

**CR 455
PROJECT
DEVELOPMENT
AND
ENVIRONMENT
(PD&E) STUDY**

**Cultural
Resources
Technical
Memorandum**

February 2021



DESKTOP ANALYSIS FOR THE CR 455 EXTENSION PROJECT DEVELOPMENT & ENVIRONMENT STUDY

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PRINCIPAL INVESTIGATOR: Bill Eggers, CEP, CWB, PWS

CLIENT: Lake County Public Works Department

DATE: July 2019

METRO Consulting Group, LLC (METRO) completed a desktop review of the CR 455 Extension Project Development and Environment (PD&E) Study from Hartwood Marsh Road to Schofield Road in Lake County, Florida to identify cultural resources, cultural resource potential, and previously recorded historic properties in the vicinity of the project corridor that are listed, or may be eligible for listing, in the National Register of Historic Places (NRHP).

The Study Area was defined as a $\pm 2,098$ -acre area in Sections 2, 11, 13-14, and 23-26 of Township 23 South, Range 26 East, Lake County, Florida (FMSF, **Appendix 1**). The Study Area encompasses and helps to guide the development of alignment alternatives for the proposed roadway improvements (**Figure 1**). METRO requested a cultural resource inventory from the Florida Master Site File (FMSF, **Appendix 1**) and reviewed the FMSF database and publicly available Geographic Information System (GIS) data (University of Florida GeoPlan Center, 2018) for any previous surveys or previously reported resources within the Study Area. The Lake County Property Appraiser (Lake County, 2019) databases, historic maps, and aerial photographs were reviewed along with United States Geological Survey (USGS) historic and current quadrangle maps (United States Geological Survey, 2019), and historic aerial photographs from the Florida Geographic Digital Collection (University of Florida Map & Imagery Library, 2019) to determine whether potential historic resources constructed prior to 1974 were located therein.

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1.0 PREVIOUS SURVEYS

A review of the FMSF data indicates that four previous cultural resource surveys intersect the Study Area (**Table 1**). Several other surveys were conducted on abutting parcels and within the region. **Figure 2** shows the location of previous surveys in the region and highlights those within the Study Area. The existence of a previous survey in the area may not alleviate the need for an updated survey for the current project. Factors such as the date of the previous study and the scope/intensity of the actual work performed must be considered before its conclusions or recommendations can be assumed for the current project.

Table 1: Previously Reported Cultural Resource Assessments within the CR 455 PD&E Study Area

FMSF No.	Name	Year	Reference
10214	Cultural Resource Assessment, Hartwood Marsh Road, Lake County, Florida	2003	Southarc, Inc.
22487	An Archaeological and Historical Survey of the Proposed Cellular Communications Project, Center Lake FI-01013, in Lake County, Florida	2015	Panamerican Consultants, Inc.
15337	A Cultural Resource Assessment Survey of the Water Conserv II - Site 1 and 10 Tracts, Lake County, Florida	2008	Michael Arbutnot
12894	An Intensive Cultural Resource Assessment Survey of the Karlton Tract, Orange and Lake Counties, Florida	2005	Environmental Services, Inc.

Figure 1: CR 455 Extension PD&E Alternative Alignments

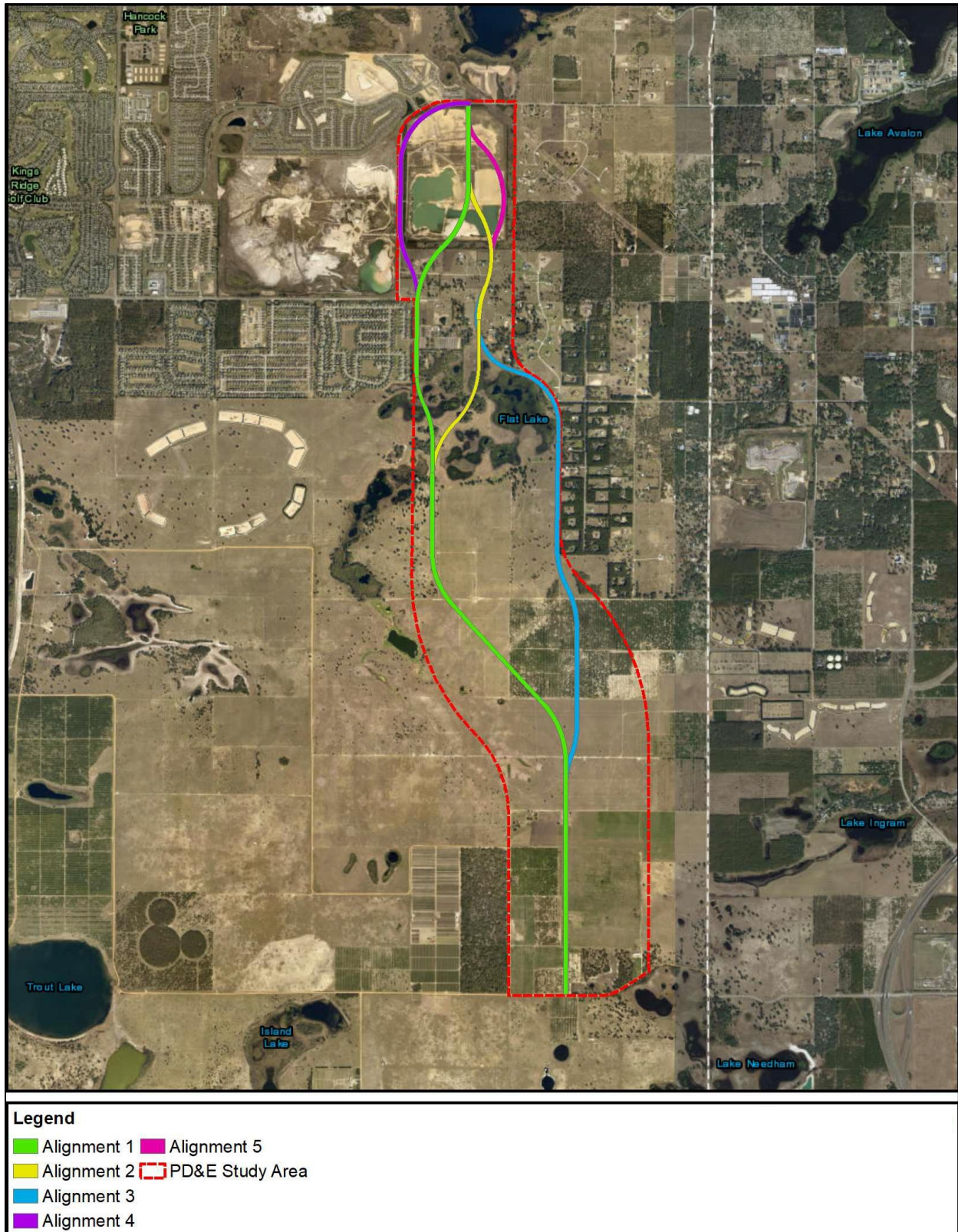
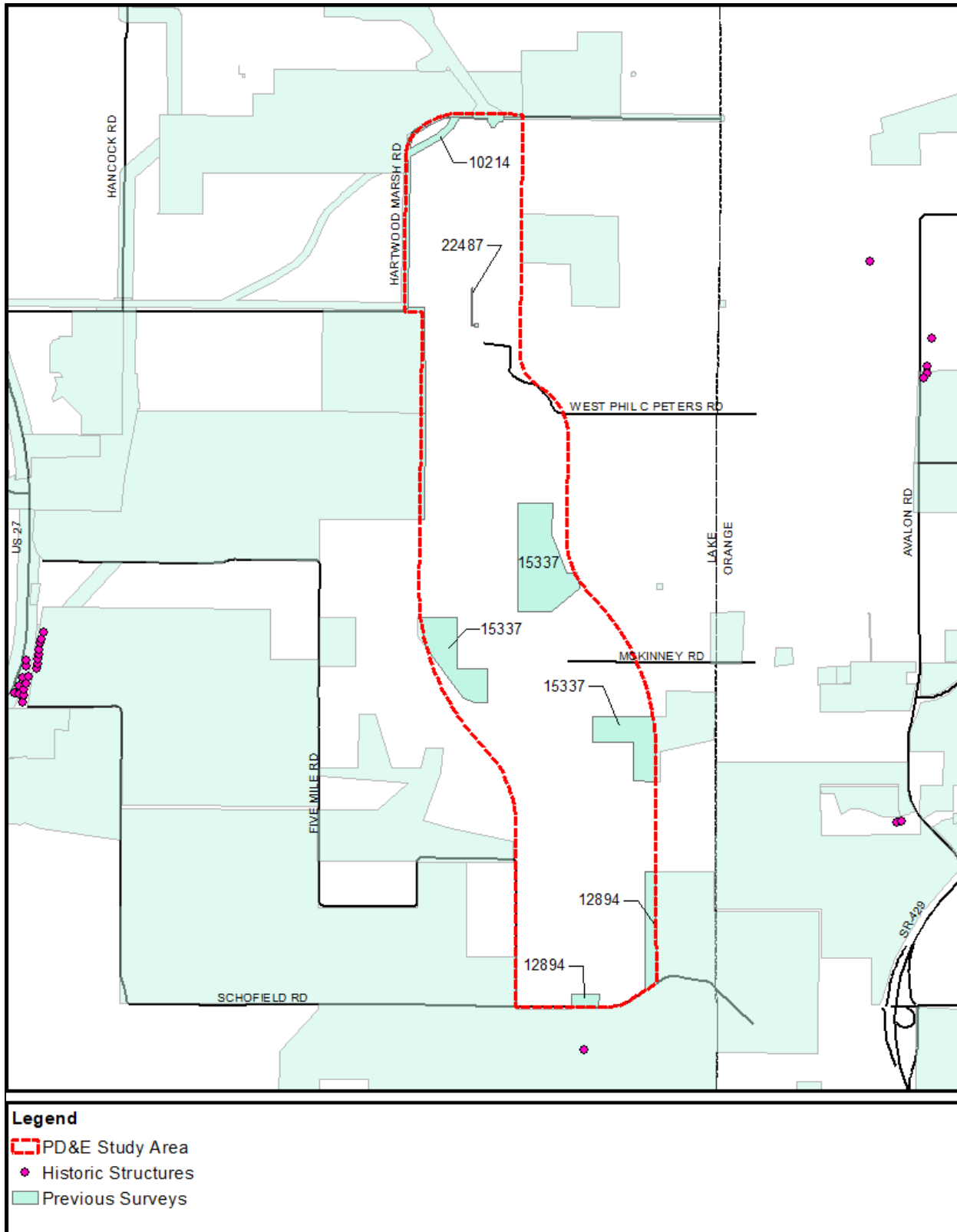


Figure 2: CR 455 Extension PD&E Cultural Resources



2.0 PREVIOUSLY REPORTED SOURCES

According to the inventory letter from the FMSF, there are “...no previously-reported cultural resources within the area indicated.” It should be noted that the Study Area may contain unrecorded archaeological sites, historical structures, or other resources even if previously surveyed for cultural resources.

3.0 UNREPORTED SOURCES

For transportation projects, a 45-year cut-off (e.g., “structures constructed prior to 1974”) is typically used for the architectural history survey in order to give the cultural resource assessment survey document a five-year “shelf life.” This is the standard for transportation projects in Florida, where construction is not anticipated during the same year as the completion of the Cultural Resource Assessment Survey (CRAS). This rationale and approach are accepted by the State Historic Preservation Officer (SHPO).

The area encompassing Foxhole Road and Flat Lake Road is the only portion of the Study Area that contains buildings of any kind currently. A review of the Lake County Property Appraiser’s GIS database indicates there are no historic (pre-1974) buildings within the Study Area. All of them were built in 1990 or later. A review of historic aerial photographs from 1958 (**Figure 3**) and 1974 (**Figure 4**) and USGS Quadrangles from 1958 – 1962 (**Figure 5** and **Figure 6**) showed that this rural residential area and much of the surrounding region was either natural, undeveloped land or planted with citrus trees in both years. No structures or railroads were present. Based on the map review, there is a low potential for unreported historic resources within the Study Area.

Figure 3: 1958 Historic Aerial Photograph Depicting Rural Residential Area of Interest



Figure 4: 1974 Historic Aerial Photograph Depicting Rural Residential Area of Interest



Figure 5: 1958 USGS Quadrangle

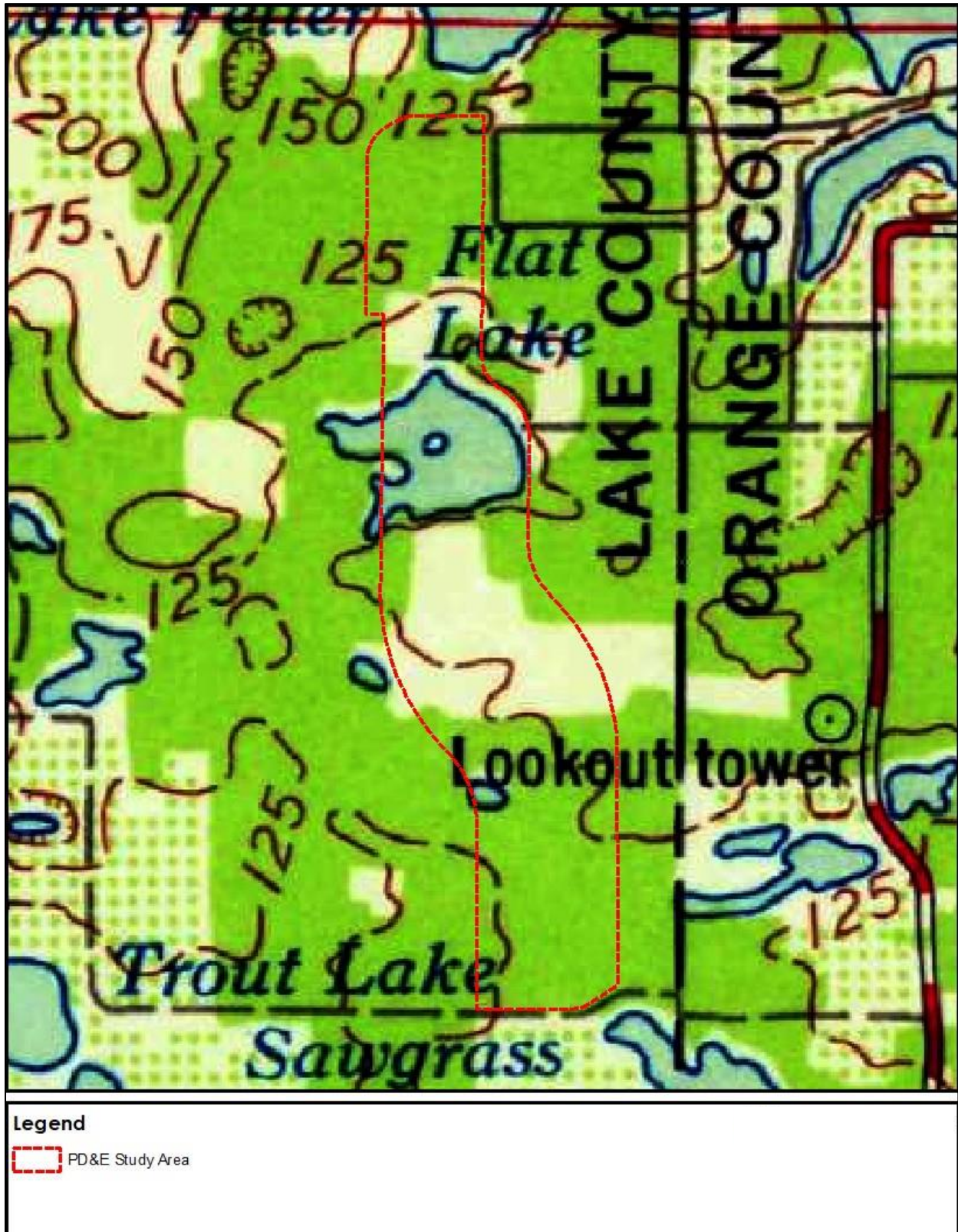
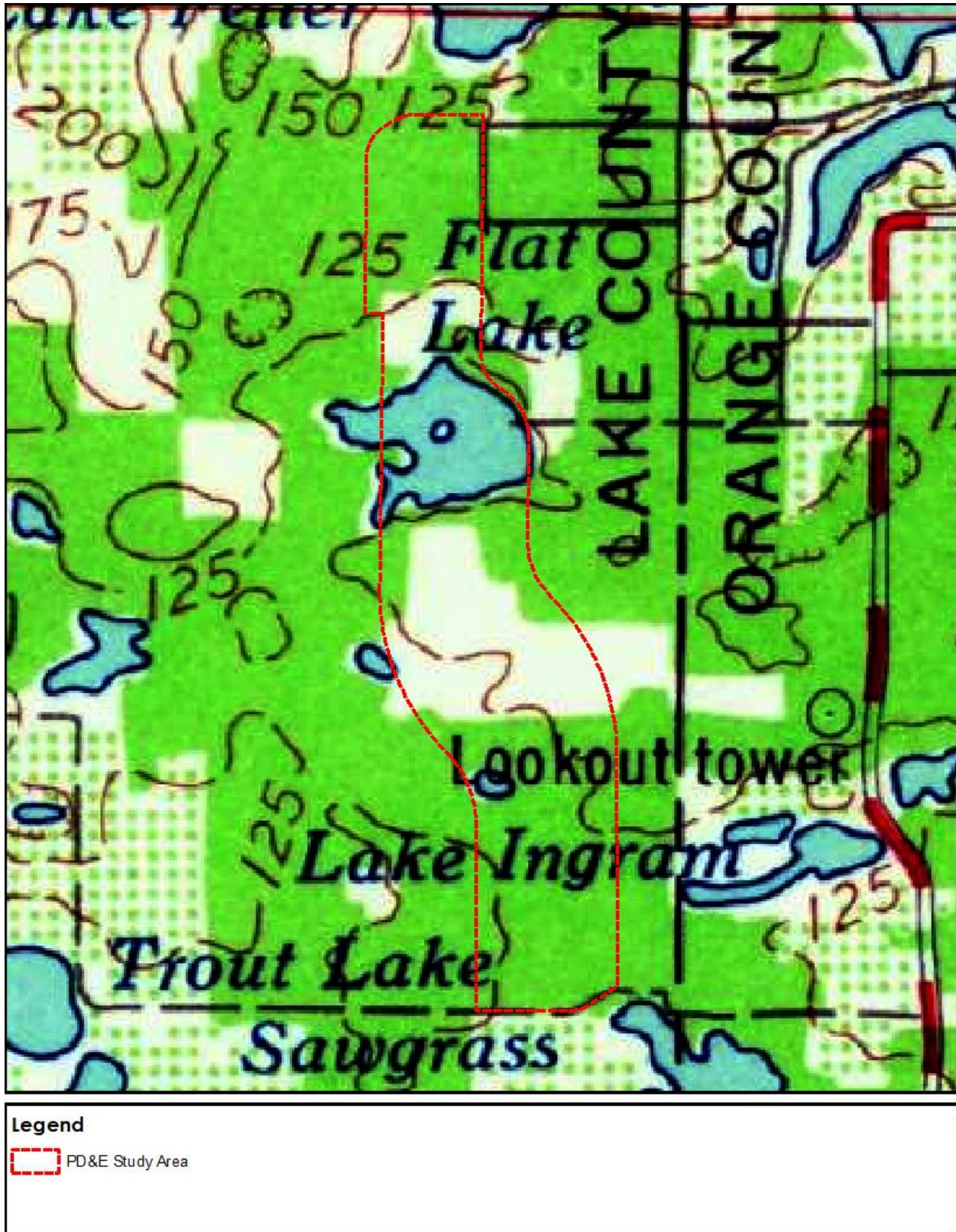


Figure 6: 1962 USGS Quadrangle



4.0 SOIL DRAINAGE

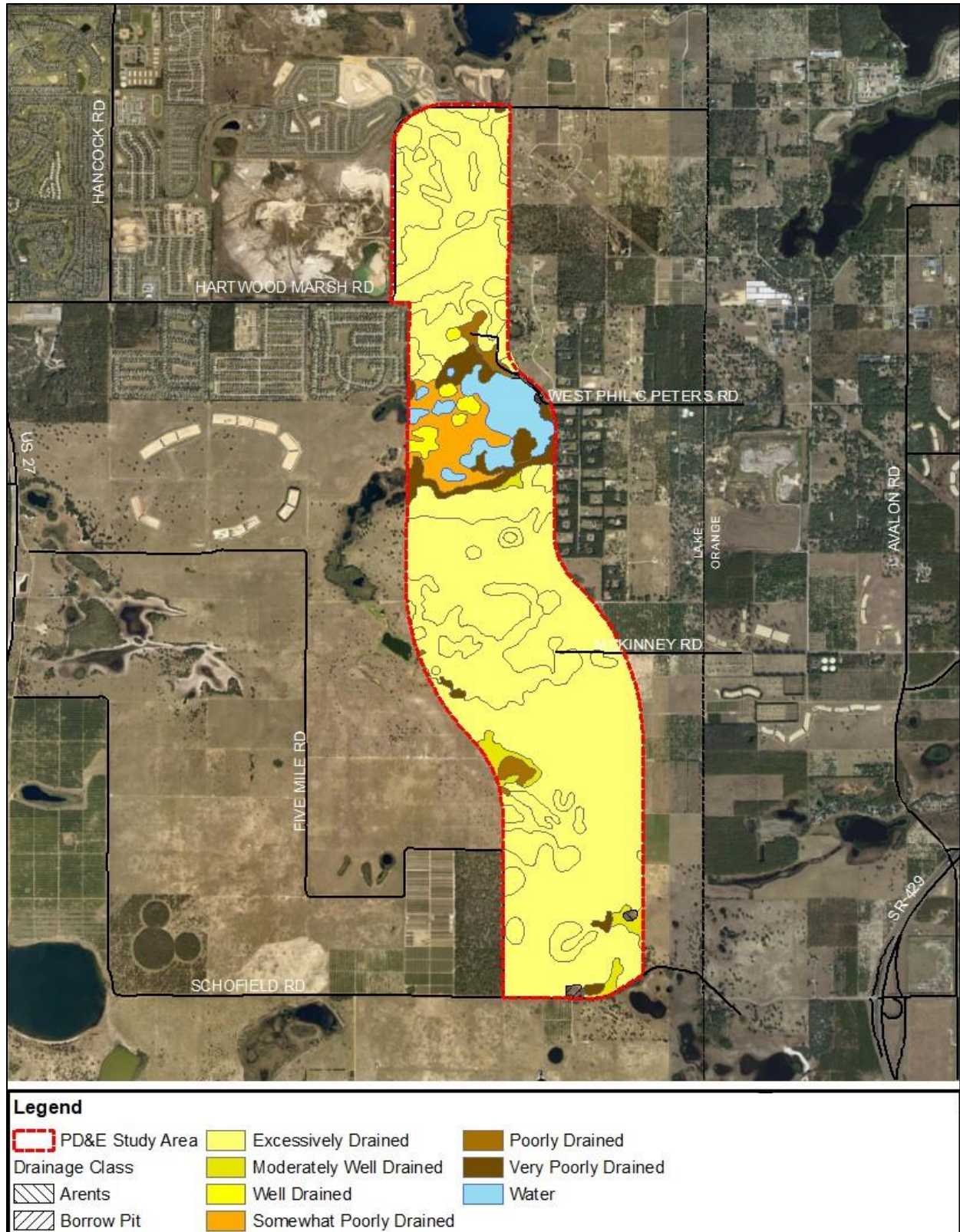
Soils drainage varies across the Study Area (**Table 2; Figure 7**). Areas with excessively drained to well drained soils are considered to have a high probability of encountering intact historic or prehistoric archaeological deposits, while the probability is moderate for moderately well drained to somewhat poorly drained soils, and low for the remainder of the Study Area.

Table 2: Soil Drainage within the CR 455 PD&E Study Area

Soil Drainage	Acres	Percentage
Excessively Drained	1744	83%
Moderately Well Drained	39	2%
Well Drained	25	1%
Somewhat Poorly Drained	81	4%
Poorly Drained	26	1%
Very Poorly Drained	81	4%
Water	93	4%
Arents	5	0%
Borrow Pit	3	0%

In addition to soil drainage, other environmental factors including access to wetlands and freshwater resources, relative elevation, and the results of previously conducted surveys are factored into determining the potential presence for prehistoric archaeological sites. Poorly drained soils are not ideal for prehistoric habitation, while well-drained soils in proximity to a navigable water system may represent ideal conditions. Once a preferred alignment is chosen, archaeological probability can be determined for areas of proposed ground-disturbing activity.

Figure 7: CR 455 Extension PD&E Soils Drainage Classification Map



5.0 RECOMMENDATIONS

Federal, state, and local laws require formal environmental review for most projects. This memorandum DOES NOT constitute such a review. Once a Build Alternative is approved, an Area of Potential Effect (APE) should be defined within which project-related effects to significant cultural resources will be assessed. The APE should be subjected to a CRAS, including both archaeological and architectural history fieldwork. The CRAS report, with required FMSF documentation, should be provided to the SHPO for concurrence on all cultural resource recommendations.

The archaeological APE for the project should be defined as the existing and proposed rights-of-way within which construction will take place. Archaeological sites identified within the project APE that are determined ineligible for NRHP listing by the SHPO will require no further consideration. Sites that are determined eligible for NRHP by the SHPO will be subject to an effects evaluation to determine project-related effects. Avoidance or minimization of effects should be considered. If adverse effects cannot be avoided, consultation with the SHPO will be required to develop suitable mitigation, most likely through additional excavation.

The architectural APE should be defined to include the existing and proposed right-of-way in addition to an appropriate buffer, which may vary in areas depending on whether the improvements involve new roadway alignment or expansion of an existing roadway corridor. Historic resources identified within the project APE that are determined ineligible for NRHP listing by the SHPO will require no further consideration. Resources that are determined eligible for NRHP by the SHPO will be subject to an effects evaluation to determine whether the project will have direct or indirect effects on the resource and, if so, whether those effects are adverse. If agency consultation finds that the project will have an adverse effect on one or more eligible historic resources, avoidance and/or minimization of effects should be considered. If adverse effects cannot be avoided, consultation with the SHPO will be required to develop suitable mitigation, most likely through Historic American Building Surveys (HABS), Historic American Engineering Record (HAER), or other forms of documentation.

With regard to NRHP-eligible historic linear resources, unless the project would cut off, reroute, or otherwise materially alter the resource itself or its function, the project is unlikely to have an adverse effect. Overpassing eligible railroads and canals, for instance, is generally not considered an adverse effect.

6.0 REFERENCES CITED

Lake County. (2019, July). *Lake County Connect Interactive Map*. Retrieved from Lake County Property Appraiser: <http://gis.lakecountyfl.gov/gisweb/>

United States Geological Survey. (2019, July). *USGS Topoview*. Retrieved from National Geologic Map Database: <https://ngmdb.usgs.gov/topoview/>

University of Florida GeoPlan Center. (2018, June). *FGDL Metadata Explorer*. Retrieved from Florida Geographic Data Library: <https://www.fgdl.org>

University of Florida Map & Imagery Library. (2019, June). *Aerial Photography: Florida Collection*. Retrieved from University of Florida Digital Collections: <https://ufdc.ufl.edu/aerials>

7.0 APPENDICES

Appendix 1

FMSF Inventory Letter and Map



This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333 for project review information.

June 25, 2018



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In response to your inquiry of June 19th 2018, the Florida Master Site File lists no previously reported cultural resources within the area indicated:

TRS: T23S, R26 E: Sections 1-2, 11-14, 23-26, 35 and 36 within the project location shown on the corresponding map.

When interpreting the results of our search, please consider the following information:








- **This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.**
- **Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.**

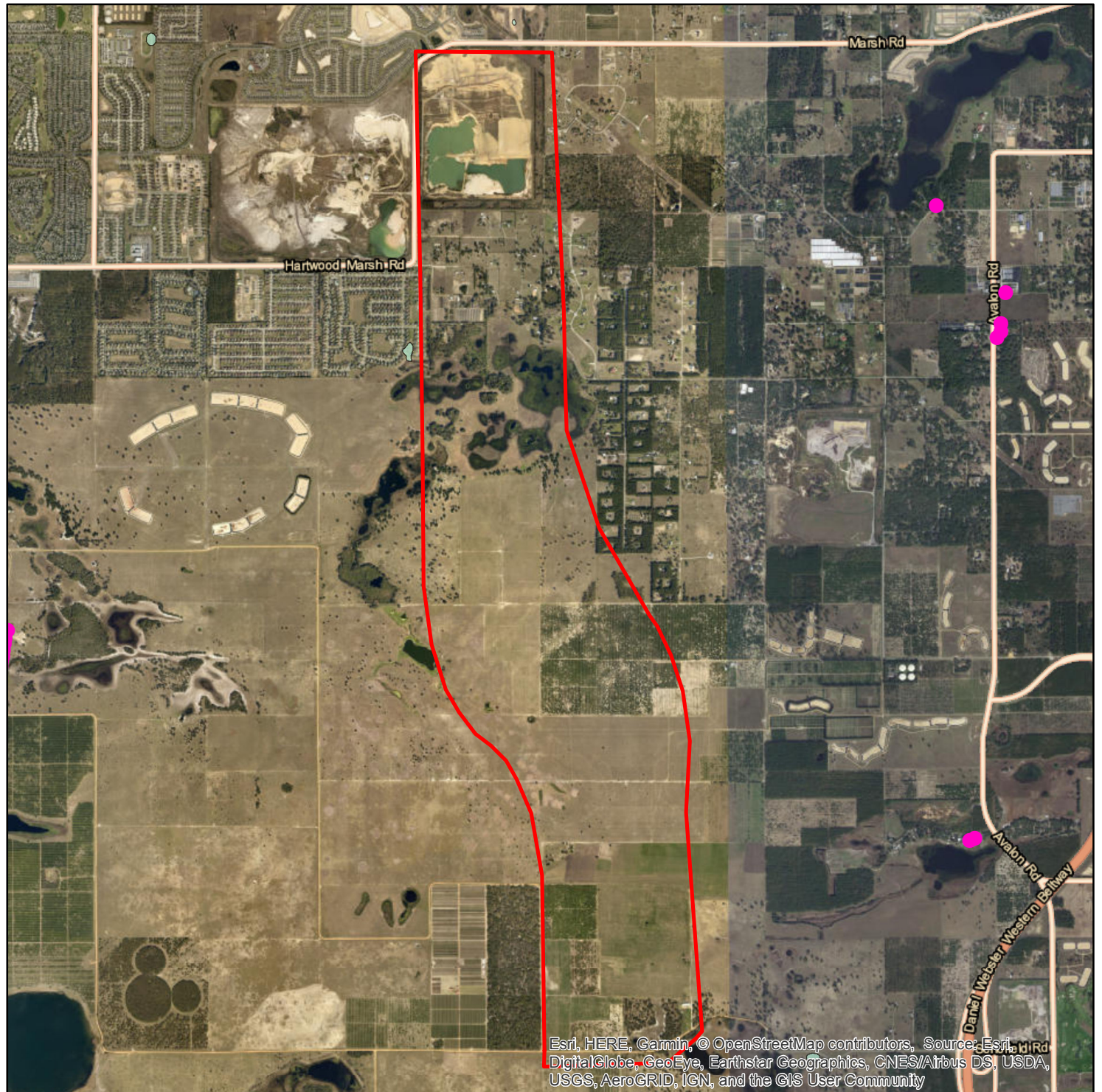
Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Sam M. Wilford.
Archaeological Data Analyst
Florida Master Site File
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Legend

-  Search Area
-  Standing Structures
-  Archaeological Sites
-  Historic Bridges
-  Historic Cemeteries
-  National Register Listing
-  Resource Groups



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