CONNECTICUT ENVIRONMENTAL IMPACT EVALUATION
Prepared pursuant to Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-1 to 12, inclusive

FOR

MADISON SHORE LINE EAST RAILROAD STATION
MADISON, CONNECTICUT

STATE PROJECT NO. 310-0048

*** * ***

Prepared for:
THE CONNECTICUT DEPARTMENT OF TRANSPORTATION

March 2009

Approved:

_____ _____

For Connecticut Department of Transportation **Date**

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ACRONYMS AND ABBREVIATIONS

ACOE	U.S. Army Corps of Engineers
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AOEC	Area of Environmental Concern
APA	Aquifer Protection Area
BMPs	Best Management Practices
C&D Plan	Conservation and Development Policies Plan for Connecticut (2005-2010)
CEPA	Connecticut Environmental Policy Act
CERC	Connecticut Economic Resource Center
CGS	Connecticut General Statutes
CL&P	Connecticut Light and Power
CO	Carbon Monoxide
CTDOT	Connecticut Department of Transportation
CTDEP	Connecticut Department of Environmental Protection
CTDPH	Connecticut Department of Public Health
EIE	Environmental Impact Evaluation
EPA	U.S. Environmental Protection Agency
ETPH	Total Petroleum Hydrocarbons
FEMA	Federal Emergency Management Agency
GIS	Geographic Information Systems
LOS	Level of Service
MPO	Municipal Planning Organization
NAAQS	National Ambient Air Quality Standards
NDDB	Natural Diversity Database
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OAQPS	EPA Office of Air Quality Planning and Standards
OLISP	Office of Long Island Sound Programs
OPM	Connecticut Office of Policy and Management
OSHA	Occupational Safety and Health Administration
PM	Particulate Matter
PPM	Parts Per Million
RAP	Remedial Action Plan
RCSA	Regulations of Connecticut State Agencies
ROW	Right of Way
RSR	Remediation Standard Regulations
SCEL	Stream Channel Encroachment Line
SCRCOG	South Central Regional Council of Governments
SF	Square Feet
SHPO	State Historic Preservation Office/Officer
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SLE	Shore Line East
SVOC	Semi-volatile Organic Compounds
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
WPCA	Madison Health Department/Water Pollution Control Authority

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EXECUTIVE SUMMARY

Project Name: Madison Shore Line East Railroad Station, Madison, Connecticut (State Project No. 310-0048)

Date: March 2009

Sponsoring Agency: Connecticut Department of Transportation (CTDOT)

Participating Agency: None

Preparer: Fitzgerald & Halliday, Inc., 72 Cedar Street, Hartford, Connecticut 06106

Project Description – The Proposed Action

CTDOT is in the process of making strategic infrastructure and service improvements to the Shore Line East (SLE) commuter rail service so that it will be fully capable of meeting future commuter rail passenger needs. The Proposed Action being evaluated in this Environmental Impact Evaluation (EIE) includes infrastructure improvements at the new Madison SLE Railroad Station located at 77 Bradley Road. The study area is depicted in Figure ES-1. The Proposed Action improvements are above and beyond those improvements that were constructed and brought online by CTDOT under State Project 310-0020 on July 28, 2008. State Project 310-0020 included construction of a 199-space surface parking lot south of the railroad corridor, a south side high-level rail platform with commuter passenger shelter, and pedestrian connections between the surface parking lot and the platform/shelter. Photo 1 depicts some of these project elements shortly after their completion on July 28, 2008. Under State Project 310-0020, the old Madison Railroad Station, located just northwest of the Wall Street / Bradley Road intersection, was relocated to the new station site at 77 Bradley Road. The new site is CTDOT-owned, whereas the old station site was leased by CTDOT from the Northeast Railroad Passenger Corporation (Amtrak). As depicted in Photo 1, the new site provides for better station layout/configuration as well as improved parking with expansion possibilities.

The improvements that comprise the Proposed Action being assessed in this EIE are depicted conceptually on Figure ES-2 and are described below:

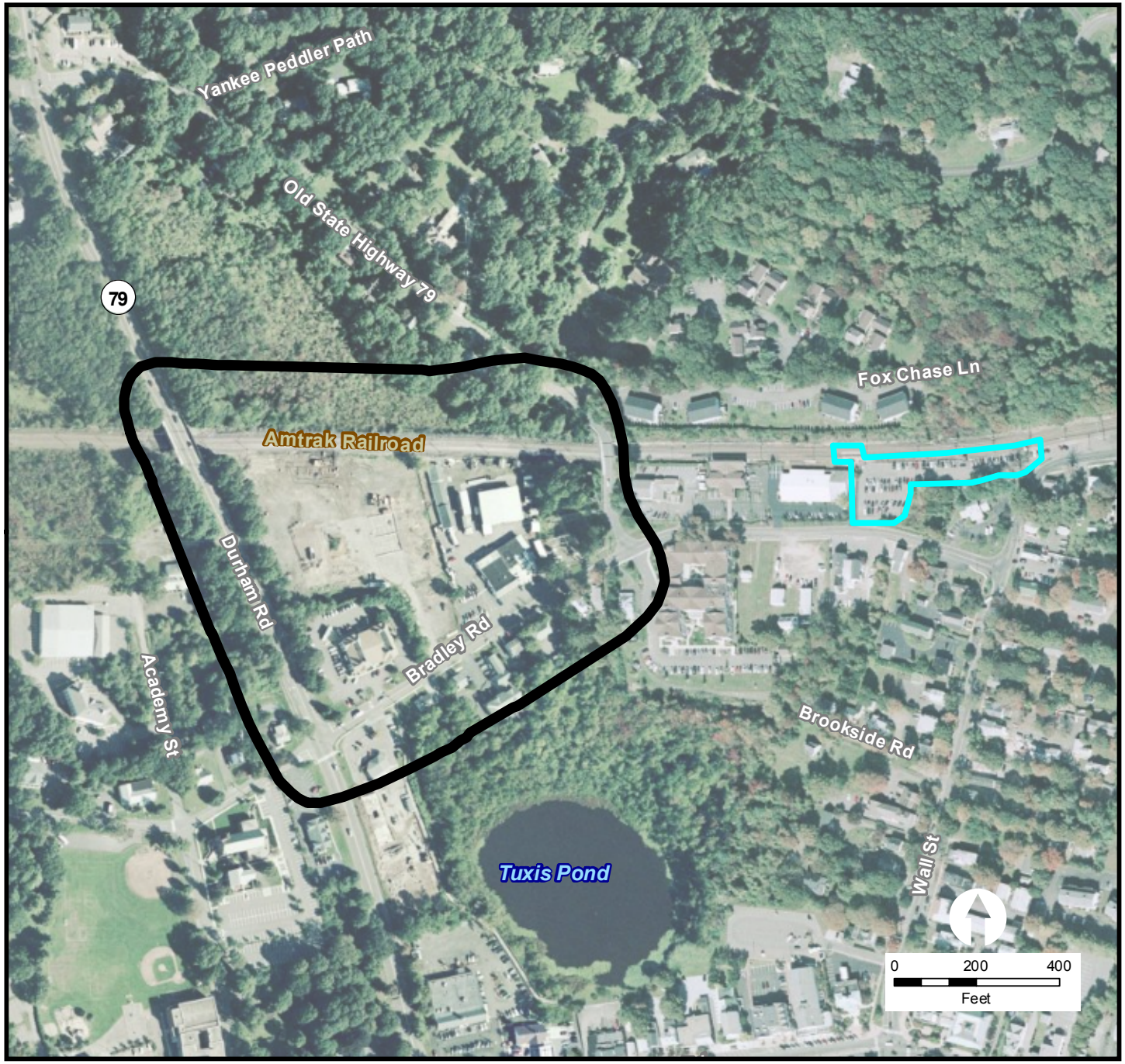
- A new north side high-level rail platform to be located opposite the existing south side high-level rail platform that was constructed in July 2008. This project element is highlighted in orange on Figure ES-2.

- A new pedestrian bridge over the active rail line that will connect to the north side and south side platforms as well as to the upper level of the new parking garage. The new pedestrian bridge will include elevators to satisfy the requirements of the Americans with Disabilities Act (ADA). This project element is also highlighted in orange on Figure ES-2.

- A new three-level parking garage with a foundation capable of supporting a fourth level. The new parking garage will accommodate a total of 585 parking spaces and will be constructed on the location of the existing surface parking lot located south of the rail line and adjacent to the south side high-level rail platform. The new parking garage will include direct pedestrian connections to the south side high-level rail platform and shelter as well as to the proposed pedestrian overpass. The garage will be fully illuminated and will be accessible from the existing station entrance located off of Bradley Road. A loop-road will be constructed around the parking garage structure that will include access and egress points to the garage and that will also allow for passenger drop-off directly in front of the station and rail platforms. The new parking garage is highlighted in gray and the loop road in brown on Figure ES-2.

- In order to build the north side high-level rail platform and elevator shaft and to allow for future emergency and maintenance access to these north side project elements, a construction access road will be constructed from Old Route 79 to the platform. The access road will be constructed on fill with a gravel surface and will parallel the railroad corridor. The access roadway is highlighted in yellow on Figure ES-2.

Project construction cost is anticipated to range from $30 to $35 million, with start of construction in April, 2010. This cost represents a midpoint of construction (2011) dollars. The facility is scheduled to be open and operational by mid-2012.



Proposed Action Study Area

Existing Platform & Parking

Figure ES-1
Site Location

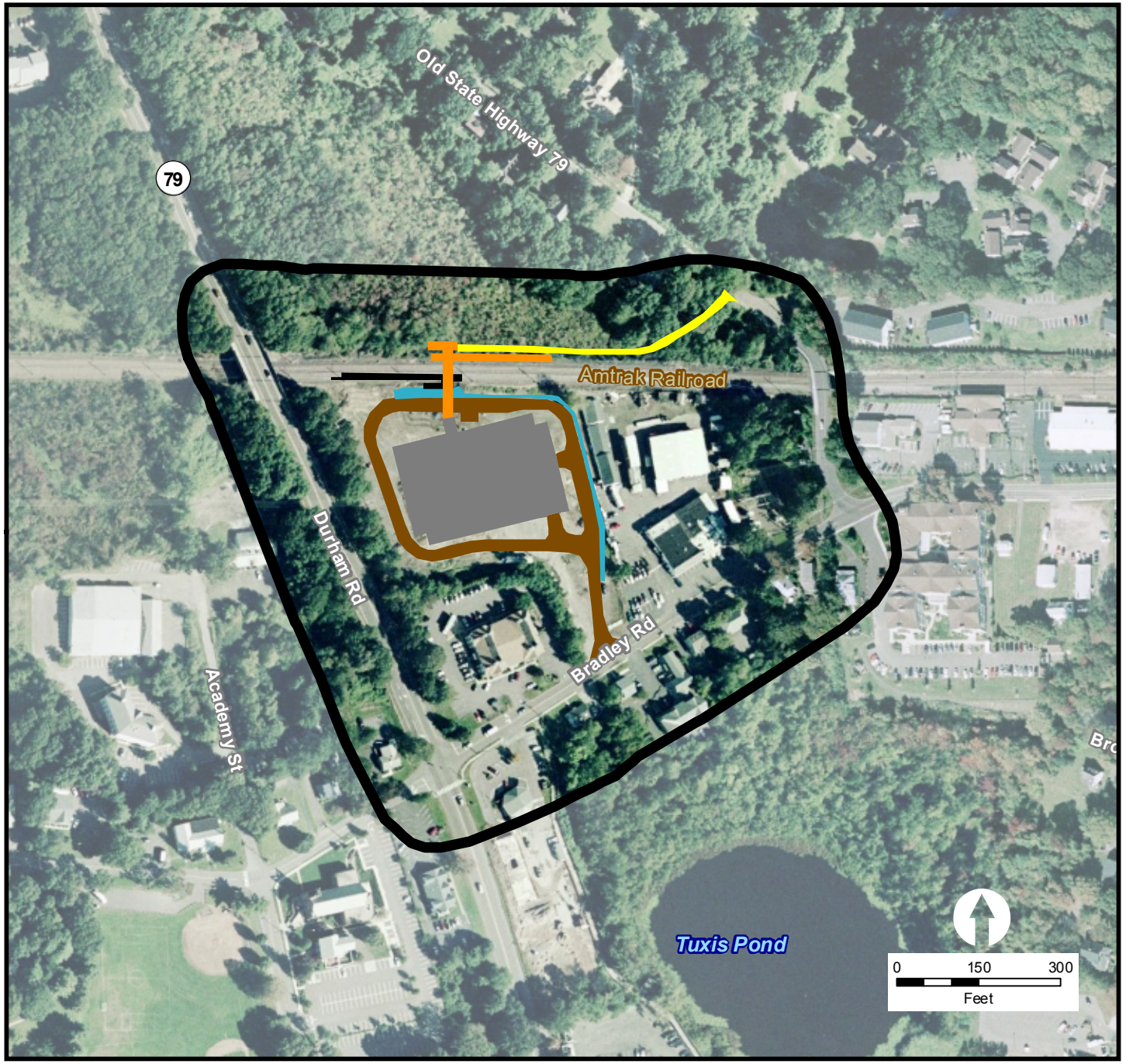
Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Photo 1: Newly Constructed Madison Shore Line East Railroad Station (July 2008)

SHORE LINE EAST RAILROAD-MADISON STATION



Study Area

Proposed Action

- Ped. Bridge/North Platform
- South Platform (Existing)
- Loop Road
- Garage
- Const. Access/Maint. Road
- Sidewalk

Figure ES-2
Proposed Action

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Project Background

SLE trains are owned and operated by CTDOT under contract with Amtrak to provide daily rail operations. SLE commuter rail operations began in May of 1990 serving seven stations along a 33-mile segment of Amtrak's Northeast Corridor between New Haven and Old Saybrook. The service was extended by CTDOT eastward to New London in 1996. SLE service operates in the peak direction only and in the morning connects at New Haven, Bridgeport, and Stamford stations for Metro-North service to New York City's Grand Central Terminal.

Since its inception there has been a steady increase in SLE ridership, but starting in 2005 a marked increase in ridership occurred. According to a January 1, 2007 CTDOT report to the Governor entitled, "Expanding Rail Service on Shore Line East," the average monthly ridership on SLE in 2004 was 33,786, and was 35,289 in 2005. The average monthly ridership through September 2006 was 38,207, which is more than eight percent higher than 2005 levels. CTDOT's Statewide Travel Model estimates ridership will increase approximately four percent annually without factoring in any further SLE improvements or service expansion. Thus, the upward trend in ridership is expected to continue into 2009 and beyond, especially as improvements are made to the SLE service, congestion on Interstate 95 worsens, and gas prices continue to fluctuate. Overall, Governor M. Jodi Rell and CTDOT are committed to meeting the future needs of commuters as evidenced by the many infrastructure and service improvements that have been and continue to be implemented along the SLE corridor.

SLE infrastructure improvements that have already occurred include the construction of new train stations at Branford, Clinton, and Guilford, which opened in 2005. The new Branford SLE Station that opened in 2005 is a partial station that includes a new south side high-level rail platform and surface parking lot. The north side high-level rail platform, expanded parking, and a kiss-and-ride drop off area will be completed at the Branford SLE Station by 2011. These three stations were constructed to replace older lower platform decks. The lower platform decks required train conductors to exit trains at each station stop to lower stairs that allowed passengers to board. Special portable handicap access ramps also had to be deployed as needed. This inefficient procedure significantly prolonged each station stop, causing service delays. The new SLE stations have increased access and service to the commuters, improving functions such as handicapped accessibility, high-level platforms to allow for level and efficient boarding of trains, a commuter shelter area, a convenient commuter drop off area, increased parking and enhanced lighting.

In addition to these three stations, the new station at Madison is partially constructed. A south side high-level rail platform, passenger shelter, and 199-space surface parking lot were completed on July 28, 2008 as part of State Project 310-0020 (refer to Section 1.1 of this EIE for details on that approved project). The Proposed Action being evaluated in this EIE includes the remaining infrastructure improvements at the new Madison SLE Station to make it a full service facility. In Westbrook, a project to build north-side and south-side high-level rail platforms, a pedestrian bridge, and parking improvements at the existing station site will begin in mid-2010 and be completed by the end of 2012.

Along with station improvements, CTDOT has also initiated a SLE rail car refurbishing program that involved the purchase and subsequent refurbishing of Virginia Railway Express cars to provide an additional 2,000 seats to meet increased ridership demands. Also, in November 2007, CTDOT initiated an inaugural weekend and holiday service schedule which culminated in December 2007 and then started up again in December 2008. All of these actions demonstrate CTDOT's commitment to improving SLE commuter rail service well into the future.

In order to expand SLE service to facilitate future bi-directional service as called for in the January 1, 2007 CTDOT report to the Governor, CTDOT is obligated under current lease agreements with Amtrak to construct high-level rail platforms on both sides of the rail corridor at each SLE station. This is required if CTDOT wants to provide commuter service outside the current rush hour periods. Thus, a new north side high-level rail platform at the Madison SLE Station and at other SLE stations is necessary. The double platform configuration will benefit commuters in that: 1) a two-sided station will increase ridership and therefore reduce traffic congestion on coastal roadway corridors by allowing for two-way commuting on the SLE corridor, and 2) having two platforms allows more flexibility in how trains are scheduled and will allow additional trains to operate on the line in the future.

The Proposed Action at the Madison SLE Station has a two-fold objective: 1) to construct a new north side high-level rail platform in order to provide a full-service dual-platform commuter station and 2) to construct expanded parking in the form of a three-level garage. The garage will have a foundation capable of supporting a fourth level of parking as necessary, to accommodate future commuters as ridership continues to grow. The new platform and parking garage will be financed with state funds, and as such, is subject to the regulations and guidance established by the Connecticut Environmental Policy Act (CEPA) (Connecticut General Statutes [CGS] Sections 22a-1 through 22a-1h, inclusive, and where applicable, CEPA regulations Section 22a-1a-1 through 22a-1a-12, inclusive, of the Regulations of Connecticut State Agencies [RCSA]). Under CEPA, the document to be prepared is an Environmental Impact Evaluation (EIE). The lead state agency for CEPA documentation is CTDOT.

Purpose and Need

The purpose of the Proposed Action relates directly to CTDOT's ongoing commitment to expand commuter rail services in keeping with Governor Rell's Transportation Initiative, which was passed by the Connecticut Legislature in 2005. CTDOT's commitment involves implementing various projects, such as the Proposed Action, which will make commuter rail services modern, reliable, and convenient so that the future transportation needs of Connecticut's residents are met. The provision of premium commuter rail service is considered a key aspect in promoting the economy as well as a high quality of life in Connecticut. With more people commuting by rail to and from their workplace, fewer commuters will be traveling in their cars making for less congestion and a safer environment. The goal of enhancing commuter rail service is a common theme found in state, regional and local plans of development. Transportation improvements that are consistent with various plans of conservation and development lead to increased travel options, better transportation systems, increased economic vitality and containment of sprawl.

The need for the Proposed Action is two-fold:

There is an increasing customer service need as demonstrated by steadily increasing SLE ridership numbers (refer to Project Background section for specifics). Connecticut's residents are utilizing the state rail service for in-state travel as well as for travel to and from New York City. This has been precipitated by:

- Increased development pressures in coastal and southeastern Connecticut;
- Increased congestion on coastal roadway corridors including I-95 and U.S. Route 1;
- Rapidly fluctuating gas prices;
- An increasingly mobile workforce; and
- Improved commuter rail infrastructure.

The result is that existing parking facilities at SLE railroad stations can no longer meet the demand. CTDOT's goal is to provide between 400 and 500 parking spaces at each SLE commuter rail station in order to accommodate future patrons. A parking study conducted at the old Madison Railroad Station on May 31, 2007 to determine the peak parking demand during an average weekday morning revealed that 134 of the available 169 spaces (or 79 percent) were occupied, indicating a strong need to provide additional parking to accommodate future SLE customers in Madison. The parking study was conducted for the old station since the new station's 199-space parking lot was not yet completed. Since that parking lot and the south side platform have been completed, SLE service has been moved from the old station to the new station at 77 Bradley Road. Commuters should no longer have to park at the old station site as it is approximately one-quarter mile from the new station location. Thus, even with the new 199-space surface parking lot at the new station, there is still the need to provide additional and convenient parking for SLE commuters in order to reach CTDOT's goal of 400 to 500 spaces at each SLE station.

For commuters taking SLE, Governor Rell has announced improved service to and from New Haven and for reverse commuting to Old Saybrook in the near future. Improved service east of New Haven is an important component in reducing traffic congestion and improving mobility in southeastern Connecticut. To efficiently and effectively provide this enhanced service, there is the need to construct north side high-level rail platforms at each of the existing SLE stations, thereby making each station a full service dual-platform station. The need is driven by existing lease agreements between CTDOT and Amtrak. Under current lease agreements, CTDOT is obligated to construct high-level rail platforms on both sides of the rail corridor at each SLE station if CTDOT wants to provide commuter service outside the current rush hour periods. Thus, in order to meet Amtrak lease requirements and to provide bi-directional service, a new north side high-level rail platform at the Madison SLE Station and at other SLE stations is necessary if future expansion of SLE service is to succeed.

Alternative Actions

Two alternatives are assessed in this EIE; a Build Alternative and the No-Build Alternative. Because existing lease agreements between Amtrak and CTDOT stipulate that future expansion

of SLE service beyond the current peak periods cannot occur without constructing dual high-level rail platforms at each SLE station, and because parking at the Madison SLE Station is quickly approaching capacity, the Build Alternative is the only alternative that will successfully meet the stated purpose and need as defined. The Build and No-Build Alternatives are discussed below.

Build Alternative

In order to successfully meet the purpose and need, infrastructure improvements must occur at the Madison SLE Railroad Station. For instance, a new north side high-level rail platform must be located opposite the south side platform in order for optimum rail station functionality to be achieved.

In terms of parking, H.W. Lochner, Inc. conducted a study entitled, *A Supplemental Parking Feasibility Study for Shore Line East Stations in Madison and Westbrook* (June 13, 2003). The study found that there are few parking options available to CTDOT at the new Madison SLE station location. The study allowed for direct comparison in determining which options may be more desirable than others due to a property's availability, proximity, costs, permitting, and special constraints associated with parking lot development. A total of three (3) concepts for additional parking were presented in the report:

- *Madison Square Office Building (1.44 acres)*: This parcel, which could provide approximately 144 parking spaces, is located just southwest of the station site and contains a two-story professional office condominium. The total cost to acquire the parcel (June 2003) was $2,072,000, resulting in a cost per space ratio of $14,395 per space. Positive aspects of this site include: 1) proximity to the station, 2) number of parking spaces gained**,** 3) parking contained in one area, 4) site opens up the entrance to the new railroad station, and improves visibility. Negative aspects include: 1) purchase cost, 2) relocation of eleven professional offices, 3) demolition costs, 4) removal of an aesthetically pleasing office building, 5) inland wetlands (drainage swale) along the northern and eastern property lines would require either a bridge or culvert crossing with corresponding wetland impacts and 6) topography does not allow for the integration of the two parking areas.

- *Tuxis Lumber Property (2.7 acres)*: This parcel, which could provide approximately 233 parking spaces, is located immediately east of the new Madison SLE Station site. There are several structures on the property. It was determined that the total acquisition cost (June 2003) was $1,567,000 with a cost per space ratio of $6,734 per space. Positive aspects include: 1) Proximity to the new station, 2) parking would be contained in one area, 3) number of parking spaces gained**,** 4) the size of the lot would solve long term parking needs, 5) the site opens up the entrance to the railroad station, improving visibility, and 6) the topography is conducive to the development of parking. Negative aspects include: 1) demolition costs, 2) business relocation costs, 3) moderate environmental cleanup risk, and 4) high cost of the parcel. There are no natural or

manmade barriers between this parcel and the new station parcel and the topography is conducive to parking expansion.

- *National Railroad Passenger Corporation (3.76 acres)*: The parcel, which provides 169 spaces, is used for commuter parking at the old Madison SLE Station located in the northwest quadrant of the Wall Street / Bradley Road intersection. There are no structures on the property and the parcel is leased by CTDOT from Amtrak. The costs associated with the parcel to allow for future commuter parking and improved pedestrian connections to the new station were $200,000 (June 2003) for a cost per space ratio of $1,316 per space. Positive aspects include: 1) site is currently set up and used for parking, 2) there are no property acquisition costs as CTDOT currently leases the parcel from Amtrak, and 3) low development costs. Negative aspects include: 1) walking distance to the new station platforms is slightly greater than one-quarter mile 2) interviews with Town of Madison officials suggest that there may be community resistance to a permanent lot in this location due to previous community issues brought forth related to the location of the proposed station, and 3) pedestrians must cross Old Route 79 to access the new station platforms. There is also no current pedestrian path from the existing parking area to the proposed new SLE station along the north side of Bradley Road. Since lease agreements are already in place, the entire cost of this concept would involve designing and constructing a pedestrian sidewalk and related traffic control devices to allow for safe egress between the parking lot and the new station facilities. The derived cost assumes a new sidewalk along the north side of Bradley Road to include a crosswalk and signal at Old Route 79, illumination, signing, and aesthetic landscape treatments. This cost could be significantly lower if the existing sidewalk on the south side of Bradley Road were to be used; however, pedestrians would then need to cross Bradley Road two times.

Based on the information provided to CTDOT in the H.W. Lochner report, it was determined by CTDOT that none of the three options would successfully and efficiently meet future SLE parking demand. Either the cost of purchasing parcels, relocating businesses, and developing parking was considered prohibitive or the parking options were deemed inconvenient to SLE commuters, thereby reducing the attractiveness of the SLE service, which would be counter-productive. It was subsequently decided that a three-level parking garage, with a foundation capable of expansion to a fourth level, was the best parking option for the new Madison SLE Railroad station. The parking garage would be erected on the site of the 199-space surface parking lot that was constructed in July 2008 under State Project 310-0020. During parking garage construction, SLE service would be relocated back to the old Madison SLE Station location until the garage is completed and open for service. By constructing the parking garage, a total of 585 parking spaces would be available to SLE commuters.

No-Build Alternative

Under the No-Build Alternative, current operations at the SLE Railroad Station in Madison would continue unchanged. Trains would operate on one track (the south side) in order to pick-up and drop-off passengers. Although this is in keeping with current lease agreements between CTDOT and Amtrak regarding the existing SLE service, this type of operation will not be

allowed once the lease agreement expires or when SLE service is expanded. The lease specifically requires that north side high-level rail platforms be constructed if CTDOT expects to expand SLE service beyond the current rush hour period in the future.

The No-Build Alternative also means that the parking capacity at the station will be 199-spaces (State Project 310-0020) and that no new parking will be constructed. It is possible that surface parking could continue to be provided at the old station platform site located approximately one-quarter mile to the east at least until such a time as either a new parking garage is constructed at the new railroad station or the lease agreement between CTDOT and Amtrak that governs the use of the old surface lot expires. However, long-term and/or permanent use of the old surface lot as additional parking for the new SLE station is not a feasible option due to the inconvenient distance that commuters would have to travel between their parked car and the active rail platform. Additionally, a weekday peak hour parking survey conducted by Fitzgerald & Halliday, Inc. (FHI) in May 2007 for the old station parking lot (169 spaces) determined that parking at Madison's SLE Railroad station is already at 79% capacity. Thus, under the No-Build Alternative, the existing parking shortage at the station will not be alleviated. Although the No-Build Alternative would involve no new construction and as a result, no significant environmental impacts, the alternative falls short of meeting the purpose and need of the project.

Alternative Sites Controlled or Reasonably Available

Because rail is a fixed system, land available for the Proposed Action must be located immediately adjacent to the rail corridor and existing station in order to gain maximum benefit from the project and its intended use. As described above under the Build Alternative, the north side high-level rail platform must be located opposite the existing south side platform in order for optimal functionality, and parking options are limited for various reasons. Lastly, the Proposed Action site is highly suitable because it has been developed as the site of the new Madison SLE Railroad Station, is easily accessible from local roadways, and is in close proximity to downtown Madison.

Overall, no other sites were evaluated since there are no other known available sites suitable for the Proposed Action.

Impact Analysis Summary

The implementation of the Proposed Action will have minor adverse environmental impacts that can be mitigated. Environmental impacts and proposed mitigation measures are summarized in Table ES-1.

Table ES-1: Summary of Impacts and Proposed Mitigation

Resource	Impact Analysis	Mitigation
Land Use and Zoning	Partial acquisition (approximately 0.2 acres) of land from one privately-owned parcel located north of the railroad corridor and west of Old Route 79. No impacts to land use or zoning	CTDOT will coordinate directly with the property owner to negotiate the property transfer and provide appropriate compensation.
Consistency with Local and Regional Plans	The Proposed Action is consistent with local and regional development plans	No mitigation is required
Consistency with C&D Plan	The Proposed Action is consistent with the C&D Plan	No mitigation is required
Traffic and Parking	The surrounding roadway network will adequately support the additional traffic volume generated by the Proposed Action. No adverse impacts anticipated; however the provision of an exclusive eastbound left-turn lane on Bradley Road at the site drive will be beneficial to traffic operations. Additional beneficial impacts of the Proposed Action include more parking for rail commuters and improved/safe pedestrian connections.	Although traffic operations under 2030 Proposed Action conditions are anticipated to operate at an acceptable LOS (LOS D or better) at all study area intersections, minor modifications to the eastbound lane into the site from Bradley Road are being considered. The State Traffic Commission will dictate what modifications must be made, if any; during the Major Traffic Generator Application review process.
Air Quality	Construction period impacts: Potential impacts from prolonged use of diesel powered vehicles. Typical diesel air quality emissions include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (PM2.5).	Construction equipment will be required to comply with all pertinent state and federal air quality regulations. Construction period BMPs to be followed to reduce airborne dust, other particulate matter, and odorous substances arising from project operations.
Noise	Construction period impacts: Potential for continuous as well as intermittent (or impulse) noise to be experienced in the immediate project vicinity.	Construction noise is exempt under Section 22a-69-1.8(g) of the RCSA; however, CTDOT's general provision on construction noise described under Section 1.10.05 of *Form 816* must be included in the construction contract for this project.
Neighborhoods and Housing	Indirect beneficial impact to local socio-economic conditions as commuters may shop locally for convenience goods. No adverse impacts on neighborhoods or housing.	No mitigation required

Resource	Impact Analysis	Mitigation
Water Quality	No net increase in impervious surfaces with the Proposed Action compared to the existing condition. Thus, runoff volumes and velocities will be similar to and/or less than the existing condition. Still the potential exists for downstream sedimentation impacts without proper mitigation. Construction period impacts: Increased potential for sedimentation of offsite streams and inland wetlands due to runoff from exposed surfaces during site work.	Final design of new facility will be fully coordinated with the CTDEP and ACOE and will include stormwater renovation measures. Project design will comply with both the CTDEP 2004 Stormwater Quality Manual and the CTDEP 2002 Sedimentation and Erosion Control Manual. During construction, temporary best management practices (BMPs) will be employed and an Erosion and Sedimentation Control Plan (E&S Plan) will be implemented. A Stormwater Pollution Control Plan (SWPCP) will also be registered for the project.
Hydrology and Floodplains	No impacts	No mitigation required
Wetlands	The Proposed Action will require filling approximately 0.3 acres of red maple swamp located to the north of the existing rail corridor. Filling will result from the construction of the north side high-level rail platform and the maintenance/emergency access roadway to the platform. This estimate of impact is a worse case scenario based on 4:1 side slopes for the construction access roadway. CTDOT is presently considering design options to further reduce wetland impacts.	Permanent inland wetland impacts will be mitigated through the provision of compensatory wetlands (in terms of acreage and/or functions and values). CTDOT is currently looking at wetland creation and restoration possibilities. Priority mitigation sites will be state-owned properties with evidence of filling or disturbance to prior wetlands, preferably in or adjacent to the project area or in the same watershed, but all options will be investigated. The ultimate mitigation package will be investigated and designed through consultation with the CTDEP and ACOE as part of the environmental permitting process.

Resource	Impact Analysis	Mitigation
Flora, Fauna, Threatened and Endangered Species	Filling of 0.3 acres of red maple swamp will slightly reduce the swamps' suitability for wildlife use. The lost trees and shrubs from the wetland fringe would cause the disturbance edge that is presently defined by the toe of the rail corridor's ballast slope to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk. Impacts to flora and fauna overall are thus considered to be minor.	The minor impacts to flora/fauna/habitats will be mitigated through the compensatory wetland mitigation package, to be developed through consultation with the CTDEP and ACOE as part of the environmental permitting process. The mitigation will be designed to replace the wildlife habitat functions of the impacted wetlands, in size and value.
Soils and Geology	No Impacts	No mitigation required
Coastal Zone and Coastal Barriers	The Proposed Action is not located within Connecticut's designated coastal zone. Therefore, no impacts to the coastal zone or coastal resources will occur.	No mitigation required
Cultural Resources	No Impacts	No mitigation required

Resource	Impact Analysis	Mitigation
Solid Waste and Hazardous Materials	The Proposed Action is located on property formerly leased by Laidlaw Transit which was determined to contain varying degrees of soil contamination, primarily related to petroleum product dispensing and storage. The contamination has been remedied through the excavation and subsequent removal of the contaminated soil as part of State Project 310-0020, which involved construction of the new surface parking lot and south side high-level rail platform for the new Madison SLE Railroad Station on the property. The construction of the parking garage and north side high-level rail platform (the Proposed Action) therefore is not anticipated to pose any hazards to construction workers or the general population.	No mitigation required. Although there is no anticipated threat of contamination, as standard practice, a Health and Safety Plan will be developed for the project that will be communicated to construction workers.
Use/Creation of Hazardous Materials	No Impacts	No mitigation required
Aesthetics and Visual Effects	Proposed Action will be visually compatible to adjacent commercial and transportation land uses located south of the railroad corridor. Three houses along Old Route 79 will have their viewsheds slightly impacted primarily due to construction of the emergency/maintenance access road which will remove trees and shrubs along the wetland fringe, thereby creating a more direct line of site to the large three-level parking garage.	A landscaping plan that includes vegetative buffers / plantings along the edge of the gravel emergency / maintenance access road. These plantings could minimize anticipated visual impacts to the three homes along Old Route 79. To minimize the impact of station and parking garage lighting, it is proposed that full cutoff lights that are dark sky compliant be used on the Proposed Action site.
Energy Uses and Conservation	Minimal increase in amount of energy consumed above existing conditions	No mitigation required
Public Utilities and Services	Potential temporary service disruptions (CL&P) during construction	Coordinate utility construction scheduling with service providers
Public Health and Safety	Beneficial Impact – site conditions improved with new safety features such as fencing, illumination, and pedestrian overpass among others.	No mitigation required

List of Potential Permits and Approvals

The following permits, approvals, certifications, and registrations **may** be required for completion of the Proposed Action:

Federal

- ACOE Section 404 Permit

State

- CTDEP General Permit: Stormwater and Dewatering Wastewaters from Construction
- CTDEP 401 Water Quality Certification
- CTDEP Inland Wetlands & Watercourses
- Department of Transportation State Traffic Commission Certificate

Coordination Process

Per CEPA requirements, a scoping notice for the Proposed Action was placed in Connecticut's *Environmental Monitor* on June 5, 2007. A Public Scoping Meeting was not conducted for this project as such a meeting was not requested by 25 or more individuals or by an association that represents 25 or more members during the 30 day scoping comment period. Only two resource agencies, the Connecticut Department of Environmental Protection (CTDEP), and Connecticut Department of Public Health (CTDPH) provided scoping comments during the 30 day comment period. During data collection efforts involved in the documentation of existing environmental conditions, several federal and state resource agencies were contacted for information as were local officials in the Town of Madison. A copy of the CEPA public scoping notice as well as responses received during the formal public scoping period (June 5, 2007 through July 19, 2007) are included in Appendix A. Important agency and local correspondence is also included in Appendix A.

Conclusion

The Proposed Action is essential for increasing the efficiency of operations at the SLE Railroad Station in Madison and is an important part of meeting future transportation demands in southeastern Connecticut. Potential adverse effects from the Proposed Action include:

- Partial acquisition (approximately 0.2 acres) of land from one privately-owned parcel located north of the railroad corridor and west of Old Route 79.
- Approximately 0.3 acres of a red maple swamp will be filled to allow for construction vehicle access as well as emergency/maintenance access to the north side high-level rail platform. However, this is a worse case scenario as CTDOT is presently considering design options to reduce wetland impacts.

- The loss of trees and shrubs along the southernmost boundary of the red maple swamp would cause the disturbance edge that is presently defined by the toe of the rail corridor's ballast slope, to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk. Impacts to flora and fauna overall are thus considered to be minor.
- Change in visual setting for at least three residences located north of the railroad tracks along the western side of Old Route 79
- Temporary construction-related inconveniences

These impacts will be mitigated through landscaping, proper management of materials and resources during and after construction, and by adhering to all applicable state, and federal regulations related to inland wetlands protection, erosion and sedimentation control, and stormwater runoff/water quality treatment/management. A Health and Safety Plan will be developed and implemented in accordance with Occupational Safety and Health Administration (OSHA) guidelines to ensure that construction workers are protected from potential contamination and other hazards.

Coordination with resource agencies, including the CTDEP and ACOE, among others, will continue throughout the duration of the project to ensure that all regulatory requirements are met. Through its impact avoidance and mitigation measures, the Proposed Action will not incur any significant environmental, cultural, or social impacts.

Review Period and Comments

The Draft EIE was made available for public review and comment from November 18, 2008 to January 2, 2009. Notice of Draft EIE availability and public hearing was placed in Connecticut's *Environmental Monitor* on November 18, 2008. Additionally, notice of Draft EIE availability and public hearing was advertised in the New Haven Register on November 18, December 11, and December 18, 2008. Notices and Affidavits are included in Appendix D of the EIE. The Draft EIE was made available for public review at the following locations:

- CTDOT Offices in Newington, Connecticut
- Madison Town Clerk's Office
- E.C. Scranton Memorial Library in Madison, Connecticut
- South Central Regional Council of Governments Office in North Haven, Connecticut

A public hearing was advertised and held at the Town Campus, 8 Campus Drive in Madison at 7:00 PM on December 18, 2008. A transcript of the public hearing is included in Appendix F. Written comments received during the public comment period (November 18, 2008 through January 2, 2009) are included in Appendix G. Responses to these comments, as well as to comments made during the public hearing are provided in Appendix H.

Written comments on the document may be submitted to:

Department of Transportation
Mr. Edgar T. Hurle, Transportation Planning Director
Bureau of Policy and Planning
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546
E-Mail: edgar.hurle@po.state.ct.us

EIE Distribution List

The following agencies/persons received a copy of the Draft Environmental Impact Evaluation for the Madison SLE Railroad Station, Madison, Connecticut (State Project No. 310-0048):

State Representatives and Senators

Hon. Deborah Heinrich State Representative Legislative Office Building, Room 4000 Hartford, CT 06106-1591	Hon. Edward Meyer State Senator Legislative Office Building, Room 1000 Hartford, CT 06106-1591

Town Officials

Hon. Alfred Goldberg, First Selectman Town of Madison 8 Campus Drive Madison, CT 06443	Ms. Dolly Bean, Town Clerk Town of Madison 8 Campus Drive Madison, CT 06443
Mr. D. Stewart MacMillan Jr., P.E. Director of Public Works Facilities and Town Engineer Town of Madison 8 Campus Drive Madison, CT 06443	Ms. Marilyn Ozols, Planning & Zoning Administrator Town of Madison 8 Campus Drive Madison, CT 06443

State Agencies

Hon. Gina McCarthy Commissioner Department of Environmental Protection 79 Elm Street Hartford, CT 06106	Mr. Kendall Wiggin State Librarian Connecticut State Library 231 Capitol Avenue Hartford, CT 06106
Mr. David Fox Senior Environmental Analyst Department of Environmental Protection 79 Elm Street Hartford, CT 06102	Hon. Robert M. Ward Commissioner Connecticut Department of Motor Vehicles 60 State Street Wethersfield, CT 06161

State Agencies

Hon. Joan McDonald Commissioner Connecticut Department of Economic and Community Development 505 Hudson Street Hartford, CT 06106	Mr. Robert L. Genuario Secretary Office of Policy and Management 450 Capitol Avenue Hartford, CT 06106-1308
Mr. Raymond Jordan State Coordinator Connecticut Department of Housing and Urban Development One Corporate Center, 19th Floor Hartford, CT 06103	Hon. Raeanne V. Curtis Commissioner Connecticut Department of Public Works 165 Capitol Avenue Hartford, CT 06106
Hon. J. Robert Galvin, M.D., M.P.H. Commissioner Department of Public Health 410 Capitol Avenue Hartford, CT 06134	Mr. Judd Everhart Department of Transportation Office of Communications P.O. Box 317546 2800 Berlin Turnpike Newington, CT 06131-7546
Mr. Karl J. Wagener Executive Director Council on Environmental Quality 79 Elm Street Hartford, CT 06106	Ms. Karen Senich Executive Director Connecticut Commission on Culture and Tourism One Financial Plaza 755 Main Street Hartford, CT 06103

Other

Ms. Judy Gott Director South Central Regional Council of Governments 127 Washington Avenue, 4th Floor West North Haven, CT 06473	Ms. Sandra Long, Library Director E.C. Scranton Memorial Library 801 Boston Post Road Madison, CT 06443

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1. INTRODUCTION

1.1. Description of Proposed Action

CTDOT is in the process of making strategic infrastructure and service improvements to the SLE commuter rail service so that it will be fully capable of meeting future commuter rail passenger needs. The Proposed Action being evaluated in this EIE includes infrastructure improvements at the new Madison SLE Railroad Station located at 77 Bradley Road. The study area is depicted in Figure 1. The Proposed Action improvements are above and beyond those improvements that were constructed and brought online by CTDOT under State Project 310-0020 on July 28, 2008. State Project 310-0020 included construction of a 199-space surface parking lot south of the railroad corridor, a south side high-level rail platform with commuter passenger shelter, and pedestrian connections between the surface parking lot and the platform/shelter. Photo 1 depicts some of these project elements shortly after their project completion on July 28, 2008. Under State Project 310-0020, the old Madison Railroad Station, located just northwest of the Wall Street / Bradley Road intersection, was relocated to the new station site at 77 Bradley Road. The new site is CTDOT-owned, whereas the old station site was leased by CTDOT from Amtrak. As depicted in Photo 1, the new site provides for better station layout/configuration as well as improved parking with expansion possibilities.

The improvements that comprise the Proposed Action being assessed in this EIE are depicted conceptually on Figure 2 and are described below:

- A new north side high-level rail platform to be located opposite the existing south side high-level rail platform that was constructed in July 2008. This project element is highlighted in orange on Figure 2.

- A new pedestrian bridge over the active rail line that will connect to the north side and south side platforms as well as to the upper level of the new parking garage. The new pedestrian bridge will include elevators to satisfy the requirements of the Americans with Disabilities Act (ADA). This project element is also highlighted in orange on Figure 2.

- A new three-level parking garage with a foundation capable of supporting a fourth level. The new parking garage will accommodate a total of 585 parking spaces and will be constructed on the location of the existing surface parking lot located south of the rail line and adjacent to the south side high-level rail platform. The new parking garage will include direct pedestrian connections to the south side high-level rail platform and shelter as well as to the proposed pedestrian overpass. The garage will be fully illuminated and will be accessible from the existing station entrance located off of Bradley Road. A loop-road will be constructed around the parking garage structure that will include access and egress points to the garage and that will also allow for passenger drop-off directly in front

of the station and rail platforms. The new parking garage is highlighted in gray and the loop road in brown on Figure 2.

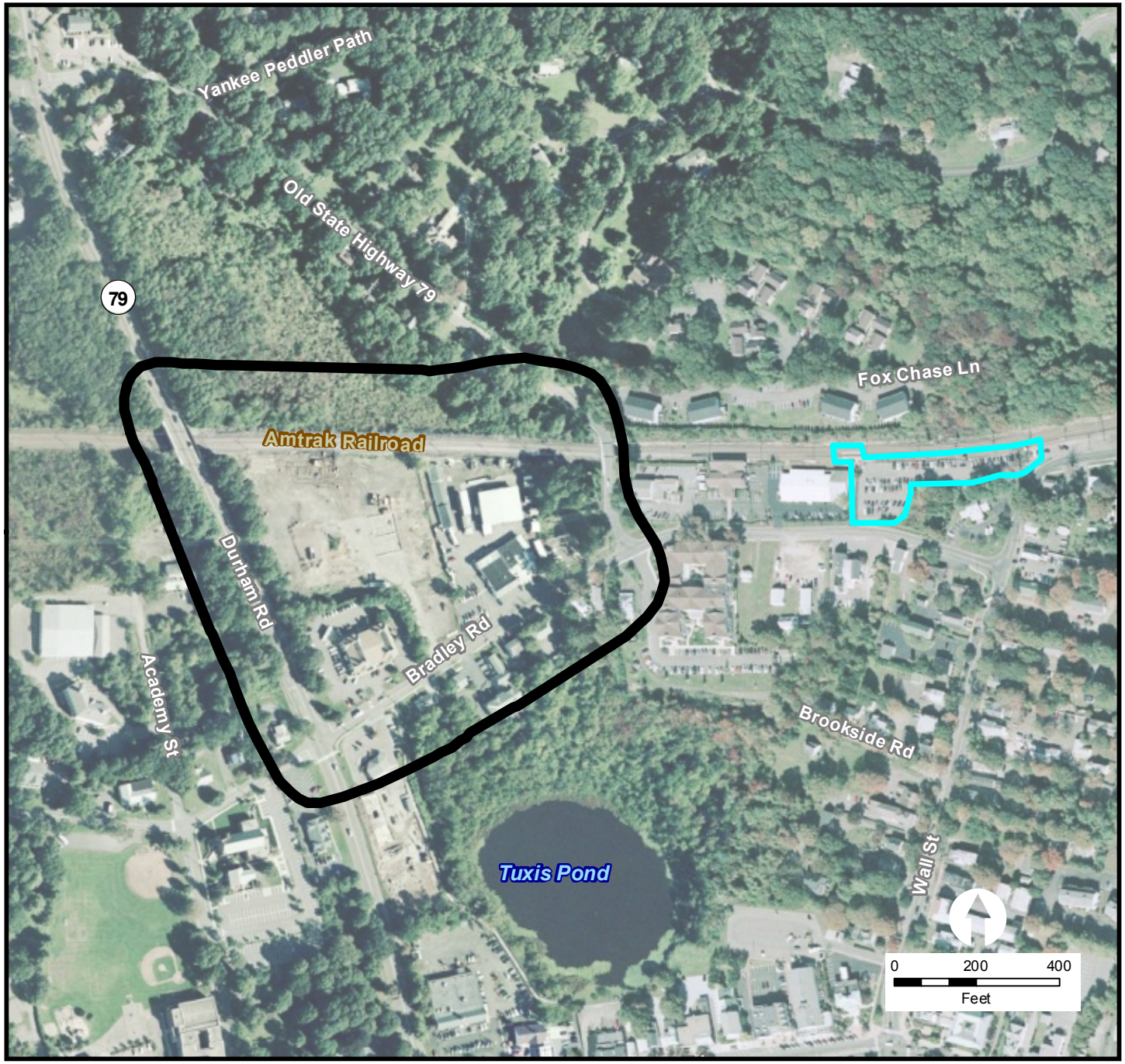
- In order to build the north side high-level rail platform and elevator shaft and to allow for future emergency and maintenance access to these north side project elements, a construction access road will be constructed from Old Route 79 to the platform. The access road will be constructed on fill with a gravel surface and will parallel the railroad corridor. The access roadway is highlighted in yellow on Figure 2.

Project construction cost is anticipated to range from $30 to $35 million, with start of construction in April, 2010. This cost represents a midpoint of construction (2011) dollars. The facility is scheduled to be open and operational by mid-2012.

1.2. Project Background

SLE trains are owned and operated by CTDOT under contract with Amtrak to provide daily rail operations. SLE commuter rail operations began in May of 1990 serving seven stations along a 33-mile segment of Amtrak's Northeast Corridor between New Haven and Old Saybrook. The service was extended by CTDOT eastward to New London in 1996. SLE service operates in the peak direction only and in the morning connects at New Haven, Bridgeport, and Stamford stations for Metro-North service to New York City's Grand Central Terminal.

Since its inception there has been a steady increase in SLE ridership, but starting in 2005 a marked increase in ridership has occurred. According to a January 1, 2007 CTDOT report to the Governor entitled, "Expanding Rail Service on Shore Line East," the average monthly ridership on SLE in 2004 was 33,786, and was 35,289 in 2005. The average monthly ridership through September 2006 was 38,207, which is more than eight percent higher than 2005 levels. CTDOT's Statewide Travel Model estimates ridership will increase approximately four percent annually without factoring in any further SLE improvements or service expansion. Thus, the upward trend in ridership is expected to continue into 2009 and beyond, especially as improvements are made to the SLE service, congestion on Interstate 95 worsens, and gas prices continue to fluctuate. Overall, Governor Rell and CTDOT are committed to meeting the future needs of commuters as evidenced by the many infrastructure and service improvements that have been and continue to be implemented along the SLE corridor.



Proposed Action Study Area

Former Station Location

Figure 1
Site Location

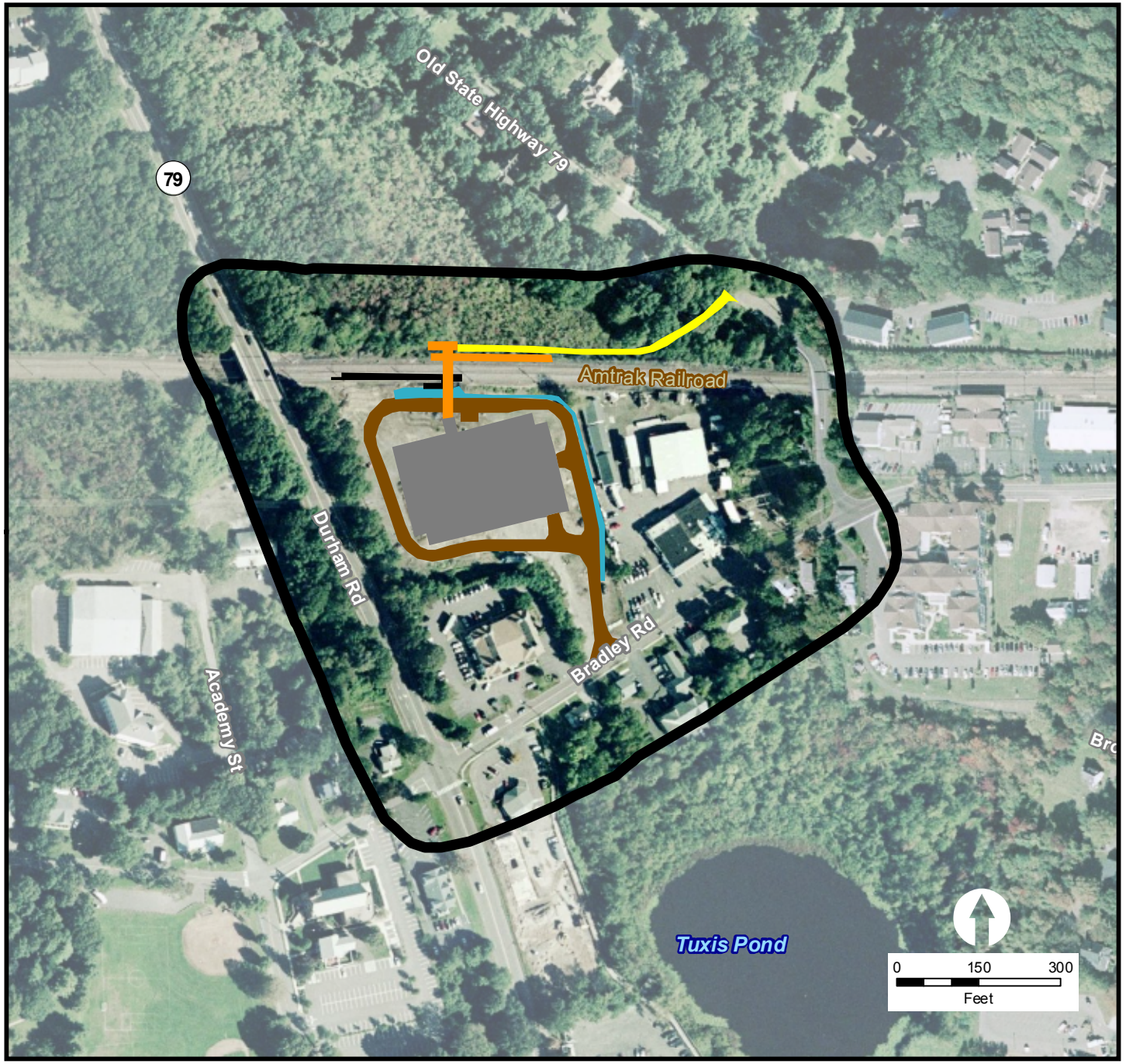
Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Photo 1: Newly Constructed Madison Shore Line East Railroad Station (July 2008)

SHORE LINE EAST RAILROAD-MADISON STATION



Study Area

Proposed Action

- Ped. Bridge/North Platform
- South Platform (Existing)
- Loop Road
- Garage
- Const. Access/Maint. Road
- Sidewalk

Figure 2
Proposed Action

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

SLE infrastructure improvements that have already occurred include the construction of new train stations at Branford, Clinton, and Guilford, which opened in 2005. The new Branford SLE Station that opened in 2005 is a partial station that includes a new south side high-level rail platform and surface parking lot. The north side high-level rail platform, expanded parking, and a kiss-and-ride drop off area will be completed at the Branford SLE Station by 2011. These three stations were constructed to replace older lower platform decks. The lower platform decks required train conductors to exit trains at each station stop to lower stairs that allowed passengers to board. Special portable handicap access ramps also had to be deployed as needed. This inefficient procedure significantly prolonged each station stop, causing service delays. The new SLE stations have increased access and service to the commuters, improving functions such as handicapped accessibility, high-level platforms to allow for level and efficient boarding of trains, a commuter shelter area, a convenient commuter drop off area, increased parking and enhanced lighting.

In addition to these three stations, the new station at Madison is partially constructed. A south side high-level rail platform, passenger shelter, and 199-space surface parking lot were completed on July 28, 2008 as part of State Project 310-0020. The Proposed Action being evaluated in this EIE includes the remaining infrastructure improvements at the new Madison SLE Station to make it a full service facility. In Westbrook, a project to build north-side and south-side high-level rail platforms, a pedestrian bridge, and parking improvements at the existing station site will begin in mid-2010 and be completed by the end of 2012.

Along with station improvements, CTDOT has also initiated a SLE rail car refurbishing program that involved the purchase and subsequent refurbishing of Virginia Railway Express cars to provide an additional 2,000 seats to meet increased ridership demands. Also, in November 2007, CTDOT initiated an inaugural weekend and holiday service. This service became a permanent addition to the SLE schedule in July 2008. All of these actions demonstrate CTDOT's commitment to improving SLE commuter rail service well into the future.

In order to expand SLE service to facilitate future bi-directional service as called for in the January 1, 2007 CTDOT report to the Governor, CTDOT is obligated under current lease agreements with Amtrak to construct high-level rail platforms on both sides of the rail corridor at each SLE station. This is required if CTDOT wants to provide commuter service outside the current rush hour periods. Thus, a new north side high-level rail platform at the Madison SLE Station and at other SLE stations is necessary. The double platform configuration will benefit commuters in that: 1) a two-sided station will increase ridership and therefore reduce traffic congestion on coastal roadway corridors by allowing for two-way commuting on the SLE corridor, and 2) having two platforms allows more flexibility in how trains are scheduled and will allow additional trains to operate on the line in the future.

The Proposed Action at the Madison SLE Station has a two-fold objective: 1) to construct a new north side high-level rail platform in order to provide a full-service dual-platform commuter station and 2) to construct expanded parking in the form of a three-level garage. The garage will have a foundation capable of supporting a fourth level of parking as necessary to accommodate

future commuters as ridership continues to grow. The new platform and parking garage will be financed with state funds, and as such, is subject to the regulations and guidance established by the Connecticut Environmental Policy Act (CEPA) (Connecticut General Statutes [CGS] Sections 22a-1 through 22a-1h, inclusive, and where applicable, CEPA regulations Section 22a-1a-1 through 22a-1a-12, inclusive, of the Regulations of Connecticut State Agencies [RCSA]). Under CEPA, the document to be prepared is an Environmental Impact Evaluation (EIE). The lead state agency for CEPA documentation is CTDOT.

1.3. Purpose and Need

The purpose of the Proposed Action relates directly to CTDOT's ongoing commitment to expand commuter rail services in keeping with Governor Rell's Transportation Initiative, which was passed by the Connecticut Legislature in 2005. CTDOT's commitment involves implementing various projects, such as the Proposed Action, which will make commuter rail services modern, reliable, and convenient so that the future transportation needs of Connecticut's residents are met. The provision of premium commuter rail service is considered a key aspect in promoting the economy as well as a high quality of life in Connecticut. With more people commuting by rail to and from their workplace, fewer commuters will be traveling in their cars making for less congestion and a safer environment. The goal of enhancing commuter rail service is a common theme found in state, regional and local plans of development. Transportation improvements that are consistent with various plans of conservation and development lead to increased travel options, better transportation systems, increased economic vitality and containment of sprawl.

The need for the Proposed Action is two-fold:

There is an increasing customer service need as demonstrated by steadily increasing SLE ridership numbers (refer to Project Background section for specifics). Connecticut's residents are utilizing the state rail service for in-state travel as well as for travel to and from New York City. This has been precipitated by:

- Increased development pressures in coastal and southeastern Connecticut;
- Increased congestion on coastal roadway corridors including I-95 and U.S. Route 1;
- Rapidly fluctuating gas prices;
- An increasingly mobile workforce; and
- Improved commuter rail infrastructure.

The result is that existing parking facilities at SLE railroad stations can no longer meet the demand. CTDOT's goal is to provide between 400 and 500 parking spaces at each SLE commuter rail station in order to accommodate future patrons. A parking study conducted at the old Madison Railroad Station on May 31, 2007 to determine the peak parking demand during an average weekday morning revealed that 134 of the available 169 spaces (or 79 percent) were occupied, indicating a strong need to provide additional parking to accommodate future SLE customers in Madison. The parking study was conducted for the old station since the new

station's 199-space parking lot was not yet completed. Since that parking lot and the south side platform have been completed, SLE service has been moved from the old station to the new station at 77 Bradley Road. Commuters should no longer have to park at the old station site as it is more than a quarter mile from the new station location. Thus, even with the new 199-space surface parking lot at the new station, there is still the need to provide additional and convenient parking for SLE commuters in order to reach CTDOT's goal of 400 to 500 spaces at each SLE station.

For commuters taking SLE, Governor Rell has announced improved service to and from New Haven and for reverse commuting to Old Saybrook in the near future. Improved service east of New Haven is an important component in reducing traffic congestion and improving mobility in Southeastern Connecticut. To efficiently and effectively provide this enhanced service, there is the need to construct north side high-level rail platforms at each of the existing SLE stations, thereby making each station a full service dual-platform station. The need is driven by existing lease agreements between CTDOT and Amtrak. Under current lease agreements, CTDOT is obligated to construct high-level rail platforms on both sides of the rail corridor at each SLE station if CTDOT wants to provide commuter service outside the current rush hour periods. Thus, in order to meet Amtrak lease requirements and to provide bi-directional service, a new north side high-level rail platform at the Madison SLE Station and at other SLE stations is necessary if future expansion of SLE service is to succeed.

2. ALTERNATIVES CONSIDERED

2.1. Alternative Actions

Two alternatives are assessed in this EIE; a Build Alternative and the No-Build Alternative. Because existing lease agreements between Amtrak and CTDOT stipulate that future expansion of SLE service beyond the current peak periods cannot occur without constructing dual high-level rail platforms at each SLE station, and because parking at the Madison SLE Station is quickly approaching capacity, the Build Alternative is the only alternative that will successfully meet the stated purpose and need as defined. The Build and No-Build Alternatives are discussed below.

Build Alternative – Proposed Action

In order to successfully meet the purpose and need, infrastructure improvements must occur at the Madison SLE Railroad Station. For instance, a new north side high-level rail platform must be located opposite the south side platform in order for optimum rail station functionality to be achieved.

In terms of parking, H.W. Lochner, Inc. conducted a study entitled, *A Supplemental Parking Feasibility Study for Shore Line East Stations in Madison and Westbrook* (June 13, 2003). The study found that there are few parking options available to CTDOT at the new Madison SLE station location. The study allowed for direct comparison in determining which options may be more desirable than others due to a property's availability, proximity, costs, permitting, and special constraints associated with parking lot development. A total of three (3) concepts for additional parking were presented in the report:

- *Madison Square Office Building (1.44 acres)*: This parcel, which could provide approximately 144 parking spaces, is located just southwest of the station site and contains a two-story professional office condominium. The total cost to acquire the parcel (June 2003) was $2,072,000, resulting in a cost per space ratio of $14,395 per space. Positive aspects of this site include: 1) proximity to the station, 2) number of parking spaces gained**,** 3) parking contained in one area, 4) site opens up the entrance to the new railroad station, and improves visibility. Negative aspects include: 1) purchase cost, 2) relocation of eleven professional offices, 3) demolition costs, 4) removal of an aesthetically pleasing office building, 5) inland wetlands (drainage swale) along the northern and eastern property lines would require either a bridge or culvert crossing with corresponding wetland impacts and 6) topography does not allow for the integration of the two parking areas.

- *Tuxis Lumber Property (2.7 acres)*: This parcel, which could provide approximately 233 parking spaces, is located immediately east of the new Madison SLE Station site. There are several structures on the property. It was determined that the total acquisition cost (June 2003) was $1,567,000 with a cost per space ratio of $6,734 per space. Positive aspects include: 1) Proximity to the new station, 2) parking would be contained in one area, 3) number of parking spaces gained**,** 4) the size of the lot would solve long term parking needs, 5) the site opens up the entrance to the railroad station, improving visibility, and 6) the topography is conducive to the development of parking. Negative aspects include: 1) demolition costs, 2) business relocation costs, 3) moderate environmental cleanup risk, and 4) high cost of the parcel. There are no natural or man-made barriers between this parcel and the new station parcel and the topography is conducive to parking expansion.

- *National Railroad Passenger Corporation (3.76 acres)*: The parcel, which provides 169 spaces, is used for commuter parking at the old Madison SLE Station located in the northwest quadrant of the Wall Street / Bradley Road intersection. There are no structures on the property and the parcel is leased by CTDOT from Amtrak. The costs associated with the parcel to allow for future commuter parking and improved pedestrian connections to the new station were $200,000 (June 2003) for a cost per space ratio of $1,316 per space. Positive aspects include: 1) site is currently set up and used for parking, 2) there are no property acquisition costs as CTDOT currently leases the parcel from Amtrak, and 3) low development costs. Negative aspects include: 1) walking distance to the new station platforms is slightly greater than one-quarter mile 2) interviews with Town of Madison officials suggest that there may be community resistance to a permanent lot in this location due to previous community issues brought forth related to the location of the proposed station, and 3) pedestrians must cross Old Route 79 to access the new station platforms. There is also no current pedestrian path from the existing parking area to the proposed new SLE station along the north side of Bradley Road. Since lease agreements are already in place, the entire cost of this concept would involve designing and constructing a pedestrian sidewalk and related traffic control devices to allow for safe egress between the parking lot and the new station facilities. The derived cost assumes a new sidewalk along the north side of Bradley Road to include a crosswalk and signal at Old Route 79, illumination, signing, and aesthetic landscape treatments. This cost could be significantly lower if the existing sidewalk on the south side of Bradley Road were to be used; however, pedestrians would then need to cross Bradley Road two times.

Based on the information provided to CTDOT in the H.W. Lochner report, it was determined by CTDOT that none of the three options would successfully and efficiently meet future SLE parking demand. Either the cost of purchasing parcels, relocating businesses, and developing parking was considered prohibitive or the parking options were deemed inconvenient to SLE commuters, thereby reducing the attractiveness of the SLE service, which would be counter-productive. It was subsequently decided that a three-level parking garage, with a foundation capable of expansion to a fourth level, was the best parking option for the new Madison SLE Railroad station. The parking garage would be erected on the site of the 199-space surface

parking lot that was constructed in July 2008 under State Project 310-0020. During parking garage construction, SLE service would be relocated back to the old Madison SLE Station location until the garage is completed and open for service. By constructing the parking garage, a total of 585 parking spaces would be available to SLE commuters.

No-Build Alternative

Under the No-Build Alternative, current operations at the SLE Railroad Station in Madison would continue unchanged. Trains would operate on one track (the south side) in order to pick-up and drop-off passengers. Although this is in keeping with current lease agreements between CTDOT and Amtrak regarding the existing SLE service, this type of operation will not be allowed once the lease agreement expires or when SLE service is expanded. The lease specifically requires that north side high-level rail platforms be constructed if CTDOT expects to expand SLE service beyond the current rush hour period in the future.

The No-Build Alternative also means that the parking capacity at the station will be 199-spaces (State Project 310-0020) and that no new parking will be constructed. It is possible that surface parking could continue to be provided at the old station platform site located approximately one-quarter mile to the east at least until such a time as either a new parking garage is constructed at the new railroad station or the lease agreement between CTDOT and Amtrak that governs the use of the old surface lot expires. However, long-term and/or permanent use of the old surface lot as additional parking for the new SLE station is not a feasible option due to the inconvenient distance that commuters would have to travel between their parked car and the active rail platform. Additionally, a weekday peak hour parking survey conducted by Fitzgerald & Halliday, Inc. (FHI) in May 2007 for the old station parking lot (169 spaces) determined that parking at Madison's SLE Railroad station is already at 79% capacity. Thus, under the No-Build Alternative, the existing parking shortage at the station will not be alleviated. Although the No-Build Alternative would involve no new construction and as a result, no significant environmental impacts, the alternative falls short of meeting the purpose and need of the project.

2.2. Alternative Sites Controlled or Reasonably Available

Because rail is a fixed system, land available for the Proposed Action must be located immediately adjacent to the rail corridor and existing station in order to gain maximum benefit from the project and its intended use. As described above under the Build Alternative, the north side high-level rail platform must be located opposite the existing south side platform in order for optimal functionality, and parking options are limited for various reasons. Lastly, the Proposed Action site is highly suitable because it has been developed as the site of the new Madison SLE Railroad Station, is easily accessible from local roadways, and is in close proximity to downtown Madison.

Overall, no other sites were evaluated since there are no other known available sites suitable for the Proposed Action.

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3. EXISTING ENVIRONMENT AND IMPACT EVALUATION

3.1. Land Use, Zoning and Local and Regional Development Plans

Existing Setting

Land Use

The Proposed Action site is located in the Town of Madison, on the northwestern edge of Madison's downtown. As shown in Figure 1, the site occupies the northeast corner of the intersection of Durham Road (State Route 79) and Bradley Road on property with the address 77 Bradley Road. The site was formerly leased by Laidlaw Transit, a school bus transportation company. Laidlaw Transit used the site for school bus storage and maintenance up until the parcel was acquired by CTDOT as part of State Project 310-0020 (described in Section 1.1 of this EIE). As part of the Proposed Action being evaluated in this EIE, a new parking garage will be constructed south of the existing rail corridor on the site of the commuter parking lot. The proposed parking garage will be accessed by SLE patrons from Bradley Road. Additionally, a north side high-level rail platform and pedestrian bridges (connecting the new garage to the south side and north side rail platforms) will be constructed. A gravel construction access road will also be constructed from Old Route 79 to the north side high-level rail platform. This access road will parallel the railroad tracks and will have a gated entrance at Old Route 79. Upon completion of project construction, the roadway will remain to provide emergency and maintenance access to the north side project elements.

According to field observations and a review of the existing land use map in the Town of Madison's Plan of Conservation and Development (November 1, 2000), the area surrounding the Proposed Action site is characterized by a suburban downtown mix of residences, and commercial and office spaces (see Figure 3). There is also undeveloped land to the north of the site.

The broader study area surrounding the Proposed Action site consists of 1) downtown Madison, a primarily commercial/retail area, the Town Green, and public buildings, such as the E.C. Scranton Memorial Public Library and U.S. Post Office to the south, 2) professional office complexes, such as Madison Square and Woodland Office Park, light industrial, and more commercial/retail uses to the east and west, and 3) primarily residential to the north.

Zoning

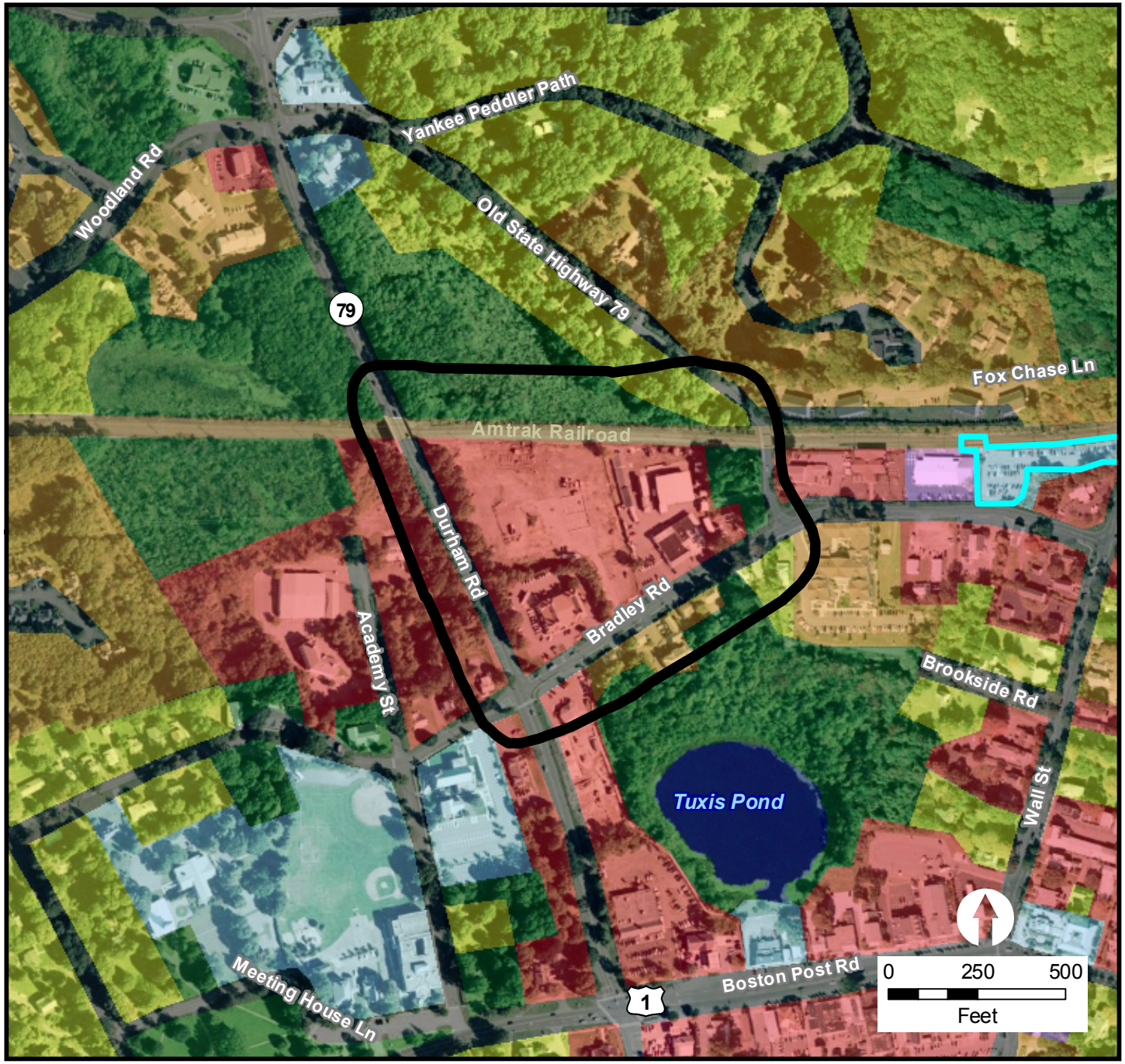
According to the Town of Madison's Zoning Regulations and Zoning Map (Town of Madison, 2006), the site for the Proposed Action falls within the northwestern-most corner of the Downtown District (D). The Downtown District extends to the south and east of the Proposed

Action site. To the north of the site is a Residential District (R-1), and a Light Industrial District (LI) and Residential District (R-2) are to the west. Madison's zoning categories are presented and described in Table 1.

Table 1: Madison Zoning Categories and Descriptions

Zoning Category	Zoning Description
Downtown District (D)	The purpose of the Downtown District is to maintain and enhance the historic character and charm of the downtown, while allowing the existing downtown area along Boston Post Road and Wall Street to expand into adjacent lands within the District.
Residential District (R-1, R-2)	The purpose of this district is to set aside and protect areas which may be developed for single family dwellings on large lots. It is intended that all uses permitted in this district be compatible with single family development and consistent with local street characteristics, the use and protection of private water and sewer facilities (where public facilities are unavailable) and the level of other public services.
Light Industrial District (LI)	Permitted uses include business or professional offices and financial institutions, retail businesses, commercial greenhouses, restaurants, theaters, research laboratories, undertaker establishments, washing machine establishments, automobile service stations and repair shops, public garages, farm equipment salesrooms, newspaper plant or job printing establishment, public utility buildings, plants for the processing and distribution of milk and dairy products and bottling of beverages, retail lumber, assembly halls, dance halls, billiard and pool parlors, bowling alleys, municipal buildings, fire houses, philanthropic, educational, recreational or religious uses, parks and playgrounds, day care centers or nursery schools, hotels and motels, manufacturing (pottery and ceramic products, concrete, and finishing of woods, metals, plastics, textiles, paper, glass, leather, fiber), storage warehouses, and veterinary hospitals and indoor boarding kennels.

Source: Town of Madison, Madison's Zoning Regulations and Zoning Map, 2006.



Study Area

Existing Platform & Parking

Land Use

- Single Family Residential
- Multi-Family Residential
- Commercial
- Industrial
- Institutional / Public Facilities
- Open Space
- Water
- Road
- Rail

Figure 3
Land Use

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Local and Regional Development Plans

The Proposed Action site falls within the planning regions addressed by the Madison Plan of Conservation and Development (Madison Planning and Zoning Commission, November 1, 2000) and the Plan of Conservation and Development - South Central Region (South Central Regional Council of Governments [SCRCOG] June, 2008). These plans each articulate a vision, goals, and objectives for future land use and overall development within their respective planning regions. Relevant key elements of these reports are summarized below.

Madison Plan of Conservation and Development: The *Madison Plan of Conservation and Development* (Madison Planning and Zoning Commission, November 1, 2000) identifies the following issues, opportunities and policies that are relevant to the Proposed Action:

- The existing railroad station is seen as a community asset. There is a desire to evaluate how possible future transportation projects, such as for additional parking, may benefit the community.
- Madison wants to balance pursuing opportunities to increase rail service (including improving the train station parking) with making sure the improvements are appropriate for the town and contribute to community character. There is a desire to review train station improvement projects (including any proposed pedestrian bridges or towers) for their aesthetics and function. The Town wants to work with CTDOT and SCRCOG on transportation improvements.
- Madison is striving to interconnect all of the pedestrian walkways in Madison (sidewalks, paths, trails) into a cohesive overall system. The Town wants to improve and extend the sidewalk network in and around Madison Center.

A future land use map developed for Madison shows the Proposed Action site at the northwestern fringe of a proposed future "Village District." The 2000 Future Land Use Plan indicates that the Proposed Action site lies in an area slated for business land uses.

Plan of Conservation and Development - South Central Region (June, 2008): Madison is located within the SCRCOG Planning Region along with 14 other municipalities. SCRCOG recently completed an update of its regional plan of conservation and development. Specific to the Proposed Action, this document identifies improvements at the SLE railroad station in Madison as one of a number of rail transportation programs that supports the goals of the plan for sound economic development, promoting transit-oriented development, encouraging desired land use patterns, and enhancing the quality of life in the region. The plan states "the region's land use strategies reflect the overall State Plan's strategy to reinforce and conserve existing urban areas, to promote staged, appropriate, sustainable development, and to preserve areas of significant environmental value." Improvements to access rail service are considered consistent with this strategy.

SCRCOG Long Range Transportation Plan 2007–2035: This document addresses broad transportation goals for the region over the next 25 years and provides direction for the region regarding major policy issues. The Plan highlights that highway improvements will address only

a portion of the region's transportation requirements and that to meet needs over the long-term, multi-modal solutions will be required. With respect to the Proposed Action, the document specifically identifies station and parking improvements at the SLE site in Madison as a significant regional project.

Direct and Indirect Impacts

Land Use

Impacts to land use are evaluated based on the effect that the Proposed Action will have on land use patterns, compatibility of land uses, encroachments on existing land use, and access to land compared to the No-Build Alternative. The No-Build Alternative will constitute a continuance of existing land use conditions and therefore will have no adverse impact on land use.

The Proposed Action will be a state facility that will utilize both existing CTDOT properties and privately owned land. As such, it will require one partial property acquisition. This partial property acquisition, along the west side of Old Route 79, will initially allow access by construction vehicles, and later maintenance and emergency access, to the new north side high-level rail platform, elevators, and pedestrian overpass. The partial taking involves land only (approximately 0.2 acres). According to the Town of Madison parcel maps, the property is currently owned by William J. Carroll. The Proposed Action will not encroach on any other existing land uses. The land north of the access road is undeveloped and is occupied by a red maple swamp. It is designated as town-owned open space.

The parking garage proposed for the south side of the railroad tracks will be erected on the site of existing surface parking that was completed and opened to rail commuters on July 28, 2008 as part of State Project 310-0020 (refer to Section 1.1 of this EIE for more details relative to that project). Adjacent land uses include Tuxis Lumber Company to the east and Madison Square, a professional office complex, to the south. These land uses are compatible with the rail station and its parking facility. Access to the new parking garage and station will continue to be gained from Bradley Road via a driveway located between the driveways for Tuxis Lumber Company and Madison Square. There is unlikely to be any inconvenience to businesses and residences in the study area, as those using the parking garage and north side platform at the new Madison Station will rely on the same transportation network as users of the former Madison Station located at the northwest corner of Bradley Road and Wall Street.

Overall, the Proposed Action will occur on the site of the new Madison SLE Railroad Station (as constructed in July 2008 under State Project 310-0020) and therefore is compatible with adjacent mixed residential, commercial, and light industrial uses to the east, west, and south, and undeveloped land to the north. Consequently, the Proposed Action will not adversely affect existing land use patterns or trends. There will be one adverse impact on private property, as a partial taking of land will be necessary for development of a maintenance/emergency access road north of the railroad tracks with an access point off of Old Route 79.

Zoning

The No-Build Alternative will not alter existing conditions and as such will have no impact on zoning.

Generally, state and federal projects are exempt from municipal zoning requirements. However, CTDOT strives to avoid conflict with local regulations. The Proposed Action is consistent with zoning designations in the project study area and will not induce any change to zoning in the area. The Proposed Action is located within Madison's Downtown District. The purpose of the Downtown District is to maintain and enhance the character of the downtown, while allowing downtown to expand into adjacent lands within the District.

Consistency with Local and Regional Development Plans

The Proposed Action is fully consistent with the visions and goals outlined in the pertinent local and regional planning documents described above.

Proposed Mitigation

Land Use and Zoning

As there will be no significant adverse impacts on land use or zoning, no mitigation is warranted or proposed.

There will be one adverse impact on private property. A partial taking of approximately 0.2 acres will be necessary for development of a construction/maintenance and emergency access road north of the railroad tracks with an access point off of Old Route 79. CTDOT will coordinate closely with the Town of Madison during final design to offset impacts to the downtown neighborhood character. In order to mitigate the one partial private property taking, CTDOT will coordinate directly with the property owner to negotiate the property transfer and provide appropriate compensation.

Consistency with Local and Regional Development Plans

The No-Build Alternative is not consistent with the revitalization goals expressed in local and regional plans, as it does not support enhancement of commuter rail access or facilitate general economic growth in the Town of Madison.

The Proposed Action is consistent with the vision, goals, and recommendations expressed in local and regional plans for future development of the Town of Madison and the South Central Planning Region.

Since the Proposed Action is consistent with local and regional plans, no mitigation is warranted or proposed.

3.2. Consistency with State Plan of Conservation and Development

Existing Setting

The Connecticut Office of Policy and Management (OPM) *Conservation and Development Policies Plan for Connecticut (2005-2010)* (the C&D Plan) contains growth management, economic, environmental quality, and public service infrastructure guidelines and goals for the State of Connecticut. The overall strategy of the C&D Plan is to reinforce and conserve existing urban areas, to promote appropriate, sustainable development, and to preserve areas of significant environmental value. The Locational Guide Map which accompanies the C&D Plan provides a geographical interpretation of the State's conservation and development policies.

According to the C&D Plan's Development Locational Guide Map, the Proposed Action falls within a Growth Area. Typically, they "support staged urban-scale expansion in areas suitable for long-term economic growth that are currently less than 80% built up, but have existing or planned infrastructure to support future growth in the region." The state strategy for Growth Areas is to provide "high priority and affirmative support toward concentration of new growth that occurs outside of Regional Centers and Neighborhood Conservation Areas into specified areas capable of supporting large-scale, mixed uses and densities in close relationship to the Regional Centers."

Consistency

The Proposed Action is consistent with the general policies and strategies for Growth Areas as defined in the C&D Plan. It will enhance existing rail infrastructure and access to Madison via commuter rail — for employees and employers, for patrons of Madison businesses and business owners, and for residents. It will also be located in an area of planned downtown expansion in Madison. The Proposed Action is consistent with the C&D Plan's policy to support staged urban-scale expansion in an area suitable for long-term economic growth that has existing infrastructure to support future growth in the region. Additionally, the Proposed Action will be located along an existing street network currently used to access the station. As such, the Proposed Action will utilize the existing transportation infrastructure. Indirectly, it will help reduce vehicle miles traveled in the region, thereby supporting energy conservation and air quality programs also identified in the C&D Plan.

Overall, the development of the Proposed Action at this location in Madison is consistent with the desired overall direction of area-wide development.

3.3. Traffic and Parking

This section describes existing traffic and parking conditions in the study area and the potential traffic and parking impacts associated with the Proposed Action.

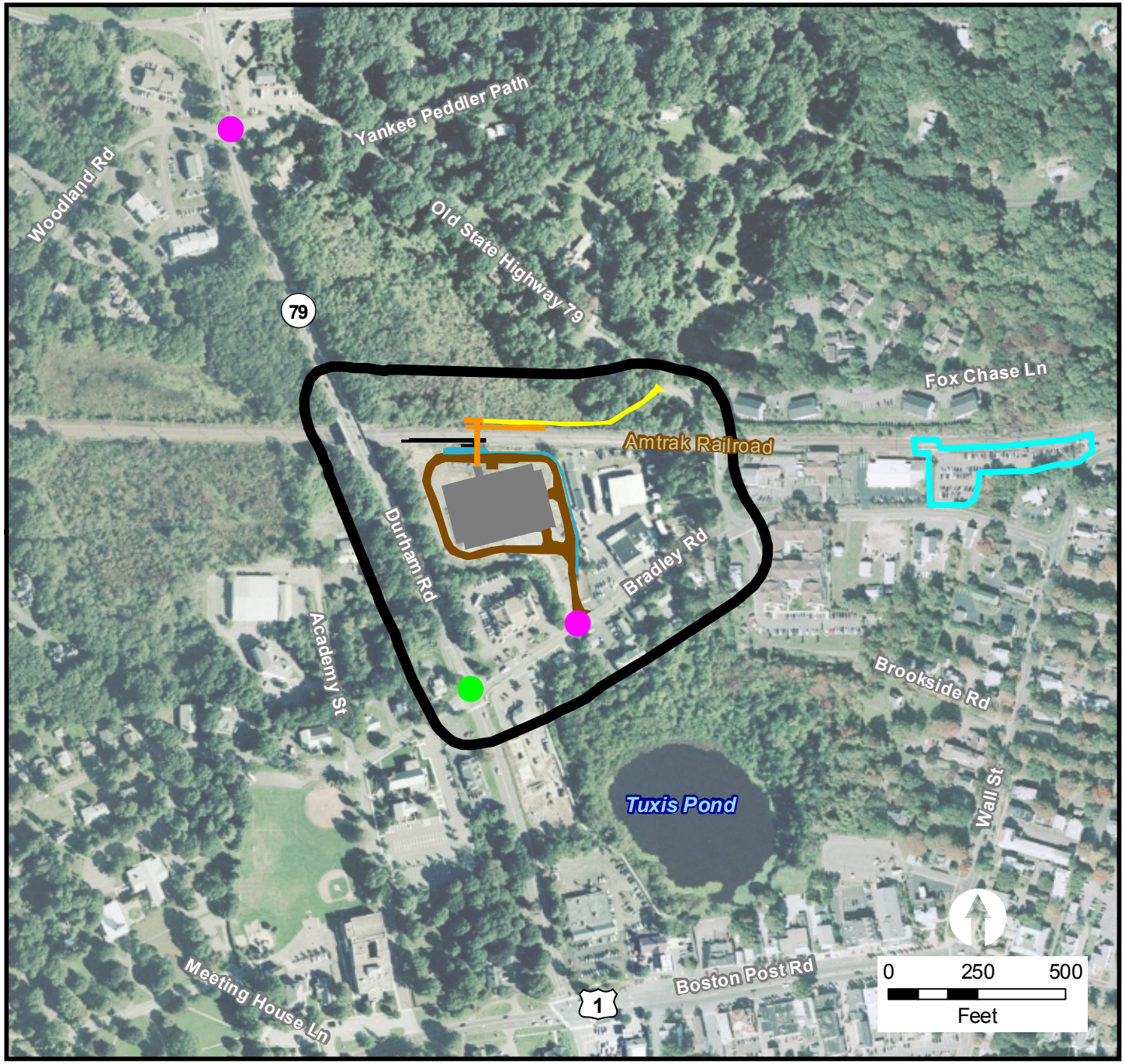
Existing Setting

The study area specifically assessed for the traffic and parking component of this EIE is located in Madison along Bradley Road, running east from the intersection of Bradley Road and State Route 79 (Durham Road) towards the Rail Station Access Drive. State Route 79 in the vicinity is from the Main Street commercial area south to Boston Post Road (Route 1). The area is bounded by State Route 79 to the west, Wall Street to the east and Bradley Road to the south. State Route 79 in the vicinity of the study area is a two-lane minor arterial. Wall Street along the east side of the study area south from Bradley Road is a two-lane major collector roadway. Bradley Road is also a two-lane major collector roadway providing east-west access to State Route 79 and Wall Street. Land uses within the study area are characterized by a suburban downtown mix of residences, and commercial and office spaces (refer to Section 3.1 of this EIE).

Three intersections in the study area were analyzed for traffic levels-of-service (LOS) and operational considerations. The three intersections studied are the following:

1. State Route 79 (Durham Road) at Bradley Road (signalized)
2. Bradley Road at Old Route 79 (unsignalized)
3. Bradley Road at Station Access Drive (unsignalized)

Figure 4 shows the site location and study area intersections in relation to the surrounding roadway network.



Study Area

Existing Platform & Parking

Study Area Intersections

Signalized

Unsignalized

Proposed Action

Ped. Bridge/North Platform

South Platform (Existing)

Loop Road

Garage

Const. Access/Maint. Road

Sidewalk

Figure 4
Study Area Intersections

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Access and Parking

At the time traffic counts were conducted (May 31, 2007), the existing Madison SLE Railroad Station consisted of the old south side platform and surface parking lot located northwest of the Wall Street/Bradley Road intersection. The new Madison SLE Railroad Station, comprised of a new south side high-level rail platform and 199-space surface parking lot at 77 Bradley Road, was under construction and not yet in service. The new infrastructure built under State Project 310-0020 (refer to Section 1.1 of this EIE for more information on this project) was opened for service on July 28, 2008. Thus, the access and parking discussion that follows refers to conditions at the old Madison SLE Railroad Station site, which is still in service and being leased by CTDOT from Amtrak.

Access to the Madison SLE Railroad Station (old station platform and parking lot) is provided from Bradley Road between Old Route 79 and Wall Street. The access drive is an unsignalized intersection. There are a total of 169 parking spaces available comprised of 5 handicapped spaces and 164 general parking spaces.

Parking counts at the station were collected to determine the peak parking demand during an average weekday morning peak period. Results indicate that the peak parking demand was observed to be 0 handicapped spaces and 134 general parking spaces between 9:00 AM and 10:00 AM during the weekday morning. These results indicate that the surface parking lot is at seventy-nine percent (79%) occupancy. Table 2 summarizes the parking count data.

Table 2: Observed Parking Occupancy

	Handicapped Spaces	General Spaces	Total
Number of Spaces	5	164	169
Observed Spaces	0	134	134
Utilization %	0%	82%	79%

Source: Fitzgerald & Halliday, Inc., May 2007

Transit, Pedestrian, and Bicycle Facilities

Transit services that exist in the area around the SLE Madison Rail Station include rail and bus service. Rail service is provided by SLE between New Haven's Union and State Street stations and the New London Rail Station, stopping at the SLE Madison Rail Station. SLE monthly ticket holders are entitled to use the Guaranteed Ride Program. This program allows rail users who may need a ride from work because of an emergency, illness, family crisis, or having to work late unexpectedly to call for a free taxi ride home. Also, passengers are permitted to carry their bicycles (with the front tire removed) on board SLE trains.

DATTCO operates the S-route bus service in the Madison Station area. The S-route runs between downtown New Haven (Church & Crown Streets) and the Old Saybrook Rail Station, and services the Madison Station area on weekdays. More detailed information on rail and bus routes serving the study area is displayed in Table 3.

Bradley Road features sidewalks on one or both sides, creating a continuous pedestrian network along its length in the study area. According to the Connecticut Bicycle Map (CTDOT, 2002) and the South Central Regional Bicycle and Pedestrian Plan (2007), State Route 79 is designated a cross state bicycle route. There is no other state or region-wide designated bicycle route in the station area.

Table 3: Transit Routes

Transit Line	Description of Service	Schedule
SLE Rail	Service between downtown New Haven (Union & State Street Station) and New London Rail Station (Old Saybrook Station on weekends and holidays).	Weekday westbound trains depart Madison Station every 25-35 minutes between 5:42 – 9:29 AM. Weekday eastbound trains depart Madison Station 11 times between 1:27 - 9:17 PM. Weekend westbound trains depart Madison Station approximately every two hours between 7:15 AM and 1:15 PM. Weekend eastbound Trains depart Madison Station for Old Saybrook Station approximately every 2 hours between 2:29 PM and 10:32 PM.
S-Route Bus (Operated by DATTCO)	Service between downtown New Haven (Church & Crown Streets) and Old Saybrook Rail Station	Weekday westbound buses depart Scranton Gazebo 12 times between 6:25 AM and 6:20 PM. Weekday eastbound buses depart Scranton Gazebo 13 times between 6:35 AM and 6:25 PM. Two eastbound midday buses will stop at the Madison Station upon request. No weekend service.

Traffic Data Collection

CTDOT provided traffic count data for the AM and PM peak hours for the base year 2007, and for the No-Build Alternative and Proposed Action 2030 conditions. A summary of these roadway volumes is included in Appendix C of this EIE.

Traffic Operations Analysis

Intersection Analysis

Level-of-service (LOS) capacity analysis of the study area intersections was conducted in March 2008. LOS for an intersection is rated in a range from A to F, with A being the best operating conditions and LOS F being the most congested. LOS F represents long delays and generally

unacceptable conditions. LOS designation is reported differently for signalized and unsignalized intersections. For signalized intersections, LOS is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, LOS criteria are stated in terms of average stopped delay per vehicle for the peak 15-minute period of the peak hour for the entire intersection and by approach. For unsignalized intersections, the analysis assumes that the traffic on the mainline is not affected by traffic on the side street. The LOS for each movement is calculated by determining the number of gaps that are available in the conflicting traffic stream. Based on the number of gaps, the capacity of the movement can be calculated. The demand of the movement is then compared to the capacity and utilized to determine the average delay for the movement. For unsignalized intersections, an overall LOS is not determined. Table 4 provides a summary of the LOS for the study area intersections under existing conditions.

Table 4: Level-of-Service Summary Existing Condition (2007)

	Existing (2007)	
	AM Peak Hour	PM Peak Hour
Signalized Intersections		
State Route 79 (Durham Road) & Bradley Road	A	B
Unsignalized Intersections		
Bradley Road & Old Route 79	B	B
Bradley Road & Station Access Drive	A	B

Source: Fitzgerald & Halliday, Inc., March 2008

Base Year 2007: According to the CTDOT Consultant Administration and Project Development Manual (September, 2008), the minimum acceptable intersection LOS is D. The analysis results describe the operational effectiveness of the study area intersections. Results from the LOS analysis for the study area intersections indicate that all of the intersections operate at acceptable levels of service under existing conditions (LOS D or better).

Safety Evaluation

Crash data were obtained from CTDOT for State Route 79 over a three-year period (2004-2006). A total of 33 crashes were recorded along State Route 79 from Old Route 79 to Route 1 over the three-year period. Fifty-eight percent (58%) of the total crashes on this roadway segment during this period were rear end collisions, indicating that drivers are likely following too closely. Fifteen percent (15%) of the total crashes consisted of turning-intersecting paths collisions, indicating carelessness when turning or inadequate intersection controls. The third most common collision type on this roadway segment was angled collisions, accounting for twelve percent (12%) of the total collisions in this three-year period.

A review of the crash data indicates that the highest number of crashes (11) occurred on State Route 79 at the intersection of Old Route 79/Woodland Road. Thirty-six percent (36%) of the collisions at this location were rear end collisions, and thirty-six percent (36%) percent of the collisions were sideswipe-same direction collisions. Ten (10) crashes on State Route 79 occurred at the intersection of Bradley Road. Sixty percent (60%) of these crashes were rear end collisions.

Based on this crash data, there does not appear to be an existing high accident location or pattern of correctable accident occurrence in the study area. A summary of crash data is provided in Appendix C of this EIE. Crash data on the local roadways was not available.

Direct and Indirect Impacts

Traffic Impacts

In order to estimate traffic impacts from the Proposed Action, traffic flow and operations were evaluated for the future design year 2030. Projected traffic volumes for the design year 2030 obtained from CTDOT were used to evaluate the study area intersections under the No-Build Alternative and the Proposed Action 2030 conditions.

Recently constructed at the new Madison SLE Railroad Station site as part of a separate project (State Project 310-0020) is a surface parking lot for 199 vehicles and a south side high-level platform. This project was completed in July 2008 and is considered under the No-Build Alternative 2030 evaluation. Results from the No-Build Alternative analysis, as shown in Table 5, indicate that all study area intersections will operate at acceptable levels of service (LOS D or better).

Table 5: Level-of-Service Summary Existing Condition (2007) and No-Build Alternative (2030)

	Existing (2007)		No-Action (2030)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Signalized Intersections				
State Route 79 (Durham Road) & Bradley Road	A	B	B	B
Unsignalized Intersections				
Bradley Road & Old Route 79	B	B	C	C
Bradley Road & Station Access Drive	A	B	B	C

Source: Fitzgerald & Halliday, Inc., March 2008

The Proposed Action includes the construction of a three-level parking garage, a north side high-level rail platform, and pedestrian bridges from the new garage to the south side and north side platforms. With construction of the parking garage, parking capacity at the station will increase from 199 to a maximum of 585 spaces.

Results from the LOS analysis for the 2030 Proposed Action condition (compared to the 2030 No-Build Alternative), as shown in Table 6, indicate that the LOS for the study area intersections is expected to be similar to operations under the No-Action condition. Under the 2030 Proposed Action conditions, all study area intersections are anticipated to operate at an acceptable LOS (LOS D or better). Therefore, no adverse impacts are expected as a result of the Proposed Action.

Table 6: Level-of-Service Summary No-Build Alternative (2030) and Proposed Action (2030)

	No-Action (2030)		Proposed Action (2030)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Signalized Intersections				
State Route 79 (Durham Road) & Bradley Road	B	B	B	C
Unsignalized Intersections				
Bradley Road & Old Route 79	C	C	C	C
Bradley Road & Station Access Drive	B	C	B	D

Source: Fitzgerald & Halliday, Inc., March 2008

Proposed Mitigation

Although traffic operations under 2030 Proposed Action conditions are anticipated to operate at an acceptable LOS (LOS D or better) at all study area intersections, minor modifications to the eastbound lane into the site from Bradley Road are being considered. The State Traffic Commission will dictate what modifications must be made, if any, during the Major Traffic Generator Application review process.

3.4. Air Quality

Existing Setting

The Clean Air Act of 1970 and subsequent Clean Air Act Amendments established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants to ensure the protection of human health and public welfare. NAAQS were established for carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), ozone (O_3), and particulate matter (PM). The Clean Air Act also required states to monitor air quality to determine if regions meet the NAAQS. If a region shows exceedances of any of the NAAQS, that part of the state is classified as non-attainment for that pollutant and the state must develop an air quality plan, called a State Implementation Plan (SIP), to bring that area into compliance.

The EPA Office of Air Quality Planning and Standards has set NAAQS for six common pollutants, called "criteria" pollutants. They are listed below. Carbon monoxide (CO), one of the six pollutants regulated by the NAAQS, is the air quality parameter that could be most likely affected by traffic associated with the Proposed Action. Units of measure for the standards are parts per million (ppm) by volume, milligrams per cubic meter of air (mg/m^3), and micrograms per cubic meter of air ($\mu g/m^3$) (refer to Table 7).

Table 7: National Ambient Air Quality Standards

Pollutant	Primary Standards	Averaging Times	Secondary Standards
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour[1]	None
	35 ppm (40 mg/m^3)	1-hour[1]	None
Lead	1.5 $\mu g/m^3$	Quarterly Average	Same as Primary
Nitrogen Dioxide	0.053 ppm (100 $\mu g/m^3$)	Annual (Arithmetic Mean)	Same as Primary
Particulate Matter (PM_{10})	150 ug/m^3	24-hour[1]	
Particulate Matter ($PM_{2.5}$)	15 $\mu g/m^3$	Annual[2] (Arith. Mean)	Same as Primary
	35 ug/m^3	24-hour[3]	
Ozone	0.075 ppm	8-hour[4]	Same as Primary
Sulfur Oxides	0.03 ppm	Annual (Arith. Mean)	-------
	0.14 ppm	24-hour[1]	-------
	-------	3-hour[1]	0.5 ppm (1300 ug/m^3)

[1] Not to be exceeded more than once per year.
[2] To attain this standard, the 3-year average of the annual arithmetic mean $PM_{2.5}$ concentrations from single or multiple community-oriented monitors must not exceed 15 ug/m^3.
[3] To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 65 ug/m^3.
[4] To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm.

According to the EPA's *2006 Annual Report on Air Quality in New England* (July 2007), the current air quality attainment designations for the six criteria pollutants in New Haven County are:

CO: The entire state of Connecticut is currently designated as attainment for CO. A limited maintenance plan for CO is in effect for the New Haven-Meriden-Waterbury region.

Ozone: The entire state of Connecticut is designated as non-attainment for the 8-hour ozone standard.

PM: EPA has established NAAQS for two size ranges of PM. The entire state of Connecticut is currently in attainment of PM_{10} (particulate matter with a diameter of 10 microns or less). New Haven County is in non-attainment for $PM_{2.5}$ (particulate matter with a diameter of 2.5 microns or less).

NO_2: The entire State of Connecticut is in attainment for NO_2.

Pb: The entire State of Connecticut is in attainment for Pb.

SO_2: The entire State of Connecticut is in attainment for SO_2.

Direct and Indirect Impacts

Regional Impacts – Transportation Conformity

The impacts of a particular project on regional air quality are difficult to determine, particularly for small projects such at this one. The determination of regional air quality impacts requires a rigorous modeling exercise, conducted by metropolitan planning organizations and/or state departments of transportation. They conduct air quality conformity determinations of their long- and short-term transportation plans. This process involves modeling travel demand across the entire regional transportation system and applying vehicle trips, vehicle miles of travel, and their associated emissions to the network. Conformity is demonstrated when the forecasted emissions of the existing and planned road and transit networks of a transportation plan do not cause exceedances of air quality standards.

SCRCOG, the metropolitan planning organization for the region, coordinates with CTDOT to conduct a conformity determination of the Regional Transportation Plan and Transportation Improvement Program. The conformity analysis must demonstrate that the existing and planned road and transit network emissions are forecasted to be less than the amount allowed in the VOC, NO_x, and CO emissions budgets established by the CTDEP for transportation sources. The emissions budgets are set at levels that will maintain the NAAQS for each pollutant. Therefore, transportation-related emissions must be less than or equal to these emissions budgets.

Project Level Conformity Determination

Federal regulations concerning the conformity of transportation projects developed, funded or approved by the United States Department of Transportation (USDOT) and by MPOs are contained in 40 CFR 93. In accordance with 40 CFR 93.109, the applicable criteria and procedures for determining the conformity of a project which is from a conforming Transportation Plan are listed in 40 CFR 93.109(b). Each of these criteria has been determined to be satisfied for the Proposed Action, as follows:

- **Proposed Action from a Conformity Plan** – The Proposed Action is identified in the SCRCOG's current Long Range Transportation Plan. The scope of this project, as described in this EIE, is consistent with the scope identified in the current Plan.

- **Current Conforming Plan** – The SCRCOG's current Long Range Transportation Plan was determined to be in conformity by FHWA and FTA. The Proposed Action is included in this Plan.

- **CO Hot Spots** – This project will not cause or contribute to any new violations or increase the frequency or severity of any existing CO violations in CO maintenance areas, as shown by the results of the microscale (local) CO hot spot analysis contained herein.

- **$PM_{2.5}$ Hot Spots -** This project is exempt from conformity requirements under Section 40 CFR Part 93.126 of the conformity rule. A project level $PM_{2.5}$ qualitative analysis is therefore not required.

- **PM_{10} Control Measures -** There are no PM_{10} control measures in the current State Implementation Plan.

In summary, the Proposed Action has been determined to be in conformity with the Clean Air Act, as amended, pursuant to all applicable EPA regulations.

Local Impacts – Microscale Analysis

In order to assess CO impacts on local air quality from the project, a modeling analysis was conducted to calculate CO concentrations under existing, no build, and build conditions at sensitive receptor locations in the vicinity of the intersection most likely to be impacted by the build alternative. The modeling analysis determined if the Proposed Action will create violations of federal CO standards. The analysis was conducted using the EPA MOBILE6.2 emissions factor model and the CALQVIEW2 (Windows version of CAL3QHC Version 2) model.

Capacity and queuing analyses were performed for several intersections in the vicinity of the Proposed Action. The intersection at State Route 79 at Bradley Road was identified as most likely to be impacted by the build alternative. Capacity and queuing analyses were completed for the following peak periods:

- 2007 morning and afternoon (Existing Conditions),
- 2011 morning Build, afternoon Build, morning No-Build, and afternoon No-Build scenarios (Build Year), and
- 2030 morning Build, afternoon Build, morning No-Build, and afternoon No-Build scenarios.

CALQVIEW2 is a line source dispersion model that applies the Gaussian dispersion theory to traffic inputs and meteorological conditions to predict CO concentrations from vehicles on the roadway. Air quality impacts from mobile sources are modeled by analyzing queue links and free flow links. Queue links are those that simulate vehicles idling at the stop bar of an intersection. Free flow links simulate vehicles traveling through an intersection. Receptor locations are selected based on where people may be located who may be exposed to the CO produced by vehicles in the area (e.g., sidewalks, outdoor eating establishments). Each receptor was located at a height of 5.9 feet, per EPA guidance.

CALQVIEW2 meteorological and background information is listed in Table 8.

Table 8: CALQVIEW2 Parameters

Parameter	Value
Averaging time	60 mins
Surface roughness length	175 cm
Settling velocity	0
Deposition velocity	0
Scale conversion factor	0.3048 (units in ft)
Output	1 (in ft)
Wind speed	1 m/s
Wind direction	0
Stability class	4 (D) – Urban
Mixing height	1000 m
1-hour background concentration	4.3 ppm
Multiple wind directions	Yes – 10 degree increments
Receptor height	6.0 ft
Signal times	Varies (traffic analysis)
Traffic volumes	Varies (traffic analysis)

Mobile source CO emission factors were modeled using MOBILE6.2. Results from the model represent the one-hour average CO concentrations at each receptor due to the modeled traffic, and include a background concentration of 3.0 ppm. To determine the eight-hour average concentration at each receptor, the one-hour dispersion result from the model was multiplied by the persistence factor of 0.7. The 2007 AM and PM; 2011 AM Build, PM Build, AM No-Build, and PM No-Build; and 2030 AM Build, PM Build, AM No-Build, and PM No-Build conditions

were each modeled for the pre-determined intersections, for a total of 10 model runs. Table 9 presents the highest CO reading for each model run.

Table 9: Highest Predicted CO Results – State Route 79/Bradley Road Intersection

Model Run	Highest 1-hour Concentration (ppm)	Corresponding 8-hour Concentration (ppm)	Receptor Location
2007 Peak AM Existing	5.8	4.1	Northwest corner of intersection
2007 Peak PM Existing	6.3	4.4	Southbound south mid-block
2011 Peak AM No-Build	5.9	4.1	Southbound south mid-block
2011 Peak PM No-Build	6.0	4.2	Southwest corner of intersection
2011 Peak AM Build	5.9	4.1	Westbound east mid-block
2011 Peak PM Build	6.1	4.3	Westbound east mid-block
2030 Peak AM No-Build	5.7	4.0	Southbound south mid-block
2030 Peak PM No-Build	5.7	4.0	Southwest corner of intersection
2030 Peak AM Build	5.7	4.0	Southwest corner of intersection
2030 Peak PM Build	5.9	4.1	Westbound east mid-block

NAAQS for CO: 1-hour standard of 35.0 ppm, 8-hour standard of 9.0 ppm.

As shown in Table 9, all results are well below the CO NAAQS of 35 ppm for one hour and 9 ppm for eight hours. Thus, the proposed project will not create any violations of federal CO standards. These findings appear to be reasonable, based on the following:

- Air quality monitoring data show that existing CO levels in the area are well below the CO NAAQS. Therefore CO hot spots are highly unlikely in the vicinity of the proposed project.

- The low level of trips generated by the proposed project relative to total regional trips is unlikely to negatively impact regional air quality. The VOC, NO_x, and CO emissions from the transportation system are currently below those allowed by CTDEP. Thus, the effects of increased travel can be accommodated without causing the emission budgets to be violated, and as a result, will not cause or contribute to further violations of the NAAQS. Furthermore, recent monitored ozone exceedances are primarily due to the transport of ozone and other pollutants from beyond Connecticut. The low number of additional vehicle trips is unlikely to cause or contribute to further ozone exceedances.

The proposed project has been evaluated to determine whether the project will cause the NAAQS to be exceeded. For transportation projects, the criteria pollutants of primary concern are mobile sources of CO and ozone. Emissions of PM_{10} and $PM_{2.5}$ are also potential concerns, particularly from diesel engines.

CO hot spots are unlikely in the vicinity of the Proposed Action because existing CO levels in the area are already well below the CO NAAQS and the project will not substantially change emission sources/quantities. PM exceedances are not expected.

During clearing and construction of the proposed facility and associated paved surfaces potential air quality impacts include: airborne dust particles from exposed soils and emissions from idling and mobile construction vehicles. Construction period impacts are discussed in more detail in Section 3.20 of this EIE.

Proposed Mitigation

It is not anticipated that any short- or long-term adverse air quality impacts will occur as a result of the project. Therefore, no specific air quality mitigation measures are proposed.

To minimize impacts to air quality during construction the following best management practices will be followed:

- Minimization of exposed erodible earth area to the extent possible.
- Stabilization of exposed earth with grass, pavement, or other cover as early as possible.
- Application of stabilizing agent (i.e., calcium chloride, water) to the work areas and haul roads.
- Covering, shielding or stabilizing stockpiled material as necessary.
- Use of covered haul trucks.
- To minimize drag out, the incidental transport of soil by construction equipment from unpaved to paved surfaces, rinsing of construction equipment with water or any other equivalent method.
- Use of clean fuels including ultra-low sulfur diesel fuel (15 ppm sulfur), compressed natural gas or emulsified fuels (e.g., Purinox, approved by the California Air Resources Board).
- Eliminating any unnecessary idling to no more than three (3) minutes.

3.5. Noise

Existing Setting

Noise-sensitive land uses include: a) residences, hotels, and other buildings where people sleep; b) institutional resources such as churches, schools, hospitals, and libraries; and c) various tracts

of land where quiet is an essential element of the land's intended purpose, such as a National Historic Landmark where outdoor interpretation routinely takes place.

A site visit was conducted on April 3, 2008 to identify and categorize land uses (receptors) in the project vicinity and to obtain a better understanding of the existing noise environment. The Proposed Action site is located on the outskirts of downtown Madison, a suburban town center. The site is bordered by State Route 79 to the west. State Route 79 is a busy arterial facilitating movement of people into and out of Madison Center. The existing Northeast Corridor railroad tracks, which straddle the Proposed Action site, are active with Amtrak, freight, and SLE commuter trains, and thus contribute to existing noise levels. To the south of the Proposed Action site is Bradley Road, which serves downtown commercial, as well as surrounding industrial and residential land uses. Bradley Road is also part of the transportation network serving the existing Madison Railroad Station. Interstate 95 is not far from the Proposed Action site, located approximately 1,000 feet to the north.

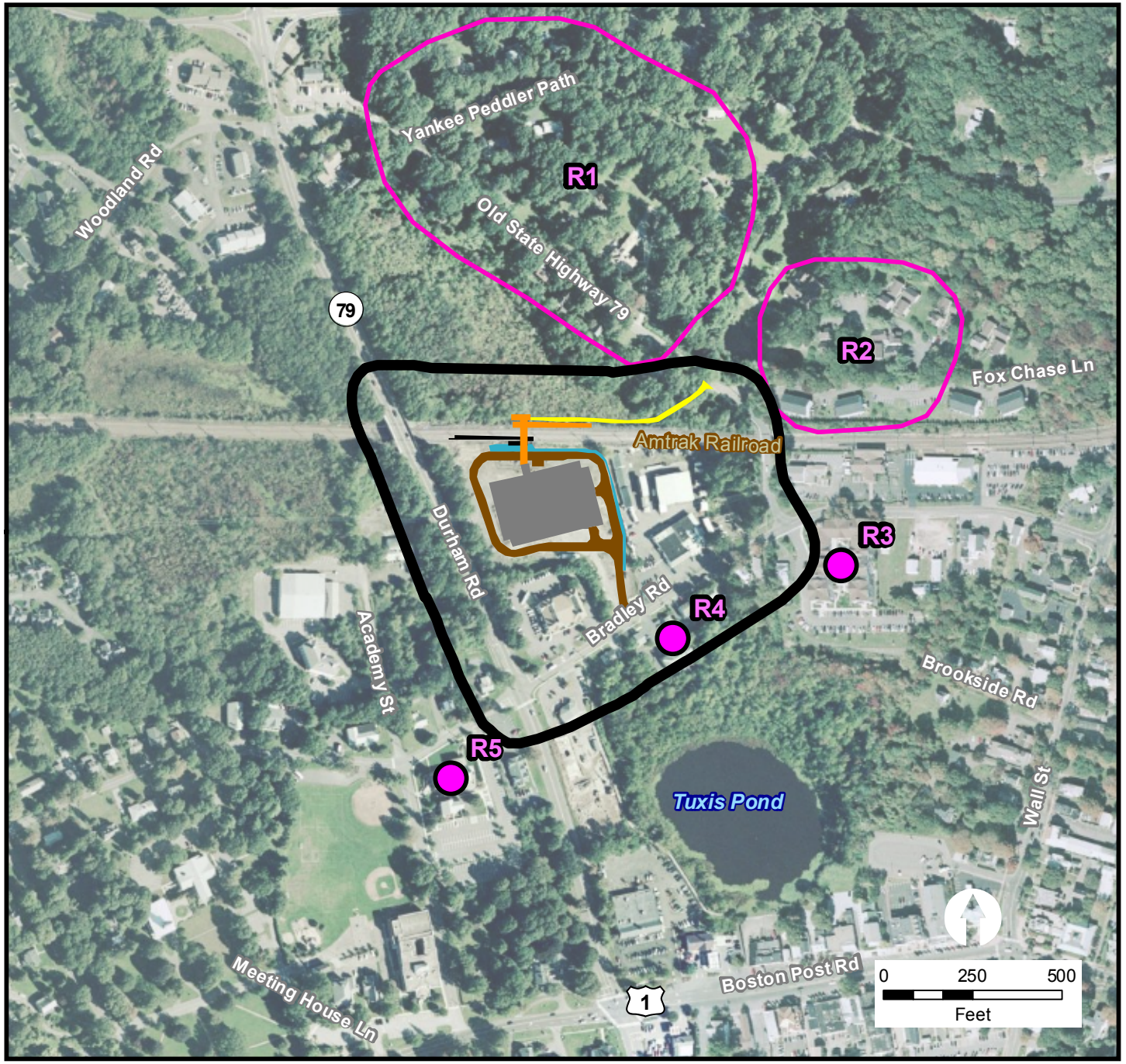
Land uses surrounding the Proposed Action site are mixed and include residential, commercial, institutional, industrial, and recreational uses. Figure 5 depicts noise-sensitive land uses in the vicinity of the Proposed Action site. The receptors include several residential clusters as well as a church as listed in Table 10 below:

Table 10: Noise Sensitive Receptors in the Vicinity of the Proposed Action Site

Receptor	Receptor Description	Location
R1	Residential neighborhood defined by Old State Route 79 and Yankee Peddler Path. Houses consist of one, two, and three-story single-family dwellings.	420 feet northeast of Proposed Action site
R2	Residential neighborhood defined by Railside Place and Fox Chase Lane. Neighborhood consists of two-story apartments.	795 feet east of Proposed Action site
R3	The Hearth at Tuxis Pond, a senior assisted living facility on Bradley Road. Three-story building complex.	820 feet southeast of Proposed Action site.
R4	Mixed residential dwellings along Bradley Road. Primarily commercial use in the area with a few two and three-story residential dwellings.	550 feet south of the Proposed Action site
R5	St. Margaret Roman Catholic Church on Academy Street.	840 feet southwest of the Proposed Action site

Source: Fitzgerald & Halliday, Inc., July 2008.

Existing 2008 noise levels have not been measured for this EIE and no prior studies quantifying existing noise levels are known to exist for the project study area. Despite the lack of quantitative noise data for the project site, suburban environments similar to this one in Madison are considered moderately noisy places. At this particular site, noise is predominately generated by the frequent passage of SLE, Amtrak, and freight trains along the existing railroad corridor.



Study Area

Noise Sensitive Receptors

Residential Neighborhoods

Proposed Action

- Ped. Bridge/North Platform
- South Platform (Existing)
- Loop Road
- Garage
- Const. Access/Maint. Road
- Sidewalk

Figure 5
Noise Sensitive Receptors

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Noise from trains is generated not only by the steel wheels on the rails, but also emanates from whistles as trains approach Madison Station. Other sources of noise in the project area include vehicular traffic along I-95, State Route 79, and Bradley Road.

In general, noise levels within suburban environments typically range from 55 dBA (A-weighted decibels) to 60 dBA (*Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006). Because the existing railroad corridor is the most prominent source of existing noise affecting noise sensitive receptors in the project study area, column three/row three entitled, "Railroad Lines" of Table 5-7 in the referenced FTA manual was used to estimate existing noise levels. According to the "Railroad Lines" data contained in Table 5-7, noise sensitive receptors that are located between 60 and 120 feet from an active rail line experience noise levels of approximately 65 dBA. Noise sensitive receptors located between 120 and 240 feet from an active rail line experience noise levels of approximately 60 dBA. Noise sensitive receptors located between 240 and 500 feet from an active rail line experience noise levels of approximately 55 dBA. Also, those noise sensitive receptors located 800 feet away (or greater) experience noise levels of approximately 45 dBA. Table 11 indicates that existing noise levels from the rail corridor at the receptors identified in Table 10 range from 55 to 65 L_{dn} (L_{dn} is a day-night sound level which describes a receiver's cumulative noise exposure from all events over a full 24 hours, with events between 10 P.M. and 7 A.M. increased by 10 decibels to account for greater nighttime sensitivity to noise). Overall, based on the known noise sources in the study area, existing noise levels at the Proposed Action site are anticipated to fall within or slightly exceed a typical suburban noise exposure range.

Table 11: Estimate of Noise Exposure from Existing Rail Corridor at Identified Noise Sensitive Receptors

Receptor	Distance (in feet) to Existing Railroad Corridor	Noise Exposure Estimate (L_{dn})
R1	360	55
R2	75	65
R3	100	65
R4	450	55
R5	950	45

Source: Fitzgerald & Halliday, Inc., July 2008.

Direct and Indirect Impacts

The No-Build Alternative represents no change to the existing environment at the proposed site and therefore would have no adverse noise effects.

According to guidance contained in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (FTA-VA-90-1003-06, May 2006); prior to any detailed noise modeling, a noise screening procedure is first conducted to determine if noise sensitive receptors fall within screening distances (or thresholds) that have been established for various types of transit projects. If a receptor falls within an established screening distance, then a detailed noise analysis is required. If a receptor falls outside the established threshold distance, then modeling is not required and noise impacts will not occur from the project. This screening procedure is outlined in Chapter 4 of FTA's guidance manual, specifically in Tables 4-1 and 4-2.

New Parking Garage

For the Proposed Action, the most prominent feature is the construction of the new 585-space parking garage. The new parking garage will replace and be constructed on top of a 199-space surface parking lot at the Proposed Action site which was constructed in July 2008 as part of State Project 310-0020. According to Chapter 4 of the FTA noise manual, noise modeling for parking facilities is only required if noise sensitive receptors (such as residences) fall within 125 (unobstructed) feet of the new parking facility and only if the parking facility has a capacity of over 1,000 vehicles. Since neither of these two thresholds applies to the Proposed Action, it is concluded that the parking garage component of the Proposed Action will have no impact with respect to noise once it is fully constructed and operational.

New North Side Platform

The Proposed Action also includes the construction of a new north side high-level rail platform and pedestrian overpass. A south side high-level rail platform with a passenger station and shelter has been constructed as a separate project (State Project 310-0020) and was completed in July 2008. There is currently an existing Madison Station approximately one-quarter mile east of the Proposed Action site at the northwest intersection of Bradley Road, Wall Street, and Railroad Avenue. It is known that at least the same number of trains, if not more, will be traveling along the rail corridor in the vicinity of the project in future years as ridership increases and the SLE service is expanded. Any increase in the number of trains along the SLE corridor, however, is a planning decision by CTDOT made in conjunction with Amtrak and is based on increased growth and ridership demands along the overall SLE system. Thus, the construction of the new north side high-level rail platform itself will not immediately precipitate an increase in the number of SLE trains, and therefore will not contribute to increased noise levels in the project study area.

With respect to train whistles, train engineers blow whistles for three specific reasons:

- When approaching and/or departing a station,
- Upon approaching an at-grade railroad crossing, and
- To warn railroad workers and/or trespassers within the railroad right-of-way of an approaching train.

Since there are no at-grade railroad crossings in the project study area, train whistles are only blown near the existing Madison SLE Station for two of the three reasons mentioned above. Since the Proposed Action alone will not precipitate an increase in the number of trains stopping at the Madison SLE station (as described above) there will be no perceived noise impact resulting from train whistles associated with the Proposed Action. Existing and future conditions will remain the same with the project.

Access Roadways to Station

With respect to the access roadways leading to the rail station, Chapter 4 of the FTA noise manual stipulates that detailed noise modeling is only required for access roadways when noise sensitive receptors along the access roadway fall within 100 feet (unobstructed) or 50 feet (obstructed) of the access roadway, and only when the access roadway carries 1,000 vehicles per peak hour and 12 buses per peak hour. Receptors along Old State Route 79 are approximately 100 feet (unobstructed) from the access roadway but existing and future peak hour volumes along Old State Route 79 are less than 1,000 vehicles. It is therefore concluded that Old State Route 79, as an access roadway to the station, will have no impact with respect to noise as it relates to the construction and operation of the Proposed Action. Similarly, the mixed residential dwellings along Bradley Road as represented by label R4 on Figure 5 are also within 100 feet of Bradley Road. However, existing and future peak hour volumes along Bradley Road are less than 1,000 vehicles. It is therefore concluded that Bradley Road, as an access roadway to the station, will have no impact with respect to noise as it relates to the construction and operation of the Proposed Action.

Increased noise levels associated with the Proposed Action will be noticeable only during construction activities. These impacts are addressed in Section 3.20 entitled *Construction Impacts*.

Proposed Mitigation

The Proposed Action will not result in adverse noise impacts. Therefore, noise mitigation is not required or proposed.

3.6. Neighborhoods/Housing

The following discussion of neighborhoods and housing includes consideration of local socio-economic conditions, existing neighborhoods, and residential character. Local socio-economic conditions include major employers, economic trends, employment levels, income, and poverty levels. Comparative information on neighborhoods, housing, and local socio-economic conditions was obtained from the U.S. Census 2000, Connecticut Economic Resources Center (CERC), and field observation.

Existing Setting

Local Socio-Economic Conditions

Socioeconomic conditions considered for this EIE include local employment, major employment sectors, median household income, and poverty and labor force information. Data regarding these economic indicators are provided in the following tables.

Table 12: 2008 Economic Profile for Madison, CT

Housing Data	Madison
Median Household Income (2007)	$109,924
New Housing Units (2006)	45
Housing Sales Units (2006)	234
Median Residential Sales Price (2006)	$502,500
Employment By Sector	
Agriculture	1.1%
Construction/Mining	6.3%
Manufacturing	6.6%
Transportation and Utilities	5.3%
Trade	23.0%
Finance, Insurance, Real Estate	5.8%
Services	48.7%
Government	3.4%

Source: CERC Town Profile 2008

Major sources of employment in Madison include services (i.e., hair salons, accountants, dry cleaners) and trades (i.e., electricians, plumbers) respectively.

Table 13: Comparison of Census 2000 Employment and Income Data

	Study Area*	Madison	New Haven County	State of CT
Income/Poverty				
Median Household Income (1999)	$57,407	$87,497	$48,834	$53,935
Percent Below Poverty	1.8%	1.3%	9.2%	7.6%
Employment Status				
Population	667	17,858	824,008	3,405,565
Of Employment Age (16+)	549	13,406	643,641	2,652,316
Employed	364	8,931	396,326	1,664,440
Percent Unemployed (2005)	1.6%	2.1%	5.9%	5.3%

Source: CERC, 2008; Census 2000.

* Study Area corresponds to Census Tract 194100, Block Group 3.

The data indicates that Madison has a lower percent unemployment, a lower percent living below the poverty level, and a higher median household income than New Haven County and Connecticut. The study area data suggest a moderate income neighborhood with low unemployment and a low poverty rate. The study area median household income is lower than that of Madison as a whole, but on par with that of Connecticut.

The Proposed Action study area consists of 1) services, trades, and light industrial/manufacturing along Bradley Road and the State Route 79 corridor, and 2) a primarily commercial/retail area along the Boston Post Road/U.S. Route 1 corridor in Madison Center. The top five employers (by number of employees) in Madison in 2006 included:

- Madison Town & Schools
- Stop & Shop
- Harborside Health – Madison House
- McDonald's Restaurant
- Garrity Industries, Inc.

The five top businesses on the Grand List (taxpayers) in Madison (CERC 2004) included:

- Connecticut Light & Power
- The Hearth at Tuxis Pond LLC
- Mary Lee Stiegler
- Robert F. Schumann
- Vigliotti Construction Co.

Several of the types of businesses represented within the study area and its immediate surroundings are listed in Table 14. While these are not necessarily the largest employers or taxpayers in Madison, they provide an indicator of the diversity of businesses in the vital economic center and community downtown where the rail station is located.

Table 14: Study Area Representative Businesses and Services

Bradley Road	State Route 79 Corridor	Downtown/Boston Post Road/U.S. Route 1 Corridor
• Tuxis Lumber Company • Madison Square (professional office complex, with medical, dental, insurance, law, and other uses) • Webster Bank • Kearney Insurance Agency • Mind-Body Personal Training Studio	• Madison Dental Building • Madison Optical • Woodland Office Park (professional office complex) • East Shore Medical Center • Hair salon	• Gift and clothing stores • Antique shops • Furniture store • R.J. Julia Booksellers • Restaurants and coffee shops • Banks • Madison Wine Shop • Barber shop and hair salon • Cleaners • Toy store

Bradley Road	State Route 79 Corridor	Downtown/Boston Post Road/U.S. Route 1 Corridor
• Shoreline Chiropractic Center • Computer Wellness Clinic • Accountant, architect, and optician offices • Vista Vocational & Life Skills Center		• Pet store • Real estate offices • Gas stations • Convenience stores • CVS Pharmacy • Fine arts gallery • Opticare • Jewelers • Madison Movie Theater • Sylvan Learning Center • U.S. Post Office • Financial/investment planning offices

Source: Fitzgerald & Halliday, Inc., 2008.

Census data on commuting patterns in Madison reflect that only 2.5 percent of workers both reside *and* live in Madison. Those Madison residents that travel outside the town to get to work *and* those who live outside Madison who come into town to work rely on the inter-town transportation system. Approximately 60 percent of workers from Madison travel outside the town for work, with most workers heading to New Haven for jobs.

Neighborhoods:

Neighborhoods can be defined by formal designation, or presence of an organized neighborhood organization. They can also be identified by residents' expressed sense of community cohesion, their sense of unification, "belonging", or closeness to a neighborhood or community. The Town of Madison does not define neighborhoods for any formal planning or political sub-area purposes. In addition, there are no neighborhood organizations which represent the study area. However, there are three cohesive neighborhoods within the study area: 1) the Yankee Peddler Path neighborhood, 2) Railside Place residential community, and 3) The Hearth at Tuxis Pond (a senior living community). Each of these neighborhoods forms a cohesive cluster, sharing common architecture and resources, such as sidewalks, recreation areas, and/or surface parking. Each of these residential communities is within walking distance of the Proposed Action as well as downtown Madison.

Housing

Table 15 provides indictors of the character of housing that comprises the neighborhoods surrounding the Proposed Action site.

Table 15: Comparison of Census 2000 Household/Demographic Data

	Study Area*	Madison	New Haven County	State of CT
Household Characteristics				
Households	334	6,528	319,309	1,302,227
Housing Units	353	7,386	340,372	1,385,975
Percent Vacant Units	7.1%	11.8%	6.4%	6.1%
Percent Owner Occupied	51.6%	77.9%	59%	62.8%
Percent Renter Occupied	41.4%	10.4%	34.6%	31.2%
Population	667	17,858	824,008	3,405,565
Average Household Size	2.01	2.72	2.50	2.50
Males	356	8,611	395,879	1,648,523
Females	311	9,247	428,129	1,757,042
Median Age	43.8	41.0	37.0	37.4
Percent Elderly (65+ Years)	25.9%	14.3%	14.5%	13.8%
Percent Minority	1.8%	3.4%	20.7%	18.4%

Source: U.S. Census 2000. *Study Area corresponds to Census Tract 194100, Block Group 3.

The data suggest this is a neighborhood with a higher median age and higher percent elderly population than Madison, New Haven County, and Connecticut. The average household size in the study is comparatively lower. The data suggests that the study area includes many seniors/retirees and working individuals or couples, few with children.

Direct and Indirect Impacts

Local Socio-Economic Conditions

Impacts to local socio-economic conditions were assessed in terms of changes in employment and demand for local goods and services. The No-Build Alternative will constitute a continuance of existing conditions and, as such, will have no direct or indirect impacts to local socio-economic conditions.

The Proposed Action will not displace any businesses or jobs but will have the beneficial effect of increasing opportunities to use the train to get to work with additional parking for commuters. Because the train station is within walking distance of the downtown as well as several professional office complexes, access to local goods and services in this area of Madison is convenient. The Proposed Action may indirectly increase demand for local services and goods as commuters stop en route to/from work to take care of household tasks such as dry cleaning or to purchase convenience foods or other items. This may also indirectly result in business growth which in turn could include some new job opportunities in Madison's downtown. Consequently, the Proposed Action is expected to have an indirect beneficial effect on socio-economic conditions, particularly business vitality, expansion, and job growth in Madison.

Neighborhoods

Impacts to neighborhoods were assessed in terms of disruptions to convenient access within the neighborhood (for vehicles as well as pedestrians or bicyclists), introduction of physical barriers to resident interaction within a neighborhood, loss of community institutions, and loss of structures important to the cohesive architectural or historical fabric of the neighborhood. The No-Build Alternative will constitute a continuance of existing conditions and, as such, will have no direct or indirect impacts on neighborhoods.

Under the Proposed Action, commuter access to the parking garage and north side high-level rail platform will be gained from Bradley Road, via a driveway located between Tuxis Lumber Company and Madison Square. This public access driveway was constructed and opened in July 2008 as part of State Project 310-0020. That project involved the relocation of the old Madison Railroad Station and surface parking lot from the northwest corner of the Bradley Road/Wall Street intersection to the site of the former Laidlaw Transit school bus storage and maintenance facility. Commuters planning on using the new parking garage and north side high-level rail platform at the new Madison Station will rely on the same transportation network as users of the old Madison Station (located approximately one-quarter mile to the east).

The Proposed Action will also include an emergency/maintenance access driveway leading from Old Route 79 to the north side high-level rail platform. This restricted access/gated gravel driveway will be constructed parallel to the north side of the rail corridor and will initially be used for construction vehicle access. Overall, access to the new railroad station and parking garage will not significantly affect existing access patterns within adjacent neighborhoods. The traffic analysis conducted for this EIE supports this conclusion as residential neighborhoods and nearby businesses will not be inconvenienced by traffic congestion associated with the Proposed Action. In addition, no new physical barriers to access within the neighborhood will be created. No community institutions or important structures will be displaced for the Proposed Action. Consequently, the Proposed Action will have no adverse effect to any neighborhoods.

Housing

The No-Build Alternative will constitute continuance of existing conditions and, as such, will have no direct or indirect impacts to neighborhoods.

The Proposed Action may result in one adverse impact on private property, as a partial taking of land may be necessary for development of a construction access road located north of the railroad tracks with an access point off of Old Route 79. Once project elements located north of the tracks are constructed, the gravel road access will remain in place to allow for future maintenance as well as emergency access. This partial taking may involve approximately 0.2 acres of land but the taking will have no substantive direct or indirect effect on the overall mix or availability of existing housing in the surrounding neighborhoods. Consequently, the Proposed Action will have no adverse direct or indirect impact on housing in the study area.

Mitigation

The Proposed Action will not result in any direct or indirect impacts to neighborhoods, housing, or existing socio-economic conditions. Therefore, no mitigation is required or proposed.

3.7. Water Quality

Existing Setting

Surface Water

There is an unnamed creek which runs northwest to southeast through the study area, behind the residences on Old Route 79. This creek forms the eastern boundary of a large red maple swamp wetland north of the Proposed Action site. The unnamed creek is channeled under Bradley Road via a culvert, is piped underground, and ultimately discharges to Tuxis Pond, a surface water body approximately 900 feet southeast of the Proposed Action site.

A second unnamed watercourse is located southwest of the Proposed Action site. The stream originates in a wetland located between Academy Street and State Route 79 and then flows in an easterly direction under State Route 79 via a culvert. East of State Route 79, the unnamed stream serves as the property boundary between the Proposed Action site on the north and the Madison Square office condominiums to the south. The stream then curves to the south and passes by culvert under Bradley Road and ultimately drains into Tuxis Pond. The stream collects stormwater runoff for State Route 79 as well as several developed parcels. There are several other small ponds around the study area, as well as a third unnamed creek east of the study area, which is also hydraulically connected to Tuxis Pond. Refer to Figure 6 entitled Wetlands and Watercourses for the location of the streams and small ponds described above.

According to the State of Connecticut Water Quality Standards (CTDEP, December 17, 2002), Tuxis Pond, as well as the unnamed creeks and other small ponds in the study area, have a Class A water quality designation. Designated uses of Class A surface water resources include potential drinking water, fish and wildlife habitat, recreational uses, and agricultural and industrial supply.

Groundwater

Groundwater in the project vicinity is classified by CTDEP as GA (GIS *Ground Water Classifications* Data Layer, updated 2006). Designated uses of Class GA groundwater resources include: existing private and potential public or private supplies of water suitable for drinking without treatment; and base flow for hydraulically connected surface water bodies.

According to the CTDEP Aquifer Protection Program, there are no state identified Aquifer Protection Areas (APAs) within the project study area. Also, there are no public surface or

groundwater drinking water supplies or known domestic wells within one mile of the Proposed Action site. Southern Madison's drinking water supply comes, primarily, from the Connecticut Water Company. A water main runs along Bradley Road that services the site and surrounding area to the south of I-95.

Depth to groundwater at the Proposed Action site was measured in nine wells on June 25, 2003 while conducting a Task 220 Exploratory Site Investigation for the Laidlaw Bus Garage – CTDOT Project No: 310-0020 (GEI Consultants, July 2, 2003). Laidlaw was the former occupant of the Proposed Action site. Groundwater depths on site range from 1.17 to 4.59 feet below grade. General groundwater flow was determined to be to the south towards the unnamed stream that forms the property boundary between the Proposed Action site and the Madison Square office condominiums.

Direct and Indirect Impacts

The No-Build Alternative would result in no direct or indirect impacts to surface or groundwater resources.

The Proposed Action's potential impacts on water quality associated with surface water, stormwater, and groundwater are described below.

Surface Water and Stormwater

There will be no net increase in impervious surface area with the Proposed Action. The existing site consists of a paved surface parking lot that was constructed as part of State Project 310-0020. The Proposed Action will involve the construction of a new three-level parking garage directly on the site of the existing surface lot. A loop-road will encircle the parking garage which will allow for parking garage access/egress as well as for passenger drop-offs directly in front of the station platforms. Like the parking garage, the loop road will also be constructed on the site of the existing paved surface parking lot. The Proposed Action also includes a construction /emergency/maintenance access road connecting Old Route 79 to the new north side high-level rail platform. This will be a pervious gravel driveway with restricted (gated) access.

Paved roadway surfaces and the upper exposed level of the parking garage are accumulation areas for contaminants associated with motor vehicle operations, such as fuel and oil leaks, brake and tire dust, and other potentially toxic materials. During storm events, these contaminants can be conveyed via sheet flow and/or piped drainage systems to downstream waters. The hard asphalt and concrete surfaces convey runoff faster than soils and vegetation, thereby potentially resulting in faster-moving, more erosive velocities of stormwater flowing from the site. Because the existing site is already paved and utilized for parking, stormwater runoff characteristics such as volume, velocity, and type of contaminants will not change significantly with the Proposed Action as compared to the existing condition. In fact, the construction of a parking garage actually reduces potential impacts attributed to stormwater runoff as the structure provides more parking spaces on site with less impervious surface. Only the top level of the garage will be

exposed to rainfall that will produce stormwater runoff. Interior parking levels will be shielded from the elements and will have a separate closed drainage system that will lead to an underground storage tank. The tank will be emptied on a regular basis by a contractor who will haul the contents off-site to an approved treatment facility.

During construction, there is an increased risk of water quality degradation from soil erosion, sediments in runoff, turbidity, and fuel or oil spills associated with excavation, grading, and construction equipment. Soil excavation, and grading, if not properly managed, can trigger soil erosion and sedimentation of downstream waters. Erosion and sedimentation controls will be implemented during the construction period to mitigate for this impact. Refer to Section 3.20 Construction Impacts for additional information pertaining to erosion and sedimentation controls.

Mitigation measures are described in more detail below. With the implementation of proposed mitigation, no adverse effects on water quality from the Proposed Action are expected.

Groundwater

Although there are no aquifer protection areas or groundwater supply wells in close proximity to the Proposed Action site, adverse impacts on groundwater can occur when contaminants, either on the surface or within the soil, infiltrate the groundwater table. To minimize such impacts, the proposed stormwater management system will be designed to collect and treat potentially contaminated runoff from the new facility. For interior parking areas, floor drains will connect to oil water separators. Drainage will flow into floor drains in the garage and pass through these treatment devices prior to entering an underground storage tank. Contaminated drainage in this storage tank will be hauled offsite at regular intervals by a licensed contractor. Overall, the parking garage drainage system, along with other water quality mitigation measures (described below) will significantly reduce any adverse effects that stormwater runoff may have on groundwater resources.

Proposed Mitigation

The Proposed Action will incorporate a comprehensive stormwater handling and drainage design to effectively minimize the effects of runoff. Vegetated swales are proposed at several locations between the parking garage and the loop road. Stormwater runoff from the loop road and from other impervious surfaces will be conveyed via sheet flow and/or an engineering drainage system consisting of catch basins and pipes to these vegetated swales. The treated stormwater will then exit the swales and be piped to the unnamed stream located southwest of the Proposed Action site.

To minimize the effects of erosion and sedimentation during the construction period, a Stormwater Pollution Control Plan and an Erosion and Sedimentation Control Plan would be designed and implemented in accordance with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control* (CTDEP, 2002). The measures taken would prevent and minimize

sedimentation, siltation, and/or pollution of the unnamed creeks in the study area, as well as Tuxis Pond. Stormwater management facilities will be fully coordinated with CTDEP and will be appropriately designed in conformance with the *Connecticut Stormwater Quality Manual* (CTDEP, 2004).

The Proposed Action would disturb one or more acres, triggering the need for a Dewatering Wastewater/Construction Stormwater General Permit from CTDEP. A Stormwater Pollution Prevention Plan (SWPPP) will be required by the permit.

3.8. Hydrology and Floodplains

Existing Setting

Hydrology

The Proposed Action site is in a very level area surrounded by wetlands on several sides. Drainage flow is generally from north to south and west to east on and around the site. There is an unnamed watercourse which runs northwest to southeast through the study area, behind the residences on Old Route 79. This watercourse forms the eastern boundary of a red maple swamp located north of the Proposed Action site. The swamp receives drainage from higher elevation land uses primarily to the north and northeast and is hydrologically connected to wetlands west of State Route 79 by culverts. Some of these culverts were observed to be laden with silt and/or clogged with debris. Based on the bowl shape of this wetland and hydrologic evidence that the water level fluctuates, it is clear that this area serves to store and attenuate flood waters. Drainage and flood waters, flowing southerly, collect along the northern side of the railroad tracks, then easterly into the unnamed creek. The watercourse then flows southeasterly in a piped system under the railroad tracks and southerly under Bradley Road, ultimately discharging to Tuxis Pond, southeast of the Proposed Action site.

A second unnamed watercourse is located south of the Proposed Action site and forms the property line between the Proposed Action site and the Madison Square office condominiums to the south. This watercourse flows easterly from a culvert under State Route 79, then curves south and is piped under Bradley Road on its way toward Tuxis Pond.

Floodplains

There are no 100-year floodplains within the vicinity of the Proposed Action site.

Stream Channel Encroachment Lines

There are no Stream Channel Encroachment Lines (SCELs) in the vicinity of the Proposed Action site.

Direct and Indirect Impacts

The No-Build Alternative would involve no construction and therefore has no direct or indirect impacts on hydrology, floodways, 100-year floodplain resources, or SCEL.

There are no floodplains or SCELs in the vicinity of the Proposed Action site, and, therefore no impacts to these resources.

Construction of the north side high-level rail platform and the emergency access/maintenance road would require some filling of the wetland located north of the railroad corridor. To maintain existing hydrology, an appropriately sized culvert, as determined by a drainage engineer, will be installed where the access road will cross the unnamed stream channel. Overall, the Proposed Action is not anticipated to adversely affect the hydraulic characteristics of the site nor concentrate flows in such a way as to increase erosion.

Proposed Mitigation

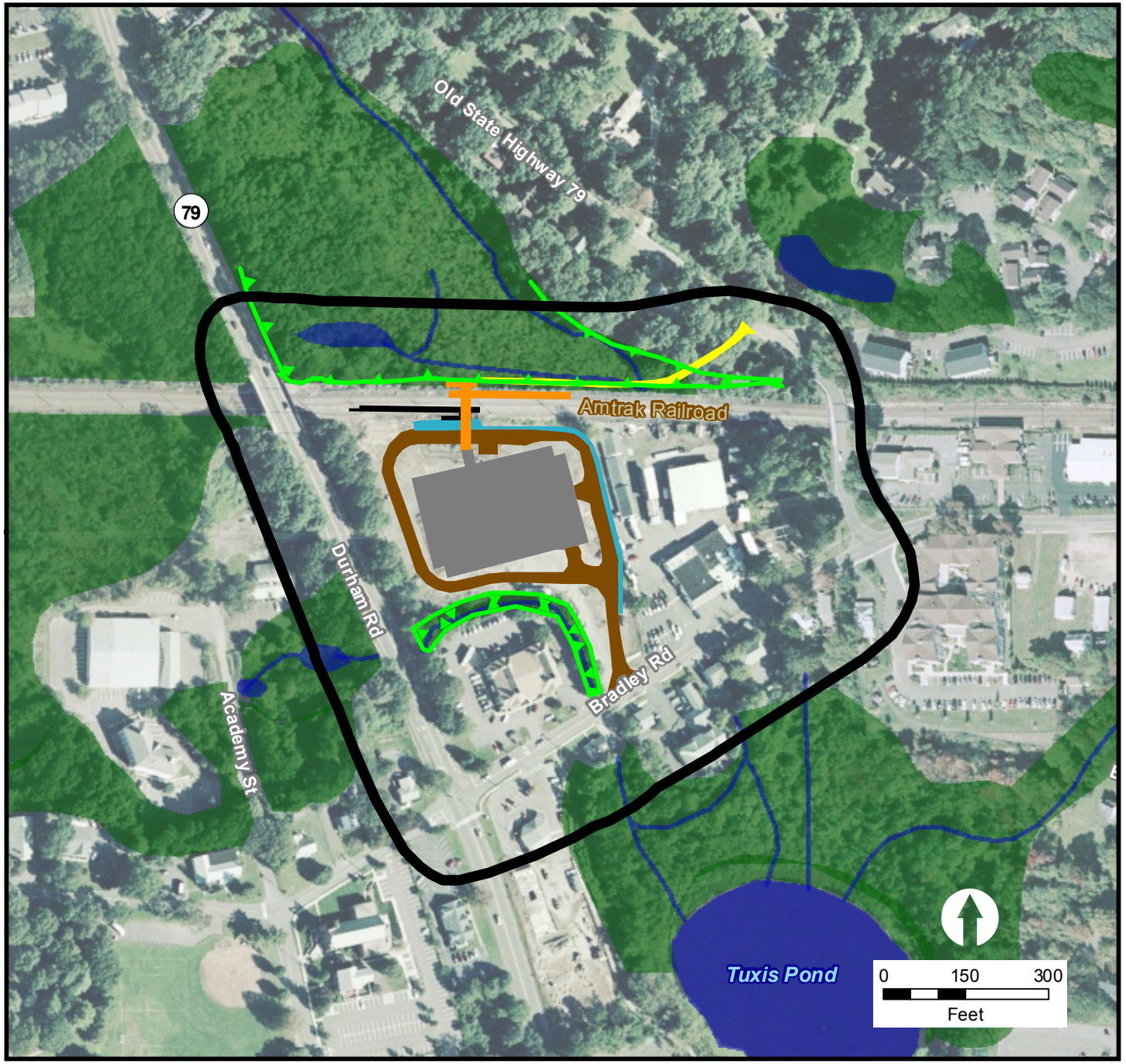
Potential hydrologic impacts attributed to stormwater runoff from the Proposed Action site will be mitigated as referenced in Section 3.7 – Water Quality - of this EIE. Mitigation measures will be fully coordinated with the CTDEP and will be appropriately designed in conformance with the *Connecticut Stormwater Quality Manual* (CTDEP, 2004). Overall, construction and post-construction runoff from the site will be collected and detained in swales and other proposed stormwater management features around the proposed parking lot that are designed to gradually discharge runoff so that runoff volumes do not exceed pre-construction conditions.

3.9. Wetlands

Existing Setting

There are two wetland areas that lie next to the Proposed Action site within the study area. One is a forested wetland of approximately seven (7) acres along the north side of the tracks. The other is a narrow stream channel of approximately 0.4 acres on the south side of the proposed parking garage and loop road. The forested wetland was field delineated by CTDOT in July 2002 and June 2007. The stream channel was field delineated by CTDOT in June 2003. The boundaries of the delineated wetlands, as well as the adjacent wetlands (hydric soils) as mapped by the Natural Resource Conservation Service (NRCS), are shown on Figure 6.

The forested wetland is a red maple swamp, which is the most common type of forested wetland in Connecticut. Vegetation is dominated by red maple (*Acer rubrum*) trees, mixed with some young white pines (*Pinus strobus*) directly along the tracks and black birch (*Betula lenta*) in the slightly higher portions of the wetland. The shrub layer, which is sparse throughout most of the wetland, includes silky dogwood (*Cornus amomum*) and saplings of red maple, red oak, and black birch. The ground layer has some ferns but predominantly has deep leaf litter.



Study Area
Streams
Field Delineated Wetlands
Surface Water
NRCS Mapped Inland Wetlands

Proposed Action

Ped. Bridge/North Platform
South Platform (Existing)
Loop Road
Garage
Const. Access/Maint. Road
Sidewalk

Figure 6
Wetlands & Watercourses

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

A watercourse runs along the eastern boundary of the wetland, carrying flows southeasterly into a culvert under the railroad tracks, and from there south to Tuxis Pond. Runoff from the north and west collects in a small pond in the southwest corner of the wetland and also comes to rest as open water at the base of the railroad ballast. This drainage then flows easterly along the tracks to meet the watercourse near the culvert under the railroad tracks.

Within the wetland, a meandering stream channel forms and flows southerly toward the eastern side of the small pond. Along this short stretch of stream is an area of well developed shrub and ground-layer vegetation, as well as several dead snags. This small patch therefore has the structure of a scrub-shrub wetland, nested within the overall red maple swamp. Vegetation in this portion of the wetland includes a ground layer of tussock sedge, skunk cabbage (*Symplocarpus foetidus*) and other herbaceous plants, a shrub layer dominated by young red maple and silky dogwood, and occasional red maple trees.

The primary functions and values of this wetland are floodflow alteration and sediment/toxicant retention. The entire wetland and particularly the small pond collect drainage from the slightly higher lands to the north and from the west side of State Route 79 through an existing culvert. Based on the slightly depressed topography in this area and hydrologic evidence that the water level fluctuates, it is clear that one of the major functions of the overall wetland is flood storage. Given the developed land uses upslope from the wetland and its water collection capacity, it also has high value for sediment/toxicant retention. In the wooded swamp, there is sparse vegetation in the shrub and ground layers but the scrub-shrub area with its dense herbaceous and shrub vegetation, although small, has good value in terms of wildlife habitat, biological production, and biodiversity. Wildlife habitat is thus a secondary function. The wetland is surrounded by land uses which have diminished the wetland's connectivity with adjacent habitats: the State Route 79 fill embankment to the west; the Northeast Corridor railroad track, which is also raised; and residential home and yard development along the northern and northeastern sides. No fish habitat is present. During a site visit in spring 2008, red-winged blackbirds (*Agelaius phoeniceus*) were observed in the wetlands and northern cardinal (*Cardinalis cardinalis*) song was heard in nearby areas.

The wetland associated with the narrow stream channel has variable vegetation along its banks. For most of its length next to the proposed loop road, the northern bank of the stream has been cleared of vegetation and is managed as lawn or geotextile/rock. In this stretch, wetland vegetation on the northern bank is limited to jewelweed (*Impatiens capensis)* growing along the water's edge. Along the southern bank of the stream and on the west and south ends of the crescent-shaped delineation, a narrow fringe of wetland vegetation grows along the channel. Species are characteristic of red maple forested wetlands, with the canopy including red maple, yellow poplar *(Liriodendron tulipifera),* pin oak *(Quercus palustris),* yellow birch *(Betula lutea),* and white pine (*Pinus strobus*). The variably-dense herbaceous vegetation consists of Virginia creeper (*Parthenocissus quinquefolia),* poison ivy (*Rhus radicans),* Asiatic bittersweet *(Celastrus orbiculatus),* grape (*Vitis* spp.), jewelweed, a few cattails *(Typha latifolia),* and sensitive fern (*Onoclea sensibilis).*

This stream flows from forested wetlands west of Route 79 (Durham Road) via a culvert under the road. Next to the Proposed Action site, it curves to the south and flows under Bradley Road at a location just west of the access driveway to the new railroad station, and from there to Tuxis Pond. The primary function of this wetland is sediment/toxicant retention, as it filters sediments and pollutants originating from adjacent developed areas and roadways. No fish habitat is present and very limited wildlife habitat is offered by this wetland.

Direct and Indirect Impacts

The Proposed Action would directly impact up to approximately 0.3 acres of wetlands. Impacts would result from construction of the north side high-level rail platform and the emergency access/maintenance road, which would require some filling of the wetland north of the tracks. Most of the impacts are associated with the access road. The 0.3 acre estimate is based on the maximum potential impact from a road design with 4:1 side slopes, shown on Figure 6. The proposed (gravel) road is needed for construction of the north side platform as well as for future maintenance of the platform and for emergency access. CTDOT is considering design options to reduce wetland impacts; the potential impact of 0.3 acres is the worst case scenario. No direct impacts would occur to the stream channel on the south side of the Proposed Action, which will be separated from the construction by an existing retaining wall.

The gravel road will be pervious to allow infiltration of precipitation. A culvert will be installed at the crossing of the existing stream channel to maintain existing flows. The hydrology and drainage patterns within the wetland would thus not change. Runoff from surrounding areas would continue to feed the wetland and the wetland would continue to retain high waters and allow gradual out-flows similar to existing conditions. The important flood storage and sediment/toxicant retention functions associated with this wetland would therefore not be impacted. Minor impacts to wetland habitat could occur, as construction would result in the loss of a linear strip of trees along the rail corridor. This sliver take would cause the disturbance edge, which is presently defined by the toe of the rail corridor's ballast slope, to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk.

The proposed stormwater management system will be designed to collect, filter, and direct runoff in a manner that will not adversely impact any wetlands. The proposed treatments are described more fully in Section 3.7 of this EIE.

During construction, there is a risk of sedimentation reaching wetlands, which could degrade water quality and promote invasive plant species growth. To prevent these impacts, a Stormwater Pollution Control Plan and an Erosion and Sedimentation Control Plan would be designed and implemented in accordance with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control* (CTDEP, 2002). The measures taken will prevent and minimize sedimentation, siltation, and/or pollution of the wetlands and waterways into which the project

area's runoff drains. Stormwater management facilities will be appropriately designed in conformance with the *Connecticut Stormwater Quality Manual* (CT DEP, 2004) to ensure that stormwater runoff is appropriately treated prior to discharge from the project area.

Proposed Mitigation

Permanent inland wetland impacts will be mitigated through the provision of compensatory wetlands (in terms of acreage and/or functions and values). CTDOT is currently looking at wetland creation and restoration possibilities to mitigate impacts. Priority mitigation sites will be state-owned properties and sites with evidence of filling or disturbance to prior wetlands, but all options will be investigated. Sites located in or adjacent to the project area will be investigated first and if none are found, the search will be expanded to include sites within the project watershed or beyond as necessary. The ultimate mitigation package will be investigated and designed through consultation with the CTDEP and Army Corps of Engineers (ACOE) as part of the environmental permitting process.

Environmental permits triggered by the construction activities in inland wetlands include the federal ACOE Section 404 and the state CTDEP Inland Wetlands and Watercourses permits. If an individual ACOE permit is required, a CTDEP Water Quality Certification will also be required. Permit requirements will include compensatory mitigation for inland wetland impacts, erosion and sedimentation control measures, stormwater best management practices, and additional environmental protection actions.

3.10. Flora/Fauna/Habitats/Threatened and Endangered Species

Existing Setting

Madison is located in the eastern coastal ecoregion of Connecticut (Dowhan and Craig, 1976), characterized by relatively level lands with areas of rock outcroppings. The Proposed Action site spans a very level area that includes both developed land and undeveloped wetlands.

The ecological resources in the overall study area have been previously affected and fragmented by development. Development has replaced native habitats by pavement and buildings, has created barriers to wildlife dispersal, and changed runoff patterns. The portion of the Proposed Action site south of the tracks and abutting properties to the south and southeast are commercial and mixed use properties with buildings and pavement. North and northeast of the Proposed Action site, land use is more suburban and is characterized by scattered low-density residential development and relatively small nodes of commercial development. To the west and southwest of the site, on the west side of State Route 79, are two other quadrants of undeveloped wetlands that appear, from aerial photographic review (1934 series), to be part of the same formerly contiguous wetland system.

Flora and Fauna

The majority of the Proposed Action site, south of the railroad tracks, is a cleared parking area that was formerly the site of a school bus storage and maintenance facility owned by Laidlaw Transit. This area and the surrounding developed commercial properties are mostly devoid of vegetation, although there are some narrow landscape fringes and, as described in the Wetland section, a narrow stream channel between the Proposed Action site and the Madison Square office condominium development to the south. Overall, these areas do not sustain diverse or beneficial flora and fauna.

North of the tracks is a red maple forested wetland (swamp), which provides a range of native plant species and offers the best potential wildlife habitat in the study area. This area is designated as town-owned open space. More northerly of the wetlands are low-density residences surrounded by dense tree cover. These areas have primarily native upland trees and shrubs typical of suburban areas in Connecticut forests, such as oaks, hickories, maples, dogwoods, and others.

The red maple swamp provides a continuous tree canopy with underlying shrub and ground layers of varying composition and density, as described in detail in the Wetlands section. Important habitat elements in red maple swamps include the following: tree bark provides perch and cover for amphibians; tree roots and leaf litter provide hibernation sites for amphibians; the tree canopy provides nesting sites for birds; shrub and herbaceous layers offer important food, cover, and nesting sites for a variety of amphibians, reptiles, small mammals, and birds; ponds and open water provide breeding habitat for amphibians and reptiles. The quality of the habitat in the study area of the Proposed Action is compromised by adjacent development and by the barriers to wildlife movement posed by adjacent roadways and the railroad tracks. As such, the species diversity and the number of individuals using the site is likely lower than expected for similar habitat of a larger size or in a less disturbed setting. Still it offers a variety of habitat for various wildlife species.

Table 16 shows a potential species list for the northern forested wetlands. This list was compiled based on scientific literature of habitat associations, species distribution, and field observations for this EIE. These species have not been observed in the study area but have been documented to occur in similar habitat conditions, reflecting the vegetation, hydrologic conditions, and proximity to urban/suburban disturbance. These species could thus potentially occur. The probability of their occurrence is quite variable, even in less disturbed similar habitats throughout the state.

Of note is that the small pond in the wetland does not appear to have vernal pool characteristics. The pond appears to persist year-round. During field observations in spring 2008, there were no overhanging branches, submerged branches or leaf masses in or around the pond, and no evidence of amphibian egg masses. No amphibian vocalizations were heard. Based on these observations, vernal pool species would not be expected to occur, as reflected in the potential species list.

During a site visit in early April 2008, red-winged blackbirds (*Agelaius phoeniceus*) were observed in the track-side emergent wetlands and northern cardinal (*Cardinalis cardinalis*) song was heard in nearby areas. No other wildlife species or their signs were observed around any part of the site.

Table 16: Potential Wildlife Species List for the Forested (Red Maple) Wetlands in the Proposed Action Study Area

Amphibians	
American toad	*Bufo a. americanus*
Northern spring peeper	*Pseudacris c. crucifer*
Gray treefrog	*Hyla versicolor*
Red-spotted newt	*Notophthalmus v. viridescens*
Green frog	*Rana clamitans melanota*
Pickerel frog	*Rana palustris*
Northern redback salamander	*Plethodon cinereus*
Reptiles	
Snapping turtle	*Chelydra s. serpentina*
Eastern garter snake	*Thamnophis s. sirtalis*
Mammals	
White-tailed deer	*Odocoileus virginianus*
Gray fox	*Urocyon cinereoargenteus*
Virginia opossum	*Didelphis virginiana*
Raccoon	*Procyon lotor*
Gray squirrel	*Sciurus carolinensis*
White-footed mouse	*Peromyscus leucopus*
Short-tailed shrew	*Blarina brevicauda*
Big brown bat	*Eptesicus fuscus*
Birds	
Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Blue jay	*Cyanocitta cristata*
Black-capped chickadee	*Parus atricapillus*
Carolina wren	*Thryothorus ludovicianus* (brushy thickets)
Veery	*Catharus fuscescens*
Northern cardinal	*Cardinalis cardinalis*
Red-winged blackbirds	*Agelaius phoeniceus*
Vireos	*Vireo* spp.
Waterthrushes	*Seiurus* spp.

Source: Habitat associations and nomenclature from DeGraaf and Rudis 1986

Ecologically Sensitive Areas / Threatened and Endangered Species

The CTDEP GIS data for the Natural Diversity Data Base (NDDB) [consulted February 2008] showed no records of threatened or endangered species or their habitats, ecologically unique areas, or species of special concern on or adjacent to the Proposed Action site. The nearest such records were located along the Madison shoreline. Per current CTDEP and U.S. Fish and Wildlife Service (USFWS) protocols, no further coordination with CTDEP or the USFWS is necessary relative to state or federally listed threatened and endangered species. Correspondence from the USFWS dated January 1, 2008 is included in Appendix A.

Direct and Indirect Impacts

The No-Build Alternative would result in no construction and thus no direct or indirect impacts on flora, fauna, or threatened and endangered species.

Most of the construction for the Proposed Action would occur on already disturbed ground. The one natural habitat that will be directly disturbed is the forested wetland along the north side of the tracks, where a linear strip of land totaling up to 0.3 acres could be impacted by the gravel access road and northern platform. The construction will slightly reduce the wetland's size and suitability for wildlife use. The sliver take, which will involve the removal of trees and shrubs, would cause the disturbance edge that is presently defined by the toe of the rail corridor's ballast slope, to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk. Impacts to flora and fauna overall are thus considered to be minor.

No indirect impacts to flora, fauna, or threatened and endangered species are anticipated. The loss of the wetland strip does represent a cumulative impact to habitat, since this type of minor habitat impact, added to other such impacts at other sites over time, contribute to decreased biodiversity and reduced biological productivity in the larger region.

Proposed Mitigation

The minor impacts to flora/fauna/habitats will be mitigated through the compensatory wetland mitigation package, to be developed through consultation with the CTDEP and ACOE as part of the environmental permitting process. The mitigation will be designed to replace the wildlife habitat functions of the impacted wetlands, in size and value.

3.11. Soils and Geology

Existing Setting

Soils on the Proposed Action site have been mapped as "Urban Complex/Udorthents" by the NRCS. These soils are typically found in areas that have been disturbed by excavation, filling, and various land use activities. This is consistent with field observations, a review of historic aerial photographs, and the findings of a Task 220 Exploratory Site Investigation for the site conducted by GEI Consultants dated July 2, 2003. As part of State Project 310-0020, which involved the construction of the new south side high-level rail platform and surface parking lot on the site, petroleum contaminated soils were excavated and removed from the Proposed Action site as part of site remediation activities. Clean fill was brought in and graded accordingly to allow for construction of the surface parking lot, access driveway, and south side platform. Thus, the entire site is disturbed and lacking in well developed topsoil.

According to the 1973 United States Geological Survey (USGS) Map of Bedrock Geology for the Clinton, Connecticut Quadrangle; bedrock geology underlying the site is comprised of Middletown Gneiss, biotite schist with quartz-sillimanite nodules and calcsilicate gneiss containing calcite and diopside. Bedrock was not encountered by GEI Consultants during numerous exploratory borings conducted as part of the Task 220 site investigation (July 2, 2003).

With respect to surficial geology, the Surficial Materials Map of Connecticut (CTDEP 1992) indicates that the site is underlain by fine to medium fine sand and gravel overlaid by a one-two foot layer of fill. A peat layer (two to three feet thick) at depths of 2.5 to 10 feet below grade exists throughout most areas of the site. An eight foot thick peat layer was observed at the southwestern portion of the site during exploratory borings conducted by GEI Consultants during their Task 220 site investigation (July 2, 2003). Much of the peat was removed or preconsolidated prior to the lot paving under State Project #310-0020.

There are no farmland soils of primary or statewide importance on the Proposed Action site nor are there any farming operations. Prime farmland soils exist to the north of the Proposed Action site along Old Route 79 but this area is now a residential development. In addition, there are no geological features of cultural, agricultural, or ecological significance.

Direct and Indirect Impacts

The No-Build Alternative would result in no construction and therefore no direct or indirect impacts on soils resources.

The project site contains no soils or geological features of cultural, agricultural, or ecological significance. The Proposed Action would therefore have no adverse impacts on soils-related resources.

Proposed Mitigation

Since no significant adverse impacts on soils or geology are anticipated, no mitigation is required or proposed.

3.12. Coastal Zone and Coastal Barriers

Existing Setting

The Proposed Action site is not located within the coastal zone boundary as designated by the CTDEP Coastal Area Management Program. The coastal zone in Madison includes all lands from the Long Island shore north to U.S. Route 1. Thus, there are no coastal resources, coastal barriers, or other protected coastal areas on or adjacent to the Proposed Action site.

Direct and Indirect Impacts

The No-Build Alternative would involve no construction and no direct or indirect impacts on coastal resources.

The Proposed Action will not impact coastal resources, coastal barriers or other protected coastal areas as the Proposed Action site is located north of the CTDEP designated coastal boundary.

Proposed Mitigation

Since the Proposed Action will have no impact to coastal resources or coastal barriers, no mitigation is required.

3.13. Cultural Resources

Existing Setting

Potential historic, architectural, and archaeological resources located within the general vicinity of the Proposed Action site were identified through consultation with the Historic Preservation and Museum Division of the Connecticut Commission on Culture & Tourism, and review of the National Register of Historic Places. Agency consultation was conducted by CTDOT during the planning stages of the Proposed Action. The Division Director and Deputy State Historic Preservation Officer responded in a letter dated September 29, 2006 which states, "This office expects that the proposed undertaking will have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places". The comments included in the letter were provided in accordance with the review requirements of the

National Historic Preservation Act and CEPA. The September 29, 2006 coordination letter is included in Appendix A of this EIE.

Direct and Indirect Impacts

The No-Build Alternative will not result in any impacts to cultural, architectural or archaeological resources.

The Proposed Action was evaluated for potential adverse effects on historic, architectural or archaeological resources listed on or determined eligible for the NRHP. Coordination with the SHPO (Appendix A) has revealed that the Proposed Action will have **no effect** on cultural resources.

Proposed Mitigation

Since the Proposed Action will have no effect on cultural, architectural, or archaeological resources, mitigation is not required or proposed.

3.14. Solid Waste and Hazardous Materials

Existing Setting

The Proposed Action will occur on three parcels:

- The former Laidlaw Transit school bus storage and maintenance garage property located at 77 Bradley Road. The 3.56 acre parcel sits just east of State Route 79, north of Bradley Road and south of the Northeast Corridor railroad tracks. The property was purchased by CTDOT under State Project 31-0020 for the purposes of constructing a new Madison SLE Railroad Station to replace the former station located near the northwest corner of the Wall Street/Bradley Road intersection. Under State Project 310-0020, CTDOT constructed a new south side high-level rail platform and 199-space surface parking lot south of the rail corridor. These station elements opened in July 2008.
- The linear railroad right-of-way owned by Amtrak that currently includes two active rail lines comprising the Northeast Corridor, and associated catenary infrastructure. The north side high-level rail platform to be constructed as part of the Proposed Action will be located on Amtrak-owned right-of-way.
- A privately-owned parcel located immediately north of the rail corridor and west of Old Route 79. According to Town of Madison Assessor's maps the property is owned by William J. Carroll and includes a residential structure and outbuilding. A partial take of approximately 0.2 acres is planned for the southernmost portion of the parcel adjacent to the rail corridor to allow for construction access, and later emergency and maintenance

access to the new north side high-level rail platform that will be constructed as part of the Proposed Action.

As part of the work conducted under State Project 310-0020, GEI Consultants conducted an exploratory site investigation (Task 220) for the Laidlaw Transit parcel located at 77 Bradley Road (July 2, 2003). The purpose of the Task 220 was to perform a more detailed investigation of the property to assess the nature and extent of potential on-site releases to soils, groundwater, and/or surface waters in accordance with prevailing standards and guidelines, and to determine if any remediation of such releases was required pursuant to the Remediation Standard Regulations (RSRs) of 22a-133k-1 through 3 of the Regulations of Connecticut State Agencies (RCSA).

The Task 220 effort focused specifically on six (6) potential Areas of Environmental Concern (AOEC), which were identified on the project site during a Task 120 Preliminary Site Evaluation conducted by GEI Consultants in May 14, 2003. The Task 220 investigation and a supplement to that investigation dated November 8, 2004 found that the upper four feet of soil in two of the six AOEC's contained volatile organic carbons (VOCs), semi-volatile organic carbons (SVOCs), total petroleum hydrocarbons (ETPH), and lead concentrations that were above the residential direct exposure criteria established by the Connecticut RSR (January 1996). Groundwater beneath the site was also found to be impacted with benzene and that groundwater extracted from the area posed a health threat only if consumed.

As part of State Project 310-0020, contaminated soil was excavated from the two AOECs and disposed of at an off-site treatment/disposal facility. Suitable clean fill materials were brought on-site to replace the excavated soils. Thus, the Proposed Action site has been fully remediated by the actions undertaken during State Project 310-0020 and there are no further AOEC's (environmental contamination issues) at the site.

The other parcels that comprise the Proposed Action site (the privately owned residential parcel to the north of the rail corridor and west of Old Route 79, and the linear Amtrak Northeast Corridor right-of-way) have not been investigated to the same level of detail. However, no evidence exists in available GIS data or CTDEP files to suggest that contamination issues or hazardous conditions exist on these other parcels.

Direct and Indirect Impacts

The No-Build Alternative would be a continuance of existing conditions. As such, there will be no hazardous materials and/or solid waste generation and disposal issues associated with the subject parcels.

Known contamination issues on the Proposed Action site have been resolved under State Project 310-0020. As such, there will be no hazardous materials and/or solid waste generation and disposal issues associated with the parking garage parcel located at 77 Bradley Road. The other two parcels that comprise the Proposed Action site do not appear to have any known contamination issues or hazardous conditions.

Proposed Mitigation

Since the Proposed Action will have no contamination, hazardous materials, or solid waste generation or disposal issues, mitigation is not required or proposed.

Although there is no anticipated threat of contamination, as standard practice, a Health and Safety Plan will be developed for the Proposed Action that will be communicated to construction workers.

3.15. Use/Creation of Pesticides, Toxins or Hazardous Materials

Existing Setting

Maintenance of the existing Amtrak railroad right-of-way may have involved the application of herbicides over the years to keep vegetative growth from intruding into the rail corridor. The only other hazardous materials issue associated with the Proposed Action concerns the interior drainage picked up by the floor drains in the proposed parking garage. Fuel, oils, grease and other vehicular debris may find their way into the floor drains and oil water separators included as part of the drainage design for the garage. The oil water separators will have to be regularly emptied and maintained in order to remove these hazardous materials. This is a routine maintenance operation that takes place in most parking garage structures. There is no other known use/creation of pesticides, toxins, or hazardous materials issues associated with the Proposed Action site as described in Section 3.14.

Direct and Indirect Impacts

The No-Build Alternative would be a continuance of existing conditions. As such, there will be no use/creation of pesticides, toxins, or other hazardous materials issues other than the possible application of herbicides for rail corridor maintenance as described above.

Other than the need to regularly maintain oil water separators to remove and dispose of hazardous fuel, oils, and grease, is the need to control vegetation on the developed site with sporadic pesticide applications.

Proposed Mitigation

Since no impacts will occur, mitigation is not required or proposed.

3.16. Aesthetic/Visual Effects

Existing Setting

The Proposed Action site is on level ground in a relatively level area of Madison. The Proposed Action site was formerly occupied by a school bus storage and maintenance facility that was leased by Laidlaw Transit. The site was purchased by CTDOT as part of State Project 310-0020, which relocated the old Madison Railroad Station (located one-quarter mile to the east near the intersection of Bradley Road and Wall Street) to the Laidlaw Transit site. State Project 310-0020 involved the demolition of on-site buildings, soil remediation, construction of a new south side high-level rail platform and passenger shelter, and construction of a new 199-space surface parking lot. This project was completed in July 2008.

With the completion of State Project 310-0020, the Proposed Action site being evaluated in this EIE now consists of the existing train station surface parking lot located south of the tracks, and a south side high-level rail platform and passenger shelter. The open pavement of the surface lot is covered with parked cars. In addition to the new infrastructure that has been added to the site as part of State Project 310-0020, visual features on the site include the existing Northeast Corridor railroad tracks and associated metal catenary poles and wires located along both sides of the tracks. North of the tracks, a red maple swamp abuts the tracks. Visual features include the trunks and foliage of red maple and white pine trees.

The proposed three-level parking garage will be located on the existing surface parking lot that was completed in July 2008. The northern high-level rail platform will be located along the north side of the tracks across from the existing south side platform. These locations are all currently visible from the raised transportation elements around the site, including the State Route 79 Bridge (over the railroad tracks) to the west, the Old Route 79 Bridge (over the railroad tracks) to the east, and from the tracks themselves (trains). The parking area is additionally visible from the commercial land uses directly adjacent to the station on Bradley Street. The existing platform and the catenary system are visible from the commercial properties on Bradley Street and at least partially visible from three houses on Old Route 79 to the northeast of the site. During the winter, these houses have a partially blocked view of the site; during the foliage season, their views are more obscured. At night, dark sky compliant lighting of the parking lot and station may be partially visible from these locations as well.

Direct and Indirect Impacts

The No-Build Alternative would result in no construction and thus no direct or indirect impacts on visual and aesthetic quality.

The Proposed Action would add a parking garage to the open surface parking lot south of the railroad corridor, a station platform on the north side of the tracks opposite the existing platform, a gravel emergency access/maintenance roadway leading from Old Route 79 to the north side

platform, and a new pedestrian bridge connection between the two station platforms and the proposed parking garage. The proposed north side platform would mirror the existing platform in height, size and style. The roofs of the platforms are approximately 50 feet above the level of the tracks and designed to look similar to the roofs of buildings. The garage would be constructed as a three-level structure, approximately 40 feet above existing ground, with a possible future addition of a fourth level, to approximately 50 feet in height. An elevated walkway would connect the garage to the southern and northern rail platforms at the level of the second level (40 feet above ground). The garage and station platforms will be well-maintained steel, concrete, and glass structures with areas of stone/brick fascia.

The proposed garage and platform will continue the transportation use of the site and will be visually compatible with this use by matching the architecture of the existing platform. Refer to Photo 1 included in Section 1.2 of this EIE which depicts the existing south side high-level rail platform and passenger shelter that was constructed at the Proposed Action site as part of State Project 310-0020 and opened for service on July 28, 2008. The new architectural features will be slightly higher than the catenary poles and will blend in visually and possibly soften the view of the angular industrial-looking catenary network. The scale of the garage will be larger than many of the surrounding commercial properties, but similar to the adjacent Madison Square office condominium building with tall box-shaped chimneys on Bradley Road.

The new features will be primarily visible from the commercial properties to the south, with which the features will be compatible. No adverse effects to the commercial area are anticipated. The three houses on Old Route 79 with views of the existing platform will likely experience slight negative impacts from the Proposed Action, primarily from the parking garage. The northern platform will be in keeping with current views; however the construction of the gravel drive to the station will remove a band of vegetation which currently screens the houses from full views of the parking area. They will therefore have a more exposed view of the parking area within which the new garage and its associated illumination will be visible. While the parking garage building will be architecturally clean and similar in appearance to other existing station elements, it will be a larger-scaled building with more exposure to these houses, and likely perceived as intrusive compared to their currently more suburban backdrop. This change in setting would be perceived as a visual impact.

Proposed Mitigation

The primary means of mitigating the adverse impacts to the several houses on Old Route 79 will be to establish plantings. Planting a buffer of trees and shrubs along the edges of the new gravel emergency/maintenance access road would provide visual screening of the new parking garage. The buffer would be composed of native trees and shrubs adapted to living at the edges of red maple swamps, in order to ensure their growth, long-term survival, and compatible appearance with the adjacent wetland vegetation.

To minimize visual impacts from parking garage and station lighting, full cutoff parking lot lights will be installed. These lights are designed to shine down on the surface of the parking

areas and not to cast light sideways or upwards. All lighting at the station will be "Dark Sky Compliant." Through these measures, visual and aesthetic impacts associated with the facility can in large part be successfully mitigated.

3.17. Energy Use and Conservation

Existing Setting

The Proposed Action site is comprised primarily of an existing surface parking lot south of the railroad tracks, with minimal energy use/consumption, and vacant undeveloped parcels north of the railroad tracks with no associated energy use/consumption. Energy use south of the railroad tracks is limited primarily to the electricity needed for parking lot and south side platform illumination. There is also electricity needed to operate the variable message signs on the station platform that are used to alert passengers of oncoming trains. The SLE rail corridor is electrified throughout the study area.

Direct and Indirect Impacts

The No-Build Alternative would not change background conditions in energy use within the study area or region as a whole.

The Proposed Action includes the construction of a new three-level parking garage on the site of an existing surface parking lot, a new north side high-level rail platform opposite the existing south side platform, and a pedestrian overpass with elevators connecting the new north side platform to the existing south side platform and parking garage. There are also various pedestrian connections including walkways and stairwells, and a gravel emergency access/maintenance roadway connecting Old Route 79 to the new north side platform.

Overall, the energy demand associated with the Proposed Action is minimal and is limited primarily to the electricity needed to illuminate the commuter parking areas, pedestrian connections, and to operate the elevators. Other energy requirements include power for the variable message signs on the platforms, for an audible train approach messaging system, and for lighting of a management office on the ground level of the parking garage. The Proposed Action is not anticipated to result in an immediate increase in the number of trains utilizing the SLE rail corridor; therefore, there will not be a measurable change in energy consumption associated with trains serving the new high-level rail platform on the north side of the SLE rail corridor.

As far as energy availability, there is ample energy supply to meet the increased electrical demand associated with the Proposed Action.

From a regional perspective, it is anticipated that the Proposed Action will have a positive impact on the consumption of energy because it will improve access to and enhance the use of mass transportation. Thus, the project is expected to contribute to a reduction in the consumption of

fossil fuels associated with vehicular traffic on the region's roadways, especially during peak commuting periods.

Proposed Mitigation

Since the Proposed Action will have a low energy demand, it is not anticipated to significantly change energy consumption. Also, the Proposed Action may actually contribute to a reduction in fossil fuel consumption by vehicles on a regional scale; therefore, no mitigation is proposed or required.

3.18. Public Utilities and Services

Existing Setting

The following is a brief description of the various utilities in the vicinity of the Proposed Action:

Potable Water

There are no public surface or groundwater drinking water supplies or known domestic wells within one mile of the Proposed Action site. Southern Madison's drinking water supply primarily comes from the Connecticut Water Company. Water lines are located in the streets surrounding the Proposed Actions site (State Route 79, Bradley Road, and Old Route 79).

Sanitary Sewer

The Town of Madison has no sewers and is actively involved in a sewer avoidance program. Homes are served by septic systems, or on-site subsurface sewage disposal systems, owned and maintained by property owners. Madison also has several community septic systems serving residential associations, which are maintained by the community served with oversight by the Madison Health Department/Water Pollution Control Authority (WPCA). Other properties have onsite sewage treatment plants with primary oversight by the CTDEP and secondary oversight by the Madison WPCA.

Stormwater Management

There is an unnamed creek which runs northwest to southeast through the study area, behind the residences on Old Route 79. This creek forms the eastern boundary of a large red maple swamp wetland located north of the Proposed Action site. State Route 79 and Old Route 79 are higher in elevation than the wetland area, and stormwater is conveyed via sheet flow from these streets to the wetland area, where it ponds and migrates to the unnamed creek. The unnamed creek is channeled under Bradley Road via a culvert, is piped underground, and ultimately discharges to Tuxis Pond, a surface water body approximately 900 feet southeast of the Proposed Action site.

A second unnamed watercourse is located southwest of the Proposed Action site. The stream originates in a wetland located between Academy Street and State Route 79 and then flows in an easterly direction under State Route 79 via a culvert. East of State Route 79, the unnamed stream serves as the property boundary between the Proposed Action site on the north and the Madison Square office condominiums to the south. The stream then curves to the south and passes via culvert under Bradley Road and ultimately drains into Tuxis Pond. The stream collects stormwater runoff from State Route 79 as well as from several developed parcels.

Energy Supply and Other Utilities

Connecticut Light & Power (CL&P) provides electricity to the Proposed Action site. There are underground electrical conduits that feed power to the existing parking lot and platform lights. The rail corridor is electrified as evidenced by the catenary poles, wires, transformers, and associated infrastructure. There are railroad utility conduits and junction boxes all along the rail corridor within the right-of-way. There is also a fiber optic telephone conduit located along and parallel to the north side of the railroad tracks. Gas lines are located in adjacent streets including Bradley Road and Old Route 79.

Direct and Indirect Impacts

The No-Build Alternative would represent a continuance of existing conditions and therefore would have no impact on public utilities or services.

Potable Water

There will be no impacts to potable water from the Proposed Action.

Sanitary Sewer

Madison has no sewers and is actively involved in a sewer avoidance program. Properties are served by septic systems, community septic systems, or onsite sewage treatment plants. These facilities will not be impacted by the Proposed Action.

Stormwater Management

There will be no net increase in impervious surface area with the Proposed Action. Refer to Section 3.7 of this EIE for a detailed discussion on potential stormwater quality impacts and treatment/mitigation measures associated with the Proposed Action.

Energy Supply

The Proposed Action will require electricity, supplied by CL&P, for light fixtures associated with the new commuter parking garage and various pedestrian connections including walkways and stairwells, the new north side high-level rail platform, and to power elevators connecting the

new north side platform to the existing south side platform and parking garage. Other energy requirements include power for variable message signs and the audible train approach messaging system on the station platforms, and lighting of a ground floor management office. A CL&P aerial easement will need to be relocated in order to build the three-story parking garage.

Overall, the energy demand associated with the Proposed Action is minimal. The Proposed Action is not anticipated to result in an immediate increase in the number of trains utilizing the SLE rail corridor; therefore, there will not be a measurable change in energy consumption associated with trains serving the new high-level rail platform on the north side of the rail corridor. As far as energy availability, there is ample energy supply to meet the increased electrical demand associated with the Proposed Action.

From a regional perspective, it is anticipated that the Proposed Action will have a positive impact on the consumption of energy because it will improve access to and enhance the use of mass transportation. Thus, the project is expected to contribute to a reduction in the consumption of fossil fuels associated with vehicular traffic on the region's roadways, especially during peak commuting periods.

The potential exists for temporary electrical service disruptions to nearby CL&P customers during the construction involved in making new electrical connections to the Proposed Action site. These impacts are described in Section 3.20 of this EIE entitled, Construction Period Impacts.

Proposed Mitigation

Utility construction and scheduling will be thoroughly coordinated with utility providers to minimize service disruptions to the greatest extent practicable. Such coordination will include planning to provide advanced notice of anticipated service outages to affected consumers. Additionally, all work within the railroad right-of-way will be thoroughly coordinated with Amtrak to minimize potential conflicts with railroad-related utilities.

To mitigate potential water quality degradation from erosion and sedimentation during the construction period, a Stormwater Pollution Control Plan and an Erosion and Sedimentation Control Plan will be designed and implemented in accordance with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control* (CTDEP, 2002). The measures taken would prevent and minimize sedimentation, siltation, and/or pollution of the unnamed creeks in the study area, as well as Tuxis Pond. Stormwater management facilities will be fully coordinated with the CTDEP and will be appropriately designed in conformance with the *Connecticut Stormwater Quality Manual* (CTDEP, 2004).

The Proposed Action would disturb one or more acres, triggering the need for a Dewatering Wastewater/Construction Stormwater General Permit from CTDEP. A Stormwater Pollution Prevention Plan (SWPPP) will be required by the permit.

3.19. Public Health and Safety

Existing Setting

The linear Northeast Corridor right-of-way is an electrified railroad corridor that is owned by Amtrak. Chain link fencing has been erected along the south side of the rail corridor in the vicinity of the new (July 2008) south side high-level platform and the surface parking lot to keep people (commuters) off of the railroad tracks and away from moving trains and electrical hazards. Fencing runs around the perimeter of the rail station surface parking lot and is also located in other areas along the tracks where pedestrian access to the tracks is most likely given the terrain. There is presently no fencing along the north side of the SLE rail corridor primarily because a red maple swamp occupies much of the area. The wetland effectively keeps people from illegally accessing the railroad tracks. The parcel north of the rail corridor housing the wetland is designated as town-owned open space. The Old Route 79 bridge over the rail corridor, which is located immediately east of the Proposed Action site, includes a high clearance protective fence. The fence deters people from throwing refuse onto the tracks and from accessing the tracks from the bridge.

The vicinity of the Proposed Action is routinely patrolled by the Madison Police Department, which is located at 9 Campus Drive, approximately 2.5 miles northeast of the Proposed Action site. The Madison Fire Department, located at 655 Boston Post Road, is approximately one-quarter mile south of the Proposed Action site.

Direct and Indirect Impacts

No direct or indirect adverse impacts to the provision of public safety and security services are anticipated with the No-Build Alternative or the Proposed Action.

The Proposed Action is anticipated to have several positive effects relative to safety and security on site. The pedestrian overpass that will connect the north and south platforms and parking garage will enable passengers to flow between platforms without having to physically cross an active rail line. The pedestrian overpass will also include elevators in compliance with the Americans with Disabilities Act (ADA).

Access to the new station and parking garage facility will be controlled with a steel security fence and an entrance and an exit gate. The new north side high-level rail platform will include yellow paint markings cautioning passengers to stand clear of the rail side edge of the platform and an audible train approach messaging system. Fire extinguishers and hose connections, emergency phones at regular intervals on each floor of the parking structure, a lighting system to promote pedestrian and vehicular safety and security, and other safety features will also be included in the station design. A battery-operated back-up emergency power and lighting system will be installed. Primarily passive security systems will be employed at the rail station; however, a closed circuit television system, connected to a remote monitoring station, will be

installed for security. A management office, for a security presence, will be located within the lower level of the parking structure. Pedestrian access points will be located along the perimeter of the parking structure, designed to minimize pedestrian conflicts with vehicles.

Overall, the Proposed Action is not anticipated to affect the safety and security of neighboring residential streets nor will it affect the operations of police, fire or other emergency response crews in the area. The site already houses a surface parking lot and the south side platform; the Proposed Action is simply adding other station elements (north side high-level platform, pedestrian overpass and elevators, commuter parking garage, and a north side gravel access road for the short-term construction period and long-term emergency access and maintenance) so as to make the existing station a more efficient and fully operational facility. Once constructed, the facility will continue to be actively patrolled by local police.

Proposed Mitigation

Because the Proposed Action is anticipated to have an overall beneficial impact on safety and security at the site, mitigation is not required or proposed.

3.20. Construction Period Impacts

Construction of the Proposed Action will begin in April 2010 and be completed by mid-2012. The following types of construction equipment, among others, will be used to prepare the site, and to construct the new north side high-level rail platform, pedestrian overpass, commuter parking garage, and other associated improvements:

- Dump trucks
- Dozers
- Backhoes
- Loaders
- Scrapers and Graders
- Pavers
- Mixers
- Steam Rollers
- Cranes
- Pile Drivers
- Air compressors
- Generators
- Jack hammers and other pneumatic tools
- Track side rail construction equipment

Construction of the new north side high-level rail platform and pedestrian overpass will involve using both trackside and landside construction equipment and will require extensive coordination with Amtrak in order to minimize track outages/service disruptions and to ensure safe working

conditions at all times within the electrified railroad corridor. Landside construction equipment will access the site of the new platform from a gravel access driveway that will be constructed parallel to the rail corridor from Old Route 79. The gravel access driveway will require filling in approximately 0.3 acres of the southern-most fringe of a red-maple swamp located north of the railroad corridor. The 0.3 acre estimate is based on the maximum potential impact from a road design with 4:1 side slopes. CTDOT is considering design options to reduce wetland impacts; the potential impact of 0.3 acres is the worst case scenario.

The existing surface parking lot south of the tracks will be used as a staging area for all phases of project construction, with equipment being strategically located and coordinated so as not to affect construction of the parking garage and other station elements. During construction, commuters using the Madison SLE Station will be directed to use the old Madison station south side platform and surface parking lot located approximately one-quarter mile east of the Proposed Action site near the intersection of Wall Street and Bradley Road. CTDOT presently leases the parcel from Amtrak and intends to keep that lease agreement in place at least until the Proposed Action is constructed if not longer. The temporary relocation of the SLE station back to the old site will be fully coordinated by CTDOT with Amtrak.

Construction activities associated with the Proposed Action will result in a variety of temporary impacts as described below:

Air Quality: During earthwork and construction of the Proposed Action, the potential exists for dust from exposed surfaces to become airborne. CTDOT will require contractors to comply with current best management practices. Additionally, the prolonged use of diesel-powered construction vehicles contributes to increased diesel exhaust emissions including carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter ($PM_{2.5}$). Concerns over diesel exhaust emissions have led EPA to develop new emission standards for new diesel-powered vehicles beginning in 2004.

Noise: During construction, continuous as well as intermittent (or impulse) noise will be experienced in the immediate project vicinity, which may be perceived by some to be intrusive, annoying and discomforting. This noise will be generated by construction equipment including pneumatic tools which emit strong penetrating percussive sounds, and the daily movement of dump trucks, loaders, backhoes, trackside construction equipment, and other heavy equipment to, from, and on the construction site. In general, good public relations related to noise issues should be practiced during the construction period.

Table 17 provides typical noise emission levels in A-weighted decibels (dBA) at a location 50 feet from various types of construction equipment that may be used on the project site. For comparison, everyday noise levels within suburban environments similar to that found at the Madison project site range from about 50 to 60 dBA (*Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006).

Table 17: Noise Emission Levels from Construction Equipment

Construction Equipment	*Noise Level (dBA) 50 feet from Source*
Air compressor	81
Backhoe	80
Dozer	85
Generator	81
Jackhammer	88
Loader	85
Pneumatic Tool	85
Rock Drill	98
Dump Truck	85

Source: *Transit Noise and Vibration Impact Assessment* (FTA-VA-90-1003-06, May 2006)

In general, noise levels are reduced by 6 dBA for each doubling of distance from a noise source. For example, a dump truck with a noise level of 85 dBA at 50 feet will have a noise level of 79 dBA at 100 feet, 73 dBA at 200 feet, 67 dBA at 400 feet, 61 dBA at 800 feet, and so forth. Buildings and other barriers located between a noise source and a receiver further reduce the intensity of construction noise. The closest noise sensitive receptor to the Proposed Action site is a residence on Old Route 79 that is located approximately 340 feet to the northeast. The closest occupied building is the Madison Square office condominium complex located roughly 200 feet to the southwest of the site. Noise levels from a dump truck at the residence located 340 feet from the site will roughly fall in the 67 dBA range. Noise levels from the dump truck at the Madison Square office condominiums will roughly fall in the 73 dBA range These noise levels conform to CTDOT's general provision on construction noise as defined under Section 1.10.05 of CTDOT's Standard Specifications for Road, Bridges and Incidental Construction (*Form 816*) (2004). These provisions state that, "the maximum allowable level of noise at a residence or occupied building nearest to the project site shall be 90 decibels on the "A" weighted scale (dBA).

Water Quality/Wetlands: Excavation, stockpiling, grading, and other earth moving activities lead to exposed surfaces, rendering them susceptible to wind and rain erosive forces. Runoff can carry suspended sediments to downstream receiving waters where the sediment will become deposited as runoff velocities decrease. The sedimentation of downstream receiving waters can adversely affect water quality as well as aquatic habitats for invertebrates, fish and other organisms.

Economy: Minimal economic activity will be stimulated by construction of the Proposed Action. One effect will be the production of jobs in on- and off-site construction, and trade, transportation, manufacturing, and services in support of construction. The earnings from these jobs will in turn generate personal expenditures by project-related workers that will stimulate the local and regional economy. Expenditures will also encompass materials used in construction. Overall there will be a small but beneficial construction period effect on the economy.

Solid Waste and Hazardous Materials: Solid waste will be generated from construction and will be disposed of as municipal solid waste. Any construction waste materials containing lead based paint, asbestos containing materials, or solvents (e.g., paint thinner, varnishes) will be managed as hazardous waste and disposed of by a licensed waste hauler. A Health and Safety Plan will be developed for the project and communicated to construction workers.

Public Utilities: During construction, the installation of new utility lines and connections/tie-ins (primarily electrical) has the potential to result in temporary short-term disruptions of local service. In addition, construction associated with underground utility installation has the potential to impact stormwater runoff quality as erosion of exposed soils may lead to sediment transport and potential increases in the turbidity of receiving waters.

Energy Use and Conservation: Project construction will result in an increased local demand for fossil fuels (mainly diesel fuel) and an increased demand for electricity.

Proposed Mitigation

To mitigate potential temporary construction impacts, an efficient construction phasing and sequencing plan will be developed that will include the following measures:

Appropriate mitigation for excessive idling of construction equipment and fugitive dust control are described in Section 22a-174 of the RCSA. Mitigation measures to control impacts to air quality during construction will include wetting and stabilization to decrease dust, cleaning paved areas, placing tarps over truck beds when hauling dirt, and staging construction in such a way to minimize the amount and duration of exposed earth. In addition, the contractor will be required to keep equipment maintained and operating efficiently in a clean manner to mitigate any exhaust impacts. Construction vehicles will also need to comply with the three-minute idling regulation.

While construction noise is exempt under Section 22a-69-1.8(g) of the RCSA, construction contract documents will require the contractor to limit the duration and intensity of noise generated by construction. Specifically, CTDOT's general provision on construction noise as defined under Section 1.10.05 of CTDOT's Standard Specifications for Road, Bridges and Incidental Construction (*Form 816*) (2004), states that, "The contractor shall take measures to control the noise caused by its construction operations, including but not limited to noise generated by equipment used for drilling, pile-driving, blasting, excavation and hauling. All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer. The maximum allowable level of noise at the residence or occupied building nearest to the Project site shall be 90 decibels on the "A" weighted scale (dBA). The contractor shall halt any Project operation that violates this standard until the Contractor develops and implements a methodology that enables it to conduct its Project operations within the 90-dBA limit." Although some activities may not exceed this noise specification, they may be perceived as being intrusive both in air transmitted noise and ground transmitted vibration. For this reason,

good public relations pertaining to noise issues should be considered during construction activities.

A comprehensive Erosion and Sedimentation Control Plan (E&S Plan) will be developed specifically for the Proposed Action. The E&S Plan will be implemented and maintained in conformance with the *Connecticut Guidelines for Soil Erosion and Sedimentation Control* (CTDOT, 2002) and other federal and state policies. Silt fences, hay bales, and other controls will be properly installed adjacent to the Proposed Action disturbance limits, and will be maintained throughout the period of active construction until exposed soils have become stabilized. The Proposed Action will disturb one or more acres, triggering the need for a Dewatering Wastewater/Construction Stormwater General Permit from CTDEP. A Stormwater Pollution Prevention Plan (SWPPP) will be required by the permit.

Incidental exposure of hazardous materials during construction will be addressed prior to the commencement of construction, with the development of a site-specific hazardous materials management plan. A Health & Safety Plan for construction workers will also be developed in accordance with Occupational Safety and Health Administration (OSHA) guidelines. No hazardous materials other than diesel fuel for construction equipment will be stored on site during construction. All fuel storage tanks used during construction will be equipped with secondary containment systems.

During all phases of construction, efforts will be made to avoid and minimize impacts to utilities to the greatest extent practicable. Coordination with the Town of Madison and all utility providers will take place prior to the start of construction.

During construction, track outages will be closely coordinated with the appropriate railroad authorities and will be limited to the greatest extent practicable.

The FHWA Work Zone Safety and Mobility Rule will be adhered to in accordance with CTDOT's Policy on Systematic Consideration and Management of Work Zone Impacts, (attached in Appendix E). Additionally, all construction personnel will be required to be railroad safety trained to ensure they are fully educated about the hazards of working on and adjacent to an active electrified rail corridor.

3.21. Cumulative Impacts

As required by CEPA, indirect and cumulative impacts must be studied in the EIE to determine if the Proposed Action fosters or accelerates development beyond the immediate project area and if the Proposed Action, when added to other actions, collectively results in significant environmental impacts.

Indirect effects are those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use,

population density or growth rate, and related effects on air and water and other natural resources and systems, including ecosystems. These effects were assessed and documented within each of the resource categories detailed in Sections 3.1 through 3.19 of this EIE.

Cumulative effects are defined as the impact on the environment that results from the incremental impact of the Proposed Action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The potential cumulative effects of the Proposed Action are documented below, including definition of the geographic area and time frame within which such cumulative impacts can be reasonably expected to occur.

Cumulative Impacts Analysis Topics

Table 18 summarizes the rationale for the socioeconomic, cultural, and natural environmental resources that are considered below in the cumulative impacts analysis for the Proposed Action. This listing is based on the assessment of potential direct and indirect resource impacts analyzed above for this EIE.

Table 18: Rationale – Resources Included in the Cumulative Effects Analysis

Resource	Rationale
Neighborhoods and Housing (*includes noise, cohesion, services, air quality, aesthetics/visual affects*)	Potential for indirect effects in terms of cohesion
Socio-economics (*includes employment, income, economic development*)	Potential for indirect effects
Groundwater/Surface Water Quality	Potential for indirect effects
Wetlands	Potential for direct and indirect effects

Cumulative Effects Impact Area

The cumulative impacts analysis considers planned and programmed projects which in concert with the Proposed Action may result in some cumulative effect on environmental or community resources. The analysis must, therefore, define the geographic area within which planned and programmed projects would reasonably be expected to have a synergistic effect in association with the Proposed Action. Using the environmental resources that may be affected by direct impacts of the project as a guide (Table 18 above), multiple resource boundaries were reviewed to determine appropriate cumulative effects sub-boundaries. These potential sub-boundaries include Census Block Groups, reasonable neighborhood boundaries for development within a one-mile radius of Exit 61, and the sub-watershed boundary within Madison. The cumulative effects study area is shown in Figure 7.

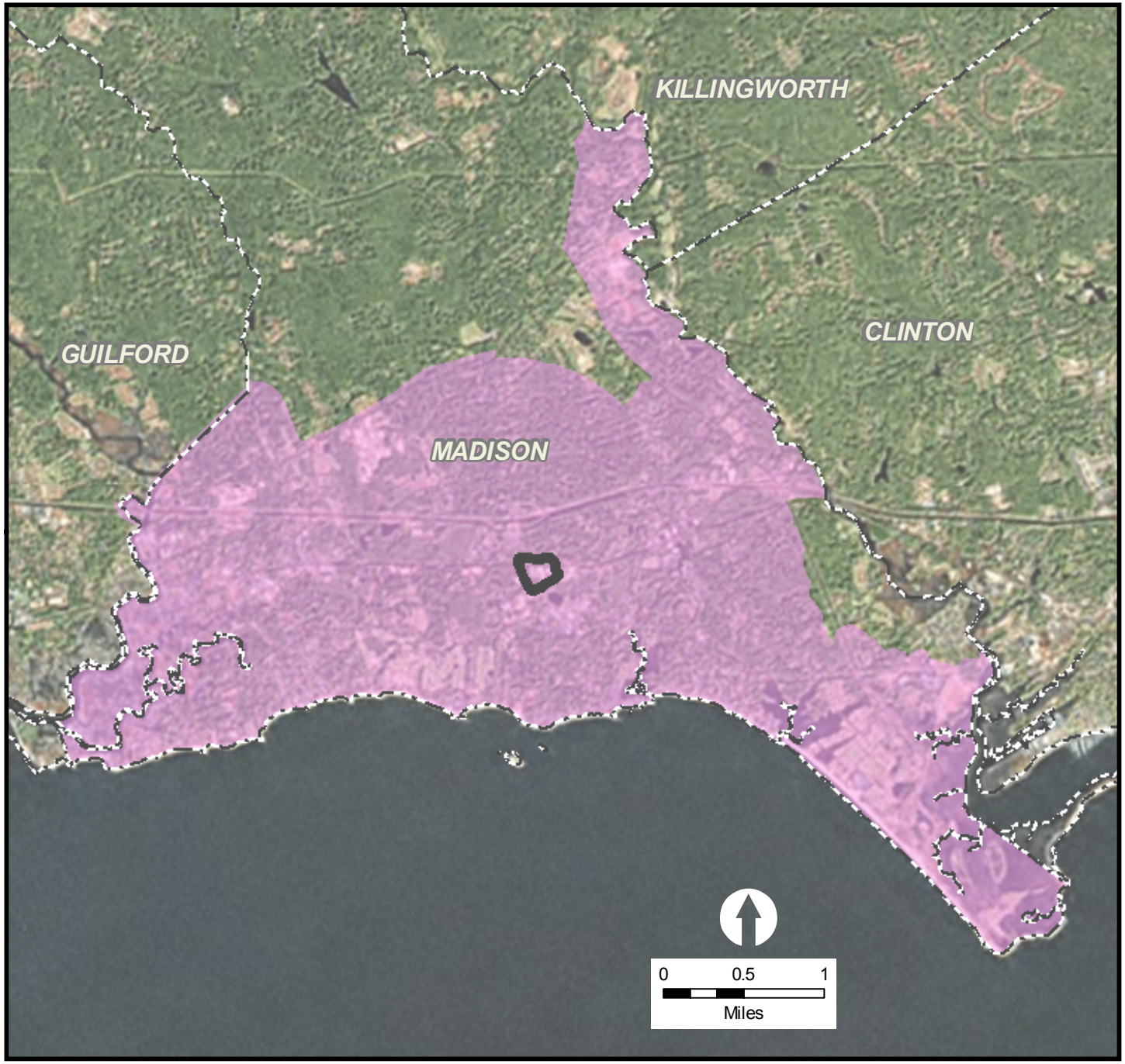
Proposed Timeline

The cumulative impacts analysis must be framed within the context of a reasonable time period. That is, it must answer the question of how the railroad line and then the Proposed Action may have had or could have a cumulative influence on resources in its surroundings in the context of other development activity over time. For this Proposed Action, the following time frames were considered:

- Past time frame: Year the SLE service opened – 1990
- Current time frame: 2008 – under current operating conditions for the rail line and current level of area-wide development
- Future time frame: The year that currently planned improvements to the commuter rail program for SLE will be completed – 2012

Planned and Programmed Development and Development Trends

Since 1990 Madison has been experiencing steady residential growth, yet limited non-residential development. Information on Madison's growth patterns and current development projects was obtained from Ms. Marylin Ozols, Planning and Zoning Administrator of Madison's Land Use Office (personal communication 6-12-2008). Residential growth in this period has been characterized primarily by new subdivisions, with a few multi-family projects near the downtown, including senior housing, and some mixed-use projects that incorporate both retail and residential units. These have been developed primarily along the Boston Post Road (U.S. Route 1) northeast of Madison's downtown. Madison had an estimated 2000 population of 17,858 persons. This represents a 15 percent increase from the 1990 population of 15,485 people. The population is expected to continue to grow but at a somewhat slower pace of six (6) percent between 2007 and 2012 (CERC, Town Profile, 2008). In addition, housing construction and sales have been strong with 45 new units and 234 home sales in 2007 (CERC Town Profile, 2008).



Study Area

ICE Area

Figure 7
Indirect and Cumulative Effects Area

Shoreline East Expansion
Madison, CT

October 2008 - Fitzgerald & Halliday, Inc. - Project # 463.12 - original in color

Aerial data - 2008 (Microsoft Virtual Earth)

Recent projects which are approved, constructed or anticipated in the cumulative effects impact area include:

- Webster Bank site at the corner of Bradley and Durham Road – office/retail space with apartments on the second floor
- 1343 Boston Post Road – a mixed-use building with 1,200 square feet of retail on the ground floor and eight (8) apartments on the second and third floors
- Madison Marketplace – a mixed-use development at Route 1 and Dudley Lane with 59,000 square feet of first floor retail and 28 apartments above
- Madison Landing – a residential development with 127 units for 55 and older "active adults". It includes a mix of units with a central square and meetinghouse. There is an outdoor swimming pool, locker room facility, and a neighborhood "post office," where residents can pick up their mail.

Potential Cumulative Impacts

Neighborhoods and Housing: The Proposed Action in association with ongoing development trends is anticipated to have a beneficial cumulative impact to the cohesion of existing neighborhoods. The Proposed Action site is situated on the edge of Madison's commercial core. It is, thereby, adjacent to and within walking distance of the downtown neighborhood. Madison has been pro-active in planning for the downtown neighborhood with the adoption of the *Bradley Road Vision Study* in 2005 (Madison Economic Development Commission, June 2005) and current ongoing update in 2008. In addition, a new off-road path/walkway has recently been completed connecting Bradley Road to the downtown at Tuxis Pond and Boston Post Road. The new train station with parking garage is expected to create an opportunity for redevelopment of Bradley Road consistent with the Vision Study for a mix of uses and diversity of pedestrian-scale development. The transformation of Bradley Road will, along with the increased activity created by the new train station and parking garage, have the cumulative effect of making the downtown and outlying commercial and residential clusters increasingly vibrant and sustainable. This in turn will strengthen the neighborhoods that surround the downtown economically and socially. In addition, the enhanced access to rail for commuting to jobs elsewhere is expected to have a positive synergistic effect with that trend. It will enable residents to live and invest in the current neighborhoods and offers an asset that will improve the marketability of nearby housing developments.

Socio-economic Effects: The Proposed Action in association with ongoing development trends is anticipated to have a beneficial cumulative impact to the economy, jobs and employment in Madison. Enhanced multimodal access to the train for jobs which lie predominantly outside Madison will help sustain Madison's residents' incomes, and indirectly businesses in Madison which they might patronize. Conversely, the increase in the number of commuters coming to use the train station and using services within walking distance in the downtown can be expected to help sustain the community core as it grows.

Groundwater/Water Quality: There will be no net increase in impervious surfaces with the Proposed Action compared to existing conditions on the site. In general, the addition of impervious surfaces to the landscape, such as rooftops or paved roadways and parking lots, can potentially contribute to water quality degradation issues if stormwater runoff treatment measures are not properly implemented. Ongoing residential development trends which are expected to continue in the region along with ongoing infill and redevelopment in Madison's downtown will result in increased paved and other impervious surface areas in the Hammonassett River sub-watershed. In the same manner, each of the planned and programmed development projects will add to impervious land coverage in the form of building footprints, driveways, and parking in the proximity of the Proposed Action site. Increases in paved and other impervious surfaces contribute to stormwater runoff and potential for sedimentation and contamination of downstream waters. The cumulative adverse effects to water quality will be offset, however, by stormwater management measures included in the design of each development site. These stormwater management features are required in order to comply with the regulatory framework that exists to protect wetlands and water bodies, water quality, and other important natural resources. Project designs must comply with stringent federal, state, and in some cases local permit requirements (i.e. non-state actions are subject to local permit requirements). Consequently, cumulative adverse effects to water quality are expected to be minor and will be controlled and managed through these permit processes. No additional mitigation for this cumulative impact is warranted or proposed.

Wetlands: Construction of the Proposed Action will impact approximately 0.3 acres of wetlands. However, CTDOT is considering design options to reduce wetland impacts; the potential impact of 0.3 acres is the worst case scenario. Ongoing new development elsewhere in Madison may also encroach upon inland wetlands in the Hammonasset River sub-watershed area, creating a cumulative effect to wetland acreage and functions and values in the sub-watershed. However, federal, state, and local regulations are in place to protect both inland and tidal wetlands from adverse development impacts. These regulations are firmly enforced through stringent permitting processes. Where impacts occur and are permitted, mitigation is often required to replace the impacted acreage and functionality lost. Consequently, the potential for adverse cumulative impacts to wetlands will be offset by the combination of implementing local wetland regulation requirements and any mitigation that is required for the Proposed Action. No additional information for this cumulative impact is warranted or proposed.

4. UNAVOIDABLE ADVERSE IMPACTS

The unavoidable adverse impacts from the Proposed Action will include:

- Partial acquisition (approximately 0.2 acres) of land from one privately-owned parcel located north of the railroad corridor and west of Old Route 79.
- Approximately 0.3 acres of a red maple swamp will be filled to allow for construction vehicle access as well as emergency/maintenance access to the north side high-level rail platform. However, CTDOT is considering design options to reduce wetland impacts; the potential impact of 0.3 acres is the worst case scenario.
- The loss of trees and shrubs along the southernmost boundary of the red maple swamp would cause the disturbance edge that is presently defined by the toe of the rail corridor's ballast slope, to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk. Impacts to flora and fauna overall are thus considered to be minor.
- Change in visual setting for at least three residences located north of the railroad tracks along the western side of Old Route 79
- Temporary construction-related inconveniences

The use of the site for the proposed improvements is consistent with adjacent transportation uses and does not result in any adverse secondary development effects that have not already been planned for and approved. The Proposed Action will include mitigation measures that will be fully coordinated with resource agencies to ensure that they serve their intended purpose. The mitigation measures will offset the potential adverse impacts and maintain the safety and quality of life that currently exists at the site. Given these considerations, the unavoidable adverse impacts are not estimated to be significant.

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5. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable commitments of resources caused by the Proposed Action include the following:

- Energy - energy will be consumed in project construction as well as to operate station elements and any additional trains that will operate as part of the expanded SLE commuter rail service.
- Land - the land will be developed and the topography altered. The commitment of the site to this use will preclude the possibility of other uses at the site into the foreseeable future.
- Natural resources – site development will require the filling of approximately 0.3 acres of a red maple swamp wetland located north of the railroad corridor to allow for construction vehicle access and emergency/maintenance access to the new north side high-level rail platform and elevator. However, this is a worse case scenario as CTDOT is presently considering design options to reduce wetland impacts. The Proposed Action will require the removal of some trees and shrubs located along the southernmost periphery of the wetland. The removal of this vegetation would cause the disturbance edge that is presently defined by the toe of the rail corridor's ballast slope, to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk. Impacts to flora and fauna overall are thus considered to be minor.
- Construction materials - a variety of natural, man-made, and processed construction materials will be utilized to construct the Proposed Action.
- Human labor - the dedication of human labor to the construction of the Proposed Action represents an irretrievable expenditure of time and production that is thus unavailable for other purposes.
- Financial - Finally, the project expenditures, once committed, will no longer be available for other purposes and, once spent, cannot be regained.

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6. SUMMARY OF MITIGATION MEASURES

The adverse impacts of the Proposed Action are limited and can all be mitigated. The following table summarizes the proposed mitigation measures for each impacted resource category. Where no mitigation is proposed, the impact evaluations have determined that adverse impacts are minor and do not warrant mitigation, that no adverse impacts were identified, or that anticipated impacts will be beneficial.

Table 19: Summary of Impacts and Proposed Mitigation

Resource	Impact Analysis	Mitigation
Land Use and Zoning	Partial acquisition (approximately 0.2 acres) of one privately-owned parcel located north of the railroad corridor and west of Old Route 79. No impacts to land use or zoning	CTDOT will coordinate directly with the property owner to negotiate the property transfer and provide appropriate compensation.
Consistency with Local and Regional Plans	The Proposed Action is consistent with local and regional development plans	No mitigation is required
Consistency with C&D Plan	The Proposed Action is consistent with the C&D Plan	No mitigation is required
Traffic and Parking	The surrounding roadway network will adequately support the additional traffic volume generated by the Proposed Action. No adverse impacts anticipated; however the provision of an exclusive eastbound left-turn lane on Bradley Road at the site drive will be beneficial to traffic operations. Additional beneficial impact of the Proposed Action include more parking for rail commuters and improved/safe pedestrian connections.	Although traffic operations under 2030 Proposed Action conditions are anticipated to operate at an acceptable LOS (LOS D or better) at all study area intersections, minor modifications to the eastbound lane into the site from Bradley Road are being considered. The State Traffic Commission will dictate what modifications must be made, if any; during the Major Traffic Generator Application review process.
Air Quality	Construction period impacts: Potential impacts from prolonged use of diesel powered vehicles. Typical diesel air quality emissions include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (PM2.5).	Construction equipment will be required to comply with all pertinent state and federal air quality regulations. Construction period BMPs to be followed to reduce airborne dust, other particulate matter, and odorous substances arising from project operations.

Resource	Impact Analysis	Mitigation
Noise	Construction period impacts: Potential for continuous as well as intermittent (or impulse) noise to be experienced in the immediate project vicinity.	Construction noise is exempt under Section 22a-69-1.8(g) of the RCSA, however, CTDOT's general provision on construction noise described under Section 1.10.05 of *Form 816* must be included in the construction contract for this project.
Neighborhoods and Housing	Indirect beneficial impact to local socio-economic conditions as commuters may shop locally for convenience goods. No adverse impacts on neighborhoods or housing.	No mitigation required
Water Quality	No net increase in impervious surfaces with the Proposed Action compared to the existing condition. Thus, runoff volumes and velocities will be similar to and/or less than the existing condition. Still the potential exists for downstream sedimentation impacts without proper mitigation. Construction period impacts: Increased potential for sedimentation of offsite streams and inland wetlands due to runoff from exposed surfaces during site work.	Final design of new facility will be fully coordinated with the CTDEP and ACOE and will include stormwater renovation measures. Project design will comply with both the CTDEP 2004 Stormwater Quality Manual and the CTDEP 2002 Sedimentation and Erosion Control Manual. During construction, temporary best management practices (BMPs) will be employed and an Erosion and Sedimentation Control Plan (E&S Plan) will be implemented. A Stormwater Pollution Control Plan (SWPCP) will also be registered for the project.
Hydrology and Floodplains	No impacts	No mitigation required

Resource	Impact Analysis	Mitigation
Wetlands	The Proposed Action will require filling approximately 0.3 acres of red maple swamp located to the north of the existing rail corridor. Filling will result from the construction of the north side high-level rail platform and the maintenance/emergency access roadway to the platform. This estimate of impact is a worse case scenario based on 4:1 side slopes for the construction access roadway. CTDOT is presently considering design options to further reduce wetland impacts.	Permanent inland wetland impacts will be mitigated through the provision of compensatory wetlands (in terms of acreage and/or functions and values). CTDOT is currently looking at wetland creation and restoration possibilities. Priority mitigation sites will be state-owned properties with evidence of filling or disturbance to prior wetlands, preferably in or adjacent to the project area or in the same watershed, but all options will be investigated. The ultimate mitigation package will be investigated and designed through consultation with the CTDEP and ACOE as part of the environmental permitting process.
Flora, Fauna, Threatened and Endangered Species	Filling of 0.3 acres of red maple swamp will slightly reduce the swamps' suitability for wildlife use. The lost trees and shrubs from the wetland fringe would cause the disturbance edge that is presently defined by the toe of the rail corridor's ballast slope to now be located further into the wetland. Potentially affected species are expected to be common species tolerant of urban/suburban conditions with relatively small home ranges. As such, the Proposed Action could slightly decrease the overall carrying capacity of the wetland but would not substantially change the species composition of the wetland or put any wildlife populations at risk. Impacts to flora and fauna overall are thus considered to be minor.	The minor impacts to flora/fauna/habitats will be mitigated through the compensatory wetland mitigation package, to be developed through consultation with the CTDEP and ACOE as part of the environmental permitting process. The mitigation will be designed to replace the wildlife habitat functions of the impacted wetlands, in size and value.
Soils and Geology	No Impacts	No mitigation required
Coastal Zone and Coastal Barriers	The Proposed Action is not located within Connecticut's designated coastal zone. Therefore, no impacts to the coastal zone or coastal resources will occur.	No mitigation required

Resource	Impact Analysis	Mitigation
Cultural Resources	No Impacts	No mitigation required
Solid Waste and Hazardous Materials	The Proposed Action is located on property formerly leased by Laidlaw Transit and which was determined to contain varying degrees of soil contamination, primarily related to petroleum product dispensing and storage. The contamination has been remedied through the excavation and subsequent removal of the contaminated soil as part of State Project 310-0020, which involved construction of the new surface parking lot and south side high-level rail platform for the new Madison SLE Railroad Station on the property. The construction of the parking garage and north side high-level rail platform (the Proposed Action) therefore is not anticipated to pose any hazards to construction workers or the general population.	No mitigation required. Although there is no anticipated threat of contamination, as standard practice, a Health and Safety Plan will be developed for the project that will be communicated to construction workers.
Use/Creation of Hazardous Materials	No Impacts	No mitigation required
Aesthetics and Visual Effects	Proposed Action will be visually compatible to adjacent commercial and transportation land uses located south of the railroad corridor. Three houses along Old Route 79 will have their viewsheds slightly impacted primarily due to construction of the emergency/maintenance access road which will remove trees and shrubs along the wetland fringe, thereby creating a more direct line of site to the large three-level parking garage.	A landscaping plan that includes vegetative buffers / plantings along the edge of the gravel emergency / maintenance access road. These plantings could minimize anticipated visual impacts to the three homes along Old Route 79. To minimize the impact of station and parking garage lighting, it is proposed that full cutoff lights that are dark sky compliant be used on the Proposed Action site.
Energy Uses and Conservation	Minimal increase in amount of energy consumed above existing conditions	No mitigation required
Public Utilities and Services	Potential temporary service disruptions (CL&P) during construction	Coordinate utility construction scheduling with service providers
Public Health and Safety	Beneficial Impact – site conditions improved with new safety features such as fencing, illumination, and pedestrian overpass among others.	No mitigation required

7. COST BENEFIT ANALYSIS

The primary costs of the Proposed Action arise from the monetary outlay and energy consumption required for constructing the north side high-level rail platform, pedestrian overpass, new commuter parking garage, and other associated improvements. Project construction cost is anticipated to range from $30 to $35 million, with start of construction in April 2010. This cost represents a midpoint of construction (2011) dollars. This cost does not include the inherent secondary costs associated with future energy and maintenance needs of the proposed improvements. These secondary costs are expected to average approximately $70,000 to $100,000 annually and will cover electricity, water, snow/ice removal, closed drainage system maintenance (i.e., hauling and disposal of storage tank wastewater and cleaning of oil/water separators), landscaping, and other general maintenance. The annual cost is estimated based on actual annual maintenance and energy costs associated with similar stations along the SLE system. In terms of parking revenue, decisions regarding possible fee collection are still being considered.

Costs associated with the environmental impacts as defined in this EIE are relatively minimal. The Proposed Action is very compatible with its surroundings as it is essentially the full build-out of the partially completed Madison SLE Railroad Station that was constructed under State Project 310-0020 and opened in July 2008. Thus, the Proposed Action is not a new use, but instead is the expansion of an existing use that is compatible with existing plans of development for the surrounding area. As mentioned, the intent of the Proposed Action is to complete the partial SLE railroad station by constructing a new north side high-level rail platform opposite the existing south side high-level rail platform; constructing a new parking garage on the site of the existing surface parking lot, and by constructing a new pedestrian overpass with elevators to provide safe movements between the two platforms and the upper level of the parking garage. All these improvements have one unified purpose; to make the SLE commuter rail service an attractive transportation alternative for Connecticut's commuters and residents. This in turn will hopefully increase ridership, thereby reducing the number of vehicle miles traveled on Connecticut's already congested Interstate 95 and U.S. Route 1 coastal corridors. Similar improvements have already been implemented or are in the process of being implemented at other SLE stations in the towns of Guilford, Branford, Clinton, and Westbrook as part of Governor Rell's Transportation Initiative which was approved by Connecticut's Legislature in 2005. Thus the improvements are part of an overall SLE system upgrade which will substantially benefit Connecticut's population well into the future, especially in light of the rapidly fluctuating price of gasoline.

Considering the immediate and longer-term operational and financial benefits of the Proposed Action, weighed against the project's construction costs and minor adverse environmental impacts, the Proposed Action appears to be an advantageous activity that justifies the expenditures.

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8. LIST OF CERTIFICATES, PERMITS AND APPROVALS

Certificates, Permits and Approvals

The following permits, approvals, certifications, and registrations **may** be required for completion of the Proposed Action:

Federal

- ACOE Section 404 Permit

State

- CTDEP General Permit: Stormwater and Dewatering Wastewaters from Construction
- CTDEP 401 Water Quality Certification
- CTDEP Inland Wetlands & Watercourses
- Department of Transportation State Traffic Commission Certificate

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Personal Communications

Madison Land Use Offices. Phone Conversation with Ms. Marylin Ozols, Planning and Zoning Administrator. June 12, 2008.

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APPENDICES

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APPENDIX A
Scoping Notice and Correspondence/Coordination

Monitor Archives

ENVIRONMENTAL MONITOR

The official site for project information under the Connecticut Environmental Policy Act

June 5, 2007

Scoping Notices

1. **NEW!** Waterbury Transportation Center (Waterbury)
2. **NEW!** Branford Shore Line East Railroad Station (Branford)
3. **NEW!** Madison Shore Line East Railroad Station (Madison)

Environmental Impact Evaluations available for review and comment

1. **NEW!** Metropolitan District Long Term Combined Sewer Overflow Control Project (Primarily Hartford, West Hartford)
2. Implementation of Master Plan Activities, East Haven Rifle Range (East Haven)
3. South Windsor I-291 Gateway Zone (South Windsor)

The next issue will be published on June 19, 2007.
Subscribe to e-alerts to receive an e-mail when The Environmental Monitor is published.

Scoping Notices

Scoping Notices have been issued for the following state projects. These projects are in the earliest stages of planning. At the scoping stage, detailed information on a project's design, alternatives, and environmental impacts does not yet exist. Sponsoring agencies are asking for comments from other agencies and from the public as to the scope of alternatives and environmental impacts that should be considered for further study. Send your comments to the contact person listed for the project by the date indicated.

3. Notice of Scoping for Madison Shore Line East Railroad Station

Municipality where project is located: Madison

Address of Project Location: Durham Road and Bradley Road

Project Description: Improvements to the Madison SLE Railroad Station include the construction of a 585 space parking garage, a north side high level rail platform, and pedestrian bridges from the new garage to the south side and north side platforms.

Project Map: Click here to view map #1 Click here to view map #2

Written comments from the public are welcome and will be accepted from June 5, 2007 until the close of business on July 19, 2007.

Any person can ask the sponsoring agency to hold a Public Scoping Meeting by sending such a request to the address below. If a meeting is requested by 25 or more individuals, or by an association that represents 25 or more members, the sponsoring agency shall schedule a Public Scoping Meeting.

Written comments and/or requests for a Public Scoping Meeting should be sent to:

Name: Edgar T. Hurle, Transportation Planning Director
Agency: State of CT Department of Transportation
Address: 2800 Berlin Turnpike
Newington, CT 06131
Fax: 860 594-3377
E-Mail: Edgar.Hurle@po.state.ct.us

If you have questions about the public meeting, or other questions about the scoping for this project, contact:

Name: Jessica DiLuca, Transportation Planner 2
Agency: State of CT Department of Transportation
Address: 2800 Berlin Turnpike
Newington, CT 06131
Phone: 860 594-2135
Fax: 860 594-3028
E-Mail: Jessica.DiLuca@po.state.ct.us

The agency expects to release an Environmental Impact Evaluation for this project, for public review and comment, in October, 2007.

463.12

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

RECEIVED

JUN 7 2007

ENVIRONMENTAL PLANNING
DIVISION

June 6, 2007

Mr. Edgar T Hurle, Transportation Planning Director
Department of Transportation
2800 Berlin Turnpike
Newington, CT 06106

RE: Notice of Scoping for Madison Shore Line East Railroad Station

Dear Mr. Hurle:

The Drinking Water Section of the Department of Public Health has reviewed the above-mentioned project for potential impacts to any sources of public drinking water supply. This project does not appear to be in a public water supply source water area, therefore the Drinking Water Section has no comments at this time.

Sincerely,

Lori Mathieu, Supervising Environmental Analyst
Source Water Protection Unit
Drinking Water Section

FROM THE DESK OF
CYNTHIA S. HOLDEN

JUN 0 7 2007

	F.Y.I.	PLS. DO	PLS. SEE ME
KEITH T. HALL	✓		
MARK W. ALEXANDER			
PAUL N. CORRENTE			
STEPHEN V. DELPAPA			

Phone: (860) 509-7333
Telephone Device for the Deaf: (860) 509-7191
410 Capitol Avenue - MS # 51 WAT
P.O. Box 340308 Hartford, CT 06134

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

FROM THE DESK OF
CYNTHIA S. HOLDEN

JUL 26 2007

	F.Y.I.	PLS. DO	PLS SEE ME
KEITH T. HALL			
MARK W. ALEXANDER			
PAUL N. CORRENTE			
STEPHEN V. DELPAPA			

July 17, 2007

Edgar T. Hurle, Transportation Planning Director
State of Connecticut Department of Transportation
2800 Berlin Turnpike
Newington, CT 06131

RE: **Review of Scoping Notice for Madison Shore Line East (SLE) Railroad Station**

Dear Mr. Hurle:

The following comments are offered in response to your request concerning the State Agency scoping information for the proposed Madison Shore Line SLE rail Road Station located at Durham Road and Bradley Road, Madison CT. A review of the scoping documents reveals limited information at this stage of the project. Should the project include any demolition of existing buildings or excavation of soils, then a plan must be in place to address lead contaminated soils, lead-based paint, and asbestos since these materials may be encountered during demolition or excavating activities. This type of construction activity could result in the disturbance of surfaces that may contain asbestos, lead-based paint and/or lead contaminated soils.

The following summarizes the Department's position with regard to lead and asbestos.

A. Lead-Based Paint:

It does not appear that excavation or construction activities that may be associated with this project are subject to the Department of Public Health (DPH), Childhood Lead Poisoning Prevention and Control Regulations (§§19a-111-1 through 19a-111-11). However, there are other issues that must be addressed related to lead-based paint. Among these issues are the following:

- Testing of paint on existing structures marked for demolition or lead in soils should be performed by a lead inspector or lead inspector/risk assessor certified by the DPH.
- Planned demolition or soil removal activities should be performed using lead-safe work practices.

Phone:
Telephone Device for the Deaf: (860) 509-7191
410 Capitol Avenue - MS # _____
P.O. Box 340308 Hartford, CT 06134

- If lead-based paint or lead contaminated soil is identified, the classification and disposal of generated waste must comply with the Resource Conservation Recovery Act (RCRA) and Connecticut Department of Environmental Protection standards (e. g., Toxicity Characteristics Leaching Procedure [TCLP] testing, reporting, and record keeping requirements).
- Additionally, if lead-based paint, lead containing paint, or lead contaminated soil is identified, workers must be trained (as a minimum) according to the Occupational Safety and Health Administration (OSHA) lead standards (29 CFR 1926.62). Because other contaminants may also be present on the site, additional health and safety training may be required (e. g., hazardous waste and/or asbestos).

Additional inquires on the subject of lead-based paint can be directed to Alan Buzzetti, Supervising Environmental Sanitarian, Coordinator of the Lead Poisoning Prevention and Control Program at (860) 509-7299.

B. Asbestos Program:
This facility is subject to the provisions of 40 CFR 61, Subpart M, the asbestos national Emission Standards for Hazardous Air Pollutions. As such, a thorough inspection of the facility must be conducted prior to commencement of any renovation or demolition activities. A DPH licensed asbestos inspector or Management Planner is required to conduct this asbestos inspection. In the event that asbestos-containing material is identified that will be impacted by the renovation or demolition activities, the material must be properly abated. A DPH licensed asbestos abatement contractor must conduct any asbestos abatement that involves more than three (3) linear feet or more than three square feet of asbestos-containing material. Additionally, the DPH must provide with notification prior to asbestos abatement that involves greater than 10 linear feet or greater than 25 square feet. Asbestos abatement must be performed in accordance with all applicable federal, state, and local regulations.

Additional inquiries on the subject of asbestos abatement can be directed to Ronald Skomro, Supervising Environmental Sanitarian, Coordinator of the Asbestos Program at 860-509-7367.

Sincerely,

Suzanne Blancaflor, MS, Chief
Environmental Health Section

C: J. Smith, Office of Policy Management

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CH

July 11, 2007

FROM THE DESK OF
CYNTHIA S. HOLDEN

JUL 16 2007

	F.Y.I.	PLS. DO	PLS. SEE
KEITH T. HALL	X		
MARK W. ALEXANDER			
PAUL N. CORRENTE			
STEPHEN V. DELPAPA			

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JUL 13 2007

ENVIRONMENTAL PLANNING
DIVISION

Mr. Edgar T. Hurle, Transportation Planning Director
Connecticut Department of Transportation
Bureau of Policy and Planning
2800 Berlin Turnpike
Post Office Box 317546
Newington, Connecticut 06131-7546

Re: Scoping Notice – Madison Shore Line East Railroad Station

Dear Ned:

These comments are provided in response to the Notice of Scoping published in the Environmental Monitor for the improvements to the Madison station of Shore Line East. The Department of Environmental Protection wishes ConnDOT well with this expansion. DEP supports efforts to expand the capacity of public transportation services such as Shore Line East, and in this specific case its potential to reduce vehicle miles of travel and congestion on Interstate 95.

DEP also notes that the expansion and upgrade of Shore Line East services and facilities is endorsed in the *South Central Regional Long Range Transportation Plan 2007 – 2035*. That Plan also advocates that provision be made for bicycles at Shore Line East facilities. DEP endorses the call for bicycle racks at Shore Line East stations to encourage multi-modal trips involving bicycles and mass transit.

The current proposal calls for the construction of a 585-space parking garage within the footprint of the existing parking lot, a north side high level platform, and pedestrian bridges connecting the garage structure to the passenger platforms. The Madison Shore Line East station is outside of the coastal boundary as defined by Connecticut General Statutes section 22a-94 and therefore does not require review by the DEP Office of Long Island Sound Programs. The site also does not contain or is not proximal to any sites listed in the DEP Natural Diversity Data Base as containing Federally-listed endangered or threatened species or State-listed endangered, threatened or special concern species.

Stormwater management for parking garages typically should involve two separate collection systems designed to treat the runoff from different types of parking areas. Any exposed parking levels will produce a high volume of runoff with relatively low concentrations of pollutants. Runoff from such areas should be directed to the storm sewer system and the collection system should include controls to remove sediment and oil or grease. A gross particle separator is recommended for this purpose. Advanced designs for gross particle separators have been developed, incorporating cyclonic or swirl technology, that the Department believes are more effective in retaining medium to coarse grained sediments as well as floatables than standard designs. It is recommended that the appropriate variety of this type of unit with a cyclonic design be installed. Interior levels of the garage will produce a low volume of runoff

with relatively high concentrations of pollutants. In addition, the need for cleaning of the garage must be considered and floor washwater cannot be directed to a stormwater sewer system. Runoff from interior areas should be directed to the sanitary sewer system, again with appropriate treatment. An oil separator tank with a capacity of at least 1000 gallons is required. A licensed waste oil hauler must clean the tank at least once a year. A list of certified haulers can be obtained from the Bureau of Materials Management & Compliance Assurance at (860) 424-3366. The discharge of floor washwater is covered under a *General Permit for Miscellaneous Discharges of Sewer Compatible Wastewater* as building maintenance wastewater. Registration is required for discharges greater than 5000 gallons per day. For further information concerning stormwater management, contact the Permitting & Enforcement Division at (860) 424-3018. A fact sheet describing the permit and the registration form may be downloaded at:
http://www.ct.gov/dep/cwp/view.asp?a=2709&q=324212&depNav_GID=1643#MiscellaneousGP.

It is unclear from the Notice of Scoping exactly how large of an area will be involved in the construction activities. For stormwater discharges from construction sites where one or more acres are to be disturbed, a permit pursuant to 40 CFR 122.26 is required. The Permitting & Enforcement Division has issued a *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* that will cover these discharges. For projects disturbing five or more acres, registration describing the site and the construction activity must be submitted to the Department prior to the initiation of construction. A stormwater pollution control plan, including measures such as erosion and sediment controls and post construction stormwater management, must be prepared. For sites where more than 10 acres will be disturbed, the plan must be submitted to the Department. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures. Another requirement of this permit is that stormwater discharges located less than 500 feet from a tidal wetland must be discharged through a system designed to retain the volume of stormwater runoff generated by 1 inch of rainfall on the site. For construction projects with a total disturbed area between one and five acres, no registration is required as long as the project is reviewed by the town and receives written approval of its erosion and sediment control measures and it adheres to the *Connecticut Guidelines for Soil Erosion and Sediment Control*. If no review is conducted by the town or written approval is not provided, the permittee must register with the Department. For further information, contact the division at (860) 424-3018. A copy of the general permit as well as registration forms may be downloaded at:
http://www.ct.gov/dep/cwp/view.asp?a=2709&q=324212&depNav_GID=1643#StormwaterConstructionGP

Our best wishes to ConnDOT as you proceed with the development of an Environmental Impact Evaluation for this project. We look forward to reviewing this document when it has been completed and released. If you should have any questions concerning these comments, please feel free to call me at (860) 424-4110.

Respectfully,

Frederick L. Riese

Frederick L. Riese
Senior Environmental Analyst

rec

Connecticut Commission on Culture & Tourism

Historic Preservation & Museum Division

59 South Prospect Street
Hartford, Connecticut
06106

(v) 860.566.3005
(f) 860.566.5078

September 29, 2006

Mr. Scott A. Hill
Bureau of Engineering & Highway Operations
ConnDOT
2800 Berlin Turnpike
Newington, CT

Subject: Parking Garage
Shore Line East Railroad Station
Madison, CT
ConnDOT #310-xxx

Dear Mr. Hill:

The State Historic Preservation Office has reviewed the above-named project. This office expects that the proposed undertaking will have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

This office appreciates the opportunity to have reviewed and commented upon the proposed undertaking.

This comment is provided in accordance with the National Historic Preservation Act and the Connecticut Environmental Policy Act.

For further information please contact Dr. David A. Poirier, Staff Archaeologist.

Sincerely,

J. Paul Loether
Division Director and Deputy
State Historic Preservation Officer

cc: Mr. Keith Hall/ConnDOT

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

January 1, 2008

To Whom It May Concern:

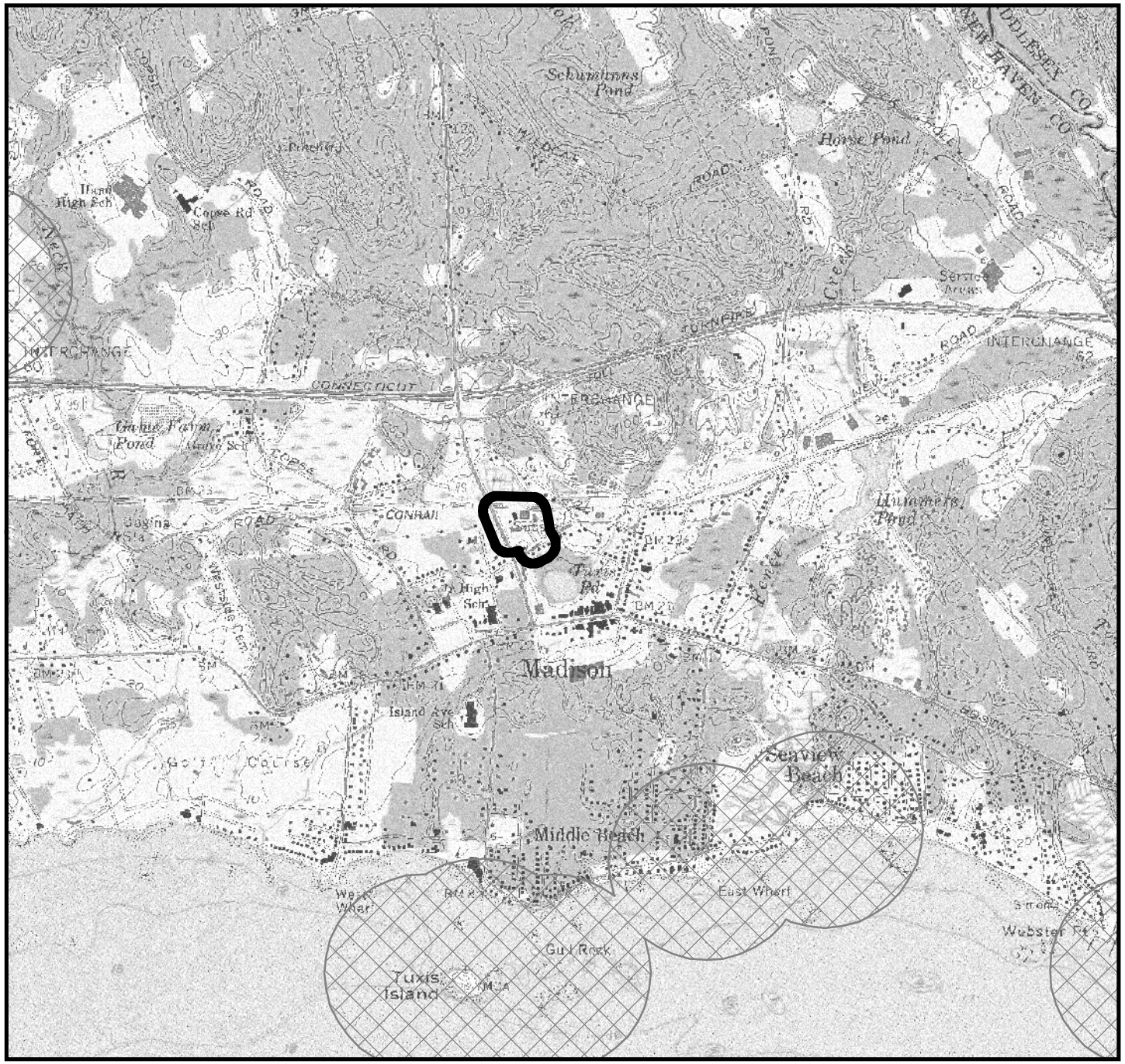
This project was reviewed for federally-listed or proposed threatened or endangered species presence per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website (http://www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation.htm). Based on information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (Service) are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with the Service under Section 7 of the Endangered Species Act is not required.

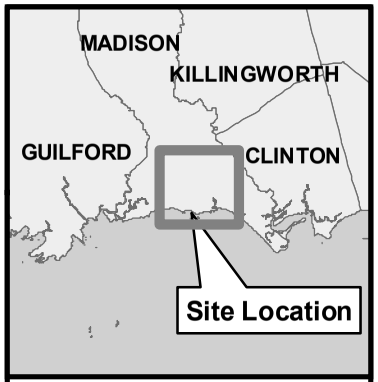
This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this review, unless additional information on listed or proposed species becomes available.

Thank you for your coordination. Please contact us at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Anthony P. Tur
Endangered Species Specialist
New England Field Office





Study Area

CT NDDB - 2008

U.S.G.S. Quadrangle: Clinton, CT

1:24,000

CT DEP Natural Diversity Database - 2008

Shoreline East Expansion Madison, CT

February 2008 - Fitzgerald & Halliday, Inc. - Project #643.12 - original in color

APPENDIX B
Draft EIE Distribution List

EIE Distribution List

The following agencies/persons received a copy of the Draft Environmental Impact Evaluation for the Madison Shore Line East Railroad Station, Madison, Connecticut (State Project No. 310-0048):

State Representatives and Senators

Hon. Deborah Heinrich State Representative Legislative Office Building, Room 4000 Hartford, CT 06106-1591	Hon. Edward Meyer State Senator Legislative Office Building, Room 1000 Hartford, CT 06106-1591

Town Officials

Hon. Alfred Goldberg, First Selectman Town of Madison 8 Campus Drive Madison, CT 06443	Ms. Dolly Bean, Town Clerk Town of Madison 8 Campus Drive Madison, CT 06443
Mr. D. Stewart MacMillan Jr., P.E. Director of Public Works, Facilities and Town Engineer Town of Madison 8 Campus Drive Madison, CT 06443	Ms. Marilyn Ozols Planning & Zoning Administrator Town of Madison 8 Campus Drive Madison, CT 06443

State Agencies

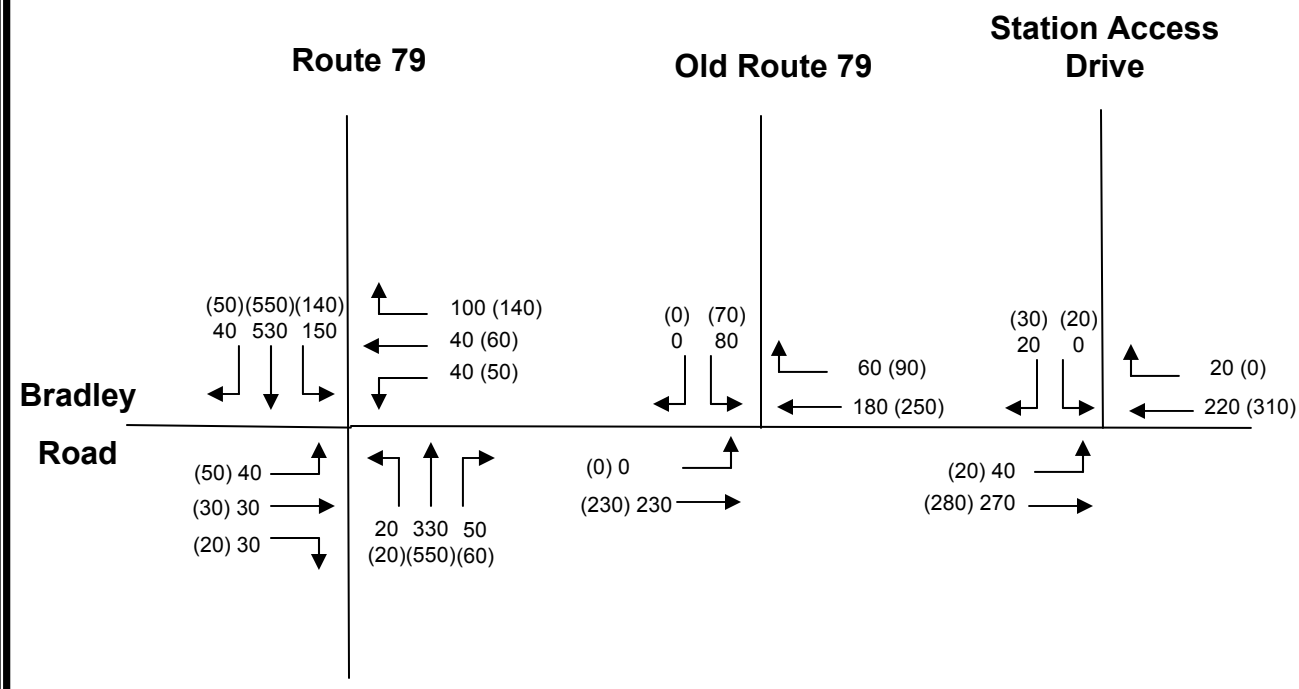
Hon. Gina McCarthy Commissioner Department of Environmental Protection 79 Elm Street Hartford, CT 06106	Mr. Kendall Wiggin State Librarian Connecticut State Library 231 Capitol Avenue Hartford, CT 06106
Mr. David Fox Senior Environmental Analyst Department of Environmental Protection 79 Elm Street Hartford, CT 06102	Hon. Robert M. Ward Commissioner Connecticut Department of Motor Vehicles 60 State Street Wethersfield, CT 06161
Hon. Joan McDonald Commissioner Connecticut Department of Economic and Community Development 505 Hudson Street Hartford, CT 06106	Mr. Robert L. Genuario Secretary Office of Policy and Management 450 Capitol Avenue Hartford, CT 06106-1308
Mr. Raymond Jordan State Coordinator Connecticut Department of Housing and Urban Development One Corporate Center, 19th Floor Hartford, CT 06103	Hon. Raeanne V. Curtis Commissioner Connecticut Department of Public Works 165 Capitol Avenue Hartford, CT 06106

Hon. J. Robert Galvin, M.D., M.P.H. Commissioner Department of Public Health 410 Capitol Avenue Hartford, CT 06134	Mr. Judd Everhart Department of Transportation Office of Communications P.O. Box 317546 2800 Berlin Turnpike Newington, CT 06131-7546
Mr. Karl J. Wagener Executive Director Council on Environmental Quality 79 Elm Street Hartford, CT 06106	Ms. Karen Senich Executive Director Connecticut Commission on Culture and Tourism One Financial Plaza 755 Main Street Hartford, CT 06103

Other

Ms. Judy Gott Director South Central Regional Council of Governments 127 Washington Avenue, 4th Floor West North Haven, CT 06473	Ms. Sandra Long, Library Director E.C. Scranton Memorial Library 801 Boston Post Road Madison, CT 06443

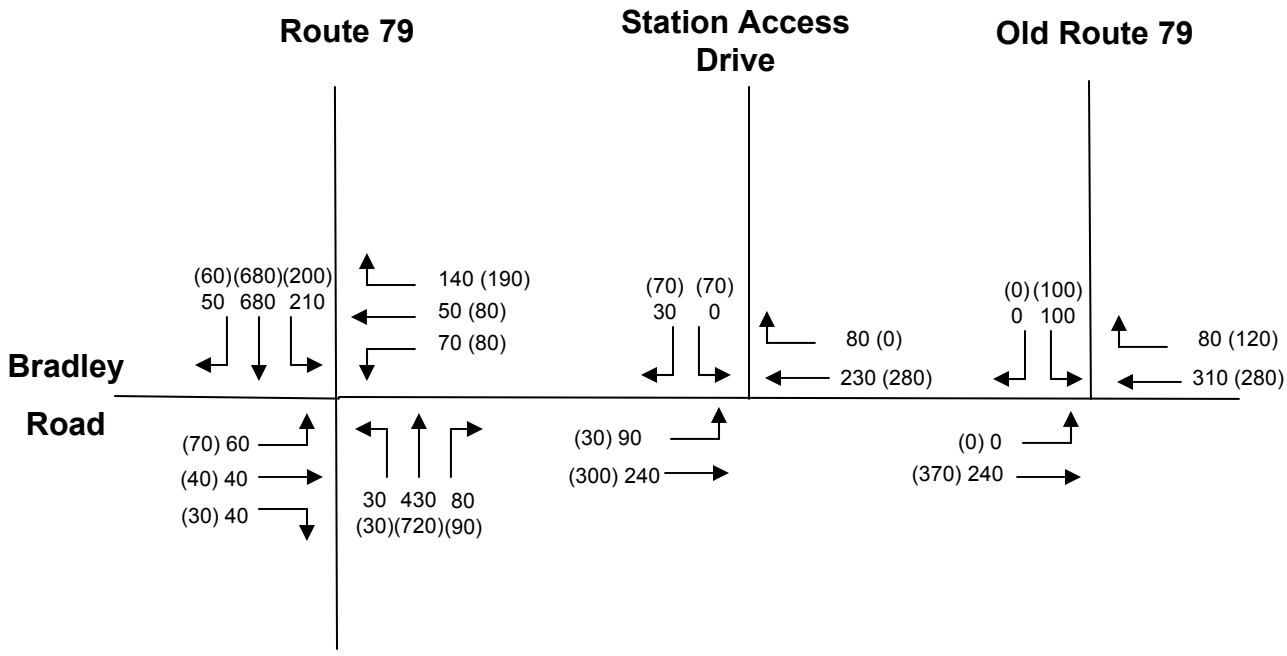
APPENDIX C
Traffic Data



North

Not to Scale

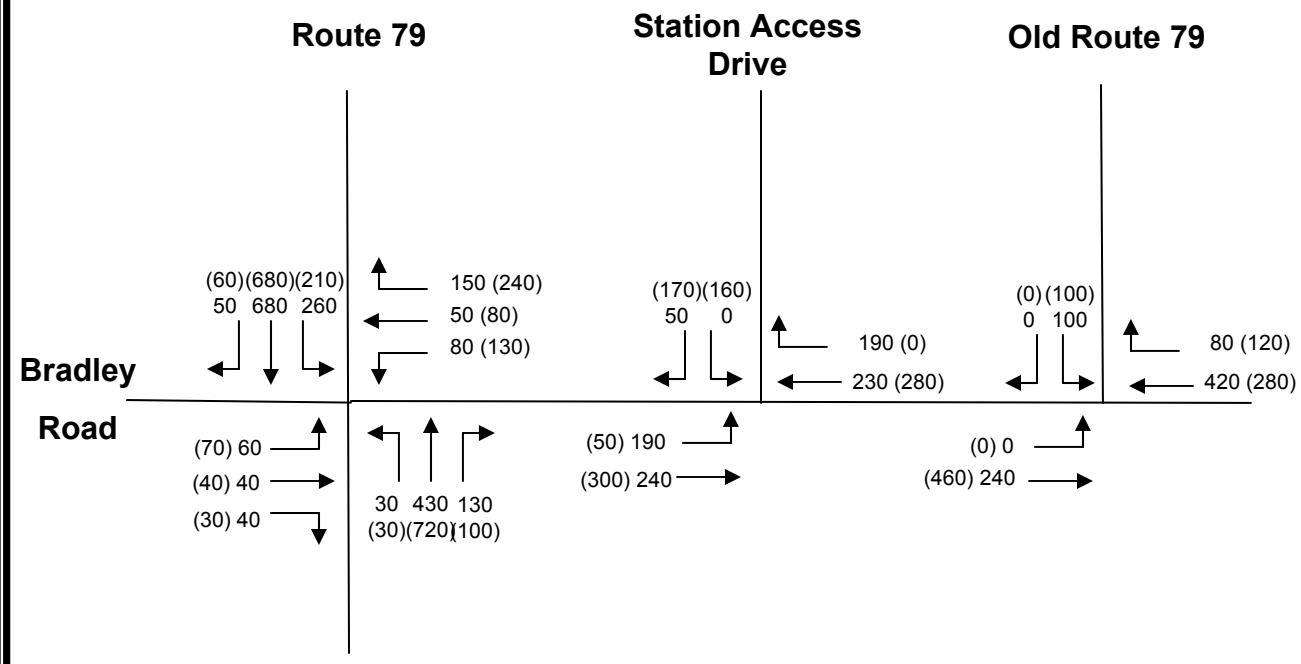
Madison Rail Station
Existing Traffic Volumes (2007)
AM (PM) Peak Hour



North

Not to Scale

Madison Rail Station
No-Action Alternative Traffic Volumes (2030)
AM (PM) Peak Hour



North

Not to Scale

Madison Rail Station
Proposed Action Traffic Volumes (2030)
AM (PM) Peak Hour

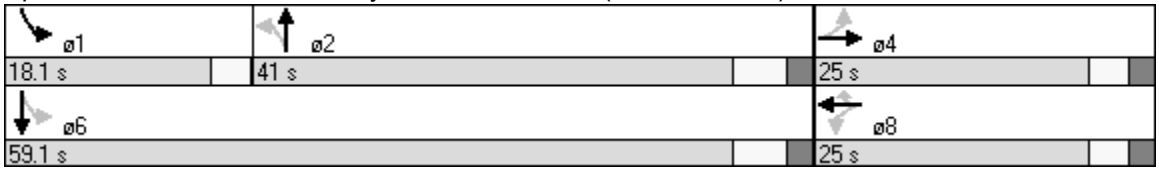
Crash Data Summary on State Roadways (2004-2006)
Madison Rail Station

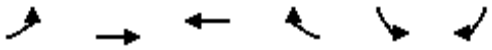
Intersection / Segment	Total Number of Crashes	Number of Crashes Resulting in Injuries	Collision Type	Number of Crashes
Rte 79 at Rt 1	7	2	Rear-end	5
			Angle	2
Rte 79 from Rt 1 to Bradley Rd	3	0	Rear-end	2
			Sideswipe-Opposite Direction	1
Rte 79 at Bradley Rd	10	1	Rear-end	6
			Angle	2
			Turning-Same Direction	1
			Sideswipe-Same Direction	1
Rte 79 from Bradley Rd to Old Rte 79/Woodland Rd	2	0	Rear-end	2
Rte 79 at Old Rte 79/Woodland Rd	11	1	Rear-end	4
			Turning-Same Direction	1
			Turning-Intersecting Paths	1
			Sideswipe-Same Direction	4
			Turning-Opposite Direction	1
Total	**33**	**4**		**33**

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	1723	0	0	1757	1583	0	2069	0	1778	1853	0
Flt Permitted	0.701				0.848			0.958		0.373		
Satd. Flow (perm)	1306	1723	0	0	1527	1583	0	1988	0	698	1853	0
Satd. Flow (RTOR)		33				109		11			9	
Volume (vph)	40	30	30	40	40	100	20	330	50	150	530	40
Lane Group Flow (vph)	43	66	0	0	86	109	0	435	0	163	619	0
Turn Type	Perm			Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	25.0	25.0	0.0	25.0	25.0	25.0	41.0	41.0	0.0	18.1	59.1	0.0
Act Effct Green (s)	8.6	8.6			8.6	8.6		23.3		33.3	34.3	
Actuated g/C Ratio	0.17	0.17			0.17	0.17		0.49		0.71	0.73	
v/c Ratio	0.19	0.20			0.32	0.30		0.44		0.26	0.46	
Control Delay	20.2	12.9			21.9	7.3		10.8		4.5	5.5	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	20.2	12.9			21.9	7.3		10.8		4.5	5.5	
LOS	C	B			C	A		B		A	A	
Approach Delay		15.8			13.8			10.8			5.3	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)	10	8			21	0		72		13	63	
Queue Length 95th (ft)	35	36			59	33		162		35	151	
Internal Link Dist (ft)		292			802			835			1671	
Turn Bay Length (ft)	75					125				200		
Base Capacity (vph)	445	610			521	612		1218		694	1504	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.10	0.11			0.17	0.18		0.36		0.23	0.41	

Intersection Summary	
Cycle Length: 84.1	
Actuated Cycle Length: 47.2	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Bradley Road & Route 79 (Durham Road)

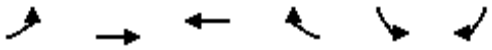




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		-3%	
Volume (veh/h)	0	230	180	60	80	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	250	196	65	87	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		882				
pX, platoon unblocked						
vC, conflicting volume	261				478	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	261				478	228
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				84	100
cM capacity (veh/h)	1304				546	811

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	250	261	87
Volume Left	0	0	87
Volume Right	0	65	0
cSH	1304	1700	546
Volume to Capacity	0.00	0.15	0.16
Queue Length 95th (ft)	0	0	14
Control Delay (s)	0.0	0.0	12.8
Lane LOS			B
Approach Delay (s)	0.0	0.0	12.8
Approach LOS			B

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	24.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	40	270	220	20	0	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	293	239	22	0	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1082				
pX, platoon unblocked						
vC, conflicting volume	261				630	250
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	261				630	250
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	97
cM capacity (veh/h)	1304				430	789

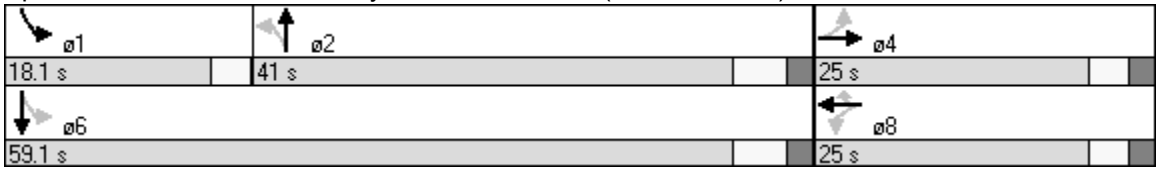
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	337	261	22
Volume Left	43	0	0
Volume Right	0	22	22
cSH	1304	1700	789
Volume to Capacity	0.03	0.15	0.03
Queue Length 95th (ft)	3	0	2
Control Delay (s)	1.3	0.0	9.7
Lane LOS	A		A
Approach Delay (s)	1.3	0.0	9.7
Approach LOS			A

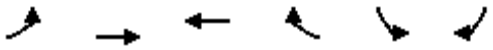
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	1751	0	0	1761	1583	0	2079	0	1778	1850	0
Flt Permitted	0.665				0.856			0.971		0.244		
Satd. Flow (perm)	1239	1751	0	0	1541	1583	0	2023	0	457	1850	0
Satd. Flow (RTOR)		22				152		8			11	
Volume (vph)	50	30	20	50	60	140	20	550	60	140	550	50
Lane Group Flow (vph)	54	55	0	0	119	152	0	685	0	152	652	0
Turn Type	Perm			Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	25.0	25.0	0.0	25.0	25.0	25.0	41.0	41.0	0.0	18.1	59.1	0.0
Act Effct Green (s)	10.0	10.0			10.0	10.0		28.3		38.6	39.8	
Actuated g/C Ratio	0.18	0.18			0.18	0.18		0.53		0.72	0.74	
v/c Ratio	0.24	0.17			0.43	0.37		0.64		0.32	0.48	
Control Delay	24.7	16.3			27.5	7.8		13.8		5.4	5.9	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	24.7	16.3			27.5	7.8		13.8		5.4	5.9	
LOS	C	B			C	A		B		A	A	
Approach Delay		20.5			16.4			13.8			5.8	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)	15	9			34	0		146		13	78	
Queue Length 95th (ft)	49	39			91	43		317		38	189	
Internal Link Dist (ft)		292			802			835			1671	
Turn Bay Length (ft)	75					125				200		
Base Capacity (vph)	393	571			489	606		1212		592	1474	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.14	0.10			0.24	0.25		0.57		0.26	0.44	

Intersection Summary	
Cycle Length: 84.1	
Actuated Cycle Length: 53.8	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Bradley Road & Route 79 (Durham Road)

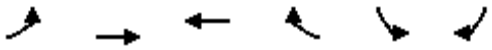




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		-3%	
Volume (veh/h)	0	230	250	90	70	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	250	272	98	76	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		882				
pX, platoon unblocked						
vC, conflicting volume	370				571	321
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	370				571	321
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				84	100
cM capacity (veh/h)	1189				483	720

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	250	370	76
Volume Left	0	0	76
Volume Right	0	98	0
cSH	1189	1700	483
Volume to Capacity	0.00	0.22	0.16
Queue Length 95th (ft)	0	0	14
Control Delay (s)	0.0	0.0	13.8
Lane LOS			B
Approach Delay (s)	0.0	0.0	13.8
Approach LOS			B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	29.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	20	280	310	0	20	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	304	337	0	22	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1082				
pX, platoon unblocked						
vC, conflicting volume	337				685	337
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	337				685	337
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				95	95
cM capacity (veh/h)	1222				407	705

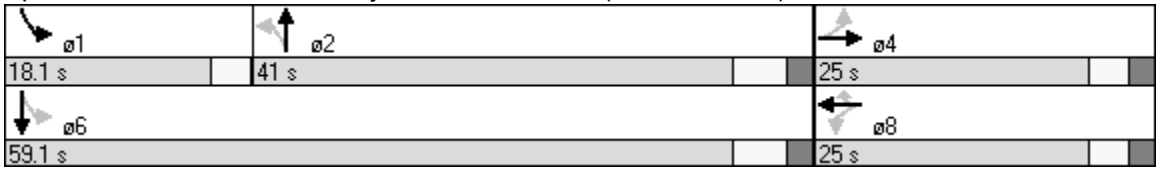
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	326	337	54
Volume Left	22	0	22
Volume Right	0	0	33
cSH	1222	1700	545
Volume to Capacity	0.02	0.20	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.7	0.0	12.3
Lane LOS	A		B
Approach Delay (s)	0.7	0.0	12.3
Approach LOS			B

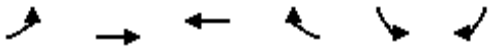
Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	1723	0	0	1750	1583	0	2063	0	1778	1853	0
Flt Permitted	0.644				0.791			0.932		0.293		
Satd. Flow (perm)	1200	1723	0	0	1424	1583	0	1928	0	549	1853	0
Satd. Flow (RTOR)		43				152		13			9	
Volume (vph)	60	40	40	70	50	140	30	430	80	210	680	50
Lane Group Flow (vph)	65	86	0	0	130	152	0	587	0	228	793	0
Turn Type	Perm			Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	25.0	25.0	0.0	25.0	25.0	25.0	41.0	41.0	0.0	18.1	59.1	0.0
Act Effct Green (s)	10.8	10.8			10.8	10.8		27.6		38.7	40.0	
Actuated g/C Ratio	0.19	0.19			0.19	0.19		0.50		0.71	0.73	
v/c Ratio	0.29	0.24			0.48	0.36		0.60		0.42	0.59	
Control Delay	25.3	14.6			28.8	7.5		14.6		6.5	7.8	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	25.3	14.6			28.8	7.5		14.6		6.5	7.8	
LOS	C	B			C	A		B		A	A	
Approach Delay		19.2			17.3			14.6			7.5	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)	17	11			36	0		127		22	115	
Queue Length 95th (ft)	59	51			103	44		296		61	291	
Internal Link Dist (ft)		292			104			835			1671	
Turn Bay Length (ft)	75					125				200		
Base Capacity (vph)	382	577			453	607		1130		628	1461	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.17	0.15			0.29	0.25		0.52		0.36	0.54	

Intersection Summary	
Cycle Length: 84.1	
Actuated Cycle Length: 54.8	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Bradley Road & Route 79 (Durham Road)

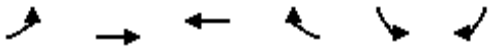




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		-3%	
Volume (veh/h)	0	240	310	80	100	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	261	337	87	109	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		882				
pX, platoon unblocked						
vC, conflicting volume	424				641	380
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	424				641	380
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				75	100
cM capacity (veh/h)	1135				439	667

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	261	424	109
Volume Left	0	0	109
Volume Right	0	87	0
cSH	1135	1700	439
Volume to Capacity	0.00	0.25	0.25
Queue Length 95th (ft)	0	0	24
Control Delay (s)	0.0	0.0	15.9
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.9
Approach LOS			C

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	90	240	230	80	0	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	261	250	87	0	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		184				
pX, platoon unblocked					0.97	
vC, conflicting volume	337				750	293
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	337				743	293
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				100	96
cM capacity (veh/h)	1222				342	746

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	359	337	33
Volume Left	98	0	0
Volume Right	0	87	33
cSH	1222	1700	746
Volume to Capacity	0.08	0.20	0.04
Queue Length 95th (ft)	7	0	3
Control Delay (s)	2.8	0.0	10.0
Lane LOS	A		B
Approach Delay (s)	2.8	0.0	10.0
Approach LOS			B

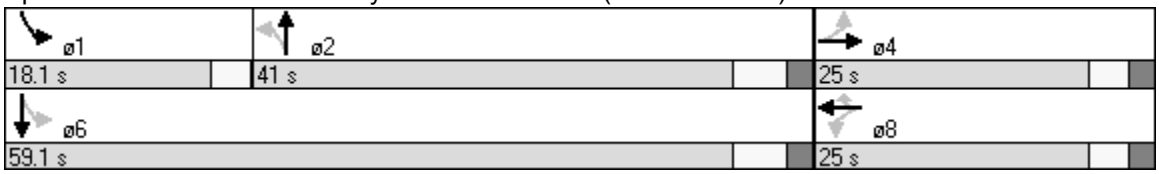
Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

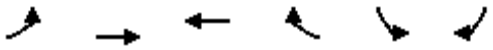
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	1742	0	0	1757	1583	0	2077	0	1778	1850	0
Flt Permitted	0.562				0.814			0.954		0.168		
Satd. Flow (perm)	1047	1742	0	0	1466	1583	0	1986	0	315	1850	0
Satd. Flow (RTOR)		33				207		9			11	
Volume (vph)	70	40	30	80	80	190	30	720	90	200	680	60
Lane Group Flow (vph)	76	76	0	0	174	207	0	914	0	217	804	0
Turn Type	Perm			Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	25.0	25.0	0.0	25.0	25.0	25.0	41.0	41.0	0.0	18.1	59.1	0.0
Act Effct Green (s)	13.4	13.4			13.4	13.4		37.9		49.1	49.1	
Actuated g/C Ratio	0.19	0.19			0.19	0.19		0.54		0.70	0.70	
v/c Ratio	0.38	0.21			0.62	0.44		0.85		0.59	0.62	
Control Delay	31.1	17.0			36.9	7.3		25.8		12.2	9.3	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	31.1	17.0			36.9	7.3		25.8		12.2	9.3	
LOS	C	B			D	A		C		B	A	
Approach Delay		24.0			20.8			25.8			9.9	
Approach LOS		C			C			C			A	
Queue Length 50th (ft)	28	15			68	0		301		26	149	
Queue Length 95th (ft)	71	51			140	51		#717		75	342	
Internal Link Dist (ft)		292			104			835			1671	
Turn Bay Length (ft)	75					125				200		
Base Capacity (vph)	283	495			396	579		1071		466	1334	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.27	0.15			0.44	0.36		0.85		0.47	0.60	

Intersection Summary	
Cycle Length: 84.1	
Actuated Cycle Length: 70.6	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 18.4	Intersection LOS: B
Intersection Capacity Utilization 109.7%	ICU Level of Service H
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Bradley Road & Route 79 (Durham Road)

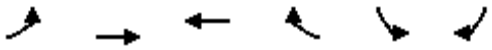




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		-3%	
Volume (veh/h)	0	370	280	120	100	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	402	304	130	109	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		882				
pX, platoon unblocked						
vC, conflicting volume	435				772	370
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	435				772	370
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				70	100
cM capacity (veh/h)	1125				368	676

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	402	435	109
Volume Left	0	0	109
Volume Right	0	130	0
cSH	1125	1700	368
Volume to Capacity	0.00	0.26	0.30
Queue Length 95th (ft)	0	0	30
Control Delay (s)	0.0	0.0	18.8
Lane LOS			C
Approach Delay (s)	0.0	0.0	18.8
Approach LOS			C

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	30	300	280	0	70	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	326	304	0	76	76
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		184				
pX, platoon unblocked					0.97	
vC, conflicting volume	304				696	304
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	304				686	304
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				80	90
cM capacity (veh/h)	1256				390	735

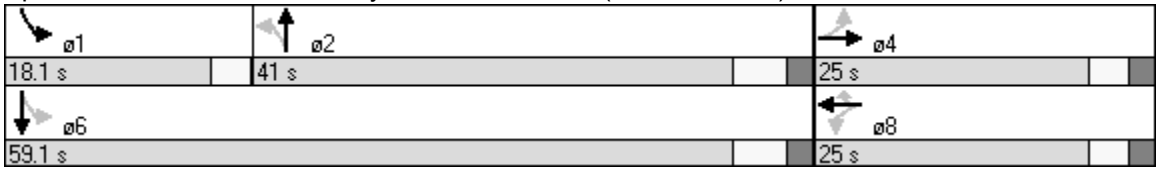
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	359	304	152
Volume Left	33	0	76
Volume Right	0	0	76
cSH	1256	1700	510
Volume to Capacity	0.03	0.18	0.30
Queue Length 95th (ft)	2	0	31
Control Delay (s)	1.0	0.0	15.0
Lane LOS	A		C
Approach Delay (s)	1.0	0.0	15.0
Approach LOS			C

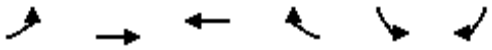
Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	1723	0	0	1747	1583	0	2042	0	1778	1853	0
Flt Permitted	0.624				0.775			0.937		0.267		
Satd. Flow (perm)	1162	1723	0	0	1396	1583	0	1919	0	500	1853	0
Satd. Flow (RTOR)		43				163		22			9	
Volume (vph)	60	40	40	80	50	150	30	430	130	260	680	50
Lane Group Flow (vph)	65	86	0	0	141	163	0	641	0	283	793	0
Turn Type	Perm			Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	25.0	25.0	0.0	25.0	25.0	25.0	41.0	41.0	0.0	18.1	59.1	0.0
Act Effct Green (s)	11.6	11.6			11.6	11.6		29.1		41.3	42.6	
Actuated g/C Ratio	0.19	0.19			0.19	0.19		0.50		0.71	0.73	
v/c Ratio	0.29	0.23			0.52	0.37		0.66		0.54	0.58	
Control Delay	26.7	15.2			31.4	7.5		16.7		8.3	8.1	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	26.7	15.2			31.4	7.5		16.7		8.3	8.1	
LOS	C	B			C	A		B		A	A	
Approach Delay		20.2			18.6			16.7			8.1	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)	19	12			43	0		155		30	124	
Queue Length 95th (ft)	61	52			114	46		367		81	312	
Internal Link Dist (ft)		292			104			835			1671	
Turn Bay Length (ft)	75					125				200		
Base Capacity (vph)	358	560			430	600		1102		608	1445	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.18	0.15			0.33	0.27		0.58		0.47	0.55	

Intersection Summary	
Cycle Length: 84.1	
Actuated Cycle Length: 58.1	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 94.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Bradley Road & Route 79 (Durham Road)

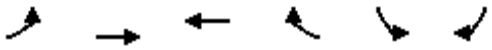




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		-3%	
Volume (veh/h)	0	240	420	80	100	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	261	457	87	109	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		882				
pX, platoon unblocked						
vC, conflicting volume	543				761	500
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	543				761	500
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				71	100
cM capacity (veh/h)	1025				374	571

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	261	543	109
Volume Left	0	0	109
Volume Right	0	87	0
cSH	1025	1700	374
Volume to Capacity	0.00	0.32	0.29
Queue Length 95th (ft)	0	0	30
Control Delay (s)	0.0	0.0	18.5
Lane LOS			C
Approach Delay (s)	0.0	0.0	18.5
Approach LOS			C

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	190	240	230	190	0	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	207	261	250	207	0	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		184				
pX, platoon unblocked					0.95	
vC, conflicting volume	457				1027	353
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	457				1028	353
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	81				100	92
cM capacity (veh/h)	1104				201	690

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	467	457	54
Volume Left	207	0	0
Volume Right	0	207	54
cSH	1104	1700	690
Volume to Capacity	0.19	0.27	0.08
Queue Length 95th (ft)	17	0	6
Control Delay (s)	5.1	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	5.1	0.0	10.7
Approach LOS			B

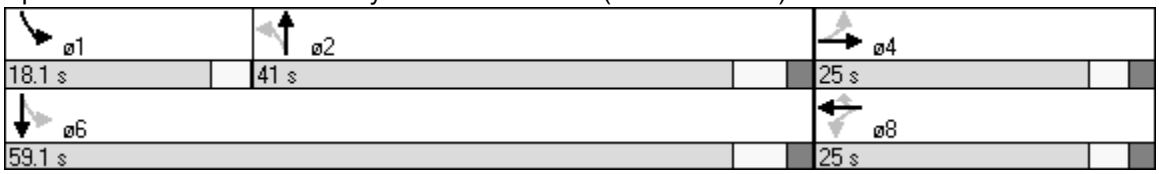
Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

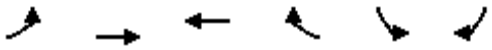
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	1742	0	0	1747	1583	0	2073	0	1778	1850	0
Flt Permitted	0.465				0.767			0.955		0.165		
Satd. Flow (perm)	866	1742	0	0	1381	1583	0	1984	0	309	1850	0
Satd. Flow (RTOR)		33				261		10			11	
Volume (vph)	70	40	30	130	80	240	30	720	100	210	680	60
Lane Group Flow (vph)	76	76	0	0	228	261	0	925	0	228	804	0
Turn Type	Perm			Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	25.0	25.0	0.0	25.0	25.0	25.0	41.0	41.0	0.0	18.1	59.1	0.0
Act Effct Green (s)	16.2	16.2			16.2	16.2		37.7		49.5	49.5	
Actuated g/C Ratio	0.22	0.22			0.22	0.22		0.51		0.67	0.67	
v/c Ratio	0.40	0.19			0.75	0.47		0.91		0.63	0.65	
Control Delay	31.8	16.3			43.5	6.7		33.3		14.7	10.8	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	31.8	16.3			43.5	6.7		33.3		14.7	10.8	
LOS	C	B			D	A		C		B	B	
Approach Delay		24.1			23.9			33.3			11.7	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	29	15			95	0		366		35	189	
Queue Length 95th (ft)	74	51			#193	57		#743		86	342	
Internal Link Dist (ft)		292			104			835			1671	
Turn Bay Length (ft)	75					125				200		
Base Capacity (vph)	233	492			371	616		1019		450	1288	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.33	0.15			0.61	0.42		0.91		0.51	0.62	

Intersection Summary	
Cycle Length: 84.1	
Actuated Cycle Length: 73.8	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 113.1%	ICU Level of Service H
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Bradley Road & Route 79 (Durham Road)

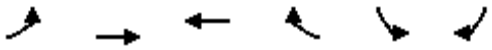




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		-3%	
Volume (veh/h)	0	460	280	120	100	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	500	304	130	109	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		882				
pX, platoon unblocked						
vC, conflicting volume	435				870	370
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	435				870	370
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				66	100
cM capacity (veh/h)	1125				323	676

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	500	435	109
Volume Left	0	0	109
Volume Right	0	130	0
cSH	1125	1700	323
Volume to Capacity	0.00	0.26	0.34
Queue Length 95th (ft)	0	0	36
Control Delay (s)	0.0	0.0	21.7
Lane LOS			C
Approach Delay (s)	0.0	0.0	21.7
Approach LOS			C

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	50	300	280	0	160	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	326	304	0	174	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		184				
pX, platoon unblocked					0.96	
vC, conflicting volume	304				739	304
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	304				728	304
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				52	75
cM capacity (veh/h)	1256				359	735

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	380	304	359
Volume Left	54	0	174
Volume Right	0	0	185
cSH	1256	1700	487
Volume to Capacity	0.04	0.18	0.74
Queue Length 95th (ft)	3	0	152
Control Delay (s)	1.5	0.0	30.3
Lane LOS	A		D
Approach Delay (s)	1.5	0.0	30.3
Approach LOS			D

Intersection Summary			
Average Delay	11.0		
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

APPENDIX D
Notice of Availability of Draft EIE, Notice of Public Hearing, and Affidavits

Monitor Archives

ENVIRONMENTAL MONITOR

The official site for project information under the Connecticut Environmental Policy Act

November 18, 2008

Scoping Notices

1. Engineering Study for the Extension of Public Water System from Middletown to Durham

2. New Haven - Hartford - Springfield Commuter Rail Improvements

Environmental Impact Evaluations

1. Hammonasset Beach Erosion Study - Madison.

2. **NEW!** Madison Shore Line East Railroad Station - Madison

State Land Transfers

There are no state land transfers posted for public notice or comment in this edition.

The next issue will be published on December 2, 2008.

Subscribe to e-alerts to receive an e-mail when The Environmental Monitor is published.

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2. Notice of EIE for the Madison Shore Line East Railroad Station

Municipality where project is proposed: Madison, CT

Address of Possible Project Location: Bradley Road, Madison, CT

Project Description: Infrastructure improvements to the Madison Shore Line East (SLE)Railroad Station including a new north-side high level rail platform, a new pedestrian bridge over the active rail line connecting the north-side and south-side platforms, and a new three-level parking garage to accommodate a total of 585 parking spaces. The project is intended to provide a full-service dual-platform commuter rail station and to provide expanded parking to accommodate future commuters with increasing SLE ridership.

Project Map: Click here to view the site location

Comments on this EIE will be accepted until the close of business on :
January 2, 2009

The public can view a copy of this EIE at: The Madison Town Clerk's Office, Town Campus, 8 Campus Drive, Madison, CT; The E.C. Scranton Memorial Library, 801 Boston Post Road, Madison, CT; The Connecticut Department of Transportation, 2800 Berlin Turnpike - Room 2155, Newington, CT; The South Central Regional Council of Governments, 127 Washington Avenue – 4th Floor-West, North Haven, CT .

There is a public hearing scheduled for this EIE on :

DATE: Thursday, December 18, 2008

TIME: 7:00 pm

PLACE: Hammonasset Room at Town Campus, 8 Campus Drive, Madison, CT.

Send your comments about this EIE to:

Name: Edgar Hurle - Transportation Planning Director
Agency: State of Connecticut Department of Transportation
Address: 2800 Berlin Turnpike, Newington, CT 06131

E-Mail: Edgar.Hurle@po.state.ct.us

If you have questions about the public hearing, where you can review this EIE, or similar matters, please contact :

Name: Jessica DiLuca - Transportation Planner II
Agency: State of Connecticut Department of Transportation
Address: 2800 Berlin Turnpike, Newington, CT 06131
E-Mail: Jessica.DiLuca@po.state.ct.us
Phone: 860-594-2135

Affidavit of Publication

State of Connecticut
County of Fairfield

I, **Candace Coberly**, a billing representative of Graystone Group Advertising, 2710 North Ave., Suite 200, Bridgeport, CT 06604, do solemly swear that on:

Date: 11-18-08

Ad title: DOT- Legal Notice

Appeared in: New Haven Register publication and the newspaper extracts hereto annexed were clipped from the above named issue of said newspaper.

Subscribed and sworn to this 7 day of January, 2009 before me.

Beth E. Stoller Notary Public

BETH E. STOLLER
Notary Public
State of Connecticut
My Commission Expires 12/31/2012

Affidavit of Publication

State of Connecticut
County of Fairfield

I, **Candace Coberly**, a billing representative of Graystone Group Advertising, 2710 North Ave., Suite 200, Bridgeport, CT 06604, do solemly swear that on:

Date: 12-11-08

Ad title: ROT - Legal Notice

Appeared in: New Haven Register publication and the newspaper extracts hereto annexed were clipped from the above named issue of said newspaper.

Subscribed and sworn to this 7 day of January, 2009 before me.

PETRA E. SCHOLLER
Notary Public
State of Connecticut
My Commission Expires 12/31/2012

Notary Public

Affidavit of Publication

State of Connecticut
County of Fairfield

I, **Candace Coberly**, a billing representative of Graystone Group Advertising, 2710 North Ave., Suite 200, Bridgeport, CT 06604, do solemly swear that on:

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Ad title: ROT- Legal Notice

Appeared in: New Haven Register publication and the newspaper extracts hereto annexed were clipped from the above named issue of said newspaper.

Subscribed and sworn to this 7 day of January, 2009 before me.

Beth E Stoller Notary Public

BETH E. STOLLER
Notary Public
State of Connecticut
My Commission Expires 12/31/2012

APPENDIX E
ConnDOT's Policy on Systematic Consideration and Management of Work Zone Impacts

CONNECTICUT DEPARTMENT OF TRANSPORTATION

POLICY STATEMENT

POLICY NO. E&H.O.- 57
August 10, 2007

SUBJECT: Policy on Systematic Consideration and Management of Work Zone Impacts

It is the policy of the Department to systematically consider and manage work zone impacts of significant projects.

In establishing this Work Zone policy, the Department's objectives are to:

1. Provide a high level of safety for both workers and the public.
2. Minimize congestion and community impacts.
3. Provide both maintenance forces and contractors adequate access to the highway to efficiently conduct their work.

In order to meet these objectives, appropriate planning, design, construction, maintenance, and public awareness strategies shall be employed on all significant projects. For the purposes of this policy, a significant project is defined as:

> A stationary highway construction or maintenance activity which causes sustained mobility impacts on I-84, I-91, I-95, I-291, I-384, or I-691 for more than three (3) days with either intermittent or continuous lane closures. In addition, any highway construction or maintenance activity that alone or in combination with other concurrent activities nearby, which is expected based on engineering judgment, to cause sustained mobility impacts that are considered greater than what is considered tolerable relative to typical traffic operations experienced in the area of the work zone, may be declared a significant project.

It is recognized that the Department's emergency operations may not always allow a systematic consideration of work zone impacts. In such situations, the objectives of this policy will be honored as much as practicable.

Ralph J. Carpenter
COMMISSIONER

List 3

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

memorandum

subject Work Zone Safety and Mobility Policy and Implementation Plan

date: August 6, 2007

To Mr. Charles Barone
Mr. James H. Norman
Mr. Robert P. Mongillo
Mr. Lewis Cannon

from Michael W. Lonergan
Acting Bureau Chief
Bureau of Engineering
and Highway Operations

In September 2004, the Federal Highway Administration (FHWA) published updates to the Work Zone regulations contained in 23 CFR 630 Subpart J. The updated rule is referred to as the Work Zone Safety and Mobility Rule (Rule) and applies to all State and local governments that received Federal-aid highway funding. Transportation agencies are required to comply with the provisions of the Rule by October 12, 2007.

The Rule requires agencies to develop and implement an agency-level Work Zone Safety and Mobility policy to support systematic consideration and management of work zone impacts across all stages of project development. In order to develop this required policy, as well as prepare an associated implementation plan, a Rule Steering Committee was established by the Department. Members of this multi-disciplinary committee included representatives from the FHWA and Offices of Construction, Maintenance, Engineering, and Intermodal Planning.

The attached draft Department policy entitled "Policy on Systematic Consideration and Management of Work Zone Impacts" is in conformance with the Rule and by copy of this memorandum is being forwarded to Commissioner Carpenter's Office for approval. The policy defines which Department projects are subject to the Rule and allows an exception for unplanned emergency operations.

The attached implementation plan has been developed to provide guidance to your offices in complying with the Rule. The plan identifies several assignments and ongoing responsibilities for the units under your supervision which will be necessary for compliance. It should be noted that your Offices will need to develop more specific project and program level procedures to institutionalize the letter and spirit of the Rule. Your representatives to the Rule Steering Committee should be utilized as resources in this effort.

It has been determined that in Connecticut all "significant" projects, as defined by the policy, that begin their planning, preliminary engineering or preliminary design phase on or after October 1, 2007, or whose design completion date (DCD) is on or after October 1, 2008, shall be in accordance with the Rule. For those "significant" projects with a DCD during Federal Fiscal Year 2008 (October 1, 2007 to September 30, 2008), the FHWA, in coordination with the Department, will approve PS&E following confirmation that the appropriate TMP components have been incorporated in compliance with the Rule. Please take the steps necessary to ensure the Department's compliance with the Rule by these dates.

Attachment(s)
cc: Bradley Keazer (FHWA)
Robert Ramirez (FHWA)

John F. Carey:jyk

cc: Comr. Carpenter – Dep. Comr. Boice – Dep. Comr. Curtis – Dep. Comr. Martin
David Crowther – Please process the attached Policy for Commissioner Carpenter's approval.
Arthur W. Gruhn – Michael W. Lonergan - Richard T. Jankovich
James H. Norman, Acting Engineering Administrator
Timothy Wilson
Carmine Trotta .
Robert P. Mongillo-Charles A. Drda-Ronald Cormier-David A. Sawicki-John Carey (Maintenance)
Mark Rolfe
John F. Carey

CONNECTICUT DEPARTMENT OF TRANSPORTATION

POLICY STATEMENT

POLICY NO. E&HO
August 6, 2007

SUBJECT: Policy on Systematic Consideration and Management of Work Zone Impacts

It is the policy of the Department to systematically consider and manage work zone impacts of significant projects.

In establishing this Work Zone policy, the Department's objectives are:

1. Provide a high level of safety for both workers and the public.
2. Minimize congestion and community impacts.
3. To provide both maintenance forces and contractors adequate access to the highway to efficiently conduct their work.

In order to meet these objectives, appropriate planning, design, construction, maintenance and public awareness strategies shall be employed on all significant projects. For the purposes of this policy, a significant project is defined as:

> A stationary highway construction or maintenance activity which causes sustained mobility impacts on I-84, I-91, I-95, I-691, I-291 or I-384 for more than 3 days with either intermittent or continuous lane closures. In addition, any highway construction or maintenance activity that alone or in combination with other concurrent activities nearby, which is expected based on engineering judgment, to cause sustained mobility impacts that are considered greater than what is considered tolerable relative to typical traffic operations experienced in the area of the work zone, may be declared a significant project.

It is recognized that the Department's emergency operations may not always allow a systematic consideration of work zone impacts. In such situations, the objectives of this policy will be honored as much as practicable.

WORK ZONE SAFETY AND MOBILITY IMPLEMENTATION PLAN GUIDANCE

The Connecticut Department of Transportation (Department) shall establish and implement a program to improve safety and mobility within work zones for certain interstate and state roadway construction projects, in accordance with the Federal Highway Administration Work Zone Safety and Mobility Final Rule.

COMPLIANCE

The Department, in compliance with the Federal Highway Administration Final Rule, has developed a Policy regarding Work Zone Safety and Mobility (WZS&M). Implementation of this policy is effective October 1, 2007. All State transportation planning documents (e.g. planning studies, Master Plans, Long Range Plans, Strategic Highway Safety Plans) that include certain interstate or state roads and are initiated on or following October 1, 2007, shall address WZS&M in accordance with the Final Rule and Department policy. In addition, WZS&M compliance shall be implemented for those interstate or state roadway transportation projects that have been designated as "significant" in accordance with this Policy and Implementation Plan, which have been in development prior to October 1, 2007, and that begin the preliminary engineering or preliminary design phase of development on or after October 1, 2007, or whose design completion date (DCD) is on or after October 1, 2008.

For those "significant" projects with a DCD during Federal Fiscal Year 2008 (October 1, 2007 to September 30, 2008), the FHWA, in coordination with the Department, will approve PS&E following confirmation that the appropriate TMP components have been incorporated in compliance with the WZS&M Final Rule.

The Department WZS&M Policy and Implementation Plan (and associated procedures) shall be reviewed every two years (or as needed) to determine the effectiveness of its application and consistency with FHWA direction.

INTRODUCTION

On September 9, 2004, the Federal Highway Administration (FHWA) issued a final rule on Work Zone Safety and Mobility. This rule addresses the changing times of more traffic, more congestion, greater safety issues, and more work zones. The FHWA revised the regulation to facilitate comprehensive consideration of the broader safety and mobility impacts of work zones across all stages of project development, and the adoption of additional strategies that help manage these impacts during project implementation. The new FHWA provisions are intended to help State Departments of Transportation (DOTs) meet current and future work zone safety and mobility challenges, and serve the needs of the American people. DOTs must be in compliance with the final Rule by October 12, 2007. The key features of the Final Rule are as follows:

- A policy driven focus that will institutionalize work zone processes and procedures at the agency level, with specific language for application at the project level.
- A systems engineering approach that includes provisions to work zone considerations starting early in planning, and progressing through project design, implementation, and performance assessment.
- Emphasis on addressing the broader impacts of work zones to develop transportation management strategies that address traffic safety and control through the work zone, transportation operations, and public information and outreach.
- Emphasis on a partner driven approach, whereby transportation agencies and the FHWA will work together towards improving work zone safety and mobility.
- Overall flexibility, scalability, and adaptability of the provisions, so as to customize the application of the regulations according to the needs of individual agencies, and to meet the needs of the various types of highway projects.

Section 135 of Title 23 and Section 5304 of Title 49 of the United States Code (USC), as amended by the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) requires each State to carry out a transportation planning process that provides for consideration of projects and strategies that will increase the safety of the transportation system for motorized and non-motorized users. With respect to Work Zone Safety, SAFETEA-LU contains several provisions that address safety in highway construction work zones. They are as follows:

Work Zone Safety Grants – Under the Work Zone Safety Grants program, the U.S. Department of Transportation (USDOT) will make grants to nonprofit and not-for-profit organizations to provide training to prevent and reduce work zone injuries and fatalities. Such grants may be used for:

- construction worker training to prevent injuries and fatalities
- development of guidelines to prevent work zone injuries and fatalities
- training for State and local governments, transportation agencies, and other groups implementing these guidelines

Temporary Traffic Control Devices (TTC) - Projects may not be approved on Federal-aid highways or under the Federal Lands Highway program unless proper temporary traffic control devices to improve safety in work zones will be installed and maintained during construction, utility, and maintenance operations on the portion of the highway to be improved by such projects. Installation and maintenance of the devices must be in accordance with the Manual on Uniform Traffic Control Devices.

The Secretary of Transportation, after consultation with appropriate Federal and State officials, is to issue regulations establishing the conditions for the appropriate use of, and expenditure of funds for, uniformed law enforcement officer, positive protective measures between workers and motorized traffic, and installation and maintenance of temporary traffic control devices during construction, utility, and maintenance operations.

Worker Injury Prevention and Free Flow of Vehicular Traffic – By August 10, 2006, the Secretary of U.S. DOT must establish regulations requiring highway workers to wear high visibility garments.

National Work Zone Safety Information Clearinghouse - Under this program, the U.S. DOT will make grants to a national nonprofit foundation for the operation of the National Work Zone Information Clearinghouse to be used for assembling and disseminating, electronically or otherwise, information relating to the improvement of work zone safety.

Implementation of the Department policy on WZS&M involves a number of actions to address:

- Data collection and Reporting during project construction.
- Data retention.
- Data analysis.
- Early evaluation and documentation in the identification of "significant" proposed projects.
- Establishment of specific project scope and limits.
- Reassessment of "significant" project determinations at each phase of project development.
- Development of a TTC plan, Transportation Operations (TO) plan and Public Outreach (PO)/Public Information (PI) program components, as warranted.
- Application during project construction.
- Monitoring during project construction.
- Post-construction analysis of significant projects.

BACKGROUND

WZS&M focuses on those projects that are determined to be "significant" as defined by Department policy (and consistent with FHWA guidelines). The scope and limits of all projects that are advanced to construction by the Department evolves as information becomes available and analysis is refined. In addressing WZS&M, it is essential that an initial determination regarding the project "significance" is made as early as possible and that there is an opportunity to reassess that determination at the various phases of project development and definition (i.e. planning, preliminary engineering, preliminary design, and final design).

The initial stage in the overall development and determination of a "significant project" as defined by the Department policy on WZS&M, is the conduct of a planning analysis to identify the transportation needs and deficiencies to be addressed for both the existing and future (20-year horizon) "No Build" conditions. Once such needs are identified, options are considered towards the development of a recommended action to modify the transportation system to address those needs. An implementation plan which may consist of both near-term (if any) and long-term recommendations is recommended. This is typically accomplished by a State/Federal (Federal Highway Administration) study team representing planning, maintenance, and engineering design disciplines, often in coordination with a stakeholder committee.

Recommendations documented at the planning phase are considered conceptual, possibly consisting of various transportation modes, and must be refined and more precisely defined as the recommended action(s) is further developed through the National Environmental Policy Act / Connecticut Environmental Policy Act (NEPA/CEPA) documentation, preliminary engineering, preliminary design and final design processes. A determination of a "significant project" must be reassessed for every project at each of these stages of project development.

IMPLEMENTATION

Training:

The Final Rule specifies that agencies require appropriate training and periodic updates, for personnel involved in the development, design, implementation operations, inspection and enforcement of work zone related transportation management and traffic control. These include transportation planners, design engineers, traffic and safety engineers, temporary traffic control designers and program managers, regional construction managers, construction project staff, maintenance staff, and contractor and utility staff. This may include executive level decision-makers, policy makers, senior managers, information officers, and law enforcement and incident responders.

The Department and Industry Organizations will provide the opportunity for training through a number of initiatives. The Department, through the Training Coordinator and in coordination with the FHWA, will seek to sponsor available related courses for Department personnel. In addition, annual training provided for Department Construction Inspectors will include a discussion addressing WZS&M.

Data Collection / Reporting Procedures:

The Department's Offices of Traffic Engineering, Maintenance, Construction and Inventory and Forecasting will establish procedures for the collection, reporting and retention of WZS&M data, for "significant" projects. Such information may include but may not be limited to:

- Incident type and duration.
- Residual traffic queue and duration.
- Police reporting records.

Data shall be collected and retained for all projects determined to be "significant", within the work zone limits, defined as the display point of the approach "Series 16" limited liability sign, through to the exiting "End Construction" sign.

Data Retention / Analysis:

The Final Rule requires States to use field observations, available Work Zone Crash data, and operational information to manage Work Zone impacts for specific significant projects during construction. In addition, States are required to continually pursue improvement of Work Zone Safety and mobility by analyzing Work Zone Crash and operational data from multiple significant projects to improve State processes and procedures.

The satisfaction of these two requirements will require updates to the Department's computerized data retention system that are in progress but not yet

available. While the Department's roadway characteristics file has been revised to a relational data base, the Department's accident record, traffic volume, and pre-design project status/location files currently reside on a legacy main frame computer system and are not readily linked. Such linkage is necessary to identify construction project limits and reflect accident, traffic volume, and roadway inventory records. The Department is presently pursuing improvements to these mainframe files which will move these records to relational databases similar to the roadway characteristics file. Improvements to the electronic entry of accident records into the DOT system are also planned. Such improvements will allow efficient and timely reviews.

For the interim, the Department will rely on the Offices of Maintenance and Construction field personnel to monitor their work zones and make appropriate adjustments based on their observations of accidents and traffic operations. Multiple reviews will be limited in scope until the planned improvements to the data system become available. All data collected will be retained by the Offices of Maintenance and Construction, with a copy to the Traffic Division and the Bureau of Policy and Planning's office of Inventory and Forecasting.

Planning:

As required by Section 135 of Title 23 USC, the Department identifies in its Long-Range Transportation Plan (LRP), safety and security issues, including work zone safety, and actions being taken to address them. Also, the State 2007 Master Transportation Plan (MTP) identifies safety and mobility needs among the primary principles the Department has committed to strive towards. Work Zone Safety and Mobility is presented as one component of 'Transportation Safety and Security Programs and Plans". Updates of these plans will address work zone safety and mobility as a component of "Transportation Safety Programs and Plans".

The State LRP and MTP will identify and discuss actions that the Department has taken or plans to take to comply with the FHWA September 9, 2004 Final Rule on WZS&M. The Department's actions and plans to comply with work zone safety-related regulations required by SAFETEA-LU will be discussed in these plans, as will work zone safety programs undertaken with any funding received from U.S. Department of Transportation Work Zone Safety Grants program.

A preliminary determination of "significance" as it relates to WZS&M will be made for each roadway component of the study corridor near-term and long-term roadway project recommendations. Based upon the following definition of a ***"significant project"*** as established by the Department WZS&M policy in accordance with the FHWA Final Rule:

> *A stationary highway construction or maintenance activity which causes sustained mobility impacts on I-84, I-91, I-95, I-691, I-291, or I-384 for more than 3 days with either intermittent or continuous lane closures. In*

addition, any highway construction or maintenance activity that alone or in combination with other concurrent activities nearby, which is expected based on engineering judgment, to cause sustained mobility impacts that are considered greater than what is considered tolerable relative to typical traffic operations experienced in the area of the work zone, may be declared a significant project.

WZS&M will be addressed in initial planning studies and in the NEPA/CEPA documentation processes as part of an assessment regarding project Constructability, and Maintenance and Protection of Traffic, for each roadway component (near-term and long-term) of the recommended action(s). In determining the significance of a recommended roadway action(s) at the planning phase of project development, consideration will be given to:

- recommended project(s) definition and scope, for each near-term and long-term component;
- whether the recommended action(s) meets the definition of significance in accordance with the Department WZS&M policy;
- whether the recommended action(s) is on existing or new alignment;
- the primary type of travel being served (e.g. commuter / recreational / affected stakeholders);
- the existing and predicted future No-Build hourly traffic volumes and vehicle types, and roadway capacity along the study corridor major routes (including the primary corridor, parallel corridors, alternate routes);
- the availability of other than roadway modes for travel; and
- possible other planned/scheduled projects in the study area.

- A qualitative assessment will be made regarding the "significance" of each component (near-term and long-term) of the recommended action. A determination will be made regarding the anticipated need (or not) for a specific WZS&M Transportation Management Plan (TMP) as it relates to each component of the recommended action (near-term and long-term). Possible elements of a TMP will be presented for consideration during further development of the project(s) through preliminary engineering, preliminary design and final design processes.

Preliminary Engineering/Preliminary Design

The determination of "significance" for recommended transportation improvement modifications previously made during the planning stage will be reviewed for reconfirmation or modification during the preliminary engineering/preliminary design phases as the scope and limits of the project are more clearly defined. For those projects that did not involve a planning stage, an initial determination of significance will need to be made and documented in the Recommended Project Memorandum.

During the preliminary engineering/preliminary design phases, development of the Transportation Management Plan (TMP), including the appropriate preliminary TTC Plan, TO Plan, and PO/PI Program are initiated. Available data collected from similar projects will be reviewed and used in developing this information. Alternative roadway routes, as well as alternative modes of transportation (e.g., rail, bus, and ferry) will be identified as a component of the TMP. Bicycle and pedestrian access will also be addressed.

Confirmation of the determination of significance and the development of the TMP will be documented at the initial project scoping and at the preliminary design/design approval stages. Any change from the initial determination of significance will be approved by the Engineering Administrator.

Final Design

Once again during the final design, the determination of "significance" for recommended transportation improvement modifications made during the preliminary engineering/preliminary design phases will be reviewed for reconfirmation or modification. During this phase, the TMP will be finalized, including the appropriate final TTC Plan(s), TO Plan, and PO/PI Program. The specific work zone limits shall be defined for each construction project.

Appropriate documentation confirming the determination of significance and relating to the development of the TMP will be included in the final design report and in the Stewardship Agreement Checklist. Any change in the determination of significance will be approved by the Engineering Administrator.

Regarding the development of the TMP, it is recognized that each improvement project may present unique considerations; as such, developing the TMP is an iterative process that evolves as the design progresses. However, for purposes of uniformity, standardization of TMPs for projects with similar scopes should be considered.

Construction:

As a significant project progresses into the construction phase, special consideration will be given in terms of design and constructability review, inspection staffing, monitoring and reporting procedures for field activity and general oversight and administration.

Within the design review process, construction staff will ensure that Plans, Specifications and Estimates (PS&E's) include appropriate pay items to implement the Transportation Management Plan (TMP). On active projects, Construction and the Contractor will each designate a trained person (Responsible Person) to properly implement the TMP. In addition to the

inspection of Temporary Traffic Control (TTC) and Transportation Operation (TO) components of the TMP, Construction will take the lead in the coordination and implementation of Public Awareness (PI) strategies. Construction will monitor and collect data on work zone incidents for the purpose of identifying problematic trends and implementing appropriate adjustments.

All data collected will be retained by the Office of Construction, with a copy to the Traffic Division and the Bureau of Policy and Planning's office of Inventory and Forecasting

Maintenance:

A review of all maintenance and utility activities will be conducted. During the earliest possible stages of the review, it will be determined if the scope of work to be performed is within the Department's definition of "significant project" as it applies to the final rule. Final approval of the determination will be made by the District Maintenance Director.

The TMP for significant maintenance or utility projects will consist of a TTC plan with a PI / PO component. This plan will also apply to permit activities.

Maintenance will monitor and collect data on work zone incidents for the purpose of identifying problematic trends and implementing appropriate adjustments.
All data collected will be retained by the Office of Maintenance with a copy to the Traffic Division and the Bureau of Policy and Planning's office of Inventory and Forecasting

Exceptions:

The FHWA Final Rule provides for an exception process for those Interstate system projects, or classes of projects, that are deemed to be significant according to the Rule or Department Policy, but in reality, may not have a high level of sustained work zone impacts. For such projects that are classified as "significant" as applied to work zone safety and mobility, through the application of this provision, but in the judgment of the Department they do not cause sustained work zone impacts, the Department may request an exception, from the FHWA Division Office, to the requirements triggered by the classification. Exceptions to these provisions may be granted by the FHWA Division Office based upon the Department's ability to demonstrate that the specific Interstate system project or categories of Interstate system projects do not have sustained work zone impacts. The Department can submit to the FHWA Division Office, qualitative and/or quantitative criteria documentation to demonstrate that the specific project or categories of projects will not have sustained work zone impacts.

APPENDIX A

IMPLEMENTATION – ASSIGNMENTS

This information is intended to provide general guidance regarding the responsibilities of the various ConnDOT stakeholders involved in the implementation of the WZS&M Final Rule. The specific mechanism(s) for implementation must be developed by the individual offices.

WORK ZONE SAFETY AND MOBILITY

IMPLEMENTATION PLAN – DIVISION ASSIGNMENTS)

CONNDOT DIVISION	*FUNCTIONS*	*WZS & M RESPONSIBILITIES / ASSIGNMENTS*
PLANNING		
SYSTEMS INFORMATION	▪ Systems Inventory. ▪ Accident records. ▪ Traffic Data Collection ▪ Traffic Data Monitoring. ▪ Census/Modeling. ▪ Trip Analysis. ▪ GIS/Computer Systems.	▪ Training ▪ Data Collection and Retention. ▪ Assist in Developing Electronic Documentation and Queries. ▪ Project WZ Limits – Electronic (GIS) mapping and database.
POLICY	▪ STIP. ▪ Long Range / Master Plans ▪ Legislative Analysis. ▪ State / Federal Funding Programs. ▪ Field Coordination (RPOs). ▪ Safety Program.	▪ Training ▪ Address WZS&M in Long Range and Master Plans. ▪ Include in Strategic Highway Safety Plan (SHSP) and in the 2008 Highway Safety Plan (HSP)*. * Note: Work Zone Safety Grants are available to qualifying municipalities on a one-time basis.
INTERMODAL (PROJECT) PLANNING	▪ Aviation / Ports. ▪ Transit. / Bike & Pedestrian. ▪ Location (Highway). ▪ Security / Evacuation Planning.	
ENVIRONMENTAL PLANNING	▪ Environmental / Historic Documents. ▪ Water Resources. ▪ Water Compliance. ▪ Air and Noise Analysis	▪ Training ▪ Studies Documentation – - Provide Preliminary determination of "Significant Project". - Constructability Review. ▪ Studies Documentation – - Provide Preliminary determination of "Significant Project". - Constructability Review.
ASSET MANAGEMENT	▪ Document and Maintain Department Assets Inventory and Determine Financial Investment Needs (5).	▪ Training ▪ To Be Determined.

WORK ZONE SAFETY AND MOBILITY

IMPLEMENTATION PLAN – DIVISION ASSIGNMENTS (Continued)

CONNDOT DIVISION	*FUNCTIONS*	*WZS & M RESPONSIBILITIES / ASSIGNMENTS*
ENGINEERING	▪ Define Project Scope and Limits. ▪ Funding. ▪ Preliminary Engineering. ▪ Traffic Analysis. ▪ Preliminary Design. ▪ Final Design.	▪ Training. ▪ Determination/Verification of project "significance". ▪ Stewardship Agreement. ▪ Work Zone mapping. ▪ Operational analysis of collected data. ▪ Develop TMP, including TTC, TO and PI. ▪ Public Outreach.
CONSTRUCTION	▪ Project Administration.	▪ Training. ▪ Implement TMP. ▪ Public Outreach. ▪ Data Collection and dissemination.
MAINTENANCE	▪ Daily facility maintenance and repairs. ▪ Project Administration.	▪ Training. ▪ Determination/Verification of project "significance". ▪ Stewardship Agreement? ▪ Work Zone mapping. ▪ Operational analysis of collected data. ▪ Develop TMP, including TTC, TO and PI. ▪ Public Outreach.

APPENDIX B

TRAINING NEEDS

This information is intended to provide general overview of the extent of initial and subsequent training needs to of the various ConnDOT stakeholders involved in the implementation of the WZS&M Final Rule. The specific mechanism(s) for implementation must be developed by the individual offices.

Work Zone Safety and Mobility

ANTICIPATED TRAINING NEEDS

Bureau of Policy and Planning

ConnDOT Division	*FUNCTIONS (Estimated Number of Positions)*	*TRAINING NEEDS*
4202/57522 (Systems Information)	▪ Systems Inventory (10) ▪ Accident records (12) ▪ Traffic Monitoring (16)	▪ Data Collection needs ▪ Electronic Documentation and Queries
4203/57523 (Systems Information)	▪ GIS/Computer Systems (5)	▪ WZ Mapping Database – establishment and maintenance
4503/57533 (Policy)	▪ Long Range Plan / Legislative Analysis (4) ▪ State/Federal Programs (1) ▪ Field Coordination (4) ▪ Safety (11)	▪ LRP/MTP Policy Statement ▪ Funding Opportunities ▪ Regional Coordination ▪ Training Course / Annual Reporting?
4502/57532 (Intermodal Planning)	▪ Location (Highway) (4)	▪ Studies Documentation ("Significant Project")
4503/57542 (Environmental Planning)	▪ Environmental Documents/ Historic Documents (5)	▪ Studies Documentation ("Significant Project")
4601/57551 (Asset Management)	▪ Document and Maintain Department Assets Inventory and Determine Financial Investment Needs (5).	▪ Initial Awareness Training. ▪ Potential Future Training as Required.

Work Zone Safety and Mobility

ANTICIPATED TRAINING NEEDS (Continued)

Bureau of Engineering and Highway Operations

ConnDOT Division	*FUNCTION (Number of Positions)*	*TRAINING NEEDS*
ENGINEERING Unit 1400 Traffic Engineering	TE2 (20) TE3 (15) Supervising Engineer (8)	1 – Design & Operation of Work Zone Traffic Control 2 – Construction Staging
Unit 1300 Consultant Design	TE3 (35) Supervising Engineer (10)	
Unit 1305 State Design	TE2 (30) TE3 (30) Supervising Engineer (12)	
CONSTRUCTION ▪ 501 Headquarters ▪ 601 District 1 ▪ 701 District 2 ▪ 801 District 3 ▪ 901 District 4	▪ Administrators/Managers (2) ▪ District Management (9) ▪ HQ Supervisors (7) ▪ District Supervisors (16) ▪ HQ Engineers -TE3 (5) ▪ District Project Engineers (44)	▪ FHWA-NHI-380003 Design and Operation of Work Zone Traffic Control ▪ Annual presentation updating WZ policy and practice through winter "Supervisor School".
	▪ District Inspectors - TE2 (95) ▪ District Inspectors - TE1 (79) ▪ District Inspectors – Intern (9) ▪ HQ Engineers – TE2,TE1 (8)	▪ FHWA-NHI-380063 Construction Zone Safety Inspection ▪ Annual refresher on Work Zone Traffic Control Best Practices through winter "Inspector School".
MAINTENANCE 1510 1530 1610 1710 1810 1910 The training numbers reflect all sub-units within Maintenance.	▪ Administrators/Managers (27)	▪ Roadway Safety Awareness
	▪ Gen. Supv (62) ▪ Crew Leader (128) ▪ Maint's (990)	▪ Work Zone Safety for Roadway Maintenance Operations
	▪ Planning (14) ▪ Dist Serv Agent (18)	▪ Roadway Safety Awareness Inspection
	▪ District Traffic Engineer (4) ▪ Highway Operations (3) ▪ Dist Bridge Eng + Newington Staff (7)	▪ Design /Operation

List of Acronyms

AASHTO	-	American Association of State Highway and Transportation officials
ADT	-	Average Daily Traffic
CEPA	-	Connecticut Environmental Policy Act
Department	-	Connecticut Department of Transportation
FHWA	-	Federal Highway Administration
Final Rule	-	Federal Highway Administration Work Zone Safety and Mobility Final Rule
GIS	-	Geographic Information Systems
HSP	-	Highway Safety Plan
LRP	-	Long Range Transportation Plan
MTP	-	Master Transportation Plan
NEPA	-	National Environmental Policy Act
No-Build	-	The analysis condition of imposing future (20 year horizon) traffic on the existing transportation system.
PI	-	Public Information
PO	-	Public Outreach
PS&E	-	Plans, Specifications and Estimates
SAFETA-LU	-	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHSP	-	Strategic Highway Safety Plan
Significant	-	Significant project as defined by Department Policy on Work Zone Safety and Mobility
TMP	-	Transportation Management Plan
TO	-	Transportation Operations
TTC	-	Temporary Traffic Control Device
USDOT	-	United States Department of Transportation
WZ	-	Work Zone
WZS&M	-	Work Zone Safety and Mobility

APPENDIX F
Public Hearing Transcript

TRANSCRIPT OF:

DEPARTMENT OF TRANSPORTATION

PUBLIC HEARING
STATE PROJECT NO. 310-0048

MADISON SHORE LINE EAST RAILROAD STATION
MADISON, CONNECTICUT

December 18, 2008

Town Campus
8 Campus Drive
Madison, Connecticut

Connecticut Department of Transportation
Public Hearing
State Project No. 310-0048
Madison Shore Line East Railroad Station
Madison, CT

ROBERT W. IKE: Good evening ladies and gentlemen. My name is Robert W. Ike from the Connecticut Department of Transportation. I will serve as Moderator for tonight's public hearing.

I'd like to introduce the individuals to my left and right who are here this evening to make presentations and listen to your comments and concerns -- Mr. Paul M. Stanton, Principal Planner, Fitzgerald & Halliday, Inc. and Mr. Steven Degen from the Connecticut Department of Transportation's Rights of Way. We also have Mr. Eugene Colonese from the Office of Rails, Mr. John Hanifin from Office of Rails, Mr. Scott Hill from the Office of Design, Miss Jessica DiLuca and Miss Kim Lesay from the Office of Policy & Planning. We also have David Tudryn from Michael Baker Associates and we have Miss Gott from the…Judy Gott from the Regional Planning Agency, and we also have our trusted technicians, Mr. George Carbonell and Mr. George Hudson.

We are meeting with you this evening in order to discuss the current design and draft Connecticut Environmental Impact Evaluation for improvements to the Madison Shore Line East Railroad Station here in the

Town of Madison. This public hearing is being conducted in accordance with the Connecticut Department of Transportation's policy entitled "Public Involvement/Public Hearings for Highway Layouts and Designs", revised October 1995.

The draft EIE document has been available for public inspection here at the Madison Town Clerk's Office, Town Campus, 8 Campus Drive, Madison; the E.C. Scranton Memorial Library, 801 Boston Post Road, Madison, and the South Central Regional Council of Governments, 127 Washington Avenue, 4th Floor West, North Haven, as well as at the Connecticut Department of Transportation, 2800 Berlin Turnpike, Room 2155, Newington, Monday through Friday between the hours of 8:30AM and 4:00PM, holidays excluded.

I will now discuss the format for tonight's hearing, then I will turn the podium over to presenters who will give design, environmental and rights of way presentations of the draft EIE document. I will then moderate the hearing as we listen to your comments. For your information, our presentation should take approximately 15 to 20 minutes to complete.

My intent is to conduct a fair and orderly hearing tonight by following a particular format. We would appreciate your patience during my remarks as well as the presentations to follow by holding your remarks and

comments until this portion of the hearing has been completed. We will be happy to remain here this evening until everyone has had a reasonable opportunity to speak.

Experience has shown that audible recordings can only be made if the person making a statement uses the microphone connected to the recording equipment. A microphone has been set up and if you wish to make a statement, please come to the microphone after I read your name from the sign-up sheet. Please introduce yourself, and if you are presenting an organization, please give its name as well. If you didn't sign up to speak but a question comes to mind, feel free to raise your hand and I will be happy to recognize you after I go through the speaker sign-up sheet.

For those individuals who have a prepared statement, you may read it into the record if you so desire. However, if the statement is lengthy, you are asked to offer a written copy of the statement for the record and give a brief summary of its contents. Such attachments to the record carry as much weight as the transcribed verbal testimony received here tonight when the transcript is reviewed.

If you wish to speak this evening, we have a sign-up sheet at the entrance to the room. There is a 3-minute time limit on all first time speakers. There'll be no yielding of your time to other speakers; your time

is for your own comments. If, after all first time speakers have finished, anyone who would like the opportunity to speak again, a reasonable amount of additional time will be allotted for this purpose. Anyone who wishes to present written comments for the public hearing record should give them to me before the end of tonight's hearing.

As a result of the information that you might learn at tonight's hearing, you may wish to make additional comment on the draft EIE document. Written statements or exhibits concerning it may be mailed or delivered to the attention of:

Mr. Edgar T. Hurle

Transportation Planning Director

Bureau of Policy & Planning

Connecticut Department of Transportation

2800 Berlin Turnpike

Newington, Connecticut 06131-75456

This information is available in the handout which you should have received when you entered the room tonight. The deadline for receipt of comment on the draft EIE document is January 2, 2009. Written statements or exhibits must be postmarked by this date and must be reproducible in black and white on not larger than 8 ½ x 11 inch paper. This information will be made

part of the public hearing record and will be considered in the same regard as oral statements.

At this point I will turn the podium over to Mr. Stanton who will give environmental and design information on this proposed project. Mr. Stanton will be followed by Mr. Steve Degen who will give the Right of Way presentation. Mr. Stanton…

PAUL STANTON: Thanks Bob. Again, my name is Paul Stanton. I'm a Principal Planner with Fitzgerald and Halliday and we've been contracted by the DOT to do the Environmental Impact Evaluation for this project. I'm not really going to spend much time on this agenda but after I speak Mr. Degen will talk a little bit about the rights of way and then we'll open up for comments from the public as Bob mentioned.

So what's the purpose of this hearing? Well, it's to provide an overview of the proposed infrastructure improvements that are going to occur at the Madison Railroad Station, and then I'm going to talk a little bit about the EIE process and the findings of that EIE document and an analysis, and talk a little bit about the mitigation for adverse impacts that we discovered from the project. And lastly, again, the CEPA which is the Connecticut Environmental Policy Act EIE process is a transparent process

that allows opportunity for public input and that's, again, the primary purpose why we are here tonight.

So the first thing I want to talk about is what's out there right now. As many of you know, back in July of 2008, a project was completed on the site at 77 Bradley Road which was the Laidlaw Transit…it was a bus facility. There was a lot of school buses out there. The property is owned by DOT and in July they built a passenger shelter in the south side high level platform as you can see, and a 199 space surface parking lot. It's a very nice looking facility. The EIE covers additional infrastructure improvements at that site and that's called the Proposed Action and that's what we evaluated. The proposed action includes a north side high level rail platform which will be located opposite the south side platform, a pedestrian overpass that will allow for safe crossing between the two platforms so that passengers won't have to cross at grade on the tracks. That overpass will include stairwell access as well as elevator access so that it will be fully handicap accessible. It will meet the Americans with Disabilities Act.

Another component of the project is there's going to be a three story parking garage built on the site, and the foundation of that parking garage is going to be such that it can accommodate a fourth story, and that parking garage is going to accommodate 550..585 rather, vehicles. Additionally,

there's going to be a loop road around the parking garage that will allow access for what's called a kiss-and-ride drop-off area, as passengers…like people that aren't going to park their car for a long term can drive up and around and drop their passengers off right in front of the station and then continue on their way and exit the station.

There's going to be a gravel access road from old Route 79 that's going to parallel the north side of the tracks to the north side high level rail platform, and the reason that's being constructed is to allow construction access so the construction vehicles can get in there, build the north side platform as well as the pedestrian…part of the pedestrian bridge on that side of the tracks. That access road, after construction, is going to remain in place and it's going to be gated; a restricted access and what it's going to do is it's going to be allowing maintenance access and emergency access as necessary at that location.

Tied in with all this is going to be some upgraded pedestrian connections to allow direct access between the garage and the station, and there's also going to be some illumination elements very similar to what we have out there right now I believe, and some landscaping.

The estimated project cost is based on 2011 dollars—that's the mid point of construction—$30 to $35 Million Dollars. And the construction

schedule… and I want to add that this schedule was based on our knowledge back when we wrote this document about six or eight months ago, before this economic crisis that we're facing, was estimated to be from April 2010 to the summer of 2012. That is going to be subject to review again so I don't know, maybe Scott might want to comment on that after but that's something that still might be, you know, changed a little bit.

In terms of the site location, again, it's at 77 Bradley Road and it's bounded by old Route 79 on the north and east—actually on the north there's a red maple swamp that borders the tracks and Durham Road borders it on the west; that's Route 79, and Bradley Road is on the south. The project involves a partial acquisition of a privately owned residential parcel on the north side of the tracks and on the west side of old Route 79, and that acquisition is for the construction access road and it's estimated to be approximately .2 acres. And access to the entire station and all of its elements is going to be from Bradley Road with the exception of the emergency access to the north side which will be from old Route 79. And that, of course, as I mentioned will be a gated restricted access.

Now this graphic shows the site location which is bounded by the black line and the blue or the teal color is the location of the former railroad station, and that's about a quarter of a mile to the east. You might note that

the aerial photo behind there doesn't show the existing…the new station as of July 2008. This aerial photo is a little bit outdated but it does show the former bus facility has been cleaned out. All the buses are out of there and the site has basically been cleaned and ready for the construction that took place in July of '08. This just conceptually shows the project elements. The big gray square in the middle is the proposed parking garage; again, three story parking garage. The brown loop around it is the access to the station, and then, as I mentioned, cars can drive around the back side of the garage, drop off passengers right in front of the station, and they can also access directly into the garage or egress from the garage. The yellow is the construction access road that I mentioned. The two orange elements—the upside down L if you will—is the north side platform and the pedestrian overpass, and then the black is the existing south side platform, and the blue is pedestrian connections—sidewalks.

So why is it that we have to do an environmental impact evaluation? The project is State funded and as such it triggers the need to satisfy the Connecticut Environmental Policy Act or CEPA. And an EIE basically is assessment of impacts, both positive or beneficial impacts, as well as negative adverse impacts. It kind of paints the whole picture of the project. We look at ways to avoid the impacts through design and we also look at if

there's an adverse unavoidable impact, we look at mitigation strategies to offset that impact. And, again, the EIE process is a transparent process allowing the public opportunity to comment.

So this is the process, and the red circles identify where we stand right now in the process. Just to backtrack a little bit, early on we identified a project purpose and need and all this is spelled out in the handout. It talks a little bit about what the project elements are that we're looking at. There was an alternatives analysis and obviously with this project, really the only alternative we can look at to make a full station is to build the additional infrastructure on the existing site. We documented the existing conditions, we assessed the impacts, we prepared a draft EIE which is the document that we've circulated for public review and now we're holding our public hearing and there's going to be, as Bob mentioned, there's a 45-day comment period which started November 18th when we advertised this in the Environmental Monitor which is what CEPA requires us to do. That period will end on January 2, 2009 and all those comments that come in, we will address and then prepare a record of decision as well as the final EIE will incorporate all those comments, and then send the record of decision off to the Office of Policy and Management who is the ultimate authority or agency if you will

that signs off on the document and determines if our EIE meets the requirements of the Connecticut Environmental Policy Act.

The document covers a variety of resource categories or issues areas if you will. They range from community resources, cultural resources, natural resources—a wide variety of things. We looked at such things as traffic and parking and land use. How is the project going to affect the local neighborhood? Is there going to be any public safety issues or improvements with the project? We looked, on the natural resources side of things; we looked at soils and geology and wetlands; that was a key issue on this because of the red maple swamp. Flood plans and water quality; we looked at the existing water quality conditions within that red maple swamp and the streams nearby and how the proposed project's drainage potentially could affect that water quality. And on the cultural resources, what I like to call the physical issues if you will, we considered how the project could potentially affect ambient noise levels in the area, air quality. What is it going to do to the aesthetics of the area? Are there any hazardous materials? So it covers a broad range of issue areas and, again, as I mentioned, it covers both beneficial and adverse impacts, and the approach is how do we avoid these resources with the design first and then if we can't avoid them, what can we do to minimize impacts. The way I think of that is—for instance, if

you're going to have a fill in a wetland, how could we minimize that fill? A lot of times what we'll do is maybe put a retaining wall that can limit the amount of fill that's put into the wetland to reduce the impacts. That's what minimization is considered to be as an example. And where there's adverse impacts that we can't minimize or we can't avoid, we have to come up with some kind of a mitigation to offset those impacts.

I wanted to just show this one graphic because, really, wetlands are probably the biggest issue on this particular project. This shows the project…the infrastructure elements that I talked about earlier in relation to the wetland areas surrounding the site. Up to the north, the light green line identifies the boundary of the wetland; the red maple swamp that's located to the north. If you actually go out to the site, you'll see that the toe of ballast slope for the railroad tracks comes right down and basically the wetlands start right there so obviously the construction access road, which is kind of obscured by that line, you'll see that that is going to encroach a little bit onto the perimeter of that wetland right along the railroad tracks. There's really no other wetland impacts except for in that one location on the north side.

I'll talk a little bit more about that wetland impact in a second. I just wanted to summarize some of the key findings in terms of benefits. Now

this project is consistent with state, regional and municipal plans in that all those plans call for or preach that they want to have improved parking or more parking at commuter rail stations. They want to improve commuter rail service. They want to improve that transportation aspect to get more cars off of I-95 and Route 1. The corridor's getting very crowded and it's just another alternative for commuters. The parking garage offsets an existing parking demand. We did a survey of the parking lot but we couldn't do it at the existing facility that was just built. We did it at the former location and I forget the date that we did that but it was about 80% capacity when we did that and I believe that site holds about 150-something…I don't know…158 parking spaces…and that was at 80% capacity. So the new parking lot will provide…or parking garage rather…will provide 500 and some-odd spaces which will certainly offset that need for parking. And in so doing it's going to improve the attractiveness of the Shore Line East commuter rail service to prospective commuters.

The station, as I mentioned, is going to fully handicap accessible with the improved pedestrian connections—the elevator, the overpass, and the improvement safety features that it's going to have. It's going to basically make Shore Line East rail service more modern, reliable, and convenient for commuters and this project, along with a lot of other improvements that are

being undertaken by ConnDOT along Shore Line East is going to allow for future expansion of Shore Line East service and allow for reverse commuting. So it has a lot of benefits.

This slide is extremely wordy and I don't expect you to read it all, but we kind of narrowed down what the key impacts are on this particular project. In terms of aesthetics, there's going to be some limited visual changes to what's call the viewshed of people that live along old Route 79. Right now they look out their back window and they can see the red maple swamp and they can see a portion of the station. By building the north side platform they're going to be exposed a little bit more to the lights and the infrastructure that's built over there. To offset that there's going to be some landscaping, a vegetative buffer, and also a full cut-off lighting that is dark sky compliant. That's the type of lighting we have out there right now.

The wetland impact—we estimated, and again, this is based on a conceptual design, to be .3 acres to that red maple swamp and that's the worst case scenario considering a 4:1 side slope for that gravel access road and it probably can be improved upon—the amount of wetland impact—as the design progresses. That impact, of course, is going to need to be mitigated. It's an adverse impact and there's going to be a need to coordinate with the DEP and the Army Corps of Engineers to come up with

a wetland mitigation package to compensate for that loss. Right now ConnDOT is currently looking at different possibilities close to the site or within the same watershed as the site in order to replace the values that are lost, the functions that are lost of that wetland, and of course, the acreage that's lost, and the amount of acreage that's going to be replaced is based on a ratio formula that has been developed by the Corps of Engineers. I'm not going to get into all the details on that but, again, it's something that's ongoing at the present moment so we can offset that impact.

Concurrent with the wetland impact, that wetland does serve a little bit of a wildlife habitat function and with the filling of the .3 acres, as part of that compensatory mitigation package, we're going to have to make sure that that package helps to offset that wildlife function so that the new wetland that we construct or restore or whatever the ultimate package is, offsets that wetland habitat function—that loss of wetland habitat.

As I mentioned earlier there is going to be a partial acquisition—approximately .2 acres of land from that privately-owned property located north of the tracks and, again, that's from the construction maintenance access roadway. Mr. Steve Degen will talk a little bit more about right of way and how that applies.

Lastly, construction impacts—this project's going to take approximately two years to build and there's going to be minor temporary impacts related to noise, air quality, storm water runoff, and there's several things. This is something that's faced on virtually every project and there's several things that are done, certain bid specifications to reduce diesel emissions, things of that nature—there'll be fugitive dust controls such as maybe putting tarps on the back of construction haul trucks, watering the site so that there's not a lot of tracking of soils and sediments offsite. The project will also comply with both the 2004 Connecticut DEP Storm Water Quality Guidance Manual, as well as the Sediment and Erosion Control Manual. Those are two things that when the designers work on these projects, they adhere to those requirements and those documents.

The other issue is that the parking garage is going to be built on the existing 199 space surface lot that was just built so obviously during that two-year period where are those people going to park in order to use the commuter rail. The plan is to shift the parking back to the former site and to re-use that during that period, however, there is going to be a little bit of a reduction in the number of parking spaces when that shift is made because the existing site right now has 199 surface parking spaces. The former site, like I said, has roughly 150 so there's about a loss of 50 spaces, and

ConnDOT is going to work out a plan to figure out how to resolve that reduction in parking. While under construction, the parking garage in the north side platform, the new station at 77 Bradley Road is not going to be operational. All the service is going to shift back to the former site which is owned by Amtrak and will be leased by ConnDOT.

So that's essentially…again, like I said, we looked at a lot of other resource issues but those were the highlights of the impact areas. If you want to learn a little bit more about the air, the noise—all that stuff—it's in there. There's really no significant impacts based on our analysis. These were the ones that we needed to call out to your attention. As Bob mentioned earlier, the document is available for viewing at these locations – the E.C. Scranton Library, the Madison Town Clerk's Office, at the DOT and also at the South Central Regional Council of Governments. And again, I want to re-emphasize the January 2nd , 2009 date—that's when the comments are due. We'll collect all those comments at that point and incorporate them into the final document with responses, and please send all your comments to Mr. Edgar T. Hurle at the e-mail, address or his fax number and we'll be sure to get it in. Thank you, and I'd like to turn it over to Steve now.

STEVE DEGEN: Thank you Paul. Again, my name is Steve Degen. I'm a Property Agent assigned as a Project Coordinator in the administration division of the Office of Rights of Way. The function of our office is to acquire all property and property rights necessary for transportation projects. We are required to adhere to the provisions of the Federal Relocation and Real Properties Act of 1970 as amended, any time federal funds are used as well as Connecticut State Statutes 43-50 through 43-57. State Statute 43-57 deals with your rights as a property owner to seek mediation through the Office of Ombudsman, Robert S. Poliner, whose office is located on Capital Avenue in Hartford.

The project as presented requires a couple of easements from one property owner. Basically our process is the property is identified, a title search is completed on the property. Once a map as viewed is acceptable, a letter, along with a map showing the area that's required is sent to the property owner. After that a valuation is determined for the property. Once it's been approved by our office, an offer is verbally made and also provided to you in writing. Any time a value cannot be agreed upon, the State will acquire the property through eminent domain. This is our absolute last resort and under the 43-57 Statute, you will be notified of your rights to seek mediation through the Office of Ombudsman for the eminent domain

procedure. Once the eminent domain action has been taken, the money that's been offered to you will be deposited in the court system and it is available to you to take out at any point once the condemnation has occurred, and there is no effect to you of taking the money out prior to.

At this point in time I'll turn the podium back over to Mr. Ike and we will accept your questions.

ROBERT W. IKE: Thank you Steve. Seeing that Madison is the host town this evening we will allow the First Selectperson to make comments or questions. Just come to the microphone and give your name and address please.

AL GOLDBERG: Mr. Ike, our favorite State Representative is with us tonight, Debra Heinrich, and I would like to offer her the opportunity to speak first if she would so like to do so.

DEBRA HEINRICH: Is that okay?

ROBERT W. IKE: Yes, Ma'am; that's fine. Yes Ma'am. Just give your address for the record.

DEBRA HEINRICH: Certainly. My name is Debra Heinrich and I live at 11 Beaver Pond Road in Madison. I wanted to start by saying thank you to the DOT for recognizing the importance of Phase II as well as Phase I of this project, both to our local economy as well as the state economy and right

now how very important it is for the recovery of both our local and our state economy and to say thank you for moving this along. I know you did mention that we will be revisiting when the project starts, however, I do want to emphasize how important it is to the recovery of our economy to keep projects like these moving forward. I also want to stress while we're talking about environmental impact, the importance of mass transit to the overall environmental impact of the state and hope that that's also a very important part that you'll take into account as you move forward with considering the environmental impacts. Of course mass transit is one way to keep cars off the road. It's one way to link up people so they can get to work by, as you mentioned, expanding the Shore Line East so that you can get reverse commute. Not only will that have an impact, again, on our economy but also on the environment. I also want to mention that I think this parking structure that we're discussing is a very important land use. We're building *up* on something that's already parking lot and, of course, you mentioned that we want to see more parking in mass transit so that more people can access it and, of course, this kind of structure where we are working *up* is a good use of land and a good use of space. So thank you for this project and I appreciate your considerations.

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ROBERT W. IKE: Thank you. Just give your name and address, again, for the record sir.

AL GOLDBERG: Mr. Ike – I'm Al Goldberg. I live at 60 Colonial Road here in Madison, and I'm currently serving as the First Selectman of this town. I wonder, Mr. Ike, if I can invite Mike Ott, our Assistant Town Engineer and Assistant Director of Public Works to join me, and if it's okay with you, we thought we would sit down here and perhaps this microphone could be lowered as we have some questions we'd like to ask you. Would that be alright?

ROBERT W. IKE: Certainly.

AL GOLDBERG: Thank you.

ROBERT W. IKE: Mike, just come to the microphone please and give your name and address for the record.

MIKE OTT: I'm Mike Ott, Assistant Director of Public Works and Town Engineer, and I live at 85 Heldlyn [phonetic] Road in Hadlyme, Connecticut.

AL GOLDBERG: Like representative Heinrich, I'm here to express my appreciation tonight for your efforts here. Madison has embraced our new train station which we call Phase I and I can tell that more people are using it because 80% of our new expanded parking lot is generally in use every day so I'm thinking that we've gained at least 50 regular riders just as a result of

the station. I have a series of questions I'd like to present tonight. These questions are not designed to indicate our opposition to any of this project. These are just questions I'm curious about. Let me say again, we embrace this project and we would like to move it forward and in no way am I interested in slowing it down. I'm hoping that despite some of the chilling economic conditions that we've experienced lately that perhaps there might be a silver lining in this cloud in that perhaps some funds will flow more freely for public works projects like this from the federal government.

I've been in office for one year and I know some of my questions tonight are going to probably have an answer to them that is contained in an earlier version of this environmental assessment study. We think of this as Phase II and this study is designed to prepare us for Phase II. Some of my questions probably should have been asked five years ago when we were looking at Phase I but nevertheless if the site is going to be disrupted again, I just want to make sure that certain impacts have been assessed and that certain impacts have been minimized.

2 I think my first question has to do with a body of water which is just off the site here. We call it Tuxis Pond and it is a natural feature to our town which may play an ever-increasing role in our town's downtown area and so the impact of this project on that pond is of concern to me and I'm certainly

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interested in understanding whether the impacts have been fully assessed and minimized. The runoff from the train station finds its way immediately down to Tuxis Pond and that's what my concern is. I don't want Tuxis Pond to end up being a collection point for things coming off of this site. The first part of my question has to do with the sedimentation which would be generated during construction and I know that you'll be calling for silt fences and sediment control fences. I'm just looking to be assured that the adequacy of those fences will be continuously monitored by experts especially after weather related conditions which might overwhelm or disrupt the effectiveness of those fences. I don't really know what your procedures are but my first question had to do with looking for assurance that during this two-year construction period, that those control fences are continuously monitored by knowledgeable people.

ROBERT W. IKE: I assure you that during construction, and I'll say like any of the other staff people, we have inspectors on the job and that is their job to make sure that the sediment control measures are in place so there will be either our agents or DOT staff on the site daily…and I'll let Keith address that issue.

KEITH HALL: I would just like to say First Selectman Goldberg I believe we were good stewards of Tuxis Pond during the construction of the lot

that's open now and we would continue to employ some of the same techniques as monitored by DEP that we did then as we will upcoming for this future thing. We're bound, as Paul pointed out, by the 2002 Erosion Sedimentation Control Standards put out by DEP. The additional thing that's in play now that wasn't during the design of the previous one is the 2004 Storm Water Quality Manual which leads to lots of additional measures that are taken to improve the runoff to natural bodies of water such as Tuxis Pond so we believe we were good stewards during the past construction and we'll practice those same techniques. If there's something that we're not aware of please let us know and we'd be happy to do what we can to address that.

AL GOLDBERG: Thank you. That's a fine answer. Let me continue on the Tuxis Pond theme. Mike Ott's had a chance to review some of the earlier materials that had to do with Phase I. My original question had to do with whether storm water runoff could be handled onsite instead of being sent down to the pond. I'm not sure whether you're going to be able to answer this question but it is our understanding that there are conditions on the site having to do with a high water table and previous contaminated soils which prevent us from using some methodology either for permeable surfaces or for infiltrating storm water on the site itself instead of sending it

elsewhere. I don't know whether there's anybody that can speak to that here tonight. If there would I'd love to hear about that. If not…

ROBERT W. IKE: Just come to the microphone [mingled voices]

RICH CASSIN: Rich Cassin, Senior Engineer for [mingled voices]

ROBERT W. IKE: Okay. Just identify yourself for the record. Okay?

RICH CASSIN: Good evening. My name's Rich Cassin. I'm with Michael Baker Engineering. We're a consultant for the Connecticut Department of Transportation and we're responsible for doing the civil engineering design for the project. We've started our engineering design for the site development, the Phase II development now, and we are considering storm water management measures to make sure that the runoff is controlled before it discharges to the Tuxis Pond area. We are doing our calculations right now and once we're done with those they'll be available to the town for review to make sure that you understand that we're complying with the 2004 Storm Water Quality Manual which does require your water quality management and detention for making sure that high water events don't cause any downstream damage.

AL GOLDBERG: Mr. Cassin, are you aware of whether it's possible to infiltrate the water on the site?

RICH CASSIN: Well, as you mentioned, the ground conditions—there's a lot of I guess peat soil conditions in the area so the ground water conditions aren't well suited for infiltration type measure but we've been able to grade the site and if you look at the exhibit upfront there on the board, we have some storm water swales and control structures that are going to control the storm water runoff so that it won't cause high water events before it leaves the site. That's the design approach that we're taking right now – is creating swales and control structures to collect all the storm water coming from the parking garage.

ROBERT W. IKE: Please identify yourself for the record Keith.

KEITH HALL: Keith Hall – one of the other features about parking garages is what we do is we try and separate storm level…I'm sorry, roof level drainage is deemed cleaner so that is captured in some of Rich's calculations and equations. Drainage and the effluent from the bottom of cars are in storms like we're going to have tomorrow on the interior levels will go to an oil/water separator tank underground that's pumped out so that is not directly infiltrating into the system. A lot of the contamination and even some of the peat layer during the construction of the lot, we went through a significant expense and David will recall this as well, to pre-consolidate that so we didn't have settlement out there of the asphalt

surfaces. So we believe we've taken out all the dirty dirt, as we call it, all the dirty dirt we're going to have to deal with. We may have some spots when we do some foundations that are going a little bit deeper but we took care of a lot of the significant problems that can be forecasted during the construction of this expansion or Phase II facility.

AL GOLDBERG: This oil/water separator – do I understand correctly that will be regularly maintained and serviced by DOT?

KEITH HALL: Yes it will.

AL GOLDBERG: And is the funding in place for that on sort of a permanent level?

KEITH HALL: Our Rail Operations Group, like they do now, contracts out for be it be plowing of the lot, emptying trashcans, shoveling the platforms—things like that so, yes, we recognize when we build one of these facilities it's an ongoing cost. There's not a pot of money set aside right now to do it but it's an obligation when we do these kinds of projects that we're going to properly maintain it.

AL GOLDBERG: Uh-huh. Thank you. My next question—I'm starting to go to the green side of my questions. The lighting on the site and the signage on the site – I was hoping that as the plans for this evolve that you'll be considering some solar powered lighting and signage for this site. I think

it would be very appropriate and in keeping with the spirit of this town. My next question had to do with a specific reference on Page 77 of this document which indicated that certain options are being considered for minimizing the impact on the wetlands. Those options were not identified and I'd be curious as to what options are being considered. I'm sorry; I'm in the second bullet point on Page 77. It's a chapter labeled Unavoidable Adverse Impacts.

6

ROBERT W. IKE: Yes…just identify yourself for the record please.

DAVID TUDRYN: Thank you. My name's David Tudryn; I'm the Project Manager for the consulting engineer hired by ConnDOT—Baker Engineering. To answer your question, by trying to reduce the width of the access drive, the construction road referred to on the north side, we looked at some of the vehicles we need to bring in there in order to construct the pedestrian overpass and later to maintain the overpass, the windows and other things…we made it the bare minimum. I believe we went with 12 feet for a roadway width. Instead of looking at a conventional 4:1 side slope towards the wetland for that roadway which is elevated from where the wetland is, we looked at a 2:1 slope and then are now looking at a sheet piling strategy which we would drive piles and be able to have a very abrupt drop from the access drive to the wetlands so that would further mitigate or

limit the amount of damage to the wetlands. Those are the things we're looking at right now. Now there's a few constructability issues with the sheet piling as you can imagine. It's very close to the railroad but it's not insurmountable. I think it's something we can look at. We're looking at cost estimates and constructability issues with that and that would help for sure.

AL GOLDBERG: Tell me as long as you're standing here…

DAVID TUDRYN: Sure.

AL GOLDBERG: I'm wondering whether a wetlands mitigation site has been identified yet which would compensate for the intrusion.

DAVID TUDRYN: As part of our contract, we are working with Paul and his office at FHI to search for sites in the area and Paul has just begun. His office has just begun that process. We looked around areas of Madison, identified a few, but we're still looking. It's definitely an ongoing process that has not been completed yet.

AL GOLDBERG: Does this mitigation site have to be located within Madison?

DAVID TUDRYN: That's a question that maybe Paul [mingled voices]

ROBERT W. IKE: We have Kim Lesay from [mingled voices]

DAVID TUDRYN: Oh, Kim might…

ROBERT W. IKE: Yeah, just come up and identify yourself for the record please.

7

KIM LESAY: Kim Lesay; Office of Environmental Planning. As far as if the site has to be in Madison, we always have kind of a hierarchy. We'd like the mitigation to be as close to the impact as possible so we will look at the site itself and look for some suitable mitigation close to the site first. Sometimes that doesn't always happen. The next thing that we'd look at staying within the same watershed so we, again as Dave explained, we've really just begun that process. We'll be working with engineering and FHI to find a site that's suitable. We'd like to be as close as we can because that really helps replicate the function and value that you've lost, hopefully the closer you stay, but sometimes that's not always possible.

AL GOLDBERG: How is the watershed defined in this case?

KIM LESAY: I don't have a drainage map in front of me but I don't know if there's one in the document actually, but they're as defined by the drainage basins that's available to DEP. We could certainly get that to you if you were interested in that. It doesn't follow the towns; it follows topography.

AL GOLDBERG: Under the rules which you have to follow, could this potentially slow up the project?

7

KIM LESAY: Yes, it could. We've begun discussing it now and have identified it as an issue in hopes that it won't. My first hope is that we'll avoid enough of the wetland—that we'll see that .3 acre number that we used in the document goes down considerably. From there we'll have to see what kind of impact we're still at but we'll try to avoid it first and from there, if mitigation is still required, we have certain ratios that we have to follow now with the Army Corps of Engineers so it's a lot more than 1 to 1 so we're trying to get that number down as low as possible.

ROBERT W. IKE: Paul, do you have a comment?

PAUL STANTION: Yeah [mingled voices]

ROBERT W. IKE: Just identify yourself for the record please.

PAUL STANTON: Yes…Paul Stanton; Fitzgerald and Halliday. As part of the CEPA EIE process, we don't have to get into all the details about the mitigation plan. We just…the main point here is that we have to make everybody aware what the level of impact—the worst case scenario could be—and how we can improve upon that. As Kim mentioned, a lot of the mitigation design and discussion and coordination takes place during the permitting process so it's not going to hinder the EIE getting approved to get through this phase but it is part of the permitting phase.

7 **AL GOLDBERG:** I don't know whether we here in this municipality can be helpful to you in identifying possible sites but we're certainly willing to participate if you think some local knowledge might be of help.

KIM LESAY: Kim Lesay from Environmental Planning again. Yes, local knowledge is always the best so we always look for restoration first, creation second, and then enhancement and preservation would follow so if you know of any fill sites in town that could be restored that could be very valuable information. We'd be more than open to look at anything that you have to offer. That's a great help to us – thank you.

AL GOLDBERG: I'll end on this note…We obviously would like this project to be as green as possible. It's in keeping with the spirit of our community here and as the plans for this evolve I hope we will be able to add further questions and comments towards that end. I appreciate your patience in dealing with my questions and now I'm going to ask my colleague here whether he's got some of his own.

8 **MIKE OTT:** I've got two topics of concern and I realize you're probably in the early phases of design but I thought I might get these on the record and maybe we can respectfully ask that we have the opportunity to review these issues. One is storm water management both from a water quality perspective and a control of peak discharges perspective. It's a small

catchment - I'm sure the engineers who have looked at this realize that but there have been reported flooding problems immediately downstream…upstream of Tuxis Pond. But immediately downstream of the site there's private properties—commercial businesses on the south side of Bradley Road with low lying parking areas immediately adjacent to the wetland associated with Tuxis Pond. That floods on, I think, on a fairly regular basis and there's septic system issues I believe with these properties also…or I should say there's septic systems in the low areas. There's also been reported the flooding issues downstream of Tuxis Pond also. Tuxis Brook goes through the center of the town's downtown business district of sorts. And the second thing is traffic. I'm concerned about levels of service of intersections—I know the EIE addresses this and, again, I don't…I don't know what stage of design…are you in an early stage of design? [mingled voices] Are you preliminary still?

ROBERT W. IKE: [not discernable]

DAVID TUDRYN: Yes, Bobbie. David Tudryn—Baker Engineering. We're at roughly 60% complete phase. The site design might be a little less than that at this point. However, we are completing a State Traffic Commission Permit for the site so all the local intersections and levels of service will be analyzed during that process.

MIKE OTT: Okay. And in addition to intersection levels of service, I was curious about pedestrian movements and sidewalk connections and I've gotten a couple of calls actually about a crosswalk on Bradley Road—the train station—you know, across to the train station entrance across to the sidewalk on the south side of Bradley Road. And the last thing, I guess I noticed in the EIE that you might be considering some improvements to Bradley Road if I read it right. It sounded like it might have been a widening of maybe the Bradley Road/Route 79 intersection…if I read it right. I guess I realize you're…you know, you're at 60% or so...

DAVID TUDRYN: Right.

MIKE OTT: …but we'd respectfully request that we have the opportunity to review those engineering issues.

NOT IDENTIFIED: Do you want to address that Keith?

ROBERT W. IKE: Please identify yourself again Keith.

KEITH HALL: Keith Hall; DOT. Yeah, the 60% submission—the DOT has not yet received but it's our practice when we receive these milestone submissions that we'll send copies down to you…First Selectman Goldberg and we'll certainly listen to how many copies you want. As far as…I can tell you about the crosswalk on Bradley Road. I recall when we opened the current…or in the design of the current station, although it was not an STC

application, there was communication at that time with the Chief of Police who of course is involved with STC application and will be for this garage project but it was my recollection that the Chief of Police at that time did not want a crosswalk on Bradley Road. So I'll have to go back and see if that was actually the case. I believe it was. I don't remember who the gentleman was but certainly all kinds of improvements are at the discretion of the STC so we may be doing some widening; we may not. At this point we just don't know. We haven't made that application yet and until we're locked in with the 60% design, we won't ask Baker to submit an STC—that's generally things we do towards the end. But the town has a role in the approval of an STC application as I think you both understand so… And I'm glad I got back up because I wanted to speak to your green comment as well. One of the new things that the DOT is obligated to do for projects that cost more than $5 Million is do a high-performance building kind of analysis. There's state statutes that deal with this. Really, an expanded station, a parking garage, has very little in the way of what we think of as a building so often times parking garages I think are even exempted from the green building statutes but we do go and analyze opportunities for what we can do to accommodate green. I know you mentioned solar lighting. I don't believe that's an actual individual criteria in that high-performance building analysis

but that's the kinds of things we would take a look at as we wrap up this design. I'm not sure that that completely answers your question but probably a little more than you perhaps were aware of.

[mingled voices] **ROBERT W. IKE:** Just identify yourself for the record sir.

AL GOLDBERG: This is Al Goldberg again. We would certainly encourage you to think as broadly as possible. I realize it's your building; it's not the Town of Madison's building. To the extent that you can think broadly and use recycled materials as some of the components of the building materials, I know that this community would find that very acceptable.

KEITH HALL: Thank you.

ROBERT W. IKE: Thank you. Thank you gentlemen. We just want to open it back up – anybody else has any comments? See that we didn't have…I gave you the courtesy. Thank you sir.

AL GOLDBERG: Thank you.

ROBERT W. IKE: The comments are well noted for the record. That's the first time I've ever seen that. That's very good. It was very good. Are there any other speakers? Any other first time speakers? Any other second comments? No second comments? Okay. Seeing there are no further

comments I will now close tonight's hearing. On behalf of Commissioner Joseph F. Marie, I would like to thank you for coming and expressing your views tonight. Please remember yet that you have until January 2nd, 2009 to submit any written postmarked comments to the Connecticut Department of Transportation. Thank you and have a good evening.

TRANSCRIPT CERTIFICATION

THIS TRANSCRIPT CONSISTING OF 39 PAGES, ONE AUDIO

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DATED: January 12, 2009

APPENDIX G
Written Comments Received During the Public Comment Period (November 18, 2008 through January 2, 2009)

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

To: Edgar T. Hurle - Transportation Planning Director
DOT - Bureau of Policy & Planning, 2800 Berlin Turnpike, Newington

From: David J. Fox - Senior Environmental Analyst **Telephone:** (860) 424-4111

E-Mail: david.fox@ct.gov

Date: December 31, 2008

Subject: Shore Line East Railroad Station, Madison

The Department of Environmental Protection has reviewed the Environmental Impact Evaluation (EIE) for proposed improvements to the Shore Line East Railroad Station in Madison. The following commentary is submitted for your consideration.

The Department supports efforts to expand the capacity of public transportation services such as Shore Line East, especially given its potential to reduce vehicle miles traveled and congestion in the I-95 corridor. The use of public transit will decrease vehicular emissions that contribute to ozone formation, particulate matter levels and climate change. As noted in the EIE, enhancing commuter rail service is a common theme in state, regional and local plans of conservation and development.

11 Unavoidable and unmitigated impacts to wetlands and watercourses must be compensated. Page 51 notes "ConnDOT is currently looking at wetland creation and restoration possibilities to mitigate impacts." Section 22a-41(a)(4) of the Connecticut General Statutes establishes the following order of priority for compensatory mitigation: (1) restoration, (2) enhancement and (3) creation of productive wetland or watercourse resources. Any proposed compensatory mitigation should be guided by this order of priority. As explained in the EIE, the ultimate mitigation package will be designed as part of environmental permitting.

12 The EIE presents a conceptual approach to stormwater management appropriate for CEPA review. The Department encourages the use of as much pervious area as possible, where subsurface contamination is not a concern, as a Low Impact Development (LID) measure. For this project, construction of a parking garage at the site of an existing paved parking lot, the opportunities to utilize pervious surfaces are admittedly somewhat limited. The proposed emergency/maintenance access road north of the rail line will be a pervious gravel driveway. The EIE for the Branford Shore Line East station had noted that pervious asphalt may be considered for the kiss-and-ride area and overflow parking lot. Pervious asphalt, pervious concrete or pavers would also be options worth consideration for the access and loop drives at the Madison facility.

As noted on page 46, the project will disturb more than one acre, so ConnDOT will need to register for the *General Permit for the Discharge of Stormwater and Dewatering Wastewaters*

12 *Associated with Construction Activities*. A site-specific Stormwater Pollution Control Plan meeting the requirements of the general permit must be prepared for the project but does not need to be submitted with the registration because there will be less than 10 acres of disturbance.

13 After a brief discussion of an EPA Voluntary Diesel Retrofit Program, page 68 states that "ConnDOT will require contractors to comply with current best management practices." It is not clear whether measures similar to the Connecticut Clean Air Construction Initiative employed by ConnDOT for the Q-Bridge projects will be implemented. For construction projects in urban areas, the Department typically recommends the use of construction equipment that has the best available controls on diesel emissions. Equipment, such as diesel oxidation catalysts or particulate filters, or the use of ultra-low sulfur fuel (15 ppm sulfur) can be effective in reducing exhaust emissions. The Department also recommends the use of diesel oxidation catalysts or diesel particulate filters for pre 2007-model year on-road vehicles typically used in construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites.

An additional mitigation measure, compliance with Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies that limits the idling of mobile sources to 3 minutes, is noted on page 70. Use of posted signs indicating the three-minute idling limit is recommended. It is also recommended that contract specifications include language similar to the anti-idling regulations to allow enforcement of idling restrictions at the project site without the involvement of the Department..

14 The document does not mention any plans to better accommodate bicyclists at the railroad station. The Department endorses the recommendation for bicycle racks at Shore Line East facilities contained in the *South Central Regional Long Range Transportation Plan 2007 - 2035*. Adding bicycle parking to the station would be a low-cost, space-saving method of increasing train ridership. Long-term bicycle parking should provide commuters a secure and weather-protected place to store their bicycles. These can be an existing overhang or covered walkway, a special covering, weatherproof outdoor bicycle lockers, or an indoor storage area. The Department urges that provision of appropriate bicycle storage be included in the design for the upgraded Milford station.

Thank you for the opportunity to review this project. If there are any questions regarding these comments, please contact me.

cc: Robert Hannon, DEO/OPPD
Jeff Caiola, DEP/IWRD
Chris Malik, DEP/WPSD
Ellen Pierce, DEP/APSD

APPENDIX H
Responses to Comments

PUBLIC HEARING TRANSCRIPT COMMENTS AND RESPONSES

(Note: Refer to numbered comments in the right-hand margin of the transcript included in Appendix F. Many of the comments raised during the public hearing were responded to by project team members during the hearing. Those responses were used as the basis for the responses provided below.)

Comment #1 – Deborah Heinrich

Response: Comments noted and acknowledged. With funding available, CT DOT is committed to implementing the strategic infrastructure and service improvements currently planned for the Shore Line East (SLE) corridor so that it will be fully capable of meeting future commuter rail passenger needs. CT DOT recognizes the importance of mass transit not only as means to help alleviate existing traffic congestion, but also for its environmental and economic benefit to the state as a whole.

Comment #2 – Al Goldberg

Response: CT DOT has construction inspectors on site whose job it is to ensure that appropriate erosion and sedimentation controls are properly installed and maintained throughout the duration of construction. CT DOT believes it has been a good steward of Tuxis Pond during the construction of the 199-space surface parking lot, south-side high level rail platform, and passenger shelter; collectively referred to as Phase 1 of the Madison SLE Railroad Station project. For the Proposed Action being evaluated in this EIE (Phase 2), CT DOT is bound by the Connecticut Department of Environmental Protection's (CTDEP) 2002 Erosion and Sedimentation Control Standards as well as by CTDEP's 2004 Stormwater Quality Manual. The latter manual was not in place when Phase I was designed, so there will be additional stormwater treatment measures included with the Proposed Action (Phase 2) that will further improve runoff to natural water bodies such as Tuxis Pond.

Comment #3 – Al Goldberg

Response: The engineering for the site development is underway, and stormwater management measures are being thoroughly considered to ensure that runoff is controlled and treated before it discharges to the Tuxis Pond area. The drainage calculations and stormwater design, which will be available for review by the Town, will fully comply with the CTDEP's 2004 Stormwater Quality Manual.

Regarding potential infiltration of stormwater runoff on-site, the peat soil conditions and high groundwater table are not well suited for this type of stormwater management measure. Therefore, the design approach is to create swales and control structures that will collect and treat the runoff prior to it being discharged off-site. Site runoff that is handled by these swales and control structures will be from exposed paved surfaces as well as from the roof of the parking garage. Drainage from the interior levels of the parking garage will be conveyed by a separate enclosed system that will discharge into an underground oil/water separator tank that will be regularly pumped out.

With respect to the comment about previous contaminated soil conditions: during construction of the Phase 1 surface parking lot, considerable effort and expense went into removing contaminated soils for disposal at an off-site treatment/disposal facility. Suitable clean fill materials were brought on-site to replace the excavated soils. Thus, the Proposed Action site has been fully remediated by the actions undertaken during Phase 1 construction.

Comment #4 – Al Goldberg

Response: The oil/water separator will be regularly maintained and serviced by CT DOT. The Rail Operations Group contracts out maintenance services at facilities under their purview. These services include such items as snow plowing, trash removal, and parking garage oil/water separator pump-outs. Although there is no maintenance money set aside for this facility at the moment, CT DOT realizes that they are obligated to properly maintain facilities like the Madison Railroad Station at an annual cost.

Comment #5 – Al Goldberg

Response: One of the new procedures that CT DOT is obligated to do on projects that cost more than $5 million is a high-performance building analysis (also referred to as a green building analysis). Although parking garages are exempt from Connecticut's green building statutes, CT DOT does analyze ways to incorporate environmentally friendly ("green") building design elements on projects, and this project is no exception. Solar lighting may not be an actual criteria in a high-performance building analysis, but these types of "green" building and site features will be considered as the design nears completion.

Comment #6 – Al Goldberg

Response: The 0.3-acre wetland impact reported in the EIE is a worst-case scenario based on an access road with a conventional 4:1 side slope. Design engineers are presently evaluating the feasibility of two other options for the access road that would minimize the amount of fill placed into the wetland located north of the railroad tracks. One option is to construct the access road with a 2:1 side slope and the other is to construct the access road using sheet piling placed along the northern (wetland) side of the access road. The option that best meets the needs of the project while minimizing impacts to wetlands will be incorporated in the final design and advanced into the permitting phase.

Comment #7 – Al Goldberg

Response: When dealing with wetlands the first goal is to try to avoid impacts altogether. If that is not possible, every effort will be made during design development to minimize impacts to the greatest extent practicable. This is presently being done with the evaluation of the access road design options as described in the response to comment #6. Hopefully, that effort will

reduce impacts to wetlands to less than the 0.3 acres reported in the EIE. Because CT DOT is bound by the wetland mitigation requirements and ratios established by the U.S. Army Corps of Engineers (ACOE), it is critical to know the exact amount of wetland acreage impacted and the affected functions and values. This information will dictate if mitigation is even required, and if so, guide the amount and type of mitigation that would be needed for this project. In developing a mitigation package, the ACOE has identified restoration of previously disturbed wetlands as the first priority, followed by enhancement, creation, and then by land preservation.

The search for a suitable mitigation site to offset wetland impacts associated with this project is underway. A hierarchical approach is typically followed when searching for a mitigation site. The first step is to look for a suitable mitigation site either directly on or immediately adjacent to the project site. Sometimes this is not possible, so the search is broadened to include the watershed where the wetland impact occurs. With respect to watershed boundaries, they are defined by CTDEP mapping and are based on topography and not town lines, so in some cases, suitable mitigation may not be found within the Town where the impact occurs. However, the objective is not to stray too far from the wetland impact as the closer you are to the impact site the greater the chance that the mitigation site may be able to replicate the wetland functions and values that were lost. So, in this case, staying within the Town of Madison is the objective.

The overall wetland mitigation process can be somewhat lengthy as it involves considerable coordination with both the ACOE and the CTDEP, both with respect to obtaining approval of the identified mitigation site as well as facilitating the review and approval of the final mitigation design package. This process does not hold up the EIE approval as it is handled primarily during the projects final design and permitting stage. However, it could affect the overall project schedule. For this reason, CT DOT is taking a proactive approach and getting started on the process now by conducting a search to identify suitable mitigation sites. Because local knowledge is important, CT DOT welcomes any information the Town could provide to help advance this search.

Comment #8 – Mike Ott

Response: As mentioned in the response to comment #3, the engineering for the site development is underway and is approximately 60% complete. Site stormwater management measures are being thoroughly considered to ensure that peak discharge rates are controlled so as not to exacerbate any downstream flooding problems, and to ensure that runoff is treated before it discharges to the Tuxis Pond area. The drainage calculations and stormwater design, which will be available for review by the Town, will fully comply with the CTDEP's 2004 Stormwater Quality Manual.

Comment #9 – Mike Ott

Response: CT DOT will soon be preparing a State Traffic Commission (STC) permit for the site so all local intersections and levels of service will be analyzed as part of that process.

Comment #10 – Mike Ott

Response: CT DOT's practice is to send milestone submissions to the town. When the 60% submission for the project site is delivered by the design consultant, CT DOT will forward it to Madison. As far as the pedestrian crosswalk near the station entrance on Bradley Road, this subject will need to be revisited. During Phase 1 of the new station, correspondence with Madison's Chief of Police indicated that a pedestrian crosswalk was not desired. Once the 60% design submission is complete, the STC application and review process will get underway. Any improvements to intersections and local roadways are at the discretion of the STC and the Town will play a role in the STC application approval process. CT DOT is obligated to implement the recommended improvements that are stipulated in the STC permit for this project.

Comment #11 – Connecticut Department of Environmental Protection

Response: CT DOT is committed to ongoing coordination with CTDEP during construction and permitting for the Proposed Action. The recommendations made in this comment letter regarding wetland mitigation will be addressed during final design. Refer to the response provided to comment #7 of the Public Hearing Transcript by Madison First Selectman Al Goldberg, for additional information.

Comment #12 – Connecticut Department of Environmental Protection

Response: CT DOT will coordinate stormwater details with the CTDEP during the permitting process to ensure that all stormwater issues raised by the CTDEP in this comment are adequately resolved. This includes among other items, the possible use of pervious asphalt on the loop road and access road. A site-specific Stormwater Pollution Control Plan meeting the requirements of the General Permit for the *Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* will be prepared for this project.

Comment #13 – Connecticut Department of Environmental Protection

Response: CT DOT will require contractors to comply with current best management practices. Best management practices include the control and abatement of dust, mist, smoke, vapor, gas, aerosol, other particulate matter, odorous substances and any combination thereof arising from project operations. CT DOT will recommend the use of ultra-low sulfur fuel, as well as the use of the most modern construction equipment (Tier II and Tier III). CT DOT will require the contractor to comply with the anti-idling requirements of Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies, while also recommending that a mitigation plan be developed to abate impacts to identified sensitive receptors, which include schools, hospitals, daycare etc. and the recommended use of truck staging areas.

Comment #13 – Connecticut Department of Environmental Protection

Response: The recommendation for additional bicycle parking and amenities is acknowledged and will be addressed during final design for the Proposed Action.

WRITTEN COMMENTS RECEIVED FROM THE PUBLIC

Note: There were no written comments submitted by the public during the November 18, 2008 to January 2, 2009 comment period.