



**Environmental
Assessment -
Livingston
Street
Transportation
Improvement
Project
24 CFR Part 58**

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1. PROJECT INFORMATION

Project Name: Livingston Street Transportation Improvement Project

Responsible Entity: Town of Tewksbury, Massachusetts

Grant Recipient (if different than Responsible Entity): N/A

State/Local Identifier: Grantee's Unique Entity Identifier (UEI): CGGRZ6RFW9N3; Federal Award Identification Number (FAIN): B-24-CP-MA-0966

Preparer: Megan Gatto, AICP (Woodard & Curran, Inc.)

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1.1 Project Location

The Proposed Project includes approximately 4,100-feet (0.78 miles) of right-of-way along Livingston Street between East Street and Roy's Way in Tewksbury, Massachusetts.

1.2 Description of Proposed Project

The Proposed Project is a multi-modal enhancement project that would create and improve pedestrian, bicycle, transit, and vehicle facilities along Livingston Street in the Town of Tewksbury, Massachusetts. The Proposed Site includes approximately 4,100-feet (0.78 miles) of right-of-way along Livingston Street between East Street on the northwest and Roy's Way on the southeast (see **Appendix B, Drawing Set**, and **Appendix C, Figure 1**). New sidewalks on the west side of Livingston Street would connect to the existing sidewalk network on East Street and Livingston Street south of Roy's Way. Livingston Street would also be resurfaced to improve the quality of riding for vehicles and cyclists. Bike lanes would be provided where there is sufficient public right-of-way. Where such space does not exist, shared lane markings would be added to the roadway to improve cyclists' safety. Crosswalks would be added across Roy and Corrine Ways, Delaney Drive, and Greenhouse Road; and across Livingston Street at Delaney Drive (improvements to an existing crosswalk), at a parking lot for Livingston Field, and Greenhouse Road. These crosswalks would allow for pedestrian access to the new sidewalk and would be equipped with Rectangular Rapid Flashing Beacons, which are pedestrian-actuated LED-array-based conspicuity enhancements used to improve safety at uncontrolled, marked crosswalks. Improved bus shelters at Livingston Street and Delaney Drive for the Lowell Regional Transit Authority Line 12 Bus would also be provided.

1.3 Statement of Purpose and Need for the Proposal

The Proposed Project is a multi-modal enhancement project that would create and improve pedestrian, bicycle, transit, and vehicle facilities along Livingston Street.

The Proposed Project is part of the Town's pedestrian mobility master plan and would address the issue of connectivity by bridging a significant gap in the Town's sidewalk network. Bridging this gap will connect the essential facilities in town including the Tewksbury Recreational Complex, State Hospital campus, Senior Center, Public Library, and Tewksbury Housing Authority elderly and affordable housing properties. This Proposed Project would address pedestrian and bicycle safety along this roadway by providing safe sidewalks, bicycle lanes, and sharrows. The Proposed Project would improve access to the Lowell Regional Transit Authority (LRTA) bus route along Livingston Street and provide a bus shelter to keep transit users protected from the weather while waiting for the bus. Lastly, the project will improve the rideability of Livingston Street by creating a smooth riding surface for both motorists and cyclists.

1.4 Existing Conditions and Trends

The Project Site includes 4,100 feet (0.78 miles) of public right-of-way along Livingston Street, between East Street on the northwest and Roy's Way on the southeast, in Tewksbury, Massachusetts. Livingston Street is a paved two-lane road with one travel lane in each direction separated by a double-yellow line that is approximately 50 feet in width. There is an existing crosswalk across Livingston Street at Delaney Drive and a bus shelter on the west side of the street. Generally, Livingston Street does not have shoulders; however, some gravel shoulders exist on the west side of Livingston Street between East Street and Greenhouse Road. The Project Site is a public right-of-way in active transportation use and not mapped within a zoning district or subject to zoning regulations.

Adjacent to the Project Site, from East Street to Roy’s Way, land uses generally include cropland, forest, non-forested wetland, very low density residential, and multifamily residential (see **Appendix C, Figure 2**). The majority of the Project Site abuts Tewksbury State Hospital Land on either side. Further south, the Project Site also abuts Tewksbury Housing Authority property and state property. There are no zoning districts mapped in the area; however, there is a floodplain overlay district mapped on either side of Livingston Street between Greenhouse Road and the entrance to Strongwater Farm. Also, a portion of the Project Site is mapped within a Groundwater Protection Overlay District from East Street to approximately Greenhouse Road (see **Appendix C, Figure 3**). The Project Site is also adjacent to state protected and recreational open space lands on either side up to Greenhouse Road and to Delaney Drive on the east side of Livingston Street.

In the future without the Proposed Project, Livingston Street would continue to exhibit substandard transportation facilities, including those for pedestrians, cyclists, and transit users; further contribute to impaired asset connectivity; and unsafe conditions and potential conflict for and between various road users.

1.5 Funding information

TABLE 1: FUNDING INFORMATION

Identifier	Program	Funding Amount
Federal Award Identification Number (FAIN): B-24-CP-MA-0966	FY24 HUD Community Project Funding	\$850,000
N/A	Chapter 90	\$1,650,000

Estimated Total HUD Funded Amount: \$850,000

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$2.5 Million.

1.6 Additional Studies

Norse Environmental Services, Inc. (2024, May 7). *Wetland delineation report for Livingston Street, Tewksbury, MA*. Prepared for GCG Associates, Inc. <https://www.norseenvironmental.com>.

1.7 Field Inspection

Field Inspection was completed on April 23, 2025, by Megan Gatto.

1.8 List of Permits Obtained

The permits listed in this section were evaluated for applicability to the Proposed Project. The following is a list of anticipated permits and approvals that would be required. These permits and approvals may be subject to change during final design:

- Local Approvals/Permits – Town of Tewksbury
 - Department of Public Works - Street and Sidewalk
 - Planning Board - Land Disturbance
 - Town Manager - Funding

- Conservation Commission - Wetlands Protection Act Notice of Intent
- State Approvals
 - Massachusetts Construction General Permit

1.9 No Action Alternative

In the No Action Alternative, no changes are expected on the Project Site and the current roadway would remain as it is in existing conditions. Livingston Street would continue to exhibit substandard transportation facilities, including those for pedestrians, cyclists, and transit users; further contribute to impaired asset connectivity; and unsafe conditions with potential conflict between various road users.

1.10 Action Alternatives

All improvements to Livingston Street are proposed within the right-of-way. Thus, all the action alternatives assessed are variations of roadway design within the right-of-way. All action alternatives avoid permanent impacts to the delineated wetlands adjacent to the right-of-way. There were two schematic design alternatives for the Proposed Project. For these schematic alternatives, there are no differences between the two from East Street to the entrance to Stonewater Farm. Schematic Option #1 proposed a separated northbound bike lane at an approximate location opposite the Stonewater Farm entrance, which continued to a point just south of Delaney Drive. A wider developed right-of-way associated with a separate bicycle lane may have had more vegetation and wildlife impacts associated with it. Schematic Option #2 proposes improvements to Greenhouse Road, Delaney Drive, Corrine Way, and Roy Way to include a stop line before the crosswalks.

The Preferred Alternative (see **Appendix B, Drawing Set**) shows a combination of elements from Schematic Options #1 and #2. From East Street, the Preferred Alternative includes the reclamation and reconstruction of the existing two-lane road (Livingston Street) with minimal road widening (approximately 1-3 feet); dedicated northbound and southbound bicycle lanes; and new 5-foot wide sidewalks along the west side of the street. In the street segment approaching Greenhouse Road and through the area with adjacent wetlands, the dedicated southbound bicycle lane converts into a shared vehicle/bicycle lane. At Greenhouse Road, a vehicle stop line and American with Disability Act (ADA) crosswalks (across Greenhouse Road and across Livingston Street at the entrance to The Pines Trails at Tewksbury State Hospital Cemetery Conservation Area) would be constructed. Continuing south, to further protect the wetlands and the integrity of the newly reconstructed street, a retaining wall would be installed. Near the entrance of Strongwater Farm, the bicycle lane would divert away from the street to become a dedicated bicycle lane again. At Livingston Field, an ADA crosswalk with detectable warning panel would be installed across Livingston Street. Then, both the dedicated northbound and southbound bicycles lane would convert into a shared vehicle/bicycle lane to minimize impacts to a 12-inch culvert that is to be removed and replaced and to adjacent housing authority properties to the end of the project area at Roy's Way. Delaney Drive, Corrine Way, and Roy's Way would have stop lines and crosswalks, with a crosswalk across Livingston Street at Delaney Drive as well with a rapid rectangular flashing beacon. Finally, at Corrine Way, an improved bus shelter would be installed.

The Preferred Alternative would avoid impacts to adjacent wetlands while providing a safer environment for pedestrians, bicyclists, and transit users, and increase access to recreational and community facility amenities.

2. COMPLIANCE WITH 24 CFR 50.4, 58.5, AND 58.6 LAWS AND AUTHORITIES

2.1 Statutes, Executive Orders, and Regulations Listed at 24 CFR 50.4 and 58.6

2.1.1 Airport Hazards

The Project Site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. Therefore, the Proposed Project is in compliance with the Airport Hazards requirements. The Project Site is located over 17,000 feet from the “clear zone” associated with the nearest airfield (see **Appendix C, Figure 4**).

There are no formal compliance steps or mitigation required.

2.1.2 Coastal Barrier Resources

The Town of Tewksbury is not recognized as having any coastal contact that would require it being identified within a Coastal Barrier Resource System (CBRS); therefore, the Proposed Project has no potential to affect a CBRS and is in compliance with the CBRS Act (see **Appendix C, Figure 5**).

There are no formal compliance steps or mitigation required.

2.1.3 Flood Insurance

The Proposed Project does not involve mortgage insurance, refinance, acquisition, repairs, construction, or rehabilitation of a structure, mobile home, or insurable personal property. Nor is the Proposed Project within the FEMA-designated floodplain. Therefore, the Proposed Project does not require Flood Insurance to comply with the applicable Flood Insurance regulations.

There are no formal compliance steps or mitigation required.

2.2 Statutes, Executive Orders, and Regulations Listed at 24 CFR 50.4 and 58.5

2.2.1 Clean Air

2.2.1.1 Operational

The Proposed Project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities.

Direct impacts result from emissions generated by stationary sources, such as fuel burned on site for heating, ventilation, or air conditioning (HVAC) systems. The Proposed Project does not include any new stationary emission sources and therefore would not result in significant adverse impacts to air quality conditions due to stationary sources. Indirect air quality impacts involve emissions generated by mobile sources, such as vehicles traveling to and from the site of a Proposed Project. The Proposed Project would not generate new operational vehicle trips and would therefore not result in any mobile source emissions. Therefore, it is concluded that the Proposed Project would not result in any significant adverse operational air quality impacts.

2.2.1.2 Construction

During construction, air pollutant emissions may result from: trucks delivering construction materials and removing debris; workers' vehicles; and operation of construction equipment. Localized increases in air emissions would be minimized during construction by incorporating traffic management requirements into the construction contract documents and ensuring that idling of delivery trucks or other equipment would not be permitted during periods when they are unloading or not in active use. With these measures in place, while localized increase in air emissions are expected during construction, the limited volume of emissions is not expected to significantly affect local air quality, and these increases would also be short term and temporary.

Fugitive Dust. It is expected that project construction activities, such as excavation, hauling, dumping, spreading, grading, and compacting, would result in localized increases in fugitive dust due to wind and/or vehicular traffic over unpaved surfaces. Dust emission volumes depend on the extent and nature of the work activities, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. The majority of the fugitive construction dust consists of relatively large-sized particles that settle out within a short distance of the construction site and do not significantly affect buildings or people nearby. With the Proposed Project, there is limited earth moving and dust emissions are not expected to travel far from the work zone, with most particulates settling near the work zone.

With the Proposed Project, all necessary measures as outlined in the Massachusetts Department of Environmental Protection Air Pollution Control Regulations and Tewksbury's Construction Standards for dust suppression and emission controls will be followed. Therefore, no significant air quality impacts are expected, and the Proposed Project is compliant with the Clean Air Act.

There are no formal compliance steps or mitigation required.

2.2.2 Coastal Zone Management

The Proposed Project is not located in, nor does it affect the Massachusetts Coastal Zone Boundary. Therefore, the Proposed Project is in compliance with the applicable Coastal Zone Management regulations (see **Appendix B, Figure 6**).

There are no formal compliance steps or mitigation required.

2.2.3 Contamination and Toxic Substances

The Project Site does not include and is not located in close proximity to toxic, hazardous, or radioactive substances. An environmental records review was conducted and found no known sources of contamination within the vicinity of the Proposed Project (see **Appendix A, Environmental Review Worksheets**).

Although there are underground storage tanks located approximately 0.250 miles from the Project Site at Tewksbury Hospital, no spill reports have been identified. In addition, all voluntary clean-up sites within the 0.5 radius of the Proposed Project are complete and have been closed.

With the results of the environmental records review, no significant adverse impacts are anticipated with the Proposed Project with respect to contamination and toxic substances.

There are no formal compliance steps or mitigation required.

2.2.4 Endangered Species

The Proposed Project involves activities that have the potential to affect species or habitats as it involves clearing vegetation, including trees in the right-of-way to construct sidewalks and bicycle lanes. An official list of federally identified threatened, endangered, proposed, and candidate species was obtained from the U.S. Fish and Wildlife (USFWS) through its Information, Planning, and Conservation (IPaC) System on April 23, 2025 (see **Appendix D**). The official species list revealed that there are two threatened, endangered, or candidate species that may be present on the Project Site and immediate vicinity. These species include the Tricolored Bat (*Perimyotis subflavus*, endangered), and the Monarch Butterfly (*Danaus plexippus*, threatened). In a letter dated, April 23, 2025, the USFWS issued a concurrence with the determination that the Proposed Project “may affect but is not likely to adversely affect” threatened, endangered, proposed, and candidate species (see **Appendix C**).

A site assessment was conducted on April 23, 2025 (see **Appendix C, Figure 7** and **7a** through **7i**). The Project Site habitat is primarily street right-of-way or vegetated street edge with both live and dead hardwood trees. Portions of the Project Site include the edges of freshwater emergent wetlands, and prime forest land of statewide importance and level 1 prime forest land. Adjacent to the Project Site, the area includes land in agricultural and recreational use as well as community facility (Tewksbury Hospital and Strongwater Farm Therapeutic Equestrian Center) and residential (public housing) use.

Tricolored bats are often found in caves and abandoned mines, although they also have been found roosting in road-associated culverts in the winter. During the spring, summer, and fall, tricolored bats are found in the forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in pine trees, and occasionally human structures (U.S. Fish & Wildlife Service, ECOS Species Profile, <https://ecos.fws.gov/ecp/species/10515>). The Project Site includes suitable habitat for this species; therefore, the Tricolored bat has the potential to be present on the Project Site. While the area of new transportation infrastructure would be very limited, there is the potential for impacts to this species during construction. The IPAC-assisted determination key for the tricolored bat was used to arrive at a determination of “may affect, but not likely to adversely affect” tricolored bat.

To avoid impacts to tricolored bats, tree clearing required to facilitate the Proposed Project would be limited to the inactive season (November 1 to April 14 for inland Massachusetts) while most tricolored bats are hibernating and not active, roosting in trees, or pup-rearing.

During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.) and multiple generations can be produced, with most adult butterflies living approximately 2-5 weeks; overwintering adults enter into reproductive diapause (suspended reproduction) and live six to nine months. In many regions where monarchs are present, monarchs breed year-round. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing (U.S. Fish & Wildlife Service, ECOS Species Profile, <https://ecos.fws.gov/ecp/species/9743>). Potentially suitable habitat for monarch butterfly, was identified on the Project Site. Foraging habitat is characterized as sunny natural or disturbed open areas. No areas with milkweed (*Asclepias* spp.), suitable for breeding habitat, were observed; however, marginal foraging habitat was observed. Monarch butterfly

is federally listed as proposed threatened and does not receive legal protection under the Endangered Species Act; however, the USFWS encourages cooperative conservation efforts for the species, if possible.

To the extent feasible, the Proposed Project would minimize the use of insecticides and herbicides and restore monarch butterfly habitat by replanting milkweed and nectar plants in areas disturbed by constructing the Proposed Project.

With the measures in-place, it is concluded that the Proposed Project would not result in any significant adverse impact on federally identified threatened, endangered, proposed, and candidate species.

2.2.5 Explosive and Flammable Hazards

The Proposed Project does not involve a hazardous facility or include development that will increase residential density or conversion. Therefore, the Proposed Project is in compliance with the applicable Explosive and Flammable Hazards regulation.

There are no formal compliance steps or mitigation required.

2.2.6 Farmlands Protection

The Proposed Project does not include activities that would change land use, including the conversion of agricultural land to non-agricultural use. Operationally, the Proposed Project is not expected to increase traffic along this right-of-way that would cause indirect effects (i.e., increased dust or air emissions) on adjacent agricultural land or result in land use conversion from development pressure on these adjacent agricultural uses. During construction, temporary impacts may occur to adjacent agricultural land; however, are not anticipated to be significant or adverse. Therefore, the Proposed Project is in compliance with the applicable Farmlands Protection regulations.

There are no formal compliance steps or mitigation required.

2.2.7 Floodplain Management

The Proposed Project does not occur in a floodplain (see **Appendix C, Figure 8**).

There are no formal compliance steps or mitigation required.

2.2.8 Historic Preservation

Section 106 is required for the Proposed Project as it includes activities with the potential to cause effects to historic properties. A review of the National Register of Historic Places (NRHP) interactive map (<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>) reveals that the Project Site is located within the Tewksbury State Hospital historic district, which includes 35 contributing buildings, 3 contributing objects, and 11 contributing sites. A number of contributing features are adjacent to the Area of Potential Effect (APE) and one of these contributing features is a stone Bridge (ca. 1900) that is within the APE. Consultation with the Massachusetts Historical Commission, as the State Historic Preservation Office (SHPO), was conducted by GCG Associates, Inc. in January 2025. In a letter dated January 28, 2025, the Massachusetts Historical Commission determined that the Proposed Project would have “no adverse effect” on significant historic or archaeological properties (see **Appendix E**). Therefore, no further review is required, and the Proposed Project is in compliance with the National Historic Preservation Act.

There are no formal compliance steps or mitigation required.

2.2.9 Noise Abatement and Control

The Proposed Project would not involve activities that result in new operational noise. Therefore, the Proposed Project is exempt from the noise abatement and control regulations.

Construction activities with the Proposed Project would result in localized increases in noise and vibration during the construction period. Impacts on community noise levels during construction could result from noise from construction equipment operation and delivery vehicles traveling to and from the site. Construction noise is regulated by the Town of Tewksbury Noise Bylaw (Chapter 8.12), which sets exterior noise standards and limits construction activity to the hours of 7 AM and 7 PM on weekdays and Saturdays. The proposed construction would proceed along Livingston Street; therefore, the localized noise increases associated with project construction would be temporary and of short duration. Therefore, the Proposed Project is not anticipated to result in significant adverse noise impacts during construction.

There are no formal compliance steps or mitigation required.

2.2.10 Sole Source Aquifers

The Proposed Project is not located on a sole source aquifer (SSA); therefore, the Proposed Project is exempt from the applicable sole source aquifers regulations. The nearest SSA is approximately 25.8 miles from the Project Site (see **Appendix C, Figure 9**).

There are no formal compliance steps or mitigation required.

2.2.11 Wetlands Protection

Although the Proposed Project involves ground disturbance, it would not impact on- or off-site wetlands (see **Appendix C, Figure 10**). During construction, straw filter tube would be used for erosion control to protect adjacent wetlands.

There are no formal compliance steps or mitigation required.

2.2.12 Wild and Scenic Rivers

The Proposed Project is not in proximity of a National Wild and Scenic Rivers System (NWRS). The nearest NWRS is over 5.49 miles from the Project Site. Therefore, the Proposed Project is exempt from compliance with the applicable Wild and Scenic Rivers regulations (see **Appendix C, Figure 11**).

There are no formal compliance steps or mitigation required.

3. ENVIRONMENTAL ASSESSMENT FACTORS

Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features, and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable, and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed, and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

3.1 Land Development

3.1.1 Conformance with Plans/Compatible Land Use/Scale and Urban Design (Impact Code 2)

The Proposed Project conforms to the Town of Tewksbury plans and policies, in particular, its pedestrian mobility master plan, which outlines goals for increasing connectivity by connecting fragmented segments of existing sidewalk for better usability; providing access to destinations through walkable routes to popular municipal and commercial destinations; promoting outdoor exercise such as walking, jogging, or running; and safety by reducing the potential for accidents with motorized vehicles. The Proposed Project would be completely within the existing right-of-way and not require any changes in land use or zoning. The project would be designed at an appropriate scale that fits within the context of the community and meets the project's purpose and need. Therefore, there is **No impact anticipated** under this environmental assessment factor.

3.1.2 Soil Suitability/Slope/Erosion/Drainage/Storm Water Runoff (Impact Code 2)

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil resource report for the Project Site, the Project Site generally consists of Windsor loamy sand, Deerfield loamy fine sand, and Montauk fine sandy loam, with a slope range of 0 to 8 percent.

A review of the MassMapper 1-foot contour layer reveals a generally flat topography within the right-of-way, with a segment of steep slopes between Greenhouse Road and an entrance to Strongwater Farm adjacent to the right-of-way and an area of sloping in the right-of-way adjacent to Livingston Field. Some grading may be required to facilitate the sidewalks and bicycle lanes alongside the existing roadway footprint. A retaining wall would be constructed for a small segment of the roadway to provide stability to the new sidewalk.

An erosion and sediment control plan would be developed for the Proposed Project to minimize the displacement of soil, manage sedimentation to prevent it from entering waterbodies and/or wetlands, protect water quality, and adhere to local, state, and federal regulations regarding land disturbance.

Therefore, there is **No impact anticipated** under this environmental assessment factor.

3.1.3 Hazards and Nuisances including Site Safety and Noise (Impact Code 2)

In general, the Proposed Project is not likely to be affected by natural hazards, air pollution generators, or nuisances and the project itself is not a noise generating facility. With the Proposed Project, man-made site hazards, such as recreational areas being located next to high traffic areas, dangerous crossings, and inadequate separation of pedestrian/vehicle traffic would be minimized. The Proposed Project would comply with the requirements of the Manual on Uniform Traffic Control Devices (MUTCD) and the Massachusetts Department of Transportation (MassDOT) Project Development and Design Guide. During construction, the Proposed Project would adhere to a Traffic Management Plan to manage traffic flow and ensure safety during construction. See also “Noise Abatement and Control,” above. With these measures in place, there is **No impact anticipated** under this environmental assessment factor.

3.2 Socioeconomic

3.2.1 Employment and Income Patterns (Impact Code 1)

This project is anticipated to have a **Minor beneficial impact** on employment with the construction jobs associated with the reconstruction of Livingston Street. With the expansion of multi-modal infrastructure in the community, leading to increased connectivity between community recreational and community facility assets, and improved safety, the Proposed Project is expected to have beneficial outcomes for Town residents.

3.2.2 Demographic Character Changes, Displacement (Impact Code 2)

No demographic character changes or displacement is anticipated with the Proposed Project. Therefore, there is **No impact anticipated** under this environmental assessment factor.

3.3 Community Facilities and Services

3.3.1 Educational and Cultural Facilities (Impact Code 2)

The Proposed Project is not anticipated to have an impact on area educational and cultural facilities. Therefore, there is **No impact anticipated** under this environmental assessment factor.

3.3.2 Commercial Facilities (Impact Code 2)

With the Proposed Project, transit facilities, particularly those that support the adjacent public housing facilities, would be improved and would maintain adequate and convenient access to retail services through transit connection. Therefore, there is **No impact anticipated** with respect to commercial facilities with the Proposed Project.

3.3.3 Health Care and Social Services (Impact Code 2)

Health care and social services are not anticipated to be impacted by the Proposed Project. With the implementation of the Proposed Project, access to the nearby Tewksbury Hospital would be improved. During construction, access would be maintained to the hospital. Therefore, there is **No impact anticipated** with respect to health care and social services with the Proposed Project.

3.3.4 Solid Waste Disposal/Recycling (Impact Code 2)

The Proposed Project would not generate operational solid waste. Therefore, there is no solid waste disposal and recycling impacts anticipated with the project. Therefore, there is **No impact anticipated** with respect to solid waste disposal and recycling with the Proposed Project.

3.3.5 Waste Water/Sanitary Sewers (Impact Code 2)

The Proposed Project would not require wastewater or sanitary sewer service. Therefore, there is **No impact anticipated** with respect to wastewater with the Proposed Project.

3.3.6 Water Supply (Impact Code 2)

The Proposed Project would not require water service. Therefore, there is **No impact anticipated** with respect to water supply with the Proposed Project.

3.3.7 Public Safety – Police, Fire and Emergency Medical (Impact Code 1)

The Proposed Project is not anticipated to impact public safety services. With the provision of multi-modal infrastructure, a reduction in pedestrian, bicycle, and vehicle conflicts can be expected, leading to a reduced burden on public safety services. Additionally, response times may be improved with a resurfaced roadway. Therefore, there is a **Minor beneficial impact** anticipated with respect to public safety with the Proposed Project.

3.3.8 Parks, Open Space and Recreation (Impact Code 1)

Open space and recreational areas are adjacent to the Project Site. With the Proposed Project, the new sidewalks and bike lanes will provide more accessibility to the recreational assets of the Town. Therefore, there is a **Minor beneficial impact** with respect to parks, open space, and recreation with the Proposed Project.

3.3.9 Transportation and Accessibility (Impact Code 1)

The Proposed Project is a multi-modal enhancement project that would create and improve pedestrian, bicycle, transit, and vehicle facilities. Significant geometric changes to the roadway are not proposed. The Proposed Project is being designed to comply with the requirements of the Manual on Uniform Traffic Control Devices (MUTCD) and the Massachusetts Department of Transportation (MassDOT) Project Development and Design Guide. During construction, the Proposed Project would adhere to a Traffic Management Plan to manage traffic flow and ensure safety during construction. Therefore, there is a **Minor beneficial impact** with respect to transportation and accessibility with the Proposed Project.

3.4 Natural Features

3.4.1 Unique Natural Features, Water Resources (Impact Code 2)

There are no unique natural features present on the Project Site. Groundwater will not be used, and surface water bodies are not present. Therefore, there is **No impact anticipated** with respect to unique natural features or water resources with the Proposed Project.

3.4.2 Vegetation, Wildlife (Impact Code 2)

With project construction, vegetated areas of the right-of-way would be cleared to facilitate new pedestrian and bicycle infrastructure. It is anticipated that the Proposed Project would clear 16 trees, of which 4 are considered living and 14 inches at diameter breast height (dbh) or larger, to facilitate the Proposed Project. Any areas disturbed outside of the new infrastructure would be replanted with native vegetated species. As stated above, to the extent feasible, the Proposed Project would minimize the use of insecticides and herbicides and restore monarch butterfly habitat by replanting milkweed and nectar plants in areas disturbed by construction. The Proposed Project would avoid wetlands, and a stormwater pollution prevention plan would outline measures to protect those nearby wetlands and wetland species from runoff. To avoid impacts to wildlife, in particular tricolored bats, tree clearing would be limited to the inactive season (November 1 to April 14 for inland Massachusetts). Therefore, the Proposed Project is not likely to adversely affect any threatened, endangered, candidate, or special concern species, or significant natural communities and there is **No impact anticipated** with respect to vegetation and wildlife with the Proposed Project.

3.5 Energy

3.5.1 Energy Efficiency (Impact Code 2)

There will be **No impact anticipated** with the implementation of the Proposed Project since there is no energy component associated with the project. By providing pedestrian, bicycle, and transit facilities a reduction in vehicle fuel use could be expected.

4. CONCLUSION

4.1 Public Outreach

The Town of Tewksbury has maintained information about the Proposed Project on its website, which can be found at the following link: <https://tewksbury-ma.gov/928/Livingston-Street-Transportation-Improve>. On the website, pertinent information is provided and includes information such as project description, project location, project updates, roadway closures/detour information, anticipated construction dates, typical work hours, and the name of the contractor. There is a section on the website to include project updates that will be maintained as the Proposed Project progresses. Additionally, the Town has met with adjacent landowners to discuss the project.

Public notice of the Proposed Project has been posted the local newspaper – the Tewksbury Town Crier, and a copy of the draft Environmental Assessment (EA) has been made available to the public, both electronically on the Town’s website, and at the Town of Tewksbury Town Hall. The public was provided with a 15-day public comment period from June 26, 2025 to July 11, 2025. If no substantive comments are received, the draft EA will become final, and this initial Public Notice will also serve as the final Public Notice. Substantive comments will be addressed as appropriate in the final EA document.

4.2 Cumulative Impacts Analysis

There is one other roadway construction project along East Street occurring in the vicinity of the Proposed Project and during a similar timeline. However, this is not anticipated to result in cumulative impacts as the construction of both roadways would be completed by the same Contractor and would be coordinated to avoid impacts to traffic and transportation. There are no other construction projects occurring in the vicinity of the Proposed Project. Therefore, no cumulative or combined effects are anticipated.

4.3 Summary of Findings and Conclusions

A Finding of No Significant Impact (FONSI) is appropriate for this Proposed Project. The Proposed Project would not result in a significant impact on the quality of the human environment. It will provide a newly designed roadway with a more safety conscious layout, which will improve pedestrian, bicycle, transit, and vehicle facilities along Livingston Street.

The Proposed Project conforms to the Town of Tewksbury plans and policies and does not require any changes in land use or zoning. The new roadway is designed at an appropriate scale and fits within the context of the community. Construction of the Proposed Project would last approximately 6 months and is expected to comply with all Town laws on health and safety, and for construction activities.

Mitigation measures have been proposed with the project to avoid impacts to endangered species.

4.4 Mitigation Measures and Conditions

Below is a summary of all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions will be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
<p>Endangered Species</p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>To avoid impacts to tricolored bats, tree clearing required to facilitate the Proposed Project would be limited to the inactive season (November 1 to April 14 for inland Massachusetts) while most tricolored bats are hibernating and not active, roosting in trees, or pup-rearing. This mitigation measure will be listed in project specifications and would be the responsibility of the Contractor.</p> <p>To the extent feasible, the Proposed Project would minimize the use of insecticides and herbicides and restore monarch butterfly habitat by replanting milkweed and nectar plants in areas disturbed by constructing the Proposed Project. This mitigation measure will be listed in project specifications and would be the responsibility of the Contractor.</p>

5. DETERMINATION

Finding of No Significant Impact [24 CFR 58.40(g)(1)]

The project will not result in a significant impact on the quality of the human environment.

Finding of Significant Impact [24 CFR 58.40(g)(2)]

The project may significantly affect the quality of the human environment.

Preparer Signature: Megan Gatto, AICP Date: 6/23/2025

Name/Title/Organization:
Megan Gatto, AICP
Project Manager
Woodard & Curran, Inc.

Certifying Officer Signature: John Curran

Date: 6/25/25

Name/Title/Organization:
John Curran
Town Manager
Town of Tewksbury

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

6. REFERENCES

Town of Tewksbury. (2017). *Tewksbury Pedestrian Mobility Master Plan*. Retrieved from <https://www.tewksbury-ma.gov/DocumentCenter/View/345/Tewksbury-Pedestrian-Mobility-Master-Plan-PDF?bidId=>.

MassGIS. (n.d.). MassMapper. Commonwealth of Massachusetts. Retrieved April 25, 2025, from <https://maps.massgis.digital.mass.gov/MassMapper/MassMapper.html>

Town of Tewksbury. *Municipal Vulnerability Preparedness Hazard and Feature Map*. Retrieved April 25, 2025, From <https://www.tewksbury-ma.gov/DocumentCenter/View/463/Tewksbury-Hazard-Map-January-14-2020-PDF?bidId=>

Town of Tewksbury. *Land Use Map*. Retrieved April 25, 2025. From <https://www.tewksbury-ma.gov/DocumentCenter/View/1529/Chapter-2---Land-Use-Map-2-Existing-Zoning-11-by-17-Inches-PDF?bidId=>

APPENDIX A: ENVIRONMENTAL REVIEW WORKSHEETS

Airport Hazards (CEST and EA)

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D
References		
https://www.hudexchange.info/environmental-review/airport-hazards		

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

Yes → *Continue to Question 2.*

2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?

Yes, project is in an APZ → *Continue to Question 3.*

Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

No, project is not within an APZ or RPZ/CZ

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

3. Is the project in conformance with DOD guidelines for APZ?

Yes, project is consistent with DOD guidelines without further action.

Explain how you determined that the project is consistent:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

Project is not consistent with DOD guidelines, but it has been approved by Certifying Officer or HUD Approving Official.

Explain approval process:

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 4.

Are formal compliance steps or mitigation required?

Yes

No

Coastal Barrier Resources (CEST and EA)

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	
References		
https://www.hudexchange.info/environmental-review/coastal-barrier-resources		

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

- No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*
- Yes → *Continue to Question 2.*

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

2. Indicate your selected course of action.

- After consultation with the FWS the project was given approval to continue
→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map and documentation of a FWS approval.*
- Project was not given approval
Project cannot proceed at this location.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 5.

U.S. Fish and Wildlife Service. (n.d.). *CBRS Mapper*. Retrieved April 22, 2025, from <https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/>.

Are formal compliance steps or mitigation required?

Yes

No

Flood Insurance (CEST and EA)

General requirements	Legislation	Regulation	Reference
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.5.	Flood Insurance - HUD Exchange

1. Does this project involve mortgage insurance, refinance, acquisition, repairs, construction, or rehabilitation of a structure, mobile home, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance.
Continue to the Worksheet Summary.

Yes *Continue to Question 2.*

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

No *Continue to the Worksheet Summary.*

Yes *Continue to Question 3.*

3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?

Yes, the community is participating in the National Flood Insurance Program.

For loans, loan insurance or loan guarantees, flood insurance coverage must be continued for the term of the loan. For grants and other non-loan forms of financial assistance, flood insurance coverage must be continued for the life of the building irrespective of the transfer of ownership. The amount of coverage must equal the total project cost or the maximum coverage limit of the National Flood Insurance Program, whichever is less. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

Continue to the Worksheet Summary.

- Yes, less than one year has passed since FEMA notification of Special Flood Hazards.
If less than one year has passed since notification of Special Flood Hazards, no flood insurance is required.

Continue to the Worksheet Summary.

- No. The community is not participating, or its participation has been suspended.
Federal assistance may not be used at this location. Cancel the project at this location.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

N/A

Air Quality (CEST and EA)

General Requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93
Reference		
https://www.hudexchange.info/environmental-review/air-quality		

Scope of Work

- 1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

Yes

→ Continue to Question 2.

No

Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Air Quality Attainment Status of Project's County or Air Quality Management District

- 2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

No, project's county or air quality management district is in attainment status for all criteria pollutants

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants.

Describe the findings:

→ Continue to Question 3.

3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Explain how you determined that the project would not exceed de minimis or threshold emissions.*

Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ *Continue to Question 4. Explain how you determined that the project would not exceed de minimis or threshold emissions in the Worksheet Summary.*

4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

N/A

Are formal compliance steps or mitigation required?

Yes

No

Coastal Zone Management Act (CEST and EA)

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930
References		
https://www.onecpd.info/environmental-review/coastal-zone-management		

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samona	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes → Continue to Question 2.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

2. Does this project include activities that are subject to state review?

Yes → Continue to Question 3.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

3. Has this project been determined to be consistent with the State Coastal Management Program?

Yes, with mitigation. → Continue to Question 4.

Yes, without mitigation. → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

No, project must be canceled.

Project cannot proceed at this location.

4. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the State Coastal Management Program letter of consistency) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 6.

Massachusetts Office of Coastal Zone Management. (n.d.). *Massachusetts coastal zone boundary*. Retrieved April 22, 2025, from <https://www.mass.gov/info-details/massachusetts-coastal-zone-boundary>.

Are formal compliance steps or mitigation required?

Yes

No

Contamination and Toxic Substances (Multifamily and Non-Residential Properties)

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
Reference		
https://www.hudexchange.info/programs/environmental-review/site-contamination		

1. How was site contamination evaluated?¹ Select all that apply.

- ASTM Phase I ESA
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.

Continue to Question 2.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

- No

Explain:

See Environmental Records Review below.

¹ HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

→ Based on the response, the review is in compliance with this section.
Continue to the Worksheet Summary below.

Yes.

→ Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

3. Mitigation

Document the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental effects cannot be mitigated, then HUD assistance may not be used for the project at this site.

Can adverse environmental impacts be mitigated?

Adverse environmental impacts cannot feasibly be mitigated

→ Project cannot proceed at this location.

Yes, adverse environmental impacts can be eliminated through mitigation.

→ Provide all mitigation requirements² and documents. Continue to Question 4.

4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls³, or use of institutional controls⁴.

² Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

³ Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

⁴ Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

If a remediation plan or clean-up program was necessary, which standard does it follow?

Complete removal

→ *Continue to the Worksheet Summary.*

Risk-based corrective action (RBCA)

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Environmental Records Review below.

Are formal compliance steps or mitigation required?

Yes

No

Environmental Records Review for Livingston Street in the Town of Tewksbury, Massachusetts

Environmental Record Sources	Minimum Search Distance (in miles)	Is the Proposed Project within the minimum search distance threshold?	Notes	Source
Federal NPL Site List	1	No	N/A; Sutton Brook Disposal Area, also known as the Rocco Landfill	United States Environmental Protection Agency. "Superfund National Priorities List (NPL) Where You Live Map." ArcGIS, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1&query=Superfund_National_Priorities_List_NPL_Sites_with_Status_Information_ . Accessed 9 Jan. 2025
Federal RCRA Corrective Action Facilities List	1	No	N/A	https://ordspub.epa.gov/ords/cimc/f?p=CIMC:RCRA_SEARCH::::P15_REG:01
Federal Delisted National Priorities List Site List	0.5	No	N/A	https://www.epa.gov/superfund/deleted-national-priorities-list-npl-sites-state#MA
Federal CERCLIS List	0.5	No	N/A	https://www.epa.gov/superfund/search-superfund-sites-where-you-live
Federal CERCLIS NFRAP Site List	0.5	No	N/A	
Federal RCRA Non-Corrective Action TSD Facilities List	0.5	No	N/A	https://rcrapublic.epa.gov/rcrainfoweb/action/modules/pm/searchoperatingpermittedfacility/false/MA/ALL/null
Federal RCRA Generators List	Property/ Adjoining Property	No	N/A	https://rcrapublic.epa.gov/rcrainfoweb/action/modules/pm/searchoperatingpermittedfacility/true

Federal Institutional Control/Engineering Controls Registeries	Property only	No	N/A	https://rcrapublic.epa.gov/rcrainfoweb/action/modules/cor/caindex
Federal ERNS List	Property only	No	N/A	
State and Tribal-equivalent NPL	1	No	N/A	https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=se_cond.cleanup&id=0100686
State and Tribal-equivalent CERCLIS List	0.5	No	N/A	https://www.epa.gov/superfund/statetribal-correspondence-concerning-npl-site-listing#MA
State and Tribal Landfill and/or solid waste disposal site lists	0.5	No	N/A; Sutton Brook Disposal Area, also known as the Rocco Landfill	
State and Tribal Leaking Storage Tank Lists	0.5	Yes	TEWKSBURY HOSPITAL UST; No known leaks	https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc https://ma-ust.windsorcloud.com/ust/facility/40725?1&ppid=0
State and Tribal Voluntary Cleanup Sites	0.5	Yes	RTN numbers (all closed): 3-0020058, Hospital (3-0019800, 3-0022724, 3-0019889, 3-0019799)	https://eeaonline.eea.state.ma.us/portal/dep/wastesite/results?queryString=townName:TEWKSBURY no open sites within 0.5 miles
State and Tribal Brownfields	0.5	No	N/A	https://www.mass.gov/info-details/find-brownfields-sites

Sites				
State and Tribal Registered Storage Tank Lists	Property/ Adjoining Property	No	N/A	https://www.epa.gov/ust/tribal-ust-and-lust-data
State and Tribal Institutional and Engineering control Registeries	Property only	No	N/A	https://www.epa.gov/ust/tribal-ust-and-lust-data
Note(s): National Priorities List (NPL); Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); Emergency Response Notification System (ERNS); Underground Storage Tank (UST)				

Endangered Species Act (CEST and EA)

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service (“FWS” and “NMFS” or “the Services”).	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i>); particularly section 7 (16 USC 1536).	50 CFR Part 402
References		
https://www.hudexchange.info/environmental-review/endangered-species		

1. Does the project involve any activities that have the potential to affect species or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.
 → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.
 Explain your determination:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes, the activities involved in the project have the potential to affect species and/or habitats. → *Continue to Question 2.*

2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#) or you may contact your [local FWS](#) and/or [NMFS](#) offices directly.

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation*

may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.

Yes, there are federally listed species or designated critical habitats present in the action area. → *Continue to Question 3.*

3. What effects, if any, will your project have on federally listed species or designated critical habitat?

No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ *Continue to Question 4, Informal Consultation.*

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ *Continue to Question 5, Formal Consultation.*

4. Informal Consultation is required

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?

Yes, the Service(s) concurred with the finding.

→ *Based on the response, the review is in compliance with this section. Continue to Question 6 and provide the following:*

- (1) A biological evaluation or equivalent document*
- (2) Concurrence(s) from FWS and/or NMFS*
- (3) Any other documentation of informal consultation*

Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.

No, the Service(s) did not concur with the finding. → Continue to Question 5.

5. Formal consultation is required

Section 7 of ESA (16 USC 1536) mandates consultation to resolve potential impacts to federally listed endangered and threatened species and critical habitats. If a HUD assisted project may affect any endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

→ Once consultation is complete, the review is in compliance with this section. Continue to Question 6 and provide the following:

- (1) A biological assessment, evaluation, or equivalent document
- (2) Biological opinion(s) issued by FWS and/or NMFS
- (3) Any other documentation of formal consultation

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that will be implemented to mitigate for the impact or effect, including the timeline for implementation.

Mitigation as follows will be implemented:

To avoid impacts to tricolored bats, tree clearing required to facilitate the Proposed Project would be limited to the inactive season (November 1 to April 14 for inland Massachusetts) while most tricolored bats are hibernating and not active, roosting in trees, or pup-rearing.

To the extent feasible, the Proposed Project would minimize the use of insecticides and herbicides and restore monarch butterfly habitat by replanting milkweed and nectar plants in areas disturbed by constructing the Proposed Project.

With the measures in-place, it is concluded that the Proposed Project would not result in any significant adverse impact on federally identified threatened, endangered, proposed, and candidate species.

No mitigation is necessary.

Explain why mitigation will not be made here:

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

In a letter dated, April 23, 2025, the USFWS issued a concurrence with the determination that the Proposed Project “may affect, but is not likely to adversely affect” threatened, endangered, proposed, and candidate species (see **Appendix C**).

Are formal compliance steps or mitigation required?

Yes

No

Explosive and Flammable Hazards (CEST and EA)

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C
Reference		
https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities		

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

No

→ Continue to Question 2.

Yes

Explain:

→ Go directly to Question 5.

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes

→ Continue to Question 3.

3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:

- Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR
- Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 version of National Fire Protection Association (NFPA) Code 58.

If all containers within the search area fit the above criteria, answer “no.” For any other type of aboveground storage container within the search area that holds one of the

flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer “yes.”

No

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.*

Yes

→ *Continue to Question 4.*

4. Visit HUD’s website to identify the appropriate tank or tanks to assess and to calculate the required separation distance using the [electronic assessment tool](#). To document this step in the analysis, please attach the following supporting documents to this screen:

- **Map identifying the tank selected for assessment, and showing the distance from the tank to the proposed HUD-assisted project site; and**
- **Electronic assessment tool calculation of the required separation distance.**

Based on the analysis, is the proposed HUD-assisted project site located at or beyond the required separation distance from all covered tanks?

Yes

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

No

→ *Go directly to Question 6.*

5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

Yes

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*

No

→ *Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations. Continue to Question 6.*

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Mitigation measures may include both natural and manmade barriers, modification of the project design, burial or removal of the hazard, or other engineered solutions. Describe selected mitigation measures, including the timeline for implementation, and attach an implementation plan. If negative effects cannot be mitigated, cancel the project at this location.

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

N/A

Are formal compliance steps or mitigation required?

- Yes
 No

Farmlands Protection (CEST and EA)

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658
Reference		
https://www.hudexchange.info/environmental-review/farmlands-protection		

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

- Yes → *Continue to Question 2.*
 No

Explain how you determined that agricultural land would not be converted:

The Proposed Project is within the right-of-way and does not include converting agricultural land to non-agricultural use. There would be no changes to land uses with the project. The Proposed Project is not expected to increase traffic or development pressure on agricultural land.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting your determination.*

2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nracs> or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes → *Continue to Question 3.*

3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.

- Complete form **AD-1006**, "Farmland Conversion Impact Rating" http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf and contact the state soil scientist before sending it to the local NRCS District Conservationist.
(NOTE: for corridor type projects, use instead form **NRCS-CPA-106**, "Farmland Conversion Impact Rating for Corridor Type Projects: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf.)
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 (or form NRCS-CPA-106 if applicable) to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Document your conclusion:

- Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

- Project will proceed without mitigation.

Explain why mitigation will not be made here:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 2.

Are formal compliance steps or mitigation required?

Yes

No

Floodplain Management (CEST and EA)

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55
Reference		
https://www.hudexchange.info/environmental-review/floodplain-management		

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD's floodplain management regulations in Part 55?

Yes

Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(7) or (8), provide supporting documentation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

No → *Continue to Question 2.*

2. **Provide a FEMA/FIRM or ABFE map showing the site.**

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs) or Advisory Base Flood Elevations (ABFEs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

Does your project occur in a floodplain?

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes

Select the applicable floodplain using the FEMA map or the best available information:

Floodway → *Continue to Question 3, Floodways*

- Coastal High Hazard Area (V Zone) → Continue to Question 4, Coastal High Hazard Areas
- 500-year floodplain (B Zone or shaded X Zone) → Continue to Question 5, 500-year Floodplains
- 100-year floodplain (A Zone) → The 8-Step Process is required. Continue to Question 6, 8-Step Process

3. **Floodways**

Is this a functionally dependent use?

- Yes

The 8-Step Process is required. Work with your HUD FEO to determine a way to satisfactorily continue with this project. Provide a completed 8-Step Process, including the early public notice and the final notice.

→Continue to Question 6, 8-Step Process

- No

Federal assistance may not be used at this location unless a 55.12(c) exception applies. You must either choose an alternate site or cancel the project at this location.

4. **Coastal High Hazard Area**

Is this a critical action?

- Yes

Critical actions are prohibited in coastal high hazard areas. Federal assistance may not be used at this location. Unless the action is excepted at 24 CFR 55.12(c), you must either choose an alternate site or cancel the project.

- No

Does this action include construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

- Yes, there is new construction.

New construction is prohibited in V Zones ((24 CFR 55.1(c)(3)).

- No, this action concerns only a functionally dependent use, existing construction(including improvements), or reconstruction following destruction caused by a disaster.

This construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ Continue to Question 6, 8-Step Process

5. 500-year Floodplain

Is this a critical action?

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes → Continue to Question 6, 8-Step Process

6. 8-Step Process.

Does the 8-Step Process apply? Select one of the following options:

8-Step Process applies.

Provide a completed 8-Step Process, including the early public notice and the final notice.

→ Continue to Question 7, Mitigation

5-Step Process is applicable per 55.12(a)(1-3).

Provide documentation of 5-Step Process.

Select the applicable citation:

55.12(a)(1) HUD actions involving the disposition of HUD-acquired multifamily housing projects or “bulk sales” of HUD-acquired one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24).

55.12(a)(2) HUD's actions under the National Housing Act (12 U.S.C. 1701) for the purchase or refinancing of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, and intermediate care facilities, in communities that are in good standing under the NFIP.

55.12(a)(3) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, intermediate care facilities, and one- to four-family properties, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the number of units is not increased more than 20 percent, the action does not involve a conversion from nonresidential to residential land use, the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10), and the footprint of the structure and paved areas is not significantly increased.

55.12(a)(4) HUD's (or the recipient's) actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing nonresidential buildings and structures, in communities that are in the

Regular Program of the NFIP and are in good standing, provided that the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased.

→ *Continue to Question 7, Mitigation*

- 8-Step Process is inapplicable per 55.12(b)(1-4).

Select the applicable citation:

- 55.12(b)(1) HUD's mortgage insurance actions and other financial assistance for the purchasing, mortgaging or refinancing of existing one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24), where the action is not a critical action and the property is not located in a floodway or coastal high hazard area.
- 55.12(b)(2) Financial assistance for minor repairs or improvements on one- to four-family properties that do not meet the thresholds for “substantial improvement” under § 55.2(b)(10)
- 55.12(b)(3) HUD actions involving the disposition of individual HUD-acquired, one- to four-family properties.
- 55.12(b)(4) HUD guarantees under the Loan Guarantee Recovery Fund Program (24 CFR part 573) of loans that refinance existing loans and mortgages, where any new construction or rehabilitation financed by the existing loan or mortgage has been completed prior to the filing of an application under the program, and the refinancing will not allow further construction or rehabilitation, nor result in any physical impacts or changes except for routine maintenance.
- 55.12(b)(5) The approval of financial assistance to lease an existing structure located within the floodplain, but only if—
- (i) The structure is located outside the floodway or Coastal High Hazard Area, and is in a community that is in the Regular Program of the NFIP and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24);
 - (ii) The project is not a critical action; and
 - (iii) The entire structure is or will be fully insured or insured to the maximum under the NFIP for at least the term of the lease.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

7. Mitigation

For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Which of the following mitigation/minimization measures have been identified for this project in the 8-Step or 5-Step Process? Select all that apply.

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology
- Planting or restoring native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements or similar easements
- Floodproofing of structures
- Elevating structures including freeboarding above the required base flood elevations
- Other

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 8.

Are formal compliance steps or mitigation required?

- Yes
- No

Historic Preservation (CEST and EA)

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties"
References		
https://www.hudexchange.info/environmental-review/historic-preservation		

Threshold

Is Section 106 review required for your project?

- No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the [PA Database](#) to find applicable PAs.)

Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

→ Continue to the Worksheet Summary.

- No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

Either provide the memo itself or a link to it here. Explain and justify the other determination here:

→ Continue to the Worksheet Summary.

- Yes, because the project includes activities with potential to cause effects (direct or indirect). → Continue to Step 1.

The Section 106 Process

After determining the need to do a Section 106 review, initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Note that consultation continues through all phases of the review.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if you should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that consultants may not initiate consultation with Tribes.

Select all consulting parties below (check all that apply):

- State Historic Preservation Officer (SHPO)
- Advisory Council on Historic Preservation
- Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native
- Hawaiian Organizations (NHOs)

List all tribes that were consulted here and their status of consultation:

- Other Consulting Parties

List all consulting parties that were consulted here and their status of consultation:

Describe the process of selecting consulting parties and initiating consultation here:

The “when to consult with tribes under Section 106” document was used to determine if consultation with tribes was necessary. Given that the project would not include significant ground disturbance, it was determined that tribal consultation was not required.

Provide all correspondence, notices, and notes (including comments and objections received) and continue to Step 2.

Step 2 - Identify and Evaluate Historic Properties

Define the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.

The Area of Potential Effect (APE) includes the right-of-way of Livingston Street.

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register.

Refer to HUD’s website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

A review of the National Register of Historic Places (NRHP) interactive map (<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>) reveals that the Project Site is located within the Tewksbury State Hospital historic district, which includes 35 contributing buildings, 3 contributing objects, and 11 contributing sites. A number of contributing features are adjacent to the APE and one of these contributing features is a stone Bridge (ca. 1900) that is within the APE. Consultation with the Massachusetts Historical Commission, as the State Historic Preservation Office (SHPO), was conducted by GCG Associates, Inc. in January 2025. In a letter dated January 28, 2025, the Massachusetts Historical Commission determined that the Proposed Project will have “no adverse effect” on significant historic or archaeological properties (see **Appendix D**).

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

- Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

- No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

- No Historic Properties Affected

Document reason for finding:

- No historic properties present. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*
- Historic properties present, but project will have no effect upon them. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.4\(d\)\(1\)](#)) and consult further to try to resolve objection(s).

No Adverse Effect

Document reason for finding:

Does the No Adverse Effect finding contain conditions?

Yes

Check all that apply: (check all that apply)

- Avoidance
- Modification of project
- Other

Describe conditions here:

→ *Monitor satisfactory implementation of conditions. Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

No → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.5\(c\)\(2\)](#)) and consult further to try to resolve objection(s).

Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)]

Notify the Advisory Council on Historic Preservation of the Adverse Effect and provide the documentation outlined in [36 CFR 800.11\(e\)](#). The Council has 15 days to decide whether to enter the consultation (Not required for projects covered by a Programmatic Agreement).

→ *Continue to Step 4.*

Step 4 - Resolve Adverse Effects

Work with consulting parties to try to avoid, minimize or mitigate adverse effects. Refer to HUD guidance and [36 CFR 800.6 and 800.7](#).

Were the Adverse Effects resolved?

Yes

Describe the resolution of Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation:

For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Provide signed Memorandum of Agreement (MOA) or Standard Mitigation Measures Agreement (SMMA). Continue to the Worksheet Summary.*

No

The project must be cancelled unless the “Head of Agency” approves it. Either provide approval from the “Head of Agency” or cancel the project at this location.

Describe the failure to resolve Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation and “Head of the Agency”:

Explain in detail the exact conditions or measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Provide correspondence, comments, documentation of decision, and “Head of Agency” approval. Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Massachusetts Historical Commission letter dated January 6, 2025 (see Appendix E).

Are formal compliance steps or mitigation required?

Yes

No

Noise (EA Level Reviews)

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B
References		
https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control		

1. What activities does your project involve? Check all that apply:

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

→ *Continue to Question 2.*

- Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

→ *Continue to Question 2.*

- A research demonstration project which does not result in new construction or reconstruction, interstate, land sales registration, or any timely emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

- None of the above

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).

Indicate the findings of the Preliminary Screening below:

There are no noise generators found within the threshold distances above.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.*

Noise generators were found within the threshold distances.

→ *Continue to Question 3.*

3. Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:

Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.*

Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

Indicate noise level here:

If project is rehabilitation:

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.*

If project is new construction:

Is the project in a largely undeveloped area¹?

No

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.*

¹ A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses or does not have water and sewer capacity to serve the project.

Yes

→ Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Elevate this review to an EIS-level review.

Unacceptable: (Above 75 decibels)

Indicate noise level here:

If project is rehabilitation:

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels.

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.

If project is new construction:

Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). You may either complete an EIS or provide a waiver signed by the appropriate authority. Indicate your choice:

Convert to an EIS

→ Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

Provide waiver

→ Provide an Environmental Impact Statement waiver from the Certifying Officer or the Assistant Secretary for Community Planning and Development per 24 CFR 51.104(b)(2) and noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

- 4. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.**

Mitigation as follows will be implemented:

→ Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures. Continue to the Worksheet Summary.

No mitigation is necessary.

Explain why mitigation will not be made here:

→ Continue to the Worksheet Summary.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

N/A

Are formal compliance steps or mitigation required?

Yes

No

Sole Source Aquifers (CEST and EA)

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149
Reference		
https://www.hudexchange.info/environmental-review/sole-source-aquifers		

1. Does your project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

- Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*
- No → *Continue to Question 2.*

2. Is the project located on a sole source aquifer (SSA)¹?

- No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area.*
- Yes → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

- Yes → *Provide the MOU or agreement as part of your supporting documentation. Continue to Question 4.*
- No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

- Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

No → *Continue to Question 5.*

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*

Yes → *Work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.*

6. In order to continue with the project, any threat must be mitigated, and all mitigation must be approved by the EPA. Explain in detail the proposed measures that can be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 9.

Are formal compliance steps or mitigation required?

Yes

No

Wetlands (CEST and EA)

General requirements	Legislation	Regulation
Executive Order 11990 discourages that direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.
References		
https://www.hudexchange.info/environmental-review/wetlands-protection		

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?

The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 2.*

2. Will the new construction or other ground disturbance impact an on- or off-site wetland?

The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands.

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.
→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

→ You must determine that there are no practicable alternatives to wetlands development by completing the 8-Step Process.

Provide a completed 8-Step Process as well as all documents used to make your determination, including a map. Be sure to include the early public notice and the final notice with your documentation.

Continue to Question 3.

- 3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

Which of the following mitigation actions have been or will be taken? Select all that apply:

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology through infiltration
- Native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements
- Compensatory mitigation

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Appendix B, drawing set, which illustrates avoidance of wetland areas and wetland protection measures.

Are formal compliance steps or mitigation required?

Yes

No

Wild and Scenic Rivers (CEST and EA)

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297
References		
https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers		

1. Is your project within proximity of a NWSRS river as defined below?

Wild & Scenic Rivers: These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational

Study Rivers: These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.

Nationwide Rivers Inventory (NRI): The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

→ Continue to Question 2.

2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Continue to Question 3.*

3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

See Figure 11.

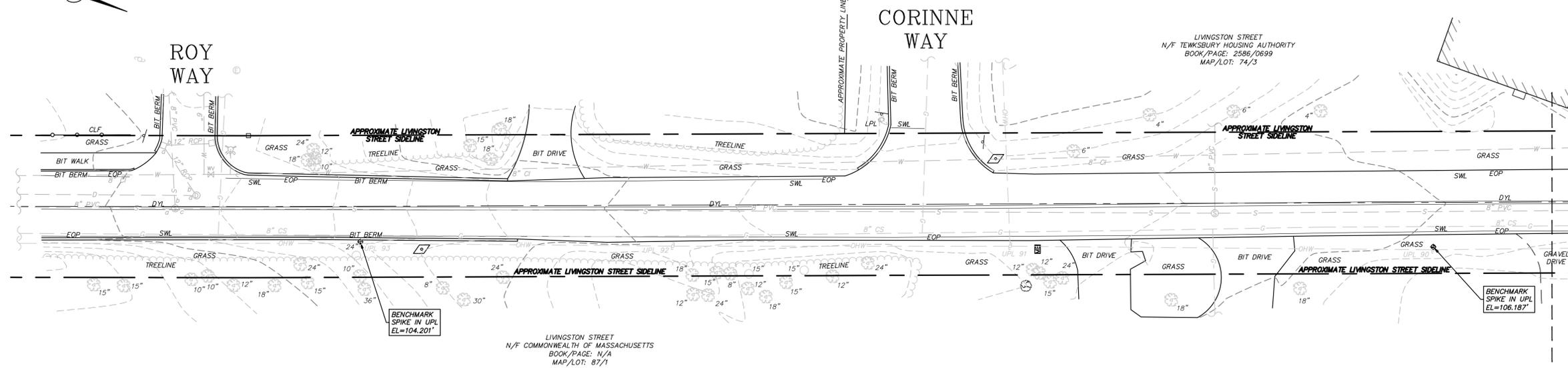
Are formal compliance steps or mitigation required?

Yes

No

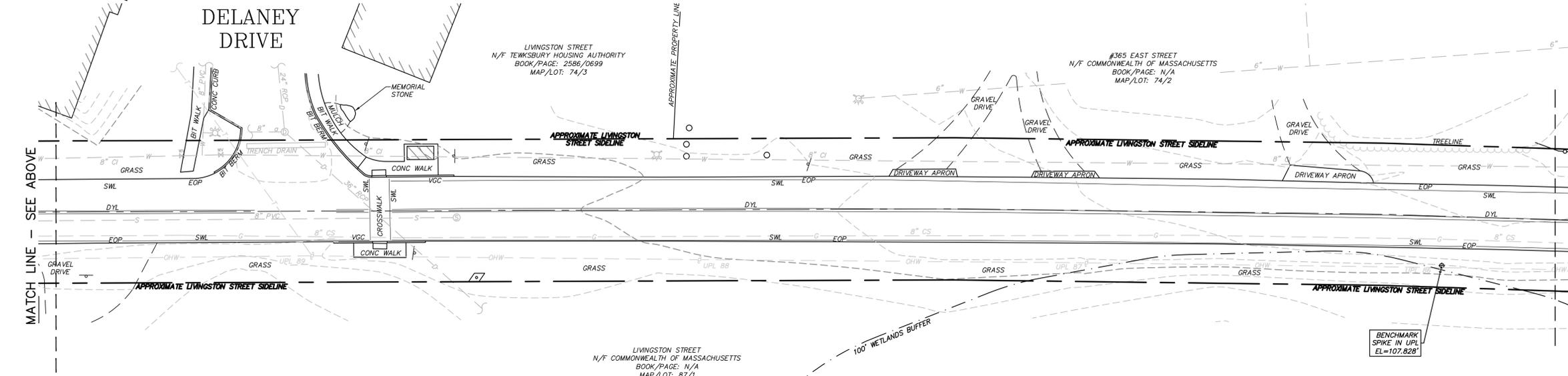
APPENDIX B: DRAWING SET

LIVINGSTON STREET

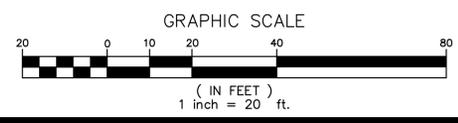


PLAN
SCALE: 1" = 20'

LIVINGSTON STREET



PLAN
SCALE: 1" = 20'

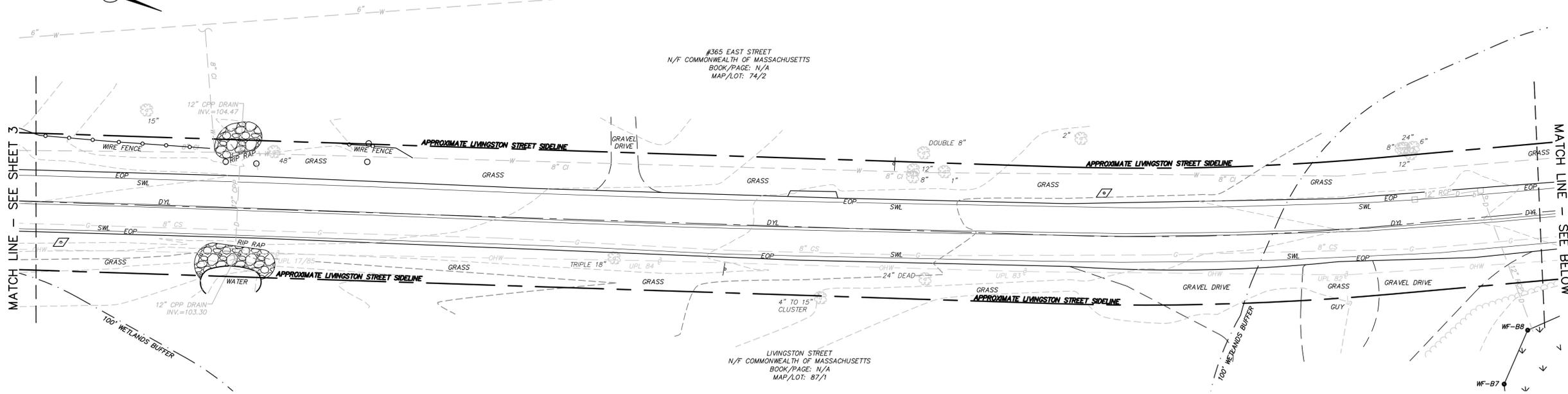


DRAFT

EXISTING CONDITIONS STA 0+00 TO STA 10+75		
TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'	DATE: MAY 12, 2025	
JOB NO. \FILE NAME: 23135-DESIGN 05.12.2025	DESIGNED BY: W.R.H. DRAWN BY: R.S.T. CHECKED BY: K.M.C.	SHEET NO. 3 OF 16



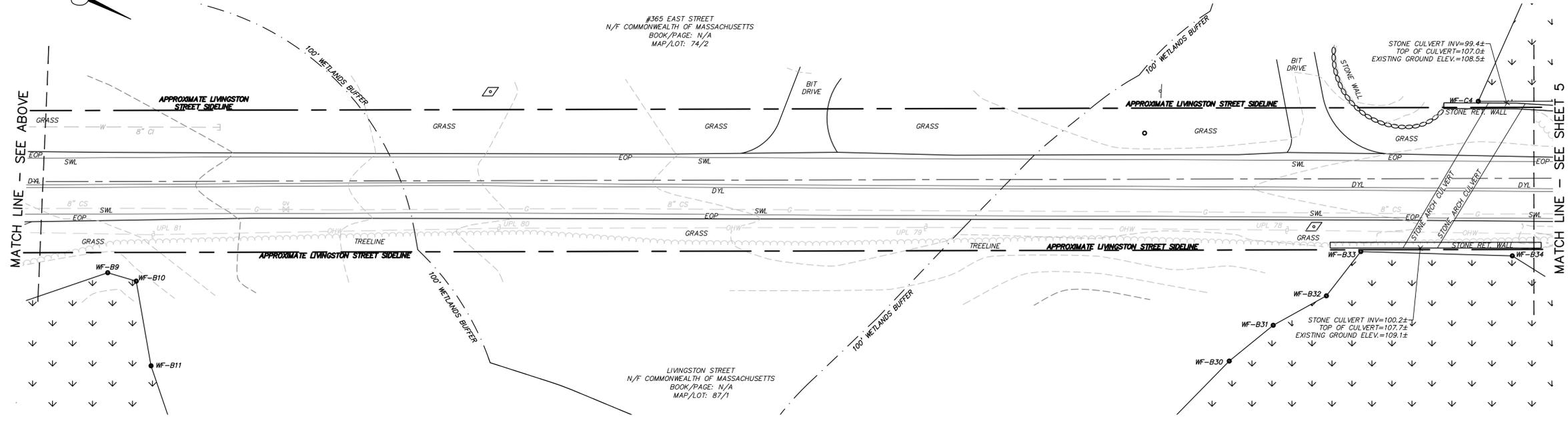
LIVINGSTON STREET



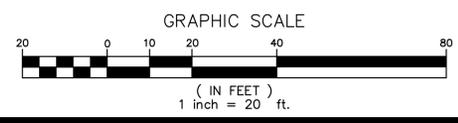
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LIVINGSTON STREET



PLAN
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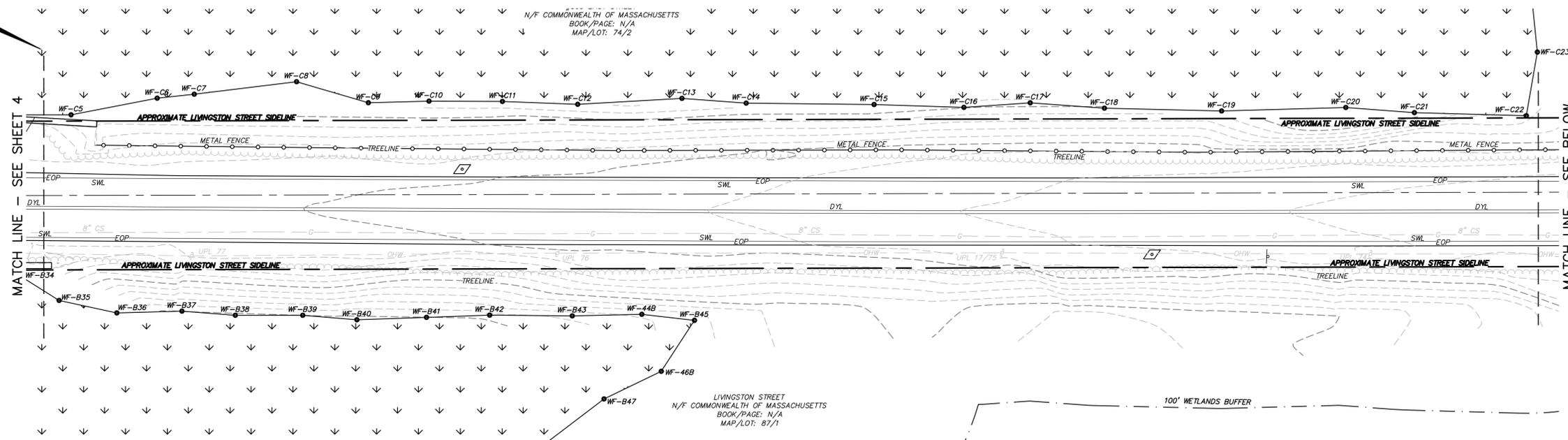


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EXISTING CONDITIONS STA 10+75 TO STA 21+50		
TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'	DATE: MAY 12, 2025	
JOB NO. \FILE NAME:	DESIGNED BY: W.R.H.	SHEET NO.
23135-DESIGN 05.12.2025	DRAWN BY: R.S.T.	4 OF 16
	CHECKED BY: K.M.C.	

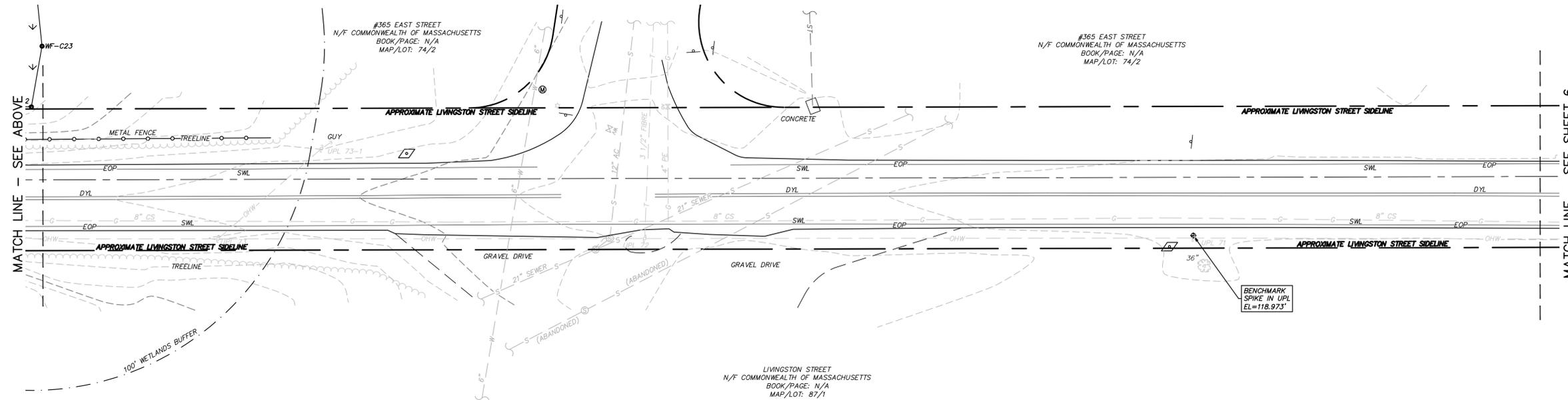
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LIVINGSTON STREET

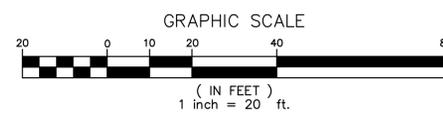


PLAN
SCALE: 1" = 20'

GREENHOUSE ROAD LIVINGSTON STREET



PLAN
SCALE: 1" = 20'

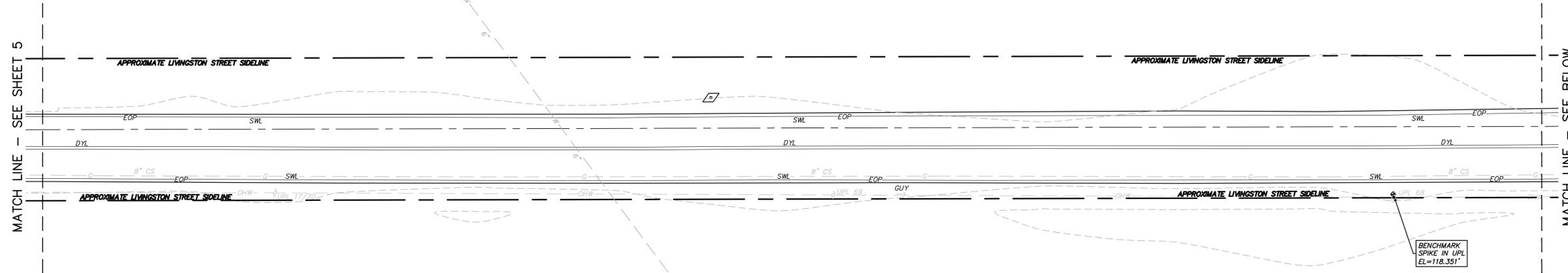


DRAFT

EXISTING CONDITIONS STA 21+50 TO STA 31+75		
TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'	DATE: MAY 12, 2025	
JOB NO. \FILE NAME:	DESIGNED BY: W.R.H.	SHEET NO.
23135-DESIGN 05.12.2025	DRAWN BY: R.S.T.	5 OF 16
	CHECKED BY: K.M.C.	

LIVINGSTON STREET

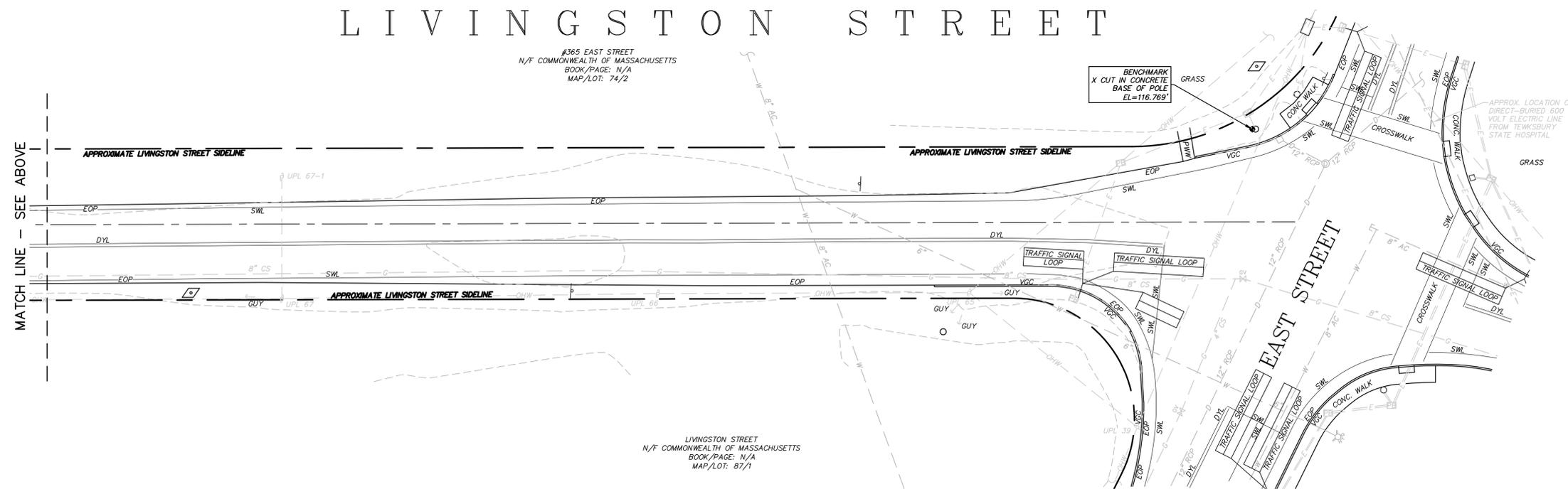
#365 EAST STREET
N/F COMMONWEALTH OF MASSACHUSETTS
BOOK/PAGE: N/A
MAP/LOT: 74/2



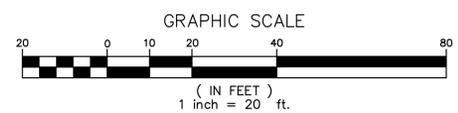
PLAN
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LIVINGSTON STREET

#365 EAST STREET
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BOOK/PAGE: N/A
MAP/LOT: 74/2



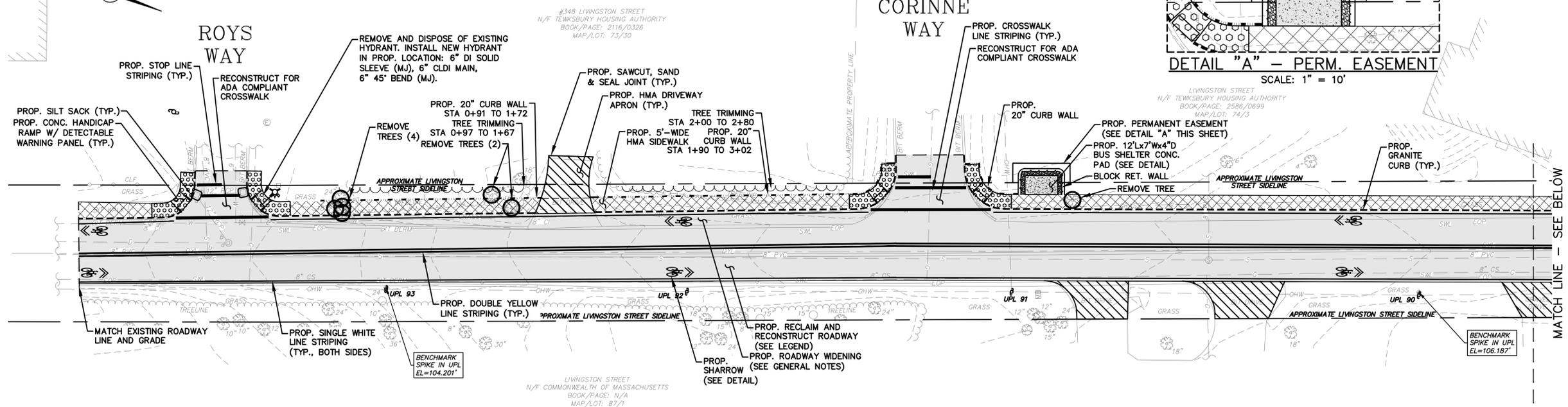
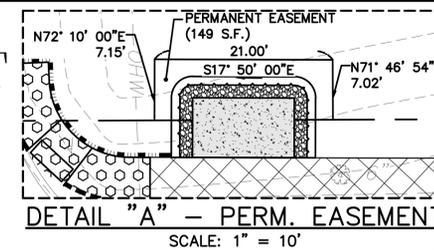
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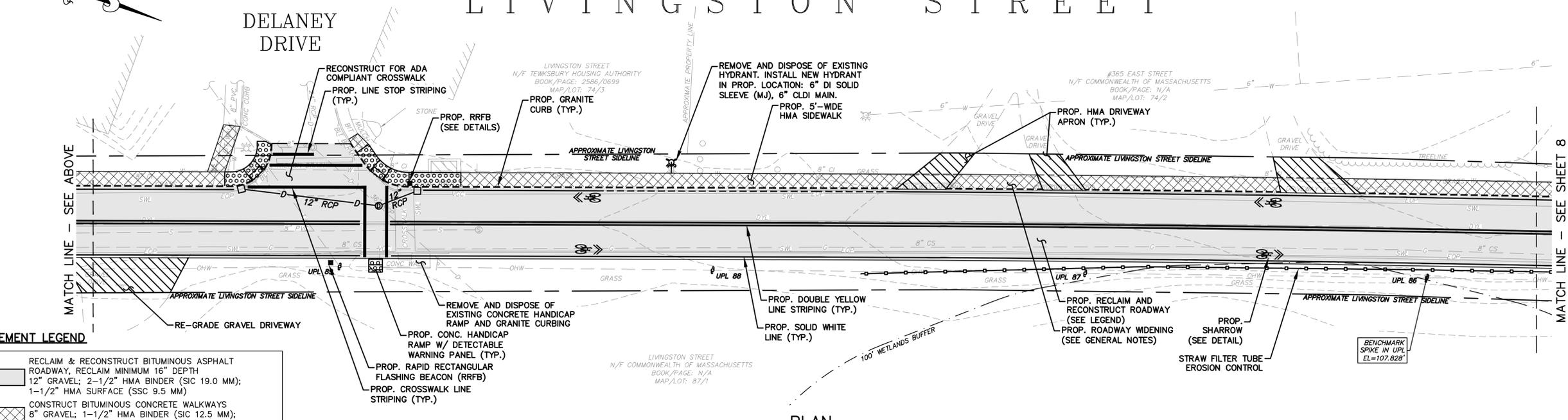
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EXISTING CONDITIONS STA 31+75 TO STA 41+25		
TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC. WILMINGTON MASSACHUSETTS		
SCALE: 1" = 20'	DATE: MAY 12, 2025	
JOB NO. \FILE NAME: 23135-DESIGN 05.12.2025	DESIGNED BY: W.R.H. DRAWN BY: R.S.T. CHECKED BY: K.M.C.	SHEET NO. 6 OF 16

LIVINGSTON STREET



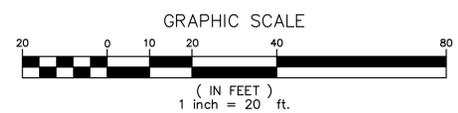
LIVINGSTON STREET



SITE IMPROVEMENT LEGEND

	RECLAIM & RECONSTRUCT BITUMINOUS ASPHALT ROADWAY, RECLAIM MINIMUM 16" DEPTH 12" GRAVEL, 2-1/2" HMA BINDER (SIC 19.0 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	CONSTRUCT BITUMINOUS CONCRETE WALKWAYS 8" GRAVEL; 1-1/2" HMA BINDER (SIC 12.5 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	RECONSTRUCT BITUMINOUS CONCRETE DRIVEWAYS 8" GRAVEL; 2-1/2" HMA BINDER (SIC 12.5MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	PROPOSED NEW CEMENT CONCRETE HANDICAP RAMP, 8" GRAVEL; 6" REINFORCED CONCRETE 4,000 PSI (SEE DETAIL)
	PROPOSED LOAM AND SEED (6" MIN. DEPTH)
	INSTALL NEW 6" VERTICAL GRANITE CURB (6" REVEAL)
	INSTALL NEW 12" MONOLITHIC BERM
	DRIVEWAY WITH 2% CROSS SLOPE
	PROPOSED STRAW WATTLE FILTER TUBE AND SILT FENCE

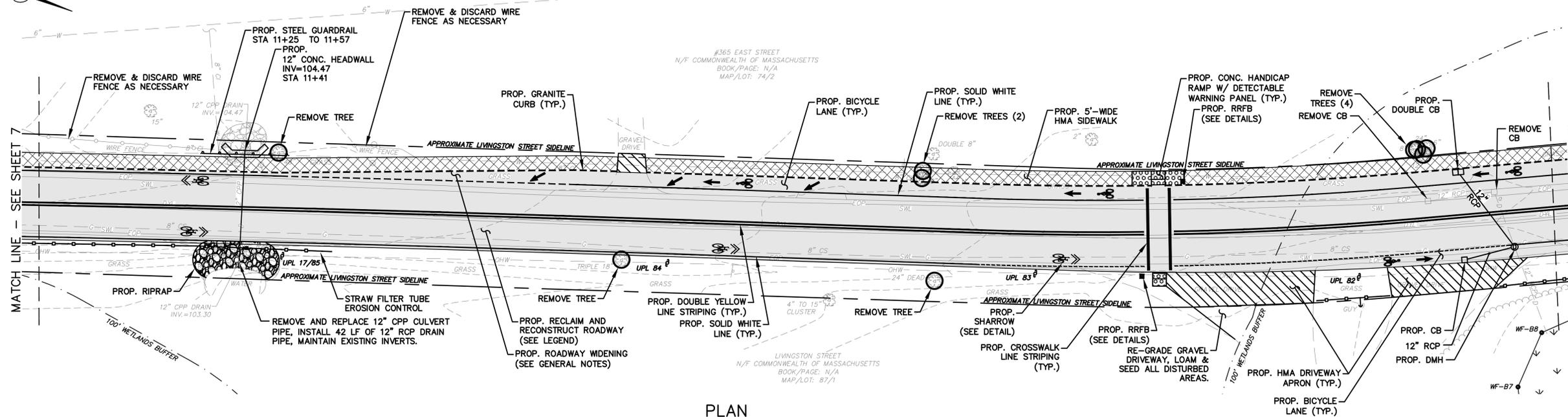
- GENERAL NOTES:**
- BC = ELEVATION OF EXISTING PAVED SURFACE
 - TC = PROPOSED ELEVATION OF TOP OF VERTICAL GRANITE CURB
 - BW = PROPOSED ELEVATION OF BACK OF SIDEWALK
 - ANY AREA WHERE THE EXISTING ROAD IS WIDENING, THE CONTRACTOR SHALL REMOVE 16" OF EXISTING MATERIAL AND CONSTRUCT THE NEW BITUMINOUS ASPHALT ROADWAY WITH 12" OF GRAVEL, 2-1/2" HMA BASE COURSE, 1-1/2" HMA TOP COURSE.



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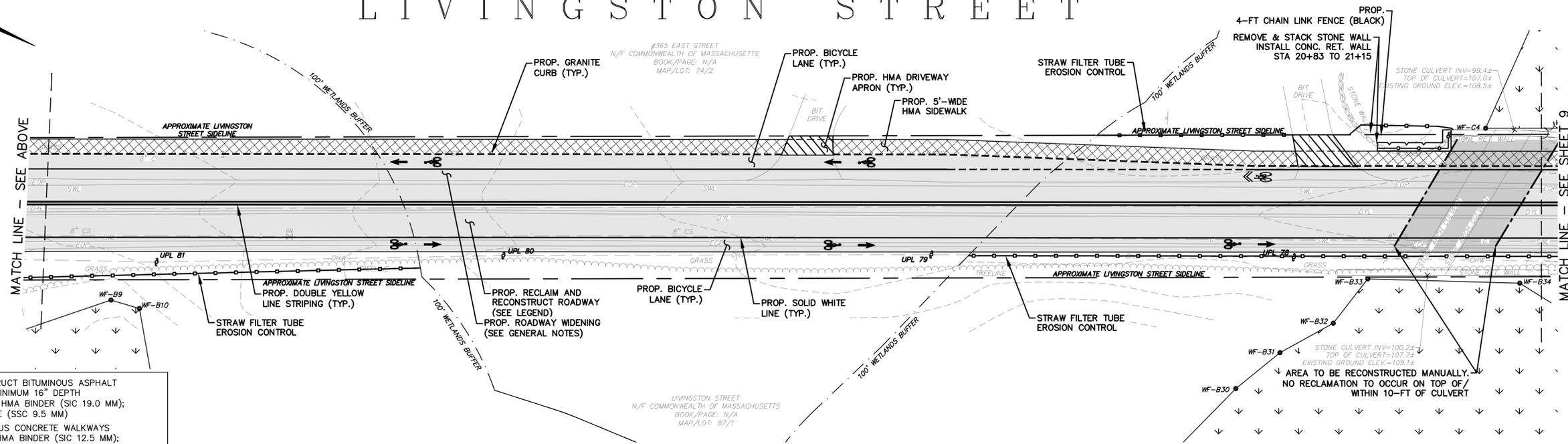
PROPOSED SITE PLAN		
STA 0+00 TO STA 10+75		
TOWN OF TEWKSBURY, MASSACHUSETTS		
LIVINGSTON STREET		
ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'		DATE: MAY 12, 2025
JOB NO. \ FILE NAME:	DESIGNED BY: W.R.H.	SHEET NO.
23135-DESIGN 05.12.2025	DRAWN BY: R.S.T.	7 OF 16
	CHECKED BY: K.M.C.	

LIVINGSTON STREET



PLAN
SCALE: 1" = 20'

LIVINGSTON STREET



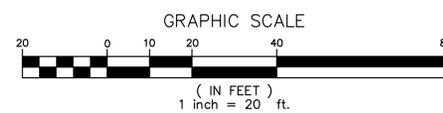
PLAN
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SITE IMPROVEMENT LEGEND

	RECLAIM & RECONSTRUCT BITUMINOUS ASPHALT ROADWAY, RECLAIM MINIMUM 16" DEPTH 12" GRAVEL; 2-1/2" HMA BINDER (SIC 19.0 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	CONSTRUCT BITUMINOUS CONCRETE WALKWAYS 8" GRAVEL; 1-1/2" HMA BINDER (SIC 12.5 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
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	PROPOSED LOAM AND SEED (6" MIN. DEPTH)
	INSTALL NEW 6" VERTICAL GRANITE CURB (6" REVEAL)
	INSTALL NEW 12" MONOLITHIC BERM
	DRIVEWAY WITH 2% CROSS SLOPE
	PROPOSED STRAW WATTLE FILTER TUBE AND SILT FENCE

GENERAL NOTES:

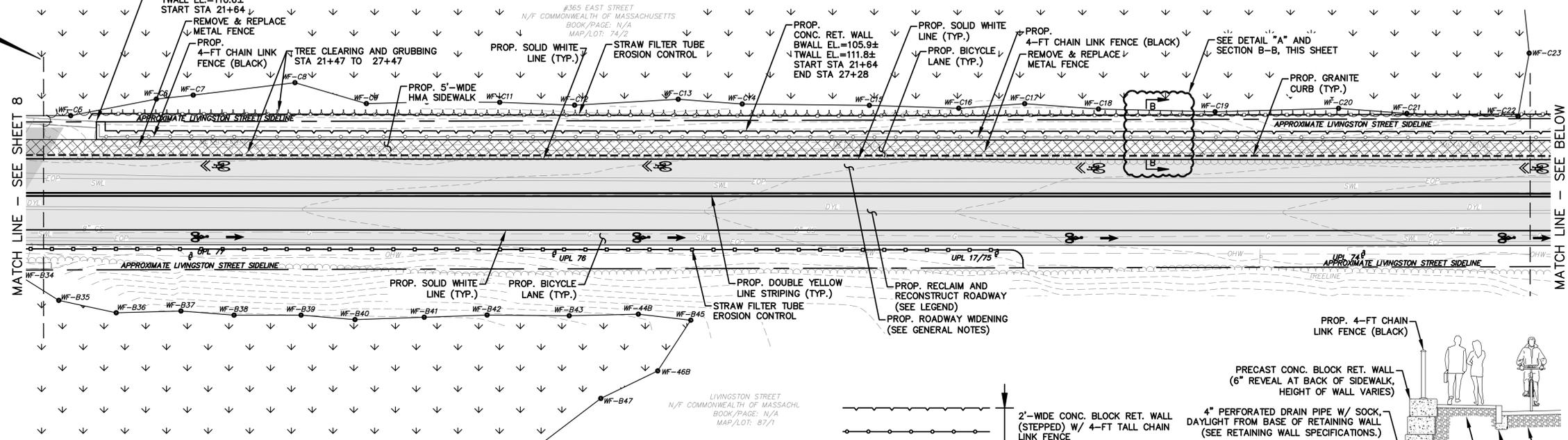
- BC = ELEVATION OF EXISTING PAVED SURFACE
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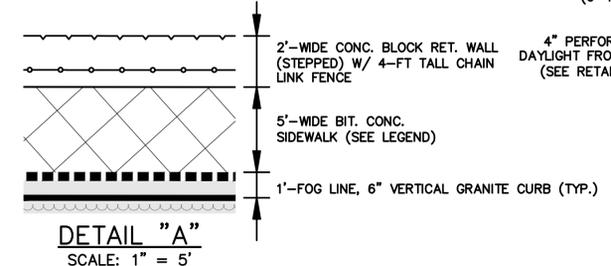
DRAFT

PROPOSED SITE PLAN STA 10+75 TO STA 21+50		
TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC.		WILMINGTON MASSACHUSETTS
SCALE: 1" = 20'	DATE: MAY 12, 2025	
JOB NO. \ FILE NAME: 23135-DESIGN 05.12.2025	DESIGNED BY: W.R.H. DRAWN BY: R.S.T. CHECKED BY: K.M.C.	SHEET NO. 8 OF 16

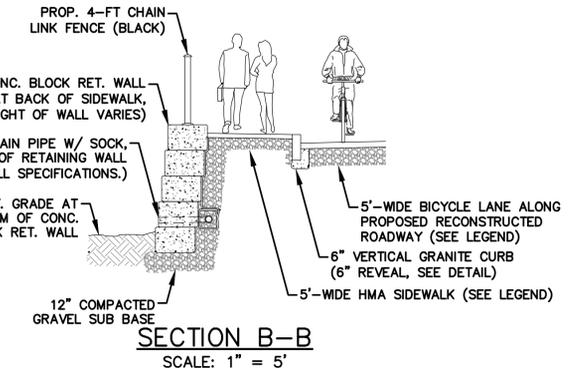
LIVINGSTON STREET



PLAN
SCALE: 1" = 20'



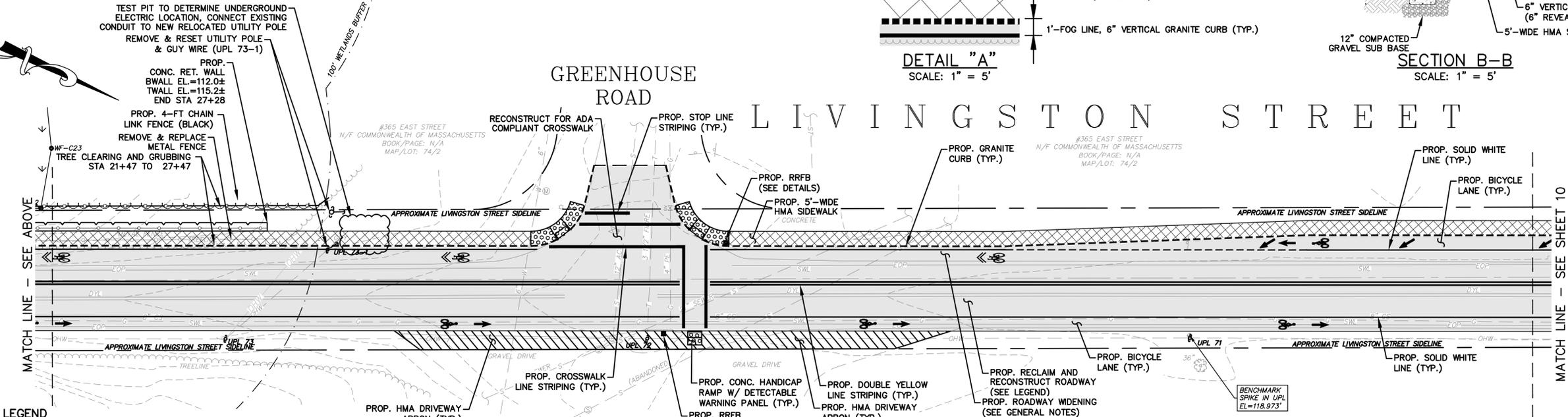
DETAIL "A"
SCALE: 1" = 5'



SECTION B-B
SCALE: 1" = 5'

GREENHOUSE ROAD

LIVINGSTON STREET

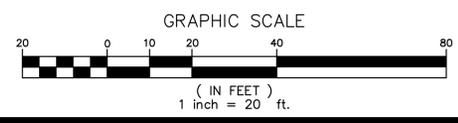


PLAN
SCALE: 1" = 20'

SITE IMPROVEMENT LEGEND

	RECLAIM & RECONSTRUCT BITUMINOUS ASPHALT ROADWAY, RECLAIM MINIMUM 16" DEPTH 12" GRAVEL; 2-1/2" HMA BINDER (SIC 19.0 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	CONSTRUCT BITUMINOUS CONCRETE WALKWAYS 8" GRAVEL; 1-1/2" HMA BINDER (SIC 12.5 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	RECONSTRUCT BITUMINOUS CONCRETE DRIVEWAYS 8" GRAVEL; 2-1/2" HMA BINDER (SIC 12.5MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	PROPOSED NEW CEMENT CONCRETE HANDICAP RAMP, 8" GRAVEL; 6" REINFORCED CONCRETE 4,000 PSI (SEE DETAIL)
	PROPOSED LOAM AND SEED (6" MIN. DEPTH)
	INSTALL NEW 6" VERTICAL GRANITE CURB (6" REVEAL)
	INSTALL NEW 12" MONOLITHIC BERM
	DRIVEWAY WITH 2% CROSS SLOPE
	PROPOSED STRAW WATTLE FILTER TUBE AND SILT FENCE

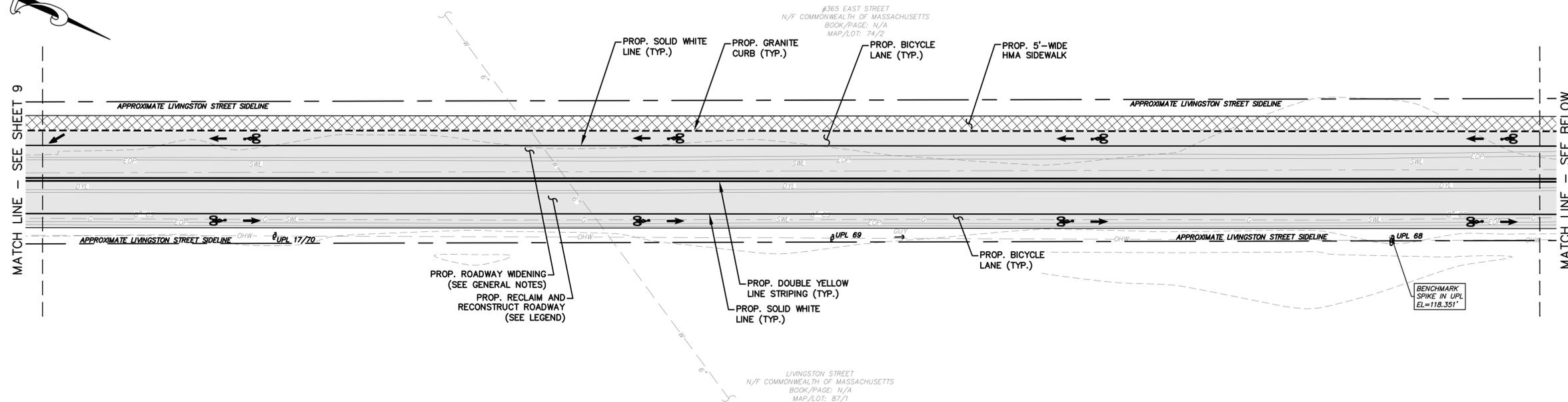
- GENERAL NOTES:**
- BC = ELEVATION OF EXISTING PAVED SURFACE
 - TC = PROPOSED ELEVATION OF TOP OF VERTICAL GRANITE CURB
 - BW = PROPOSED ELEVATION OF BACK OF SIDEWALK
 - ANY AREA WHERE THE EXISTING ROAD IS WIDENING, THE CONTRACTOR SHALL REMOVE 16" OF EXISTING MATERIAL AND CONSTRUCT THE NEW BITUMINOUS ASPHALT ROADWAY WITH 12" OF GRAVEL, 2-1/2" HMA BASE COURSE, 1-1/2" HMA TOP COURSE.



DRAFT

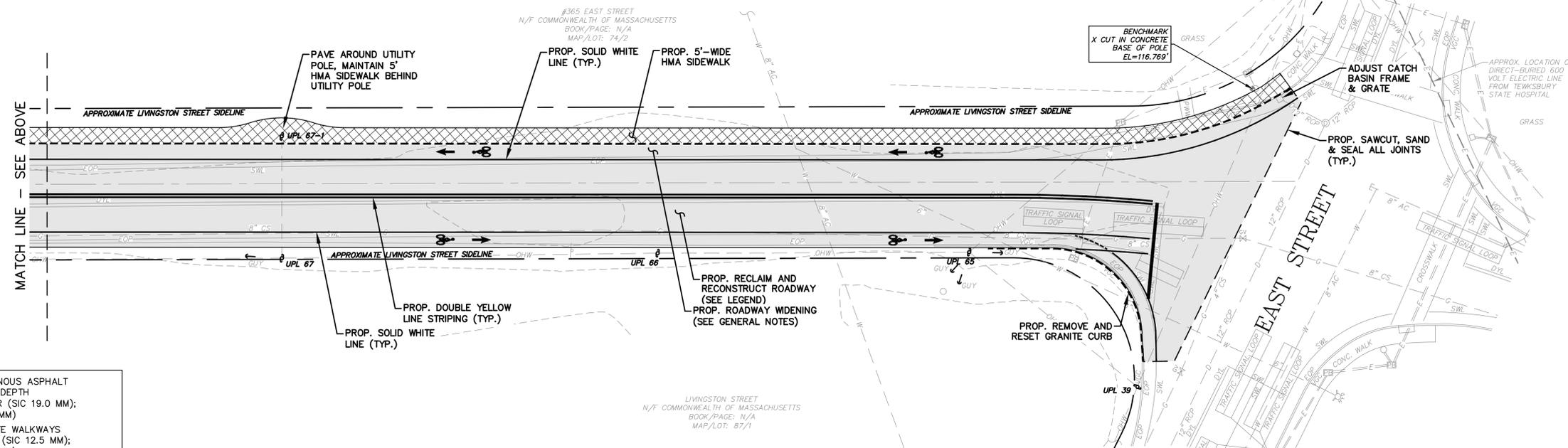
PROPOSED SITE PLAN STA 21+50 TO STA 31+75		
TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'		DATE: MAY 12, 2025
JOB NO. \ FILE NAME:	DESIGNED BY: W.R.H.	SHEET NO.
23135-DESIGN 05.12.2025	DRAWN BY: R.S.T.	9 OF 16
	CHECKED BY: K.M.C.	

LIVINGSTON STREET



PLAN
SCALE: 1" = 20'

LIVINGSTON STREET



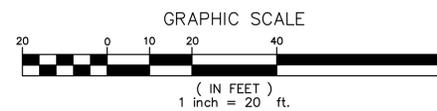
PLAN
SCALE: 1" = 20'

SITE IMPROVEMENT LEGEND

	RECLAIM & RECONSTRUCT BITUMINOUS ASPHALT ROADWAY, RECLAIM MINIMUM 16" DEPTH 12" GRAVEL; 2-1/2" HMA BINDER (SIC 19.0 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	CONSTRUCT BITUMINOUS CONCRETE WALKWAYS 8" GRAVEL; 1-1/2" HMA BINDER (SIC 12.5 MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	RECONSTRUCT BITUMINOUS CONCRETE DRIVEWAYS 8" GRAVEL; 2-1/2" HMA BINDER (SIC 12.5MM); 1-1/2" HMA SURFACE (SSC 9.5 MM)
	PROPOSED NEW CEMENT CONCRETE HANDICAP RAMP, 8" GRAVEL; 6" REINFORCED CONCRETE 4,000 PSI (SEE DETAIL)
	PROPOSED LOAM AND SEED (6" MIN. DEPTH)
	INSTALL NEW 6" VERTICAL GRANITE CURB (6" REVEAL)
	INSTALL NEW 12" MONOLITHIC BERM
	DRIVEWAY WITH 2% CROSS SLOPE
	PROPOSED STRAW WATTLE FILTER TUBE AND SILT FENCE

GENERAL NOTES:

- BC = ELEVATION OF EXISTING PAVED SURFACE
- TC = PROPOSED ELEVATION OF TOP OF VERTICAL GRANITE CURB
- BW = PROPOSED ELEVATION OF BACK OF SIDEWALK
- ANY AREA WHERE THE EXISTING ROAD IS WIDENING, THE CONTRACTOR SHALL REMOVE 16" OF EXISTING MATERIAL AND CONSTRUCT THE NEW BITUMINOUS ASPHALT ROADWAY WITH 12" OF GRAVEL, 2-1/2" HMA BASE COURSE, 1-1/2" HMA TOP COURSE.

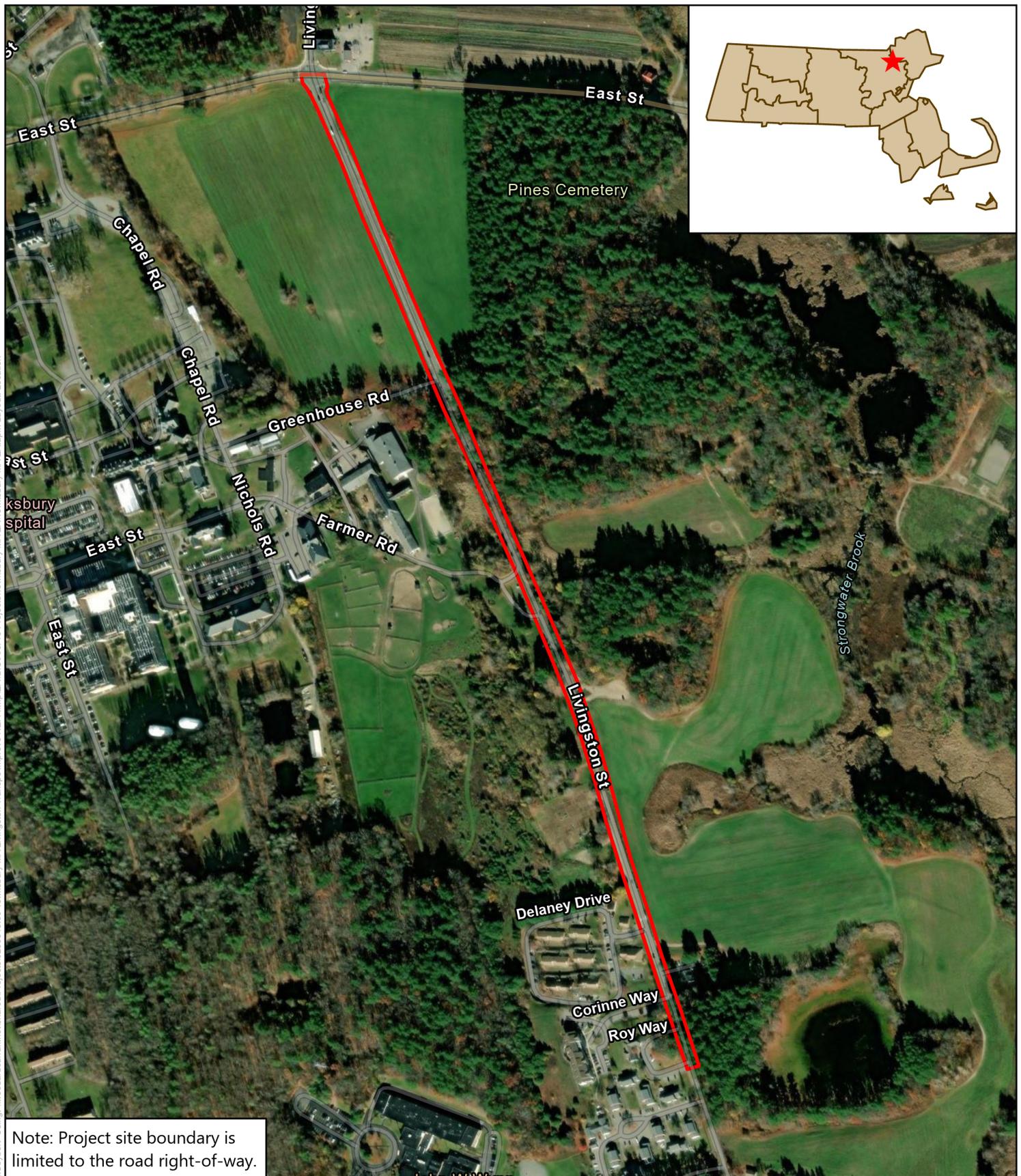


DRAFT

PROPOSED SITE PLAN STA 31+75 TO STA 41+25 TOWN OF TEWKSBURY, MASSACHUSETTS LIVINGSTON STREET ROADWAY IMPROVEMENT PROJECT		
GCG ASSOCIATES, INC. WILMINGTON MASSACHUSETTS		
SCALE: 1" = 20'	DATE: MAY 12, 2025	
JOB NO. \FILE NAME: 23135-DESIGN 05.12.2025	DESIGNED BY: W.R.H. DRAWN BY: R.S.T. CHECKED BY: K.M.C.	SHEET NO. 10 OF 16

APPENDIX C: FIGURES

Figure Exponent: 4/29/2025 By: Abby Seybert Using: \woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston - Transpo Improve NEPA\Map\EA\GIS\AcPro Projects\Tewksbury, MA\EA.aprx Layout: Location



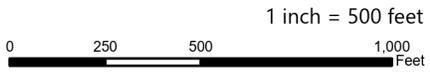
Note: Project site boundary is limited to the road right-of-way.

Figure 1. Project Location

Environmental Assessment - Livingston Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

 Project Site



Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI Imagery Hybrid Map

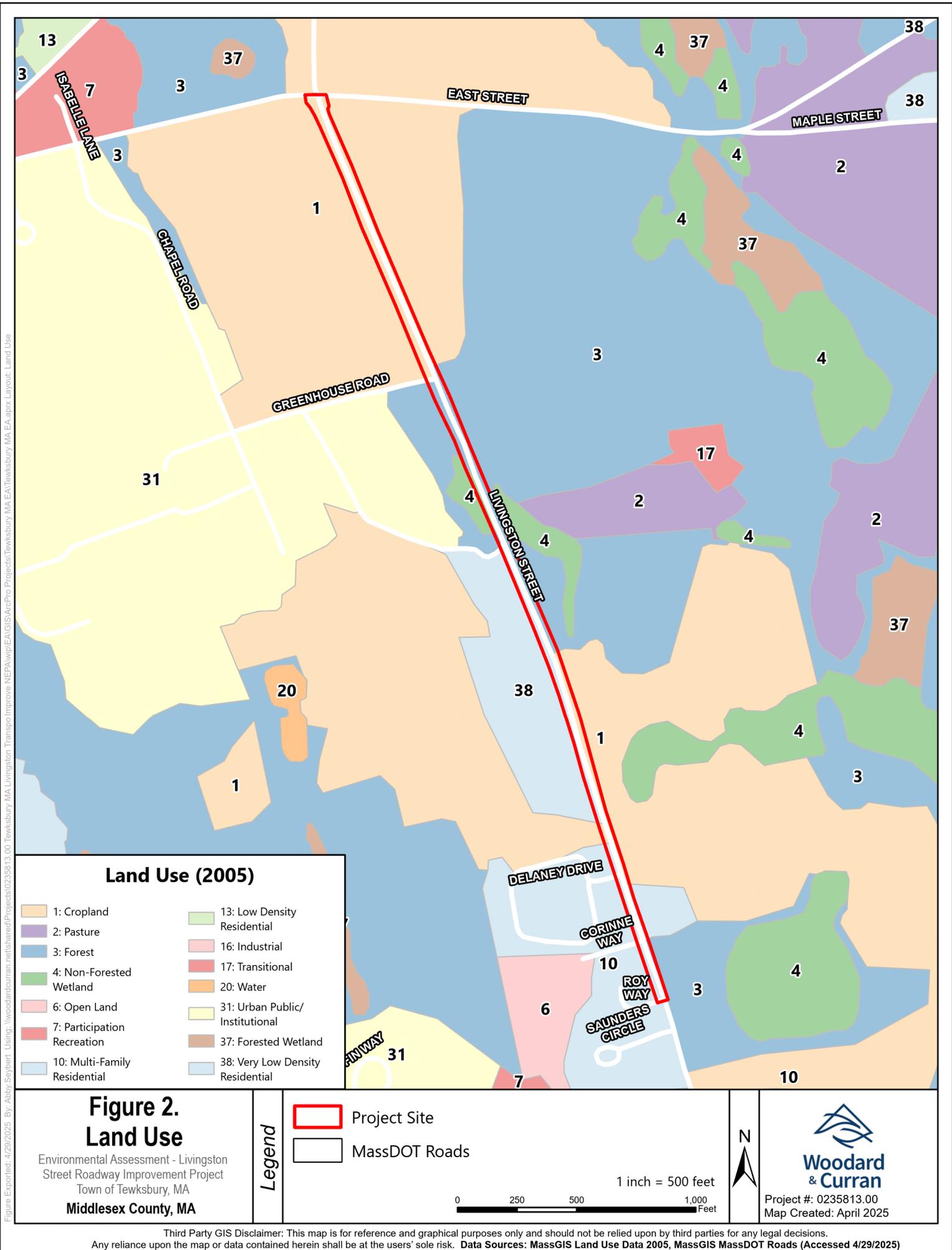


Figure Exponent: 4/29/2025 By: Abby Seybert Using: \woodardcurran.net\shared\Projects\0235813.00 Tewksbury MA Livingston - Transpo Improve NEPA\wp\EA\GIS\AcPro Projects\Tewksbury MA EA\Tewksbury MA EA.aprx Layout: Land Use

Land Use (2005)

- | | |
|------------------------------|----------------------------------|
| 1: Cropland | 13: Low Density Residential |
| 2: Pasture | 16: Industrial |
| 3: Forest | 17: Transitional |
| 4: Non-Forested Wetland | 20: Water |
| 6: Open Land | 31: Urban Public/Institutional |
| 7: Participation Recreation | 37: Forested Wetland |
| 10: Multi-Family Residential | 38: Very Low Density Residential |

Figure 2. Land Use

Environmental Assessment - Livingston Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

- Project Site
- MassDOT Roads



Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: MassGIS Land Use Data 2005, MassGIS MassDOT Roads (Accessed 4/29/2025)

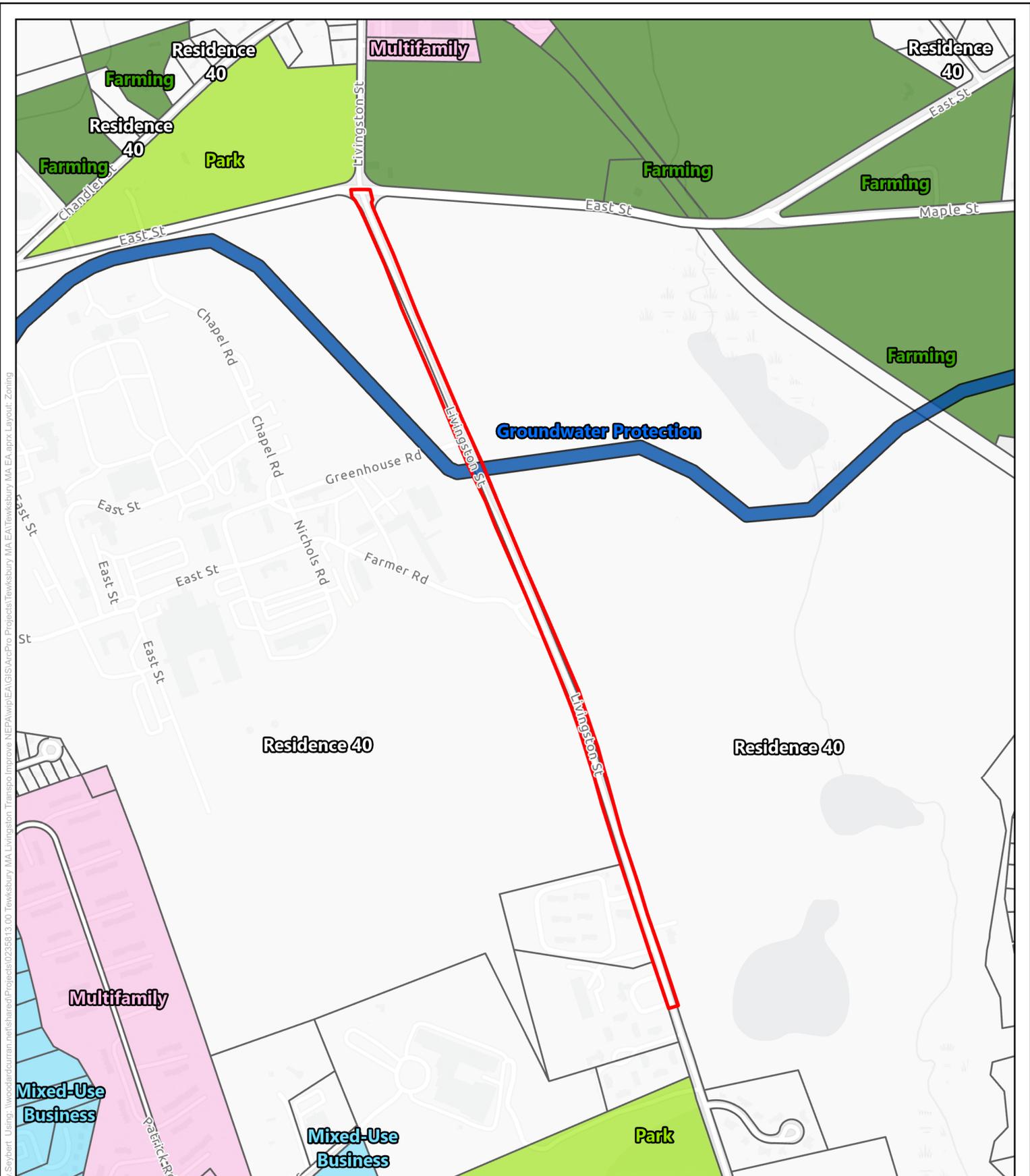
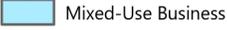
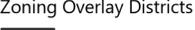
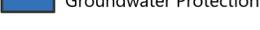
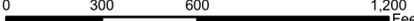


Figure Exposed: 4/25/2025 By: Abby Seybert Using: \\woodardcurran.net\shared\Projects\0235813.00 Tewksbury MA\Livingston-Transpo\Improve NEPA\WP\EA\GIS\AcPro\Projects\Tewksbury MA\EA\Tewksbury MA\EA\approx\Layout-Zoning

Figure 3.
Zoning Districts
 Environmental Assessment - Livingston
 Street Roadway Improvement Project
 Town of Tewksbury, MA
 Middlesex County, MA

Legend	 Project Site	 Park
	 Zoning Districts	 Mixed-Use Business
	 Residence 40	 Zoning Overlay Districts
	 Farming	 Groundwater Protection
	 Multifamily	

1 inch = 600 feet

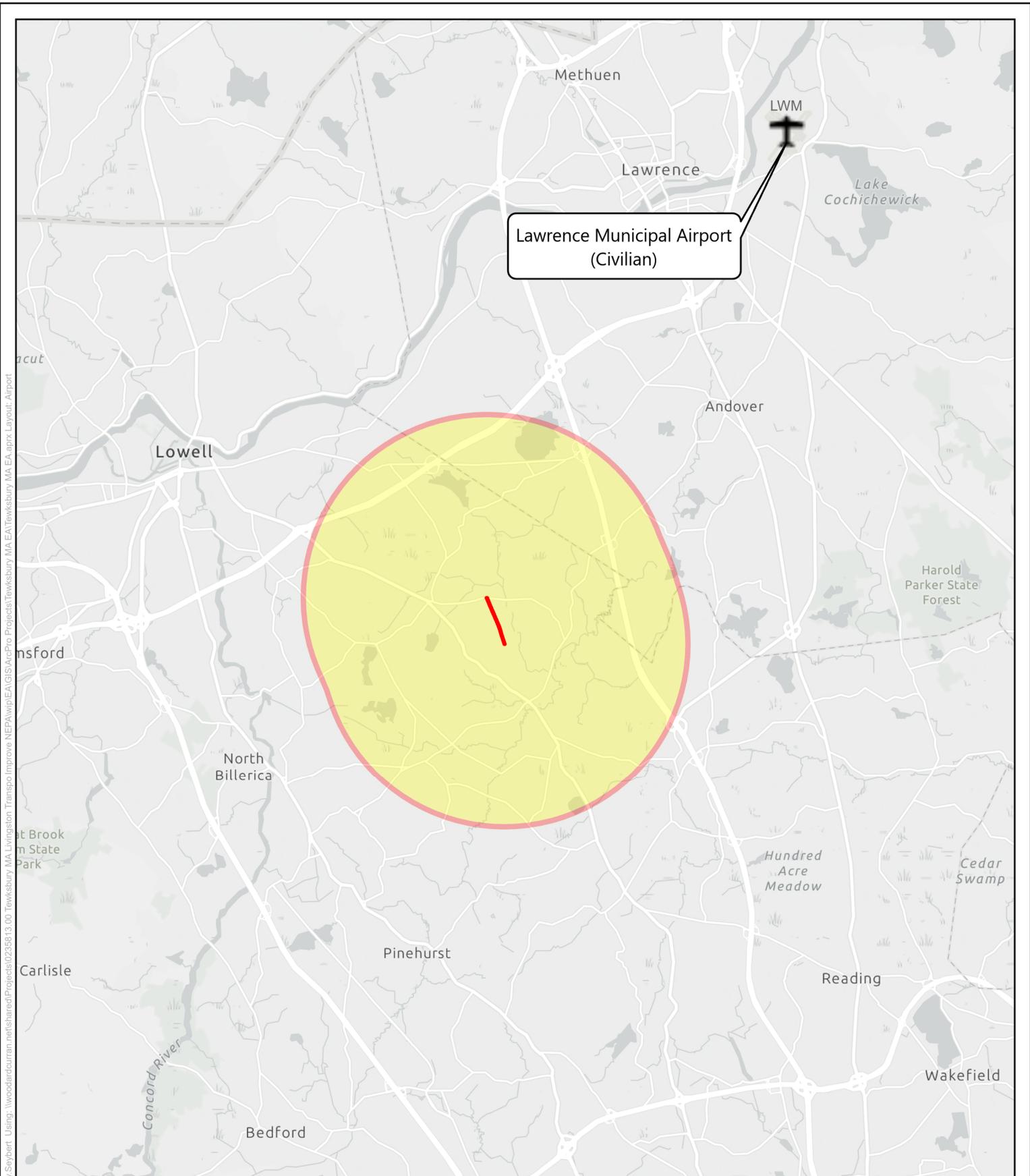





**Woodard
& Curran**

Project #: 0235813.00
 Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI Light Gray Canvas Map, Town of Tewksbury Public MapsOnline (Accessed 4/25/2025)



Lawrence Municipal Airport
(Civilian)

LWM

Figure 4. Airport Hazards

Environmental Assessment - Livingston
Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

-  Project Site
-  Project Site Buffer (15,000 ft)
-  Airport Point

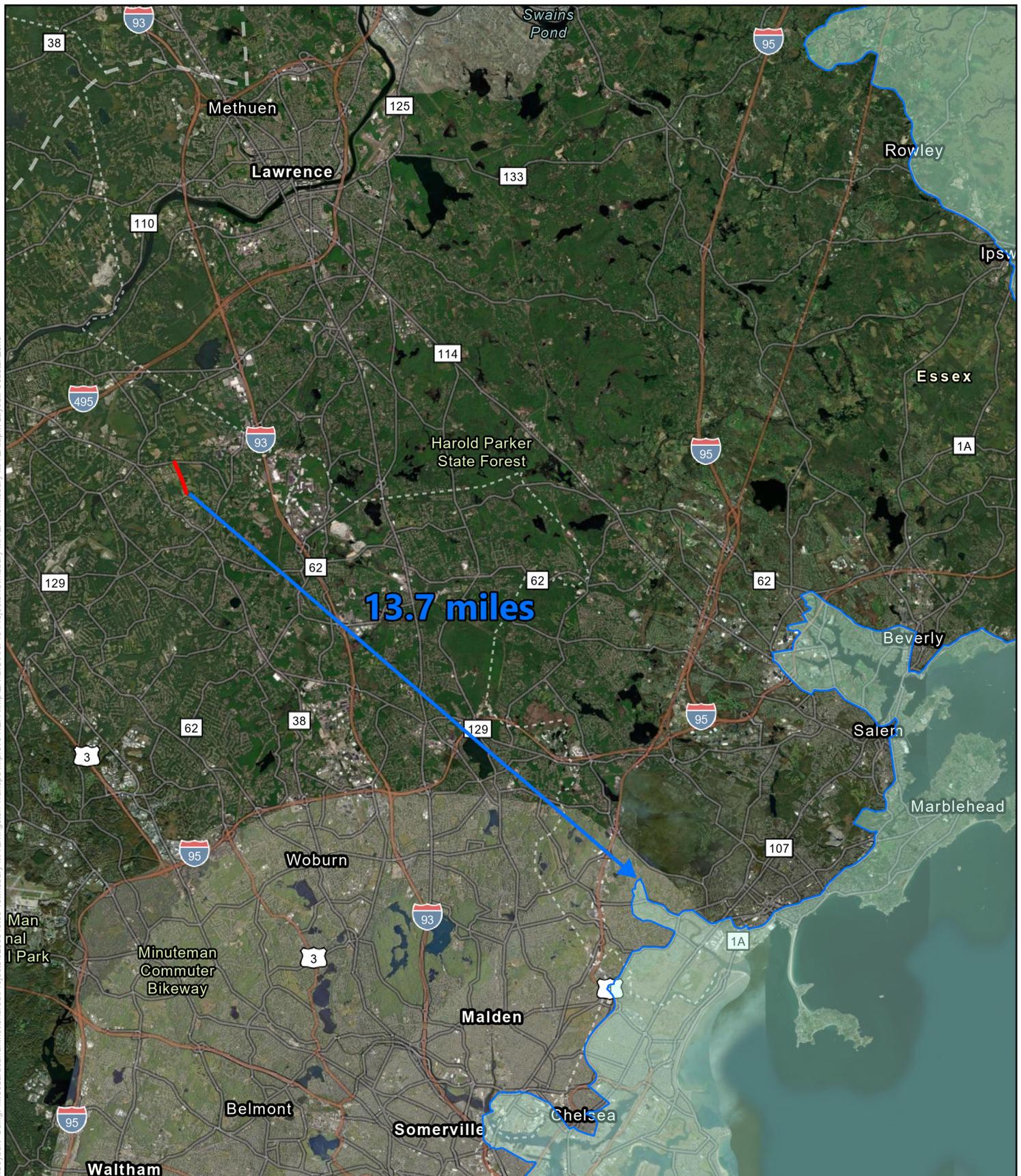


Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI Light Gray Base Map, ESRI USA Airports Layer (Accessed 4/24/2025)

Figure Exposed: 4/24/2025 By: Abby Seybert Using: \woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston, Transpo\Improve NEPA\wp\EA\GIS\AcPro\Projects\Tewksbury, MA\EA\approx\Layout-Airport

Figure Exposed: 4/24/2025 By: Abby Seybert Using: \woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA Livingston, Transpo Improve NEPA\wp\EA\GIS\AcPro Projects\Tewksbury, MA EA.aprx Layout - Coastal Zone



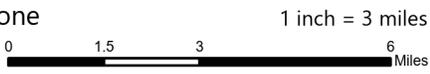
13.7 miles

Figure 6. Coastal Zone Management

Environmental Assessment - Livingston Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

- Project Site
- MA Coastal Zone Boundary
- MA Coastal Zone



Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI Imagery Hybrid Map, MassGIS Coastal Zone Boundary Data (Accessed 4/24/2025)

Figure Exported: 4/29/2025, By: Abby Seybert, Using: \woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston - Transpo Improve NEPA\EA\GIS\AcPro\Projects\Tewksbury, MA\EA.aprx Layout - Site Assessment

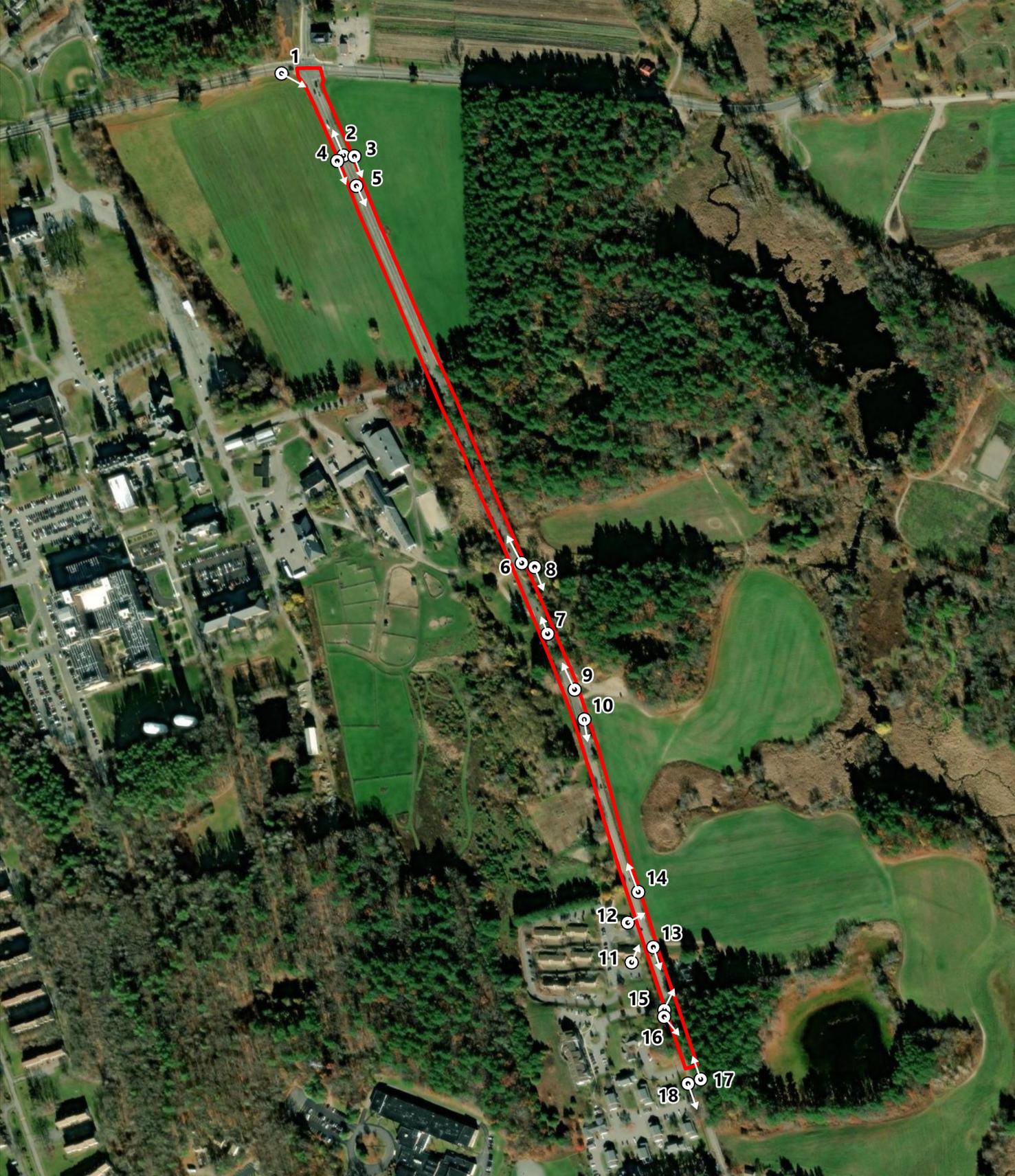


Figure 7.
Site Assessment
Environmental Assessment - Livingston
Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

- Project Site
- Photo Locations

1 inch = 500 feet

Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: ESRI Imagery Map**



Photo Number: 1 | View Direction: southeast | Date: April 23, 2025
Description: View from the northwest corner of Livingston Street and East Street looking southeast.



Photo Number: 2 | View Direction: north | Date: April 23, 2025
Description: View looking north towards East Street intersection from Livingston Street.



Photo Number: 3 | View Direction: south | Date: April 23, 2025
Description: View looking south on Livingston Street in between East Street and Greenhouse Road.



Photo Number: 4 | View Direction: south | Date: April 23, 2025
Description: View looking south on west side of Livingston Street in between East Street and Greenhouse Road.



Photo Number: 5 | View Direction: south | Date: April 23, 2025
Description: View looking south on east side of Livingston Street in between East Street and Greenhouse Road.



Photo Number: 6 | View Direction: north | Date: April 23, 2025
Description: View looking north on Livingston street near Farmer Road intersection.

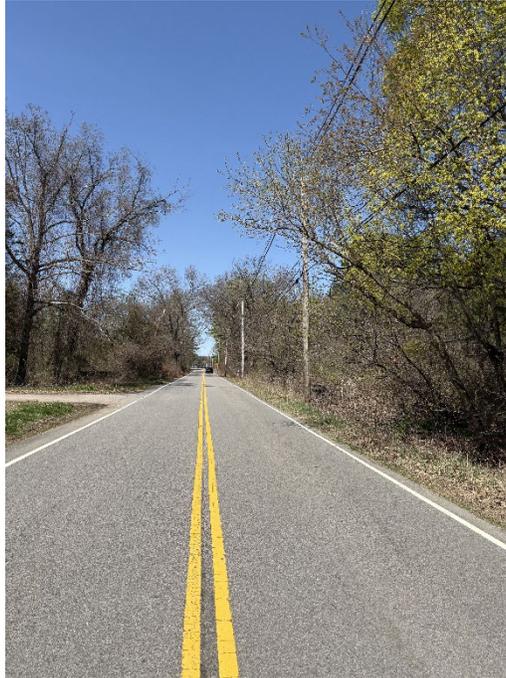


Photo Number: 7

View Direction: north

Date: April 23, 2025

Description: View looking north on Livingston Street near Stonewater Farm entrance.



Photo Number: 8

View Direction: south

Date: April 23, 2025

Description: View looking south on Livingston Street near Stonewater Farm entrance.



Photo Number: 9 | View Direction: north | Date: April 23, 2025
Description: View looking north on Livingston Street at Livingston Field.



Photo Number: 10 | View Direction: north | Date: April 23, 2025
Description: View looking north on Livingston Street at Livingston Field.



Photo Number: 11 | View Direction: north | Date: April 23, 2025
Description: View looking north at bus shelter at intersection of Livingston Street and Delaney Drive.

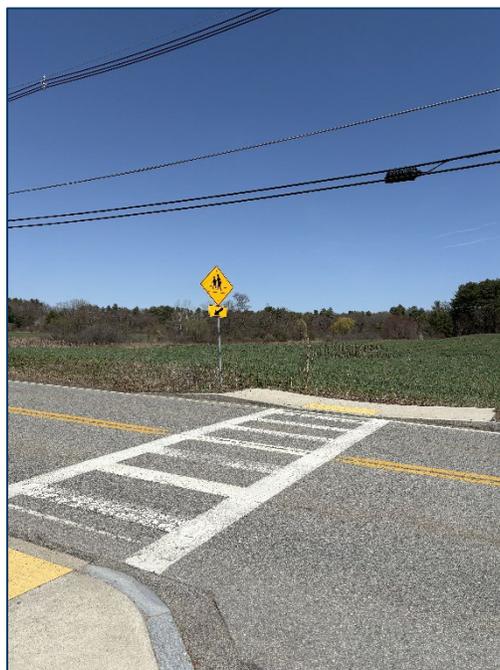


Photo Number: 12 | View Direction: east | Date: April 23, 2025
Description: Viewing looking east at existing crosswalk at Delaney Drive across Livingston Street.



Photo Number: 13 | View Direction: south | Date: April 23, 2025
Description: Viewing looking south from existing crosswalk at Delaney Drive across Livingston Street.



Photo Number: 14 | View Direction: north | Date: April 23, 2025
Description: Viewing looking north from existing crosswalk at Delaney Drive across Livingston Street.



Photo Number: 15 | View Direction: northeast | Date: April 23, 2025
Description: Viewing looking northeast at intersection of Livingston Street and Corinne Way.



Photo Number: 16 | View Direction: southeast | Date: April 23, 2025
Description: Viewing looking southeast at intersection of Livingston Street and Corinne Way.



Photo Number: 17 | View Direction: north | Date: April 23, 2025
Description: View looking north from Livingston Street near Roy's Way.



Photo Number: 18 | View Direction: south | Date: April 23, 2025
Description: View looking South from Livingston Street near Roy's Way.

Figure Exported: 4/25/2025 10:45:13 AM By: Abby Seybert Using: \\woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston_Street\Transpo_Improve_NEPA\wp\EA\GIS\AcPro_Projects\Tewksbury, MA\EA\approx Layout - FEMA

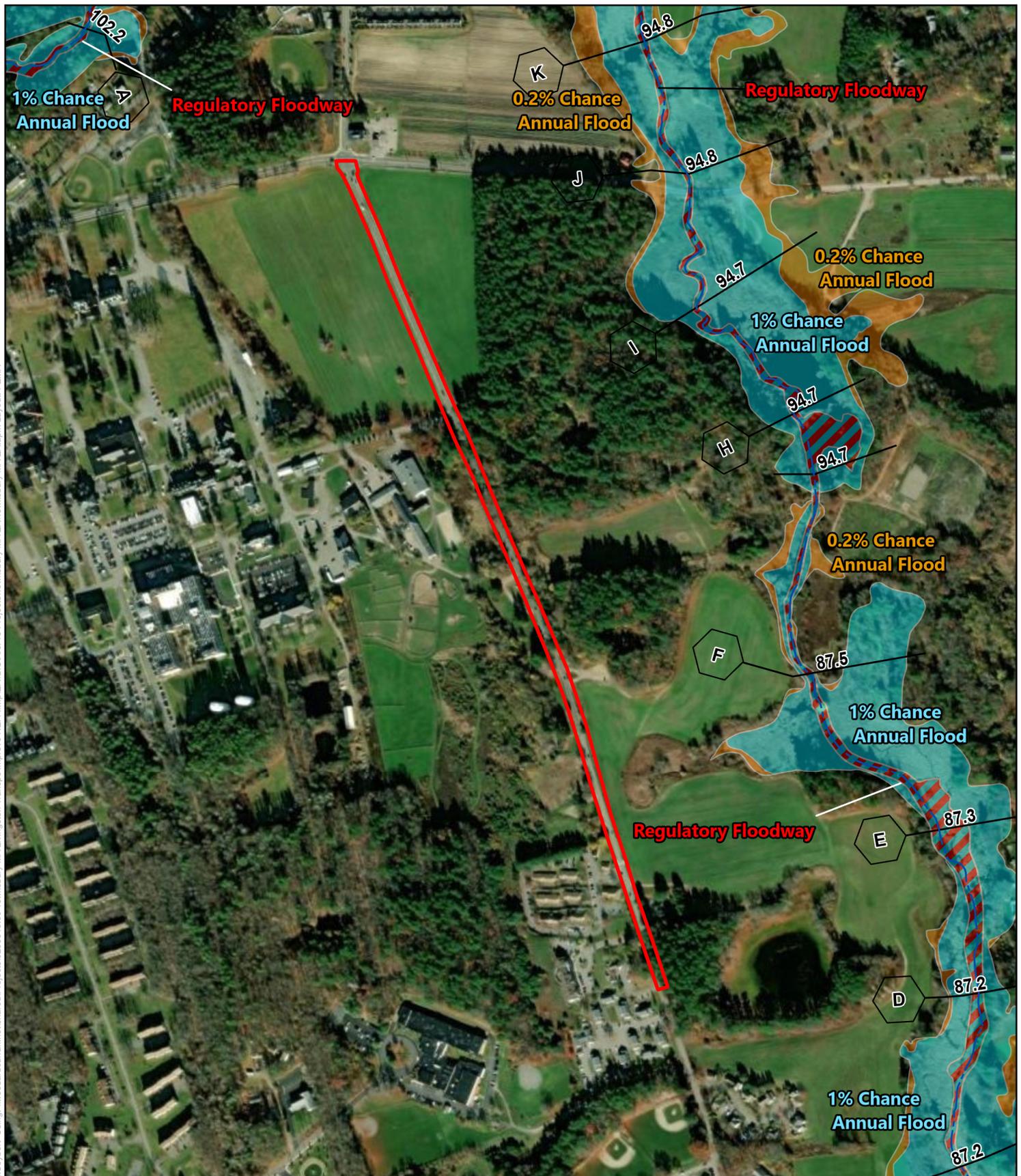
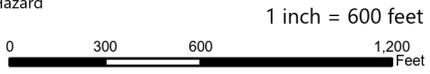


Figure 8. FEMA FIRM

Environmental Assessment - Livingston
Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

- Project Site
- Regulatory Floodway
- FEMA Flood Hazard Zones
- Profile Baselines
- 0.2% Annual Chance Flood Hazard
- Cross-Sections
- 1% Annual Chance Flood Hazard



**Woodard
& Curran**

Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI Imagery Map, FEMA National Flood Hazard Layer

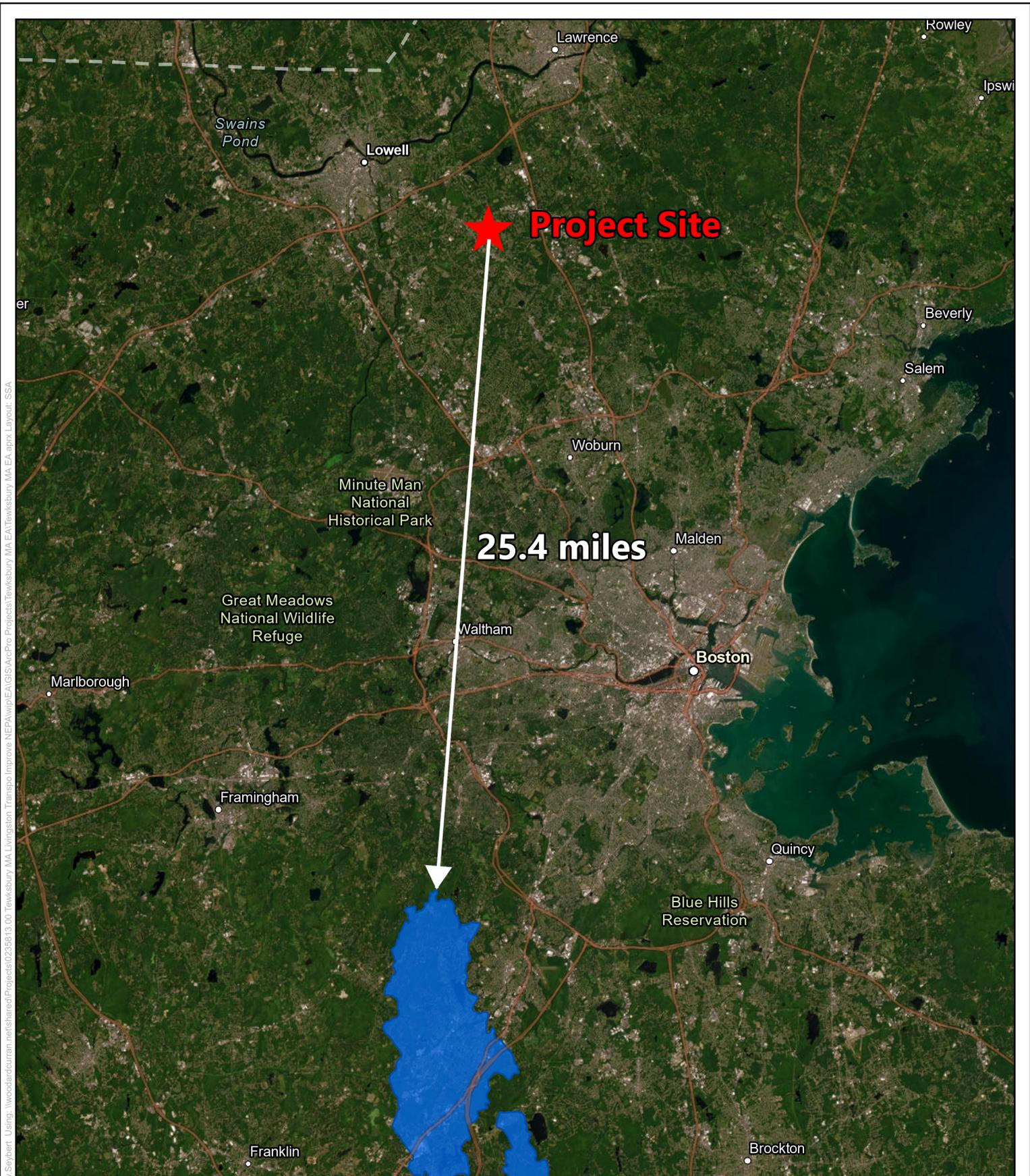
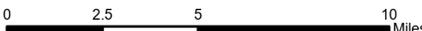


Figure Exposed: 4/25/2025 By: Abby Seybert Using: \WoodardCurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston, Transpo Improve NEPA\Map\EA\GIS\AcPro Projects\Tewksbury, MA\EA\approx Layout - SSA

Figure 9.
Sole Source Aquifers
 Environmental Assessment - Livingston
 Street Roadway Improvement Project
 Town of Tewksbury, MA
 Middlesex County, MA

Legend	 Project Site
	 Sole Source Aquifer

1 inch = 5 miles






**Woodard
& Curran**

Project #: 0235813.00
 Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: ESRI Imagery Hybrid Map, Data.gov EPA Sole Source Aquifers**

Figure Exposed: 4/25/2025 By: Abby Seydett Using: \\woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston, Transpo Improve NEPA\wp\EA\GIS\AcPro Projects\Tewksbury, MA\EA\Tewksbury, MA\EA.aprx Layout: NWI



Figure 10. National Wetlands Inventory
 Environmental Assessment - Livingston Street Roadway Improvement Project
 Town of Tewksbury, MA
 Middlesex County, MA

Legend

- Project Site
- National Wetlands Inventory
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

1 inch = 600 feet

0 300 600 1,200
 Feet

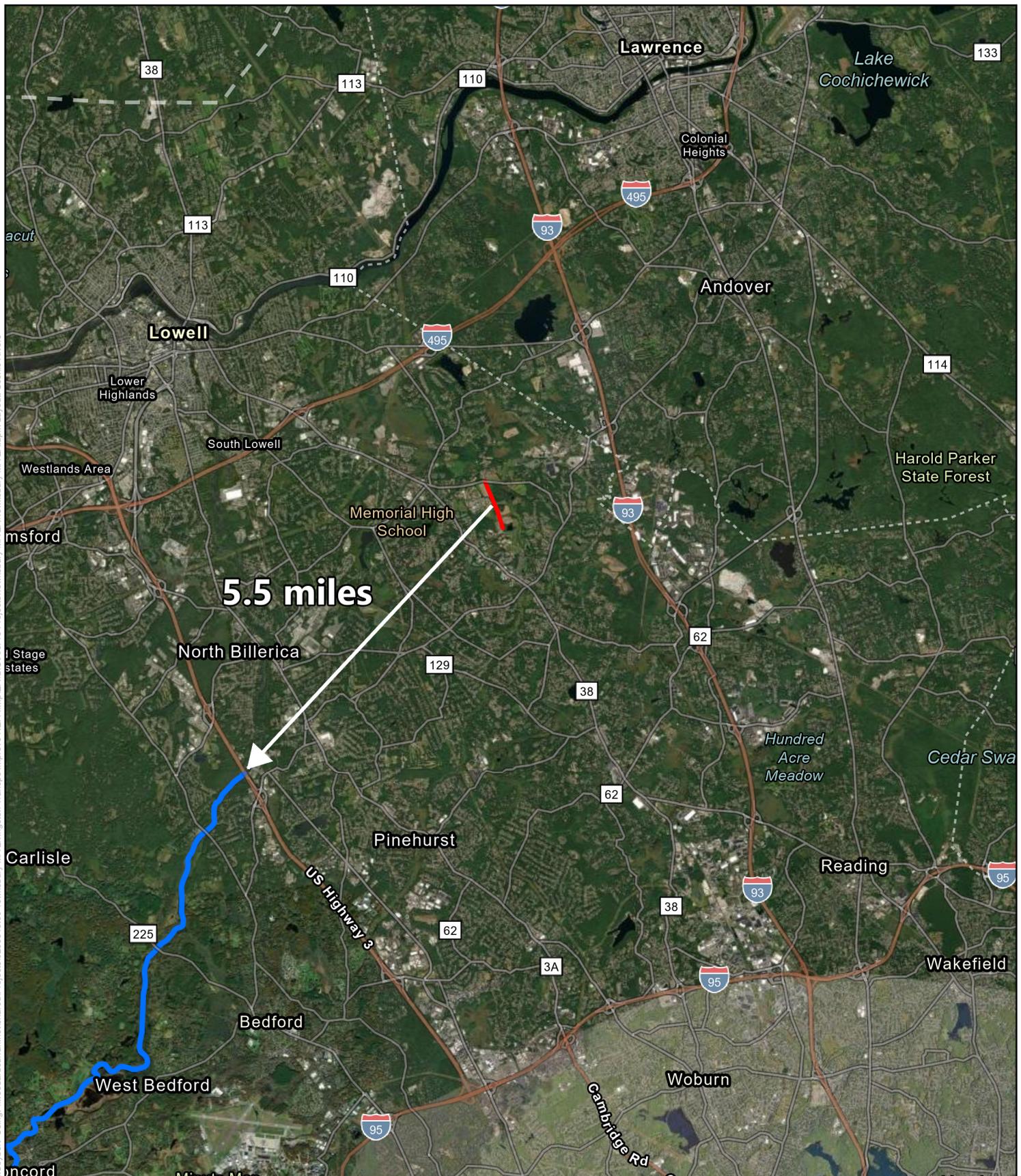
N

Woodard & Curran

Project #: 0235813.00
 Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: ESRI Imagery Map, USFWS National Wetlands Inventory**

Figure Exposed: 4/25/2025 By: Abby Seybert Using: \woodardcurran.net\shared\Projects\0235813.00 Tewksbury, MA\Livingston Street Roadway Improvement Project\GIS\AcPro\Projects\Tewksbury, MA\EA\approx\Layout - Scenic Rivers



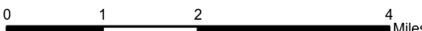
5.5 miles

Figure 11. National Wild & Scenic Rivers
Environmental Assessment - Livingston Street Roadway Improvement Project
Town of Tewksbury, MA
Middlesex County, MA

Legend

-  Project Site
-  National Wild and Scenic Rivers

1 inch = 2 miles





Project #: 0235813.00
Map Created: April 2025

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI Imagery Hybrid Map, USDA Forest Service National Wild and Scenic River Segments

APPENDIX D: ENDANGERED SPECIES CONSULTATION



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:

04/23/2025 12:27:24 UTC

Project Code: 2025-0086958

Project Name: Livingston Street Roadway Improvement Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the “**New England Field Office Endangered Species Project Review and Consultation**” website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

<https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review>

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/service/section-7-consultations>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

<https://www.fws.gov/program/migratory-bird-permit>

<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

PROJECT SUMMARY

Project Code: 2025-0086958
Project Name: Livingston Street Roadway Improvement Project
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The Proposed Project is a multi-modal enhancement project that would create and improve pedestrian, bicycle, transit, and vehicle facilities along Livingston Street in the Town of Tewksbury, Massachusetts. The Proposed Site includes approximately 4,100-feet (0.78 miles) of right-of-way along Livingston Street between East Street on the northwest and Roy's Way on the southeast. New sidewalks on the west side of Livingston Street would connect to the existing sidewalk network on East Street and Livingston Street south of Roy's Way. Livingston Street would also be resurfaced to improve the quality of riding for vehicles and cyclists. Bike lanes would be provided where there is sufficient public right-of-way. Where such space does not exist, shared lane markings would be added to the roadway to improve cyclists' safety. Crosswalks would be added across Roy and Corrine Ways, Delaney Drive, and Greenhouse Road; and across Livingston Street at Delaney Drive (improvements to an existing crosswalk), at a parking lot for Livingston Field, and Greenhouse Road. These crosswalks would allow for pedestrian access to the new sidewalk and would be equipped with Rectangular Rapid Flashing Beacons, which are pedestrian-actuated LED-array-based conspicuity enhancements used to improve safety at uncontrolled, marked crosswalks. Improved bus shelters at Livingston Street and Delaney Drive for the Lowell Regional Transit Authority Line 12 Bus would also be provided.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.608180250000004,-71.21260226895093,14z>



Counties: Middlesex County, Massachusetts

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Tewksbury town
Name: Megan Gatto
Address: 250 Royall Street
City: Canton
State: MA
Zip: 02021
Email: megan.gatto@woodardcurran.com
Phone: 7816130168

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Housing and Urban Development



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:

04/23/2025 12:36:55 UTC

Project code: 2025-0086958

Project Name: Livingston Street Roadway Improvement Project

Federal Nexus: yes

Federal Action Agency (if applicable): Department of Housing and Urban Development

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Livingston Street Roadway Improvement Project'

Dear Megan Gatto:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on April 23, 2025, for 'Livingston Street Roadway Improvement Project' (here forward, Project). This project has been assigned Project Code 2025-0086958 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements may not be complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (DKey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid. Note that conservation measures for northern long-eared bat and tricolored bat may differ. If both bat species are present in the action area and the key suggests more conservative measures for one of the species for your Project, the Project may need to apply the most conservative measures in order to avoid adverse effects. If unsure which conservation measures should be applied, please contact the appropriate Ecological Services Field Office.***

Determination for the Northern Long-Eared Bat and Tricolored Bat

Based on your IPaC submission and a standing analysis completed by the Service, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Tricolored Bat (<i>Perimyotis subflavus</i>)	Proposed Endangered	NLAA

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that consultation on the Action is complete for northern long-eared bat and/or tricolored bat and no further action is necessary unless either of the following occurs:

- new information reveals effects of the action that may affect the northern long-eared bat or tricolored bat in a manner or to an extent not previously considered; or,
- the identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat or tricolored bat that was not considered when completing the determination key.

15-Day Review Period

As indicated above, the Service will notify you within 15 calendar days if we determine that this proposed Action does not meet the criteria for a “may affect, not likely to adversely affect” (NLAA) determination for the northern long-eared bat and/or tricolored bat. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NLAA concurrence provided here. This verification period allows the identified Ecological Services Field Office to apply local knowledge to evaluation of the Action, as we may identify a small subset of actions having impacts that we did not anticipate when developing the key. In such cases, the identified Ecological Services Field Office may request additional information to verify the effects determination reached through the Northern Long-eared Bat and Tricolored Bat DKey.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Proposed Threatened

You may coordinate with our Office to determine whether the Action may affect the species and/or critical habitat listed above. Note that reinitiation of consultation would be necessary if a new species is listed or critical habitat designated that may be affected by the identified action before it is complete.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2025-0086958 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Livingston Street Roadway Improvement Project

2. Description

The following description was provided for the project 'Livingston Street Roadway Improvement Project':

The Proposed Project is a multi-modal enhancement project that would create and improve pedestrian, bicycle, transit, and vehicle facilities along Livingston Street in the Town of Tewksbury, Massachusetts. The Proposed Site includes approximately 4,100-feet (0.78 miles) of right-of-way along Livingston Street between East Street on the northwest and Roy's Way on the southeast. New sidewalks on the west side of Livingston Street would connect to the existing sidewalk network on East Street and Livingston Street south of Roy's Way. Livingston Street would also be resurfaced to improve the quality of riding for vehicles and cyclists. Bike lanes would be provided where there is sufficient public right-of-way. Where such space does not exist, shared lane markings would be added to the roadway to improve cyclists' safety. Crosswalks would be added across Roy and Corrine Ways, Delaney Drive, and Greenhouse Road; and across Livingston Street at Delaney Drive (improvements to an existing crosswalk), at a parking lot for Livingston Field, and Greenhouse Road. These crosswalks would allow for pedestrian access to the new sidewalk and would be equipped with Rectangular Rapid Flashing Beacons, which are pedestrian-actuated LED-array-based conspicuity enhancements used to improve safety at uncontrolled, marked crosswalks. Improved bus shelters at Livingston Street and Delaney Drive for the Lowell Regional Transit Authority Line 12 Bus would also be provided.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.608180250000004,-71.21260226895093,14z>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect, but not likely to adversely affect” for a least one species covered by this determination key.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

14. Will the action result in effects to a culvert or tunnel at any time of year?

Yes

15. Does the culvert or tunnel equal or exceed 23 feet (7.0 meters) in length?

Yes

16. Do the interior dimensions of the culvert or tunnel **equal or exceed 3.0 feet (0.9 meters) in height (minimum height for tricolored bat)**?

No

17. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

18. Does the action include the intentional exclusion of bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

19. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

No

20. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

21. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

No

22. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

23. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

No

24. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

25. Will the action include drilling or blasting?

No

26. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

No

27. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

No

28. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

29. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

30. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

31. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

Yes

32. Will the proposed action result in the cutting of entire trees outside of the currently maintained utility right-of-way?

No

33. Will tree trimming, limbing, or cutting be used to expand the footprint of any currently maintained utility rights-of-way?

Yes

34. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

Note: A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property.

No

35. Does the project intersect with the 0- 9.9% forest density category?

Automatically answered

No

36. Does the project intersect with the 10.0- 19.9% forest density category map?

Automatically answered

No

37. Does the project intersect with the 20.0- 29.9% forest density category map?

Automatically answered

Yes

38. Does the project intersect with the 30.0- 100% forest density category map?

Automatically answered

No

39. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 40 acres in total extent?

No

40. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

No

41. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

42. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

43. Has a presence/probable absence bat survey targeting the [tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

44. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?

(If unsure, answer ""Yes."")

Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#).

Yes

45. Do any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pine trees)?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

46. Will any tree cutting/trimming or other knocking or bringing down of trees be conducted during the Pup Season for tricolored bat?

Note: Bat activity periods for your state can be found in Appendix L of the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#).

No

47. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

3.57

IPAC USER CONTACT INFORMATION

Agency: Tewksbury town
Name: Megan Gatto
Address: 250 Royall Street
City: Canton
State: MA
Zip: 02021
Email: megan.gatto@woodardcurran.com
Phone: 7816130168

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Housing and Urban Development

APPENDIX E: HISTORIC CONSULTATION

RECEIVED

JAN 06 2025

MASS. HIST. COMM

RC.76139

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A
MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Livingston Street Roadway Improvement Project (PW-24-18)

Location / Address: Livingston Street, Tewksbury, Massachusetts (From Roy Way to East Street)

City / Town: Tewksbury, Massachusetts

Project Proponent

Name: Andrew Stack, P.E. - Town Engineer, Town of Tewksbury, Department of Public Works

Address: 999 Whipple Road

City/Town/Zip/Telephone: Tewksbury, Massachusetts/ 01876/ 978-640-4440

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

<u>Agency Name</u>	<u>Type of License or funding (specify)</u>
US Department of Housing & Urban Development	Community Project Funding
Massachusetts Department of Transportation	Chapter 90 Program
Massachusetts Department of Environmental Protection	Notice of Intent (Permit)

Project Description (narrative):

See attached.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

N/A - No demolition to buildings. Only existing roadway demolition.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

N/A - No demolition to buildings. Only existing roadway demolition.

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes, roadway reconstruction, new sidewalk construction, new retaining wall construction. See attached documents.

5/31/96 (Effective 7/1/93) - corrected

After review of the MHC's files and the materials you submitted, the MHC has determined that the proposed project will have "no adverse effect" on significant historic or archaeological properties.

950 CMR - 275

Brona Simon 1/28/25

Brona Simon Date
Executive Director
State Historic Preservation Officer
Massachusetts Historical Commission

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

Yes, Tewksbury State Hospital property located at 365 East Street, Tewksbury, MA 01876 (adjacent to Livingston Street).

What is the total acreage of the project area?

Woodland _____	acres	Productive Resources:	
Wetland _____	acres	Agriculture _____	acres
Floodplain _____	acres	Forestry _____	acres
Open space <u>1.02</u>	acres	Mining/Extraction _____	acres
Developed <u>2.51</u>	acres	Total Project Acreage <u>3.53</u>	acres

What is the acreage of the proposed new construction? 3.53 acres

What is the present land use of the project area?

Town Right-of-way/ Roadway (Livingston Street)

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

See attached.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Kevin Carter Date: 1/2/2025

Name: Kevin Carter, P.E.

Address: 84 Main Street

City/Town/Zip: Wilmington, Massachusetts 01887

Telephone: 978-657-9714

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.



**Woodard
& Curran**

woodardcurran.com