

**TRANSPORTATION IMPACT ASSESSMENT
SCOPE OF WORK**

**PROPOSED 70 SEAT RESTAURANT
STONE BANK - TISBURY, MASSACHUSETTS
11-08-2021**

1.0 Initial Investigations

- Review previous studies of the area, including studies by other consultants, the state, regional planning agencies, and the local community.
- 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.
- Consult with local and state officials to review permitting procedures, submission requirements and design standards.

2.0 Transportation Impact Assessment (TIA)

The scope of the Transportation Impact Assessment (TIA) shall consist of the following tasks:

- Gather physical and operating information for area roadways which will include:
 - Traffic volumes, including bicycle and pedestrian counts
 - Roadway geometrics
 - Traffic operating parameters
 - Speed limits
 - Sight distance measurements
 - Pedestrian and bicycle facilities
 - Public transportation services
- Complete the following data collection effort during the peak summer season (defined as July through the 3rd week of August) and off-peak season (March/April).
 - Collect 48-hour (two consecutive weekdays) vehicle volumes, classifications, and speeds using automatic traffic recorders (ATRs) on Beach Road, Water Street, Union Street, Main Street, Church Street, and the surrounding network of 1-way roads in the vicinity of the project site 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 three-hour weekday midday period (11:00 AM to 2:00 PM), a two-hour weekday evening period (4:00 to 6:00 PM) and a three-hour Saturday midday period (11:00 AM to 2:00 PM) at the following intersections:
 1. Beach Street at Beach Street Extension, Beach Road, Water Street, Lagoon Pond Road (Five-Corners)
 2. State Road at Beach Street and Main Street
 3. Water Street and Union Street

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4. Union Street and Main Street
 5. Main Street and Church Street
 6. Main Street and Norton Lane
 7. Church Street and Franklin Street
 8. State Road and Camp Street
 9. State Road at Look Street and Edgartown-Vineyard Haven Road
- Complete an inventory of available public transportation services and service routes within the study area.
 - Obtain bike/ped crashes as well as motor vehicle crash data for the study area roadways and intersections for the most recent three-year period available (2018 through 2020 or 2017 through 2019 (if available)) from MassDOT and the Tisbury Police Department. Detailed crash rate calculations will be performed for each of the study intersections.
 - 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 traffic generated by the project based on trip-generation data available from the Institute of Transportation Engineers (ITE)¹ or other appropriate source for each analysis period (average weekday and weekday morning and evening peak hours). 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 and will reflect the distribution of traffic that may result from the establishment throughout the surrounding neighborhood
 - Analysis of traffic generated by previous land uses occupied on the property, i.e., bank, etc.
 - Assess volume-to-capacity ratios, level of service, and vehicle queuing for existing and future conditions under both average and peak-month 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)² methodology and associated software. The following analysis conditions will be examined:
 - Existing conditions – 2021
 - Future conditions without the proposed project (No-Build condition) – 2028
 - Future conditions with the proposed project (Build condition) – 2028 unmitigated

¹*Trip Generation*, 10th Edition; Institute of Transportation Engineers; Washington, DC; 2017.

²*Highway Capacity Manual*, National Academy of Sciences, Transportation Research Board; Washington, D.C.; 2010.

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- Future conditions with the proposed project (Build condition) – 2028 mitigated
- Perform sight distance measurements at the site driveway intersection(s) in accordance with American Association of State Highway and Transportation Officials (AASHTO)³ standards. Recommendations will be made as necessary in order to provide the required lines of sight.
- Assess the parking demands for the project using parking demand data obtained from the Urban Land Institute (ULI),⁴ the Institute of Transportation Engineers (ITE),⁵ 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.
- 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). Specific areas to be addressed will include: pedestrian and bicycle accommodations, accessibility and connectivity; traffic control devices (signs, pavement markings, etc.); lighting; and overall safety for all roadway users (i.e., pedestrians, bicyclists, motor vehicles and public transit users).
- 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).
- Analysis of ridership impacts to the VTA including mode splits (ped/bike trips).
- Prepare a report summarizing the results of the analysis and the associated findings and recommendations for submission in support of the project approval process.
- The applicant shall apply for proceed through the process and receive any state or local permits necessary for development of the project roadways prior to the site plan receiving final town approval. Any improvements shall be designed and constructed prior to certification of occupancy.

³*A Policy on Geometric Design of Highway and Streets*, 7th Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018.

⁴*Shared Parking*, Second Edition; Urban Land Institute; Washington, D.C.; 2005.

⁵*Parking Generation*, 4th Edition; Institute of Transportation Engineers; Washington, D.C.; 2010.