



Chapter 7

Environmental Resource Review

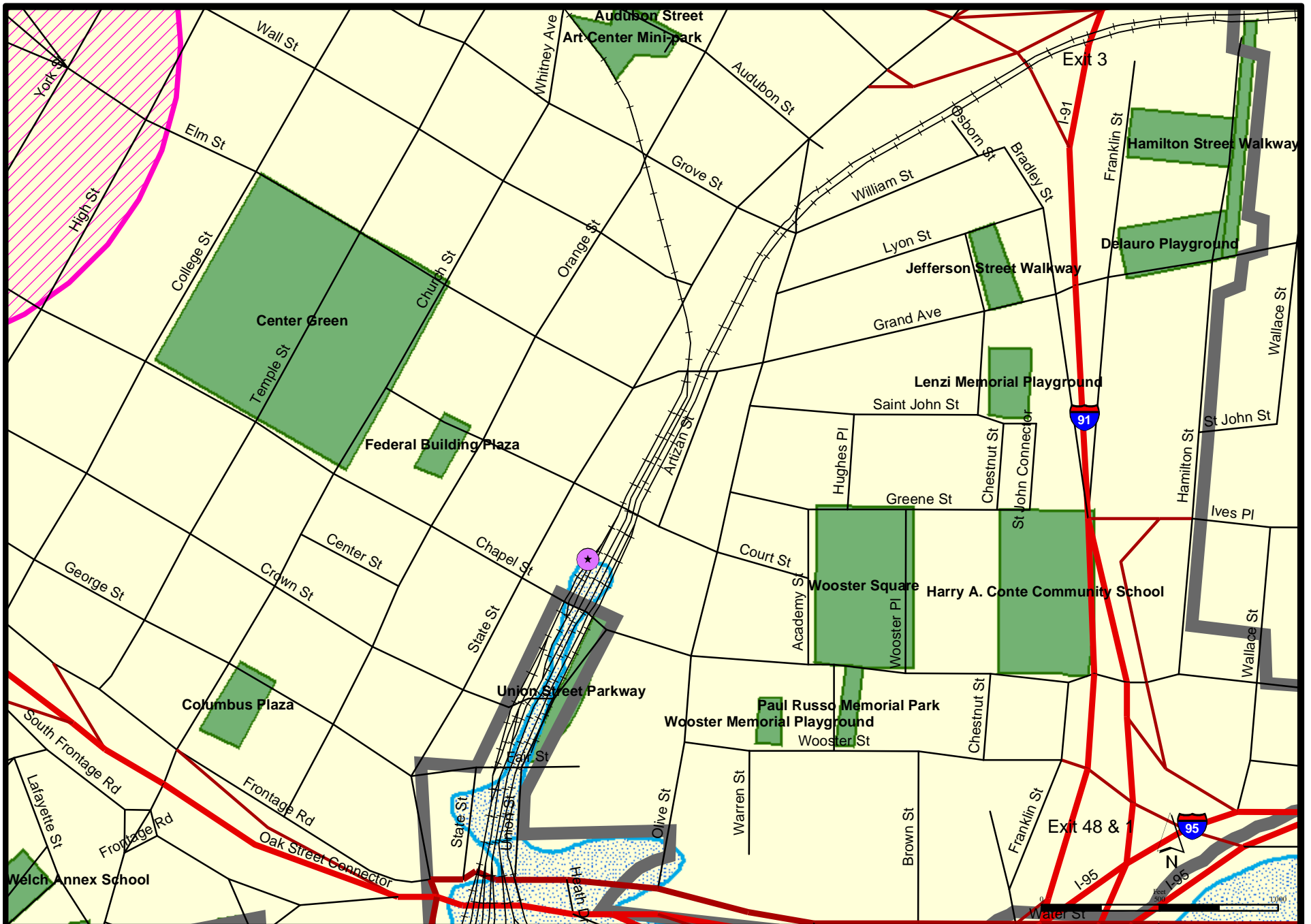
This chapter is a preliminary review of the potential environmental issues associated with the construction of the passenger stations and track for the start-up and full-build service.

7.1 Start-up Service Station Resource Review

7.1.1 New Haven State Street Station

The proposed New Haven State Street Station (Figure 7-1), located northeast of the Chapel Street / State Street intersection, lies within an existing urbanized and previously disturbed area. The only natural resource potentially affected by station development, based on the secondary source review, is the 100-year floodplain. The floodplain approaches the station site from the south along the railroad tracks, possibly extending as far as the location of the proposed elevator/stair. The proposed platform, which extends north of the elevator/stair, appears to be distinctly outside the floodplain limits. During subsequent project phases, accurate mapping of the floodplain boundary will be necessary to determine whether any proposed construction falls within it. Potential impacts on floodplains will need to be addressed during the NEPA/CEPA process. In the event that construction activities will take place within or will affect the floodplain, a Floodplain Management Certification will be needed from the Connecticut Department of Environmental Protection (CTDEP). The certification essentially requires that any construction within floodplains be planned so as not to decrease flood storage capacity and so as to place the floor of any proposed structures (e.g. station) at or above the base flood elevation (BFE). In addition, stormwater management will need to consider potential impacts to floodplains.

The site is located within the coastal boundary and is therefore subject to the Connecticut Coastal Management Act (CCMA). During the NEPA/CEPA process and subsequent permitting phases, the station will need to be shown consistent with the activities and use policies established by the CCMA. No other natural resources are in close proximity to the station. The Farmington Heritage Canal, approximately 250 feet away at its nearest point, is not expected to be affected.





At the proposed New Haven State Street site, an additional platform and connecting stair will be built to the west of and parallel to the existing Amtrak platforms. There are no historic resources located in close proximity to the proposed station additions, therefore it is anticipated that there will be no physical or visual impact to historic resources in or around this station.

7.1.2 North Haven Station

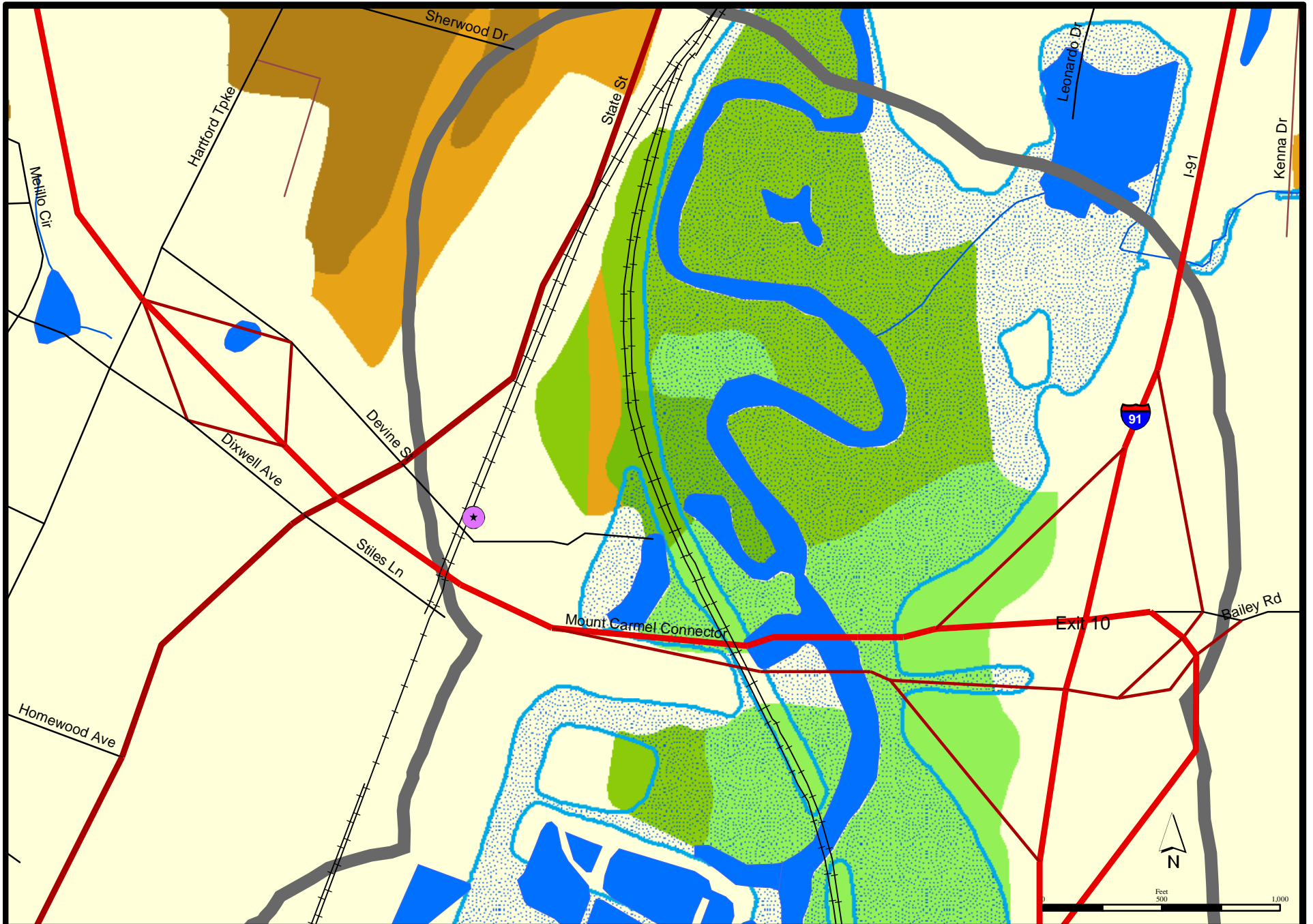
The proposed North Haven Station (Figure 7-2) is over 300 feet from mapped wetlands and contains no other natural resources, according to the secondary source review. It is therefore unlikely to adversely affect natural resources. The site, however, is located within the coastal boundary and is therefore subject to the CCMA. During the NEPA/CEPA process and subsequent permitting phases, the station will need to be shown consistent with the activities and use policies established by the CCMA.

The conceptual plan for this site includes a new station, platforms and a crossover to be constructed south of the existing Amtrak station. The immediate area does not contain any historically significant resources, therefore it is anticipated that no historic resources will be physically or visually impacted by the plan.

7.1.3 Wallingford Station

According to the secondary source mapping, there are no natural resources in the vicinity of the Wallingford Station (Figure 7-3) and, therefore, no potential impacts from either Site Plan A or Site Plan B. The Railroad Green Park, located east of the existing railroad station, would not be affected by either Site Plan A or Site Plan B.

At this site, the historic Wallingford Railroad Station, built in 1871 and listed on the National Register of Historic Places (National Register), is currently used by Amtrak as a passenger terminal. The plans at this station retain the existing station building and call for the construction of platforms and additional at-grade parking, both to be located either north or south of the existing station. The parking will mostly make use of already existing lots, but on both plans, structures will be replaced by parking. As the project advances to the NEPA/CEPA phase, it will be necessary to ensure that these structures are not potentially eligible for inclusion on the National Register. If they are, additional coordination with the State Historic Preservation Office (SHPO), a Section 4(f) Evaluation, Section 106 documentation, and various mitigation activities may be necessary. Given the current design plans and previous field visits, there are no impacts to known historic resources anticipated at this site.







7.1.4 Meriden Station

At the Meriden Station (Figure 7-4), a portion of the proposed parking lot falls within the extensive 100-year floodplain between State and Pratt Streets, and portions of the proposed elevator/stair (“up & over”) east of the railroad tracks, as well as the existing train station, may also be located within the floodplain. During subsequent project phases, accurate mapping of the floodplain boundary will be necessary to determine how much proposed construction falls within it. Potential impacts on floodplains will need to be addressed during the NEPA/CEPA process and a Floodplain Management Certification will be needed from the CTDEP prior to construction of any elements in the floodplain. The certification essentially requires that any construction (or reconstruction) within floodplains be planned so as not to decrease flood storage capacity and so as to place the floor of any proposed structures at or above the base flood elevation (BFE). In addition, stormwater management will need to consider potential impacts to floodplains.

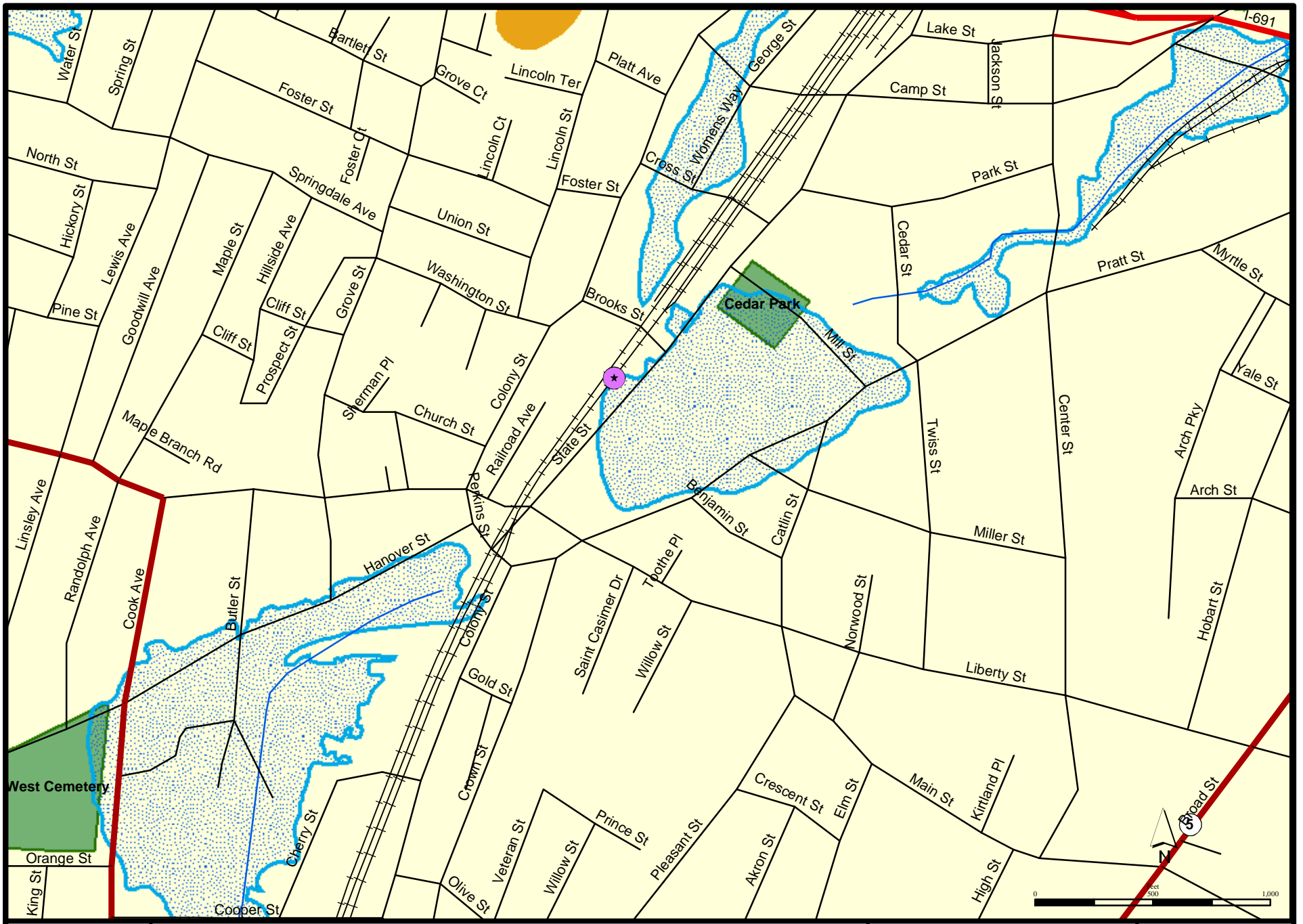
No other natural resources are in the vicinity of the station, according to the secondary source mapping.

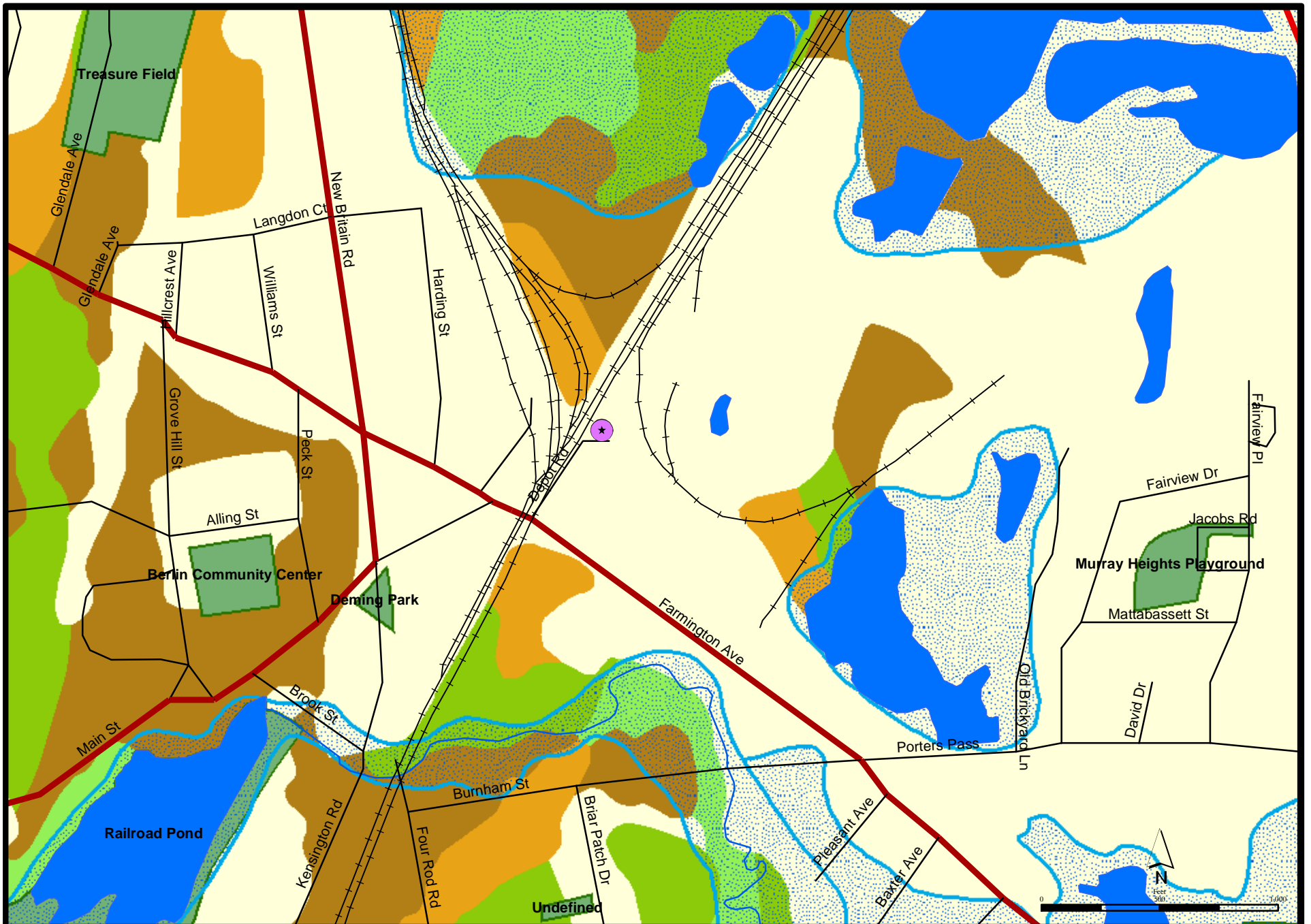
At the Meriden site, the conceptual plan incorporates the existing station, which is not a historic property. Additional platforms and a crossover are planned northwest of the station, which is located in a heavily developed commercial area at the southwest corner of the intersection of State and Brook Streets. It is anticipated that no historic resources will be impacted by this proposed design.

7.1.5 Berlin Station

The only natural resource in close proximity to the Berlin Station (Figure 7-5) is farmland soils, which are located west of the railroad tracks and north of the existing station. The proposed platforms under Site Plan A are in areas previously disturbed by rail construction and not mapped as farmlands. This option would therefore not affect farmland soils. However, the Full-build Site Plan B proposes new platforms north of the existing station on both sides of the tracks and a new parking lot northwest of the station, in an area mapped as farmlands of additional statewide importance and prime farmland. Per state and federal farmland protection policy acts, potential impacts to farmlands will need to be addressed during the NEPA/CEPA process. Proposed project activities on farmlands may require review by the Natural Resources Conservation Service (NRCS).

All site plans for this station retain the existing Berlin Railroad Station, a structure that was built in 1900 and is eligible for inclusion on the National Register of Historic Places. None of the station plans are likely to have any impact on historic resources, but given the historic nature of the existing station, it is recommended that the SHPO have an opportunity to comment on the design plans as the project advances through the NEPA/CEPA phase, to ensure compliance with Section 106 (36 CFR 800) Regulations of the Advisory Council on Historic Preservation and Section 4(f) of the Department of Transportation Act.







7.1.6 Newington Station

This station (Figure 7-6) would be a joint station with the Hartford West Busway and conceptually located as proposed by that project, on the northwest side of the railroad tracks, with access from the intersection of Route 173 / West Hill Road. The secondary source mapping showed no natural resources in that vicinity that could be impacted by the station as proposed. A commuter rail parking lot is proposed on the opposite side of the tracks, in the footprint of an existing parking lot and building between Frances Avenue and the tracks. Based on the mapping, it appears that the parking lot is outside (west of) the 100-year floodplain of Piper Brook, but accurate mapping of the floodplain boundary will be necessary to determine whether any direct project impacts will occur. Such impacts will need to be addressed during the NEPA/CEPA process and subsequent environmental permitting. Floodplain Management Certification will be required if activities will occur in or affect the floodplain. In addition, potential impacts on Piper Brook and its associated wetlands will need to be carefully considered, particularly in regard to stormwater runoff, given their proximity to the proposed development and the potential need for a retention pond for parking lot runoff.

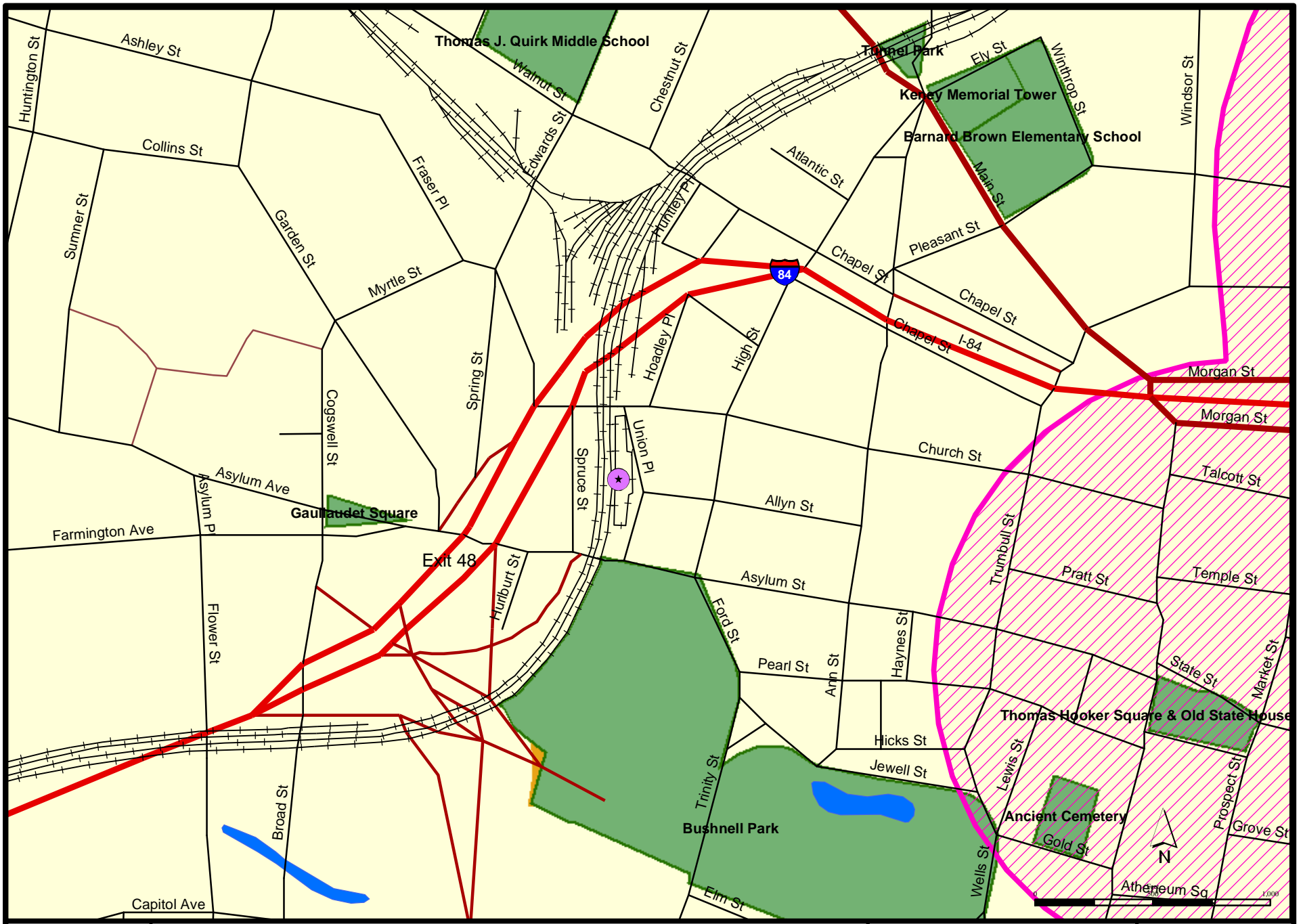
The proposed plan for this station was developed in conjunction with the Hartford West Busway project. While no historic properties will be impacted by the commuter rail portion of the plan, it is anticipated that one historic property located at 160 Willard Avenue will be impacted by the associated Busway project. Therefore, it is recommended that the SHPO review site plans of this station during the NEPA/CEPA process to ensure clarity on potential impacts.

7.1.7 Hartford Station

There are no natural resources in the vicinity of the Hartford Station (Figure 7-7), so the minor proposed modifications at this station will not directly affect natural resources. A covered walkway connecting the station with the Legislative Office Building is proposed parallel to the tracks along the edge of Bushnell Park, which would increase impervious surface but enhance access to the park.

At this site, the existing Union Station, which is listed on the National Register of Historic Places, will be utilized. The existing platforms are also incorporated into the plan. A raised platform will be added to the northern end of the existing platforms to provide commuter rail access. It is anticipated that the addition of this platform will not have a visual impact on the existing station, yet given the historic nature of the station, it is recommended that the SHPO have an opportunity to review the station plans to ensure compliance with Section 106 (36 CFR 800) Regulations of the Advisory Council on Historic Preservation and Section 4(f) of the Department of Transportation Act. If the SHPO determines that Union Station will be adversely impacted, Section 106 documentation and a separate Section 4(f) review may be required. To mitigate any adverse effects it may then be necessary to develop a Programmatic Agreement (PA) or a







Memorandum of Agreement (MOA), stipulating appropriate mitigation measures. No additional historic resources will be impacted as a result of this proposed plan.

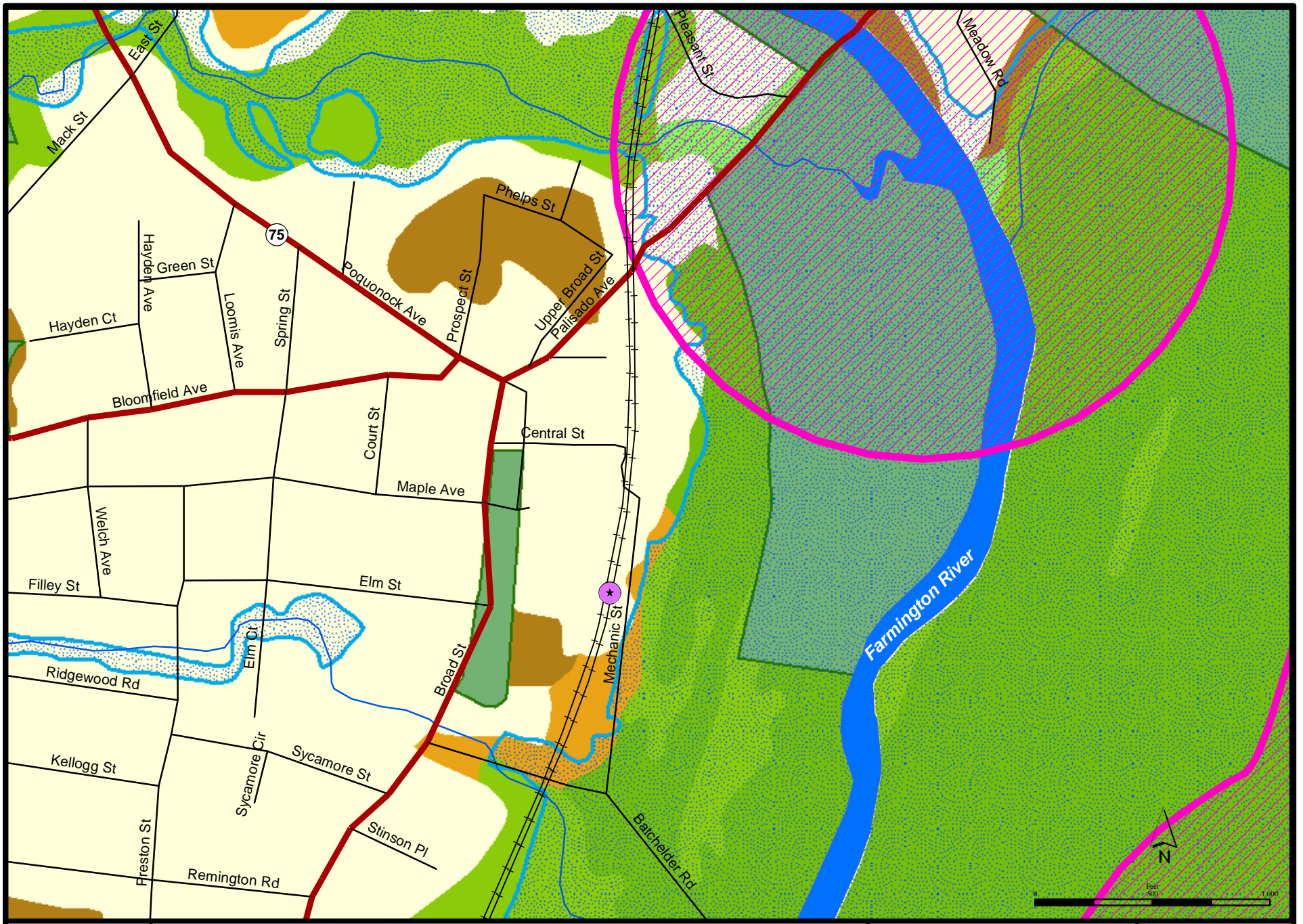
7.1.8 Windsor Station

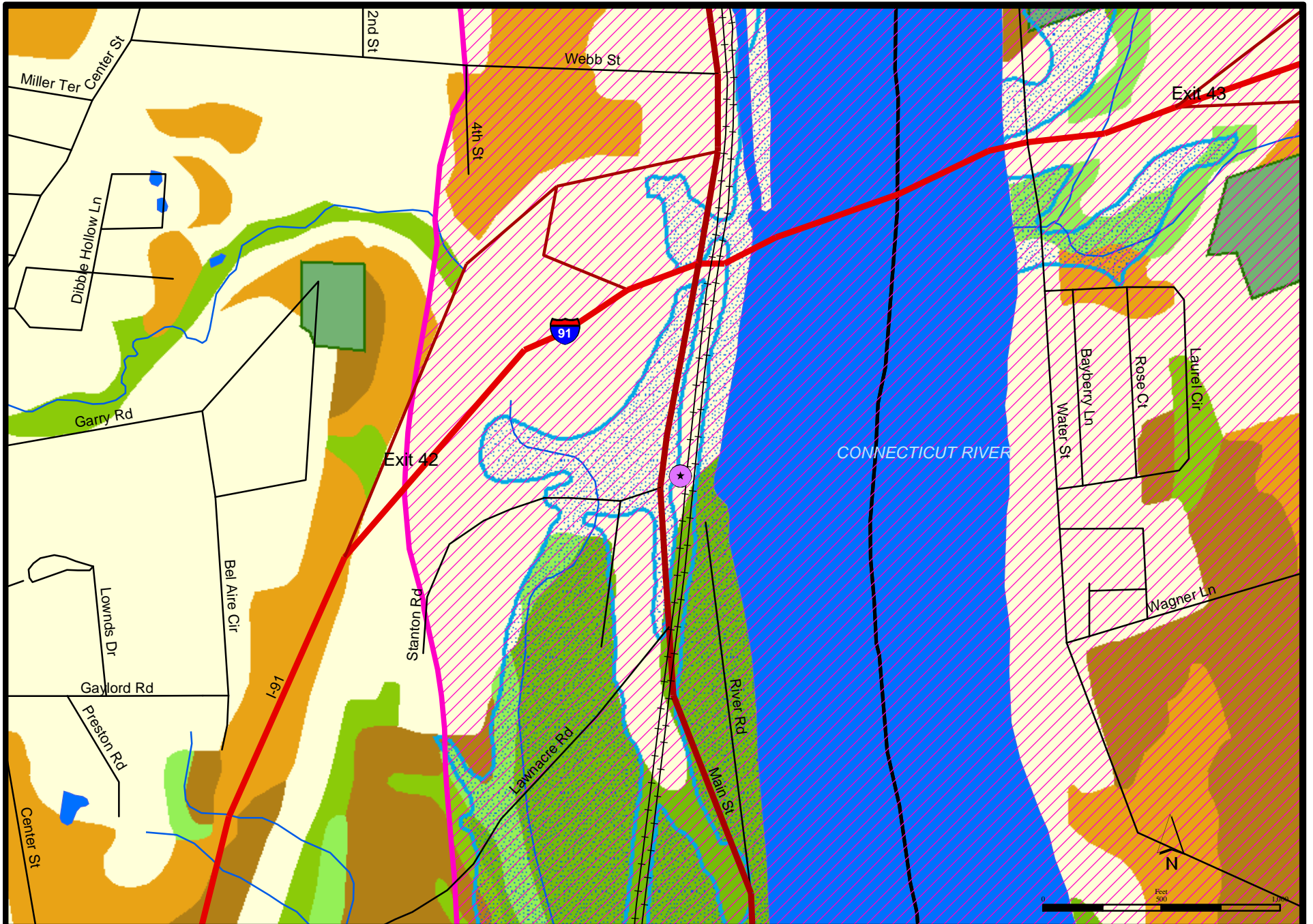
The proposed Windsor Station (Figure 7-8) would involve new platforms, “up & overs”, and a proposed parking structure between Mechanic Street and the rail line, approximately halfway between Batchelder Road and Central Street. Based on secondary source mapping, it appears that the site is surrounded and may partially encroach upon 100-year floodplains (Farmington River) and farmlands of additional statewide importance. In addition, wetlands associated with the Farmington River floodplain are shown within 100 feet. Although most of the proposed station development footprint is currently developed, a small portion in the vicinity of the dog pound appears to be vacant/undeveloped. During subsequent project phases, accurate mapping of the floodplain and farmland soils boundaries will be necessary to determine whether any proposed construction directly impacts these resources. Potential impacts on these resources will need to be addressed during the NEPA/CEPA process. In addition, potential impacts on the wetlands associated with the Farmington River will need to be carefully considered, particularly in regard to stormwater runoff, given their proximity. In the event that construction activities will take place within or will affect the floodplain, a Floodplain Management Certification will be needed from the CTDEP. Proposed project activities on farmlands may require review by the Natural Resources Conservation Service (NRCS).

The conceptual plan for this station calls for the existing station to be maintained and for new platforms and parking to be constructed on state and town-owned land. No above ground historic resources will be impacted by this plan, but the proximity of the proposed parking structure to the Connecticut River indicates that the station will need to be reviewed by the SHPO to ensure that no resources will be impacted. The NEPA/CEPA process will provide this opportunity. Given the proximity of the site to the Connecticut River, it is recommended that the site be investigated by the State Archeologist as an archeologically sensitive area prior to any ground disturbance according to Section 106 Regulations of the Advisory Council on Historic Preservation. If the SHPO determines that a historic resource that is listed or considered eligible for inclusion in the National Register will be adversely impacted, Section 106 documentation and a separate Section 4(f) review may be required. To mitigate any adverse effects it may then be necessary to develop a Programmatic Agreement (PA) or a Memorandum of Agreement (MOA), stipulating appropriate mitigation measures.

7.1.9 Windsor Locks Station

The proposed site for the Windsor Locks Station (Figure 7-9), on the northwestern corner of the Main Street / Stanton Road intersection, lies partially within the 100-year floodplain of the Connecticut River, as indicated by the secondary source mapping. There is no regulated floodway at this location. Floodplain boundaries will need to be accurately mapped and impacts on floodplains will need to be studied further in the







NEPA/CEPA process. If construction will occur in or affect the floodplain, a Floodplain Management Certification will be needed from CTDEP prior to construction. The certification essentially requires that construction within floodplain areas is planned so as not to decrease flood storage capacity and so that station elements are positioned at or above the base flood elevation (BFE). Additionally, stormwater management will need to be carefully evaluated and designed to avoid impacts on floodplains and/or wetlands.

Although mapping did not show wetland soils, field observations revealed wetlands on the proposed station site. The wetlands are associated with the channelized flow of runoff southerly along Main Street, then westerly along Stanton Road, such that the channel/wetlands essentially frame the proposed parking area. Vegetation along the approximately 20-foot-wide channel consists of dense common reed (*Phragmites australis*) bordered by mixed shrubs. Approximately 150 feet west of the intersection, along Stanton Road, the runoff is channelized through a pipe, and approximately 200 feet west of the pipe, the wetland expands into a broad field of *Phragmites*. There are also wetlands mapped along the Connecticut River on the east side of the tracks in the vicinity of the station site.

Wetlands will need to be delineated per state and federal definitions and portrayed on the proposed site plan. Further evaluation of wetland impacts will be necessary during the NEPA/CEPA process and if impacts to jurisdictional wetlands cannot be avoided, construction of the station would require an Inland Wetlands and Watercourses permit from the CTDEP and possibly a U.S. Army Corps of Engineers (ACOE) permit. Impacts that cannot be avoided would need to be minimized and then mitigated at a minimum ratio of 1:1, and CTDEP and/or the ACOE might require other mitigation measures as part of the NEPA/CEPA and/or permitting processes.

The site falls within the NDDB record that encompasses a broad corridor along the Connecticut River, so coordination with CTDEP regarding the status and/or presence of any threatened, endangered, and/or special concern species would be necessary during the NEPA/CEPA and/or environmental permitting process, to further evaluate potential impacts to such species.

Although not shown on the secondary source mapping, the CTDEP's Stream Channel Encroachment Lines list indicates that encroachment lines exist along the entire stretch of the Connecticut River within Windsor Locks. Efforts should be made to avoid impacts within stream channel encroachment lines. If impacts cannot be avoided, a Stream Channel Encroachment permit from CTDEP would be required.

The plan for this station incorporates the existing Amtrak station and calls for the construction of a new platform and paved entry improvements to the west of the tracks. An historic rail station to the north in Windsor Locks is not now included and will not be impacted by this project. The area immediately west of the proposed station includes Broad Street Green Historic District, which runs roughly along Broad Street from Batchelder Road to Union Street. However, given the presence of the existing rail line and station, the proposed station plan is not likely to have a significant impact on any of

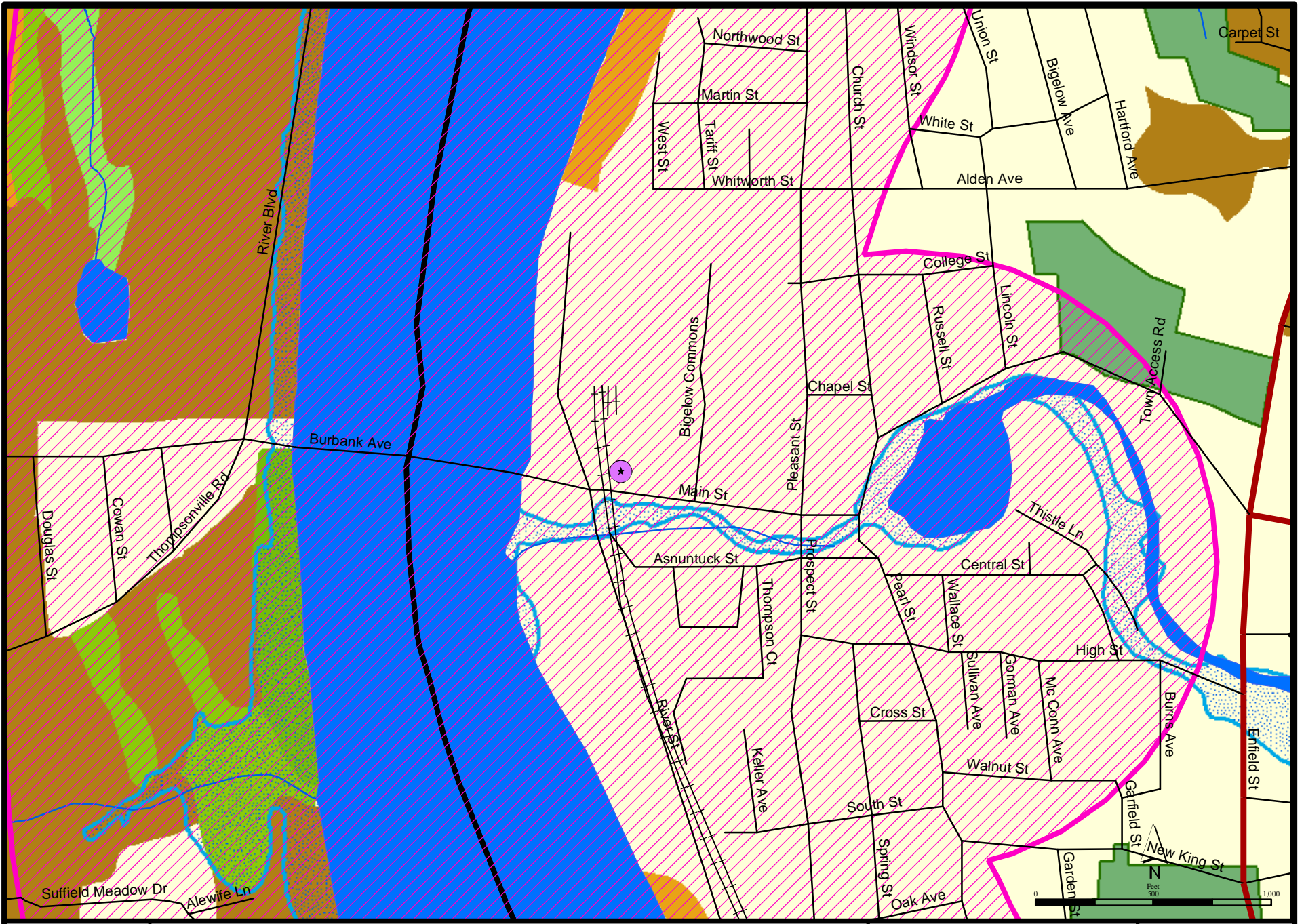


the properties included in the District. Given the close proximity of the site to the District and the historic nature of Windsor Town Center, the finalized station plans will need to be reviewed by the SHPO to ensure that they are consistent with Section 106 (36 CFR 800) of the Advisory Council on Historic Preservation and subsequently Section 4(f) of the Department of Transportation Act. The NEPA/CEPA process will provide this opportunity. If the SHPO determines that a historic resource that is listed or considered eligible for inclusion in the National Register will be adversely impacted, Section 106 documentation and a separate Section 4(f) review may then be required. To mitigate any adverse effects it may then be necessary to develop a Programmatic Agreement (PA) or a Memorandum of Agreement (MOA), stipulating appropriate mitigation measures.

7.1.10 Enfield Station

The Enfield Station (Figure 7-10), located north of Main Street between North River and Commerce Streets, falls within a broad NDDB record along the Connecticut River and possibly within the zone of an additional NDDB record. Coordination with the CTDEP regarding the status and/or presence of threatened, endangered, and/or special concern species or their habitat would be necessary during the NEPA/CEPA and/or environmental permitting process to further evaluate potential impacts to such species.

Conceptual Site Plan B proposes new parking along the disturbed rail right-of-way in combination with shared-use parking on existing parking lots. In the plan, platforms will abut the eastern wall of the Connecticut Casket Company building, a historic structure that may be eligible for inclusion on the National Register of Historic Places. The Casket Company building will be maintained as part of both station plans and as a result, it is anticipated that neither of the plans will have any significant impact on above-ground historic resources. The station will need to be reviewed by the SHPO to ensure that no resources will be impacted. Given the proximity of the site to the Connecticut River, it is recommended that the site be investigated by the State Archeologist as an archeologically sensitive area prior to any ground disturbance. The NEPA/CEPA process will provide for these further reviews. If the SHPO determines that a historic resource that is listed or considered eligible for inclusion in the National Register will be adversely impacted, Section 106 documentation and a separate Section 4(f) review may be required. To mitigate any adverse effects it may then be necessary to develop a Programmatic Agreement (PA) or a Memorandum of Agreement (MOA), stipulating appropriate mitigation measures.



**New Haven, Hartford, Springfield
Commuter Rail**

Natural Resources Review
FINAL REPORT

**ENFIELD
STATION**

Figure 7-10



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-  Wetland Soils
-  Floodplain (100-Year)
-  Natural Diversity Database
-  Prime Farmland Soils
-  Additional Statewide Important Farmland Soils
-  Parks/Open Space
-  Station



7.2 Full-build Service Station Resource Review

7.2.1 Wharton Brook Station

The Wharton Brook Station (Figure 7-11) would be accessible from the Pratt & Whitney access road, which intersects with Washington Avenue (Route 5) north of Temple Street and south of Glenn Road. Based on the secondary source mapping, the only natural resource potentially affected by the proposed Wharton Brook Station is one or more Natural Diversity Data Base (NDDB) records. The proposed platforms and parking lot fall within the potential impact area of threatened, endangered, or special-concern species or their habitats. While it is unlikely that the station site has significant ecological value, since it is located within a highly disturbed setting, coordination with the CTDEP will be necessary during the NEPA/CEPA process to further evaluate potential impacts to sensitive species from this station.

The conceptual plan for the Wharton Brook Station includes the construction of new platforms and a parking lot in an open space that would be accessible from the Pratt & Whitney access road located north of Temple Street and south of Glenn Road. The surrounding area does not contain any historically significant resources, therefore it is anticipated that no historic resources will be physically or visually impacted by the plan.

7.3 Double Tracking

A minimum of 18 miles of track will be added to create double track configurations in order to accommodate both freight rail and commuter rail traffic for the start-up service. The additional tracks will occur in five different locations with segment lengths of approximately two to four miles each. The remaining single track segments will be double-tracked for the full-build. The double track locations are described in Chapter 6.

The double tracking will occur within existing rail rights-of-way and in locations that were previously double tracked. As such, they are on ground that was formerly filled and prepared as rail bed. At the one water crossing (of the Quinnipiac River) in North Haven, a double track trestle is already in place and requires no reconstruction. A review of resource mapping shows that the proposed double track areas contain no wetlands, significant vegetation, threatened or endangered species habitat, unique geology, farmland soils, or other special resources. Engineering surveys have found no remnant rail signals, boxes, or culverts in the double track locations, so the potential for historic rail features is extremely low and the disturbed ROW condition indicates low archaeological sensitivity as well. Because the extra track segments would be directly adjacent to existing operating rail lines, they would be consistent with existing land uses. Given these considerations, the addition of the double track sections would not be expected to result in any significant adverse environmental impacts.

