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April 1, 2024

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

PROJECT NAME	: Sierra Vista Commons
PROJECT MUNICIPALITY	: Easthampton
PROJECT WATERSHED	: Connecticut
EEA NUMBER	: 16729
PROJECT PROPONENT	: Tasty Top Development, LLC
DATE NOTICED IN MONITOR	: February 23, 2024

Pursuant to the Massachusetts Environmental Protection Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.08(8) of the MEPA regulations (301 CMR 11.00), I have reviewed the Draft Environmental Impact Report (DEIR) and hereby determine that it **adequately and properly** complies with MEPA and its implementing regulations. The Proponent may prepare and submit for review a Final Environmental Impact Report (FEIR) in accordance with the Scope below. Although the DEIR was responsive to the prior Scope in clarifying the project's impacts and providing revised analyses with respect to traffic, air quality, and building energy usage, comments from Agencies on the DEIR continue to raise concerns regarding errors and omissions from said analyses that are critical to fully evaluate the project and ensure sufficient mitigation is proposed. I am allowing this project to proceed to the filing of an FEIR, which I expect will contain complete and accurate analyses. If the analyses provided in the FEIR are inadequate in describing the project's impacts and addressing other concerns raised in comments, I reserve the ability to require a Supplemental FEIR.

Project Description

As described in the DEIR, the proposed project consists of the construction of a mixed-use residential and commercial center, consisting of a 9,000 square foot (sf) Roots Learning Center (Daycare facility); a 7,000-sf Roots Gymnastic Center; a 5,000-sf sit-down restaurant with a 220-seat capacity; a

3,200-sf bank; a 4,000-sf standalone retail building; two 7,400-sf mixed-use warehouse buildings; a 16,000-sf mixed-use retail/office building with 14 apartments above; and ten mid-rise (3-floor) apartments buildings (nine 13,600-sf buildings and one 18,000-sf building). The project will also construct 478 surface parking spaces; a stormwater management system; and landscaping. The bank and sit-down restaurant are proposed to have priority visibility on the site and will be set back from Northampton Street (Route 10), a roadway controlled by the Massachusetts Department of Transportation (MassDOT), on the western portion of the site. The standalone retail building as well as the Roots Learning Center and Roots Gymnastic Center (collectively the Roots Building) will be positioned directly to the east/northeast of the bank. Seven of the ten residential buildings will be located within the northern portion of the site, across an intermittent stream that bisects the property, with surface parking and other site amenities (including a swimming pool, community garden, and playground) located within a central plaza. The remainder of the project will be located within the southern portion of the site, immediately east of the commercial/retail buildings. Access to the site will be provided by an internal roadway that will utilize a new roundabout intersection with Northampton Street, and will include sidewalks, crosswalks, and speed humps as necessary at critical points. Access to the northern portion of the property will be provided by a new bridge that will span the intermittent stream. The project will also be serviced by existing municipal sewer and water with connections to the Easthampton Main Sewer Interceptor, which runs along the northeastern property boundary, and an existing water main located in Northampton Street. In addition, a minimum 35-foot (ft) vegetative buffer will be provided along the abutting residential properties to the south.

According to the DEIR, the primary goals of the project are to redevelop an underutilized property with infill development and create a variety of affordable and mixed-income housing to advance the City's Housing Production Plan goals.

Project Site

The project site occupies approximately 33 acres of land, consisting of a mix of partially developed land, agricultural fields, wetlands, and forest, with 332 ft of frontage along Northampton Street (Route 10). The majority of the residential units are proposed within the City of Easthampton (the City)'s Residential – Suburban A (R-15) zoning district with the remainder of the project proposed within the Highway Business (HB) zoning district. The site previously supported a variety of uses that have altered approximately 17.1 acres, including approximately 10 acres of the southern portion of the site which operated as a driving range known as Easthampton Golf since at least the 1990s. Easthampton Golf included a paved parking area, a small building supporting a sales office, an artificial turf and natural grass tee box area, and a mowed lawn range. Within the immediate frontage on Northampton Street (Route 10), the site supported a retail ice cream stand and paved parking lot as well as a single-family home and barn. Approximately 6.5 acres within the northern portion of the site was historically used as an agricultural field, though it has not been actively farmed in at least two years. Access to the field is currently provided by a pre-existing, unauthorized wooden bridge that crosses an intermittent stream which bisects the property. The site is bounded by mixed commercial uses to the north and west, vacant land to the east, and residential neighborhoods to the south.

State and local wetland resource areas located within the project area include Bank, Bordering Vegetated Wetlands (BVW), and Riverfront Area (RA). According to the Massachusetts Natural Heritage and Endangered Species Program (NHESP) Atlas (15th Edition), a portion of the project site is

located within Estimated and Priority Habitat of Rare Species. A portion of the project site is also located in a Massachusetts Department of Environmental Protection (MassDEP) Approved Zone II Wellhead Protection Area. Additionally, the site formerly contained a structure listed in the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth.

The project site is located within an Environmental Justice (EJ) Population characterized by Income within the City of Easthampton. The site is located within one mile of three additional EJ Populations characterized by Income within the City of Easthampton. The site is also located within five miles of 15 additional EJ Populations.[1] As described below, the EENF identified the "Designated Geographic Area" (DGA) for the project as one mile around EJ Populations, included a review of potential impacts and benefits to the EJ Populations within this DGA, and described public involvement efforts undertaken to date.

Changes Since the EENF

Since the filing of the Expanded Environmental Notification Form (EENF), the Proponent has been working to update the project's design in order to address comments and concerns raised by state and local agencies, and the public. The DEIR describes following updates:

- As described below, the traffic study area was expanded to include four additional intersections, as requested by MassDOT, as part of the traffic analysis. No other intersections in proximity to the site are anticipated to result in an increase in peak hour traffic volume of five percent or more, or more than 100 vehicles per hour as a result of project generated trips.
- Utilizing MassDOT's Intersection Control Evaluation (ICE) procedures and in consultation with the City and MassDOT, the Proponent has selected a roundabout as the preferred intersection design alternative, in lieu of a traffic signal, to provide access to the site from Northampton Street.
- In order to accommodate the selected intersection design alternative, the Proponent has purchased the 1 Groveland Street and 94 Northampton Street properties on the northwest side of Northampton Street between Groveland Street and Mountainview Drive. Acquisition of these properties will facilitate construction of the roundabout by providing sufficient area controlled by the Proponent to be incorporated into the Northampton Street right-of-way. Additional changes to site circulation have also resulted in a reduction in total parking spaces from 510 to 478 and a modified entry to and parking at the proposed bank.
- Following a peer review, required as part of the local review and approval process with the Easthampton Conservation Commission, changes were made to the stormwater management system, including redirecting flow from one basin to another and the addition of riprap emergency spillways to several stormwater basins.
- In response to comments provided by the Massachusetts Department of Energy Resources (DOER), the project has eliminated the use of propane water heating.

[1] The EEA EJ Mapper is available at: https://www.mass.gov/info-details/environmental-justice-populations-in-massachusetts

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include the direct alteration of 21.5 acres of land (including 4.4 acres of new land alteration and tree clearing) and the creation of 11.8 acres of impervious surface (including the construction of 202 housing units with 54 units being affordable units).[2] The project will also construct 478 parking spaces; is expected to generate 4,382 New average daily trips (adt); and is anticipated to result in 68,820 gallons per day (gpd) of water use and wastewater generation.[3]

Measures to avoid, minimize, and mitigate environmental impacts include the use of erosion and sedimentation controls during construction; the construction of a stormwater management system; the installation of landscaping features and vegetative screening throughout the site; the implementation of a comprehensive Transportation Demand Management (TDM) program; and the beneficial reuse of prime farmland soil either as part of the on-site landscaping efforts or to be sold for reuse locally. Additional mitigation measures should be identified in the FEIR.

Jurisdiction and Permitting

This project is subject to MEPA review and a mandatory EIR because it requires Agency Action and meets/exceeds the MEPA thresholds 301 CMR 11.03(1)(a)(2) for the creation of 10 or more acres of impervious area and 301 CMR 11.03(6)(a)(6) for the generation of 3,000 or more New adt on roadways providing access to a single location. It also exceeds the ENF thresholds at 301 CMR 11.03(1)(b)(2) for the creation of 5 or more acres of impervious area; 301 CMR 11.03(1)(b)(4) for the conversion of land in active agricultural use to nonagricultural use, provided the land includes soils classified as prime, state important, or unique by the USDA; 301 CMR 11.03(6)(b)(13) for the generation of 2,000 or more New adt on roadways providing access to a single location; 301 CMR 11.03(6)(b)(14) for the generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location; and 301 CMR 11.03(6)(b)(15) for the construction of 300 or more New parking spaces at a single location. The project is also required to prepare an EIR pursuant to 301 CMR 11.06(7)(b) because it is located within a DGA of one or more EJ Populations.

The project will require a Vehicular Access Permit from MassDOT. The project will also require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA). The project was issued an Order of Conditions (OOC) by the Easthampton Conservation Commission (MassDEP File No. 151-0322) on January 23, 2024, which was not appealed. The project also received Site Plan Approval and Special Permit Approval from the Easthampton Planning Board on November 14, 2023 and Demolition Delay approval from the Easthampton Historical Commission.[4]

[2] This represents an increase of 19 affordable units from the EENF.

[3] This represents a decrease of 22 parking spaces from the EENF.

[4] The Easthampton Demolition Delay Ordinance requires that any proposed demolition of buildings over 50 years old be reviewed and approved by the Easthampton Historical Commission.

Because the Proponent will seek Financial Assistance from one or more Agencies, MEPA jurisdiction is broad in scope and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in MEPA regulations.[5]

Review of the DEIR

The DEIR included a project description, existing and proposed conditions plans, revised estimates of project-related impacts, an updated alternatives analysis, a Traffic Impact Assessment (TIA), a revised GHG analysis, and an identification of measures to avoid, minimize and mitigate environmental impacts. The DEIR provided a response to comments on the EENF and draft Section 61 Findings.

Environmental Justice (EJ) / Public Health

As noted above, the project site is located within an EJ Population characterized by Income within the City of Easthampton. The site is located within one mile of three additional EJ Populations characterized by Income within the City of Easthampton. The site is also located within five miles of 15 additional EJ Populations. No languages were identified as being spoken by 5% or more of Limited English Proficiency ("LEP") residents within one mile of the project site.

The DEIR describes the public involvement plan that the Project has undertaken to engage with EJ Populations. In accordance with the Scope, the Proponent obtained an updated "EJ Reference List" from the MEPA office, which included a list of Community Based Organizations (CBOs) and tribes/indigenous organizations. The Proponent held an evening, in-person public drop-in office hour session for the project on January 31, 2024, at the Emily Williston Memorial Library in Easthampton, which was attended by four members of the public.[6] According to the DEIR, in advance of the meeting, the Proponent published a notice of the office hour session on the library calendar, project website, and by posting a project fact sheet at neighborhood and community gathering locations within the DGA, including information on the date, time, and location of the meeting.[7] The Proponent also sent out notice of the meeting to a digital mailing to a list of stakeholders, including individuals and organizations that commented on the EENF and to the EJ Reference List. In addition, opportunity for public review and comment was provided during the Easthampton Planning Board and Easthampton Conservation Commission hearing process. The DEIR indicates that the Proponent remains committed to supporting and updating the project website as the project progresses.

In accordance with the Scope, the DEIR also provides estimates of the number of construction period truck trips that are anticipated for the project. According to the DEIR, the project will likely result in a maximum of approximately 15 to 20 truck trips per day during peak construction phases; however, this many truck trips will not occur every day during construction. The site, which is located within the middle of an EJ Population, is only accessible via Northampton Street; therefore, there are no access routes to/from the site that would not travel through an EJ Population. It is anticipated that any

[5] According to the DEIR, the Proponent intends to seek various forms of Financial Assistance, including tax credits and deferred payment loans, from the Executive Office of Housing and Livable Communities and the Massachusetts Housing Finance Agency.

[6] Confirmed via email on March 22, 2024 from Adrienne Dunk (GZA) to Nicholas Moreno (MEPA).

[7] See https://www.gza.com/sierra-vista-commons.

construction related trips would utilize major roadways as they travel between the regional transportation system and the project site, including Northampton Street (Route 10), Holyoke Street (Route 141), Pleasant Street, East Street, and Park Street which would provide access U.S. Interstate I-91. Following construction, diesel truck traffic to the site is anticipated to be minimal and would likely be associated with waste management vehicles (i.e., trash and recycling trucks) and deliveries to the restaurant. Fewer than ten diesel truck trips per week are anticipated following construction.

According to the DEIR, the EENF previously presented a baseline assessment of any existing unfair or inequitable Environmental Burden and related public health consequences impacting EJ Populations in accordance with 301 CMR 11.07(6)(n)1. and the MEPA Interim Protocol for Analysis of EJ Impacts. Based on the data surveyed, there appears to be an indication of an existing "unfair or inequitable" burden impacting the identified EJ Populations. In particular, two census tracts (Census Tract 8223 and Census Tract 8224.02) within the project's DGA the meet the "vulnerable health EJ criteria" for childhood blood lead. The DEIR states that while the EJ Populations within the DGA may exhibit some existing unfair or inequitable environmental burden, the Project is not expected to materially exacerbate such existing conditions. The main sources of potential construction period impacts are emissions from construction equipment, motor vehicles and fugitive dust emissions from disturbed soil surface areas. According to the DEIR, any minor construction adverse effects would be mitigated to the greatest extent practicable through use of construction period BMPs. In addition, as described below, three intersections located within EJ Populations (including Northampton Street/Florence Road/Highland Avenue, Northampton Street/Oneil Street, and Main Street (Route 10)/Union Street) will maintain or improve the level of service experienced by vehicles following project implementation.[8]

Traffic and Transportation

Study Area

As noted above, the DEIR includes a revised TIA of an expanded traffic study area around the project site; the TIA evaluates the project's impacts on intersection operations, safety, and bicycle, pedestrian, and transit modes. The intersections within the study area that have been analyzed and evaluated include:

- Northampton Street (Route 10)/Florence Road/Highland Avenue (signalized)
- Northampton Street (Route 10)/West Street (signalized)[9]
- Northampton Street (Route 10)/Oneil Street (signalized)
- Main Street (Route 10)/Union Street (signalized)
- Northampton Street (Route 10)/Main Street (Route 10)/Pleasant Street/Lyman Avenue (unsignalized)
- Northampton Street (Route 10)/Mountainview Street (unsignalized)

[8] The intersection of Northampton Street/West Street, which is located immediately adjacent to an EJ Population, will also experience an improvement during the evening peak hours.

[9] The intersections of Northampton Street/Florence Road/Highland Avenue and Northampton Street/West Street were previously reviewed in the EENF.

Trip Generation and Distribution

The DEIR states the project is expected to generate 4,382 New unadjusted adt. Base traffic conditions within the study area were developed by conducting turning movement counts (TMCs) and automatic traffic recorder (ATR) counts for both weekday and Saturday volume conditions in September 2021 at the Northampton Street (Route 10)/Florence Road/Highland Avenue intersection and in November 2022 at the Northampton Street (Route 10)/West Street intersection. ATR counts were conducted along Northampton Street (Route 10) just north of the project site in September 2021 and reconducted over a 48-hour period in January 2023. TMCs were conducted at Northampton Street/Pleasant Street and Northampton Street/Main Street in September 2022; at Northampton Street/Oneil Street in October 2023; and at Northampton Street/Mountainview Street in July 2023. In addition, MassDOT seasonal adjustment factors were reviewed; however, all months when data collection occurred, except for January, have lower-than-average vehicle volumes. Therefore, no seasonal adjustments were made to ensure a more conservative analysis.

Future traffic conditions were projected to the year 2030, using a one percent per year growth rate in base traffic conditions and a number of Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) Land Use Codes (LUC) representing the different components of the project, including:

- LUC 565 – Day Care Center
- LUC 220 – Multifamily Housing (Low-Rise)
- LUC 150 – Warehousing
- LUC 822 – Strip Retail Plaza
- LUC 932 – High-Turnover (Sit-Down) Restaurant
- LUC 912 – Drive-in Bank

The DEIR notes that there is no LUC for a Gymnastics Center in the ITE manual; therefore, data collected at the Roots Gymnastics Center located in Westfield, Massachusetts was used to project trip generation rates for the proposed 7,000-sf building. The DEIR also notes that there is one notable development near the project site that would generate traffic on study area roadways. Specifically, the DEIR identifies a project located at 113 Northampton Street consisting of a 2,227-sf coffee shop (Starbucks) with 33 parking spaces, generating 1,800 adt with approximately 198 of those trips occurring during the morning peak hours and 98 occurring during the afternoon peak hours. In addition, the project proposes a connection between the coffee shop parking lot and the bank parking lot. In addition, the DEIR identified a smaller project in the area that is not expected to have a significant impact on traffic. The proposed project at 150 Northampton Street consists of the renovation of an existing hospitality business to include a second floor and upgrades to the parking lot. Due to the scale of the renovation project, any project generated trips are presumed to be included in the background growth rate.

Given the nature of the proposed land use, the project is expected to generate 373 New unadjusted adt during the weekday morning peak hour and 525 New unadjusted adt during the weekday evening peak hour. Trip distribution for the project results in 39% of site traffic traveling to/from the site along Northampton Street to the north of Florence Road/Highland Avenue; 22% of site traffic traveling to/from the site along Florence Road north of Northampton Street; 7% of site traffic traveling to/from

the site along West Street west of Northampton Street; 12% of site traffic traveling to/from the site along Pleasant Street east of Northampton Street; 12% of site traffic traveling to/from the site along Main Street; and 8% of site traffic traveling to/from the site along Union Street east of Main Street.

Traffic Operations

Level-of-service (LOS) analyses were conducted within the study area under existing and projected volume conditions to determine the effect that the additional site-generated traffic will have on traffic operations. LOS is represented using letter grades "A" through "F," with LOS A representing very low delays and free flow conditions and LOS F representing unacceptable conditions for most drivers and conditions in which vehicle demand generally exceeds roadway capacity. According to the DEIR, under current conditions the intersection of Northampton Street/Florence Road/Highland Avenue operates at LOS D during the morning peak hours and at LOS E during the evening peak hours; the intersections of Northampton Street/West Street and Northampton Street/Oneil Street operate at LOS B during the morning peak hours and LOS D during the evening peak hours; and the intersection of Main Street/Union Street operates at LOS B during the morning and evening peak hours.

Under 2030 No-Build conditions, the intersection of Northampton Street/Florence Road/Highland Avenue will decrease from LOS D to LOS E during the morning peak hours and from LOS E to LOS F during the evening peak hours; the intersection of Northampton Street/West Street will decrease from LOS B to LOS C during the morning peak hours and decrease from LOS D to LOS F during the evening peak hours; the intersection of Northampton Street/Oneil Street will decrease from LOS B to LOS C during the morning peak hours and decrease from LOS D to LOS E during the evening peak hours; and the intersection of Main Street/Union Street will decrease from LOS B to LOS C during the morning peak hours and remain at LOS B during the evening peak hours. The DEIR does not provide overall LOS for the intersections of Northampton Street/Main Street/Pleasant Street/Lyman Avenue and Northampton Street/Mountainview Street; however, LOS is anticipated to remain unchanged (when compared to 2023 Existing conditions) during both the morning and evening peak hours for the majority of turning movements except for the westbound Pleasant St right turn, which will decrease from LOS D to LOS E during the morning peak hours and decrease from LOS E to LOS F during the evening peak hours.

Under 2030 Build conditions (when compared to 2030 No-Build conditions), the intersection of Northampton Street/Florence Road/Highland Avenue will improve from LOS E to LOS D during the morning peak hours and from LOS F to LOS E during the evening peak hours; the intersection of Northampton Street/West Street will remain at LOS C during the morning peak hours and improve from LOS F to LOS D during the evening peak hours; the intersection of Northampton Street/Oneil Street remain at LOS C during the morning peak hours and improve from LOS E to LOS D during the evening peak hours; and the intersection of Main Street/Union Street will remain at LOS C during the morning peak hours and at LOS B during the evening peak hours. In addition, LOS is anticipated to remain unchanged for the Northampton Street/Main Street/Pleasant Street/Lyman Avenue and Northampton Street/Mountainview Street intersections during both the morning and evening peak hours for the majority of turning movements except for the westbound Pleasant Street right turn, which will decrease from LOS E to LOS F during the morning peak hours, and the eastbound Mountainview Street left and right turn, which will decrease from LOS D to LOS E during the morning peak hours and decrease from LOS D to LOS F during the evening peak hours. As noted below, the project proposes a number of

TDM measures which have been incorporated into the traffic capacity analysis presented herein. However, a number of turning movements are still anticipated to experience a decline in LOS.

Roadway Improvements

According to the DEIR, there are number of planned improvements to roadway, bicycle, and pedestrian facilities in proximity to the project site. These improvements were incorporated into the TIA when evaluating LOS at the intersections studied. In particular, the DEIR identified the following roadway improvement projects:

- **Main Street Improvement Project (TIP) (Project No. 612258)** - The City is developing a long-term redesign plan for Main Street (Route 10) to improve safety; transit, walking, and bicycling infrastructure; plant street trees; implement green infrastructure; and employ designs to make downtown Easthampton safer and more attractive for users. MassDOT will be implementing Complete Streets throughout Downtown Easthampton. The project scope is the Manhan River Bridge, rotary (including a portion of Pleasant Street) to the intersection of Main Street and Park Street. Construction is currently anticipated to begin in 2026.
- **Northampton Street Complete Streets Project (MassDOT Project No. 608423)** – MassDOT is developing a plan to improve Northampton Street (Route 10) for all users. The roadway will be resurfaced and widened for improved bicycle accommodations, new and reconstructed sidewalks are proposed, and new wheelchair ramps and crosswalks will be installed. Other work includes improving drainage, signage, pavement markings, and other incidentals. Construction is currently anticipated to begin in 2028.
- **Pedestrian Improvement Plan** – MassDOT is implementing a pedestrian improvement plan along Northampton Street at the sight of a previous pedestrian fatality. Two new crosswalks with associated sidewalk improvements, Rectangular Rapid-Flashing Beacons (RRFBs), and new bus stops coordinated with the Pioneer Valley Transit Authority (PVTA) and the City will be installed just north of Groveland Street at 180 Northampton Street. Construction began in early November 2023.

Site Access and Parking

As noted above, the Proponent has selected a roundabout as the preferred intersection design alternative, in lieu of a traffic signal, to provide access to the site from Northampton Street. To facilitate this new connection, the Proponent has acquired the 1 Groveland Street and 94 Northampton Street properties on the northwest side of Northampton Street between Groveland Street and Mountainview Drive. Acquisition of these properties will facilitate construction of the roundabout by providing sufficient area controlled by the Proponent to be incorporated into the Northampton Street right-of-way. Gated emergency access will also be provided from Colonial Avenue (immediately southwest of the project site) to ensure a secondary means of access is available for emergency responders. The DEIR also states that recalibrating signal timings at various intersections along Route 10 would further enhance traffic efficiency. In addition, the project will create 393 parking spaces across the redeveloped site (with 85 parking spaces reserved for future construction for a total of 478 parking spaces), with parking to be provided during each phase of the in accordance with the City's parking ratio requirements. As described below, the Proponent will conduct parking inventory and occupancy surveys

of both vehicle and bicycle parking on-site in order to determine in additional parking should be constructed.

Comments provided by MassDOT state that although study areas intersections will remain at an acceptable LOS with the selected intersection design and signal timing changes, the FEIR should include the analysis of a signalized site driveway option to reflect the alternative analysis conducted to support the selection of the preferred intersection alternative. Comments also note that MassDOT would also like to work with Proponent regarding the timing of implementation as well as the funding for the design and construction of the roundabout which should be discussed prior to the submittal of the FEIR. In addition, the proposed mitigation measures and draft Section 61 Findings should be updated to reflect the commitment made regarding the construction of the roundabout.

Multimodal Infrastructure

According to the DEIR, the study area provides adequate pedestrian accommodations, including sidewalks along both sides of each roadway segment and crosswalks with wheelchair ramps at all signalized intersections. However, bicycle lanes are not provided on any roadway segments within the study area. In response to the Scope, pedestrian crosswalk counts and bicycle TMCs were collected during peak hours at study area intersections. Pedestrian activity throughout the study area was found to be very low along with minimal bicycle activity during the morning and afternoon peak hours.[10] In addition, the project area is served by local public transportation options consisting of two bus routes, Route 10 (Nashawannuck Express) and Route R41, provided by the PVTA. The closest Route 10 stop is located at the CVS on Northampton Street, which is located approximately a quarter mile from the project site.[11] The closest Route R41 stop is located at the Old Town House, which is located approximately a half-mile from the project site. The DEIR states that the MassDOT pedestrian improvement plan along Northampton Street will construct a new bus stop to serve the existing PVTA route; therefore, bus stop within the project site may not be warranted. However, the Proponent remains open to further incorporate a bus stop within the project site should the PVTA request one.

Transportation Demand Management (TDM) and Monitoring

As detailed in the DEIR, the Proponent has committed to implementing a program of TDM strategies with a goal of reducing the number of single-occupancy vehicles on the road by 35% due to the implementation of strategies that promote ridesharing and encourage the use of alternative transportation modes. Specific TDM measures include:

- Providing designated parking spaces for carpooling will be conveniently located in the parking area between Buildings 13 and 14, which is centrally located to all commercial buildings. All designated parking spaces will be clearly identified with signage.
- Construction of an eight-ft wide shared use path connecting the project site to Northampton Street. The path will run adjacent to the main roadway through the development, and loop around the eastern residential portion of the development.

[10] Pedestrian and bicycle counts were taken at the same time as the TMC on September 30, 2021; November 29, 2022; and January 4, January 17, and January 18, 2023.

[11] According to the DEIR, Route 10 operates as a Flex/Van service that provides scheduled service to fixed stops but also allows for the bus to travel closer to the passenger starting or ending point.

- Construction of a concrete pad with a bike rack outside of every building. In addition, each residential apartment building will have secure bike storage rooms inside the buildings open to the residents.
- Installation of a Valley Bike Share station along the sidewalk adjacent to Northampton Street.
- Providing on-site recreational services for residents including a pool, community garden, and playground;
- Designating a Transportation Coordinator (proposed to be the Proponent) to provide onsite support and education that encourage the use of alternative modes of travel.
- On-site commercial businesses will provide services to the residents/employees within the development, including a daycare facility, restaurants, a bank, and a retail building.
- Traffic signal retiming at the intersections of Northampton Street/Florence Street/Highland Avenue and Northampton Street/West Street; and
- Installation of four electric vehicle (EV) charging stations with designated parking spaces in front of each residential building (for a total of 40 EV charging stations) and designating 20% of all residential spaces EV-ready spaces.

The Proponent has also committed, as required, to implement a five-year annual Traffic Monitoring Program (TMP) starting six months after occupancy. Specific components of the TMP would include:

- Simultaneous ATR counts including vehicle classification at the site driveway for a continuous seven-day period;
- Weekday morning and evening peak hour TMCs and operations analysis at "mitigated" intersections, including those involving site driveways;
- Perform parking inventory and occupancy counts of both vehicle and bicycle parking on-site;
- Travel survey of employees and patrons at the site (to be administered by the Transportation Coordinator); and
- Transit Ridership counts.

Comments provided by MassDOT state that the proposed TDM measures have the potential to reduce single-occupancy vehicle trips to the project site and acknowledge that the success of this program will be evaluated through the TMP.

Transportation Mitigation

As noted above, although the project has proposed a suite of TDM measures intended to reduce vehicle trips to the project site, in conjunction with anticipated roadway improvements, several intersections are still anticipated to experience a decline in LOS. In particular, the westbound Pleasant Street right turn (during the morning peak hours) and the eastbound Mountainview Street left and right turn (during the evening peak hours) are anticipated to experience an LOS F under the 2030 Build conditions. The FEIR should clarify that these intersections are still showing "F" conditions notwithstanding roadway improvements, and proposed TDM measures and signal changes. If so, the project should be subject to strict monitoring to fully evaluate the assumptions made in the TIA and to determine the effectiveness of the TDM program at all intersections throughout the study area. The FEIR should identify what actions may be taken if expectations regarding future LOS are not met.

Air Quality

In accordance with the Scope, the DEIR included an updated analysis of mesoscale emissions of volatile organic compounds (VOCs), oxides of nitrogen (NO_x), coarse particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$) under four scenarios: 2023 Existing, 2030 No-Build, 2030 Build without TDM (Base Case), and 2030 Build with TDM (Mitigation Case). The DEIR notes that the mesoscale analysis utilized the U.S. EPA MOVES3 Mobile Source Emission Factor Model and complied with the MassDEP Guidelines for Performing Mesoscale Analysis of Indirect Sources. According to the DEIR, emissions within the traffic study area (consisting of 25 existing roadway segments in proximity to the project site and five roadway segments planned as part of the project) under 2023 Existing conditions were modeled to consist of 28.7 kilograms per day (kg/day) of VOCs, 9.17 kg/day of NO_x, 0.20 kg/day of PM_{10}, and 0.18 kg/day of $PM_{2.5}$. Under 2030 No-Build conditions, emissions were modeled to consist of 20.72 kg/day of VOCs, 3.30 kg/day of NO_x, 0.124 kg/day of PM_{10}, and 0.111 kg/day of $PM_{2.5}$. Under 2030 Base Case conditions, emissions were modeled to consist of 25.61 kg/day of VOCs (4.89 kg/day increase from the 2030 No-Build condition), 3.64 kg/day of NO_x (0.34 kg/day increase from the 2030 No-Build condition), 0.137 kg/day of PM_{10} (0.013 kg/day increase from the 2030 No-Build condition), and 0.123 kg/day of $PM_{2.5}$ (0.012 kg/day increase from the 2030 No-Build condition). Comparatively, under 2030 Mitigation Case conditions, which consist of the TDM measures detailed above that the Proponent has committed to implementing, emissions were modeled to consist of 24.97 kg/day of VOCs (4.25 kg/day increase from the 2030 No-Build condition), 3.55 kg/day of NO_x (0.25 kg/day increase from the 2030 No-Build condition), 0.133 kg/day of PM_{10} (0.009 kg/day increase from the 2030 No-Build condition), and 0.120 kg/day of $PM_{2.5}$ (0.009 kg/day increase from the 2030 No-Build condition).[12] These numbers show an increase from No-Build to Build with TDM conditions of approximately 20.51% for VOCs, 7.58% for NO_x, 7.26% for PM_{10}, and 8.11% for $PM_{2.5}$ (increase of 1.71, 0.101, 0.004, and 0.004 tons per year, respectively). However, the analysis indicates that there will not be an increase over one ton per year from No-Build to Build with TDM conditions at any single intersection within the study area for the pollutants evaluated. Therefore, the DEIR states, that additional air quality mitigation, beyond the TDM measures the Proponent has committed to, is not necessary. I note, however, that the mesoscale analysis is not intended to isolate emissions increases at a single location, but rather to estimate overall impacts of the project by calculating volumetric increases in emissions over the traffic study area (which could be viewed as the maximum impact area of the project). Given the project's location within an EJ Population, the FEIR should clarify the geographic radius covered by the traffic study area, further explain what accounts for the >1 tpy increase in VOCs notwithstanding mitigation measures, and explore additional mitigation measures that could be employed to further reduce VOCs and other air emissions associated with new traffic. For instance, the FEIR should indicate whether additional TDM measures could be taken to incentivize multi-modal forms of transportation over single occupancy vehicle trips.

Land Alteration, Impervious Surfaces, and Agricultural Soils

In accordance with the Scope, the DEIR characterizes and quantifies the new land alteration including the type of vegetation that will be cleared. According to the DEIR, the site current consists of

[12] When converted to tons per year (tpy), the 2030 Build with TDM (Mitigation Case) consists of 10.05 tpy of VOCs (1.71 tpy increase from the 2030 No-Build condition), 1.43 tpy of NO_x (0.101 tpy increase from the 2030 No-Build condition), 0.054 tpy of PM_{10} (0.004 tpy increase from the 2030 No-Build condition), and 0.048 tpy of $PM_{2.5}$ (0.004 tpy increase from the 2030 No-Build condition).

approximately 0.44 acres impervious cover consisting of the paved area and building located along its Northampton Street frontage and approximately 19.3 acres of previously altered land consisting of turf lawn used for the prior driving range business and agricultural fields. Neither the turf lawn area nor the agricultural fields have been used for their prior purposes since 2022 and are currently a successional old field habitat. Approximately 13.7 acres of the site also consist of mixed hardwood forest. As noted above, two additional properties on the northwest side of Northampton Street were purchased in 2023 and consist of approximately 0.21 acres of impervious cover and 0.69 acres of previously altered but pervious cover comprised of a lawn with low-density trees throughout.

According to the DEIR, the project will develop a total of 21.5 acres of the project site and approximately 0.2-acres of the additional two properties on Northampton Street. Within the previously disturbed portions of the site (including the impervious areas and successional old field habitat), 17.1 acres will be developed into 3.17 acres of building; 7.29 acres of paved surfaces including sidewalks, driveways, and parking; and 6.64 acres of vegetated areas including turf grass, landscape plantings, and stormwater basins. Approximately 4.4 acres of the undeveloped mixed hardwood forested area will be developed into 0.94 acres of building; 0.65 acres of paved surfaces including sidewalks, driveways, and parking; and 2.81 acres of vegetated areas including turf grass, landscape plantings, and stormwater basins. The project will also convert most of 94 Northampton Street to the proposed roundabout and revised Mountainview Street intersection, whereas most of 1 Groveland Street will remain as lawn. Between the two properties, the project will convert approximately 0.12 acres of existing pavement to intersection and approximately 0.06 acres of lawn to intersection.

The DEIR also provides a comprehensive evaluation of all measures taken to reduce the amount of land alteration and conversion of impervious areas to pervious materials, including reductions in building program, roadway widths and parking areas; use of pervious pavement for roadways and/or sidewalks; land banking of parking until warranted by demand; and supplemental landscaping or tree planting to mitigate impacts associated with clearing. Specific design measures detailed in the DEIR include:

- avoiding impacts to wetland resources including the 200-feet Riverfront Area to the Manhan River;
- preserving approximately 11.5 acres (35% of the site) as natural open space, including 9.3 acres of forested land;
- minimizing alteration of steep slopes by limiting the work to only the installation of stormwater outfalls in these areas;
- incorporating Low Impact Development (LID) measures;
- reducing internal drive widths to reduce overall pavement areas;
- reserving 85 parking spaces which will be maintained as vegetated space until or unless necessary to satisfy future parking demands;
- incorporating rain gardens at each of the residential buildings to capture roof runoff and improve water quality and promote groundwater recharge;
- implementing a landscape plan which includes 203 trees, 243 shrubs, and the use of New England Conservation and Wildlife Seed; and
- reuse or sale of existing topsoil onsite.

As detailed below, the project will be implemented in phases. Tree removal has been designed to be phased such that only trees within the current work area will be removed. This is most evident in the rear portion of the site where Phase 1 will include only the tree clearing necessary to implement the stormwater features. During Phase 2, additional clearing will be necessary to accommodate the temporary fire access road; however, the final clearing limits will not be reached until Phase 3 when the remaining four rear apartment buildings will be constructed. The developed portions of the site will also be regraded to create a gradual, consistent, and stable slope to support the roadway, sidewalks, buildings, and stormwater system. Overall, site grading will alter the site elevation up to two ft and will generally slope from the northwest to the southeast. Grading will also be phased and will be limited to only those areas where work is ongoing. In order to accommodate construction of the buildings, approximately 12,000 cubic yards (cy) of soil will be excavated and removed from the site. Topsoil will be sold locally, and subsoils will be disposed of in accordance with local, state, and federal regulations. The FEIR should evaluate the project's consistency with the Massachusetts Department of Agricultural Resource (MDAR) Agricultural Land Mitigation Policy to ensure adequate mitigation is proposed for the loss of prime farmland, which is a valuable resource for the Commonwealth.

Wetlands and Stormwater

As noted above, wetland resource areas are located on and adjacent to the project site. According to the DEIR, the project only proposes alteration of the 100-ft buffer zone to Bank and BVW. Therefore, there are no applicable resource-specific performance standards for evaluation of impacts. However, the Wetlands Regulations allow for the review of proposed alteration of the buffer zone and how it may alter the capacity of the adjacent resources to protect the interests of the WPA. The DEIR states that the project will construct a new stream crossing to gain access to the northeastern portion of the project site and will subsequently remove the existing, illicit wooden stream crossing. Prior to constructing the bridge, erosion and sedimentation controls will be installed along both sides of the intermittent stream. The upland area will be excavated as necessary to install the concrete footings and foundation walls, which will include wingwalls extending landward from the edge of the Bank. Once the foundation walls are in place, the bridge decking will be installed to fully span the intermittent stream. Water and sanitary sewer lines will be run under the roadway within the bridge structure, thus avoiding direct impacts to wetland resource areas. Once the new stream crossing has been completed, the existing non-compliant stream crossing will be removed. As stated above, the Easthampton Conservation Commission reviewed the project for its consistency with the Wetlands Protection Act (WPA), the Wetland Regulations (310 CMR 10.00) and associated performance standards including the Massachusetts Stormwater Management Standards (SMS), Stream Crossing Design Standards, and local ordinances. An OOC (MassDEP File No. 151-0322) for the project was issued on January 23, 2024 and was not appealed.

In accordance with the Scope, the DEIR provided an updated Stormwater Report that includes details about the design and function of the proposed stormwater system. The stormwater system will be comprised of deep-sump, hooded catch basins, oil and grit separators/hydrodynamic separator units to remove total suspended solids (TSS), detention basins with sediment forebays, and aboveground infiltration basins. Stormwater will be captured and treated by detention and/or infiltration basins located throughout the property. The basin locations have been designed to maintain existing hydraulic patterns and flow discharge points. Runoff from the roadways and parking lots will be captured via catch basins and pipe networks, treated via water quality structures and will then be discharged to the nearest basin. Building roof runoff will be collected via downspouts and piped to the stormwater basins. Outflow from

the basins will be regulated by individual outlet control structures in each basin with flow piped toward the on-site intermittent stream and discharged via a series of level spreaders. As noted previously, the Stormwater Report was subject to a peer review which has resulted in two primary changes to the design. In particular, a portion of the stormwater has been redirected from one basin to another, thereby reducing the size of the first basin. Riprap has also been incorporated into the emergency spillways in four of the basins should the basins overflow. In addition, a stormwater Operation and Maintenance Plan has been developed and will be implemented following construction to ensure the stormwater management system is properly maintained.

According to the DEIR, low impact development (LID) and environmentally sensitive site design (ESSD) measures were considered and are proposed as part of the project to manage stormwater. These measures primarily include minimizing impervious surfaces and maintaining the site's existing hydrology. Additional LID techniques include avoiding direct impacts to on-site and off-site wetland resource areas; creating a site design that maintains natural drainage patterns and minimizes the creation or disturbance of steep slopes; minimizing disturbance to existing vegetation (9.3 acres of forested land will not be altered as part of the project); and the construction of two open air infiltration basins and 13 rain gardens to promote groundwater recharge. The stormwater management system does not include subsurface infiltration structures and therefore the Underground Injection Control (UIC) registration is not applicable. Based on soil boring and test pit data collected, the proposed infiltration and detention basin bottom elevations are above groundwater elevations, and the infiltration basin bottoms are at least three ft above groundwater.[13] The DEIR states that the project does not meet the definition of a land use with a higher potential pollutant load (LUHPPL) as the parking lots have been designed to be separate and no parking lot and associated stormwater treatment train will exceed 1,000 vehicle trips per day (the identified threshold for parking lots with high-intensity-uses). However, the proposed stormwater management system has been designed to remove greater than 90% of the average annual post-construction load of total suspended solids (TSS) and 60% of total phosphorus. A hydrodynamic separator will remove 85% of the initial TSS prior to discharge into a detention or infiltration basins with a sediment forebay which will remove an additional 50 or 80% of TSS respectively resulting in at least 90% TSS removal overall. In addition, the stormwater management system includes source control, pollution prevention measures, and structural stormwater BMPs to manage water quality and provide groundwater infiltration and recharge and will therefore not have any impact on the MassDEP Approved Zone II.

Water and Wastewater

According to the DEIR, the project will be connected to the public water supply via the water main located within Northampton Street and once fully constructed, will use approximately 68,820 gpd. Public water is supplied from the Barnes Aquifer system and the City m has a permitted withdrawal limit of 3.8 million gpd and currently uses an average of approximately 42% of the permitted capacity. The DEIR states that the City has proposed to improve the water supply system along Northampton Street independent of the project due to the water main being undersized and aged. Following review by a Fire Protection Engineer, commissioned by the Proponent, the existing water supply is sufficient for the fire protection sprinkler system for the first two phases of the project. In addition, it was

[13] The DEIR states that the Easthampton Stormwater Ordinance requires a minimum of three ft separation between infiltration basins and groundwater, as compared to the two ft required by the SMS.

recommended that an 8" underground water main loop be run through the project site to connect to the municipal water supply in two locations, which has been incorporated into the project design. Phases 3 and 4 will not be constructed until the City has upgraded the Northampton Street water supply line.

The DEIR states that the project will be connected to the public sanity sewer system via the East Hampton Main Sewer Interceptor, which runs along the northeastern property boundary. Wastewater is treated at the Easthampton Wastewater Treatment Plant which has a 3.8 million gpd capacity and a current average daily flow of 2.5 million gpd (approximately 66% of the permitted capacity). Once fully constructed, the project will generate approximately 68,820 gpd of wastewater. Comments provided by MassDEP state review of the project indicates that the project may include the ownership and operation of a private (not owned by a municipality) treatment works, consisting of a common sewer system. I refer the Proponent to comments provided by MassDEP, incorporated by reference herein, which details specific regulatory requirements for the owners/operators of private treatment works.

Climate Change

Adaptation and Resiliency

In accordance with the Scope, the Proponent performed an analysis to evaluate the proposed development hydrology and hydraulics (H&H) under future climate conditions associated with the 24-hour 25-year storm (4% annual chance) and the 24-hour 50-year storm (2% annual chance) in 2070. According to the DEIR, the Proponent independently calculated the projected 2070 planning horizon 24-hour 10-year storm depth (design storm previously evaluated in the EENF) to be 5.96 inches, using methodologies recommended by the MA Resilience Design Tool.[14] Nonetheless, the MA Resilience Design Tool output report actually attached to the EENF projected the 24-hour precipitation depth associated with a 2070 10-year storm event to be 7.1 inches. Subsequently, precipitation depths associated with the 25- and 50-year storm events in 2070 were calculated to be 7.48 and 8.52 inches, respectively. According to the results of the analysis, it appears that the stormwater system, which is designed to convey and provide recharge for the current 100-year storm event (8.07"), would be resilient to the future (2070) 25-year storm event, but not the 2070 50-year storm, and is anticipated to decrease runoff flow rates and volumes compared to existing conditions under the 25-year climate scenario evaluated.[15]

The Proponent also performed a "Tier 2" analysis to evaluate the proposed development under future (2070) extreme heat conditions. Information available through the Resilient MA Climate Change Projections Dashboard was utilized as baseline values. The DEIR summarizes the results of the analysis in the following table:

[14] The DEIR states that the MA Resilience Design Tool and Resilient MA Climate Change Projections Dashboard were not used to generate projected precipitation depths as part of the analysis. The MA Resilience Design Tool output report now generates values more associated with what was formerly known as the "Tier 3" analysis.

[15] Based on the information provided in the DEIR, it does not appear that the stormwater system is resilient during a 50-year storm event as of 2070 as is stated.

Design Criteria	Baseline	50th Percentile, 2070s	Change
Annual average temperature (F)	46.98	54.63	+7.65
Annual summer temperature (F)	67.93	76.84	+8.91
Annual winter temperature (F)	25.01	32.66	+7.65
Heat Index (F)		185.4[2]	
Days Above 90 F	6.41	57.54	+51.13
Days Above 95 F	0.46	25	+24.54
Days Below 32 F	158.63	116.78	-41.85
Number of Heat Waves per Year		6.79	
Average Heat Wave Duration (days)		6.92	
Cooling Degree Days	459.27	1436.05	+976.78
Heating Degree Days	7038.04	5227.28	-1810.76

According to the DEIR, as the project involves tree removal and increases in paved areas, it is anticipated that impacts resulting from extreme heat (due to changes in future climate conditions and from the heat island effect) may generally increase over the lifetime of the development.[16] The Proponent has incorporated several measures into the design to limit the impacts of climate change and potential heat island effects on the surrounding area. Measures taken to avoid or minimize heat impacts include:

- Limiting overall tree removal on-site, specifically around wetlands and waterways to minimize heating and/or desiccating these resources;
- Configuring stormwater basins between buildings or along tree lines to provide at least partial shading of the basins to limit water warming prior to release or infiltration;
- Designing the parking areas to be several separate parking areas to support additional shading of paved surfaces;
- Using high albedo roof materials including white roofs on all buildings except for the Roots Building and the contractor storage units which will have light grey metal roofs;
- Locating stormwater basins and other site development features outside the RA;
- Designating at least 85 parking spaces to be built only if demand requires it. Prior to site demand for these spaces, the areas will be maintained with vegetative cover to limit heat absorption;
- Planting and maintaining a landscape plan with at least 203 shade trees and 243 shrubs around buildings, and along roadways and parking areas; and
- Creating a recreational area for residents that includes a swimming pool.

Greenhouse Gas (GHG) Emissions

This project is subject to review under the May 5, 2010, Revised MEPA Greenhouse Gas Emissions Policy and Protocol (MEPA GHG Policy), which requires Proponents to quantify carbon dioxide (CO_2) emissions and identify measures to avoid, minimize or mitigate such emissions. In accordance with the Scope, the DEIR included a revised GHG emissions analysis for both the project's stationary sources and transportation-related emissions (mobile sources).

Stationary Sources

[16] Heat islands are developed areas that have increased temperatures compared to undeveloped areas because buildings and pavement can absorb more heat during the day than natural landscapes. These structures then radiate that heat out at night, maintaining higher than average temperatures.

As noted above, the project proposes a total of 60,000 sf of commercial space (consisting of a restaurant, bank, retail, a gymnastics studio, day care center, and warehouse/storage units) and 350,000 sf of residential space (consisting of 202 residential units). The mixed-use retail building includes one floor for retail activity and two floors for residential units. The retail activity was evaluated in the commercial building analysis while the residential units were evaluated in the analysis of residential space.

Commercial Buildings

The EENF provides estimates of stationary source emissions for the Base Case and Mitigation Case, based on the selected mitigation measures, for each of the commercial building components of the project. The stationary Base Case represents the International Energy Conservation Code (IECC) 2021 Edition with Massachusetts Stretch Energy Code Amendments (the Stretch Code), effective July 1, 2023. GHG emissions from stationary sources are measured in tons of CO_2 equivalents per year (tpy). Emission estimates were calculated using the eQUEST energy design software and the latest CO_2 emission rate for grid electricity. According to the DEIR, as each planned commercial building is not larger than 20,000-sf, the project proposes the use of the Prescriptive Compliance pathway detailed in the Stretch Code. Therefore, the Mitigation Case includes compliance with the 2023 Stretch Code and the Prescriptive Compliance pathway, as well as additional energy mitigation measures planned by the Proponent, as described below, with a primary focus on reducing thermal energy demand and efficient electrification. The Base Case and Mitigation Case were combined to provide a cumulative estimate of emissions for the project as a whole. The DEIR asserts that the Base Case would result in 279.8 tons of CO_2 per year (CO_2/year) and the Mitigation Case would result in 241.6 tons of CO_2/year, a reduction of 13.6% from the Base Case. To achieve these emission reductions, the project, as proposed, will utilize:

- energy efficient windows (including triple panes and a U-value[17] of 0.25)
- energy efficient building envelopes (including Low-Thermal Energy Demand Intensity (TEDI), roof insulation with a U-value of 0.024, and wall insulation with a U-vale of 0.071 or lower);
- thermally broken window and wall components will be used to eliminate thermal bridges;
- low air infiltration to ensure low heating and cooling TEDI;
- higher-efficiency heating, ventilation, and air conditioning (HVAC) systems (utilizing air-source heat pumps (ASHP) for all space heating and cooling;
- Energy Recovery Ventilation (ERV) units for all buildings (70% heat recovery), except for the warehouse buildings;
- electric hot water heaters;
- Energy STAR equipment and appliances (for cooking and refrigeration);
- energy efficient interior and exterior lighting; and
- low-flow fixtures and plumbing.

The project also proposes to install roof-top Photovoltaic (PV) arrays on the Roots Building and stand-alone retail buildings, which would accommodate 20,000 sf of PV arrays across the four buildings. In addition, the Proponent has committed to making 25% of commercial parking spaces (except for the

[17] Thermal transmittance, also known as U-value, is the rate of transfer of heat through a material or structure. Lower U-values equate to higher levels of insulation.

warehouse buildings) EV-ready spaces, for a total of 48 EV-ready spaces.

Comments provided by DOER note that the warehouse buildings are proposed without energy recovery ventilation. Comments state that the Strech Code generally mandates energy recovery ventilation for most applications and is recommended in this instance. Comments further recommend reviewing the Stretch Code requirements and committing to energy recovery ventilation for the warehouse buildings even in the unusual event it is not required by code, as a mitigation measure.

Residential Buildings

According to the DEIR, the project includes nine three-story apartment buildings with 18 units, one three-story apartment building with 26 units, and one three-story mixed-use building where the first floor includes retail and the upper two floors include 14 apartments. The residential units will two options, a two-bedroom apartment (1,184 sf) or a three-bedroom apartment (1,816 sf). Generally, the three-bedroom apartments will be situated on the corners of each floor with the smaller two-bedroom apartments located in the middle of the floor. The DEIR provides estimates of stationary source emissions for the Base Case and Mitigation Case for the residential buildings based on a third-floor three-bedroom apartment with exterior walls on the north and west sides, in order to yield a conservative result. The project proposes to achieve a HERS Index score of 42; however, it is anticipated that units with shared side walls (middle location) and corner units without exterior walls on the north and west sides of each building will achieve lower HERS scores. Although it is unnecessary to take other mitigating actions if compliance with the 2023 Stretch Code and achievement of a HERS Index score of 45 has been demonstrated, the Proponent has committed to additional mitigation actions that predominantly focus on reducing thermal energy demand and efficient electrification. Specifically, the project proposes:

- energy efficient windows and building envelopes;
- higher-efficiency heating, ventilation, and air conditioning (HVAC) systems (utilizing air-source heat pumps (ASHP) for all space heating and cooling;
- Energy Recovery Ventilation (ERV) units for all buildings (70% effectiveness);
- electric ASHP water heaters;
- Energy STAR appliances (refrigerator, washer, dryer, dishwasher and range);
- energy efficient interior and exterior lighting; and
- low-flow fixtures and plumbing;

The project also proposes to have 7,500 sf of residential roof space be solar-ready (greater than 40% required by the Stretch Code); 20% of all residential parking spaces to be EV-ready (for a total of 58 EV-ready spaces); and install 4 EV charging stations per residential building (for a total of 40 EV charging stations). In addition, a Passivehouse feasibility study/gap analysis was performed in January 2024, the results of which are currently being reviewed by the Proponent.

Comments provided by DOER state that no information was provided in the DEIR for the 14-units above the retail/office building and it is recommended that these units be Passivehouse with air source heat pump space heating and electric resistance water heating. Comments also state that in the feasibility study/gap analysis provided, rather than compare Passivehouse to what is being proposed

(HERS 45, all electric), the gap analysis compared Passivehouse to the IECC 2021 prescriptive code.[18] Because the IECC 2021 prescriptive code is a much lower standard than HERS 45, the gap in this analysis is artificially enlarged, thereby making Passivehouse appear more expensive. In addition, the gap analysis did not include a professionally-estimated cost evaluation of first costs for the proposed case and first costs for the Passivehouse case. The Passivehouse feasibility study/gap analysis should be revised in accordance with the Scope.

Mobile Sources

The DEIR provides estimates of GHG emissions for the 2023 Existing, 2030 No-Build, 2030 Build without TDM (Base Case), and 2030 Build with TDM (Mitigation Case). GHG emissions from mobile sources are measured in tons of CO_2 equivalents per year (tpy). Emission estimates were calculated based on the roadway segments in the traffic study area; the length of each road segment; the vehicle approach (free-flow or queue); average speed; and traffic volumes for each segment utilizing the EPA MOVES3 model project scale option. Under 2023 Existing conditions, emissions were modeled to consist of 5,256 tpy. The 2030 No-Build would result in 5,056 tpy due to an anticipated one percent per year annual growth rate in traffic volumes. The Base Case would result in an increase of 515 tpy (5,571 tpy) over the No-Build scenario due to increased vehicle traffic resulting from project-generated vehicle trips. The Mitigation Case would increase emissions over the No-Build by 376 tpy (5,432 tpy), but represents a 139 tpy (or 2.5%) reduction as compared to the Base (Build) Case. As described above, the DEIR proposes a number of TDM measures to reduce the use of single-occupancy vehicles, promote ridesharing, and encourage the use of alternative transportation modes.

Construction Period

According to the DEIR, project construction will be constructed in four phases in order to manage overall land disturbance, construction disruptions to traffic and noise, and to allow for appropriate erosion and sediment control. In response to the Scope, the DEIR identified all components of the project to be completed in each phase, and detailed initial work to be performed site-wide in advance of future phases:

- **Phase 1** – This phase will include initial site preparation consisting of the construction of the temporary construction entrances extending into the site from Northampton Street and Colonial Avenue; implementation of erosion and sedimentation controls (silt fence with straw wattle) along the southern side of the central wetland and along both sides of the stream crossing; and construction of temporary settling basins to management stormwater during construction. The existing, stream crossing will be used to provide initial access to the rear portion of the site. Footers for the new stream crossing will be installed from either side of the stream to avoid direct wetland impacts and the new bridge span and utility lines will be installed above the footers. Site wide tree and vegetation clearing will also commence to facilitate the construction of the proposed stormwater basins. Subsurface drainage features will also be installed and protected by silt sack inlet protection and temporary swales will be graded to divert runoff around basins as necessary during construction. Underground utilities will be installed across the southern portion of the site, across the stream crossing, and into the northern portion of the site.

[18] Comments state that the IECC 2021 prescriptive is not code minimum in Massachusetts. Minimum code for these buildings would be HERS 45, which is what is being proposed.

The internal roadway and sidewalks from Northampton Street across the stream crossing will also be installed. In addition, this phase will include the construction of the Roots Building with 76 parking spaces.

- **Phase 2** – This phase will include construction of three apartment buildings with 90 parking spaces in the northern portion of the site. Additional erosion and sedimentation controls will be installed around the work area and two temporary settling basins will be constructed. Tree removal east of the temporary fire access road will commence in advance of site grading to support the construction of these buildings, parking, and the temporary fire access road. Water and sanitary sewer utilities will be extended under the roadway to service the three proposed buildings and additional stormwater management infrastructure will be installed.
- **Phase 3** – This phase will include construction of the remaining four apartment buildings with 107 parking spaces in the northern portion of the site. East of the apartment buildings, additional tree removal will be necessary to achieve the final clearing limits and facilitate final grading. The temporary fire access road will be removed, and a permanent roadway will be installed, along with permanent sidewalks to connect the buildings constructed in both Phase 2 and Phase 3. The playground, community garden, pool, and pool house will be constructed within the access road island to provide community services to the apartment buildings. This phase also includes the construction of the bank with 36 parking spaces as well as the standalone retail building with eight parking spaces. A sidewalk and crosswalk will be installed to provide safe pedestrian access to the retail space from both Northampton Street and the Roots Building. In addition, vehicle access between the bank the existing Starbucks, located adjacent to the project site, will be installed.
- **Phase 4** – This phase will include construction of the sit-down restaurant pad with 41parking spaces; the two warehouse buildings with 11 parking spaces; the mixed-use commercial building with 28 parking spaces; and the remaining three apartment buildings with 81 parking spaces. This phase will also construct sidewalks and crosswalks to connect each building and provide safe pedestrian and bicycle access around the development.

The DEIR states that all construction activities will be managed in accordance with applicable MassDEP regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017), and other applicable regulations. As noted above, solid waste generated during Project construction will be reused and recycled as appropriate. Any asphalt, brick, or concrete (ABC) rubble associated with the Project must be handled in accordance with the MassDEP Solid Waste regulations and the reuse of any materials requires the submittal of a MassDEP BWP SW41 – Beneficial Use Determination. Any remaining waste construction materials will be disposed of in accordance with state and local regulations. The Project will comply with the Solid Waste Regulations, including 310 CMR 19.017: Waste Ban, which prohibit the disposal, transfer for disposal, or contracting for disposal of certain hazardous, recyclable, or compostable items. In addition, tree removal related to land clearing, and handling/processing of clean wood, will be handled according to state regulations, including 310 CMR 16.00 and 310 CMR 19.00. In addition, the Proponent has committed to filing a Commencement of Construction Notice with MEPA pursuant to 301 CMR 11.08(10).

SCOPE

General

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, and include the information and analyses identified in this Scope. It should clearly demonstrate that the Proponent has sought to avoid, minimize, and mitigate Damage to the Environment to the maximum extent feasible.

Project Description and Permitting

The FEIR should describe any changes to the Project since the filing of the DEIR. The FEIR should identify, describe, and assess the environmental impacts of any changes to the Project that have occurred between the preparation of the DEIR and FEIR. The FEIR should also include an updated list of required Permits, Financial Assistance, and other state, local and federal approvals and provide an update on the status of each of these pending actions.

The FEIR should include site plans for existing and post-development conditions. Plans should clearly identify all project components (e.g., structures, roadways, etc.); impervious areas; surface elevations; wetland resource areas; rare species habitat; and stormwater and utility infrastructure (including EV infrastructure). These plans should also identify roadway infrastructure; bicycle and pedestrian infrastructure; the type and location of potential vehicle and bicycle parking (including EV parking); and adjacent land uses.

The information and analyses identified in this Scope should be addressed within the main body of the FEIR and not in appendices. In general, appendices should be used only to provide raw data, such as drainage calculations and TSS removal rates, that are otherwise adequately summarized with text, tables, and figures within the main body of the FEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in electronic format, include links to individual sections. Any references in the FEIR to materials provided in an appendix should include specific page numbers to facilitate review.

Environmental Justice (EJ) / Public Health

The FEIR, or a summary thereof, should be distributed to the EJ Reference List that was used to provide notice of the DEIR. The Proponent should obtain a revised EJ Reference List from the MEPA Office to ensure that contact information is updated. The same efforts to notice the project should be made prior to the submission of the FEIR. The FEIR should provide an update on any outreach conducted since the filing of the DEIR, and identify any changes made to the Project design in response to this outreach.

The FEIR should clarify the geographic radius covered by the traffic study area, further explain what accounts for the >1 tpy increase in VOCs notwithstanding mitigation measures, and explore additional mitigation measures that could be employed to further reduce VOCs and other air emissions

associated with new traffic. For instance, the FEIR should indicate whether additional TDM measures could be taken to incentivize multi-modal forms of transportation over single occupancy vehicle trips.

Land Alteration

The FEIR should include a narrative describing the project's consistency with the MDAR Agricultural Land Mitigation Policy. The FEIR should identify all measures that will be considered to mitigate impacts to prime farmland soils, including contributions to agricultural land conservation programs. In addition, the Proponent should explore granting a Conservation Restriction in order to permanently protect the portion of the project site that will be preserved as open space.

Traffic and Transportation

The FEIR should include a revised TIA that also evaluates a signalized site driveway option to reflect the alternative analysis conducted to support the selection of the roundabout intersection alternative. Prior to the filing of the FEIR, the Proponent should consult with MassDOT regarding the timing of implementation as well as the funding for the design and construction of the roundabout. The FEIR should provide an update on any such coordination, discuss timing and funding of the proposed improvements, and identify any changes made to the project design or mitigation commitments in response to this consultation. In addition, the proposed mitigation measures and draft Section 61 Findings should be updated to reflect the commitment made regarding the construction of the roundabout.

The FEIR should clarify which intersections are still showing LOS F conditions notwithstanding roadway improvements, and proposed TDM measures and signal changes. The FEIR should further clarify the TMP and what measures will be taken should the if the proposed TDM measures do not prove successful.

Wastewater

As noted above, the project may include ownership and operation of a private treatment works, consisting of a common sewer system. Prior to filing the FEIR, the Proponent should consult with MassDEP to determine whether the project proposes a private treatment works, as defined at 314 CMR 12.00. The FEIR should provide an update on any such coordination, include a determination as to whether the project will construct a treatment works, and identify any changes made to the project design or mitigation commitments in response to this consultation. To the extent that the project will construct a treatment works, the FEIR should include a narrative identifying any additional permitting or regulatory requirements, including the establishment of a preventive maintenance program to ensure the efficient operation of the facility and equipment. The FEIR should demonstrate the project's consistency with the applicable regulations at 314 CMR 12.00 and update the proposed mitigation measures accordingly.

Climate Change

Adaptation and Resiliency

The FEIR should re-evaluate the efficacy of the stormwater management system during a 50-year storm event as of 2070. Information available through the Resilient MA Climate Change Projections Dashboard could be used as a resource.[19] To the extent the project is unable to accommodate this future year storm scenario, the FEIR should discuss whether the project has engaged in flexible adaptative strategies, and whether current designs allow for future upgrades to be made to adapt to climate change.

Greenhouse Gas Emissions (GHG)

The FEIR should include a discussion of Strech Code requirements as it relates to requiring energy recovery ventilation in warehouse buildings. In the event that energy recovery ventilation is not required by the Strech Code, the Proponent should commit to incorporating it as a mitigation measure or provide an explanation as to why it is not feasible. The FEIR should include a revised Passivehouse gap analysis that compares what is being proposed to Passivehouse. The gap analysis should include a life cycle evaluation and a professionally-estimated cost evaluation of first costs for the proposed case and first costs for the Passivehouse case, with the later netted against a $0.6M incentive. The gap analysis should also estimate the peak electric demand (summer and winter) associated with the proposed HERS 45 case and the peak electric demand (summer and winter) associated with Passivehouse. The FEIR should also clarify what is proposed for the residential units above the retail/office buildings and incorporate that information into the gap analysis.

Mitigation and Draft Section 61 Findings

The FEIR should include a separate chapter summarizing all proposed mitigation measures including construction-period measures. This chapter should also include a comprehensive list of all commitments made by the Proponent to avoid, minimize, and mitigate the environmental and related public health impacts of the Project, and should include a separate section outlining mitigation commitments relative to EJ populations. The filing should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The list of commitments should be provided in a tabular format organized by subject matter (traffic, water/wastewater, GHG, environmental justice, etc.) and identify the Agency Action or Permit associated with each category of impact. Draft Section 61 Findings should be separately included for each Agency Action to be taken on the Project. The filing should clearly indicate which mitigation measures will be constructed or implemented based upon Project phasing to ensure that adequate measures are in place to mitigate impacts associated with each development phase.

To ensure that all GHG emissions reduction measures adopted by the Proponent as the Preferred Alternative are actually constructed or performed by the Proponent, the Proponent must provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their

[19] Available at https://resilientma-mapcenter-mass-eoeea.hub.arcgis.com/.

equivalent, have been completed. The commitment to provide this self-certification in the manner outlined above shall be incorporated into the draft Section 61 Findings included in the FEIR.

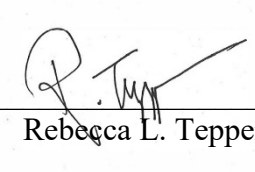
Responses to Comments

The FEIR should contain a copy of this Certificate and a copy of each comment letter received. To ensure that the issues raised by commenters are addressed, the FEIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the scope of the FEIR beyond what has been expressly identified in this certificate.

Circulation

In accordance with 301 CMR 11.16(3), the Proponent should circulate the FEIR to those parties who commented on the DEIR, each Agency from which the Project will seek Permits, Land Transfers or Financial Assistance, and to any other Agency or Person identified in the Scope. Per 301 CMR 11.16(5), the Proponent may circulate copies of the FEIR to commenters in CD-ROM format, by directing commenters to a Project website address, or electronically. However, the Proponent should make available a reasonable number of hard copies to accommodate those without convenient access to a computer to be distributed upon request on a first come, first served basis. The Proponent should send correspondence accompanying the digital copy or identifying the web address of the online version of the FEIR indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. A copy of the FEIR should be made available for review in the Easthampton Public Library.

April 1, 2024
Date



Rebecca L. Tepper

Comments received:

3/6/2024 Stockbridge-Munsee Community
3/20/2024 Pioneer Valley Planning Commission (PVPC)
3/22/2024 Cernak Family
3/22/2024 Massachusetts Department of Environmental Protection (MassDEP)
3/25/2024 Massachusetts Department of Transportation (MassDOT)
3/28/2024 Massachusetts Department of Energy Resources (DOER)

RLT/NJM/njm

RE: EEA #16729 - Submittal of Draft Environmental Impact Report - Sierra Vista Commons - Easthampton, MA

Adrienne Dunk <Adrienne.Dunk@gza.com>

Mon 3/11/2024 11:39 AM

To:thpo <thpo@mohican-nsn.gov>
Cc:MEPA-EJ (EEA) <MEPA-EJ@mass.gov>;Moreno, Nicholas (EEA) <Nicholas.Moreno@mass.gov>

Thank you for your comments, Jeff. I've CC'ed Nick Moreno on this email as he is the MEPA Analyst and will be compiling public comments on the EIR.

Thanks,

Adrienne

Adrienne Dunk, WPIT
Project Manager
GZA | 1350 Main Street, Suite 1400 | Springfield, MA 01103
o: 413-726-2144 | c: 201-247-8950 | adrienne.dunk@gza.com | www.gza.com | LinkedIn

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT
Known for excellence. Built on trust.

From: thpo <thpo@mohican-nsn.gov>
Sent: Wednesday, March 6, 2024 4:14 PM
To: Adrienne Dunk <Adrienne.Dunk@gza.com>
Cc: MEPA-EJ (EEA <MEPA-EJ@mass.gov>
Subject: [EXTERNAL] RE: EEA #16729 - Submittal of Draft Environmental Impact Report - Sierra Vista Commons - Easthampton, MA

Dear Adrienne,

Thank you for the plans for the drafty EIS for the proposed Sierra Vista Commons project in Easthampton, Hampshire County, MA.

I am concerned that this APE is situated in close proximity to the Manhan River and the Connecticut River which would have made it an attractive location for Native American settlement. This part of Massachusetts was an important locus of Mohican settlement and this particular location would have been an advantageous place for settlement. It is also very close to a known site: 19-HS-42: a palisaded fort.

The Stockbridge-Munsee Community recommends that an archaeological survey be conducted at this property prior to development.

Thank You,
Jeff

Jeffrey C Bendremer Ph.D., RPA
Tribal Historic Preservation Officer
Stockbridge-Munsee Community
Tribal Historic Preservation Extension Office
86 Spring St.

Catalyst for Regional Progress
PVPC
Kimberly H. Robinson, MUP
Executive Director

March 20, 2024

Ms. Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Attention: MEPA Unit

Reference: Review Comments on the Draft Environmental Impact Report (DEIR) for the Sierra Vista Commons Project, EEA # 16729.

Dear Secretary Tepper:

The Pioneer Valley Planning Commission (PVPC) has the following review comments on the DEIR for the above-cited project. As proposed, the project in Easthampton, MA consists of the development of a mixed-use residential and commercial center.

Historic Preservation Comments

The MHC Reconnaissance Survey Town Report for Easthampton notes the presence of 34 undated Native sites (as of 1982) and speculates that Easthampton likely had a moderate Native population with potential for surviving evidence in proximity to the Manhan River. There is a great deal of proposed ground disturbing work, over several project phases, on the 33-acre site, which currently has approximately 16 undeveloped acres. The project proposes development of 21.5 acres, including 4.4 acres of previously unaltered mixed hardwood forest. PVPC encourages the development of a general Unanticipated Discoveries Plan which outlines specific measures to be implemented during site development, providing more guidance for the construction team.

The Easthampton Historical Commission is not included as part of the distribution list for the DEIR. The local historic commission should be included on the distribution list for all future correspondence related to this project.

Additional information is requested on the former Hampshire and Hampden Canal which has remnants on site. It is requested that the FEIR include information on any potential impacts to canal remnants. A mitigation plan for protection of the canal remnant would be beneficial.

Transportation Comments

Additional information on the trip generation impacts of the proposed project was requested as part of PVPC's comment letter on the EENF for the project. While Attachment 5.3 in the DEIR does expand on the project trip generation information, it does not provide clarity on the trips generated during the

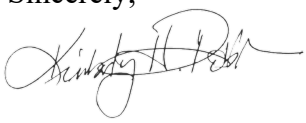
roadway peak hour versus the peak hour of the generator/land use. It is requested this information be included as part of the FEIR.

PVPC concurs with the proposed transportation monitoring program (TPM) for the project as outlined in the DEIR. We would like to request that PVPC be added to the distribution list for the TPM.

The DEIR describes how traffic operations at three of the study area signalized intersections can be improved through signal retiming. It is unclear from the DEIR who will be responsible for the proposed signal timing changes. Additional information is requested in the FEIR and Section 61 Finding to identify the responsible party for the proposed changes to traffic signal timings in the study area. It is also requested that the Section 61 Finding be updated to reflect the commitment made on the construction of a roundabout on Route 10 at the project site driveway.

Thank you for the opportunity to offer our comments on this proposed project.

Sincerely,



Kimberly H. Robinson, MUP
Executive Director

cc: Jesse W. Belcher-Timme, PVPC Commissioner – Easthampton
Jeffrey Bagg, Easthampton City Planner
Bao Long, MassDOT District 2
Lionel Lucien, MassDOT Public Private Development
Adrienne Dunk, GZA Geoenvironmental, Inc.

The Cernak Family
(Strathrile Properties, LLC,
102 Northampton Street LLC, and
The Kenneth S. Cernak Revocable Trust)

March 22, 2024

MA Executive Office of Energy & Environmental Affairs
MEPA Office
100 Cambridge St., Suite 900
Boston, MA 02114

Attn: Nicholas Moreno, MEPA Analyst

Subject: Sierra Vista Commons Project
Easthampton, Massachusetts
EEA# 16729

Dear Nicholas:

The Cernak Family (which includes the parties mentioned in the letterhead above) is a directly impacted group of landowners owning several commercial properties directly opposite the proposed Sierra Vista Commons project with access along both Northampton Street and Mountainview Street. The Cernak Family, having operated commercial properties contributing to the local community at these locations for 90 years, has engaged professional transportation engineers MDM Transportation Consultants, Inc. (MDM) and BETA Group to assist in technical review of proposed traffic impacts and planned roadway mitigation throughout the local review and approval process including the filed Draft Environmental Impact Report (DEIR). The objective of this ongoing review and commentary is to ensure that a viable, equitable and timely set of improvements are implemented by the Proponent that will ensure the continued viability of our longstanding commercial operations and future development of our property.

During the local review and approval process, mutual agreement was reached among the Easthampton Planning Board, the Proponent, the Cernak Family, and its reviewing agents that a roundabout design option is a preferred design solution that will accommodate the mutual safety and operating needs for public travel on Northampton Street, the Sierra Vista Commons project and the abutting properties owned by the Cernak Family. In fact, this is reflected in the November 14, 2023 Decision of the Easthampton Planning Board that is included in the DEIR filing which presents a more detailed accounting of testimony that led to that conclusion. Please see the attached drawing of the preferred design solution.

We remain concerned that any alternative to a roundabout, namely a traffic signal alternative, is not an appropriate solution; in fact, a signal would have a direct negative impact on the operations of our commercial properties, adjacent commercial properties, and the general public due to extensive vehicle queuing and driveway impacts that would result as elaborated in the local record and filings. We therefore request that the Proponent engage with MassDOT during preparation of the Final EIR (FEIR) and ultimately the Section 61 Finding process to definitively identify the roundabout alternative as the selected mitigation alternative for Sierra Vista Commons. We recognize that the roundabout alternative would require land acquisition from the Cernak Family and have indicated through ongoing discussions with the Proponent's engineering team that we would support the necessary acquisition to the extent this option is selected by MassDOT.

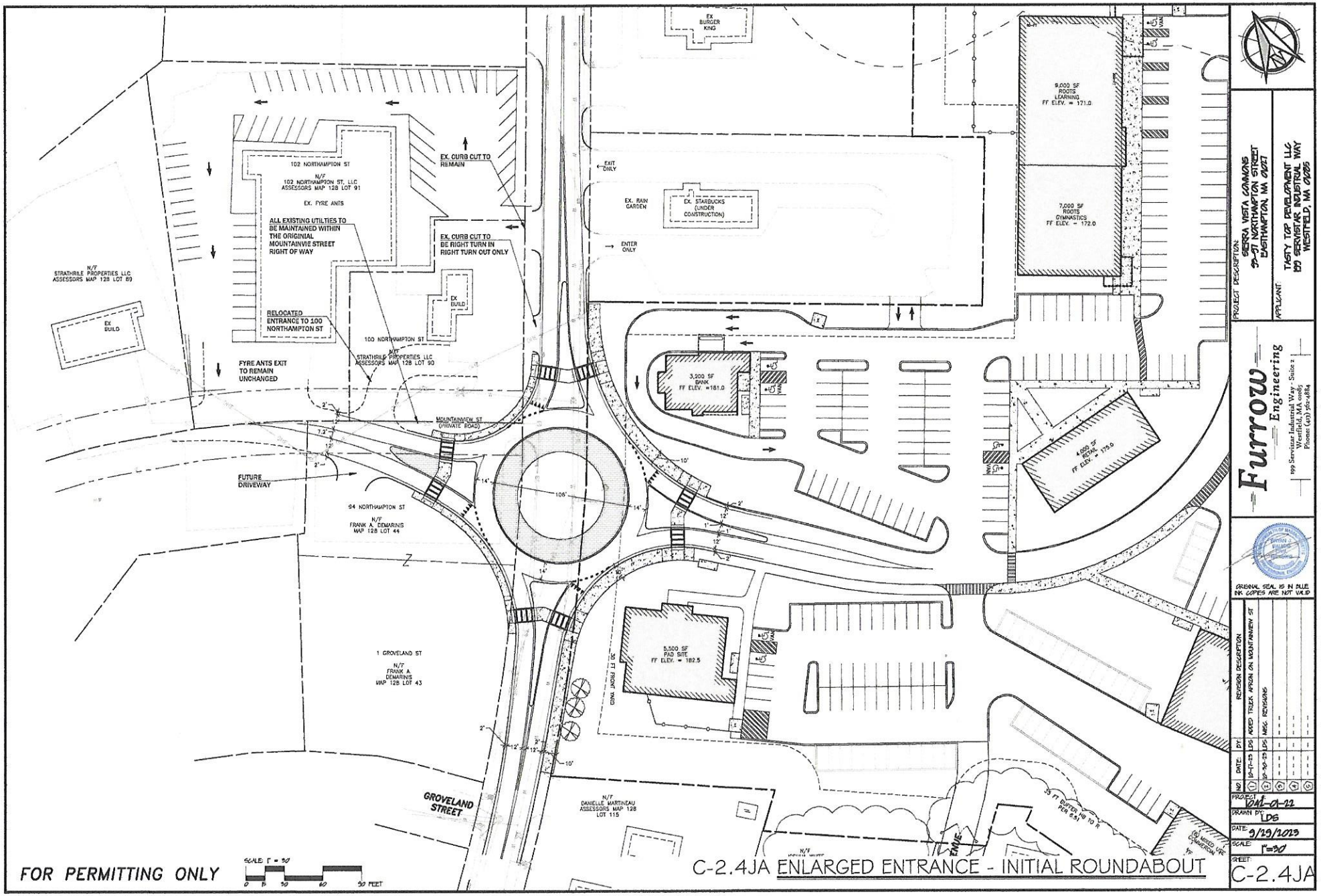
On behalf of the Cernak Family, I look forward to continued coordination with the Proponent on advancing the roundabout option and to confirmation by MassDOT that this design option will be memorialized in the Section 61 Finding for the project.

Sincerely,

Jennifer L. Cernak

(Cernak Family Representative)

Attachments: Preferred Roundabout Option Exhibit



FOR PERMITTING ONLY

C-2.4JA ENLARGED ENTRANCE - INITIAL ROUNDABOUT

PROJECT DESCRIPTION: SIERRA VISTA COMMONS 99-91 NORTHAMPTON STREET EASTHAMPTON, MA 01027

APPLICANT: TASTY TOP DEVELOPMENT LLC 109 SERVISTAR INDUSTRIAL WAY WESTFIELD, MA 01085

Furrow Engineering
109 Servistar Industrial Way - Suite 2
Westfield, MA 01085
Phone: (413) 562-1884

ORIGINAL SEAL IS IN BLUE INK COPIES ARE NOT VALID

NO	DATE	BY	REVISION DESCRIPTION
1	12-17-13	LDS	ADDED TRUCK APRON ON MOUNTAINVIEW ST
2	12-30-13	LDS	MISC. REVISIONS
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---

PROJECT: 2013-01-22
DRAWN BY: LDS
DATE: 9/29/2013
SCALE: 1"=30'
SHEET: C-2.4JA

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

March 22, 2024

Rebecca Tepper, Secretary
Executive Office of Energy & Environmental Affairs
Massachusetts Environmental Policy Act Office
Nicholas Moreno, EEA No. 16729
100 Cambridge Street, 9th Floor
Boston, MA 02114-2524

Re: Sierra Vista Commons
Easthampton - DEIR

Dear Secretary Tepper,

The Massachusetts Department of Environmental Protection (MassDEP), Western Regional Office (WERO) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) submitted for the proposed Sierra Vista Commons project to be constructed at 93, 94, 95, 97 Northampton Street and 1 Groveland Street (Route 10) in Easthampton (EEA #16729). The site previously held a driving range, ice cream stand, single-family home, a barn and agricultural fields. An intermittent stream bisects the site. MassDEP attended a site meeting on July 20, 2023.

The applicable MassDEP regulatory and permitting considerations regarding wetlands, wastewater drinking water, underground injection control, air pollution, solid waste, hazardous waste and waste site cleanup are discussed.

I. Project Description

The Proponent, Tasty Top Development, LLC, is proposing to construct a mixed-use commercial and residential center to include 202 housing units contained within 10 mid-rise buildings, a restaurant, a bank, a daycare facility, a gymnastic center, a mixed-use retail/office building with apartments above, a separate retail building and 2 warehouse/storage units. Internal roadways are proposed to be constructed for building access with 478 new parking spaces. New electrical utilities, including lighted parking lots, with two EV charging stations will be located in front of each residential building. Proposed recreational opportunities include a community pool, a playground, and a community garden.

Agricultural fields located in the rear of the property have been historically accessed via an unauthorized wooden bridge crossing over an intermittent stream. The Proponent proposes removal of the existing noncompliant stream crossing and construction of a new, compliant stream crossing; the Proponent states that work will have no direct impacts to wetland resource areas. Internal potable water and wastewater utilities will be connected to the existing Easthampton infrastructure. An on-site stormwater management system, not connected to the City stormwater system, is proposed.

Environmental Justice populations are identified within one and five-mile radii of the project site in the municipalities of Easthampton, Holyoke, South Hadley, and Northampton. The categories are Income, Minority, Minority and Income, and Minority, Income and English Isolation. The Proponent posits the project will have neither short-term nor long-term environmental or public health impacts affecting Environmental Justice Populations.

Environmental Impacts associated with this project and changes since the EENF review include:

- Total site acreage - increase of .9 acres – Total - 33.9 acres
- New acres of land altered - 4.4 acres (no change)
- Acres of impervious area - existing - 0.3 acres, change – 12.1 acres, Total 12.4 acres (no change)
- Structures - Gross square footage (SF) - new - 422,000 SF, Footprint: 180,128 SF (no change)
- Number of housing units - new - 202 units (no change)
- Vehicle trips per day - 4,382 (no change)
- Parking spaces - reduction of 32 - Total – 478
- Water use (gallons per day) - new- 68,820 GPD (no change)
- Wastewater generation– new - 68,820 GPD (no change)

II. Required Mass DEP Permits and/or Applicable Regulations

Wetlands
310 CMR 10.000
Wastewater
314 CMR 7.00
Drinking Water
310 CMR 22.00
Underground Injection Control
310 CMR 27.00
Air Pollution
310 CMR 7.00
Solid Waste
310 CMR 16.00

Hazardous Waste
310 CMR 30.00
Bureau of Waste Site Cleanup
310 CMR 40.000

III. Permit Discussion

Bureau of Water Resources

Wetlands Protection Act
MassDEP wishes to emphasize that any changes in the project that result in new, different, or additional impacts to resource area and/or their buffer zone may, at the discretion of the issuing authority, require filing a new Notice of Intent or an amended Notice of Intent.

In order to avoid any misunderstanding on the part of reviewers, MassDEP recommends that the FEIR Executive Summary clearly articulate that the WPA permitting process has been initiated and completed, as well as acknowledging that any changes in the project that result in new, different, or additional impacts to resource area and/or their buffer zone may, at the discretion of the issuing authority, require filing a new Notice of Intent or an amended Notice of Intent.

Limited Project
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Resource Area Impacts
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Dewatering
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Stormwater
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Wastewater
MassDEP review of the subject project indicates that the project may include the ownership and operation of a private (not owned by a municipality) treatment works, consisting of a common sewer system. MassDEP hereby provides notice to the proponent of its regulations at 314 CMR 12.00 and their applicability to the proposed “treatment works”. The proponent should refer to the definition of treatment works in these regulations. The most recent version of the referenced regulations was promulgated in 2014 and apply to both municipal and private treatment works for the operation and maintenance of these systems.

MassDEP's primary concern revolves around the potential lack of awareness among owners/operators of private treatment works regarding their regulatory responsibilities. These obligations encompass routine preventive maintenance and adherence to the regulations outlined in 314 CMR 12.00 and other requirements described therein. These regulations encompass the operational and maintenance requirements for both public and private treatment works, aiming to

guarantee their effective functioning. One of the key requirements of these regulations is to establish that all treatment works, public and private, maintain and implement a written preventive maintenance program to ensure the efficient operation of the facility and equipment. The requirements to develop and implement the preventive maintenance plan can be found at 314 CMR 12.04(1)

Drinking Water
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Underground Injection Control
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Bureau of Air and Waste

Air Quality
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Construction Activities
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Boilers/Generators/Emergency Generators
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Construction Equipment
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Asbestos
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Solid Waste
The Proponent shall properly manage and dispose of all solid waste generated by or discovered during this proposed project pursuant to 310 CMR 16.00 and 310 CMR 19.000, including the regulations at 310 CMR 19.017 (waste ban).

Soils Management
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Hazardous Waste
MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

Bureau of Waste Site Cleanup

MassDEP has no additional comments. See prior comment letter dated August 9, 2023.

IV. Other Comments/Guidance

Greenhouse Gas Policy (GHG)

MassDEP works collaboratively with the Department of Energy Resources (MassDOER) to review the proposed GHG analysis and mitigations. MassDOER comments will be addressed under separate heading.

Section 61 Findings

There are no identified permits required from MassDEP for this proposed project. Should there be impacts identified that require mitigation and any MassDEP permits identified in future filings, Section 61 Findings must be included.

MassDEP staff is available for discussions as the project progresses. If you have any questions regarding this comment letter, please do not hesitate to contact Sean Gonsalves at (781) 400-4272

Sincerely,

Sean Gonsalves, R.S. for
Michael Gorski
Regional Director

cc: MEPA File

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbits-Nutt, Secretary & CEO

massDOT
Massachusetts Department of Transportation

March 25, 2024

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

RE: Easthampton: Sierra Vista Commons Project - DEIR
EEA #16729

ATTN: MEPA Unit
Nicholas Moreno

Dear Secretary Tepper:

On behalf of the Massachusetts Department of Transportation, I am submitting comments regarding the Draft Environmental Impact Report for the proposed Sierra Vista Commons Project in Easthampton 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

DJM/jll

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

cc: Jonathan Gulliver, Administrator, Highway Division
Carrie Lavallee, P.E., Chief Engineer, Highway Division
Patricia Leavenworth, P.E., District 2 Highway Director
James Danila, P.E., State Traffic Engineer
Pioneer Valley Planning Commission (PVPC)
Town of Easthampton Planning Board

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbits-Nutt, Secretary & CEO

massDOT
Massachusetts Department of Transportation

MEMORANDUM

TO: David Mohler, Executive Director
Office of Transportation Planning

FROM: J. Lionel Lucien, P.E, Manager
Public/Private Development Unit

DATE: March 25, 2024

RE: Easthampton: Sierra Vista Commons Project – DEIR
EEA #16729

The Public/Private Development Unit (PPDU) has reviewed the Draft Environmental Impact Report (DEIR) for the Sierra Vista Commons Project at 93, 95, and 97 Northampton Street (Route 10) in Easthampton as submitted by GZA GeoEnvironmental, Inc. (GZA) on behalf of Tasty Top Development, LLC. (the "Proponent"). The Project site was formerly occupied by six buildings that were demolished prior to October 2022. Vehicular access to and from the site will be provided by an internal roadway that will utilize a new intersection with Route 10, and will include sidewalks, and crosswalks. The site is bounded by mixed commercial uses to the north and west, vacant land to the east, and residential neighborhoods to the south. The site currently consists of partially developed land with 332 feet of frontage along Route 10.

The Project entails the construction of a 500,000 square foot (sf) mixed-use development with a total of 478 parking spaces. The mixed-use development includes:

- Roots Learning Center (daycare facility), approximately 9,000 square feet (SF);
- Roots Gymnastic Center, approximately 7,000 SF;
- 1 sit-down restaurant, 220-seat capacity, approximately 5,500 SF;
- 1 bank, approximately 3,200 SF;
- 1 stand-alone small retail, approximately 4,000 SF;
- 2 mixed-use warehouse/storage, contractor units, approximately 7,400 SF/building;
- 1 mixed-use retail/office buildings with 14 apartments above, approximately 16,000 SF; and
- 10 mid-rise (3 floor) apartments buildings, 188 units total, nine 13,600-SF buildings and one 18,000-SF building.

The Project previously submitted an Expanded Environmental Notification Form (EENF) on July 10, 2023, for which the Secretary of Energy and Environmental Affairs issued a Certificate on August 16, 2023, requiring the Proponent to prepare a DEIR.

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

The DEIR includes a TIA prepared by Howard Stein Hudson in accordance with the EEA/MassDOT *Transportation Impact Assessment (TIA) Guidelines*. The TIA includes an analysis of the study area that addresses the Project's impacts on intersection operations, safety, and bicycle, pedestrian, and transit modes. The TIA generally conforms to the scope as originally described in the Project EENF and is generally responsive to MassDOT commentary.

Trip Generation

In accordance with the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition), the EENF outlines that the Project will utilize Land Use Code (LUC) 565 (Day Care Center), LUC 20 (Multifamily Housing Low-Rise), LUC 150 (Warehousing), LUC 822 (Strip Retail Plaza under 40ksf), LUC 932 (High-Turnover Sit-Down Restaurant), and LUC 912 (Drive-in Bank) to represent a conservative estimate of trips generated by the multiple uses included in the Project. The proposed project is anticipated to generate a total of 4,382 new trips, including 373 trips during the weekday morning peak hour and 525 trips during the weekday evening peak hour.

Study Area

MassDOT requested the Proponent to expand their study area which now includes:

- Route 10 at Florence Road and Highland Avenue;
- Route 10 at the Project driveway;
- Route 10 at O'Neil Street;
- Route 10 at West Street;
- Route 10 at Main Street/Lyman Ave/Pleasant Street/Campus Lane;
- Route 10 at Union Street;
- Pleasant Street at Ferry Street and Lovefield Street;
- Ferry Street at East Street; and
- Route 66 (Westhampton Road) at Florence Road.

The analysis included in this DEIR was expanded to include these intersections. No other intersections were identified where the project-generated trips were anticipated to increase peak hour traffic volume by 5% or more or more than 100 vehicles per hour.

Safety

The TIA indicates that the Proponent acquired crash data from 2017 to 2020 from MassDOT's IMPACT portal. In MassDOT District 2, where the Project site is situated, the average crash rate at signalized intersections is 0.89 per million entering vehicles (MEV). Intersections with higher-than-average crash rates are typically subject to further examination by the jurisdictional agency. Both intersections under study have crash rates below the District

2 average, and no pedestrians were involved in these incidents. However, MassDOT notes that outside the study's data window, there was a fatal pedestrian crash in August 2022 on Route 10 near the project site.

MassDOT acknowledges a pedestrian safety improvement plan for the area where the fatality occurred, which includes installing a crosswalk and sidewalk from Groveland Street to the site drive. There should be coordination with MassDOT's District 2 office prior to submission of the FEIR regarding these concerns.

Traffic Operations

Under the Build (2030) conditions, the intersection of Route 10/Florence Road/Highland Avenue maintains the same level of service (LOS) during both peak hours, with all approaches operating at acceptable LOS. However, the intersection of Route 10/West Street experiences a decline from LOS C to LOS E during the a.m. peak hour and from LOS E to LOS F during the p.m. peak hour. Additionally, the West Street eastbound left-turn/right-turn approach deteriorates from LOS D to LOS E during the p.m. peak hour. Similarly, at the intersection of Route 10/Oneil Street, there is no change in LOS during the a.m. peak hour but a shift from LOS E to LOS F during the p.m. peak hour, with the Route 10 southbound approach worsening to LOS F during the same period.

Continuing, at the intersection of Route 10/Union Street, an acceptable LOS is maintained during both peak hours, although the Route 10 northbound through movement declines from LOS D to LOS E during the a.m. peak hour. Further down, the intersection of Route 10/Lyman Avenue witnesses a decline from LOS C to LOS E during the p.m. peak hour. Similarly, the intersection of Route 10/Main Street/Pleasant Street westbound approach deteriorates from LOS E to LOS F during the p.m. peak hour. Additionally, at the intersections of Route 10/Mountainview Street and Route 10/Project Site Driveway, various approaches experience worsening LOS, notably reaching LOS F during peak hours.

Site Access

After extensive review involving the City, its peer reviewer, and engineers hired by affected property owners, a roundabout was selected as the best option for managing traffic flow, particularly to address concerns about vehicle queues on Route 10 and the safety of left-turns from adjacent properties. Consequently, no further examination of a signalized intersection was deemed necessary. The proposed roundabout will be a single leg one, situated in alignment with the relocation of Mountainview Street. Additionally, recalibrating signal timings at various intersections along Route 10 would further enhance traffic efficiency.

Although MassDOT notes that with this mitigation the study areas intersections will remain at an acceptable LOS, the FEIR should include the analysis of signalized site driveway option to reflect the alternative analysis conducted to determine the site access selection. The draft Section 61 Finding should be updated to reflect the commitment made regarding the

construction of the roundabout. MassDOT would also like to work with Proponent regarding the timing of implementation as well as the funding for the design and construction of the roundabout which should be discussed prior to the submittal of the FEIR.

Transportation Demand Management

The Proponent proposes to provide a Transportation Demand Management (TDM) program with the goal of reducing vehicle trips to the Project site. This program, briefly summarized, will include:

- Designated parking spaces for carpooling will be conveniently located in the parking area between Buildings 13 and 14, which is centrally located to all commercial buildings. All designated parking spaces will be clearly identified with signage;
- The development will include an eight-foot-wide shared use concrete path that will connect the development to Route 10. The path will run adjacent to the main roadway through the development, and loop around the eastern residential portion of the development. The path will be wide enough to accommodate pedestrians and bicyclists;
- The development will include a concrete pad with a bike rack outside of every building within the development. The proposed bike rack locations are shown on plan series C-2 of the project plan set;
- Each residential apartment building will have secure bike storage rooms inside the buildings open to the residents;
- A Valley Bike Share station will be installed on the property along the sidewalk following Route 10. The proposed location is shown on the plan sheet C-2.1 of the project plan set;
- Recreational services will be provided on-site for the residents of the apartment buildings including a pool, community garden, and playground;
- On-site commercial businesses will provide services to the residents/employees within the development, including a daycare facility, restaurants, a bank, and a retail building. These services will help to reduce vehicle trips;
- Tasty Top LLC., will act as the transportation coordinator and provide onsite support and education on the Trip Reduction Plan to tenants; and
- The transportation coordinator will work with tenants and subcontractors such as waste disposal to schedule truck deliveries and traffic for off-hours to the extent practicable.

MassDOT finds the proposed TDM measures have the potential to reduce single-occupancy-vehicle trips to the Project site and acknowledges that the success of this program will be evaluated in part under the Transportation Monitoring Program (TMP) outlined below.

Transportation Monitoring Program

The Proponent will be required to conduct an annual Traffic Monitoring Program (TMP) for a period of five years, beginning six months after occupancy of the full-build project. The TMP will include:

- Simultaneous automatic traffic recorder (ATR) counts at the site driveway for a continuous 24-hour period on a typical weekday;
- Travel survey of employees and patrons at the site (to be administered by the Transportation Coordinator);
- Weekday AM and PM peak hour turning movement counts (TMCs) and operations analysis at "mitigated" intersections, including those involving site driveways; and
- Transit Ridership counts.

The goals of the monitoring program will be to evaluate the assumptions made in the DEIR and the adequacy of the mitigation measures, as well as to determine the effectiveness of the TDM program.

Section 61 Finding

Based on minimal Project impact, responsiveness to MassDOT commentary on the Project EENF, and the provided comments above, MassDOT recommends the preparation of a FEIR. The Proponent should coordinate with appropriate MassDOT sections during the preparation of the FEIR. If you have any questions regarding these comments, please contact *William.M.Simon@dot.state.ma.us.*

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Kim Driscoll
Lt. Governor

Rebecca Tepper
Secretary

Elizabeth Mahony
Commissioner

28 March 2024

Rebecca Tepper, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02114
Attn: MEPA Unit

RE: Sierra Vista Commons, Easthampton, MA, EEA #16729

cc: Jo Ann Bodemer, Director of Energy Efficiency, Department of Energy Resource
Elizabeth Mahony, Commissioner, Department of Energy Resources

Dear Secretary Tepper:

We've reviewed the Draft Environmental Impact Report (DEIR) for the proposed project. The project includes 140,400-sf of new multifamily buildings (ten, 3-story, 13,600-sf apartment buildings and one, 3-story, 18,000-sf building, total of 188 dwelling units) and the following commercial buildings:

Warehouse (2 buildings)	14,800-sf, total
Small retail	4,000-sf
Restaurant	5,500-sf
Gymnastics Studio	7,000-sf
Daycare Center	9,000-sf
Bank	3,200-sf

There is also a 16,000-sf building with retail/office and 14 residential units.

Executive Summary

The commercial buildings are proposing quality mitigation measures, including improved envelope and efficient electrification of space heating and hot water. The residential buildings, however, did not complete recommended evaluations of Passvehouse and the work that was

performed contains a significant error. Further, no Passivehouse evaluation was performed for the 14 units above the retail/office. The proposed dwelling units, built to Passivehouse, would be eligible for more than **$0.6M** in MassSave incentives. Detailed comments are herein.

COMMERCIAL BUILDINGS

All the buildings are less than 20,000-sf and thus qualify for the prescriptive pathway of the Stretch Code. This project has committed to be in compliance with Section C401.3, C402 through C406, and Section C408 of IECC 2021 Edition and the 2023 Stretch Code.

The proposed buildings include improved envelope which yields the following TEDI improvements:

Table 5.21 Heating and Cooling Thermal Load Demand Intensity (TEDI)

Building	Base Case Cooling (kBtu/sf/yr)	Mitigation Case Cooling (kBtu/sf/yr)	Cooling Improvement (kBtu/sf/yr)	Base Case Heating (kBtu/sf/yr)	Mitigation Case Heating (kBtu/sf/yr)	Heating Improvement (kBtu/sf/yr)
Warehouse/Storage	13.18	11.31	14.2%	-9.97	-10.884	-9.1%
Small Retail	19.91	18.04	9.4%	-53.98	-49.63	8.1%
Restaurant	44.69	38.53	13.8%	-53.94	-52.11	3.4%
Mixed Retail	12.38	10.63	14.1%	-19.23	-18.53	3.7%
Gymnastics Studio and Daycare Center	9.32	8.08	13.4%	-36.39	-35.34	2.9%
Bank	11.02	9.1	17.5%	-37.46	-35.47	5.3%
kBtu/sf/yr = thousand British thermal units per square foot per year						

Thermally broken window and wall components will be used to eliminate thermal bridges. Wood construction buildings will have continuous insulation on exterior walls, while pre-engineered metal buildings will have foam on face of framing members to provide thermal break.

The roof insulation for the restaurant, small retail, mixed retail, and bank will be U-0.026 (R-38 equivalent). The roofs for the gymnastics center, daycare facility, and warehouse will provide U-0.024 (R-42 equivalent) at the exterior, with an additional interior insulation of U-0.077 (R-13 equivalent).

The project is proposing triple-pane low-E windows with a U-Factor of 0.24 and Solar Heat Gain Coefficient of 0.615.

All buildings will be space heated with electric air source heat pumps. Water heating in all buildings will be electric resistance. No propane, gas, or other fossil fuels will be used.

The HVAC units will have EER values more than 10% higher than IEC 2021 values. Energy Recovery Ventilation (ERV) units will be used for each building with approximately 70% heat recovery. Except for the Gymnastics Center and Warehouse, electric air-source Variable Refrigerant Flow (VRF) systems will be capable of energy recovery during concurrent heating and cooling.

We note that the warehouse is proposed with no energy recovery ventilation. Energy recovery ventilation is recommended. Note that the code generally mandates energy recovery ventilation for most applications. We recommend reviewing code requirements and committing to energy recovery ventilation even in the unusual event it is not required by code, as a mitigation measure.

Low air infiltration will be confirmed with whole-building testing in the field to ensure low heating and cooling TEDI.

All buildings except the gymnastic center and warehouse will have air infiltration of 0.25 cfm/sf at 75 Pa or less. The gymnastics center and warehouse will have standard-code air infiltration of 0.3 cfm/sf at 75 Pa.

RESIDENTIAL BUILDINGS

No information was provided for the 14-units proposed above the retail/office building. It's recommended that these units be Passivehouse with air source heat pump space heating and electric resistance water heating.

The three-story residential buildings are proposed to be all electric with HERS 45. HERS 45 is code minimum for an all-electric building.

The insulation levels for the residential buildings are: ceiling R-60 (wood frame); continuous exterior wall insulation of R-30 (Wood Frame); continuous floor insulation of R-30 (wood frame); and roof insulation of R-42.

The project is committing to an energy recovery system with a 70% effectiveness, or per C403.6.2 if using a direct control system. Air source heat pumps will provide all space heating.

In our previous review, we recommended an evaluation of Passivehouse. The evaluation provided was incomplete and erroneous, however.

<u>Error</u>

Our recommendation was to include a 'gap analysis' that compared: (a) what is being proposed; to (b) Passivehouse. In the gap analysis provided, however, rather than compare Passivehouse to what is being proposed (HERs 45, all electric), the gap analysis compared Passivehouse to IECC 2021 prescriptive code[1]. Because IECC 2021 prescriptive code is much lower standard than HERs 45, the gap in this analysis is artificially larger, which will make Passivehouse appear more expensive[2].

[1] Note, IECC 2021 prescriptive is not code minimum in Massachusetts. Minimum code for these buildings would be HERS 45, which is what is being proposed.

[2] For example, the gap analysis shows R-42 roof, taken from IECC 2021. In fact, an R-60 roof is proposed.

Incomplete

The gap analysis also did not include a professionally-estimated cost evaluation of first costs for the proposed case and first cost for the Passivehouse case, with the later netted against a $0.6M incentive. The analysis should also include a life cycle evaluation.

Further, we recommend estimating the peak electric demand (summer and winter) associated with the proposed HERs 45 case and the peak electric demand (summer and winter) associated with Passivehouse. Electric service loads may be able to be reduced with Passivehouse, which will provide further value.

The Passivehouse evaluation also did not appear to consider the 14 units above the office and retail.

Solar and EV

The project is proposing commendable, above-code, solar and EV commitments, as noted below.

Approximately 7,500-sf of residential rooftop will be dedicated to solar PV. This will provide more than 40% of flat rooftop for solar PV readiness. In addition, solar PV is planned for the Daycare Center, Gymnastics studio, and stand-alone retail buildings (with arrays of 5,000 SF or less per building). Additional roofs will be flat with 80% solar PV readiness which exceeds minimum solar readiness requirement.

Per the code, 20% of the residential parking spaces will be EV ready. As an above-code mitigation measure, 4 EV stations per residential building will be provided. For the commercial buildings, 25% of new garage spaces for the restaurant, bank, small retail, mixed-use retail, gymnastics studio & daycare center will be EV-ready, totaling 48 spaces.

Recommendations

1. Address the Passivehouse gap analysis and cost estimates as described herein.

2. Clarify what is proposed for the residential units above the retail/office buildings. Incorporate into the gap analysis.

3. We note that the warehouse is proposed with no energy recovery ventilation. Energy recovery ventilation is recommended. Note that the code generally mandates energy recovery ventilation for most applications. We recommend reviewing code requirements and committing to energy recovery ventilation even in the unusual event it not required by code, as a mitigation measure.

Paul F. Ormond, P.E.
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Massachusetts Department of Energy Resources