

ARCHEOLOGICAL SITES

John Milner Associates

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An Investigation of  
Previously Recorded Prehistoric Archeological Sites  
Associated with Proposed Limerick Transmission Lines,  
Montgomery and Chester Counties, Pennsylvania

submitted to  
Philadelphia Electric Company  
2301 Market Street  
Philadelphia, PA 19101

by

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1982

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## I. INTRODUCTION

As part of its proposal to construct additional power transmission lines in southeastern Pennsylvania, the Philadelphia Electric Company (PECO) has petitioned the Pennsylvania Public Utility Commission (PUC) regarding certain siting review requirements. In that petition, previously recorded prehistoric archeological sites within two miles of the proposed routes were listed and identified on maps prepared by PECO. The PUC has requested additional information regarding the proximity of sites to the rights-of-way, impacts to sites expected to result from construction, and measures to be employed to mitigate potential adverse impacts. The investigation reported herein was conducted by John Milner Associates, Inc. to assist PECO in responding to the PUC inquiries. The report is divided into sections providing background information, outlining the methods of data recovery, and describing the results. The significance of archeological sites is discussed, and expected effects on sites within the rights-of-way follow, and form the basis of recommendations to mitigate potential adverse effects.

### Description of the Proposed Routes

The five proposed transmission lines traverse portions of Montgomery and Chester Counties in southeastern Pennsylvania. They are briefly described as follows:

- 1.. Limerick-Cromby (Figure 1): Two lines, one on each side of the Schuylkill River, are proposed from Limerick Unit No. 1 to the existing Cromby generating station. The route on the easterly side of the river lies within an existing Conrail right-of-way, which approximately parallels the river for a distance of 7.4 miles. It then leaves the railroad right-of-way and joins an existing PECO right-of-way to cross the river and enter Cromby. The line on the westerly side of the Schuylkill occupies an existing Conrail right-of-way, which generally follows the river and extends for 8.63 miles between Limerick and Cromby. The easterly route will require approximately 59 support structures and approximately 68 structures will be required on the westerly route. The rights-of-way vary in width but are a minimum of 60 feet wide.
2. Cromby-Plymouth Meeting (Figure 2): The alternate preferred by PUC occupies 8.4 miles of PECO's existing right-of-way and 5.1 miles of Conrail right-of-way for a total distance of 13.5 miles. PECO's right-of-way varies in width

from 80 to 120 feet and the Conrail right-of-way is a minimum of 60 feet wide. The line generally follows the northern side of the Schuylkill and crosses two ox-bow bends. Approximately 122 support structures are required.

3. Cromby-North Wales (Figure 3): The proposed line occupies approximately 16 miles of existing PECO right-of-way, with a width varying from 150 to 450 feet. It leaves the Schuylkill River in a northerly and easterly direction, and traverses uplands for most of its length. Approximately 93 support structures are required.
4. Limerick-Whitpain (Figure 4): The proposed line extends from Limerick Unit No. 2 across uplands to the existing Whitpain Substation, a distance of approximately 16.5 miles. It occupies existing PECO right-of-way for the entire length, with widths ranging between 300 and 520 feet. Approximately 86 support structures are required.

#### Goals and Scope of the Investigation

As indicated above, the archeological investigation was undertaken to obtain additional information about previously recorded sites which may be affected by construction of the proposed lines. Specific goals of the project were to define the proximity of sites to the rights-of-way, to further document the nature and condition of the sites, to determine the potential impacts expected to result from construction, and to offer options for mitigating those impacts. Subsurface testing, either to locate additional sites or to allow further evaluation of known sites, was specifically excluded from the project scope. The methods and results of the investigation are detailed following a brief description of the project area.

## II. DESCRIPTION OF THE PROJECT AREA

The project area, a four mile wide corridor (2 miles either side of the right-of-way center line) along each of the previously described proposed routes, lies within Montgomery and Chester Counties in southeastern Pennsylvania. It is included in the following six U.S.G.S. 7.5 minute topographic maps: Phoenixville, Collegeville, Landsdale, Malvern, Norristown, and Valley Forge.

Situated in the Piedmont Physiographic Province (Fenneman and Johnson 1946) topographic features of the project area include low rolling hills interspersed with floodplains in the interior, and floodplains, terraces, and bluffs overlooking the Schuylkill River. The area is well watered by such streams as the Perkiomen and Skippack Creeks and innumerable smaller streams which eventually feed into the Schuylkill River. The topography of the area and the dendritic drainage pattern present today are the residual result of the several episodes of glaciation, the last of which, the Wisconsin, ended some 12,000 years ago. The flora and fauna of the area have changed over the last 12,000 years due to climatic changes associated with the glacial retreat and culminated in the dominance of the northern forest association of oak, hickory, and chestnut found in the area today.

The soils of the area are deep to moderately deep, well drained, and part of the Landsdale-Penn-Readington Association and the Reaville-Penn-Klinesville Association (Kunkle 1963; Smith 1967). These soils are well suited to agriculture, which is the primary occupation of the present inhabitants. In addition to farming, heavy and light industry are present, primarily along the banks of the Schuylkill River which, historically, served as a major transportation link between Philadelphia and points west.

### III. METHODS OF DATA RECOVERY

Data for this investigation were obtained from three primary sources: the Pennsylvania Archeological Sites Survey (PASS) files maintained by the Pennsylvania Historical and Museum Commission (PHMC) in Harrisburg, interviews with avocational archeologists knowledgeable about sites in the project area, and brief field reconnaissance of selected sites. Data pertaining to pre-historic archeological sites only was gathered. The techniques employed and types of data obtained are outlined as follows:

1. PASS Files: Review of the PASS files indicated the presence of 61 previously recorded sites within the project area. The vast majority of these sites were recorded by three members of the Schuylkill Valley Chapter of the Society for Pennsylvania Archaeology. Although the quantity and quality of recorded data varies, the site forms generally include locations, descriptions of some artifacts, and in some cases, presumed cultural affiliations. Information from the site forms was recorded and site locations were plotted onto U.S.G.S. 7.5 minute topographic maps. Names and addresses of local informants were also obtained from the site files.
2. Interviews: Of the three avocational archeologists noted above only one, Mr. Arthur Krasley, remains active in the area. His collection of artifacts from sites within the project area was examined and photographed, and information concerning the sites' conditions, exact locations, and other specific information was obtained. Landowners in the project vicinity were also queried as to their knowledge of local sites. Mr. John Neidley's extensive artifact collection from the Fricks Lock area has been reported by Holzinger and Humpreville (1972).
3. Field Reconnaissance: Twenty-four of the 61 recorded sites were determined to be in or in close proximity to the proposed construction rights-of-way. Each of these sites was subjected to a brief field reconnaissance in order to more accurately ascertain its present condition and location relative to the area expected to be impacted. A surface survey was conducted at each relocated site and artifacts were collected from within the rights-of-way. Artifacts observed outside the rights-of-way were recorded in a field journal but were left in situ. Notes were maintained for each site to document the



surficial boundaries (if they could be determined), existing field conditions and surface visibility, and the nature and extent of disturbances. A photographic record was also made of each relocated site.

The remaining 37 recorded sites were determined to be outside of the proposed rights-of-way and, accordingly, are not expected to be affected by construction of the transmission lines. They were excluded from the field reconnaissance and are not discussed further.

## IV. RESULTS

As noted above, 61 sites have been previously recorded in the project area, and 24 of these sites lie within, or in very close proximity to, the proposed construction rights-of-way. Results of the field reconnaissance of the 24 sites are summarized in Table 1 and are detailed below. To facilitate management decisions, they are organized by the proposed transmission lines. Site designations are abbreviated forms of the alpha-numeric system of nomenclature in which "Ch" refers to Chester County and "Mg" refers to Montgomery County. Cultural affiliations are noted, when possible, in terms of the following cultural traditions:

Paleo-Indian	c.10,000 B.C. - c.7,000 B.C.
Archaic	c.7,000 B.C. - c.1,000 B.C.
Transitional	c.1,800 B.C. - c.800 B.C.
Early-Middle Woodland	c.800 B.C. - A.D. 1000
Late Woodland	c.A.D. 1000 - A.D. 1550
Historic Contact	A.D. 1550 - A.D. 1750

1. Limerick-Cromby (Figure 1): Seventeen of the 24 sites subjected to field reconnaissance are located along the Limerick-Cromby lines. One site, Ch-56, was found to extend into the right-of-way, and 11 sites were found to be totally outside of the rights-of-way. Surficial boundaries of the remaining five sites could not be determined due to very poor surface visibility, but they may also extend into the rights-of-way. These 17 sites are briefly described as follows:

- A. Sites Within the Rights-of-Way:

Ch-56, located east of Route 724, is a floodplain site which has been bisected by the Conrail right-of-way. Archaic and Early-Middle Woodland components have been recognized at the site. Artifacts appear to be concentrated on the east side of the right-of-way, and include waste flakes of argillite and quartz, biface fragments of quartz and quartzite, a fragmentary quartz unifacial scraper, and a quartz core. Although the site was undoubtedly disturbed by railroad construction, portions of it within the right-of-way may remain intact.

B. Sites of Undetermined Proximity:

Ch-55 is located on the west side of Route 724 and is currently in pasture. Krasley has reported Archaic and Late Woodland artifacts from the site, although no artifacts were observed during this reconnaissance due to severely limited surface visibility. The site may extend eastward into the right-of-way although it has been disturbed by road and railroad construction.

Ch-105, located between Schuylkill Road and the right-of-way, is also currently in pasture and could not be successfully surface inspected. Krasley has recovered projectile points indicative of an Archaic component.

Mg-1, located south of Linfield, was also not visible from the surface. It is recorded as a Late Woodland site on a terrace of the Schuylkill River. Although partially excavated by the Schuylkill Valley Chapter of the Society for Pennsylvania Archaeology in 1971, the results of that work have not been reported. Disturbance from railroad construction appears to have been severe.

Mg-37, located between the right-of-way and the Schuylkill River, is on a large floodplain, currently fallow with no surface visibility. The site is recorded as Archaic, although according to the site form, triangular projectile points characteristic of Late Woodland occupations were recovered during excavations conducted by the Hill School.

Mg-39 is recorded on a terrace east of the right-of-way, northwest of Royersford. The site is currently in pasture, affording no surface visibility. The site's cultural affiliation, integrity, or other characteristics could not be ascertained.

C. Sites Outside the Rights-of-Way:

The remaining 11 sites were all found to be outside of the rights-of-way proposed for construction.

Ch-36, Ch-107, and Mg-14 have all been severely disturbed by housing developments, and are not proximate to the rights-of-way.

Ch-37 is located south of Fricks Lock Road in an existing PECO right-of-way, which is not scheduled for additional construction as part of the project. Artifacts found on the site include jasper and quartz waste flakes and a flint projectile point tip. Other artifacts reported from the site are celts and jasper and argillite tools. The site is believed to span the Archaic through Late Woodland periods, and appears to have been only minimally disturbed.

Ch-43 and Ch-111 appear to be separately recorded loci of the same large floodplain occupation area. Excellent surface visibility afforded by recent plowing allowed the observation of large amounts of waste flakes, tools, and pottery fragments. Krasley reports that the sites have been intensively collected for at least a century, and that they have yielded artifacts spanning the area's prehistory from Paleo-Indian through Late Woodland. The right-of-way in the vicinity of Ch-43 and Ch-111 has been cut into a steep slope between the first and second river terraces and does not encroach upon the sites.

Ch-47 occupies a hilltop location west of the Schuylkill River. Although surface visibility was poor, less than 20 percent, it was sufficient to allow the identification of a small scatter of primarily quartz waste flakes. Krasley has reported two Archaic projectile points also from the site. No artifacts were observed on the slope separating the site from the right-of-way.

Ch-103, reported by Krasley as a Transitional site, is currently planted in rye. Although waste flakes were observed on the site, no flakes or other artifacts were found within the right-of-way.

Ch-104, an Archaic through Middle Woodland site also reported by Krasley, was found to lie more than 900 feet from the right-of-way. It contained flakes, cores, and fire-cracked rock.

Mg-15, located between the right-of-way and Major Hollow Road, produced fire-cracked rock and waste flakes from its flat areas. No artifacts were observed on the steep slope between the site and the right-of-way.

Mg-38, the final site, was identified on a small knoll approximately 450 feet east of its recorded location. The site is isolated from the right-of-way by a steep slope devoid of artifacts.

2. Cromby-Plymouth Meeting (Figure 2): Seven sites on the proposed Cromby-Plymouth Meeting line were subject to field reconnaissance. Of these, one was found to be within the right-of-way, two were found to be clearly outside the right-of-way, and the remaining four sites may extend into the right-of-way, although poor surface visibility prevented precise definition of their boundaries. These sites are briefly described as follows:

A. Sites Within the Right-of-Way:

Ch-53 is a very large bluff-top site in an oxbow bend of the Schuylkill River. It is currently in corn stubble which afforded fair surface visibility of 20 to 40 percent. Three quartz biface fragments, a unifacial scraper fragment of quartz, numerous quartz waste flakes, and a jasper side-notched projectile point were recovered during this investigation. Krasley has reported finding a considerable number of artifacts from this site representing every prehistoric tradition defined in southeastern Pennsylvania. Included in his collection from Ch-53 are two fluted projectile points, diagnostic of the Paleo-Indian Tradition, and numerous bifurcate points indicative of Early Archaic occupation, in addition to artifacts representing subsequent cultural components. Disturbance to the site appears minimal.

B. Sites of Undetermined Proximity:

Ch-110, located near Black Rock Tunnel, is currently in pasture and could not be successfully examined due to the absence of surface visibility.

Ch-116, recorded as a large floodplain site, is currently a fallow field with no surface visibility. The recorded site boundaries include a

portion of the right-of-way, although site boundaries could not be reaffirmed due to the absence of surface visibility.

Mg-8, west of a trailer park on the north side of the Schuylkill River, is currently fallow and affords no surface exposure. Accordingly, its boundaries or cultural affiliations could not be determined through surface examination. (PUC QUESTION 31(c))

Mg-10, located at Port Indian, is occupied by a housing development with sod lawns, affording no surface exposure. As with other sites lacking surface visibility, further assessment of its areal extent and potential significance could not be made at this time. (PUC QUESTION 31(b))

C. Sites Outside the Right-of-Way:

Mg-18 is located north of Barbadoes Island and is currently occupied by a housing development. The entire area has been extensively graded and filled, precluding relocation of the site. The severe disturbance and the site's distance from the right-of-way make additional significant impacts unlikely. (PUC QUESTION 31(a))

Mg-74, north of Valley Forge National Historical Park, is presently in corn stubble. Surface visibility on the site and in the right-of-way was poor, but approached 20 percent in some areas. Waste flakes, cores, and fire-cracked rock were observed on the site, but were approximately 700 feet from the right-of-way.

3. Cromby-North Wales and Limerick-Whitpain (Figures 3 and 4): Both of these lines leave the Schuylkill River and traverse uplands for their lengths. They both cross a large floodplain of the Perkiomen Creek near its confluence with several unnamed drainages. Holzinger and Humpreville surveyed the vicinity of the PECO pumping station for archeological resources in 1972, but reported negative results. They documented extensive disturbance and determined the presence of a marsh until geologically-recent downcutting of the Perkiomen channel. No other archeological surveys or sites have been reported for the vicinity of either proposed line.

To summarize the results, 61 sites have been recorded in the project area. These sites are concentrated along the Schuylkill River and, consequently, are limited to the Limerick-Cromby and Cromby-Plymouth Meeting lines. Field reconnaissance of 24 sites, selected on the basis of their proximity to the rights-of-way, determined that site Ch-56 is within the Limerick-Cromby right-of-way and site Ch-53 is within the Cromby-Plymouth Meeting right-of-way. Nine additional sites may also extend into the rights-of-way, although surface visibility was insufficient to determine site boundaries. The remaining 13 sites were determined to lie completely outside the rights-of-way.

Table 1. Site and Right-of-Way Proximity

	In	Undetermined	Out
1. Limerick-Cromby			
Ch-36			X
Ch-37			X
Ch-43			X
Ch-47			X
Ch-55		X	
Ch-56	X		
Ch-103			X
Ch-104			X
Ch-105		X	
Ch-107			X
Ch-111			X
Mg-1		X	
Mg-14			X
Mg-15			X
Mg-37		X	
Mg-38			X
Mg-39		X	
2. Cromby-Plymouth Meeting			
Ch-53	X		
Ch-110		X	
Ch-116		X	
Mg-8		X	
Mg-10		X	
Mg-18			X
Mg-74			X



## V. DISCUSSIONS OF SIGNIFICANCE AND EFFECTS

1. Recorded Sites In or Near the Rights-of-Way: As reported above, two sites were determined to be within the rights-of-way and nine additional sites may also extend into the rights-of-way. The remaining 50 sites are well removed from the rights-of-way, and are not expected to be affected by proposed construction. Before addressing the potential impacts to the 10 sites in or near the rights-of-way, it is necessary to discuss the concept of site significance as it relates to the determination of expected impacts.

Within the past fifteen years, a set of procedures for assessing impacts to archeological resources has evolved in response to federal legislation and policy. Although mandated for development projects with federal funding, assistance, or licensing, the general framework is also applicable for addressing archeological resources pursuant to Pennsylvania's Historic Preservation Act of 1978 (P.L. 78-273). In most instances, a two-phased program of investigation is undertaken to first locate potential archeological resources, and, secondly, to evaluate their significance. Effects, or impacts, from proposed projects are then considered for each significant site.

The significance of archeological sites is normally evaluated in terms of their ability to provide information important in elucidating and understanding an area's prehistory or history. Characteristics which contribute to a site's significance may include the presence of discrete cultural components, undisturbed natural and cultural strata, or an abundance of floral or faunal remains, to name a few. In most instances the presence or absence of such characteristics can be determined only through subsurface testing. In areas of obscured surface visibility or buried cultural deposits, subsurface testing is also necessary to adequately define the areal limits of sites and to define the types of data they are expected to contain.

2. Currently available information is insufficient to determine the significance, and the need for further consideration, of the two sites within the rights-of-way, Ch-53 and Ch-56. If the two sites are assumed to be significant, it is also assumed that they will be adversely affected by proposed construction.

Impacts expected include deep disturbance in the areas to be excavated for support structure anchors, and more extensive but shallow disturbance caused by the movement of heavy equipment within the right-of-way.

Similarly, data obtained through subsurface testing are necessary to define the significance and the areal extent of the 11 sites found to be near the rights-of-way, but which were obscured by ground cover or are buried.

2. Other Areas of Potential Impact: This investigation has considered the 61 sites previously recorded in the project area. As noted above, most of these sites are clustered along the Schuylkill River and have been identified and recorded by local avocational archeologists. Despite the number of sites recorded by these people, it is apparent that they concentrated their efforts on the larger and more accessible sites along the Schuylkill River. The absence of recorded sites in the upland areas of the Cromby-North Wales and Limerick-Whitpain lines is believed to reflect the lack of systematic archeological surveys rather than the absence of archeological sites.

In his survey of Blue Marsh Lake, on the Tulpehocken Creek in Berks County, Kinsey (1976) developed a predictive model of archeological site locations. Kinsey's model may be extrapolated to the upland portion of the project area due to their similar topographic and environmental settings. Kinsey (1976: 59-60) classified sites located during his survey based on five geomorphological criteria: hilltop and hillside, swampy floodplains, dry floodplains, terraces along the Tulpehocken, and terraces along tributaries of the Tulpehocken. He found that hilltop locations, most often associated with a nearby spring, comprised the loci for 13 of 23 sites. Artifacts from these sites were predominantly of quartzite, favored by Late Archaic inhabitants, and reflected a high percentage of waste flakes. In contrast, floodplain sites most often contained artifacts of jasper, chalcedony, and flint and yielded a greater proportion of finished tools. Kinsey (1976:65) hypothesized that the floodplain sites were transient camps occupied in the course of hunting and processing game, and that the drier hilltop sites were loci of more extended occupation as seasonal base camps.

Although data pertaining to cultural-historical traditions other than Late Archaic were scarce in the project area, Kinsey (1976) also formulated

hypotheses about some aspects of earlier and later settlement patterns. He (Kinsey 1976:59) noted that jasper, favored by Paleo-Indians, is available as outcrops in the Fleetwood-Bowers area between Allentown and Reading, and that Paleo-Indian base camps and food procurement camps would be expected within a ten mile radius of these outcrops. Woodland sites were also quite rare in the project area, but Kinsey (1976:65) believed Woodland settlements might be concentrated in a few large semi-permanent villages in areas of high agricultural potential along tributary streams.

To extend Kinsey's data to the present project area, the majority of sites within the uplands are expected to be small Late Archaic sites with low artifact densities. Areas of high site probability are flat hilltops associated with a nearby spring or other water source. Located on well-drained soils with slopes less than five percent, these sites are expected to be seasonal base camps oriented towards hunting and the exploitation of nearby riverine resources. Areas of medium site probability are frequently inundated floodplains which are expected to contain transient camps and resource procurement and processing sites. Areas of low site potential include hillsides with slopes in excess of ten percent.

Based on Kinsey's data, a number of unrecorded archeological sites are expected in the upland portions of the Cromby-North Wales and Limerick-Whitpain lines. Additional sites may also be present in less accessible areas along the Schuylkill River. Although upland sites are probably smaller and contain fewer artifacts than the Schuylkill River floodplain sites, they are nevertheless an important expression of aboriginal settlement and subsistence patterns. Such sites may represent specialized resource procurement activities or cultural adaptations not evidenced on the riverine floodplain sites. Since upland sites are often more shallow and closer to the surface than floodplain sites, they are especially sensitive to construction-related ground disturbance. It is concluded that construction in the upland areas may also impact significant archeological sites which have not yet been identified or recorded.

## VI. MITIGATIVE OPTIONS.

As discussed in the preceding section, 13 known sites and an unknown number of unrecorded sites may be impacted by the proposed construction. Potential adverse effects to archeological resources are most often mitigated through avoidance or protective measures designed to preserve the data in situ, or through controlled data recovery designed to preserve the data but not the actual site. Of these, in situ preservation is the preferred mitigative option. It may be accomplished by locating support structures outside of defined site boundaries, and by restricting vehicle operation within site boundaries. In some cases, sites may also be preserved in situ by placing protective fill over them prior to construction.

When avoidance is not feasible due to engineering or other environmental considerations, impacts may be successfully mitigated by retrieving the data prior to construction disturbance. Such data recovery is normally accomplished through controlled archeological excavations guided by a research design or set of research questions developed for the specific site under consideration. Careful excavations, recording, analysis, and reporting are necessary to complete the mitigation through data recovery.

More detailed definition of potential impacts and specific mitigation measures require further determinations of site boundaries and significance. Necessary data for such determinations may be obtained through subsurface testing coupled with existing information.

## VII. REFERENCES CITED

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FIGURES

APPENDIX A  
ARTIFACT INVENTORY





LIMERICK TRANSMISSION LINES  
ARTIFACT INVENTORY SHEET

Site: 36-Ch-53

Provenience: Surface

Item Description	Quantity
Fragmentary quartz bifaces	3
Fragmentary quartz unifacial scraper	1
Quartz flakes	13
Side-notched point (jasper)	1

LIMERICK TRANSMISSION LINES  
ARTIFACT INVENTORY SHEET

Site: 36-Ch-56

Provenience: Surface

Item Description	Quantity
Flakes, argilite	3
Flakes, quartz	1
Core quartz	1
Fragmentary biface quartz	1
Fragmentary biface quartzite	1
Fragmentary quartz unifacial scraper	1

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COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

WILLIAM PENN MEMORIAL MUSEUM AND ARCHIVAL BUILDING

BOX 1026

HARRISBURG, PENNSYLVANIA 17120

G. N. DeCOWSKY  
CHIEF ELECTRICAL ENGINEER  
FEB 1 - 1982  
LEP-677

January 26, 1982

ELECTRICAL ENGINEERING  
TRANSMISSION & DIST. ENG. SECTION  
L. F. HAMILTON  
FEB 2 - 1982  
Referred: / / /

Mr. George N. DeCowsky  
Chief Electrical Engineer  
Philadelphia Electric Company  
2301 Market Street  
P.O. Box 8699  
Philadelphia, PA 19101

Re: Proposed 230 kV line from proposed  
Limerick Generating Station to Cromby  
Generating Station, Montgomery & Chester  
Counties, File No. ER 82 042M 0047

Dear Mr. DeCowsky:

The above named application has been reviewed by the Bureau for  
Historic Preservation in accordance with Section 106 of the National  
Historic Preservation Act of 1966, Executive Order 11593 and the  
regulations of the Advisory Council on Historic Preservation (36 CFR 800).

There is a high probability that archeological resources may be  
affected by this project. A survey or limited testing of the area should  
be undertaken to locate potentially significant archeological resources.  
Guidelines and instructions for this phase are available from this office.  
If you have any questions, please call Kurt Carr at (717) 783-5216.

Sincerely,

Brenda Barrett  
Director  
Bureau for Historic Preservation  
(717) 783-8947

ELECTRICAL ENGINEERING DIVISION  
FEB 2 - 1982  
G. D. PARADIS

L.F.H

~~6/11~~



COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

WILLIAM PENN MEMORIAL MUSEUM AND ARCHIVES BUILDING  
BOX 1026  
HARRISBURG, PENNSYLVANIA 17130

ELECTRICAL ENGINEERING  
TRANSMISSION & DIST. DIV. SECTION  
L. J. HILTON  
SEP 9 - 1982  
Referred:

September 3, 1982

Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

ELECTRICAL ENGINEERING DIVISION  
SEP 9 - 1982  
G. D. PARADIS

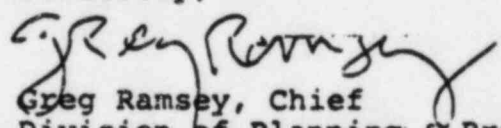
Re: New Cable Line for Cromby  
Station, ER 82-012M-0047

Dear Sir:

It has come to our attention that you are planning a new cable line from your Cromby Station, south into Montgomery County and then west back into Chester County.

Significant archeological sites are located in or near your project area & others are likely to exist. These resources could be adversely affected by project activities. Intensive testing of the archeological resources will be needed to determine their eligibility for listing in the National Register of Historic Places. For assistance in developing the necessary scope of work, please contact Kurt Carr of the Division of Planning & Protection, Bureau for Historic Preservation, Pennsylvania Historical and Museum Commission. The sites and areas that concern us are listed below.

ch 53

Sincerely,  
  
Greg Ramsey, Chief  
Division of Planning & Protection  
Bureau for Historic Preservation  
(717) 783-8947

GR/vms  
c: Public Utility Commission  
Kurt Carr

*Tony C. H.  
Answers for  
your letter  
Greg Ramsey  
1/10/82  
9/6/82*

*Dr. P. H.*

LEE  
NLIK  
TKS file

September 17, 1982

Mr. G. Ramsey, Chief  
Division of Planning and Protection  
Bureau for Historic Preservation  
Box 1026  
Harrisburg, Pa. 17120

Subject: New Cable Line for Crosby Station  
ER 82-0424-0047

Dear Mr. Ramsey:

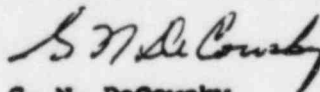
Your letter to Philadelphia Electric Company dated September 3, 1982 was referred to me for reply.

On January 13, 1982 a letter was sent to Mrs. Frank Piasecki, Chairperson, Pennsylvania Historical and Museum Commission advising the Commission that a petition, Docket P-810309, was filed by Philadelphia Electric Company before the Pennsylvania Public Utility Commission. A copy of that petition was mailed to Mrs. Piasecki on January 22, 1982.

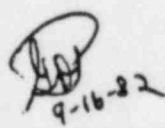
On January 26, 1982 I received a letter from Ms. Brenda Barrett, Director, Bureau for Historic Preservation. We have since retained John Milner Associates of West Chester, Pa. to prepare two reports, one on historic sites and the second on archeological sites.

Mr. H. Bechtel of this company has met twice with Mr. Kurt Carr of your Bureau. A copy of the two reports mentioned above were given to him. Philadelphia Electric Company will work with your Bureau to resolve any concerns that may exist.

Very truly yours,



G. N. DeCowsky  
Chief Electrical Engineer



ALM:VLB

cc: Secretary, PUC  
G. Gornish  
E. J. Bradley  
D. S. Frieman  
B. R. Stowell



COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

WILLIAM PENN MEMORIAL MUSEUM AND ARCHIVES BUILDING

BOX 1026

HARRISBURG, PENNSYLVANIA 17120

September 27, 1982

OCT 11 1982		
SEARCHED	INDEXED	FILED
SERIALIZED		
C.M.F.		

Harry Bechtel  
Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

Re: An Investigation of Preciously Recorded Prehistoric Archeological Sites Associated with Proposed Limerick Transmission Lines, Montogomery and Chester Counties, Pennsylvania, by T.L. Struthers and R.F. Hoffman, 1982  
# File No. ER 82-042M-0047

Dear Mr. Bechtel:

The Bureau for Historic Preservation has reviewed the above titled report and there appears to be a misunderstanding. We felt this report resulted from a complete on ground survey of the entire project area. This is not the case and, as recommended by Struthers and Hoffman, a complete survey identifying all sites to be impacted by this project should be undertaken. A recommended scope of work for this survey has been enclosed. Once this work has been completed this office will need to review the results to determine which sites may be eligible to the National Register of Historic Places and will require investigation. As discussed in the report, our general recommendation will be to avoid all significant sites. This may not always be possible and measures will be required to mitigate the effects of construction and maintance.

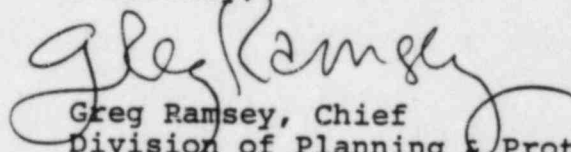
At this point we can say that due to the extreme age of CH53, this site may meet National Register criteria. If this site can not be avoided, an investigation will be required to gather the significant information contained by this assuming the site has been previously distrurbed site. As mitigation we recommend that the entire right-of-way be plowed and disked and that a controled surface collection be performed. The collected artifacts should be maped and analyzed to determine what horizontal patterns are present. Based on the surface collection a series of two meters squares should be excavated to examine high densiti areas and search for subsurface features. The Pennsylvania Historical and Museum Commission reserves the right of first refusal to all aifacts and records resulting from this investigation.

It is not possible to assess the significance of CH56 at this time, although the topographic situation and some of the artifacts indicate that further investigation may determine that it is eligible. To make this determination, we suggest a series of two meter squares down the center of the right of way to establish if any significant data is present.

We hope the above has been helpful in outlining the procedures which will be required to avoid adversely effecting significant cultural resources. Enclosed you will find a list of archeological contractors who do this type of work in Pennsylvania. We suggest that you request proposals from several of these groups to perform the investigations outlined above. The one you accept should be sent to this office for review.

If we can be of further assistance please contact Kurt W. Carr (717) 783-5216.

Sincerely,



Greg Ramsey, Chief  
Division of Planning & Protection  
Bureau for Historic Preservation

Enclosure

GR/vms

cc: Public Utility Commission



## PHASE II ARCHEOLOGICAL SURVEY

### SUGGESTED SCOPE OF WORK

The following are a set of guidelines recommended by the State Bureau for Historic Preservation for the examination of possible cultural resources which may be adversely impacted by this project. The goal of this survey is to locate all cultural resources (both historic and prehistoric) within the project area and develop a preliminary statement concerning their eligibility to the National Register of Historic Places. If no sites are located which may be eligible to the Register, the construction project will proceed. Any sites which are located and may be significant to our understanding of past lifeways will be first evaluated by the Bureau for Historic Preservation and Dr. Barry Kent (State Archeologist) before a determination of the sites eligibility is prepared. A plan for mitigation will then be developed in conjunction with our office.

The methods to be used in this survey will proceed in a four stage process. They are based on several concerns of this office. First, we need to be supplied with enough data to evaluate both the effectiveness of the survey and the significance of any resources located by that survey. Second, there is a desire to provide some standardization of procedures so that the results of surveys may be more easily evaluated. Third, it is our opinion that the use of a predictive model is the most cost efficient method for locating cultural resources, especially prehistoric resources, and we strongly suggest the use of a field testing methodology based on a model. In the following outline we make several recommendations concerning the size and spacing interval of test units for the testing of differential probability areas. These are guidelines and may be revised according to the investigators research experience. However, any major revisions should be discussed with this office and supported in the final report.

#### Methodology

The methods to be used in this survey will proceed in a four stage process. The first stage will involve a literature search and informant interviews. The literature search will include an examination of general county history, insurance maps and county atlases. Manuscripts dealing with previous surveys or archeological excavations in or near the project area should be consulted along with our office and the State Archeologist.

Finally, information concerning the environment of the region and specifically the project area should be collected so an ecological analysis can be developed. Informant interviews should include professional and avocational historians and archeologists. An attempt to contact the local residents who have lived within the project area for the longest period of time should also be made.

Based on the results of the above research a predictive model concerning the location of cultural resources within the project right-of-way should be developed. This model should generally be based on the investigators knowledge of historic and pre-historic lifeways and the resources which these people utilized. The project area should be divided into zones of high and low probability for historic and pre-historic resources. We suggest the following assumptions so that certain areas can be eliminated from the investigation.

- 1) Areas under or adjacent to paved roads or their shoulders have been severely impacted resulting in the destruction or near destruction of all cultural resources.
- 2) Road cuts or areas of road build up have resulted in the loss of significance of any cultural resources present.
- 3) Areas situated on a slope of 15% or more are inhospitable areas for habitation and do not contain significant pre-historic resources.

The third stage of this investigation is the field reconnaissance. All areas which have not been eliminated by the model will be walked and carefully examined for remains. In high probability areas where plowing has recently occurred and there is no possibility of buried (sub A horizon) cultural remains, a surface examination is all that

is recommended. In areas that do not consist of bare ground, one meter square test units at ten meter intervals should be placed along the right-of-way. These should be excavated to the base of the A horizon (at least 15cm) and all soil should be screened using 3/8 inch mesh or smaller. If cultural remains below the A horizon are believed possible, the depth should be increased accordingly. When artifacts are encountered in test units the interval should be reduced to five meters and an attempt to define the limits of the site should be made (as they exist within the right-of-way).

Alternatives to the above guidelines for high probability areas such as the use of a large diameter power soil auger and used at shorter intervals or the plowing of the right-of-way would be considered. A backhoe is suggested for areas where artifacts are deeply buried.

Low probability areas require a less intensive examination (although a walkover is required) with one meter test units placed at 100 meter intervals. If cultural remains are encountered in these units the limits of this site should be defined by using five meter intervals.

The final stage of this investigation is the analysis of the field reconnaissance data and an evaluation of any cultural resources which may have been located. In considering these remains a special emphasis should be placed on chronology and function. In evaluating the significance of sites, the possibility of sub-surface features should be addressed.

The final report for this survey should include the following topics:

**I. Regional Environmental Background**

A. Ecology of Project Area

B. Historic Background

1. Surveys and Excavations in or near project area

C. Pre-historic Background

1. Surveys and Excavations in or near project area

**II. Predictive Model for Project Area**

A. Map Showing Areas of High and Low Probability

**III. Field Methods**

A. Map Locating All Test Units

**IV. Results of Field Survey**

A. Soil Profiles

B. Artifacts From Each Test Unit

C. Maps Locating Sites

D. Evaluation of Sites

E. Recommendations Concerning Significance

**Appendices**

1) Site Forms

2) Literature Consulted

3) Informants

The final depository of artifacts from this survey will be determined by the Office of Historic Preservation and the State Archeologist.

CONTRACTORS

Cultural Heritage Research Services  
P.O. Box 67  
New Castle, DE 19720  
302-429-0744

GAI Consultants, Inc.  
570 Beatty Road  
Pittsburgh,  
Monroeville, PA 15146  
412-856-6400

Gove Associates  
1601 Portage Street  
Kalamazoo, Michigan 49001  
616-385-0011

Dr. James Hatch  
Department of Anthropology  
Pennsylvania State University  
University Park, PA 16802  
Home: 814-238-1680  
Office: 814-863-0562

Mr. Richard W. Hunter  
Archeologist, MA, SOPA, AFFA  
113 Rileyville Road  
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609-466-0025

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Bryn Mawr, PA  
215-LA5-1000 Ext. 359

Dr. Susan Kardas  
Dr. Edward Larrabee  
Historic Sites Research  
86 Snowden Lane  
Princeton, NJ 08540  
609-921-8109

Dr. W. Fred Kinsey  
North Museum  
Franklin & Marshall College  
Lancaster, PA 17604  
717-291-3943

Dr. Barbara Liggett  
116 West Gravers Lane  
Philadelphia, PA 19118  
215-242-3599

Dr. Ronald Michael  
Department of Anthropology  
California State College  
California, PA 15419  
Home: 412-438-0686  
Office: 412-938-4042

Mid-Atlantic Archeological Resources, Inc.  
Mr. Ronald Thomas  
P.O. Box 676  
Newark, Delaware 19711  
302-368-5777

John Milner Associates  
309 North Matlack Street  
West Chester, PA 19380  
(Alex Townsend, Daniel Roberts)  
215-436-9000

Michael Parrington  
4625 Spruce Street  
Philadelphia, PA 19104  
215-747-8438

Public Archeology Facility  
State University of New York  
Binghamton, NY 13901  
607-798-4788

Dr. James Richardson  
Carnegie Museum  
Pittsburgh, PA 15211  
University of Pitt:  
412-624-4096

Dr. Robert Schuyler, Managing Director  
Museum Institute for Conservation Archeology  
University Museum, University of Pa.  
Philadelphia, PA 19104  
215-243-6981

Mr. Mike Steward  
Route 1, Box 2  
Waynesboro, PA 17268  
717-762-9715

WAPORA  
5700 Hillside Avenue  
Cincinnati, Ohio 45233

Dr. Renata Wolyneć, Dept. of Anthropology  
Edinboro State College  
Edinboro, PA  
814-732-2573

Soil Systems, Inc.  
5201 Governor Printz Boulevard  
Wilmington, DE 19809  
302-762-2965

Clark Sykes, Director  
Office of Public Archaeology  
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Archaeological Studies Program  
525E-232 Bay State Road  
Boston, Massachusetts 02215  
617-353-3415

Louis Berger & Associates, Inc.  
100 Halsted Street  
East Orange, New Jersey 07019

Paul D. Marshall & Associates, Inc.  
Suite 406  
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Charleston, West Virginia 25301

Conran Alexander Hay  
Dept. of Anthropology  
Pennsylvania State University  
409 Carpenter Building  
University Park, PA 16802  
814-863-2301

Richard Hunter  
Louis Berger & Associates, Inc.  
100 Halsted Street  
East Orange, New Jersey 07019  
201-678-1960

Edward F. Heite  
P.O. Box 53  
Camden-Wyoming, Delaware 19934  
(302) 697-1789

John R. Kern, Ph. D.  
Manager, Cultural Resources  
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209 East Washington Avenue  
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517-788-3560

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University of Delaware  
Newark, DE 19711  
302-738-2821

Gilbert/Commonwealth  
Commonwealth Associates, Inc.  
209 East Washington Avenue  
Jackson, Michigan 49201

Dr. William Gardner  
Thunderbird Archeology Associates, Inc.  
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Front Royal, Virginia 22630  
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Alex H. Townsend  
Consulting Archeology  
39 South New Street  
West Chester, PA 19380



COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

WILLIAM PENN MEMORIAL MUSEUM AND ARCHIVES BUILDING  
BOX 1026

HARRISBURG, PENNSYLVANIA 17120

G. N. DeCOWSKY  
CHIEF ELECTRICAL ENGINEER  
NOV 22 1982  
Noted  
Referred to *LEP?*

November 16, 1982

ELECTRICAL ENGINEERING  
TRANSMISSION & DIST. ENG. SECTION  
L. F. HAMILTON  
NOV 30 1982  
Referred: *GDP*

G.N. DeCowsky  
Chief Electircal Engineer  
Philadelphia Electric Company  
2301 Market Street  
P.O. Box 8699  
Philadelphia, PA

Re: New Cable Line for  
Cromby Station  
ER82 042M 0047

ELECTRICAL ENGINEERING  
NOV 19 1982  
G. D. PARADIS

Dear Mr. DeCowsky:

The study "An Investigation of Potential Visual Effects Upon Previously Recorded Historic Sites in the Vicinity of Proposed Limerick Transmission Lines, Montgomery and Chester Counties" concludes with the statement that "the number and severity of adverse visual effects, or impacts, can only be determined in conjunction with statements of significance and identification of historically important visual elements of each site". Please indicate whether it is PECO's intention to conduct additional studies which would further analyze and eliminate or reduce negative changes to the viewsheds of the 49 sites identified and/or whether meecings or field views are anticipated to explore this issue. It is our opinion that the above referenced study leaves several issues unresolved.

Sincerely,

Greg Ramsey, Chief  
Division of Planning and Protection  
Bureau for Historic Preservation

GR:sk

cc: PUC

# PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

REAL ESTATE DIVISION

December 1, 1982

Mr. Greg Ramsey, Chief  
Division of Planning and Protection  
Bureau for Historic Preservation  
Wm. Penn Memorial Museum and Archives Bldg.  
Box 1026  
Harrisburg, Pennsylvania 17120

Dear Mr. Ramsey:

With reference to your letter to Harry Bechtel of this office, dated September 27, 1982, we regret that there was a misunderstanding of the scope of archaeological work necessary prior to commencing construction of transmission lines associated with Limerick Generating Station.

Of the five transmission lines involved (see Exhibit I), lines 1, 2 and 3 are scheduled for construction beginning in early 1983. The significant amount of additional work required could have a potentially severe impact on this construction schedule. With this fact in mind, we began, immediately following receipt of your letter, to develop a program which we have confidence will meet the needs of all concerned without delaying approval:

I - A predictive site location model (see Exhibit II) has been developed by our consultant, John Milner Assoc., West Chester, Pa. Each of the transmission lines has been evaluated on the basis of the model, with areas of high, moderate and low site probability defined;

II - A Phase I survey of the transmission line routes was begun on November 3, and is expected to be completed by December 15. The survey methodology being used includes a thorough survey of areas having high and moderate site potential, and minimal survey in areas deemed to be low in potential. All sites discovered under this Phase I survey will be recorded on standard State (PASS) forms;

III - Once Phase I is completed, a Phase II survey will begin. Sites to be subjected to Phase II survey will be chosen based upon surficial evidence, studies of existing collections, site reports and projected adverse affect. The Phase II survey will initially concentrate on the first three lines to be constructed. Those lines scheduled for later construction will be done last;



Mr. Greg Ramsey  
page 2  
December 1, 1982

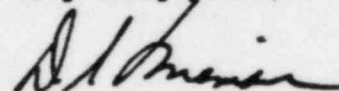
IV - It is anticipated that a number of potentially significant sites will be discovered during Phases I and II in addition to several sites already recorded (known sites having potential significance, and which may be affected, include CH 53 and CH 103). Phase II excavations are already underway on CH 103. CH 53 will also be subjected to Phase II investigation. Potential significance of sites, and the affects of the project on those sites, will be discussed with the State, and on those significant sites where adverse affect is projected, mitigative measures agreeable to you and us will be implemented.

V - On November 9, 1982, a meeting was held in the offices of the State Archaeologist. Those present were B. Kent and Kurt Carr of PHMC, W. Payne and G. Paradis of PE Co. and D. Roberts of J. Milner Associates. At this meeting, the tightness of our construction schedule was pointed out, the Phase I model was discussed with no discernable objections and the above program was discussed. The following items were agreed upon:

- A - Two of the first three lines to be constructed (Lines 1 and 2, Exhibit I) are almost completely within railroad rights-of-way. The other three lines are entirely on existing transmission line rights-of-way. It was agreed that large portions of the lines within the railroad rights-of-way would be approved based upon the Phase I survey;
- B - It was also agreed that due to the tight construction schedule, an abbreviated report would be sufficient for approval. The abbreviated report will follow HCRS Guidelines for Management Summaries (Exhibit III). Both PECO personnel and representatives of J. Milner Assoc. will be readily available for consultation following submission of the abbreviated report. A full report, in accordance with SHPO guidelines, will be submitted at the earliest opportunity;
- C - It was indicated that approval for all five lines will be given to the PUC subject to PECO agreeing to follow the above described program for all lines;
- D - It was agreed that in those areas where PECO utilizes existing access roads, no mitigative measures will be required.

We feel confident that this program will meet with your approval. We look forward to cooperating with you on this and future projects.

Very truly yours,



D. S. Frieman  
Manager

WCP:lb  
cc: B. Kent  
K. Carr  
D. Roberts

PREHISTORIC ARCHEOLOGICAL SITE LOCATIONAL MODEL  
FOR PROPOSED LIMERICK TRANSMISSION LINES,  
MONTGOMERY AND CHESTER COUNTIES, PENNSYLVANIA

The following locational model is based on several factors, which include geology, drainage, soils, and present land use. The study area under consideration is comprised of four proposed transmission line rights-of-way located in Montgomery and Chester counties. The rights-of-way extend east and southeast of the Limerick nuclear power plant, cover a distance of 68.3 miles, and range from a minimum of 80 feet to a maximum of 520 feet in width. The study area is situated in the Piedmont Physiographic Province (Fenneman and Johnson 1946), and is comprised of low, rolling hills interspersed with floodplains in the interior, and floodplains, terraces, and bluffs overlooking the Schuylkill River. The area is well watered by such streams as the Perkiomen and Skippack Creeks and innumerable smaller streams which eventually feed into the Schuylkill (Struthers and Hoffman 1982).

Each of the four proposed transmission lines have been evaluated using the factors discussed above, and areas of high, moderate, and low site probability have been defined using these factors. The areas of high site probability include upland areas such as hilltops, hillsides, terraces, and bluffs near major watercourses. Areas of moderate site probability include upland areas near minor watercourses and floodplains. Areas of low site probability include areas having slope in excess of 15 percent and previously disturbed areas such as housing subdivisions, industrial parks, road and railroad rights-of-way.

The first survey segment extends southeast from Limerick to Cromby on the east and west banks of the Schuylkill over a distance of 16 miles. This survey segment is located in a highly developed area and, as a result, 10.5 miles of the segment are rated low, 4.3 miles have moderate potential, and 1.2 miles have high potential (See Table 1). The second survey segment extends east from Cromby to Plymouth Meeting over a distance of 20.7 miles. This segment is also located in an area of heavy development, and 10.3 miles of the segment was rated low, three miles has moderate potential, and 7.4

miles has high potential (Table 1). The third segment extends from Cromby to North Wales over a distance of 15.4 miles. The survey segment is located in a rural setting where disturbance is minimal, and 6.2 miles of this segment has been rated as having moderate potential and 9.2 miles high potential. The last segment extends from Limerick to Whitpain over a distance of 16.2 miles. This survey segment is also primarily rural in character and disturbance is minimal. The segment has been rated as having 1.8 miles of low site potential, 6.3 miles of moderate potential, and 8.1 miles of high potential.

Based on known site densities in similar environmental settings, it is estimated that areas of high site potential will produce 1 to 1.5 sites per mile and areas of moderate potential are expected to produce .5 to 1 site per miles. Given these expectations, the survey should result in the location of a minimum of 36 sites and a maximum of 59 sites. The exact number of sites which will be located as a result of the survey cannot be predicted due to several limiting external factors, which include the existing limited data base, and the conditions under which the survey is conducted.

The survey methodology being proposed includes a 100 percent survey of those areas rated as having high and moderate site potential, and minimal survey in those areas rated as having low potential. Survey in low potential areas will consist of vehicular and pedestrian survey in order to assess and confirm the unsuitability of the terrain for habitation or the disturbances caused by prior development. Survey in the moderate and high potential areas will consist of surface reconnaissance in those areas where surface visibility is sufficient for cultural resource assessment, and subsurface testing where visibility is inadequate or in areas where the possibility of deeply buried deposits exists. Survey procedures and results will be documented using field notes, drawings, and photographs.

TABLE 1 - SITE POTENTIAL

SURVEY SEGMENT	SITE POTENTIAL			TOTALS
	LOW	MODERATE	HIGH	
Limerick-Cromby	10.5 miles	4.3 miles	1.2 miles	16 miles
Cromby-Plymouth Meeting	10.3 miles	3.0 miles	7.4 miles	20.7 miles
Cromby-North Wales	--	6.2 miles	9.2 miles	15.4 miles
Limerick-Whitpain	1.8 miles	6.3 miles	8.1 miles	16.2 miles
TOTALS	22.6 miles	19.8 miles	25.9 miles	68.3 miles

REFERENCES CITED

Fenneman, Nevin M. and Douglas W. Johnson

1946 Physical Divisions of the United States. U.S. Geological Survey, Physiographic Committee.

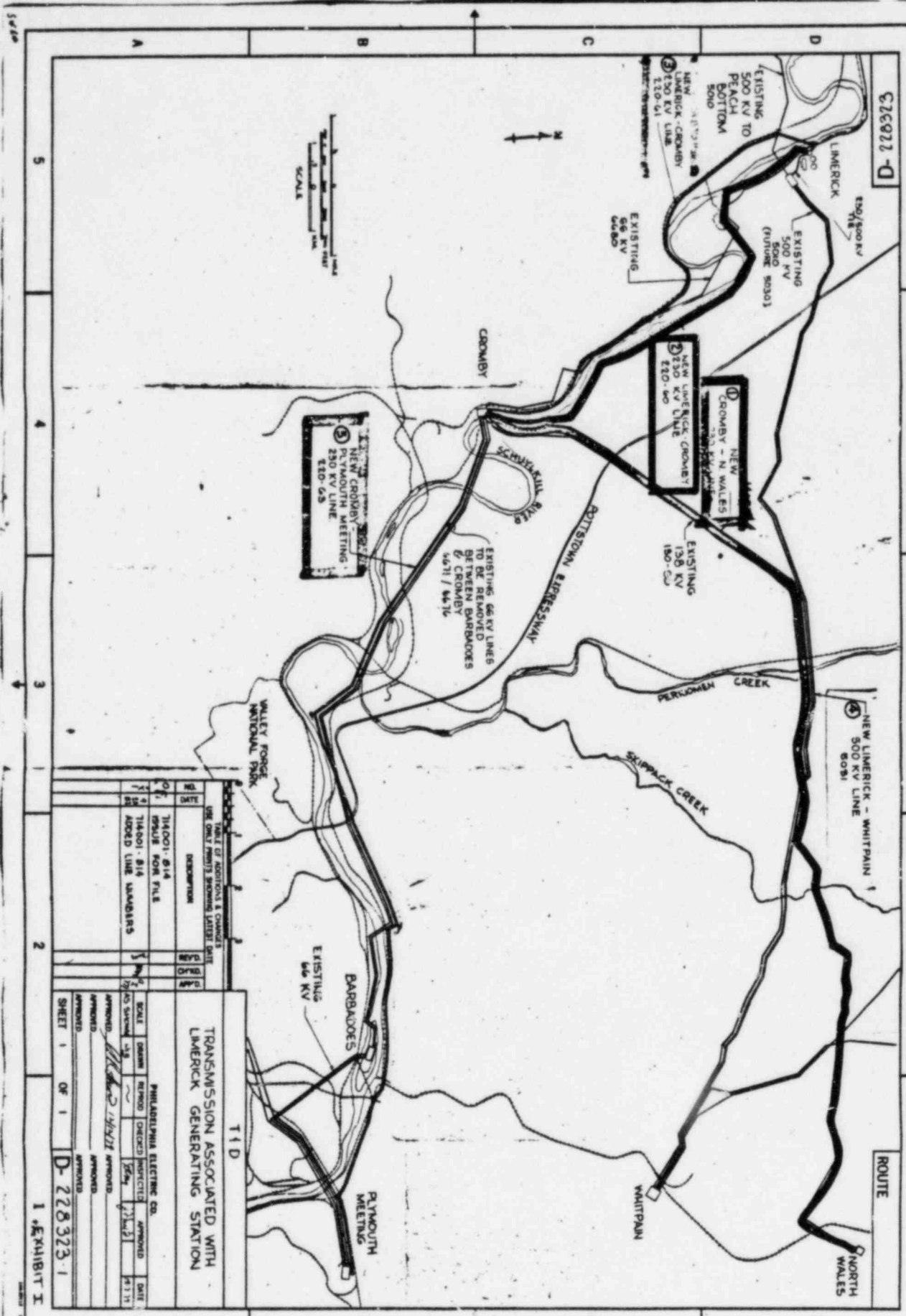
Struthers, Thomas L. and Robert F. Hoffman

1982 An Investigation of Previously Recorded Prehistoric Archeological Sites Associated with Proposed Limerick Transmission Lines, Montgomery and Chester Counties, Pennsylvania. Report submitted to Philadelphia Electric Company.

## GUIDELINES FOR MANAGEMENT SUMMARIES

- I. Introduction
  - A. Brief description of who, what, where, when, why of project.
- II. Work Executed
  - A. Brief, general indication of people or places contracted for information.
  - B. Brief explanation of field strategy.
    - 1. % of surface collection attempted.
    - 2. Were site dimensions defined by shovel testing or by estimating varying density of surface artifacts?
    - 3. How was site significance or insignificance determined?
- III. Results (can be given in tabular form)
  - A. Site information.
    - 1. Type of site - lithic scatter, quarry, structure, etc.
    - 2. Site size.
    - 3. Cultural association, if known.
    - 4. Presence or absence of stratigraphy.
  - B. Success of field strategy.
    - 1. Were there problems in project implementation which would affect agency compliance or planning?
- IV. Recommendations
  - A. National Register of Historic Places eligibility.
    - 1. Which sites eligible and why.
    - 2. Which sites need additional testing.
  - B. Recommendations for further work, if necessary (limit discussion to sites requiring attention rather than giving a budget estimate and detailed plan).

NOTE: Management Summary is not meant to be a lengthy interim report. Most summaries can be complete in approximately five (5) pages. These summaries are planning aids and a means of disseminating information immediately.



NO.	REV.	DATE	DESCRIPTION	BY	CHKD	APP'D
1			AS SHOWN			
2			AS SHOWN			
3			AS SHOWN			
4			AS SHOWN			
5			AS SHOWN			

DATE	11/11
SCALE	1" = 1/2" (AS SHOWN)
DRAWN BY	PHILADELPHIA ELECTRIC CO.
REVISION	AS SHOWN
CHECKED	AS SHOWN
INSPECTED	AS SHOWN
APPROVED	AS SHOWN
DATE	11/11

PHILADELPHIA ELECTRIC CO.	
TRANSMISSION ASSOCIATED WITH	
LIMERICK GENERATING STATION	
T1D	
SHEET 1 OF 1	
D-228323-1	
EXHIBIT 1	



COMMONWEALTH OF PENNSYLVANIA  
 PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION  
 WILLIAM PENN MEMORIAL MUSEUM AND ARCHIVES BUILDING  
 BOX 1026  
 HARRISBURG, PENNSYLVANIA 17120

December 8, 1982

D.S. Frieman, Manager  
 Philadelphia Electric Co.  
 2301 Market St.  
 P.O. Box 8699  
 Philadelphia, PA 19101

Re: ER82-042M-0047

Dear Mr. Frieman:

We agree with the procedure concerning the management of archeological resources outlined in your letter of December 1, 1982 for the transmission associated with the Limerick Generating Station. If this program is followed, this project will adequately consider cultural resources and there should be no adverse effect on these resources.

Sincerely,

Greg Ramsey, Chief  
 Division of Planning & Protection  
 Bureau for Historic Preservation

GR:sk

*Copy to J. De Groot,  
 E. J. Blawie,  
 G. Boman*