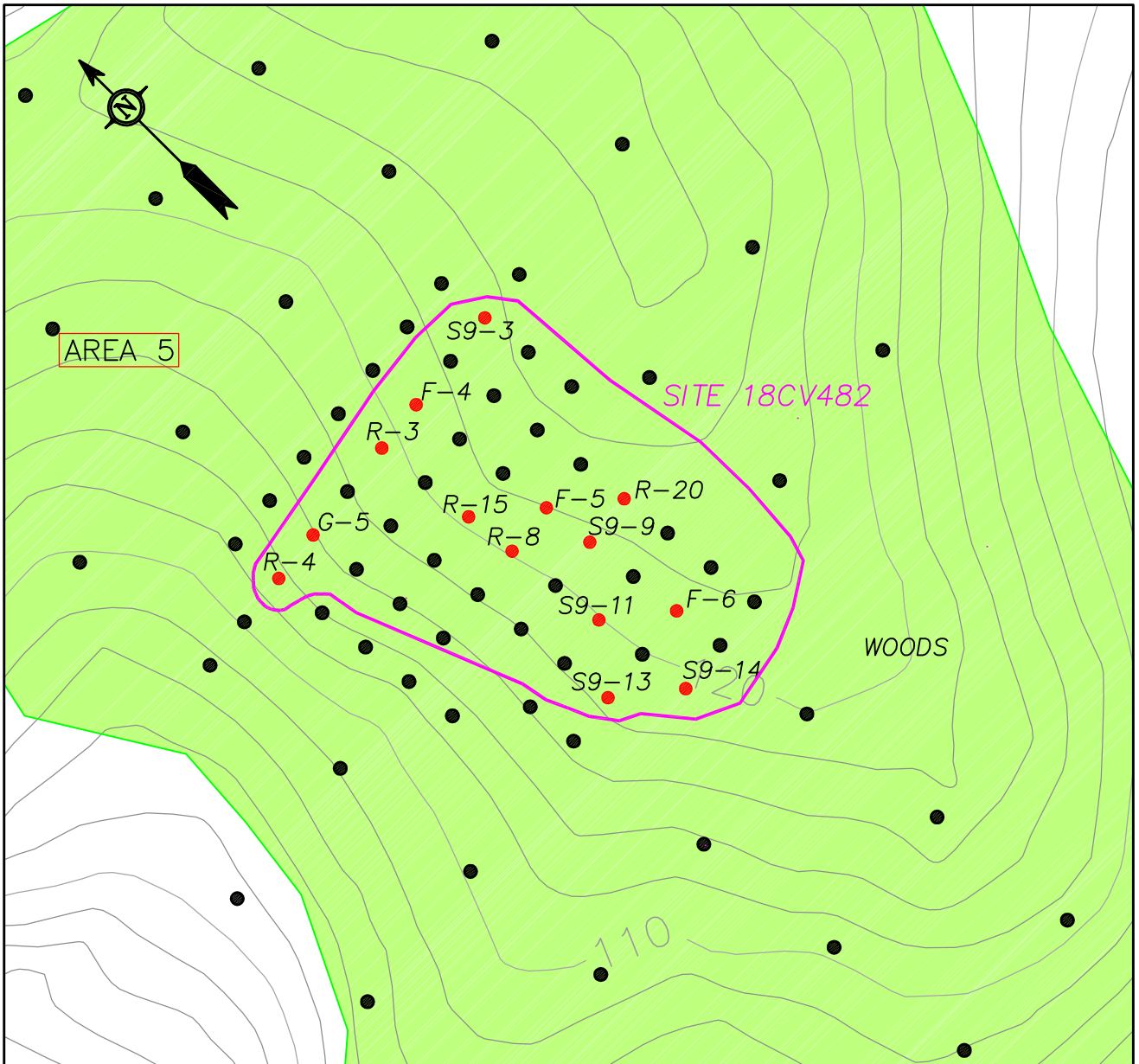
Site 18Cv482 represents a late-nineteenth-century domestic site on a ridge above a tributary of Goldstein Branch. The site is disturbed and lacks integrity. GAI concludes that Site 18Cv482 does not have a potential to contribute important information on the historic occupation of this area. GAI recommends that Site 18Cv482 is Not Eligible in the National Register of Historic Places under Criterion D. GAI further recommends that proposed project construction be allowed to proceed as planned with no additional archaeological testing of this site.



SOURCE: 1987 USGS 7.5-MINUTE COVE POINT, MD



 gai consultants	FIGURE 17-1 SITE 18CV482 LOCATION		DWN TJN	CHKD BAM
			APPD. BAM	DATE 3/7/07
	CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND		SCALE	AS NOTED
			DRAWING NUMBER C080212.00	



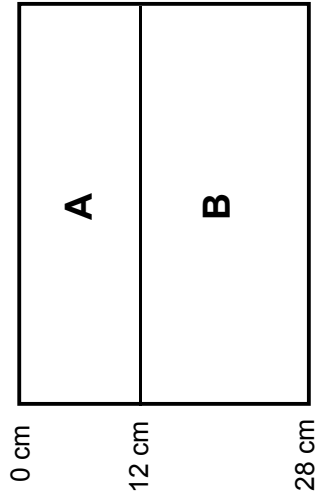
LEGEND:

- SITE BOUNDARY
- △ ISOLATED FIND
- NEGATIVE STP
- POSITIVE STP (HISTORIC)
- POSITIVE STP (PREHISTORIC)
- POSITIVE STP (HISTORIC/PREHISTORIC)
- F-1 STP IDENTIFICATION



<p>FIGURE 17-2 SITE 18CV482 SHOWING PHASE 1B TESTING LOCATIONS</p>	DWN. <u>RSE</u>	CHKD. <u>---</u>	SCALE:
	APPD. <u>---</u>	DATE <u>---</u>	<u>1"=50'</u>
DRAWING NUMBER			
<p>CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND</p>		<p>C060570-10-001-00-A-A007</p>	
		REV	

STP G5



A – Very dark grayish brown
(10YR3/2) sandy loam

B – Light olive brown (2.5YR5/4)
sand loam

Meter Scale



DWN	SJS	CHKD	BAM
APPD.	BAM	DATE	2/20/07
SCALE	As noted		
DRAWING NUMBER	C060570.10.011		

FIGURE 17-3. 18CV482: REPRESENTATIVE PHASE Ib
SHOVEL TEST PROFILE (STP G5)

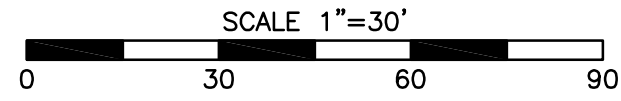
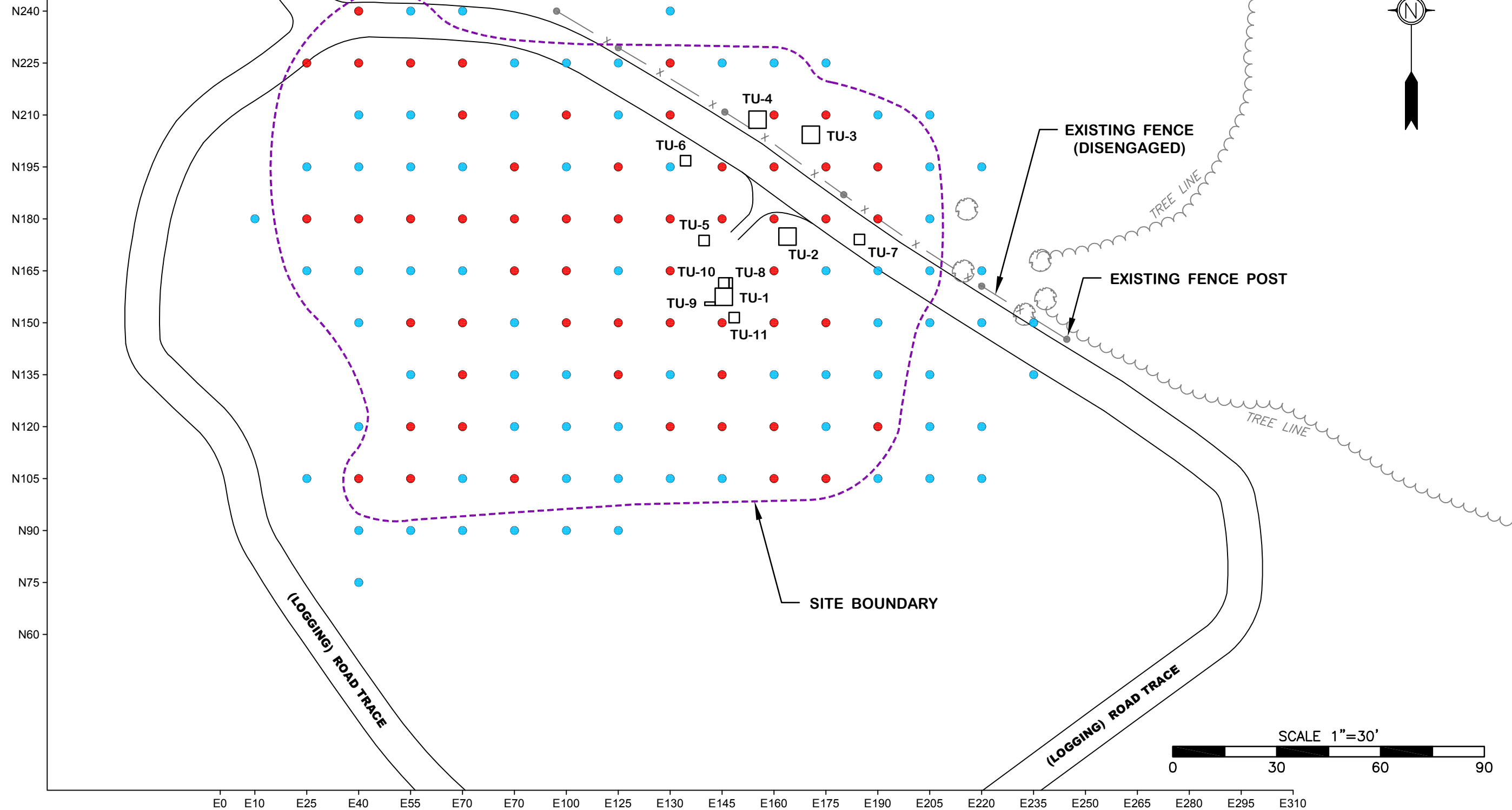
CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND



gai consultants

SITE 18CV482

STP PLAN



PLOTTER FILE: ENV COLOR

LEGEND

- TEST UNIT-(TU)
- SHOVEL TEST PIT (STP)-NEGATIVE
- SHOVEL TEST PIT (STP)-POSITIVE (HISTORIC)
- x --- SITE BOUNDARY
- x --- FENCE LINE & POSTS
- TREE



FIGURE 17-4
 SITE 18CV482
 SITE MAP
 PLAN VIEW
 CALVERT CLIFFS NUCLEAR POWER PLANT
 CALVERT COUNTY, MARYLAND

DWN. JL	CHKD. -	SCALE:
APPD. -	DATE 7/28/08	1"=30'
DRAWING NUMBER		
C080212-00-000-00-C-B000		
△	REV	

DISTRIBUTION OF ALL ARTIFACTS

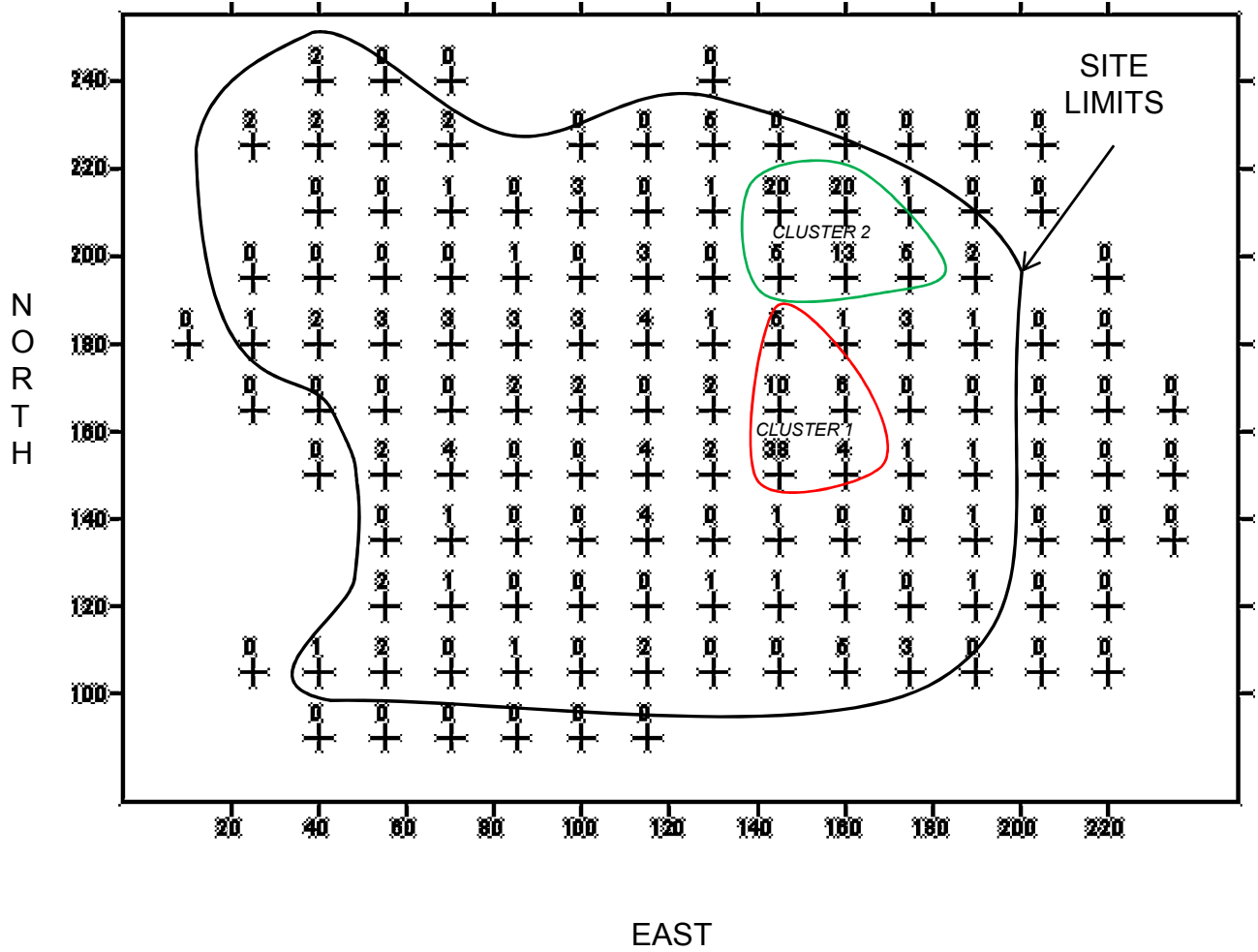


FIGURE 17-5: SITE 18CV482, DISTRIBUTION OF ALL ARTIFACTS

**CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND**

DWN SJS CHKD LF

APPD. DATE 7/21/07

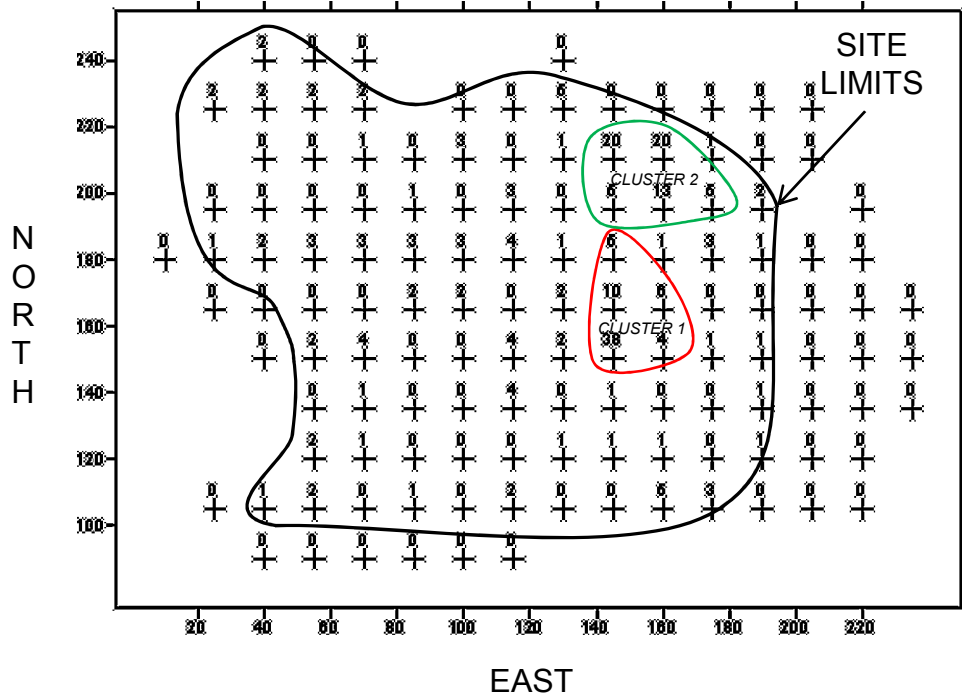
SCALE As noted

DRAWING NUMBER C080212.00

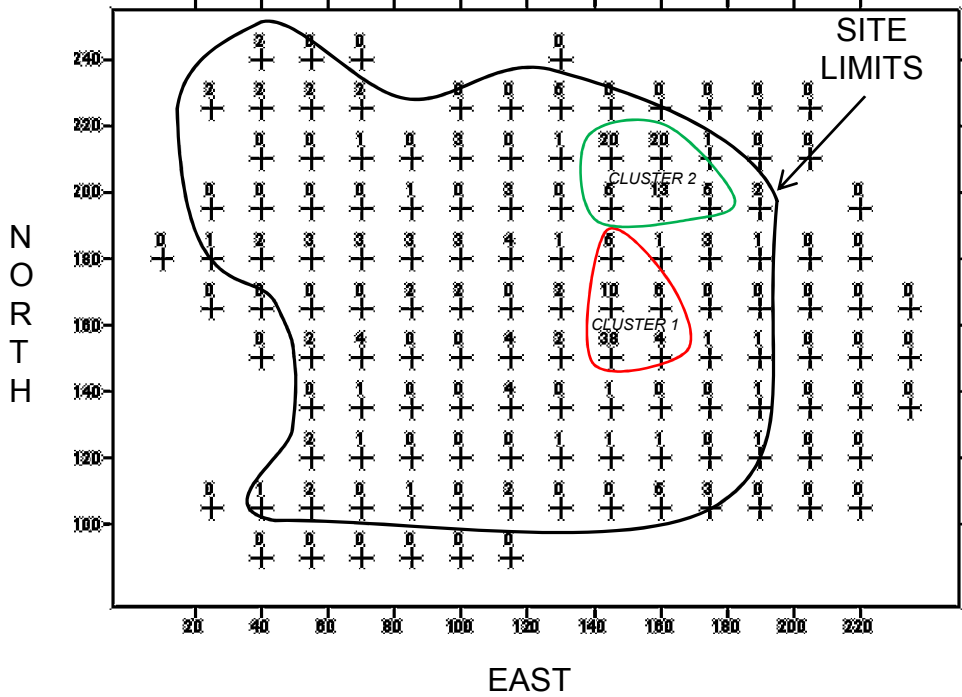


gai consultants

DISTRIBUTION OF ARCHITECTURE ARTIFACTS



DISTRIBUTION OF KITCHEN ARTIFACTS



gai consultants

FIGURE 17-6: SITE 18CV482, DISTRIBUTION OF ARCHITECTURE (TOP) AND KITCHEN (BOTTOM) ARTIFACTS

**CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND**

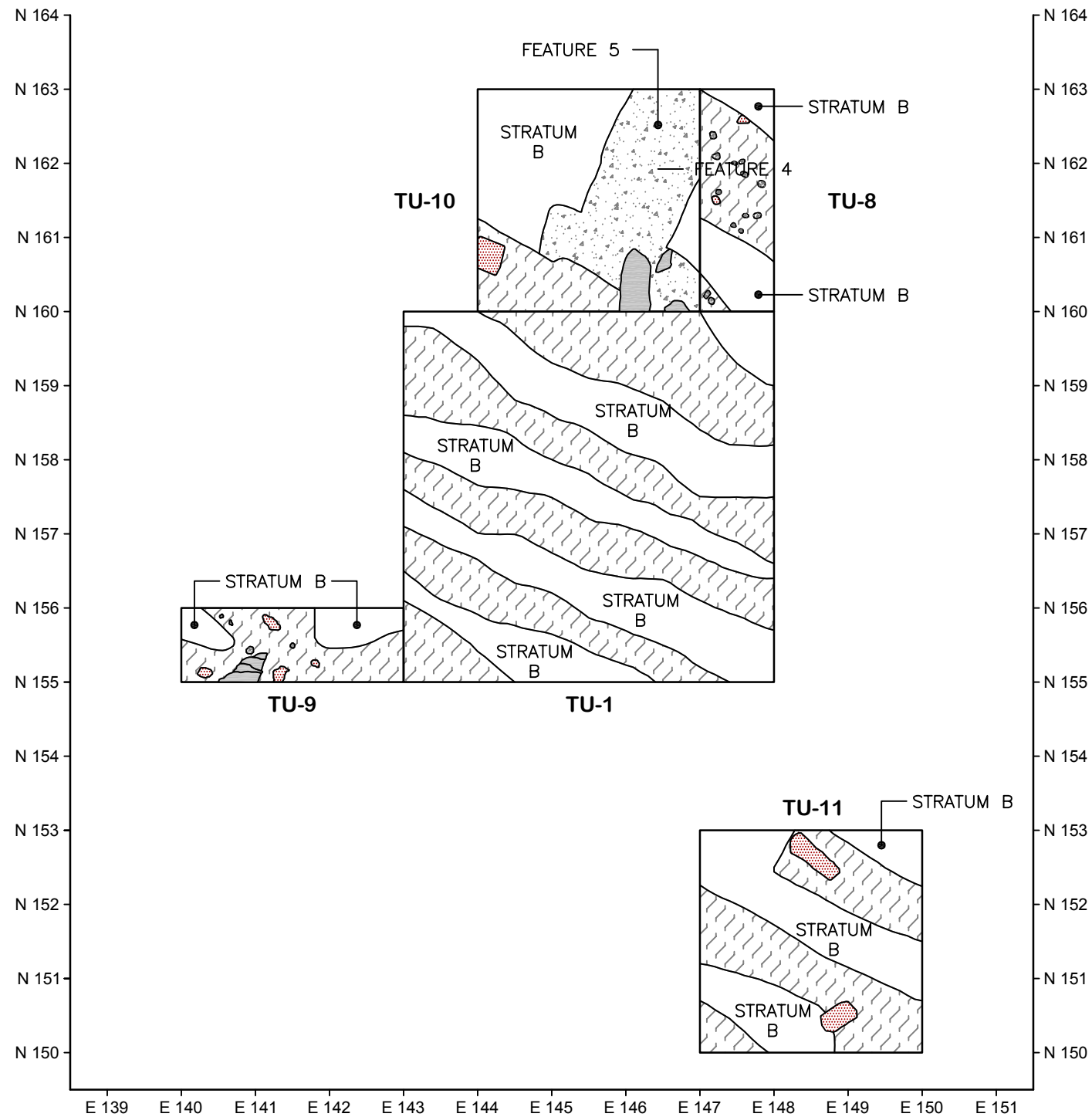
DWN SJS CHKD LF

APPD. DATE 7/21/07

SCALE As noted

DRAWING NUMBER C080212.00

PLOTTER FILE: ENV COLOR



SITE 18CV482
TEST UNITS 1, 8, 9, 10 AND 11
PLAN VIEW

TU-1

STRATUM B = (10YR 5/8) YELLOWISH BROWN, SANDY LOAM
 PLOW SCAR = (10YR 3/4) DARK YELLOWISH BROWN, SANDY LOAM

TU-8

STRATUM B = (10YR 5/8) YELLOWISH BROWN, SANDY LOAM
 PLOW SCAR = (10YR 3/4) DARK YELLOWISH BROWN, SANDY LOAM

TU-9

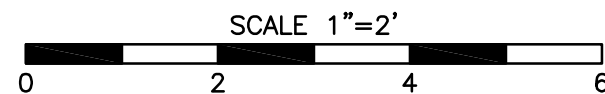
STRATUM B = (10YR 5/8) YELLOWISH BROWN, SANDY LOAM
 FEATURE 4 = (10YR 4/2) DARK GRAYISH BROWN, SILT LOAM

TU-10

STRATUM B = (10YR 5/8) YELLOWISH BROWN, SANDY LOAM
 FEATURE 5 = MORTAR CAPPING STONE WALL

TU-11

STRATUM B = (7.5YR 5/8) STRONG BROWN, SILTY CLAY LOAM
 PLOW SCAR = (10YR 4/3) BROWN, SILT LOAM



LEGEND			
	ROCK		FEATURE
	MORTAR		PLOW SCAR
	BRICK		
	CHARCOAL		

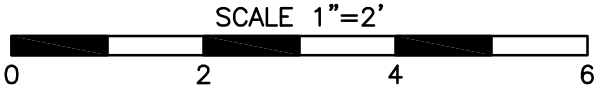
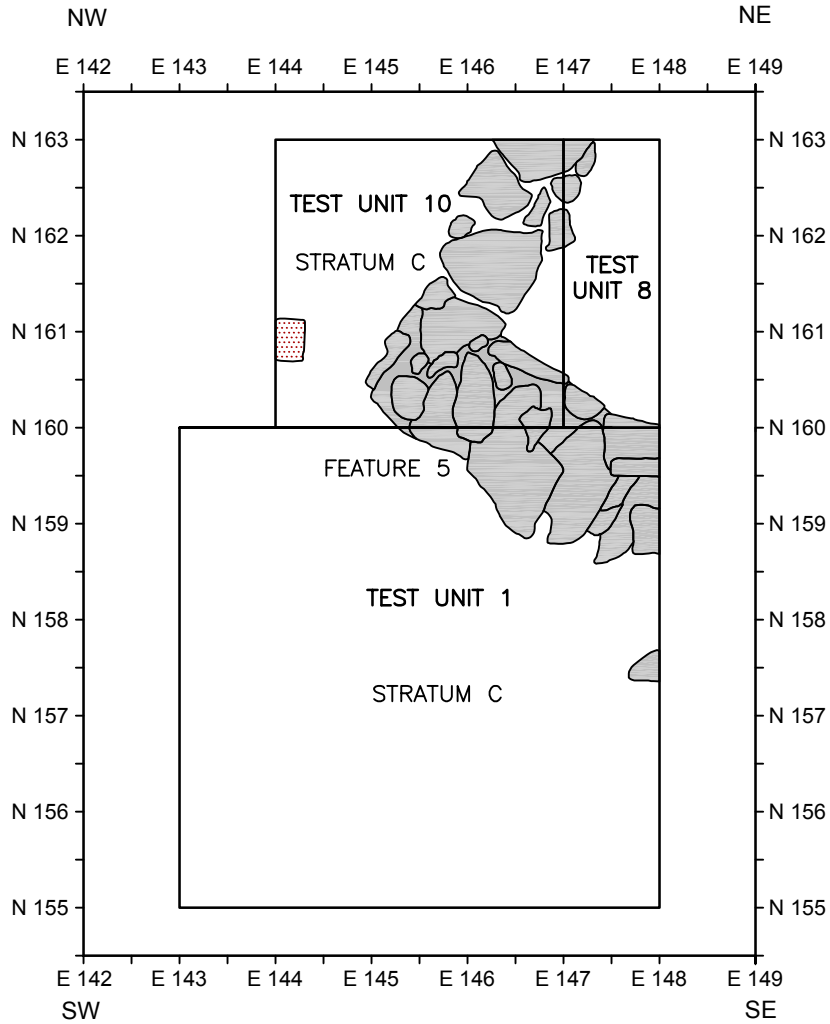
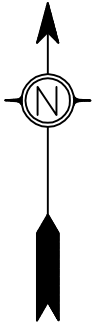


FIGURE 17-7		DWN. <u>JL</u>	CHKD. <u>-</u>	SCALE:
SITE 18CV482		APPD. <u>-</u>	DATE <u>7/25/08</u>	<u>1"=2'</u>
TEST UNITS 1, 8, 9, 10 AND 11		DRAWING NUMBER		
PLAN VIEW		C080212-00-000-00-C-B000		
CALVERT CLIFFS NUCLEAR POWER PLANT		REV		
CALVERT COUNTY, MARYLAND				

GAI CAD FILE: P:\PTI\2008\C080212.00\Cadd\Dwg\Worksheet\Worksheet-Plans\Profiles\Worksheet-Test Units-01.dwg 7/28/2008

SITE 18CV482

FEATURE 5 PLAN VIEW



STRATUM C = (10YR 4/6) DARK YELLOWISH BROWN, SILTY CLAY LOAM
 FEATURE 5 = (10YR 3/4) DARK YELLOWISH BROWN SANDY LOAM AND STONE WALL

LEGEND

ROCK

BRICK



FIGURE 17-8

SITE 18CV482
 FEATURE 5
 PLAN VIEW

CALVERT CLIFFS NUCLEAR POWER PLANT
 CALVERT COUNTY, MARYLAND

DWN. <u>IP</u>	CHKD. <u>—</u>	SCALE:
APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=2'</u>

DRAWING NUMBER

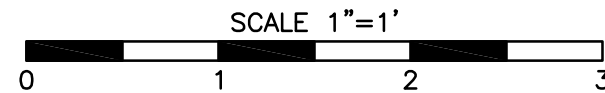
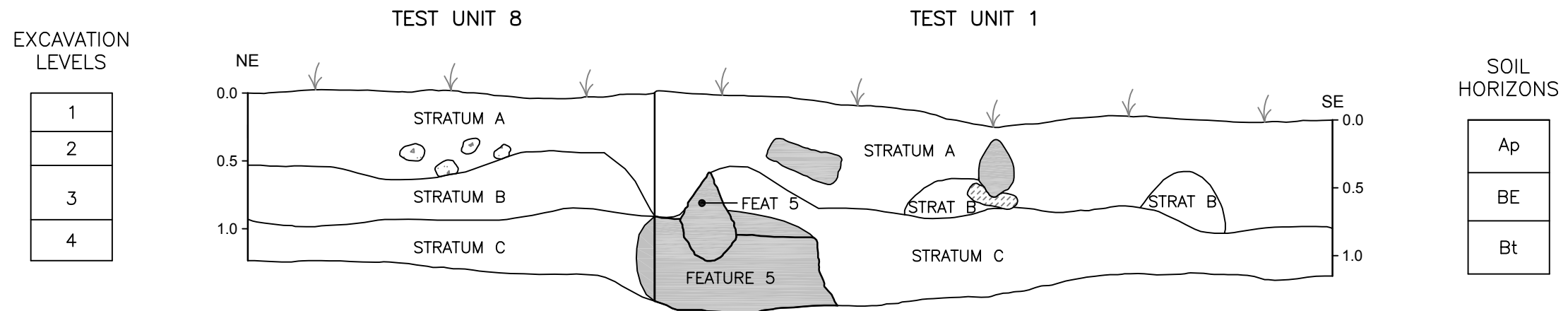
C080212-00-000-00-C-A000



SITE 18CV482

TEST UNIT 1 AND 8

EAST PROFILE

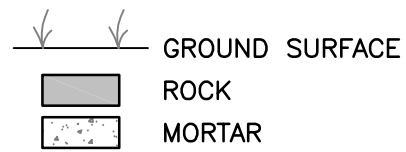


STRATUM A = (10YR 3/3) DARK BROWN, SANDY LOAM

STRATUM B = (10YR 5/8) YELLOWISH BROWN, SANDY LOAM

STRATUM C = (10YR 4/6) DARK YELLOWISH BROWN, SILTY CLAY LOAM

PLOTTER FILE: ENV COLOR



LEGEND



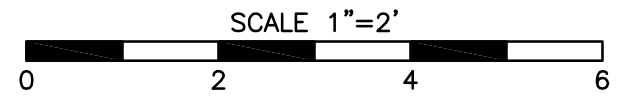
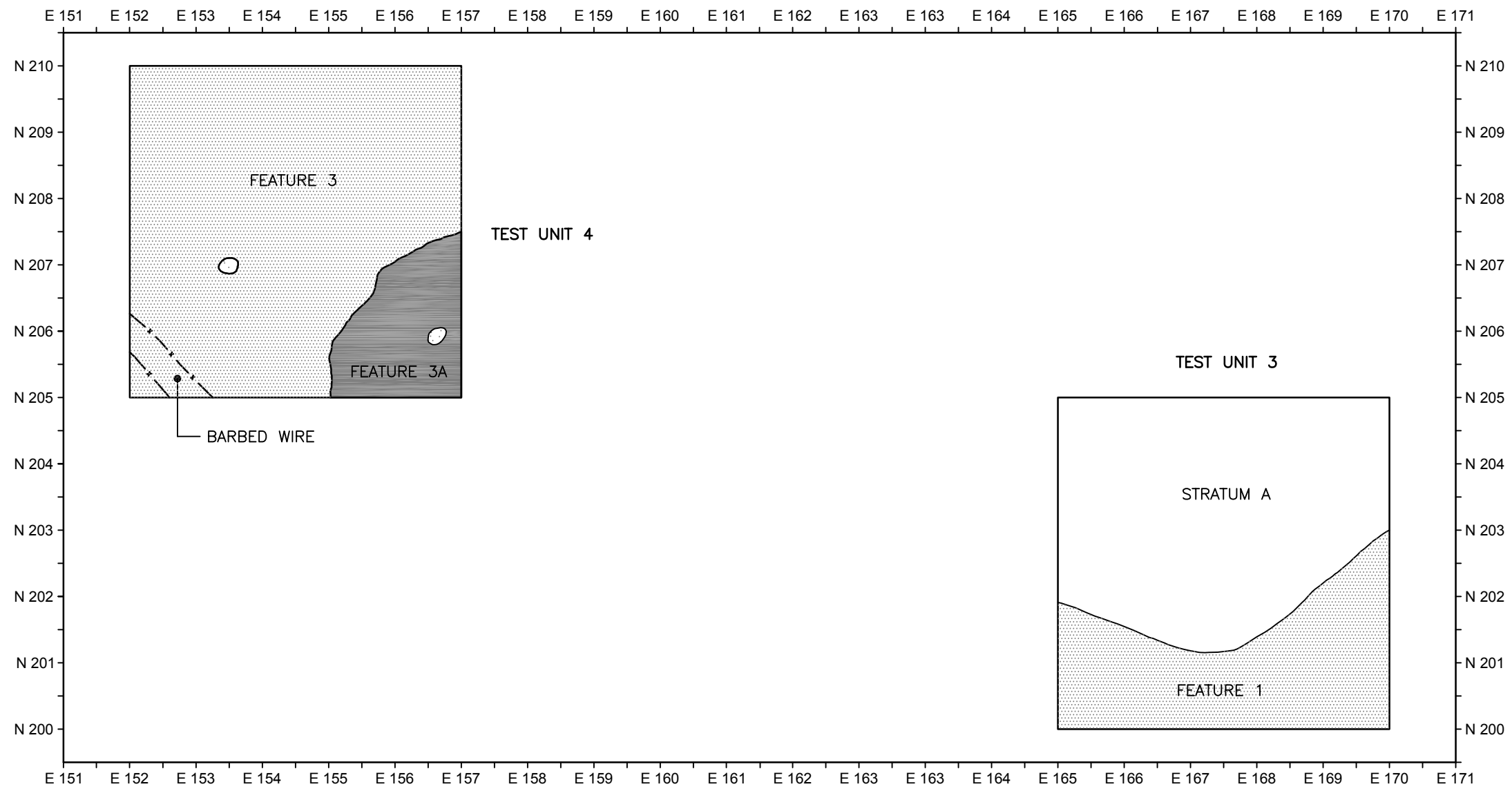
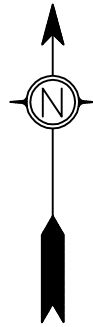
FIGURE 17-9

SITE 18CV482
TEST UNIT 1 AND 8
EAST PROFILE

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

DWN. IP	CHKD. —	SCALE:
APPD. —	DATE 7/28/08	1"=1'
DRAWING NUMBER		
C080212-00-000-00-C-B000		REV

SITE 18CV482
TEST UNIT 3 AND 4
PLAN VIEW



FEATURE 1 = (10YR 4/3) BROWN MOTTLED WITH (10YR 5/4) YELLOWISH BROWN, SANDY LOAM
 STRATUM A = (10YR 4/3) BROWN, SILT LOAM WITH MOTTLED (10YR 5/4) YELLOWISH BROWN, SANDY LOAM
 FEATURE 3A = (10YR 2/1) BLACK, SANDY LOAM
 FEATURE 3 = (10YR 3/3) DARK BROWN, SANDY LOAM

PLOTTER FILE: ENV COLOR

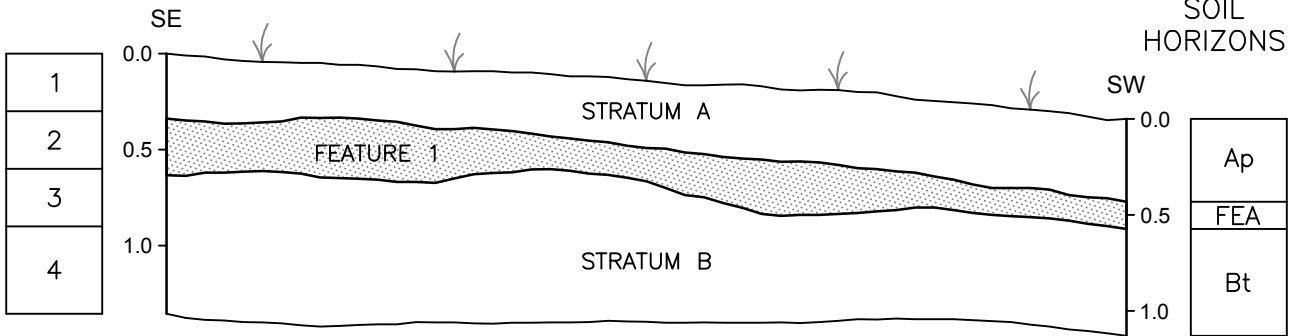
<p>LEGEND</p> <p> MORTAR</p> <p> FEATURE 3a</p> <p> FEATURE</p>	 Pittsburgh Office 385 East Waterfront Drive Homestead, PA 15120-5005 412-476-2000	FIGURE 17-10		DWN. <u>IP</u>	CHKD. <u>—</u>	SCALE:
		SITE 18CV482 TEST UNIT 3 AND 4 PLAN VIEW		APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=2'</u>
		CALVERT CLIFFS NUCLEAR POWER PLANT CALVERT COUNTY, MARYLAND		DRAWING NUMBER		C080212-00-000-00-C-B000

SITE 18CV482

TEST UNIT 3

SOUTH PROFILE

EXCAVATION
LEVELS



STRATUM A = (10YR 4/3) BROWN, SANDY LOAM

STRATUM B = (10YR 5/4) YELLOWISH BROWN, SANDY LOAM
MOTTLED WITH (10YR 5/8) YELLOWISH BROWN, SANDY LOAM

FEATURE 1 = (10YR 4/3) BROWN, SANDY LOAM
MOTTLED WITH (10YR 5/4) YELLOWISH BROWN SAND LOAM (MIDDEN)

LEGEND

GROUND SURFACE

FEATURE



FIGURE 7-11

SITE 18CV482
TEST UNIT 3
SOUTH PROFILE

DWN. JL

CHKD. —

SCALE:

APPD. —

DATE 7/28/08

1"=1'

DRAWING NUMBER

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

C080212-00-000-00-C-A000



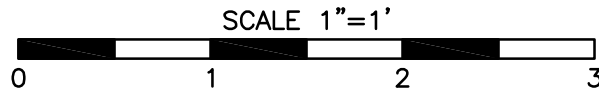
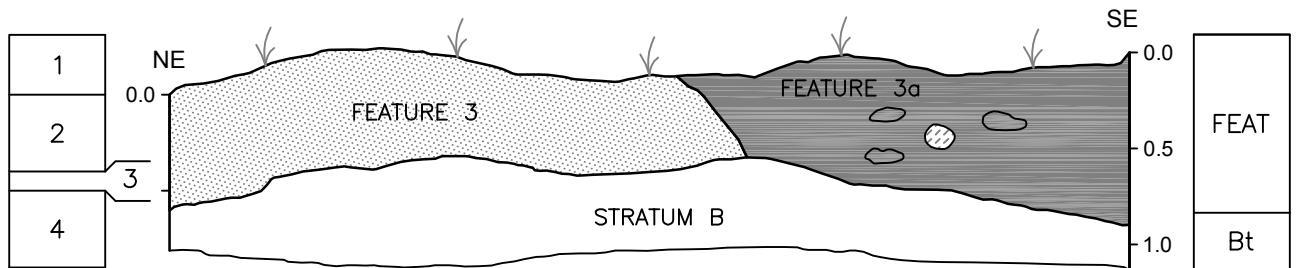
SITE 18CV482

TEST UNIT 4

EXCAVATION
LEVELS

EAST PROFILE

SOIL
HORIZONS



FEATURE 3 = (10YR 3/3) DARK BROWN, SANDY LOAM

FEATURE 3a = (10YR 2/1) BLACK, SANDY LOAM

STRATUM B = (10YR 5/6) YELLOWISH BROWN, SANDY CLAY

LEGEND

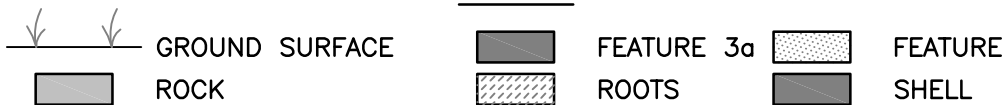


FIGURE 17-12

SITE 18CV482
TEST UNIT 4
EAST PROFILE

DWN. <u>IP</u>	CHKD. <u>—</u>	SCALE:
APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=1'</u>

DRAWING NUMBER

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

C080212-00-000-00-C-A000



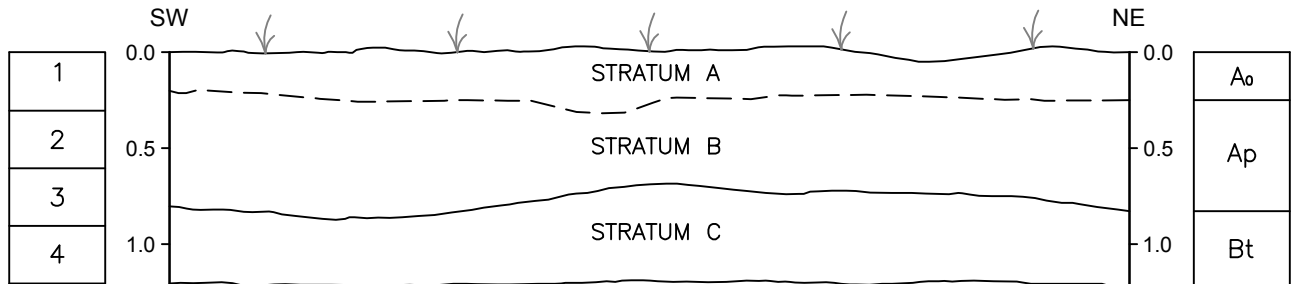
SITE 18CV482

TEST UNIT 2

EXCAVATION
LEVELS

WEST PROFILE

SOIL
HORIZONS



SCALE 1"=1'



STRATUM A = (10YR 3/4) DARK YELLOWISH BROWN, SILTY LOAM

STRATUM B = (10YR 5/4) YELLOWISH BROWN, SILTY CLAY LOAM

STRATUM C = (10YR 5/6) YELLOWISH BROWN, SILTY CLAY LOAM

LEGEND

 GROUND SURFACE



FIGURE 17-13

SITE 18CV482
TEST UNIT 2
WEST PROFILE

DWN. <u>IP</u>	CHKD. <u>—</u>	SCALE:
APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=1'</u>

DRAWING NUMBER

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

C080212-00-000-00-C-A000



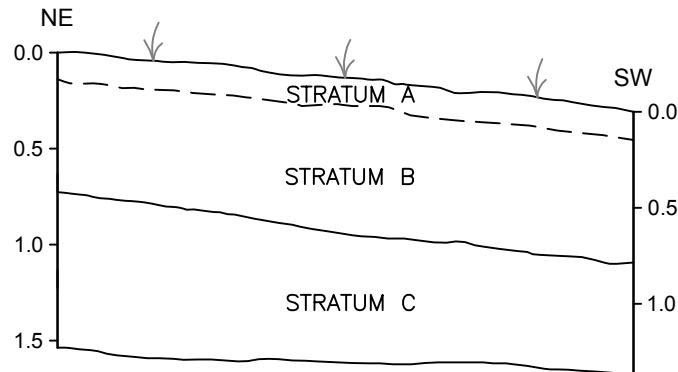
SITE 18CV482

TEST UNIT 5

SOUTH PROFILE

EXCAVATION LEVELS

1
2
3
4
5



SOIL HORIZONS

A _o
A _p
B _t

SCALE 1"=1'



STRATUM A = (10YR 5/3) BROWN, SLIT LOAM

STRATUM B = (10YR 5/4) YELLOWISH BROWN, SANDY CLAY LOAM

STRATUM C = (10YR 5/8) YELLOWISH BROWN, SANDY CLAY LOAM

LEGEND

  GROUND SURFACE



FIGURE 17-14

SITE 18CV482
TEST UNIT 5
SOUTH PROFILE

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

DWN. IP

CHKD. —

SCALE:

APPD. —

DATE 7/28/08

1"=1'

DRAWING NUMBER

C080212-00-000-00-C-A000



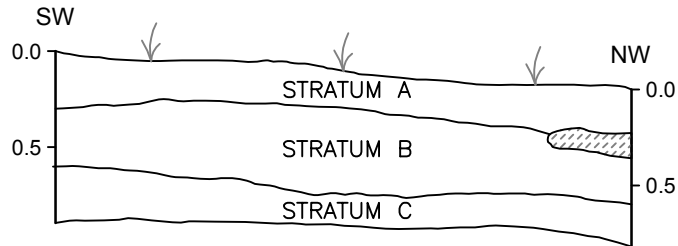
SITE 18CV482

TEST UNIT 6

WEST PROFILE

EXCAVATION LEVELS

1
2
3



SOIL HORIZONS

A ₀
Be
Bt

SCALE 1"=1'



STRATUM A = (10YR 3/3) DARK BROWN, SANDY LOAM

STRATUM B = (10YR 4/4) DARK YELLOWISH BROWN, SANDY CLAY LOAM

STRATUM C = (10YR 4/6) YELLOWISH BROWN, SANDY CLAY LOAM

LEGEND

GROUND SURFACE

ROOTS



FIGURE 17-15

SITE 18CV482
TEST UNIT 6
WEST PROFILE

DWN. IP

CHKD. —

SCALE:

APPD. —

DATE 7/28/08

1"=1'

DRAWING NUMBER

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

C080212-00-000-00-C-A000



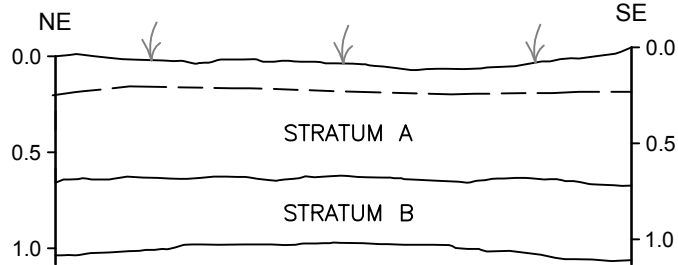
SITE 18CV482

TEST UNIT 7

EAST PROFILE

EXCAVATION LEVELS

1
2
3



SOIL HORIZONS

A _o
A _p
B _t

SCALE 1"=1'



STRATUM A = (10YR 5/3) YELLOWISH BROWN, SILTY CLAY LOAM

STRATUM B = (10YR 6/4) LIGTH YELLOWISH BROWN, SILTY CLAY LOAM

LEGEND

GROUND SURFACE



FIGURE 17-16

SITE 18CV482
TEST UNIT 7
EAST PROFILE

CALVERT CLIFFS NUCLEAR POWER PLANT
CALVERT COUNTY, MARYLAND

DWN. <u>IP</u>	CHKD. <u>—</u>	SCALE:
APPD. <u>—</u>	DATE <u>7/28/08</u>	<u>1"=1'</u>

DRAWING NUMBER

C080212-00-000-00-C-A000



