Massachusetts Gaming Commission

RFA-2 Application Review

Category 1 License for Casinos: Region A

Report to the Commissioners for: Category # 4—Building and Site Design

Commissioner James F. McHugh

September 8, 2014

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Rating System

Color coding and rating explanation

INSUFFICIENT	Failed to present a clear plan to address the topic, or failed to meet the minimum acceptable criteria of the Commission.
SUFFICIENT	Comprehensible and met the minimum acceptable criteria of the Commission; and/or provided the required or requested information.
VERY GOOD	Comprehensive, demonstrates credible experience and plans, and/or excels in some areas.
OUTSTANDING	Uniformly high quality and demonstrates convincing experience, creative thinking, innovative plans and a substantially unique approach.

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2. Overall Rating, Category 4, Building & Site Design

The 79 Category 4 questions roll up into one of seven Criteria summarized on pages 7 through 9. In turn, the seven Criteria roll up into this Overall Rating for Category 4. Both Applicants were rated sufficient for Criteria 5, 6, and 7 demonstrating an understanding and good progress related to permitting; offering security and surveillance measures consistent with their other properties; and adequately demonstrating control of the site for the proposed casino. The differentiators are found in the first four Criteria which examine Creativity and Excellence; High Caliber Amenities; Compatibility with Surroundings; and Sustainability.

S VG	**Mohegan Sun|Revere** The Applicant responded well to Criteria 1, 3 and 4 and adequately to Criterion 2. It proposes a resort casino, estimated to cost $570 million, that is contemporary and the building configuration and material choices are consistently sensitive to its surroundings. The overall design is suggestive of the resort legacy for which Revere Beach is renowned. The Applicant has recognized the need to create an exterior that is understated with respect to massing, materials, fenestration, lighting, and site circulation. In deference to its partially residential context, the project's edges pull back from the bordering streets and reinforce the distinct inward focus of the development. Its southwestern entrance and porte cochere direct customer and service vehicles onto the site away from residential streets. Its two hotels towers, (one 3-star, one 4-star) are relatively low profile with gently curved footprints and exterior treatments that visually break up the volume. The building program is well thought out with a quality of proposed finishes comparable to Mohegan Sun's facilities in Connecticut. The Applicant is committed to pursue LEED Gold Certification. The design incorporates sustainability features and commits to 20% of its electricity via on-site generation of renewable energy and purchase of Renewable Energy Certificates (RECs). Other features include a robust sustainability education program; an aggressive water conservation program; and a cleanup of Sales Creek with enhanced landscaping features. Mohegan Sun proposes traffic management and mitigation measures are that are complete and workable. The site is accessible to the larger roadway network at three locations, and two vehicular entrances/exits are provided for on-site patron parking. Mohegan Sun has developed two alternatives for improving traffic flow along Route 1A and both improve conditions at the Boardman Street intersection. Mohegan Sun takes advantage of its proximity to MBTA's Blue Line Beachmont Station with an attractive and prominent pedestrian entry at the site's northeast corner. Also the Applicant will enhance the station which, when coupled with the proximate casino entrance, will stimulate use of public transit. The design approach fits well with the site and adjacent neighborhoods, is attractively styled, and demonstrates its compatibility with surroundings. It could be further enhanced by opening the casino level to the racetrack with added fenestration and perhaps terraces for dining. Though configured sensitively with respect to its neighbors, the experiential connection to nearby Revere Beach could be more carefully developed to reach its full potential.
S	**Wynn|Everett** The Applicant responded adequately to well on three of the first four Criteria but less than adequately on Criterion 3, primarily because of its treatment of Sullivan Square. Wynn has chosen to redevelop a heavily contaminated waterfront site formerly occupied by a chemical manufacturer and currently barred from public use and enjoyment. Wynn proposes to clean up the site; dredge the river; create a richly landscaped open space welcoming public use; and complete the link to the Mystic River Reservation. The proposal conforms to the Everett Municipal Harbor Plan and the Lower Broadway District Urban Renewal Plan and will be a potential catalyst for a changing waterfront. The resort (aside from site cleanup) is estimated to cost $1 billion. The design emphasizes the luxury market featuring a 5-star hotel and amenities consistent with the Wynn brand. It adapts to its site—the building occupies a majority of the site while still allowing for continuous open space along the waterfront. An attractive retail galleria extends into the southern part of the site with a 365-foot hotel tower on the north side above the casino floor, all above a four-level underground garage. The waterfront galleria references European civic buildings of the 18th and 19th centuries. But the hotel tower is stylistically different from and unrelated to the base's traditional detailing. Moreover, the tower does not have the innovative energy characteristic of Wynn's Las Vegas hotels and of the best new construction in the Boston region. This is a particular concern for a building that will occupy such a prominent place on the Boston Area skyline. The project will be LEED Gold certifiable and demonstrates compliance with sustainability goals and use of renewable electricity sources (10%) via on-site generation and RECs. Wynn addresses transportation issues with varying degrees of detail. The project site will be served by a single main driveway with a secondary driveway for service vehicles and employee shuttles. Patrons will access the garage through a single entrance/exit. The Wynn proposed traffic mitigation measures are adequate except at Sullivan Square, projected to carry about two-thirds of the project's traffic. The proposed near-term improvements at Sullivan Square are incompletely developed because the mitigation does not address the eastern or northern portions of the rotary, and deficient primarily due to interferences created by traffic queuing at several closely spaced intersections. There is uncertainty about the design, funding, and timing of a long-term solution at Sullivan Square and Wynn has not committed to participate in its design or construction. The Application does cite proximity to public transportation and proposes use of shuttle busses plus its own water shuttles connecting with downtown locations. The choice of the site, the toxic cleanup, and revitalization of the area represent a positive outcome for Everett but an undramatic hotel tower architecturally inconsistent with the building's base and the incomplete and deficient mitigation plans for Sullivan Square downgrade this rating.

3. Criteria Rating Summary

	Mohegan Sun|Revere	Wynn|Everett
1. Demonstrate Creativity in Design and Overall Concept Excellence	S VG	S
	Mohegan Sun proposes to redevelop approximately 40 acres currently occupied by the Suffolk Downs stables into an urban resort casino located next to the MBTA Blue Line Beachmont Station. The proposal draws inspiration from the legacy and history of Revere Beach. The building program and design respond to a variety of adjacent site conditions including the racetrack, commercial retail, a busy artery, two-story homes and a neighborhood retail district. A large, prominent pedestrian entrance is situated at the corner closest to the MBTA station providing a strong visual connection, a modest public plaza, and access to the interior retail arcade. A separate vehicular court entrance is located on the opposite corner across from a retail strip mall. The primary program elements are located above street level, on top of a three-story parking structure. Building massing is modulated, stepping back from the street and adjacent residential homes and following the curve of the racetrack, with hotel rooms distributed into two low-rise towers. Sales Creek, which cuts across the site, is enhanced and integrated into the development, along with landscaped berms that partially conceal the structured parking at the base and a linear park and walking trail that parallels Winthrop Avenue. The curving, contemporary structure is distinguished by a series of large concrete canopies suggestive of beach umbrellas, which extend along the circulation spine of the building. The façade, primarily inward looking, provides glimpses of interior activity through the glass enclosed pedestrian lobby. Sustainability features include a PV field and rooftop garden and greenhouses. Although the design is inward looking with only one pedestrian entrance; incorporates very limited public open space; and presents a limited connection to Revere Beach, it offers the promise of a distinctive, modern resort casino. Wynn proposes to redevelop approximately 26 developable acres of former industrial land along the Mystic River into a luxury resort casino that embraces its waterfront location. The proposed development is consistent with the City of Everett's vision for the Mystic River waterfront. It introduces public access and amenities to a previously inaccessible, heavily contaminated site along the water's edge and provides connections to the Mystic River pedestrian network. The proposal entails extensive environmental cleanup; river dredging for marine access; a dock to facilitate water transportation; and generously landscaped outdoor spaces (although the outdoor amphitheater described in the application does not appear in FEIR documentation). Given the site constraints in terms of access, acreage, and context, Wynn proposes a clear and appropriate site strategy that is responsive to the waterfront at the ground plane and offers a sky lit retail concourse and winter garden. The proposed building incorporates a mix of architectural styles including a low, traditionally detailed retail concourse with domed roofs and a 27-story hotel tower that appears inconsistent with the base. While the promise of a luxury resort, reclamation of the waterfront for public use, and aspects of the proposed design are appealing, it is unclear whether the proposed design provides a distinctive solution that makes the most of this opportunity. Mohegan Sun presents a creative design that recognizes its place within its surroundings. Wynn presents a development plan with many positives but the hotel tower does not have the innovative energy characteristic of its Las Vegas hotels and of best new construction in the Boston Area.	
2. Gaming Establishment of High Caliber with Quality Amenities in Partnership with Local Facilities	S VG	VG
	Mohegan Sun provides amenities complementary to—and consistent with—a resort casino intended to appeal to a cross-section of the marketplace. Their proposal is distinguished by a large gaming area adjacent to retail, hotel, and conference spaces; two hotel offerings—a 3-star "boutique hotel" and a 4-star "casino hotel"; and development of some of the roof as outdoor space for patrons. Wynn emphasizes their approach to the luxury market—including upscale retail tenants, nightclub, and 5-star hotel suites—consistent with their experience in other markets. Coupled with this approach is a site location accessible by water and a well-developed landscape connected to the waterfront and open to the public. The Wynn/Everett proposal consciously separates the gaming floor from the hotel and retail experience. Its retail concourse is punctuated by a winter garden to provide seasonal interest. Wynn takes a lead on this Criterion for its repurposing of a difficult, toxic site advancing regional waterfront goals, and by separating its gaming floor from non-gaming amenities. Further, Wynn estimates total cost of construction at $1B; Mohegan Sun at $570 M.	

3. Criteria Rating (cont.)

	Mohegan Sun|Revere	Wynn|Everett
3. Compatibility with Surroundings	S – VG	I – S
	The most complex concern in this Criterion is traffic mitigation. Both Applicants have addressed this issue identifying numerous intersections and roadways for improvements to mitigate the impact of the project-generated traffic, and in some cases to improve the traffic flow. The major differentiator between the Applicants is: Mohegan Sun mitigation measures for major impacted roadways are complete and workable; the Wynn measures for Sullivan Square remain incomplete. The approach to public transportation differs based on the site locations: notably Mohegan Sun is situated adjacent to the MBTA Blue Line Beachmont station and takes full advantage of promoting this transit connection; Wynn offers shuttles to nearby Orange Line stations and proposes to build a fleet of water shuttles with 49 passenger capacities serving downtown Boston, Logan Airport, and the Convention Center/Innovation District. Each Applicant describes its relationship with surroundings. Mohegan Sun is located adjacent to a residential neighborhood to the north and east and suggests sufficient measures to control both noise and lighting impacts. Wynn is located in an industrialized area with no abutting residential properties and its noise and lighting measures are consistent with this environment. Both sites have access to adequate water and sewer service. Both Applicants make use of neglected sites and improve storm water runoff volume and quality. The Wynn location is a toxic site formerly used for chemical manufacturing. Wynn will clean the site and incorporate waterfront public uses for the first time. Mohegan Sun responded well to traffic mitigation and adequately addressed other issues in this Criterion. The Wynn project has a major weakness with respect to the traffic mitigation solutions at Sullivan Square. It responded adequately to the other questions and contributes in a positive way to the surroundings with the proposed site cleanup and waterfront development.	
4. Utilize Sustainable Development Principles in the Construction and During the Life Cycle of the Facility	VG	S – VG
	Mohegan Sun's approach to energy and sustainability reflects Mohegan Sun's experience in Connecticut and related tribal culture and values. The Applicant's approach is enhanced by their specific commitment to pursue LEED Gold Certification under the auspices of the U.S. Green Building Council. Additionally, the Applicant has stated their commitment to comply with the Massachusetts Stretch Energy Code and to meet 20% of their electrical requirements via renewable energy or certificates. The Applicant's approach to site elements (including Sales Creek), storm water management, water reduction, and ongoing operations is consistent with their overall sustainability strategies. Additional sustainability commitments of note include: thermal storage to shave peak loads; partnership to provide waste for off-site biofuel generation; a green roof with greenhouse for local food production; and robust education program including building tours. Applicant generally provided complete responses to questions in Criterion 4. Wynn's approach to energy and sustainability is notable for its emphasis on improved efficiency and operations. The Applicant commits to achieving a project that would be certifiable under the U.S. Green Building Council LEED NC 2009 guidelines at a level of Gold or better. Additionally, the Applicant has indicated their commitment to exceed the requirements of the Massachusetts Stretch Energy Code (very recently adopted in Everett) and to meet 10% of their electrical requirements via renewable energy or certificates. The proposed cleanup of hazardous materials on the site represents a significant contribution and commitment to improving the environment. With respect to ongoing operations, the Applicant will utilize a sophisticated optimization plan integrating energy management across all systems to maintain building efficiencies; will continuously improve lighting efficiencies; will use absorption chillers to reduce peak electricity use and shift loads; and plans to develop a "robust and fully integrated public and employee education program." Wynn provided less detail in its responses to these questions. Both Applicants engender confidence with approaches to sustainability and energy use. Mohegan Sun distinguished itself with its commitment to pursue certification by the USGBC, their increased commitment to renewable energy sources, and their agreement to support biofuel.	
5. Security, Monitoring, Surveillance, and Emergency Procedures	S	S
	Both Applicants have experience in other properties that is relevant to the questions of this Criterion. Both detail surveillance procedures, security policies, regulatory accommodations, and emergency response. Mohegan Sun has recent relevant experience with respect to regulatory Computerized Accounting and Auditing systems stemming from the Pennsylvania Gaming Authority; Wynn states it does not have current experience with this oversight system. It is anticipated that both Applicants will meet all requirements based upon the experience and success of their other properties. Mohegan Sun provided more direct responses and relevant detail. Wynn was generally brief in its responses; although much detail provided in some instances was in the form of off-the-shelf manuals from other properties that were not annotated for the specific details requested.	

3. Criteria Rating (cont.)

	Mohegan Sun|Revere	Wynn|Everett
6. Permitting	**S**	**S**
	Mohegan Sun: The two most important permitting issues relate to traffic mitigation and the enhancement and protection of Sales Creek. The Applicant is progressing well in development plans in both these areas. Traffic mitigation is being developed through the MEPA process and will be permitted by MassDOT. The mitigation to protect the wetland resources along Sales Creek is also being developed through the MEPA process and will be permitted by the Revere Conservation Commission, with the possibility of an appeal to DEP. There are no other significant permitting issues. Permitting could be completed by the end of February 2015, followed by a 30-month construction period, with an opening in September 2017. Two factors could delay the permitting process. They include protracted traffic permitting and wetland permitting. Wynn: The four most important permitting issues relate to traffic mitigation, compliance with the Everett Municipal Harbor Plan (Chapter 91 License), dredging and marine works, and site clean-up. There have been significant concerns raised by MassDOT, and others, about the traffic mitigation plan as presented in the Draft and Final EIRs. These concerns will need to be addressed by the Applicant in a Supplemental Final EIR although there remains concern about the completeness of the mitigation, especially at Sullivan Square in Boston. The Applicant is in compliance with the Municipal Harbor Plan and is well along in finalizing plans for dredging, marine works, and site hazardous materials clean-up. The regulatory agencies (DEP, Corps of Engineers) have been kept informed and there are no anticipated issues with obtaining water-related permits. The Applicant will need to comply with the National Environmental Policy Act (NEPA) related to dredging and federal highway improvements. There are no other significant permitting issues. Permitting, despite its complexity, is well along and could be completed by the end of July 2015, followed by a 36-month construction period, with an opening in July 2018. Two factors could delay the permitting process. They include protracted traffic permitting and public involvement in the planning for the site's hazardous materials clean-up.	
7. Other	**S**	**S**
	Both Applicants provided satisfactory responses to the two questions in this Criterion. Both provided sufficient evidence of control over proposed site. Mohegan Sun provided (in response to Commission Request for Clarification) a metes and bounds survey clearly delineating its site showing it controls the full extent of the land it needs. Wynn does not yet have agreements on adjacent properties that are required for the preferred alternative. Wynn states that it is in discussions with the MBTA for this property but there is a mandated regulatory process in Massachusetts for the transfer of state-owned property that has not begun and introduces uncertainty.	

4. Review Detail

Criterion 1: Demonstrate Creativity in Design and Overall Concept Excellence

This criterion addresses the overall concept and design approach proposed by each applicant and, additionally, offers an opportunity for the applicants to distinguish their proposal in the spirit of the gaming legislation: "recognizing the importance of the Commonwealth's unique cultural and social resources and integrating them into new development opportunities." This is a holistic criterion, comprised of nine questions, to address Massachusetts Gaming Commission goals related to distinctive design that reflects Massachusetts culture and values; high quality design; respect for context; and sustainable solutions. **The questions within this criterion are grouped in order of importance as follows:**

GROUPING OF QUESTIONS BY IMPORTANCE		
Group 1— Design Approach	4-1 Overall Theme 4-2 Relationship with Surroundings 4-4 Color Rendering 4-5 Schematic Design 4-6 Proposed Landscaping	These questions capture the key elements of Criterion 1: the applicant's description of its overall concept for the Casino development; an image of that proposed concept; and the schematic design documentation that illustrates the proposed building and site development and highlights its distinguishing features. See Appendix A, A Basis for Evaluation of Architectural Design Quality and Appendix B, Design Review, for background and further detail.
Group 2— Supporting Elements	4-3 Architects, Engineers & Designers 4-8 Parking 4-9 Transportation Infrastructure	The proposed Design Team is secondary to the approach presented in the questions above. Parking and Transportation Infrastructure information are an important aspect of the overall concept. As presented in this criterion they are considered descriptive; the evaluation of these items is more fully considered under Criterion 3 below.
Group 3— Optional Deliverable	4-7 Alternative Presentation	This item is optional. Presentations to be considered include video, virtual tours, and models. These media may add some clarity, but the graphics provided under Group 1 must adequately describe the vision and the concepts

	Mohegan Sun|Revere	**Wynn|Everett**
Overall Rating	**S** — **VG**	**S**

Mohegan Sun proposes to redevelop approximately 40 acres currently occupied by the Suffolk Downs stables into an urban resort casino located next to the MBTA Blue Line Beachmont Station. The proposal draws inspiration from the legacy and history of Revere Beach. The building program and design respond to a variety of adjacent site conditions including the racetrack, commercial retail, a busy artery, two-story homes and a neighborhood retail district. A large, prominent pedestrian entrance is situated at the corner closest to the MBTA station providing a strong visual connection, a modest public plaza, and access to the interior retail arcade. A separate vehicular court entrance is located on the opposite corner across from a retail strip mall. The primary program elements are located above street level, on top of a three-story parking structure. Building massing is modulated, stepping back from the street and adjacent residential homes and following the curve of the racetrack, with hotel rooms distributed into two low-rise towers. Sales Creek, which cuts across the site, is enhanced and integrated into the development, along with landscaped berms that partially conceal the structured parking at the base and a linear park and walking trail that parallels Winthrop Avenue. The curving, contemporary structure is distinguished by a series of large concrete canopies suggestive of beach umbrellas, which extend along the circulation spine of the building. The façade, primarily inward looking, provides glimpses of interior activity through the glass enclosed pedestrian lobby. Sustainability features include a PV field and rooftop garden and greenhouses. Although the design is inward looking with only one pedestrian entrance; incorporates very limited public open space; and presents a limited connection to Revere Beach, it offers the promise of a distinctive, modern resort casino.

Wynn proposes to redevelop approximately 26 developable acres of former industrial land along the Mystic River into a luxury resort casino that embraces its waterfront location. The proposed development is consistent with the City of Everett's vision for the Mystic River waterfront. It introduces public access and amenities to a previously inaccessible, heavily contaminated site along the water's edge and provides connections to the Mystic River pedestrian network. The proposal entails extensive environmental cleanup; river dredging for marine access; a dock to facilitate water transportation; and generously landscaped outdoor spaces (although the outdoor amphitheater described in the application does not appear in FEIR documentation). Given the site constraints in terms of access, acreage, and context, Wynn proposes a clear and appropriate site strategy that is responsive to the waterfront at the ground plane and offers a sky lit retail concourse and winter garden. The proposed building incorporates a mix of architectural styles including a low, traditionally detailed retail concourse with domed roofs and a 27-story hotel tower that appears inconsistent with the base. While the promise of a luxury resort, reclamation of the waterfront for public use, and aspects of the proposed design are appealing, it is unclear whether the proposed design provides a distinctive solution that makes the most of this opportunity.

Mohegan Sun presents a creative design that recognizes its place within its surroundings. Wynn presents a development plan with many positives but the hotel tower does not have the innovative energy characteristic of its Las Vegas hotels and of the best new construction in the Boston Area.

Criterion 1: Demonstrate Creativity in Design and Overall Concept Excellence (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**S** VG	**S**
4-1 Overall theme 4-2 Relationship with Surroundings 4-4 Color Rendering 4-5 Schematic Design 4-6 Proposed Landscaping	• Overall theme is urban resort casino which Applicant states draws upon legacy and history of Revere Beach as a resort. • The inward-focused development is raised above the street on a 3-level parking podium with limited entry points (elevated arrival court and corner entry proximate to MBTA Blue Line). • The building base curves gently along the street edges to provide additional area for its bermed landscape buffer. • The building includes a gaming area, retail and restaurant arcade, meeting space, children's entertainment and daycare space, spa, two hotel properties, and structured parking. • The exterior is understated with respect to massing, materials, fenestration, lighting, and site circulation and relies upon a series of concrete canopies over the circulation spine to mark the design. • The landscape approach respects and integrates the existing Sales Creek.	• Overall theme is five star luxury (casino, hotel, and all amenities) consistent with Wynn brand. • Development is outwardly focused and is consistent with the Everett Central Waterfront Municipal Harbor Plan and the Everett Lower Broadway District Urban Renewal Plan. • Project entails significant clean up of brownfield site along edge of Mystic River and creating public waterfront opportunities for the first time in Everett at this site. • Building is composed of underground parking, traditionally detailed two story base with 27-story hotel tower that is less ornamented than and inconsistent with the base; EIFS (Exterior Insulation & Finish System) cladding on tower is inconsistent with Wynn emphasis on high quality finishes as stated in the application. • Entries/public functions are concentrated on building's river-facing south side; service functions on north side facing away from river. • Creates landscaped waterfront linked to existing pedestrian network.
Group 2 Rating	**S**	**S**
4-3 Architects, Engineers & Designers 4-8 Parking 4-9 Transportation Infrastructure	• Applicant proposes an experienced design team, with the lead architect having worked at Mohegan Sun in Connecticut. However, the role of the associated (local) architect is unclear. • A total of 4,470 on-site parking spaces will be provided, with 4,200 parking spaces in an above-ground parking garage and 270 parking spaces in a surface parking lot. Additionally, approximately 750 off-site parking spaces will be provided for employees. This is equivalent to 0.89 and 1.04 parking spaces per gaming position excluding and including off-site parking, respectively. • Applicant has not identified exact locations of off-site parking spaces. • Approximately 6,000 existing parking spaces at Suffolk Downs in East Boston. Not clear if relocating stables will impact parking at Suffolk Downs and potentially cause a shortage of parking at the race track. • Applicant will provide Carpool/Vanpool, although the exact location of these spaces have not yet been identified. Handicap parking spaces will be provided on each floor of the proposed parking garage. • Parking supply is expected to be adequate. • On-site circulation is clearly depicted. There are two garage entrances/exits and two entrances to the facility (in addition to elevators/entrances from the parking garage). • Primary access via Furlong and Tomesello Way (from Winthrop Ave). • Access via Tomesello Way from Route 1A will not be encouraged for patrons of the casino. • Refueling will be provided by the existing gas stations in the vicinity.	• Wynn team experienced at developing resort casinos but no information provided on Architect of Record, structural engineer, acoustic engineer, and security consultant. • The applicant proposes 3,700 on-site parking spaces (as specified in the FEIR) in an underground parking garage, and approximately 800 off-site spaces (for employees only). This is equivalent to 0.89 and 1.08 parking spaces per gaming position excluding and including off-site parking, respectively. • The applicant proposes to provide off-site employee parking at Station Landing parking garage (near Wellington Circle), at the Malden Center parking garage, and at an unidentified location somewhere within the existing industrial area of Everett on the east side of Broadway (Route 99). • The applicant proposes dedicated spaces for self-parking, buses, valet, carpool/vanpool, and electric charging stations. • The parking supply is expected to be adequate. • A single primary driveway will serve the majority of vehicles accessing the project site. • A secondary driveway will be utilized for service vehicles and employee shuttles in the preferred site alternative. • Not all regional highways/roadways were identified and discussed. Notably, Route 1, Memorial Drive/Land Blvd, Storrow Drive, I-90 and Route 2 were not included in the Applicant's DEIR nor FEIR. • Refueling will be provided by the existing gas stations in the vicinity.
Group 3 Rating	**S**	**S**
4-7 Alt. Presentation	• Optional alternative presentation not provided.	• Alternative presentation described--not accessible at time of review.

Criterion 2: Gaming Establishment of High Caliber with Quality Amenities in Partnership with Local Facilities

This criterion seeks to understand the amenities offered, quality of finishes, customer experience, and the interrelationship of the Casino with the community and supports the objective of 23K, §18 (5)*. **The questions within this criterion are grouped in order of importance as follows:**

GROUPING OF QUESTIONS BY IMPORTANCE		
Group 1—Description of Facilities	4-10 Gaming Amenities 4-11 Non-Gaming Amenities 4-15 Entertainment Venues 4-16 Public Spaces 4-17 Description of Hotel 4-19 Quality of Amenities	These questions provide an overall assessment of the product offered by the applicant, including appearance and quality of amenities. These items relate most directly to the gaming legislation requirements. See Appendix A, A Basis for Evaluation of Architectural Design Quality and Appendix B, Design Review, for background and further detail.
Group 2—Other Amenities	4-12 Exhibition Space 4-13 Conference Space 4-18 Other Facilities	These questions describe other amenities, including exhibition space, conference or meeting space, child care space, and other amenities. The first two questions address whether the project will compete with existing exhibition and conference venues.
Group 3—Socio/Economic/Cultural	4-14 Serving the Surrounding Community 4-20 Art	These questions address how the Casino integrates with the community as a neighbor and a business. This set is considered important to creating a gaming establishment of high caliber.
Group 4—Tourism	4-21 Tourism Diversity 4-22 Diversified Regional Tourism	These questions are mentioned in the Statute as set out below. The team considered them but recognized these are more fully considered in Category 3, Economic Development and are not as much a factor in Category 4, Building and Site Design. See also Appendix F, MGL c. 23K, §5, 9, and 18.

	Mohegan Sun|Revere	**Wynn|Everett**
Overall Rating	**S** … **VG**	**VG**
	Mohegan Sun provides amenities complementary to—and consistent with—a resort casino intended to appeal to a cross-section of the marketplace. Their proposal is distinguished by a large gaming area adjacent to retail, hotel, and conference spaces; two hotel offerings—a 3-star "boutique hotel" and a 4-star "casino hotel"; and development of some of the roof as outdoor space for patrons. Wynn emphasizes their approach to the luxury market—including upscale retail tenants, nightclub, and 5-star hotel suites—consistent with their experience in other markets. Coupled with this approach is a site location accessible by water and a well-developed landscape connected to the waterfront and open to the public. The Wynn/Everett proposal consciously separates the gaming floor from the hotel and retail experience. Its retail concourse is punctuated by a winter garden to provide seasonal interest. Wynn takes a lead on this Criterion for its repurposing of a difficult, toxic site advancing regional waterfront goals, and by separating its gaming floor from non-gaming amenities. Further, Wynn estimates total cost of construction at $1B; Mohegan Sun at $570 M	

c. 23K §18** requires the commission to evaluate how each applicant proposes to advance several objectives, including, "(5)*** *building a gaming establishment of high caliber with a variety of quality amenities to be included as part of the gaming establishment and operated in partnership with local hotels and dining, retail and entertainment facilities so that patrons experience the diversified regional tourism industry; …"* See Appendix E, MGL c 23K, §5, 9, and 18.

Criterion 2: Gaming Establishment of High Caliber with Quality Amenities in Partnership with Local Facilities (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**S**	**VG**
4-10 Gaming Amenities 4-11 Non-Gaming Amenities 4-15 Entertainment Venues 4-16 Public Spaces 4-17 Description of Hotel 4-19 Quality of Amenities	• 172,000 SF fan-shaped gaming floor with 4200 slots and 120 table games accessed from elevated arrival court, retail arcade, and pedestrian entry near MBTA Beachmont station. • Two hotels are proposed—a 3-star "boutique hotel" and a 4-star "casino hotel"—with 450-550 rooms total. • The main gaming floor encompasses a Wolf Den entertainment venue overlooking the Suffolk Downs track. • An additional gaming location, the "Moon Casino", is located above the Beachmont entrance. • Retail arcade for 55 tenants including food and beverage options. • The rooftop of the retail arcade and casino is developed as a green roof to provide outdoor space (including a pool) for hotel guests, and includes a greenhouse. • Applicant estimates cost/hotel room = ~ $220,000 (425 to 550 rooms). • Applicant estimates total cost of construction = $527 million (w/FF&E).	• 192,543 SF rectangular gaming floor with 3242 slots and 168 table games with perimeter bars and lounges as described in the FEIR. • A five-star 504 room hotel with oversized standard rooms and suites occupies a tower. • Gaming floor is intentionally separated from non-gaming amenities such that patrons can access shops, restaurants, exterior amenities without passing through or near casino. • Sky lit retail concourse with shops and restaurants extends out from main entrance towards river front Entertainment venues including sports bar, nightclub, and a casino lounge. • In addition to the publicly-accessible landscaped waterfront, project includes a heavily planted interior winter garden. • Applicant emphasizes unparalleled five-star quality of all amenities. • Applicant estimates cost/hotel room = ~ $635,000 (504 rooms). • Applicant estimates total cost of construction = $1,050 million (w/FF&E).
Group 2 Rating	**S**	**S**
4-12 Exhibition Space 4-13 Conference Space 4-18 Other Facilities	• Meeting and conference space includes 45,000 SF of conference space, including a 13,000 SF ballroom with a 1,200 SF stage (950 seat capacity), on the same level as casino floor and retail arcade. • Applicant proposes a children's entertainment center and a supervised arcade. Day care services will be available for an additional fee.	• Meeting and conference space limited to 35,000 SF of second floor space. • No child care facilities proposed.
Group 3 Rating	**S**	**S** VG
4-14 Serving the Surrounding Community 4-20 Art	• Applicant proposes travelling and permanent installations of "local art"; sculpture to be included in interior courts, arrival court, and perhaps exterior landscape.	• Development of waterfront will provide recreational opportunities for community residents. • Extensive Wynn-owned art collection will be publicly displayed throughout premises.
Group 4 Rating	**S** VG	**S** VG
4-21 Tourism Diversity 4-22 Diversified Regional Tourism	• Applicant emphasizes easy access to/from Boston cultural resources. • Limited information on tour bus programs other than to reference relationships with charter companies in Connecticut. • Applicant relies on Momentum Card rewards program for ties to local retailers. Participating retailers integrated into ongoing promotions. • Applicant plans to have formal understandings with MA Coalition for the Performing Arts and collaborative booking and marketing with the Wang Center for the Performing Arts and has executed a Memorandum of Understanding with Citi Center. • Site adjacent to MBTA Blue Line Beachmont station. • Applicant proposes to market Mohegan Tribe history and culture, linked to the Boston Harbor islands and Freedom Trail.	• Applicant proposes relationships with local entertainment venues but provides details only for Letter of Intent with Boston Pops. • Applicant places a low priority on tour bus programs as casino will target the high end gamblers. • Applicant will use its eight international marketing offices to promote Massachusetts tourism and host outreach events. • Applicant proposes water taxi service to ferry patrons to Boston Inner Harbor attractions. • Applicant will offer seasonal promotions to ensure tourism diversity throughout calendar year (e.g.: Chinese New Year, Brazilian Independence Day).

Criterion 3: Compatibility with Surroundings

This criterion solicits the applicants' plans on mitigating impacts to traffic, local services, and utilities. It also examines the relationship of the casinos with the local businesses with the objective of supporting these establishments. **The questions within this criterion are grouped in order of importance as follows:**

GROUPING OF QUESTIONS BY IMPORTANCE		
Group 1—Transportation Adequacy, Mitigation, Improvements	4-23 Egress from Gaming Establishment 4-24 Adequacy of Existing Transportation Infrastructure 4-25 Traffic Mitigation* 4-26 Parking Facilities	Taken together, the questions of this group highlight the importance of an adequate transportation infrastructure and traffic mitigation plan to the success of the casino development. Question 4-25 which derives from the gaming statute G.L. c. 23K, is specifically called out in §18 (8) as an objective that each applicant should advance, and that the Commission shall evaluate and issue a statement of findings for same.* Questions 4-23, 4-24, and 4-26 are closely tied to 4-25 and are therefore included in this group. See Appendix C, Traffic and Parking, for background and further detail.
Group 2—Neighborliness, Impacts on Surroundings	4-27 Adjacent Land 4-30 Minimizing Noise and Lighting 4-31 Integration with Surrounding Venues 4-32 Site Improvements	The questions in this group address how the proposed development relates to its surroundings. It considers potential impacts such as noise, lighting, and shadows on adjacent properties and potential benefits such as site improvements associated with this scale of development.
Group 3— Utilities, Services, Misc.	4-28 Delivery of supplies and trash removal 4-29 Signage 4-33 Stimulating Retail Activity 4-34 Extreme Weather 4-35 Regional Water Facilities 4-36 Sewage Facilities	These questions capture important issues related to utilities and logistics. They warrant careful consideration but are not considered as important as the questions in Groups 1 and 2.

	Mohegan Sun|Revere	**Wynn|Everett**
Overall Rating	**S** — **VG**	**I** — **S**

The most complex concern in this Criterion is traffic mitigation. Both Applicants have addressed this issue identifying numerous intersections and roadways for improvements to mitigate the impact of the project-generated traffic, and in some cases to improve the traffic flow. The major differentiator between the Applicants is: Mohegan Sun mitigation measures for major impacted roadways are complete and workable; the Wynn measures for Sullivan Square remain incomplete. The approach to public transportation differs based on the site locations: notably Mohegan Sun is situated adjacent to the MBTA Blue Line Beachmont station and takes full advantage of promoting this transit connection; Wynn offers shuttles to nearby Orange Line stations and proposes to build a fleet of water shuttles with 49 passenger capacities serving downtown Boston, Logan Airport, and the Convention Center/Innovation District.

Each Applicant describes its relationship with surroundings. Mohegan Sun is located adjacent to a residential neighborhood to the north and east and suggests sufficient measures to control both noise and lighting impacts. Wynn is located in an industrialized area with no abutting residential properties and its noise and lighting measures are consistent with this environment. Both sites have access to adequate water and sewer service. Both Applicants make use of neglected sites and improve storm water runoff volume and quality. The Wynn location is a toxic site formerly used for chemical manufacturing. Wynn will clean the site and incorporate waterfront public uses for the first time.

Mohegan Sun responded well to traffic mitigation and adequately addressed other issues in this Criterion. The Wynn project has a major weakness with respect to the traffic mitigation solutions at Sullivan Square. It responded adequately to the other questions and contributes in a positive way to the surroundings with the proposed site cleanup and waterfront development.

*__c. 23K, §18__ requires the commission to evaluate how each applicant proposes to advance several objectives, including, "***(8)** *… utilizing sustainable development principles including but not limited to: … (iii) efforts to mitigate vehicle trips; …."* See Appendix F, MGL c. 23K, §5, 9, and 18.

Criterion 3: Compatibility with Surroundings (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**S** ... **VG**	**I**
4-23 Egress from Gaming Establishment 4-24 Adequacy of Existing Transportation Infrastructure 4-25 Traffic Mitigation 4-26 Parking Facilities	• There are two vehicular access/egress driveways into the on-site parking garage from Tomasello Way. • There are three access points that connect Tomasello Way with the regional roadways: Tomasello Way at Winthrop Ave, Furlong Drive, and Tomasello Way at Route 1A. The Applicant notes that access to Tomasello Way from Route 1A will not be encouraged for patrons of the casino, though it is acknowledged that some patrons will use this existing public roadway to access the casino. • The proposed site is adjacent to the Revere Beach Parkway, and less than half a mile from Route 1A, both regional roadways. The project site is located within a few miles from major highways such as Route 1, I-93, and I-90. • The applicant's traffic studies did not include an evaluation of all regional roadways and highways. Most notably, an evaluation of the toll plazas at the Sumner Tunnel and at the Ted Williams Tunnel were not included. • The proposed site is accessible via MBTA subway (Blue Line) and bus. Beachmont Station is less than 200 ft from the project site. The Applicant has committed to making significant improvements at the Beachmont MBTA Station. • Trip generation rates are reasonable for a casino/resort type facility. • The Applicant proposed traffic mitigation at multiple locations, most notably at the Route 1/Route 16 interchange, Bell Circle, and Copeland Circle. At all locations, the applicant provided enough supporting detail and conceptual plans, and the proposed traffic mitigation is adequate. • The SDEIR contains two options for Route 1A improvements: a flyover ramp over Boardman Street for Route 1A northbound traffic only, or alternatively, a series of at-grade traffic signals. Either option is an improvement relative to existing conditions. It is noted MassDOT will ultimately select the preferred option. • The applicant proposed to implement traffic reduction strategies, including encouraging the use of public transportation, disseminating public transportation information, and coordinating with on-site tenants to implement similar measures. • Direct pedestrian access to/from the casino and the retail portions of the site are provided via separate entrances from the parking garage.	• Single primary driveway provides access/egress onto roadway network via Broadway (Route 99). Secondary driveway is proposed for service vehicles and employee shuttles only in preferred alternative. • Potential on-site traffic circulation problems due to vehicular queuing on the primary driveway past the single parking garage entrance/exit. This will likely require staff to direct on-site traffic during peak periods. • Preferred access alternative for proposed primary and secondary driveways require MBTA license agreements or land purchases. • Project site is adjacent to Route 99, and is located a few miles from major highways, such as I-93, Route 1, and I-90. • Applicant's traffic studies did not include an evaluation of all regional roadways and highways. Most notably, an evaluation of the Memorial Drive and Route 2 were not included. • Proposed site is accessible via MBTA buses. Applicant proposed shuttle service to/from MBTA Orange Line stations (Wellington and Malden Center) as well as "premium park & ride" shuttles to/from Massport Logan Express lots (in Braintree, Framingham, and Woburn). • Water transportation proposed to allow access between Long Wharf and Seaport World Trade Center and the project site. Applicant is funding a study by the Boston Harbor Association (currently in progress) to evaluate water transportation needs in the area • Applicant committed to building custom boats for the water transportation that will allow access to/from the project site without the need for the Alford Street bridge to be raised. • Trip generation rates are reasonable for the proposed project • Applicant's proposed traffic mitigation at multiple locations, most notably along Broadway (Route 99), and at Sweetser Circle, Santilli Circle, and Wellington Circle. At these locations, the Applicant provided enough supporting detail and conceptual plans, and the proposed traffic mitigation is adequate. • Traffic mitigation measures for Sullivan Square are incomplete: the forecasted volumes are not provided at the proposed roadway link between Cambridge Street and Maffa Way; intersection capacity analysis results provided only for one of the two locations where new traffic signals are proposed; and proposed mitigation does not address traffic operation problems on the eastern half of Sullivan Square. • Queue analyses at many intersections and queue figures in FEIR appendix underestimate queuing distance because anticipated queue lengths will extend beyond the length of some turning lanes. This will cause the vehicular queue to overflow into adjacent travel lanes. • The Applicant proposes to implement traffic reduction strategies, including ridesharing programs, shuttles to/from transit stations, water shuttles, and Zipcar parking. • Direct pedestrian access to/from the casino and the retail portions of the site are provided via separate entrances from the parking garage.

Criterion 3: Compatibility with Surroundings (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 2 Rating	**S** **VG**	**S** **VG**
4-27 Adjacent Land 4-30 Minimizing Noise and Lighting 4-31 Integration with Surrounding Venues 4-32 Site Improvements	• Project design minimizes adverse impact on adjacent community through use of landscaped berms to partially screen parking, building massing that steps back from the street, and integration of vehicle drop off within footprint of building base. • Applicant will comply with City of Revere operational noise reduction requirements and listed mitigation strategies but failed to present a plan for construction phase noise reduction. Applicant states that light reduction strategies will "minimize light trespass and sky glow." • Applicant will operate a seasonal shuttle between the casino and nearby Revere Beach and three other shuttles between the casino and Boston's Back Bay district, Theater district, and Maverick Square area. • Rehabilitation of Sales Creek integrated into landscape design concept. • Applicant has signed agreement with Wang Center to manage on-site entertainment and to co-present off-site entertainment events with no guarantee that any off-site events will actually take place.	• Project is consistent with the Municipal Harbor Plan and connects its waterfront to the existing river edge pedestrian network. • Applicant provided comprehensive list of construction noise reduction strategies but no operational noise reduction strategy. • Applicant mentions a Letter of Intent for future sponsorship of BSO special events and agreement with Boston Harbor Association that is currently conducting a study regarding water transportation to and from the site. • Project will entail significant cleanup of contaminated site and development of landscaped waterfront zone for public use. • Applicant will fund enhancement of public facilities in nearby Gateway Park including a canoe launch, fishing pier, and new lighting, signage, and planting.
Group 3 Rating	**S**	**S**
4-28 Delivery of supplies and trash removal 4-29 Signage 4-33 Stimulating Retail Activity 4-34 Extreme Weather 4-35 Regional Water Facilities 4-36 Sewage Facilities	• Trash and recycling is contained in a central facility with refrigerated storage to control odors. • Applicant has contract commitment with recycling firm to convert organic waste into energy. • Signage generally depicted as discreet backlit signs and will use energy efficient LED lighting. • Applicant will implement partnership with local retailers and restaurants in which patrons and employers are given rewards to be used as cash for purchasing goods and services. • The Applicant failed to describe how the facility would be available for community use in a weather emergency but has stated its commitment to work with local officials on this issue. • Water and wastewater needs can be served by local and MWRA facilities due to existing excess capacity.	• Trash and recycling is contained in a central facility with some refrigerated storage to control odors. • Food waste recycling will be implemented. Will install food waste macerator/dewatering unit to grind and dewater before waste is transported off site. Will seek long-term contract for offsite anaerobic digestion of food waste. • Applicant has not provided a comprehensive signage package. • Applicant has agreed to purchase gift vouchers from Everett and Malden businesses to encourage employee spending in these communities. • Applicant states that the facility could be used as a backup shelter in a weather emergency. • Water and wastewater needs can be served by local and MWRA facilities due to existing excess capacity.

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Criterion 4: Utilize Sustainable Development Principles in the Construction and During the Life Cycle of the Facility

This criterion considers responses regarding sustainability, both in design and construction and across the life cycle of the facility and is comprised of 23 questions covering a broad range of concerns—including overall approach to sustainable design for the building and site; energy codes; mechanical, electrical and plumbing approaches; specific equipment and systems; on-site and off-site renewable energy commitments; and ongoing sustainable practices. **Group 1 questions focus on compliance with LEED and other sustainability standards along with renewable energy sourcing and Group 2, equal in importance to Group 1, focuses on conservation measures. The Group 3 questions are of lesser importance.**

GROUPING OF QUESTIONS BY IMPORTANCE		
Group 1— LEED , energy performance, and energy sources/renewables	4-37 LEED Certification* 4-38 Compliance with Environmental Standards 4-39 Stretch Energy Code* 4-46 On-site Energy Generation* 4-47 Off-site Renewable Energy* 4-53 Net Zero Energy 4-54 Sustainable Building Construction	These questions require the applicants to document their intent to design and construct a facility that meets contemporary energy performance standards for buildings of this type. On-site and off-site renewable energy commitments are important parts of gauging the broader environmental performance of the proposed gaming establishments and are related to the Commonwealth's leadership position in renewable energy. Taken together, the Group 1 questions provide a comprehensive overview of sustainability and renewable energy sourcing. See Appendix D, Energy and Sustainable Design, for background and further detail.
Group 2— Site Systems and ongoing operations	4-41 Storm Water* 4-42 Water Conservation* 4-43 Energy Efficient Equipment* 4-48 Building Envelope and HVAC 4-49 Energy Consumption Monitoring* 4-50 Advanced Building Controls for Energy* 4-51 Centralized Heating & Cooling 4-55 Ongoing Sustainable Site Operations 4-59 Grid Failure	These questions focus on the energy efficiency and conservation as opposed to energy generation. They require the applicant to document the proposed systems for heating and cooling critical to a high-performance building. In addition, sustainable approaches to site design, storm water, water use (including irrigation), and ongoing operations are also addressed by these questions, and are considered important for buildings of this scale and their environmental footprints.
Group 3— Finer grain sustainable strategies	4-40 Alternative Fuel Vehicles 4-44 Energy Efficient Gaming Equipment 4-45 Lighting 4-52 Shifting Peak Energy 4-56 Testing of Clean Energy Technologies 4-57 Energy Contracts 4-58 Public Education on Clean Energy	These questions require the applicants to document specific sustainable strategies that may be considered at a finer grain than the overarching approaches in Groups 1 and 2. Accordingly, these are deemed of secondary importance under this criterion.

	Mohegan Sun|Revere	Wynn|Everett
Overall Rating	**VG**	**S** — **VG**

Mohegan Sun's approach to energy and sustainability reflects Mohegan Sun's experience in Connecticut and related tribal culture and values. The Applicant's approach is enhanced by their specific commitment to pursue LEED Gold Certification under the auspices of the U.S. Green Building Council. Additionally, the Applicant has stated their commitment to comply with the Massachusetts Stretch Energy Code and to meet 20% of their electrical requirements via renewable energy or certificates. The Applicant's approach to site elements (including Sales Creek), storm water management, water reduction, and ongoing operations is consistent with their overall sustainability strategies. Additional sustainability commitments of note include: thermal storage to shave peak loads; partnership to provide waste for off-site biofuel generation; a green roof with greenhouse for local food production; and robust education program including building tours. Applicant generally provided complete responses to questions in Criterion 4.

Wynn's approach to energy and sustainability is notable for its emphasis on improved efficiency and operations. The Applicant commits to achieving a project that would be certifiable under the U.S. Green Building Council LEED NC 2009 guidelines at a level of Gold or better. Additionally, the Applicant has indicated their commitment to exceed the requirements of the Massachusetts Stretch Energy Code (very recently adopted in Everett) and to meet 10% of their electrical requirements via renewable energy or certificates. The proposed cleanup of hazardous materials on the site represents a significant contribution and commitment to improving the environment. With respect to ongoing operations, the Applicant will utilize a sophisticated optimization plan integrating energy management across all systems to maintain building efficiencies; will continuously improve lighting efficiencies; will use absorption chillers to reduce peak electricity use and shift loads; and plans to develop a "robust and fully integrated public and employee education program." Wynn provided less detail in its responses to these questions.

Both Applicants engender confidence with approaches to sustainability and energy use. Mohegan Sun distinguished itself with its commitment to pursue certification by the USGBC, their increased commitment to renewable energy sources, and their agreement to support biofuel.

*These questions derive from the gaming regulations, G.L. c. 23K are specifically called out in §18 (8) as objectives each applicant proposes to advance, and that the Commission shall evaluate and issue a statement of findings. See Appendix F, MGL c. 23K, §5, 9, and 18.

Criterion 4: Utilize Sustainable Development Principles in the Construction and During the Life Cycle … (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**VG**	**VG**
4-37 LEED Certification 4-38 Compliance with Environmental Standards 4-39 Stretch Energy Code 4-46 On-site Energy Generation 4-47 Off-site Renewable Energy 4-53 Net Zero Energy 4-54 Sustainable Building Construction	• Commits to LEED NC 2009 Gold certification or better, and provides a preliminary checklist that demonstrates path to certification. • Incorporates some principles from LEED-EBOM, LEED for Neighborhood Development and ISI Envision Standard; provides ISI Envision checklist; does not intend to pursue certification. • Commits to meeting the Massachusetts Stretch Energy Code as currently in effect in Revere. • Proposes a 1 MW rooftop solar photovoltaic system expected to generate about 3% of use; and purchase 14,000 MWh/year of RECs. • Long-term commitment to provide or purchase 20% of energy use from renewable sources. • Will redevelop existing site including improvements to Sales Creek. • Commits to recycling construction waste and ongoing recycling programs throughout the facility.	• Commits to achieving a project that would be certifiable under LEED NC 2009 at a level of Gold or better and provides supporting preliminary checklist. • Provides a LEED-EBOM and ISI Envision checklists but does not intend to pursue certification. • Applicant has targeted energy savings of 28%, exceeding the MA Stretch Energy Code, currently in effect in Everett. • Proposes 1 MW rooftop solar photovoltaic system, about 3% of Casino's energy use, and purchase the balance up to 10% of energy use from New England sources of renewable power. • Committed to cleaning and redeveloping a state-listed brownfields site and will use sustainable site maintenance practices. • 75% of construction waste recycled; use locally sourced materials Will utilize indoor air monitoring systems for Indoor Air Quality (IAQ) management during construction and once operations.
Group 2 Rating	**VG**	**S** / **VG**
4-41 Storm Water 4-42 Water Conservation 4-43 Energy Efficient Equipment 4-48 Building Envelope HVAC 4-49 Energy Consumption Monitoring 4-50 Advanced Building Controls for Energy 4-51 Centralized Heating & Cooling 4-55 Ongoing Sustainable Site Operations 4-59 Grid Failure	• Storm water management plan meets DEP's Standards. • Quality of runoff will be improved by the development of the site. • Will save water by using efficient fixtures, recycling grey water for public toilet flushing, and using captured rainwater and treated grey water for at least 50% of irrigation needs. • Proposes efficient central plant design, energy recovery, and Energy-Star rated appliances. • Building systems and envelope will be commissioned by third-party as documented in a commissioning plan. Post-occupancy and retro commissioning will be performed under measurement and verification plan. • Building will include advanced monitoring and controls systems for mechanical systems and lighting. • Will leverage their experience as a certified Green Lodging Facility in Connecticut to implement sustainable operations.	• Storm water management plan will meet DEP's Storm Water Standards. • Quality of runoff will be improved by the development of the site. • Will save water with efficient fixtures and captured rainwater. Irrigation needs will be met by captured rainwater. • Proposes efficient central utility plant, energy recovery, and Energy Star rated appliances. • A commissioning plan will be developed for enhanced commissioning of the building envelope and systems; will include measurement and verification. • Project will use a sophisticated optimization plan integrating energy management across all systems.
Group 3 Rating	**VG**	**S**
4-40 Alternative Fuel Vehicles 4-44 Energy Efficient Gaming Equipment 4-45 Lighting 4-52 Shifting Peak Energy 4-56 Testing of Clean Energy Technologies 4-57 Energy Contracts 4-58 Public Education on Clean Energy	• Details use of efficient lighting fixtures with automated controls, daylight sensing, and regular monitoring and upgrades of lighting to ensure ongoing energy savings for lighting. • Thermal storage of hot water to reduce peak energy needs. • Proposes partnership with Harvest Power to provide fuel stock for bio-gas electric generation off-site. • On site food production proposed in roof-top greenhouse. • Intends to produce or procure renewable energy or certificates for 40% of annual electricity needs for 2 years; and 20% in perpetuity. • Provides details of a green education program including fixed information kiosks, building tours explaining sustainable building design and operation including energy production and consumption.	• Will use day-lighting and high efficiency fixtures; will maintain and upgrade lighting to reduce lighting power density and continuously improve lighting efficiency. • Will use absorption chillers to reduce peak electricity use and shift loads. • Will meet 10% of annual electricity needs with combination of on-site renewable energy generation and purchase of off-site Class 1 renewable energy. • Plans to develop a "robust and fully integrated public and employee education program". • Lacked specificity or detail on responses to some questions.

Criterion 5: Security, Monitoring, Surveillance, and Emergency Procedures

This criterion seeks to understand the security procedures of the facility, regulatory facilitation, operational transparency, and how the facility will respond to an emergency situation. **The nine questions grouped into three topics of equal importance.**

GROUPING OF QUESTIONS BY EQUALLY IMPORTANT CATEGORIES		
Group 1—Security Features	4-60 Surveillance 4-65 Excluding Minors 4-66 Security of Premises 4-67 History of Security 4-68 Computerized Accounting and Auditing	These questions address the ability of the facility's system and/or systems to oversee all operations of the facility in an efficient manner in order to maintain the security and safety of the patrons, staff, and grounds; and to insure minors are not permitted in the gaming facilities.
Group 2—Regulatory Coordination	4-63 Regulatory Accommodations 4-64 Regulatory Surveillance	These questions require each applicant to address regulatory requirements.
Group 3—Emergency Procedures	4-61 Emergency Evacuation 4-62 Emergency Response	This section deals with internal procedures to be implemented during an emergency and what the facility will offer local and state authorities in the event of an emergency. These responses are important to local fire, police, and EMS services to determine the potential effect this facility would have on these services.

	Mohegan Sun|Revere	**Wynn|Everett**
Overall Rating	**S**	**S**
	Both Applicants have experience in other properties that is relevant to the questions of this Criterion. Both detail surveillance procedures, security policies, regulatory accommodations, and emergency response. Mohegan Sun has recent relevant experience with respect to regulatory Computerized Accounting and Auditing systems stemming from the Pennsylvania Gaming Authority; Wynn states it does not have current experience with this oversight system. It is anticipated that both Applicants will meet all requirements based upon the experience and success of their other properties. Mohegan Sun provided more direct responses and relevant detail. Wynn was generally brief in its responses; although much detail provided in some instances was in the form of off-the-shelf manuals from other properties that were not annotated for the specific details requested.	

Criterion 5: Security, Monitoring, Surveillance, and Emergency Procedures (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**S** **VG**	**S**
4-60 Surveillance 4-65 Excluding Minors 4-66 Security of Premises 4-67 History of Security 4-68 Computerized Accounting and Auditing	• Provides comprehensive level of surveillance and state intent to comply with Commission standards. Description consistent with conceptual design. • Will provide minimum of one trained security staff at each entry point plus active patrol of gaming area to include ID checking. • Applicant generally addresses issues raised in Security of Premises question. Provides and procedure documents to enhance their response. • Security History answer is complete with exception of specific metrics used to measure success; however crime statistics for 2011 comparing Mohegan Sun Connecticut to New London County, Norwich, and Montville CT are very favorable. • Commits to fully meeting MGC requirements and provides evidence of similar computerized accounting and auditing system installation in Pennsylvania; lists references with PA Gaming Control Board; describes IT support.	• Provides extensive documentation of areas requiring surveillance, access of personnel to monitoring room, and surveillance operation and maintenance; states intent to comply with Commission standards. • Does not mention entrance screening of minors but provides Las Vegas Wynn/Encore mandatory procedures for all employees barring minors from gaming floor and providing instruction on enforcement of this mandate. • Applicant briefly and incompletely addresses Security of Premises issues although stating it will implement procedures "substantially similar" to its Las Vegas properties, and provides a sample policy on "Use of Force". • Security History response provides 500 page Wynn/Encore Security Operations Manual and 100 page Security Post Orders detailing procedures at those casinos. Provides no metrics. • Wynn provides brief statement with no exhibits stating it will institute all measures required by MGC to facilitate its central computerized accounting and auditing (CCAA) system. No current experience with regulatory CCAA.
Group 2 Rating	**S**	**S**
4-63 Regulatory Accommodations 4-64 Regulatory Surveillance	• Promises 2000 sq. ft. min. for State Police and flexibility to meet MGC space needs. Will meet other MGC requirements including interview rooms, fingerprinting, surveillance observation, etc. No details provided. • Does not favor off-site access but full MGC on-site facility surveillance.	• Brief answer stating sufficient space to be provided for MGC and law enforcement daily operations, unrestricted access to surveillance, computer terminals for MGC player tracking and audit functions. No details provided. • "Unrestricted access will be provided to the appropriate division of the MGC and will be configured in any manner requested."
Group 3 Rating	**S**	**S**
4-61 Emergency Evacuation 4-62 Emergency Response	• Applicant provides a complete and sufficient answer to emergency evacuation question; cites experience with existing facilities; will meet or exceed the requirements of 527 CMR Board of Fire prevention Regulations, and other applicable building codes; requires emergency training for all workforce. • Discusses cooperation with State and Local authorities; importance of employee training; provided documents from other properties addressing active shooter and evacuation plans.	• "Will fully comply with all building regulatory requirements"; will employ full time security and operations staff trained and equipped to manage emergency situations. • Notes its cooperation with local authorities. Provides policies and programs from LV properties including Life Safety Program, Active Shooter Protocol, Bomb Threat Procedures, Robbery Response.

Criterion 6: Permitting

This criterion addresses the permits required for the projects, the status of the permitting process, zoning and zoning compliance. **The nine questions grouped into two topics of equal importance.**

GROUPING OF QUESTIONS BY EQUALLY IMPORTANT CATEGORIES		
Group 1—Permitting	4-69 Permit Chart 4-70 Permit Chart Attachments 4-71 ENF 4-72 EOEEA Certificate on the ENF 4-73 Draft and Final EIR 4-74 EOEEA Certificate on the EIR's 4-75 Environmental Assessments, Findings and Environmental Impact Statements	The permitting questions request that the applicant provide a summary of the permits, copies of the permits and other related documentation. Key issues and the risks that may be associated with completing the permitting process in the anticipated schedule were evaluated. See Appendix E, Permitting, Design and Construction Schedule Review for background and further detail.
Group 2—Zoning	4-76 Host Community Zoning 4-77 Permit Appeals	This criterion includes zoning requirements and how the project will meet them.

	Mohegan Sun|Revere	Wynn|Everett
Overall Rating	**S**	**S**

Mohegan Sun: The two most important permitting issues relate to traffic mitigation and the enhancement and protection of Sales Creek. The Applicant is progressing well in development plans in both these areas. Traffic mitigation is being developed through the MEPA process and will be permitted by MassDOT. The mitigation to protect the wetland resources along Sales Creek is also being developed through the MEPA process and will be permitted by the Revere Conservation Commission, with the possibility of an appeal to DEP. There are no other significant permitting issues.

Permitting could be completed by the end of February 2015, followed by a 30-month construction period, with an opening in September 2017. Two factors could delay the permitting process. They include protracted traffic permitting and wetland permitting.

Wynn: The four most important permitting issues relate to traffic mitigation, compliance with the Everett Municipal Harbor Plan (Chapter 91 License), dredging and marine works, and site clean-up. There have been significant concerns raised by MassDOT, and others, about the traffic mitigation plan as presented in the Draft and Final EIRs. These concerns will need to be addressed by the Applicant in a Supplemental Final EIR although there remains concern about the completeness of the mitigation, especially at Sullivan Square in Boston.

The Applicant is in compliance with the Municipal Harbor Plan and is well along in finalizing plans for dredging, marine works, and site hazardous materials clean-up. The regulatory agencies (DEP, Corps of Engineers) have been kept informed and there are no anticipated issues with obtaining water-related permits. The Applicant will need to comply with the National Environmental Policy Act (NEPA) related to dredging and federal highway improvements. There are no other significant permitting issues.

Permitting, despite its complexity, is well along and could be completed by the end of July 2015, followed by a 36-month construction period, with an opening in July 2018. Two factors could delay the permitting process. They include protracted traffic permitting and public involvement in the planning for the site's hazardous materials clean-up.

Criterion 6: Permitting (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**S**	**S**
4-69 Permit Chart 4-70 Permit Chart Attachments 4-71 ENF 4-72 EOEEA Certificate (ENF) 4-73 EIR 4-74 EOEEA Certificate (EIR) 4-75 Environmental Assessment, Findings, and Impact Statement	• Permit chart provided, including dates, periods and citations. • Critical path is through MEPA process followed by state permits. • Applicant has filed a Supplemental Draft EIR following the Secretary's ruling on Notice of Project Change. • Key state permits include: Mass DOT (traffic), DCR (Traffic on Route 16), DEP (air, sewer, water reuse), MWRA (sewer), Mass Historical Commission (Route 16 and displaced stables). • Proximity to Sales Creek, part of Rumney Marshes ACEC (Area of Critical Environmental Concern), requires higher level of environmental protection. • Key local permits, not subject to completion of the MEPA process, include the Revere Site Plan Review Committee (Site Plan Review), Conservation Commission (Order of Conditions) and Public Works (water and sewer). • Off-site transportation improvements will require permits from Chelsea and Boston. • Federal permits include those from EPA (construction) and the FAA (building and crane heights). • The two most important permitting issues relate to traffic mitigation along the Route 1 corridor and the enhancement and protection of wetland resources along Sales Creek. • Permitting could be completed by the end of February 2015, followed by a 30 month construction period, with an opening in September 2017. • Two factors could delay the permitting process. They include protracted traffic and wetland permitting.	• Permit chart provided, including dates, periods and citations. • Critical paths: 1) Massachusetts Environmental Policy Act (MEPA) process followed by state permits; 2) National Environmental Policy Act (NEPA) followed by federal permits. • Applicant has filed a Final EIR updating and expanding the information in the Draft EIR. • Key state permits: Mass DOT (traffic), DCR (Traffic on Route 16), DEP (air, sewer, Chapter 91 Waterways License, Water Quality Certificate and Hazardous Materials clean-up), MWRA (sewer), Coastal Zone Management Consistency Review, and possibly Mass Historical Commission (Route 16 improvements). • A Municipal Harbor Plan has been approved by DEP, prerequisite for a Chapter 91 License; extensive subsurface information has been collected and analyzed, required for permits associated with dredging, marine works and site clean-up. Traffic mitigation shown in the FEIR has changed significantly since the filing of the DEIR and the RFA-2 application, particularly at Santilli Circle in Everett and at Sullivan Square/I-93 in Boston. It is expected that the proposed traffic mitigation at Sullivan Square will be further revised in the Supplemental FEIR that the Applicant is required to submit to MEPA. • Key local permits, not subject to completion of the MEPA process, include: Everett Planning Board (Site Plan Review), Conservation Commission (Order of Conditions) and Public Works (water and sewer). • Off-site road improvements require permits from Boston. • Federal permits include: Corps of Engineers and EPA (dredging and marine works); Federal Highway Administration (FHWA) (Interstate highway improvements). The dredging and marine work and the improvements to federal highways will require compliance with NEPA. • Permitting could be completed by the end of July 2015, then a 36 month construction period, with an opening in July 2018. • Two factors could delay permitting: 1) protracted traffic permitting, which may include negotiations over mitigation along Route 16 and at Sullivan Square with FHWA involvement. 2) public involvement in the planning for hazardous materials clean-up with DEP involvement.
Group 2 Rating	**S**	**S**
4-76 Zoning 4-77 Permit Appeals	• Permitted by right. Site Plan Review required. • States no appeals filed	• Permitted by right. Site Plan Review required. • The City of Somerville is protesting the Everett Municipal Harbor Plan and has filed a lawsuit in Superior Court.

Criterion 7: Other

This criterion addresses pro forma information related to the site and contingent future uses. It is comprised of two unrelated questions grouped together.

GROUPING OF QUESTIONS BY IMPORTANCE		
Group 1—Other Questions	4-78 Other Uses of Facility 4-79 Site Plan	These questions address the ability of the facility to be used for other proposes should gaming operations cease and the historic ownership of the property and any land options, agreements and/or environmental information.

	Mohegan Sun|Revere	Wynn|Everett
Overall Rating	**S**	**S**
	Both Applicants provided satisfactory responses to the two questions in this Criterion. Both provided sufficient evidence of control over proposed site. Mohegan Sun provided (in response to Commission Request for Clarification) a metes and bounds survey clearly delineating its site showing it controls the full extent of the land it needs. Wynn does not yet have agreements on adjacent properties that are required for the preferred alternative. Wynn states that it is in discussions with the MBTA for this property but there is a mandated regulatory process in Massachusetts for the transfer of state-owned property that has not begun and introduces uncertainty.	

Criterion 7: Other (cont.)

	Mohegan Sun|Revere	Wynn|Everett
Group 1 Rating	**S**	**S**
4-78 Other Uses of Facility 4-79 Site Plan	• Provided examples of reasonable future uses including serving as a satellite campus for a local university and possible use of casino as an exhibition hall. No details. • Site plan information is complete and includes recent metes and bounds survey unambiguously identifying Revere City boundary with Boston. Property in Revere to be leased from Suffolk Downs under terms of Ground Lease included in RFA-2. • Property is clearly delineated.	• Proposes that gaming, representing less than 10% of overall facility, could be used for additional retail, convention space, etc., while remainder of space would continue to function as designed. • Prime property for Wynn Casino depicted in 1942 plan and does not provide metes and bounds description. Parcel shown is located in Everett. Additional parcels shown on preferred layout plan appear to be controlled by MBTA and Wynn is in discussions with that agency. • Responded adequately but property limits uncertain for preferred layout; it requires a small parcel acquisition in Boston for the access driveway.

A Basis for Evaluation of Architectural Design Quality

Introduction

Purpose

Design quality is an overarching consideration—encompassing physical, cultural, historical, and aesthetic considerations—and can be an elusive topic to address. The purpose of this document is to articulate principles to be used as a basis for evaluating architectural design quality and, more specifically, to serve as a framework for the design evaluation of the Category 1 Casino applications.

Overview

The evaluation of design is both objective and subjective. Some aspects are evaluated in respect to established standards yielding a clear determination, such as whether or not a building's form—e.g., height and setbacks—is consistent with zoning or planning guidelines. Others—such as the choice of materials—are more qualitative, taking into consideration industry standards, local environment and construction practices, and the goals and expectations for the project. Lastly, the evaluation of some considerations—particularly aesthetics—is subjective and will be influenced by personal and professional preferences, expertise, and experience.

Key Considerations

Drawing on historical architectural design standards and federal, state, and local guidelines, key considerations for design quality have been identified and are discussed in greater detail below. In general terms, a well-designed site and building will:

- Be of consistently high quality
- Reflect the qualities of the region
- Provide public space and amenities
- Serve and improve its immediate environment
- Be compatible with planning visions
- Strengthen connections with existing and future networks
- Capture and extend the essential qualities of the building type

These principles have formed the basis for the consideration and evaluation of the building and site designs proposed in the Category 1 casino applications and may provide guidance in dealing with site planning and architectural design issues as these projects are developed through subsequent stages of design and construction.

Background

Design Evaluation

Evaluating design is a complex process that takes into account multiple considerations such as form, program or use, functionality, materials, context (physical, economic, and social), and aesthetics. Since design is specific to the problem at hand—to its function, to its site and place, and to its physical and cultural context—the evaluation of an architectural design solution needs

to consider not only the external appearance but also the project in relation to its program, site, and context.

The evaluation process itself—and the decisions rendered as a result of the process—can vary depending on the goals and criteria for the project, the purpose of the evaluation, and the stage at which the project is evaluated.

Reference Materials

In evaluating planning and design there are certain general principles that have a degree of universal acceptance. The Roman architect, Vitruvius, wrote that "Well building hath three conditions; firmness, commodity, and delight." This statement has been generally accepted as a definition of good architectural design since the Roman era. A contemporary translation of the original Latin (*firmitas, utilitas, et venustas*) might be "durability, usefulness, and attractiveness." The last word in the sentence, "attractiveness" refers to the experiential qualities and appeal of an architectural environment as well as an external image as perceived from a distant viewpoint.

In contemporary times, the federal government's General Services Administration (GSA) Design Excellence Program attempts to describe some of the qualities of good design for federal buildings in its guiding principles, including:

"…*incorporating into such designs qualities which reflect the regional architectural traditions of that part of the nation in which buildings are located*."

"…special attention should be paid to the general ensemble of streets and public spaces of which Federal buildings will form a part."

Similarly motivated principles (among others) were outlined in the white paper provided by the Massachusetts Chapter of the AIA (American Institute of Architects) entitled "Casino Design: Sustainability and Community Linkages: Requiring Excellence for Massachusetts Casinos" (March 2013).

In addition, local guidance was gleaned from the Artery Business Committee's (now known as A Better City) principles for design and programming in the Wharf District of downtown Boston and from the architectural design review documents utilized by five cities located in New England: New London, CT; New Haven, CT; Northampton, MA; Lowell, MA; and Concord, NH. These cities were chosen because of their relative proximity and similar size to Springfield, Everett, and Revere. An overriding premise common to all these design review documents is that well designed buildings are good neighbors, and an important part of being a good neighbor is reflecting and responding to the planning and design characteristics of the surrounding built environment.

Approach to Review

In reviewing and evaluating a design, the clarity and completeness of the materials is important. For a concept design such as the Category 1 Casino applications, there is an expectation that the representation of a design proposal be consistent, complete, and clear. As an example, the representation of the size, location, and configuration of a specific component—such as a parking structure or hotel—should be consistently depicted in the various

plan, elevation, section, and perspective drawings in order to be clearly understood. A proposal should also represent all sides of a project, not just those that provide the most attractive views, and drawings should not utilize drawing techniques, such as the placement of entourage in renderings (people, vehicles, animals, plants, etc.) in order to blur or conceal building elements that could be deemed unattractive or problematic.

The Category 1 design review is grounded in the RFA-2 application materials, where approximately one third of the application questions concern Building and Site Design and provide broad-reaching and detailed information on the manifold aspects of design.
Supplementing the information submitted by the applicants, the review benefits from site visits to understand context; public meetings and input along with host and surrounding community agreements to hear from the community; existing facility visits to assess the quality and approach to development and operations; and MEPA documents including SDEIR for Mohegan Sun and FEIR for Wynn. Finally, Requests for Clarifications addressed apparent contradictions or inconsistencies.

Framework for Evaluation

Using the historical definition of good architectural design and drawing on federal, state, and local guidelines, certain elements of design quality emerge. As a basis for the evaluation of architectural design, a well-designed site and building will:

- **Be of consistently high quality** in its design, construction, and materials. High quality design extends through all scales from the broadest site planning and building organization to finish materials, details, planting, lighting, and signage. Quality materials and details also contribute to the life-span of the building.
- **Reflect and project the aspirations of the community, the region, and the Commonwealth** through its design even as it solves problems related to its immediate site and its program.
- **Provide public space and amenities** that benefit patrons and the community, open and accessible to all throughout the day and the seasons.
- **Serve and improve its immediate environment,** both manmade and natural**.**
- **Be compatible with planning visions** by being consistent with, and respectful of, the community's existing physical, historic, and cultural character and its plans and/or visions for the future.
- **Strengthen connections with existing and future networks** by integrating the site with adjoining streets and sidewalks, public transportation systems, waterways, trails, parks, and public spaces. Related to the issue of networks is that of access: an accessible site accommodates a broad cross section of users and can be seen as welcoming to the general public.
- **Capture and extend the essential qualities of the building type** to communicate its intended purpose in a captivating way. A resort casino design should reflect the business intentions and theme of the project. If the business intention is to convey luxury, then its exterior and interior

should clearly and consistently reflect that. If the business intent is fun and entertainment, than it should send that message and incorporate a program of uses and create an environment that consistently supports and communicates that theme.

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Raymond L. Porfilio, Jr., AIA, LEED AP
Epstein Joslin Architects
August 28, 2014

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Design Review

MOHEGAN SUN

Executive Summary

Using the key considerations outlined in Appendix A, the Mohegan Sun conceptual design may be understood as follows:

- *Overall quality.* The proposed design and its supporting documentation consistently portray an integrated design approach similar in quality to that observed at Mohegan Sun's Connecticut casino. Whether the facility ultimately reaches this level of design quality will depend on the continued development of the final building design, including the mix of retail tenants, the choice of materials, and the construction detailing.
- *Relationship to its region.* The proposed design references the history of Revere Beach as a resort destination in a contemporary architectural style.
- *Public space and amenities.* Landscaping and walkways are provided along the street edges. Otherwise, the public space and amenities provided are accessible only from within the development.
- *Serve and improve its immediate environment.* Designed to maximize its site potential, the proposed development sensitively responds to each of its respective sides. It proposes improvements to Sales Creek, locates a primary entrance adjacent to the MBTA Beachmont Station, and makes an effort to reduce the visual and physical impact of the parking structure at the lower levels of the building's base, though further attention may be required at the bus parking and loading areas adjacent to Washburn Avenue.
- *Compatibility with planning visions.* The proposed design establishes a presence at the southern edge of Revere and has the potential to be an initial step in creating a gateway to the community and the beach.
- *Connections with existing and future networks.* The proposed design is knit into the fabric of its site: the pedestrian entry is located adjacent to the MBTA Beachmont Station; the Sales Creek environs are respected and strengthened; the casino curves to reflect the racetrack beyond; and views to Boston and Revere Beach are provided.
- *Qualities of the building type.* With distinctive canopies uniting the design and the use of the building base roof for outdoor space, the proposal suggests design opportunities appropriate for a resort casino in an urban area.

Discussion of the specific aspects of the concept design presented by Mohegan Sun follows.

Site

The Mohegan Sun proposal will occupy a 40 acre site that is bordered to the north and east by a residential neighborhood, to the south by the Suffolk Downs racetrack, and to the west by a shopping center. The site is presently occupied by a dense array of horse barns that serve Suffolk Downs, and a small creek cuts across its southwestern corner. All the existing structures will be demolished. (See Figure 1.)

The site will be accessed by vehicles primarily via the north and southbound lanes of Route 1A, a divided highway that serves as an extension of I-90 north of Logan Airport, and secondary approach roads, Tomasello Way and Winthrop Avenue that border the site's western and northern edges respectively. Pedestrians will arrive from the community to the north or by public transport from the nearby MBTA Blue Line Beachmont Station.

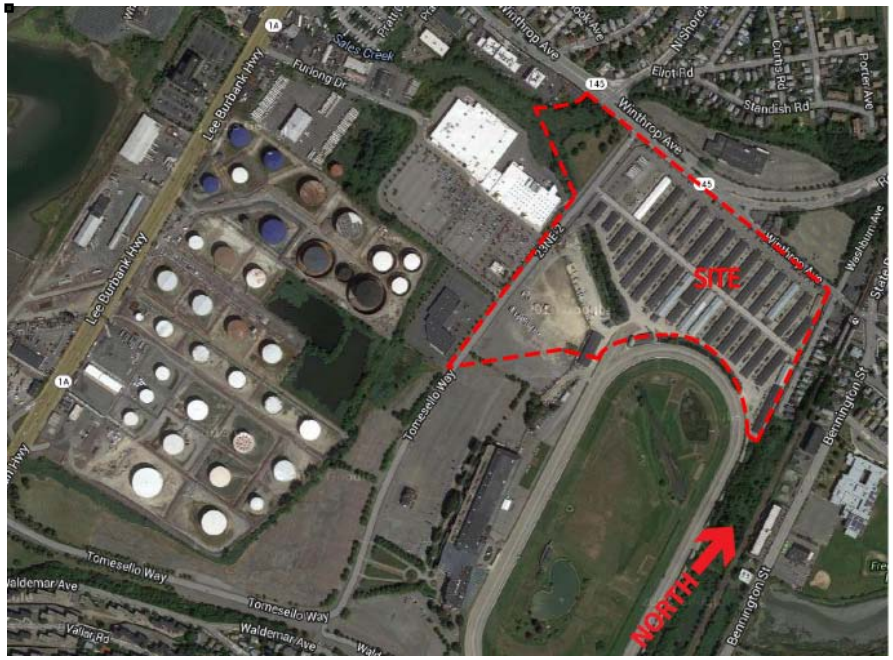

Figure 1. Existing Site

Program Elements

The program includes a large gaming floor, and several non-gaming amenities including a retail and restaurant arcade, meeting space, a children's entertainment and daycare space, a spa, a three-star and a four-star hotel, and above-ground structured parking.

Organization

The foundation of the proposal's organization is a four-story base in which the bottom three levels are devoted to parking and back of house spaces, and the top level houses the gaming floor and non gaming amenities. The four-story base pulls back from the street edges to the north, east and west, and embraces the racetrack to the south with a curved façade. (See Figures 2 and 3.)

The two hotels sit on top of the base with the smaller six-story hotel perched on the northern edge and the taller ten-story hotel on the southern edge.

There are three customer entries. A dramatic elevated circular court at the southwest corner of the building will accommodate passenger car arrivals for taxi and valet; a glass rotunda at the northeast corner (which connects to a small neighborhood retail district and provides ready access to the MBTA station) will accommodate pedestrians and bus pick-up and drop-off; and elevator access from the garage will provide localized access to accommodate self-parkers. (See Figure 3.)

Internally the casino level is organized with the retail arcade running east to west linking the arrival court, food court, and meeting space to the west with the fan-shaped gaming floor and circular pedestrian entry to the east. The gaming floor is located near the southern edge and offers views of the racetrack. In general, the main level—including the casino, hotel lobbies, and retail—is inwardly focused with limited entry points, no outdoor dining space, and few opportunities for external views. The top of the four-story base is developed as a green roof area surrounding the opening of the arrival court, links the two hotels and their outdoor swimming pools, and offers views to the water and Boston.

Exterior Design

While the Mohegan Sun proposal limits direct connections to its surroundings, the architects have recognized the need to create an exterior that is understated with respect to massing, materials, fenestration, lighting, and site circulation as the site resides on the edge of a residential neighborhood. This design approach begins with the site's roadways which bring all customer and service vehicles into the southwestern corner of the site away from the residential streets. The site circulation directs service vehicles and buses to a dedicated area to the east, adjacent to Washburn Avenue. Next, the three levels

Figure 2. Section looking west showing 4-story building base

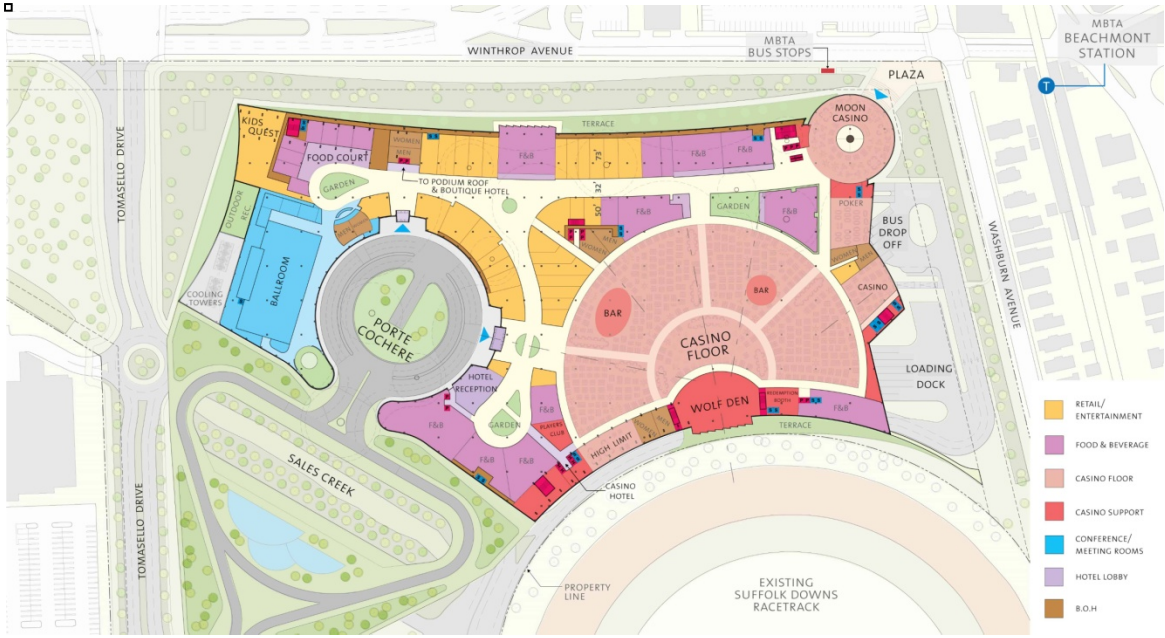

Figure 3. Casino Level Plan

of parking within the four-story base are partially masked by well landscaped berms that rise up from the street edge to buffer the building from its surroundings, and the uppermost parking levels that protrude from this earthen buffer are shown to be clad with a warm grey fieldstone to minimize light pollution from car headlights and to provide a natural backdrop to the vegetation. (See Figure 4.) Moving upward, the absence of much fenestration on the casino level also helps to minimize light pollution and the arrival court with its higher concentration of light and activity is effectively buried within the building footprint on the south side away from the residential areas.

Figure 4. Looking East Along Winthrop Avenue

The primary outward gesture to the neighborhood comes in the form of the lantern-like prominent pedestrian entry at the site's northeast corner, located as close as possible to the adjacent MBTA Blue Line Beachmont Station. (See Figure 5.)

Finally, the decision to distribute 450 to 550 hotel rooms into two separate blocks instead of one taller tower reduces the overall project height and minimizes the casting of extended shadows. The block

Figure 5. View of Northeast Entrance for Pedestrians

closer to the residential area is six stories above the roof of the four-story base and the taller of the two hotels is pushed as far from the residential area as possible. Both hotels are articulated with deep bronze clad reveals at each floor level which visually break up the volumes into individual stories, and their outward facing façades feature single vertical indentations from top to bottom to further break up their apparent mass.

The project's materials which include fieldstone, limestone, and colored precast concrete for the podium and glass and bronze colored framing and accents for the hotels are within a color palette that is earthy yet quiet. While the renderings do not illustrate a comprehensive signage package, they do show signage that is consistently back lit and therefore visible, but subdued.

In an effort to relate to the nearby Revere Beach, the project's designers have introduced a series of linked concrete canopies running over the top of the casino level's interior circulation, starting at the

arrival court and ending at the pedestrian entry. This feature, shown as a floating cloud-like or tree-like field of elements, uplit from below, will become an identifier for the project and give it a unique character: from the drawings provided, the canopies will be visible at night from the adjacent residential areas and their columnar supports will be visible at the interior. However, it is unclear how visible the canopies will be from the green roof proposed for the building base and the building enclosure between the roof line and the canopies will require further design and construction attention. (See Figures 4 and 5.)

Summary

The overall design and documentation consistently portray a distinctive contemporary approach to the proposed casino in Revere, building upon the history of the city as a resort destination. The logic of the proposal's configuration and material choices are consistently sensitive to its surroundings. In deference to its partially residential context, the project's edges pull back from the bordering streets and reinforce the distinct inward focus of the development. However, the design could be enhanced by further opening up the main level to the south with added fenestration (and perhaps terraces for outdoor dining) and by strengthening the experiential connection to the nearby Revere Beach. This promising approach will require continued refinement and careful execution to reach its full potential.

WYNN EVERETT

Executive Summary

Using the key considerations outlined in Appendix A, the Wynn conceptual design may be understood as follows:

- *Overall quality.* The proposal emphasizes the luxury market as observed in other Wynn properties. This is perhaps best reflected in the conception of the hotel interiors and the retail arcade; less so in the articulation and materials of the tower's exterior. Further, the overall proposal lacks consistency in its documentation and in the resolution of the design of its components.
- *Relationship to its region.* The proposed development is in a prominent location on the Mystic River and will be a potential catalyst for a changing waterfront. The development is located on a peninsula and its impact will be a highly visible symbol of redevelopment.
- *Public space and amenities.* The proposed development provides a harbor walk and link to the Gateway Center and the Mystic River Reservation to the north and anticipated future development to the south and east. In addition, the retail arcade is developed along the ground floor, opening out to the waterfront.
- *Serve and improve its immediate environment.* The proposed development restores a highly contaminated site and provides a publicly accessible, richly landscaped outdoor space along the waterfront.
- *Compatibility with planning visions.* The proposed development is consistent with the Everett Central Waterfront Municipal Harbor Plan, the Draft Everett Lower Broadway District Urban Renewal Plan, and Chapter 91 requirements for development along the water's edge.
- *Connections with existing and future networks.* The proposed development emphasizes the potential of pedestrian connections via the harbor walk and with water transportation. The success of these will depend on future development of adjacent parcels.
- *Qualities of the building type*. The proposed development adapts to its site. The conceptual design as presented articulates the retail arcade in a manner distinct from the hotel tower such that they represent two building styles; in both, the materials and their details remain to be developed.

Discussion of the specific aspects of the concept design presented by Wynn follows.

Site

The Wynn proposal is planned for a 33.9 acre former industrial site located along the Mystic River with just under 26 acres of developable land. (See Figure 6.) Once occupied by the Monsanto Chemical Company it has few existing structures and minimal vegetation. It is bordered to the west by MBTA commuter rail tracks and a large "big box" shopping center sitting on the other side of the tracks; to the east by Alford Street/Broadway (Route 99); and to the north by a large MBTA vehicle maintenance facility (the entrance to the site will benefit from negotiations regarding the abutting MBTA property). The adjacent waterfront property, on the opposite side of Alford Street/Broadway, is occupied by a large electric power plant and next to that, an industrial scale steel recycling operation. A small sliver of land between the site proper and Alford Street/Broadway is landscaped and bermed and otherwise occupied by an MWRA pump station, a maintenance building, and a 365-foot wind turbine. The section of Alford Street/Broadway north of the site is an undivided four-lane street lined with low-rise light industrial, commercial, and residential buildings. Customer and service vehicles will arrive at the resort casino via the north and south bound lanes of Alford Street/Broadway.

Program Elements

The program includes a large gaming floor and several non- gaming amenities including a retail and restaurant galleria, nightclub, a spa, meeting space, a five-star hotel, and structured underground parking.

Organization

The building occupies the majority of the site while still allowing for continuous open space along the waterfront. (See Figure 7.) The small

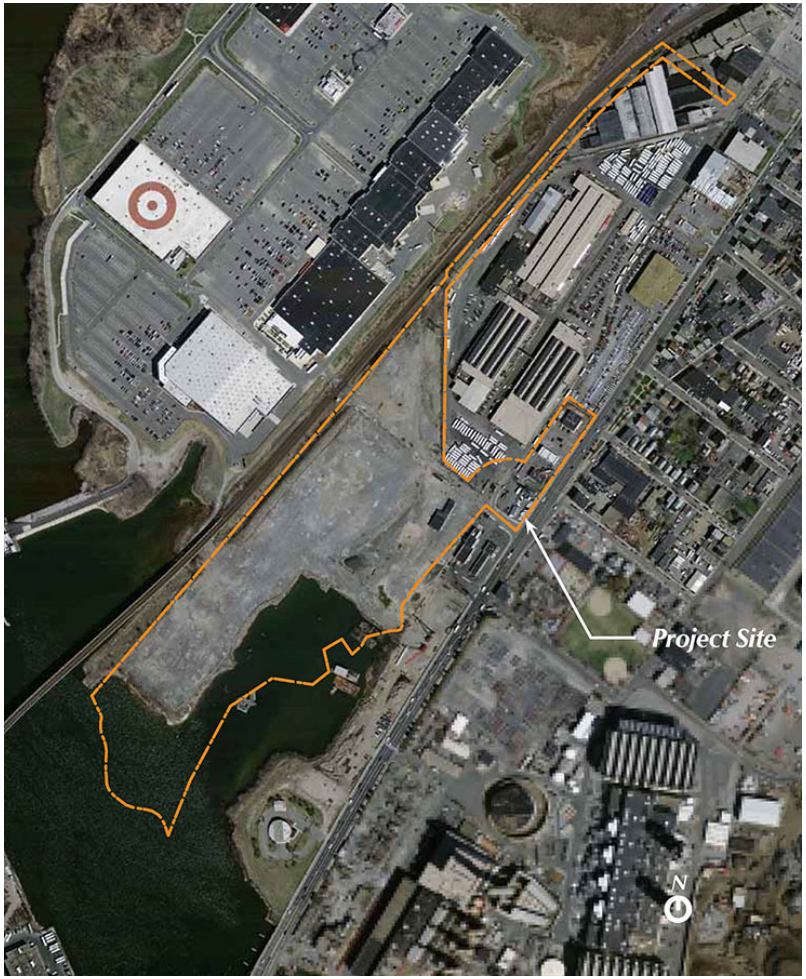

Figure 6. Existing Site

Figure 7. Proposed Site Plan

space left over along the western and northern edges is used for fire lanes and a service yard. In the preferred alternative, customers arriving by car or bus will enter the site off of Alford Street/Broadway via a new intersection and proceed along a driveway that curls back to the waterfront, terminating at the main entrance; service vehicles will enter via a separate driveway from the north that cuts through the neighboring MBTA maintenance facility property terminating at the project's service yard at the northern tip of the site.

The main customer entrance faces the waterfront and is furnished with a large porte cochere. From there customers enter into a large skylit "winter garden". Secondary entrances lead from the landscaped waterfront area into the retail galleria and provide convenient access for pedestrians walking along the river or arriving by boat.

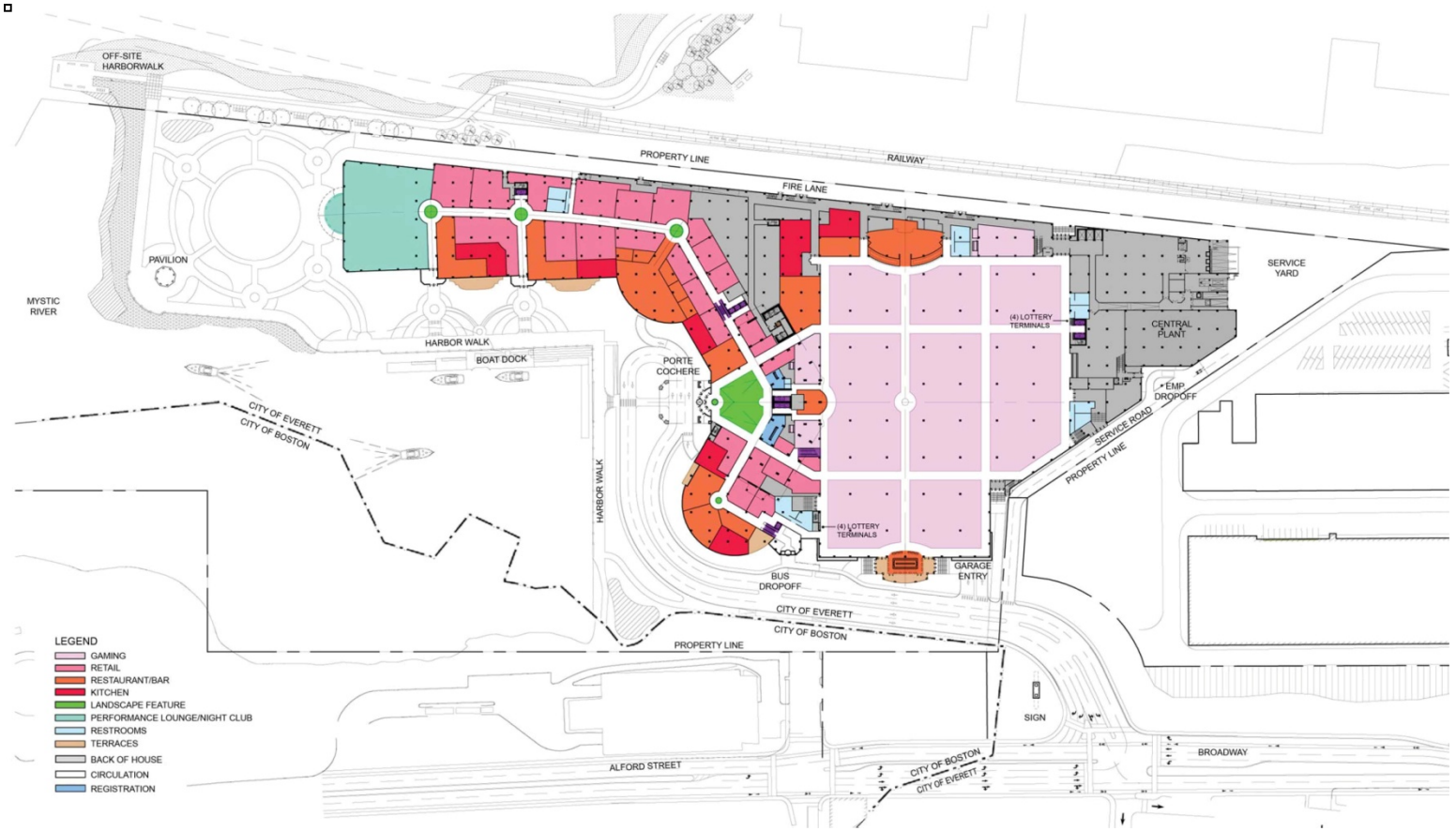

Figure 8. Casino Level Plan

The proposal's vertical organization begins with a four level underground parking structure with a footprint that roughly matches that of the building above. Sitting directly above the parking is the building's base containing a large gaming floor, back-of-house functions, a nightclub and retail shops and restaurants. On this level and on the waterfront side of the gaming floor is a skylit retail and restaurant galleria intersected by the main customer entry and the hotel lobby. The retail galleria extends into the southern part of the site terminating at the location of a circular open green space adjacent to the water's edge. Sitting above the gaming floor is a meeting space, spa, and a second level of back of house functions. The hotel rises above all this from a location between the main entrance and the waterfront side of the gaming floor to a height approaching 400 feet. (See Figure 8.)

Figure 9. Exterior View from the South

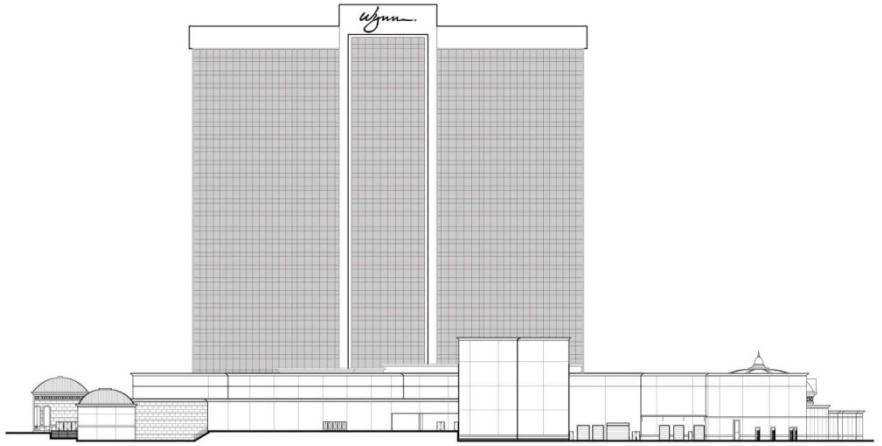

Figure 10. North Elevation

Exterior Design

The exterior design is characterized by materials and details for the casino/retail base distinct from that of the hotel tower. The renderings show the waterfront facing façades of the retail galleria with rusticated stone-like surfaces, arched openings, decorative fabric awnings, and pavilion-like entries with metal clad domed roofs. (See Figure 9.)

Stylistically the waterfront side of the building base appears to reference European civic buildings of the 18th and 19th century typically found in a dense urban context. The restaurants along the southern arm of the galleria open out into the landscaped area with dining terraces which help to integrate the building base with the waterfront. The styling of the base's river facing façades is intended to suggest the theme of five-star luxury. The west and north façades of the base are undecorated and windowless synthetic stucco EIFS (Exterior Insulation and Finish System) surfaces that face fire lanes and service yards (See Figure 10.)

In contrast to the building's base, the v-shaped hotel is stylistically different from—and is unrelated to—the base's traditional detailing. Clad mostly with bronze colored glass curtain wall, its roof line and corners are trimmed with unembellished synthetic stucco (EIFS). Its height and width give it a scale unmatched in this neighborhood. The Applicant describes it as a dramatic and iconic feature that will be added to the Everett and greater Boston skyline. However, the tower does not have the innovative energy characteristics of Wynn's Las Vegas hotels and of the best new construction in the Boston region. This is a particular concern for a building that will occupy such a prominent place on the greater Boston skyline.

Figure 11. View of Proposed Boat Dock

The landscaped area of the waterfront zone is well planted and provides a continuous pedestrian path along the water edge that links up with the larger Mystic River pedestrian network. A new boat dock, supporting water transit, is proposed for the water's edge just opposite the galleria. The dock appears as a simple wood structure and the bulkhead which stretches along half of the project's waterfront appears to be constructed from steel sheet piling. The materials and detailing of the dock and the accompanying bulkhead appear utilitarian and lack any notable features to celebrate a sense of arrival from the water. (See Figure 11.)

Finally, the renderings and landscape plans show large trees distributed around the river facing side of the site. Generally the layout of the walkways and planted zones mirror the traditional styling and symmetry of the retail arcade and are suggestive of the five-star theme

Summary

The Everett proposal emphasizes the promise of the Wynn brand, referencing a five-star luxury experience similar to other Wynn properties. The positive features of the proposal include the cleanup of a contaminated site, the redevelopment of a waterfront for public use (which has long been a regional goal), and the creation of new water transit facilities on its site. Additionally, it is organized with all parking underground thereby preserving as much landscaped open space as possible. Its waterfront retail galleria references European civic buildings of the 18th and 19th centuries. However, the hotel tower is stylistically different from, and unrelated to, the base's traditional detailing. Moreover, the tower does not have the innovative energy characteristic of Wynn's Las Vegas hotels and of the best new construction in the Boston region. This is a particular concern for a building that will occupy such a prominent place on the greater Boston skyline.

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August 28, 2014

Traffic and Parking Review

Executive Summary

The purpose of this memorandum is to provide background and an overview of traffic impact studies in general and an understanding of the key factors that determine how well the Category 1 Applicants in Region A, Mohegan Sun Massachusetts (MSM)/Revere and Wynn/Everett, responded to the traffic and parking related questions in the application. Some of the key factors in reviewing each Applicant's responses and traffic studies include:

- Trip generation forecasts
- Parking demand analysis
- Site access
- Adequacy of the study area
- Intersection operations
- Traffic deficiencies and proposed mitigation

Following a discussion of key general factors in the traffic and parking studies, a summary of each Applicant's overall traffic and parking response is provided.

Traffic Impact Analysis Process – General Overview

Traffic Impact & Access Studies (TIAS) have become a common part of permitting, planning and designing new projects at both the local and state level. Typically, a TIAS is used for the following:

- To determine the capacity of the existing transportation system (highways, transit, etc.).
- To identify the potential transportation demands (i.e., vehicular traffic, transit trips, parking demands, person trips) that could result from a proposed development project.
- To evaluate the effect that those new demands have on the transportation system near the proposed development project.
- To determine the development project's access requirements and identify necessary mitigation actions that should be considered to reduce or eliminate the development project's impacts.

In conducting a TIAS, there are a number of distinct steps to be followed. Guidelines are provided by a number of organizations, including the Institute of Transportation Engineers (ITE)[1] and the Massachusetts Department of Transportation (MassDOT). Local communities may also have specific study requirements.

Initially, data collection and inventories of the existing transportation systems are gathered. Inventories include collecting operating characteristics (e.g., traffic volumes, crash history) and physical data related to the transportation system (roadway width, intersection geometrics, transit route, etc.). The time periods for traffic volume data collection are determined by the proposed land use. For example, peak morning (7-9 AM) and afternoon (4-6 PM) commuting periods are studied for residential uses. Weekday afternoon peak commuting and Saturday midday peak conditions are studied for retail projects. Other special uses (e.g., a sporting arena) may require site specific time periods. In some cases, the anticipated conditions of both the commuting peak times and the facility peak time are examined. In general, the TIAS typically examines the estimated traffic conditions during the commuting peak volume time periods, as these would typically reflect the worst case conditions. If the traffic demands of the proposed development can be accommodated during the peak time periods, then it is assumed that traffic can be adequately accommodated

[1] Institute of Transportation Engineers, Transportation Impact Analyses for Site Development, An ITE Recommended Practice, Washington , D.C. , 2010.

during other time periods. If improvements are warranted, traffic mitigation must be designed for the peak roadway volume conditions and will improve travel conditions during the off-peak times as well.

In the case of a proposed gaming facility, the facility peak traffic typically occurs late on Saturday afternoons and evenings with an additional busy period later on Friday evenings. The Friday PM commuting period and other weekend hours are also busy periods. Traffic studies for proposed gaming facilities should, at a minimum, evaluate conditions during the Friday PM commuter period and a Saturday midday peak period. While the facility peak traffic typically occurs later in the evening, trip forecast information should also be provided for the facility peak periods, even if those periods are not analyzed in detail relative to traffic operations. Given the type of the multi-use development project being proposed with the gaming facility by both Applicants in Region A, the morning peak hour is not as critical for traffic analysis purposes.

The selection of a study area is dependent upon the proposed development use as well as its size. A larger or more intense use (e.g., a large retail center) will generate more traffic from a larger geographic area than a smaller, less intense use (e.g., a small office). The study area evaluated by each of the Region A Applicants is discussed later in this memorandum.

A major step in completing the TIAS is the forecasting of transportation demands in terms of vehicle trips. Urban areas with extensive transit systems and nearby high-density residential uses require that forecasts include person trips by mode of travel as well as vehicle trips. Both of the proposed casinos in Region A are located in urban areas with varying degrees of access to public transportation services, and therefore warrant a more detailed analysis with person-trip forecasts and a division of those trips across multiple modes of transportation. In some studies, forecasts may also need to include parking demand estimates. In estimating the arrival and departure patterns of the site related trips the Applicant should consider the existing traffic patterns in the vicinity of proposed development project, as well as the population and available transportation network within the expected “draw” area of the project. Again, a larger project will attract trips from further distances. Based on information provided in the research and trip distribution models used by each of the Applicants, either proposed casino would draw traffic from distances driven up to 2 hours away. Based on our previous research performed for the Category 2 gaming facilities and the review of the Category 1 Region B casino proposal, the market area studied by each of the Applicants appears to be reasonable.

Analysis of each Applicant’s impacts is based on accepted methods and criteria that indicate how well the existing transportation system will operate once the proposed development is built and functioning. In general, the transportation analysis methods compare the demands versus the available capacity for adjacent intersections; roadway segments; and where applicable, other components of the transportation system, such as a transit service line or parking facilities. The analysis enables a determination of the incremental impacts caused by each of the proposed development projects. The analysis results help with determining the need for and extent of mitigation and if the proposed site access plan will adequately serve the respective development projects. Criteria are defined for each component of the transportation system (e.g., intersections, ramp merges) that determines the estimated operating conditions in terms of Level of Service (LOS), which is a qualitative measure to rate the quality of traffic flow in a transportation system. The Level of Service for a particular portion of the transportation network is defined in the Highway Capacity

Manual[2], and can vary throughout the day as the demands placed on the transportation system vary.

In reviewing the Wynn/Everett and the MSM/Revere proposals, the adequacy of each site's access, circulation and parking supply were evaluated.

Traffic and Parking Application Questions

Each Applicant was required to provide information relative to potential traffic impacts, parking needs, a parking plan, site access, and proposed mitigation. As part of the Building and Site Design portion of the application, the following are seven (7) specific application questions or items that each Applicant needed to respond to. In addition to the seven Building and Site Design application questions related to traffic and parking, there are five (5) specific Applicant questions from Category 5 – Mitigation that are also relevant to traffic. Those questions are listed below as well.

4-8 Parking;
4-9 Transportation Infrastructure;
4-23 Egress for the Gaming Establishment Site;
4-24 Adequacy of Existing Transportation Infrastructure;
4-25 Traffic Mitigation;
4-26 Parking Facilities;
4-40 Alternative Fuel Vehicles;
5-1 Infrastructure Costs;
5-2 Impacts and Costs;
5-33 Traffic Control Measures;
5-34 Traffic for Special Events; and
5-35 Snow Removal.

These items focus on providing descriptions of on and off-site transportation infrastructure, the adequacy of the current system and what, if any, mitigation actions are necessary to minimize impact and accommodate each of the project's respective demands.

In addition to the information provided in the application itself, each Applicant's TIAS was included as part of their submissions to the Executive Office of Energy and Environmental Affairs (EOEEA) through the State's environmental review process, the Massachusetts Environmental Policy Act (MEPA). The MEPA process is a public process, and allows for comments from state agencies, municipalities, organizations, and private citizens. Both of the Applicant's MEPA documents provided significant additional information with respect to traffic, parking and mitigation.

In the case of Wynn/Everett, the additional MEPA documents submitted included their Draft Environmental Impact Report (DEIR) dated December 16, 2013 and their Final Environmental Impact Report (FEIR) dated June 30, 2013, both EEA # 15060.

In the case of MSM/Revere, the additional documents included their DEIR dated September 3, 2013, their Notice of Project Change (NPC) dated January 28, 2014, and their Supplemental Draft Environmental Impact Report (SDEIR) dated June 30, 2014, all EEA # 15006

Each Applicant may have to complete further review coordinated through the MEPA process, in addition to this MGC review. Consequently, each Applicant may need to address outstanding issues or requests for additional information as part of the MEPA process and during the permitting/design stages following MGC license award.

Overall Review Approach

As part of our evaluation, we visited both proposed project locations in order to become familiar with each site and its surrounding transportation network. A review of the MEPA documents provided an understanding of the existing roadway

[2] Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2010.

network in the vicinity of each proposed site; the anticipated daily and peak traffic volumes and arrival/departure travel patterns; the level of impact each new development project could have on traffic operations; and the extent to which mitigation of impacts may be required. The MEPA documents were reviewed in conjunction with the specific responses to the application questions. In conducting the review, accepted engineering guidelines for traffic study procedures and analysis methods published by MassDOT and ITE[3] were used, as well as conducting independent research with respect to trip forecasts and analysis, where appropriate.

The following paragraphs summarize the key impact factors that are critical aspects in determining the adequacy of the traffic and parking responses.

Gaming establishment Related Traffic Forecasts

While gaming establishments in general have been in existence for years, there has been a relatively limited amount of traffic and parking data collected for this type of land use that has been compiled into a usable database to forecast peak traffic levels. The ITE Trip Generation manual has compiled the largest source of data to forecast traffic for different land uses. However, ITE has a limited amount of information available for the gaming establishment type land use.

With a limited amount of data and forecast models available through ITE, additional research was conducted as part of our review to determine the traffic generating characteristics of gaming establishments. A number of published technical papers and technical reports submitted for other gaming establishment projects were obtained for review and a list of these are attached to this memorandum. Based on our research, trip forecast information for similar gaming establishments was identified and used as a guide to determine the reasonableness of the information submitted by the Applicant. Key findings from our research include:

- Trips are typically forecasted based on the number of gaming positions (gp),
- The peak activity for gaming establishments occur on Saturday evenings with Friday evenings (after the commuter peak) and Sunday afternoons also experiencing comparable levels of activity.
- While gaming establishment activity is not high during the typical weekday morning commute, research indicates that the gaming establishments can also be active during a weekday PM commute, particularly the Friday PM commuting time period.
- The peak season of gaming establishment activity is typically during the July-August period.

As a result of this research, the following vehicle trip generation rates were identified.

TABLE 1 Summary of Vehicle Trip Generation Rates
(per gaming position)

Day	PM Peak Hour (avg.)	Range pf Peak Hour Trip Rates
Friday	0.43/gp[A]	0.19-0.79/gp
Saturday	0.48/gp[B]	0.30-0.64/gp

[A] vehicle trip rate at time of roadway peak
[B] vehicle trip rate at time of facility peak

[3] Institute of Transportation Engineers, Trip Generation, Washington, D.C., 2012.

Because the trip generation rate data available for a casino type of facility is very limited, the data found in our research produced a wide range of trip rates as it represents casino facilities that vary greatly in surrounding environment types (urban versus suburban), the number and type of on-site amenities, and other factors. Therefore, the above range of trip rates will be used as a baseline evaluation model to evaluate whether each of the Applicant's trip rates is within the range of limited historical data.

Based on our findings, it appears that it is more appropriate to develop trip generation rates by limiting the trip rate comparisons to reflect only facilities that have similar features and are located in similar surrounding environments as the one proposed by each of the Applicants. Due to the limited available data, additional trip generation rate research was performed by each Applicant to justify the trip generation rates proposed.

To encourage the use of alternate modes of transportation, a common part of traffic studies is the development of a Transportation Demand Management (TDM) program. A comprehensive TDM program is also a typical requirement for large-scale projects going through the MEPA review process, and usually consists of actions such as designating a full time transportation coordinator, joining and supporting organizations that promote the use of alternate modes of transportation, providing information on-site about public transportation options, subsidizing employee public transportation fares, and other items.

Parking Supply Requirements

Based on information from ITE Parking Generation[4] manual and from MGC advisors familiar with numerous gaming establishments in the northeast and Canada, it was determined that providing one (1) parking space for each gaming position serves as a reasonable baseline evaluation criteria for evaluating parking adequacy at the Category 1 casinos. Our review of each Applicant's proposed parking plans considered the amount of parking to be provided and evaluated the designation of parking for different categories of user (e.g., employees, valet, electric, etc.). We also reviewed access from adjacent roadway systems, the layout of parking areas, and the connections or path for pedestrians to travel between parking areas and building entrance.

Adequacy of Study Area

The limit of a study area is a key aspect of conducting a TIAS and in determining critical impacts and mitigation needs. A study area is typically selected based on the proposed use and the magnitude of likely trip generation, the project's access points, the anticipated arrival/departure patterns, the location of key nearby intersections, known problem locations, and known issues within reasonable proximity of the project site. The larger the project, the more the potential market area or geographic draw tends to be, which requires a larger study area. There is no one set of guidelines for determining a study area. ITE provides some guidance, but regional agencies as well as individual communities may have different requirements. For example, ITE suggests that large shopping centers (>100,000 square feet) or developments that will generate more than 500 peak hour trips should consider a study area that includes all signalized intersections and freeway ramps within two (2) miles of the property line and major unsignalized intersections within one (1) mile of the property line. However, it may be necessary to study locations beyond these limits depending on the issues and type/size of the development. Engineering judgment plays a critical role in determining the study limits.

[4] Institute of Transportation Engineers, Parking Generation, Washington, D.C., 2010, 4th Edition.

Identifying Traffic Deficiencies and Required Mitigation

In determining the adequacy of the existing transportation infrastructure and the proposed on-site parking supply, we evaluated each project's demand versus the capacity (or supply) of adjacent roadways. For traffic flow, this is typically accomplished by completing what is referred to as a Level of Service (LOS) analysis at the study intersections and if applicable, the roadway segments and highway ramps included in the study area. LOS is a qualitative measure defined in the Highway Capacity Manual[5] and is used by traffic engineers to rate the quality of traffic flow in the transportation system. Levels 'A' to 'F' are designated with the analysis methods taking into account the physical conditions of the roadways, the volume and characteristics of the traffic and type of traffic control (e.g., traffic signal, STOP sign, merge, etc.). The Level of Service indicates how well or how poorly intersections and roadway sections operate. LOS 'A' represents the best operating conditions and 'F' the worst. In addition to LOS, vehicular queues at intersections is another critical measure of traffic operations, particularly in urban areas where the potential exists for vehicular queues to extend from one intersection through an upstream adjacent intersection. The TIAS for each application forecasts and evaluates future conditions with and without the proposed gaming establishment (Build vs. No-Build). Comparing the No-Build results with the Build conditions indicates the incremental impact of the gaming establishment related demands. Based on the findings, deficient locations (those experiencing a LOS 'E' or LOS 'F') or those locations anticipated to experience significant changes in levels of incremental impact can be identified and the need for mitigation determined.

Locations noted as deficient and possibly requiring mitigation were identified as part of the evaluation. Locations noted as being deficient without the project (i.e., No-Build condition) may need improvements, but may not be the responsibility of the Applicant. However, if the deficiency is considered by state or local authorities with jurisdictional control to be significant, it is common for the project proponents to participate in mitigating the deficiency.

In reviewing each of the Applicant's traffic and parking responses, the traffic studies submitted by the Applicants were reviewed and those locations noted as "deficient" were identified. Our evaluation then determined if mitigation was proposed for the noted deficient locations. A judgment was made related to the proposed mitigation in terms of being feasible; the clarity of the presentation; and if the Applicant adequately demonstrated that the deficiency would be alleviated.

Summary of the MSM/Revere Traffic and Parking Responses

This section provides a summary of the technical reviews of the traffic and parking responses provided by MSM/Revere. The figures referenced below are included as an attachment to this memorandum.

Information contained in the MSM/Revere's traffic study (prepared by Vanasse Hangen Brustlin, Inc.) and other supporting information included in the MSM/Revere application were reviewed for relevant information. In general, the TIAS followed procedures and methods generally accepted by MassDOT. Additionally, comment letters and memoranda prepared by MassDOT and various municipalities on the submitted DEIR were reviewed to obtain any further insights or concerns related to the proposed casino.

In terms of accessibility, the MSM/Revere project site is located on the south side of Winthrop Avenue in Revere. The project site is located less than half a mile to the east of Route 1A, a major regional roadway. Winthrop Avenue connects with the Revere

[5] Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2010.

Beach Parkway (Route 16), a major east-west regional roadway with connections to Route 1 and I-93, both regional highways. To the south of the project site, Route 1A provides connections to Logan International Airport, the Sumner and Callahan Tunnels, and the Ted Williams Tunnel. These tunnels provide access to the interstate highway system (I-93 and I-90), as well as access to downtown Boston. To the north of the project site, Route 1A connects with Route 60 through the City of Revere to provide access to Route 1. Regional Area and Site Locus Maps are shown in Figures 1 and 2, respectively.

The project site is located less than 200 feet from Beachmont Station, on the MBTA Blue Line. The project site is also served by MBTA bus service, primarily via Route 119 which operates along Winthrop Avenue with bus stops in the immediate vicinity of the project site. The existing public transportation system map is shown in Figure 3. The project's primary pedestrian entrance is located at the northeast corner of the project site to take advantage of the close proximity to Beachmont Station.

The proposed site will be accessible from the larger transportation network via three roadways: Tomasello Way at Winthrop Ave, Furlong Drive, and Tomasello Way at Route 1A. However, the Applicant states that patrons will be encouraged to use Furlong Drive and their traffic analysis reflects that.

The project site is directly served by two proposed driveways, each with a proposed roundabout at its intersection with Tomasello Way. The driveway that connects to the smaller proposed roundabout, located approximately 550 feet south of Winthrop Avenue, will provide access to and from the proposed on-site parking garage. The second driveway connects to the larger proposed roundabout and is located across from Furlong Drive, approximately 1,200 feet south of Winthrop Avenue. This driveway provides a second access to and from the proposed on-site parking garage, as well as access to a bus drop-off and pick-up location, the loading docks for service vehicles, and a surface parking lot that will serve as a valet overflow and taxi staging area. A separate driveway also connects to the larger roundabout that provides access to the porte cochere. The project site plan, showing both driveway locations, is shown on Figure 4.

The Applicant is proposing to construct an on-site parking garage with 4,200 parking spaces. An additional 270 on-site parking spaces are proposed in the surface lot noted above. The parking garage is proposed for patrons only. Employees will be required to park at off-site locations. Approximately 750 off-site parking spaces are proposed, though the exact locations of the off-site employee parking has yet to be identified. The number of parking spaces provided is equivalent to 0.89 and 1.04 parking spaces per gaming position excluding and including the off-site parking, respectively. Based on the parking supply guideline of 1.0 parking space per gaming position noted above and the parking projections made by the Applicant, the proposed parking supply is adequate to meet the expected demands. The Applicant provided a clear presentation of the proposed parking layout, its proposed uses, and its access and egress to and from adjacent roadways. The parking garage provides direct pedestrian access to and from the casino, the hotel, or the retail uses. The parking floor plans are shown in Figures 5 through 7.

The potential traffic routes to be used for access and egress were adequately identified and described by the Applicant. The Applicant's traffic study area (in their SDEIR) included a total of 28 intersections in Revere, Boston, and Chelsea. The overall traffic study area is considered to be adequate, but it is noted that not all major roadways and highways were studied, such as the existing toll plazas at the Sumner Tunnel and Ted Williams Tunnel. These existing toll plazas were likely omitted due to MassDOT's stated plans to move to an all-electronic tolling system statewide. The study area is shown in Figure 8.

The Applicant's traffic study examined the Friday afternoon commuter peak hour and the Saturday midday peak hour, when the peak traffic flow occurs on the adjacent roadway system. The Applicant's trip generation rates of 0.40 and 0.41 trips per gaming position (Friday evening and Saturday midday peak hours, respectively) for the proposed casino are based on data obtained from two similar facilities, the Parx Philadelphia Casino and Race Track in Bensalem, PA and Chester Harrah's Casino and Race Track in Chester, PA. Based on our research of the trip forecast models, the trip generation rates used by the Applicant are reasonable.

The Applicant then split the expected trips into numerous travel modes, including automobile, taxi, public transportation, shuttle bus/coach, and walk/bike. The mode split presented in their SDEIR is a reasonable split among the various transportation alternatives, and is summarized in Table 2. Traffic Distribution Maps, representing the distribution of peak hour traffic flow, are shown in Figure 9. The Applicant is proposing a Transportation Demand Management (TDM) program that includes designating a transportation coordinator, MassRIDES, joining the Logan Transportation Management Association (Logan TMA), a guaranteed ride home program, flex time work options when feasible, a transportation monitoring program, and a possible bicycle sharing station, and other items.

The Applicant has proposed mitigation measures at various locations. The mitigation measures include traffic signal improvements, pavement markings upgrades, lane configuration changes, roadway widening, and/or roadway and intersection geometric improvements. Depending on location, the mitigation measure may be a stand-alone improvement or combined with several improvement elements. Other mitigation measures include pedestrian and bicycle improvements.

Table 2 – MSM/Revere Summary of Travel Mode Split

Mode	Patrons	Employees
Auto	73%	56% [A]
Taxi/Drop-off	11%	7%
Public Transit	11%	30%
Shuttle Bus/Coaches	5%	56% [A]
Walk/Bike	< 1%	7%
Total	**100%**	**100%**

[A] As noted above, the vast majority of employee parking is to be located off-site. The 56% auto share is the share of employees driving to the offsite parking locations, and then using employee shuttles to access to travel to the project site.

source: Supplemental Draft Environmental Impact Report, Mohegan Sun Massachusetts, Revere, Massachusetts, EEA #15006

The most critical areas where mitigation is proposed are at the following locations:

- Route 1A (Revere/Boston)
- Route 1 / Route 16 interchange (Revere/Chelsea)
- Bell Circle (Revere)
- Copeland Circle (Revere)
- Beachmont Station (Revere)

Conceptual level plans of the proposed improvements at the above locations are shown in Figures 10 through 19.

The most significant mitigation that the Applicant is proposing is along Route 1A. The Applicant has settled on two alternatives for improvements along Route 1A, including a Route 1A "northbound flyover" alternative at the Boardman Street intersection, and a series of traffic signals in the "at-grade" alternative. In the northbound flyover alternative, Route 1A northbound through traffic would be served by an elevated portion of the roadway and

would not travel through the signalized intersection at Boardman Street. It is noted that the "northbound flyover" alternative needs to be developed further to address safety concerns in the proposed weaving area near Waldemar Ave. In the "at-grade" alternative, three new traffic signals are proposed along the corridor, in addition to keeping two existing traffic signals. It is noted that with this alternative, all left-turns from Route 1A would be prohibited, and vehicles would be required to make downstream u-turn movements instead. In this manner, each traffic signal would be able to operate more efficiently compared to the existing traffic signals along the Route 1A corridor. Either option mitigates the casino-related traffic and is an improvement relative to the existing conditions. MassDOT will ultimately be responsible for selecting the preferred alternative.

In their SDEIR, the Applicant also discusses a possible Route 1A flyover in both the northbound and southbound directions. However, the Applicant is not proposing to construct or fund a flyover in both directions and notes that a Route 1A southbound flyover is primarily needed only during the morning peak period, when casino-related traffic is very light. But the Applicant has demonstrated that the proposed Route 1A northbound flyover does not preclude MassDOT from constructing a flyover in the southbound direction either concurrently with a northbound flyover or at a later date, but notes that additional right-of-way would be required on the west side of the Route 1A corridor in order to construct a southbound flyover.

At the Route 1 / Route 16 interchange, new ramps and two new traffic signals are proposed. The proposed conditions allow for full access between Route 1 to/from the north and Route 16 to/from the east. While these access improvements will serve patrons of the proposed casino, the improvements will enhance mobility and solve a long-standing problem at the interchange. Furthermore, as a result of these proposed improvements, traffic operations are expected to improve at the nearby intersection of Route 16 / Webster Ave, due to a reduced need for u-turning vehicles traveling through the intersection.

At Bell Circle, minor roadway widening is proposed to provide two right-turn lanes to continue on Route 1A. While this movement often operates as two cramped lanes today, the roadway is currently striped as a single lane. The proposed improvements are expected to improve capacity and safety for this movement at Bell Circle.

Copeland Circle is a large rotary at the Route 1 / Route 60 interchange. The rotary is so large (with a diameter of 800-1,200 feet) that it does not function as a typical rotary, but instead functions as a series of merging, weaving, and diverging traffic movements. The Applicant is proposing to provide new pavement markings and signage throughout the rotary to provide clear guidance to motorists. Additionally, three new traffic signals are proposed within the rotary to control traffic at existing weaving locations. Combined, these improvements are expected to improve safety at Copeland Circle.

The Applicant is also proposing improvements at the MBTA Beachmont Station. While still in discussions with the MBTA, the Applicant has committed to fund improvements to enhance pedestrian and bicycle connections, improve interior finishes and appearances, upgrades to the Station's mechanical and electrical systems, and improve the Station's weather resiliency, accessibility, and security.

In addition to the mitigation at the five locations described above, mitigation measures are proposed at other locations. The mitigation at these other locations typically include minor roadway or median geometric improvements, pavement marking and signage improvements, and/or traffic signal improvements. It is notable that the Applicant has provided conceptual level plans for 11 other locations, which are shown in Figures 20 through 32. Table

3 summarizes all of the proposed mitigation measures, and the associated cost estimates.

Table 3 – MSM/Revere Summary of Proposed Mitigation

Proposed Mitigation	Estimated Cost
Route 1A at Boardman Street, Waldemar Avenue, Tomasello Way, Jughandle, and Furlong Drive	$45.0 million
Route 1 / Route 16 interchange, and Route 16 / Webster Ave / Garfield Ave intersection	
Route 16 at Route 145 and Harris Street	
Winthrop Ave and Revere Beach Parkway at North Shore Road and Tomasello Way	
Donnely Square (Bennington Street at Winthrop Ave and Bennington Street at Crescent Ave)	
Bell Circle	
Brown Circle	
Copeland Circle	
Revere Street at Route 60 and at Route 1A	
Saratoga Street at Bennington Street and at Boardman Street	
Neptune Road Corridor from Chelsea Street to Frankfort Street	
Route 1A Southbound Ramp at Curtis Street	
Bicycle improvements beach-to-beach connection and site access	
MBTA Beachmont Station Improvements	$1.5 million
Total	**$46.5 million**

source: Supplemental Draft Environmental Impact Report, Mohegan Sun Massachusetts, Revere, Massachusetts, EEA #15006

In general, all of the proposed mitigation plans, large and small, adequately mitigate the project's impact and improve the transportation infrastructure in the area.

Summary of the Wynn/Everett Traffic and Parking Responses

This section provides a summary of the technical reviews of the traffic and parking responses provided by Wynn/Everett. The figures referenced below are included as an attachment to this memorandum.

Information contained in the Wynn/Everett's traffic study (prepared by Howard/Stein-Hudson Associates, Inc.) and other supporting information included in the Wynn/Everett Application were reviewed for relevant information. In general, the TIAS followed procedures and methods generally accepted by MassDOT. Additionally, comment letters and memoranda prepared by MassDOT and various municipalities on the submitted DEIR were reviewed to obtain any further insights or concerns related to the proposed casino.

In terms of accessibility, the Wynn/Everett project site is located on the west side of Broadway (Route 99) in Everett. To the north of the site, Route 99 connects with the Revere Beach Parkway (Route 16) at Sweetser Circle. The Revere Beach Parkway is a major east-west regional roadway that provides access to major highways such as I-93 and Route 1. To the south of the project site, Route 99 travels over the Mystic River via the Alford Street Bridge, and connects to Sullivan Square. Sullivan Square provides connections from I-93, and to/from Somerville and Charlestown. Route 99 continues south of Sullivan Square as Rutherford Ave in Charlestown, and provides access to/from Charlestown, Cambridge (via the Gilmore Bridge), and downtown Boston (via the N. Washington Street Bridge). Regional Area and Site Locus Maps are shown in Figures 33 and 34, respectively.

There are three Massachusetts Bay Transportation Authority (MBTA) bus routes that run along Broadway, with existing bus stops located adjacent to the project site. The project site is also located approximately one (1) mile from the Sullivan Square Station,

approximately 1.4 miles from the Wellington Circle Station, and approximately 2.5 miles from the Malden Center Station. All three stations are along the MBTA Orange Line subway service, and Wynn/Everett proposes to provide both patron and employee shuttles to/from Wellington Circle and Malden Center. The existing MBTA system map is shown in Figure 35.

The proposed site will be accessed via two driveways, both on Route 99. A single primary driveway, across from Mystic Street, will serve all patrons and will carry the vast majority of site traffic. The primary driveway provides access to the single point of entry/exit for patrons using the on-site parking garage, a tour bus drop-off area, and access to the porte cochere where taxi, and valet, and patron transit shuttles will pick-up and drop-off. A second entrance/exit into the garage is provided in the vicinity of the porte cochere for valet use only. A secondary driveway, across from Beacham Street, will provide access for service vehicles and employee shuttles only. Several loading bays and a roadway loop for employee shuttle pick-up and drop-off are provided at the rear of the proposed facility. The two driveways are shown in Figures 36 and 37. A service road is proposed to connect both driveways on the project site. It is noted that this service road is not expected to be used during peak periods, but will provide for additional emergency access. Both driveways are proposed to be controlled with traffic signals. Based on the Applicant's traffic analyses, it is expected that the queue of vehicles on the primary site driveway exiting the site will extend back and passes the on-site parking garage entrance/exit during peak periods. The Applicant could manually control traffic at the intersection of the primary driveway and the garage entrance/exit to ensure that this vehicular queue would not block the entrance lanes on the site.

Both driveways in the preferred alternative also require license agreements and/or land purchases from the MBTA, as portions of the proposed driveways go over land at the adjacent MBTA maintenance facility. The preferred primary driveway configuration would result in the relocation of the existing secure entrance to the MBTA facility. In their FEIR, the Applicant provided drawings showing a proposed secure entrance to the MBTA facility on the north side of the MBTA facility, and drawings of truck paths showing how MBTA vehicles could use the new entrance and continue to use the existing facility in a similar manner as the existing conditions. However, in the event that an agreement to purchase the MBTA land for the primary driveway cannot be reached, an alternate site driveway configuration is proposed, and shown in Figure 38. While the alternate site driveway configuration is workable, there are several additional concerns with the alternate alignment. Rather than a smooth curve of the driveway, the alternate site driveway would have an almost 90-degree turn. Furthermore, the patron entrance/exit is located in the immediate vicinity of this turn, as is the entrance/exit to the existing secure gate for the adjacent MBTA facility. With the alternate site driveway configuration, the vehicle queuing issues discussed previously would be exacerbated due to less driveway distance between the proposed traffic signal at Route 99 and the entrance/exit for the parking garage. Moreover, short-term vehicle conflicts are expected during the brief periods of shift changes at the MBTA facility, which are not controlled by the Applicant and could occur during peak periods. In the event that the alternate site driveway configuration is constructed, it is expected that manual traffic control would be required on the site-driveway for longer periods of time.

The Applicant is proposing to construct an on-site parking garage with 3,700 parking spaces (as described in their FEIR). The parking garage is proposed for patrons only, and all employees will be required to park at off-site locations. Approximately 800 off-site parking spaces are proposed, distributed among three locations: at Station Landing (near Wellington Circle), at Malden Center, and at an unidentified location somewhere within the existing industrial area of Everett on the east side of Broadway (Route 99). The

number of parking spaces provided is equivalent to 0.89 and 1.08 parking spaces per gaming position excluding and including the off-site parking, respectively. Based on the parking supply guideline of 1.0 parking space per gaming position noted above and the parking projections made by the Applicant, the proposed parking supply is adequate to meet the expected demands. The Applicant provided a clear presentation of the proposed parking layout, its proposed uses, and its access and egress to and from adjacent roadways. The parking garage provides direct pedestrian access to and from the casino, the hotel, or the retail uses. The parking floor plans are shown in Figures 39 through 41. The proposed off-site parking locations are shown in Figure 42.

The potential routes to be used for access and egress were adequately identified and described by the Applicant. The Applicant's traffic study area (in their DEIR) included a total of 57 intersections in Everett, Chelsea, Revere, Medford, Somerville, Boston, and Cambridge. The overall traffic study area is considered to be adequate, but it is noted that not all major roadways and highways were studied, such as Memorial Drive and Route 2, both of which could carry significant traffic coming from or going to the west. The study area is shown in Figure 43. In their FEIR, the number of study intersections was reduced to 21, as many of the previously studied locations were not expected to experience a significant impact and therefore it was not necessary to restudy them.

The Applicant's traffic study examined the Friday afternoon commuter peak hour and the Saturday midday peak hour, when the peak traffic flow occurs on the adjacent roadway system. It is noted that the Applicant expects the Friday evening peak of the casino to occur well past the typical peak commuting periods. The Applicant has provided two sets of traffic analyses for Friday afternoon, one with the peak casino traffic artificially superimposed on the peak commuting traffic (as required by MassDOT), and a second set of analyses (which the Applicant calls the "real peak") that analyzes the Friday afternoon commuter peak hour with only the site-generated traffic that is actually expected to occur during the commuter peak. Approximately 42% less project-generated traffic is expected during the Friday afternoon commuter peak hour compared with the peak of the facility later in the evening on Friday. The Applicant's trip generation rates of 0.29 and 0.33 trips per gaming position (Friday evening and Saturday midday peak hours, respectively) for the proposed casino are based on data obtained from two similar facilities, the Casino de Montreal in Montreal, Canada, and the Resort World Casino at Aqueduct in New York, NY. Based on research of the trip forecast models, the trip generation rates used by the Applicant are on the low side of the range of rates that would be expected for similar facilities. It is also noted that the Applicant developed trip generation forecasts for the non-gaming uses of the proposed site (hotel, retail, and night club/lounge) based on standard industry-accepted rates contained in the ITE Trip Generation[6] manual. These additional trips for non-gaming uses were reduced for both "internal capture" and "pass-by" trips. Internal capture trips are those made by persons using more than one land use on-site and are therefore "internal" and non-vehicular trips, while pass-by trips are those made by patrons of the site who would already be on the adjacent roadway regardless of the proposed project. It is appropriate and reasonable for these adjustments to be applied to the proposed facility. Because of the additional non-gaming related trips, the overall trip generation is reasonable.

The Applicant then split the expected trips into numerous travel modes, such as automobile, taxi, MBTA Orange Line (and private Orange Line shuttles to connect to the project site), MBTA local bus, water transportation, tour bus, premium park and ride, and

[6] Institute of Transportation Engineers, Trip Generation, Washington, D.C., 2012

employee shuttles (to bring employees to the project site from the off-site parking locations). The mode split presented in their FEIR is a reasonable split among the various transportation alternatives, and is summarized in Table 4. Traffic Distribution Maps, representing the distribution of peak hour traffic flow, are shown in Figures 44 through 46. The Applicant is proposing a Transportation Demand Management (TDM) program that includes designating a transportation coordinator, MassRIDES, NuRides, subsidized MBTA passes for employees, on-site Charlie Card sales, neighborhood shuttles for employees, a guaranteed ride home program, car sharing, a bicycle sharing station, a transportation monitoring program, and other items.

The Applicant has proposed mitigation measures at various locations. The mitigation measures include traffic signal improvements, pavement markings upgrades, lane configuration changes, roadway widening, and/or roadway and intersection geometric improvements. Depending on location, the mitigation measure may be a stand-alone improvement or combined with several improvement elements. Other mitigation measures include pedestrian and bicycle improvements.

The most critical areas where mitigation is proposed are at the following locations:

- Broadway (Route 99) (Everett/Boston)
- Sweetser Circle (Everett)
- Santilli Circle (Everett)
- Wellington Circle (Medford)
- Sullivan Square (Boston)

Conceptual level plans of the proposed improvements at the above locations are shown in Figures 47 through 56.

Table 4 – Wynn/Everett Summary of Travel Mode Split

Mode	Patrons	Employees
Automobile Travel		
Park on-site	63%	0%
Taxicab	8%	0%
Park Off-site (connect to employee shuttle)	0%	41% [A]
Subtotal	*71%*	*41%*
Public Transportation		
MBTA Orange Line	10% [B]	20% [B]
MBTA Local Bus	0%	10%
Water Transportation [C]	6%	3%
Subtotal	*16%*	*33%*
Private Transportation		
Tour Bus	10%	0%
Orange Line Shuttle	10% [B]	20% [B]
Premium Park and Ride	3%	3%
Employee Shuttle	0%	41% [A]
Neighborhood Shuttle	0%	20%
Subtotal	*23%*	*84%*
Walk/Bicycle		
Subtotal	*0%*	*3%*

[A] Employee trips to the site are comprised of two segments: the automobile trip to an off-site employee parking lot and a shuttle bus trip to the project site. Both segments are shown, resulting in a sum greater than 100%.

[B] MBTA Orange Line trips are comprised of two segments: the Orange Line trip and the transfer to a shuttle. Both segments are shown, resulting in a sum greater than 100%.

[C] The Water Transportation service to the project site will be provided by the Applicant. However, the Applicant lists these trips under "public transportation" because the service will be part of the larger public water transportation network.

source: Final Environmental Impact Report, Wynn Everett, Everett, Massachusetts, EOEEA #15060

Table 5, below, summarizes all of the proposed mitigation and associated costs.

Table 5 – Wynn/Everett Summary of Proposed Mitigation

Proposed Mitigation	Estimated Cost
Everett	
Santilli Circle	$23 million
Sweetser Circle	$2 million
Lower Broadway (Route 99) corridor	$4 million
Broadway / Norwood Street / Chelsea Street	$75,000
Lower Broadway Truck Route, including the reconstruction of Robin Street and Dexter Street	$4.3 million
Broadway / Ferry Street	$20,000
Medford	
Wellington Circle	$3.2 million
Traffic signal timing optimization at two locations on Route 16	$20,000
Boston	
Sullivan Square	$4.6 million[A]
Alford Street (Route 99) / Dexter Street	Included in cost of Lower Broadway corridor improvements
Revere	
Bell Circle	$550,000
Chelsea	
Route 16 / Washington Ave	$275,000
Traffic signal timing optimization at three locations on Route 16	$30,000
Total	**$42.07 million**

source: Final Environmental Impact Report, Wynn Everett, Everett, Massachusetts, EOEEA #15060

[A]Surrounding Community Agreements with Somerville and Cambridge indicate that approximately $6 million will be spent to mitigate Sullivan Square

Broadway (Route 99) is proposed to be widened to provide two through travel lanes in each direction, with turning lanes and/or landscaped median where appropriate. Additionally, bicycle lanes will be provided in both directions, and the sidewalks on both sides of Route 99 will be reconstructed.

At Sweetser Circle, the existing rotary intersection configuration will be retained. However, selected roadway approaches will be widened such that all approaches to the rotary have two travel lanes. Pavement markings and signage are proposed to provide clearly delineated travel lanes on all approaches and within the rotary, a significant improvement over wide unmarked pavement area of the existing rotary.

At Santilli Circle, a "flyover ramp" is proposed from Route 16 eastbound to Frontage Road on the northeast side of Santilli Circle. The proposed flyover ramp will serve casino traffic as well as a significant portion of the existing traffic volumes at Santilli Circle. As a result of removing hundreds of vehicles (during the peak hours) from the two existing at-grade traffic signals, the signal timings are proposed to be optimized, resulting in significant improvements in the flow of traffic for all vehicles at Santilli Circle. It is noted that the proposed flyover ramp needs to be further developed to better accommodate the existing bus stop (to be retained) located on Frontage Road. Furthermore, the northern half of the rotary is proposed to be widening from two lanes to three, providing further improvements to the flow of traffic at that portion of Santilli Circle.

At Wellington Circle, the Applicant proposes minor roadway widening on several approaches to, and within the intersection. Specifically, a third westbound through lane on Route 16 is proposed between the northbound and southbound barrels of Route 28, a fourth eastbound through lane on Route 16 is proposed on the approach to Wellington Circle, and a sixth northbound lane is proposed on Route 28 northbound, to provide two exclusive left-turn lanes, three through lanes, and an exclusive right-turn lane. In

addition to the minor roadway widening, traffic signal timing optimization is proposed at all signalized locations within Wellington Circle.

At all of the above locations, the Applicant's proposed infrastructure improvements, mitigate the expected additional casino-related traffic, and in many cases significantly improve long-standing regional transportation "bottlenecks".

At Sullivan Square, however, the Applicant's proposed mitigation does not adequately address the existing operational issues nor the impacts from additional casino-related traffic volumes expected to be using the roadway network. The Applicant is projecting that approximately two-thirds of site traffic is expected to travel through Sullivan Square, and thus the area is critical for traffic traveling to and from the project. The Applicant's proposed mitigation at Sullivan Square includes:

- Reconstruct Cambridge Street between the I-93 northbound off-ramp and Sullivan Square / Maffa Way
- Widen the existing busway between Cambridge Street and Maffa Way, and allow general traffic to use this roadway link (rather than MBTA traffic only, as it functions today)
- New traffic signal control at Cambridge Street / Spice Street / MBTA busway
- New traffic signal control at Maffa Way / MBTA busway
- Re-stripe the I-93 northbound off-ramp to provide a shared left/right turn lane and an exclusive right-turn lane (rather than a single left-turn lane and a single right-turn lane).
- Optimize traffic signal timing at Cambridge Street / I-93 northbound off-ramp
- Optimize traffic signal timing at Cambridge Street / Maffa Way/Alford Street

The analysis of the proposed mitigation is viewed as deficient and the overall mitigation at Sullivan Square is incomplete. The analysis is deficient for the following reasons:

- An estimate of traffic volumes that would be expected to use the new busway link was not provided.
- An analysis of the new traffic signal proposed at Maffa Way / Busway was not conducted.
- The proposed mitigation plan includes three right-turn lanes from Cambridge Street into the Sullivan Square rotary. However, the left-most right-turn lane is provided for a distance of approximately 200 feet. The Applicant's analysis indicates that a typical vehicular queue will extend well beyond this distance and spill back into the other through lanes (including the 50th percentile queue in the Friday PM "real peak" conditions). It is expected that this queue will regularly extend back beyond the Cambridge Street / I-93 northbound off-ramp intersection. This downstream vehicular queue was not considered in the Cambridge Street / I-93 northbound off-ramp intersection analysis, and therefore understates the vehicular delays and queues that are expected on the ramp with the potential associated impacts on I-93.

The overall mitigation plan at Sullivan Square is viewed as incomplete, because it does not address operational deficiencies on the eastern and northern portions of the Sullivan Square rotary, i.e., where Rutherford Ave, Main Street, and Alford Street enter the Sullivan Square rotary.

The City of Boston has conducted a series of planning efforts over the past 15 plus years to determine a preferred alternative for a long-term solution at Sullivan Square. The City has presented two alternatives, a "surface option" that would eliminate the Route 99 underpass through Sullivan Square and an "underpass option" that would maintain the existing Route 99 underpass. Both options

would eliminate the rotary portion of Sullivan Square and create a more typical grid-like street system. While the "surface option" was endorsed by the previous City administration as the preferred alternative, it is unclear if the "surface option" remains the preferred alternative. In the Applicant's opinion, the two through lanes that would be provided in the "surface option" (as presented by the Boston Transportation Department) would not operate at acceptable Levels of Service, with or without the proposed Wynn/Everett casino. The final selection of a preferred long-term solution at Sullivan Square presents difficulties for the Applicant for two reasons: the surface option does not operate acceptably for the expected future traffic volumes and it would be unreasonable to expect the Applicant to completely mitigate the existing problems and construct a long-term solution that would operate acceptably. However, the Applicant's current mitigation plans did not include any discussion of a collaborative process between the Applicant, the City of Boston, and various other interested parties that would need to occur in order to move the process forward in determining a preferred long-term solution, and design and construction of that preferred solution. The Applicant has not committed to be engaged in that process, nor has the Applicant committed any funds for a portion of further planning, design, or construction of any long-term solution at Sullivan Square (the Applicant has withdrawn an offer to fund a portion of the planning and design work that was made in their DEIR, based on an understanding the funding for the design of a long-term solution has already been allocated). Furthermore, the Applicant also has not identified any possible short-term improvements that could be implemented at the Sullivan Square rotary intersections with Rutherford Ave, Main Street, or Alford Street.

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Wing C. Wong, PE, PTOE
Green International Affiliates, Inc.
July 31, 2014

List of References Related to Traffic Forecast Research

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2. Trip Generation Characteristics of Small to Medium Sized Casinos, by Michael Trueblood and Tara Gude, presented at the ITE 2001 Annual Meeting & Exhibit
3. Recalibration of Trip General Model for Las Vegas Hotel/Casinos, by Curtis D. Roe, Mohamed S. Kaseko, and Kenneth W. Ackeret, ITE Journal, May 2002
4. Transportation Impact Study for 400 North Broad, Tower Entertainment, LLC, City of Philadelphia, prepared by Traffic Planning and Design, Inc., November 7, 2012
5. Transportation Impact Study for Hollywood Casino – Philadelphia, prepared by Pennoni Associates, Inc., revised February 1, 2013
6. Mega Casino Transport Analysis, prepared by Erin Toop, Jason Zhou, and Hou Ding (all University of Toronto), December 23, 2012
7. Traffic Impact Study – Baltimore Casino, prepared by Whitman, Requardt & Associates, LLP and RJM Engineering, Inc., February 2013
8. Traffic Impact and Access Study – Foxwoods Resort Casino – Milford, MA, prepared by Tetra Tech, July 9, 2013

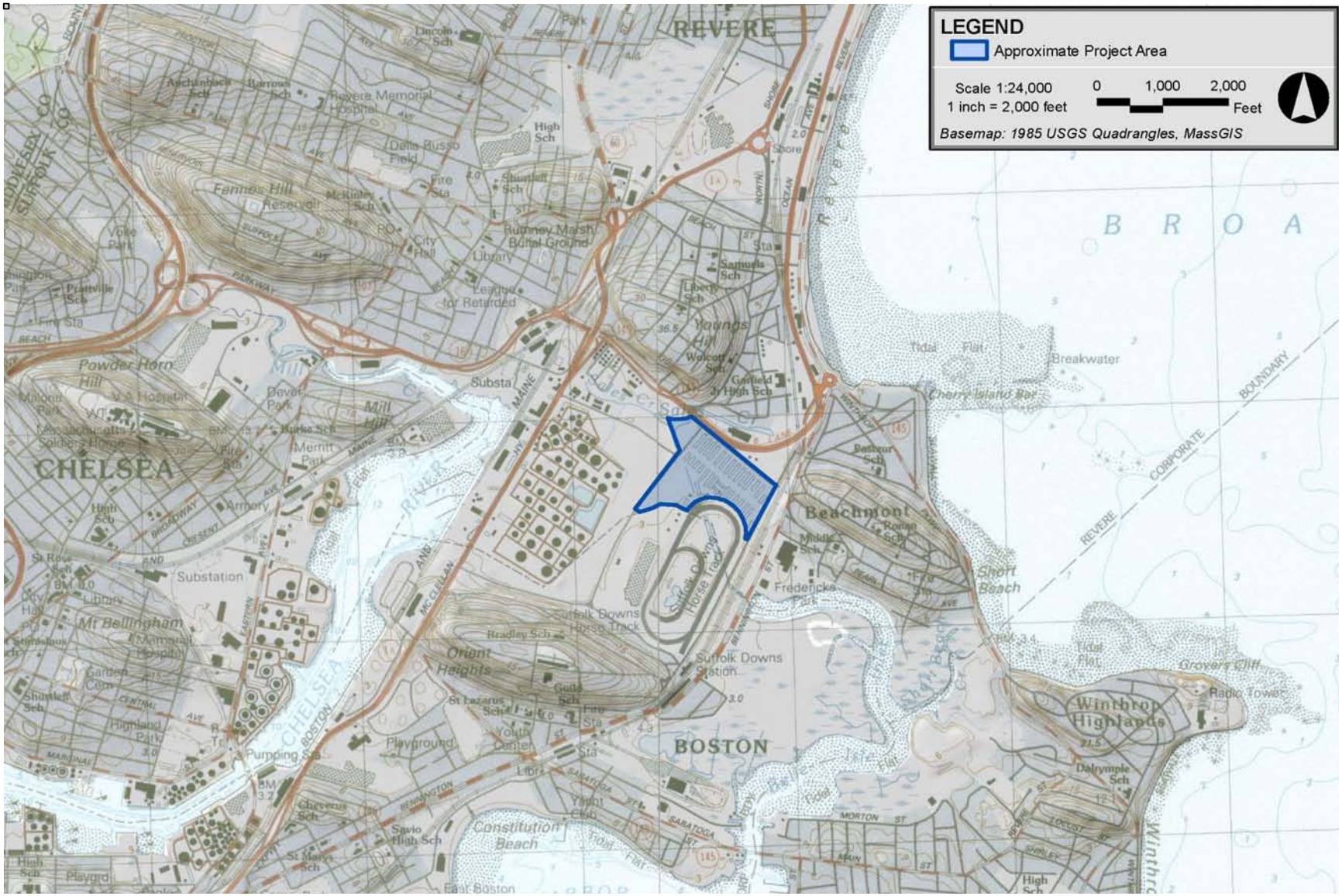

Figure 1 – Regional Area Map

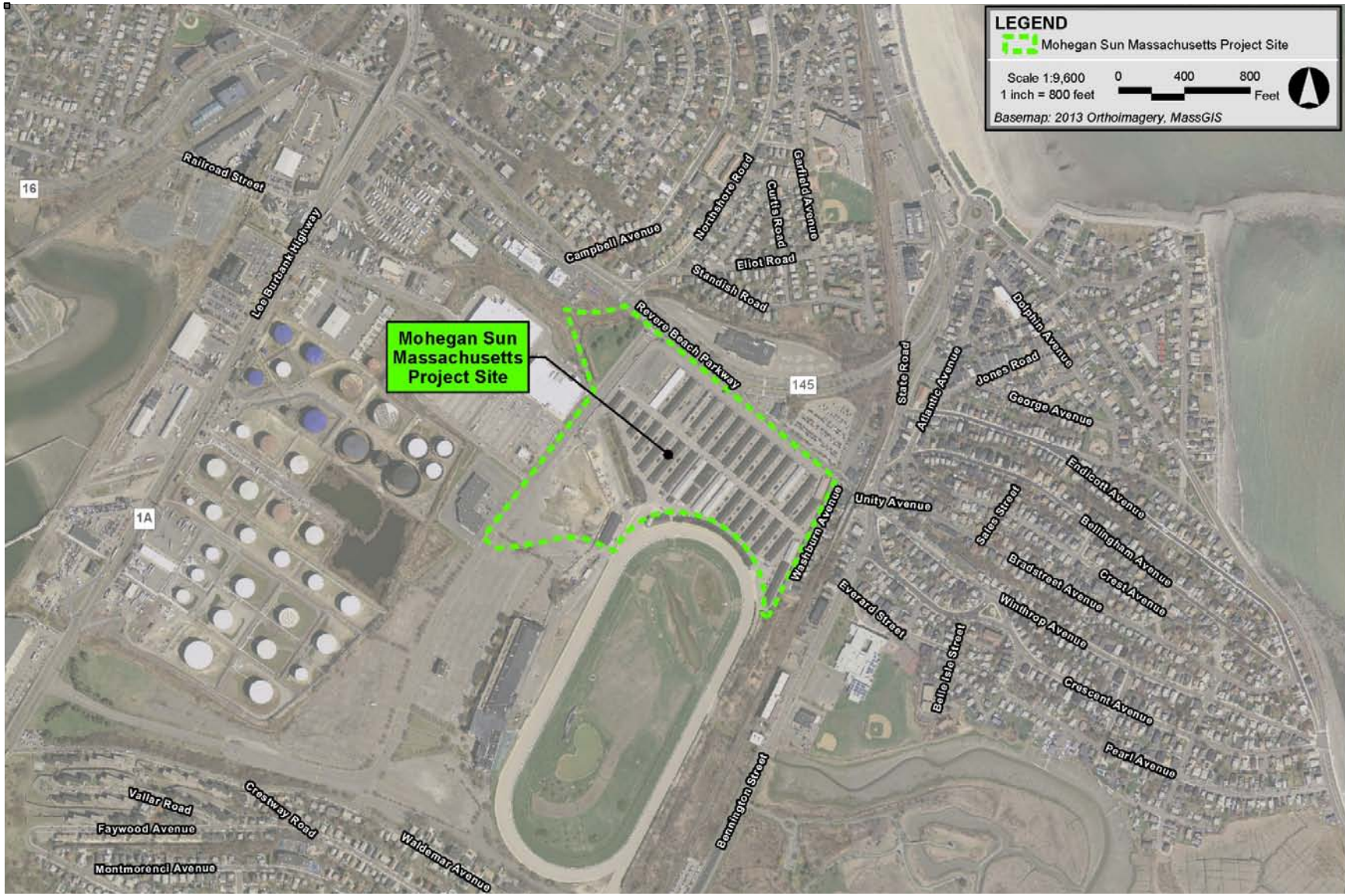

Figure 2 – Site Locus Map

Source: MassGIS Orthographic Aerial Imagery, Boston, Massachusetts

Figure 3 – Existing MBTA System

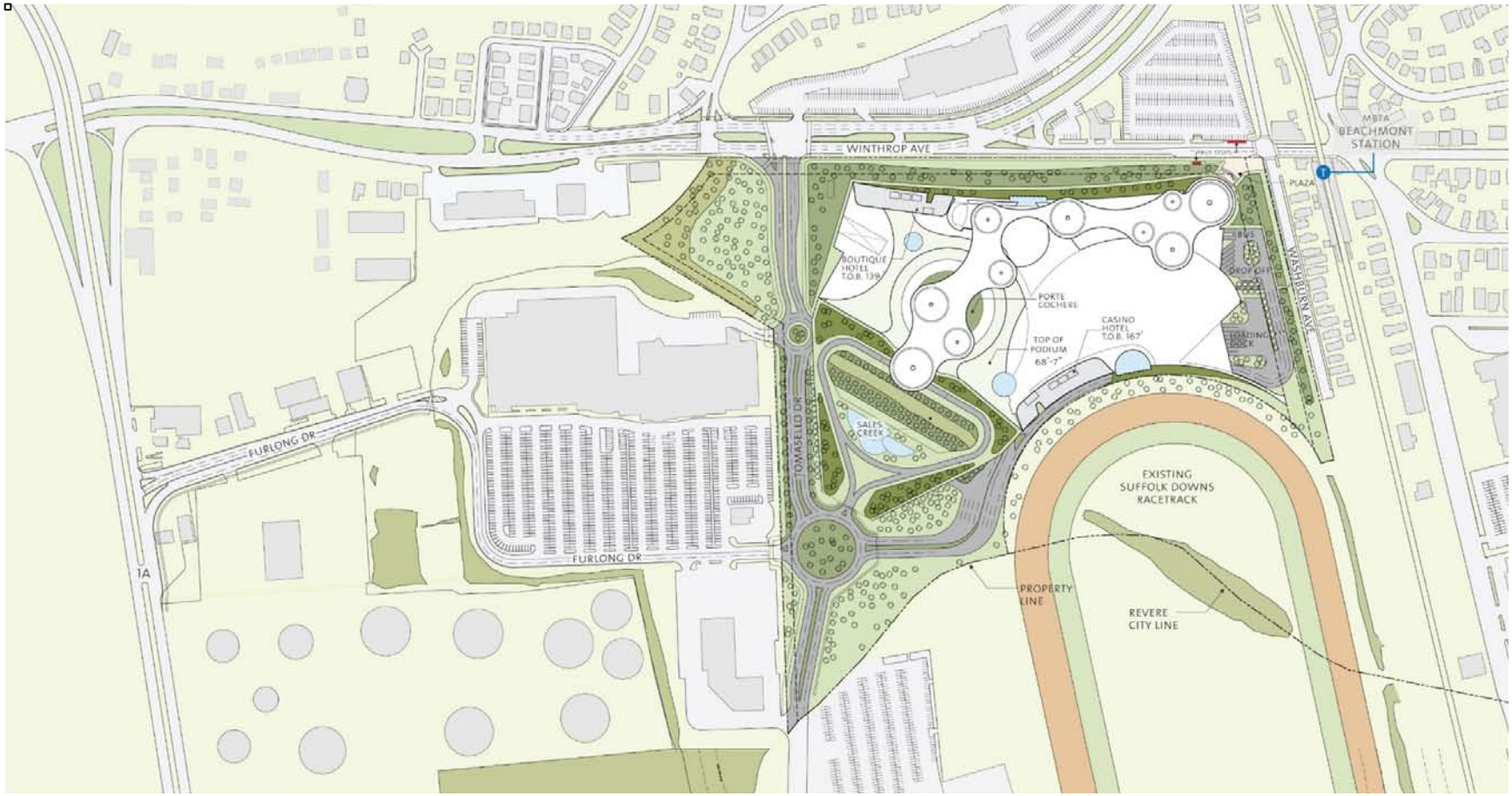

Figure 4 – MSM/Revere Project Site Plan

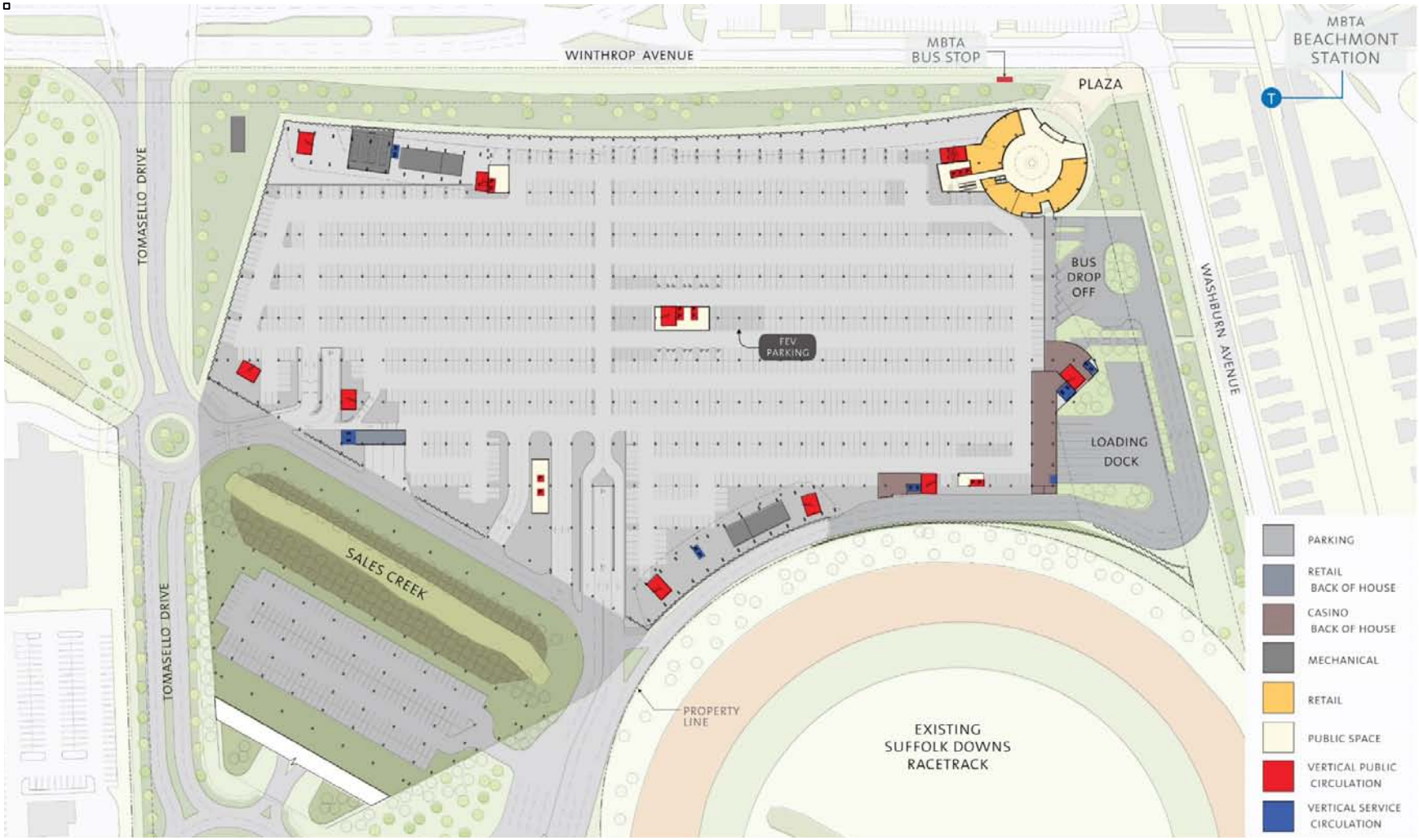

Figure 5 – MSM/Revere Building Plan – Parking Level 1

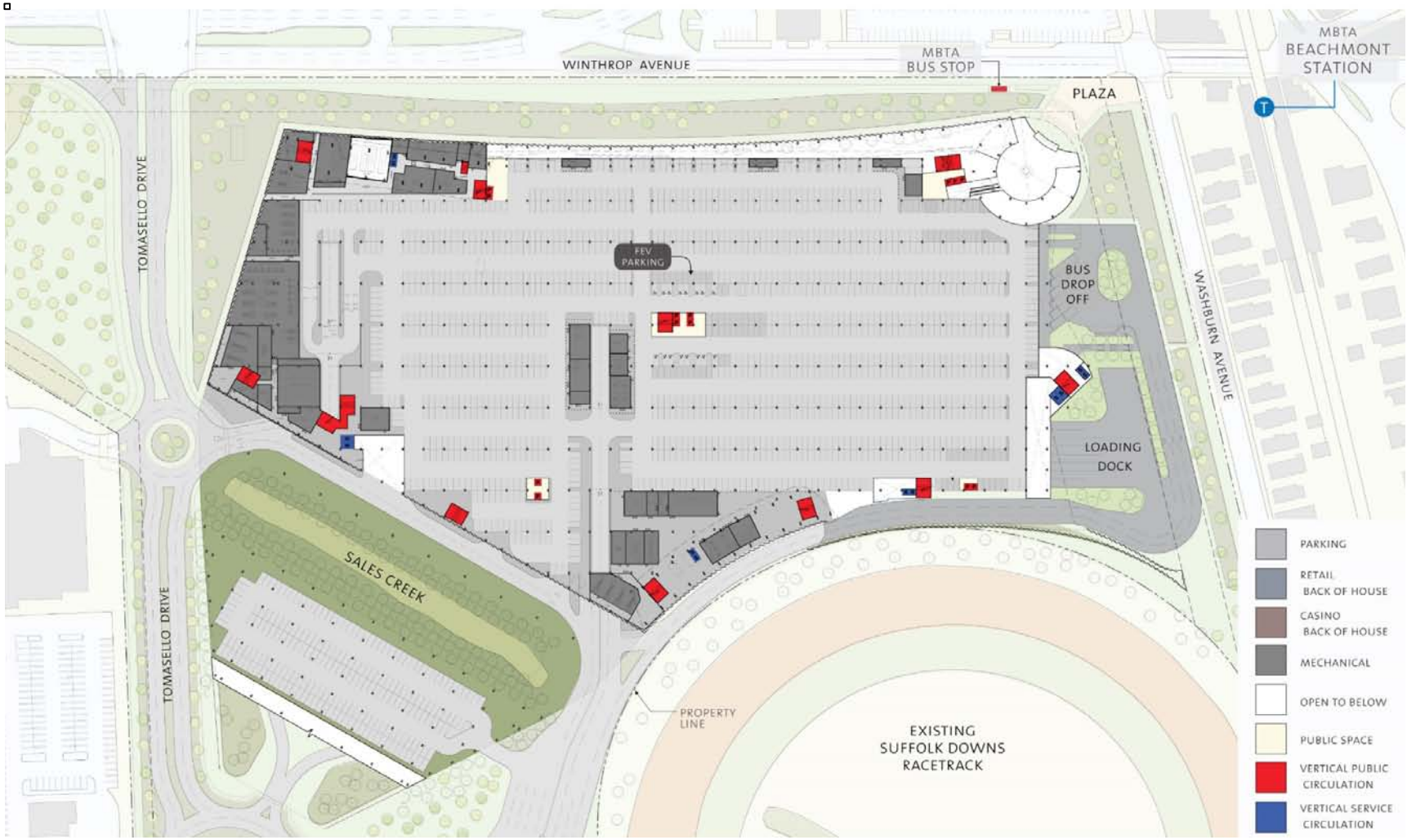

Figure 6 – MSM/Revere Building Plan – Parking Level 2

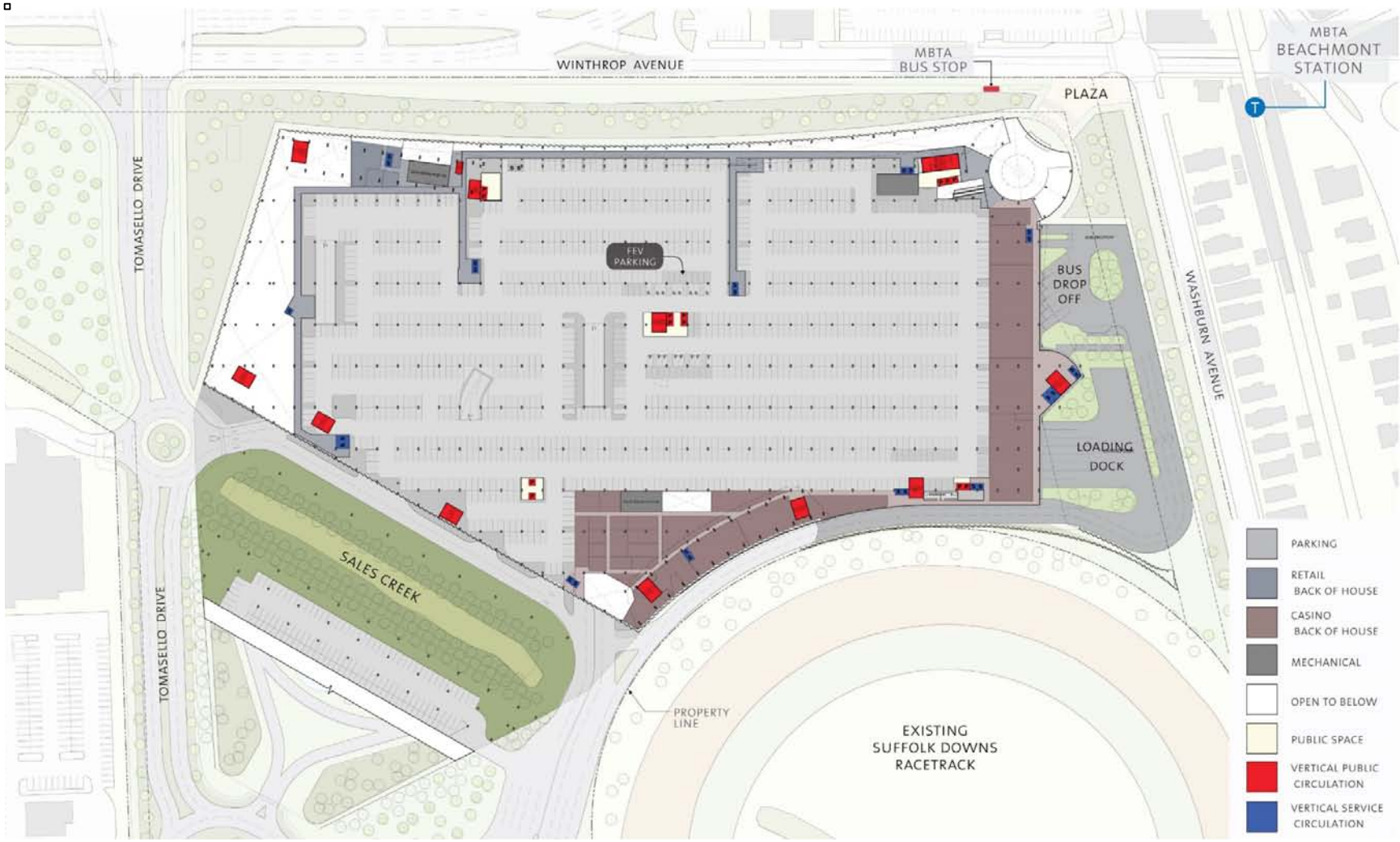

Figure 7 – MSM/Revere Building Plan – Parking Level 3

Figure 8 – MSM/Revere Study Area

Figure 9 – MSM/Revere Trip Distribution Map

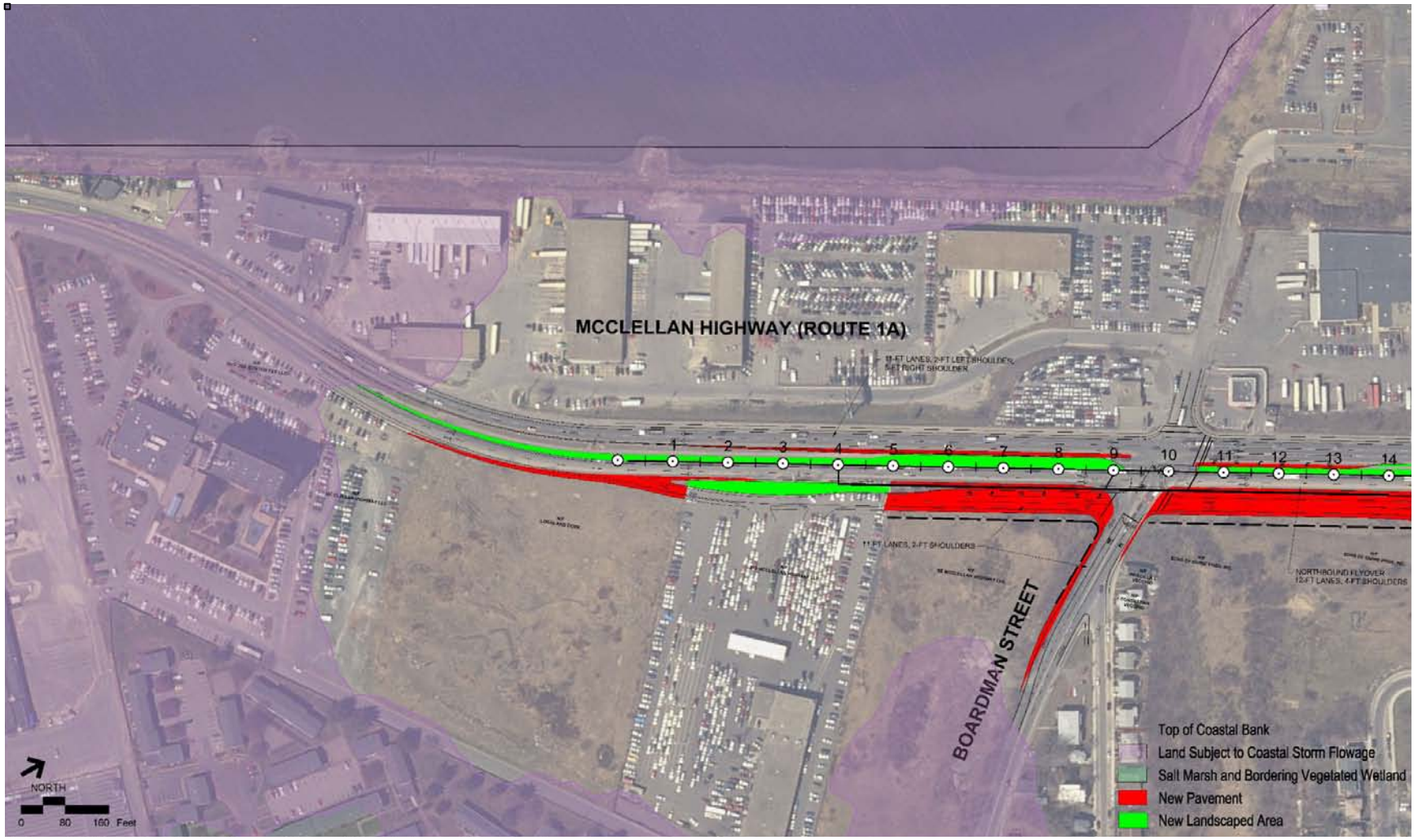

Figure 10 – Route 1A Northbound Flyover Alternative (1 of 3)

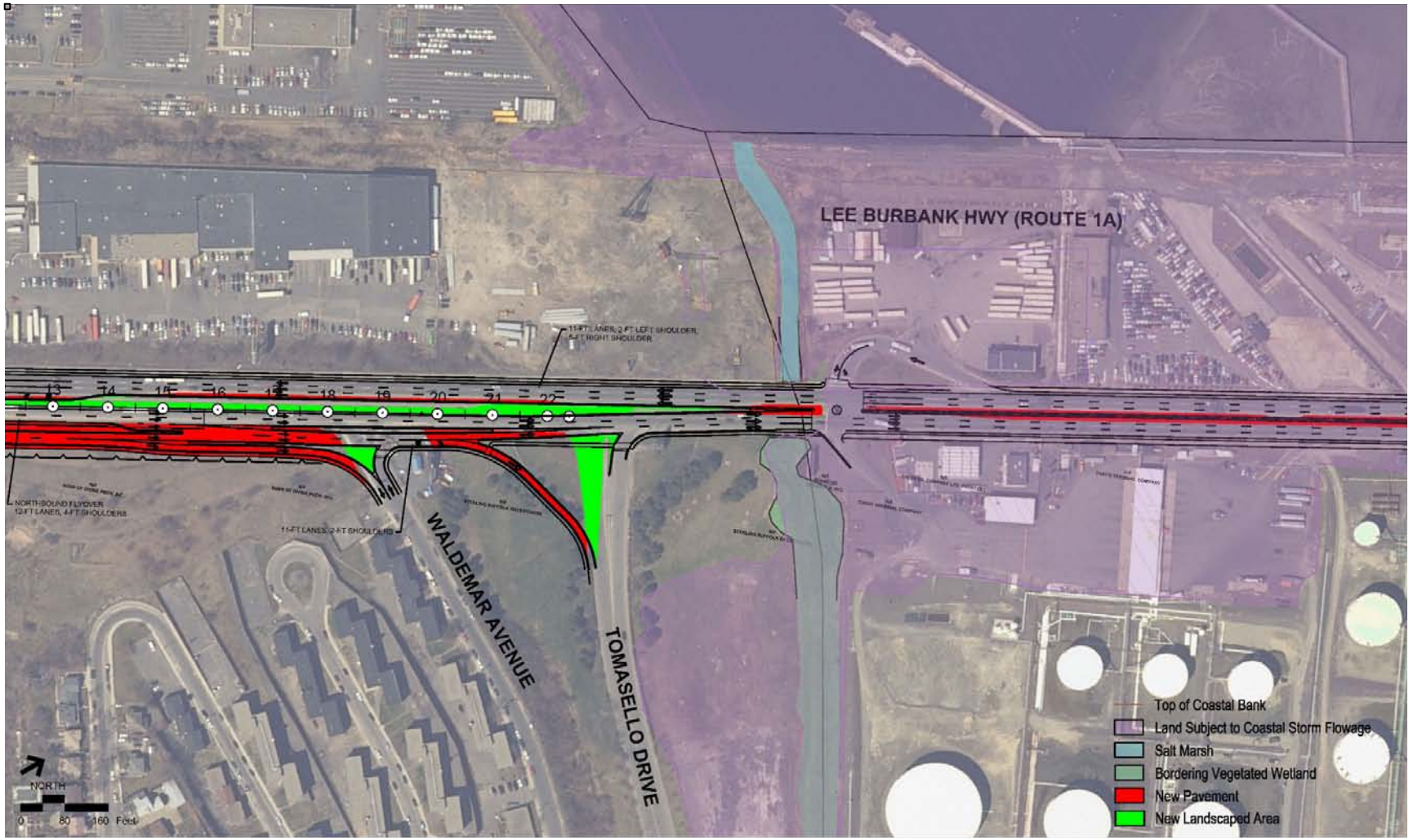

Figure 11 – Route 1A Northbound Flyover Alternative (2 of 3)

Figure 12 – Route 1A Northbound Flyover Alternative (3 of 3)

Figure 13 – Route 1A At-Grade Alternative (1 of 3)

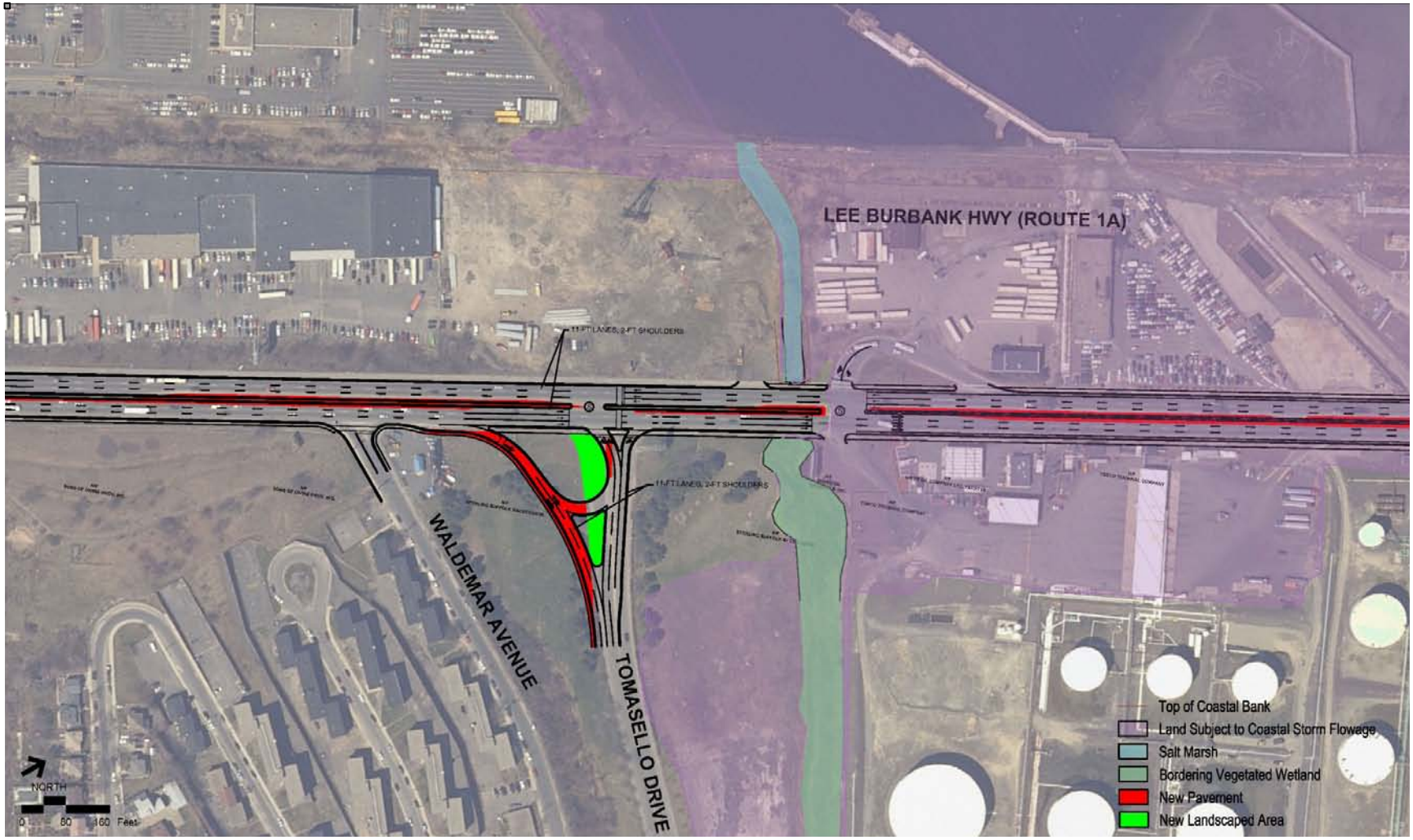

Figure 14 – Route 1A At-Grade Alternative (2 of 3)

Figure 15 – Route 1A At-Grade Alternative (3 of 3)

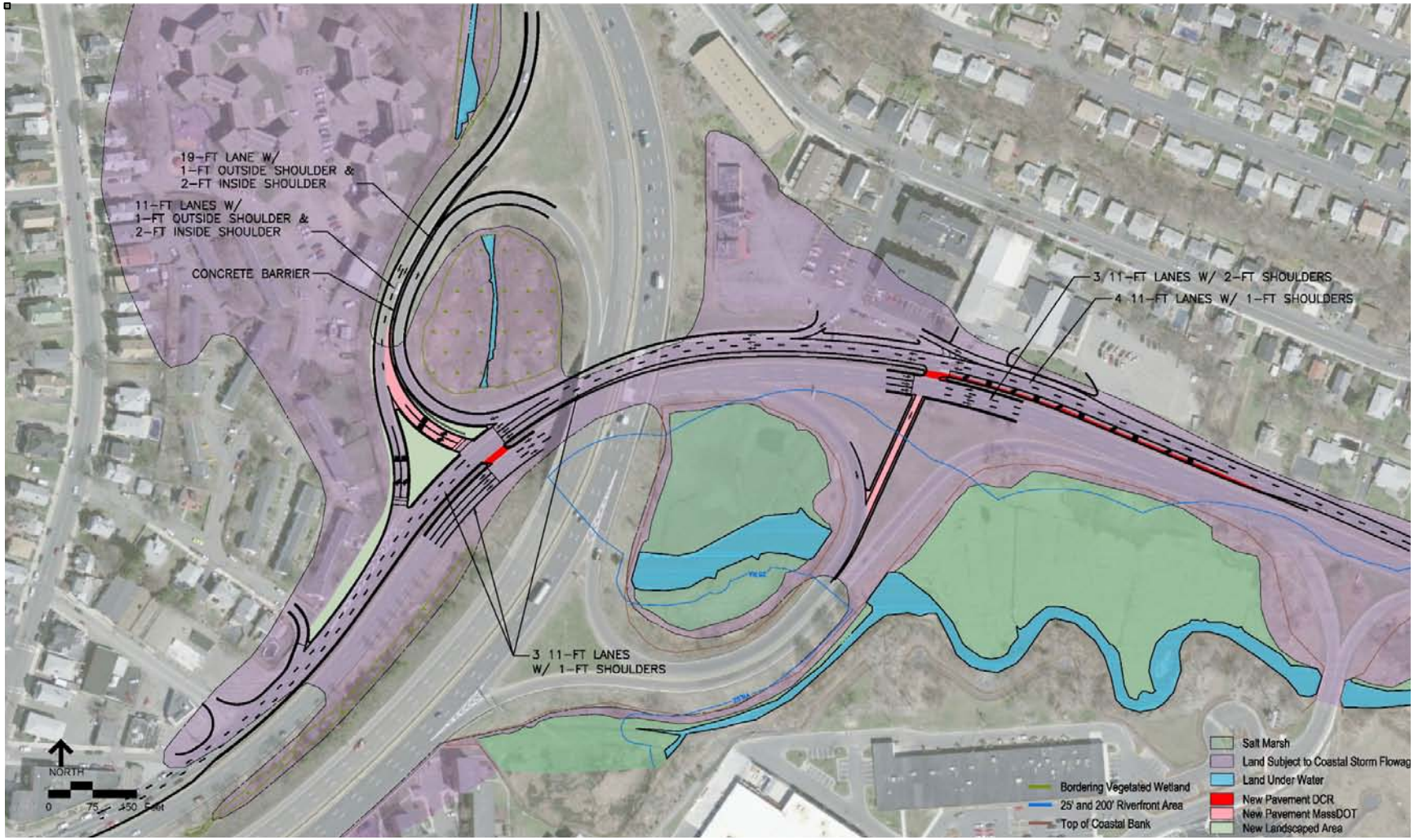

Figure 16 – Route1/Route 16 Interchange – Median Work Alternative

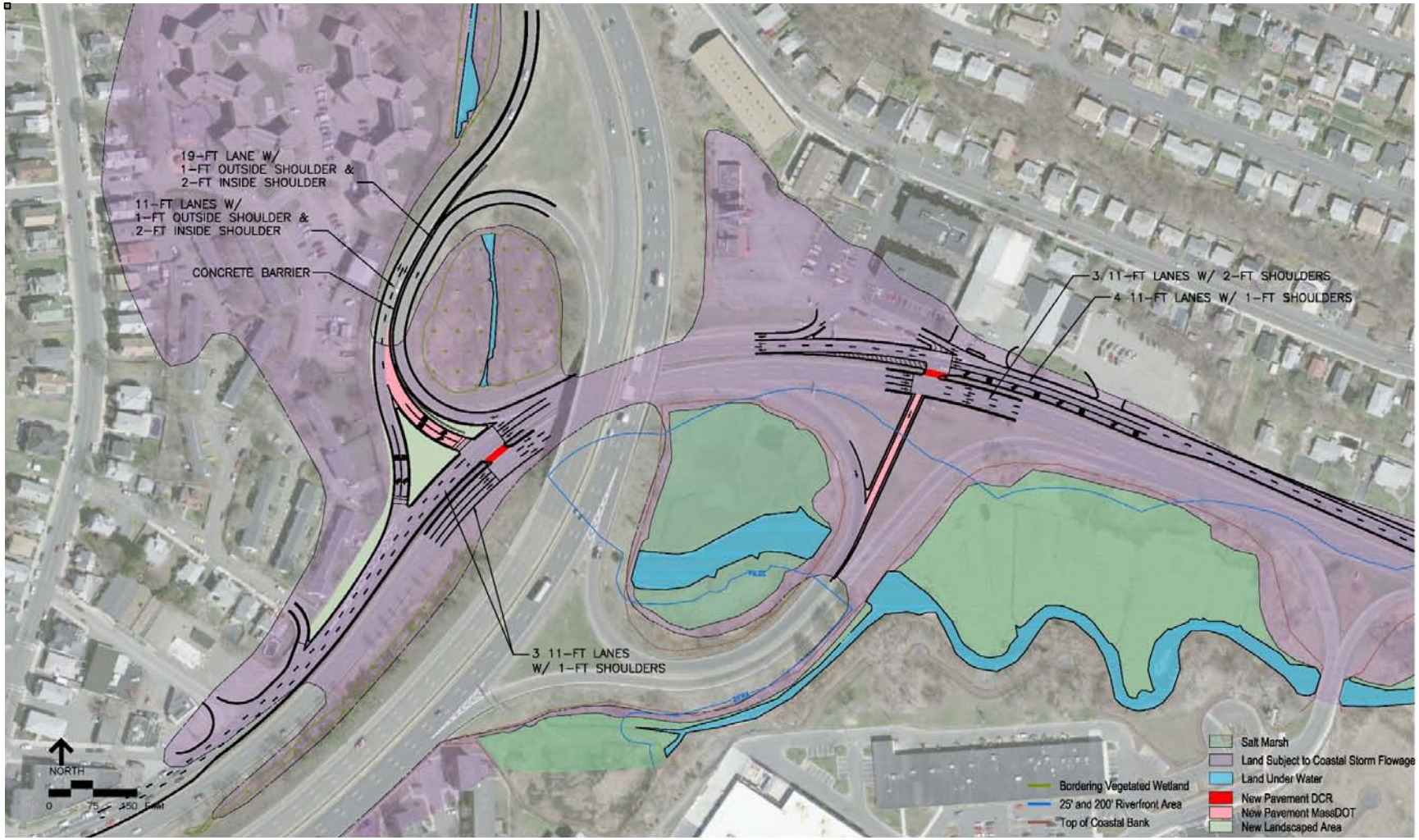

Figure 17 – Route1/Route 16 Interchange – Striping Alternative

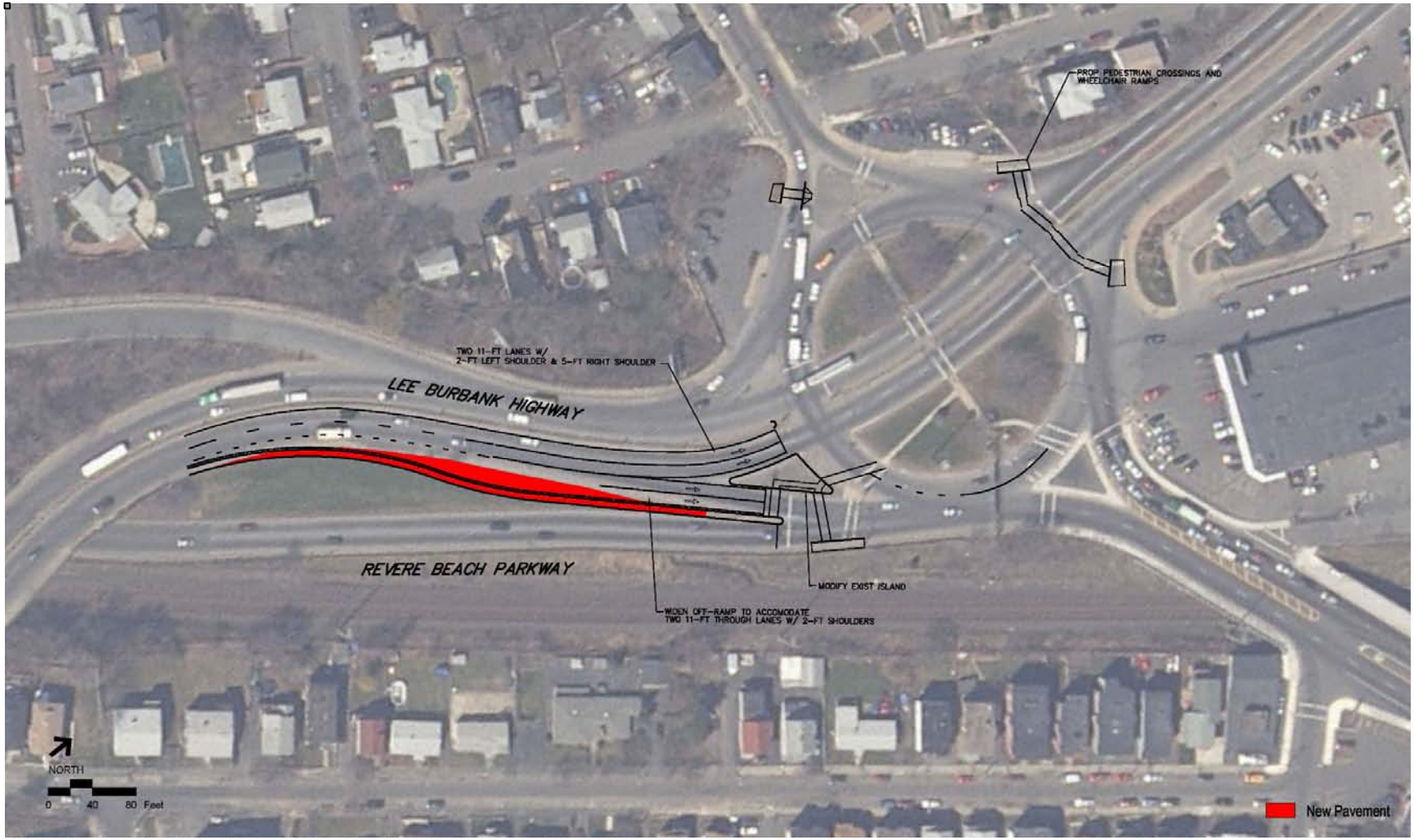

Figure 18 – Proposed Bell Circle Improvements

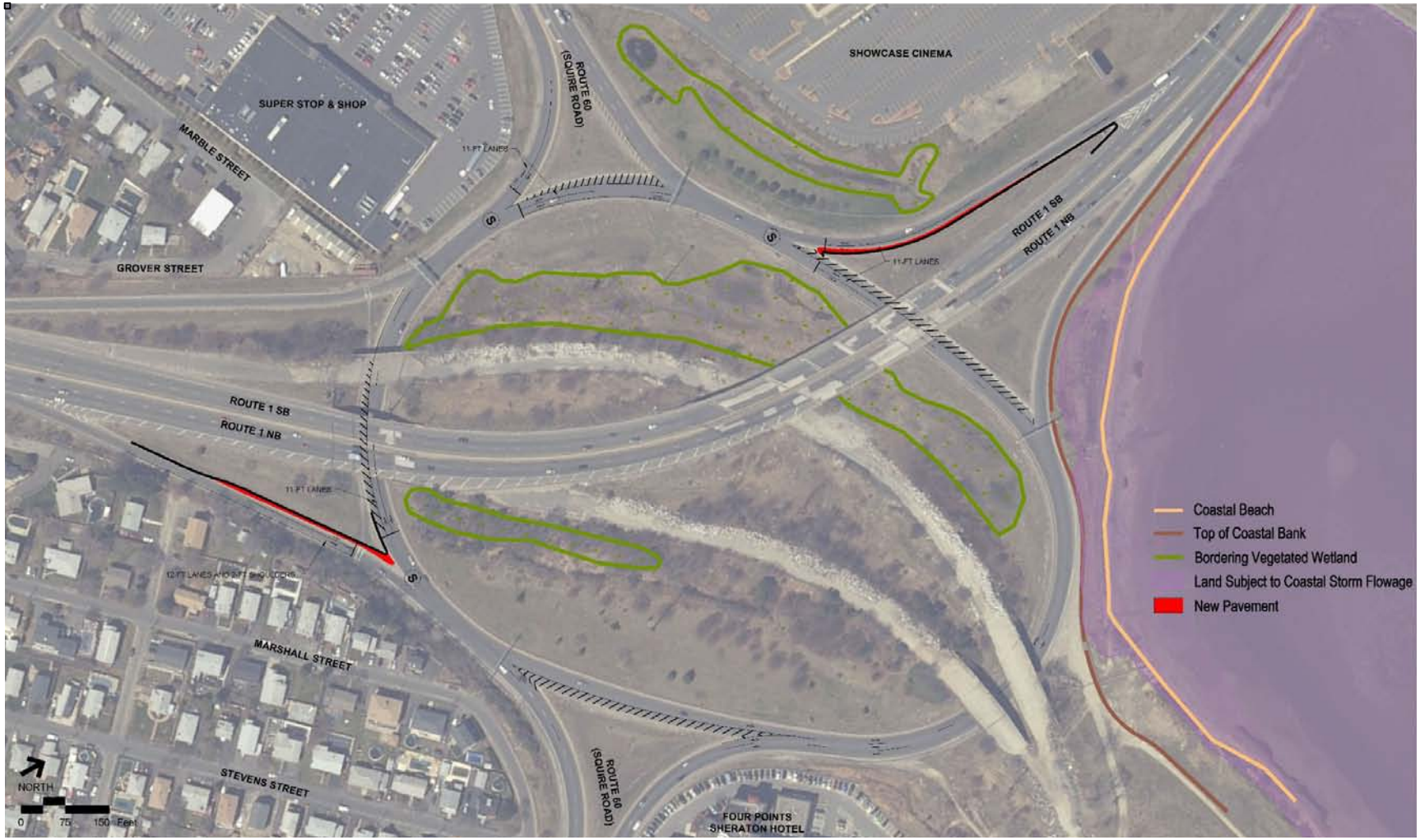

Figure 19 – Proposed Copeland Circle Improvements

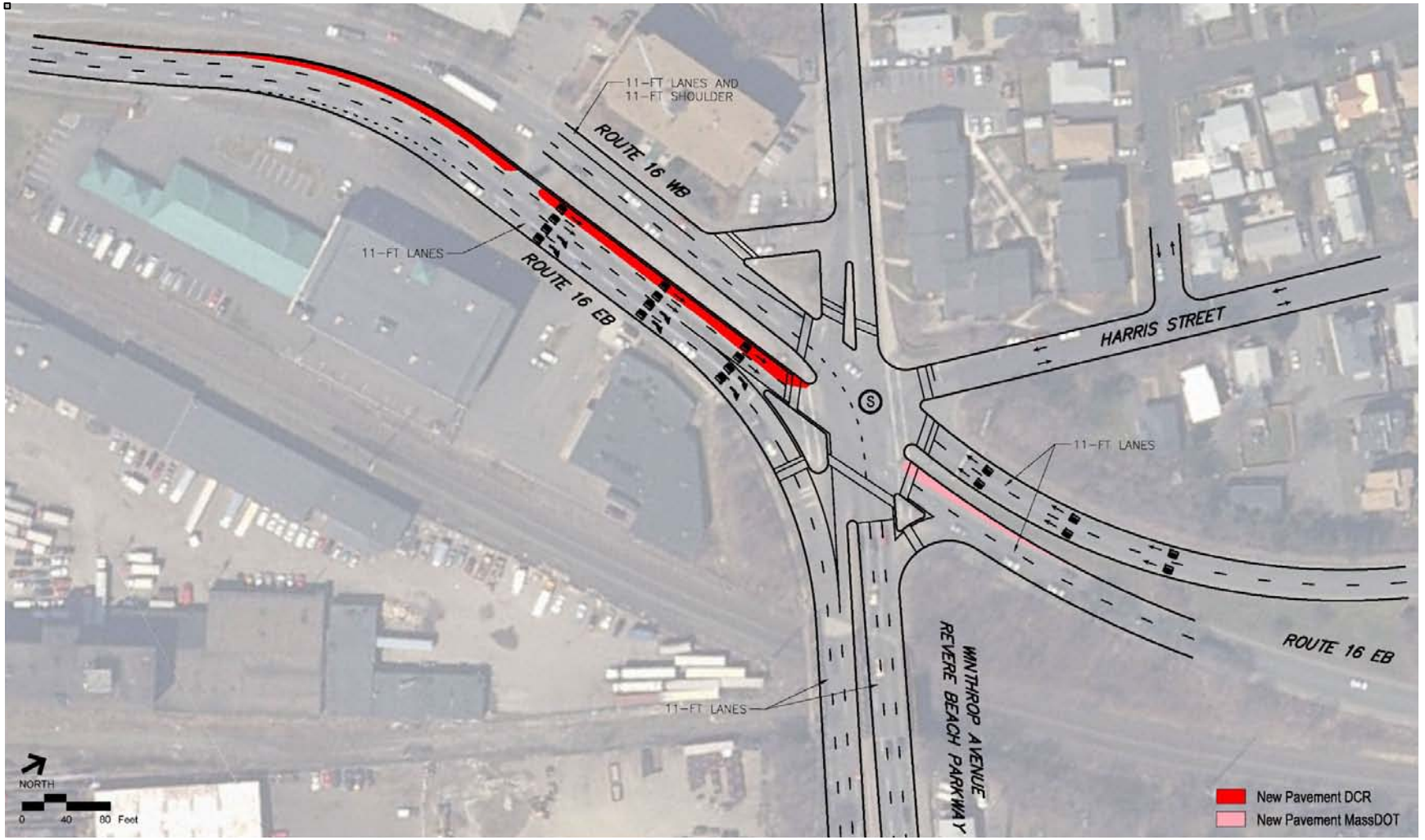

Figure 20 – Winthrop Avenue/Revere Beach Parkway/Harris Street – Harris Street Two-Way

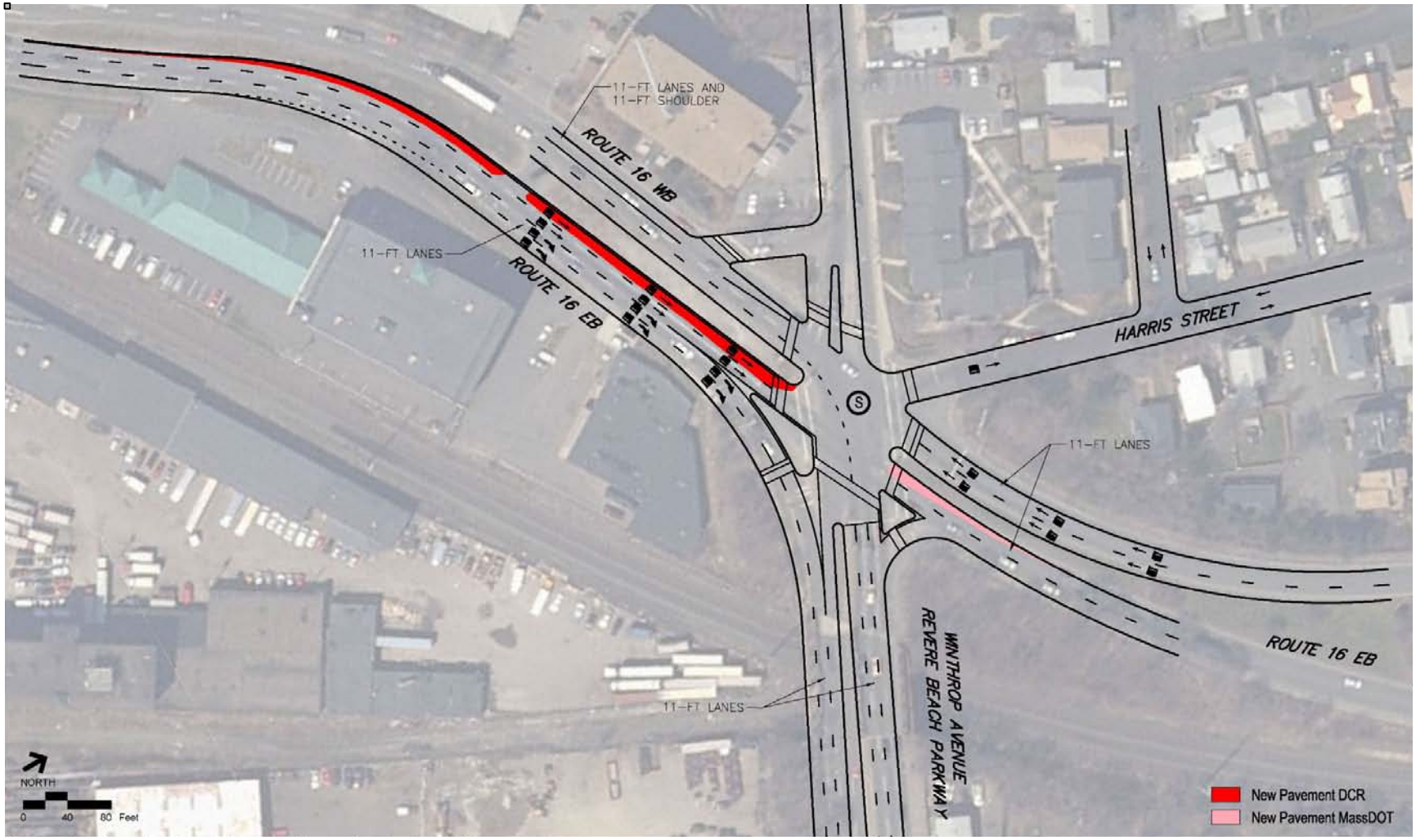

Figure 21 – Winthrop Avenue/Revere Beach Parkway/Harris Street – Harris Street One-Way

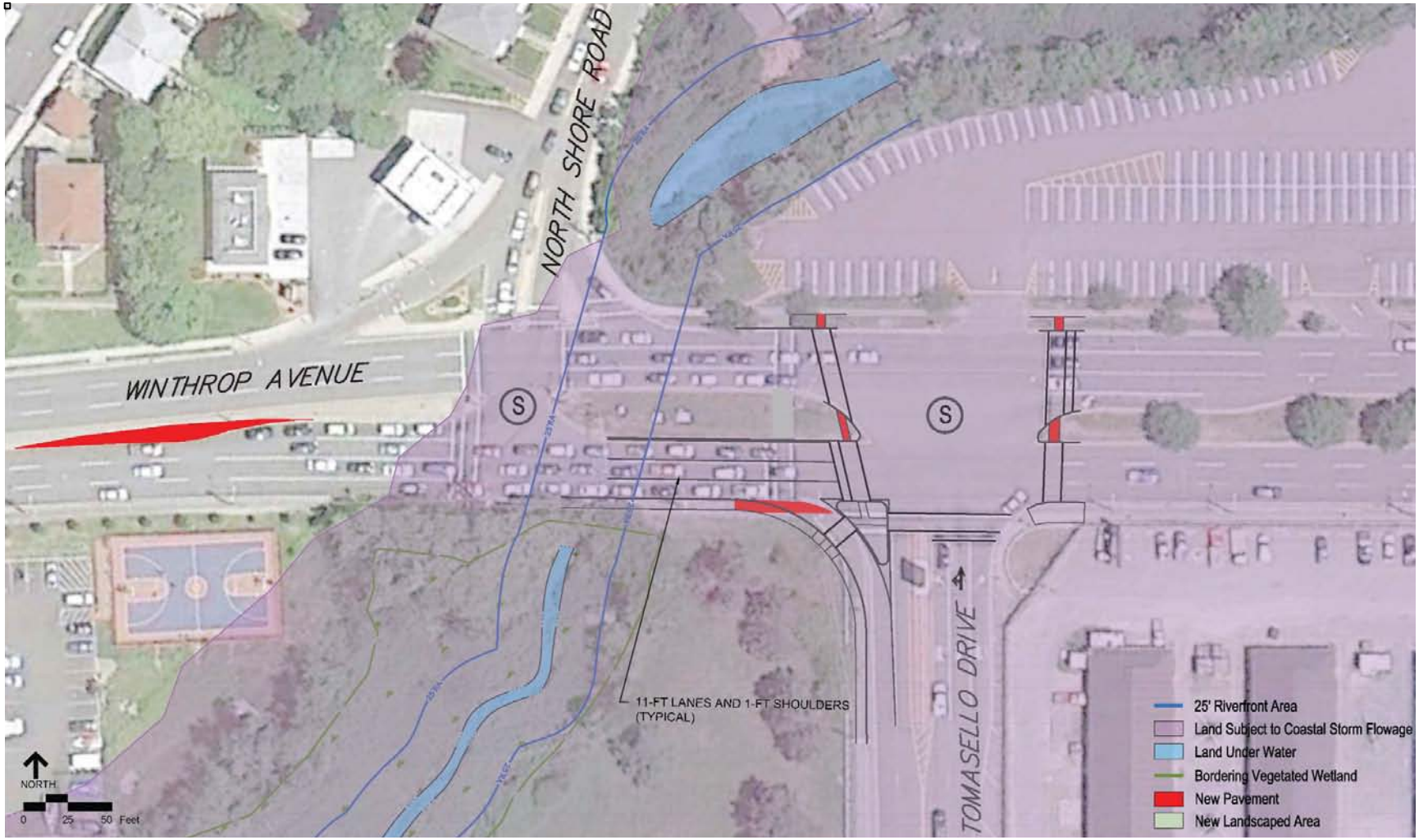

Figure 22 – Winthrop Avenue/North Shore Road/Tomasello Drive – Alternative A

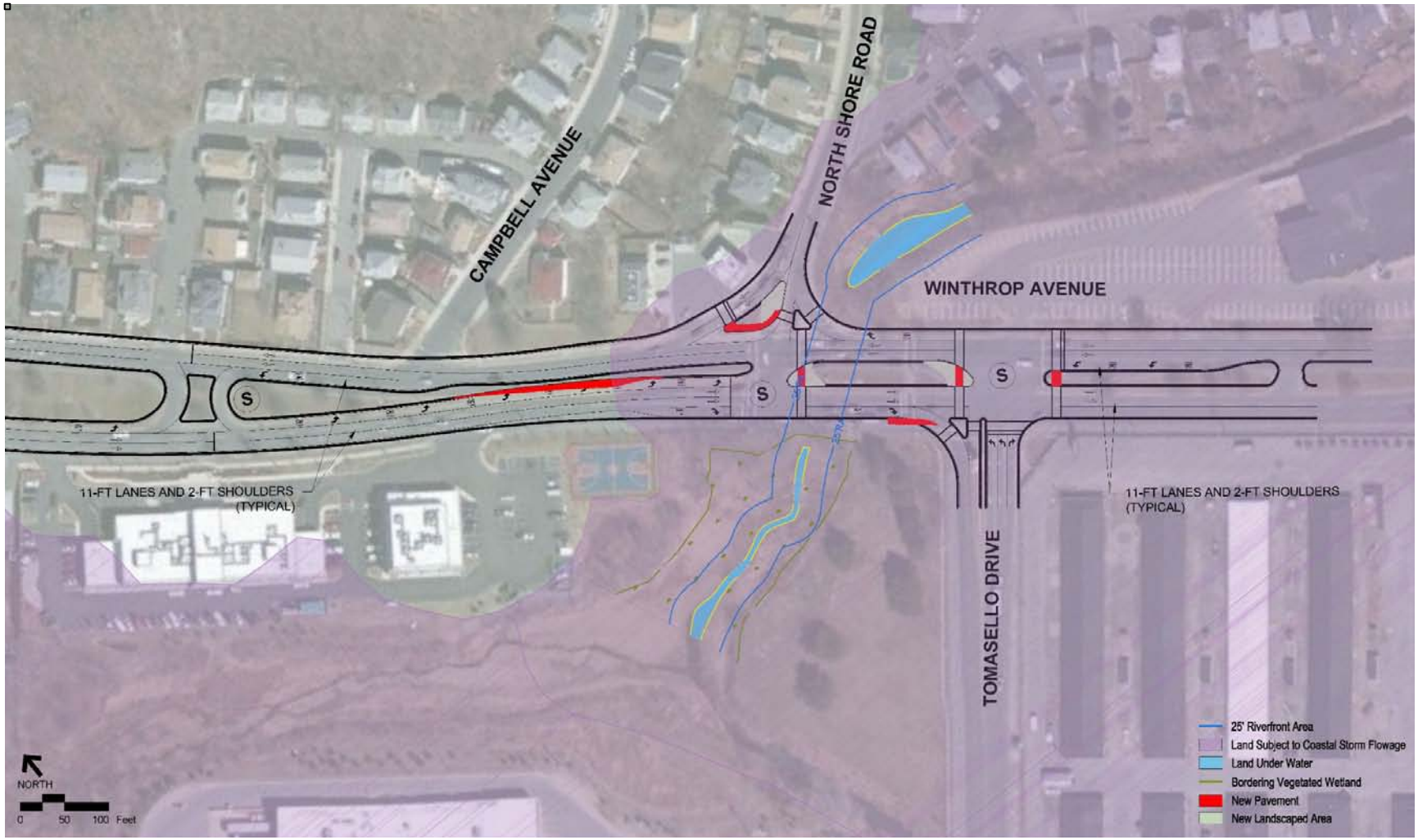

Figure 23 – Winthrop Avenue/North Shore Road/Tomasello Drive – Alternative B

Figure 24 – Proposed Improvements on Winthrop Avenue at Washburn Avenue and at Bennington Street

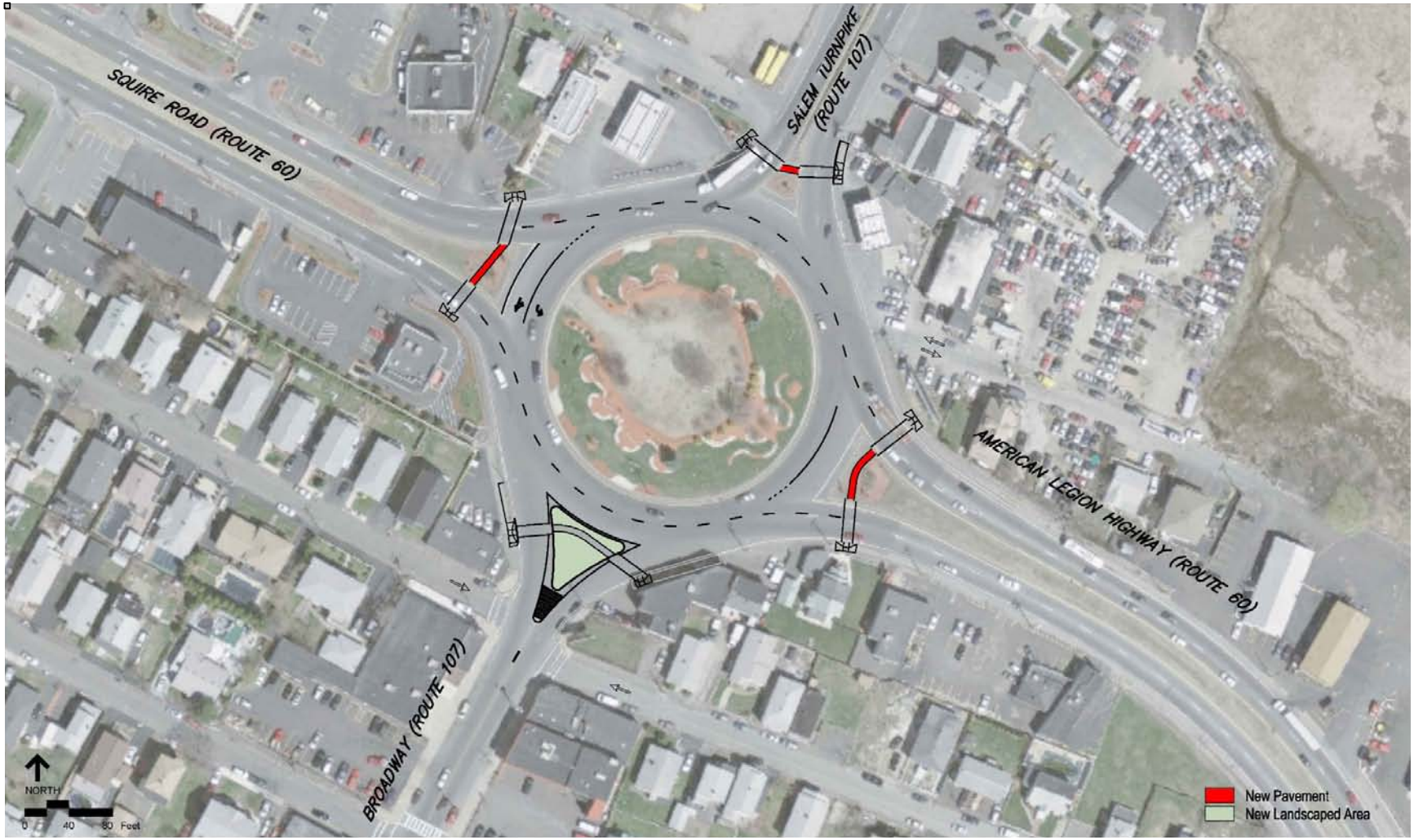

Figure 25 – Proposed Brown Circle Improvements

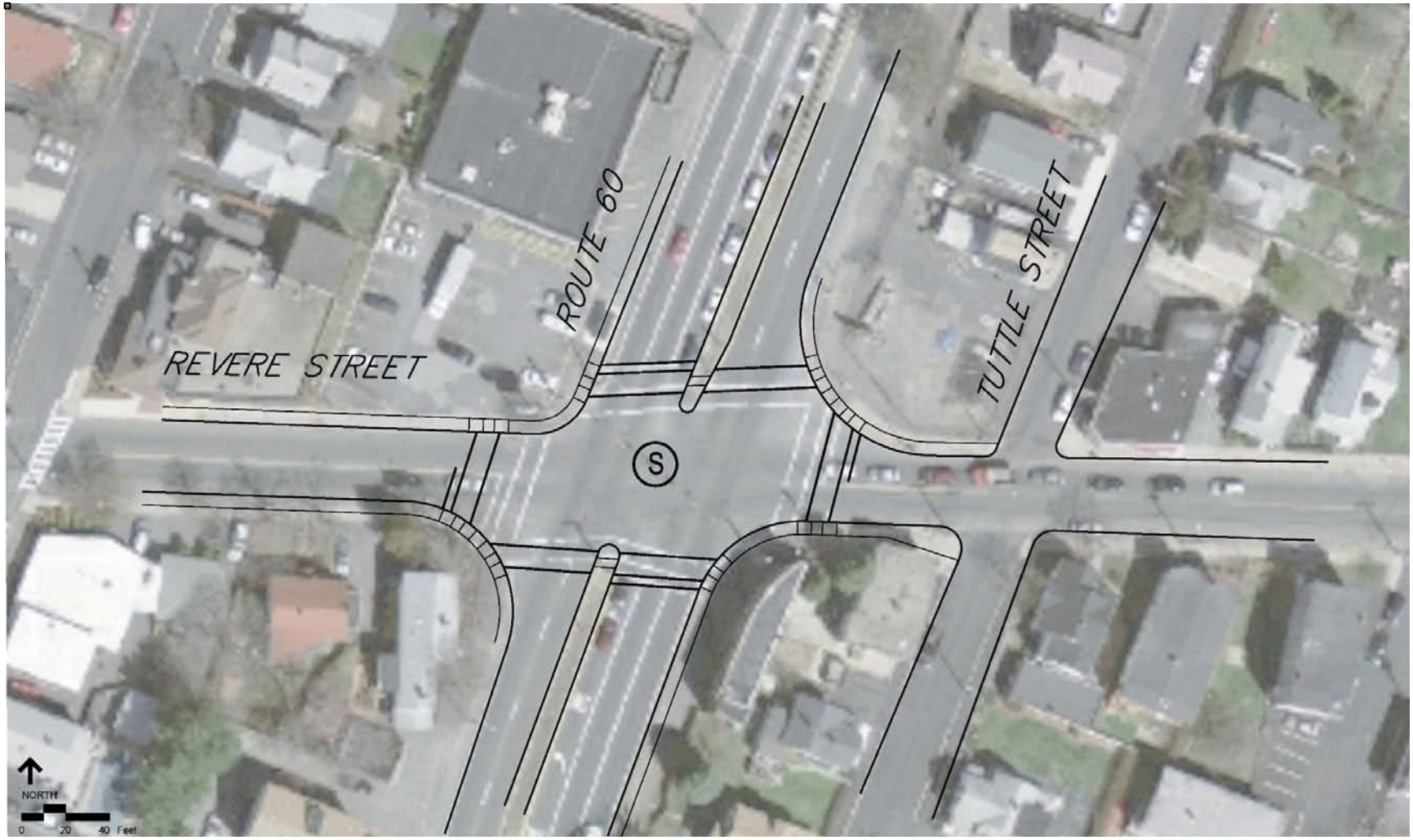

Figure 26 – Proposed Improvements at Route 60/Revere Street

Figure 27 – Proposed Improvements at Route 1A/Revere Street

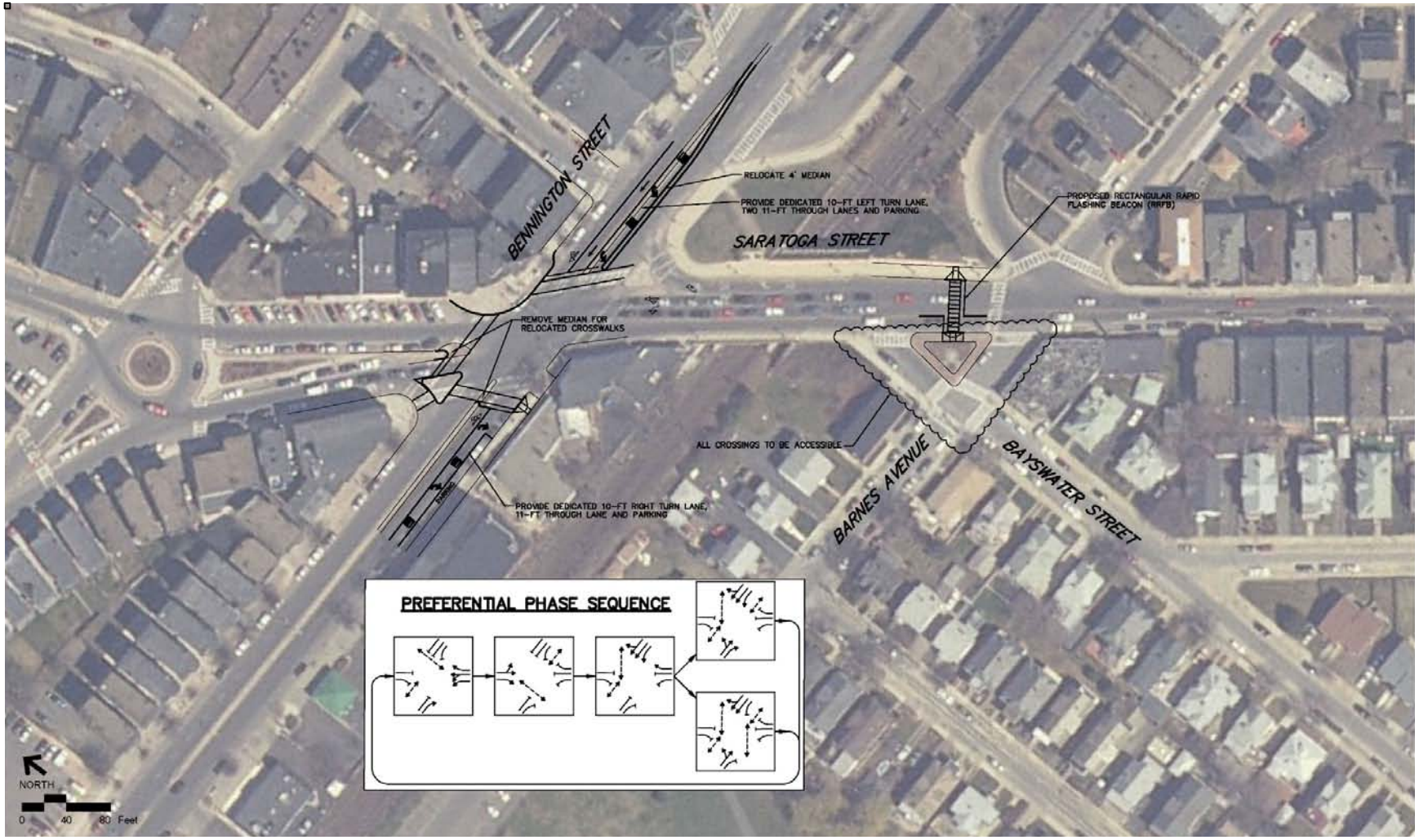

Figure 28 – Proposed Improvements at Saratoga Street/Bennington Street

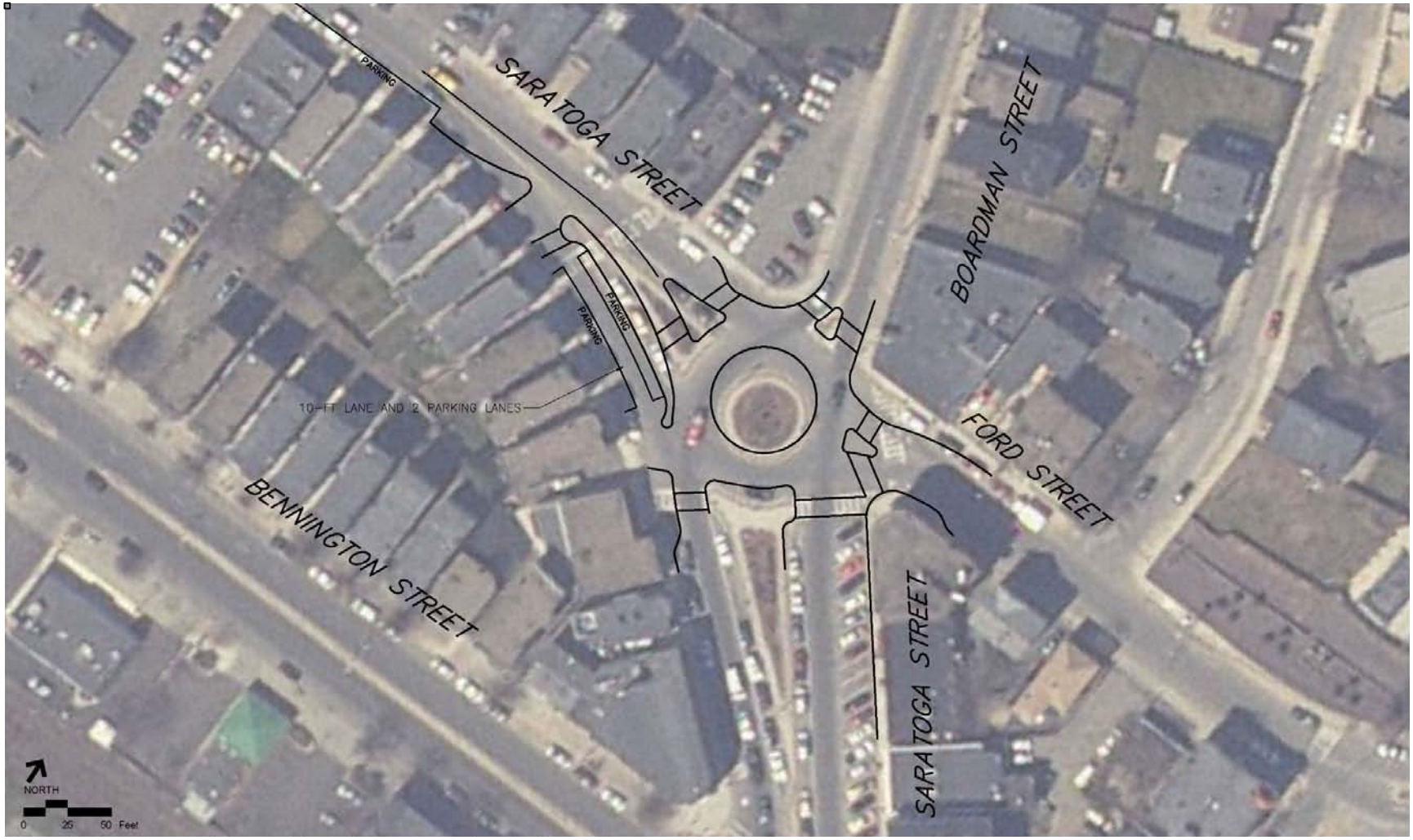

Figure 29 – Proposed Improvements at Saratoga Street/Boardman Street

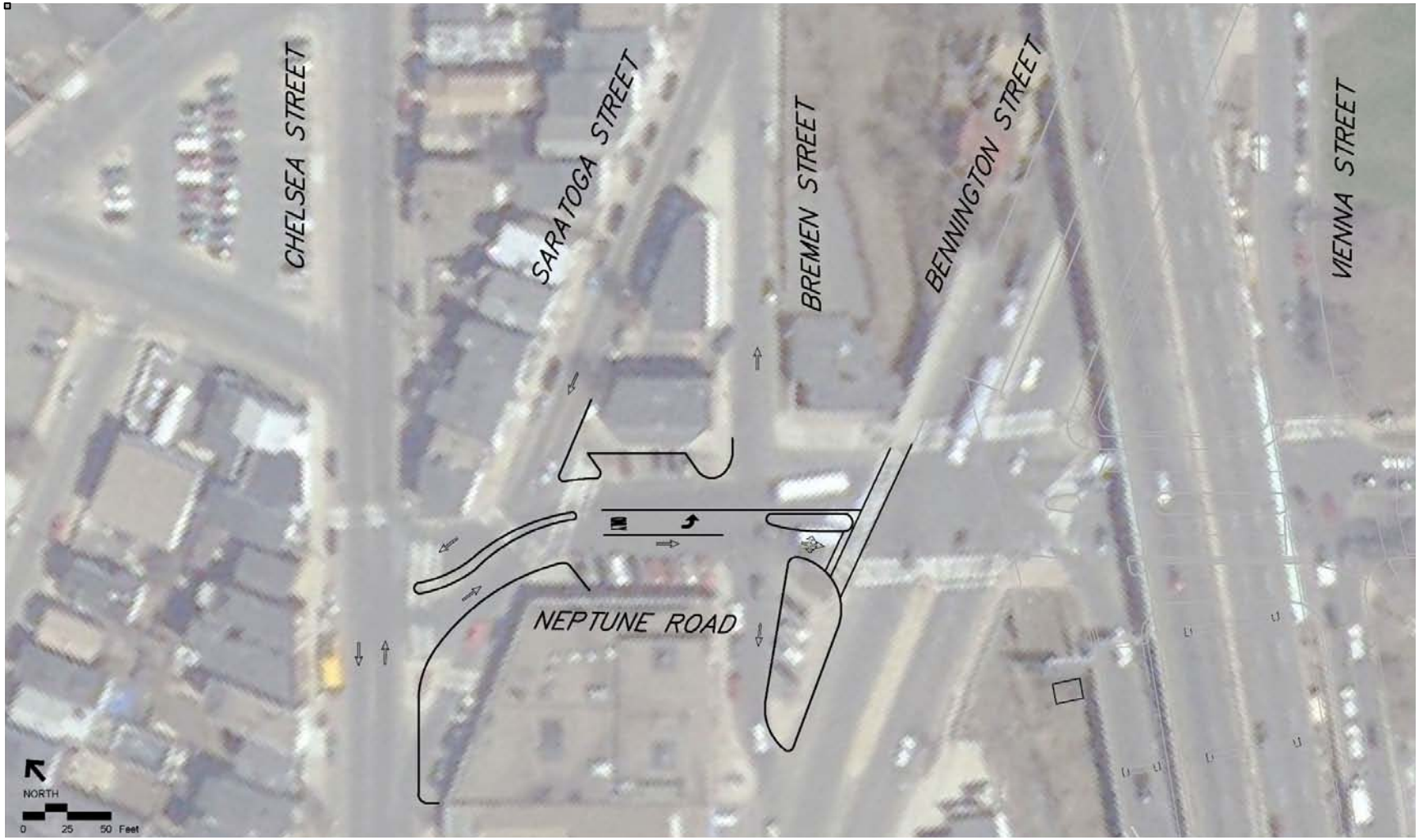

Figure 30 – Proposed Improvements at Neptune Road/Chelsea Street

Figure 31 – Proposed Improvements at Route 1A Southbound/Vienna Street

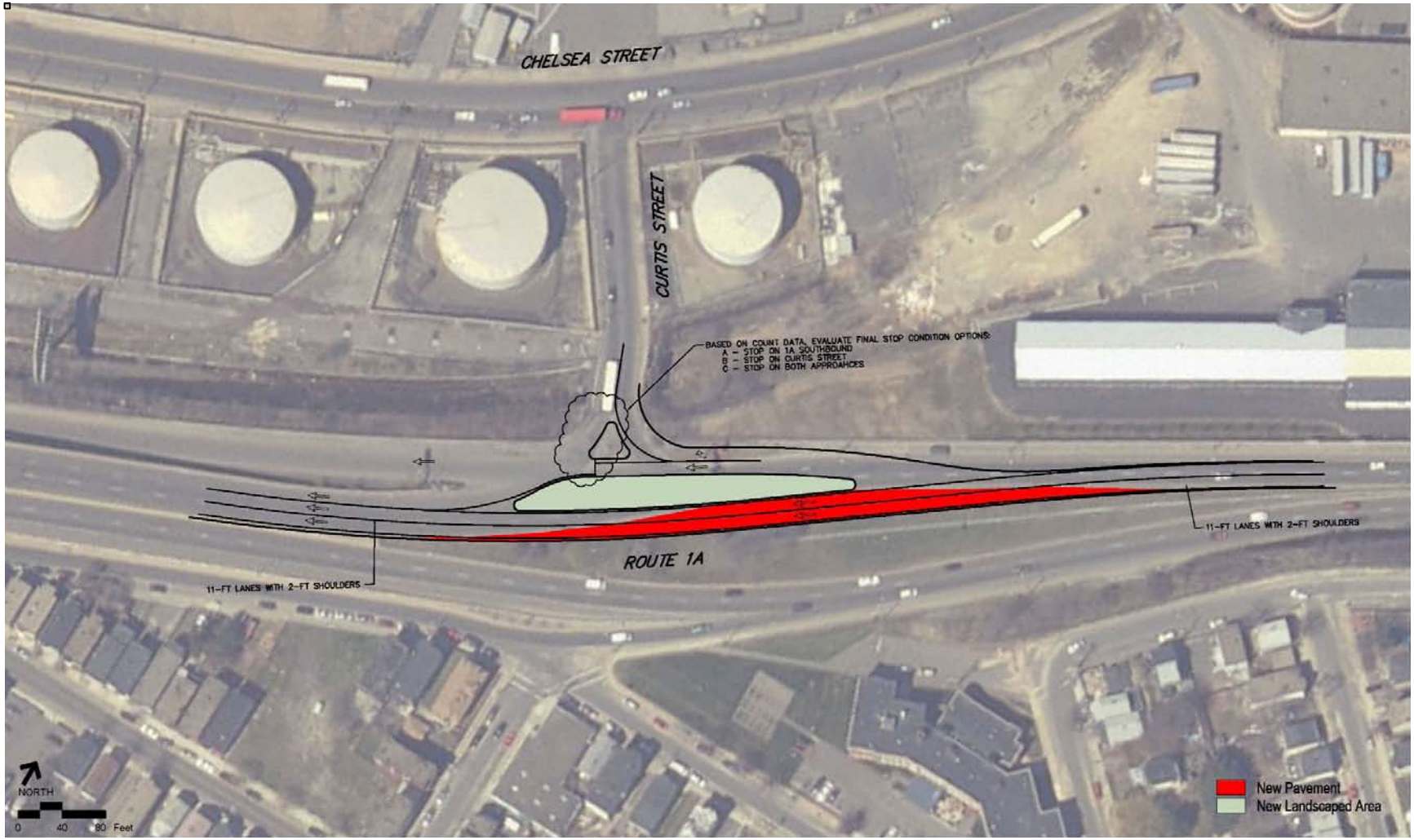

Figure 32 – Proposed Improvements at Route 1A Southbound//Curtis Street

Figure 33 – Wynn/Everett Regional Area Map

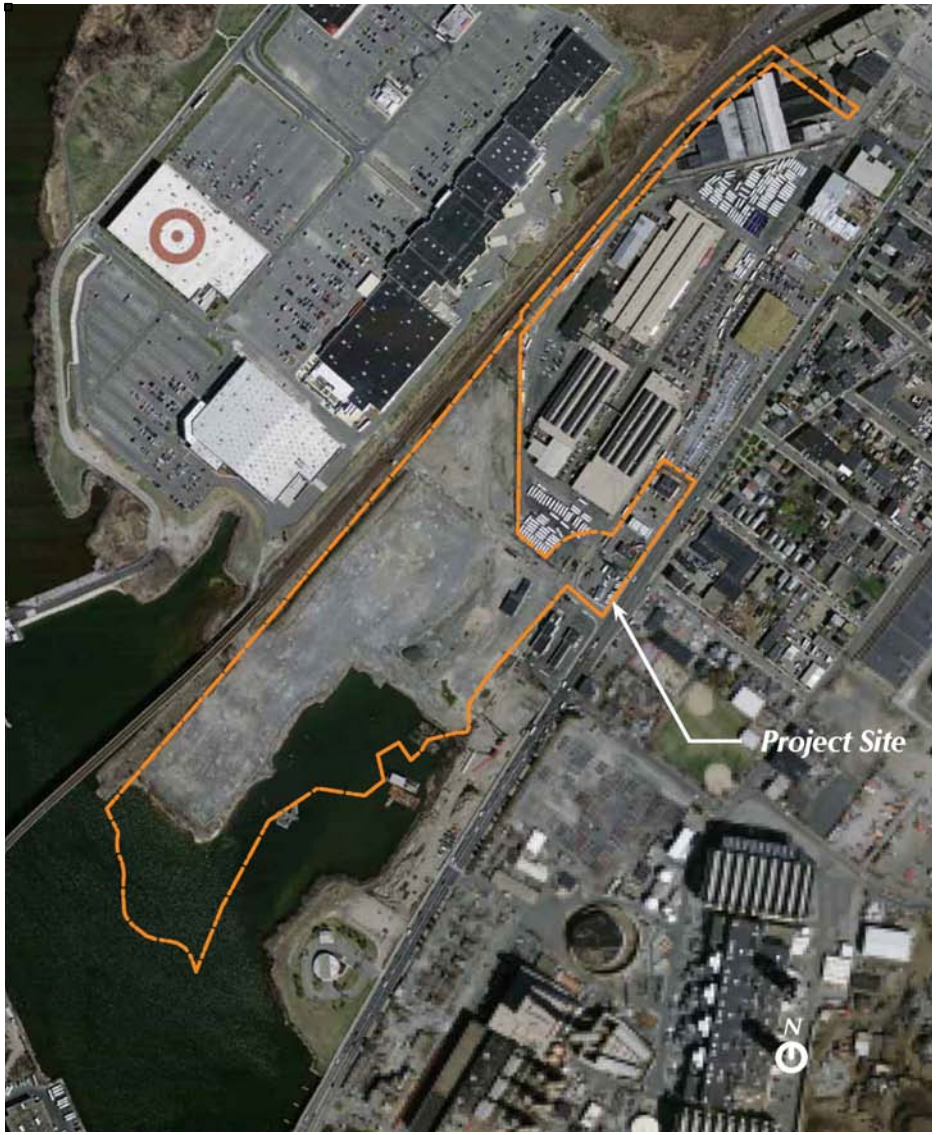

Figure 34 – Wynn/Everett Site Locus Map

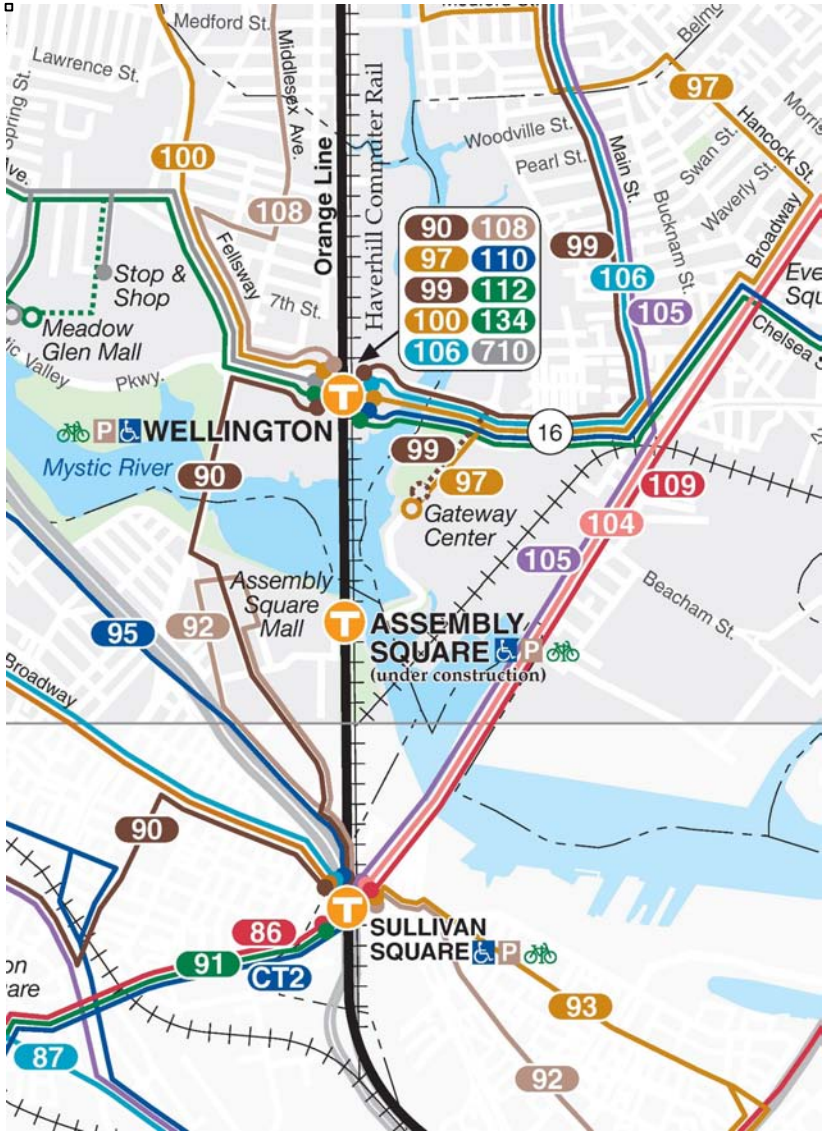

Figure 35 – Existing MBTA Map

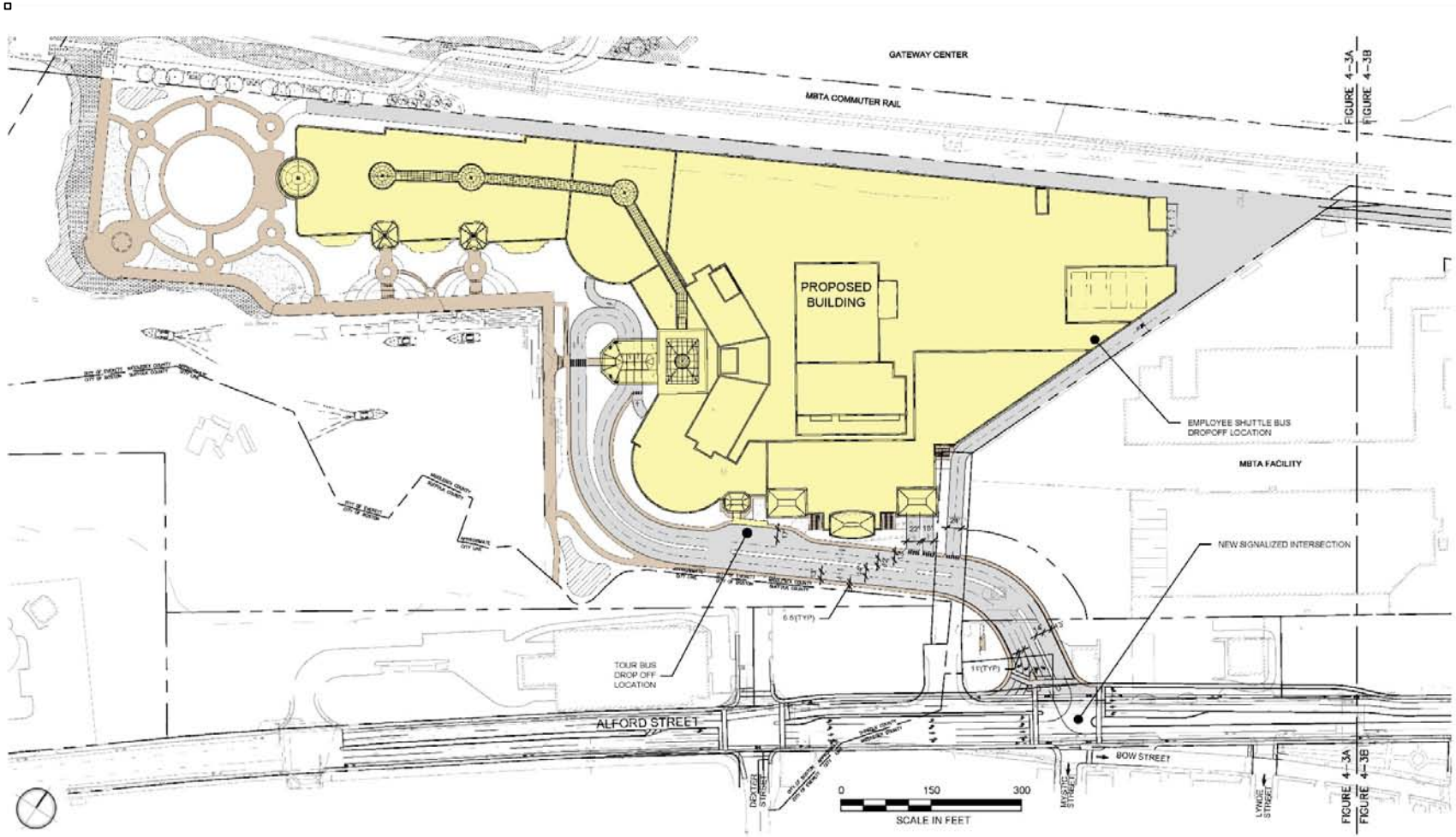

Figure 36 – Wynn/Everett Preferred Site Access Configuration (1 of 2)

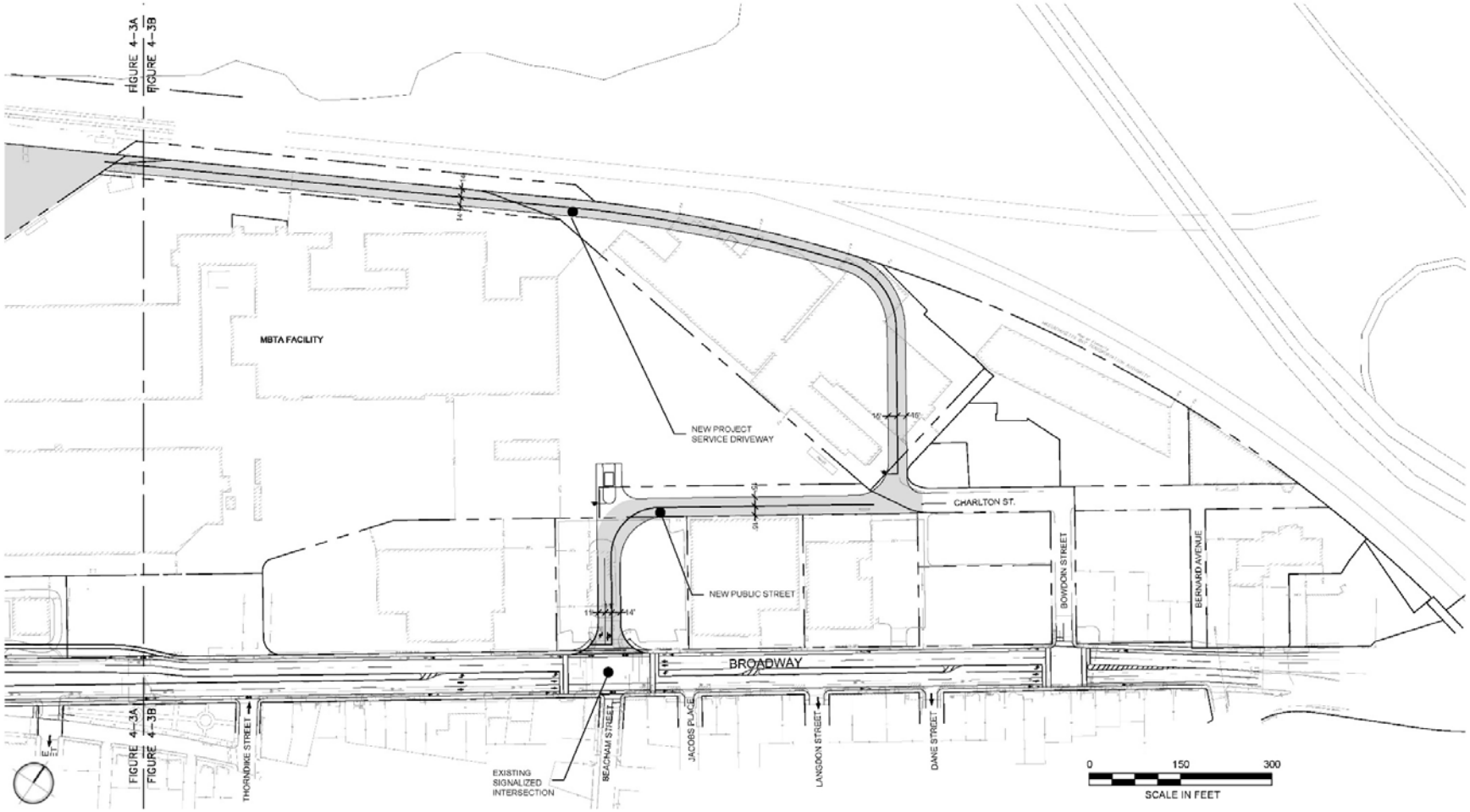

Figure 37 – Wynn/Everett Preferred Site Access Configuration (2 of 2)

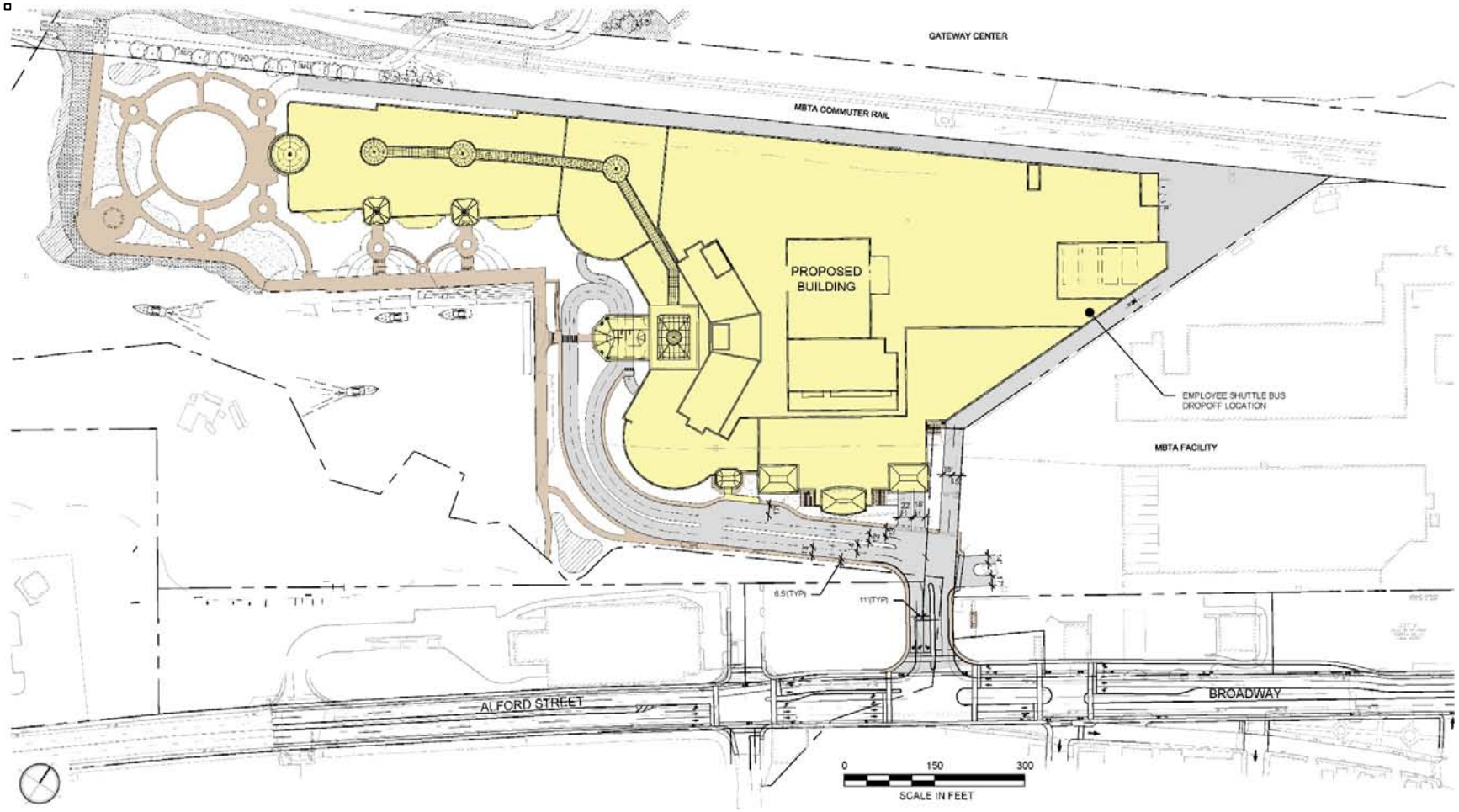

Figure 38 – Wynn/Everett Alternate Site Access Configuration

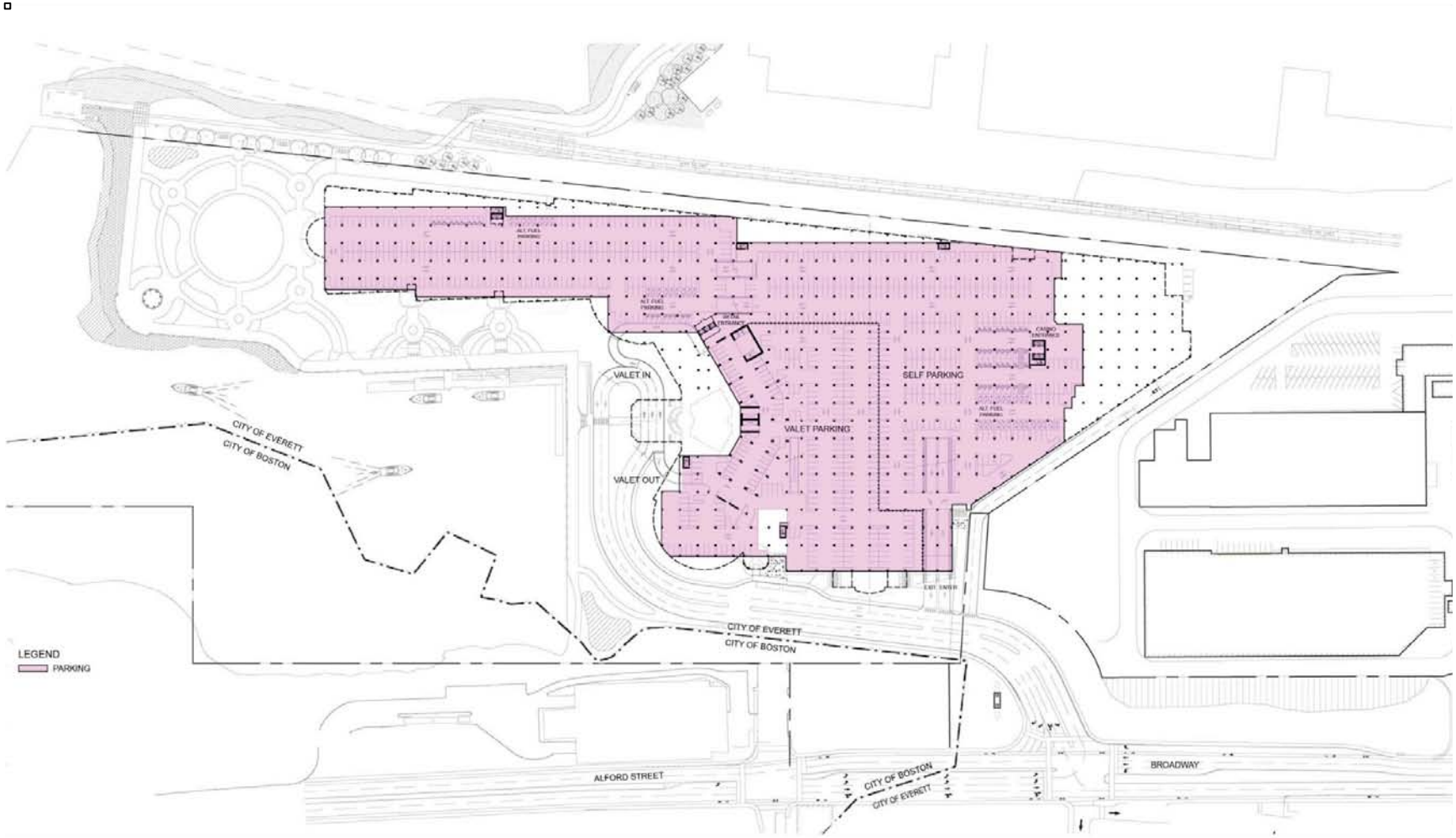

Figure 39– Wynn/Everett Parking Level B1

Figure 40– Wynn/Everett Parking Level B2 & B3

PARKING TABULATION				
Level	Retail	Self	Valet	Total By Level
B1	274	345	265	884
B2	274	414	312	1000
B3	274	759	0	1033
B4	0	783	0	783
Total Parking	822	2301	577	**3700**

NOTE: STAFF PARKING OFF-SITE

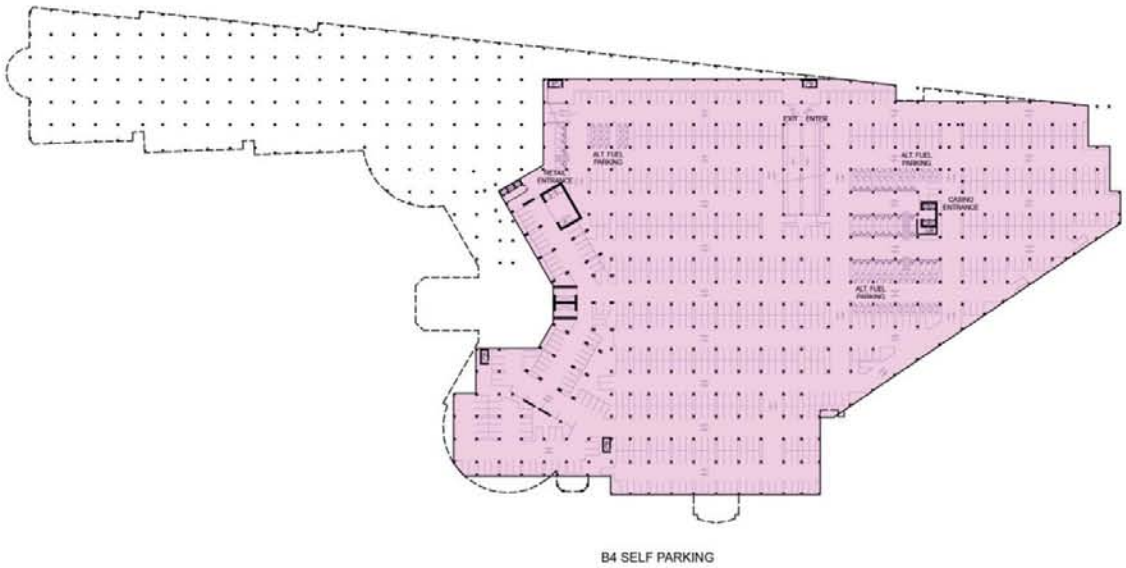

Figure 41– Wynn/Everett Parking Level B4

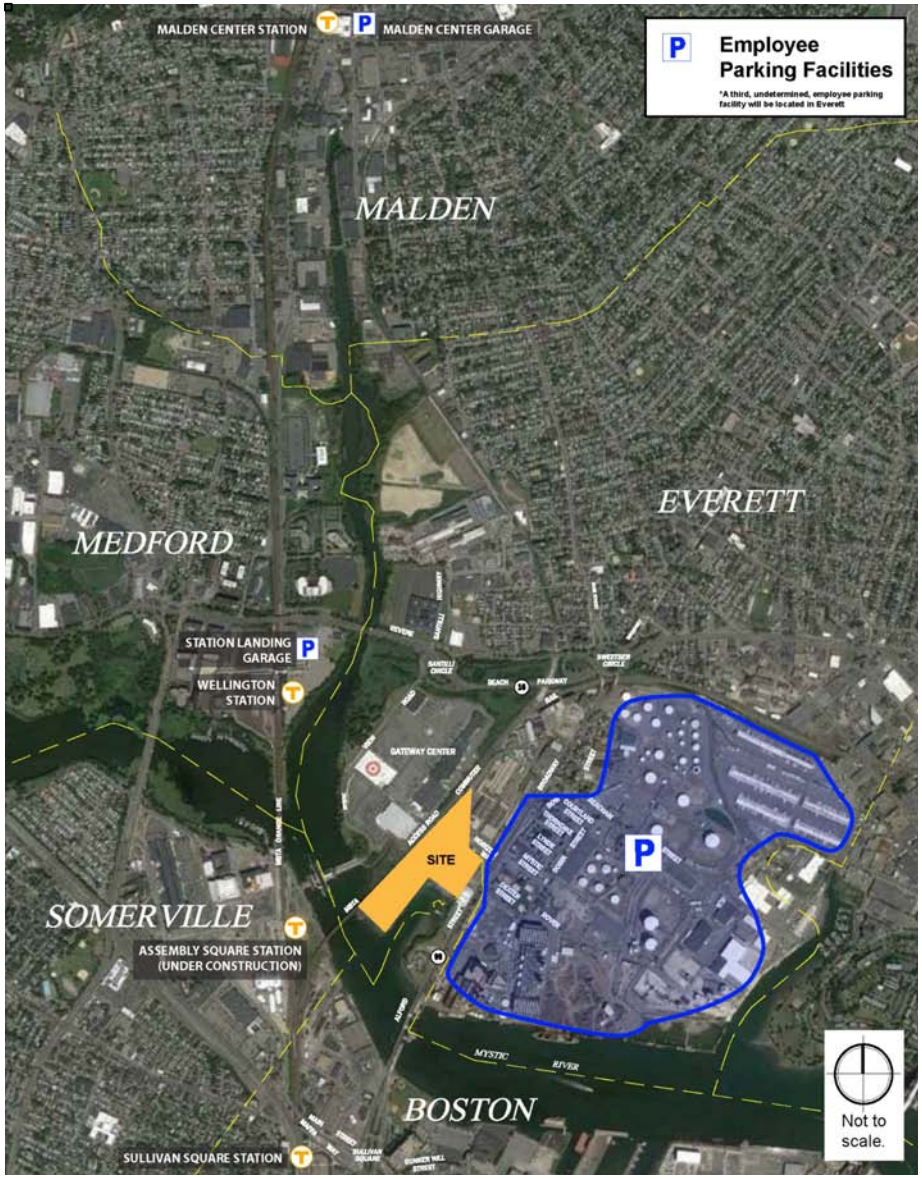

Figure 42– Wynn/Everett Off Site Parking Locations

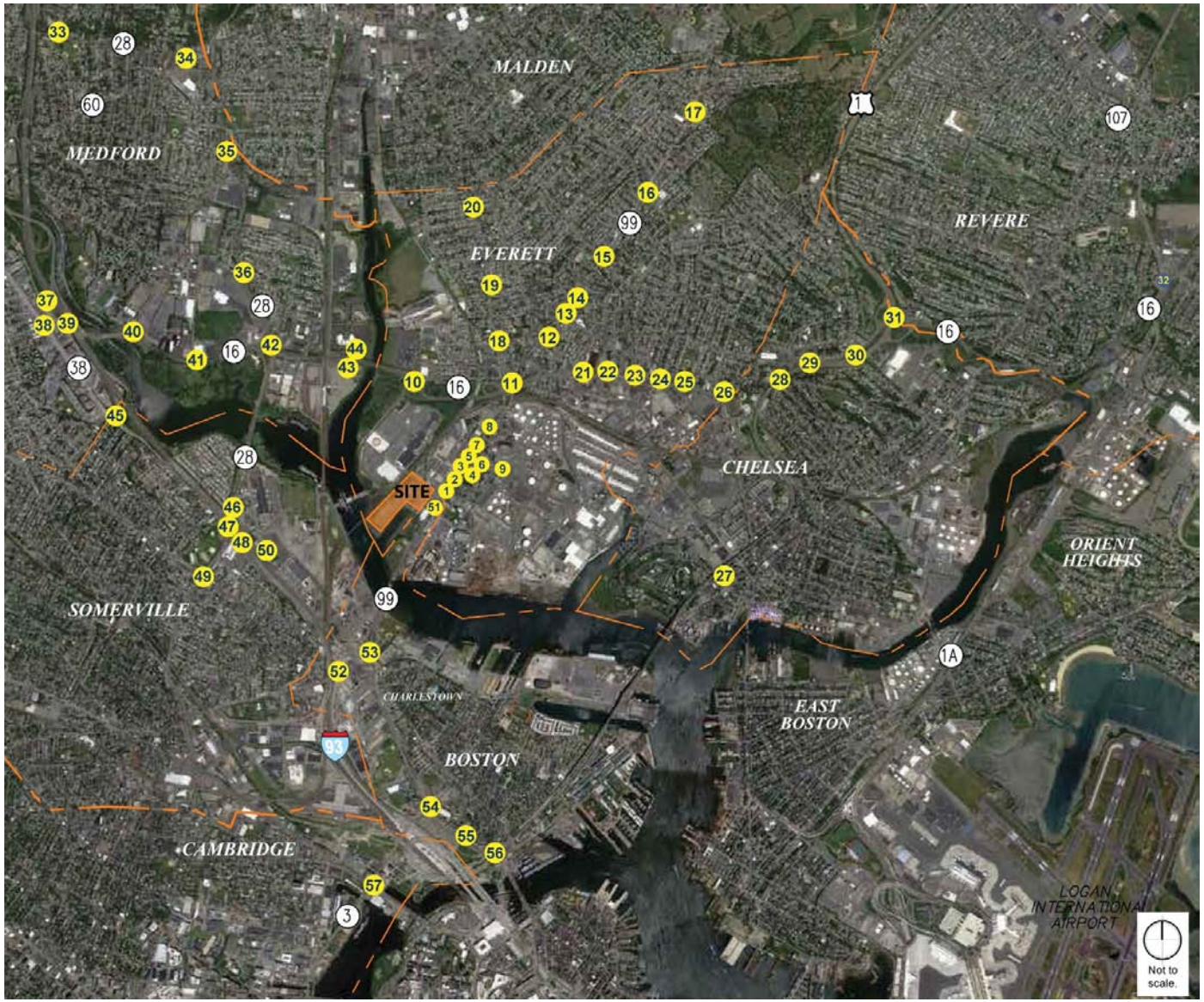

Figure 43– Wynn/Everett Study Area

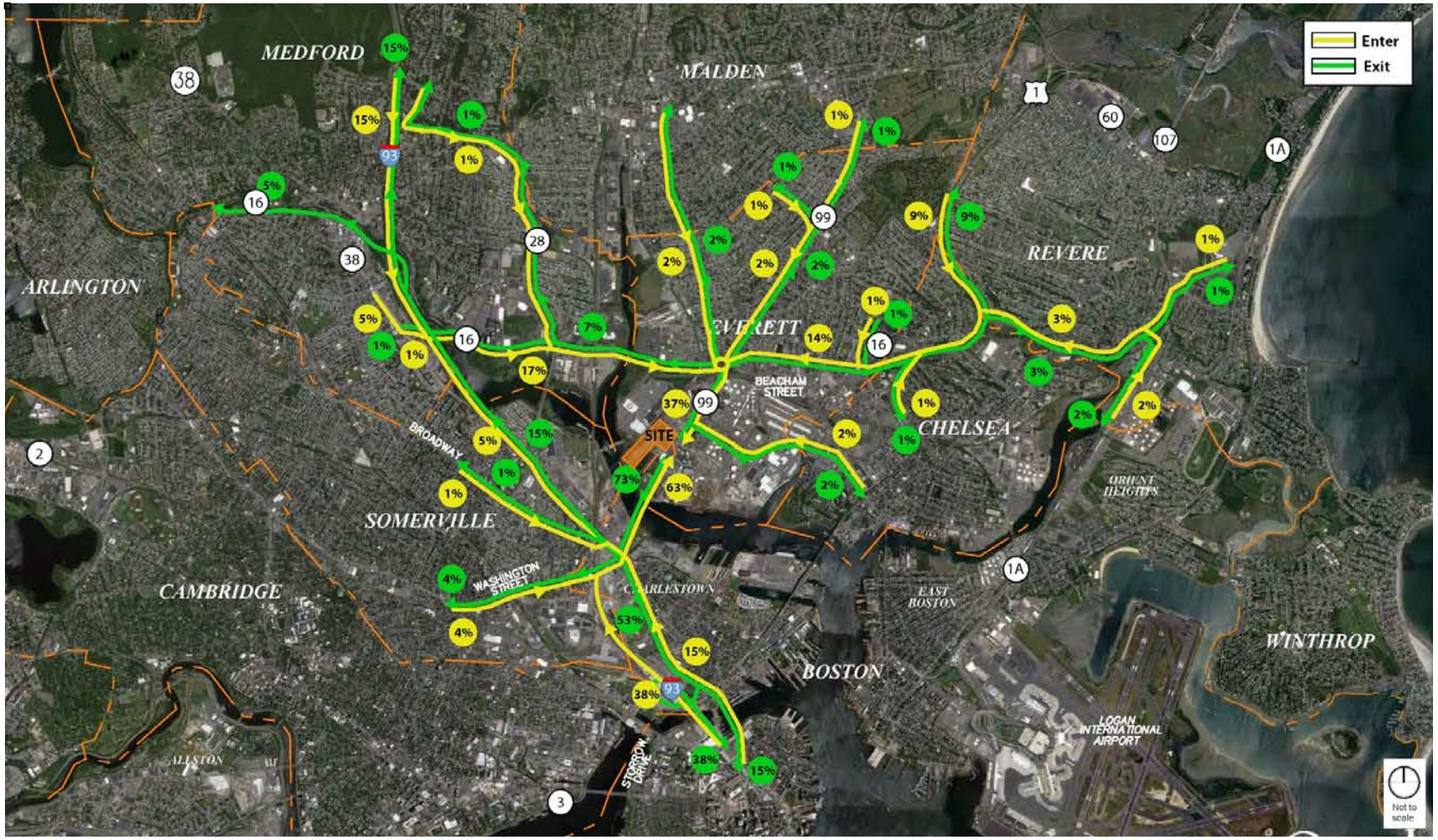

Figure 44– Wynn/Everett Trip Distribution Map – Patrons

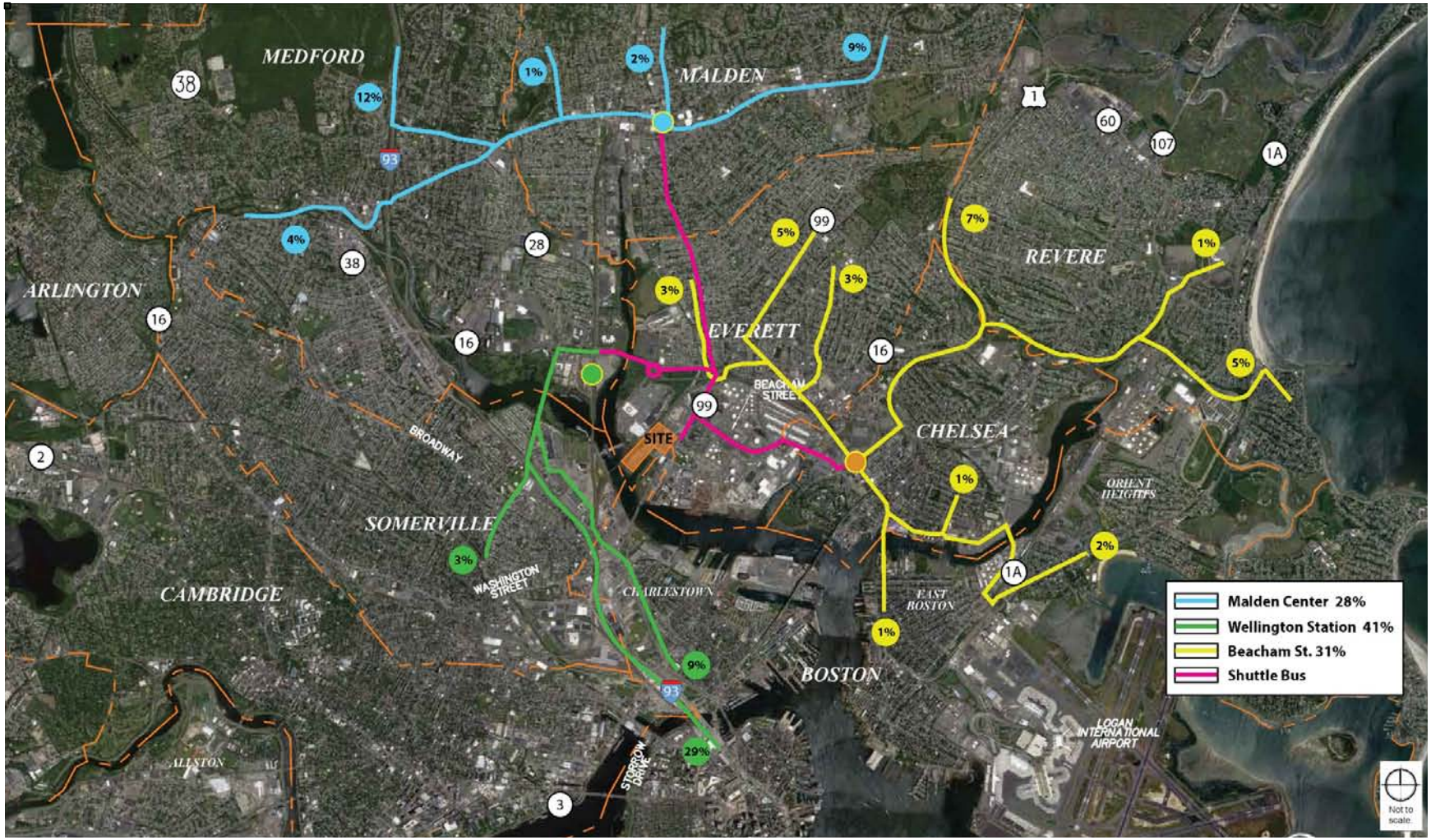

Figure 45– Wynn/Everett Trip Distribution Map – Employees

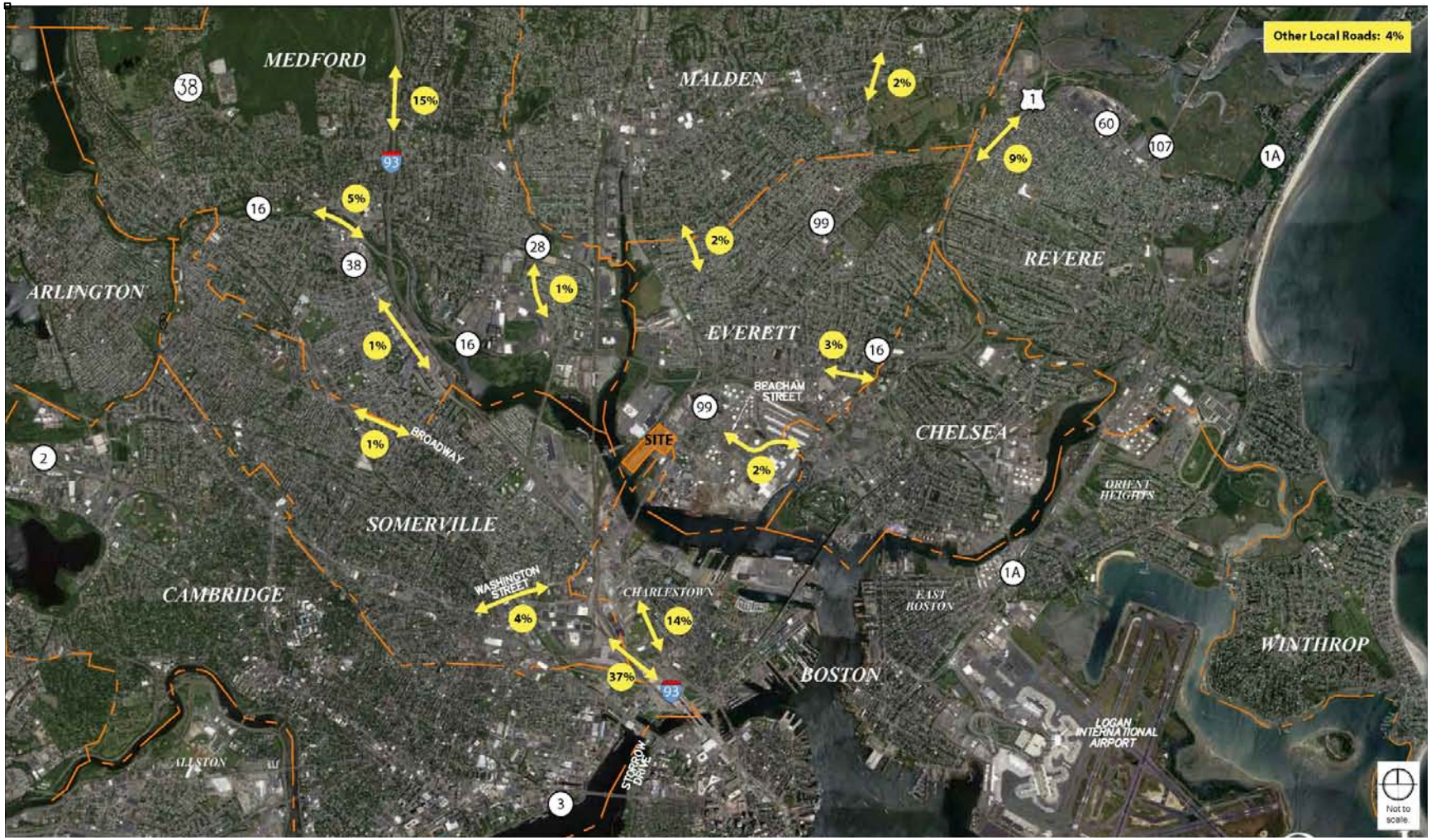

Figure 46– Wynn/Everett Trip Distribution Map – Combined Patrons/Employees

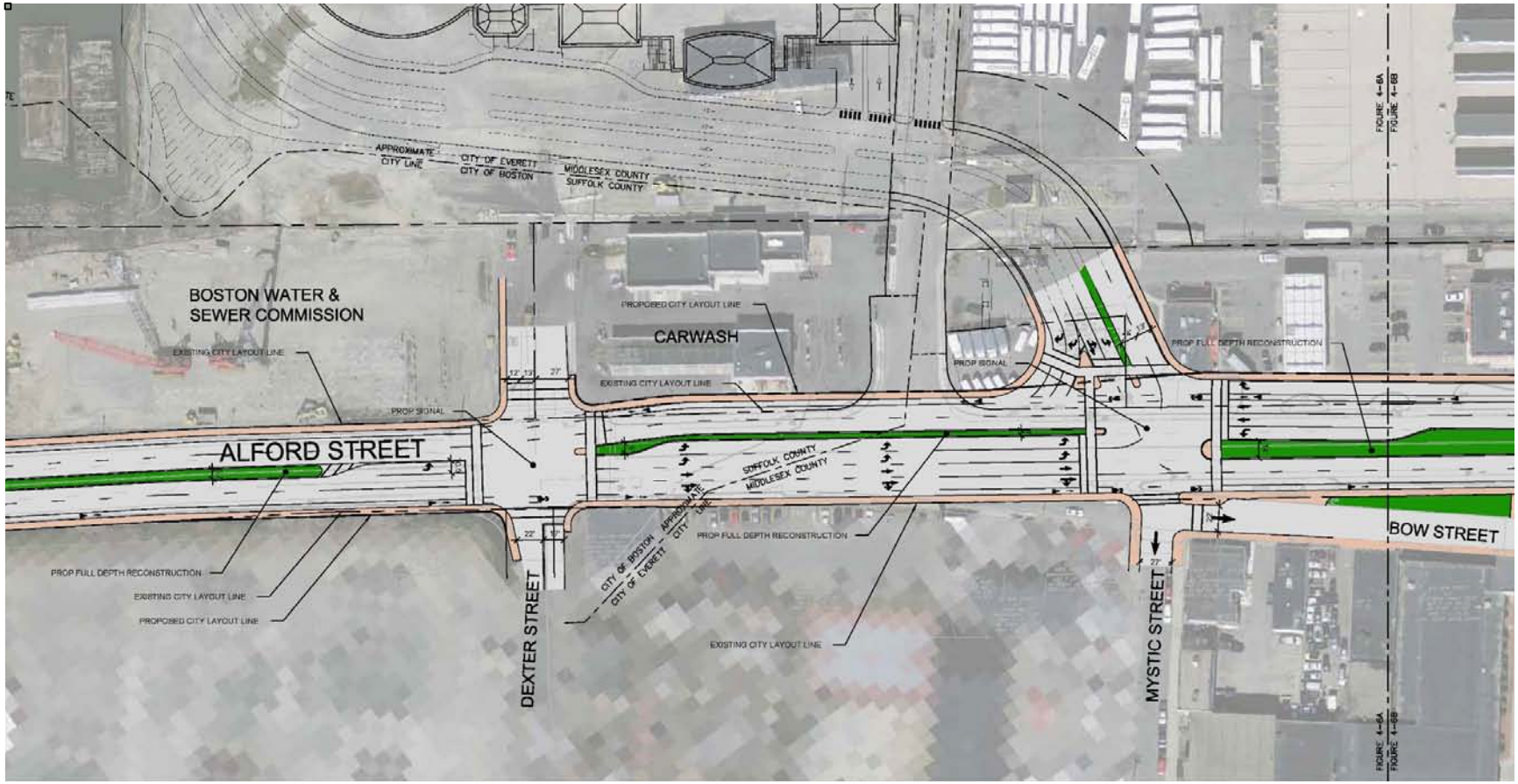

Figure 47 – Proposed Improvements on Broadway (Route 99) – 1 of 3

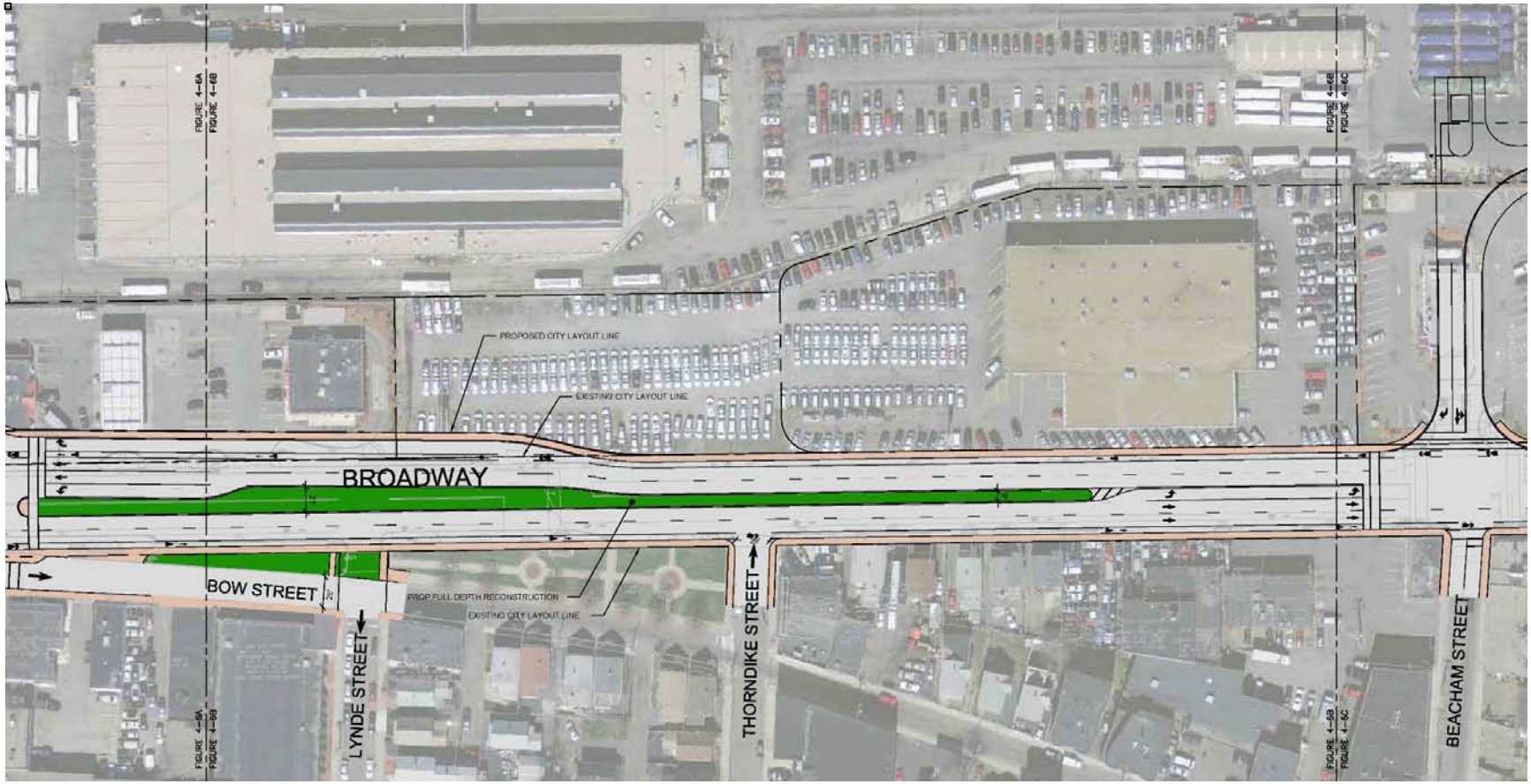

Figure 48 – Proposed Improvements on Broadway (Route 99) – 2 of 3

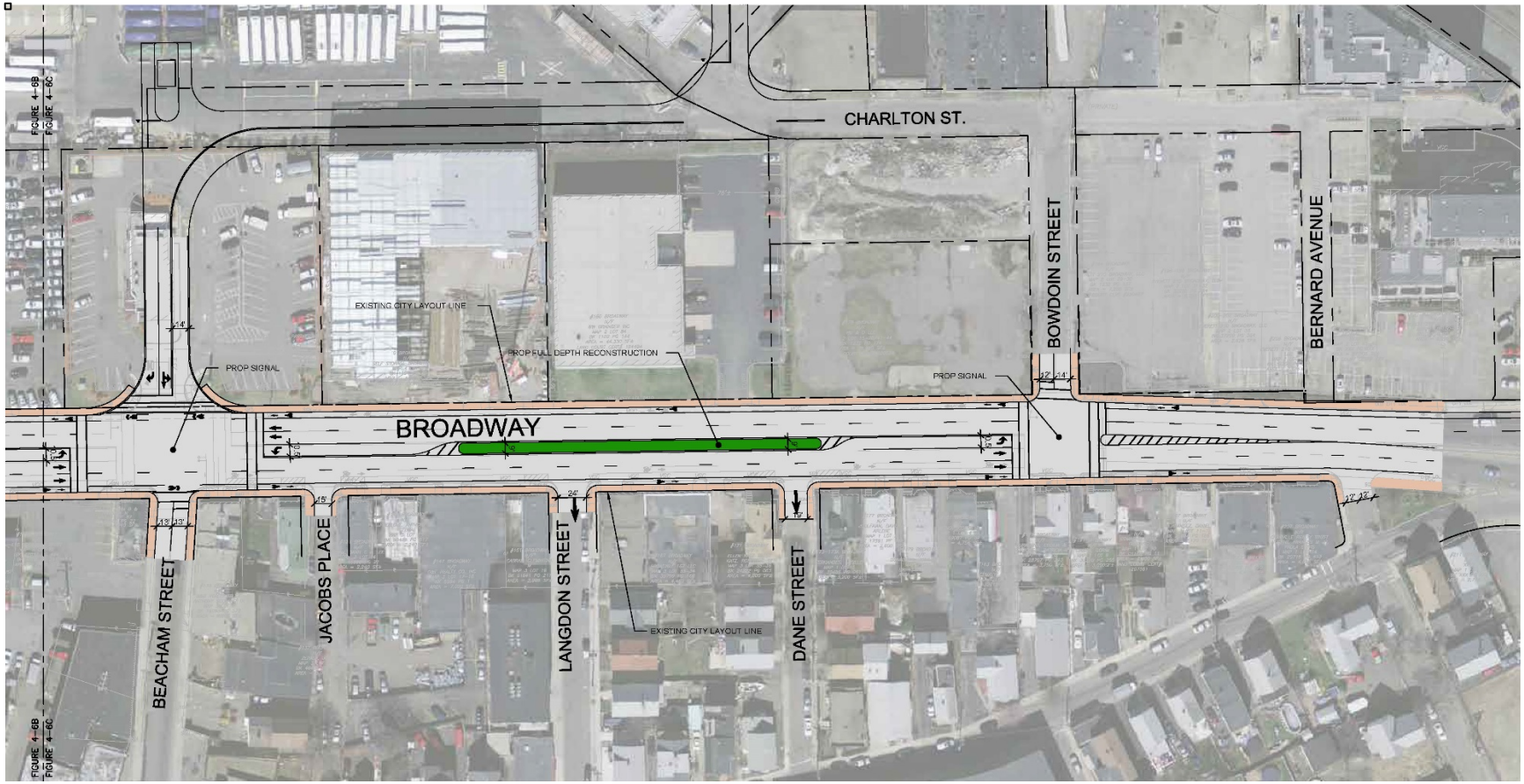

Figure 49 – Proposed Improvements on Broadway (Route 99) – 3 of 3

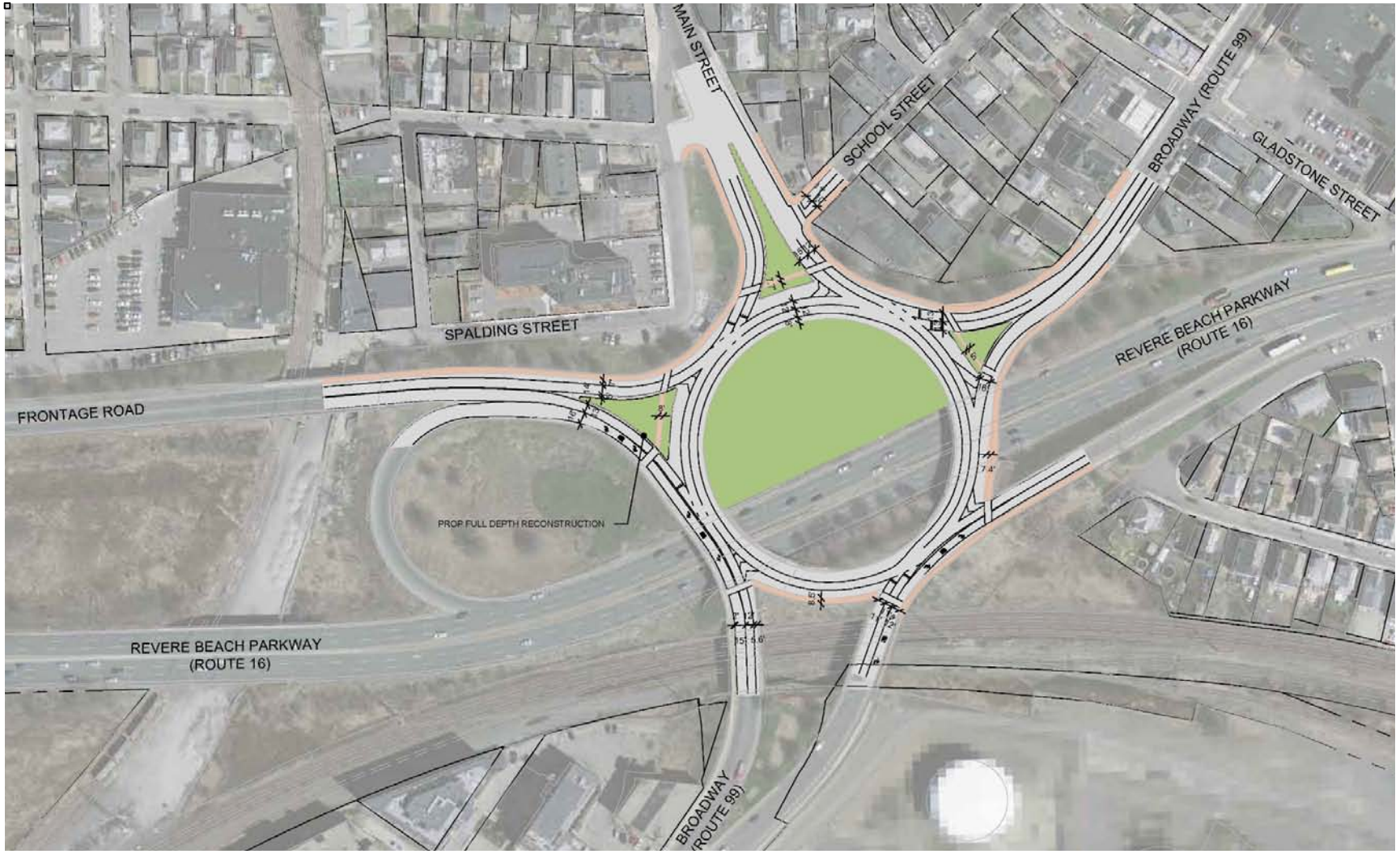

Figure 50 – Proposed Sweetser Circle Improvements

Figure 51 – Proposed Santilli Circle Improvements

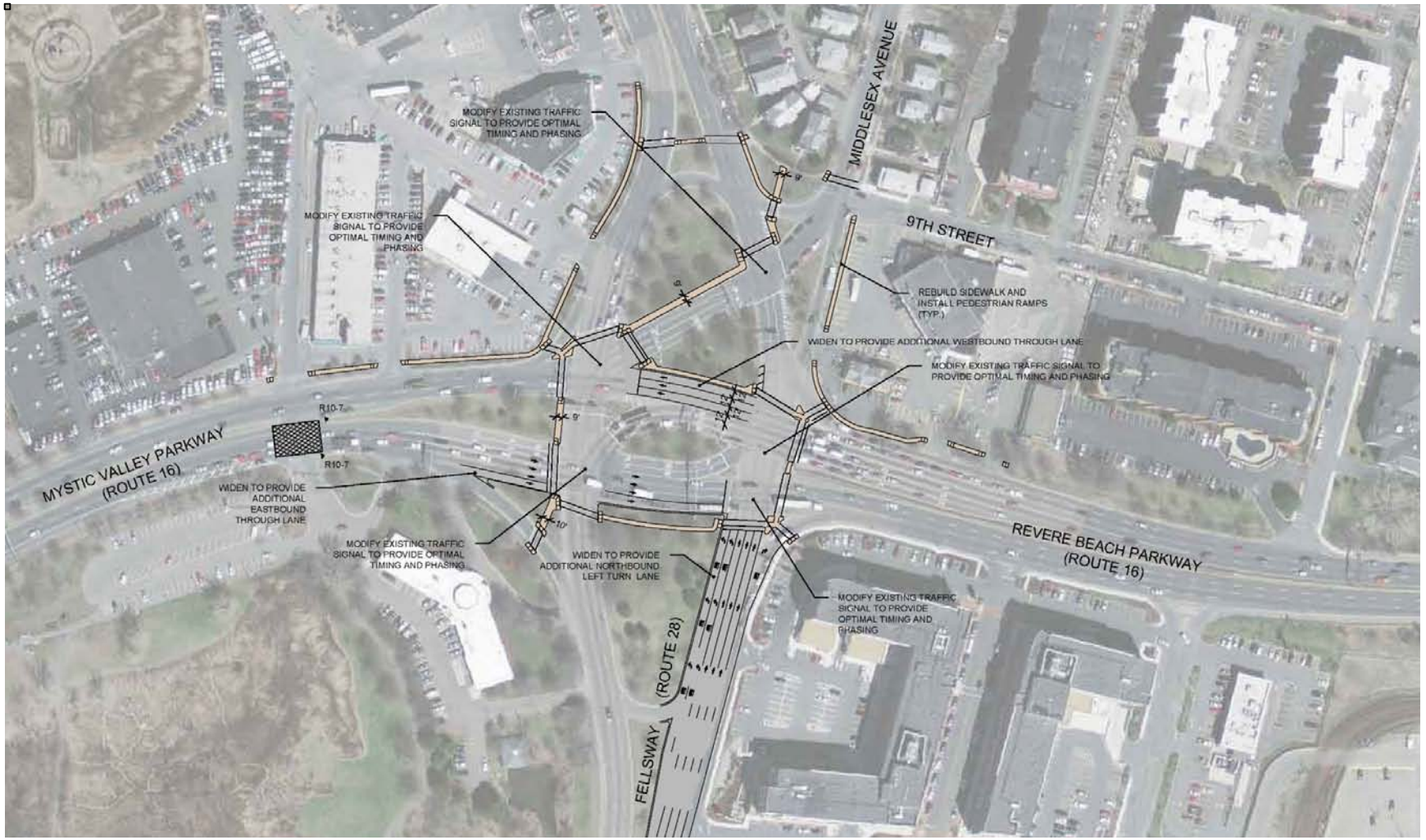

Figure 52 – Proposed Wellington Circle Improvements – 1 of 3

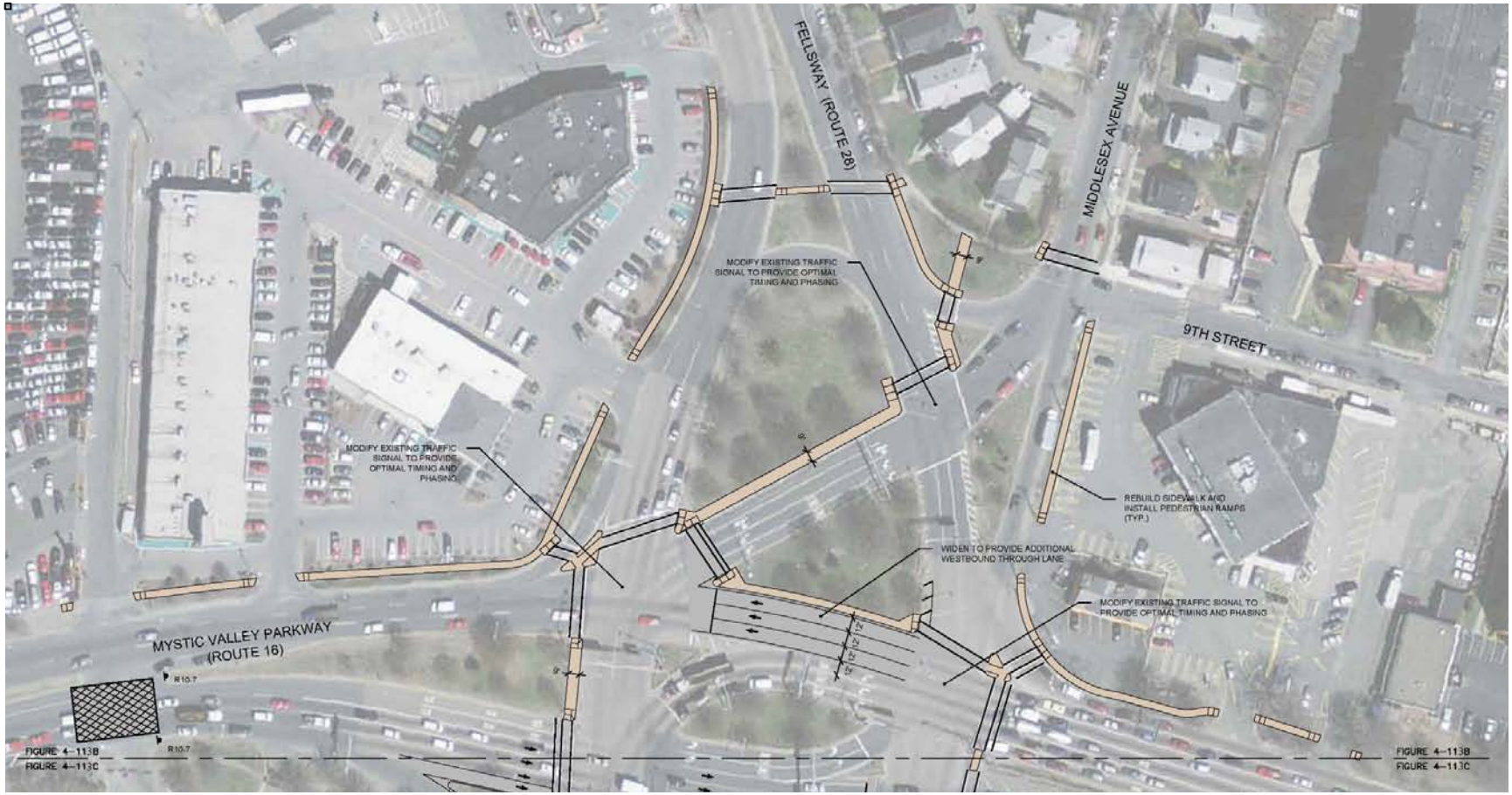

Figure 53 – Proposed Wellington Circle Improvements – 2 of 3

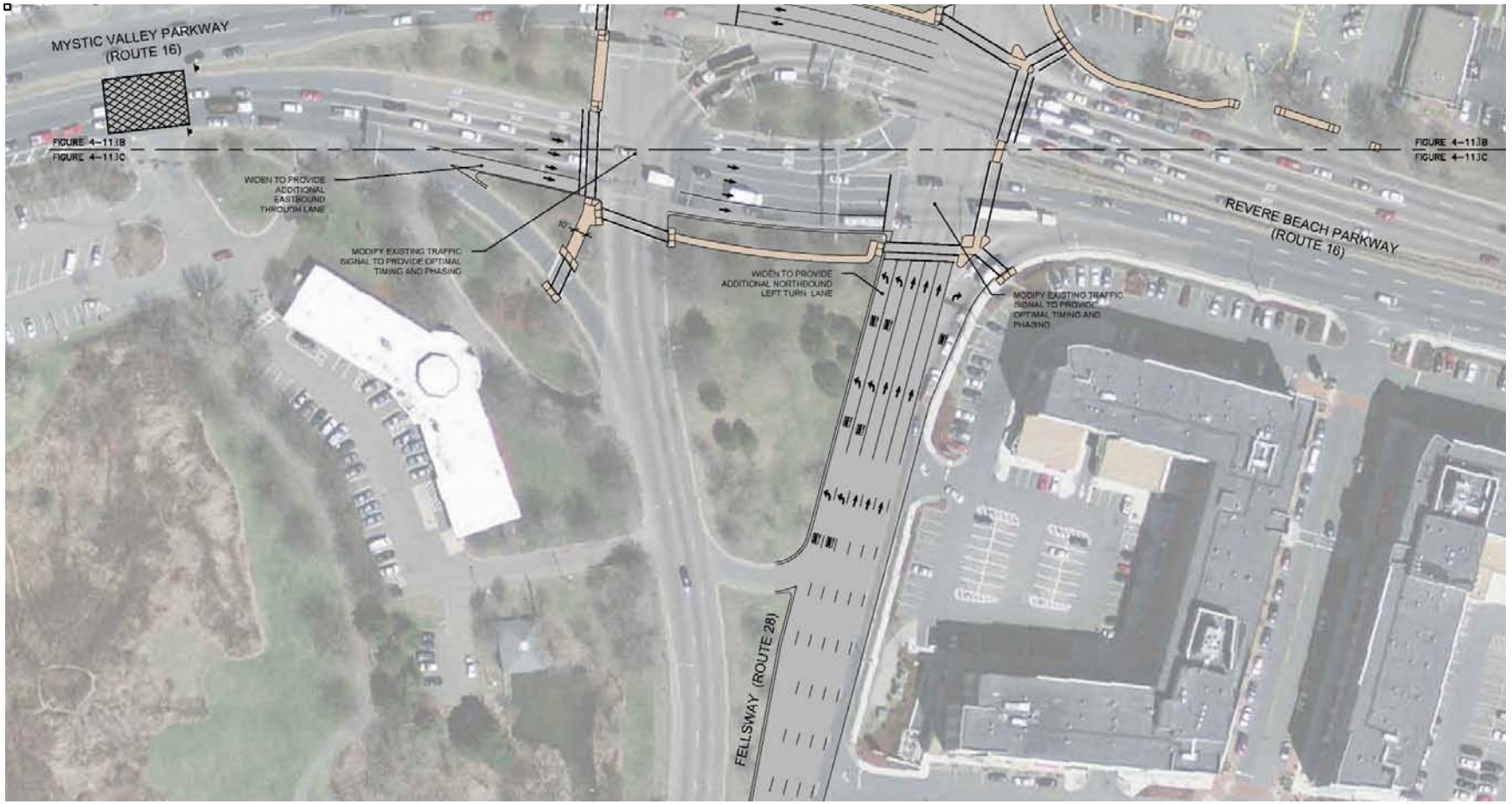

Figure 54 – Proposed Wellington Circle Improvements – 3 of 3

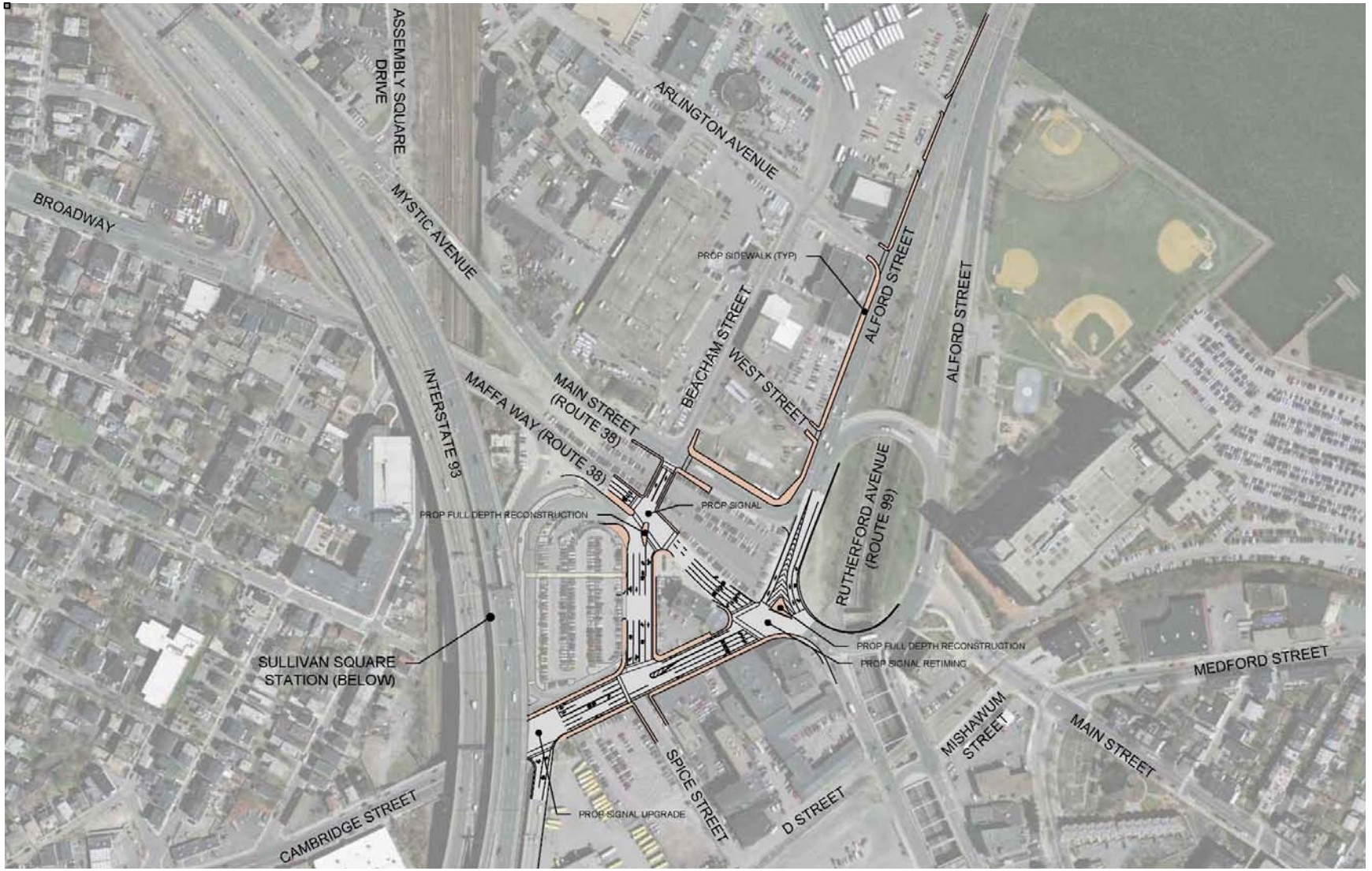

Figure 55 – Proposed Sullivan Square Improvements – 1 of 2

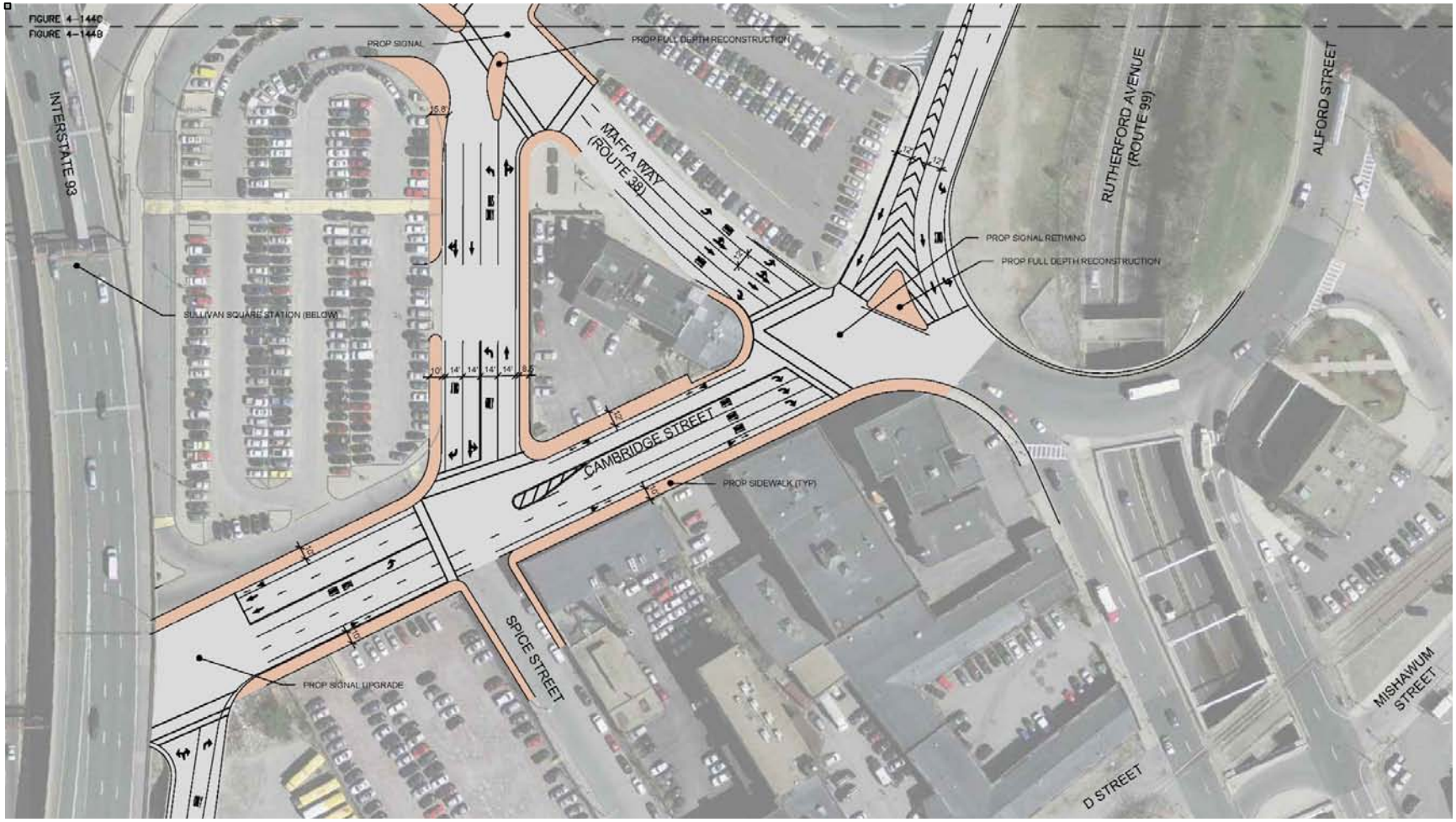

Figure 56 – Proposed Sullivan Square Improvements – 2 of 2

Energy and Sustainable Design Review

OVERVIEW

This discussion reviews how the Applicant proposes to advance certain objectives related to energy and sustainable design in MGL c.23K, §18 (8) based on their responses to Questions 4-37 LEED Certification; 4-39 Stretch Energy Code; 4-46 On-Site Energy Generation, 4-47 Off-Site Renewable Energy, and 4-54 Sustainable Building Construction[1]. The questions and responses specifically relate to three objectives listed in MGL c.23K, §18 (8):

(i) Being certified as LEED gold or higher,
(ii) Meeting or exceeding the stretch energy code, and
(iii) Procuring or generating on-site 10% of its annual electricity consumption from renewable sources.

Among its sustainable development principles, the enabling legislation explicitly includes LEED Gold certifiability and Massachusetts "Stretch" Code requirements among the factors the Commission must consider. For context, Massachusetts Executive Order 484 signed in 2009 established the "Leading by Example" program, which targets a 35% reduction in overall energy consumption by state-owned buildings by Fiscal Year 2030, and a 40% reduction in greenhouse gas emissions. Additional requirements include: procuring renewably sourced electricity, incorporating bio-based fuels for oil burning applications, and reducing potable water use. Under Executive Order 484 significant projects designed for use by a public entity must meet LEED Certification, plus energy performance of 20% improvement from baseline, commissioning, and smart growth criteria established by the Commonwealth.

This summary addresses LEED, the Stretch Code, and renewable energy in the context of the Category 1 Casino license applications and provides background for the analysis of questions considered under Criteria 4, Utilize Sustainable Development Principles in Construction and Life Cycle of Facility.

Chapter 23K, §18

In determining whether an applicant shall receive a gaming license, the commission shall evaluate and issue a statement of findings of how each applicant proposes to advance the following objectives:

…(8) utilizing sustainable development principles including, but not limited to: (i) being certified as gold or higher under the appropriate certification category in the Leadership in Environmental and Energy Design program created by the United States Green Building Council; (ii) meeting or exceeding the stretch energy code requirements contained in Appendix 120AA of the Massachusetts building energy code or equivalent commitment to advanced energy efficiency as determined by the secretary of energy and environmental affairs; (iii) efforts to mitigate vehicle trips; (iv) efforts to conserve water and manage storm water; (v) demonstrating that electrical and HVAC equipment and appliances will be Energy Star labeled where available; (vi) procuring or generating on-site 10 percent of its annual electricity consumption from renewable sources qualified by the department of energy resources under section 11F of chapter 25A; and (vii) developing an ongoing plan to sub-meter and monitor all major sources of energy consumption and undertake regular efforts to maintain and improve energy efficiency of buildings in their systems…

[1] Listed under Category 4, Criteria 4, Utilize Sustainable Development Principles in the Construction and During the Life Cycle of the Facility.

SUMMARY

The three key objectives explained in this discussion are:

A. Being certified as LEED gold or higher.

The gaming legislation requires applicants to achieve at minimum, certifiability under the United States Green Building Council (USGBC) LEED Rating system at the Gold level of 60 points. Mohegan Sun has committed to achieve this standard, and has further committed to pursue certification of the project at Certified Gold or higher level from the USGBC. Wynn has committed to a project that meets or exceeds the LEED Gold Standard, but has not committed to certification by the USGBC.

B. Meeting or exceeding the stretch energy code.

The Massachusetts Stretch Energy code requires large commercial projects in communities that have adopted the Stretch Code to be designed to use 20% less energy than the current base code standard. The City of Revere and the City of Everett have adopted the Stretch Code. Mohegan Sun has committed to meet the current Stretch Code requirements; Wynn has committed to meet all applicable codes and has targeted energy reductions under LEED exceeding the Stretch Code requirements.

C. Utilizing renewable energy sources.

Applicants are required to generate on-site or procure contracts for at least 10% of their annual electric consumption. Both Mohegan Sun and Wynn have committed to this goal, through a combination of on-site rooftop photovoltaic array installations (of approximately 3% of electric energy use) and contracts to purchase renewable power for the remaining percentage of their electric energy consumption. Mohegan Sun further commits to procure at least an additional 10% of their electricity from renewable sources under long-term contracts.

Each of these objectives is discussed in more detail below, with background on the standard and review of the applicants' responses.

A. LEED

USGBC Leadership in Energy and Environmental Design Rating System (LEED) has become a widely accepted baseline for measuring sustainable building performance across the US (although many advocates of sustainable building design regard it as an imperfect measure of sustainability). There are now a diverse array of specialized versions of the LEED Rating system for different building types, and different phases in a project lifecycle. The applicants address several of these rating systems:

- Mohegan Sun discusses LEED for New Construction (LEED NC), as well as LEED for Neighborhood Development (LEED ND) and LEED for Existing Building Operations and Maintenance (LEED EBOM), and has provided a checklist and narrative for LEED NC 2009.
- Wynn has included two checklists: one for LEED NC 2009, and a checklist for LEED EBOM with their supplemental response to question 4-38, along with a narrative covering some of the credits in the LEED EBOM list with their response to question 4-37.

LEED NC, as its name suggests, is applied to new construction and major renovations. The EBOM system evaluates the energy performance and building maintenance and operating practices for existing buildings regardless of their original design, and can guide decisions regarding ongoing retrofits during the life of the building.

This system can be applied to buildings certified under LEED NC once they are fully operational.

Many institutions, states, and federal government agencies, including the Commonwealth of Massachusetts, have mandated achieving some level of LEED certification for new construction projects in their jurisdiction. For example, the Massachusetts Leading by Example program defined in Executive Order 484 requires all projects overseen by the Division of Capital Asset Management and Maintenance (DCAMM) and any other executive agency, or projects built for use by state agencies on state land, to meet the Massachusetts "LEED Plus" standard which includes certification by the USGBC LEED program for projects over 20,000 square feet. Also, many leading private institutions require a LEED Gold minimum standard for new construction. So while the standard set for the gaming license goes beyond State minimum requirements for public buildings, it is in line with targets of other forward-looking projects and agencies within the Commonwealth.

LEED Certified and LEED 'Certifiable'

Pursuing LEED Gold certification requires a commitment from the whole project team to ensure that decisions are made throughout design, bidding, and construction with both the overall goal and the specific requirements in mind. A team committed to achieving certification establishes the goals early and maintains its commitment and focus throughout the project to ensure that the project achieves integration of building design, mechanical systems, and site design with environmentally sound construction practices.

In theory, pursuing LEED Gold certifiability should entail the same process, while saving the costs and time of the registration fees and documentation submittal needed to undergo USGBC review for certification. However, the 'certifiable' standard lacks the enforcement mechanism provided by a third party review. A project aiming for 'certifiable' status under a given standard can be seen to carry less weight of commitment than a project that has committed to certification and intends to undergo scrutiny by the USGBC under the formal LEED certification reviews.

The LEED NC Rating

The LEED New Construction Rating System (LEED NC) is based on achieving up to 110 possible total credit points across seven categories. The levels of certification are: Certified (40-49), Silver (50-59), Gold (60-79), and Platinum (80 and above). See Table 1.

The USGBC provides a summary checklist of the current LEED NC 2009 rating system. The checklist has three columns for each possible credit: YES, ?, and NO.

- The YES column includes items the project team is confident the project can achieve.
- The question mark column is for those credits that may be possible depending on the details of the design development, budget, and construction process.
- The NO column is for credits that are not applicable or not likely to be achieved based on the building's siting and design.

A LEED Checklist prepared early in design provides an approach for the project to reach the targeted level. During design development and construction the checklists can serve as a guideline for the project team for specific project attributes that need to be met for the project. Certification at a given level of LEED is achieved only after documentation for all credits is submitted to the USGBC, and attainment of each credit has been reviewed and verified by the USGBC. The number of verified credits will determine the level of certification. Some credits in the YES column from the initial checklist may be lost, and some credits in the ? column may become possible to achieve based on

TABLE 1. LEED CHECKLIST COMPARISON TABLE FOR MGC CATEGORY 1, AREA A CASINO APPLICANTS

LEED 2009 FOR NEW CONSTUCTION AND MAJOR RENOVATION - CERTIFICATION LEVELS:

TOTAL POSSIBLE POINTS	**110 POINTS**	
PLATIUM	80+ POINTS	
GOLD	**60-79 POINTS**	**TARGETED MINIMUM LEVEL FOR APPLICANTS**
SILVER	50-59 POINTS	
CERTIFIED	40-49 POINTS	

LEED 2009 for New Construction and Major Renovations: Summary by Category

Category		**Mohegan Sun Revere** Points Total by Category			**WYNN Everett** Points Total by Category		
	Points in Category	YES	?	combined	YES	?	combined
Sustainable Sites	*26*	**18**	**6**	**24**	**19**	**0**	**19**
Water Efficiency	*10*	**6**	**4**	**10**	**6**	**4**	**10**
Energy and Atmosphere	*35*	**16**	**2**	**18**	**18**	**17**	**35**
Materials & Resources	*14*	**6**	**1**	**7**	**4**	**4**	**8**
Indoor Environmental Quality	*15*	**11**	**2**	**13**	**10**	**4**	**14**
Innovation & Design Process	*6*	**6**	**0**	**6**	**4**	**0**	**4**
Regional Priority Credits	*4*	**3**	**1**	**4**	**4**	**0**	**4**
Total	*110*	66.00	16.00	82.00	65.00	29.00	94.00
		GOLD MIN. +6		PLATINUM MIN. +2	GOLD MIN. +5		PLATINUM MIN. +14

availability of materials, final configuration of building systems, or the way in which the construction is bid, negotiated, and carried out. It is important to identify sufficient credits above the minimum for any given certification level so that the project can achieve its goals even with some attrition.

As noted in the overview, the Commission will evaluate how each applicant proposes to advance the objective of being certified as gold or higher under the appropriate certification category of LEED. Question 4-37 asks the applicant to describe plans for becoming certifiable at the gold or higher level of LEED.

MOHEGAN SUN LEED Response

Mohegan Sun states its commitment to achieve LEED Gold certification through the USGBC certification process. This distinction is significant because the rigor of submitting documentation for USGBC review to achieve the targeted rating provides a lever that acts throughout the decision making process to shift outcomes towards attaining the targeted credit goals. A LEED checklist completed with the intent to achieve certification requires diligence in assessing the feasibility of each credit listed, as the selected credits must be achieved or replaced with additional credits to meet the targeted status.

The Applicant has provided a LEED NC 2009 checklist, which shows sixty-six credits targeted as likely, six points above the LEED Gold threshold. An additional sixteen credits are listed as possible, which brings the total to eighty-two possible credits, or two points above LEED Platinum threshold. (See Table 1.)

WYNN LEED Response

Wynn states its commitment to design a project meeting or exceeding the standard of LEED Gold certifiability, and has provided checklists and narrative defining an approach to achieve that goal. The Applicant has provided an updated LEED NC 2009 checklist with their final Environmental Impact Report (FEIR) that identifies sixty-five credits as likely, five points above the LEED Gold threshold. An additional twenty-nine credits are targeted as possible, which would be fourteen points above the LEED Platinum threshold.

The checklist that has been provided by Wynn lacks a detailed narrative of how each credit is to be achieved. The number of credits listed as likely is consistent with the design as outlined within the application; however, the points listed as possible depart somewhat from the stated design approach. For example: the checklist suggests the project might achieve 10 possible additional credit points for optimizing energy performance under Energy and Atmosphere Credit 1, but this standard has not been achieved elsewhere by mixed use buildings of this type and would require design features not proposed in the application. Likewise, the co-generation plant is misclassified as qualifying as a renewable energy source, which overestimates the renewable portion of project electrical energy to be generated on-site.

The Applicant has not explicitly stated a commitment to the certification process, but has left it open for consideration as the project progresses. (See Table 1.)

B. MASSACHUSETTS STRETCH CODE

The Massachusetts Stretch Energy Code is an appendix to the Massachusetts State Building Code, Eighth Edition (780 CMR Appendix 115.AA), which was adopted by the Board of Building Regulations and Standards in May 2009 as an option for towns and cities interested in more energy efficient building standards than the "base" energy code. The Stretch Code amends the Massachusetts base energy code (IECC 2009) to achieve approximately a 20% improvement in building energy performance from an established baseline. For large commercial buildings over 100,000 SF, such as the proposed casinos, the current Stretch Code requires a 20% reduction in predicted energy use (calculated using accepted energy modeling software) below the

baseline established by ASHRAE 90.1-2007. The method is the same as used for documenting energy credits under the USGBC's LEED program.

Stretch Code Changes

In accordance with the statutory requirements of the Green Communities Act of 2008, Massachusetts has adopted a new baseline energy code for commercial buildings based on 2012 IECC and ASHRAE 90.1 2010, which will take effect starting July 2014, and which will raise the baseline for energy performance of new buildings in the Commonwealth. A new Stretch Code has not yet been proposed or enacted, although it is anticipated that a new code will potentially require a 15% improvement in energy performance over the new base code, or about a 35% improvement from the current ASHRAE 90.1 2007 baseline.

Energy savings are generally achieved through improved design and construction of the building envelope and efficient electrical, heating, cooling, and ventilation systems.

MOHEGAN SUN REVERE Stretch Code Response

The City of Revere adopted the Massachusetts Stretch Code, effective January 1, 2012. The Applicant states its commitment to meet the applicable Stretch Code, and in its response the Applicant also notes the pending changes to the baseline and Stretch Code, anticipating the new Stretch Code might require an additional 12-15% reduction of energy use from the IECC 2012 baseline. The response lists energy efficiency systems the project will utilize to achieve the current Stretch Code goals.

WYNN EVERETT Stretch Code Response

The City of Everett has recently adopted the Massachusetts Stretch Code. The Applicant states it will comply with all applicable building codes, and that they will meet the LEED NC Gold level. Wynn has targeted 28% energy use reduction in its LEED checklist, which would satisfy the Stretch Code, and states its commitment to advanced energy efficiency, including design for energy savings and advanced monitoring, building controls, and management practices to maintain and improve ongoing performance, supported by its FEIR submission.

C. RENEWABLE ENERGY SOURCES

The Commonwealth's plan for greenhouse gas emissions (GGE) limits includes encouraging renewable sources of energy in the sectors of buildings and transportation (G.L. Chapter 21N). The Commonwealth has enacted legislation and programs to encourage both on-site generation of electricity and a market for renewable energy purchase and generation by utilities.

On-site generation of electricity from renewable sources reduces the greenhouse gas emissions of the project, and also helps reduce the need for additional power plant generation. Purchasing renewable energy from utilities or purchasing Renewable Energy Certificates (RECs) builds a stable market for renewable sources of energy generation, especially if done through long-term contracts (i.e., contracts with a duration of 10 to 20 years).

RECs are created when a certified renewable source generates electricity. One REC is issued for each megawatt-hour (MWh) of renewable electricity produced, and the certificate represents the renewable attributes of the electricity. These RECs can then be sold in a REC market transferring the renewable attributes to the purchaser, who may use them for credits against their production or use of non-renewable electricity. When the REC is created the renewable attributes are split from the electricity, and the electricity, if sold, is no longer counted as renewable.

In Massachusetts, the gaming legislation requires gaming facilities to generate or procure ten percent of annual electricity

consumption from renewable sources qualified under section 11F of Chapter 25A. The qualified sources are defined as Class I or Class II sources, based on when they began generating electric power. State law defines a broad array of qualifying sources of renewable energy. For on-site generation, the most commonly used sources are solar photovoltaic (PV), solar thermal, and wind. Ground source heat pumps, commonly referred to as geothermal, are also widely used in the region. Off-site generation includes additional options that can be utilized by larger utilities. Off-site renewable energy can be purchased through contracts for energy services, or by purchasing RECs. Per Chapter 25A, Section 11F, Class 1 renewable energy generating sources are those which began generating energy on or after January 1, 1998 from any of nine sources: (1) Solar photovoltaic or solar thermal electric energy, (2) wind energy, (3) ocean thermal, wave or tidal energy, (4) fuel cell utilizing renewable fuels, (5) landfill gas, (6) energy generated by new or increased capacity at hydro-electric facilities (with some restrictions), (7) low emission advanced biomass power conversion technologies using approved fuels, (8) marine or hydrokinetic energy, or, (9) geothermal energy. Class II sources began generating prior to January 1, 1998.

Questions 4-46, 4-47, and 4-57 relate to renewable energy generation and consumption by the proposed gaming facilities. These questions address on-site generation, purchase of off-site generated power through power contracts or purchasing renewable energy credits, and in question 4-57, directly address long-term contracts for wind, solar, or other renewables.

It is worth noting the relationship between an Applicant's renewable energy strategies, as described in its responses, and the LEED NC 2009 rating system requirements. There are two LEED credit categories related to renewable energy generation and procurement under the Energy and Atmosphere (EA) credit category:

EA Credit 2: On-Site Renewable Energy provides points for renewable energy generated on-site (1-7 points for 1% to 13% of energy *costs* in 2% increments*)*.

EA Credit 6: Green Power, provides up to 2 points for purchasing certified renewable energy generated off-site, specifying minimum 2-year contracts to provide at least 35% of estimated building electricity use from renewable sources defined by Center for Resource Solutions' Green-e Energy product certification requirements.

Note that the LEED-based green power purchasing commitments for two-year contracts fall well short of the duration of the fifteen-year Category 1 gaming license, and well short of the long-term contracts of 10-20 years by state standards. Optimally, facilities would be making long-term commitments to purchase renewable energy throughout the duration of the license.

MOHEGAN SUN REVERE Renewable Energy Response

The Applicant commits to a total of 20% of electricity needs to be achieved through combined on-site generation and purchases of RECs.

On-site Generation

The Applicant's response states it is still in the process of planning for on-site generation. The plans anticipate a rooftop solar array of 1 megawatt, to generate approximately 1.2 MWH/year of energy (which is about 3% of the facility's anticipated electric power needs). The plan drawings show this array located on the roof of the building base. Additional information on the array including confirmation of its size and general location has been provided as part of the responses to Host Community Hearing Questions and in the SDEIR.

On the LEED NC 2009 checklist for the casino, the Applicant has targeted two points as possible for LEED NC EA Credit 2, On-site Renewable Energy, which requires 3% of electric use to be generated from renewable sources on-site. The Applicant does not plan to

generate 25% of electricity from renewable sources on-site in the future due to limited roof space.

Off-site Renewable Energy

As noted above, the Applicant commits to purchasing RECs to achieve an overall 20% renewable energy minimum for the project's long-term electric use, when on-site and off-site sources are combined. In the LEED checklist, the Applicant has targeted two points for LEED-NC EA Credit 6, Green Power, which requires a minimum two-year contract for at least 35% of electric power use, and states in 4-57 that longer-term purchase agreements will be maintained at 20%, to exceed the 10% stipulated by MGL c.23K, §18 (8).

In addition to the Solar Photovoltaic (PV) power generation, the Applicant describes plans to provide food waste for a biogas facility in Massachusetts. This energy would not likely be used by the Casino itself, so would not count toward renewable energy generation, but by providing a reliable source of organic waste the Casino could serve as an anchor for the establishment of a local biogas facility in the region. This is an innovative approach to addressing the Commonwealth's planned requirements for removing large sources of food waste from the waste stream.

WYNN EVERETT Renewable Energy Response

The Applicant commits to a total of 10% of electricity needs to be achieved through combined on-site generation and purchases of RECs.

On-site Generation

Wynn states its commitment to building a rooftop photovoltaic system on the building podium to generate 3% of the project's annual electrical consumption. The array is shown on roof plans submitted with the FEIR. On the LEED NC 2009 checklist for the Casino, the Applicant has targeted two points as possible for LEED NC EA Credit 2, On-site Renewable Energy, which requires 3% of electric use to be generated from renewable sources on-site. This is supported by calculations in the FEIR.

Wynn also includes a description of the micro-turbine co-generation plant planned for the project, and states it will provide 20% of the Casino's electric power needs. In this instance co-generation refers to the combined heat and power (CHP) centralized plant that will both provide electricity and use the by-product heat, including for absorption chillers. Although the co-generation plant will be an efficient source of on-site power and thermal energy for the project, it is not qualified as a renewable source under Massachusetts law, so it is not relevant to the renewable energy target.

In the response to question 4-46 regarding plans to generate electricity from renewable sources on-site, the Applicant states that 30% of the Casino's electricity will qualify as renewable. The calculation provided in support is based on 3% from the photovoltaic array, 7% off-site purchased renewable power, and 20% contribution from the co-generation plant. The off-site and co-generation do not represent renewable on-site generation; nevertheless, the overall number shows a reduction in power requirements from the electric grid.

Off-site Renewable Energy

As noted above, the Applicant commits to purchasing RECs to achieve an overall 10% renewable energy minimum for the project's electric use, when on-site and off-site sources are combined. In the LEED checklist, the Applicant has targeted two possible points for LEED-NC EA credit 6, Green Power, which requires a minimum two-year contract for at least 35% of electric power use if the applicant chooses to pursue this approach. There is no mention of longer term purchase agreements above the 10% stipulated by MGL c.23K, §18 (8).

CONCLUSION

Both of the Applicants propose strategies to build and operate energy efficient projects that meet the intent of the energy and sustainability goals of MGL c.23K legislation. Importantly, both Applicants emphasize their corporate commitment to managing the ongoing energy use of the projects. The application by Mohegan Sun presents more detail and consistency on the plans to meet these goals, but the design effort of each of the projects indicates they are capable of meeting or exceeding the Commonwealth's energy performance and sustainability requirements.

With respect to LEED certification, Mohegan Sun makes a commitment to third party oversight of their project through the USGBC certification process—which can help ensure that the project follows through on these strategies and fulfills its goals. Wynn makes a commitment to building a project that is LEED NC certifiable at the Gold or better level, but has not committed to the third party review process.

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August 28, 2014

Permitting, Design and Construction Schedule Review

OVERVIEW

This Appendix provides an evaluation of the Applicant's responses to the questions asked in Criterion 6, Permitting. The permit process in Massachusetts for a large project, like a Category 1 Casino, typically requires action on the local, state, and federal levels. Permits on the local level, from towns or cities, are normally needed from the Zoning Board of Appeals (zoning issues), the Planning Board (site plan approval), and the Conservation Commission (wetlands and storm water issues). These permits can normally be processed independent of state and federal permits.

At the state level, Massachusetts has a two-step permitting process. The first step is an environmental review under the Massachusetts Environmental Policy Act (MEPA). This process, which typically consists of three filings by the Applicant (Environmental Notification Form, Draft Environmental Impact Report, and Final Environmental Impact Report), is triggered when certain thresholds are exceeded in specific subject matter areas such as land disturbance, traffic, energy, water, and sewer. The purpose of the review is to evaluate impacts and mitigation, obtain public and agency comments on the evaluation process, and build consensus on the level of mitigation required for the project.

The second step, after the MEPA process is complete, is for the individual state agencies to issue permits informed by the results of the MEPA process. The permits typically needed for a Casino will be issued by the Massachusetts Department of Transportation (MassDOT) for roadway improvements and the Massachusetts Department of Environmental Protection (DEP) for water and sewer infrastructure improvements, protection of water resources, and air emissions. The Wynn site in Everett contains hazardous materials and is therefore subject to the Massachusetts Contingency Plan (MCP) under DEP.

At the federal level, the permit process is normally not as extensive as at the local and state levels. The actions typically include Federal Highway Administration (FHWA) approval for changes to Interstate highways, The Environmental Protection Agency (EPA) general permits for storm water discharges, and the Federal Aviation Administration (FAA) approvals for work in Revere or Everett near Logan Airport. The Wynn casino in Everett proposes new bulkheads, docks, and dredging in the Mystic River (navigable water of the US) and will therefore require Federal approval from the U.S. Army Corps of Engineers (Corps) and EPA.

Construction is not normally started before permits are obtained. However an Applicant can, at its own risk, start construction on certain portions of the project that are not directly under permit review. This approach is not being pursued by any of the Applicants in Area A.

The individual applications submitted by Mohegan Sun and Wynn were reviewed with the following in mind:

1. Realistic understanding of the extent and complexity of the permitting process.
2. The extent and quality of the technical information presented in the MEPA documents and in the applications to support the permitting process.
3. Extent of interaction with regulatory agencies and ability to secure permits consistent with proposed schedules.

Permitting, Design, and Construction Schedule Analysis

The attached Figure summarizes the permitting, design, and construction schedule for each of the two Casinos. The following summarizes the permitting status for each casino.

MOHEGAN SUN REVERE

The Applicant has a realistic understanding of the permitting process. The critical path is through the state MEPA process under the Executive Office of Energy and Environmental Affairs (EEA) and subsequent state permits.

The Certificate on the Draft Environmental Impact Report (EIR) was issued by MEPA on September 3, 2013 for the original Casino Proposal at the Suffolk Downs site straddling East Boston and Revere. Since the subsequent East Boston vote turned down the project, Mohegan Sun in its proposal has moved the casino to the Revere portion of the Suffolk Downs site. Mohegan Sun subsequently filed a Notice of Project Change (NPC) with MEPA. The Applicant argued in the NPC that the new project is similar and slightly smaller than the previous one and in about the same location; therefore it should be allowed to proceed to a Final EIR. MEPA did not agree with this approach and has required that the Draft EIR be redone for the new Mohegan Sun Casino.

The MEPA decision to require a Supplemental Draft EIR was included in the Certificate on the NPC issued on March 28, 2014. The scope for the Supplemental Draft EIR required significant additional work covering the following areas: Program Definition and Permitting, Transportation (MassDOT has requested a completely redone traffic study), Greenhouse Gas Emissions, Water and Wastewater, Wetland Resources, Storm Water, Historic Buildings, and finally a clear definition of Mitigation Measures in each area.

The Applicant filed the Supplemental Draft EIR on June 30, 2014.

Because of the change in the project's location from East Boston to Revere, much of the technical data supporting the permitting process (e.g. traffic and flood mitigation data) were not up-to-date in the Application. These data have now been updated either through answers to clarification questions from the Commission or in the Supplemental Draft EIR.

The Applicant received a Certificate on the Supplemental Draft EIR and is required to file a Final EIR primarily addressing remaining traffic, environmental, and permitting issues.

Following completion of the MEPA process, expected no earlier than the end of November 2014, state permits can be filed and obtained as follows.

Key state permits include those from MassDOT (traffic), Department of Conservation and Recreation (DCR) (traffic on Route 16), DEP (air, sewer and water reuse), and the Massachusetts Water Resources Authority (MWRA) (sewer and dewatering). The demolition of the stables and barns and work on Revere Beach Parkway will need Massachusetts Historic Commission (MHC) review and the project will be subject to the EEA Greenhouse gas emission policy.

The main traffic improvements will be along the Route 1A corridor, with the most significant work proposed for the Boardman Street intersection. The Applicant has developed alternative mitigation plans for the corridor and will need to work with MassDOT, Revere, and Boston during the remainder of the MEPA process to choose a preferred plan.

The project is in an Area of Critical Environmental Concern (ACEC) along Sales Creek which is tributary to Belle Isle Marsh. This is the southern portion of the Rumney Marshes ACEC, which was designated because of sensitive salt water habitat. Being in an ACEC doesn't require a specific permit, rather it allows the Authorities that do issue permits (e.g., Conservation Commissions, DEP) to require a higher level of environmental protection. Further it is important to note that the flow in Sales Creek is controlled by a tide gate downstream from the casino site. As such the creek is not tidal but largely a brackish water, disturbed, urban waterway, unlike the rest of the saltwater ACEC. The casino project is proposing to expand and properly landscape the buffer along the creek and improve the storm water discharges to levels appropriate for an ACEC.

Key local permits in Revere include a Site Plan Review by the Site Plan Review Committee, an Order of Conditions from the Conservation Commission, and water and sewer permits from the Public Works Department. The Conservation Commission permit (an Order of Conditions) is reviewed by DEP and is also subject to appeal to DEP by local parties with standing.

Off-site transportation improvements will require permits from Chelsea (roadway and conservation) and Boston (roadway, conservation, and public improvements).

Federal permits include a construction General Permit issued by EPA at least 14 days before construction starts and FAA approval of heights (buildings and construction cranes) due to the proximity to Logan Airport.

Schedule for Permitting, Design and Construction. If MEPA determines that the Final EIR is adequate and properly complies with the Massachusetts Environmental Policy Act by the end of November 2014, it is reasonable to expect that local, state, and federal permitting can be obtained by the end of February 2015, with construction starting in March 2015. A 30 month construction period, as proposed by the Applicant, would give an opening date in September 2017. A 30 month construction period is reasonable.

In the Supplemental Draft EIR the Applicant proposes a schedule where casino construction starts in November 2014, with an opening 30 months later in April 2017. It is not reasonable to anticipate that the MEPA process could be completed and permits obtained such that construction could start in November 2014. As noted above, a March 2015 construction start is more likely.

Two factors could potentially delay the opening:

1. Protracted wetland permitting with the Revere Conservation Commission, including an appeal to DEP.
2. Protracted permitting with MassDOT regarding off-site roadway improvements.

It is expected that these potential delays could postpone the opening 6 to 12 months, although some of this could be made up with a shorter construction period.

WYNN EVERETT

The Applicant has a realistic understanding of the permitting process. The Wynn casino process is more complicated than for Mohegan Sun. This is primarily due to the extensive work in and adjacent to the Mystic River. Like Mohegan Sun, one of the Applicant's critical paths is through the State MEPA process and subsequent state permits. In addition there are significant federal permits, most notably for dredging and transportation, which are not routine and could require more time than the state and local permitting processes. Further, these federal actions will trigger the National Environmental Policy Act (NEPA) process.

The Draft EIR was filed on December 16, 2013 before the RFA-2 Application was submitted to the Massachusetts Gaming Commission on December 31, 2013 and the Certificate on the Draft EIR was issued by MEPA on February 21, 2014.

MEPA required significant additional work in the Final EIR. The work covered the following areas: Program Definition and Permitting, Transportation, Greenhouse Gas Emissions, Water and Wastewater, Wetlands, Dredging, Marine Facilities, Storm Water, Hazardous Wastes, Historic Buildings, and finally a clear definition of Mitigation Measures in each area.

The Applicant filed the Final EIR on June 30, 2014. A Certificate was issued on August 15, 2014 requiring the Applicant to file a Supplemental Final EIR primarily addressing remaining transportation issues.

Following completion of the MEPA process, expected no earlier than the end of December 2014, state permits can be filed and obtained as follows.

Key state permits include those from MassDOT (traffic), DCR (traffic on Route 16), DEP (sewer, Chapter 91 Waterways License, Water Quality Certification, Massachusetts Contingency Plan (MCP) for hazardous materials), Coastal Zone Management (consistency review for waterfront work and dredging), and MWRA (construction). Work on Revere Beach Parkway will need Massachusetts Historic Commission review and the project will be subject to the EEA Greenhouse gas emission policy.

- **Massachusetts DOT Roadway Improvements.** MassDOT has made significant comments regarding the Applicant's proposed improvements to Santilli Circle on Route 16 and to Sullivan Square as presented in the Draft and Final EIRs. The Applicant will need to address these comments in a Supplemental Final EIR, although there remains concern about the completeness of the mitigation plans, especially at Sullivan Square in Boston. There is uncertainty in the amount of time it will take to negotiate mitigation plans to the satisfaction of key interest groups (Route 16: Applicant, MassDOT, City of Everett, and DCR; and Sullivan Square: Applicant, MassDOT, and City of Boston). This uncertainty has a significant potential impact on the project schedule.
- **DEP Chapter 91 License.** The portion of the Wynn site adjacent to the Mystic River is on filled tidelands that are regulated by the State. There are specific statewide requirements that govern a Chapter 91 License in filled or flowed tidelands, issued by DEP. However these requirements can be altered by an approved Municipal Harbor Plan. The City of Everett has submitted a Municipal Harbor Plan that includes the Wynn site and specifically the Wynn project. The Plan identifies alternative requirements for height and open space of the Wynn Casino and additional public benefits that off-set the changes, if needed. The public benefits include public access to the waterfront, a landscaped harbor walk connected to the existing walk up-river from the project, and water transportation facilities. DEP has approved the Municipal Harbor Plan with support from DCR, MBTA, and DEP Waterways program. This approval will guide the process that DEP goes through in issuing a Chapter 91 License after the MEPA process is completed, since the key issues have been resolved in the Municipal Harbor Plan.
- **DEP Massachusetts Contingency Plan.** Since there are hazardous materials on the site, the project is subject to the MCP under DEP. The key contaminants in the soil and groundwater on the site and in river sediments include arsenic, lead, and petroleum-related products from prior industrial activities. The MCP cleanup program is managed by the property owner, under the direction of a Licensed Site Professional (LSP). There is a four step evaluation process that is necessary before remediation can begin. DEP does not approve each step, but can audit the process at any time. The project is in the third step of the MCP evaluation process. If a gaming license is issued to Wynn, they will take over the responsibility for completing the process and remediating the site.

  Based on a significant amount of data, the Applicant has characterized the hazardous materials and has concluded that disposal of excavated materials on the site will be in an out-of-state landfill. The most contaminated hazardous materials remaining on site will be treated in place by soil stabilization and the remainder of the site will be capped with clean fill and top soil.

  After remediation an Activity and Use Limitation (AUL) may prohibit certain sensitive uses on the site (e.g., residential), or more likely an AUL could control activities on the site that would protect a wide range of uses, including residential. For example

a repair or maintenance activity that disrupted the soil cap would need to replace the cap as originally designed. AULs that may apply to the site are not anticipated to limit the casino and related facilities. The MCP process can move ahead at the Applicant's pace. An EPA dewatering General Permit is required before the excavation work can begin. Further, the MCP does have a public involvement option which at this point has not been exercised. That could change if a request is made by interested parties which could then slow the process. Finally to remediate the contaminated sediments in the river and adjacent cove, dredging may be required as discussed further below.

Key federal permits include those from the Corps (dredging and marine work), EPA (dredging approval and dewatering and construction General Permits), FAA approval of heights (buildings and construction cranes due to the proximity to Logan Airport) and FHWA approval may be required for improvements proposed to the I-93 ramps and Routes 16 and 99. Federal permits from the Corps and FHWA will trigger review under NEPA, which is similar to the MEPA process at the state level.

The Corps will be the lead federal agency managing the NEPA process given that the key permitting issues relate to its jurisdiction (dredging). It is expected that the Corps will require that an Environmental Assessment (EA) be completed. This is the first step in NEPA and should be sufficiently detailed to complete the process. A Draft and Final Environmental Impact Statement (EIS) should not be necessary for a project of this limited scope. Further, federal highway permitting may be dealt with administratively by MassDOT and FHWA and may not need to be included in the EA documentation.

Dredging and Waterfront Work. Federal action includes a Corps permit under Section 10 of the Rivers and Harbors Act for dredging and marine work in navigable waters of the United States. EPA participates in the Corps permit under Section 404 of the Clean Water Act and DEP issues a Water Quality Certification. The Applicant has compiled a significant amount of data based on discussions with the Corps and DEP. As a result the Applicant has characterized the dredged materials and has concluded that disposal will be in an out-of-state landfill. Dredging operations are being proposed using clamshells for excavation, dewatering dredged material, and transporting off site by either truck or barge. The area proposed to be dredged, as outlined in the Draft EIR, is limited to the existing navigation channel and the proposed docking area. This would leave a significant portion of the cove in front of the site exposed at low water. These exposed mud flats would not be a positive addition to the arrival experience at the casino. The Applicant will likely want to extend the dredging to all areas in the cove, such that that the bottom is below low water throughout.

Also the Applicant did not directly address dredging in preparation for the shellfish restoration project or as remediation for the contaminated sediments in the cove and river. These expanded dredging operations, if needed, would add additional demands to the permitting process. Because the dredging is not necessary to construct the remainder of the project, the land side building could begin at the Applicant's risk, while the dredging permits are obtained. Finally the dredging, marine, and MCP remediation work need to be coordinated as noted above and because some of the MCP excavation work is adjacent to and dependent upon the bulkhead construction.

Key local permits in Everett include a Site Plan Review by the Planning Board and an Order of Conditions from the Conservation Commission for both the site work and improvements on Route 16 at Santilli Circle. Sewer and water connection permits will also be needed from the Public Works Department. The Conservation Commission permit (an Order of Conditions) is reviewed by DEP and subject to appeal to DEP by local interested parties.

Off-site transportation improvements will require permits from Boston (roadway and public improvements).

Schedule for Permitting, Design, and Construction. MEPA has determined that a Supplemental Final EIR is required, thus the MEPA process is likely to be completed no earlier than the end of December 2014. It is reasonable to expect an additional 6 months will be needed to obtain local, state, and federal permitting, given the number and complexity of the permits. With permits obtained by the end of June 2015, construction could start in July 2015. A 36 month construction period, as proposed by the Applicant, would give an opening date in July 2018, which is reasonable. The Applicant has indicated an opening in 2017 which is not reasonable given the extent of the permitting process. However, it is not unreasonable that the 36-month construction period could be shortened by several months to accelerate the opening date.

Two factors could potentially delay the opening:

1. Delay in obtaining approvals for the extensive improvements to Santilli Circle on Route 16 and/or improvements to Sullivan Square, including FHWA approval for I-93 ramp improvements.
2. The likelihood that the site will be subject to an MCP Public Involvement Plan (PIP), requiring public hearings, comment periods, and draft and final documents before arriving at a response action plan to clean up the hazardous materials on the site. The response action plan will address the health and environmental hazards on the site and in the sediments in the Mystic River, informed by public comment with associated delays.

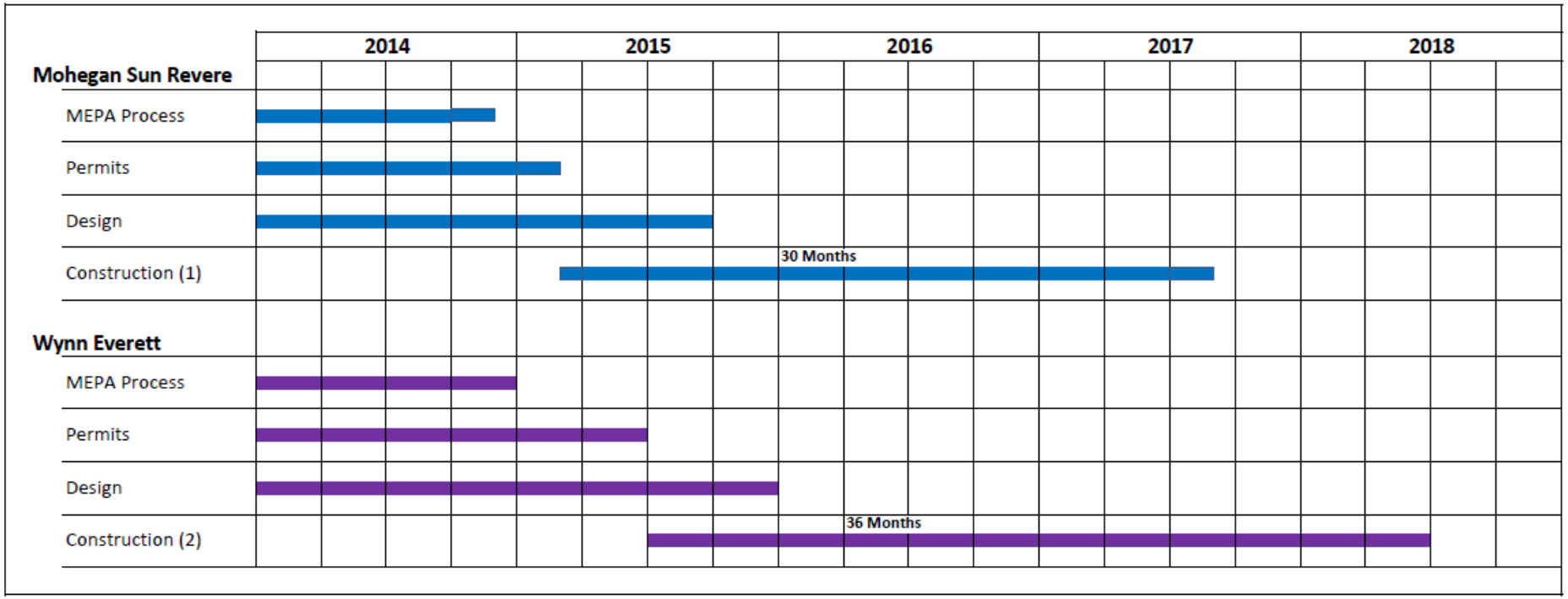
It is expected that these potential delays could postpone the opening 6 to 12 months, although some of this could be made up with a shorter construction period.

Richard Moore, PE
City Point Partners LLC
August 28, 2014

ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
AUL	Activity and Use Limitation
Corps	U.S. Army Corps of Engineers
CZM	Coastal Zone Management
DCR	Massachusetts Department of Conservation and Recreation
DEP	Massachusetts Department of Environmental Protection
EEA	Massachusetts Executive Office of Energy and Environmental Affairs
EIR	Environmental Impact Report
EPA	U. S. Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
LSP	Licensed Site Professional
MassDOT	Massachusetts Department of Transportation
MBTA	Massachusetts Bay Transportation Authority
MCP	Massachusetts Contingency Plan
MEPA	Massachusetts Environmental Policy Act
MHC	Massachusetts Historical Commission
MWRA	Massachusetts Water Resources Authority
NEPA	National Environmental Policy Act
NPC	Notice of Project Change
PIP	Public Involvement Plan

ESTIMATED SCHEDULE - CASINOS



(1) The Applicant, in the Supplemental DEIR, indicates a construction start in November 2014 with an opening in April 2017

(2) The Applicant, in the Final EIR, indicates an opening in 2017

MGL c. 23K, §5, 9, and 18

Section 5: Regulations for the implementation, administration and enforcement of chapter

[Text of section added by 2011, 194, Sec. 16 effective November 22, 2011.]

Section 5. (a) The commission shall promulgate regulations for the implementation, administration and enforcement of this chapter including, without limitation, regulations that:

(1) prescribe the method and form of application which an applicant for licensure shall follow and complete before consideration by the commission;

(2) prescribe the information to be furnished by an applicant or licensee concerning an applicant or licensee's antecedents, habits, character, associates, criminal record, business activities and financial affairs, past or present;

(3) prescribe the criteria for evaluation of the application for a gaming license including, with regard to the proposed gaming establishment, an evaluation of architectural design and concept excellence, integration of the establishment into its surroundings, potential access to multi-modal means of transportation, tourism appeal, level of capital investment committed, financial strength of the applicant and the applicant's financial plan;

(4) prescribe the information to be furnished by a gaming licensee relating to the licensee's gaming employees;

(5) require fingerprinting of an applicant for a gaming license, a gaming licensee and employees of a gaming licensee or other methods of identification;

(6) prescribe the manner and method of collection and payment of assessments and fees and issuance of licenses;

(7) prescribe grounds and procedures for the revocation or suspension of a license or registration;

(8) require quarterly financial reports and an annual audit prepared by a certified public accountant attesting to the financial condition of a gaming licensee and disclosing whether the accounts, records and control procedures examined are maintained by the gaming licensee as required by this chapter and the regulations promulgated by the commission;

(9) prescribe the minimum procedures for effective control over the internal fiscal affairs of a gaming licensee, including provisions for the safeguarding of assets and revenues, the recording of cash and evidence of indebtedness and the maintenance of reliable records, accounts and reports of transactions, operations and events, including reports by the commission;

(10) provide for a minimum uniform standard of accounting procedures;

(11) establish licensure and work permits for employees working at the gaming establishment and minimum training requirements; provided, however, that the commission may establish certification procedures for any training schools and the minimum requirements for reciprocal licensing for out-of-state gaming employees;

(12) require that all gaming establishment employees be properly trained in their respective professions;

(13) prescribe the conduct of junkets and conditions of junket agreements between gaming licensees and junket representatives;

(14) provide for the interim authorization of a gaming establishment under this chapter;

(15) develop standards for monitoring and enforcing a gaming licensee's agreement with impacted live entertainment venues;

(16) establish procedures and ensure compliance with the timelines for making the capital investments required under this chapter;

(17) require the posting of payback statistics of slot machines played in a gaming establishment; and

(18) establish security procedures for ensuring the safety of minors on the premises of a gaming establishment.

(b) The commission may, pursuant to section 2 of chapter 30A, promulgate, amend or repeal any regulation promulgated under this chapter as an emergency regulation if such regulation is necessary to protect the interests of the commonwealth in regulating a gaming establishment

Section 9: Application for gaming licenses

[Text of section added by 2011, 194, Sec. 16 effective November 22, 2011.]

Section 9. (a) The commission shall prescribe the form of the application for gaming licenses which shall require, but not be limited to:

(1) the name of the applicant;

(2) the mailing address and, if a corporation, the name of the state under the laws of which it is incorporated, the location of its principal place of business and the names and addresses of its directors and stockholders;

(3) the identity of each person having a direct or indirect interest in the business and the nature of such interest; provided, however, that if the disclosed entity is a trust, the application shall disclose the names and addresses of all beneficiaries; provided further, that if the disclosed entity is a partnership, the application shall disclose the names and addresses of all partners, both general and limited; and provided further, that if the disclosed entity is a limited liability company, the application shall disclose the names and addresses of all members;

(4) an independent audit report of all financial activities and interests including, but not limited to, the disclosure of all contributions, donations, loans or any other financial transactions to or from a gaming entity or operator in the past 5 years;

(5) clear and convincing evidence of financial stability including, but not limited to, bank references, business and personal income and disbursement schedules, tax returns and other reports filed by government agencies and business and personal accounting check records and ledgers;

(6) information and documentation to demonstrate that the applicant has sufficient business ability and experience to create the likelihood of establishing and maintaining a successful gaming establishment;

(7) a full description of the proposed internal controls and security systems for the proposed gaming establishment and any related facilities;

(8) an agreement that the applicant shall mitigate the potential negative public health consequences associated with gambling and the operation of a gaming establishment, including: (i) maintaining a smoke-free environment within the gaming establishment under section 22 of chapter 270; (ii) providing complimentary on-site space for an independent substance abuse and mental health counseling service to be selected by the commission; (iii) prominently displaying information on the signs of problem gambling and how to access assistance; (iv) describing a process for individuals to exclude their names and contact information from a

gaming licensee's database or any other list held by the gaming licensee for use in marketing or promotional communications; and (v) instituting other public health strategies as determined by the commission;

(9) the designs for the proposed gaming establishment, including the names and addresses of the architects, engineers and designers, and a timeline of construction that includes detailed stages of construction for the gaming establishment, non-gaming structures and racecourse, where applicable;

(10) the number of construction hours estimated to complete the work;

(11) a description of the ancillary entertainment services and amenities to be provided at the proposed gaming establishment; provided, however, that a gaming licensee shall only be permitted to build a live entertainment venue that has less than 1,000 seats or more than 3,500 seats;

(12) the number of employees to be employed at the proposed gaming establishment, including detailed information on the pay rate and benefits for employees;

(13) completed studies and reports as required by the commission, which shall include, but not be limited to, an examination of the proposed gaming establishment's: (i) economic benefits to the region and the commonwealth; (ii) local and regional social, environmental, traffic and infrastructure impacts; (iii) impact on the local and regional economy, including the impact on cultural institutions and on small businesses in the host community and surrounding communities; (iv) cost to the host community and surrounding communities and the commonwealth for the proposed gaming establishment to be located at the proposed location; and (v) the estimated municipal and state tax revenue to be generated by the gaming establishment; provided, however, that nothing contained in any such study or report shall preclude a municipality from seeking funding approval pursuant to clause (7) of section 4 for professional services to examine or evaluate a cost, benefit or other impact;

(14) the names of proposed vendors of gaming equipment;

(15) the location of the proposed gaming establishment, which shall include the address, maps, book and page numbers from the appropriate registry of deeds, assessed value of the land at the time of application and ownership interests over the past 20 years, including all interests, options, agreements in property and demographic, geographic and environmental information and any other information requested by the commission;

(16) the type and number of games to be conducted at the proposed gaming establishment and the specific location of the games in the proposed gaming establishment;

(17) the number of hotels and rooms, restaurants and other amenities located at the proposed gaming establishment and how they measure in quality to other area hotels and amenities;

(18) whether the applicant's proposed gaming establishment is part of a regional or local economic plan; and

(19) whether the applicant purchased or intends to purchase publicly-owned land for the proposed gaming establishment.

(b) Applications for licenses shall be public records under section 10 of chapter 66; provided however, that trade secrets, competitively-sensitive or other proprietary information provided in the course of an application for a gaming license under this chapter, the disclosure of which would place the applicant at a competitive disadvantage, may be withheld from disclosure under chapter 66.

Section 18: Objectives to be advanced in determining granting of license; statement of findings

[Text of section added by 2011, 194, Sec. 16 effective November 22, 2011.]

Section 18. In determining whether an applicant shall receive a gaming license, the commission shall evaluate and issue a statement of findings of how each applicant proposes to advance the following objectives:

(1) protecting the lottery from any adverse impacts due to expanded gaming including, but not limited to, developing cross-marketing strategies with the lottery and increasing ticket sales to out-of-state residents;

(2) promoting local businesses in host and surrounding communities, including developing cross-marketing strategies with local restaurants, small businesses, hotels, retail outlets and impacted live entertainment venues;

(3) realizing maximum capital investment exclusive of land acquisition and infrastructure improvements;

(4) implementing a workforce development plan that utilizes the existing labor force, including the estimated number of construction jobs a proposed gaming establishment will generate, the development of workforce training programs that serve the unemployed and methods for accessing employment at the gaming establishment;

(5) building a gaming establishment of high caliber with a variety of quality amenities to be included as part of the gaming establishment and operated in partnership with local hotels and dining, retail and entertainment facilities so that patrons experience the diversified regional tourism industry;

(6) taking additional measures to address problem gambling including, but not limited to, training of gaming employees to identify patrons exhibiting problems with gambling and prevention programs targeted toward vulnerable populations;

(7) providing a market analysis detailing the benefits of the site location of the gaming establishment and the estimated recapture rate of gaming-related spending by residents travelling to out-of-state gaming establishments;

(8) utilizing sustainable development principles including, but not limited to: (i) being certified as gold or higher under the appropriate certification category in the Leadership in Environmental and Energy Design program created by the United States Green Building Council; (ii) meeting or exceeding the stretch energy code requirements contained in Appendix 120AA of the Massachusetts building energy code or equivalent commitment to advanced energy efficiency as determined by the secretary of energy and environmental affairs; (iii) efforts to mitigate vehicle trips; (iv) efforts to conserve water and manage storm water; (v) demonstrating that electrical and HVAC equipment and appliances will be EnergyStar labeled where available; (vi) procuring or generating on-site 10 per cent of its annual electricity consumption from renewable sources qualified by the department of energy resources under section 11F of chapter 25A; and (vii) developing an ongoing plan to submeter and monitor all major sources of energy consumption and undertake regular efforts to maintain and improve energy efficiency of buildings in their systems;

(9) establishing, funding and maintaining human resource hiring and training practices that promote the development of a skilled and diverse workforce and access to promotion opportunities through a workforce training program that: (i) establishes transparent career paths with measurable criteria within the gaming establishment that lead to increased responsibility and higher pay grades that are designed to allow employees to pursue career advancement and

promotion; (ii) provides employee access to additional resources, such as tuition reimbursement or stipend policies, to enable employees to acquire the education or job training needed to advance career paths based on increased responsibility and pay grades; and (iii) establishes an on-site child day-care program;

(10) contracting with local business owners for the provision of goods and services to the gaming establishment, including developing plans designed to assist businesses in the commonwealth in identifying the needs for goods and services to the establishment;

(11) maximizing revenues received by the commonwealth;

(12) providing a high number of quality jobs in the gaming establishment;

(13) offering the highest and best value to create a secure and robust gaming market in the region and the commonwealth;

(14) mitigating potential impacts on host and surrounding communities which might result from the development or operation of the gaming establishment;

(15) purchasing, whenever possible, domestically manufactured slot machines for installation in the gaming establishment;

(16) implementing a marketing program that identifies specific goals, expressed as an overall program goal applicable to the total dollar amount of contracts, for the utilization of: (i) minority business enterprises, women business enterprises and veteran business enterprises to participate as contractors in the design of the gaming establishment; (ii) minority business enterprises, women business enterprises and veteran business enterprises to participate as contractors in the construction of the gaming establishment; and (iii) minority business enterprises, women business enterprises and veteran business enterprises to participate as vendors in the provision of goods and services procured by the gaming establishment and any businesses operated as part of the gaming establishment;

(17) implementing a workforce development plan that: (i) incorporates an affirmative action program of equal opportunity by which the applicant guarantees to provide equal employment opportunities to all employees qualified for licensure in all employment categories, including persons with disabilities; (ii) utilizes the existing labor force in the commonwealth; (iii) estimates the number of construction jobs a gaming establishment will generate and provides for equal employment opportunities and which includes specific goals for the utilization of minorities, women and veterans on those construction jobs; (iv) identifies workforce training programs offered by the gaming establishment; and (v) identifies the methods for accessing employment at the gaming establishment;

(18) whether the applicant has a contract with organized labor, including hospitality services, and has the support of organized labor for its application, which specifies: (i) the number of employees to be employed at the gaming establishment, including detailed information on the pay rate and benefits for employees and contractors; (ii) the total amount of investment by the applicant in the gaming establishment and all infrastructure improvements related to the project; (iii) completed studies and reports as required by the commission, which shall include, but need not be limited to, an economic benefit study, both for the commonwealth and the region; and (iv) whether the applicant has included detailed plans for assuring labor harmony during all phases of the construction, reconstruction, renovation, development and operation of the gaming establishment; and

(19) gaining public support in the host and surrounding communities which may be demonstrated through public comment received by the commission or gaming applicant.