

The Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA:02114

Karyn E. Polito LIEUTENANT GOVERNOR

> Matthew A. Beaton SECRETARY

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April 12, 2019

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME

: North Carver Development and Urban Renewal Plan

PROJECT MUNICIPALITY

: Carver

PROJECT WATERSHED

: Taunton River

EEA NUMBER

: 15639

PROJECT PROPONENT

: Route 44 Redevelopment, LLC

DATE NOTICED IN MONITOR

: March 6, 2019

Pursuant to the Massachusetts Environmental Policy Act (M.G. L. c. 30, ss. 61-62I) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Final Environmental Impact Report (FEIR) and hereby determine that it adequately and properly complies with MEPA and its implementing regulations. The project may proceed to permitting.

Project Description

As described in the FEIR, the project involves the construction of up to 1.77 million square feet (sf) of warehouse/distribution uses in three buildings, including 1.06 million sf in Building A, 115,000 sf in Building B and 600,000 sf in Building C. The project includes 1,883 parking spaces, including 259 spaces for trucks and trailers; access roads; a wastewater treatment facility (WWTF); and water, stormwater, electricity and communications infrastructure and utilities.

A conceptual project plan was included in the Expanded Environmental Notification Form (EENF) as a component of the North Carver Urban Renewal Plan (NCURP). A Final Record of Decision (FROD) on a request for a Phase 1 Waiver for the NCURP was issued on April 12, 2017. The FROD indicated that the Department of Housing and Community Development (DHCD) could act on the NCURP prior to conclusion of MEPA review for the development project. The NCURP was approved by the Department of Housing and Community Development (DHCD) on May 8, 2017. The Carver Redevelopment Authority (CRA) is responsible for the following actions identified in the NCURP:

- Acquisition of 13 privately-owned parcels and portions of two other privately-owned parcels totaling 242.1 acres to assemble a suitable development area;
- Relocation of three residential occupants and three commercial occupants displaced by land acquisition;
- Demolition of five buildings;
- Installation of infrastructure, including new public roadways, reconstruction of existing roadways and intersections, and extension of the municipal water system to the site;
- Creation of a viable disposition parcel to convey to a selected developer; and
- Establishment of design controls for the redevelopment of the parcel.

Project Site

The NCURP applies to a 301.4-acre area in northwest Carver. The area is bordered by Route 58 (North Main Street) to the east, Route 44 to the south, the Middleborough town line and Middleborough landfill to the west, and the Plympton town line and a low-density residential neighborhood to the north. A portion of Montello Street passes through the eastern section of the planning area. The planning area is comprised of 25 parcels, of which two are publicly owned and the remainder are privately owned.

The project site occupies 283.2 acres within the NCURP district. It includes the 128-acre Whitworth property, which was historically used for sand and gravel extraction, a wood waste landfill, a wood waste processing operation and a 30-acre septage facility, which was demolished in 2013. The site also includes cranberry bogs and a former residential property. The Proponent is conducting site preparation activities, including placement of fill material pursuant to an Administrative Consent Order (ACO) issued by the Massachusetts Department of Environmental Protection's (MassDEP) in accordance with its Interim Policy for the Re-Use of Soil for Large Reclamation Projects (COMM-15-01) dated August 28, 2015.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM) numbers 25023C0337J and 25023C0341J (both effective July 17, 2012), a portion of the northwest part of the site associated with a cranberry bog is within the 100-year floodplain (Zone A).

Environmental Impacts and Mitigation

Potential environmental impacts of the project include disturbance of 123 acres of land, addition of 79.1 acres of impervious area, and wetlands alteration including 1,400 sf of Bordering Vegetated Wetlands (BVW), 85 linear feet (lf) of Bank, 190 sf of Land Under Waterways and Waterbodies (LUWW) and 54,210 sf of Riverfront Area. The project will generate 8,398 average daily trips (adt) and

add 1,883 parking spaces. It will use up to 38,000 gallons per day (gpd) of water and generate 38,000 gpd of wastewater. Greenhouse Gas (GHG) emissions are associated with on-site energy use and transportation.

Measures to avoid, minimize and mitigate impacts include siting structures to minimize direct impacts to wetlands resource areas and providing a buffer between project activities and residences north of the site. The project will include a new wastewater treatment facility and a stormwater management system designed in accordance with the Stormwater Management Standards (SMS) of the Wetlands Protection Act Regulations (310 CMR 10.00). Traffic mitigation will include reconfiguring Montello Street and its intersection with Route 58 and prohibiting project-related traffic from the residential portion of Montello Street north of the site entrance. The building designs incorporate measures to increase energy efficiency. During the construction period, mitigation measures will include sedimentation and erosion controls, designated truck routes, measures to minimize emissions of air pollutants by construction vehicles, and noise, dust and odor controls.

Jurisdiction and Permitting

The project is subject to the preparation of a Mandatory EIR pursuant to the MEPA regulations because it requires State Agency Actions and will directly alter 50 or more acres of land (301 CMR 11.03(1)(a)(1)); create ten or more acres of impervious area (301 CMR 11.03(1)(a)(2)); generate 3,000 or more new trips on roadways providing access to a single location (301 CMR 11.03(6)(a)(6)); and construct 1,000 or more new parking spaces at a single location (301 CMR 11.06(a)(7)). In addition, the approval of a new urban renewal plan in accordance with MGL c. 121B meets the ENF threshold at 301 CMR 11.03(1)(b)(7). The NCURP was approved by DHCD on May 8, 2017. The project requires a Groundwater Discharge Permit, a Drinking Water Distribution Modification Permit and a Corrective Action Design (CAD) Permit from MassDEP. It requires a Vehicular Access Permit from the Massachusetts Department of Transportation (MassDOT). The project is subject to review under the May 2010 MEPA GHG Emissions Policy and Protocol (GHG Policy).

The project requires an Order of Conditions from the Carver Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions (SOC) from MassDEP). It will require a National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit from the United States Environmental Protection Agency (EPA).

The project is a component of the NCURP, which was developed by a municipal redevelopment authority acting in accordance with M.G.L. c. 121B. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Changes Since the Filing of the DEIR

The design of the site access has been refined since the DEIR. The intersection of the site driveway at Montello Street has shifted approximately 130 feet (ft) to the north to minimize impacts to the Riverfront Area.

Review of the FEIR

The FEIR was generally responsive to the Scope included in the Certificate on the DEIR. It described existing site conditions and provided a detailed description and plans of the project, including proposed uses and structures. The FEIR provided a list of required State Permits, Financial Assistance, or other State approvals and provided an update on the status of each of these pending actions, a Response to Comments received on the DEIR and Draft Section 61 Findings.

Land Alteration

The project requires significant filling and excavation to establish final site grades. The FEIR quantified the volume of cut and fill required at the site and provided a plan showing the changes in ground elevation under proposed conditions. According to the FEIR, 1.09 million cubic yards (cy) of fill is required, of which 732,000 cy will be brought to the site and placed in accordance with the ACO. This material will generally be used to establish final grades ranging from approximately 86 ft NAVD 88 to 94 ft NAVD 88 where Buildings A and B will be constructed. Excavation of up to 38 ft of elevated landforms will provide an additional 355,000 cy of fill material to establish final grades of approximately 90 ft NAVD 88 to 98 ft NAVD 88 for Building C. Approximately 8,000 cy of additional material, which is not associated with the ACO, will be brought to the site to meet final grades.

Traffic and Transportation

As required by the Scope, the FEIR provided additional information to support the method used to estimate the project's trip generation and identified specific commitments to monitor and mitigate the project's impacts on the local and regional highway system. Proposed transportation mitigation measures are detailed in the Mitigation section below.

Trip Generation

The project will generate 8,398 adt, including 770 trips during the morning peak period, 735 trips during the evening peak period and 420 truck trips. This estimate was calculated by averaging trip rates developed by the Institute of Transportation Engineers (ITE) for Land Use Codes (LUC) 150 (Warehousing) and 156 (High-Cube Parcel Hub Warehouse). The average trip rate of 4.75 trips per thousand square feet was applied to the entire 1.77 million of buildout of the project; the trip generation estimate was not adjusted to account for pass-by or internal capture trips. The number of truck trips per day is based on the expectation that 5 percent of all trips to the site will be by trucks. If monitoring indicates the trip generation or number of truck trips is higher than anticipated due to the nature of the businesses occupying the site, the Proponent should consult with the MEPA office and MassDOT to determine if additional MEPA review is warranted.

Traffic Operations and Mitigation

The FEIR provided an updated discussion of proposed transportation mitigation measures. The traffic analysis included in the DEIR identified six intersections that would be impacted by the project, resulting in Levels of Service (LOS) operations below acceptable levels. The intersections include:

- Route 58 at Montello Street;
- Route 58 at Route 44 Westbound Ramps;
- Route 58 at Route 44 Eastbound Off-Ramp;
- Route 58 at High Street;
- Route 105 at Route 44; and,
- Middleborough Rotary.

The FEIR described measures to mitigate impacts at these intersections. Roadway mitigation along Route 58 at the intersections Montello Street and the Route 44 On-Ramps and Off-Ramps will generally include modification of the lane geometry and signalization (four new signals). Under Build 2025 with Mitigation conditions, these intersections will operate at LOS C or better. To minimize queue lengths, the Proponent will optimize signal timings at the intersections of Route 105 at Route 44 and Route 58 at Plymouth Street. According to the FEIR, mitigation has not been proposed at the intersection of Route 58 at High Street because the project's addition of trips at this intersection will be minimal and will not affect operations; in addition, delays at this unsignalized intersection are likely to be lower than modelled because drivers will accept smaller gaps in traffic on minor streets. Mitigation is not proposed at the Middleborough Rotary; operations at the rotary are included in the Proponent's Transportation Monitoring Program (TMP). Safety improvements are proposed at the intersections of Route 58 and Plymouth Street and Route 44 at Route 105 in accordance with Roadway Safety Audits (RSA) completed in May 2018.

The FEIR described the following bicycle and pedestrian improvements: extension of existing sidewalks along the west side of Route 58 to the shopping center adjacent to the project site; addition of 5-ft shoulders on both sides of Route 58 to accommodate bicyclists; addition of pedestrian phases to proposed signals; addition of a crosswalk across Route 58 near the shopping center; and installation of an advance warning sign to alert drivers to the crosswalk. The Proponent will not provide sidewalks on Route 58 between the shopping center and Montello Street because it would impact 2,500 sf of BVW. The Proponent should consider adding sidewalks and a bicycle path to the segment of Montello Street that will be discontinued; this would benefit the project by extending pedestrian and bicycle facilities to Montello Street close to the site entrance. The Proponent will construct internal driveways to accommodate busses and will construct bus shelters if service is extended to the site.

Roadway mitigation will be provided in phases. Prior to any occupancy of the site, intersection of Route 58 at Montello Street will be relocated and pedestrian and bicycle facilities along Route 58 will be completed. When site uses generate 225 peak hour trips (approximately 500,000 sf to 1,300,000 sf of development), the Route 58 at Route 44 Westbound and Eastbound Ramps intersections will be signalized and safety and signal timing improvements will be implemented at the intersections of Route 58 at Plymouth Street and Route 44 at Route 105. When the project generates 550 peak hour trips (approximately 1,300,000 sf to 1,770,000 sf of development), the Route 58 at Montello Street intersection will be signalized and changes to lane geometry at the Route 58 at Route 44 Westbound and Eastbound Ramps intersections will be constructed.

Greenhouse Gas Emissions

The FEIR included an updated GHG analysis that reflected revised Base Case and Design Case scenarios. The building design has been modified to include additional GHG mitigation measures,

including R-40 roof insulation and the use of heat pumps in the office space of all buildings. According to the Department of Energy Resources (DOER), the project's stationary-source GHG emissions could be reduced by a total of 22 percent if the use of heat pumps were expanded to the whole building space. The FEIR indicated that heat pumps are infeasible for use in the warehouses because those spaces would only be heated (not cooled). I refer the Proponent to the DOER comment letter for more information regarding Alternative Energy Credits (AECs) that could offset the cost of heat pumps for heating the warehouse space and providing hot water.

The FEIR documented that that a solar photovoltaic (PV) system covering 30 percent of the project's roof area would generate 596,652 kiloWatt-hours per year (kWh/yr). That level of energy generation would offset approximately 3,407 tpy of GHG emissions, which is equivalent to all of the project's stationary-source emissions and a portion of its mobile-source emissions. The Proponent has committed to offsetting its stationary-source GHG emissions by installing a rooftop PV system of the necessary size. I commend the Proponent for this significant commitment to offsetting GHG emissions. I encourage the Proponent to consider expanding the rooftop PV systems beyond the 30 percent roof area. The project may be eligible for financial incentives through the Solar Massachusetts Renewable Target (SMART) program administered by DOER.

Stationary-source GHG emissions from the Design Case would be 2,319.2 tpy, a reduction of 251.2 tpy (9.8 percent) from the Base Case (2,570.4 tpy). The project's mobile-source emissions will be 3,891 tpy, a reduction of 1,284 tpy (25 percent) from the Base Case after implementation of roadway improvements and Transportation Demand Management (TDM) measures. The project's total GHG emissions under the Preferred Alternative will be 6,210.2 tpy, a reduction of 1,535.2 tpy (20 percent) from the Base Case scenario.

Wetlands

The project will alter 1,400 sf (910 sf permanently) of BVW, 85 lf of Bank, 190 sf of LUWW and 54,210 sf (47,750 sf permanently) of Riverfront Area. Most of the wetlands impacts are associated with construction of the site access roads, including the relocation of the Montello Street at Route 58 intersection. The FEIR provided a plan that identifies wetland resource areas and impacts to wetlands and the FEIR described proposed mitigation measures. The Proponent will replicate a 1,100-sf area of BVW on the north side of the Montello Street. The BVW replication will include excavating an upland area to match the grade of an adjacent wetland, adding one foot of wetland soil and planting wetland trees and shrubs. Impacts to Riverfront Area will be mitigated by removing pavement on the portion of Montello Street to be abandoned and restoring other disturbed Riverfront Area on the site. Approximately 73,240 sf of Riverfront Area will be replanted with native species.

Water and Wastewater

The project will generate approximately 38,000 gpd of wastewater based on Title V flow generation rates. The FEIR included a Hydrogeologic Evaluation Report (HER) and identified potential designs of the WWTF and effluent disposal area. Based on soil and groundwater conditions, a leaching field has been proposed within the central part of the site near Building A. The effluent disposal area

The Proponent may offset these emissions using a different renewable energy generating technology if public and/or private financial incentives favor a technology other than solar PV.

will have a primary leaching area of at least 12,700 sf and a reserve leaching area with a minimum area of 6,350 sf. The leaching system will include perforated high-density polyethylene (HDPE) chambers surrounded by granular material and a filter fabric separation layer above the system. According to the HER, the proposed location will meet MassDEP design criteria, including a separation of four ft or more from the mounded water table at seasonal high groundwater conditions, directional groundwater flow away from public water supply wells and sufficient distance (greater than 420 ft) from any wetlands or private supply wells that could be influenced by discharge from the effluent field. The WWTF design has not been identified; however, it will be based on one of the following treatment methods: a Membrane Bioreactor (MBR), a Moving Bed Bioreactor (MBBR) or a Submerged Active Growth Bioreactor (SAGR). According to the FEIR, either one of the methods will meet MassDEP effluent limits. Performance of the wastewater system will be monitored during operation of the facility by collecting and analyzing samples of effluent and groundwater and submitting monthly reports to MassDEP. MassDEP may require the Proponent to establish escrow accounts for repair and replacement of the WWTF.

Mitigation and Section 61 Findings

The FEIR provided a list of mitigation commitments and draft Section 61 Findings. The Proponent will provide a GHG self-certification document to the MEPA Office that is signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) and indicates that all of the required mitigation measures, or their equivalents, have been completed. The certification should describe any PV generating facilities that have been installed and identify heat pumps used for space or water heating.

Traffic and Transportation

The Proponent will collect traffic counts, analyze traffic operations and complete signal warrant analyses as the project is built out to determine when the following mitigation measures must be implemented:

Phase 1- Prior to Occupancy

- Multi-modal improvements along Route 58, including extension of the sidewalk on the west side of the road, 5-ft wide shoulders on both sides of the road, pedestrian signal, a crosswalk across Route 58 and an advance warning sign;
- Relocation of the intersection of Route 58 at Montello Street, including separate left-tur and right-turn lanes on the Montello Street eastbound approach, separate left-turn and through lanes on the Route 58 northbound approach, and a shared through/right-turn lane on the Route 58 southbound approach; and,
- Construction of internal roadways that can accommodate potential bus service to the site.

Phase 2- Approximately 225 Peak Hour Trips

 Signalization of the of Route 58 at Route 44 Westbound and Route 58 at Route 44 Eastbound Ramps;

- Improvements at the intersection of Route 58 at Plymouth Street, including replacement of faded pavement markings and signage, installation of an advance warning sign for the new lane geometry and signal timing adjustments; and,
- Signal timing improvements at the intersection of Route 44 at Route 105.

Phase 3- Approximately 550 Peak Hour Trips

- Signalization of the intersection of Route 58 at Montello Street; and,
- Modification of lane geometry at the Route 58 at Route 44 Westbound and Eastbound Ramps intersections to provide a four-lane cross-section.

Transportation Demand Management

The project will include implementation of the following TDM measures to reduce SOV trips to and from the site:

- Designating an on-site Transportation Coordinator to promote alternative means of transportation to the site;
- Installing infrastructure to support future installation of electric vehicle charging stations;
- Providing a cafeteria, mail drop boxes and ATM machines for employee use;
- Promoting carpooling and ride-matching assistance programs offered by Bay State Commute;
- Designating preferential parking spaces for low emissions vehicles;
- Implementing a guaranteed ride home program for employees;
- Using direct deposit for employee paychecks; and
- Implementation of a TDM Monitoring Program that will monitor the effectiveness of mitigation and evaluate the need for modifications if the vehicle trip reduction is less than 5 percent.

Traffic Monitoring Program

The Proponent will conduct a Traffic Monitoring Program annually for five years beginning six months after full occupancy, in addition to the traffic monitoring and analysis that will be conducted to determine the need for phased roadway mitigation. Annual reports will be provided to MassDOT and MassDEP. The monitoring program will include:

- Automatic traffic recorder (ATR) counts for a continuous 24-hour period on a typical weekday and Saturday at the following locations:
 - o Montello Street east of Route 58;
 - o the southern and northern site driveways; and,
 - o the Middleborough Rotary.
- Turning Movement Counts (TMC) will be conducted on a typical weekday from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the following locations:

- o Route 58 at Montello Street;
- o Route 58 at Route 44 Westbound Ramps;
- o Route 58 at Route 44 Eastbound Off-Ramps and On-Ramps;
- o Route 58 at Plymouth Street;
- o Route 58 at Parsonage Road/Mayflower Road; and,
- o Route 44 at Route 105.

Greenhouse Gas Emissions

- Energy efficient windows and building envelope with wall insulation, roof insulation and window U-values meeting Building Code requirements;
- Low window to wall ratios ranging from 11.4 percent to 15.4 percent in the buildings and 19.6 percent in the WWTF;
- High efficiency boilers (94 percent efficiency) and service hot water heaters (97 percent efficiency) exceeding Building Code requirements;
- Water source heat pumps in Building A;
- Reduced lighting power density (LPD) in the buildings and the WWTF;
- Encouraging the use of Energy STAR appliances and equipment;
- Building commissioning and energy tracking and monitoring systems;
- Low-flow and water-efficient plumbing;
- Green Tenant guidelines to inform tenants on how to conserve energy;
- Offsetting the project's stationary-source emissions through an on-site rooftop PV generating system or other renewable energy generation technology; and,
- Implementation of TDM measures to reduce vehicle trips to the site by 5 percent.

To ensure all GHG emissions reduction measures adopted by the Proponent as the Preferred Alternative are implemented, the Proponent will submit a self-certification to the MEPA Office at the completion of the project that will be signed by an appropriate professional (e.g. engineer, architect, transportation planner, general contractor) indicating that all of the required GHG mitigation measures, or equivalent measures that are designed to collectively achieve identified reductions in stationary source GHG emissions and transportation-related measures have been incorporated into the project.

Climate Change Resiliency

- Reduce heat gain by using a low-albedo roofing system, such as solar photovoltaic (PV) panels (in addition to what is already committed) or white roofing material;
- · Incorporate drought-resistant plants into the landscaping; and,
- Evaluate the need for backup generators and fuel supplies.

Wetlands and Stormwater

- Provide a 1,100-sf BVW replication area;
- Enhance 73,240 sf of Riverfront Area with native plantings;

- Construct a stormwater management system that meets all requirements of the SMS and includes Best Management Practices such as oil/grit separators, deep-sump hooded catch basins, sediment forebays, water quality swales and infiltration basins; and
- Incorporate Low Impact Development (LID) techniques such as bioretention areas, tree box filters and the use of roof runoff for irrigation into the project design.

Water and Wastewater

- Construct a wastewater treatment system, including a WWTF and effluent disposal field with a capacity of up to 40,000 gpd consistent with MassDEP standards and requirements;
- Certify that the Proponent will be responsible for the operation of the WWTF, including reporting, monitoring maintenance, repair and replacement;
- Establish escrow accounts for maintenance and replacement of the wastewater system;
- Construct a 2,000-ft long water main and 125,000-gallon elevated water storage tank for the North Carver Water District;
- Install low-flow plumbing fixtures; and
- Implement water-conserving landscaping practices such as use of non-invasive, drought-resistant plants and limits on outdoor water use.

Solid Waste

- Remediate the woodwaste landfill on the site in accordance with MassDEP's Solid Waste Management (310 CMR 19.00) and Site Assignment (310 CMR 16.00) regulations;
- Excavate and remove of the landfill material and mix it with reclamation soil brought to the site to stabilize the site as a final corrective action.

Construction Period

- Implement construction period erosion and sedimentation control measures as specified by the Stormwater Pollution Prevention Plan (SWPPP);
- Minimize the spread of dust by using wet suppression, covering trucks carrying soil and minimizing debris stored on site;
- Minimize noise impacts of construction activities by minimizing vehicle idling, using
 mufflers on construction equipment, scheduling noisy construction activities during
 periods of high ambient noise levels and complying with MassDEP and Town of Carver
 noise regulations;
- Direct all trucks to access the site from Montello Street south of the existing driveway;
- Implement the diesel reduction strategies outlined in MassDEP's Diesel Engine Retrofits in the Construction Industry: A How to Guide (2008), which are to reduce idling; replace/repower/rebuild vehicles and engines; retrofit; and refuel through compliance with Massachusetts' Anti-Idling law (310 CMR 7.11), MassDEP's Diesel Retrofit Program (DRP), Massachusetts' Low Sulfur Diesel standards (301 CMR 7.05), U.S. EPA's Clean Air Nonroad Diesel Rule, and U.S. EPA's Tier 4 Emissions Standards (40 CFR part 1039); and,
- Recycle 75 percent of construction material.

Conclusion

Based on a review of the FEIR, comments letters, and consultation with State Agencies, I find that the FEIR adequately and properly complies with MEPA and its implementing regulations. Outstanding issues can be addressed during State and local permitting and review. No further MEPA review is required and the project may proceed to permitting. State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

April 12, 2019

Date

Matthew A. Beaton

Comments received:

03/14/2019	Greater Attleboro-Taunton Regional Transit Authority (GATRA)
04/04/2019	Southeastern Regional Planning and Economic Development District (SRPEDD)
	Massachusetts Department of Transportation (MassDOT)
04/09/2019	Massachusetts Department of Environmental Protection (MassDEP) - Southeast
0 11 0 21 2 2 2	Regional Office (SERO)
04/10/2019	Department of Energy Resources (DOER)

MAB/AJS/ajs



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

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Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

April 9, 2019

Secretary Matthew A. Beaton, Executive Office of Energy & Environmental Affairs 100 Cambridge Street, Suite 900 Attention: MEPA Unit Boston, MA 02114 RE:FEIR Review #15639, CARVER. North Carver Development located at the intersection at Montello Street and Route 58

Dear Secretary Beaton,

The Massachusetts Department of Environmental Protection (MassDEP) has reviewed the Final Environmental Impact Report (FEIR) for the proposed North Carver Development located at the intersection at Montello Street and Route 58, Carver, Massachusetts, EEA# 15639. The Project Proponent provides the following information for the Project:

The Project involves the construction of up to 1.77 million square feet of new warehouse/ distribution facilities with ancillary office uses, 1,883 parking spaces, and paved access roads (Figure 1.1). To support the program, new utility infrastructure will be constructed, including a new 1,500 - square foot sewage treatment facility with an associated 30,000 square foot leaching field, and water, electricity and communication distribution systems. The stormwater management system will incorporate Best Management Practices (BMPs) to manage the flow and quality of stormwater runoff from the Site. The Project Site will be accessed from a re-configured intersection at Montello Street and Route 58 and includes a new configuration for Montello Street.

Bureau of Water Resources Comments

Wetlands and Waterways: The Proponent has adequately addressed the Department's Wetlands and Waterways comments.

<u>Water Management Act Comments</u>: WMA staff has reviewed the North Carver Development EIR and have no additional comments to submit.

Bureau of Waste Site Cleanup Comments

The Proponent has adequately addressed the comments raised by the Bureau of Waste Site Cleanup.

Air Quality Comments:

Mesoscale and Microscale Analyses/GHG Emissions: "The FEIR has adequately addressed comments raised by MassDEP with regard to mobile and stationary source GHG emissions. The Proponent has outlined a feasible TDM program for implementation by tenants designed to reduce project-related vehicle miles traveled (VMT) and will conduct an annual traffic monitoring program, including the success of the TDM program, for a period of 5 years post-construction. MassDEP continues to strongly recommend the installation of rooftop solar photovoltaic systems on each building within the proposed development."

Solid Waste Comments: Based on its review of the Final Environmental Impact Report for the North Carver Development project in Carver EEA No. 15639, the Massachusetts Department of Environmental Protection (MassDEP) Solid Waste Management Section has determined that the Proponent has adequately addressed its comments previously provided in the Environmental Notification Form and Draft EIR documents.

Other Comments/Guidance

MassDEP staff is available to provide additional guidance to the Proponent upon request. If you have any questions regarding this comment letter, please do not hesitate to contact George Zoto at either george.zoto@mass.gov or 508-946-2820.

Very truly yours,

Regional Engineer, Bureau of Water Resources

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director and Acting BAW Deputy Regional Director David Johnston, Deputy Regional Director, BWR
Gerard Martin, Deputy Regional Director, BWSC
Jennifer Viveiros, Deputy Regional Director, ADMIN
Jim Mahala, Chief, Wetlands and Waterways, BWR
Gary Makuch, Wetlands and Waterways, BWR
Doug Coppi, Solid Waste Management, BAW
Mark Dakers, Chief, Solid Waste Management, BAW
Shi Chen, Water Management Act, BWR/Boston
Duane LeVangie, Chief, Water Management Act, BWR/Boston
Allen Hemberger, Site Management, BWSC



COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

DEPARTMENT OF ENERGY RESOURCES

100 CAMBRIDGE ST., SUITE 1020 BOSTON, MA 02114

Telephone: 617-626-7300 Facsimile: 617-727-0030

Charles D. Baker Governor

Karyn E. Polito Lt. Governor Matthew A. Beaton Secretary

Judith F. Judson Commissioner

10 April 2019

Matthew Beaton, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02114

Attn: MEPA Unit

RE: North Carver Development, North Carver, Massachusetts, EEA #15639

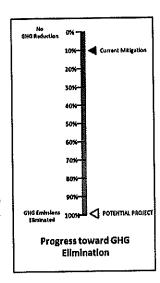
Cc: Maggie McCarey, Director of Efficiency Programs, Department of Energy Resources Judith Judson, Commissioner, Department of Energy Resources

Dear Secretary Beaton:

We've reviewed the Final Environmental Impact Report (FEIR) for the above project. The proposed project consists of three buildings totaling approximately 1.8M sf of warehouse space. About 5% of the warehouse floor area will be office.

In summary:

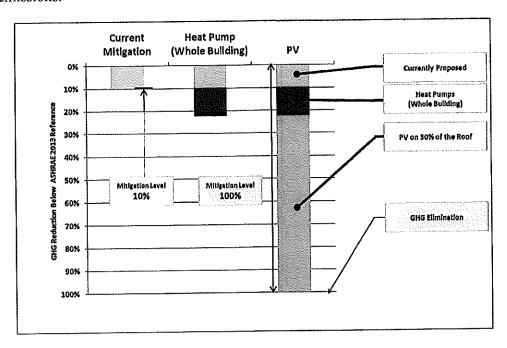
- The currently-proposed Mitigation Level for the project is 10%. Currently-planned mitigation consists of R-40 roof and heat pump space heating for the office portions.
- The project can readily **eliminate emissions** (100% reduction in GHG). This can be done by expanding use of heat pumps to all the buildings' areas (not just the office portions) and adding solar PV to about 30% of the total roof area.
- Qualifying heat pumps could potentially be eligible for up to approximately \$36,000 per year worth of Alternative Energy Credits.



Pathway to Emissions Elimination

The currently-planned GHG reduction is reported to be 10%. Emissions can be eliminated, as illustrated below:

- Expanding heat pump (or VRF) heating from just the office portions of the buildings to all the buildings' area would more than double GHG mitigation, improving reduction to 22%.
- Addition of solar PV on about 30% of the total roof area would eliminate the balance of all
 emissions.



Heat Pumps and Alternative Energy Credits

The proponent was responsive to incorporate heat pumps for space heating of the office portions of the project. We recommend expanding heat pump space heating to the entire buildings' area. The submission explains that heat pumps were not chosen because the warehouse will be only heated, and not cooled, making it difficult to justify heat pump (or VRF) equipment cost.

However, space heating with eligible heat pumps (or VRF) could qualify for Alternative Energy Credits (AECs)¹. The value of these credits could be approximately \$36,000 per year² which may justify using this equipment for heating-only application.

Further, if heat pumps are also used to provide water heating, the development could eliminate gas infrastructure from the project altogether, which may save capital costs and offset any heat pump/VRF premium. Office portions of the development have relatively small service water

https://www.mass.gov/service-details/alternative-portfolio-standard-rulemaking

² At \$15/AEC

North Carver Development, EEA #15639 North Carver, Massachusetts

loads. These loads would be readily met with heat pump water heaters, electric on-demand heaters, or electric storage heaters.

MassSave®

MassSave® offers energy efficiency incentives which can offset equipment and other costs. It's recommended that the proponent meet with MassSave® in person in get an assessment of available incentives.

Solar PV

The proponent was responsive to review rooftop solar and is committing to a solar array that would cover 30 percent of their rooftop. This would offset approximately 2,700 tpy of GHG emissions and would effectively eliminate stationary source GHG emissions (if heat pumps are used as illustrated above).

With all space, water, and all other loads on electricity, the project should examine all solar pathways (net metering, qualified facility, and on-bill credits) under the SMART program. This evaluation should be coupled with heat pump evaluations above, as well.

In the submission the proponent provided a plan showing solar expanded to about 80% of the roof, demonstrating the extent of potential additional solar. We recommend the proponent commit to set-aside the presented 80% for potential future solar PV.

Recommendations:

We recommend that the following:

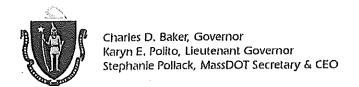
- 1. Examine expanding heat pump space heating to the entire building, including consideration of value of Alternative Energy Credits (AECs) and benefit of on-site production from PV. Also, examine switch to electric-based water heating which would allow elimination of gas service from the project and cost savings.
- 2. Incorporate solar PV on at least 30% of the roofs. Confirm commitment to set aside 80% of roof to be PV-ready.

Sincerely,

Paul F. Ormond, P.E.

Energy Efficiency Engineer

Massachusetts Department of Energy Resources





April 5, 2019

Matthew Beaton, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114-2150

RE: Carver: North Carver Development - FEIR

(EEA #15639)

ATTN: MEPA Unit

Alex Strysky

Dear Secretary Beaton:

On behalf of the Massachusetts Department of Transportation, I am submitting comments regarding the proposed North Carver Development project in Carver, as prepared by the Office of Transportation Planning. If you have any questions regarding these comments, please contact J. Lionel Lucien, P.E., Manager of the Public/Private Development Unit, at (857) 368-8862.

Sincerely,

David J. Mohler Executive Director

Office of Transportation Planning

cc: Jonathan Gulliver, Administrator, Highway Division

Patricia Leavenworth, P.E., Chief Engineer, Highway Division

Nell Boudreau, Assistant Administrator of Traffic and Safety Engineering

Mary-Joe Perry, District 5 Highway Director

Southeastern Regional Planning & Economic Development District

Old Colony Planning Council

Greater Attleboro Taunton Regional Transit Authority

Department of Planning and Community Development, Town of Carver

PPDU Files





TO:

David J. Mohler, Executive Director

Office of Transportation Planning

FROM:

J. Lionel Lucien, P.E, Manager

Public/Private Development Unit

DATE:

April 5, 2019

RE:

Carver: North Carver Development - FEIR

(EEA #15639)

The Public/Private Development Unit (PPDU) has reviewed the Final Environmental Impact Report (FEIR) for the North Carver Development in Carver. The project site consists of 282.3 acres of abandoned and/or underutilized land making up the western portion of the North Carver Urban Renewal Plan (NCURP), bounded by the Carver town line to the north and west, Route 44 to the south, and portions of North Main Street and Montello Street to the east. The Proponent seeks to develop warehouse/distribution facilities with ancillary office uses comprising approximately 1.77 million square feet.

The NCURP was the subject of an Expanded Environmental Notification Form (EENF) found to be in compliance with MEPA regulations in March 2017. This project is part of the implementation of the NCURP and is proposed to be developed in two phases. The first phase, which has been the subject of the EIR submissions, involves the redevelopment of the western portion of the NCURP. The second phase, which will focus on retail and commercial development on the eastern edge of the NCURP, would be covered in a future MEPA filing.

Based on the information presented in the DEIR, the project would generate 8,398 new trips on a typical weekday, with 770 new trips during the weekday morning peak hour and 735 new trips during the weekday evening peak hour. The project site will accommodate 1,883 parking spaces.

The project requires a Vehicular Access Permit from MassDOT, as most traffic will access the site via Route 44, a state-controlled highway, and Route 58, a state-controlled highway south of Montello Street.

Trip Generation

The Proponent provided further clarification regarding the methodology used to estimate the project's trip generation. Due to uncertainty over the Full-Build characteristics of the warehouse and distribution facilities proposed for development, the Proponent opted to use the Institute of Transportation Engineers (ITE)'s *Trip Generation Manual* (10th Edition) Land Use Code (LUC) 150 –Warehousing and LUC 156 – High-Cube Parcel Hub Warehouse to derive the trip generation rates. This provides a conservative analysis as LUC 156 contains a trip generation

rate higher than any of the empirical data references as likely usage for the site. The FEIR notes that the average trip generation rates between these two LUC's (4.75 trips per thousand square feet, the average of 1.74 trips per thousand square feet for LUC 150 and 7.75 trips per thousand square feet for LUC 156) was found and applied to the 1.77 million square feet of proposed development.

The project will be required to submit a Notice of Project Change (NPC) should the anticipated trip generation of tenants, once acquired, be higher than the 4.75 trips per thousand square feet estimate, or should anticipated truck traffic be higher than the five percent figure currently estimated.

Safety

The Proponent has committed to the following safety and operational improvements identified as part of Road Safety Audits (RSAs) completed as mitigation for this project:

Route 58 at Plymouth Street

- Refresh the faded pavement markings;
- Replace faded signage;
- Install advanced warning signage on both the Route 58 northbound and southbound approaches to notify drivers of the upcoming lane geometry and signal; and
- Signal timing improvements and time of day programming.

Route 44 at Route 105

- Replace and install advanced warning signage;
- Signal timing improvements and time of day programming.

MassDOT along with the Town of Middleborough has previously completed a Road Safety Audit at the Middleborough Rotary to address existing safety deficiencies. The RSA identified several recommendations for improvements, which were recently implemented by MassDOT. These improvements included modifying the geometry of the rotary, resurfacing and restriping each approach and the inner rotary to accommodate two lanes, and updating and adding traffic signs. MassDOT is also currently in the preliminary design phase for future improvement plans for the rotary to address long-term operational and safety deficiencies. The Proponent has agreed to incorporate the rotary into its monitoring program and to report on any safety or operational concerns associated with the addition of site-generated traffic. Accordingly, the Proponent should obtain baseline traffic count estimates prior to the occupancy of the project to ensure that operations under the current configuration of the rotary are accounted for in the monitoring program, as counts from 2014 were referenced for the capacity analyses for this project.

Traffic Operations

Capacity analyses were conducted for the weekday morning and weekday evening peak periods for the existing, future 2025 No-Build, future 2025 Build, and future 2025 Mitigated Build conditions and detailed in the DEIR filing. The capacity analysis found most of the study area intersections operating at acceptable conditions in 2025, with level of service (LOS) at D or better. The following intersections were found to be operating at LOS B or F; however, the Proponent has identified a comprehensive improvement program to address the adverse impacts associated with the project:

Route 58 (North Main Street) at Montello Street (south)

The Montello Street eastbound approach is anticipated to process the majority of the project's exiting traffic in the weekday morning and weekday evening peak hours, with northbound Route 58 left-turn movements operating at LOS E in the 2025 Build condition. The Proponent seeks to shift this intersection approximately 400 feet to the north and create a new signalized intersection. This realignment would create a perpendicular intersection, limiting the interaction between project-related trips and Silo Marketplace Shopping Center traffic. The existing unsignalized intersection would remain to provide access to the shopping center. Montello Street is proposed to be gated just north of its intersection with the northern Site Driveway to restrict project-related traffic on the residential portion of the street.

The lane geometry of the mitigated intersection would include separate left-turn and right-turn lanes on the Montello Street eastbound approach, separate left-turn and through lanes on the Route 58 northbound approach, and a shared through/right-turn lane on the Route 58 southbound approach.

The mitigated intersection is anticipated to operate at LOS A in the weekday morning peak hour and LOS B in the weekday evening peak hour in the 2025 Mitigated Build condition.

The Proponent will implement this improvement in phases. The intersection will be relocated prior to any site occupancy. A sensitivity analysis determined approximately 550 peak hour trips would be needed for signalization to be warranted, which corresponds to approximately 1.3 million to 1.77 million square feet of the development program. If traffic operations are found to be unacceptable prior to signal warrant analyses being satisfied for this intersection, the Proponent will coordinate and fund police control during peak periods until a time when the mitigation is complete.

Route 58 (North Main Street) at Route 44 Westbound Ramps

The westbound Route 44 Westbound Ramps approach is anticipated to operate at LOS F in the weekday morning and weekday evening peak hours in the 2025 Build condition. The Proponent seeks to signalize this intersection and modify the lane geometry on Route 58. The Route 58 southbound approach would include two through lanes and maintain the channelized right-turn lane. The Route 58 northbound approach would include a shared left-turn/through lane

and a through lane. The lane geometry would be consistent with the proposed modifications to the intersections to the north and south of this location.

The mitigated intersection is anticipated to operate at LOS B in the weekday morning peak hour and LOS C in the weekday evening peak hour in the 2025 Mitigated Build condition.

The Proponent also intends to implement this improvement in phases. A sensitivity analysis determined approximately 225 peak hour trips would be needed for signalization to be needed, which corresponds to approximately 500,000 to 1.3 million square feet of the development program. Five-hundred fifty peak period trips would be needed for modification of the lane geometry on Route 58 to a four-lane cross section in the vicinity of the ramps, which corresponds to approximately 1.3 million to 1.77 million square feet of the development program. If traffic operations are found to be unacceptable prior to signal warrant analyses being satisfied for this intersection, the Proponent will coordinate and fund police control during peak periods until a time when the mitigation is complete.

Route 58 (North Main Street) at Route 44 Eastbound Ramps

The eastbound Route 44 Eastbound Off-Ramp approach is anticipated to operate at LOS F in the weekday morning and weekday evening peak hours in the 2025 Build condition. The Proponent seeks to signalize this intersection and modify the lane geometry on Route 58. The Route 58 southbound approach would include two through lanes and maintain the channelized right-turn lane. The two southbound lanes of Route 58 would be carried south to meet the existing two lane southbound section.

The mitigated intersections are anticipated to operate at LOS B (Route 58/Route 44 Eastbound Off-Ramp) and LOS A (Route 58/Route 44 Eastbound On-Ramp) in both the weekday morning and weekday evening peak hours in the 2025 Mitigated Build condition.

The Proponent also intends to implement this improvement in phases. A sensitivity analysis determined approximately 225 peak hour trips would be needed for signalization to be needed, which corresponds to approximately 500,000 to 1.3 million square feet of the development program. Five-hundred fifty peak period trips would be needed for modification of the lane geometry on Route 58 to a four-lane cross section in the vicinity of the ramps, which corresponds to approximately 1.3 million to 1.77 million square feet of the development program. If traffic operations are found to be unacceptable prior to signal warrant analyses being satisfied for this intersection, the Proponent will coordinate and fund police control during peak periods until a time when the mitigation is complete.

Route 58 (North Main Street) at High Street

The westbound High Street approach is anticipated to operate at LOS F in the weekday morning and weekday evening peak hours in the 2025 Build condition. The Proponent indicates it will only add five to ten vehicles to this approach; however, the capacity analysis indicates much more significant impacts between the 2025 No-Build and Build conditions. The Proponent notes that field observations generally note that motorists on minor streets generally accept

smaller gaps in traffic than those used in the analysis procedures and therefore experience less delay than reported by the analysis software, leading to an over-estimation of calculated delays at unsignalized intersections. We accept this justification for the absence of mitigation improvements at this intersection.

Multimodal Access

MassDOT's DEIR response letter requested that the Proponent evaluate the feasibility of providing sidewalks along both sides of Route 58 along the 400 feet between the shopping center driveway and the new Route 58/Montello Street (south) intersection as well as bicycle infrastructure which is more effective than the five-foot wide shoulders along Route 58 proposed as mitigation in the DEIR. The Proponent notes that providing such accommodations will impact adjacent wetlands and increase the project's wetland impact to over the 5,000 square foot threshold.

The project site has been designed to be able to accommodate buses and shelters should service from the Greater Attleboro Taunton Regional Transit Authority (GATRA) be provided in the future.

Transportation Monitoring Program

The Proponent has committed to traffic monitoring following initial site occupancy, in accordance with the proposed phasing of the mitigation program. The Proponent is also required to conduct an annual traffic monitoring program for a period of five years, beginning six months after occupancy of the Full-Build project. At a minimum, the monitoring program should include:

- Simultaneous automatic traffic recorder (ATR) counts at the northern and southern site driveways for a continuous 24-hour period on a typical weekday and Saturday;
- Travel survey of employees and patrons at the site (to be administered by the Transportation Coordinator); and
- Weekday AM, weekday PM and Saturday peak hour turning movement counts (TMCs) and operations analysis at "mitigated" intersections, including the intersections of Route 58/Plymouth Street, Route 58/Parsonage Road/Mayflower Road, and Route 44/Route 105.

The Proponent has indicated the monitoring program will also include collection of ATR counts on Montello Street east of the Route 58/Montello Street (south) intersection and the Route 44, Route 28, and Route 18 approaches of the Middleborough Rotary. We also request that the monitoring program include the following intersections:

- Route 44/Old Center Street;
- Route 44/Everett Street; and
- Route 44/Plymouth Street.

Baseline traffic counts should be collected at these intersections prior to site occupancy.

The goals of the monitoring program will be to evaluate the assumptions made in the Draft Environmental Impact Report and the adequacy of the mitigation measures, as well as to determine the effectiveness of the TDM program. The results of each iteration of the monitoring program should be summarized in a technical memorandum provided to MassDOT PPDU and the District 5 Office.

MassDOT recommends that no further environmental review be required based on transportation-related issues. The Proponent should submit to MassDOT a letter of commitment to implement the above mitigation. The letter will be the basis to issue the MassDOT Section 61 Finding for the project. If you have any questions regarding these comments, please contact me at (857) 368-8862 or Michael Clark at (857) 368-8867.



BY EMAIL

March 14, 2019

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
Attn: MBPA Office
MEPA Analyst: Alex Strysky, EEA #15639
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: North Carver Development, EEA # 15639 - Final Environmental Impact Report

Dear Secretary Beaton:

The Town of Carver is a member of the Greater Attleboro Taunton Regional Transit Authority (GATRA). GATRA provides demand response and medical transportation bus service along the Route 44 corridor in conjunction with the local Council on Aging.

As we indicated in our response to the DEIR, we would be willing to examine our options and mutually explore our interests as it relates to the benefits of public transportation with the project developer. GATRA recommends that on-site roadways should be developed in order for public transit buses and vans to enter the site and circulate in an efficient manner. If bus shelters are constructed, the facility should meet all appropriate ADA guidelines and path of travel for individuals with disabilities to access the bus service.

GATRA would be willing to meet with the developer to ensure a transit friendly development is constructed and easily accessed by GATRA vehicles.

Sincerely,

Francis J. Gay

Administrator

cc: Stephanie Kruel, VHB
Paul Mission, SRPEDD
Ron Morgan

rkm



Southeastern Regional Planning & Economic Development District 88 Broadway * Taunton, MA 02780-2557

Acushnet Attleboro Berkley Carver Dartmouth Dighton Fairhaven Fall River Freetown Lakeville Mansfield Marion Mattapoisett Middleborough New Bedford N. Attleborough Norton Plainville Raynham Rehoboth Rochester Scekonk

Somerset

Swansea Taunton Wareham

Westport

April 4, 2019

Matthew A. Beaton, Secretary
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: #15639 North Carver Development, Carver, Massachusetts, Attn. Alex Strysky

Dear Secretary Beaton:

SRPEDD has reviewed the FEIR for the North Carver Development located on the northwest portion of Carver, Massachusetts. Based on the review of the FEIR report dated February 28, 2019, SRPEDD offers the following comment for your consideration:

- 1. SRPEDD is concerned about the increase in heavy truck volumes and overall congestion that the proposed development may produce for the Middleborough Rotary. In the Fall of 2018, MassDOT completed interim improvements to the Rotary, changing it from a single lane rotary to a double lane modern roundabout. This modification has made noticeable differences in the circulation pattern, vehicle queueing and overall delay at this regionally significant facility. The FEIR states that the Transportation Monitoring Program has been updated since the DEIR to include the Middleborough Rotary; however, unless current traffic data is obtained (post interim improvements), the analysis will be using old and inaccurate data since the historical counts provided in the DEIR were collected in 2014 and adjusted to the base year of 2018 using a growth factor. As such, updated traffic counts should be completed prior to construction of the development and used to complete a complete operations analyis of the Rotary under its new configuration along with existing and future full build scenarios.
- 2. The addition of the Middleborough Rotary and the Route 44 & Route 105 intersection to the Transportation Monitoring Program are key locations that are expected to be impacted by the increase in truck traffic from the proposed development. However, the FEIR did not mention the addition of the other intesections along Route 44 (Old Center Street, Everett Street and Plymouth Street) between the Rotary and the Route 44 & Route 105 intersection. Like the Rotary and the Route 44 & Route 105 intersection, these facilities are certain to be impacted by the increase in truck traffic generated by the proposed development. Moreover, the Route 44 & Everett Street and the Route 44 & Plymouth Street intersections were identified as 2013-2015 HSIP Crash Clusters. As such, at the very least, those three intersections should be included in the Traffic Monitoring Program.

Voice: (508) 824-1367 • Fax: (508) 823-1803 • E-Mail: info@srpedd.org • Website: www.srpedd.org

Thank you for the opportunity to comment on this proposal. SRPEDD staff is available to answer any questions or address any concerns raised by these comments.

Respectfully,

Jeff Walker

Executive Director

JW:ldo