

for Minor Transportation Projects,¹ the Office of Environmental Planning (OEP) intends to make a determination of effect on historic properties for the described undertaking.

Technical Review of Project

Bridge #04730 was constructed in 1970 and carries Gurleyville Road over the Fenton River in Mansfield approximately 1.3 miles east of U.S. Route 195 (Images 1-7). The bridge was built in 1970 and the superstructure is comprised of eight prestressed concrete deck units with metal railings supported by stone masonry abutments with a concrete bridge seat founded on unknown foundation (likely masonry). The bridge carries bi-directional traffic in an east-west direction over a 23'-7"-wide roadway curb-to-curb width and has span length of approximately 42'. Gurleyville Road is classified as a Rural Minor Collector and the Average Daily Traffic (ADT) on the bridge is estimated to be 1,512 vehicles (per 2022 inspection report). The bridge does not carry any sidewalks. Fenton River flows under the bridge from the north to the south. There are no utilities carried by the bridge and there are overhead utilities that cross the structure from the northeast to the southwest. Bridge #04730 is categorized as Not Eligible for listing in the NRHP in the statewide bridge inventory database maintained by CTDOT and OEP cultural resources staff concur with this categorization.

The existing bridge rail system is in poor condition due to presence of holes, section loss and cracks in rails and connections to posts. The bridge rail system does not meet current safety standards and the existing roadway width of 23'-7" does not meet FHWA Standards (24'-0" Minimum based on ADT between 1,001- 2,000 vehicles) or Connecticut Department of Transportation (CTDOT) Standards (24'-0" minimum for Rural Collector). Since the roadway width does not meet FHWA standards, the bridge is considered to be Functionally Obsolete. The bridge is also considered to be scour critical. The purpose of this project is to address deficiencies identified by recent inspections, increase the roadway width to 24' minimum in order to meet current FHWA and State Standards and eliminate scour deficiency on the bridge.

Based on the condition of the existing bridge, as well as the fact that the existing abutments will not support a wider superstructure (this being required to accommodate a widened roadway), a full bridge replacement is proposed (Image 12). The proposed replacement will involve removal of the existing bridge superstructure and masonry abutments, construction of new

¹ *Programmatic Agreement among the Federal Highway Administration, the Connecticut Department of Transportation, the Connecticut State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Implementation of Minor Transportation Projects*, signed October 26, 2012 and revised May 4, 2018. Accessible online at: www.ct.gov/culturalresources.

concrete abutments supported on pile foundations designed for scour, and installation of a new superstructure to carry a 24'-0" wide roadway meeting FHWA and CTDOT design standards. The deck out-to-out width is anticipated to be approximately 28'-0", and the proposed span length of 42' will match existing. The span length and/or low chord may be adjusted as necessary to improve hydraulic performance, however, the proposed bridge rail system will be an open bridge rail system meeting current safety standards. Gurleyville Road will be reconstructed approximately 125' at both approaches to the bridge and new guiderails will be installed at all approach corners to the bridge to meet current design standards. Finally, a two-car pull-off area with a processed aggregate base will be provided for recreational users southeast of the crossing.

Area of Potential Effect (APE)

As noted, Bridge #04730 is located approximately 1.3-mile east of Gurleyville Road's intersection with U.S. Route 195 in the town of Mansfield. This bridge is located in a rural agricultural residence zone according to the Town of Mansfield zoning map and northwest of project site is a parking lot for the Blue-Blazed Nipmuck Trail and the remnants of an old sluiceway. Southwest of the bridge is the Torrey Preserve, a local open space property, and Riverside Burying Ground is present northeast of the bridge. The project site is also located within the Gurleyville Historic District

Based upon the character of the proposed scope (replacement of the bridge within effectively the same footprint and improvements to the existing roadway), it was determined that the area of potential effect (APE) should be limited to the bridge, roadway, and immediately abutting properties, upon which the implications of construction, both visual and audible, would be the most prevalent (Images 1 and 12). As such, the area of potential effect (APE) for State Project #0077-0249 is limited to approximately 50' x 300' of roadway ROW, including, as well as north and south of, the structure, and temporary easement areas required to complete the project.

To identify above-ground historic properties in the APE, OEP Qualified Staff reviewed available information, including the National Register Information System, the Connecticut State Historic Preservation Office's (SHPO) Cultural Resource Information System (ConnCRIS), CTDOT's internal records and databases (this including historic project plans), local GIS databases, and available historic maps and imagery (Images 8-11). Bridge #04730 has been determined to not be eligible for listing in the National Register of Historic Places (NRHP), however, the bridge and entirety of the APE is located within the boundaries of the NRHP-listed Gurleyville Historic District. No previously unidentified NRHP-eligible resources were identified by OEP cultural resources staff.

There are two properties that contribute to the Gurleyville Historic District that are located within the APE, these including 0 Gurleyville Road (PID #1090) and 0 Gurleyville Road (PID #195). The first is identified as resource #1 in the historic district and is the former site of the Royce Silk Mill/E.B. Smith Silk Mill (1848-1921), while the second is identified as resource #19 and consists of the Riverside Burial Ground (established ca. 1845). Neither, however, would be physically affected by the proposed project, nor would temporary or visual impacts affect the properties to such a degree so as to compromise their historic character, integrity, or ability to contribute to the historic district. Protective fencing will also be employed to prevent encroachment beyond the proposed work areas in the vicinity of these historic resources.

Archaeological Conditions Within or Abutting the APE

Digital site records maintained by the Office of the State Archaeologist, ConnCRIS, and OEP's own internally compiled database of historic resources and previously conducted cultural resource studies, were consulted for the purpose of identifying any known archaeological sites located within the APE. One previously identified post-Contact archaeological site is located within the APE, this being the aforementioned Royce Silk Mill/E.B. Smith Silk Mill Site (CT Site #76-188), however, no documented pre-Contact archaeological sites were found to be present within the project area or a more than one-half-mile radius.

The sediments in the project APE are categorized as Occum Fine Sandy Loam (0-3% slopes) or Merrimac Sandy Loam (0-3% slopes), both of which predictive models identify as having a "high" likelihood of possessing archaeological resources. While a review of historic mapping and previous project plans suggests that soil disturbances have taken place within the APE during the construction of Gurleyville Road, Bridge #04730, and local industrial and residential development, given the nature of the soil modeling and proximity of several historic resources, including one known archaeological site, a Phase I Archaeological Assessment and Reconnaissance Survey was conducted to evaluate the likelihood that project might impact any intact NRHP-eligible archaeological resources. Despite the initial concern, however, the survey did not discover any cultural material within the study area and no further archaeological testing was recommended.²

Given the aforementioned conditions and the findings of the Phase I Cultural Resources Assessment and Reconnaissance Survey, OEP Qualified Staff

² *End-of-Fieldwork Memorandum, Phase 1A and Phase 1B Cultural Resources Assessment and Reconnaissance Survey for CTDOT Project No. 0077-0249, Gurleyville Road over the Fenton River (Bridge No. 04730) in the Town of Mansfield, Connecticut*, prepared by Heritage Consultants, LLC, for CHA Consulting, September 2024.

has determined that there is minimal foreseeable potential to impact intact archaeological resources within the project area and no further study is recommended.

Conclusion

Qualified OEP cultural resources staff conducted background research and reviewed the project scope. A review of records maintained by the Connecticut State Historic Preservation Office (SHPO) and evaluation by OEP Qualified Staff indicates that the project area is listed in the NRHP as a historic district, however, Bridge #04730 is not a contributing resource and the statewide bridge database maintained by CTDOT similarly identifies the bridge as being Not Eligible for listing on the NRHP, this being a determination that Qualified Staff at OEP concurs with. Furthermore, impacts resultant of the proposed project would not affect historic district to a significant degree and OEP staff, as well as consultants tasked with completing a Phase I Archaeological Assessment and Reconnaissance Survey of the project area have also determined that there is minimal foreseeable potential to impact intact archaeological resources within the project area and no further study is recommended. Finally, consultation was carried out with federally-recognized Native American Tribal authorities with ancestral ties to the state of Connecticut for this undertaking in September-October 2024. None of the Tribes contacted expressed any concern with the project after consultation.

As such, in accordance with the Section 106 Programmatic Agreement for Minor Transportation Projects, OEP has determined that the project will result in No Adverse Effects to Historic Properties and no further consultation with the Connecticut State Historic Preservation Officer (CTSPHO) is required. A copy of this determination will be included in the quarterly report of Minor Transportation Projects that is submitted to CTSHPO.



Lucas A. Karmazinas
National Register Specialist
Office of Environmental Planning
Connecticut Department of Transportation



Image 1: 2023 aerial image of project site and vicinity. Approximate project area identified in red.



Image 2: South (downstream) face of Bridge #04730 looking northwest from the Fenton River.



Image 3: North (upstream) face of Bridge #04730 looking south from the Fenton River.



Image 4: Roadway level of Bridge #04730 looking east along Gurleyville Road.



Image 5: Roadway level of Bridge #04730 looking west along Gurleyville Road. Note the existing Nipmuck Trail parking area northwest of the bridge (to be replaced) and the existing gravel parking area southeast of the bridge (to be replaced).



Image 6: View looking northeast away from Bridge #04730 showing the proximity of the Riverside Burial Ground.



Image 7: View looking northeast at the Nipmuck Trail parking lot, beyond which is the Royce Silk Mill/E.B. Smith Silk Mill Site (CT Site #76-188). Note the bridge crossing well to the rearground.



Image 8: 1934 aerial image of project site and vicinity. Approximate project area identified in red. Note the location of the Royce Silk Mill/E.B. Smith Silk Mill Site (CT Site #76-188) to the northwest and Riverside Burial Ground to the northeast, as well as the previous alignment of Gurleyville Road.

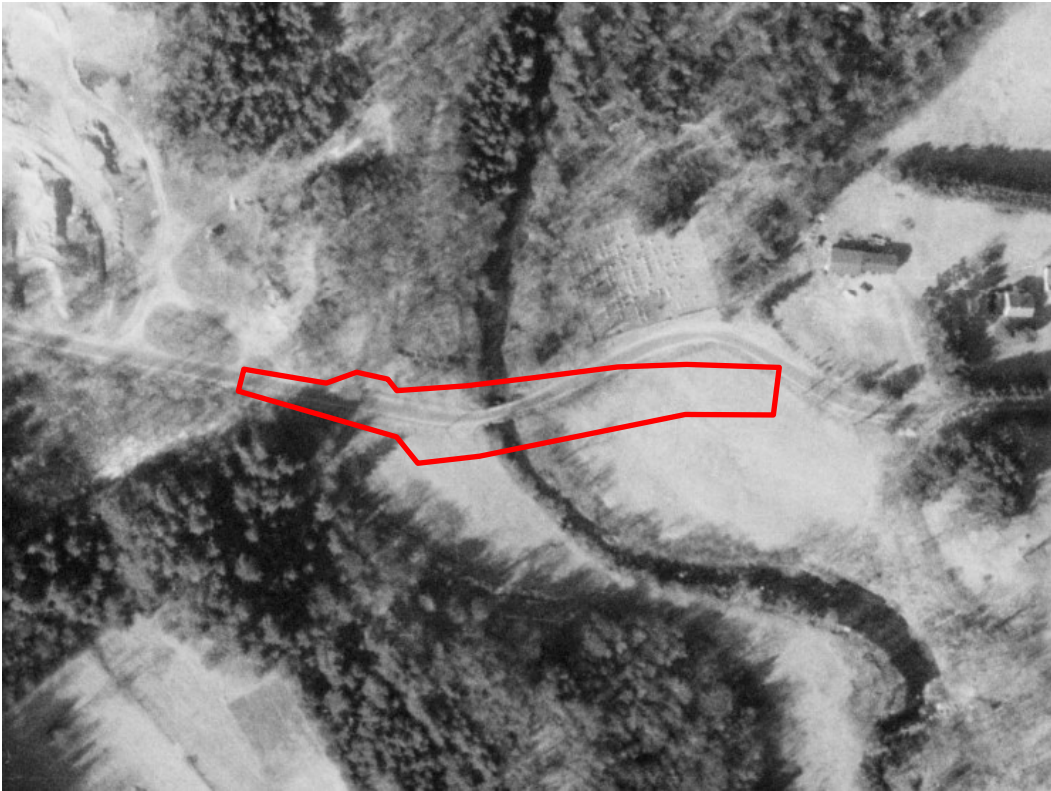


Image 9: 1965 aerial image of project site and vicinity. Approximate project area identified in red. Note that the former mill site has become overgrown and that the previous roadway alignment is still intact.

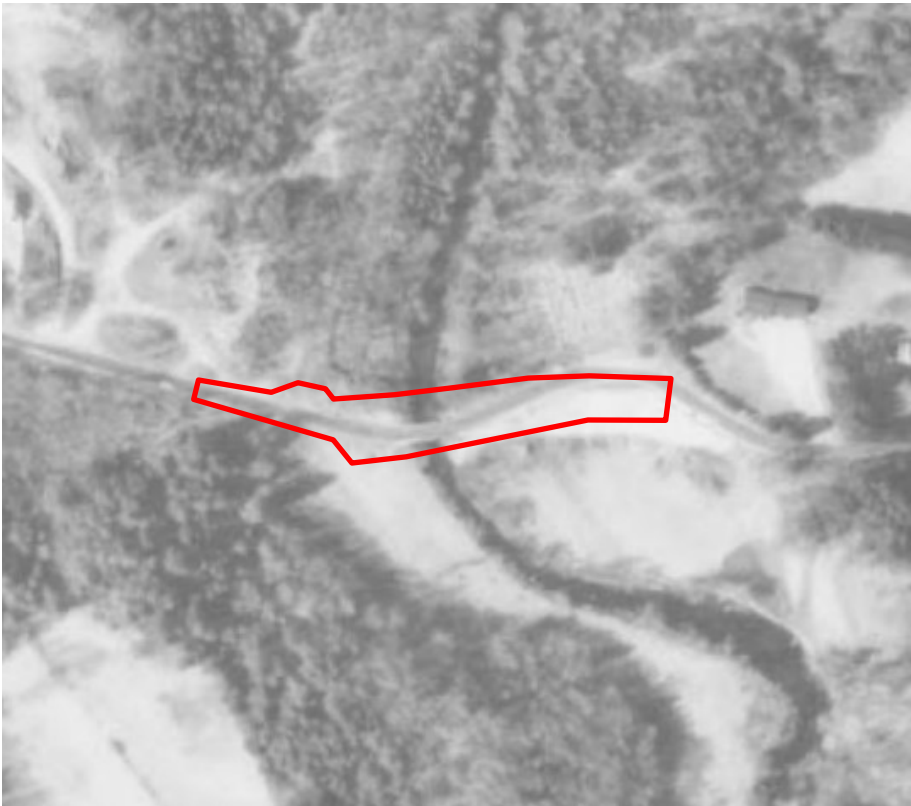
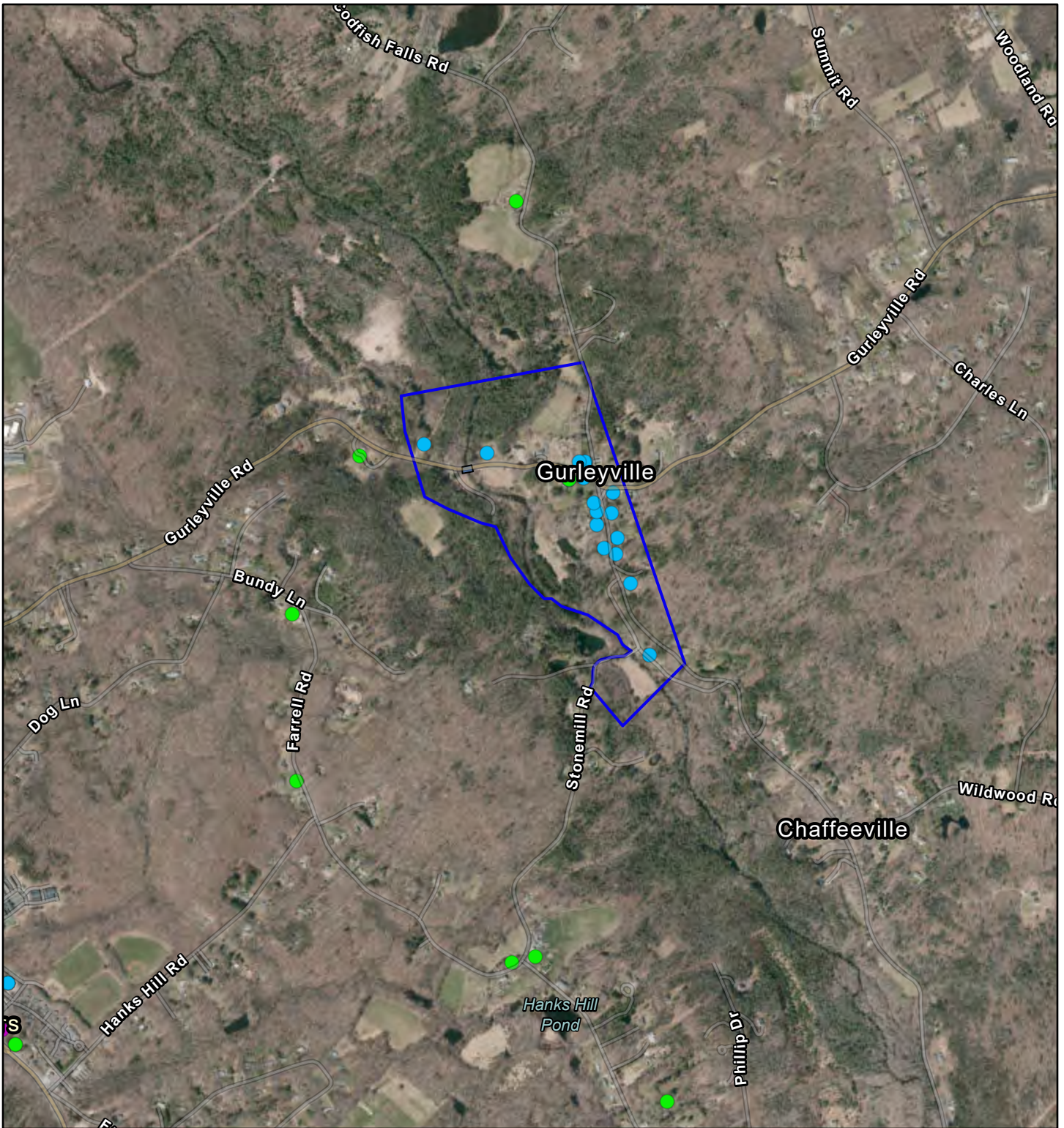


Image 10: 1970 aerial image of project site and vicinity. Approximate project area identified in red. Note that the area east of the crossing has been cleared anticipation of the construction of the present Bridge #04730 and roadway realignment project.

077-249_Mansfield_Hist_Properties

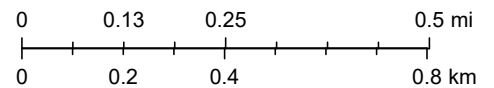


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Above Ground Resources

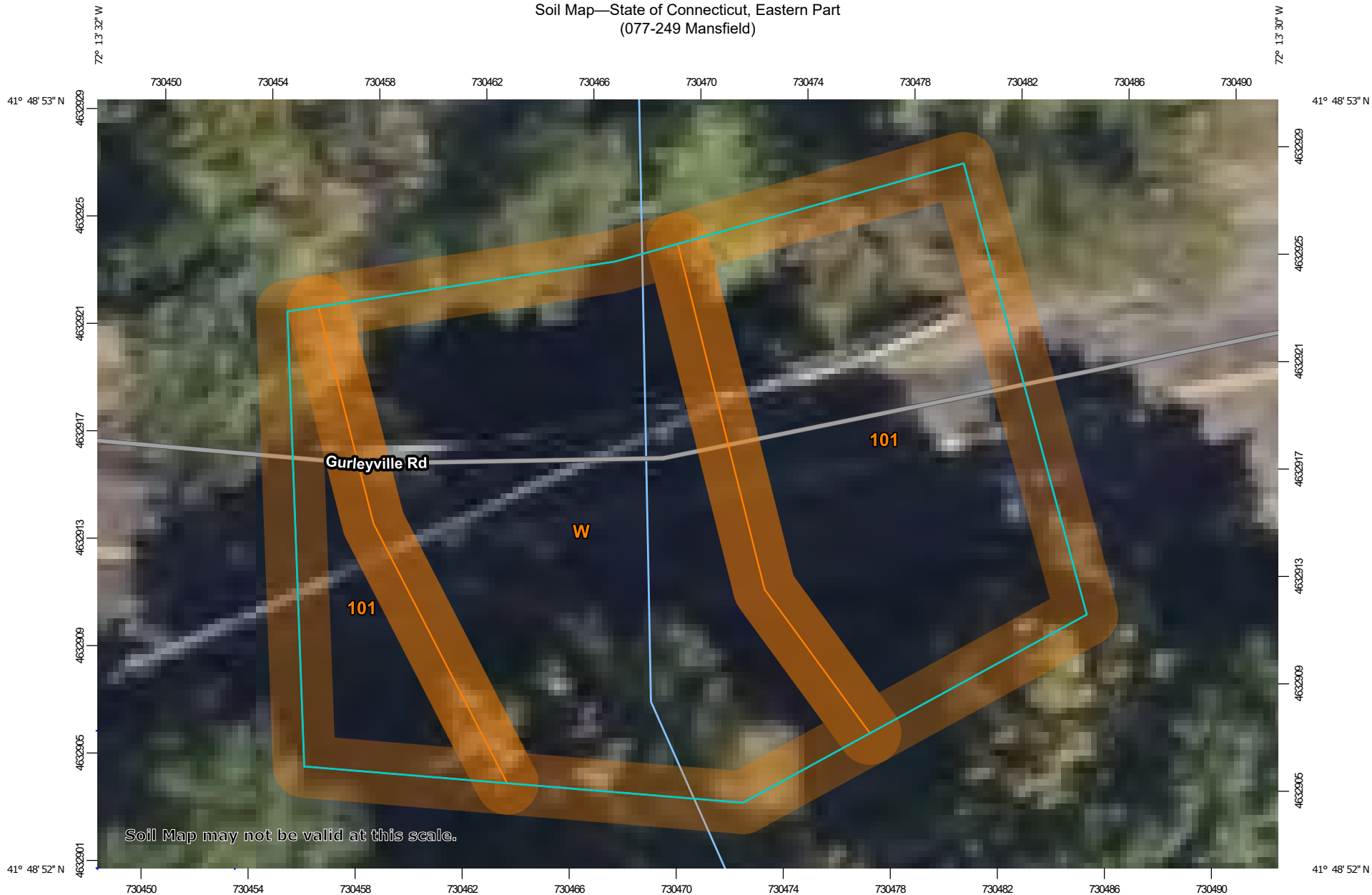
- National Register
- State Register
- Inventoried
- 077-249 Mansfield_Shp - 077-249 Mansfield
- National Register District



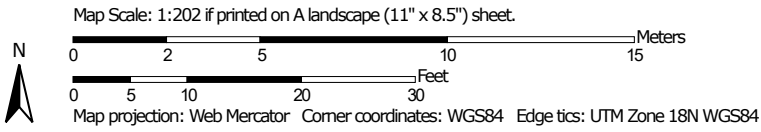
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, State of Connecticut, Maxar

ArcGIS Web AppBuilder

Soil Map—State of Connecticut, Eastern Part
(077-249 Mansfield)




Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut, Eastern Part
Survey Area Data: Version 1, Sep 15, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

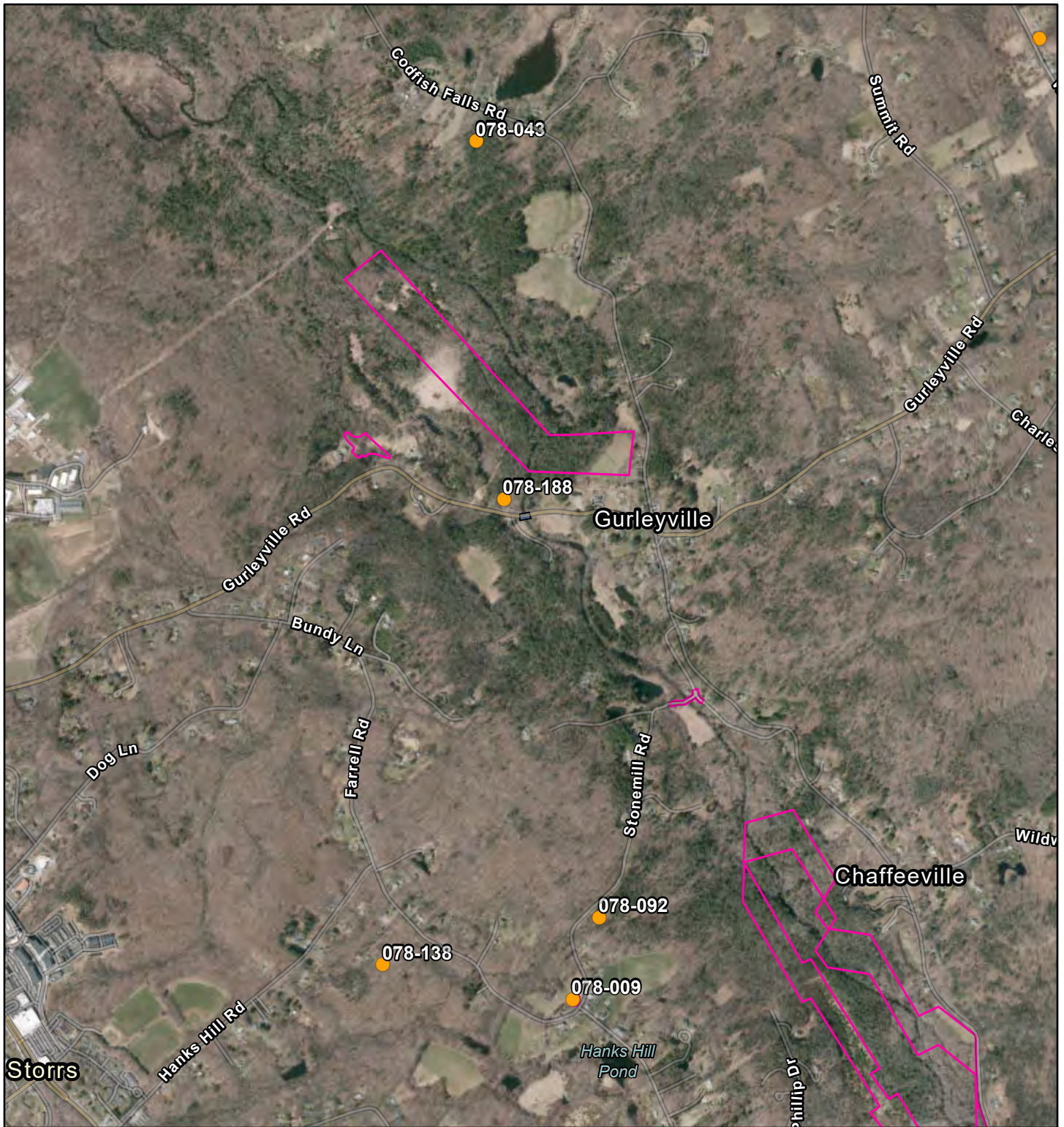
Date(s) aerial images were photographed: Jun 14, 2022—Oct 6, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101	Occum fine sandy loam	0.1	50.5%
W	Water	0.1	49.5%
Totals for Area of Interest		0.1	100.0%

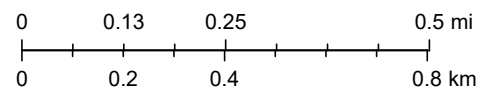
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- Archaeology Sites
- 077-249 Mansfield_Shp - 077-249 Mansfield
- CHPC



Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, State of Connecticut, Maxar

ArcGIS Web AppBuilder



U.S. Department
of Transportation
**Federal Highway
Administration**

Connecticut Division

21 October 2024

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In Reply Refer To:
HDA-CT

Dear CTDOT Cultural Resources Unit:

The Federal Highway Administration (FHWA) has conducted and concluded tribal consultation for transportation undertakings, as requested by your office. On September 13, 2024, FHWA electronically delivered information about applicable undertakings to those Federally recognized Indian tribes which have an identified area of interest including the project area.

Responses were received, as indicated below, from The Mohegan Tribe, the Stockbridge Munsee Community (SMC), and the Mashantucket Pequot Tribal Nation (MPTN). Please see attached copies of these communications and note any requested further action from the THPOs.

The following undertakings have undergone tribal consultation:

State Project Number	Description	Summary Comments Received from Tribe(s)
0040-0149	<i>Rehabilitation/Replacement of Bridge Numbers 01382, 02703 & 02704 (East Haddam, Middlesex County) [FAP #1040(105)].</i>	Anticipated NAE. MPTN – requested additional consultation. Mohegan – no concerns– No additional responses received. Additional consultation will be required for this project.
0044-0161	<i>Bridge #05623 Replacement (East Lyme, New London County). [FAP #6044(001)].</i>	Anticipated no properties affected. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0051-0276	<i>Replacement of Bridge #02110 (Farmington, Hartford County). [FAP #0010(132)].</i>	Anticipated NAE. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0054-0094	<i>Replacement of Bridge #00935 (Franklin, New London County). [FAP #0032(208)].</i>	Anticipated no properties affected. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0058-0344	<i>Replacement of Bridge #04675 (Groton, New London County). [FAP #6058(004)].</i>	Anticipated PA exempt. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0063-0721	<i>Hartford Riverwalk Extension (Hartford, Hartford County). [FAP #PEDS(209)]</i>	Anticipated no properties affected. MPTN – requested additional consultation. Mohegan – no concerns– No additional responses received. Additional consultation will be required for this project.
0077-0249	<i>Replacement of Bridge #04730 (Mansfield, Tolland County). [FAP #6077(011)].</i>	Anticipated PA exempt. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0080-0135	<i>Rehabilitation/Replacement of Bridge #07059 (Middlebury, New Haven County). [FAP #0842(322)].</i>	Anticipated PA exempt. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0083-0277	<i>Replacement of Bridge No. 00153 (Milford, New Haven County). [FAP #0951(397)].</i>	Anticipated no properties affected. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0108-0006	<i>Rehabilitation/Replacement of Bridge #07117 (Plainfield, Windham County). [FAP # TBD].</i>	Anticipated no properties affected. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.

0111-0127	Bridge #05350 Replacement (Pomfret, Windham County). [FAP #6111(013)].	Anticipated no properties affected. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0152-0163	Lane Reconfigurations - Route 32 at Old Norwich Road (Waterford, New London County). [FAP #000T(378)].	Anticipated NAE. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0154-0128	Replacement of Bridge 00232 (Westbrook, Middlesex County). [FAP #0153(002)].	Anticipated no properties affected. Mohegan/MPTN – no concerns– No additional responses received. No further consultation anticipated for this project as proposed.
0159-0193	Replacement of Br #'s 00642, 00810, and 00811 (Wethersfield, Hartford County). [0015(148)].	Anticipated Adverse Effect Mohegan/MPTN – no concerns– No additional responses received. Additional Consultation will be required to resolve adverse effect. MOA anticipated.
FY 2023 PFP Application	Pollinator-Friendly Practices on Roadsides and Highway Rights-of-Way Discretionary Grant Program Application (Various Municipality, Statewide).	Informational submission. Mohegan/SMC/MPTN - – no concerns– No additional responses received.

Additionally, FHWA has provided copies of the *FHWA/CTDOT MOU for Tribal Consultation Procedures* implementation report and the Section 106 PA Quarterly Report for the 2nd quarter of 2024 to the Tribes. No comments or concerns relating to the reports were received.

With this letter, the 30-day Tribal consultation period is concluded for the submitted documents related to undertakings identified herein. FHWA has continuing consultation responsibilities to respond to comments and requests for information received from the Tribes, as well as providing opportunities for Tribal review and comment on reports and documents relating to projects for which they are identified as consulting or concurring parties.

We look forward to working with your office to resolve any comments provided by Tribes. FHWA appreciates your continued cooperation in tracking Tribal consultation outcomes and your assistance in ensuring that commitments made to Tribes are met. If you have any questions, please contact me telephone at 860-494-7577 or by email at emilie.holland@dot.gov.

Sincerely,

M. Emilie Holland
Environmental Protection Specialist
FHWA Connecticut Division

Enclosures