

**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENT**

**BERLIN  
X-A-000(052)  
12958B**

**FINAL ENVIRONMENTAL ASSESSMENT/  
FINAL SECTION 4(f) EVALUATION**





BERLIN  
Reconstruction of NH 110  
Coos County, New Hampshire

FINAL ENVIRONMENTAL ASSESSMENT & SECTION 4(f) EVALUATION

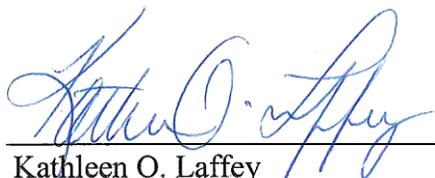
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4/23/10  
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## **PART I. FINAL ENVIRONMENTAL ASSESSMENT**

### **1.0 Purpose and Need**

This project is required to improve the conveyance of traffic through an approximately 0.6 mile section of NH 110 in the City of Berlin. Presently, NH 110 traverses along a circuitous route along several neighborhood streets from downtown Berlin, at its intersection with NH 16 (Main Street), to the northern periphery of the urban compact of the City (**Exhibit 1**). Truck traffic must negotiate narrow residential streets with several tight intersections and make 90 degree turns while avoiding parked cars, pedestrian and bicycle traffic and other motor vehicles. The high volume of trucks and passenger cars negotiating these narrow, circuitous streets through the neighborhood compromises community cohesion of the neighborhood, bicycle and pedestrian movements and results in considerable concerns for safety.

Two major transportation routes pass through the City of Berlin. The NH 16 highway corridor, the State's easternmost north-south highway, is extremely important for the flow of goods and traffic regionally and through the City. The roadway network in Berlin has as its focal point the commercial/industrial district located along this NH 16 corridor. NH 110, is a key regional east-west highway that intersects with NH 16 in downtown Berlin and provides access to US 3, the State's westernmost north-south highway, in Groveton (**Exhibit 2**). Additionally NH 110 provides an interregional significance as Canadian trucking firms use NH 110 to travel to Berlin and areas further east in Maine through the NH 16 connection with US 2 in Gorham, another major regional east-west route, located just south of Berlin.

### **2.0 Project History**

In the early 1960's the City of Berlin hired consultants to help the City write its first comprehensive planning document. Transportation through the City was a major component of the plan published in 1964. A clear focus was the acknowledgement that NH 110, a major truck route through the City, did not belong through a residential neighborhood and that a major impediment was a narrow and severely deficient under-clearance of the Green Street railroad bridge, requiring the establishment of several truck detour routes within the City. The area is further constrained by surrounding mountains, the St. Lawrence & Atlantic railroad corridor, the Dead River and steep terrain. These natural and man-made features severely limit the possible roadway configurations for the area.

In the early 1970's the Haynes study focused on connecting NH 16 with NH 110. The designs involved a variety of ways to connect the two highways including bridges, railroad crossings, minor and major reconstructions, and bypass alternatives. One bypass alternative was looked at in-depth, but due to cost and major grade challenges the City focused on a route that involved the existing NH 110 area with the construction of new bridges over the railroad and the Dead River and improvements to York and Willow Streets. In the Fall of 1979 the City Council requested the Governor appoint a special commission to determine the necessity of the project and a public hearing was held in May 1980. The Commission rejected the necessity for the

layout of this alternative, due to the costs, the proposed construction of a new bridge over the St. Lawrence & Atlantic railroad, great impacts to York Street neighborhood and non-support of the alignment by the community. In the mid 1980's the City Planning Board decided that any alternative would not include any additional new bridges nor at-grade crossings of the railroad. In 1993 the City Manager requested that the Planning Board revive efforts and work towards a solution to address this on-going problem. Two routes were recommended by the Planning Board and in early 1995 the City Council submitted an application to the Regional Planning Commission to place the NH Route 110 Corridor project onto the State Ten Year Transportation Plan.

The project was included in the 2001 Ten Year Plan and divided into two Phases that were determined to have independent utility. Phase 1 centered on the replacement of the railroad bridge over Green Street, which would eliminate truck detour routes through the City that avoided the under-clearance limitations of the Green Street bridge. Construction on Phase 1 was completed in 2007.

For the Phase 2 project, conceptual alternative routes were developed in 2001-2002 and then presented at several meetings in Berlin for public comment. Following the initial scoping meeting, preliminary studies were performed to identify historic and socioeconomic concerns. Four alternatives for the Phase 2 project were presented to the City by the NH Department of Transportation (NHDOT). The Planning Board spent several months reviewing and evaluating the alternatives. In 2004, after holding a public informational meeting about the project, the Planning Board amended the City's Master Plan to support Alternative 4E as the alternative with the best long-term planning benefits for the City. The City Council voted to support the selection of this alternative.

### **3.0 Existing Conditions**

Existing NH 110 is an urban minor arterial that navigates along a circuitous route through the neighborhood streets of Green Street, Second Avenue, Madigan Street, Third Avenue and Wight Street. Apart from Third Avenue, which was conceived as a "Grand Boulevard" during the development of the Berlin Heights Addition subdivision and consists of two 16-foot travel lanes with 16-foot wide shoulders, the existing pavement width of these local urban streets consist of two 12-foot travel lanes with varying shoulder widths of 6 feet on Madigan Street to shoulder widths of 2 feet to 5 feet on Second Avenue. The existing sidewalks along the project area are 5 foot wide, apart from some 6 foot wide sidewalks on Green Street located adjacent to the recently reconstructed St. Lawrence & Atlantic Railroad overpass. The horizontal and vertical geometry is substandard and is not adequate for posted 30 mph speed limits at several locations within the project limits. The maximum grade is as great as 8% on Green Street as it approaches Second Avenue. Several street intersections have poor sight distances for the posted speed limit and their approaches are skewed. Several driveways intersect along the route.

The existing (2008) annual average daily traffic (AADT) is 5,260 vehicles per day (vpd) with 11% truck traffic. The opening year (2011) AADT of 5,530 vpd is anticipated to increase

to 6,760 vpd by the design year of 2031. During the January 1994 through December 2007 period 127 crashes, with 2 fatalities, were reported to have occurred within the project area.

Truck traffic must negotiate narrow residential streets with several tight intersections and make 90 degree turns while avoiding parked cars, pedestrian and bicycle traffic and other motor vehicles. The high volume of trucks and passenger cars negotiating these narrow, circuitous streets through the neighborhood compromises community cohesion of the neighborhood, bicycle and pedestrian movements and results in considerable concerns for safety. (see Section 5.10). Noise associated with large truck traffic contributes to the continued deterioration of the quality of life through the residentially zoned portions of the project (see Section 5.5).

#### **4.0 Alternatives Evaluation**

As noted in Section 2.0 various alternatives were studied, including bypass options and several NH Route 110 on-line alternatives. Summarized below are brief descriptions and evaluations of the No-Build, the NH Route 110 reconstruction and bypass alternatives that were considered and dismissed, and alternatives that were retained for further consideration, Alternative 2, and the Selected Alternative (Alternative 4E).

##### **4.1 No Build**

The No-Build alternative would not address the concerns with NH 110 and truck traffic, as well as through passenger traffic, traversing along a circuitous route through several neighborhood streets, the safety hazards and roadway deficiencies inherent to the project area would not be addressed. The existing sub-standard geometry of the roadway along several of the neighborhood streets would not be addressed. The No-Build would not address the minimum 4-foot shoulders desired for roadway within the State's Bike Route program in several locations within the project limits. The potential for safety hazards would increase over time as the traffic volumes increase. Additionally, this alternative would not improve the existing sub-standard sight distances. Furthermore, the No-Build would not address the truck noise, and deteriorating community cohesion to the neighborhood.

##### **4.2 NH Route 110 Alternatives**

Several alternatives were evaluated that relocated NH Route 110 along different alignments in the vicinity of the existing alignment. These characteristics and impacts of these alternatives are summarized in **Exhibit 3**.

###### **4.2.1 Alternative 1**

This alternative would reconstruct and relocate the alignment of NH 110 beginning in the vicinity of the existing St. Lawrence & Atlantic Railroad bridge over Green Street and continuing northerly on Green Street to Second Avenue, Madigan Street and Third Avenue to Wight Street (**Exhibit 4**). This option would reroute NH 110 by cutting through the Sessions Street/Madigan Street block.

Alternative 1 has marginal geometrics when compared with the others. Based on input received at Public Informational meetings and further consideration of the issues involved, this proposed alternative was not supported as Alternative 2 performed similar tasks with less impacts.

#### 4.2.2 Alternative 3E

This alternative conveys NH 110 from Green Street down Second Avenue and then onto a new alignment paralleling the railroad before joining Wight St. in the vicinity of Fourth Avenue. This alternative has two variations. One variation holds to the existing edge of sidewalk on the western side of Second Avenue and widens to the east (Alternative 3E). The second variation holds to the existing edge of sidewalk on the eastern side of Second Avenue and widens to the west ( see Alternative 3W).

This alternative would reconstruct and relocate the alignment of NH 110 beginning in the vicinity of the existing St. Lawrence & Atlantic Railroad bridge over Green Street and continuing northerly on Green Street following along the east side of Second Avenue past Mannering Street and Third Avenue to intersect with Wight Street.

Based on input received at Public Informational meetings and further consideration of the issues involved, this proposed alternative was not supported as Alternative 2 performed similar tasks with less impacts. Second Avenue cannot accommodate even a narrow typical, as the buildings are so close to the road that any widening would impact them.

#### 4.2.3 Alternative 3W

This alternative would reconstruct and relocate the alignment of NH 110 beginning in the vicinity of the existing St. Lawrence & Atlantic Railroad bridge over Green Street and continuing northerly on Green Street following along the west side of Second Avenue past Mannering Street and Third Avenue to intersect with Wight Street.

Based on input received at Public Informational meetings and further consideration of the issues involved, this proposed alternative was not supported as Alternative 2 performed similar tasks with less impacts.

#### 4.2.4 Alternative 4W

This alternative would reconstruct and relocate the alignment of NH 110 beginning at the existing St. Lawrence & Atlantic Railroad bridge over Green Street and continuing northerly on Green Street to First Avenue, with the widening occurring along the west side of First Avenue, through the existing dead end, forming a new T-intersection with Hillside Avenue (**Exhibit 5**). The alignment would then continue parallel to the rail corridor to join with Wight Street in the vicinity of the existing Third Avenue.

Based on input received at Public Informational meetings and further consideration of the issues involved, this proposed alternative was not supported as the alignment of Alternative 4E, the Selected Alternative, by being placed closer to the railroad corridor performs similar tasks with less impacts to the neighborhood.

### **4.3 Bypass Alignments**

#### 4.3.1 Area Wide Bypass Alternatives

Alignments, which completely bypass this section of NH 110 are beyond the scope of the project. Although construction of these bypass alternatives would avoid all impacts to the Berlin Heights Addition Historic District they would require extensive acquisition of new right-of-way. The topography, which would be encountered with any full bypass alignment, would raise serious engineering and construction concerns. These alignments would also have greater impacts to undeveloped properties, streams, wetlands and substantially increase costs. Additionally, existing topographic and land use features to the northeast, such as Mt. Jasper, the Dead River, the Dead River Pond, the railroad corridor, as well as the system of residential streets are substantial constraints to connecting NH 110 to NH 16 further to the north. Topographic features created by Mt. Forist and Jericho Mountain severely limit constructability of any bypass alignments to the west.

#### 4.3.2 Area Specific Bypass Alternatives

Alignments, which shift this segment of NH Route 110 to the east to connect to Willow Street and York Street, would require new bridges to cross the Dead River and the railroad corridor. Impacts to the Berlin High School and athletic fields, and to developed neighborhoods located on the east side of the Dead River would occur. Engineering and construction concerns with the topography that would also be encountered, as well as the additional residential displacements and impacts to the existing layout of residential streets, are substantial constraints to connecting NH 110 to NH 16.

Alignments, which shift this segment of highway to the west would still impact the Berlin Heights Addition District. Engineering and construction concerns with the topography would also be encountered as well as areas which may have potential archeological sensitivity. Depending on the distance from the existing alignment, a new alignment alternative has the potential for additional residential displacements.

Both the east or west shift scenarios of NH 110 would require the acquisition of additional new right-of-way, would incur substantial increases in costs and is beyond the scope of the project, which is basically the reconstruction of an existing roadway.

For these reasons, bypass alignments are not considered feasible or prudent.

## 4.4 Alternatives Retained for Further Consideration

### 4.4.1 Alternative 2

This alternative would reconstruct and relocate the alignment of NH 110 beginning at the existing St. Lawrence & Atlantic Railroad bridge over Green Street and continuing northerly on Green Street to Second Avenue, Madigan Street, Mannering Street and Third Avenue to Wight Street (**Exhibit 6**). This option would reroute NH 110 by cutting through the Sessions Street/Madigan Street block and the Madigan Street/Mannering Street block.

This alternative would retain truck traffic through the center of the neighborhood. Based on input received at Public Informational meetings and further consideration of the issues involved, this proposed alternative was not supported as the Proposed Alternative 4E was determined to have less long-term impacts to the neighborhood and community. This alternative severely impacts the existing grid pattern at the center of the neighborhood by going through two city blocks and realigning three intersections.

Due to the relatively large right-of-way (ROW) impacts associated with Alternative 4E (the Selected Alternative) compared to this Alternative, a more detailed evaluation was progressed through the Preliminary Design which assesses its impacts relative to the Selected Alternative. For specific resources these impact evaluations are discussed and contrasted with the Selected Alternative below in Section 5.0 - Evaluation of Environmental Effects.

### 4.4.2 Selected Alternative - Alternative 4E

The Selected Alternative (Alternative 4E) involves the reconstruction and relocation of approximately 0.6 miles of NH 110, with a portion on new alignment, that would create a more direct route for the roadway between Green Street and Wight Street, and would remove through traffic from the largely residential neighborhood (**Exhibit 7**). The new alignment of NH 110 would begin on Green Street in the vicinity of the existing St. Lawrence & Atlantic Railroad overpass and extend northerly approximately 3,600 feet, initially following First Avenue, with widening occurring to the east side. The alignment would continue through the existing First Avenue dead-end forming a new T-intersection with Hillside Avenue, then proceeding northerly adjacent to the St. Lawrence & Atlantic Railroad rail corridor, and rejoining with the existing NH 110 alignment on Wight Street in the vicinity of its intersection with Fourth Avenue.

Reconstruction of Wight Street would extend  $\pm 1,500$  feet on existing alignment from Fourth Avenue, matching in with an existing improved section of NH 110. Additionally, the changes in the NH 110 alignment would entail the reconfiguration of the intersection of Green Street with First Avenue, eliminate the Second Avenue connection with Hillside Avenue thereby ending Second Avenue at its intersection with Mannering Street, and reconfigure Third Avenue to form a T-intersection with the relocated section of NH 110 just south of the NH 110 alignment rejoining with the existing Wight Street alignment. Hinchey Street would remain a dead-end and would not connect with the relocated NH 110.

Minor approach work would also be necessary at the intersections of NH 110 with: Gilbert Street, the remaining westerly portion of Green Street; Roderick Street; Hillside Avenue; Third Avenue; Fourth Avenue; Fifth Avenue; Boulay Street; Sixth Avenue; and Duguay Street. Sidewalks would be constructed along both sides of NH 110 along the new alignment from Green Street to Fourth Avenue. North of Fourth Avenue, the existing sidewalks along both sides of Wight Street would be reconstructed. This alternative also maintains the existing grid pattern of the center of the neighborhood by relocating the alignment along the railroad tracks.

The following typical roadway configurations are proposed and will provide a 30 mph design speed (**Exhibit 7**). From the beginning of the project limits, the St. Lawrence & Atlantic Railroad overpass over Green Street, to ±200 feet north of the proposed Third Avenue intersection with Wight Street, the roadway will consist of two 12-foot wide travel lanes, each with 4-foot shoulders, 6-foot grass panels and 8-foot sidewalks. Continuing north along Wight Street to the end of the project limits, the roadway will match in with the existing alignment and will consist of two 12-foot travel lanes, each with 4-foot shoulders and 6-foot sidewalks. From Green Street to Third Avenue, NH 110 will be established with a right-of-way width of 66 feet. Along Wight Street the ROW width will be 46 feet.

None of the intersections warrant signalization. Stop sign control would be provided for all the side streets intersecting NH 110. The remnants of First Avenue north of Green Street will be discontinued, however driveway access will be provided to all properties along the corridor that remain viable lots. The reconstruction of the intersections with Wight Street would provide adequate sight distances for the proposed 30 mph design speed of NH 110. The intersection of Roderick Street with First Avenue will be provided with a 25 mph sight distance.

## **5.0 Evaluation of Environmental Effects**

The effects of the project relative to the following social, economic, natural and cultural resources/issues, if applicable, have been reviewed for Alternative 4E (the Selected Alternative) and Alternative 2. Resources/issues, which are not discussed in the body of the report, were investigated, however, no impacts were evident and as such these resources/issues are omitted from the environmental documentation. The resources and issues deemed applicable for this project are indicated in **Bold** type.

### **5.1 Resources/Issues**

| <u>Social/Economic</u>      |                           | <u>Natural</u>             | <u>Cultural</u>       |
|-----------------------------|---------------------------|----------------------------|-----------------------|
| <b>Safety</b>               | <b>Land Acquisition</b>   | <b>Water Quality</b>       | <b>Historical</b>     |
| <b>Displacements</b>        | <b>Business Impacts</b>   | <b>Surface Water</b>       | <b>Archaeological</b> |
| <b>Neighborhoods</b>        | Farmlands                 | Ground Water               | Stonewalls            |
| <b>Recreation</b>           | <b>Community Services</b> | <b>Floodplains</b>         | <b>Aesthetics</b>     |
| Public Lands                | Energy Needs              | Wildlife or Fisheries      |                       |
| <b>Construction Impacts</b> | <b>Utilities</b>          | <b>Endangered Species/</b> |                       |
| <b>Air Quality</b>          | <b>Land Use</b>           | <b>Natural Communities</b> |                       |

**Social/Economic**

Noise  
Environmental Justice  
Oil/Petroleum and  
Hazardous Materials  
Transportation Patterns  
LCIP Properties

**Natural**

NH Designated Rivers  
Wild & Scenic Rivers  
Rechannelization  
Wetlands  
Forest Lands  
Coastal Zone

Discussion of the effects on the resources/issues follows:

**5.2 Safety**

- **Pedestrian patterns and concerns:**

A major concern in the NH Route 110 corridor area is pedestrian safety. The corridor area is home to the City's recreation department and adjacent recreation field. The Notre Dame Skating arena is also adjacent to the neighborhood. This part of the corridor is just outside of the downtown and there is a considerable amount of pedestrian traffic to all of the above-mentioned places. The alternative must address these concerns in a safe and straightforward manner that provides for the optimum in sight distance and intersection recognition to accommodate the school crossing zones. NH 110 will be relocated outside the neighborhood and allow unimpeded through movement from Green Street to Wight Street. As there will no longer be any sharp 90 degree turns along narrow neighborhood streets to negotiate, large trucks will remain within their respective travel lanes. Alternative 4E best addresses these concerns.

- **Bicycle routes and concerns:**

The NH 110 corridor is identified in State Bicycle maps as a recommended bicycle route through the City. The existing corridor poses safety concerns associated with bicycles due to the high volume of trucks and passenger cars negotiating these narrow, circuitous streets through the neighborhood, with several areas with narrow shoulders and conflicts with driveways. Bicycle use would be improved with the provision of paved 4-foot shoulders on either side of NH 110 along the new alignment and the improvement of sight distance with intersecting roadways. With the proposed reduction of driveways and intersections (see **Table 5.1**) Alternative 4E best addresses these concerns as compared with Alternative 2.

Additionally, the safety of local bicycle use by children and others within the neighborhood would be enhanced with the removal of truck and through traffic presently bisecting the neighborhood. One fatality has been reported to occur with a bicyclist.

- **School Districts:**

A school bus garage is located on the west side of Third Avenue at Hinchey Street. This is in the vicinity of where the narrower Wight Street connects with Third Avenue. This area is

on a curve and there are sight distance concerns with potential conflicts with school buses maneuvering into the garage and the through traffic, which includes large percentage of trucks, using NH 110. The Selected Alternative would eliminate the through and truck traffic from Third Avenue, increasing the safety of the school bus operations.

- **Crash Data:**

The current crash data available reported 127 crashes within the project area from 1994 to 2007. Two fatalities were also reported to occur within the area. One fatal crash occurred with a bicyclist, and 27 other crashes resulted in personal injuries. The intersection of Second Avenue and Madigan Street had 10 crashes attributed to it, which was more than any other intersection. Three of these crashes were attributed to “unsafe backing.” The intersection of Second and Third Avenues with Mannering and Madigan Streets had 5 and 6 crashes each. Crash data from the Berlin Police Department from January 1, 2002 until May 9, 2007 shows three crashes at the Green Street and Second Avenue intersection. There were five crashes each at the following intersections: Second Avenue and Madigan, Second Avenue and Mannering, There were also five crashes each at the following intersections; Third Avenue and Madigan Street, Third Avenue and Mannering Street.

The number of driveways and intersections along the respective alignments for each alternative from the Green Street railroad overpass to the intersection of Fourth Avenue show that Alternative 4E has the least points of potential conflict between vehicles.

**Table 5.1 - Traffic Conflict Points**

| <b>NH 110</b>       | <b>Driveways</b> | <b>Intersections</b> |
|---------------------|------------------|----------------------|
| Alternative 2       | 30               | 7                    |
| Alternative 4E      | 10               | 6                    |
| <b>Side Streets</b> | <b>Driveways</b> | <b>Intersections</b> |
| Alternative 2       | 8                | 1                    |
| Alternative 4E      | 10               | 2                    |

Safety concerns associated with bicycle use would be improved with the provision of paved 4-foot shoulders on either side of NH 110. Reduction of existing conflicts with driveways and sharp turns that would occur with the Selected Alternative would enhance the traffic flow through the City.

### **5.3 Transportation Patterns**

The annual average daily traffic (AADT) in 2008 along NH 110 was 5,260 vehicles per day, with 11% of the traffic consisting of heavy trucks. The traffic volume is estimated to increase to 6,760 AADT with 12% trucks by the 2031 design year. The proposed project would enhance transportation through the City of Berlin as well as the regional traffic pattern. The existing circuitous route through the center of an established neighborhood would be replaced with a straighter alignment that skirts the edge of the neighborhood. The proposed alignment

would provide a well-defined route through the City that would enhance the regional transportation connectivity of traffic from NH 16 to points west of the City. The relocation of the NH 110 alignment alongside the existing St. Lawrence & Atlantic Railroad ROW would consolidate a transportation corridor through the City.

The alignment of the Selected Alternative would no longer provide a direct connection of Second Avenue with Hillside Avenue, requiring a minor detour along Third Avenue and the new NH 110 alignment for Second Avenue residents wishing to access Hillside Avenue. Through traffic, which presently use Second Avenue would be along the new alignment or along Third Avenue and would not be affected by this dead-ending of Second Avenue.

Green Street, Second Avenue, Madigan and Mannering Streets, and Third Avenue would no longer be on the NH 110 corridor reducing the amount and type of traffic that would be accessing these routes. Traffic would change from its existing function as a State highway with concurrent heavy truck traffic to primarily providing for neighborhood functions, and local access to and from other city neighborhoods. The intersection of Green Street and the proposed NH 110 alignment, as well as the intersection of Third Avenue with NH 110, would be reconfigured and would reflect the conversion of these existing through routes into their function for local uses.

#### **5.4 Air Quality**

The proposed project is located within an area of the State that is in attainment with respect to the National Ambient Air Quality Standards (NAAQS) for ozone and all other criteria pollutants (CO, NO<sub>x</sub>, VOCs, PM<sub>10</sub> and PM<sub>2.5</sub>). The proposed work is not considered a "Regionally Significant Project" as defined in the final Transportation Conformity rules (40 CFR 93.101) or in those rules adopted by the New Hampshire Department of Environmental Services in accordance with the interagency consultation provisions required by 40 CFR 93.105. When completed, the project is not expected to result in significant air quality impacts or contribute to violations of the NAAQS. Consequently, this project is exempt from the conformity requirements of the Clean Air Act Amendments of 1990. The project has been included in the *Statewide Transportation Improvement Program (STIP) 2009-2012*, dated January 23, 2009.

This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the No-Build alternative. As such, the Federal Highway Administration (FHWA) has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxics (MSAT) concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in Vehicle Miles Traveled (VMT), FHWA predicts MSATs will decline in the range of 57 percent to 87 percent, from 2000 to 2020, based on regulations now in effect. This will both reduce the

background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

Though exempt from the requirements of the Clean Air Act, the National Environmental Policy Act also requires consideration of the project's impact on air quality. The proposed improvements include the elimination of several main-line stop signs allowing traffic on NH Route 110 to flow more freely. When completed, it is expected that congestion will be reduced and the overall efficiency throughout the corridor will be improved. Computer analyses of other projects (such as Manchester, 10622A and Londonderry, 12704) with substantially higher traffic volumes, flowing under more restrictive conditions, have consistently yielded maximum CO concentrations well below the one-hour NAAQS of 35 ppm and the eight-hour criteria of 9 ppm. As these projects were found not to have a detrimental impact on air quality, and for the reasons stated above, it can be concluded that this project will also not have an adverse impact on air quality.

## 5.5 Noise

The NH Department of Transportation's *Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects* (Noise Policy) provides guidelines for assessing noise impacts and determining the need, feasibility, and reasonableness of noise abatement measures for proposed Type I highway construction and improvement projects. Noise impacts associated with the proposed project were examined in accordance with the guidelines set forth in the Department's Noise Policy. The existing and predicted noise levels were calculated using FHWA's Traffic Noise Model (TNM) Lookup Tables.

The project area consists of primarily residential properties. The existing peak hour traffic noise levels for those properties directly adjacent to the existing roadway (first-row receptors) are between 62 and 64 decibels. The existing peak hour traffic noise levels for those properties farther away from the existing roadway are between 56 and 59 decibels.

Alternative 2 involves straightening out the existing alignment of NH Route 110 in order to eliminate several sharp corners and stop conditions (**Exhibit 6**). Existing peak hour traffic noise levels for the first-row receptors along NH Route 110 are between 62 and 64 decibels and are expected to be between 57 and 64 decibels upon completion of the project. As the roadway will be shifted away from some properties located along the existing alignment of NH Route 110, this alternative is expected to result in a 3 to 8 decibel decrease in noise levels for approximately 22 receptors located along the existing alignment of NH Route 110 (**Exhibit 8**). Of the receptors that will remain upon the completion of this alternative, none will be any closer to NH Route 110 than the existing alignment. As a result, this alternative is not expected to result in any noticeable increases in noise levels to any adjacent receptors.

The Selected Alternative (Alternative 4E) involves relocating NH Route 110 between 275 feet and 600 feet east of its existing alignment (**Exhibit 7**). This shift would result in peak hour design year (2031) noise levels between 62 and 65 decibels for approximately 10 receptors

in the area of First Avenue and Roderick St. These noise levels represent a 4 to 7 decibel increase over existing noise levels which are between 56 decibels and 59 decibels. Conversely, this alternative would shift the NH Route 110 corridor away from many properties along Second Avenue, Third Avenue, Sessions St. and Madigan St., resulting in a 3 to 9 decibel decrease in noise levels for approximately 56 receptors (**Exhibit 9**). Existing noise levels for these properties are between 62 and 64 decibels and are expected to drop to levels between 54 and 60 decibels under the peak hour design year conditions.

Construction of either Alternative 4E or 2 will not result in noise levels that approach (within 1 decibel) or exceed the FHWA residential Noise Abatement Criteria of 67 decibels. Construction of this project is also not expected to raise noise levels by more than 7 decibels and in some cases will reduce noise up to 9 decibels for some properties. As such, no noise abatement is proposed for this project.

Construction activities will temporarily increase noise due to the use of heavy equipment, however these noise levels will return to normal after the project has been completed.

## **5.6 Oil/Petroleum and Hazardous Materials**

An initial review of the NH Department of Environmental Services' (NHDES) files posted on their OneStop web site and a field evaluation was conducted to identify the potential for oil/petroleum contamination and hazardous materials (OHM) concerns within the project area. Several underground storage tanks located within the project area were identified in the NHDES files as closed. Due to historic and existing uses of properties, potential concerns with OHM were identified that may be of concern for both Alternative 2 and the Selected Alternative on Parcels 107 and 127 (see **Exhibit 6** and **Exhibit 7**). Three additional properties of potential concern Parcels 80, 81, and 97, were also identified along Alternative 2.

Anticipated construction of drainage pipes to convey stormwater to their proposed discharge points (see Section 5.13) through Parcels 171, 174, 175, 176 and 179 may pose additional concern. In particular, Parcels 174 and 175 have been identified by NHDES as containing polynuclear aromatic hydrocarbons (PAH's). As such, Activity and Use Restrictions have been placed on the properties and recorded in the deed. These restrictions may be amended upon application and approval of NHDES, who would determine whether any proposed changes would present an unacceptable level of risk to human health and environment. If it is determined that a portion of these properties would be necessary for the construction of stormwater treatment measures, coordination will occur with NHDES on their design, and the remediation that may be necessary to address the PAH contamination.

Initial site assessments (ISA's) will be conducted on the identified parcels to determine the actual risks associated with the purchase of these properties and/or construction of the project. It is anticipated that any contamination identified will be minor in nature and within standard treatment measures and protocols. Results of these investigations will be provided to the NHDES for their review and comments. Coordination will be on-going with NHDES on any

identified OHM sites identified along the Selected Alternative. If necessary, tank closure assessments, will be performed following the removal of any underground storage tanks.

Due to health and safety concerns with the demolition of older buildings, the Department will conduct a comprehensive building audit to identify and quantify all regulated building materials and special wastes. Materials and wastes that may be inventoried include the presence of asbestos, mercury, refrigerants and lead paints that may be present within any buildings prior to their demolition. Audits for residential buildings will likely be limited to asbestos and lead paints, while those for commercial buildings will include a more comprehensive audit for other regulated materials. Appropriate measures and procedures will be undertaken to assure that these materials are properly handled and disposed of in accordance with State and Federal rules and regulations.

### **5.7 Zoning**

According to the Zoning Ordinances of the City of Berlin, the project area is divided into four primary zoning districts (**Exhibit 10**): Residential Two-family, Residential General, Residential Single Family, and Business General. The Residential Two-family district provides for medium density residential development and associated uses that provided for amenities, such as home-based child care, public recreational facilities, schools and religious institutions. The Residential General, district accommodates high-density residential development, allowing two-family structures as well as multifamily. In addition to the amenities provided in the Residential Two-family district, this district also permits services to residences such as office space, restaurants and neighborhood grocery stores. The Residential Single Family district consists of low to medium density residential lots for single family homes. The Business General district allows intense commercial development and light industrial facilities with a commercial service area. This business district is designed to accommodate pedestrian and vehicular traffic.

### **5.8 Land Acquisition / Land Use / Tax Base**

#### 5.8.1 Alternative 2

Alternative 2 would affect approximately 50 properties with impacts to the properties ranging from minor strip takes and temporary construction easement to acquisition of the entire property. These impacts include:

- Considerable loss of the grid layout of the roadways within the neighborhood.
- Dead-ending Session Street at Second Avenue.
- Thirteen primary buildings to be demolished (five secondary).
- Loss of building density and pattern within the neighborhood.
- Loss of Madigan Street between Second Avenue and Third Avenue.
- Loss of three blocks of Third Avenue.
- Introduction of two new intersections.
- Introduction of a new type of roadway with curvilinear design within the established neighborhood.

- Three sizeable intersection changes (Madigan Street at Second Avenue, Madigan Street at Third Avenue, and Green Street at Second Avenue).

The total acquisitions would consist of 10 residential buildings with 19 housing units, and two businesses. Of the 19 housing units that would be acquired through Alternative 2, four are single family and the remaining ones are in multi-family structures. These housing units account for almost one third of the existing housing units to be acquired. Most of the relocation efforts would have to focus on locating rental properties. The City of Berlin has 216 units available Citywide for rent and 87 are available for sale.

#### 5.8.1.1 Property Values

Twelve properties, containing 19 housing units, would be acquired through Alternative 2, which would include four single family homes, four two-family dwellings, one three-family dwelling, one four-family dwelling and two commercial properties. Based on the 2003 assessment, summarized in Table 5.2, the total assessed value of these 12 properties was \$465,500 or 0.17% of the City's total assessed property values. This alternative would have a minor impact on the property values of the City.

**Table 5.2 - 2003 Assessment Values and Tax Revenue for Alternative 2 Properties.**

| Parcel No.                    | Map-Lot  | Dwelling Type                                | 2003 Assessment Value                   | 2003 Property Taxes |
|-------------------------------|----------|--|---|---------------------|
| 59                            | 119-0405 | 3-family                                     | \$22,600                                | \$1,004             |
| 57                            | 119-0406 | single family                                | 43,800                                  | 1,946               |
| 55                            | 119-0407 | 2-family                                     | 47,000                                  | 2,088               |
| 53                            | 119-0408 | single family                                | 37,300                                  | 1,657               |
| 52                            | 119-0409 | 2-family                                     | 37,400                                  | 1,661               |
| 51                            | 119-0410 | 2-family                                     | 34,300                                  | 1,524               |
| 50                            | 119-0413 | single family                                | 47,700                                  | 2,119               |
| 66*                           | 119-0444 | single family*<br>(open lot)                 | 12,100                                  | 537                 |
| 68                            | 119-0445 | commercial                                   | 32,500                                  | 1,444               |
| 86                            | 119-0503 | 4-family                                     | 48,800                                  | 2,168               |
| 84                            | 119-0504 | 2-family                                     | 45,900                                  | 2,039               |
| 80                            | 119-0505 | commercial                                   | 56,100                                  | 2,492               |
| <b>Total</b>                  |          | <b>19 housing units<br/>2 business units</b> | <b>\$465,500</b>                        | <b>\$20,679</b>     |
| <b>City of Berlin</b>         |          |  | <b>\$265,849,142<br/>with utilities</b> | <b>\$6,028,045</b>  |
| <b>Percentage<br/>of City</b> |          |  | <b>0.17%</b>                            | <b>0.34%</b>        |

Source: *NH Route 110 Relocation -Socioeconomic Impact Analysis*, Maguire Group, Inc., November 19, 2004

\*Note - house burned and demolished – 2008

### 5.8.2 Alternative 4E

The proposed action would affect approximately 65 properties with impacts to the properties ranging from minor strip takes and temporary construction easement to acquisition of the entire property. These impacts include:

- Thirty primary buildings to be demolished (17 secondary).
- Loss of grid (2 blocks).
- First Avenue no longer dead ends at the railroad.
- New through traffic along the edge of the District.
- Loss of direct connection of Second Avenue to Hillside Avenue.
- New connection of Third Avenue with Wight St.; slight grid pattern change.
- Introduction of a new roadway along the St. Lawrence & Atlantic railroad corridor.
- Loss of building density and pattern along the border of the neighborhood.
- Loss of setting for properties, including those houses adjacent to the railroad corridor.
- One sizeable intersection change (Green Street at First Avenue).

The total acquisitions would consist of 30 residential buildings with 57 housing units and two businesses. Of the 57 housing units to be acquired, twelve are single family homes and the remaining are in multifamily structures. The City of Berlin has 216 units available citywide for rent and 87 are available for sale.

#### 5.8.2.1 Property Values

There would be 33 properties, containing 57 housing units and two businesses, acquired for Alternative 4E. They consist of 12 single family homes, 11 two-family buildings, six three-family buildings, one five-family, one commercial and an open lot. Table 5.3 summarizes the properties that would be acquired, having a total assessed value of \$1,108,900, 0.42% of the City's total assessed properties.

**Table 5.3 - 2003 Assessment Values and Tax Revenue for Alternative 4E Properties**

| Parcel No. | Map-Lot  | Dwelling Type | 2003 Assessment Value | 2003 Property Taxes |
|------------|----------|---------------|-----------------------|---------------------|
| 32         | 119-0343 | 2-family      | \$39,200              | \$1,741             |
| 34         | 119-0344 | 2-family      | 42,900                | 1,906               |
| 35         | 119-0345 | single family | 44,700                | 1,986               |
| 36         | 119-0346 | single family | 29,900                | 1,328               |
| 37         | 119-0347 | single family | 38,000                | 1,688               |
| 33         | 119-0348 | 2-family      | 39,400                | 1,750               |
| 31         | 119-0349 | open lot      | 2,300                 | 102                 |
| 29         | 119-0350 | 2-family      | 45,300                | 2,012               |
| 27         | 119-0351 | single family | 46,100                | 2,048               |
| 24         | 119-0352 | 3-family      | 36,100                | 1,604               |

| Parcel No.                | Map-Lot  | Dwelling Type                                | 2003 Assessment Value                   | 2003 Property Taxes |
|---------------------------|----------|--|---|---------------------|
| 20                        | 119-0353 | single family                                | 32,300                                  | 1,435               |
| 16                        | 119-0360 | 2-family                                     | 33,400                                  | 1,484               |
| 14                        | 119-0361 | 5-family                                     | 29,500                                  | 1,310               |
| 8                         | 119-0362 | 3-family                                     | 43,400                                  | 1,928               |
| 7                         | 119-0363 | single family                                | 61,400                                  | 2,727               |
| 3                         | 119-0364 | 2-family                                     | 34,500                                  | 1,532               |
| 2                         | 119-0366 | 3-family                                     | 21,100                                  | 928                 |
| 104                       | 119-0426 | single family                                | 52,400                                  | 2,306               |
| 105                       | 119-0427 | single family                                | 20,600                                  | 915                 |
| 106                       | 119-0428 | single family                                | 29,600                                  | 1,315               |
| 38                        | 119-0429 | 2-family                                     | 31,700                                  | 1,408               |
| 40                        | 119-0430 | single family                                | 22,000                                  | 977                 |
| 39                        | 119-0431 | 2-family                                     | 4,400                                   | 195                 |
| 41                        | 119-0432 | 2-family                                     | 31,600                                  | 1,404               |
| 42                        | 119-0433 | single family                                | 31,900                                  | 1,404               |
| 117                       | 119-0487 | single family                                | 34,500                                  | 1,532               |
| 116                       | 119-0488 | 2-family                                     | 33,900                                  | 1,506               |
| 115                       | 119-0489 | 2-family                                     | 31,800                                  | 1,413               |
| 113                       | 119-0490 | garage                                       | 5,100                                   | 224                 |
| 111                       | 119-0491 | 3-family                                     | 46,800                                  | 2,079               |
| 109*                      | 119-0492 | 3-family                                     | 37,300                                  | 1,657               |
| 107                       | 119-0493 | commercial                                   | 44,500                                  | 1,977               |
| 121                       | 120-0012 | 2-family                                     | 31,300                                  | 1,378               |
| <b>Total</b>              |          | <b>48 housing units<br/>2 business units</b> | <b>\$1,108,900</b>                      | <b>\$49,199</b>     |
| <b>City of Berlin</b>     |          |  | <b>\$265,849,142<br/>with utilities</b> | <b>\$6,028,045</b>  |
| <b>Percentage of City</b> |          |  | <b>0.42 %</b>                           | <b>0.82%</b>        |

Source: *NH Route 110 Relocation - Socioeconomic Impact Analysis*, Maguire Group, Inc., November 19, 2004

\*Note – vacant, burned July 2008, demolished 2009

Residents would be relocated and provided with safe and reasonable living accommodations in compliance with the Federal Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended.

## 5.9 Business Impacts

Alternative 2 would impact a vacant commercial property located on Green Street (Parcel 68) and the Mr. Auto service garage located on Third Avenue (Parcel 80). The general effect of the business relocation on the local economy is expected to be minimal as the business would likely relocate and become reestablished in the community. The business would be afforded all

the relocation benefits available to them according to the Federal Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Alternative 4E would impact the Guay, Bros. service garage located on Third Avenue (Parcel 107). The general effect of the business relocation on the local economy is expected to be minimal as the business would likely relocate and become reestablished in the community. The business would be afforded all the relocation benefits available to them according to the Federal Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended.

The Building Blocks Day Care facility located on First Avenue (Parcel 16) is presently damaged by fire and is no longer occupied, if the day care does become re-established prior to the commencement of the project, the business would also be afforded all the relocation benefits.

## **5.10 Neighborhoods / Displacements**

This neighborhood continues to deteriorate due in part to NH 110 and the heavy truck and car traffic going through the neighborhood. This neighborhood has low home values, brings a small amount of tax revenue to the City, and requires many services due to the condition of some of these buildings. The relocation of NH 110 would contribute to the revitalization of the neighborhood by moving the heavy truck traffic from the largely residential neighborhood.

The City has implemented a strong housing program with the intent of revitalizing the community's housing stock. The target is primarily multi-family homes that have code and structural deficiencies. There are a few vacant properties in the neighborhood and many properties have been sold and resold over the past several years. This neighborhood is in neglect and would benefit from the removal of the truck traffic from the interior of the neighborhood.

### 5.10.1 Alternative 2

Alternative 2, would require the acquisition of 10 residential properties and two commercial properties. There are approximately 15 tenant-occupied and four owner-occupied units that would be affected by this alternative. A Conceptual Relocation Study would be performed by the Department to assure that there is an adequate number of functionally similar, decent, safe and sanitary residential replacement housing to accommodate displaced residents and sufficient replacement sites to accommodate the business relocation in the city of Berlin. The acquisition and relocation program would be conducted and provided in accordance with the Federal Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended.

#### 5.10.1.1 Community Cohesion - Alternative 2

Currently, NH 110 travels along Third Avenue and divides the neighborhood. Third Avenue is wider than the other adjacent streets with little buffering between the sidewalk and the roadway. Physically, Alternative 2 would also maintain and worsens the division that Third

Avenue creates between residences south of Sessions Street and north of Madigan Street, Second Avenue, and Green Street. The alignment would interrupt the established grid pattern of the street layout that is throughout the project area and the Berlin Heights Addition neighborhood. The proposed alignment retains this neighborhood division and in retaining its curved nature enhances the division.

Alternative 2 would continue to move existing heavy truck and passenger car through traffic through the same area of the neighborhood. Businesses would continue to get exposure from through traffic and residences would still be impacted by the truck traffic. Noise impacts due to heavy truck traffic also affects the cohesion of the neighborhood.

Routing NH 110 through the Madigan Street block would eliminate the maneuvering of trucks through the narrow streets of the area and provide a more navigable route and safer roadway conditions for both drivers and pedestrians. The layout would have reduced the width of Third Avenue by providing a grass panel between the sidewalk and road.

#### 5.10.2 Alternative 4E

The Selected Alternative would require the acquisition of 30 residential properties, one business and one parcel with storage units. There are approximately 45 tenant-occupied and 12 owner-occupied units that would be affected by the Selected Alternative. A Conceptual Relocation Study would be performed by the Department to assure that there is an adequate number of functionally similar, decent, safe and sanitary residential replacement housing to accommodate the displaced residents and sufficient replacement sites to accommodate the business relocation in the city of Berlin. The acquisition and relocation program will be conducted in accordance with the Federal Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended. The Department will assign Relocation Advisors to manage these relocations.

There would be impacts to the neighborhood of about 4.9 acres. The impacts to the neighborhood, apart from the total acquisitions would consist of slope impacts and driveway matches. The proposed roadway would be widened slightly, provided with paved shoulders and curbing.

The Selected Alternative gives the area the best chance to be a residential neighborhood that was envisioned and that it used to be one hundred years ago. This neighborhood was laid out in the early 1900's and seemed to rely on Third Avenue as its center with the Catholic Church and Catholic School located along the roadway. The current route configuration has truck and car traffic maneuvering through the neighborhood. With this comes noise, speeding traffic - trucks and cars, and difficult turns due to the narrow streets, steep grades, and tight intersection. The area is not the quiet residential neighborhood that one can find just a block or two to the west.

### 5.10.2.1 Community Cohesion - Alternative 4E

Alternative 4E moves NH 110 from its existing route along Third Avenue and realigns it along First Avenue, running parallel with the railroad tracks back to Wight Street. This would shift the heavy truck traffic from an area where heavy truck traffic is an existing condition to an area of the neighborhood where it does not currently exist. First Avenue is a dead end street with traffic only from those that live on it. The truck route would be removed from the center of the neighborhood and though the two businesses on Third Avenue would lose exposure from this through traffic, this would result in a minimal impact since these types of businesses typically do not necessarily rely on passing traffic as an integral part of their business.

Overall, this alignment maintains the existing grid pattern of the neighborhood apart from the reconfiguration of the First Avenue intersection with Green Street. The width of Third Avenue would remain and could continue to act as a division. However, Alternative 4E would produce a barrier between eastern portions of the neighborhood and remnant properties located on Roderick Street.

## **5.11 Environmental Justice**

Executive Order 12898, enacted in 1994, requires an Environmental Justice evaluation be conducted for all transportation projects that are undertaken, funded, or approved by the Federal Highway Administration (FHWA) to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, and social and economic effects, on minority populations and low-income populations. There are no environmental justice properties located within the project limits. The US Housing and Urban Development (HUD) property, overseen by the Berlin Housing Authority, is located on Green Street south of the project limits. None of the alternatives would interfere with the low-income housing uses of this property.

A socioeconomic impact study was conducted to provide an analysis of the demographics of the project area and determine if the proposed alternatives disproportionately impact individuals based on their socioeconomic background such as race, ethnicity, age or household income. The results of the study were reported in the November 19, 2004 NH Route 110 Relocation - Socioeconomic Impacts Analysis prepared by Maguire Group, Inc. This report presents a snapshot of the project area and the City of Berlin as the data relate to the proposed alignments. The data presented in the report was used to evaluate potential adverse or beneficial impacts of the realignment and reconstruction of NH 110. Following is a summary of the results of this analysis.

### 5.11.1 Alternative 2

Alternative 2 does not disproportionately impact individuals based on socioeconomic characteristics. The acquisitions associated with this alternative are concentrated in three US Census Blocks, which shared the same proportions of low-income, minority and other special populations as the study area and the City of Berlin as a whole - 2% of the population was non-

white; individuals 65 years old and older comprised 18% impacted population; and nearly one quarter (22%) was under the age of 18.

Alternative 2 would further worsen the division created by the existing truck route between those residences south of Sessions Street and north of Madigan Street, Second Avenue, and Green Street. This area between the alternative and the railroad tracks is divided between Census Block 1 and 3 and to gain a perspective on the economic standing of this population is difficult due to limited income data available at a small geographic scale. The 1999 median household income for Block Group 3 was reported to be \$35,859, higher than the median income of the City, \$29,647. For Block Group 1, it was reported to be \$17,765, much lower than the City. Although the area contains a lower-income population, they do not appear to be singled out or targeted by the impacts of the alternative.

#### 5.11.2 Alternative 4E

Alternative 4E would not disproportionately impact minority and elderly populations. In the blocks where properties would be acquired, only 2.2% of the population was non-white and nearly one quarter (21.9%) of the blocks' population was 65 and older. However, one third (34.2%) of the impacted census blocks' population was under the age of 18 years, a slightly higher percentage than the City as a whole (21.3%).

Alternative 4E would acquire homes located in both Census Block 1 and 3 and, as with the Alternative 2; it is difficult to gain a perspective on the economic standing of this population due to limited income data available at a small geographic scale. The 1999 median household income for Block Group 3 was reported to be \$35,859, higher than the median income of the City, \$29,647. For Block Group 1, it was reported to be \$17,765, much lower than the City. Nineteen of the 28 properties (68.9%) to be acquired through the alternative are located in Block Group 1; therefore, the alignment would appear to have a greater impact on the lower income population of the neighborhood. However, this is largely due to the Berlin Housing Authority's main property being within Block Group 1. All the residents of these onsite units are either elderly or disabled and have incomes that range from extremely low to low. The Berlin Housing Authority units are located east of the railroad tracks, are outside the project limits and not impacted by the project. Additionally, Alternative 4E would isolate a small grouping of four homes between the proposed alignment and the railroad tracks. These homes are also located in Block Group 1.

### **5.12 Community Services / Recreation**

Community services include local resources such as Police and Fire Departments, schools, libraries, or public health facilities. The Police Station is located within the project area on Green Street west of the existing St. Lawrence & Atlantic Railroad bridge. Green Street would remain open to traffic during construction and access to the Police Station would remain. Construction of the project is not anticipated to cause any undo delays in responses to and from the police station.

The Hillside Elementary School, located on Hillside Avenue, and the Berlin Junior High School, located on State Street off Hillside Avenue, are north and east of the project area across from the railroad corridor and the Dead River. The Berlin Senior High School is located across from the Dead River further off Hillside Avenue on Willard Street. These facilities are beyond the immediate project limits. During construction through traffic may detour temporarily along Hillside Avenue trying to avoid construction and may contribute to minor temporary congestion in the vicinity of these facilities.

The Gilbert Street Park is a small city park along Green Street and Gilbert Street which directly abuts the St. Lawrence & Atlantic Railroad Line to the west (**Exhibit 7**). This park is used as an outdoor ice skating rink during the winter months and is the site for children summer programs. Minor temporary slope impacts to the park would occur as a result of the project. Ongoing coordination with the City of Berlin has confirmed that the proposed construction in the vicinity of this property would not substantially affect the recreational purposes of the park. Green Street would remain open to traffic during construction and access to the park would remain. Existing parking adjacent to the park along Green Street will be retained. The Recreation Department sponsors activities year round at the Berlin Recreation Center and Parks Department located on First Avenue south of Green Street.

The physical impacts of the Selected Alternative, as well as Alternative 2, are similar for the Park, Police Station and Recreational Center. However, the reduction of truck and general traffic on Green Street and in the neighborhood north and east of First Avenue resulting from the construction of the Selected Alternative would provide safer pedestrian and bicycle access to the Recreation Center from the neighborhood. Alternative 2 would continue to bisect the neighborhood with the potential for conflict with large vehicles and heavy traffic remaining for children, teens, and parents, from the neighborhood located to the north and east, that would participate in recreational activities at the Center and the adjacent athletic field.

### **5.13 Water Quality / Surface Waters / Groundwater**

The project area is located within the 1-mile surface water impairment buffers of the Androscoggin River, the Dead River and Jericho Brook. Impairments to these adjacent surface waters are associated with the presence of *Escherichia coli* bacteria (**Table 5.4**), likely the result of illicit sewer connections to storm drains. For the Androscoggin River this parameter is designated as a pollutant that is causing marginal impairment as defined by NH DES, but a TMDL is not necessary since other controls are expected to attain water quality standards within a reasonable time. For the Dead River and Jericho Brook this parameter is a more severe impairment that is causing poor water quality as defined by NH DES, but a TMDL is not necessary since other controls are expected to attain water quality standards within a reasonable time.

**Table 5.4 - Surface Water Impairments within Project Area - 1-Mile Buffers**

| ASSESSMENT UNIT ID | BEACH? | ASSESSMENT UNIT NAME      | IMPAIRMENTS      |
|--------------------|--------|---------------------------|------------------|
| NHIMP400010606-02  | N      | ANDROSCOGGIN RIVER, IMP   | ESCHERICHIA COLI |
| NHRIV400010606-09  | N      | ANDROSCOGGIN RIVER, WTF   | ESCHERICHIA COLI |
| NHRIV400010606-08  | N      | ANDROSCOGGIN RIVER, WTF   | ESCHERICHIA COLI |
| NHRIV400010606-07  | N      | ANDROSCOGGIN RIVER, WTF   | ESCHERICHIA COLI |
| NHRIV400010606-02  | N      | DEAD RIVER, JERICHO BROOK | ESCHERICHIA COLI |

Source: NHDES One Stop Web Geographic Information System <http://www2.des.state.nh.us/gis/onestop/>

Impacts associated with either Alternative 2 or the Selected Alternative are within the Dead River watershed. The Dead River is located beyond the project limits approximately 200 feet east of the St. Lawrence & Atlantic Railroad corridor. The water is rated as Class B, whose primary use is for fishing, boating, and swimming.

Currently, stormwater over the majority of the project limits is collected into a closed drainage system and discharged through culverts to the Dead River southeast of the project area. To manage the concerns associated with the existing conditions of the storm water drainage system within the limits of the project, the proposed design for the Selected Alternative is anticipated to incorporate two new discharge points to the Dead River. Storm water would be directed from the existing city drainage system through a 36 inch diameter drainage pipe that would be jacked under the active railroad corridor at these two locations. Detention ponds are anticipated to be constructed south of the railroad corridor in two possible locations: within the remnants of Parcels 29, 31, and 33 (east of First Avenue), and; in Parcel 179 (north of Hillside Avenue). When constructed, the detention areas would provide water quality treatment of the runoff prior to its discharge into the Dead River. These water quality treatment measures would reduce the Total Suspended Solids (TSS) within the runoff, which would consequently reduce the contribution of the project area to the existing impairment.

Standard erosion control practices and appropriate roadway construction methods would be employed during construction to control siltation and minimize disturbance to the Dead River and any associated wetlands adjacent to the project. The contractor must submit a professionally prepared erosion and sedimentation control plan (detailing the control measures to be used) for approval before any work can be performed.

There are neither public water supply wells nor wellhead protection areas located within the project area. No private drinking water wells are located within the project limits.

#### **5.14 Wetlands**

For either the Selected Alternative or Alternative 2, minor impacts to the Dead River would occur as a result of the construction of new stormwater discharge points, as discussed in Section 5.13 above, into the Dead River. The Dead River in this location has been classified in accordance with the US Fish and Wildlife Service Manual FWS-OBS-79/31 as a riverine lower

perennial unconsolidated bottom permanently flooded (R2UBH) wetland. The impacts anticipated with the construction of new drainage outlets to the Dead River would consist of slight temporary impacts, which would require a minor impact permit from the NH Wetlands Bureau and would qualify for a State Programmatic General Permit from the US Army Corps of Engineers. No other wetlands are located within the project area.

The possible project impacts were reviewed at a monthly Natural Resource Agency Meeting held on July 15, 2009. Agencies, in addition to NHDOT and FHWA that attended this meeting, included the NH Wetlands Bureau, US Army Corps of Engineers, US Environmental Protection Agency, NH Fish and Game Department, and NH Office of Emergency Management. No one objected to the impacts as presented. No wetland mitigation, outside of the proposed water quality treatment measures, would be necessary for either the Selected Alternative or Alternative 2 if these impacts were to occur.

### **5.15 Endangered Species / Natural Communities**

A search of the NH Natural Heritage Inventory Bureau database has been conducted for records of rare plant and animal species and exemplary natural communities within the project limits of either the Selected Alternative or Alternative 2. The database has demonstrated the presence of Bald Eagle (*Haliaeetus leucocephalus*) and Common Nighthawk (*Chordeiles minor*) in the greater City of Berlin area, but has not identified any known occurrences of these species within the specific project area (**Exhibit 11**).

### **5.16 Floodplains**

For either the Selected Alternative or Alternative 2, the project would temporarily impact the 100 year floodplain of the Dead River during construction of the proposed new drainage outlets, as discussed in Section 5.13 above. These impacts would not cause a permanent loss of the flood storage capacity to the Dead River as a result of the construction of the project. No mitigation would be necessary as any impacts would only be temporary.

### **5.17 Cultural Resources**

The Department has coordinated with the NH Division of Historical Resources (NHDHR) the Federal Highway Administration (FHWA), and City of Berlin Officials to locate and identify National Register of Historic Places listed or eligible properties within the immediate area of the proposed project, and determine how they would be affected. Discussions with the NHDHR and FHWA were held during Monthly Cultural Resource Agency Coordination Meetings held on June 6, 2002, July 15, 2002, February 26, 2003, March 24, 2003, April 8, 2004, May 13, 2004, June 10, 2004, July 2, 2008, December 4, 2008, January 22, 2009, February 12, 2009, May 14, 2009, June 4, 2009, June 22, 2009, October 1, 2009, January 14, 2010, February 4, 2010 and March 11, 2010. The City of Berlin, as a consulting party to the

Section 106 process identified during the development of this project, was invited and attended several of these meetings.

An area form was completed to identify the cultural resources present within the limits of the project. The area form indicated that the Berlin Heights Addition Historic District, which is important for its local significance to the City of Berlin, was located within the project area. Two other districts previously determined eligible for listing in the National Register of Historic Places, the Atlantic & St. Lawrence Historic District and the Berlin Mills Railway Historic District, were identified as being adjacent to the project area.

The boundaries of the Berlin Heights Addition Historic District were defined and properties were identified as contributing or non-contributing to the District. The portion of this large historic District that falls within the NH 110 Project Area (eighty-eight buildings) was documented in detail. Although determinations of individual eligibility for each building impacted within the Berlin Heights Addition Historic District were not made; the more architecturally significant properties and the more common building types in the District were outlined. Historical research on individually surveyed buildings, included examination of Sanborn maps and limited deed research conducted at the Coos County Registry of Deeds in Lancaster.

#### 5.17.1 Historical Resources

There are three historical districts within the vicinity of the project area. Details on these districts are discussed below:

- **Berlin Heights Addition Historic District:**

The project is located within the Berlin Heights Addition Historic District (also known as “The Avenues”), which is important for its local significance to the City of Berlin. It reflects several important contexts in the history of the City, in the area of community planning and development. Significance focuses on the platting of the District and its settlement by ethnic groups during development of the paper mills and other industry in the late 19<sup>th</sup> century.

The Berlin Heights Addition, located on the west side of Berlin, was designed in a grid pattern between 1892 and 1893 by the Berlin Heights Land Corporation, adjacent to its earlier (and more affluent) residential neighborhood to the north, Berlin Heights. The densely settled neighborhood was plated by a private land corporation, in response to the 134 percent increase in the city's population between 1880 and 1890, as local industries expanded. The actual build-out was done by individual home and business owners, and private small speculators over a 30 year period. The development was influenced by geographical and population pressures and by investment decisions of property owners, some of whom purchased more than one lot for buffering or later development.

The norm for neighborhood residences was a single, freestanding, wood-framed dwelling with light, air, and land on all sides, a reflection of the 19<sup>th</sup> century ideal of the pastoral garden suburb; but the neighborhood also accommodated two- to three-story multifamily, often owner-

occupied, dwellings and some commercial buildings, especially on the thoroughfares. Common features of the multi-family housing were the mortared stone foundations and walls, multi-story porches and horizontal divisions into flats. Of note are the secondary landscapes of: block interiors; sloping topography; rock outcrops, and; decorative and utilitarian stone walls to demarcate property boundaries and landscape features.

It now appears that the ethnic residents of the District were associated through religious groups and perhaps other ethnic organizations, thus the population of the Addition was diverse. The District was one of several ethnic enclaves composed of individual families, French Canadians, Irish-Americans, Russian and Polish Jews, Italians and smaller members of other groups. These groups were dispersed across the District. Individual families might have lived in the District for several generations. From the beginning the identity of the Addition seems to have been more that of a residential neighborhood than as an area of workers' housing, and through time it reflected the assimilation and increasing prosperity of its residents.

The District is bounded on the east by the Grand Trunk Railroad tracks (St. Lawrence & Atlantic Railroad) from Mt. Forist Street to the south, extending north to the Wight Street (NH 110) intersection with Sixth Avenue. The western limits skirt the foothills of Mt. Forist on Sixth Avenue to Jolbert Street, then along Fifth Avenue to Mt. Forist Street, then along Russian Street ending at Harding Street. The southern boundary extends from Mt. Forist Street along Gerrish Street and First Avenue to Harding Street (**Exhibit 12**).

All buildings from the period of significance were considered to contribute to the District, unless they had lost so much integrity as to be unrecognizable. Many properties have replacement siding and windows, and enclosed porches are common, but these changes were considered acceptable to contributing properties status as long as the building retained the ability to convey its historic form, building type and usage. Non-contributing properties are relatively small within the District creating little intrusion into the visual continuity of the District.

Determinations of Eligibility and Effects on historic properties were made by the NHDHR, FHWA and NHDOT based on the Section 106 review process established by the National Historic Preservation Act of 1966 and outlined in 36 CFR 800.9.

The Berlin Heights Addition Historic District is eligible for listing on the National Register of Historic Places under Criterion A for Community Planning & Development; Ethnic Heritage and Industry, and under Criterion C for Architecture. Its period of significance is from c. 1892-c.1958 from its planning through the completion of its grid plan and peak population. This period encompasses the evolution of the building forms and commercial properties.

- **Atlantic & St. Lawrence Historic District:**

The Atlantic & St. Lawrence Historic District (St. Lawrence & Atlantic Railroad Co.), consisting of 52 miles of railroad right-of-way, including its branch lines, railroad stations, buildings and structures, has been previously determined eligible for listing in the National Register of Historic Places. This historic District is located immediately adjacent to the project area.

- **Berlin Mills Railway Historic District:**

The Berlin Mills Railway Historic District, consisting of 2.6 miles of railroad right-of-way, including its buildings and structures, has been previously determined eligible for listing in the National Register of Historic Places. This historic District is located in the vicinity of the project area.

5.17.1.1 Historical Resources Impacts - Alternative 2

The following Effects of Alternative 2 to the Berlin Heights Addition Historic District were determined:

- Considerable loss of street grid.
- Dead-ending of Session Street.
- Nine primary contributing structures demolished (three secondary).
- Loss of building density and pattern.
- Loss of Madigan Street between Second Avenue and Third Avenue.
- Loss of three blocks of Third Avenue.
- Introduction of two new intersections.
- Introduction of new type of roadway with curvilinear design.
- Three large intersection changes.
- Loss of retaining walls.

5.17.1.2 Historical Resources Impacts - Alternative 4E

The following Effects of Alternative 4E to the Berlin Heights Addition Historic District were determined:

- Large number of buildings lost on 33 properties - 27 with contributing primary buildings including 10 contributing secondary structures; 3 with contributing secondary structures only; and, 3 noncontributing properties.
- Minor loss of street grid.
- First Avenue no longer dead ends at the railroad.
- New through traffic along the edge of the District.
- Loss of direct connection of Second Avenue to Hillside Avenue.
- New connection of Third Avenue with Wight St.; slight grid pattern change.
- Introduction of a new road along railroad corridor.
- Loss of building density and pattern.
- Loss of setting for properties, including those houses adjacent to the railroad corridor.
- One large intersection change.
- Loss of retaining walls.

### 5.17.1.3 Comparison of Effects of Alternatives

Comparisons of the effects of the Selected Alternative (Alternative 4E) and Alternative 2 on the streetscapes, blocks, and contributing properties are summarized below and outlined in **Table 5.5**. Comparisons of the visual impacts to the District of these alternatives are outlined in **Table 5.6**.

- Both alternatives present irreversible adverse effects to the historic nature of the neighborhood, each lessening the District’s historical significance and integrity in different ways.
- More of the grid is lost with Alternative 2, with visual impacts to 29 contributing properties, compared to 16 with Alternative 4E.
- More contributing structures are acquired with Alternative 4E at 27 (and 14 secondary structures) compared to Alternative 2, with nine (and three secondary structures).
- Acquisition of “good examples of types” would result in three from Alternative 2 and seven from Alternative 4E. Proportionally the impacts to these good examples are comparable for both alternatives, though there is a higher concentration of multi-family housing examples of type that would be impacted along Alternative 4E.
- Comparison of the loss of grid cannot be directly evaluated against the loss of architecture. However the visual impacts to the District shows that the loss of grid with Alternative 2 would result in a greater impact to the cohesion to and core of the District.
- Consideration of long-term impacts identify that the continued provision of a state route, with large truck traffic as provided with Alternative 2, would result in greater deterioration of the District through the continued separation of the neighborhood.

**Table 5.5 - Effects Determination**

|   | <b>Alternative 2</b>     | <b>Alternative 4E</b>     |
|---|--------------------------|---------------------------|
| Primary Contributing Structure Takes                            | 9                        | 27                        |
| Secondary (outbuildings) Contributing Structure Takes           | 3 (with 1 possible save) | 14 (with 1 possible save) |
| <b>Total Contributing Structures Takes</b>                      | <b>12</b>                | <b>41</b>                 |
| Primary Non-Contributing Takes                                  | 2                        | 4                         |
| Secondary Non-Contributing Takes                                | 2                        | 3                         |
| <b>Total Non-Contributing Structures Takes</b>                  | <b>4</b>                 | <b>7</b>                  |
| <b>Total Contributing and Non-Contributing Structures Takes</b> | <b>16</b>                | <b>48</b>                 |
| Contributing Properties Strip Takes                             | 0                        | 8                         |
| Visual Impacts on Contributing Properties                       | 29                       | 15                        |
| No Effects or No Adverse Effects on Contributing Structures     | 14                       | 5                         |
| Loss of Representative Buildings                                | 3 (33.3% of takes)       | 7 (26% of takes)          |

|                     | <b>Alternative 2</b>   | <b>Alternative 4E</b>  |
|---------------------|--|--|
| Intersection Takes  | Third Ave. and Madigan St.<br><br>Second Ave. and Madigan St.<br><br>Green St. and Second Ave.<br>(at the "Y" Intersection)  | Green St. and First Ave.   |
| Partial Blocks Lost | <b>3</b>   | <b>5</b>   |
| Dead Ends           | Sessions St. at Second Ave.  | Second Ave. at Hillside<br>(loss of direct connection)   |
| Loss of Streets     | Loss of Madigan St. between<br>Second Ave. and Third Ave.<br><br>Loss of Second Ave. between<br>Sessions St. and Madigan St.<br><br>Loss of Boulevard feeling of<br>Third Ave.<br><br>Loss of "Y" Intersection at<br>Green St. | Loss of First Ave between<br>Roderick St. and Green St.<br><br>Loss of Green St. between<br>First Ave. and Gilbert St.<br><br>Change of Direction /<br>Symmetry of Third Ave.<br>and Wight St. |

Both alternatives present irreversible adverse effects to the historic nature and quality of the neighborhood. Alternative 2 introduces a great deal of vacant space throughout its length and a large new structure, a truck route built to modern design standards that disrupts its grid street pattern, one of the most character defining features of the District. Although Alternative 4E demolishes a large number of contributing properties at the eastern boundary of the District, it does less to compromise the feeling, association and linkages that are the defining characteristics of the District's core.

Construction of Alternative 2 through the middle of the District would visually and physically sever the District's continuity, effectively fragmenting what had been united historically by its physical development and evolution. Although determinations of individual eligibility for each building impacted within the Berlin Heights Addition Historic District were not made; it is the relationship of these properties to each other as parts defining the whole from which they gain their significance. Alternative 4E, the Selected Alternative, maintains the sum of the parts of the District to a greater degree than Alternative 2.

**Table 5.6 - Visual Effects on Contributing Properties**

|                      | <b>Alternative 2</b>   | <b>Alternative 4E</b>   |
|----------------------|--|---|
| Parcel               | 48, 49, 54, 56, 58, 74, 78, 81, 83,<br>85, 87, 88, 89, 90, 92, 93, 94, 95,<br>96, 97, 98, 99, 108, 109, 110, 111,<br>112, 113, 115 | 6, 9, 10, 17, 18, 21, 25, 26, 28,<br>30, 43, 102, 108, 110, 112 |
| Number of properties | 29   | 15  |

A Memorandum of Agreement addressing the Proposed Action and outlining the specifics of the mitigation measures has been developed and signed by the NESHPO, FHWA, the City of Berlin and NHDOT (**Exhibit 14**). Additional information on these and other properties in the project area is on file at the NH Department of Transportation, Bureau of Environment, Hazen Drive and at the NH Division of Historical Resources offices, Pillsbury Street, in Concord, NH.

#### 5.17.1.4 Historical Resources Impacts Mitigation

Discussions by NHDOT with the City of Berlin have resulted in the following mitigation for Alternative 4E of the NH Route 110 relocation project.

##### 1. Documentation

- The level of documentation for each property will vary. Documentation for properties that best represent the different forms of architecture in the area of the Berlin Heights Addition impacted by the project will be conducted at HABS/HAER Level I (*Federal Register*/Vol. 68, No. 139, July 21, 2003). This documentation will include large format photographs of interiors and exteriors; scaled floor plans; mapping; and a written narrative containing a description, property history, and a comparative analysis of the subject property with others in the city and other New England industrial communities. This form of documentation could apply to about five buildings.

All other properties, most of which have undergone some alterations, will receive a Level III documentation including scaled sketch plans, a limited number of large format photographs supplemented with black and white photographs, and a brief narrative with property description and history. This effort may include the results of interviews, capturing residents' memories of the property. These narratives will be made available on-line.

- The existing grid landscape/neighborhood setting of the Berlin Heights Addition Historic District will be documented with aerial photography.

##### 2. Public Forum and Workshops, and Planning Charette

- A public forum will be presented that discusses the architectural values of the Berlin Heights Addition District Area that define the place and the ways in which they reflect the lifestyle of the residents. Two practical workshops on preservation will be conducted with residents to examine historic preservation and energy conservation, discuss saving historic windows, energy conservation, and weatherization.
- The City of Berlin and a planning consultant will conduct a planning session with residents in the Berlin Heights Addition District Area. Using the charrette format to guide the historically compatible reuse of and reinvestment in the spaces vacated by the project and areas adjacent to the project as well as in the remainder of the District, particularly along Third Avenue. This effort will dovetail with some of the other planning efforts that are underway at the city level.

### 3. Historically Compatible Landscaping

- Landscaping will serve as historical mitigation when it minimizes the visual impact of the new corridor on the adjacent historic District. Vegetative screening, including evergreens and shrubs, will be used to visually separate the western edge of the highway corridor from the District.

### 4. Purchase and Resale with Covenants of Dwellings in the District

- The purchase of approximately four vacant properties, located within and contributing to the Berlin Heights Historic District, for resale with covenants will occur by concurrence of the NHSHP, the City of Berlin, and NHDOT. Selection of these properties will be based on exterior historical integrity and reasonable interior condition.
- Interested parties will submit a proposal/plan stating how the purchaser shall meet the conditions of the covenant, detailing the proposed building use, any necessary upgrading of the building to meet the City of Berlin's Certificate of Occupancy, and indicate the manner in which the property will be maintained at the current or better condition (i.e. its physical integrity).
- Bids and proposals will be evaluated by the NHSHP, the NHDOT, and the City of Berlin. During the resale period, the NHDOT will work to maintain the property in the same condition as it was purchased. The purchase of these properties will be completed by the end of project construction.
- Each property will be sold with preservation covenants attached to the deed. Covenants will apply to the exterior only and will remain in force for a period of eight years from the date of transfer.
- Yearly monitoring of the purchased properties, documenting adherence to the covenants, will occur by the NHSHP and NHDOT.
- If properties do not sell following a nine-month marketing period or if a buyer does not follow the stipulations of the covenant, NHSHP, FHWA, the City of Berlin, and NHDOT will consult and reach agreement to resolve these issues.

### 5. Public Outreach

- State historical markers will be placed at the intersection of Green Street and NH 110 created in front of the Police Station and possibly at the Third Avenue/Wight Street intersection. The markers will convey the history of the development of the District in companion with the paper mills to characterize the neighborhood that emerged within the District.
- User-friendly version of the historical studies that have been undertaken by NHDOT and the City will be uploaded to the City and NHDHR websites.

#### 5.17.2 Archaeological Resources

A Phase IA archaeological sensitivity assessment of the Selected Alternative and Alternative 2 routes was conducted on August 25 to 26, 2008. The study was to assess known

and potential archaeological resources that may be present within the proposed project limits. The study included background research and visual inspection of the project area. All potentially impacted properties were noted, described, and photographed, with areas identified for each alternative that have undergone little or no visible disturbance or development and exhibited archaeological sensitivity. A tentative plan for Phase IB testing was also developed for each property that exhibits sensitivity.

No previously recorded Pre-Contact Native American sites are present in the project area. Due to the combination of shallow soils and extensive historic and modern disturbances that have affected every portion of the study area, the area does not retain any integrity for Native American sites and consequently no further study for Pre-Contact Native American resources is warranted.

The Phase IA Sensitivity Assessment recommended proceeding with Phase IB Intensive Archaeological Investigation at five properties on Alternative 2, and at 17 properties on Alternative 4E. One property, an abandoned, structurally unsound 1928 store (Parcel 39) whose basement may be testable, was left unexamined for safety considerations. These properties will require individual testing and interpretation, and should also be investigated at the macro-level, for the elements, patterns, and themes that tie them together as a neighborhood. These investigations will include yard deposits and house forms as artifacts that would open discussions on a wide range of culturally significant topics that include, but are not limited to: notions of class- and counter-culture formation, identity politics and immigrant's various interpretations - acceptance, rejection, or reformulation of the "American Dream". Such questions include:

- The presumed "meanings" behind the dominant house-forms in the project area and the meanings suggested by the census and directory data are seemingly at odds. What do the artifacts, or the yard deposits as a whole, suggest about where the interface was between how these people were defined from the outside and how they chose to define themselves from within?
- Can any differences be discerned in the use of yard space between owner-occupied and absentee-landlord-managed properties? Between dwellings occupied by a single family and those occupied simply by a collection of unrelated tenants? What might these suggest about working-class aspirations, projections of self, or socio-economic mobility?
- Can any differences be discerned in the deposits associated with single-family and multifamily residences?
- Is there any significant association between certain house forms and the owner/occupants of different nationalities or ethnic backgrounds? Can this lead to a discussion about ethnic or national differences in the interpretation of the American Dream?

**Table 5.7** and **Table 5.8** list each of the properties, by alternative route, and summarizes the findings and recommendations for each. Alternative 2 has 12 potentially impacted properties. Alternative 4E has 33 impacted properties.

**Table 5.7 - Phase IB Testing Alternative 2**

| <b>Parcel</b> | <b>Phase IB Recommended Testing*</b>                            | <b>Comments</b>   |
|---------------|---|---|
| 68            | None  | Built into slope; what is left looks like fill and a paved driveway.        |
| 66            | None  | Already demolished, foundation takes up entire lot. No testable yard space. |
| 59            | 3 Shovel Test Pits (STPs) in side yard; 6-8 STPs under driveway | 1928, side yard ca. 6 x 20m. Need to test under driveway in back.           |
| 57            | None  | No testable area.   |
| 55            | None  | No testable area.   |
| 53            | 4 STPs  | 1905, side yard ca. 8 x 10m. Front yard ca. 3 x 10m.                        |
| 52            | None  | No testable area.   |
| 51            | None  | No testable area.   |
| 56            | 4-6 STPs  | 1914, back yard not very visible, but looks testable.                       |
| 80            | None  | No testable area.   |
| 84            | 10 STPs   | 1914 tenement, big back yard, backhoe may be needed for gravel driveway.    |
| 86            | 10 STPs   | 1901 tenement, big back yard, but not visible from the street.              |

\*After: *Phase IA Archaeological Sensitivity Assessment, NH Rt. 110, Berlin, New Hampshire, x-A000(054), 12958B* Report Prepared for the New Hampshire Department of Transportation By Alexandra Chan, Ph.D. and Robert G. Goodby, Ph.D., January, 2009, Table 2.

**Table 5.8 - Phase IB Testing Alternative 4E**

| <b>Parcel</b> | <b>Phase IB Recommended Testing*</b> | <b>Comments</b>   |
|---------------|--------------------------------------|---|
| 2             | None                                 | No testable area  |
| 3             | None                                 | No testable area.   |
| 7             | 15 to 20 Shovel Test Pits (STPs)     | Current house is post WWII, but a pre-1914 dwelling shown in front/side yard of lot, with attached sheds/garage (latter still extant). Test under old foundation, and under paved driveway in front of sheds. |
| 8             | None                                 | No testable area.   |
| 14            | None                                 | No testable area.   |
| 16            | 10 to 15 STPs                        | 1901, small front and side yards; N.B. current preschool play yard of Parcels 14 and 8. Property lines adjusted in 1920-1928.   |
| 20            | None                                 | No testable area.   |
| 24            | 4 STPs                               | 1901, small side yard.  |
| 27            | 1 STP                                | 1901, tiny yard in front ledge in back. May decide based on results of Parcels 33 and 29, below, that testing here is fruitless.  |

| Parcel                  | Phase IB Recommended Testing*   | Comments   |
|-------------------------|---|--|
| 29                      | 4 to 6 STPs   | 1905-1909, fair sized side yard, but likely very shallow soils. Ledge outcroppings, and tall bldg foundation.  |
| 33<br>(with 31)         | 10 to 15 STPs   | Unknown date; large side and back yard, also a vegetable patch, but lots of ledge outcroppings as well.  |
| 32                      | 2 to 4 STPs   | 1901, garage 1914; small back yard, narrow side yard.  |
| 34                      | 2 to 4 STPs   | 1914, shed 1928; small paved back yard.  |
| 35                      | None  | No testable area.  |
| 36                      | 8 to 10 STPs  | 1905, side and back yards.   |
| 37                      | None  | No testable area.  |
| 41                      | 1 STP   | Almost no testable area, but room for one STP in the nook of the "L" shape in back, the workshop/garage portion.   |
| 40                      | 2 STPs  | 1 in front yard, 1 in sliver of west-side yard   |
| 39                      | 2 STPs in back and 10 STPs in basement (all necessary investigation are to be coordinated with NHDHR and NHSHP) | Store building takes up entire lot. See what basement may have before writing off. Safety is an issue, building is abandoned and not necessarily structurally sound. |
| 38                      | 3 STPs  | Back yard, not raised terrace patio, but in lower portion.   |
| 105                     | 6 STPs  | Yard space to NE and S, maybe some in back, but full of ledge outcroppings.  |
| 106                     | None  | Only testable area in front, between house and RR.   |
| 107                     | None  | Auto Body shop, disturbed, recent, and little testable area.   |
| 109 & 111<br>(with 113) | 15 STPs   | 1926 Boulay Blocks, look to have integrity (parcel 113 Boulay Blocks workshop & garages where not separated out in report*).   |
| 115                     | 4 STPs  | 1928, intact small back yard.  |
| 116                     | 2 STPs  | 1928, small back yard, under gravel drive.   |
| 117                     | 4 to 6 STPs   | 1928, intact small side, bigger back yard.   |
| 42                      | 9 STPs  | (property not evaluated in report, to be coordinated with NHDHR)   |
| 104                     | 21 STPs   | (property not evaluated in report, to be coordinated with NHDHR)   |
| 121                     | 6 STPs  | (property not evaluated in report, to be coordinated with NHDHR)   |

\*After: *Phase IA Archaeological Sensitivity Assessment, NH Rt. 110, Berlin, New Hampshire, x-A000(054), 12958B Report Prepared for the New Hampshire Department of Transportation By Alexandra Chan, Ph.D. and Robert G. Goodby, Ph.D., January, 2009, Table 2.*

#### 5.17.2.1 Archeological Resources Impacts

Archeological investigations were conducted at a Phase IA level to determine areas of sensitivity within the proposed impact areas. An Effects Memo was signed based on reviews of the architectural significance of identified resources and the potential presence of archaeological remains in the project area (**Exhibit 13**).

Once drainage designs are finalized, and in consultation with NHDHR and FHWA, all necessary phases of archaeological investigations at the Phase IB through Phase III levels will be conducted. Data gained from this effort will be made available to the public to the extent permitted by the need to protect intact archaeological resources.

Archeological investigations would be performed to characterize the contents and eligibility of the sites, which may potentially be impacted by the project. Further Determinations of Eligibility and Effects on historic archeological properties will be made by the NHDHR, FHWA and NHDOT based on the Section 106 review process established by the National Historic Preservation Act of 1966 and outlined in 36 CFR 800.9.

The Selected Alternative may involve the jacking of a drainage pipe under the Atlantic & St. Lawrence Historic District to direct stormwater runoff for treatment into a detention area located south of the railroad tracks prior to its being discharged into the Dead River. No impacts would occur to this District as the work would consist of pushing the drainage pipe under the tracks without impacting any surface features. It is anticipated that there would be no archeological concerns due to previous disturbances from the construction of the railroad tracks.

No impacts will occur to the Berlin Mills Railroad Historic District as all work associated with the project will be located outside this District.

#### 5.17.2.2 Archeological Resources Impacts Mitigation

All necessary phases of archaeological investigations at the Phase IB through Phase III levels would be conducted in consultation with NHDHR. Data gained from this effort would be made available to the public, to the extent permitted by the need to protect intact archaeological resources.

A Memorandum of Agreement among the NHSHPO, FHWA, the City of Berlin and NHDOT has been prepared that outlines the specifics of this mitigation (**Exhibit 14**). Additional information on these and other properties in the project area is on file at the NH Department of Transportation, Bureau of Environment, Hazen Drive and at the NH Division of Historical Resources offices, Pillsbury Street, in Concord, NH.

### 5.18 Utilities

The proposed project would require the relocation of overhead utility lines and power poles, and modifications to buried utilities. The following utility companies have been identified within the project area:

| <u>SERVICE</u>                                 | <u>LOCATION</u>   |
|--|-------------------|
| AT&T Broadband (CATV)                          | Aerial and Buried |
| Public Service of New Hampshire (Electric)     | Aerial and Buried |
| FairPoint (Telephone service)                  | Aerial and Buried |
| Fire Alarm Cable                               | Aerial            |
| City of Berlin Water Works (Water)             | Buried            |
| City of Berlin Public Works Department (Sewer) | Buried            |

If, during the construction period, impacts to additional utilities are identified, then the appropriate utility companies would be notified to ensure disruption to service, if any, would be kept to an absolute minimum.

### 5.19 Construction Impacts

Appropriate precautions would be taken to protect the Dead River, a nearby surface water course, by implementation of a Surface Water Pollution Prevention Plan (SWPPP) during construction. The contractor performing the work will implement the professionally prepared erosion and sedimentation control plan as outlined in the SWPPP, which will be approved by the Department. Heavy equipment operations would cause temporary increases in noise and dust levels during construction. All standard measures would be employed to ensure such increases are minimized to the extent practicable and limited to the construction period.

The proposed action would also inconvenience and disrupt motorists, pedestrians, and bicyclists. However, through traffic on the highway would be maintained during construction, though traffic may need to run on gravel surfaces for short periods of time. Any temporary suspensions of through traffic would be held to a minimum. Access to properties, including businesses, would be maintained at all times. Standard pollution prevention measures would be employed to assure all negative impacts would be minimized and restricted to the construction phase of the project to the extent practicable.

### 6.0 Agency Coordination and Public Participation

Meetings were held periodically with various Federal, State and local agencies, as well as the general public throughout the development of this project. Public Hearings were held in August 2009 in the City of Berlin to present the Necessity of the Layout, and Right-of-Way and Environmental impacts of the Preferred Alignment.

Project review meetings were held on the following dates:

| Topic                            | Date   |
|----------------------------------|--|
| Cultural Resource Agency Meeting | June 6 , 2002  |
|                                  | July 15 , 2002   |
|                                  | February 26, 2003  |
|                                  | March 24, 2003   |
|                                  | April 8, 2004  |
|                                  | May 13, 2004   |
|                                  | June 10, 2004  |
|                                  | July 2, 2008   |
|                                  | December 4, 2008   |
|                                  | February 12, 2009  |
|                                  | May 14, 2009   |
|                                  | June 4, 2009   |
|                                  | June 22, 2009  |
|                                  | October 1, 2009  |
|                                  | January 14, 2010   |
| February 4, 2010                 |  |
| March 11, 2010                   |  |
| Natural Resource Agency Meeting  | July 15, 2009  |
| Public Officials Meeting         | November 13, 2001 (Scoping)<br>April 19, 2004 (City Council Meeting)                       |
| Public Informational Meeting     | February 13, 2002 (Scoping)<br>August 28, 2008 (NHDOT/FHWA)<br>March 19, 2009 (NHDOT/FHWA) |
| ROW Public Hearing               | August 13, 2009  |
| NEPA Public Hearing              | August 27, 2009  |

Letters were sent to various Federal, State and local agencies asking for input on this project on the following dates:

| <u>Agency / Organization</u>            | <u>Date Sent</u> | <u>Date Input Received</u> |
|---|------------------|----------------------------|
| City of Berlin                          |                  |                            |
| Mayor                                   | 03/26/2009       | -                          |
| City Manager                            | 03/26/2009       | -                          |
| City Planner                            | 03/26/2009       | -                          |
| Planning Board                          | 03/26/2009       | -                          |
| Public Works                            | 03/26/2009       | -                          |
| Police Chief                            | 03/26/2009       | -                          |
| Fire Chief                              | 03/26/2009       | -                          |
| Emergency Management                    | 03/26/2009       | -                          |
| Historical Society                      | 03/26/2009       | -                          |
| North Country Council                   | 03/31/2009       | -                          |
| NH Office of Energy and Planning (NFIP) |                  | -                          |

|   |            |            |
|---|------------|------------|
| NH Dept of Resources and Econ. Development (CLS)  | 03/31/2009 | 04/06/2009 |
| NH Dept of Resources and Econ. Development (LWCF) | 03/31/2009 | 04/14/2009 |
| NH Natural Heritage Bureau                        | 03/31/2009 | 04/02/2009 |
| NH Fish & Game Department                         |            | -          |
| US Fish and Wildlife Service                      |            | 01/02/2009 |

## 6.1 Comments

Comments on the Draft Section 4(f) Evaluation were received from the Department of Interior, the Advisory Council on Historic Preservation, the NHHPO, and the City of Berlin (**Exhibits 15, 16, 17 and 18**). Specific comments and responses are summarized below.

### Department of Interior

- The MOA should encompass a broader discussion on archaeology.  
*Archeology has been incorporated in the MOA under **Stipulation VI – Archaeological Investigations**.*
- Level of documentation of the properties should be judged by the NH-SHPO.  
*Coordination with the NH SHPO has been defined in the MOA under **Stipulation I – Documentation and Acquisition of Historic Properties**.*
- Proposed relocation of the historic properties be considered in consultation with the NH-SHPO.  
*After further evaluation of this proposed relocation mitigation measure and in consultation with the NHHPO, FHWA and the City of Berlin, this mitigation measure was eliminated in favor of pursuing the purchase of historic dwellings within the District and their resale with covenants as defined in the MOA under **Stipulation IV - Purchase and Resale with Covenants of Dwellings in the District**.*

### Advisory Council on Historic Preservation

- The Advisory Council concluded that their involvement does not apply for this undertaking, and that participation in the consultation to resolve adverse effects is not needed. The final MOA, developed in consultation with the NH SHPO and other consulting parties, is to be filed with the Advisory Council to complete the requirements of Section 106 of the National Historic Preservation Act.  
*The final MOA has been developed and signed by the NH SHPO, FHWA, City of Berlin and NH DOT. A copy of the MOA, included in this documentation, has been provided to the Advisory Council pursuant to 36 CFR 800.*

### NH State Historic Preservation Officer/Director of NH DHR

- Change in wording on the comparison of effects to reflect that both alternatives present a great deal of adverse effect, in ways that impact the District differently.  
*The wording has been changed throughout the document to reflect that both alternatives present irreversible adverse effects.*
- Clarification of two bullets in Section 6.17.1.3 - Comparison of Effects of Alternatives.  
*These statements were clarified (note: due to incorrect numbering in the Draft document this Section is now **Section 5.17.1.3**).*

- Change the wording on Alternative 4E to reflect that it greatly compromises the feeling, association and linkages that define the eastern portion of the District. *The wording has been changed throughout the document to reflect that though Alternative 4E greatly demolishes a large number of contributing properties at the eastern boundary of the District, it does less to compromise the defining characteristics at the District's core.*
- Mitigation discussion is missing two key ideas – discussion of a series of workshops and number of relocated properties not be limited to one as discussed in meetings with DHR. *The mitigation section of the document and the MOA's **Stipulation II - Public Forum and Workshops and Planning Charrette** were revised to reflect the series of workshops.*

*After further evaluation of the proposed relocation mitigation option and in consultation with the NHSHPO, FHWA and the City of Berlin, this mitigation measure was eliminated in favor of pursuing the purchase of historic dwellings within the District and their resale with covenants as defined in the MOA under **Stipulation IV - Purchase and Resale with Covenants of Dwellings in the District.***

- Statement made in the document that no outstanding or individually eligible properties exist in the District is incorrect. No Determination of Eligibility for individual properties were made. *The statement throughout the document have been changed to reflect that no individual determinations of eligibility were made as part of the documentation of the resources for the project.*

#### City of Berlin

- Clarification of the information about Census Block data in Section 6.11.2 as it relates to the limits of the project. The Berlin Housing Authority's main property though located in this Census Block is beyond the project area and the inclusion in this Census Block impacts the median household income for this block group. *This discrepancy has been clarified in the document (note: due to incorrect numbering in the Draft document this Section is now **Section 5.11.2**).*
- Concerns about the ultimate cost of the mitigation of the historic impacts for the project, especially in regards to the level of documentation required on all of the impacted properties. As no individually eligible properties have been identified, nor are there any single buildings in the project area that the community feels particularly attached to, a more cursory document that gives an overall description of the District is suggested as being more reasonable. The community views the removal of the truck route through the middle of the District and routing it to its edge will be the most effective toward saving historic structures of the district, as well as benefiting the neighborhood. *The final MOA has been developed and signed by the NH SHPO, FHWA, City of Berlin and NH DOT. The mitigation package as outlined in the MOA has been discussed in consultation with the City. The level of documentation for each property will vary and is in part dependent on the interior integrity of the resource as defined in the MOA under **Stipulation I - Documentation and Acquisition of Historic Properties.** As noted in response to NH SHPO no individual determinations of eligibility were made as part of the documentation of the resources for the project.*

Responses to these comments have been incorporated in the Final Environmental Assessment and Final 4(f) Evaluation and the MOA as appropriate. Comments were received from the general public, City and regional officials during the Public Hearings. A summary of the Public Hearing comments and responses by the NHDOT is contained in NHDOT's Report of the Commissioner (**Exhibit 19**).

Requests made for full acquisition by the owners of two abutting historic properties, due to the extent of the impacts, were granted. These properties will be evaluated as to their resale potential by the NHDOT and City of Berlin, and marketed as appropriate.

### **7.0 Final and Draft Environmental Assessment/Section 4(f) Distribution List**

- Honorable Raymond Burton, Executive Councilor, State of NH
- City of Berlin
  - Mayor David Bertrand
  - Patrick MacQueen, City Manager
  - Pamela Laflamme, City Planner
  - Michael Perreault, Public Works Director
  - Francoise Cusson, Chairman Planning Board
  - Peter Morency, Police Chief
  - Randall Trull, Fire Chief
  - Denise Jensen, Head Librarian
- Odette LeClerc, Berlin & Coos County Historical Society
- Michael King, Executive Director, North Country Council
- Elizabeth Muzzey, NH State Historic Preservation Officer
- Advisory Council on Historic Preservation, Washington, DC
- Department of Interior, Washington, DC

### **8.0 Summary of Environmental Commitments**

The following environmental commitments have been made for this project.

1. The Department will perform Initial Site Assessments (ISA's) on identified parcels of concern for OHM to determine the actual risks associated with the purchase of these properties and/or construction of the project. (ENVIRONMENT / HIGHWAY DESIGN / CONSTRUCTION / RIGHT-OF-WAY) *Page 12*
2. The Department will perform comprehensive building audits to identify and quantify all regulated building materials and special wastes. (ENVIRONMENT / HIGHWAY DESIGN / CONSTRUCTION / RIGHT-OF-WAY) *Page 13*
3. The Department proposes to purchase 33 properties, containing 57 housing units and two businesses, for the Selected Alternative. Residents and businesses will be relocated and provided with safe and reasonable accommodations in compliance with the Federal

- Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended. (RIGHT-OF-WAY) Pages 16 & 17
4. Access to community services located within the project area (Police Station, Recreational Center and Gilbert Park) will be retained during construction, though temporary detours and delays may be unavoidable during construction. (CONSTRUCTION) Page 20
  5. The proposed design may incorporate a new stormwater discharge point to the Dead River. If considered necessary, detention area(s) may be constructed to provide water quality treatment of the runoff prior to its discharge into the Dead River. (ENVIRONMENT / HIGHWAY DESIGN / CONSTRUCTION / RIGHT-OF-WAY) Page 22
  6. Construction of new drainage outlets to the Dead River would consist of minor temporary impacts to the Dead River, requiring a minor impact wetlands permit from the NH Wetlands Bureau and would qualify for a State Programmatic General Permit from the US Army Corps of Engineers. (ENVIRONMENT / HIGHWAY DESIGN) Page 23
  7. Temporary impacts to the 100 year floodplain of the Dead River would be needed during construction of the proposed new drainage outlets. These outlets will be designed to assure that no permanent loss of flood storage capacity would result. (ENVIRONMENT / HIGHWAY DESIGN) Page 23
  8. A Memorandum of Agreement addressing the proposed action and mitigation measures developed as a result of the impacts to the Berlin Heights Addition Historic District has been developed and signed by NHHPO, FHWA, City of Berlin and NHDOT. (ENVIRONMENT) Page 29
  9. Historical Resources Impacts Mitigation have been proposed and will be finalized and implemented as agreed to in the Memorandum of Agreement. (ENVIRONMENT / HIGHWAY DESIGN / RIGHT-OF-WAY) Page 29
  10. Archeological investigations will be performed to characterize the contents and eligibility of any sites that may be impacted by the project. All necessary phases of archaeological investigations at the Phase IB through Phase III levels will be conducted. (ENVIRONMENT / HIGHWAY DESIGN / RIGHT-OF-WAY) Page 34
  11. The contractor performing the proposed action will implement a professionally prepared erosion and sedimentation control plan as outlined in a Surface Water Pollution Prevention Plan (SWPPP), which will be approved by the Department. (ENVIRONMENT / HIGHWAY DESIGN / CONSTRUCTION) Page 35
  12. Precautions will be employed to minimize noise and dust levels during the construction period, primarily for the abutting receptors located adjacent to the project area. (CONSTRUCTION) Page 35
  13. During construction of the proposed action access to properties, including businesses, will be maintained at all times. Any temporary suspensions of through traffic will be held to a minimum. (CONSTRUCTION) Page 35

## **PART II. FINAL SECTION 4(f) HISTORICAL EVALUATION**

### **1.0 Introduction**

Under Section 4(f) of the Department of Transportation Act as amended by the Federal-Aid Highway Act of 1983, and codified in 49 USC 303(c) the Secretary of Transportation "...may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge, or land of a historic site of national, State or local significance (as determined by Federal, State, or local officials having jurisdiction over the park, area, refuge or site) only if (1) there is no feasible and prudent alternative to the use of such land; and (2) such program or project includes all possible planning to minimize harm to such park, recreation area, wildlife and waterfowl refuge, or historic site resulting from such use."

This Final Section 4(f) Evaluation provides the required documentation to evaluate the potential impacts to Section 4(f) historic resources. This evaluation also outlines coordination that has occurred and the measures proposed to minimize harm to these resources.

### **2.0 Proposed Action**

This project's Purpose and Need is to improve the conveyance of traffic through an approximately 0.6 mile section of NH 110 in the City of Berlin. Presently, NH 110 traverses along a circuitous route along several neighborhood streets from downtown Berlin, at its intersection with NH 16 (Main Street), to the northern periphery of the urban compact of the City (**Exhibit 1**). Truck traffic must negotiate narrow residential streets with several tight intersections and make 90 degree turns while avoiding parked cars, pedestrian and bicycle traffic and other motor vehicles. The high volume of trucks and passenger cars negotiating these narrow, circuitous streets through the neighborhood compromises community cohesion of the neighborhood, bicycle and pedestrian movements and results in considerable concerns for safety.

Safety, efficient operations, neighborhood/community impacts, relocation, impacts to historic resources, consistency with long-term planning, and community support are the pertinent issues.

At present, traffic winds through a dense, residential neighborhood and must make sharp turns on narrow streets with steep grades. Large trucks account for a significant portion of the traffic and pose a significant safety hazard when attempting to negotiate the tight corners. Prior to the Phase 1 project, trucks were detoured away from the deficient clearance under the bridge on Green Street. One consolidated and designated route is desired to improve safety and alleviate congestion.

NH Route 110 in downtown Berlin is an urban minor arterial located within the City's urban compact. The average daily traffic in 2003 totaled 5,110 vehicles, 10.8% of which were trucks. An accident report from 1994-2002 listed a total of 96 accidents. One fatal accident occurred with a bicyclist, and 27 other crashes resulted in personal injuries.

Refer to Part I: Section 1.0, Purpose and Need; Section 3.0 - Existing Condition; and, Section 4.4.2- Selected Alternative - Alternative 4E of the Final Environmental Assessment for additional information.

### **3.0 Description Of Historic 4(f) Resources**

The NH Division of Historical Resources (NHDHR) and the Federal Highway Administration (FHWA) have reviewed the project area pursuant to the National Historic Preservation Act and the Advisory Council on Historic Preservation's procedures for the "Protection of Historic Properties" (36 CFR 800). It was determined by consensus that:

- The Berlin Heights Addition Historic District is eligible for listing on the National Register of Historic Places under Criterion A for Community Planning & Development; Ethnic Heritage and Industry, and under Criterion C for Architecture. Its period of significance is from c.1892 - c.1958, from its planning through the completion of its grid plan and peak population.

Complete descriptions of the historic District and its contributing properties are on file at the NH Division of Historical Resources and at the NH Department of Transportation, Bureau of Environment. More information on this resource is located in Part I, Section 5.17 - Cultural Resources of the Final Environmental Assessment, and **Exhibits 12 and 13**.

### **4.0 Avoidance Alternatives**

An avoidance alternative is prudent and feasible if it avoids using the Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the Section 4(f) property to the preservation purpose of the Section 4(f) statute.

An avoidance alternative is not feasible if it cannot be built as a matter of sound engineering judgment. 23 CFR 774.117 sets forth six factors to consider when determining whether an alternative is prudent:

1. Compromises the project so that it is unreasonable given the purpose and need;
2. Results in unacceptable safety or operational problems;
3. After reasonable mitigation, still causes:
  - Severe social, economic, or environmental impacts;
  - Severe disruption to established communities;
  - Severe environmental justice impacts; or
  - Severe impacts to other federally protected resources;
4. Results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
5. Causes other unique problems or unusual factors; or

6. Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

The following alternatives were considered in this analysis:

#### **4.1 No-Build**

This alternative would not meet the purpose and need for the project and does not address the safety deficiencies of the roadway. Normal maintenance activities are not adequate to correct these problems. Over time, this alternative would lead to increased safety hazards, risk of injury and possibly loss of life. This would not be tolerable given the importance of this major east-west State Highway (NH 110). Additionally, this alternative would not improve the existing substandard geometrics, poor sight distances, and desired minimum shoulder widths for bicycles.

See the discussion in the Final Environmental Assessment for additional information at Part I, Section 4.1 - No Build. For these reasons this alternative is not considered prudent or feasible.

#### **4.2 Bypass Alignments**

The Berlin Heights Addition Historic District is present on both sides of NH 110. Shifting the alignment westerly or easterly to avoid the Historic District properties would require the complete realignment of NH 110 resulting in much greater right-of way acquisitions. Greatly increased impacts to developed properties and environmental impacts would result. The topography, which would be encountered with any full bypass alignment, would raise serious engineering and construction concerns. These alignments would also have substantially greater impacts to undeveloped properties, woodlands, streams, wetlands and substantially increased costs.

See the alternatives discussions in the Final Environmental Assessment for additional information at Part I, Section 4.3 - Bypass Alignments. For these reasons, these alternatives are not considered prudent or feasible.

#### **5.0 Impacts on Section 4(f) Properties**

The realignment of NH 110 would require the total acquisition from the Berlin Heights Addition Historic District of twenty-seven properties with primary contributing buildings, containing ten secondary contributing buildings. The proposed project would also require the total acquisition of three parcels with secondary contributing structures. Eight contributing properties would require permanent strip acquisitions. Additional impacts to the existing street and grid layout would also be required to reconfigure and modify existing intersections. Temporary slope easements would be placed on several properties to accommodate minor slope impacts during the construction of the Selected Alternative (see **Exhibit 7**).

### Impacts on Section 4(f) Properties

| Berlin Heights Addition Historic District        |   | Permanent Acquisitions       |
|--|---|------------------------------|
| Type   | Parcels Contributing to District  | New Right of Way             |
| Primary structures<br>(27 Total Acquisitions)    | 2*, 8*, 14, 16*, 20, 24, 27*, 29, 31/33*, 32*, 34*, 35, 36, 37*, 38, 39, 40, 41, 42, 105, 106, 109, 111*, 115*, 116, 117, and 121 | 2.89 ac<br>(125,962 sq. ft.) |
| Secondary structures**<br>(3 Total Acquisitions) | 3, 7 and 113  | 0.41 ac<br>(17,812 sq. ft.)  |
| Strip acquisitions                               | 30, 43, 102, 122, 126, 130, 133, and 140  | 0.02 ac<br>(681 sq. ft.)     |
| Temporary Construction Easements                 | 127, 128, 129, 135, 136, and 138  | NA                           |
| Reconfiguration of intersections                 | Green Street, First Avenue, Second Avenue, and Third Avenue - street and grid layouts   | 1.65 ac<br>(71,810 sq. ft.)  |
| Project Total                                    |   | 4.96 ac                      |

\* - parcels that include contributing secondary structures.

\*\* - parcels with only contributing secondary structures (if present, primary structures are non-contributing).

Although Alternative 4E demolishes a larger number of contributing properties than Alternative 2 in the District, the alignment follows the eastern boundary of the District, and it does less to compromise the feeling, association and linkages that are the defining characteristics of the District's core. Although determinations of individual eligibility for each building impacted within the Berlin Heights Addition Historic District were not made; it is the relationship of these properties to each other as parts defining the whole from which they gain their significance. The Selected Alternative, maintains the sum of the parts of the District by placing its impacts along the edge of the District.

#### **6.0 Measures to Minimize Harm**

The design of the Selected Alternative was undertaken to minimize right-of-way acquisition and slope impacts to adjacent properties within the proposed alignment. This alternative was developed to provide a ROW width of 66 feet for a section of the alignment from Green Street to Third Avenue and a width of 46 feet along Wight Street within the Berlin

Heights Historic District. However, avoidance of historic impacts were not feasible and prudent where safety concerns, site conditions, cost and resource constraints occurred and where traffic demands warranted appropriate changes.

The following mitigation measures were included as part of the project and are further discussed in Part I, Section 5.17.1.4 - Historical Resources Impact Mitigation:

Documentation: The level of documentation for each property will vary and is in part dependent on the integrity of the resource. Determination of the appropriate level of documentation of each property will occur in consultation with the NESHPO.

Public Forums and Workshops, and Planning Charette: Practical workshops on preservation will be presented for the residents of the Berlin Heights Addition Historic District. A charrette will be held to discuss planning for historically compatible reuse of and reinvestment in open spaces resulting from the construction of the project.

Historically Compatible Landscaping: Vegetative screening would be placed along portions of the proposed corridor.

Purchase and Resale with Covenants of Dwellings in the District: The purchase of approximately four vacant properties, located within and contributing to the Berlin Heights Historic District, for resale with covenants. The covenants will apply to the preservation of the physical integrity of the exterior of the historic structures at current, or better, condition and will remain in force for a period of eight years.

Public Outreach: Public outreach will include placement of state historical markers and the uploading of historical studies, forums, workshops and charette to websites.

## **7.0 Least Harm Analysis**

If there is no feasible and prudent alternative to avoid harm to the Section 4(f) property, then only the alternative that causes the least overall harm in light of the statute's preservation purpose can be chosen. The least overall harm is determined by balancing the:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;
3. Relative significance of each Section 4(f) property;
4. Views of the officials with jurisdiction over each Section 4(f) property;
5. Degree to which each alternative meets the purpose and need;
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
7. Substantial differences in costs among alternatives.

As discussed in Section 4.2 - NH Route 110 Alternatives several preliminary alternatives were evaluated that relocated NH Route 110 along different alignments in the vicinity of the existing alignment. Based on input received at Public Informational meetings, lack of support and the similarity of impacts, these alternatives (Alternative 1, Alternative 3E, and Alternative 3W) were not further developed as their alignments had horizontal, vertical and sight distance

concerns, they performed similar functions as Alternative 2, and they were all determined to have greater impacts than Alternative 2, which is considered below.

Alternative 4W was also not further developed as its alignment is further away from the railroad corridor and closer to the center of the District than Alternative 4E, the Selected Alternative, considered below and which performs similar functions with less impacts to the neighborhood and the District.

The No-Build, Alternative 2 and Alternative 4E alternatives were considered in this analysis:

### **7.1 No-Build**

1. No mitigation would be required under this alternative; however over time this alternative would lead to the continued deterioration of the District.
2. There would be continuing long-term deterioration of the District with the heavy truck and passenger car through traffic remaining within the center of the District. Further deterioration of the residential characteristic of this portion of the District may be subjected to increased commercialization and loss of character of the District.
3. There would be no impacts to Section 4(f) properties as no construction would occur; however over time continued deterioration of the District would occur.
4. The No-Build was not supported by the NHSHPPO as over time continued deterioration of the District would occur.
5. The No-Build would not meet the Purpose and Need of the project.
6. The adverse impacts to safety, neighborhood cohesion, noise, and traffic patterns would continue to increase and would lead to further deterioration of the residential aspect of the neighborhood.
7. The No-Build would incur the least cost of the alternatives, but does not meet the Purpose and Need of the project.

### **7.2 Alternative 2**

1. Similar mitigation as Alternative 4E would be required consisting of documentation of the resources contributing to the District, Public Forums, Workshops, Landscaping, Relocation of Historic Properties and Public Outreach. The secondary goals of the project to reduce through passenger and truck traffic that bisect the District would not be possible to mitigate as the alignment would continue to pass through the center of the District.
2. An Adverse Effect would remain on the District as Alternative 2 would maintain and intensify the division that the existing NH 110 alignment along Third Avenue creates between those residential areas cut off by NH 110, located to the east of Third Avenue, and the majority of the Historic District and remaining neighborhood located south of Green Street and north of Third Avenue. The alignment would interrupt the established grid pattern of the street layout that is throughout the project area and the Berlin Heights Addition neighborhood. The Alternative 2 alignment retains this neighborhood division and with the introduction of a curvilinear design would

enhance the division. Construction of Alternative 2 through the middle of the District would visually and physically sever the District's continuity, effectively fragmenting what had been united historically by its physical development and evolution

3. There are less acquisitions to contributing buildings within the District than Alternative 4E. These contributing elements of the District are similar in type and there are no impacts to any architecturally outstanding properties. The alternative would present greater impacts to the street grid layout of the District by bisecting an existing urban block. The District would continue to deteriorate with the traffic remaining through the center of the District. The alternative would visually and physically sever the District's continuity, effectively fragmenting what had been united historically by its physical development and evolution.
4. The NHSHPD has determined that the alternative would have an Adverse Effect on the District. The NHSHPD have signed an effects memo with the FHWA and NH DOT to resolve the Adverse Effects of Alternative 4E. An MOA that details the mitigation measures has been included in the Final Section 4(f) Evaluation.
5. The alternative would not adequately address the concerns iterated in the Purpose and Need for the project. Conflicts with more driveways would remain than with Alternative 4E, safety issues would remain with heavy truck traffic continuing to pass through the same residential neighborhood area as presently occurs. The residences located within the neighborhood that contribute to the District would continue to be further impacted.
6. Impacts due to noise, safety, community cohesion would not be easily mitigated with the selection of Alternative 2. The alternative would contribute to the continued deterioration of the neighborhood by retaining a truck route through a residential area. The visual impacts of the alternative would be severe as it would realign NH 110 through a city block causing the loss of the existing street grid layout.
7. The alternative would be less costly, though not considered substantially so, than Alternative 4E. The costs would be mainly due to total number of acquisitions being less, the construction costs would be similar.

### **7.3 Alternative 4E**

1. Mitigation of the adverse effect of the Selected Alternative would consist of documentation of the resources contributing to the District, Public Forums, Workshops, Landscaping, Relocation of Historic Properties and Public Outreach (see Section 6.0 above). A Memorandum of Agreement addressing the Proposed Action and mitigation measures has been developed and signed by NHSHPD, FHWA and NHDOT.
2. An Adverse Effect would remain on the District as a large number of contributing properties in the District would be acquired. Although the Alternative impacts a greater number of contributing properties than Alternative 2, the alignment follows the eastern boundary of the District and does less to compromise the feeling, association and linkages that are the defining characteristics of the District's core than Alternative 2.
3. The contributing elements of the District are similar in type and there are no impacts to any architecturally outstanding properties. Although determinations of individual

eligibility for each building impacted within the Berlin Heights Addition Historic District were not made; it is the relationship of these properties to each other as parts defining the whole from which they gain their significance. The Selected Alternative, maintains the sum of the parts of the District by placing its impacts along the edge of the District.

4. The NESHPO has determined that the alternative would have an Adverse Effect on the District. The NESHPO has concurred with the Selected Alternative and have signed an effects memo (**Exhibit 13**) with the FHWA and NH DOT to address the Adverse Effects of the proposed project. An MOA that details the mitigation measures has been included in the Final Section 4(f) Evaluation.
5. The Selected Alternative better meets the Purpose and Need of the project than Alternative 2 by reducing the number of driveway conflict points, removing heavy truck traffic from the District and neighborhood, thereby increasing the safety of the residents and reducing the long-term deterioration of the District.
6. Alternative 4E will have less overall long-term impacts to the neighborhood than Alternative 2 by removing the heavy truck traffic from the center of a residential neighborhood and by moving the NH 110 alignment along the railroad to establish a transportation corridor along the edge of the neighborhood. Community cohesion and safety would improve to the neighborhood with the movement of truck and through traffic away from the middle of the neighborhood. The visual impacts of the alternative would be mitigated by landscaping along the edge of the alignment providing visual separation of the corridor from the residential area. The majority of the existing street grid layout would remain, contributing to retaining the residential neighborhood aspect.
7. Alternative 4E would be more costly, though not considered substantially so, than Alternative 2. The costs would be mainly due to total number of acquisitions being greater, the construction costs are fairly similar. The City of Berlin has supported the extra costs as they would provide for long-term revitalization of the neighborhood and is consistent with the City's planning vision.

See the discussions in the Final Environmental Assessment for additional information at Part I: Section 4.2 - NH Route 110 Alternatives; Section 4.4 - Alternative Retained for Further Consideration - Alternative 2, Section 5.10 - Neighborhoods / Displacements, and Section 5.17.1.3 Comparison of Effects of Alternatives.

## **8.0 Coordination**

Coordination meetings have been held with the NH Division of Historical Resources, the Federal Highway Administration, the NH Department of Transportation, City of Berlin Officials, and concerned citizens to discuss alternatives and measures to minimize harm to the Section 4(f) properties. The measures which were considered feasible and prudent were evaluated and incorporated into the design of the project. See Part I, Section 6.0 - Agency Coordination and Public Participation in the Final Environmental Assessment for more information on the dates of the public coordination and distribution of the document.

A Determination of Effects memo was prepared which addresses unavoidable impacts to the historic properties (see **Exhibit 13**). After further evaluation of the appropriate mitigation for these impacts and pursuant to Section 106 of the National Historic Preservation Act (36 CFR 800), a Memorandum of Agreement addressing the Proposed Action was developed and signed by NHSHP, FHWA, the City of Berlin and NHDOT (**Exhibit 14**).

### **8.1 Monthly Cultural Resource Meetings/Discussions**

June 6, 2002, July 15, 2002, February 26, 2003, March 24, 2003, April 8, 2004, May 13, 2004, June 10, 2004, July 2, 2008, December 4, 2008, February 12, 2009, May 14, 2009, June 4, 2009, June 22, 2009, October 1, 2009, January 14, 2010, February 4, 2010 and March 11, 2010.

### **8.2 Monthly Natural Resource Meetings**

July 15, 2009

### **8.3 Public Officials and Public Informational Meetings**

November 13, 2001 - Scoping Public Officials  
February 13, 2002 - Scoping Public Informational  
April 19, 2004 - City Council Meeting  
August 28, 2008 and March 19, 2009 - NHDOT/FHWA Public Informational Meetings

### **8.4 Public Hearing**

ROW Public Hearing - August 13, 2009.  
NEPA Public Hearing - August 27, 2009.

### **8.5 Comments**

Comments on the Draft Section 4(f) Evaluation were received from the Department of Interior, the Advisory Council on Historic Preservation, the NHSHP, and the City of Berlin (**Exhibits 15, 16, 17 and 18**). Specific comments and responses are summarized below.

#### Department of Interior

- The MOA should encompass a broader discussion on archaeology.  
*Archeology has been incorporated in the MOA under **Stipulation VI – Archaeological Investigations**.*
- Level of documentation of the properties should be judged by the NH-SHPO.  
*Coordination with the NH SHPO has been defined in the MOA under **Stipulation I – Documentation and Acquisition of Historic Properties**.*
- Proposed relocation of the historic properties be considered in consultation with the NH-SHPO.  
*After further evaluation of this proposed relocation mitigation measure and in consultation with the NHSHP, FHWA and the City of Berlin, this mitigation*

*measure was eliminated in favor of pursuing the purchase of historic dwellings within the District and their resale with covenants as defined in the MOA under **Stipulation IV - Purchase and Resale with Covenants of Dwellings in the District.***

#### Advisory Council on Historic Preservation

- The Advisory Council concluded that their involvement does not apply for this undertaking, and that participation in the consultation to resolve adverse effects is not needed. The final MOA, developed in consultation with the NH SHPO and other consulting parties, is to be filed with the Advisory Council to complete the requirements of Section 106 of the National Historic Preservation Act  
*The final MOA has been developed and signed by the NH SHPO, FHWA, City of Berlin and NH DOT. A copy of the MOA, included in this documentation, has been provided to the Advisory Council pursuant to 36 CFR 800.*

#### NH State Historic Preservation Officer/Director of NH DHR

- Change in wording on the comparison of effects to reflect that both alternatives present a great deal of adverse effect, in ways that impact the District differently.  
*The wording has been changed throughout the document to reflect that both alternatives present irreversible adverse effects.*
- Clarification of two bullets in Section 6.17.1.3 - Comparison of Effects of Alternatives.  
*These statements were clarified (note: due to incorrect numbering in the Draft document this Section is now **Section 5.17.1.3**).*
- Change the wording on Alternative 4E to reflect that it greatly compromises the feeling, association and linkages that define the eastern portion of the District.  
*The wording has been changed throughout the document to reflect that though Alternative 4E greatly demolishes a large number of contributing properties at the eastern boundary of the District, it does less to compromise the defining characteristics at the District's core.*
- Mitigation discussion is missing two key ideas – discussion of a series of workshops and number of relocated properties not be limited to one as discussed in meetings with DHR.  
*The mitigation section of the document and the MOA's **Stipulation II - Public Forum and Workshops and Planning Charrette** were revised to reflect the series of workshops.*

*After further evaluation of the proposed relocation mitigation option and in consultation with the NHSHPO, FHWA and the City of Berlin, this mitigation measure was eliminated in favor of pursuing the purchase of historic dwellings within the District and their resale with covenants as defined in the MOA under **Stipulation IV - Purchase and Resale with Covenants of Dwellings in the District.***

- Statement made in the document that no outstanding or individually eligible properties exist in the District is incorrect. No Determination of Eligibility for individual properties were made.  
*The statements throughout the document have been changed to reflect that no individual determinations of eligibility were made as part of the documentation of the resources for the project.*

### City of Berlin

- Clarification of the information about Census Block data in Section 6.11.2 as it relates to the limits of the project. The Berlin Housing Authority's main property though located in this Census Block is beyond the project area and the inclusion in this Census Block impacts the median household income for this block group. *This discrepancy has been clarified in the document (note: due to incorrect numbering in the Draft document this Section is now **Section 5.11.2**).*
- Concerns about the ultimate cost of the mitigation of the historic impacts for the project, especially in regards to the level of documentation required on all of the impacted properties. As no individually eligible properties have been identified, nor are there any single buildings in the project area that the community feels particularly attached to, a more cursory document that gives an overall description of the District is suggested as being more reasonable. The community views the removal of the truck route through the middle of the District and routing it to its edge will be the most effective toward saving historic structures of the district, as well as benefiting the neighborhood. *The final MOA has been developed and signed by the NH SHPO, FHWA, City of Berlin and NH DOT. The mitigation package as outlined in the MOA has been discussed in consultation with the City. The level of documentation for each property will vary and is in part dependent on the interior integrity of the resource as defined in the MOA under **Stipulation I - Documentation and Acquisition of Historic Properties**. As noted in response to NH SHPO no individual determinations of eligibility were made as part of the documentation of the resources for the project.*

Responses to these comments have been incorporated in the Final Environmental Assessment and Final 4(f) Evaluation and the MOA as appropriate. Comments were received from the general public, City and regional officials during the Public Hearings. A summary of the Public Hearing comments and responses by the NHDOT is contained in NHDOT's Report of the Commissioner (**Exhibit 19**).

Requests made for full acquisition by the owners of two abutting historic properties, due to the extent of the impacts, were granted. These properties will be evaluated as to their resale potential by the NHDOT and City of Berlin, and marketed as appropriate.

### 9.0 Summary Statement

Based upon the above considerations, it was concluded that there are no feasible and prudent alternatives to the use of land from Section 4(f) properties, and the proposed action includes all planning to minimize harm to these properties resulting from such use.

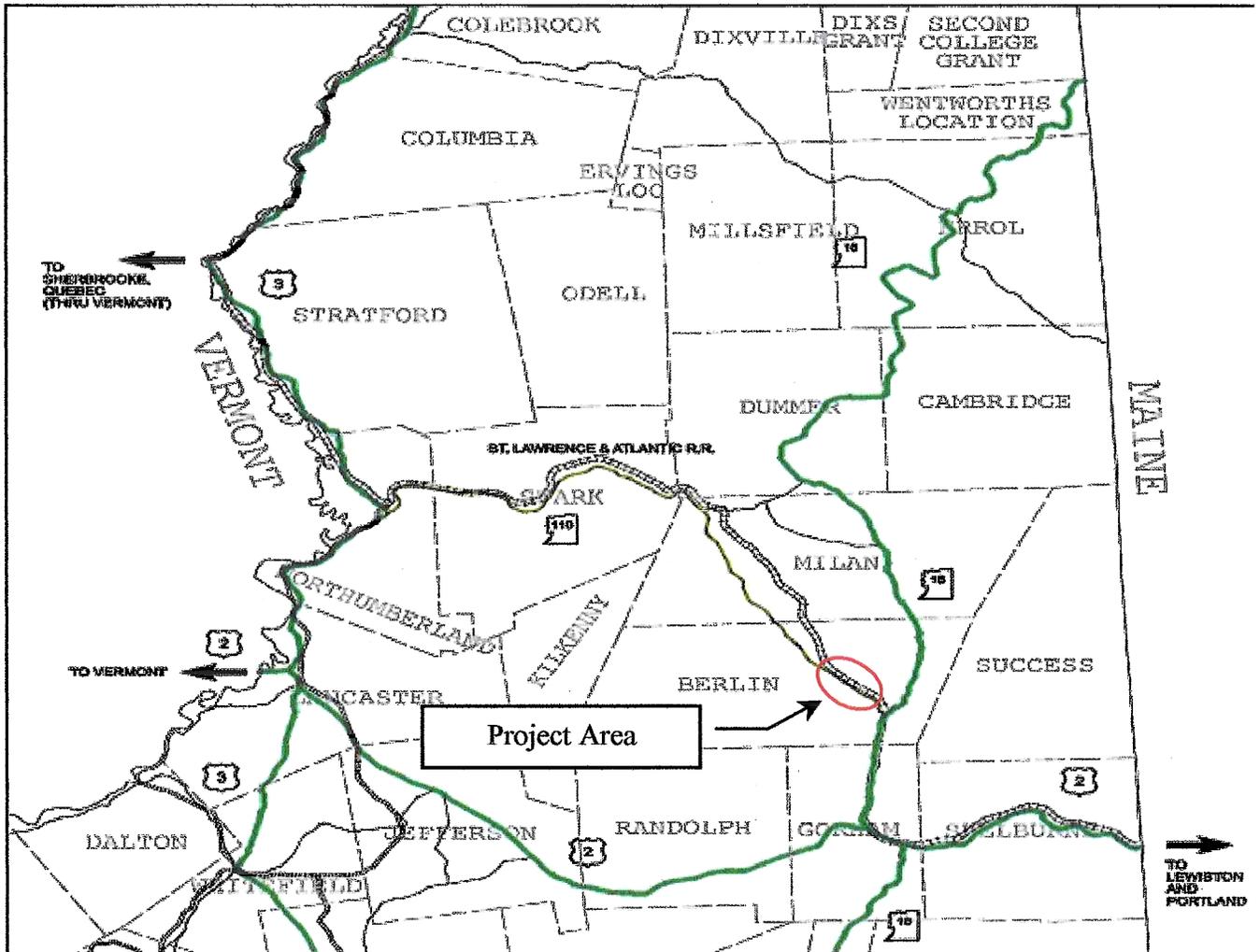
## **EXHIBITS**







# Regional Map





**SUMMARY OF IMPROVEMENT ALTERNATIVE CHARACTERISTICS / IMPACTS**

| Characteristics/Impacts   | Transportation Improvement Alternatives                           |   |  |  |  |  |  | Wight   |
|---|---|---|--|--|--|--|--|---|
|   | Alternative 1   | Alternative 2   | Alternative 3E                                     | Alternative 3W                                     | Alternative 4E                                     | Alternative 4W                                     |  |   |
| <b>Concept No.</b>  |   |   |  |  |  |  |  |   |
| <b>Level of Community Support</b><br><small>Measure of relative acceptance by community. (1 being best)</small>               |   |   |  |  |  |  |  | Similar   |
| <b>Transportation System Efficiency &amp; Safety:</b><br><small>Ease of access and lack of congestion. (1 being best)</small> |   |   |  |  |  |  |  |   |
| <b>Length of NH 110 Improvement (ft)</b><br><small>(See plans)</small>  | 2015  | 1890  | 1905   | 1900   | 2075   | 1120   |  | 1510  |
| <b>Length of Side Roads Improvement (ft)</b><br><small>(See plans)</small>  | 2110  | 675   | 65   | 565  | 800  | 1150   |  | 190   |
| <b>Number of Intersections</b><br><small>(See plans)</small>  | 6   | 7   | 5  | 5  | 6  |  |  | 4   |
| <b>Number of Drives</b><br><small>(See plans)</small>   |   | 30  |  |  | 10   |  |  |   |
| <b>Horizontal Alignment</b><br><small>(See plans)</small>   | Very curvilinear  | Moderately curvilinear                                | More direct  | More direct  | (30 mph Design) direct                             | More direct  |  |   |
| <b>Vertical Alignment (Max. Grade)</b>  | 5.0%  | 4.5% (7% vicinity of bridge)                          | 6.5%   | 6.2%   | 4.0% (7% vicinity of bridge)                       | 5.5%   |  |   |
| <b>Intersection Sight Distances</b>   |   | Sight distance is poor or limited at 4 intersections. |  |  | Sight distance is limited at 2 intersections.      |  |  | Closely follows existing alignment. Sight shifts west and east to minimize impacts. |
| <b>Miscellaneous</b>  | Shallow grade at SRD 400. Intersections proximity of 21D and 3RD. | Proximity of intersections of 2ND and 3RD             | Proximity of Hillside RR crossing at intersection. | Proximity of Hillside RR crossing at intersection. | Proximity of Hillside RR crossing to intersection. | Proximity of Hillside RR crossing to intersection. |  | -3.4%   |
| <b>Property Impacts:</b>  |   |   |  |  |  |  |  |   |
| <b>No. of Parcels Impacted</b>  | 31  | 33  | 50   | 18   | 45   | 55   |  | 34  |
| <b>No. of Total Property Acquisitions</b>   |   | 12  | 25   | 25   | 27   | 28   |  | 0   |
| <b>(No. of Housing Units Affected)</b>  |   | 0   |  | 3  | 1  |  |  | 0   |
| <b>Additional Potential Total Acquisitions</b>  |   |   |  |  |  |  |  |   |
| <b>Wetland Impacts:</b>   | None  | None  | None   | None   | None   | None   |  | None  |
| <b>Historic Properties</b>  | TBD   | TBD   | TBD  | TBD  | TBD  | TBD  |  | TBD   |
| <b>Archaeological Resources</b>   | TBD   | TBD   | TBD  | TBD  | TBD  | TBD  |  | TBD   |
| <b>Community/Neighborhood Integrity</b>   | Splits Neighborhood (Time City Block)                             | Splits Neighborhood (Time 2 City Blocks)              | Splits Neighborhood (Down Second Ave)              | Splits Neighborhood (Down Second Ave)              | Preserves Neighborhood (Along RR Corridor)         | Preserves Neighborhood (Along RR Corridor)         |  |   |
| <b>Cost: (2008 Dollars)</b>   |   |   |  |  |  |  |  |   |
| <b>Preliminary Engineering</b>  |   | \$500,000   |  |  | \$500,000  |  |  | Construction Costs Included In Alternatives   |
| <b>Right-of-Way</b>   |   | \$3,000,000   |  |  | \$5,600,000  |  |  |   |
| <b>Construction</b>   |   | \$3,800,000   |  |  | \$4,000,000  |  |  |   |
| <b>Total</b>  |   | \$7,300,000   |  |  | \$10,100,000                                       |  |  |   |

\* ROW Cost includes Relocation, Business Re-establishment, Demolition, & Administration Costs  
TBD = To Be Determined

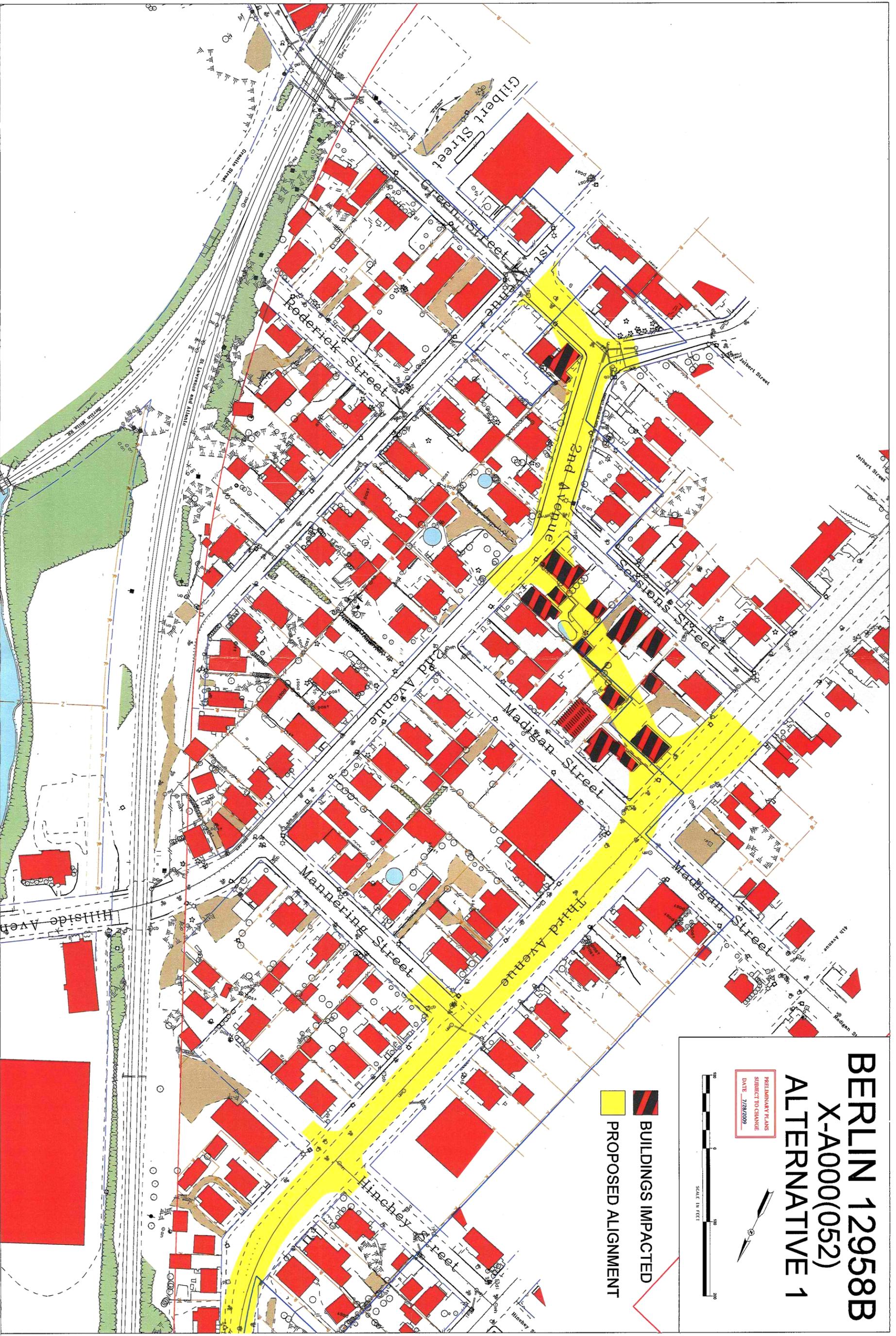


# BERLIN 12958B X-A000(052) ALTERNATIVE 1

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE 7/28/2009



-  BUILDINGS IMPACTED
-  PROPOSED ALIGNMENT



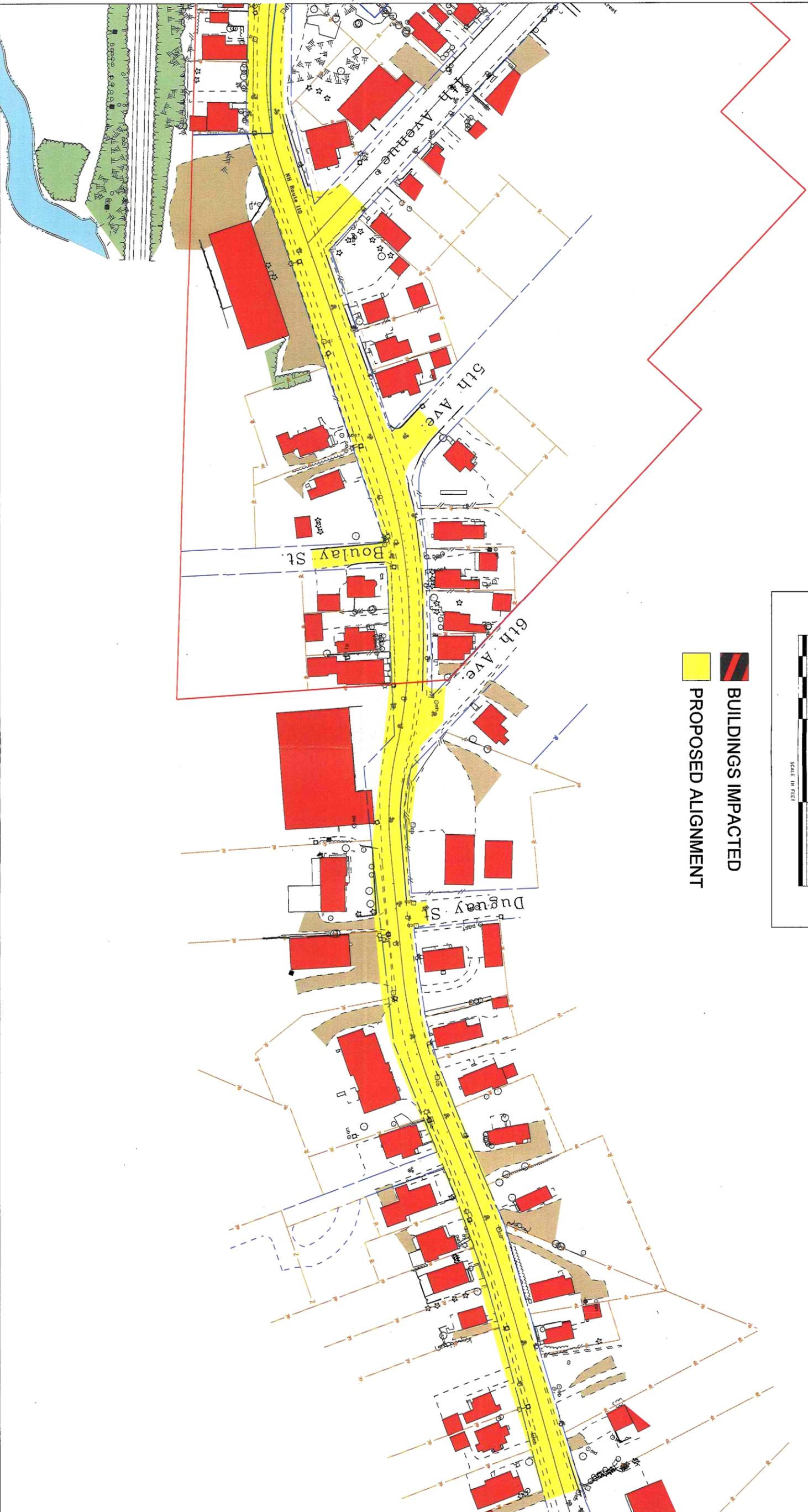


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PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE 7/28/2009



-  BUILDINGS IMPACTED
-  PROPOSED ALIGNMENT



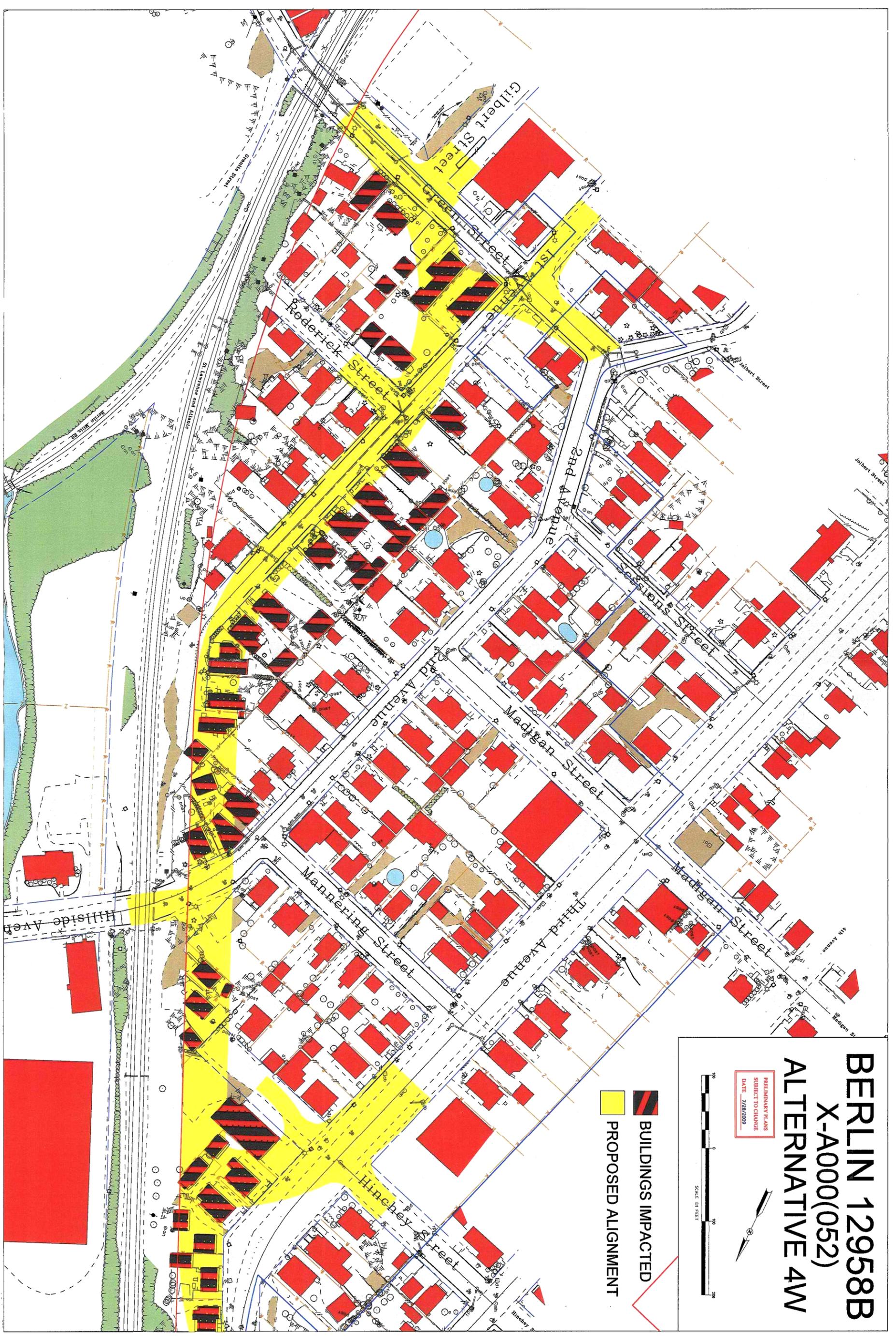


# BERLIN 12958B X-A000(052) ALTERNATIVE 4W

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE: 7/28/2009



-  BUILDINGS IMPACTED
-  PROPOSED ALIGNMENT



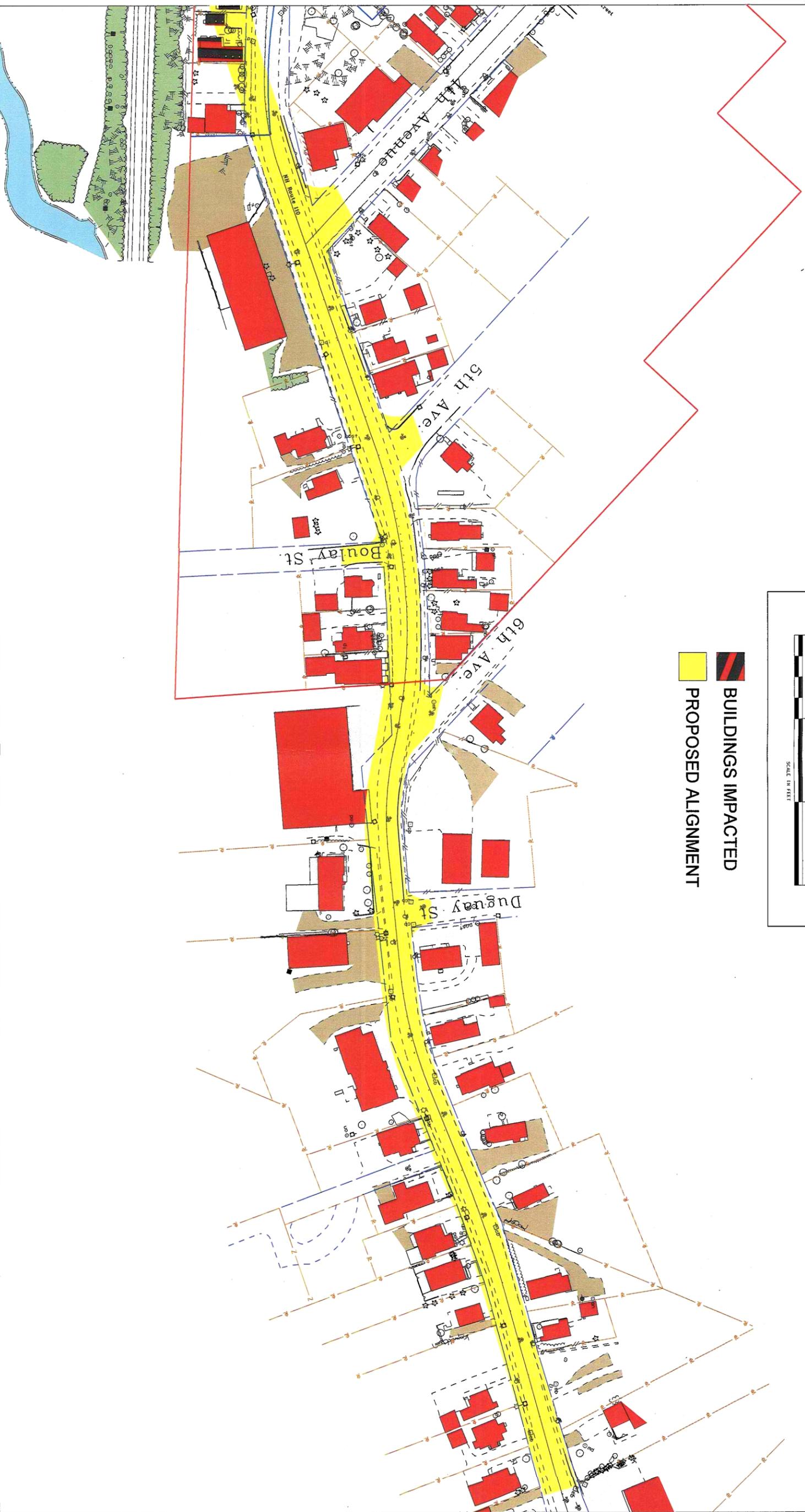


# BERLIN 12958B X-A000(052) ALTERNATIVE 4W

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE 7/28/2009



-  BUILDINGS IMPACTED
-  PROPOSED ALIGNMENT



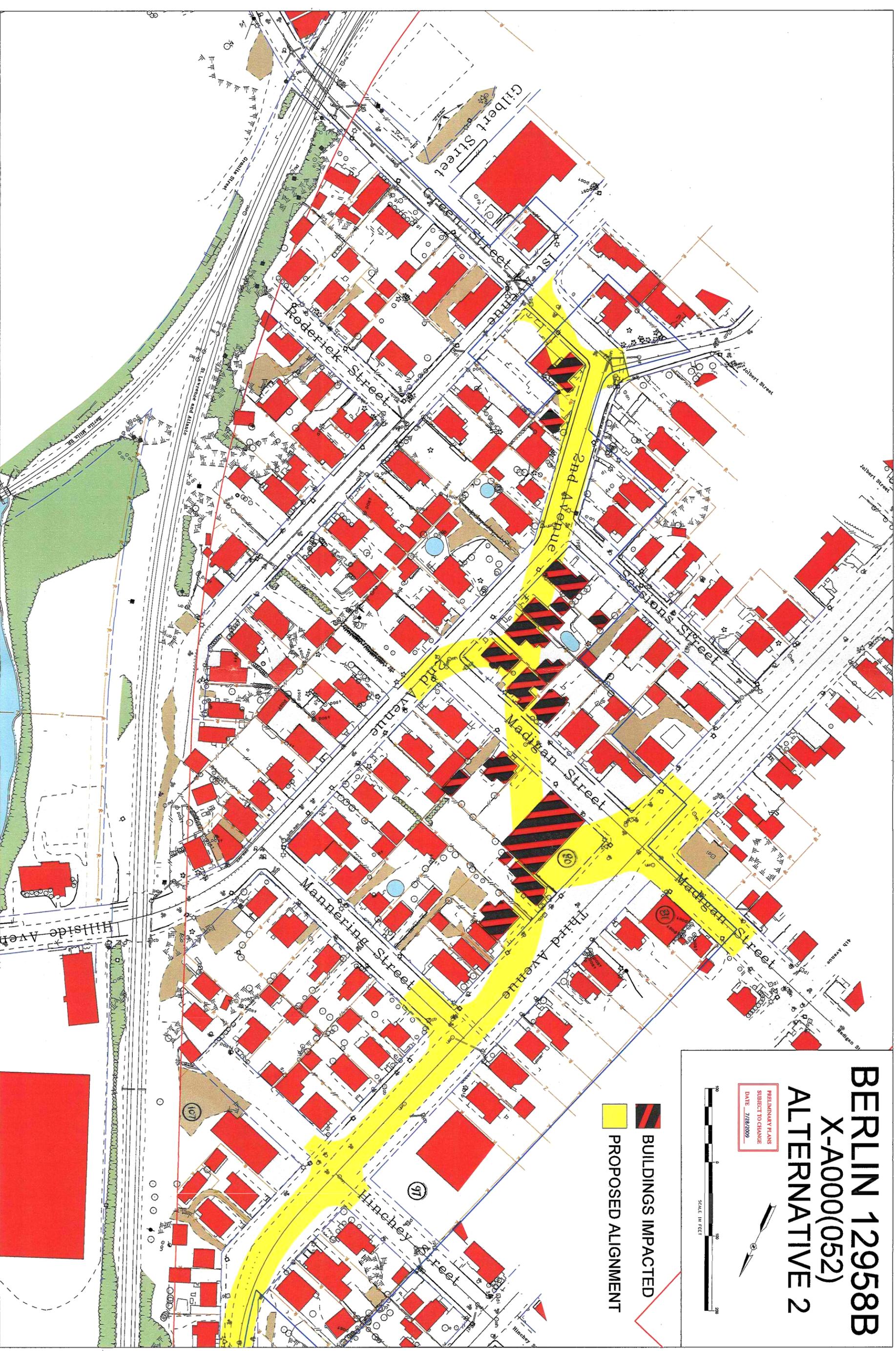


# BERLIN 12958B X-A000(052) ALTERNATIVE 2

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE: 7/28/2009



-  BUILDINGS IMPACTED
-  PROPOSED ALIGNMENT





# BERLIN 12958B X-A000(052) ALTERNATIVE 2

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE 7/28/2009



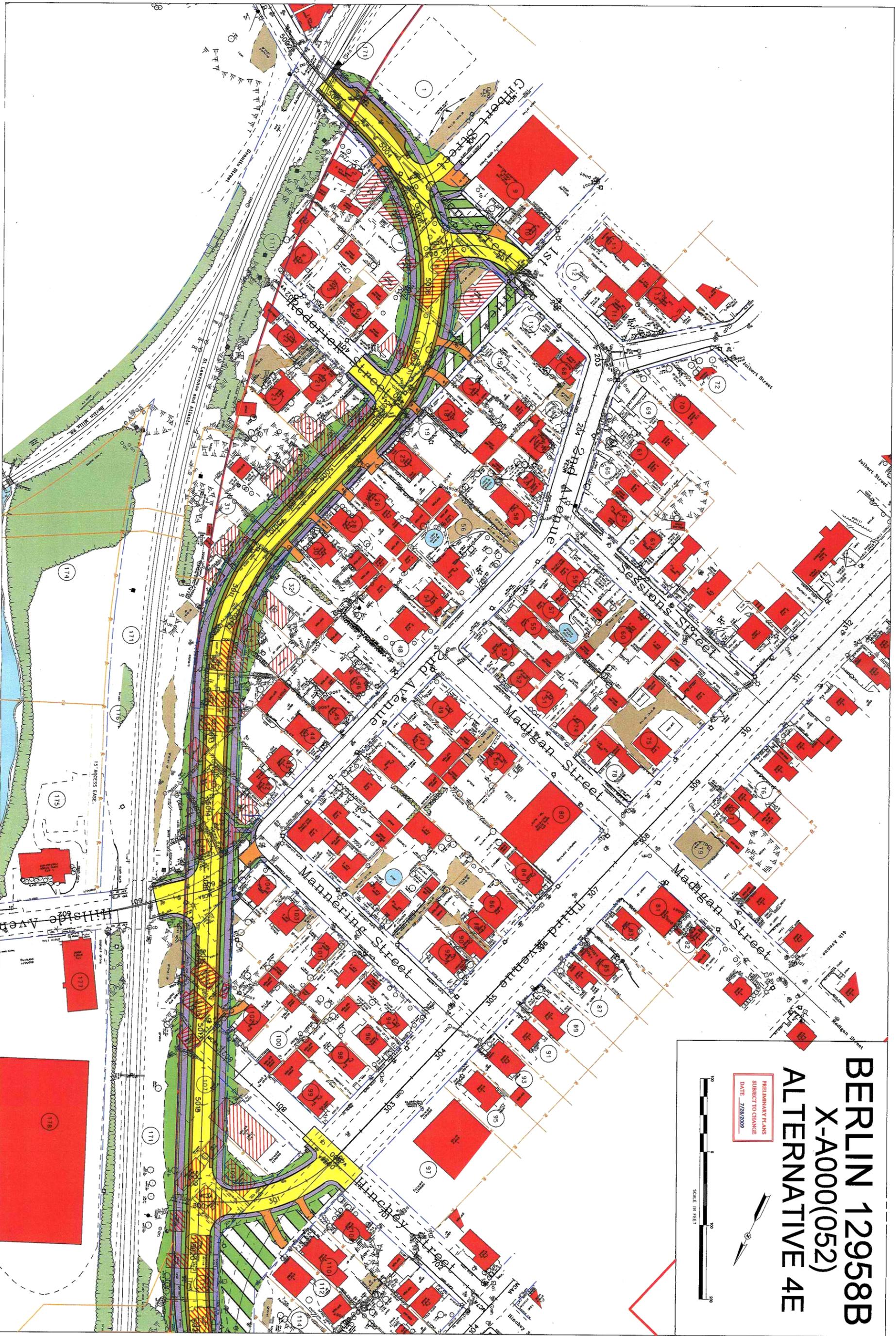
-  BUILDINGS IMPACTED
-  PROPOSED ALIGNMENT





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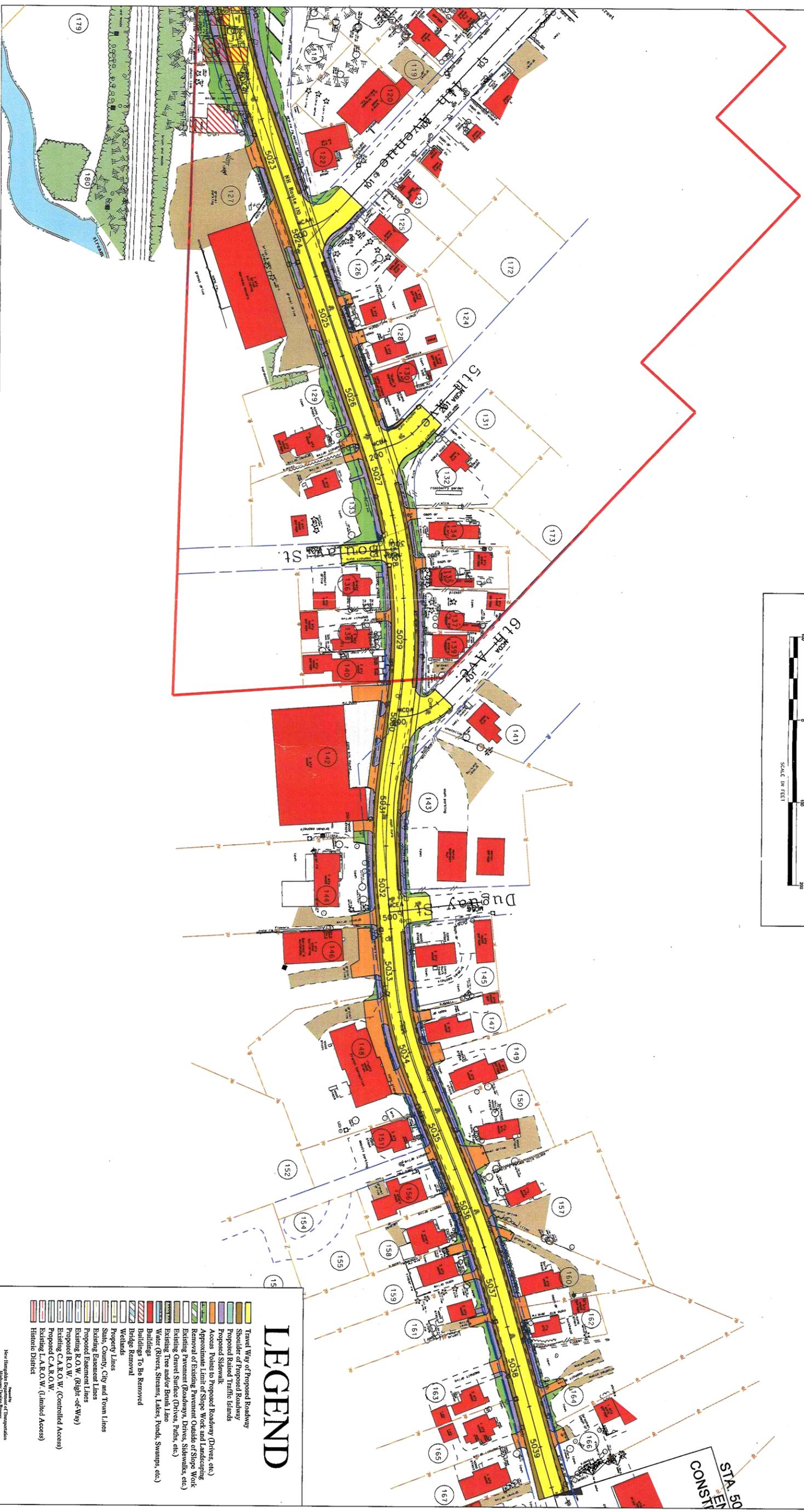
PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE 7/28/2009





# BERLIN 12958B X-A000(052) ALTERNATIVE 4E

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
DATE: 7/28/2009



## LEGEND

- Travel Way of Proposed Roadway
- Shoulder of Proposed Roadway
- Proposed Sidewalk
- Proposed Railed Traffic Islands
- Access Points to Proposed Roadway (Drives, etc.)
- Approximate Limit of Slope Work and Landscaping
- Removal of Existing Pavement Outside of Slope Work
- Existing Pavement (Roadways, Drives, Sidewalks, etc.)
- Existing Gravel Surface (Drives, Paths, etc.)
- Existing Tree and/or Brush Line
- Water (Drives, Streams, Lakes, Ponds, Swamps, etc.)
- Buildings
- Buildings To Be Removed
- Bridge Removal
- Wetlands
- Property Lines
- State, County, City and Town Lines
- Existing Easement Lines
- Proposed Easement Lines
- Existing R.O.W. (Right-of-Way)
- Proposed R.O.W.
- Existing C.A.R.O.W. (Controlled Access)
- Proposed C.A.R.O.W.
- Existing L.A.R.O.W. (Limited Access)
- Historic District

Massachusetts Department of Transportation  
Highway Design Bureau





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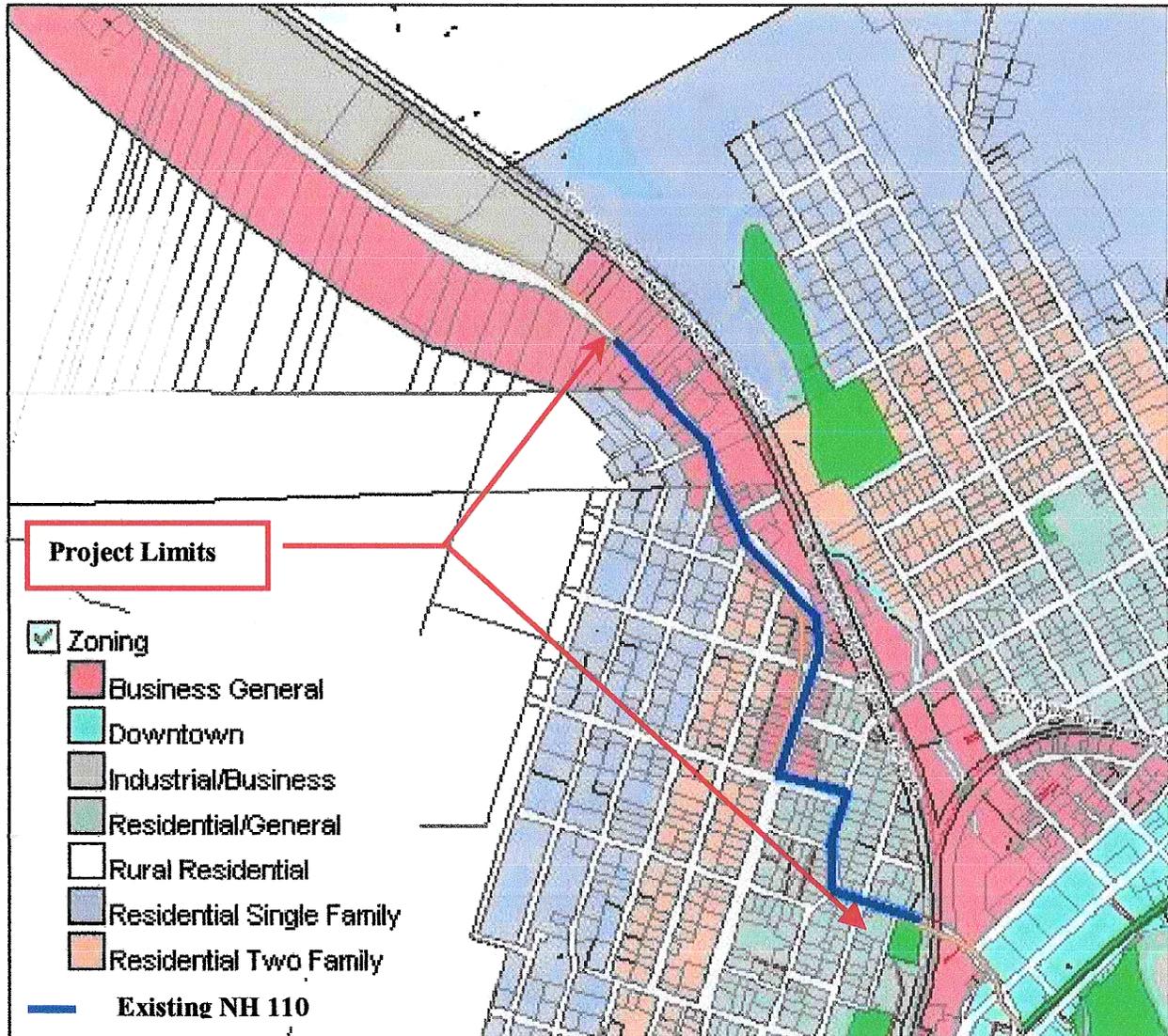
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# City of Berlin Zoning Map of Project Area





# Memo

NH NATURAL HERITAGE BUREAU



**To:** Catherine Goodmen, NH DOT  
7 Hazen Drive  
P.O. Box 483  
Concord, NH 03302-0483

**From:** Melissa Coppola, NH Natural Heritage Bureau  
**Date:** 4/2/2009 (valid for one year from this date)  
**Re:** Review by NH Natural Heritage Bureau  
NHB File ID: NHB09-0585  
**Project type:** Roads, Driveways, Bridges: Road  
construction, etc.  
**Town:** Berlin  
**Location:** Route 110 through City of Berlin  
**cc:** Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

## Comments:

## Vertebrate species

|  | State | Federal | Notes  |
|--|-------|---------|--|
| Bald Eagle ( <i>Haliaeetus leucocephalus</i> ) | T     | M       | Contact the NH Fish & Game Dept (see below). |
| Common Nighthawk ( <i>Chordeiles minor</i> )   | E     | --      | Contact the NH Fish & Game Dept (see below). |

\*Codes: "E" = Endangered, "T" = Threatened, "-" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (\*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.

Department of Resources and Economic Development  
Division of Forests and Lands  
(603) 271-2214 fax: 271-6488

DRED/NHB  
PO Box 1856  
Concord NH 03302-1856



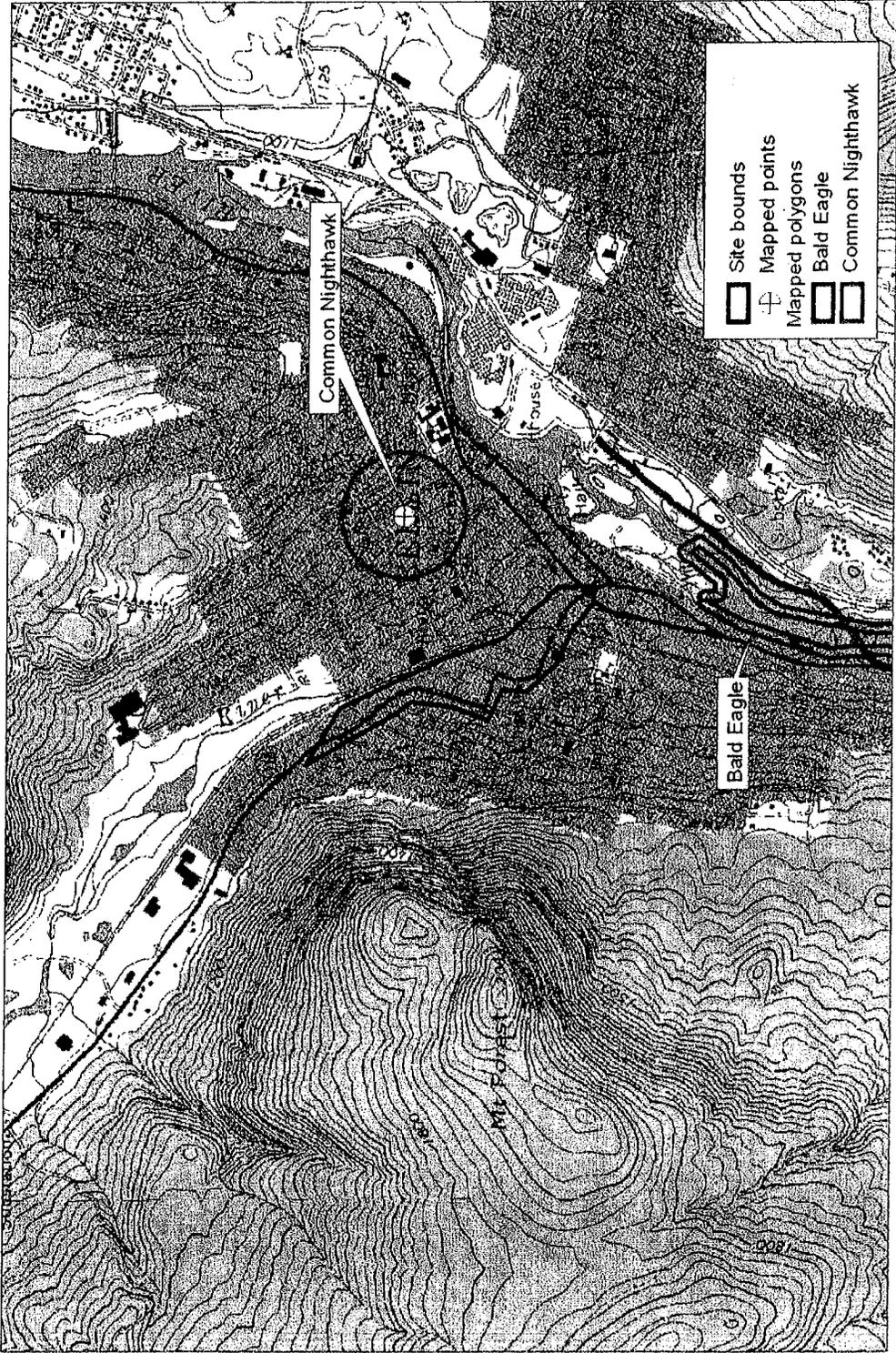
NHB09-0585



NH NATURAL HERITAGE BUREAU

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.





## New Hampshire Natural Heritage Bureau - Animal Record

**Bald Eagle (*Haliaeetus leucocephalus*)****Legal Status**

Federal: Monitored  
 State: Listed Threatened

**Conservation Status**

Global: Demonstrably widespread, abundant, and secure  
 State: Critically imperiled due to rarity or vulnerability

**Description at this Location**

Conservation Rank: Not ranked  
 Comments on Rank:

Detailed Description: 1993: Occasional observations from Rte. 16 between Berlin and Gorham.

General Area:

General Comments:

Management

Comments:

**Location**

Survey Site Name: Androscoggin River  
 Managed By: Drew Easement

County: Coos

Town(s): Gorham

Size: 165.3 acres

USGS quad(s): Berlin (4407142)

Lat, Long: 442539N, 0711129W

Elevation: 800 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

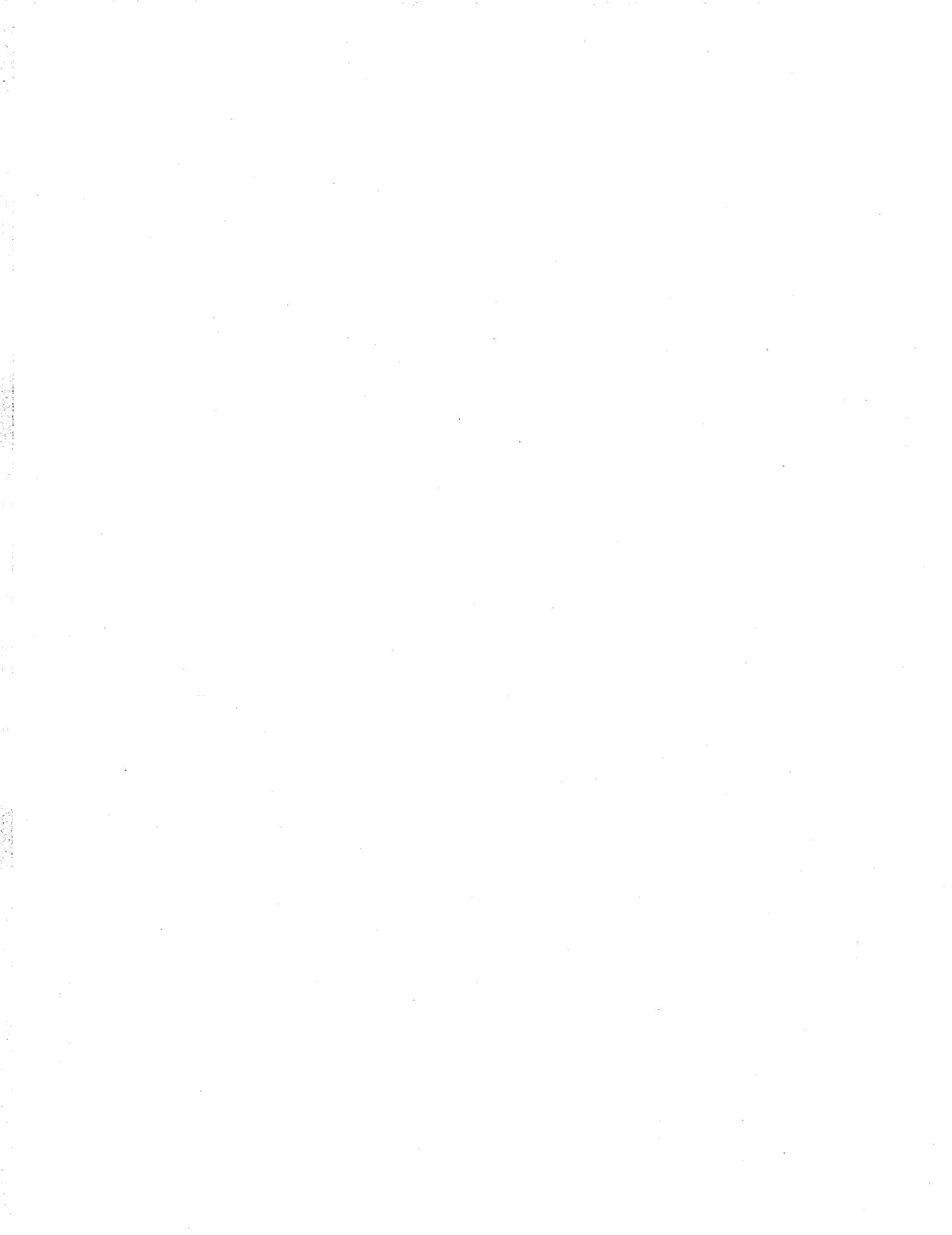
Directions: All along the Androscoggin River.

**Dates documented**

First reported: 1993

Last reported: 1993

Deluca, Diane. Audubon Society of New Hampshire. 1993. Results of Annual Eagle Wintering Surveys.



## New Hampshire Natural Heritage Bureau - Animal Record

Common Nighthawk (*Chordeiles minor*)**Legal Status**

Federal: Not listed  
 State: Listed Endangered

**Conservation Status**

Global: Demonstrably widespread, abundant, and secure  
 State: Not ranked (need more information)

**Description at this Location**

Conservation Rank: Not ranked  
 Comments on Rank:

Detailed Description: 1990: 26 adults, sex unknowns (Obs\_id 939).  
 General Area: 1990: Terrestrial - Urban / suburban (Obs\_id 939).  
 General Comments: 1990: Number above represents the high count for the period 1982-1992. Young were documented in 1985, and perhaps other years during this period (Obs\_id 939).

Management  
 Comments:

**Location**

Survey Site Name: Berlin  
 Managed By:

County: Coos USGS quad(s): Berlin (4407142)  
 Town(s): Berlin Lat, Long: 442827N, 0711050W  
 Size: 30.8 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 1990: Downtown [Berlin] (Obs\_id 939).

**Dates documented**

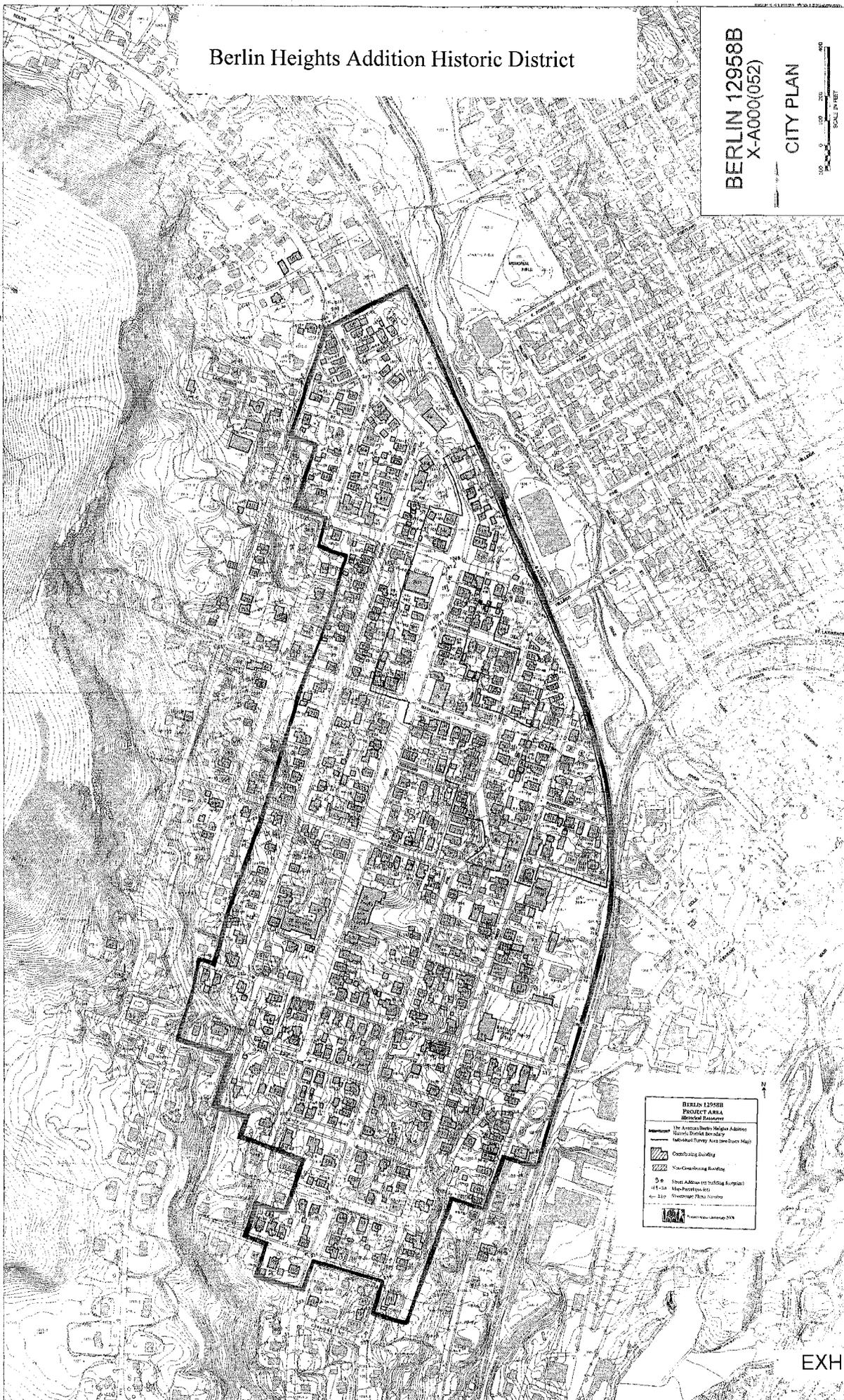
First reported: 1990-07-22 Last reported: 1990-07-29



# Berlin Heights Addition Historic District

BERLIN 12958B  
X-A000(052)

CITY PLAN



**BERLIN 12958B  
PROJECT AREA  
Historical Resources**

- The Berlin Heights Historic Addition District Boundary
- Individual Survey Area (see Page Map)
- Contributing Building
- Non-Contributing Building
- Street Address (on building footprint) (1:24 Map Panel (see list))
- Street Address (Plot Number)

National Park Service  
Historic Preservation Division





THE STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION



GEORGE N. CAMPBELL, JR.  
COMMISSIONER

JEFF BRILLHART, P.E.  
ASSISTANT COMMISSIONER

Berlin  
X-A000(052)  
12958B  
Page 1

Adverse Effect Memo

Pursuant to meetings and discussions on January 3 and May 6, 2002; April 8, May 13, and June 10, 2004; July 2 and December 4, 2008; January 22, February 12, April 10, May 14, 2009; and June 4, 2009 and for the purpose of compliance with regulations of the National Historic Preservation Act, as amended, and the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800), the NH Division of Historical Resources (NHDHR) and the NH Division of the Federal Highway Administration (FHWA) have coordinated the identification and evaluation of historic and archaeological properties with plans to reconstruct NH Route 110 between First Avenue and Wight Street along Alternative 4E in the City of Berlin, New Hampshire.

Based on reviews pursuant to 36 CFR 800.4 of the historical and architectural significance of identified resources and the potential significance for archaeological remains in the project area, we agree that the Berlin Heights Addition Historic District, also known as The Avenues, is eligible for listing in the National Register of Historic Places.

Applying the criteria of effect at 36 CFR 800.5, we have determined that the project will have an adverse effect on the Berlin Heights Addition Historic District through direct and visual impacts. Adverse effects to the district include:

- The removal of twenty-five contributing primary with thirteen secondary buildings, resulting in the loss of building density and pattern along the edge of the district;
- Total project impacts involving 4.9 acres;
- Strip takes along four contributing properties;
- Loss of retaining walls; and
- Visual impacts/impacts to the setting of buildings in the district resulting from:
  - Loss of two blocks and of partial blocks, which disrupts the plat's grid pattern;
  - Loss of sections of streets;
  - First Avenue no longer dead-ends at the railroad;
  - Through traffic along the edge of the district with the construction of a new road along the railroad corridor;
  - Loss of the direct connection between Second Avenue and Hillside Avenue;
  - New connections of Third Avenue and Wight St. with a grid pattern change;
  - New connections of First Avenue and Green Street with redirection of traffic along First Avenue;
  - Loss of setting for those houses adjacent to the railroad corridor; and
  - Two large intersection changes, totaling 2.8 acres.

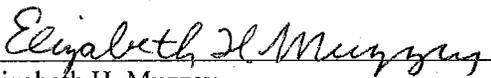


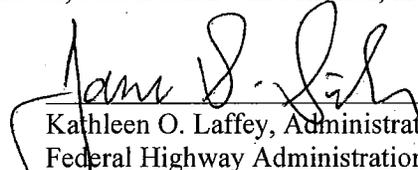
**Berlin**  
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**Page 2**

We will evaluate the following areas of mitigation for resolution of these adverse effects:

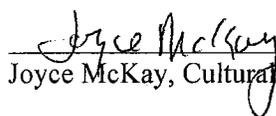
1. Documentation: The level of documentation for each property will vary and is in part dependent on the integrity of the resource.
2. Public Forums: Charrettes will be organized for planning of open spaces developed by the construction of the project.
3. Workshops: Practical workshops on preservation will be presented for the residents of the Berlin Heights Addition Historic District.
4. Historically Compatible Landscaping: Vegetative screening would be placed along portions of the proposed corridor.
5. Relocation of Historic Properties: Building relocation within or adjacent to the historic district will be considered. This element of mitigation is, in part, intended to help infill vacant areas in the district with compatible historic properties.
6. Public Outreach: Public outreach will include placement of state historical markers and the uploading of historical studies to websites.
7. Archaeology: All necessary phases of archaeological investigations at the Phase IB through III levels will be conducted. Data gained from this effort will be made available to the public to the extent permitted by the need to protect intact archaeological resources.

In accordance with the Advisory Council's regulations, consultation will continue, as appropriate, as this project proceeds.

  
Elizabeth H. Muzzey  
State Historic Preservation Officer

  
Kathleen O. Laffey, Administrator  
Federal Highway Administration

Concurred with by the New Hampshire Department of Transportation:

Date: 6/22/09 By:   
Joyce McKay, Cultural Resources Manager

c.c. Jamie Sikora Donald Lyford Christopher Waszczuk  
Elizabeth H. Muzzey Marc Laurin Pamela Laflamme

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**Memorandum of Agreement**  
**SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION**  
**PURSUANT TO 36 CFR PART 800.6(a)**

WHEREAS, the Federal Highway Administration (FHWA) has determined that the reconstruction of NH Route 110 between First Avenue and Wight Street in the Town of Berlin, New Hampshire, will have an adverse effect on the Berlin Heights Addition Historic District (District), also known as The Avenues, which is eligible for the National Register of Historic Places. FHWA has consulted with the New Hampshire State Historic Preservation Officer (NHSPO) and the City of Berlin pursuant to regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the New Hampshire Department of Transportation (NHDOT) has participated in the consultation, has solicited public comment through the public hearing process and the consulting party procedures with FHWA as stated in 36 CFR 800 (2), and is invited to concur in this Memorandum of Agreement (MOA); and

WHEREAS, the FHWA has agreed that the NHDOT shall participate in consultation with the NHSPO to find ways to mitigate their effects on impacted archaeological sites found eligible for the National Register of Historic Places under its standard phased investigations; and

WHEREAS, in accordance with 36 CFR 800, the FHWA acknowledges and accepts the advice and conditions outlined in the Advisory Council on Historic Preservation's "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," and other mitigation procedures published in the Federal Register on May 18, 1999; and

WHEREAS, under the MOA, NHDOT and NHSPO agree that recovery of significant information from affected significant historical archaeological sites may be done in accordance with published guidance; and

WHEREAS, to the best of our knowledge and belief, no human remains associated or unassociated funerary objects or sacred objects of cultural patrimony as defined in the Native American Graves Protection Act (25 U.S.C. 3001), are expected to be encountered in the archaeological work;

NOW, THEREFORE, FHWA, NHSPO, and the City of Berlin agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

## Stipulations

### I. Documentation and Acquisition of Historic Properties

The NHDOT will acquire twenty-seven contributing properties (parcels); two properties with noncontributing primary buildings and contributing secondary buildings; and two noncontributing properties, a total of 31 properties within the District.

- A. The level of documentation for each property will vary and is in part dependent on the interior integrity of the resource. Although completed as a NH Historic Property Documentation Form, documentation for properties that best represent the different forms of architecture in the impacted area of the Berlin Heights Addition Historic District will be conducted at HABS/HAER Level I (*Federal Register*/Vol. 68, No. 139, July 21, 2003). This documentation shall include large format photographs of interiors and exteriors; scaled floor plans; mapping; and a written narrative containing a detailed description, property history/significance, and a comparative analysis of the subject property with similar properties in the city and other New England industrial communities. This form of documentation could apply to approximately five buildings.
- B. All other properties, most of which have undergone some alteration, shall receive a Level III documentation including scaled sketch plans, about six large format photographs supplemented with black and white photographs, and a brief narrative with property description and history.
- C. With the caveat that building purchase, review of interior condition by the NHDOT, documentation, and demolition will be on a tight schedule, building selection for Level I and Level III documentation will be made in consultation with NESHPO within a window of five workdays.
- D. These documentation efforts for Levels I and III will include the results of interviews capturing residents' memories of the property. These narratives will be made available on-line.
- E. The landscape/neighborhood setting in the Berlin Heights Addition Historic District will be documented with aerial photography prior to the beginning of building demolition.
- F. Draft hard copies of all documentation will be provided to the NESHPO and NHDOT for review. NESHPO will receive 45 days for review. The consultant will complete four final copies for NHDOT, NESHPO, FHWA (with xeroxed large format contact prints), and the City of Berlin. One set of large format negatives will be produced for NESHPO. Electronic copies will also be made available. See Section V-B.
- G. All documentation will be completed by December 15, 2014.

### II. Public Forum and Workshops and Planning Charrette

- A. With the cooperation of other community partners and assistance and funding from the project, the NH Preservation Alliance or an equivalent entity will conduct a public forum and two workshop sessions with private building owners in the Berlin Heights Addition District Area and other city residents. The forum ("This Place Matters") will discuss architectural values of the District that define the place and the ways in which they reflect the lifestyle of the residents. The workshops will examine historic preservation and energy conservation, discussing saving historic windows, energy conservation, and weatherization. This effort will dovetail with some of the other planning efforts that are

underway at the city level and occur during the final design phase prior to construction (See Appendix A for proposal).

- B. The proposed planning charrette shall examine historically compatible reuse of spaces, reinvestment in the spaces vacated by the project, and historically appropriate landscaping in the remainder of the District, particularly along Third Avenue. This planning effort will be informed by historic photographic views of the District. It will occur during the final design phase prior to construction (See Appendix B for proposal).

### III. Historically Compatible Landscaping

Landscaping shall serve as historic mitigation when it minimizes the visual impact of the new corridor on the adjacent historic district. Vegetative screening, such as evergreens and shrubs, will be used to visually separate the north edge of the proposed corridor from the District in areas that will accommodate such plantings. NHDOT will consult closely with the City of Berlin and NESHPO during the landscape design process. Landscaping will occur near the end of the construction phase.

### IV. Purchase and Resale with Covenants of Dwellings in the District

The purchase and resale of dwellings within the District and outside the project area will occur according to the following plan.

- A. The NHDOT will purchase approximately four dwellings. The Berlin City Planner and Building Inspector, accompanied by the NHDOT Right-of-Way Engineer, Cultural Resources Manager, and Cultural Resources Assistant, will select about eight dwellings for consideration and inspect their interiors. The City Building Inspector will identify those elements that require upgrading to receive a Certificate of Occupancy from the City of Berlin. Selected dwellings will be vacant. Selection will be based on exterior historical integrity and reasonable interior condition.
- B. NESHPO, the City of Berlin, and NHDOT will review and agree on the selection of properties for purchase.
- C. The purchase and sale of these properties can occur concurrently with NHDOT's purchase of properties to be impacted by project construction and during the Construction Phase and will be completed by the end of the construction phase.
- D. Marketing of the properties for sale by the NHDOT Right-of-Way will occur through local and statewide newspapers. The City of Berlin will also advertise the buildings on its website and will list the buildings with city realtors.
- E. Each property will be sold with preservation covenants attached to the deed (see Appendix C for example and explanation), which will receive yearly monitoring by NHDOT and NESHPO. Covenants will apply to the exterior only. They will remain in force for a period of eight years from the date of transfer.
- F. Interested parties will submit a proposal/plan stating how the purchaser shall meet the conditions of the covenant, detailing the proposed building use, the necessary upgrading of the building to meet the City of Berlin's Certificate of Occupancy (see Appendix D), and other additional proposed work necessary to meet the needs of the interested party. The proposal will illustrate the buyer's understanding of meeting the preservation covenants and indicate the manner in which the property will be maintained at the current or better condition (physical integrity).

- G. The selected bid and bid proposal will be based on the high bid in combination with the interested party's proposal as explained under item F above. If the initial bid and proposal are not successful, then the bid and proposal from the next highest bidder and so on will be considered.
- H. Bids and proposals will be evaluated by the following committee: a representative from NHSHP, the NHDOT Cultural Resources Manager and Cultural Resources Assistant, the Berlin City Planner and Building Inspector, and a representative from NHDOT Right-of-way.
- I. If properties do not sell following a nine-month marketing period or if a buyer does not follow the stipulations of the covenant, parties to this MOA will consult and reach agreement to resolve these issues. During resale, the NHDOT will work to maintain the property in the same condition as it was purchased.

#### V. Public Outreach

- A. A double-sided state historical marker will be placed at the major intersection created in front of the Police Station, and a second marker will be placed at the intersection of Third Avenue and Wight Street. The markers will discuss the development of the district in companion with the paper mill industry. They will attempt to characterize the neighborhood(s) that emerged within the District. The marker will be erected prior to one year after the construction phase.
- B. A user-friendly version of the historical studies and results of planning charrette, forum, and workshops, which have been undertaken in relation to the project, will be uploaded to the city's website. These data will be uploaded by one year after the construction phase.

#### VI. Archaeological Investigations

- A. All necessary phases of archaeological investigation will be undertaken at the Phase IB through III levels in impacted archaeologically sensitive areas within the project area. If a site determined eligible for the National Register of Historic Places is identified under Phase II within the area of impact, archaeological documentation guided by a data recovery plan for the affected portion of the site will be completed and accepted by the NHSHP and FHWA. It is recognized that a small number of archaeological sites that possess very high significance may require preservation-in-place if feasible. Data gained from this effort will be made available to the public to the extent permitted by the need to protect intact archaeological resources. All field efforts will be completed before construction occurs at that location. All reports will be completed prior to December 1, 2014.
- B. If human remains and grave-associated artifacts are discovered while carrying out the activities pursuant to this MOA, the FHWA and NHDOT will immediately notify the appropriate authorities, as prescribed by New Hampshire statutes, and the NHSHP, to determine an appropriate course of action in accordance with RSA 277-C:8a-8j and the Advisory Council on Historic Preservation's (Council's) Revised "Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects," adopted by the Council on February 23, 2007 at its quarterly business meeting in Washington, D.C.

FHWA shall also ensure that the following terms and conditions are implemented:

I. Dispute Resolution

Should the NNSHPO object within 30 days to any plans or specifications provided for review or action proposed pursuant to this agreement, FHWA shall consult with the objecting party to resolve the objection. If FHWA determines that the objection cannot be resolved, FHWA shall request the further comments of the Council pursuant to 36 CFR Part 800.6(b). Any Council comment provided in response to such a request will be taken into account by FHWA in accordance with 36 CFR Part 800.6(c)(2) with reference only to the subject of the dispute; FHWA's responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

II. Termination of Agreement

If any signatory determines that the terms of the MOA cannot be executed, the signatories shall consult to seek amendment of the agreement. If the agreement is not amended, any signatory may terminate the agreement. If the terms of this agreement have not been implemented by March 1, 2016, this agreement shall be considered null and void. In such event, FHWA shall notify the parties to this agreement, and if it chooses to continue with the undertakings, shall reinitiate review of the undertaking in accordance with 36 CFR 800.

III. Amendment

Any party to this agreement may propose to FHWA that the agreement be amended, whereupon the agency will consult with the other parties to this agreement to consider the amendment. Section 36 CFR 800.6 (c)(1) shall govern the execution of this amendment.

Execution of this MOA by FHWA, NHHPO, and the City of Berlin and its subsequent acceptance by the Council, and implementation of its terms are evidence that FHWA has afforded the Council an opportunity to comment on this project, and that FHWA has taken into account the effects of the undertaking on historic properties.

NH FEDERAL HIGHWAY ADMINISTRATION

By: Arthur O. Sprey Date: 3/11/10  
Division Administrator

NEW HAMPSHIRE DIVISION OF HISTORIC RESOURCES

By: Elizabeth DeMeysey Date: 3/11/10  
NH State Historic Preservation Officer

CITY OF BERLIN

By: [Signature] Date: 3-15-10  
City Manager

Concurrence:

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

By: William Carr Date: 3/11/10

Appendices:

- A. Sample Forum/Workshop Proposal
- B. Sample Charrette Proposal
- C. Sample Covenant, Explanation, and the Secretary of the Interior's Standards
- D. Berlin's Certificate of Occupancy
- E. Example of Historic Resources Annual Monitoring Plan

Appendix A

Sample Forum/Workshop Proposal

To: Joyce McKay, NH Department of Transportation  
Linda Ray Wilson, NH Division of Historical Resources

From: Christine Latulip, North Country Field Representative  
NH Preservation Alliance

Subject: Berlin Route 110 Relocation Neighborhood Impacts-Avenues Project

Date: January 11, 2010

I. Issue

Since the 1970's repeated studies have concluded that a section of Route 110 that winds through the neighborhoods north of the City of Berlin should be relocated. These neighborhoods were called the Berlin Heights Addition, also known as the "Avenues," and were created in a grid pattern between the years 1892-1893 by the Berlin Heights Land Corporation to accommodate the growing need for workforce housing. The relocation of Route 110 will provide a safer route for pedestrians and heavy trucks that currently zigzag the neighborhood. A final plan for major demolition of 27 residential structures is pending final design, permitting and funding. A total of 45 housing units will feel the impact of the relocation.

II. Work to Date

A complete analysis of the Berlin Heights Addition Project Area was conducted in the fall of 2002 by the Preservation Company and updated in October of 2008. It concluded that demolitions in the Avenues area will have an adverse effect and significantly change the character of the neighborhood. Mitigation includes recording the significant features of the 27 identified buildings slated for demolition and documenting the past ownership of the owners and the occupants. The NH Preservation Alliance proposes to carry out "The Avenues Project" to provide a forum for the residents to understand and honor the history and traditions of the neighborhood and to help residents be more aware of good preservation and stewardship practices for Berlin's historic neighborhoods in the future.

III. Plan of Activities by the NH Preservation Alliance

The NH Preservation Alliance proposes to contract with the NHDOT to offer three workshops that will engage residents of the Avenues and beyond in understanding more about their cultural heritage. We propose to collaborate with a range of community partners in designing a neighborhood-based project to plan and carry out

our work. Partners will include, but not be limited to: neighborhood churches, Berlin & Coos Historical Society, Berlin Planning Department, Berlin High School Building Trades, Tri-County CAP, White Mountains Community College, Arts Alliance of Northern NH, , Plymouth State University, Northern Forest Center, NH Charitable Foundation, and Clean Air-Cool Planet.

The two project components are as follows:

- a. Based on the previous work of the Preservation Company, (and with community input) the NH Preservation Alliance will produce an easy-to-read handout and PowerPoint (and post to websites) summarizing the history and significant architectural features of the Avenues' built landscape.
- b. Deliver one public forum and two workshops targeted at the Avenues neighborhood and other city residents. The public forum, "This Place Matters," will describe the historic features of the buildings that define the place (such as porches, building style, trim and paint colors), and interpret how both exterior and interior features reflected lifestyles and social routines of the workforce that lived there. The two workshops will focus on historic preservation and energy conservation, and include information for saving historic windows, energy conservation and weatherization and the recommended use of authentic building materials. Local contractors and the building trades program at Berlin High School will be included in this training for historically appropriate weatherization techniques.

#### IV. Follow-Up

The events and their content will be promoted through various media and partners. The public forum will be recorded on video and linked to a local partner (City of Berlin or historical society). Others partners may likely be identified during the planning process to help perpetuate the work done on this project.

#### V. Time frame:

If accepted as a partner with NH NHDOT, the NH Preservation Alliance to complete this project within 12 months from contract signing.

Appendix B

Sample Charrette Proposal

**Jeffrey H. Taylor & Associates  
136 North Main Street, Suite 4  
Concord, NH 03301  
603-224-6555**

July 13, 2009  
(Revised August 31, 2009)

Ms. Joyce McKay  
Environmentalist  
Bureau of the Environment  
NH Dept. of Transportation  
1 Hazen Drive  
Concord, NH 03301

Re: Route 110 Design Charrette  
Berlin, NH

Dear Ms. McKay:

Thank you for the opportunity to provide this proposal to you. It is my understanding, based on conversations with yourself, with Ms. Pam Laflamme (Berlin City Planner), and with Ms. Beth Muzzey and Ms. Linda Wilson (both with the NH Division of Historic Resources) that there is a desire to mitigate the impacts of a pending upgrade to NH Route 110 in Berlin, and that a component of that mitigation is to be a design charrette.

Specifically, the charrette is to look both for ways to screen the area originally known as the Berlin Heights Addition District Area from the through traffic along the relocated Route 110, and, where that roadway joins the existing street network at Green Street and at Third Avenue, to develop a landscaping plan (including historically appropriate plantings). Additionally, the charrette participants should seek opportunities (such as along Third Avenue) to reconnect portions of this neighborhood that has been divided by heavy truck traffic for many years.

Charrette Team

For this effort, in addition to myself, I will recommend the following team to you:

Mr. Randy Knowles – Knowles Design, Goffstown, NH

Mr. Knowles is a registered landscape architect with many years of charrette experience. Specifically, he was worked on design charrettes with me in Newport, Londonderry, Penacook, Farmington, New Hampton, Middleton, and Keene.

Ms. Karen Fitzgerald – FitzDesign, Frankestown, NH

Ms. Fitzgerald is also a registered landscape architect. Since moving to New Hampshire in 2004, she has worked on design charrettes with me in Peterborough, Bristol, Newport, and Alton. She will be a fine addition to the team.

Mr. Chris Williams, AIA – Christopher P. Williams Architects, Meredith, NH

Mr. Williams is an architect with a great sensitivity to historic structures and neighborhoods. He has worked on design charrettes with me in Belmont, Franklin, Jaffrey, Bristol, New Hampton, Middleton, and Alton.

Mr. Chris Nadeau, PE – Nobis Engineering, Concord, NH

Mr. Nadeau is a registered engineer who has joined me and other members of the design team on a variety of projects, including design charrettes in Franklin, Bristol, and Peterborough.

Personally, I organized Plan NH's community charrette program in 1996 around efforts to save the Belmont Mill from demolition, and have since led over two dozen charrettes in all parts of the state, including one in Berlin in 2002. Resumes for all participants are attached.

#### Charrette Format

We are open to any format that you might suggest, but will recommend to you the one which we have used successfully both with Plan NH and independently on our own. These have typically been two-day efforts, usually on a Friday and Saturday, as follows:

|          |           |   |
|----------|-----------|---|
| Friday   | 10 AM –   | Site visit for design team                  |
|          | Noon-     | Meet with key stakeholders                  |
|          | 1:30 PM – | Public Listening Session #1                 |
|          | 7:00 PM - | Public Listening Session #2                 |
| Saturday | 8:30 AM - | Design team gathers                         |
|          | 3:00 PM - | Public presentation of preliminary findings |

The design team then refines drawings as necessary and a booklet documenting both the process and the product, and copies are produced and delivered to the client both as hard copies and in digital format. While no dates have been agreed to, it will be ideal if this work could be accomplished during the final design process and when there is no snow on the ground.

It is understood that this effort is to be undertaken in conjunction with a series of workshops for homeowners in the Berlin Heights Addition area, tentatively focused on areas relative to sensitive restoration, particularly when undertaking projects such as energy improvements, window repairs/replacements, porch restoration, and other elements that will have an impact on the building's exterior appearance and character upon completion. At the first of those workshops, I will plan to return to Berlin to summarize the findings and recommendations of the charrette as an opening to those sessions.

#### Assumptions

I will assume all responsibility for organizing the charrette team, managing the process, producing the booklet (24 copies to be delivered), and all costs associated with that effort (including mileage, meals, and accommodations for the identified team members).

I am assuming that NH NHDOT and/or the City of Berlin has and will make available at no cost such base maps as will be needed to support the charrette effort, including the proposed roadway corridor and area bounded by it, Third Avenue, Mount Forist Street, and Wight Street.

I am assuming that public space in which to conduct the charrette (along with tables, folding chairs, etc.) will be made available at no cost to the charrette team.

I am assuming that public notice and outreach regarding the charrette will be undertaken by NH NHDOT and the City (or others) at no cost to the charrette team.

I am assuming that representatives of NH NHDOT, NESHPO, and others will be available to participate in the charrette process and to advise on period appropriate plantings, and will also review all charrette documents in draft before they are printed.

I will attend the first building workshop as a resource to discuss the charrette. The workshops will be developed and presented by others.

#### Budget

The proposed fee for this effort will be \$29,243 inclusive. A detailed breakdown is included in Attachment 1 to this document.

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Questions

I would be happy to respond in person, via phone, or via e-mail to any questions or suggestions you might have regarding this process, the team, or our approach. Again, I thank you for the opportunity to provide this proposal to you. On behalf of the team, I look forward to working with you on this project.

Sincerely,

Jeffrey H. Taylor  
President

Appendix C

Sample Covenant

**HISTORIC PRESERVATION DEED RESTRICTION (COVENANT) PROVISIONS  
FOR MITIGATION BY PURCHASE AND RESALE OF A DWELLING AND GARAGE AT \_\_\_\_\_,  
BERLIN, NH, DETERMINED TO BE ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC  
PLACES  
January 2010**

As a condition of this instrument, the Grantor, the Department of Transportation, hereby conveys the above-described property, subject to the terms of the following preservation restrictions that are hereby created in said premises, by means of the State of New Hampshire hereby reserving the following preservation restrictions, under New Hampshire Revised Statutes Annotated RSA 447:45-47, and by the State of New Hampshire and the Grantee, \_\_\_\_\_, said Grantee hereby covenanting to abide by and enforce the following preservation restriction.

The Grantee covenants and agrees for itself, its heirs, administrators, successors, and assigns, by accepting this deed, that the said herein conveyed premises are and shall be subject to said following preservation restrictions for a period of eight years from the date of transfer, and to do or refrain from doing thereon or with respect thereto all acts required or prohibited by the said following preservation restrictions.

1. APPLICABILITY: The following preservation restrictions, to which the herein conveyed premises are subject, are as follows:
  - A. Grantor herein shall mean the Department of Transportation (NHDOT), its successors or assigns.
  - B. Grantee herein shall mean the Grantee of this deed.
  - C. All preservation restrictions contained herein, whether covenants, restrictions, easements, or conditions, shall be binding upon both the Grantor and Grantee.
  - D. The restrictions specified herein shall apply to the herein conveyed premises unless the Grantor provides the Grantee with a specific written waiver for any specific act in contravention thereof.
  - E. The burden of these restrictions shall run with the dwelling and two-car garage, and the 0.22-acre parcel on which it is located, and shall be binding upon all owners of any interest therein. The right of enforcement of these restrictions by the Grantor and the New Hampshire Division of Historical Resources / State Historic Preservation Office (DHR / SHPO) shall be as provided in New Hampshire Revised Statutes Annotated RSA 477:45-47 (Chapter 391, Laws of 1973, and Chapter 301, Laws of 1979), as they may be amended from time to time.
  
2. GENERAL INTENT: In the event the Grantor and/or Grantee and/or DHR / SHPO have a difference of opinion about the meaning of a specific term or condition recited below, they shall be guided in interpretation by the following statements of General Intent:
  - A. The purpose of the preservation restrictions is to preserve the significance, integrity, and architectural and historical values associated with the dwelling and garage, that make it eligible for the National Register of Historic Places.
  - B. All changes to the house subject to these preservation restrictions will be in the spirit of contributing to the public purpose of protecting and preserving the dwelling and garage in conformance with the Standards for Review (see section 4), or as required by local, state, and federal legislation for the public benefit.
  - C. The preservation restrictions shall apply to the exterior of the house and garage and to the property's setting. Insofar as feasible, repair, replacement, alterations and additions should be made in-kind, with forms and materials that match or complement and are compatible with the historic forms and materials; except that exterior color choices are not subject to the restrictions. From a preservation perspective, these elements must be maintained at the

current or better condition. The preservation restrictions do not apply to the interior, except that the grantee must maintain the certificate of occupancy issued by the City of Berlin and that any interior changes that necessitate exterior changes will not be made without written consent of the DHR / SHPO.

3. INTERPRETATION: In the event of a disagreement between Grantor and/or Grantee and/or DHR / SHPO as to the interpretation or application of the provisions of these preservation restrictions, any party may request that the matter be submitted to binding arbitration, or in the event that either party does not wish to submit to binding arbitration, Grantor and/or Grantee and/or DHR / SHPO may petition to the Merrimack or Coos County Superior Court for relief.
4. STANDARDS FOR REVIEW: The Grantor and the DHR / SHPO shall apply the following Standards for Review in exercising any authority created by these preservation restrictions to inspect the premises subject to these preservation restrictions, and to review and approve any proposed construction, alteration, rehabilitation, relocation, demolition, change in use, sale, subdivision, or other transfer of property rights. The Grantee agrees to abide by the Standards for Review in performing any construction, alteration, rehabilitation, relocation, demolition, change in use, sale, subdivision, or other transfer of property rights affecting the premises subject to these preservation restrictions. The Standards for Review are as follows:
  - A. *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (36 CFR Part 68, 1995) as they may be amended from time to time. A copy of the Standards is on file with the DHR / SHPO and is provided to the City of Berlin.
  - B. The New Hampshire Historic District Area Form entitled Berlin Heights Addition Historic District with its black and white photographs and mapping completed in the fall of 2002 and digital photographs and descriptions of the buildings taken just prior to transfer of the property to the Grantee record the appearance and condition of the premises at the time of the execution of the preservation restrictions. These views and materials are made a part of these preservation restrictions and shall constitute conclusive evidence of the appearance and condition of the premises at the time the preservation restrictions were placed on it.
5. INSPECTION AND COMPLIANCE: The Grantee agrees that the State of New Hampshire, by and through its Division of Historical Resources/ State Historic Preservation Office, shall have the right to inspect the buildings subject to these preservation restrictions at reasonable times, to ascertain whether the terms of these preservation restrictions have been complied with. The Grantee agrees to submit to the Grantor, including both DHR / SHPO and NHDOT, a Historic Resources Annual Monitoring Report (see appendix E) detailing all physical work (see appendix E), if any, undertaken on the dwelling and garage over the course of the previous year, as well as any development activities and any changes to the plan provided during the bidding process for the Property.
6. MAINTENANCE AND ADMINISTRATION: The Grantee agrees to assume the total costs of continued maintenance, repair, and administration of the buildings, in a manner that complies with the Standards for Review, in order to preserve the architectural and historical integrity of its features, materials, appearance, workmanship and environment, and in order to protect and enhance those significant characteristics which make the building eligible for the National Register of Historic Places. The Grantee shall maintain the buildings at all times and shall keep it in a state of good repair, and shall not allow the appearance of the buildings to deteriorate in any material way. Nothing herein shall prohibit the Grantee from seeking financial assistance from any sources available to the Grantee.
7. ALTERATIONS: The Grantor and the Grantee and the DHR / SHPO agree that no alterations shall be made to the buildings in its setting and no structures subsequently shall be placed, erected, relocated, or demolished on the premises subject to these preservation restrictions, without the prior written consent of the State of New Hampshire, by and through its Division of Historical/State Historic Preservation Office, its successors or assigns, except for:
  - A. ordinary repair and maintenance to conserve architectural and historical values, significance, and integrity; or

B. actions required to mitigate a casualty or other emergency promptly reported to the DHR /SHPO, its successors or assigns.

8. SUBDIVISION AND CHANGE IN USE: The Grantee agrees that the use of the buildings subject to these preservation restrictions shall not be changed, nor shall covenants or other property rights be granted, sold, or transferred, nor shall the premises be subdivided, without the prior written consent of the State of New Hampshire, by and through the DHR / SHPO, its successors or assigns.
9. EXCLUSION: The Grantee agrees that the State of New Hampshire, by and through any of its agencies, in no way assumes any obligation whatsoever for maintaining, repairing, or administering the premises covered by these preservation restrictions.
10. LIABILITY: The grantee agrees to protect, indemnify, hold harmless, and defend at its own cost and expense, the grantor, its agents, trustees, directors, officers, and employees, or independent contractors, from and against any and all claims, liabilities, expenses, costs, damages, losses, and expenditures, including reasonable attorneys' fees and disbursements hereafter incurred, arising out of or in connection with injury to or death of any person in or on the Property, physical damage to the Property, or the presence or release in, on, or about the Property at any time of any substance now or hereafter defined, listed, or otherwise classified pursuant to any law, ordinance, or regulation as a hazardous, toxic, polluting, or contaminating substance, or against any other injury or other damage occurring on or about the Property unless such injury or damage is caused by the Grantor or an agent, trustee, director, officer, employee, or independent contractor of the Grantor. In the event the Grantee is required to indemnify the Grantor in accordance with this section, the amount of such indemnity, until discharged, shall constitute a lien on the property and shall have the same priority as a mechanic's lien. Nothing contained in this section shall jeopardize the priority of any lien on the Property given by the Grantee to secure a Promissory Note or Promissory Notes. Notwithstanding the foregoing, nothing herein contained shall be construed to be a waiver of the sovereign immunity of the State of New Hampshire.
11. EXERCISE OF RIGHTS AND REMEDIES: Failure of the Grantor and/or the DHR / SHPO to exercise any right or remedy granted under these preservation restrictions shall not have the effect of waiving or limiting the exercise by the Grantor and/or the DHR / SHPO of any other right or remedy or the invocation of such right or remedy at any other time.
12. CONTINUATION: In the event that the buildings are damaged or destroyed through the willful action or negligence of the Grantee, the State of New Hampshire may initiate such administrative or judicial actions as may be legally available and appropriate.
13. SEPARABILITY: Any portion of items of these preservation restrictions found to be contrary to law shall not invalidate any other portions or items or the whole of these preservation restrictions.
14. EXTINGUISHMENT: Grantor, the NHDOT with the DHR / SHPO, and Grantee hereby recognize that circumstances may arise that may make impossible the continued ownership or use of the buildings in a manner consistent with the purpose of this Covenant and necessitate extinguishment of the Covenant. Such circumstances may include, but are not necessarily limited to, partial or total destruction of the structure resulting from casualty or by eminent domain. No such extinguishment or termination of this Covenant shall be effective until an instrument to that effect is recorded in the Coos County Registry of Deeds.
15. AMENDMENT: If circumstances arise under which an amendment to or modification of this Covenant would be appropriate, Grantor, the NHDOT with the DHR / SHPO, and Grantee may by mutual written agreement jointly amend this Covenant, provided that no amendment shall be made that will adversely affect the qualification of this Covenant or the status of Grantor and DHR / SHPO under any applicable laws, including 26 USC Section 170(h), which governs the donation of land for conservation purposes and impact on federal revenue, and 501(c)(3), which references non-profit, tax-exempt organizations under the Internal Revenue Service, and the laws of the State of New Hampshire. Any such amendment shall be consistent with the protection of preservation values of the structure and the purpose of

Berlin  
X-A000(052)  
12958B  
Page 16

this Covenant; shall not affect its duration; shall not permit any private inurement to any person or entity; and shall not adversely impact the overall architectural and historical values protected by this Covenant. Any such amendment shall be recorded in the Coos County Registry of Deeds. Nothing in this paragraph shall require Grantor or Grantee to agree to any amendment or to consult or negotiate regarding any amendment.

16. OTHER CONDITIONS: NONE.

TO HAVE AND TO HOLD the said dwelling and garage, with all the privileges and appurtenances thereunto belonging to the said Grantee and its assigns forever.

### Explanation of the Sample Covenant

The explanation of the sample covenant is as follows.

1. The grantee is the buyer of the property.
2. The Department of Transportation (NHDOT) is selling the property as the grantor. The NHDOT together with the Division of Historical Resources (DHR / SHPO) will keep a limited number of rights in the property through the covenant, essentially relating to the property's exterior appearance. They are called restrictions.
3. These restrictions in the covenant will apply to the property for a term of eight years. If the buyer sells the property before that date, the covenant will continue to be attached to the deed.
4. These restrictions apply to the outside of the buildings on the historic property and the general character of the appearance of the surrounding property. They are intended to provide for the maintenance of the current exterior appearance. They could allow the grantee to return it to a previous, documented appearance. For example, the restrictions will allow for the maintenance of existing vinyl siding or exposure and repair of earlier clapboard siding. When repairing an exterior element such as siding, the buyer will utilize siding that reasonably closely matches what is extant. The color of the buildings is left to the buyer's choice. These restrictions involve the interior of the building(s) only to fulfill the requirement to maintain it according to Berlin's Certificate of Occupancy or to avoid changes to the exterior necessitated by interior changes when these changes affect historically significant building elements.
5. When making changes to the exterior, the buyer will need to gain consent from the DHR / SHPO. Notification of the NHDOT of these changes will include a written description and plan of the change. NHDOT will forward them to DHR / SHPO.
6. When repair and building projects are reviewed, the DHR / SHPO follows the Secretary of the Interior's Standards for Treatments of Historical Properties. They are attached. Because they apply to a broad range of properties, the Standards are quite general. The DHR / SHPO uses the documentation produced before the sale of the building to identify existing conditions including areas of original materials and design and to understand whether the proposed changes by the grantee will introduce a significant change to the building and the property.
7. Each year, the DHR / SHPO contacts the property owners who hold DHR / SHPO property covenants to understand any proposed physical work to the building and its property. The standard reporting form is enclosed (see Appendix E).
8. The Grantee assumes all the costs of property repair.
9. The Grantors who hold the covenant are not liable for any costs or claims generated by the Grantee against the property.
10. As noted above, except for ordinary maintenance, proposed work to the exterior of the dwelling or garage shall receive concurrence from DHR / SHPO. The Grantee will contact the Cultural Resources Manager at NHDOT. Any significant change in building use as a dwelling or subdivision of the property will also require review and concurrence.
11. Actions required in an emergency such as damage during storms can go forward, but the NHDOT and DHR / SHPO must be promptly notified so that the grantors can assess approaches to exterior repair, if possible.
12. It is recognized that an occasion may arise, for example partial or total destruction of the property, when the covenant should be ended or amended, depending on the impact.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

*Rehabilitation may be considered as a treatment when repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate. Prior to undertaking work, a documentation plan for rehabilitation should be developed.*

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other buildings, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing, to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment shall be unimpaired.

*These standards were initially developed in 1975 and were revised in 1983 and 1992. This revision of the Standards was codified as 36 CFR Part 68 in the Federal Register, Vol. 60, N. 133, July 12, 1995; it replaces the Federal Register notice, Vol. 48, N. 190, September, 1983.*

Berlin's Certificate of Occupancy



The City of Berlin  
Code Enforcement

Joseph G. Martin 220 Main Street, Berlin, NH 03570  
603-752-1630, fax 603-752-2620, email jmartin@berlinnh.gov

*Certificate of Occupancy*

\_\_\_\_\_ Building Permit # \_\_\_\_\_  
Address of Property Requested for Occupancy

NAME: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

PROPOSED USE: \_\_\_\_\_

PREVIOUS USE: \_\_\_\_\_

OFF-SITE INSPECTIONS APPROVED

OFF-SITE IMPROVEMENTS: \_\_\_\_\_  
(Driveways, sidewalks, sewer, water) Engineering Div.

ZONING REQUIREMENTS: \_\_\_\_\_

ON-SITE INSPECTIONS APPROVED

FIRE CODE/ LIFE SAFETY CODE  
REQUIREMENTS: \_\_NFPA\_101, 2003\_EDITION\_\_NFPA\_1, 2003\_EDITION\_\_

ELECTRICAL CODE: \_\_NFPA\_70, 2006\_EDITION\_NEC\_\_

PLUMBING CODE: \_\_2006\_EDITION\_IPC\_\_

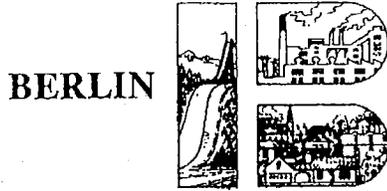
BUILDING CODE: \_\_2006\_IBC\_\_ & STATE OF N.H. MODULAR BUILDING RULES \_\_\_\_\_

FINAL APPROVAL BUILDING INSP. \_\_\_\_\_ DATE: \_\_\_\_\_

FINAL APPROVAL FIRE DEPT. \_\_\_\_\_ DATE: \_\_\_\_\_

APPLICANT: \_\_\_\_\_ DATE: \_\_\_\_\_

PROJECTED DATE OF OCCUPANCY: \_\_\_\_\_



**FIRE DEPARTMENT**

*Inspection Division*  
 263 Main Street, Berlin, NH 03570  
 (603) 752-3135

OFFICE OF  
 Assistant Fire Chief  
 Bureau of Fire Prevention and Training

OFFICE OF  
 City Building Inspector

LOCATION: \_\_\_\_\_ OCCUPANCY CHECK LIST DATE: \_\_\_\_\_

|                                      | EDITION<br>Life Safety Code | EDITION<br>Building Code |
|--------------------------------------|-----------------------------|--------------------------|
| Occupancy Classification             |                             |                          |
| Allowable construction type          |                             |                          |
| Allowable Height and Area            |                             |                          |
| Separation of sleeping rooms         |                             |                          |
| Occupant load factor                 |                             |                          |
| Number of exits required             |                             |                          |
| Allowable travel distance            |                             |                          |
| Emergency escape                     |                             |                          |
| Exit signage                         |                             |                          |
| Emergency lighting                   |                             |                          |
| Fire protection system requirements: |                             |                          |
| Suppression                          |                             |                          |
| Fire protective signaling system     |                             |                          |
| Automatic fire detection system      |                             |                          |
| Single station smoke detectors       |                             |                          |
| Protection from hazards              |                             |                          |
| Handicap provisions                  |                             |                          |



The City of Berlin  
Code Enforcement  
Joseph G. Martin 220 Main Street, Berlin, NH 03570  
603-752-1630, fax 603-752-2620, email - jmartin@berlinnh.gov

HOUSING CODE DEPARTMENT  
INSPECTION

Map-Lot: \_\_\_\_\_

Control No. \_\_\_\_\_

Property Address \_\_\_\_\_ Date \_\_\_\_\_ Day \_\_\_\_\_ Time \_\_\_\_\_

Inspector \_\_\_\_\_ Accompanied by \_\_\_\_\_

EXTERIOR (circle non-complying conditions: foundation, stairs, porch(es), walkway(s), storms, screens, fencing, roof, chimney, walls, rubbish disposal, grounds keeping, accessory structure, lighting)

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

BASEMENT/CELLAR (circle non-complying conditions): foundation, electrical, plumbing, support members, chimney(s), heating equipment, stairs, ventilation, obstructions, rubbish disposal

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Smoke Detection: required \_\_\_\_\_ Present \_\_\_\_\_ working \_\_\_\_\_ Type: Elect Batt  
Carbon Monoxide:

COMMON HALLWAYS (circle non-complying conditions): surface conditions, floor covering, electrical stairways, obstructions

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Smoke Detection: required \_\_\_\_\_ Present \_\_\_\_\_ working \_\_\_\_\_ Type: Elect Batt  
Carbon Monoxide:

Accessory Structure(s) (describe) \_\_\_\_\_

Reinspection Date \_\_\_\_\_ Time \_\_\_\_\_ Inspector's Signature \_\_\_\_\_



Historic Resources Annual Monitoring Plan



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

**2008 Historic Resources Annual Monitoring Report**

Organization: \_\_\_\_\_  
Historic Resource Name: \_\_\_\_\_  
Individual Submitting Report: \_\_\_\_\_ Phone: \_\_\_\_\_  
Email: \_\_\_\_\_ Date Completed: \_\_\_\_\_

- This report **must be submitted** to the New Hampshire Division of Historical Resources along with all required photographs \_\_\_\_\_. Mail to: The DHR / SHPO, 19 Pillsbury Street, Concord, NH 03301
- Please feel free to **use additional pages** if there is not sufficient space on this form.

The checklist below is to remind and encourage you to look at your historic resource as a whole on an annual basis and to note the condition of the following elements (if applicable). This is not a comprehensive list and building elements specific to your resource should be addressed as applicable:

- |  |   |
|--|---|
| <input type="checkbox"/> Foundation –<br>Look for moisture penetration, cracks, spalling   | <input type="checkbox"/> Windows and Doors – Check for water seepage, cracked panes, rotted sash, etc.                      |
| <input type="checkbox"/> Masonry (Including walls, chimneys, etc.) – Check for cracks, missing mortar, damaged brick or stones, etc. | <input type="checkbox"/> Paint – Check for flaking, blistering, weathering  |
| <input type="checkbox"/> Wood (Including siding, trim, eaves, cornice, etc.) – Look for rot, flaking paint, deterioration            | <input type="checkbox"/> Interior Walls and Ceilings – Visually inspect for cracks, chips, stains and loose paint/wallpaper |
| <input type="checkbox"/> Roof (Including flashing, gutters and downspouts) -- Check for missing, cracked, broken or loose materials  | <input type="checkbox"/> Interior Floors – Inspect for warping, excessive wear, damage                                      |

Please use the space provided below to make note of your observations of the above items with a brief description of the condition and its location (i.e., peeling paint on north elevation below roofline). In areas where problems are observed, are there plans to remedy the problems?

Historic Resources Annual Monitoring Report Page 2

Historic Resource Name: \_\_\_\_\_

What is the overall observed condition of the building?

Excellent    Good    Fair    Poor

Please describe:

Did you observe any major additions or modifications to the building?

Yes    No

Document with Photos and Describe:

Did you observe any violations of the terms of the Term Preservation Easement?

Yes    No

Document with Photos and Describe:

Did you observe any other issues or areas of concern?

Yes    No

Document with Photos and Describe:

**Historic Resources Annual Monitoring Report Page 3**

Historic Resource Name: \_\_\_\_\_

Please answer the following questions about completed and anticipated projects, organizational structure, and media coverage.

---

1. Projects completed during past year (Summarize briefly what, if any work you've done to the building over the past year. For example – You replaced the roof):

---

2. Projects planned for next year (Summarize briefly what, if any work you have planned to undertake on the building in the upcoming year. For example – Front landscaping work and improvements to the parking area will be done in the upcoming year.):

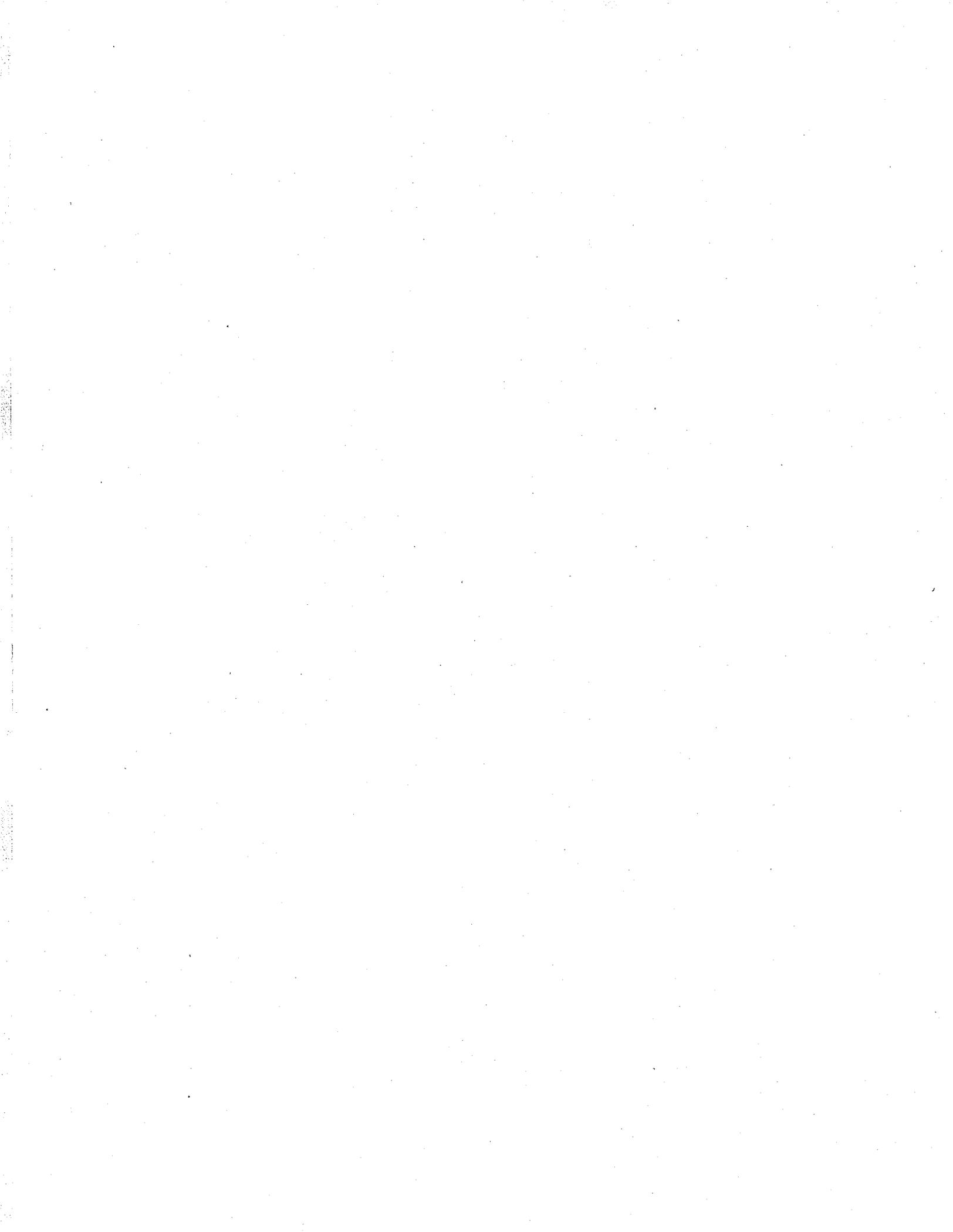
---

3. Organizational update (Summarize briefly any significant changes that have occurred in your organization in the past year. For example - new President or Chair of the Board with contact info, major fundraising efforts undertaken or planned, or a new tenant has moved in.):

---

4. Any media attention the resource has had over past year or is upcoming (Briefly summarize any media attention you have received in the past year or plan to receive in the coming year.):

**Additional comments:**





# United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, DC 20240



9043.1  
PEP/NRM

ER 09/890

DEC 16 2009

RECEIVED  
COMMISSIONERS OFFICE

DEC 21 2009

STATE OF NEW HAMPSHIRE

Ms. Kathleen O. Laffey  
Division Administrator  
Federal Highway Administration  
19 Chenell Drive, Suite One  
Concord, New Hampshire 03301

Dear Ms. Laffey:

This responds to a request for the Department of the Interior's review and comment on the Draft Environmental Assessment and Section 4(f) Evaluation for **Reconstruction of NH 110, City of Berlin, Coos County, New Hampshire.**

### PART I. DRAFT ENVIRONMENTAL ASSESSMENT (DEA)

The crux of the Purpose and Need for reconstruction of NH 110, through the historic neighborhood of the Berlin Heights Addition, determined eligible for listing as a Historic District on the National Register of Historic Places (NRHP), appears to be the present-day navigational difficulty, significant human safety hazards of large contemporary heavy-hauler trucks, and an increase in the number of smaller vehicles negotiating the narrow residential streets. The Berlin Heights Addition is laid out in a fairly strict grid-pattern over irregular terrain, necessitating 90-degree intersection turns. Legitimate residential traffic as well as bicyclists and pedestrians of all ages are subject to serious impacts and injury, as Route 110 winds its way through this neighborhood to connect with Route 16, along the west bank of the Androscoggin River, west of the Dead River and at the neighborhood's easterly edge. The Berlin Heights Addition developed over a hundred years ago in response to a population surge of 134 percent in the 1880-90s. It is located in a westerly direction from the relatively narrow bottom land of the Dead River, which enters a north-south segment of the Androscoggin River within the mountain-bound City of Berlin, just north of where the Androscoggin suddenly widens and swings due east. Also laid onto the narrow sloping west bank of the Dead River at the easterly edge of the Berlin Heights Addition lies the northwesterly routing of the historic Atlantic and St. Lawrence Railroad. An easterly leg of that railroad crosses over the Dead River and intersects the main street of Berlin, which is also the heavily trafficked corridor of the north-south NH Route 16, along the west bank of the Androscoggin River. That easterly leg crosses the Androscoggin to connect with that River's east bank rail lines that served the paper mills and a stone quarry in the southeasterly sector of Berlin. The governmental and central sector of Berlin lies in the

northerly yoke of the Dead and Androscoggin rivers from which the original Berlin Heights neighborhood slopes up to the near mountains to the north and east.

The unique character of the Berlin Heights Addition is signified by its diverse ethnic enclaves of French Canadians, Irish-Americans, Russian and Polish Jews, Italians, and smaller groupings of other peoples. Over time, with the fading of the railroad traffic presumably from diminishing paper mill and quarry operations, and the draw of employment elsewhere possibly through the increase of personal auto mobility, the impact of heavy-haul enlargement capacity of through truck traffic was realized. This impact occurred particularly in the narrow streets and their 90-degree intersections and included the serious safety hazards mentioned above. These changes in the character of the traffic and increased impacts have been extensively considered since the early 1960s—near the end of the historically significant period of the Berlin Heights Addition. Careful and attentive study has been given to the Purpose and Need for correction of this traffic problem in full awareness of the near total usurpation of available space for any corrective solutions that would not extensively damage the historic fabric and cultural resource values of the Berlin Heights Addition historic district. An initial phase (1) of the work integrated to the Preferred Alternative 4E (page 2, 2<sup>nd</sup> paragraph, page 7, 2<sup>nd</sup> paragraph, and page 38, 5<sup>th</sup> paragraph) was completed in 2007, whereupon the City's Planning Board amended its Master Plan, affirming the City Council's favor of the Preferred Alternative, 4E.

We are pleased to find in Section 6.10.2 Alt. 4E (page 18) that, "The Preferred Alternative gives the area [at least the undisturbed central, greater portion of the Berlin Heights Addition] the best chance to be a residential neighborhood that was envisioned and that used to be one hundred years ago." The following paragraph, under Section 6.10.2.1 Community Cohesion – Alternative 4E, also supports an effort to respect and sustain some of the characteristics of this historic district of a century ago. These two specific notations among a number of more positive impact evaluations and Section 6.17.1.4 considerations for archeological preservation commitments (pages 30-33) appear appropriately included in this DEA, as well as Section 7.0 Agency Coordination and Public Participation (pages 34-37) with specific references to Cultural Resource Agency Meetings and the NH State Historic Preservation Officer (SHPO).

## **PART II. DRAFT SECTION 4(f) HISTORICAL EVALUATION**

Similar to the specific positive notations acknowledged in our PART I comments above, the Department refers to the entire text of PART II, **Section 5.0 (second paragraph) Impact on Section 4(f) Properties** (found on page 41). The Department specifically refers to seven (7) items under Section 7.3 Alternative 4E (pages 44-45) as appropriately addressing the Memorandum of Agreement (MOA) aspect of Section 106 of the National Historic Preservation Act of 1966, as made rule by the Advisory Council on Historic Preservation under 36 CFR, Part 800, as well as the reasoning supporting Preferred Alternative, 4E.

The explanatory paragraph under **Section 6.0 Measures to Minimize Harm** seems to be consistent with the 6-point listing (page 42) of Historical Resources Impact Mitigation taken from Part I, Section 6.17.1.4 (on page 28 and top of page 29). The Department presents specific comments below on 2 of the 6 points in relation to the 7-point Adverse Effect Memo dated 6/22/09, displayed as EXHIBIT 13 (pages 72-73) at the end of PART II.

Reflecting on the positive signals stated above in support of the Preferred Alternative, 4E, and assurances following in the mitigation texts and/or measures to minimize harm to cultural resource values, the Department is pleased that numerous commitments to presenting a completed/signed MOA in a Final EA/Section 4(f) document are forthcoming. The Department believes that a broader Stipulation #7, on archeology, should be set forth in the final MOA to encompass the discussion on pages 30-33 of PART I, which effectively supplements the 6-point Historical Resources Impacts Mitigation cited in both PARTs I and II of this draft material.

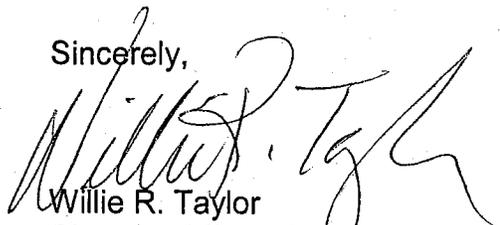
Stipulation #1. Documentation: The Department recommends that, as any property recordation file or document is determined to vary in its dependency on the integrity of the physical material available for accurate and reasonable documentation, that property should be judged by the NH-SHPO.

Stipulation #5. Relocation of Historic Properties [the genuine artifacts thereof]: The Department recommends that an effort be given to the relocation of each property to be removed from its extant historical place, that no property be overlooked, and that each be considered in consultation with the NH-SHPO.

Based on the comments above regarding the selection of Alternative 4E for this transportation project, the Department concurs that there are no feasible or prudent alternatives to avoid harm to the Berlin Heights Addition Historic District. The Department agrees to the measures to minimize harm to be set forth in the final EA/Section 4(f) document, provided they are consistent with the stipulation recommendations above and/or resolved in consultation with the NH-SHPO in an MOA.

We appreciate the opportunity to provide these comments.

Sincerely,



Willie R. Taylor  
Director, Office of Environmental  
Policy and Compliance





Preserving America's Heritage

September 8, 2009

Jamison S. Sikora  
Environmental Program Manager  
FHWA – New Hampshire Division  
19 Chenell Drive, Suite One  
Concord, NH 03301

Ref: *Proposed Reconstruction of NH 110*  
*Berlin, X-A-000(052); 12958B*  
*Coos County, New Hampshire*

Dear Mr. Sikora:

On August 17, 2009, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the New Hampshire State Historic Preservation Office (SHPO) and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact Najah Duvall-Gabriel at 202 606-8585 or [ngabriel@achp.gov](mailto:ngabriel@achp.gov).

Sincerely,

LaShavio Johnson  
Historic Preservation Technician  
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004  
Phone: 202-606-8503 • Fax: 202-606-8647 • [achp@achp.gov](mailto:achp@achp.gov) • [www.achp.gov](http://www.achp.gov)

EXHIBIT 16





## NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Cultural Resources 603-271-3483  
19 Pillsbury Street, Concord, NH 03301-3570 FAX 603-271-3433  
[www.nh.gov/nhdhr](http://www.nh.gov/nhdhr) [preservation@dcr.nh.gov](mailto:preservation@dcr.nh.gov)

August 25, 2009

Mr. Jamison S. Sikora  
NH Division Environmental Program Manager  
Federal Highway Administration  
19 Chenell Drive, Suite One  
Concord, NH 03301

Dear Jamie,

Thank you for the opportunity to comment on the draft Environmental Assessment and Section 4(f) Evaluation for the Berlin X-A-000(052) 12958B project. The Division of Historical Resources (DHR) appreciates the work that went into these documents and has only a few comments after review.

Perhaps most importantly, I would like to suggest a change in wording under the comparison of effects on page 26. The first bullet reads "Each has an Adverse Effect on the District. NHSHPO has stated that the Section 106 process does not allow for determination of which is more Adverse." Section 106 describes what is considered an adverse effect, but gives little guidance as to how to determine whether one alternative is more adverse than another. Perhaps that is because often the decision is easy; for example, one alternative takes a historic property, the other does not, and both achieve the purpose of the project. As we discussed a great deal, this project is different. Both alternatives present a great deal of adverse effects, in ways that impact the Berlin Heights Addition differently. To be more direct, could the first bullet be re-worded to instead read: "Both alternatives present irreversible adverse effects to the historic nature of the neighborhood, each lessening the District's historical significance and integrity in different ways."? That would leave out the potentially confusing statement as to what Section 106 "allows."

In the fourth bullet, same page, the last sentence is difficult to understand. Is it equating three demolitions of architecturally significant properties with seven? In what way is the higher concentration of multi-family housing important to the discussion of historical resources? Also, the sixth bullet appears unfinished.

Beginning at the bottom of page 27, the statement is made that although alternative 4E demolishes a larger number of buildings, it "does less to compromise the feeling, association and linkages that are the defining characteristics of the District." Alternative 4E greatly compromises the feeling, association and linkages that define the eastern portion of the District; it largely removes it. It may be more accurate to say that "Although Alternative 4E demolishes a large number of contributing properties at the eastern boundary of the District, it does less to compromise the feeling, association and linkages that are defining characteristics at the District's core." This statement is made again in the 4(f) analysis, in the middle of page 41 and at the bottom of page 44.



Another important point is in regard to the mitigation sections, on pages 28-29, 42 and 44. The summaries on pages 42 and 44 reflect what the DHR has agreed are appropriate mitigation measures. The more detailed description on pages 28-29 is missing two key ideas. We have discussed a series of workshops for residents, responsive to their needs, rather than just one. Also, in regard to the relocation of historic properties, at our last meeting, the DHR specifically requested that the number not be limited to only one property. Instead, we asked that information be gathered as to the cost and feasibility of moving buildings, owner/buyer interest and available locations. With more data known, the DHR, FHWA, DOT and the City could discuss the best course of action. Perhaps this list was just not updated after our most recent discussion.

One final question is the statement on page 28, twice on page 44, and perhaps elsewhere as well, that no outstanding or individually eligible properties exist in the district. I cannot remember this determination being made. Although Lynne Monroe outlined for us some of the more architecturally significant properties and the more common building types in the district, individual determinations of eligibility were not part of her scope of work, and I don't believe that the Determination of Eligibility Committee made those judgments either. Joyce McKay and/or Mary Kate Ryan at the DHR could confirm this. It's an important point, for now and the future.

Thank you again for the opportunity to review these documents. A tremendous amount of work went not only into writing them, but also in reviewing this project since its inception. Please feel free to call or email if you have any questions about our comments.

Sincerely,

Elizabeth H. Muzzey

Elizabeth H. Muzzey  
Director and State Historic Preservation Officer

c.c. M. Laurin  
J. McKay  
C. Hood  
D. Lyford  
L. Wilson





# City of Berlin



City Hall - Main Street

Office of the City Manager

September 8, 2009

**RECEIVED**  
COMMISSIONERS OFFICE

SEP 14 2009

THE STATE OF NEW HAMPSHIRE  
DEPT. OF TRANSPORTATION

Barbara Ashley, Chairperson, Hearing Commission (NH Project 12958B)  
C/O William Cass, Director of Project Development  
NHDOT  
PO Box 483  
Concord, NH 03302-0483

RE: Berlin, NH Project 12958B

Dear Ms. Ashley:

After reviewing the Draft Environmental Assessment & Section 4(f) Evaluation and attending both recent public meetings on the project, I feel it important to offer my written comments on the project. You and the other commissioners already have heard my supporting the project, specifically Alternative 4E, so I will not spend time repeating those comments. My comments are in reference to two issues found in the draft document.

The first issue is a relatively minor issue, but it deserves some explanation. On page 20 of the Draft Environmental Assessment & Section 4(f) Evaluation, Section 6.11.2 Alternative 4E, paragraph two reviews information about Census Block data. The data used in the report shows the 1999 median household income for Block Group 1 to be \$17,765, Block Group 3, \$35,859, and the City overall \$29,647. In the past, I have asked that this information be clarified to explain the discrepancy. The discrepancy is largely due to the Berlin Housing Authority's main property being located within Block Group 1. The Berlin Housing Authority is a very income sensitive property with 31 housing units onsite. All of the residents of these onsite units are either elderly or disabled and have incomes that range from extremely low to low income. It is clear that this impacts the median household income for this block group.

The reason I point this out is that by simply looking at the data it seems as though there is a greater impact to the neighborhood on the lower income residents. The Berlin Housing Authority while part of this block group is actually located on the other side of the railroad tracks, and is not part of the project area. Therefore, its residents contribute to the overall median household income of the block group, but they are not affected by the project. I hope this helps explain why the two income levels are so significantly different.

The second issue is a larger issue related to not only the Draft Environmental Assessment & Section 4 (f) Evaluation, but the project in general. The evaluation shows that there is a need to mitigate the changes to the historic district located within the project area. Specifically, Alternative 4E would necessitate demolishing twenty eight buildings. While the City certainly appreciates the magnitude of this impact to the Berlin Heights Addition Historic District, we are deeply concerned about the cost of mitigation proposed for the loss of these homes. At this point, the mitigation plan

has been agreed to in concept, but we only have a ballpark estimate of the price tag. Nowhere in the budget did I see a line item for mitigation and I can only imagine that this is in part due to the fact no budget for the mitigation has been established.

The City is willing to do what is necessary to memorialize the losses to the historic district, but there does not seem to be any correlation between mitigation and reasonable costs for said mitigation. We understand that you cannot put a cost on the loss of a historic resource, but in the case of the City of Berlin, the majority of our community does not understand what that historic resource is. Many people equate history to events and not normally architecture, which is the case in this project. For the average person to appreciate the historic value of architecture, it usually has to be significant, and unfortunately there is not one single building in the project area that the community feels particularly attached to. This makes it difficult to explain to the local citizenry why the project is going to such great lengths and cost to document this historic district.

We understand that there is a legal requirement that part of the project budget be segregated for mitigation activities. However, the community also believes that by far the most effective mitigation toward saving historic structures as well as the neighborhood itself over the long term is the removal of the truck route as far as possible from the very middle of the historic district and routing it around the edge of the district, which is accomplished with the alternative 4E route. In view of this, it seems difficult to justify spending significant project dollars on additional mitigation efforts that seem wasteful and are not of note or concern to the community. Accordingly, we believe that the dollar amount spent on additional mitigation should be minimal.

None of the affected properties in the historic district are individually eligible, only the overall neighborhood. Rather than document 8-10 properties at a cost of \$17,000-\$20,000 per property (the current estimates we have been given), the City would rather see a more cursory document that gives an overall description of the district. There have also been discussions about moving a home, which the City is amenable to if the costs prove to be fiscally prudent, however we have no idea what the cost would be as we have seen no comprehensive estimates at this point. With the state of the current national economy, and Berlin's persistently fragile economy, it seems as though the highest priority should be to focus on infrastructure which is desperately needed here in Berlin. Again, we do not dispute the legal requirements of 4(f), we simply believe that a mitigation package can be achieved that addresses the history of the district at a lower cost to the City as we will be responsible for twenty percent of the overall cost of the project.

Sincerely,

  
Patrick MacQueen  
City Manager, City of Berlin

## REPORT OF THE COMMISSIONER

BERLIN, X-A000(052), 12958B

N. H. ROUTE 110

Commission  
PUBLIC HEARING

AUGUST 13, 2009 & AUGUST 27, 2009

7:00 PM

BERLIN JUNIOR HIGH SCHOOL & BERLIN CITY HALL

The following decisions are the Department's resolution of issues as a result of the testimony presented at the August 13, 2009 and August 27, 2009 Public Hearings and written testimony subsequently submitted for the BERLIN, X-A000(052), 12958B project described as:

Alternative 4E, reconstruction of NH 110 on new alignment to create a more direct route for the roadway between Green Street and Wight Street, thus removing through traffic from the largely residential neighborhood. Beginning on Green Street just westerly of the St Lawrence and Atlantic Railroad overpass and extending north approximately three thousand feet (3,000'). The initial reconstruction will follow the alignment of First Avenue then turn and proceed adjacent to the St Lawrence and Atlantic Railroad tracks, rejoining the existing NH 110 alignment on Wight Street in the vicinity of its intersection with Fourth Avenue.

The project will also include minor approach work at the intersections of NH 110 with Gilbert Street, the westerly remnant of Green Street, Roderick Street, Hillside Avenue, Third Avenue, Fourth Avenue, Fifth Avenue, Boulay Street, Sixth Avenue and Duguay Street. Sidewalks will be constructed along both sides of NH 110.

1. Ms. Kathleen Belisle, 128 Green Street, Berlin (parcel 7), requested early acquisition of her property.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition.

2. Norman & Lorraine Lacroix, 358 Willard Street, Berlin (parcel 8), expressed support for the project and requested early acquisition of their property.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition.

3. Mr. & Mrs. Leon & Theresa Parent, 746 First Avenue, Berlin (parcels 29, 31 & 33), requested early acquisition of their properties and asked when the acquisitions would occur.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition. Before the acquisitions can proceed it is necessary to have layout approval by the Hearing Commission, Federal Highway Administration issue a "finding of no significant impact" (FONSI), and appraisals of the properties completed to identify values. It is anticipated these steps will occur in 2010 for these properties.

4. Ms. Kristen Kiernan, 50 Allen Farm Road, Northwood (parcel 38), requested early acquisition of the property on Hillside Avenue so she can proceed with the relocation of the tenants sooner rather than later.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition.

5. Mr. Randy Hynes, 838 Second Avenue, Berlin (parcel 40), requested early acquisition of his property.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition.

6. Mary & Albert Guay, PO Box 692, Berlin (parcel 107), expressed support for alternative 4E and requested early acquisition of their property on Hinchey Street.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition.

7. Mr. Daniel Drazen, 625 Fox Hollow Drive, Hudson, Mortgagee for Gerard Healey, 844 Third Avenue, Berlin (parcel 109), expressed support for the project and requested early acquisition of the property.

*Response:* Due to the project layout this property was shown to be a complete acquisition at the Public Hearing. The Department concurs with this request for early acquisition.

8. Elizabeth & Giuseppe Amato, 587 Western Avenue, Berlin (parcel 16), requested early acquisition of their property on First Avenue, but want to retain whatever portion of the property is not required for the project because they have an auto repair garage on a portion of the property that is not impacted by the project.

*Response:* The Department acknowledges this request for an early acquisition. However, because only a portion of the property will be required for the project, more detailed project plans will need to be developed to ascertain the portion of property needed to complete the project. As a result this acquisition will not be as early as those that involve purchasing the entire property.

9. Helene & Marcel Arseneau, 218 York Pond Road, Milan (parcels 2 & 3, Green Street), expressed support for the project and requested total acquisition of both of their parcels located at 114 and 124 Green Street.

*Response:* As shown at the Public Hearing, the house located on parcel 3 and portions of land from parcel 2 need to be acquired to build the project. Due to the significant change in function of these two properties as a result of the required acquisitions for the project, the Department agrees to purchase parcels 2 and 3 in their entirety.

10. Gary & Nancy Aube, 102 Mannering Street, Berlin (parcel 104), requested the purchase of their entire property as a result of the substantial change in size and function of their lot once the project is complete.

*Response:* As shown at the Public Hearing a significant portion of this property is required for the project leaving the house on a much smaller piece of property and impacting access to the parcel. The Department agrees to purchase the entire property as a result of this substantial change.

11. Kevin & Karen Spencer, 9 Oldham Road, Raymond (parcel 32), expressed support for alternative 2, which would keep proposed NH 110 more southwesterly of their property thus eliminating the impact to their property. If alternative 4E, which was presented at the Public Hearing as the preferred alternative, proceeds, they requested to know when the appraisal of their property impacts would begin. They also are concerned with the "fair market value" approach to the purchase of property in this current down economy.

*Response:* Alternative 2 was presented at previous public meetings along with other alternatives. As it does not provide as much overall benefit to the community and historic district it was not selected as the preferred alternative. Alternative 4E was selected as the preferred alternative and presented at the Public Hearing.

As shown at the Public Hearing the house located on this property needs to be acquired for the project. Due to the significant change in function of this property as a result of the required acquisition for the project the Department agrees to purchase the entire parcel. All the acquisitions associated with the project will be appraised and acquired in conformance with Federal regulations and guidelines. The appraisal will provide the fair market value of the property at the time of the appraisal. The fair market value will be reflective of property values within the general area of the property being appraised. Before the acquisition can proceed it is necessary to have layout approval by the Hearing Commission, Federal Highway Administration issue a "finding of no significant impact" (FONSI) and an appraisal of the property completed to identify its value. It is anticipated these steps will occur in 2010 for this property.

12. Normand Roy, 195 Wight Street, Berlin (parcel 149), noted the shared drive shown on the Public Hearing plan is incorrect; there is only a single, unshared driveway that accesses his property. He further noted the catch basin grate on Wight Street in front of this property appears to be loose as it is loose when a vehicle drives over it. Due to the small size of this parcel he suggested the entire property be purchased if any acquisition is necessary.

*Response:* The plans will be corrected to show only a single drive to this property. The condition of the catch basin grate has been brought to the attention of the Berlin Public Works for their action as appropriate. As the proposed roadway is essentially in the same location as the existing roadway in the vicinity of this property, only minor redefinition of the right-of-way is anticipated. This redefinition of right-of-way will require some acquisition of the property, but is not sufficient to warrant purchase of the entire property.

13. Marc & Ginger Gagne, 191 Paris Road, Stark (parcel 147), requested purchase of their property on Wight Street due to the proximity of the building to the roadway.

*Response:* As the proposed roadway is essentially in the same location as the existing roadway in the vicinity of this property, the Department does not propose to purchase the property as requested.

14. Wayne & Deborah Andrews, 133 Ash Street, Nashua (parcel 18), expressed safety concerns associated with increased traffic in front of their property on First Avenue once the proposed NH 110 is constructed. Currently First Avenue is a dead end street so traffic is mostly associated with residents living in this area. They requested their entire property be purchased as part of the project due to the significant change in setting created by the increase in traffic.

*Response:* The proposed NH 110 will curve away from this property resulting in the roadway being further from the property than existing First Avenue. As there is minimal, if any, direct impact to this property as a result of the project, the Department does not propose to purchase the property as requested.

15. Leona St Hilaire & Raymond Leclerc, 17 Hinchey Street, Berlin (parcels 100 & 102), requested the proposed driveway to parcel 102 be changed to be more parallel to the side of the building. They also suggest a sidewalk be constructed on the southerly side of Hinchey Street, on the easterly end, to provide pedestrian access to this section of roadway and to help divert roadway runoff away from the building and assist in the collection of storm water.

*Response:* The Department will coordinate the location of the proposed driveway to parcel 102 with the owner to make the proposed change as accommodating as possible. Pedestrian access to Hinchey Street will be coordinated with the City, and storm water collection will be addressed appropriately as the project proceeds through design and construction.

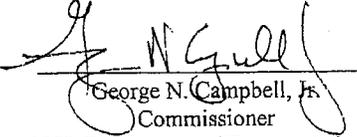
16. Anthony Harp, 99 Granite Street, Berlin, suggests bicycle pathways be included within the project.

*Response:* The project includes paved shoulders on both sides of the roadway that will provide space for bicycle travel.

17. Mr. Patrick MacQueen, City Manager, 168 Main Street, Berlin, expressed support for Alternative 4E. He noted the Environmental document should better explain the census block income data. He has concerns with the potential historic mitigation costs. While recognizing they are necessary, he notes they also need to be reasonable in keeping with the current state of the neighborhood, called the Berlin Heights Historic District.

*Response:* The Department appreciates support for the proposed alternative 4E. The Final Environmental Assessment document will better address the census block income data as it applies to the differing household income groups. Historic mitigation is a necessary component of the project cost and the Department understands and agrees with the desire of the City to keep cost at a reasonable amount. The Department will continue to involve the City in the development of the required mitigation.

Date: 3/12/10

  
George N. Campbell, Jr.  
Commissioner  
N.H. Department of Transportation

## **PHOTOGRAPHS**



# Berlin 12958B



Green Street view west from Railroad Bridge. Begin of project limits.



Green Street view east from First Ave intersection to Railroad Bridge



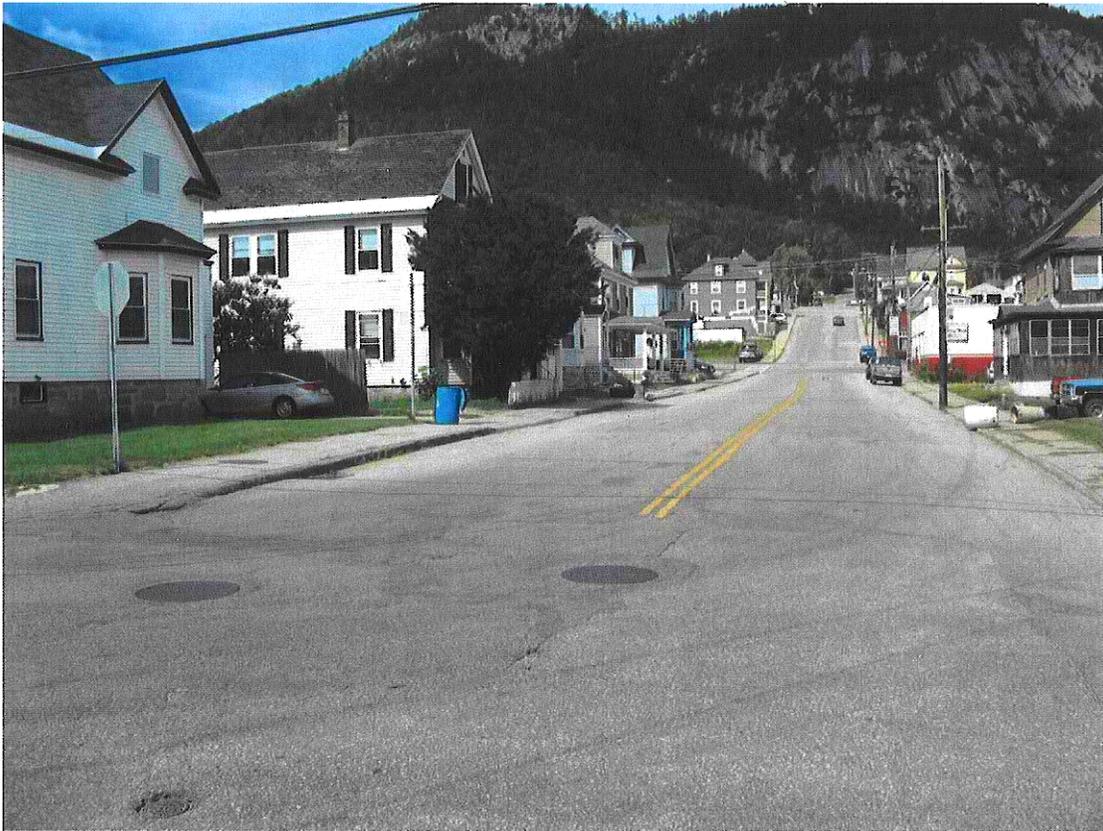
First Ave. intersection with Green Street view north



Green Street at Second Ave intersection view east.



Second Ave at Green Street intersection view north



Madigan Street view West from Second Ave.



Second Ave view south from Mannering Street



Third Ave view north.



Logging truck negotiating turn onto Madigan Street from Third Ave.



Truck tracking over sidewalk. Madigan Street and Third Ave.



Conflict of trucks negotiating turn onto Madigan Street from Second Ave.



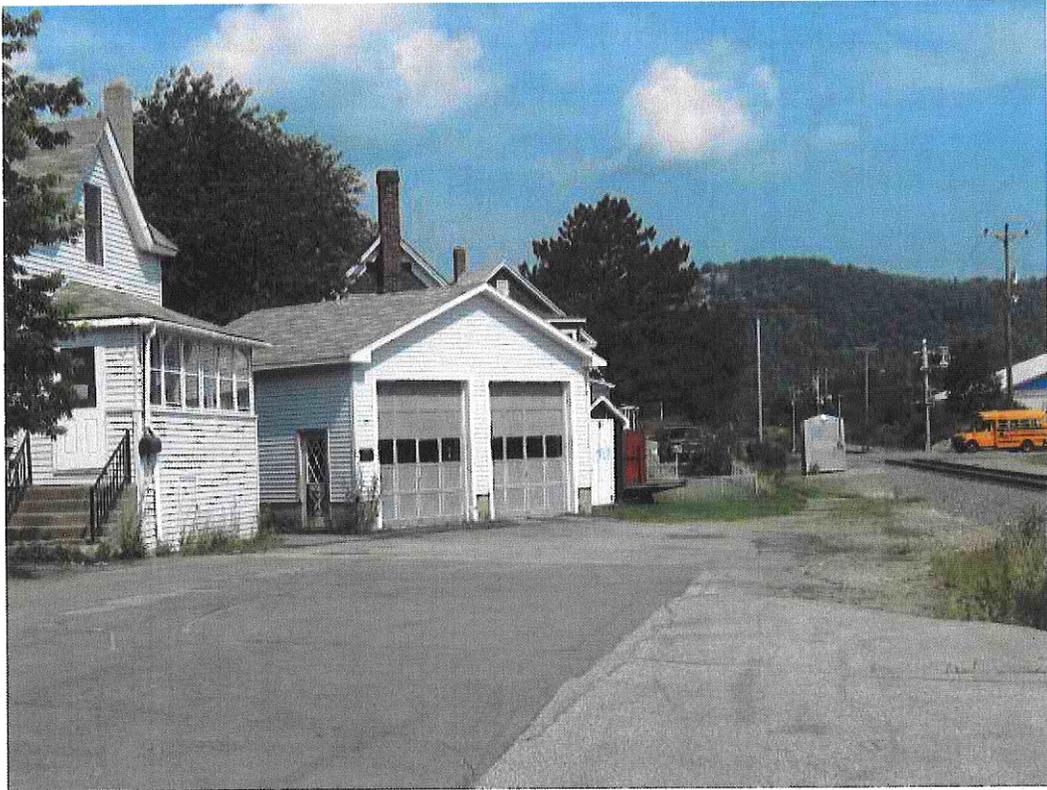
Wight Street from Third Ave view northwest



Wight Street at Fourth Ave. view south.



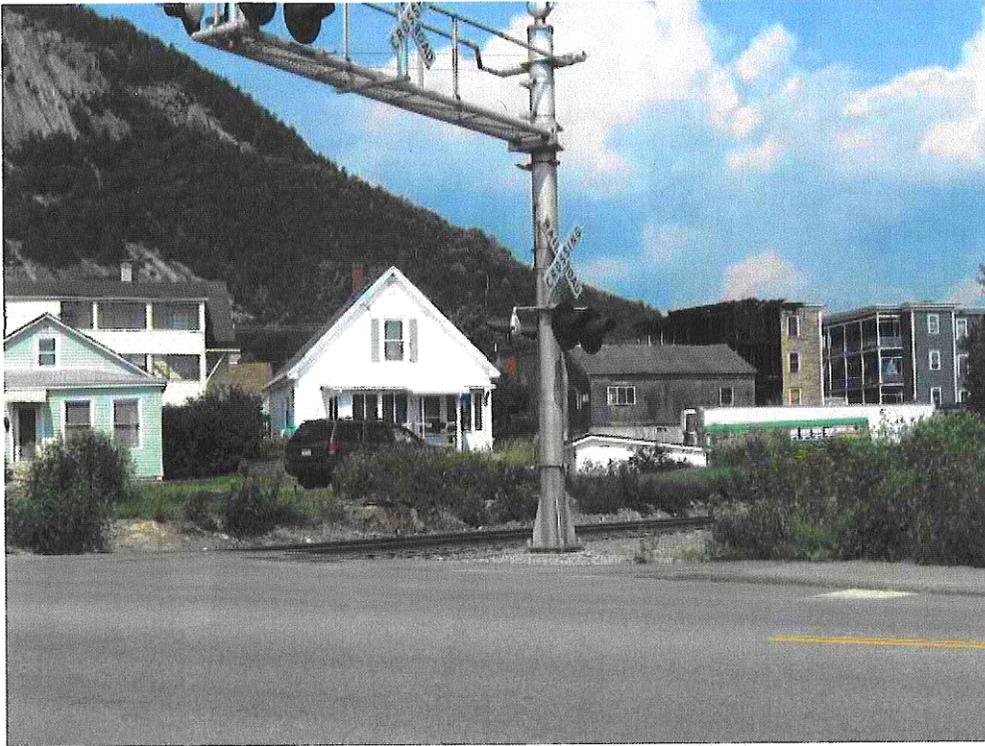
Wight Ave. view south. End of project limits



End of First Ave looking north. Proposed alignment of Alternative 4E.



First Ave view south from dead end. Proposed alignment of Alternative 4E.



Hillside Ave at Railroad crossing.  
Looking to the northwest at proposed alignment of Alternative 4E.



Hillside Ave view west to Second Ave.

