

Survey Guidelines for Pipeline Projects

Above Ground Resources

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Construction of a pipeline and its associated components requires consultation with the Pennsylvania State Historic Preservation Office to assess impacts on both above ground and below ground (archaeological) resources. Guidance on the documentation and assessment of effects of pipeline projects on above ground resources in rural or agricultural areas is provided in this document. Information on appropriate survey methods for archaeological resources is available on our website in *Guidelines for Archaeological Investigations in Pennsylvania* (revised November 2008)

To initiate consultation for pipeline projects of considerable length, we strongly recommend scheduling a meeting with the appropriate staff in the PA SHPO, Division of Archaeology and Protection.

Pipelines and the Statewide Context on Agricultural History

Most pipeline projects pass through resources that are rural or agricultural in nature. These properties often include landscape features such as woodlots, hedgerows, stone walls, and/or field patterns that could be affected by the clearing of a pipeline right of way.¹

In order to accurately assess the potential of a project to affect historic agricultural properties, surveyors must be familiar with and utilize the context on agricultural history developed by the PA SHPO and found on our website, <http://phmc.info/aghhistory>. The context presents the regional agricultural histories of Pennsylvania and provides property types for each region. A field guide of agricultural buildings and landscapes is available to assist in the identification effort.

The statewide agricultural context states that historic agricultural properties are not necessarily limited to buildings but also can include landscape features. The context indicates that if landscape features are affected, the integrity of the resource could be diminished. Therefore, it is critical that the identification of historic properties and assessment of effects for pipeline projects address the potential to affect historic agricultural landscapes. **A discussion of the**

¹ While the focus of this document is on how pipelines can affect historic agricultural properties, pipelines that go through state forest, state parks or state game lands can also affect related above ground resources, such as those constructed by the Civilian Conservation Corps (CCC) or Works Progress Administration (WPA) or other cultural landscapes. Per the NPS National Register Bulletin #30 "Guidelines for Evaluating and Documenting Rural Historic Landscapes" rural historic landscapes usually fall within one of the following types based upon historic occupation or land use: agriculture; industry; maritime activities; recreation; transportation systems; migration trails; conservation; and sites adapted for ceremonial, religious or other cultural activities. Please consult this bulletin for further information for the evaluation of non-agricultural rural historic properties.

three property types identified in the statewide agricultural context is included below for example purposes only and should not preclude examination of the statewide agricultural context. Please note that each property type requires consideration of integrity of landscape features as well as buildings.

The three property types identified for all regions in the statewide agricultural context are the farmstead, farm and historic agricultural district.

Farmstead

- A farmstead is defined as encompassing the farm dwelling[s], barn, outbuildings, and the immediately surrounding land on which these buildings are situated. It normally excludes cropland, meadow, pasture, orchard, and woodland, but could include landscape features in the immediate vicinity of the farm complex such as yards, windbreaks, ponds, gardens, ornamental trees, decorative fences, driveways, etc.
- With regards to integrity, farmstead layout and the relationship of buildings to topography are important elements. The retention of boundaries, lawns, fences, ponds, circulation elements (paths, drives), gardens, farm lanes and ornamental plantings can also affect the ability of a farm to convey its agricultural significance.
- For example, in the Northern Tier region it is common for a road to bisect an eligible farm or farmstead as part of the overall layout, whereas in regions with a heavy German cultural influence, a linear or court-yard organization is more common to eligible farms or farmsteads.

Farm

- A farm consists of a farmstead (as outlined above) plus crop fields, meadows, pastures, orchards, woodlots, etc., including landscape features such as fences, walls, tree lines, contour strips, streams, and circulation networks.
- With regards to integrity, at the farm scale, integrity depends both on the built environment and on the extent to which a farm retains traces of field divisions, fields (such as small fields or historic strip cropping), property boundaries, tree lines, hedgerows, fencing, woodlots, circulation paths and the like. The presence of historic landscape features related to agriculture is a key aspect of integrity.
- For example, the North and West Branch Susquehanna Diversified Farming region context states that an eligible farm would need to include the farmstead, plus significant acreage and intact or remnant landscape features from the period of significance. Contour strips that date from the 1930s would be a significant surviving landscape feature, as would tree lines, woodlots, crop fields, pasture, meadow, paths, fencing, and the like.

Historic Agricultural District

- A historic agricultural district is a group of farms which share common architectural and agricultural landscape features; are linked together by historic transportation corridors, including roads, railroads, paths, and/ or canals; and together express characteristic features of local historic agricultural patterns.
- For historic agricultural districts, the context states that agricultural landscape features are given equal weight as buildings in determining National Register eligibility. Often an agricultural district will have a lower overall number of contributing resources than is typical in an urban historic district, yet will possess integrity because the contributing resources occupy a large percentage of the *land area* within the district. *Like the farmstead and farm, landscape features may be counted as contributing sites in historic agricultural districts.*
- With regards to integrity, a historic agricultural district's integrity is dependent on the retention of the built environment as well as landscape features. In terms of landscape features, intact historic field patterns, treelines, ponds, disposition of pasture, woodlots, etc. are critical to retention of integrity.

Assessing the Effects of Pipelines on Historic Properties

Identification of Historic Properties

The initial effort includes delineation of the Area of Potential Effect (APE) based on the potential for the project activity to affect historic properties. This also includes the identification of resources previously evaluated for National Register eligibility as well as those that meet the 50-year-age consideration within the APE.

Defining the APE:

- Consider physical and visual effects on buildings and landscape features
- Consider potential effects resulting from the pipeline, valves, pipe yards, temporary water lines, access roads, drying and metering stations, pig launching and receiving facilities, compressor stations, wastewater ponds, and other above ground facilities along the pipeline.



Aerial view, circa 1950. Burt DeWald Farm, Lycoming County. Notice windbreaks, ornamental trees, and woodlots.

- Consider potential effects of right-of-way clearing on landscape features associated with properties in the APE that are 50 years in age or older

Identification

Once the APE has been delineated, it is necessary to conduct sufficient background research to determine the nature and extent of previously identified historic resources within the boundary. This begins with an examination of Pennsylvania's online resource database, CRGIS, and survey files available at the PA SHPO office in Harrisburg.

For agricultural resources within the APE, the documentation should include a discussion of what buildings and landscape features existed in the past and those that remain. The purpose of this discussion is to understand how agricultural resources have evolved over time and if they retain sufficient integrity to convey any potential significance. In addition, in those locations where the APE includes contiguous farmsteads and surrounding open space, current and historic aerials should be compared to determine if there is the potential for a rural or historic agricultural district.

Following background research, the field survey should identify buildings, objects, structures, sites, or districts within the APE that are over 50 years of age. Consideration must be given to how the properties relate to the relevant regions and related property types identified in the statewide agricultural context (as outlined above).

Below is a list of materials that should accompany the identification documentation submission to the PA SHPO:

1. Project Review Form. Do not bind initial project information into any archaeological report or form. Archaeological reports and forms must be separate from all above ground historic property reports and forms.
2. Narrative description overview of project.
3. Illustrations of the type, size, and scale of any proposed new construction.
4. USGS 7.5 Min. Quadrangle map(s) w/ street name overlay(s) and current aerials with APE and previously surveyed and newly surveyed properties marked on maps.
5. Current aerials - identifying right-of-way corridor and centerline, access roads and location of above ground pipeline related facilities (Do not use shading over entire right-of-way corridor).
6. Historic aerials – identifying right-of-way corridor. Historic aerials can be found at www.pennpilot.psu.edu.
7. Current, color photographs of the built environment and landscape including those areas where changes in the landscape will occur (tree cutting, access roads).
8. Statement of agricultural significance including name of agricultural region and registration requirements. This should address how properties within the APE may or may not meet the registration requirements of the statewide agricultural context and justify recommendations for future survey work.

9. List, in table format, of previously surveyed properties within the APE with their Key Numbers and any determinations of eligibility.
10. List, in table format, of surveyed properties with dates of construction, extant building list, landscape features, and recommendations for future survey.
11. For those properties that have the potential to be affected by the project activity type that are clearly not eligible for the National Register, complete Abbreviated Historic Resource Survey Forms.²

The results of the identification documentation should be reviewed and discussed with PA SHPO staff prior to evaluation of National Register eligibility. For projects where there are relatively few resources that would be affected by a project, it may be possible to present the APE and document and evaluate National Register eligibility of resources in one submission rather than preparing separate identification and evaluation reports.

Evaluation

Properties identified as warranting further survey because they have the potential to be eligible for listing in the National Register should be documented and assessed for National Register eligibility on the Historic Resource Survey Form (see relevant guidelines for further guidance). The statewide agricultural context should be consulted in the assessment of the eligibility of agricultural properties. Documentation should include a discussion of those landscape features that are critical to the ability of a property to convey its historic significance.

Assessment of Effect

For those resources identified as eligible for listing in the National Register, the impact of the project should be assessed. It is necessary to understand those features that qualify a property for listing in the National Register in order to assess potential project effects. This assessment should focus on those physical features that convey the significance of the historic property, including landscape features. The historic property's relationship to its setting, which may include surrounding landscape features and open space, should be taken into account.

In general, a project can be considered to have an adverse effect to a historic property if it diminishes the integrity of the characteristics that qualify a historic property for inclusion in the National Register. This includes the elimination of small scale features (fence rows, tree lines, field patterns, etc.) that diminish in some manner a property's ability to convey its historic significance. Another potential adverse effect associated with pipelines includes the introduction of a visual element that is out of scale or out of character within the setting of a property or district.

² Guidelines for the completion of the Abbreviated Historic Resource Survey Form and a copy of the form are found on our website. The purpose of the form is to eliminate excessive documentation of properties that are clearly not eligible for the National Register. Use of the form is generally not sufficient for properties including multiple buildings such as farms or historic districts. If insufficient information is provided in the abbreviated form, the project reviewer may request a Historic Resource Survey Form) for a resource.