# EDGARTOWN GARDENS TRANSPORTATION IMPACT ASSESSMENT DRAFT SCOPE OF WORK AUGUST 21, 2023

#### **SCOPE OF SERVICES**

### 1.0 <u>Initial Investigations</u>

- Review previous studies of the area, including studies by other consultants, the state, regional planning agencies, and the local community, in addition to any past VAI efforts.
- Consult with the development team to determine permitting strategy and timelines, evaluate local and state requirements, and review the history and previous efforts, if any, at the site and adjacent properties.
- Visit the site to update available information and observe factors that can affect access, circulation and the selection of potential improvement strategies.
- With prior approval of CLIENT, consult with local and state officials to review permitting procedures, submission requirements and design standards.
- Perform an evaluation of the Transportation thresholds of the Massachusetts Environmental Policy Act (MEPA) as they relate to the project with consideration of the current/former use of the site.

### 2.0 Transportation Impact Assessment (TIA)

- Gather physical and operating information for area roadways which will include:
  - Traffic volumes
  - Roadway geometrics
  - Traffic operating parameters
  - Speed limits
  - Sight distance measurements
  - Pedestrian and bicycle facilities
  - Public transportation services
- Obtain a 72-hour (Thursday through Saturday, inclusive) automatic traffic recorder count on Upper Main Street and Chase Road in the vicinity of the project site in order to evaluate traffic volumes and vehicle travel speeds along these roadways over an extended period.
- Obtain manual turning-movement and vehicle classification counts for a two-hour weekday morning period (7:00 to 9:00 AM), a four-hour weekday evening period (2:00 to 6:00 PM) and a three-hour Saturday midday period (11:00 AM to 2:00 PM) at the following intersections:
  - Upper Main Street and Beach Road at Edgartown-West Tisbury Road
  - Upper Main Street at Chase Road
  - Upper Main Street at Cooke Street
  - Upper Main Street at Edgartown-West Tisbury Road
  - Edgartown-West Tisbury Road at Cooke Street



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- Existing traffic volumes will be seasonally adjusted to average-month and peak-month conditions, and to account for impacts resulting from the COVID-19 pandemic, if necessary, in accordance with Martha's Vineyard Commission (MVC) and MassDOT requirements.
- Complete an inventory of available public transportation services and service routes for the study area.
- Obtain motor vehicle crash data for the study area roadways and intersections for the most recent
  five-year period available from MassDOT and/or local police department records. Detailed crash
  rate calculations will be performed for each of the study intersections. In addition, a review of
  the MassDOT high crash location database will also be undertaken for the study area.
- Estimate future No-Build traffic volumes from historic traffic counts and from information on recently approved or proposed projects. Increases in background traffic growth will then be established and applied to the existing traffic-flow networks to develop the base future No-Build analysis networks. The future conditions horizon year shall be established as a 7-year projection from the base year (existing condition) in accordance with MassDOT guidelines.
- Estimate the trip generation characteristics of the project based on trip-generation data available from the Institute of Transportation Engineers (ITE)<sup>1</sup> or other appropriate source for each analysis period (average weekday and Saturday, and weekday morning, weekday evening and Saturday midday peak hours). The base trip calculations for the project will be disseminated to the modes of transportation available to the project site, as appropriate, using data from the U.S. Census or other source. Traffic volumes expected to be generated by the project will be added to the future No-Build traffic volumes to establish the Build condition traffic volumes.
- Assess volume-to-capacity ratios, level of service, and vehicle queuing for existing and future average and peak-month traffic volume conditions at the study area intersections and project driveway(s). The traffic analysis will be based on the existing street system and any planned roadway improvements. The extent and nature of any system deficiencies will also be identified. The analysis will be formatted using the accepted Highway Capacity Manual (HCM)<sup>2</sup> methodology and associated software. The following analysis conditions will be examined:
  - Existing conditions 2023
  - Future conditions without the proposed project (No-Build condition) 2030
  - Future conditions with the proposed project (Build condition) 2030 unmitigated
  - Future conditions with the proposed project (Build condition) 2030 mitigated

<sup>2</sup>Highway Capacity Manual, National Academy of Sciences, Transportation Research Board; Washington, D.C.; 2010.

<sup>&</sup>lt;sup>1</sup>Trip Generation, 11<sup>th</sup> Edition; Institute of Transportation Engineers; Washington, DC; 2021.

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- Perform sight distance measurements at the site driveway intersection(s) in accordance with American Association of State Highway and Transportation Officials (AASHTO)<sup>3</sup> standards. Recommendations will be made as necessary in order to provide the required lines of sight.
- Define at a conceptual level off-site transportation infrastructure improvements that may be necessary to: i) provide safe and efficient access to the project; ii) address current deficiencies; and iii) accommodate project-related traffic (motor vehicles, pedestrians and bicyclists, as appropriate). Preliminary construction cost estimates will be developed for identified roadway/intersection improvements for CLIENT use.
- Develop the framework of a Transportation Demand Management (TDM) program for the project that will include specific measures that are designed to encourage the use of alternative modes of transportation to single occupant vehicles (i.e., public transportation, walking, bicycling and car/vanpooling).
- Review the parking demands for the project using data available from the Urban Land Institute (ULI),<sup>4</sup> the ITE,<sup>5</sup> the local zoning ordinance, or other appropriate source. The overall peak parking demand will be identified for the project and will be compared to the local zoning requirements for parking and the proposed parking supply. Where a parking shortfall is identified, a parking management plan will be developed in order to reduce the projected parking deficit.
- Prepare a draft report summarizing the results of the analysis for CLIENT review and comment.
- Prepare a final report, upon CLIENT review and approval of the draft, which incorporates pertinent comments for use in submitting to the project approval process.

<sup>&</sup>lt;sup>5</sup>Parking Generation, 5th Edition; Institute of Transportation Engineers; Washington, D.C.; January 2019.



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<sup>&</sup>lt;sup>3</sup>A Policy on Geometric Design of Highway and Streets, 7<sup>th</sup> Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018.

<sup>&</sup>lt;sup>4</sup>Shared Parking, Third Edition; Urban Land Institute; Washington, D.C.; 2020.