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CAPE COD COMMISSION

Cape Cod Commission Staff Report
Development of Regional Impact Review

DATE:	November 7, 2022
PROJECT:	Falmouth Road Market (Cape Cod Commission File No. 21015)
APPLICANT:	Shellback Development LLC
PROPERTY/SITE:	647 Falmouth Rd (Route 28) Mashpee, MA 02649 f/k/a 9 Shellback Way Assessor's Map 81 Parcel 132
HEARING DATE:	November 9 at 5:00 p.m., Virtual Hearing
SUBCOMMITTEE:	Ernest Virgilio (Chair), Tom Wilson, Peter Okun, Dennis Prebensen, Harold Mitchell

Development Context

Existing Conditions

- The Project is proposed on an undeveloped 3.97-acre parcel located at 647 Falmouth Rd (Route 28). The parcel is bordered by Route 28 on the east, Shellback Way and Rockland Trust Bank on the south, First Citizens Credit Union to the north, and the Deer Crossing Condominiums to the west ("Project Site"; "Site").
- Approximately 80% of the Site was disturbed for use as a sand mine in the 1990s and has since been revegetated, almost entirely with pitch pine saplings. In addition to the new growth, the previously disturbed portion of the Site also contains sand mounds and debris associated with prior mining operations. The northern portion of the site, near Jobs Fishing Road, and the eastern portion abutting Falmouth Road (Rt. 28), consist of undisturbed area.

Placetype

The 2018 Regional Policy Plan ("RPP") focuses on the review of proposed developments in relation to their surroundings. To this end, the RPP identifies eight Placetypes across the region and classifies areas based on similar natural and built characteristics. The Placetype for a given project is established at the outset of regulatory review and provides a lens to analyze the

project with respect to the goals and objectives of the RPP. The entire Project site is mapped within the Community Activity Center Placetype, and most of the parcel is also mapped within the Natural Areas Placetype, per the Cape Cod Commission ("Commission") RPP Data Viewer.

- *Community Activity Centers* are areas with a concentration of business activity, community activity, and a compact built environment. These areas are generally more walkable and densely developed than other Placetypes, including mixed commercial and residential uses and ample access to transit. The vision for Community Activity Centers is to accommodate mixed use development in a walkable vibrant area and provide diverse services, shopping, recreation, civic spaces, housing, and job opportunities, supported by adequate infrastructure.
- *Natural Areas* are generally the region's least developed and most sensitive areas. The vision for Natural Areas is to minimize adverse development impacts to sensitive resource areas, to preserve the lands that define Cape Cod's natural landscape and contribute to its scenic character, and to improve the Cape's resilience to severe storms and the effects of climate change. The Commission identified these areas by mapping MassWildlife's Natural Heritage & Endangered Species Program ("NHESP") BioMap2 Core Habitat and Critical Natural Landscapes, vernal pools, wetlands, protected open space, among other sensitive undeveloped lands.

The RPP development strategies for these Placetypes is intended to reflect their distinct natural and built characteristics, supporting appropriate development within Community Activity Centers, while discouraging adverse impacts to sensitive resource areas in Natural Areas. The Project Site is mapped as Natural Area based on NHESP's BioMap2 Core Habitat, though as indicated above and in the Wildlife and Plant Habitat analysis, most of the site has been previously disturbed. The site is not within any of the other Natural Area mapped resources included in the RPP Data Viewer.

Given their inherent differences, the Community Activity Center and Natural Area Placetype development strategies may not align across all RPP Goals and Objectives. As further discussed in this report, staff recommend that any conflicts between the two Placetype development strategies site be primarily resolved by treating the site as Community Activity Center except where the Goal or Objective relates to impacts to BioMap2 Core Habitat (See *Wildlife and Plant Habitat* and *Open Space*).

Development Plan

Development Description

The proposed development consists of:

- a new one-story building of approximately 13,229 sq. ft.+/-, designed for use as a specialty grocery store, which includes a loading area, trash/recycling enclosure, refrigerators, freezers, display shelves, restrooms, among other features associated with grocery store operations;

- a surface parking lot with handicapped spaces, electric vehicle (EV) charging stations, and bicycle racks. Access to the Project will be provided via a new driveway on Shellback Way and one ingress/egress point on Route 28; and
- a stormwater management system with infiltration basins and bio-retention areas; and
- landscaping, including supplementing the woodland buffer in the area adjacent to Route 28 with additional plantings and planting a mix of deciduous shade and evergreen trees are proposed throughout the Site (collectively, the "Project").

Background and Procedural History

The Cape Cod Commission Act charges the Commission with reviewing certain proposed developments which, due to their size or other characteristics, are presumed to have impacts beyond their local communities. Section 3 of the Commission's *Chapter A: Enabling Regulations Governing Review of Developments of Regional Impact ("Enabling Regulations")* (revised November 2021) sets forth certain thresholds, which, if met or exceeded, require the Commission to review such project as a Development of Regional Impact ("DRI"). The Falmouth Road Market, as described in the application materials, is subject to mandatory DRI review pursuant to Section 3(e)(i) of the Enabling Regulations because it proposes new construction of a retail building with a gross floor area greater than 10,000 square feet.

The Project was referred to the Commission by the Town of Mashpee on September 20, 2021, and withdrawn on October 20, 2021. The Project was referred by the Town a second time on January 10, 2022 and withdrawn on March 16, 2022.

The Town of Mashpee submitted the current DRI Referral for the Project on August 29, 2022. The Applicant submitted a DRI application to the Commission on September 15, 2022. The hearing period was opened procedurally by hearing officer on October 28, 2022.

DRI Review Standards

- Section 13(d)of the Cape Cod Commission Act and Section 6(c)(viii) of the Commission's *Enabling Regulations* contain the standards of review for DRI approval, which include, as applicable, consistency with the Cape Cod Commission Act and its Regional Policy Plan, consistency with municipal development bylaws, or, if inconsistent, that the inconsistency is necessary to enable a substantial segment of the population to secure adequate opportunities for housing, conservation, environmental protection, education, recreation or balanced economic growth, if within a District of Critical Planning Concern (DCPC), its implementing regulations, and if Commission-certified, the town's Local Comprehensive Plan. The Commission must also find that the probable benefit from the Project is greater than the probable detriment.
- DRI review of the Project is subject to the 2018 RPP, amended in March 2021, which is the version of the RPP in effect at the time of the Commission's first substantive public hearing on the Project. The Commission assesses the Project's consistency with the RPP by determining whether the Project is consistent with the Goals and Objectives in Section 6 of the RPP, as particular goals and objectives are deemed applicable and material to the Project.

Cape Cod Regional Policy Plan

Applicable and Material RPP Goals and Objectives

Commission staff reviewed the details of the DRI Application Materials and suggest that the following RPP Goals are applicable, material, and regionally significant and are thus subject to RPP consistency review: Water Resources, Wildlife & Plant Habitat, Open Space, Community Design, Transportation, Energy, Waste Management, Climate Mitigation, Cultural Heritage, and Economy. Commission staff make the following recommendations relative to the Project's consistency with these RPP Goals and relevant Objectives and Technical Bulletin guidance:

Water Resources

The Water Resources Goal of the RPP is to *maintain a sustainable supply of high-quality untreated drinking water and protect, preserve, or restore the ecological integrity of Cape Cod's fresh and marine surface water resources*.

The following Objectives are applicable and material to the Project:

- **WR1**—protect and preserve groundwater quality
- **WR3**—protect, preserve, and restore marine water resources
- **WR4**—manage and treat stormwater to protect and preserve water quality

Objective WR1: To meet Objective WR1, development be designed so that septic systems and other sources of contamination avoid adversely impacting downgradient existing or proposed drinking water wells. Projects must also contribute no more than 5 parts per million (ppm) site-wide nitrogen loading to groundwater sources unless located in Potential Public Water Supply Areas ("PPWSA") or Impaired Areas where stricter standards apply. This Project is not located within Potential Public Water Supply Areas, however, since the Project is proposed to be on private septic system (468.8 average gallons per day), the direction of groundwater flow and the proximity of public or private drinking water wells on neighboring parcels must be examined to verify that the Project is not contaminating nearby drinking water resources. Staff suggest that this additional information is needed to determine if the Project is consistent with Objective WR1.

Objective WR3: The proposed Project is located within a Marine Water Recharge Area ("MWRA") to Popponesset Bay, a nitrogen sensitive system. The wastewater for the Project is proposed to be treated by an on-site innovative/alternative technology denitrification septic system, FAST Treatment System with Nitrogen Reduction MicroFAST (by Bio-Microbics, Inc). This system is estimated to contribute an average of 19 ppm, which is less than a typical Title 5 septic system. Commission staff recommend that the Applicant be required to monitor the effluent from the I/A septic system to document the system's actual nitrogen concentration in the effluent as a condition to any DRI Decision.

The application includes a nitrogen load worksheet which indicates an average nitrogen loading of 24.13 kg/year for the site, and includes the managed turf, wastewater, and stormwater runoff. This results in a site-wide nitrogen loading concentration of 1.79 ppm, which is greater than the nitrogen loading limit of 0.0 ppm for the Popponesset Bay embayment. Nitrogen loading may be offset through a mitigation fee of not more than $200,038, or an alternative strategy for meeting the nitrogen load requirements pursuant to Objective WR3.

According to the Town of Mashpee Comprehensive Wastewater Management Plan (2015), the proposed Project is located on a parcel that is included in Phase II which includes connection to an upgraded South Cape Wastewater Treatment Facility. According to Town staff, Phase II is likely 3-4 years away, assuming Town Meeting authorizes the funds. Actual connection to the centralized sewer system would likely not happen for 5-6 years, minimally.

Objective WR4: This Objective requires all development to provide a stormwater management system which prevents adverse impacts to water and other natural resources. The Applicant's proposal for managing stormwater from impervious surfaces includes two separate treatment chains, with deep sump catch basins, proprietary separators, exfiltrating bioretention areas, subsurface structures, three infiltration basins and three bioretention areas. The proposed stormwater treatment systems utilize low impact designs and will treat for total suspended solids, pollution, while providing onsite groundwater recharge.

Commission staff note that the stormwater, landscaping, and erosion and sedimentation control plans will require revisions and additional information prior to a finding of consistency with WR4. The stormwater plans are missing some details of the subsurface systems.

The landscaping plan includes a non-native tree species, *Metasequoia glyptostroboides* (dawn redwood) for the infiltration basin near the proposed driveway off Shellback Way. Commission staff suggest that the erosion and sedimentation control (ESC) plan establish a more specific timeframe within which loam and seeding will be installed to stabilize graded and disturbed areas.

The Applicant has proposed more parking spaces than required by the Town. Commission staff has recommended that the Applicant make the additional spaces along the west side (22 spaces) and / or along the north side (24 spaces) of the parking lot porous pavement or grass grid pavers. This would reduce impervious cover and stormwater runoff for purposes of WR4.

Appropriate project management during and after construction, including the suggestions noted above, should mitigate potential impacts allowing the project to be consistent with Objective WR4.

Wildlife & Plant Habitat

The Wildlife and Plant Habitat Goal of the RPP is to *protect, preserve, or restore wildlife and plant habitat to maintain the region's natural diversity*.

The following Objectives are applicable and material to the Project:

- **WPH1**—maintain existing plant and wildlife populations and species diversity
- **WPH2**—restore degraded habitats through use of native plant communities
- **WPH3**—protect and preserve rare species habitat, vernal pools, 350-foot buffers to vernal pools
- **WPH4**—manage invasive species
- **WPH5**—promote best management practices to protect wildlife and plant habitat from the adverse impacts of development

The Project Site is at the eastern edge of a large (almost 25,000-acre) BioMap2 Core Habitat. It is not within any other sensitive natural resource areas. According to a review of historical photographs and the application materials, most of the Project Site was cleared of trees and mined for sand in the 1990s, altering its natural ecology and topography. The Project Site is also surrounded by existing development including Route 28 and South Cape Village to the east, commercial developments to the north and south, and a residential condominium development to the west. The Project Site was not developed at the time it was cleared and mined for sand in the 1990s and, over time, a pitch pine forest has grown on the site.

Objective WPH1: The Applicant prepared a Natural Resources Inventory (NRI) in accordance with Commission technical guidance. Staff suggest that the Project is consistent with WPH1 as it proposes to minimize new clearing and land alteration and cluster development to mostly that portion of the site that was previously disturbed. The Applicant also proposes to maintain the undisturbed natural buffer to Route 28 on the eastern side of the site and to plant native species within the buffer to the residential development on the western side of the site, providing for some wildlife passage to larger, intact habitat to the west. According to the NRI, the northern side of the site also contains an undisturbed natural buffer, but it does not appear any of this natural buffer will be retained within the area to be developed on the Site. The Applicant should confirm and document what species and sizes of trees will be removed from this area. According to the landscape plan, large trees, including some potential specimen trees, occur in the buffer to Route 28 and will be retained, except five trees (not specimens) will be removed for the proposed access/egress.

Objective WPH2: This Objective aims to restore altered or degraded habitats with appropriate native plantings. The proposed landscaping plan includes a suite of native species to enhance the buffers. Therefore, the Project is generally consistent with WPH2. Staff further suggest that it may benefit the Project to consider removing or replacing the non-native species currently listed on the landscape plan. While none of the plants included appear to be invasive, staff note that native species are generally more suitable for the Cape Cod landscape than non-natives.

Objective WPH3: The Project is in BioMap2 Core Habitat for Species of Conservation Concern. This resource area cannot be avoided through any other configuration as it covers most of the parcel. Following the sand and gravel operations in the 1990s, the Project Site was left to revegetate naturally and is now mainly pitch pine forest. The proposed development would contribute to permanent loss of this forested area. Staff suggest that the appropriate way to address such loss is through mitigation. The Applicant's open space mitigation, described below (See Objective OS3), should be designed to address this loss of forested BioMap2 Core Habitat.

Objective WPH4: This Objective may be met by employing Best Management Practices to avoid introducing any invasive species to a project site and developing a management plan to prevent the spread of any invasives currently on the site. According to the NRI, a small number of an invasive plants were documented on the Project Site. The Applicant proposes to remove the identified invasive species, consistent with WPH4. Commission staff recommend that, as a condition to any DRI Decision, the Applicant be required to develop and implement an invasive species management plan to ensure the invasive species, including soils associated with the invasive species on the Site, are handled properly to prevent its spread on and off the site.

Objective WPH5: The proposed Project is clustered on the portion of the site that had been previously disturbed. Staff suggests the Project is consistent with WPH5 as much of the previously undisturbed natural buffer along Route 28 would be retained. The proposed Project would also use techniques during construction to protect the more sensitive areas of the Project Site including construction fencing to the buffer area and erosion and sediment controls.

Open Space

The Open Space Goal of the RPP is *to conserve, preserve, or enhance a network of open space that contributes to the region's natural and community resources and systems*.

The following Objectives are applicable and material to the Project:

- **OS1**—protect and preserve natural cultural and recreational resources
- **OS2**—maintain or increase the connectivity of open space
- **OS3**—protect or provide open space appropriate to context

The Project site is surrounded by existing commercial, residential, and roadway development and is not adjacent to any protected open space.

Objective OS1: The Project proposes to minimize and cluster the development footprint to the area of the parcel that was previously disturbed, preserve the natural wooded buffer at the front of the site, and enhance the buffer on the rear of the site with slope-stabilizing native plantings. Staff suggest that these strategies are consistent with OS1.

To further minimize impervious surfaces, staff suggest eliminating development of the rear parking spaces if there is no demonstrable need or utilizing pervious paving and continuing to explore opportunities to utilize the existing access drive on Shellback Way, shared with the Rockland Trust Bank.

Objective OS2: The Project Site is not connected to any protected open space and provides limited opportunities for wildlife movement given the abutting road and other developments. However, staff suggest that the Project is consistent with OS2 as it will maintain vegetated buffers along the front and rear of the site and the existing pedestrian and bike path along Route 28 will also be maintained.

Objective OS3: DRIs are required to provide open space appropriate to context including Placetype. Area of development impact in Community Activity Centers must be mitigated at a ratio of 1:2 (i.e. one acre of open space mitigation for every two acres developed); Natural Areas must be mitigated at a ratio of 3:1 (i.e. three acres of open space mitigation for every one acre developed).

As noted above, the site is within both Community Activity Center and Natural Area Placetypes. The natural resource which underlies the Natural Area Placetype mapping is BioMap2 Core Habitat for Species of Conservation Concern. Considering the Placetype strategies for Natural Areas and the underlying resource, staff recommend a 3:1 open space mitigation ratio. Staff suggest that the preferred method to meet the requirement is to permanently restrict land from development in a Natural Area. Open space proposed for off-site protection should be of equal or higher natural resource value as the land being impacted.

The Area of Development Impact is approximately 3.4 acres. Based on the 3:1 open space mitigation ratio recommended by staff, approximately 10.2 acres of open space would be required. The Applicant consulted with the Mashpee Town Planner to locate properties of sufficient size to meet this requirement. The Applicant identified several properties and had limited success contacting owners. Asking prices for those properties whose owners responded were well above assessed values and, according to the Applicant, would make the Project uneconomic.

Staff subsequently suggested the Applicant contact local land trusts to identify potential parcels for acquisition or conservation restriction. Following this suggestion, the Applicant reached out to several organizations and identified one with strong interest in securing protection over open space in the Mashpee area. Conversation between the Applicant and the potential conservation partner are ongoing, as the parties work to locate suitable open space parcels. Staff suggest that the Applicant prioritize parcels which contain open space of equal or higher ecological value relative to the Project parcel.

The Applicant has alternatively proposed a cash contribution to meet its open space requirement under OS3. Staff suggests the calculation is generally consistent with Commission technical guidance and further notes that while a cash contribution is generally not an acceptable method for meeting an open space requirement for projects in Natural Areas, it is acceptable in Community Activity Centers. Given that this Project Site is in both Placetypes, staff suggest that the Subcommittee could find that a cash contribution is acceptable here.

Community Design

The Community Design Goal of the RPP is *to protect and enhance the unique character of the region's built and natural environment based on the local context*.

The following Objectives are applicable and material to the Project:

- **CD1**—promote context sensitive building and site design
- **CD2**—minimize the amount of newly disturbed land and impervious surfaces

Objective CD1: New development and redevelopment are encouraged in the Community Activity Center Placetype. While the structure is pulled back from the streetscape along Route 28, a vegetated buffer and sidewalk helps to define the streetscape. Locating new construction behind vegetation is one method of designing context-sensitive development under objective CD1. Because the current 50-foot buffer along Route 28 includes a 15' bicycle easement, it ultimately may be much narrower than 50 feet and likely will not provide full screening, especially along the building façade where existing trees will be removed, and the area replanted with short vegetation and groundcover. The Applicant has chosen to design the building with gable roof forms and greater façade variation instead of trying to achieve full vegetative screening.

The building façade along Route 28 is approximately 150' long with small projections to provide variation in the wall and roof form. The applicant added a series of three projecting bays with shed dormers to the southern portion of this façade, referencing smaller traditional building masses and increasing façade variation to 24'. This is just short of the recommended 10' of façade projection or setback per 50' of façade length. The other building facades are shorter in length (106' for the north façade, and 125' for the west façade) though still over 100', and therefore façade variation should be provided on these sides too. The primary walls on these facades do not include projections or setbacks, but the facades incorporate overhanging roof forms and columned porch areas that provide a similar level of variation. These interior-facing facades are unlikely to have significant visual impacts on the roadways and will likely primarily be visible from within the Project site. The overall proposed building will be 13,229 square feet, primarily as one massing, though the combination of varied roof ridge heights, façade projections, and partial vegetative screening helps to break up the massing and lessen its visual impact. The Project plans include information about the colors of proposed exterior siding

materials, but materials specifications are not included. The Applicant should provide specifications for the proposed siding, roof, and trim materials.

Parking is located to the side and rear of the proposed building and includes landscaped islands. Much of the vegetated area between the parking lot and Route 28 will be maintained and trees added, though it appears only deciduous trees will be planted. The Applicant may consider adding evergreens between the parking area and current buffer, as well as the western edge of the driveway to improve year-round screening. Along the western and northern sides, the parking area and building may be visible from the neighboring properties, were the vegetation on the neighboring properties to be removed or thinned. Staff understands there is a slope along the western side of the lot, but recommend denser, taller vegetation if feasible.

Objective CD2: This Objective may be met by clustering development on the site, minimizing total parking spaces to no more than the amount required by zoning, using permeable or pervious materials, and maintaining existing vegetation, among other methods. The proposed Project site is primarily disturbed area, though not currently developed or covered by impervious surfaces. As a single-story building with a large parking area, the Project will result in an increase of approximately 2.17 acres of impervious surface on the site. The site plans indicate the parking lot has approximately 50 more spaces than required under relevant zoning. Staff suggest exploring opportunities to reduce the amount of impervious surface. These may include utilizing permeable surfaces or pavers or building fewer than the proposed number of parking spaces initially and adding more only if demand is demonstrated. If it is not needed, removing some parking, especially along the western and/or northern edge, might allow for increased vegetated buffering, which could minimize the potential visual impact of the Project on neighboring sites. Staff suggest that the Project is inconsistent with Objective CD2 as currently designed.

Transportation

The Transportation Goal of the RPP is *to provide and promote a safe, reliable, and multi-modal transportation system*.

The following Objectives are applicable and material to the Project:

- **TR1**—improve safety and eliminate hazards for all users of Cape Cod's transportation system
- **TR2**—provide and promote a balanced and efficient transportation system that includes healthy transportation options and appropriate connections for all users
- **TR3**—provide an efficient and reliable transportation system that will serve the current and future needs of the region and its people

Objective TR1: To achieve consistency with this Objective, all projects must prepare an adequate Transportation Impact Assessment, provide safe pedestrian connections, apply good access management principles in site and driveway design, and locate driveways to provide acceptable

sight distance while minimizing sight distance obstructions from signs, vegetation, and other fixed items. Projects must also analyze off-site safety impacts as detailed in the technical bulletins and implement appropriate safety improvements.

Here, the Project has been designed to provide safe accommodations for both vehicular and non-vehicular (pedestrian/bicyclist) movements throughout the Site. The proposed site driveways meet the minimum safety requirements to provide safe stopping sight distance and access management tools have been implemented by restricting the Route 28 driveway to right turns only.

However, staff suggest that additional information is needed to evaluate the Project's consistency with Objective TR1. Staff suggest that the Applicant pursue:

- an ADA-compliant crossing for the shared use path across the new site driveway;
- confirmation that existing or proposed vegetation or signage will not be in conflict to affect sight lines at the site driveways;
- confirmation the Route 28 driveway is allowable as the site plans reference a note that "No driveway access to Route 28 is allowed";
- potential interconnections to proposed Project via the existing Rockland Trust driveway on Shellback Way and to the Eastern Bank and the future Mashpee Commons housing parcel parcels to the north;
- potential access point on Job's Fishing Road, potentially removing vehicle trips from the two Route 28 signals.

The TIAS safety analysis revealed there are four high crash locations that require mitigation. To address off-site safety impacts in Objective TR1, the Applicant has proposed to install various signage and striping improvements at 10 study area locations. Additionally, the Applicant is seeking to install a left turn lane on Route 28 at its intersection with Meetinghouse Road. Staff encourage discussions with MassDOT and Town officials on the proposed transportation mitigation items. Additionally, we ask the Applicant to coordinate with MassDOT on potential short-term, low-cost improvements that can be installed at the Mashpee Rotary intersection based on the Road Safety Audit (RSA) report to further address crash history at this intersection. Implementation of Flashing Yellow Arrow traffic heads at the Route 28 and Shellback Way intersection is another desirable safety enhancement. Staff anticipate continued discussions regarding the Project's proposed off-site transportation mitigation program as part of the review process and suggest that the information above is needed to determine whether the Project is consistent with TR1.

Objective TR2: DRI applications for employment sites with 25 or more employees must implement a site-specific Transportation Demand Management ("TDM") Plan. Proposed development should also construct sidewalks, multi-use paths and other bicycle/pedestrian connections within the site and connected to existing off-site networks. Here, the Project site

plan includes a complete internal sidewalk network connecting to the existing shared use path on Route 28. The Applicant is also proposing an appropriate Transportation Demand Management (TDM) program to support healthy transportation options and assist in the reduction of single-occupancy vehicle trips.

The Project Site is located along an existing CCRTA transit route with access to nearby stops and the Applicant is exploring a potential internal bus stop with CCRTA. A bicycle rack will be installed on site, however, Commission staff recommend locating the bicycle rack in a covered and more secure area near the building. Carpool parking spaces should be clearly identified on the site plan. Additionally, the Applicant should also consider replacing the existing pedestrian signal heads at the Route 28 and Shellback Way signal with countdown timers and ensuring ADA compliance is met at the signal to satisfy pedestrian safety, similar to the recent upgrade by MassDOT at the Route 28 and Job's Fishing Road signal. Another priority item for safety and pedestrian connectivity in the area is the installation of a pedestrian signal accommodations at the Route 28 at Orchard Road traffic signal. As the Applicant explores driveway interconnections with the properties to the north, a potential sidewalk easement/interconnection may also be desirable to Job's Fishing Road to allow for more direct access to future housing opportunities within Mashpee Commons. Staff suggest that more information regarding the viability of the above-mentioned driveway connections and pedestrian signal accommodations is necessary to determine consistency with TR2.

Objective TR3: This Objective deals primarily with managing vehicular congestion and maintaining adequate levels of service in the regional transportation network. The proposed and recommended mitigation measures discussed above for Objectives TR1 and TR2 will similarly assist in addressing potential impacts considered under Objective TR3, by offsetting vehicular trips and encouraging walking and bicycling with improved connections. The Applicant has proposed signal timing adjustments at the signalized intersections of Route 28 at Job's Fishing Road and Route 28 at Shellback Way and is in the process of developing conceptual plans of the proposed off-site transportation mitigation items for Commission review. Staff anticipate continued discussions regarding the Project's proposed off-site transportation mitigation program as part of the review process.

Energy

The Energy Goal of the RPP is *to ensure an adequate, reliable, and diverse supply of energy to serve the communities and economies of Cape Cod*.

The following Objectives are applicable and material to the Project:

- **EN1**—Support renewable energy development that is context-sensitive
- **EN2**—Increase resiliency of energy generation and delivery

- **EN3**—Minimize energy consumption through planning and design

The Project, as described in the Applicant's Energy Conservation and Sustainability Narrative and Greenhouse Gas Analysis, appears consistent with EN1, EN2, and EN3.

Objective EN1: This Objective may be met when a Project incorporates on-site renewable energy generation or alternative energy use, including, but not limited to: solar photovoltaic (PV), wind, solar thermal, geothermal, solar carport, fuel cells, or biofuels. Here, the Applicant proposes to use solar powered exterior lighting and will reserve a portion of the roof area as "solar ready". The application also indicates willingness to discuss other types of renewable energy generation or alternative fuels use at the site such as roof-mounted solar panels, solar carports, or biofuels. Therefore, the Project is generally consistent with EN1, subject to further discussion with the subcommittee.

Objective EN2: This Objective supports an adequate and diverse supply of energy on Cape Cod by increasing the energy resiliency of development which should result in long-term energy savings, reduced environmental impacts, and less strain on the energy grid. Methods for supporting this goal include locating utilities underground and managing for peak demand. Consumer-side demand management may be achieved through on-site energy storage technologies such as batteries, fuel cells, and emergency back-up generators.

The Project proposes placing all utility infrastructure underground. The Applicant is exploring natural gas fueled backup generation to provide energy to the development during periods where primary service is interrupted. Based on the application materials, staff recommend that the Project is consistent with EN2. The Applicant should confirm the source of proposed backup power generation when such information is available.

Objective EN3: This Objective aims to increase the energy efficiency of developments through site planning and design. Projects may achieve consistency by meeting efficiency benchmarks such as LEED, Energy Star certification, or incorporating energy efficient design elements, including but not limited to green roofs, combined heat and power systems, energy efficient lighting, electric vehicle charging stations and shade over paved areas. Applicants may propose alternative energy efficiency measures as appropriate for the type of project or as new technologies are developed and available.

Here, the Applicant proposes to incorporate energy efficient lighting, two electric vehicle charging stations, and plantings within the parking lot to shade pavement. These design elements should increase the energy efficiency of the Project and are consistent with the methods identified in EN3. Staff suggest the Applicant confirm whether the Project will include other energy efficient appliances such as the interior lighting, refrigeration, HVAC, and water systems presented in the Greenhouse Gas Analysis report.

Waste Management

The Waste Management Goal of the RPP is *to promote a sustainable solid waste management system for the region that protects public health, safety, and the environment and supports the economy*.

The following Objectives are applicable and material to the Project:

- **WM1**—to reduce waste and waste disposal by promoting waste diversion and other Zero Waste initiatives
- **WM2**—support an integrated solid waste management system

The Project, as described in the Applicant's waste management narrative, appears consistent with WM1 and WM2.

The RPP's Waste Management Goal and Objective primarily serve to support the Commonwealth of Massachusetts' Solid Waste Master Plan which aims for a "Zero Waste" future. Sustainable waste management may also have greenhouse gas reduction benefits. The Waste Management goal is material to proposed developments which are likely to involve significant solid waste generation, handling, or management. Here, the application indicates the Project will generate waste during the construction period and when operating as a grocery store.

Objective WM1: This objective focuses on waste diversion and solid waste reduction measures to benefit the economy, public health, and the natural environment of the Cape Cod region. Waste diversion approaches that a development may employ to achieve consistency with WM1 include, but are not limited to, increasing reuse of materials, increasing recycling of materials that have served their useful purpose, resource recovery of useful materials, and composting food and organic materials.

The proposed grocery store tenant has a waste reduction policy and sustainability framework which includes recycling, reducing packaging waste, diverting organic materials to compost, and donating unsold food to reduce food waste. The proposed waste management methods employed during the operational phase of the Project are consistent with WM1. Staff suggest the Applicant provide a copy of the proposed tenant's policies referenced in the waste management narrative for review by the subcommittee.

Objective WM2: This Objective may be met through proper management of construction and demolition waste and recycling. The Applicant proposes to conduct single-stream non-hazardous material recycling during the construction phase, retain a locally qualified waste management contractor, and give preference to local recycling facilities. The Applicant also proposes to reuse natural materials such as earth, stone, or gravel on-site where possible, and transport any materials that must be removed to local facilities for reuse. The proposed waste management methods employed during the construction phase of the Project are consistent with WM2. Staff suggest that Applicant should provide a detailed construction period waste management plan as a condition to the DRI decision if the Project receives approval.

Climate Mitigation

The Climate Mitigation Goal of the RPP is *to support, advance, and contribute as a region to the Commonwealth's interim and long-term greenhouse gas reduction goals and initiatives, including a state-wide net zero carbon target by 2050*.

The following Objectives are applicable and material to the Project:

- **CM1**—promote low or no carbon transportation alternatives and technologies
- **CM2**—promote low or no carbon technologies for building energy use, including appliances, lighting, and heating, ventilation, and cooling (HVAC) systems
- **CM3**—promote carbon sequestration and other emissions removal practices and technologies as appropriate to context
- **CM4**—Promote low or no carbon energy generation technologies as appropriate to context

The RPP Climate Mitigation goal aims to lower greenhouse gas ("GHG") emissions on Cape Cod consistent with the Commonwealth's overarching goals. The primary drivers of GHG emissions on Cape Cod are the transportation and energy sectors. Because climate change concerns cut across many land-use issues, the methods intended to satisfy other RPP goals, particularly Energy, may satisfy Climate Mitigation goals, and vice versa.

Objective CM1: This Objective focuses on reducing the carbon impact of transportation associated with the development through methods including but not limited to, providing pedestrian and bicycle infrastructure on site, connections to sidewalks and multi-use paths, and EV charging stations. Staff suggest the Project is generally consistent with this Objective based on the incorporation of EV charging spaces, pedestrian infrastructure, and other improvements cited in TR2 and EN3 above.

Objective CM2: This Objective may be met when a development incorporates energy efficiency measures such as optimized building design in accordance with Net Zero Energy building standards, and peak electricity demand reduction strategies. Staff suggest the Project is generally consistent with CM2 based on the measures cited in EN2 and EN3 above. The proposal includes energy efficient lighting and appliances, and peak energy demand reduction through on-site emergency generators.

Objective CM3: This Objective may be met when a project includes tree planting as part of a landscaping plan, incorporates native vegetation, and permanently protects open space, among other methods. Here, the proposed Project includes open space protection (see OS3 above), and native vegetation in the landscaping plans (see WPH1, WPH2, and CD1 above).

Objective CM4: Projects which include appropriate on-site renewable energy generation, the ability to install EV and/or PV infrastructure, and green power purchase agreements, among other strategies, may be consistent with this Objective. The Project proposes EV charging stations

within the parking lot and a portion of the building reserved as ready to support rooftop PV. Therefore, staff suggest the Project is generally consistent with CM4.

Cultural Heritage

The Cultural Heritage Goal of the RPP is *to protect and preserve the significant cultural, historic, and archaeological values and resources of Cape Cod*.

The following Objectives are applicable and material to the Project:

- **CH1**—protect and preserve forms, layouts, scale, massing, and key character defining features of historic resources, including traditional development patterns of villages and neighborhoods
- **CH2**—protect and preserve archaeological resources and assets from alteration or relocation

Objective CH1: This Objective may be met by siting new development outside of cultural landscapes and generally preserving historic structures present in the proposed development area. Here, no historic structures have been identified on the subject property or in the vicinity of the proposed development that would be impacted. The Project is located outside of cultural landscapes such as open farmlands or designed gardens. Therefore, the proposed project is consistent with Objective CH1.

Objective CH2: This Objective may be met where a proposal sites new development away from significant archaeological sites. The letter dated February 11, 2022, from the Massachusetts Historical Commission indicates that the Project site area is not considered archaeologically sensitive. Therefore, the project is consistent with Objective CH2.

Economy

The Economy Goal of the RPP is *to promote a sustainable regional economy comprised of a broad range of businesses providing employment opportunities to a diverse workforce*.

The following Objectives are applicable and material to the Project:

- **EC1**—protect and build on the Cape's competitive advantages
- **EC2**—use resources and infrastructure efficiently
- **EC4**—encourage industries that provide living wage jobs to a diverse workforce

Objective EC1: Businesses that provide local services for both residents and visitors are encouraged in Community Activity Centers. This Objective may be met when a project incorporates uses that promote walkability and multimodal transportation, and clusters new development to preserve high quality open space. The proposed Project, located within a Community Activity Center, will provide necessary services—a grocery store—for both residents

and visitors. The Project site and surrounding area has existing pedestrian and planned multi-modal infrastructure, which may help improve walkability and the use of multiple forms of transit. While the Project site itself currently is not developed, the site is also proximate to and surrounded by development, both commercial and residential. Therefore, the Project is consistent with Objective EC1 strategies for the Community Activity Center Placetype.

Objective EC2: Specifically for developments in Community Activity Centers, development is encouraged to provide or support existing infrastructure in these areas for the development of multi-family housing, mixed-use commercial space, and other uses in a compact, walkable environment. Development should use available resources efficiently by adopting a compact form and including a mix of uses to encourage pedestrian activity. The proposed Project will use resources and infrastructure efficiently by developing in a relatively walkable area served by pedestrian infrastructure, and proximate to other commercial and residential development in the area. It is also located along a Cape Cod Regional Transit Authority route, and the application states the Applicant will explore the possibility of providing a formal stop at the site along the CCRTA bus route.

Objective EC2 may be met by locating development in areas served by public transit, water, and wastewater. This Project will utilize existing municipal water and natural gas infrastructure. The area is slated for Phase II of Mashpee's Comprehensive Watershed Nitrogen Management Plan and so may eventually be able to utilize that infrastructure as well. Therefore, the Project is generally consistent with EC2.

Objective EC4: Development may support this objective by demonstrating how a project will provide high-quality employment opportunities. Specifically, projects are encouraged to create year-round jobs, pay above-average wages, provide career training, job benefits, and affordable housing for employees. The proposed Project, as outlined in the economic narrative, anticipates creating year-round jobs with benefits however additional detail is needed to determine whether the Project is consistent with EC4 as proposed. Staff suggest that the applicant provide more information including wages, employee benefits, and other details as outlined in the Energy technical bulletin at pages EC17-EC19.

Other DRI Standards of Review

Prior to approval of any DRI application, the Commission must find that the proposed project is consistent with municipal development bylaws and any Commission-certified Local Comprehensive Plan ("LCP"). Commission staff communicated with Evan Lehrer, Town Planner for the Town of Mashpee (see Letter from Evan Lehrer to Alex Peterson, dated 10/17/2022).

Consistency with Local Zoning Bylaw

The Town of Mashpee Planning department recommends that the proposed Project is consistent with the local zoning bylaw.

Consistency with Mashpee's Local Comprehensive Plan

The Town of Mashpee Planning Department recommends that the proposed Project is generally consistent with the LCP, subject to additional suggestions detailed below.

The Land Use and Growth Management element of the LCP contains an objective that any new growth be focused on designated village and industrial centers and directed away from natural resources or groundwater recharge areas. The Project is located in an area designated by the Town of Mashpee in its 1998 LCP as a growth or activity center: 'Mashpee Rotary." Further, the land use element seeks to improve the number, range, and quality of the retail, service, and recreational opportunities for residents.

The Town suggests the Applicant consider installing solar parking canopies over the surface parking areas on site to better ensure that the project will promote energy efficiency as encouraged by the land use element of the LCP.

Further, the economic development element of the 1998 LCP seeks to:

- attract new businesses that are compatible with Mashpee's goals, its business mix, and economic, cultural, and environmental resources
- to increase year-round employment opportunities
- to reduce the need for residents to shop in adjacent towns by providing as many retail and service businesses locally as can be supported.
- to enhance the attractiveness of our commercial areas to town residents, residents of adjacent towns, and tourists by maintaining and improving ease of access, increasing the number and variety of businesses, improving appearance, encouraging attractive pricing..."
- to ensure that convenient and safe bicycle and pedestrian areas are provided in commercial developments and that large-scale commercial activities are concentrated in village/commercial centers where adequate infrastructure and alternative transportation access is available.

The LCP contemplated a number of intersection improvements in and around Deer Crossing that are worth noting for this project. These improvements have not yet been made however would likely benefit this project as well as the business owners and residents of Deer Crossing.

The LCP seeks to reduce and consolidate curb cuts to Route 28. To better achieve this goal, it may be preferable to provide access from Shellback Way as proposed, and from Job's Fishing Road via the access easement shown on the submitted plans. The Applicant should consider pursuing an agreement with Mashpee Commons to secure access via Job's Fishing Road. At minimum, pedestrian access from Job's Fishing Road would demonstrate better consistency with the LCP.

The Town suggests that the proposed Project is generally consistent with Mashpee's LCP, but noted that attention to the following would be beneficial:

- transportation, including the shared use path/bike path easement along the Project Site's Route 28 frontage and potential multimodal access from Job's Fishing Road; and
- architecture, site design, and landscaping