

## **11.0 CULTURAL RESOURCES**

### **11.1 Introduction**

Cultural resources include archaeological resources and historic architectural resources. Historical properties and archaeological resources that are listed in or are eligible for listing in the National Register of Historic Places are afforded protection by Section 106 of the National Historic Preservation Act (NHPA) and Section 4(f) of the Department of Transportation Act of 1966.

Section 106 of the NHPA requires federal agencies to take into account the effects of their activities and programs on any historic district, site, building, structure, or object that is included, or eligible for inclusion, in the National Register of Historic Places. The resources and the effects on those resources are evaluated by the State Historic Preservation Officer (SHPO) and the federal agencies having jurisdiction, in this case the Federal Highway Administration (FHWA), the lead agency. In New Hampshire, the SHPO is the Director of the New Hampshire Division of Historical Resources (NHDHR). Prior to the approval of the undertaking, the agency must afford the Advisory Council on Historic Preservation (ACHP), established under Title II of the NHPA, a reasonable opportunity to comment on the undertaking.

The procedures followed in the Section 106 review are referred to as the "Section 106 process" and are set forth in regulations issued by the ACHP (36 CFR 800). The NHDHR is charged under RSA 227-C:9, Directive for Cooperation in the Protection of Historic Resources, with coordination of the identification and evaluation of cultural resources in the State of New Hampshire, which includes the review of historical resources under Section 106 and under RSA 227-C:9 for projects that affect state properties. The NHDHR, in cooperation with the NHDOT and FHWA, has established a method of identification and evaluation to meet the requirements of this historic preservation review. The purposes of this process are to (1) locate and identify historical, architectural, archaeological, and historical archaeological resources within the project's impact area; (2) apply the criteria for evaluation of significance to a resource to determine possible eligibility to the National Register of Historic Places (National Register), if not already eligible or listed; (3) assess the probable effects of a project on resources listed on or eligible for the National Register; and (4) develop appropriate mitigation methods to lessen the project's impact on affected historic properties.

The NHDHR prepared "Procedures for Identifying Cultural Resources That May Be Affected by State or Federal Transportation Projects in New Hampshire" in November 1992. These procedures were partially updated in 2003. This document offers specific guidance for cultural resource survey efforts undertaken as a component of transportation improvement projects for architectural properties. The NHDOT prepared guidelines for archaeological assessments of the project in 2004.

## **11.2 Summary of 2004 FEIS Analysis and Record of Decision Commitments**

### **11.2.1 Archaeological Resources**

Beginning in 1989, numerous archaeological studies of the I-93 corridor have been conducted to identify archaeologically sensitive areas and sites. Based on the results of these studies, the 2004 FEIS concluded that the 2005 Selected Alternative would affect 23 sensitive archaeological sites where additional study was recommended (e.g. Phase II investigations). The Phase II investigations would determine whether which of the 23 sites are eligible for the National Register of Historic Places. If there are sites that are found to be eligible for the National Register that cannot practicably be avoided through design changes, Phase III data recovery would be conducted in accordance with established standards.

### **11.2.2 Historic Architectural Resources**

The area of potential effect surveyed for historic resources for the 2004 FEIS was 500 feet on either side of the existing northbound and southbound lanes, with a minimum width of 1,000 feet. At interchanges the area extended to each side of the existing I-93 right-of-way approximately 2,000 feet along the connecting roadways. Properties near the new park-and-rides at Exits 2, 3 and 5 were also surveyed. Six districts and nine individual properties were determined eligible for the National Register of Historic Places. Through the Section 106 process, the project's effect upon them was determined, and mitigation was proposed. The Section 106 process determined that the 2005 Selected Alternative would have an adverse effect on five historic properties eligible for the National Register (Robert Armstrong House, George Armstrong House, Robert J. Prowse Memorial Bridge, Gearty House, and the stone walls associated with the Searles Castle). The Section 106 process concluded with a Memorandum of Agreement (MOA) between SHPO, NHDOT, and FHWA that specified mitigation measures for the impacted historic properties (See Appendix G of Vol 3 of the 2004 FEIS).

## **11.3 Methodology**

The reevaluation of cultural resources summarizes changes in the project impacts and mitigation commitments since the 2004 FEIS. These changes have been and continue to be coordinated with the NESHPO, NHDHR, FHWA and NHDOT. Since the 2004 FEIS, meetings were held on the following dates to discuss various cultural resource issues and to provide updates on the status of mitigation commitments:

1/13/2005, 4/13/2006, 5/4/2006, 10/5/2006, 11/2/2006, 5/3/2007, 5/10/2007, 7/12/2007, 8/9/2007, 12/6/2007, 1/10/2008, 2/7/2008, 3/13/2008, 4/3/2008, 5/8/2008, 11/13/2008, and 2/12/2009.

An updated Effects Memo incorporating the changes in the impacts of the 2005 Selected Alternative since the 2004 FEIS was signed by NHDOT, FHWA and NESHPO on July 16, 2009 (See **DSEIS** Appendix I: **Historic Resources Effects Memo Update**).

## **11.4 Existing Conditions**

Changes in existing conditions since the 2004 FEIS include further archaeological studies, a clarification of the boundary of the Armenian Settlement Historic District Area (Area SAL – D1) and the identification of a contributing building within the district, and the discovery of two stone culverts potentially eligible for the National Register within the APE along the Manchester and Lawrence Railroad Corridor (M & L Corridor). These changes are discussed in further detail below as part of the updated evaluation of the effects of the 2005 Selected Alternative on historic and archaeological resources.

## **11.5 Impacts and Mitigation**

### **11.5.1 Archaeological Resources**

Supplemental Phase 1B investigations were completed on all archaeological areas identified in the 2004 FEIS. Based on the results of these analyses, the NHDHR and FHWA determined that Phase II investigations would need to be completed at 20 sites. Based on the results of the Phase II testing, Phase III data recovery was recommended at the Hunnewell (John Dinsmore) Farmstead (27Rk7) in Windham, the Corthell Farmstead (27Rk370) in Londonderry; and the Native American site at the Dickey Plain Site Extension (27Hb216) in Manchester.

The Supplemental Phase II investigation completed in 2008 at the Hunnewell Farmstead revealed that no significant resources are located within the areas that would be impacted by the proposed project. Construction fencing is to be installed at the limits of the construction impact area and along the perimeter of the site prior to construction in the vicinity of the site to prevent any encroachment onto the site. Further historical document research is on-going as part of the final Phase II documentation of the site.

It is anticipated that avoidance of the Dickey Plain site is feasible, and that a Phase III investigation would no longer be required. The site boundaries will be fenced prior to construction. The Phase III investigations of the Corthell Farmstead would occur once the final design construction impact limits have been further refined.

### **11.5.2 Historic Architectural Resources**

#### Armenian Historic Settlement District

Expansion of the Armenian Settlement Historic District boundaries in April 2006 resulted in an additional property being designated as a contributing resource to the Historic District. The building, located at 2 Brady Avenue in Salem, had been acquired for transportation purposes prior to its designation as a contributing element to the Historic District. Acquisition of the Brady Avenue property (NHDOT Parcel ID S38) was disclosed in the 2002 DEIS and 2004 FEIS. Coordination with NHDHR and FHWA determined that this newly-designated resource would be considered a “post-review discovery” in accordance with 36 CFR 800.13(b). Mitigation for this impact will include documentation of this property following the NH Historic Property Documentation Form, which approximately follows HABS (Historic American

Building Survey) guidelines. Further mitigation for the impacts to the District would entail placing a State Historic Marker across from the Armenian Mt. Ararat Congregational Church on Brady Ave. This marker would describe the historic contribution of the District to the Town of Salem. Additionally, the Armenian Settlement Historic District Area will be more fully defined.

#### George Armstrong House and Robert Armstrong House

Design modifications in the vicinity of Exit 3 in Windham greatly reduced the proposed impacts to the George Armstrong (2004 FEIS Site ID WND0085) and Robert Armstrong properties (WND0086) located on Range Road. The change in design avoids the two dwellings making their purchase unnecessary. As part of the settlement agreement with the property owner, the NHDOT has stabilized the Robert Armstrong House. Protective easements for the rehabilitation of this house to the Secretary of the Interior Standards have been signed by the owner. Additionally, all but the barn/workshop addition to the George Armstrong House will remain standing. As noted in the MOA, both dwellings will be documented in the NH Historic Property Documentation Form format, which essentially follows the HABS guidelines.

#### Searles Castle Historic District

The Searles Castle Historic District (WND-D1) wall remnant, located north of NH 111 within the Exit 3 interchange median of I-93, in Windham was documented as a Continuation Sheet to the existing Individual Inventory form for the District as noted in the MOA.

#### Robert J. Prowse Memorial Bridge

The Robert J. Prowse Memorial Bridge (LON0116) impacts and mitigation have not changed. The bridge is being documented in the NH Historic Property Documentation Form format, which essentially follows the HAER (Historic American Engineering Standards) guidelines. Added to this study is the structural comparison of the Prowse Bridge with three other bridges along I-93. Additional mitigation follows those measures outlined in the MOA.

#### Manchester and Lawrence Railroad Corridor Stone Culverts

Final design modifications in the Exit 5 interchange area in Londonderry revealed that impacts would occur along the Manchester and Lawrence Railroad Corridor (M & L Corridor). The proposed construction involves two stone culverts. The first culvert is a brick-top stone box located under the corridor west of the proposed Exit 5 southbound off-ramp. Construction is adjacent to, but leaves the culvert in place. The second stone culvert is located under the corridor east of the proposed intersection of Auburn Road and Independence Drive. It will be replaced due to the relocation of Independence Drive onto the M & L Corridor. Based on a review pursuant to 36 CFR 800.4 of the historical and architectural significance of identified resources, NHDHR and FHWA assumed that both stone box culverts were eligible for the National Register of Historic Places. Applying the criteria of effect at 800.5, it was determined that the project would have no adverse effect on the brick-top culvert and an adverse effect on the Independence Drive culvert, resulting in a Section 4(f) impact (see Chapter 15: Draft Section 4(f) Evaluation).

NHDOT will complete a district area form for the other cultural resources along the M & L Corridor in New Hampshire (from the State line to Manchester) to determine the eligibility of the line. At the site of the brick-top culvert, the NHDOT will relocate an underground telephone cable using directional boring rather than trenching, which would affect the culvert. It will protect the brick-top stone box culvert and its immediately associated railroad corridor with orange construction fencing. Heavy machinery will not cross this culvert, and the corridor will be restored over the culvert following construction. Mitigation for the Independence Drive culvert will entail documentation on a NH Historic Property Documentation Form, which follows HAER (Historic American Engineering Record) Standards (See **DSEIS** Appendix I: Historic Resources Effects Memo Update).

## **11.6 Conclusions**

The cultural resources reevaluation indicates that there have been substantial changes in the impacts of the 2005 Selected Alternative since the 2004 FEIS, including the avoidance of impacts to certain resources and the discovery of additional National Register-eligible resources in the corridor. Changes in the project impacts and mitigation commitments have been and will continue to be coordinated with NESHPO, NHDHR and FHWA.