CHAPTER 1: PROJECT SUMMARY

1.1 PROJECT IDENTIFICATION

Project Name: Wynn Resort in Everett

Proponent: Wynn MA, LLC

Address/Location: One Horizon Way, Everett, Massachusetts

1.2 INTRODUCTION

1.2.1 PROJECT OVERVIEW

The Wynn Resort in Everett (the "Project") is a luxury resort involving an investment of at least 1.6 billion dollars to transform a blighted section of the City of Everett, Massachusetts adjacent to the Mystic River into a world-class destination. The Project will contribute hundreds of millions of dollars, including tens of millions of dollars in infrastructure contributions, to the City of Everett, the region, and the Commonwealth of Massachusetts. The Project will be constructed on the contaminated site of a former chemical manufacturing plant totaling approximately 33.9 acres (the "Project Site"), and will include a luxury hotel with 629 rooms, a gaming area, retail space, food and beverage outlets, convention and meeting space, a spa and gym, a parking garage, and other complementary amenities as described herein. The Project will also include extensive landscape and open space amenities including a public gathering area with an outdoor park-like open space, a pavilion, waterfront features, a public harborwalk, and water transportation docking facilities reconnecting the City of Everett to the Mystic River and Boston Harbor for the first time in generations. The Project will also include off-site improvements including extensive transportation improvements and a multiuse path from the Project's harborwalk to the existing paths at the Massachusetts Department of Conservation and Recreation ("DCR") Gateway Park. The Project will be developed in a single phase as soon as necessary approvals are received.

The Project will anchor and support the Everett Lower Broadway Master Plan (the "LBD Plan") as well as the Everett Central Waterfront Municipal Harbor Plan (the "Everett MHP"), approved by the Secretary of Energy and Environmental Affairs (the "Secretary") on February 10, 2014, by stimulating development of the underutilized Mystic River waterfront including the Project Site.

As demonstrated in the Project's Final Environmental Impact Report filed on June 30, 2014 (the "FEIR") and in this Supplemental Final Environmental Impact Report

(the "SFEIR"), the Project also serves the broader interests of the Commonwealth in revitalizing its Gateway Cities, creating permanent well-paying jobs, increasing waterfront access, cleaning up contaminated Brownfields, creating meaningful urban open spaces, improving transportation networks including for cyclists and pedestrians, improving stormwater runoff, reducing greenhouse gas emissions, and conserving water and energy.

The Project is already the subject of a comprehensive FEIR that is the subject of the Secretary's Certificate on the Final Environmental Impact Report dated August 15, 2014 (the "Secretary's Certificate"). Owing to concerns about traffic and transportation impacts caused by the anticipated popularity of the Project, the Secretary's Certificate required this SFEIR that was limited in scope to (i) traffic and transportation issues, and (ii) a response to the comments received on the FEIR. This SFEIR responds to the scope specified in the Secretary's Certificate.

Chapter 1 is a summary of the Project including a discussion of refinements to the Project design since the filing of the FEIR and a comprehensive evaluation of the impacts of those refinements different than those evaluated in the FEIR, if any. Chapter 1 also discusses governmental actions, approvals, and consultations undertaken by the Proponent since the FEIR and the outcomes of those consultations.

Chapter 2 is a materially enhanced transportation analysis for the Project in response to the Secretary's Certificate, and conducted in consultation with the Massachusetts Department of Transportation ("MassDOT") and the Massachusetts Bay Transportation Authority ("MBTA"), that includes additional data collected since the FEIR, and significant additional analysis of the transportation impacts of the Project and alternative means of mitigating those impacts. This analysis includes new evaluations of all potentially affected roads, new parking evaluations, and new evaluations of public and private transportation options. All of the new data and analysis has been shared with MassDOT and the data and analyses relevant to the City of Boston have been shared with the Boston Transportation Department ("BTD").

As required by the Secretary's Certificate, Chapter 3 is a comprehensive description of the Project's revised mitigation commitments and associated Draft Section 61 Findings.

Chapter 4 contains the response to all comments received on the FEIR as required by the Secretary's Certificate.

1.2.2 PROJECT DESIGN REFINEMENTS

Since the FEIR, the design of the Project has been refined. Most notably, in response to a request from the Massachusetts Gaming Commission (the "MGC"), the Project's hotel tower has been redesigned to positive reviews from the MGC and the media. Recent reports in the *Boston Globe* conclude that the Project design as refined is a "big improvement" and "more graceful" than the previous design. In addition, the *Boston Globe* praised the addition of hotel rooms and other refinements that "yield more tax revenues, create more jobs, and aid a region with a notable shortage of hotel rooms." At the Massachusetts Gaming Commission January 22nd open meeting, Stephen Crosby, the Chairman, remarked that the new building design "looks great."

The height of the tower remains unchanged since the FEIR but the new design includes a wider, curved, glass 25-story shaft that varies from a height of 386 feet down to 343.5 feet across the façade from west to east. See Figure 1-21, Overall South Elevation. The tower remains in the same location and orientation on the podium relative to the lower profile components of the building and the overall footprint of the building remains unchanged. There have also been refinements to the design and uses of the interior spaces of the tower and the design and uses of the single story portion of the building. Figures 1-5 through 1-24 are illustrations of the refined Project design.

Other Project design refinements since the FEIR include a 300 space reduction in the number of parking spaces in the parking garage, the addition of 125 hotel rooms, elimination of the previously proposed nightclub, a slight increase in gaming positions, an increase in the square footage of the convention and meeting space, and a modest reduction in the square footage of retail and food and beverage space. Table 1-1, Comparison of Project Elements as Described in FEIR and Elements of Refined Project Design, compares the elements of the Project as described and evaluated in the FEIR with the refined Project design elements evaluated in this SFEIR.

Table 1-1: Comparison of Project Elements as Described in FEIR and Elements of Refined Project Design

Element	As described in FEIR (square feet unless otherwise noted)	As refined and evaluated in SFEIR (square feet unless otherwise noted)	Change: number	Change: square feet
Hotel Rooms	504 keys	629 keys	125	
Hotel Tower	543,677	621,774		78,097
Gaming	192,543	190,461		(2,082)
Total Gaming Positions	4,160	4,580	420	
Retail (includes hotel and gaming areas)	77,250	52,632		(24,618)
Food/Beverage	64,593	54,680		(9,913)
Convention/ Meeting	32,942	37,068		4,126
Spa/Gym	13,130	15,405		2,275
Entertainment/ Nightclub	30,392	0		(30,392)
Back-of-House (includes MEP)	383,725	411,058		27,333
Front-of-House Support (includes restrooms, lobbies, etc.)	75,473	58,548		(16,925)
Total Parking Spaces	4,500 spaces	4,200 spaces	(300)	
Parking Spaces on-site	3,700 spaces	3,400 spaces	(300)	
Parking Spaces off-site	800 spaces	800 spaces		
Parking Garage	1,624,970	1,627,751		2,781
Total On-Site Gross Floor Area	3,038,695	3,096,700		58,005

Due to a Project design refinement raising the floor elevation on the western wing of the Project (the "west wing") to 18'-4" NAVD88 (six feet higher than as described in the FEIR) to provide a consistent floor elevation across the entire first floor, transitions to the outdoor open space areas will be made via slopes, stairs, and accessible ramps. Waterfront features continue to include a 20-foot wide harborwalk with a connection to DCR's Gateway Park; restored coastal bank and salt marsh, a public gathering area, a pavilion, waterfront features, and water

transportation and transient vessel docking facilities. See Figures 1-5, Proposed Conceptual Site Plan, and 1-6, First Level Floor Plan.

1.2.3 SITE VEHICULAR ACCESS

Primary vehicular access to the Project Site will be at a new signalized intersection on Broadway (Route 99). Patrons who drive to the Project Site will access the Project driveway and proceed to the on-site parking garage. The primary Project driveway will be a four-lane boulevard (two lanes in each direction) with a landscaped island, marquee sign, period lighting, sidewalks, and bicycle accommodations. The conceptual design of the primary Project driveway is shown on Figure 1-24A. Implementing the conceptual design for the primary Project driveway will require the acquisition of property owned by a third party. The Proponent has entered into an Option Agreement to purchase that property and plans to exercise the option and close on the property in the next 60-90 days.

A service driveway for employee shuttle buses, delivery vehicles, service vehicles, and emergency vehicles will be located further north on Broadway (Route 99) at the existing signalized intersection of Beacham Street and Broadway (Route 99). The conceptual design of the service driveway is shown on Figure 1-24B. Implementing the conceptual design for the service driveway will require the acquisition of three properties owned by third parties. The Proponent has entered into an option agreement and has exercised its option to acquire one of those properties. The transfer of that property is anticipated to occur in February 2015. With respect to the second property, on August 26, 2014, the Proponent submitted an offer to acquire certain property of the MBTA in Everett, MA with a deposit of One Million Five Hundred Thousand Dollars ($1,500,000). On September 3, 2014, consistent with its enabling statute, Massachusetts General Laws Chapter 161A, the MBTA issued a "Notice of Proposal and Request for Response" (the "RFR") with respect to the sale of this property seeking to achieve the best value for the MBTA through an open, competitive process. The deadline for responding to the RFR was October 3, 2014. The Proponent was the only bidder. Following the closing of the RFR, the Proponent has met with the MBTA to facilitate the closing of this property. Per the terms of the RFR, the closing on the property will take place on a date within one hundred eighty (180) days of the designation of a successful bidder. The MBTA designated Wynn as the successful bidder by letter dated January 29, 2015 and the transfer of such property is anticipated to occur in February 2015. Either the Proponent or the Everett Redevelopment Authority will acquire the third property.

The service driveway will be signed for authorized vehicles only. When necessary, the service driveway will be used to hold taxicabs waiting to pick up Project patrons at the main entrance thereby preventing taxicab queues on Broadway (Route 99).

Such taxicabs will travel along the service driveway and connect internally to the primary driveway.

The service driveway will also provide access from Broadway (Route 99) to the Everett Shops facility of the MBTA. However, access to the service driveway beyond the Everett Shops will be restricted to emergency, service, and delivery vehicles traveling to the Project. Appendix B-11 to this SFEIR contains detailed analyses of the proposed Everett Shops facility access developed in collaboration with the MBTA.

Employees who drive will park off-site at one of three employee parking lots and ride an employee shuttle bus to the Project Site. No employee parking will be provided on-site except for a limited number of spaces for executives and disabled employees.

The Project will also initiate and provide scheduled water transportation ferry service between the Downtown Boston waterfront, the South Boston Seaport, and the Project Site. The Proponent will design and construct a water taxi/shuttle dock that will be available as a new stop for water transportation routes. The Project proposes a water shuttle service with stops in Downtown Boston (Long Wharf or Rowe's Wharf) and South Boston (World Trade Center), with the potential for expansion to other Boston Inner Harbor locations. The Proponent will build custom boats for the service to ensure that they can pass under the Alford Street Bridge without requiring it to open.

1.2.4 OPEN SPACE

The Project includes extensive open spaces on a site currently unavailable to the public. The Project's open space will include lively pathways and plazas lushly landscaped with flowers and year-round plantings. The open spaces will include a pavilion, park benches, and other public amenities. The public will be encouraged to visit the Project Site to experience the ecological restoration of the Project's living shoreline, to take water transportation from the Project's new floating docks to harborfront locations in Boston, and to enjoy the vibrant outdoor programming the Proponent will provide on the Project Site.

The Project's new 20-foot wide continuous harborwalk will connect the residents of Everett and its neighboring communities to the Project and beyond. The harborwalk will be fully handicapped accessible and enhanced by high-quality pedestrian amenities along its length, including public seating, appropriate signage, pedestrian level lighting, safety railings where required, and lush plantings. The Project's restrooms will be available to the public. The Project's waterfront zone will be sheltered from the prevailing west and northwest winds during the colder months but open to the cooling sea breezes during the warmer months.

The Proponent intends to connect the harborwalk with the nearby DCR Gateway Park with a connector path over adjacent land owned by others that will also be fully handicapped accessible, with the same high quality pedestrian amenities as the harborwalk.

The Project's active open space will be a welcome and long awaited improvement on the barren, contaminated, and currently completely inaccessible Project Site that has scarred Everett for generations. In short, the Project will greatly enhance waterfront access to and along the Everett waterfront, and the waterfront of neighboring communities, in furtherance of the Everett MHP.

1.2.5 REMEDIATION

As described in the FEIR in sections already determined by the Secretary to adequately and properly comply with MEPA and its implementing regulations, soil, groundwater, and sediment at and from the Project Site were contaminated by prior activities on the Project Site including chemical manufacturing. This contamination has, for decades, impeded the use of the Project Site and adversely affected the community and the Mystic River. The Proponent will address the longstanding threats to human health and the environment posed by this contamination in compliance with applicable federal and state laws and regulations, including the Massachusetts Contingency Plan ("MCP"), and in continued consultation with the Massachusetts Department of Environmental Protection ("MassDEP"). On January 2, 2015, the Proponent acquired the Project Site, and on February 5, 2015, submitted to MassDEP an Eligible Person Submittal and Tier II Classification Submittal assuming responsibility for the further design and implementation of the remediation of the MCP Disposal Site that includes the Project Site.[1] As indicated in that submittal, the Proponent's Licensed Site Professional ("LSP") has developed, in consultation with MassDEP, a plan to complete the remediation of the contamination at and from the Project Site as soon as all necessary approvals are received from the regulators responsible for those approvals. The total estimated cost of that remediation is $22 million to $31 million plus an additional $15 million for the management and disposal of soil excavated in the course of the construction of the Project garage. The remediation plan and the approvals necessary to implement it are further discussed in Sections 1.2.5.1 and 1.2.5.2 below.

1.2.5.1 LANDSIDE REMEDIATION PLAN

The remediation of the Project Site necessary to make it safe for all of its proposed uses, including the recreational use of the open space described in Section 1.2.4 above, will be completed prior to the opening

[1] The MCP defines a Disposal Site as any "place or area...where oil and/or hazardous material has come to be located." The boundaries of a Disposal Site are not limited by property boundaries.

of the Project and has four elements: (a) In-Situ Solidification/Stabilization of contaminated soil in the southern portion of the Project Site; (b) excavation of contaminated soil in the northern portion of the Project Site and in the area of the Project Site in which the living shoreline coastal bank and salt water marsh are to be restored, and in and adjacent to the area in which the new bulkhead is to be reconstructed; (c) substantial additional excavation of contaminated soil in the footprint of the garage to be constructed on the Project Site; and (d) the placement of clean fill over any areas of the Project Site not covered by Project buildings or pavement. See Figure 1-28, Proposed Remediation, and Figure 1-30, Post-Construction Surface Conditions. The characterization of contamination on the Project Site has continued since the FEIR. As a result, the Proponent's LSP will submit to MassDEP a Release Abatement Measure Plan ("RAM Plan") respecting the In-Situ Solidification/Stabilization of contaminated soil in the southern portion of the Project Site; and the excavation of contaminated soil in the northern portion of the Project Site. The Proponent anticipates submitting the initial RAM Plan in February, 2015 and implementing the components of the initial RAM Plan in the spring of 2015. The remediation set forth in the initial RAM Plan is estimated to be completed within approximately six months of the start date.

The excavation of contaminated soil in the area of the Project Site in which the living shoreline coastal bank and salt water marsh are to be restored, the area in which the new bulkhead is to be reconstructed, and in the footprint of the garage to be constructed on the Project Site will also be the subject of a RAM Plan to be submitted to MassDEP in the spring of 2015.

The elements of the remediation plan that are the subject of the second RAM Plan require approvals, including a Chapter 91 license from MassDEP, that are not required for the elements that are the subject of the initial RAM Plan. MassDEP cannot provide these approvals until the MEPA review of the Project is completed. For that reason, the commencement date of the remediation set forth in the second RAM Plan is less predictable. However, all of the elements of the landside remediation plan will be completed in the course of the construction of the Project and before the Project opens.

The total estimated cost of the landside remediation is $27 million to $32 million including the approximately $15 million for the management and disposal of contaminated soil excavated in the course of the construction of the parking garage.

1.2.5.2 WATERSIDE REMEDIATION PLAN

As is also discussed in the FEIR, Mystic River sediment in the water side area of the Project Site is also contaminated and that contamination is believed to extend beyond the limits of the Project Site. As discussed in the first paragraph of Section 1.2.5, the Proponent will address contamination from the Project Site throughout the Disposal Site. This Section 1.2.5.2 describes the Proponent's comprehensive plan, developed in consultation with MassDEP, to respond to the water side contamination.

In July and August 2013, additional sediment sampling and analysis was completed in the water side area of the Project Site. This additional sediment sampling and analysis was sufficient to characterize conditions in the water side area of the Project Site.

The Proponent will complete the sediment sampling and analysis necessary to determine the extent of the Disposal Site. On February 4, 2015, in response to the Proponent's Request for a Determination of Applicability ("RDA"), the Boston Conservation Commission issued a Negative Determination which clears the way for sediment sampling, pursuant to a plan that was the subject of prior collaboration with the MassDEP.

The Proponent will use the results of the water side assessments already completed in Everett, and the water side assessments to be completed in Boston, to prepare a supplemental Phase II Comprehensive Site Assessment and Phase III Remedial Action Plan respecting water side contamination at and from the Project Site. The Phase III Remedial Action Plan will evaluate the feasibility of achieving a Permanent Solution for the water side contamination at and from the Project Site.

The depth to which sediment will be removed on the Project Site will be affected by the details of the living shoreline coastal bank and salt marsh restoration and the reestablishment of the prior navigational channel that, with the development of the dock system, are part of the Project. The volume of sediment estimated to be removed in connection with these improvements on the Project Site is estimated at approximately 15,000 cubic yards.

The extent of additional sediment removal to comprehensively address contamination at and from the Project Site will be determined in the Phase II Comprehensive Site Assessment, the Phase III Remedial Action Plan, and the Phase IV Remedy Implementation Plan to be submitted

under the MCP in consultation with MassDEP. The currently estimated maximum volume of additional removal to comprehensively address this contamination is approximately 60,000 cubic yards.

Sediment removal on the Project Site, and the permitting of that removal, will be as presented in the FEIR.

Sediment removal outside the Project Site for the purpose of achieving a Permanent Solution under the MCP will also be designed in accordance with applicable state and federal wetlands and water quality requirements.

The Proponent anticipates that the sediment removal from the Disposal Site can be completed in one season, and will be conducted only during those times of the year permitted by State and Federal agencies so as to reduce possible adverse impacts to the ecosystem.

1.2.6 OTHER MITIGATION AND ENHANCEMENTS

1.2.6.1 TRANSPORTATION

The transformational transportation improvements to be undertaken with respect to the Project are described in greater detail in Chapters 2 and 3. They include $65.5 to $85.5 million in capital roadway improvements plus an additional approximately $13 million in operating costs for the benefit of Project patrons as well as other travelers using Lower Broadway (Route 99) in the City of Everett, Santilli Circle in the City of Everett, Sweetser Circle in the City of Everett, Wellington Circle in the City of Medford, and Sullivan Square in the City of Boston, among others.

1.2.6.2 SHORELINE AND SHELLFISH RESTORATION

The Project continues to include substantial measures to enhance and restore the degraded coastal bank and recreate a salt marsh on the Project Site. In response to the concerns of the Massachusetts Division of Marine Fisheries, the 30,000 square foot clam and oyster seeding activities previously proposed by the Proponent have been eliminated from the Project. The Project will contribute to improvements to water quality in the Mystic River through the remediation discussed in Section 1.2.5 above as well as the implementation of stormwater Best Management Practices and other mitigation measures. The Proponent will continue to work with the Mystic River Watershed Association and

other interested parties to advance the restoration of aquatic resources in the immediate vicinity of the Project Site.

1.2.6.3 PUBLIC BOAT DOCK

The Project will include boat access to the first public boat dock in the City of Everett. The public boat dock will provide opportunities for boaters, along with the new water shuttle service, to travel by water to the Project Site. A handicapped accessible ramp to the dock will be compliant with the Americans with Disabilities Act.

1.2.7 POTENTIAL IMPACTS OF PROJECT DESIGN REFINEMENTS

This Section 1.2.7 evaluates the impacts, if any, of the Project design refinements discussed in Section 1.2.2, other than the transportation and transit impacts which are comprehensively identified and evaluated in Chapter 2 as required by the Secretary's Certificate. As is discussed in further detail below, no additional permits or approvals are required as a result of these Project design refinements and the impacts of the Project design refinements are either non-existent or insubstantial.

1.2.7.1 GREENHOUSE GAS EMISSIONS

A new Greenhouse Gas (GHG) analysis for the Project as refined, and as requested in the Secretary's Certificate, models energy use relative to the more stringent 2010 ASHRAE 90.1 standards and the existing Massachusetts Building Code IECC 2012 base. That analysis is presented in the Greenhouse Gas and Mesoscale Air Quality Analysis, included in Appendix C.

That analysis demonstrates that the Project's energy-saving measures will achieve substantial emissions reductions that are equivalent to or better than the Project design evaluated in the FEIR. Building energy use will be 18.3% below the IECC 2012 base, well beyond what may be required by the hypothetical revised Stretch Code expected, as indicated in the Secretary's Certificate, to require energy reductions of 12 to 15 percent below the IECC 2012 base.

The entire Project's energy use (including building, garage ventilation, garage lighting and water/wastewater utility energy uses) will be 26.4% below the updated ASHRAE 90.1-2010 standards. These Project energy reductions will exceed the energy reductions modeled in the FEIR (which were 29.1% but relative to the less stringent 2007 baseline consistent with applicable MEPA scoping requirements, not the more stringent 2010 ASHRAE 90.1 standards).

1.2.7.2 WETLANDS AND WATERWAYS: CHAPTER 91 TIDELANDS

The Project design, as refined, will continue to comply with the maximum applicable MHP height limits of 400 feet and 55 feet respectively. The Project continues to provide approximately 6.26 acres of open space within jurisdiction. This figure is approximately 24% of the entire land area of the Project Site and approximately 59% of the land within jurisdiction of Chapter 91. As stated in the FEIR "[t]he Project will provide substantial public benefits and water-dependent uses along the Project Site's waterfront. It will substantially transform the vacant waterfront industrial site into a vibrant and active development..."

The Project design, as refined, continues to maintain Facilities of Public Accommodation ("FPA") on the ground floor although the types and locations of those FPAs have been adjusted. Convention and meeting space has been relocated to the first level's west wing, and a grand ballroom replaces the nightclub space that has been eliminated. See Figure 1-6, First Level Floor Plan. The meeting rooms and grand ballroom will provide extensive opportunities for use by the transient public through year-round public-focused exhibits, programming and events.

The floor elevation of the west wing is proposed to be increased from elevation 12'-4" to elevation 18'-4" NAVD88, consistent with that of the rest of the building's first level. This change is in further response to concerns regarding sea level rise and improves accessibility within the building by maintaining consistent floor levels. The open space, harborwalk, and boat docking facilities will remain completely accessible from both off-site locations and the facility's first level.

Height and Shadow: The Project continues to include a 386-foot hotel tower, approximately one third of which is located within Chapter 91 tidelands jurisdiction and would exceed the baseline regulatory height standards established in Chapter 91. This area (shown in red on Figure 1-25, Chapter 91 Allowable Building Height) is consistent with the Everett MHP. The Project's low-rise west wing within tidelands jurisdiction is lower than the Chapter 91 regulatory height standard, and is also compliant with the Everett MHP.

An updated shadow study of the Project design as refined was completed consistent with the analysis contained in the FEIR. October 23rd was selected as the date on which shadows would be studied because it is during a time of the year when many people still participate

in active waterfront use and when shadows are longer and may extend to areas within Chapter 91 jurisdiction. October 23rd was also selected because the Secretary's Decision on the Everett MHP identifies this date as the most appropriate date to be used for the purpose of Waterways licensing. The updated shadow study compared the Chapter 91 jurisdictional shadow impacts of the Project design as refined to a Chapter 91 compliant project during three times (9 a.m., Noon, and 3 p.m.) on October 23rd. See Figure 1-26, Shadow Study for Proposed and Chapter 91 Compliant Projects. The updated shadow study confirms that the Project design as refined results in no net increase in shadow within Chapter 91 jurisdictional areas both on and off the Project Site. Accordingly, consistent with the conclusion of the shadow study presented in the FEIR, it is not expected that any offset for additional height will be required for the Project.

Wind Effects: An updated pedestrian level wind study of the Project design as refined was completed in the same manner as the wind study presented in the FEIR using computational fluid dynamics (CFD) modeling techniques. The updated wind study is Appendix F, Pedestrian Wind Assessment. The conclusion of the updated wind study is that the Project design as refined will not adversely affect pedestrian comfort levels in the waterfront areas of the Project Site.

The wind study found that the Project design, as refined, works well to redirect a majority of the prevailing winter winds from the west-northwest and northwest along the casino roof, with some wind directed above and through the entry portico. As shown in Figure 1-27, Predicted Wind Comfort Zones – Summer and Winter, summer wind comfort was predicted as leisurely walking while winter wind comfort was rated as leisurely walking and fast walking. Wind comfort around the entry portico was rated suitable for sitting and standing throughout the year. In the overall entry area, the predicted wind comfort conditions were satisfactory. The CFD wind analysis indicated that the wind safety criterion was met around the Project.

Based on the updated wind study, the predicted wind comfort conditions for the Project design as refined continue to be satisfactory for planned pedestrian and waterfront public open space uses.

1.2.7.3 WETLANDS AND WATERWAYS: WETLAND RESOURCE AREA IMPACTS

Through the process of applying for and receiving an Order of Conditions for the landside remediation described in Section 1.2.5.1, the delineation of Coastal Bank was adjusted in some locations to reflect on-site and topographic observations and review by MassDEP and the Everett Conservation Commission. The total increase in temporary impacts to Coastal Bank resulting from the refined delineation is less than 400 square feet.

1.2.7.4 AERONAUTICAL IMPACTS

The aeronautical impacts of the Project design as refined were also evaluated and that evaluation is included in Appendix E, Aeronautical Impact Statement. The evaluation concluded that any difference between the aeronautical impacts of the prior design and the Project design as refined is negligible. When revising the Aeronautical Impact Statement (AIS), several items were added or changed due to the refinement of the shape of the Project tower. A new radar analysis was added for Terminal Doppler Weather Radar (TDWR). The analysis showed that the Project design as refined raises no concern about the operation of TDWR. Although the change from flat to curved surfaces on the building changed the Airport Surveillance Radar reflection area and shielding coverage, the analysis of that changed reflection area and shielding coverage did not identify any new impacts. In fact, the updated study showed that reflection is less of an issue now than before.

1.2.7.5 WATER USE AND WASTEWATER GENERATION

The Project design as refined, and principally the addition of 125 hotel rooms, will result in an increase in water use and wastewater generation. The estimated sewer discharge associated with the Project design as refined is 283,489 gallons per day and the estimated water use is 311,838 gallons per day. These revised estimates were calculated in the same manner as the estimates presented in the FEIR, in accordance with the state regulations found at 314 CMR 7.00 and 314 CMR 15.00, and by comparison to similar facilities. The design flows referenced in these regulations are outdated and do not sufficiently account for anticipated reductions in water usage based on current building and plumbing codes and the Project's commitment to achieve a LEED Gold certification. However, as confirmed by the City of Everett, the Project's

water consumption and sewer use will be easily accommodated by the infrastructure serving the Project Site.

The Project will continue to incorporate water conservation measures consistent with LEED Gold certification and will also provide funding to the City of Everett to undertake infiltration/inflow (I/I) removal on a 4:1 basis consistent with MassDEP and Massachusetts Water Resources Authority ("MWRA") policy. MassDEP has committed to provide funding for the City of Everett to evaluate suitable I/I projects that could be implemented with Project I/I mitigation funds.

1.3 OTHER BENEFITS TO THE COMMONWEALTH, HOST COMMUNITY, AND SURROUNDING COMMUNITIES

Since the filing of the FEIR, the Proponent received a Category 1 gaming license for Region A (the "Gaming License"). Pursuant to the terms of the Gaming License, the Proponent has agreed to make certain payments to the City of Boston to mitigate any adverse impacts related to the Project. Following the issuance of the Gaming License, the Proponent initiated payments to certain surrounding communities as set forth in the Proponent's agreements with its surrounding communities.

The Project will result in significant public benefits associated with (i) capital investments designed to improve transportation infrastructure, (ii) economic benefits from recurring revenues, (iii) host and surrounding community payments, (iv) direct and indirect employment opportunities, and (vi) environmental benefits.

Among the economic benefits from the Project will be the gaming tax revenues generated for the Commonwealth. These revenues include over $200 million annually to be allocated for high priority needs of the Commonwealth and of cities and towns. These funds will be used for local aid, community mitigation, tourism, debt reduction, transportation infrastructure, and public health among other uses. See Table 1-2: Distribution of Wynn Everett Casino Tax Revenue, First Full Year.

The transportation infrastructure improvements proposed as mitigation for the Project will benefit all users, not just Project patrons and employees. These improvements will provide lasting improvements to the area's highway network. Capital expenditures in support of environmental improvements total $92 million, plus an estimated $22 to $33 million in remediation expense. These public benefits are further described in Chapter 2, Transportation and in Chapter 3, Mitigation Measures and Draft Section 61 Findings.

Host community payments include a $30 million initial payment for capital projects and ongoing annual payments of $25.25 million, increasing by two and one-half percent per

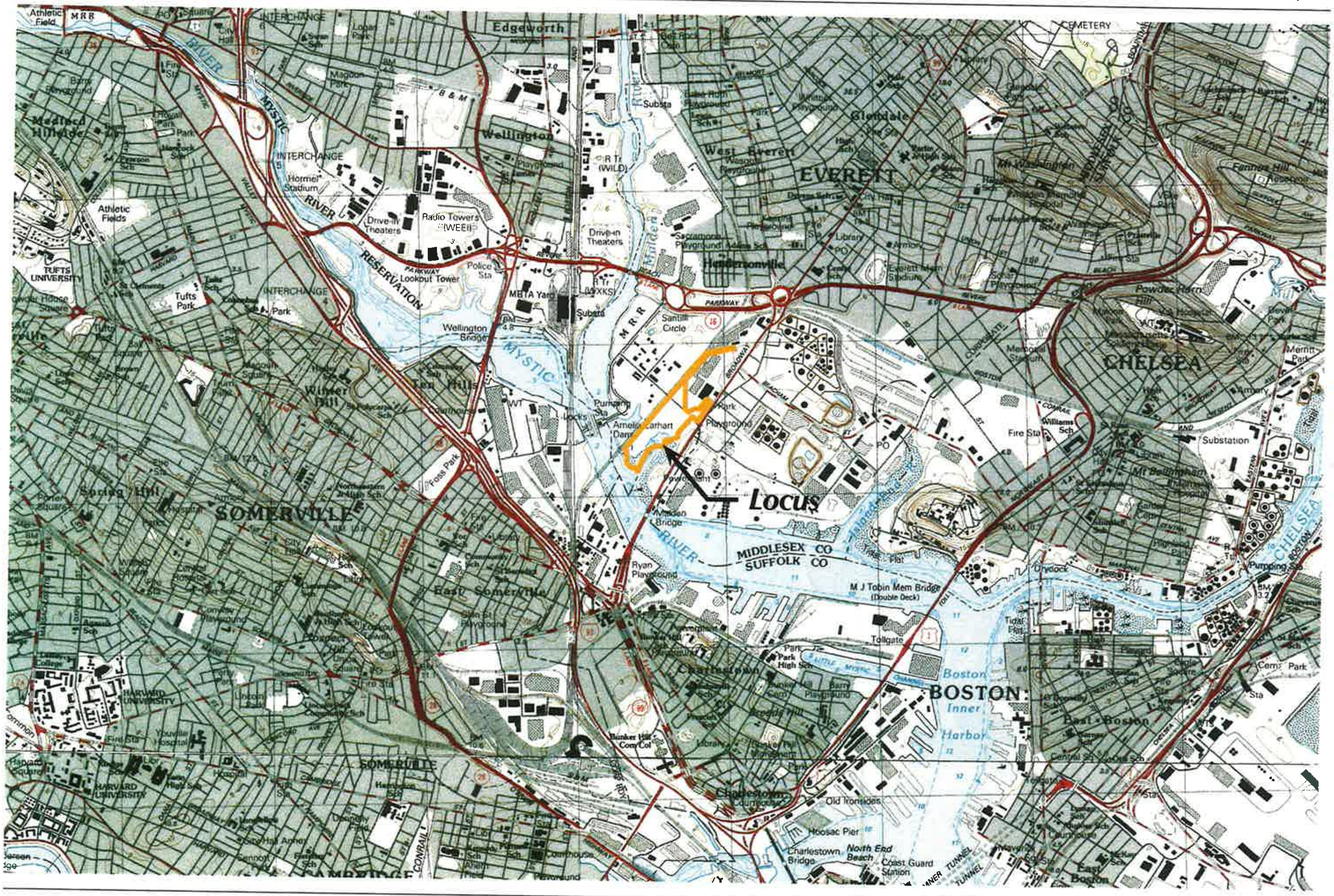
year. Surrounding community payments include upfront payments of approximately $2 million and annual recurring payments of $3.4 million per year.

In addition, pursuant to the terms of the Gaming License the Proponent agreed to an initial payment to the City of Boston of $1 million, and annual recurring payments of $1.6 million with additional amounts (totaling $25 million) for the Sullivan Square Infrastructure Project (as defined in the Gaming License).

Additionally, the Project will provide approximately 4,000 construction jobs and approximately 4,000 permanent operations jobs, the latter of which will encompass job categories such as hotel/resort personnel, facility employees, food and beverage employees, gaming, and management and will include full job training, benefits and opportunities for career advancement.

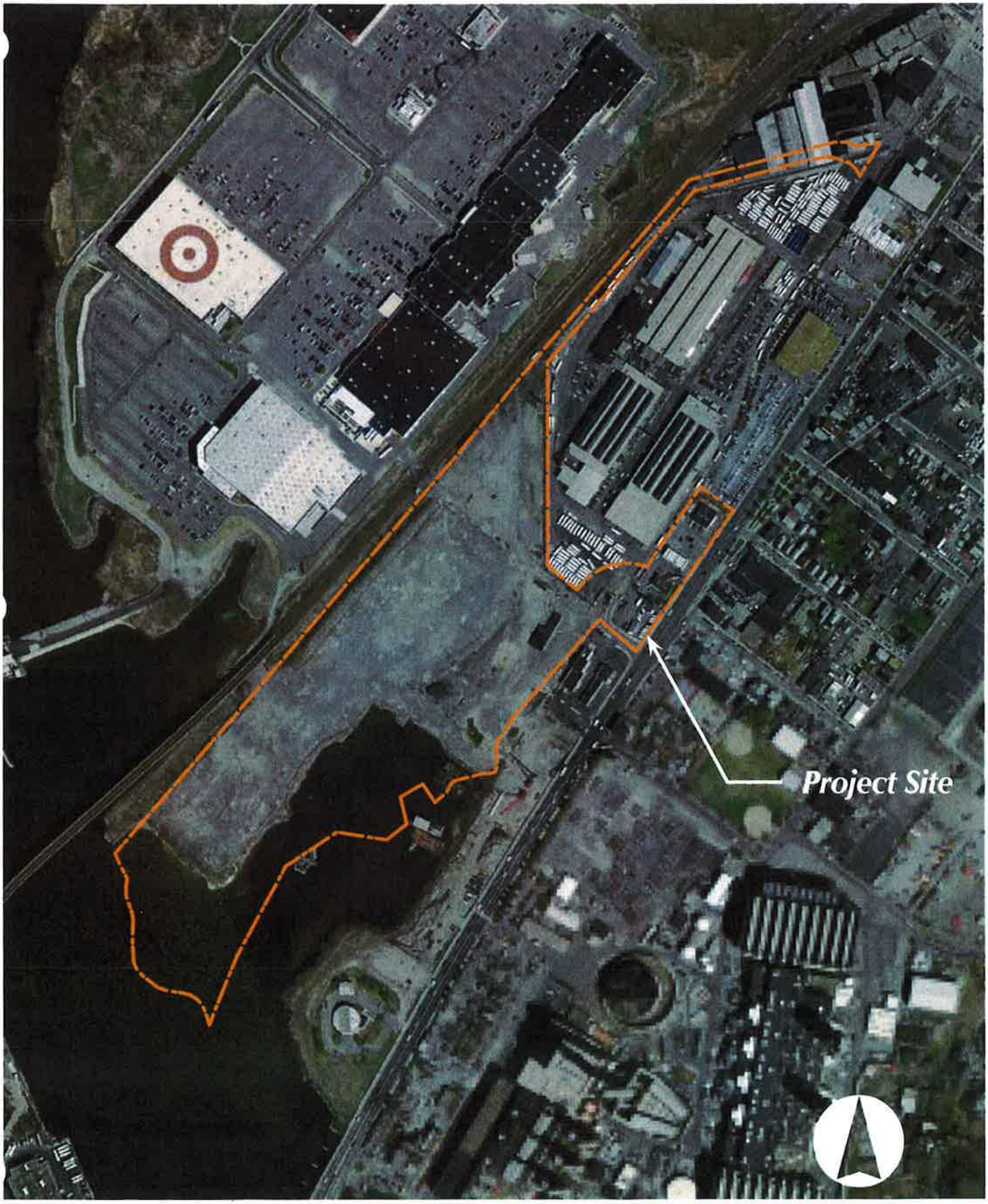
Table 1-2: Distribution of Wynn Everett Casino Tax Revenue, First Full Year

FUND PROGRAM	Percent Dedicated	Dollar Value Millions
MA Cultural Council	2.0	4.02M
MA Tourism Fund	1.0	2.01M
Community Mitigation Fund	6.5	13.07M
Local Capital Projects Fund	4.5	9.05M
Gaming Local Aid Fund	20.0	40.20M
Commonwealth Stabilization Fund	10.0	20.10M
Education Fund	14.0	28.14M
Gaming Economic Fund	9.5	19.10M
Debt Reduction Program	10	20.10M
Transportation Infrastructure & Development Fund	15.0	30.15M
Public Health Trust Fund	5.0	10.05M
Race Horse Development Fund	2.5	5.03M
TOTAL	**100%**	**$201.01M**



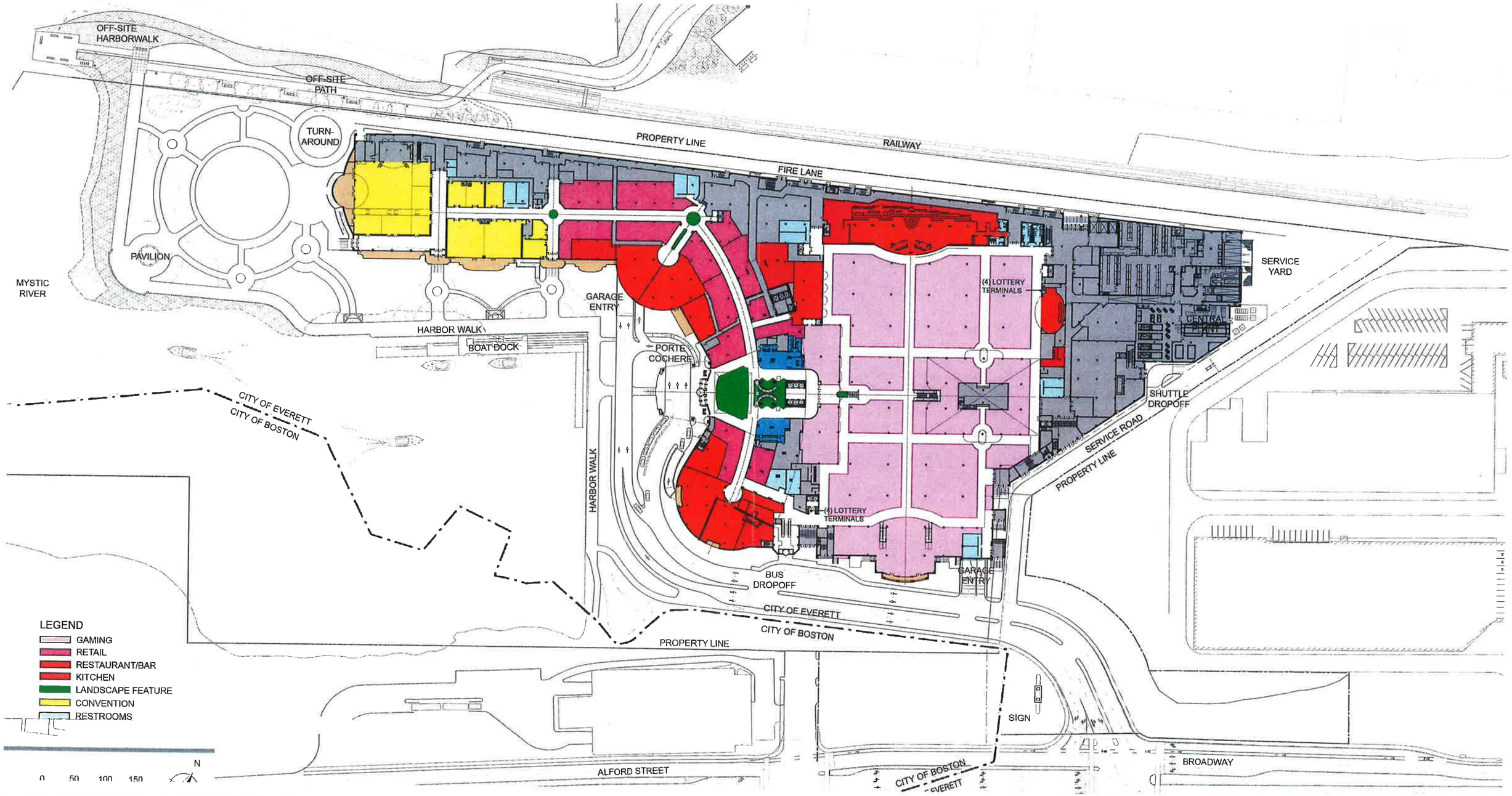
Wynn Resort in Everett
Everett, Massachusetts

Figure 1-1
Locus Map
Source: US Geological Survey, 1995



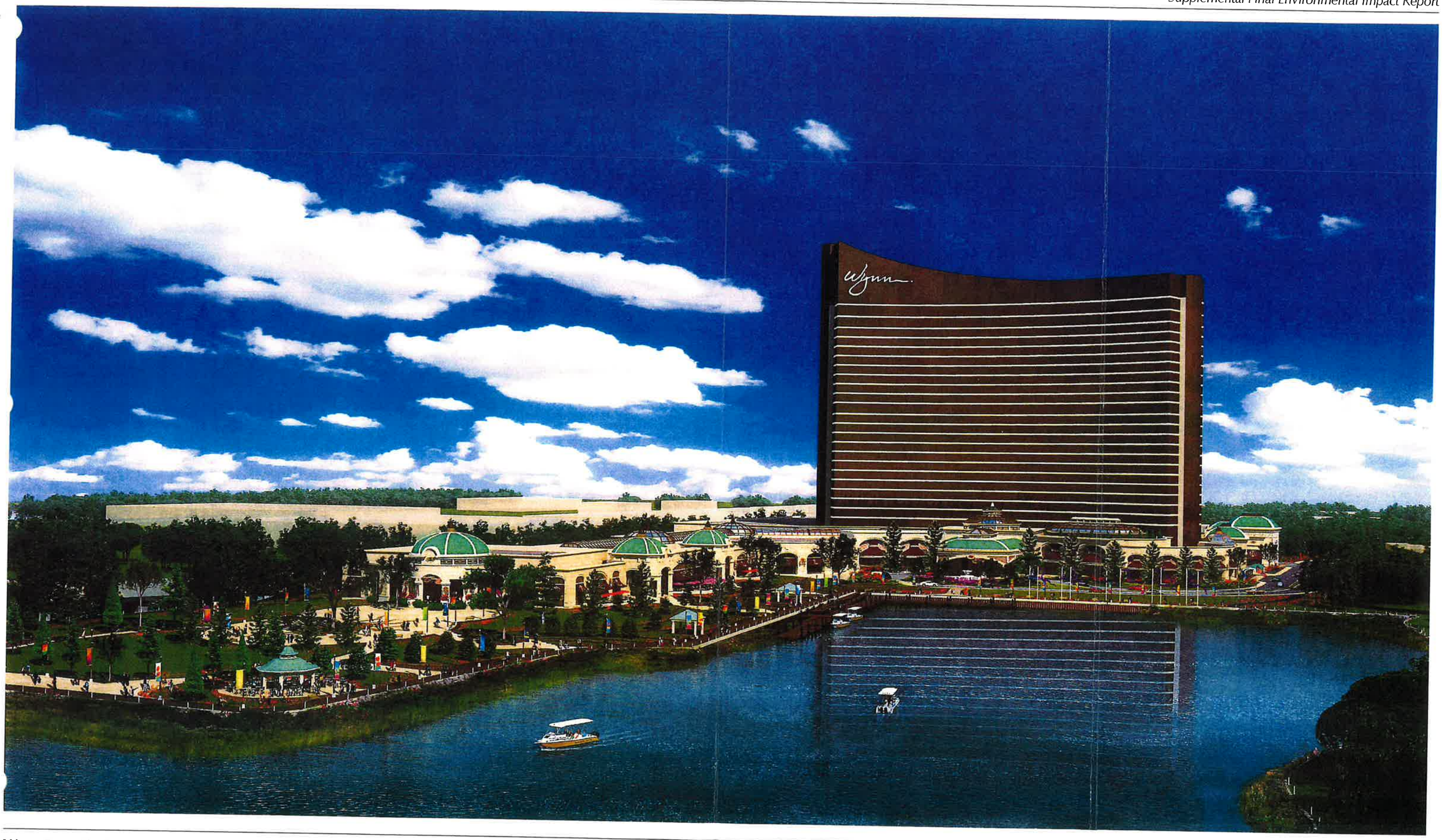
Wynn Resort in Everett
Everett, Massachusetts

Figure 1-2
Locus Aerial
Source: MassGIS, 2008



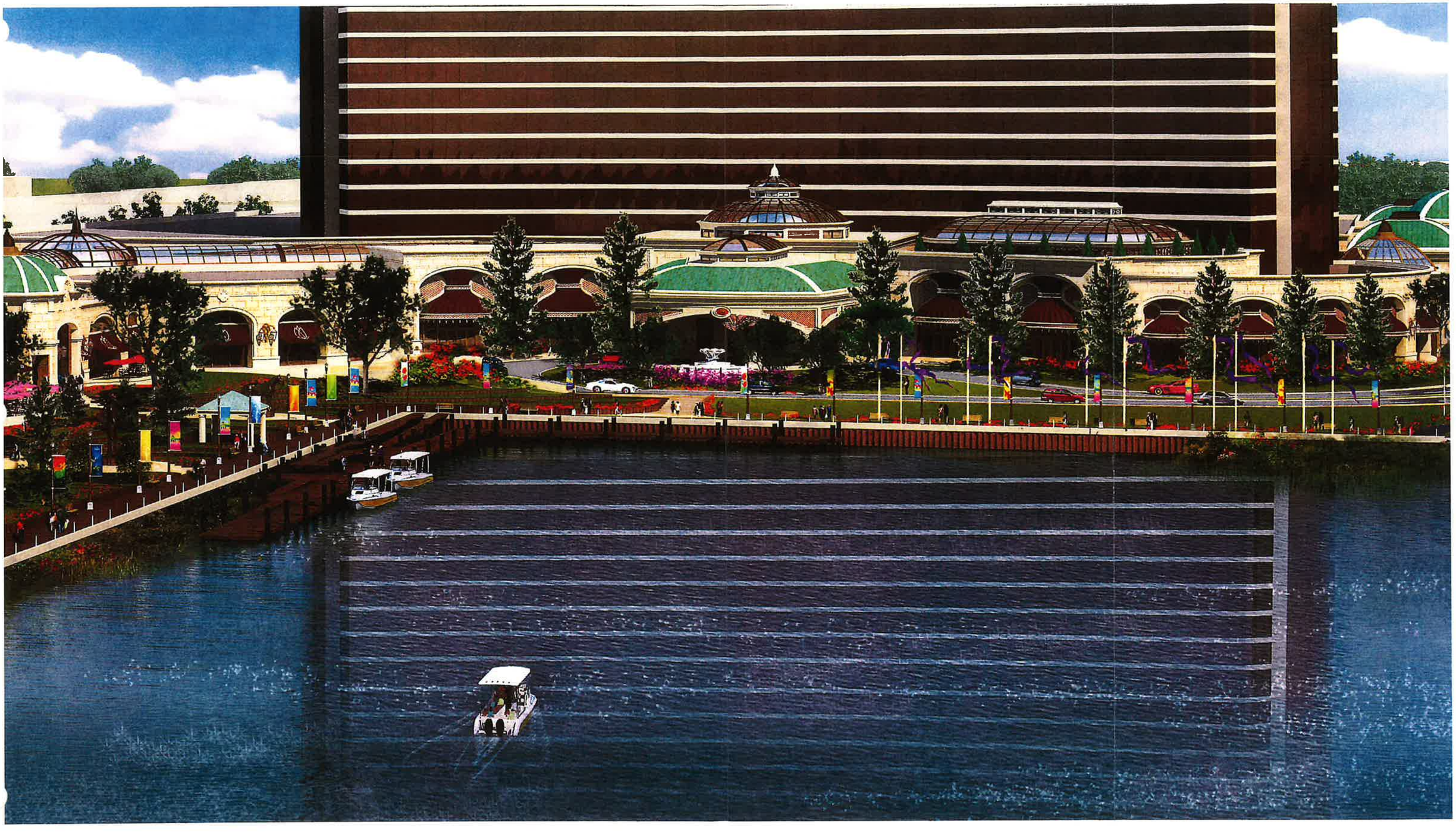
Wynn Everett
Everett, Massachusetts

Figure 1-5
Proposed Conceptual Site Plan
Source: Lifescapes International, Inc., 2015



Wynn Resort in Everett
Everett, Massachusetts

Figure 1-15
Perspective View from Mystic River

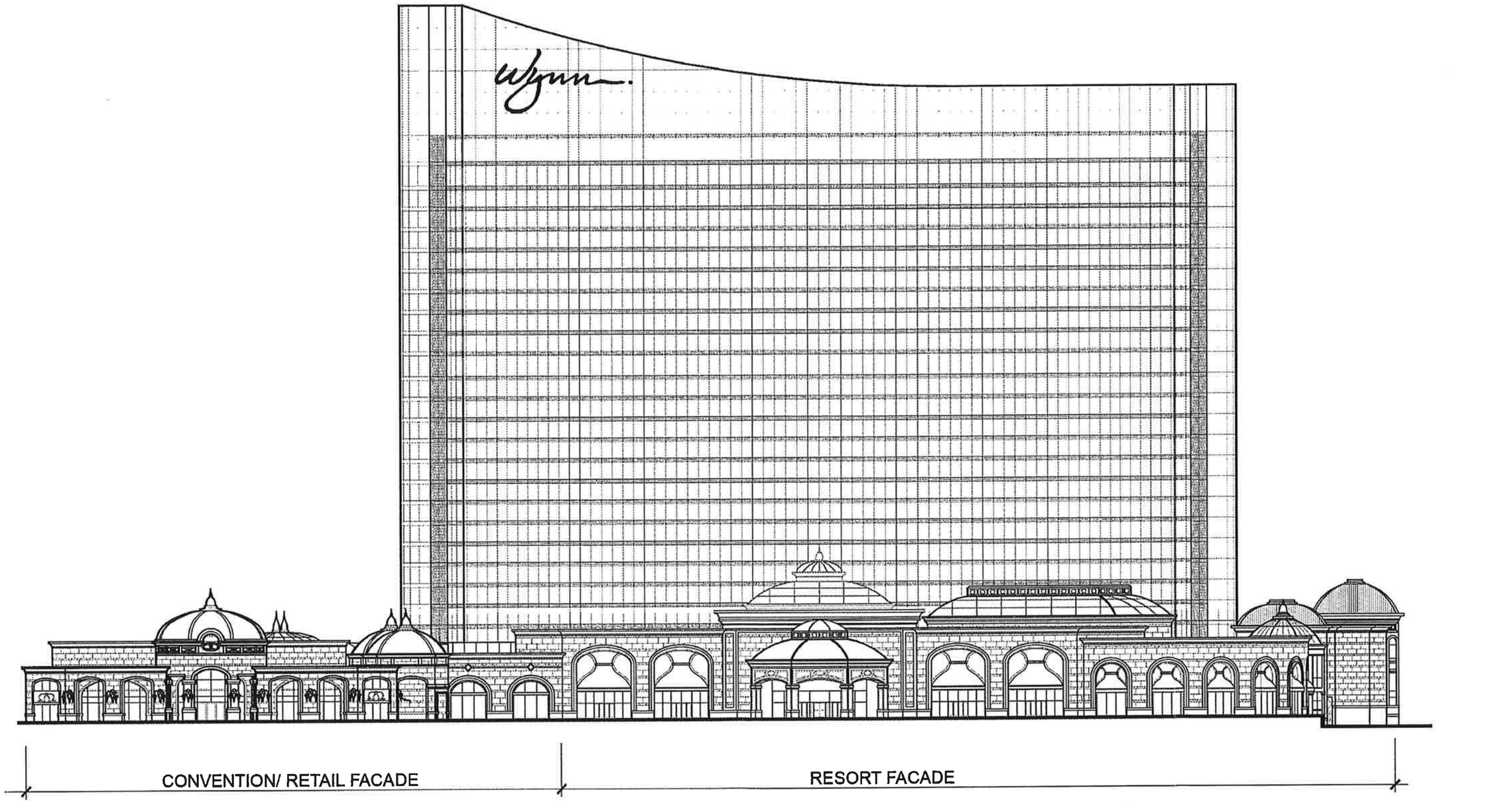


Wynn Resort in Everett
Everett, Massachusetts

Figure 1-16
Perspective View of Porte-Cochere
Source: Wynn Design & Development, LLC, 2015

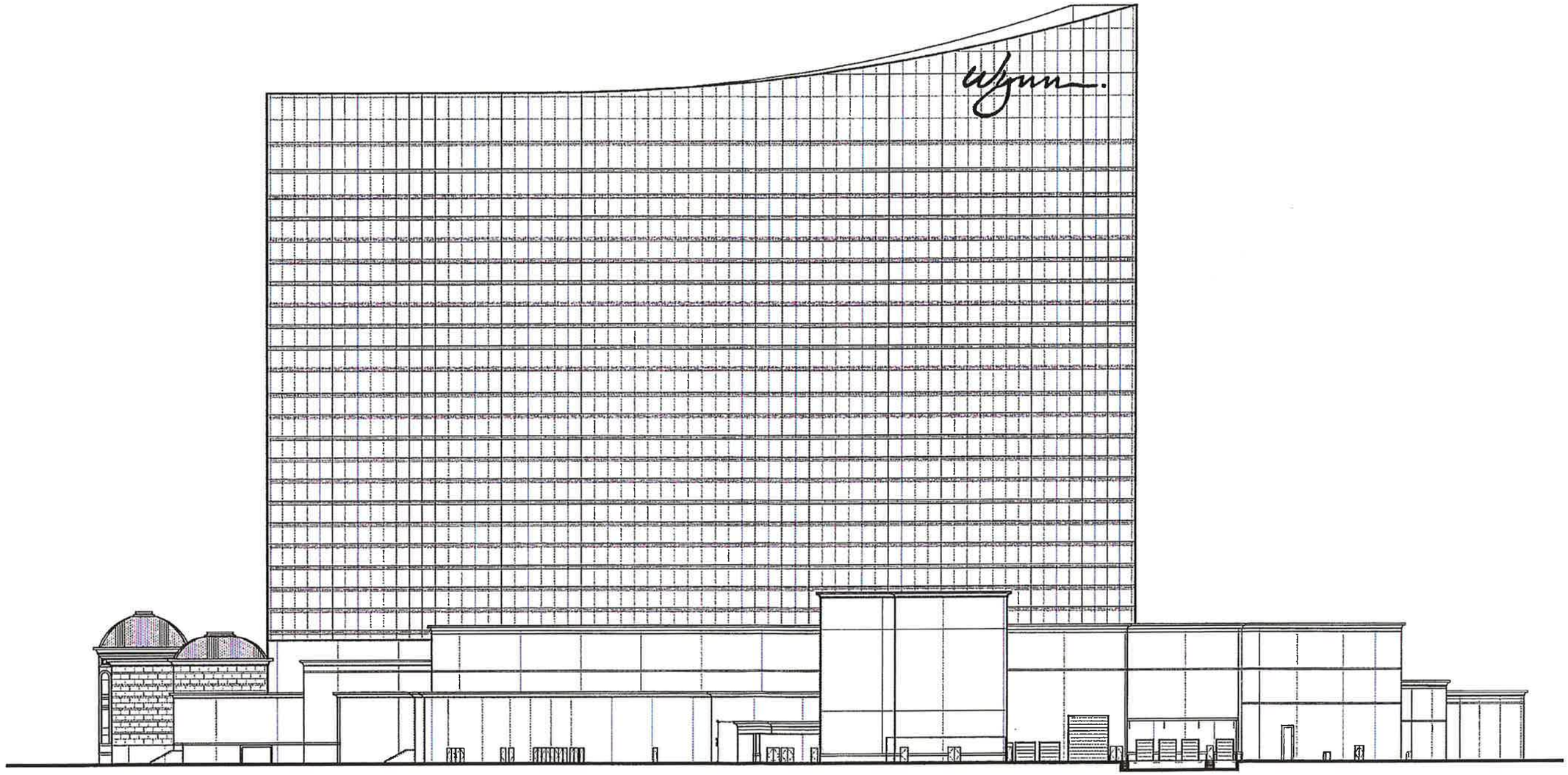
Wynn Resort in Everett
Everett, Massachusetts

Figure 1-17
Perspective View from Entry Drive
Source: Wynn Design & Development, LLC, 2015



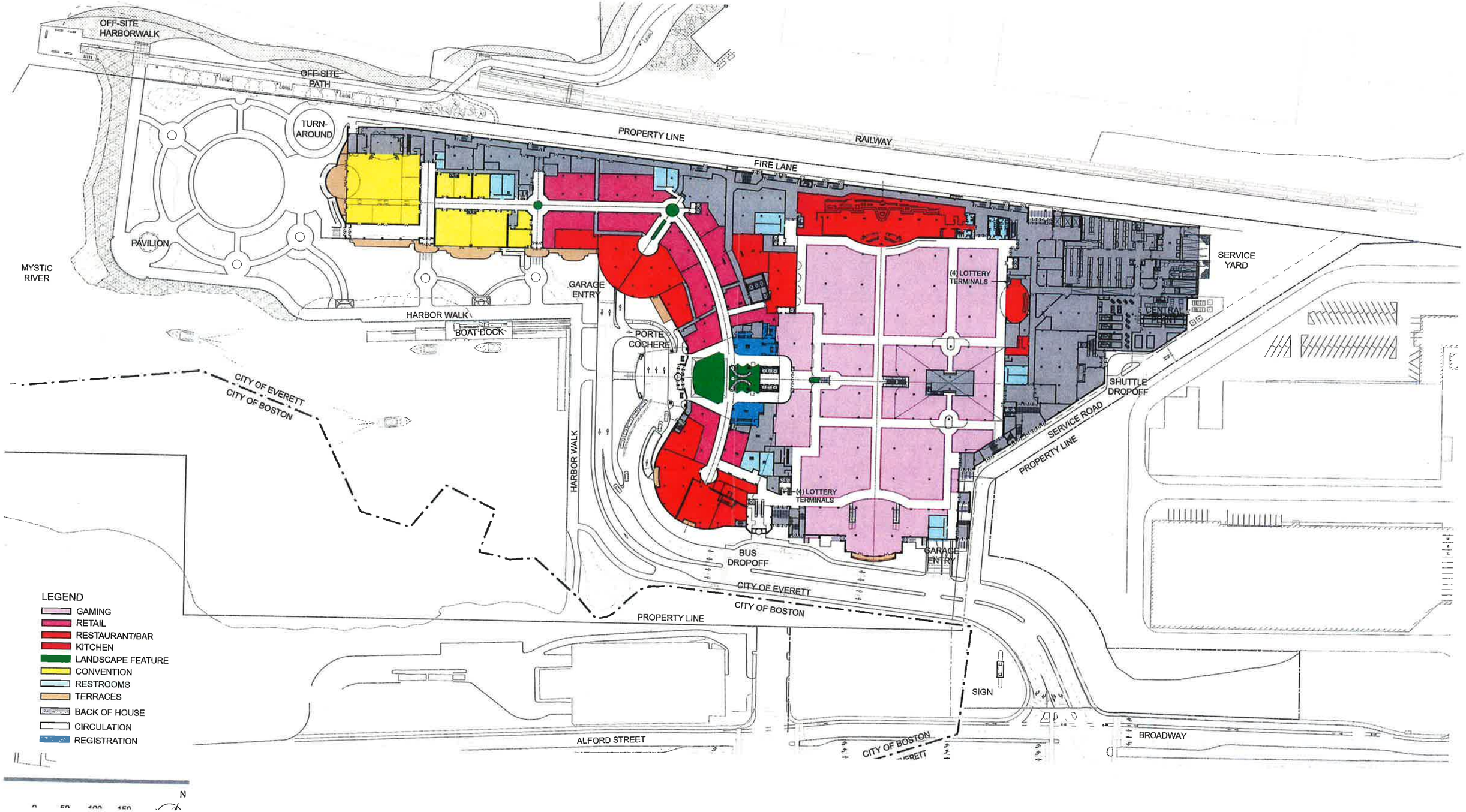
Wynn Resort in Everett
Everett, Massachusetts

Figure 1-21
Overall South Elevation
Source: Wynn Design & Development, LLC, 2015



Wynn Resort in Everett
Everett, Massachusetts

Figure 1-22
Overall North Elevation
Source: Wynn Design & Development, LLC, 2015



Wynn Resort in Everett
Everett, Massachusetts

Figure 1-24
Landscape Plan

Wynn Resort in Everett
Everett, Massachusetts

Figure 1-29
Post-construction Surface Conditions
Source: GZA Environmental, 2015

CHAPTER 2: TRANSPORTATION

This chapter presents the comprehensively revised and updated transportation impact assessment for the Project specified in the Secretary's Certificate. It includes revised trip generation, mode share and other traffic and transit analyses closely coordinated with MassDOT since the SFEIR in response to MassDOT's comments on the Proponent's analyses in the FEIR. More specifically these revised analyses, all previously reviewed by MassDOT, include updated and expanded evaluations of potentially affected roads, the identification of improvements to mitigate the impact of Project traffic on those roads, an updated parking evaluation supporting the reduction of the number of spaces in the Project garage, a comprehensive reevaluation of the public and private transit usage of the Project and the further specification of related improvements to public transit infrastructure and the development of private transit options, an updated evaluation of pedestrian and bicycle trips to the Project and related improvements, a Transportation Demand Management ("TDM") plan, and an updated Transportation Monitoring Plan. The extensive consultations with MassDOT relating to these topics are itemized in Section 1.5.1 and the consultations with the BTD on those traffic and transit topics of concern to it are summarized in Section 1.5.2. As is discussed in Section 1.5.3, MassDOT and DCR confirmed that MassDOT would be responsible for post-FEIR coordination regarding DCR's prior comments relating to Project traffic and roadway-related concerns.

2.1 TRIP GENERATION, MODE SHARE AND OTHER TRAFFIC AND TRANSIT ANALYSES SINCE THE FEIR

This section presents the trip generation analysis for the Project as refined, and the associated mode share goals for the Project. The Proponent has established quantitative goals for both patron and employee use of alternatives to single-occupancy vehicles (SOV). To achieve these goals, the Proponent is committed to implementing strong TDM measures to minimize automobile usage, detailed in Section 4.16 of the FEIR as referenced in Section 2.7.

2.1.1 TRIP GENERATION ANALYSIS AS REVISED IN CONSULTATION WITH MASSDOT

The underlying trip generation methodology and travel mode shares are the same as in the FEIR analysis.

2.1.1.1 EVALUATION OF EFFECT OF PROJECT DESIGN REFINEMENTS ON TRIP GENERATION ANALYSIS

The Project design refinements discussed in Section 1.2.2 have slightly affected the outcome of the trip generation analysis.

Table 2-1 identifies the Project design refinements responsible for these slight differences in the outcome of the trip generation analysis.

Table 2-1: Comparison of Project Evaluated in the FEIR and as Refined and Evaluated in the SFEIR

Land Use Component[1]	As Evaluated in FEIR	As Refined and Evaluated in SFEIR	Difference
Hotel	504 rooms	629 rooms	+125 rooms
Nightclub	25,341 sf	0 sf	-25,341 sf
Retail	96,172 sf	79,455 sf	-16,717 sf
Gaming	4,160 positions	4,580 positions	+420 positions

1) These components are the primary land uses affecting the trip generation analysis. Other elements of the Project (such as spa/gym facilities, restaurants, and conference spaces) generate internal trips and are accounted for in these primary categories.

An on-site parking garage with 3,400 spaces will serve hotel guests, casino patrons, and visitors to the retail shops and restaurants.

Vehicle Trip Comparison

Using the same trip generation analysis methodology documented in the FEIR, the number of vehicle trips generated by the Project design as refined has been estimated. Table 2-2 presents those estimates for the Project evaluated in the FEIR and the Project as refined.

As shown in Table 2-2, the peak hour decrease in estimated vehicle trips associated with retail and nightclub land uses is greater than the increase in estimated vehicle trips associated with hotel rooms and gaming positions. As a result, the Project design as refined generates a lower number of estimated peak hour vehicle trips; 61 fewer vehicle trips in the Friday p.m. peak hour and 143 fewer vehicle trips in the Saturday afternoon peak hour.

This trip generation analysis confirms that the Project design as refined will not result in increased traffic impacts during peak hours.

The estimated number of Saturday daily vehicle trips associated with the Project design as refined is also lower (360 fewer vehicle trips). However, the estimated number of Friday daily trips associated with the Project design as refined is higher (634 more vehicle trips). The revised trip generation estimates are used throughout the remainder of this chapter.

Table 2-2: Comparison of FEIR Project Vehicle Trips and Project Design as Refined and Evaluated in SFEIR Vehicle Trips

Time Period/ Category	Vehicle Trips		Difference	
	Project as Evaluated in FEIR	Project Design as Refined and Evaluated in SFEIR	Vehicle Trips	Percent
Friday Daily (vpd)				
Hotel	1,214	1,538	+324	
Nightclub	840	0	-840	
Retail	3,392	2,998	-394	
Gaming	13,402	14,754	+1,352	+3.3%
All Shuttles and Buses[1]	648	840	+192	
Total	19,496	20,130	+634	
Friday p.m. Peak Hour (vph)				
Hotel	65	82	+17	
Nightclub	143	0	-143	
Retail	202	172	-24	
Gaming	975	1,072	+97	-4.3%
All Shuttles and Buses[1]	34	26	-8	
Total	1,419	1,358	-61	
Saturday Daily (vpd)				
Hotel	1,334	1,686	+352	
Nightclub	2,108	0	-2,108	
Retail	4,618	4,094	-524	
Gaming	15,614	17,192	+1,578	-1.5%
All Shuttles and Buses[1]	668	1,010	+342	
Total	24,342	23,982	-360	
Saturday Afternoon Peak Hour (vph)				
Hotel	85	105	+20	
Nightclub	244	0	-244	
Retail	467	413	-54	
Gaming	1,119	1,232	+113	-7.3%
All Shuttles and Buses[1]	38	60	+22	
Total	1,953	1,810	-143	

1) Includes Wynn patron shuttles, Wynn employee shuttles, tour buses, and Premium Park and Ride buses. These vehicles serve riders in all land use categories.

Person Trip Comparison

A summary of the SOV and non-SOV person trip differences between the Project as evaluated in the FEIR and the Project design as refined and evaluated herein is presented in Tables 2-3 through 2-6.

The number of person trips is estimated to decrease in the Friday p.m. peak, Saturday daily, and Saturday peak hour conditions but will increase in the Friday daily condition.

During each time period evaluated, the person trips by travel modes assumed to be used exclusively by gaming patrons (tour bus and Premium Park and Ride (PPR)) are expected to increase as a result of the increased number of gaming positions in the Project design as refined.

Because the Proponent has committed that there will be no employee shift changes during the Friday p.m. peak hour, there will be no Friday p.m. peak hour employee trips.

Table 2-3: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in FEIR vs. Project Design as Refined and Evaluated in SFEIR, Friday Daily

Type of Person Trip[1]	Person Trips		Difference	
	Project as Evaluated in FEIR	Project Design as Revised and Evaluated in SFEIR	Person Trips	Percent
SOV				
Private Automobiles	35,532	33,130	+598	+1.8%
Taxis	3,607	3,716	+109	+3.0%
Subtotal – SOV person trips	36,139	36,846	+707	+2.0%
Non-SOV				
Orange Line to Patron Shuttle	4,508	4,616	+138	+3.0%
Orange Line to Employee Shuttle	1,348	1,354	+6	+0.4%
Water transportation	2,908	2,992	+84	+2.8%
MBTA bus	674	678	+4	+0.4%
Tour bus	3,458	3,808	+350	+10.2%
Premium Park and Ride	1,240	1,346	+106	+8.5%
Employee neighborhood shuttle	1,348	1,354	+6	+0.4%
Walk/bike	202	204	+2	+0.5%
Subtotal – Non-SOV person trips	15,686	16,382	-696	+4.4%
Total	51,825	53,228	+1,403	+2.7%

1) Includes all patron and employee trips.

Table 2-4: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in FEIR vs. Project Design as Refined and Evaluated in SFEIR, Friday p.m. Peak Hour

Type of Person Trip[1]	Person Trips		Difference	
	Project as Evaluated in FEIR	Project Design as Refined and Evaluated in SFEIR	Person Trips	Percent
SOV				
Private Automobiles	2,514	2,391	-123	-4.9%
Taxis	302	293	-9	-3.0%
Subtotal – SOV person trips	2,816	2,684	-132	-4.7%
Non-SOV				
Orange Line to Patron Shuttle	378	366	-12	-3.2%
Orange Line to Employee Shuttle	-	-	-	-
Water transportation	227	220	-7	-3.1%
MBTA bus	-	-	-	-
Tour bus	274	302	+28	+10.2%
Premium Park and Ride	82	91	+9	+9.8%
Employee neighborhood shuttle	-	-	-	-
Walk/bike	-	-	-	-
Subtotal – Non-SOV person trips	961	979	+18	+1.8%
Total	3,777	3,663	-114	-3.0%

1) Includes all patron and employee trips.

Table 2-5: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in FEIR vs. Project Design as Refined and Evaluated in SFEIR, Saturday Daily

Type of Person Trip[1]	Person Trips		Difference	
	Project as Evaluated in FEIR	Project Design as Refined and Evaluated in SFEIR	Person Trips	Percent
SOV				
Private Automobiles	41,046	39,514	-1,532	-3.7%
Taxis	4,498	4,416	-82	-1.8%
Subtotal – SOV person trips	45,544	43,930	-1,614	-3.5%
Non-SOV				
Orange Line to Patron Shuttle	5,622	5,520	-102	-1.8%
Orange Line to Employee Shuttle	1,738	1,628	-110	-6.3%
Water transportation	3,632	3,556	-76	-2.1%
MBTA bus	868	814	-54	-6.2%
Tour bus	4,030	4,436	+406	+10.1%
Premium Park and Ride	1,470	1,576	+106	+7.1%
Employee neighborhood shuttle	1,738	1,628	-110	-6.3%
Walk/bike	260	244	-16	-6.2%
Subtotal – Non-SOV person trips	19,358	19,402	+44	+0.2%
Total	64,902	63,332	-1,570	-2.4%

1) Includes all patron and employee trips.

Table 2-6: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in FEIR vs. Project Design as Refined and Evaluated in SFEIR, Saturday Afternoon Peak Hour

Type of Person Trip[1]	Person Trips		Difference	
	Project as Evaluated in FEIR	Project Design as Refined and Evaluated in SFEIR	Person Trips	Percent
SOV				
Private Automobiles	3,336	3,037	-299	-9.0%
Taxis	368	347	-21	-5.7%
Subtotal – SOV person trips	3,704	3,384	-320	-8.6%
Non-SOV				
Orange Line to Patron Shuttle	460	433	-27	-5.9%
Orange Line to Employee Shuttle	122	94	-28	-23.8%
Water transportation	294	274	-20	-11.6%
MBTA bus	61	46	-15	-23.0%
Tour bus	313	345	+32	+10.2%
Premium Park and Ride	112	118	+6	+4.5%
Employee neighborhood shuttle	122	94	-28	-23.8%
Walk/bike	18	14	-4	-22.2%
Subtotal – Non-SOV person trips	1,502	1,418	+84	-5.6%
Total	5,206	4,802	-404	-7.8%

1) Includes all patron and employee trips.

2.1.2 MODE SHARE ANALYSIS AS REVISED IN CONSULTATION WITH MASSDOT

In its comments on the FEIR, MassDOT requested that the Project travel mode share analysis be presented in the format specified in this section. For purposes of this analysis and the discussion of alternative transportation and mode share Project goals in Section 2.1.2.1, SOV refers to a private automobile carrying one or more persons or a taxicab with one or more passengers. Non-SOV refers to a train, bus, or boat, or a pedestrian or bicycle trip.

A summary of the travel mode shares used in the evaluations presented in this chapter is presented in Table 2-7. MassDOT has approved the use of these travel mode shares.

Table 2-7: Travel Mode Shares

Travel Mode	Casino Patrons	Other Project Patrons	Employees
SOV			
Private Automobile Park on-site Park off-site, connect to employee shuttle	 63% 0%	 76% 0%	 0% 41%[1]
Taxicab	8%	8%	0%
Subtotal – SOV	71%	84%	41%
Non-SOV			
Orange Line to Wynn Patron Shuttle	10%[2]	10%[2]	0%
Orange Line to Wynn Employee Shuttle	0%	0%	20%
Water Transportation	6%	6%	3%
MBTA Bus	0%	0%	10%
Tour Bus	10%	0%	0%
Premium Park and Ride	3%	0%	3%
Wynn Employee Neighborhood Shuttle	0%	0%	20%
Walk/Bicycle	0%	0%	3%
Subtotal – Non SOV	29%	16%	59%
TOTAL	100%	100%	100%

1) Because employees (except a limited number of Wynn executives and employees with disabilities) who choose to drive to work will be required to park at one of the off-site parking facilities and take an employee shuttle from that facility to the Project, 100% of employees (other than a limited number of Wynn executives and employees with disabilities) will arrive at the Project Site via non-SOV modes. However, including the segment of each employee trip in an SOV, 41% of employee trips will involve SOV modes and 59% will be exclusively via non-SOV modes.

The estimated vehicle trips by travel mode by time period for the Project design as refined are presented in Table 2-8. Non-SOV vehicles trips include trips by the Wynn patron shuttle buses to and from the Orange Line, Wynn employee shuttle buses to and from the Orange Line, Wynn employee shuttle buses to and from remote parking facilities in Medford, Malden, and Everett, the Wynn employee neighborhood shuttle buses, tour buses, PPR buses, and pedestrian and bicycle trips.

Table 2-8: SOV and Non-SOV Vehicle Trips

Time Period/ Direction of Travel	SOV Vehicle Trips	Non-SOV Vehicle Trips
Friday Daily		
In	9,645	420
Out	9,645	420
Total	19,290	840
Saturday Daily		
In	11,486	505
Out	11,486	505
Total	22,972	1,010
Friday p.m. peak hour		
In	673	13
Out	659	13
Total	1,332	26
Saturday afternoon peak hour		
In	896	30
Out	860	30
Total	1,756	60

The peak hour SOV and non-SOV trips tabulated in Table 2-8 were added to the total vehicle trips associated with the No Build (2023) condition[1] to determine the Build conditions used in this chapter. Detailed trip generation worksheets for Project design as refined are in Appendix B.

2.1.2.1 ALTERNATIVE TRANSPORTATION AND MODE SHARE PROJECT GOALS

The transportation impact assessments in this chapter are based on travel mode shares – the percentage of person trips assigned to each of the available travel modes serving the Project Site – that have been used to establish quantitative non-SOV goals for both Project patrons and employees. MassDOT has concurred with both the methodology used to develop these travel mode shares and the resulting alternative travel mode goals. To achieve these goals, the Proponent is committed to implementing strong TDM measures described in detail in Section 4.16 of the FEIR and summarized in Section 2.7. A robust transportation monitoring and reporting program, as described in the FEIR and updated in Section 2.7, will evaluate and reinforce employee and patron travel behavior consistent with the alternative travel mode goals.

[1] To reflect No Build (2023) conditions, a background growth rate of 0.5% was applied over nine years, and traffic from nearby development projects was added to the network.

In response to a MassDOT request, this section presents the projected number of Project person trips in a format different than that of the FEIR, showing person trips by single occupancy vehicle (SOV) and non-SOV vehicle. Table 2-9 and Table 2-10 summarize the estimated SOV and non-SOV person trips segregating casino patrons, other Project visitors, and employee person trips for both the Friday and Saturday daily conditions. Table 2-11 and Table 2-12 summarize the same estimated SOV and non-SOV person trips for both the Friday p.m. and Saturday afternoon peak hour conditions.

Based on the travel mode shares approved by MassDOT, 71% of casino patron person trips are expected to be by SOV modes and 29% are expected to be by non-SOV modes. Based on the same MassDOT approved mode shares, 84% of all other Project patron person trips are expected to be by SOV modes and 16% are expected to be by non-SOV modes. The reason the percentage of casino patron person trips by SOV modes is expected to be lower than the percentage of other Project patron person trips by SOV modes, is that casino patrons will have more attractive non-SOV options, such as tour buses and the Project's PPR service.

Because, as is discussed previously, employees (except a limited number of Wynn executives and employees with disabilities) who choose to drive must park at one of the off-site employee parking facilities, 100% of employees (except a limited number of Wynn executives and employees with disabilities) will arrive at the Project Site via non-SOV modes but 41% of employee person trips will include an SOV trip segment, and 59% of employee person trips will be exclusively by non-SOV modes.

The Project's alternative travel mode goals are based on these person trip mode estimates. For employees, the Proponent has set a goal of no more than 41% of employee trips by SOV. For casino patrons, the SOV goal is no more than 71% of trips.

Table 2-9: SOV and Non-SOV Person Trips by Travel Mode – Friday Daily Conditions

Type of Person Trip	Casino Patrons		Other Project Patrons		Employees		Total – Patrons and Employees	
	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share
SOV								
Private Automobiles	23,990	63%	6,364	76%	2,776	41% [2)]	33,130	62%
Taxicab	3,046	8%	670	8%	0	0%	3,716	7%
Subtotal – SOV	27,036	71%	7,034	84%	2,776	41%	36,846	69%
Non-SOV [1)]								
Orange Line to Wynn Patron Shuttle	3,808	10%	838	10%	0	0%	4,646	9%
Orange Line to Wynn Employee Shuttle	0	0%	0	0%	1,354	20%	1,354	3%
Water Transportation	2,264	6%	504	6%	204	3%	2,992	6%
MBTA Bus	0	0%	0	0%	678	10%	678	1%
Tour Bus	3,808	10%	0	0%	0	0%	3,808	7%
Premium Park and Ride	1,142	3%	0	0%	204	3%	1,346	2%
Employee Neighborhood Shuttle	0	0%	0	0%	1,354	20%	1,354	3%
Walk/Bike	0	0%	0	0%	204	3%	204	<1%
Subtotal – Non-SOV	11,042	29%	1,342	16%	3,998	59%	16,382	31%
TOTAL	38,078	100%	8,376	100%	6,774	100%	53,228	100%

Table 2-10: SOV and Non-SOV Person Trips by Travel Mode – Saturday Daily Conditions

Type of Person Trip	Casino Patrons		Other Project Patrons		Employees		Total – Patrons and Employees	
	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share
SOV								
Private Automobiles	27,952	63%	8,226	76%	3,336	41%[2)]	39,514	62%
Taxicab	3,550	8%	866	8%	0	0%	4,416	7%
Subtotal – SOV	31,502	71%	9,092	84%	3,336	41%	43,930	69%
Non-SOV								
Orange Line to Wynn Patron Shuttle	4,436	10%	1,084	10%	0	0%	5,520	9%
Orange Line to Wynn Employee Shuttle	0	0%	0	0%	1,628	20%	1,628	3%
Water Transportation	2,602	6%	710	6%	244	3%	3,556	6%
MBTA Bus	0	0%	0	0%	814	10%	814	1%
Tour Bus	4,436	10%	0	0%	0	0%	4,436	7%
Premium Park and Ride	1,332	3%	0	0%	244	3%	1,576	2%
Employee Neighborhood Shuttle	0	0%	0	0%	1,628	20%	1,628	3%
Walk/Bike	0	0%	0	0%	244	3%	244	<1%
Subtotal – Non-SOV	12,806	29%	1,794	16%	4,802	59%	19,202	31%
TOTAL	44,308	100%	10,886	100%	8,138	100%	63,332	100%

Table 2-11: SOV and Non-SOV Person Trips by Travel Mode – Friday p.m. Peak Hour Conditions

Type of Person Trip	Casino Patrons		Other Project Patrons		Employees [1]		Total – Patrons and Employees	
	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share
SOV								
Private Automobiles	1,900	63%	491	76%	0	-	2,391	65%
Taxicab	241	8%	52	8%	0	-	293	8%
Subtotal – SOV	2,141	71%	543	84%	0	-	2,684	73%
Non-SOV								
Orange Line to Wynn Patron Shuttle	302	10%	64	10%	0	-	366	10%
Orange Line to Wynn Employee Shuttle	0	0%	0	0%	0	-	0	0%
Water Transportation	181	6%	39	6%	0	-	220	6%
MBTA Bus	0	0%	0	0%	0	-	0	0%
Tour Bus	302	10%	0	0%	0	-	302	8%
Premium Park and Ride	91	3%	0	0%	0	-	91	2%
Employee Neighborhood Shuttle	0	0%	0	0%	0	-	0	0%
Walk/Bike	0	0%	0	0%	0	-	0	0%
Subtotal – Non-SOV	876	29%	103	16%	0	-	979	27%
TOTAL	3,017	100%	646	100%	0	-	3,663	100%

1) Employee shifts will be set so that there is no travel required during the Friday p.m. peak period of 4:30-6:00 p.m.

Table 2-12: SOV and Non-SOV Person Trips by Travel Mode – Saturday Afternoon Peak Hour Conditions

Type of Person Trip	Casino Patrons		Other Project Patrons		Employees		Total – Patrons and Employees	
	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share	person trips	travel mode share
SOV								
Private Automobiles	2,171	63%	674	76%	192	41%[2)]	3,037	63%
Taxicab	275	8%	72	8%	0	0%	347	7%
Subtotal – SOV	2,446	71%	746	84%	192	41%	3,384	70%
Non-SOV								
Orange Line to Wynn Patron Shuttle	345	10%	88	10%	0	0%	433	9%
Orange Line to Wynn Employee Shuttle	0	0%	0	0%	94	20%	94	2%
Water Transportation	207	6%	53	6%	14	3%	274	6%
MBTA Bus	0	0%	0	0%	46	10%	46	1%
Tour Bus	345	10%	0	0%	0	0%	345	7%
Premium Park and Ride	104	3%	0	0%	14	3%	118	2%
Employee Neighborhood Shuttle	0	0%	0	0%	94	20%	94	2%
Walk/Bike	0	0%	0	0%	14	3%	14	<1%
Subtotal – Non-SOV	1,001	29%	141	16%	276	59%	1,418	30%
TOTAL	3,447	100%	887	100%	468	100%	4,802	100%

2.2.1 LOWER BROADWAY/ALFORD STREET (ROUTE 99), EVERETT/BOSTON

The Lower Broadway/Alford Street (Route 99) area includes the intersection of the main entrance to the Project with Broadway (Route 99) in Everett. The following intersections are located in the Lower Broadway/Alford Street (Route 99) area (the identifying numbers correspond to the numbering system used in the FEIR for ease of comparison):

1. Horizon Way/Broadway (Route 99), Everett (intersection with Project main entrance);

7. Beacham Street/Broadway (Route 99), Everett (intersection with Project service road);

8. Bowdoin Street/Broadway (Route 99), Everett; and

51. Dexter Street/Alford Street (Route 99), Boston.

Because the city boundary between the City of Everett and the City of Boston is located between Intersection 1, Horizon Way/Broadway (Route 99) in Everett, and Intersection 51, Dexter Street/Alford Street (Route 99), the analyses of the Dexter Street/Alford Street (Route 99) intersection are included in this section. The Alford Street Bridge construction in this area was substantially completed in the fall of 2014, and all lanes of the bridge were reopened in both directions. In addition, the removal of the toll plaza on the Tobin Bridge (Route 1) was completed since the FEIR, and all three travel lanes on both levels of that bridge were reopened. As a result of these developments since the FEIR, BTD requested that new turning movement counts be collected at the intersections along Broadway/Alford Street (Route 99) in the cities of Everett and Boston. This was done on Friday, December 5, and Saturday, December 6, 2014 and the resulting data has been used in place of the data collected in June 2013 and evaluated in the FEIR. In general, the data collected in December 2014 were an average of 12.7% higher for the Friday p.m. peak hour and an average of 14.7% higher for the Saturday afternoon peak hour.

A seasonal adjustment of 0.97, obtained from MassDOT's *Weekday Seasonal Factors Report*, was applied to the December 2014 data, and to reflect No Build (2023) conditions, a background growth rate of 0.5% was applied over nine years, and traffic from nearby development projects was added. Volume diagrams for the Existing (2014) Friday p.m. and Saturday afternoon peak hours are shown in Figure 2-2 and Figure 2-3. The No Build (2023) Friday p.m. and Saturday afternoon peak hour volumes are shown in Figure 2-4 and Figure 2-5. The Project-generated trips for the Friday p.m. peak hour are shown in Figure 2-6, and those for the Saturday afternoon peak hour are shown in Figure 2-7. The Friday p.m. "real" peak hour

project-generated trips are shown in Figure 2-8.[4] The Build (2023) Friday p.m. and Saturday afternoon peak hour volumes are shown in Figure 2-9 and Figure 2-10. The Build (2023) Friday p.m. "real" peak hour volumes are shown in Figure 2-11.

2.2.1.1 MITIGATION

The main and service entrances to the Project Site are located on Lower Broadway (Route 99). Therefore, the Proponent proposes significant improvements to Lower Broadway/Alford Street (Route 99) that, according to the evaluations in this SFEIR, will improve traffic conditions in this area. Lower Broadway/Alford Street (Route 99) will be reconstructed between Revere Beach Parkway (Route 16) and the Project main entrance using a "Complete Streets" design to provide a general four-lane cross-section (two travel lanes per direction) with additional turning lanes provided at major intersections, sidewalks along both sides, bicycle lanes, and enhanced and relocated MBTA bus stops pursuant to plans developed in consultation with the MBTA to improve overall access and spacing of stops and locate them on the far sides of intersections reflecting the MBTA's preference. The proposed design for Lower Broadway/Alford Street (Route 99) is shown in Figure 2-12A, Figure 2-12B, and Figure 2-12C.

The Proponent will also work with the MBTA to implement local bus priority on Broadway (Route 99). The proposed locations of MBTA bus stops along Broadway/Alford Street (Route 99) are shown in Figure 2-13A and Figure 2-13B. A landscaped median and street trees will be provided where sufficient right-of-way is afforded. Existing traffic signals along the corridor will be reconstructed to include ornamental (period) poles, mast arms, lighting and appurtenances, and will include pedestrian and bicycle accommodations.

In order to improve intersection operations, the signalized intersections along Lower Broadway/Alford Street (Route 99) will be coordinated and the offsets will be optimized. By extending the cycle lengths to 120 seconds and adjusting the phasing splits, the operations at Beacham Street/Broadway (Route 99) and Bowdoin Street/Broadway (Route 99) will be improved. The proposed traffic signal phasing and timing will incorporate pedestrian phasing to ensure that pedestrians can cross Broadway (Route 99) safely. The installation of left-turn lanes on Broadway (Route 99) at both Beacham Street and Bowdoin Street will also improve operations.

[4] The definition of the "real" peak hour can be found in Section 4.6.2 of the FEIR.

The Proponent will continue to collaborate with the cities of Everett and Boston, MassDOT, and the MBTA as the design of the Lower Broadway/Alford Street (Route 99) mitigation continues.

2.2.1.2 TRAFFIC ANALYSIS

The analyses described in Section 2.1.3 show that the proposed improvements described in Section 2.2.1.1 will effectively mitigate the impacts of Project traffic on Broadway/Alford Street (Route 99) as described in further detail below and previously shared with MassDOT and the MBTA during post-FEIR consultation. Capacity analysis summary tables ("CASTs") for all conditions during the Friday p.m., Saturday afternoon, and Friday p.m. "real" peak hours are provided in Table 2-14, Table 2-15, and Table 2-16, respectively. Synchro and VISSIM output can be found in Appendix B.

1. Project Main Entrance/Mystic Street/Broadway (Route 99)

The intersection of the Project's Main Entrance/Mystic Street/Broadway (Route 99) was analyzed only in the Build (2023) Condition and the Build (2023) Condition with mitigation because the intersection does not exist in either the Existing (2013) or No-Build (2023) Conditions. Because the Build (2023) Condition includes most of the improvements discussed in Section 2.2.1.1, the only difference between the Build (2023) and Build (2023) Condition with Mitigation at this intersection is traffic signal coordination.

The analysis shows that, in all three peak hours analyzed, this intersection in the Build (2023) Condition with Mitigation will operate at an overall LOS C or better, demonstrating that the improvements discussed in Section 2.2.1.1 effectively mitigate the Project's traffic at this intersection. Both the 50th and 95th percentile queues will be accommodated by the available queue storage.

7. Beacham Street/Broadway (Route 99)

The intersection of Beacham Street and Broadway was analyzed in the No-Build, Build (2023), and Build (2023) with Mitigation Conditions. That analysis shows that the intersection of Beacham Street/Broadway (Route 99) will operate at LOS F in the No Build Condition during the Friday p.m. peak hour and LOS D in the No Build Condition during the Saturday afternoon peak hour. As a result of the improvements discussed in Section 2.2.1.1, including the addition of left-turn lanes on Broadway (Route 99) northbound and southbound, the analysis shows that the intersection will operate at LOS D in the Build (2023) Condition with

Mitigation during the Friday p.m. peak hour, Friday p.m. "real" peak hour, and Saturday afternoon peak hour, demonstrating that the improvements discussed in Section 2.2.1.1 effectively mitigate the Project's traffic at this intersection.

8. Bowdoin Street/Broadway (Route 99)

The intersection of Bowdoin Street and Broadway (Route 99) was analyzed in the No Build (2023), Build (2023), and Build (2023) with Mitigation Conditions. That analysis shows that this intersection will operate at LOS B in the No Build Condition during the Friday p.m. and the Friday p.m. "real" peak hours, and LOS A during the Saturday afternoon peak hour. As a result of the improvements discussed in Section 2.2.1.1, including the addition of a left-turn lane on the Broadway (Route 99) northbound approach, the analysis shows that the intersection will operate at LOS A in the Friday p.m. peak hour, Friday p.m. "real" peak hour, and Saturday afternoon peak hour, an improvement over the No Build Condition, demonstrating that the improvements discussed in Section 2.2.1.1 effectively mitigate the Project's traffic at this intersection.

51. Dexter Street/Alford Street (Route 99)

The intersection of Dexter Street/Alford Street (Route 99) was analyzed in the No Build (2023), Build (2023), and Build (2023) with Mitigation Conditions. That analysis shows that this intersection operates at LOS B in the No Build Condition during the Friday p.m. peak hour and the Friday p.m. "real" peak hour and LOS A during the Saturday peak hour.

As a result of the improvements discussed in Section 2.2.1.1, the overall LOS at this intersection changes from LOS B in the No Build (2023) Condition to LOS C under the Build with Mitigation Condition during the Friday p.m. peak hour. The overall LOS at this intersection changes from LOS A in the No Build (2023) Condition to LOS B under the Build with Mitigation Condition during the Saturday afternoon peak hour. The intersection will continue to operate at LOS B during the Friday p.m. "real" peak hour in the Build with Mitigation Condition, as it does in the No Build (2023) Condition. The reason for these changes is a slight additional delay as a result of adjusting traffic signal timing at this intersection to accommodate pedestrian crossings in accordance with federal safety guidelines. The intersection is being widened slightly to provide an exclusive left-turn lane on the Alford Street (Route 99) northbound approach, which means that the pedestrian crossing time also needs to be longer. Even with the traffic signal timing adjustment

necessary to comply with federal safety guidelines for pedestrian crossing time, this intersection will still operate at a LOS significantly higher than LOS E, which is considered acceptable for urban intersections.

Table 2-14: Capacity Analysis Summary, Friday p.m. Peak Hour, Lower Broadway/Alford Street (Route 99), Everett/Boston

Intersection	Existing (2014) Conditions						No Build (2023) Conditions						Build (2023) Conditions						Build (2023) with Mitigation Conditions					
	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)
1. (U) Horizon Way/ Broadway (Route 99)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Horizon EB left /right	D	34.9	0.24	27	80	145	F	65.0	0.32	93	194	145	–	–	–	–	–	–	–	–	–	–	–	–
Broadway (Route 99) NB left/thru | thru	A	0.2	0.64	83	280	265	A	0.2	0.75	270	306	265	–	–	–	–	–	–	–	–	–	–	–	–
Broadway (Route 99) SB thru | thru/right	A	0.0	0.50	2	16	480	A	0.0	0.60	14	96	480	–	–	–	–	–	–	–	–	–	–	–	–
1. (S) Site Driveway/ Broadway (Route 99)	–	–	–	–	–	–	–	–	–	–	–	–	**C**	**31.4**	**0.84**				**C**	**24.3**	**0.84**			
Site Driveway EB left	–	–	–	–	–	–	–	–	–	–	–	–	F	11.08	0.90	244	355	120	D	52.6	0.52	84	134	120
Site Driveway EB left/thru	–	–	–	–	–	–	–	–	–	–	–	–	F	113.3	0.91	214	328	>800	D	52.6	0.53	60	119	>800
Site Driveway EB right | right	–	–	–	–	–	–	–	–	–	–	–	–	D	37.6	0.63	99	239	>800	D	35.9	0.60	155	241	>800
Broadway (Route 99) NB left | left	–	–	–	–	–	–	–	–	–	–	–	–	D	53.2	0.60	90	185	405	D	44.0	0.89	117	191	405
Broadway (Route 99) NB thru | thru/right	–	–	–	–	–	–	–	–	–	–	–	–	B	10.7	0.83	395	536	405	A	7.2	0.89	69	181	405
Broadway (Route 99) SB left	–	–	–	–	–	–	–	–	–	–	–	–	E	68.9	0.58	31	75	125	D	56.0	0.58	32	81	125
Broadway (Route 99) SB thru | thru	–	–	–	–	–	–	–	–	–	–	–	–	D	38.7	0.93	264	336	575	C	32.5	0.88	260	276	>800
Broadway (Route 99) SB right	–	–	–	–	–	–	–	–	–	–	–	–	B	20.0	0.35	93	180	400	B	15.7	0.33	258	274	400
7. (S) Beacham Street/Broadway (Route 99)	**F**	**105.4**	**1.01**				**F**	**284.6**	**1.34**				**F**	**359.0**	**1.53**				**D**	**47.5**	**1.04**			
McDonalds/Service Driveway EB left/thru	C	33.4	0.17	24	53	60	C	33.1	0.14	25	57	60	C	33.1	0.13	22	52	60	D	40.5	0.14	21	52	140
McDonalds/Service Driveway EB right	C	32.3	0.04	23	48	60	C	32.2	0.03	27	55	60	C	32.2	0.03	31	61	60	D	39.5	0.03	30	59	140
Beacham WB left/thru/right	F	184.3	1.26	225	383	290	F	196.2	1.29	245	404	290	F	224.3	1.36	483	876	290	F	260.0	1.42	689	905	290
Broadway (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	C	26.4	0.54	41	109	180
Broadway (Route 99) NB [left]/thru | thru/right	F	167.9	1.28	481	620	525	F	541.2	2.11	523	534	525	F	683.5	2.43	525	542	525	C	38.0	1.00	150	266	>800
Broadway (Route 99) SB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	D	43.3	0.40	64	161	120
Broadway (Route 99) SB [left]/thru	B	16.5	0.62	203	346	690	C	22.7	0.84	223	341	690	D	47.3	1.00	457	828	690	B	12.3	0.73	527	898	636
8. (S) Bowdoin Street/Broadway (Route 99)	**A**	**5.3**	**0.50**				**B**	**17.7**	**0.79**				**C**	**29.1**	**0.92**				**A**	**8.0**	**0.61**			
Bowdoin EB left/right	D	48.1	0.31	29	65	210	D	51.0	0.55	62	117	210	D	51.0	0.55	91	150	210	D	54.6	0.46	89	139	210
Broadway (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	9.1	0.54	40	92	125
Broadway (Route 99) NB [left]/thru | thru	A	4.5	0.54	22	68	665	C	25.8	0.85	66	146	665	D	48.2	1.01	75	182	636	A	5.4	0.66	171	288	636
Broadway (Route 99) SB thru | thru/right	A	4.5	0.44	66	176	260	A	5.8	0.53	97	219	260	A	6.9	0.63	151	279	260	A	7.8	0.63	159	293	260
51. (S) Dexter Street/Alford Street (Route 99)	**B**	**10.6**	**0.68**				**B**	**12.6**	**0.77**				**B**	**19.8**	**0.96**				**C**	**25.1**	**0.97**			
Driveway EB left/thru/right	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dexter WB left/thru/right	D	335.3	0.69	112	158	640	D	35.1	0.68	118	165	640	E	68.8	0.85	107	123	640	E	64.8	0.82	160	235	640
Alford (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alford (Route 99) NB [left]/thru | thru/right	A	9.0	0.67	254	611	650	B	11.5	0.79	737	872	650	C	21.2	0.94	748	921	650	C	24.3	0.96	749	768	650
Alford (Route 99) SB left/thru | thru/right	A	7.2	0.54	133	233	259	A	9.8	0.71	166	277	259	B	11.5	0.89	197	499	405	B	20.6	0.92	418	639	405

1. Queue shown is the longest reported average for the movement/approach. Queues derived from average of five SimTraffic simulations.

(S) signalized intersection (U) unsignalized intersection

* Indicates that lane was added as part of Build – Mitigated condition. [] indicates that lane/movement was removed as part of Build – Mitigated condition.

Table 2-15: Capacity Analysis Summary, Saturday Afternoon Peak Hour, Lower Broadway/Alford Street (Route 99), Everett/Boston

Intersection	Existing (2014) Conditions						No Build (2023) Conditions						Build (2023) Conditions						Build (2023) with Mitigation Conditions					
	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)
1. (U) Horizon Way/ Broadway (Route 99)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Horizon EB left /right	C	19.5	0.07	12	36	145	C	23.3	0.08	15	45	145	–	–	–	–	–	–	–	–	–	–	–	–
Broadway (Route 99) NB left/thru | thru	A	0.1	0.48	1	11	265	A	0.1	0.53	37	175	265	–	–	–	–	–	–	–	–	–	–	–	–
Broadway (Route 99) SB thru | thru/right	A	0.0	0.57	1	17	480	A	0.0	0.63	3	29	480	–	–	–	–	–	–	–	–	–	–	–	–
1. (S) Site Driveway/Broadway (Route 99)	–	–	–	–	–	–	–	–	–	–	–	–	**C**	**34.2**	**0.88**				**C**	**32.5**	**0.92**			
Site Driveway EB left	–	–	–	–	–	–	–	–	–	–	–	–	E	57.5	0.63	198	334	120	D	53.4	0.57	83	139	120
Site Driveway EB left/thru	–	–	–	–	–	–	–	–	–	–	–	–	E	57.7	0.64	173	304	>800	D	53.5	0.58	61	114	>800
Site Driveway EB right | right	–	–	–	–	–	–	–	–	–	–	–	–	D	35.6	0.66	169	270	>800	D	37.2	0.69	143	218	>800
Broadway (Route 99) NB left | left	–	–	–	–	–	–	–	–	–	–	–	–	E	65.1	0.92	239	453	405	E	71.0	0.99	216	339	405
Broadway (Route 99) NB thru | thru/right	–	–	–	–	–	–	–	–	–	–	–	–	A	9.7	0.63	422	551	405	A	7.1	0.62	73	197	405
Broadway (Route 99) SB left	–	–	–	–	–	–	–	–	–	–	–	–	E	60.9	0.51	32	73	125	E	66.1	0.54	25	71	125
Broadway (Route 99) SB thru | thru	–	–	–	–	–	–	–	–	–	–	–	–	D	42.3	0.95	270	289	575	D	39.7	1.01	262	299	>800
Broadway (Route 99) SB right	–	–	–	–	–	–	–	–	–	–	–	–	B	18.8	0.30	113	217	400	A	6.1	0.31	117	220	400
7. (S) Beacham Street/Broadway (Route 99)	**D**	**52.3**	**0.89**				**E**	**76.6**	**1.06**				**F**	**213.4**	**1.38**				**D**	**42.5**	**0.95**			
McDonalds/Service Driveway EB left/thru	C	33.0	0.12	21	51	60	C	24.5	0.09	23	52	60	C	24.7	0.13	23	53	60	D	40.6	0.15	27	55	140
McDonalds/Service Driveway EB right	C	32.3	0.04	26	50	60	C	24.1	0.04	21	57	60	C	24.1	0.04	32	62	60	D	39.5	0.04	35	60	140
Beacham WB left/thru/right	F	146.5	1.16	214	342	290	F	81.4	1.00	155	248	290	F	105.9	1.08	199	376	290	F	229.2	1.35	529	822	290
Broadway (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	D	54.9	0.64	53	148	180
Broadway (Route 99) NB [left]/thru | thru/right	E	71.5	1.04	306	509	525	F	128.1	1.21	379	627	525	F	351.7	1.71	527	544	525	C	32.1	0.88	212	386	>800
Broadway (Route 99) SB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	C	32.4	0.14	34	112	120
Broadway (Route 99) SB [left]/thru	B	14.8	0.59	180	297	690	C	33.5	0.96	207	342	690	F	126.1	1.22	540	894	690	B	15.3	0.82	537	930	636
8. (S) Bowdoin Street/Broadway (Route 99)	**A**	**4.6**	**0.42**				**A**	**8.3**	**0.62**				**A**	**9.9**	**0.74**				**A**	**7.7**	**0.63**			
Bowdoin EB left/right	D	45.3	0.21	31	69	210	C	30.4	0.39	51	90	210	D	38.7	0.46	59	109	210	D	54.9	0.48	88	145	210
Broadway (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	B	14.3	0.55	39	86	125
Broadway (Route 99) NB [left]/thru | thru	A	2.1	0.45	25	86	665	A	8.1	0.69	122	260	665	B	10.8	0.81	132	289	636	A	2.7	0.53	26	106	636
Broadway (Route 99) SB thru | thru/right	A	5.3	0.47	73	204	260	A	6.7	0.59	121	228	260	A	7.2	0.67	174	289	260	A	8.5	0.68	178	297	260
51. (S) Dexter Street/Alford Street (Route 99)	**A**	**6.9**	**0.54**				**A**	**7.6**	**0.67**				**B**	**10.4**	**0.87**				**B**	**12.5**	**0.91**			
Driveway EB left/thru/right	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dexter WB left/thru/right	C	33.4	0.51	90	138	640	C	28.8	0.50	88	142	640	E	54.8	0.61	92	139	640	D	54.6	0.61	92	132	640
Alford (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alford (Route 99) NB [left]/thru | thru/right	A	5.0	0.48	77	134	>800	A	5.4	0.56	109	224	>800	A	5.0	0.51	725	980	650	A	7.9	0.72	747	926	650
Alford (Route 99) SB left/thru | thru/right	A	5.5	0.54	108	198	259	A	7.3	0.71	151	231	259	B	11.5	0.87	270	457	405	B	13.2	0.91	346	603	405

1. Queue shown is the longest reported average for the movement/approach. Queues derived from average of five SimTraffic simulations.

(S) signalized intersection (U) unsignalized intersection

* Indicates that lane was added as part of Build – Mitigated condition. [] indicates that lane/movement was removed as part of Build – Mitigated condition.

Table 2-16: Capacity Analysis Summary, Friday p.m. "Real" Peak Hour, Lower Broadway/Alford Street (Route 99), Everett/Boston

Intersection	Existing (2014) Conditions						No Build (2023) Conditions						Build (2023) Conditions						Build (2023) with Mitigation Conditions					
	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)
1. (U) Horizon Way/ Broadway (Route 99)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Horizon EB left /right	D	34.9	0.24	27	80	145	F	65.0	0.32	93	194	145	–	–	–	–	–	–	–	–	–	–	–	–
Broadway (Route 99) NB left/thru | thru	A	0.2	0.64	83	280	265	A	0.2	0.75	270	306	265	–	–	–	–	–	–	–	–	–	–	–	–
Broadway (Route 99) SB thru | thru/right	A	0.0	0.50	2	16	480	A	0.0	0.60	14	96	480	–	–	–	–	–	–	–	–	–	–	–	–
1. (S) Site Driveway/Broadway (Route 99)	–	–	–	–	–	–	–	–	–	–	–	–	**B**	**19.7**	**0.78**				**B**	**19.8**	**0.80**			
Site Driveway EB left	–	–	–	–	–	–	–	–	–	–	–	–	E	59.1	0.54	235	358	120	D	53.5	0.41	53	93	120
Site Driveway EB left/thru	–	–	–	–	–	–	–	–	–	–	–	–	E	59.1	0.54	201	324	>800	D	53.5	0.41	29	76	>800
Site Driveway EB right | right	–	–	–	–	–	–	–	–	–	–	–	–	D	47.0	0.60	106	220	>800	D	34.4	0.38	70	133	>800
Broadway (Route 99) NB left | left	–	–	–	–	–	–	–	–	–	–	–	–	E	66.8	0.70	109	212	405	C	34.4	0.51	69	120	405
Broadway (Route 99) NB thru | thru/right	–	–	–	–	–	–	–	–	–	–	–	–	A	6.8	0.83	385	565	405	A	6.5	0.86	66	184	405
Broadway (Route 99) SB left	–	–	–	–	–	–	–	–	–	–	–	–	E	68.9	0.58	26	67	125	D	53.6	0.53	27	71	125
Broadway (Route 99) SB thru | thru	–	–	–	–	–	–	–	–	–	–	–	–	B	19.1	0.74	266	321	575	C	28.3	0.83	250	319	>800
Broadway (Route 99) SB right	–	–	–	–	–	–	–	–	–	–	–	–	A	9.9	0.10	89	172	400	B	11.3	0.18	57	119	400
7. (S) Beacham Street/Broadway (Route 99)	**F**	**105.4**	**1.01**				**F**	**284.6**	**1.34**				**F**	**325.5**	**1.45**				**D**	**41.9**	**0.99**			
McDonalds/Service Driveway EB left/thru	C	33.4	0.17	24	53	60	C	33.1	0.14	25	57	60	C	33.1	0.03	22	54	60	D	40.5	0.14	23	54	140
McDonalds/Service Driveway EB right	C	32.3	0.04	23	48	60	C	32.2	0.03	27	55	60	C	32.2	0.01	33	62	60	D	39.5	0.03	28	54	140
Beacham WB left/thru/right	F	184.3	1.26	225	383	290	F	196.2	1.29	245	404	290	F	213.5	1.33	496	873	290	F	249.9	1.40	533	858	290
Broadway (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	B	19.5	0.42	34	104	180
Broadway (Route 99) NB [left]/thru | thru/right	F	167.9	1.28	481	620	525	F	541.2	2.11	523	534	525	F	623.1	2.29	524	539	525	C	29.2	0.95	146	145	>800
Broadway (Route 99) SB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	C	35.7	0.40	61	146	120
Broadway (Route 99) SB [left]/thru	B	16.5	0.62	203	346	690	C	22.7	0.84	223	341	690	C	32.2	0.93	478	846	690	A	9.0	0.68	322	723	636
8. (S) Bowdoin Street/Broadway (Route 99)	**A**	**5.3**	**0.50**				**B**	**17.7**	**0.79**				**C**	**22.2**	**0.86**				**A**	**8.1**	**0.58**			
Bowdoin EB left/right	D	48.1	0.31	29	65	210	D	51.0	0.55	62	117	210	D	51.0	0.55	80	135	210	D	54.6	0.46	59	114	210
Broadway (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	8.8	0.46	35	73	125
Broadway (Route 99) NB [left]/thru | thru	A	4.5	0.54	22	68	665	C	25.8	0.85	66	146	665	C	34.6	0.94	81	192	636	A	6.1	0.63	22	71	636
Broadway (Route 99) SB thru | thru/right	A	4.5	0.44	66	176	260	A	5.8	0.53	97	219	260	A	6.4	0.59	149	281	260	A	7.2	0.59	135	257	260
51. (S) Dexter Street/Alford Street (Route 99)	**B**	**10.6**	**0.68**				**B**	**12.6**	**0.77**				**B**	**17.0**	**0.90**				**B**	**17.6**	**0.90**			
Driveway EB left/thru/right	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dexter WB left/thru/right	D	335.3	0.69	112	158	640	D	35.1	0.68	118	165	640	E	58.0	0.77	107	124	640	E	64.8	0.82	169	240	640
Alford (Route 99) NB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alford (Route 99) NB [left]/thru | thru/right	A	9.0	0.67	254	611	>800	B	11.5	0.79	737	872	>800	B	17.5	0.88	749	944	>800	B	15.8	0.87	749	985	>800
Alford (Route 99) SB left/thru | thru/right	A	7.2	0.54	133	233	259	A	9.8	0.71	166	277	259	B	10.2	0.80	209	520	405	B	12.4	0.79	327	617	405

1. Queue shown is the longest reported average for the movement/approach. Queues derived from average of five SimTraffic simulations.

(S) signalized intersection (U) unsignalized intersection

* Indicates that lane was added as part of Build – Mitigated condition. [] indicates that lane/movement was removed as part of Build – Mitigated condition.

2.2.7 SULLIVAN SQUARE AND RUTHERFORD AVENUE, BOSTON

The poor operation of Sullivan Square under existing conditions has been a matter of significant concern for MassDOT, the City of Boston, and neighboring communities for many years. At the intersection of Maffa Way, Cambridge Street, and Alford Street, during certain time periods, the Cambridge Street eastbound approach to Sullivan Square experiences significant queues that spill back and block the I-93 Northbound off-ramp.

The Proponent has collaborated with MassDOT, the MBTA, and the BTD on immediate improvements to Sullivan Square that would effectively mitigate the Project's traffic impacts in a way that is compatible with the City of Boston's longer term plans to improve this intersection. Pursuant to the terms of its Gaming License, the Proponent has agreed to make a payment equal to $25 million toward implementing a long-term solution for Sullivan Square and Rutherford Avenue.

In the course of its extensive post-FEIR collaboration with MassDOT, the MBTA and the BTD, the Proponent has explored every interim improvement suggested by MassDOT, the MBTA, and the City of Boston, and has worked tirelessly to reconcile differences between those stakeholders' suggestions.

The result of this collaboration is a plan that the analyses described in Section 2.1.3 confirm will effectively mitigate the Project's traffic impacts in the Sullivan Square area.

As described in Section 2.2.1, at the request of BTD and MassDOT, turning movements at the intersections at each of the Study Area intersections at Sullivan Square and along Rutherford Avenue, including Cambridge Street at the I-93 off-ramp, were recounted on Friday, December 5, and Saturday, December 6, 2014. Volumes in the underpasses under Austin Street and Sullivan Square were verified with Automatic Traffic Recorders (ATRs). Origin-destination data in Sullivan Square was re-collected at the same time. The more recently collected data was seasonally adjusted and used in lieu of data collected in May and June 2013, which was used in the analyses contained in the FEIR. In addition, as discussed in Section 2.2, the intersection of Cambridge Street at Spice Street and Beacham Street (MBTA Driveway) was included in the more recent data collection effort and added to the Study Area as intersection #58.

Volume diagrams for Sullivan Square in the Existing (2014) Friday p.m. and Saturday afternoon peak hours are shown in Figure 2-68 and Figure 2-69. The No Build (2023) Friday p.m. and Saturday afternoon peak hour volumes at Sullivan Square are shown in Figure 2-70 and Figure 2-71. The Project-generated trips for the Friday p.m. peak hour are shown in Figure 2-72, and for the Saturday afternoon peak hour are in Figure 2-73. The Friday p.m. "real" peak hour project-generated

trips are shown in Figure 2-74. The Build (2023) Friday p.m. and Saturday afternoon peak hour volumes, which add the updated Project-generated trips to the No Build volumes, are shown in Figure 2-75 and Figure 2-76. The Build (2023) Friday p.m. "real" peak hour volumes are shown in Figure 2-77. Traffic volumes in the Build (2023) Condition with Mitigation for the Friday p.m. peak hour, Saturday afternoon peak hour, and Friday "real" peak hour are shown in Figure 2-78, Figure 2-79 and Figure 2-80.

Volume diagrams for the intersections on Rutherford Avenue under the Existing (2014) Friday p.m. and Saturday afternoon peak hours are shown in Figure 2-81 and Figure 2-82. The No Build (2023) Friday p.m. and Saturday afternoon peak hour volumes at are shown in Figure 2-83 and Figure 2-84. The Project-generated trips for the Friday p.m. peak hour are shown in Figure 2-85, and for the Saturday afternoon peak hour are in Figure 2-86. The Friday p.m. "real" peak hour Project-generated trips are shown in Figure 2-87. The Build (2023) Friday p.m. and Saturday afternoon peak hour volumes, which add the updated Project-generated trips to the No Build volumes, are shown in Figure 2-88 and Figure 2-89. The Build (2023) Friday p.m. "real" peak hour volumes are shown in Figure 2-90.

2.2.7.1 MITIGATION

To address both current and projected future operational deficiencies at the Sullivan Square/Rutherford Avenue area, the Proponent has collaborated with MassDOT, the MBTA, and the BTD on a plan to improve the Sullivan Square/Rutherford Avenue area, effectively mitigating the Project's traffic in this area. Those improvements include reconstructing Cambridge Street between its intersection with the I-93 northbound off-ramp and its intersection with Sullivan Square and Maffa Way, upgrading the traffic signal equipment at the intersections of the I-93 northbound off-ramp (Ramp C-L) and Maffa Way, and installing new traffic signals at the intersection of Spice Street, the Beacham Street Extension and Cambridge Street, and also at the intersection of Maffa Way and the Beacham Street Extension. The signals will be coordinated and timed to improve traffic flow and include accessible countdown pedestrian walk signals.

In response to a request by the City of Boston, the improvements also include improvements to Spice Street and D Street to re-route traffic from Cambridge Street and from Maffa Way that is ultimately destined for Rutherford Avenue southbound to relieve congestion at the Maffa Way/Cambridge Street/Alford Street/rotary. This is subject to the agreement of Massport, which is believed to own part of D Street.

As a result of the extensive consultation with the MBTA and BTD, the Proponent will implement additional improvements to the MBTA Busway between Cambridge Street and Maffa Way, a reconfiguration of the parking field in front of the MBTA Sullivan Square bus station, and additional improvements in how the MBTA's buses enter and exit the bus station. The plan includes a new signalized busway exit opposite the I-93 northbound off-ramp on Cambridge Street for right-turning buses. In order to accommodate the need for MBTA bus layover, which currently occurs on the MBTA Busway that will become Beacham Street Extension, the Proponent will reconstruct the lower busway and the parking field, creating a new circulation pattern for the bus station. All buses will enter the upper busway from Maffa Way. A new signalized entrance will be constructed, allowing buses to circulate into the station from Beacham Street Extension and Main Street. Buses will circulate from the upper busway to the lower busway, exiting the station onto Maffa Way via the new signalized busway exit, with the exception of those buses with destinations via Cambridge Street westbound toward Somerville.

As a result of these improvements, vehicles that currently turn right onto Cambridge Street from Maffa Way will now utilize the proposed Beacham Street Extension as will vehicles originating from Cambridge Street and destined for Main Street west of Sullivan Square. Vehicles leaving the parking area at Sullivan Square Station destined for Main Street westbound or Cambridge Street southbound will also use the Beacham Street Extension. These new movements on the Beacham Street Extension will alleviate some congestion at the Maffa Way/Cambridge Street intersection and the rotary.

The Proponent will also reconstruct the sidewalks along the west side of Sullivan Square to improve the pedestrian connection between the MBTA's Sullivan Square Station and the Project. Bicycle lanes along Cambridge Street will be incorporated into the Sullivan Square improvements and tie into the existing bicycle facilities in the rotary. The Proponent will also reconstruct the sidewalks on the east side of the rotary from Maffa Way to Main Street, including lighting and landscaping. All pedestrian improvements will be ADA-compliant. The Proponent will also provide landscape amenities in the center of the rotary, taking care to ensure that sight lines remain clear for motorists.

At the intersection of Rutherford Avenue and the Route 1 Ramps, the Proponent proposes to modify the signal timing during the Friday p.m. peak hour only. An overview of the proposed improvements is shown in

Figure 2-91A. Figures 2-91B, 2-91C, 2-91D, and 2-91E show the proposed improvements at 80-scale.

All of these improvements have been determined to be consistent with the City of Boston's long-term plan to improve Sullivan Square.

The Proponent will continue to collaborate with MassDOT, the MBTA, and BTD in the refinement of these proposed improvements as their design continues.

The City of Boston asked the Proponent to evaluate making Beacham Street a two-way street between Main Street and Arlington Street. Those evaluations revealed that this would have a negligible positive impact on the Sullivan Square/Rutherford Avenue area. In fact it was determined that this modification could, in fact, have negative consequences by inducing cut through traffic from Alford Street.

2.2.7.2 TRAFFIC ANALYSIS

The analyses described in Section 2.1.3, already reviewed by MassDOT and the BTD, show that the proposed improvements described in Section 2.2.7.1 will effectively mitigate the impacts of Project traffic on the Sullivan Square/Rutherford Avenue area.

The updated analysis is based on data collected in December 2014 at BTD's request.[5]

The proposed improvements will have a measurable positive effect on the operations of the Sullivan Square/Rutherford Avenue area.

The LOS at all signalized intersections will improve from at worst LOS F in the No Build Condition to no worse than LOS E in the Build with Mitigation Condition for all time periods.

The overall LOS of the Cambridge Street/I-93 northbound off-ramp will operate in the Build with Mitigation Condition at LOS C for all time periods, unchanged from the LOS for the No Build Condition.

The overall LOS of the main intersection of Sullivan Square, the intersection of Maffa Way, Cambridge Street, and Alford Street, will, in the Build with Mitigation Condition, improve to LOS E during the Friday

[5] The analysis in the FEIR was based on estimated volumes in the City of Boston's Rutherford Avenue corridor study. However, those estimates assumed the complete implementation of the City of Boston's preferred long-term plan for Sullivan Square and Rutherford Avenue.

p.m. peak hour and LOS D during the Friday p.m. "real" peak hour, compared to LOS F under the No Build Condition. It will continue to operate at LOS D during the Saturday afternoon peak hour in the Build with Mitigation Condition, unchanged from the No Build Condition.

The newly signalized intersections of Cambridge Street, Spice Street, and Beacham Street Extension; Maffa Way and Beacham Street Extension; Main Street and Beacham Street; and Maffa Way and the MBTA bus only Entrance will all operate at LOS D or better in all three peak hours. These intersections are not signalized in the No Build Condition, therefore, there is no overall LOS to which to compare the Build with Mitigation.

The intersection of Rutherford Avenue and the Route 1 Ramps will operate at LOS E during the Friday p.m. peak hour and LOS D during the Friday p.m. "real" peak hour in the Build with Mitigation Condition which compares favorably with LOS E during both those peaks under the No Build Condition.

The CASTs for the Friday p.m. peak hour, Saturday afternoon peak hour, and Friday p.m. "real" peak hour are shown in Table 2-41, Table 2-42, and Table 2-43. Synchro and VISSIM output can be found in Appendix B.

Table 2-43: Capacity Analysis Summary, Friday p.m. "Real" Peak Hour, Sullivan Square, Boston

Intersection	Existing (2013) Conditions						No Build (2023) Conditions						Build (2023) Conditions						Build (2023) with Mitigation Conditions					
	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)
52. (S) Cambridge Street/I-93 NB off-ramp	**B**	**18.3**	**0.51**	–	–	–	**C**	**20.7**	**0.55**	–	–	–	**D**	**35.0**	**0.67**	–	–	–	**C**	**25.9**	**0.65**	–	–	–
Cambridge EB thru | thru	A	9.5	0.38	134	212	590	B	11.3	0.38	156	251	590	B	13.8	0.41	193	313	590	B	19.5	0.49	71	159	590
Cambridge WB thru | thru	A	8.9	0.31	91	169	475	B	10.9	0.35	105	192	475	B	13.3	0.38	115	207	475	A	7.7	0.44	77	139	475
I-93 NB off-ramp NB left	C	32.7	0.68	150	247	>800	C	30.3	0.64	177	360	>800	C	27.6	0.57	487	618	>800	-	-	-	-	-	-
I-93 NB off-ramp NB left/right*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	41.6	0.85	340	497	>800
I-93 NB off-ramp NB right	D	41.9	0.81	164	290	>800	D	40.7	0.87	247	459	>800	F	96.6	1.08	511	538	>800	D	49.3	0.89	242	394	>800
Sullivan Square Station driveway SB right	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	48.7	0.01	16	57	
53. (S) Main Street/Maffa Way/Cambridge Street/Alford Street (Sullivan Square)	**D**	**41.6**	**0.89**	–	–	–	**F**	**84.8**	**1.07**	–	–	–	**F**	**115.1**	**1.16**	–	–	–	**D**	**48.6**	**1.05**	–	–	–
Maffa EB thru | thru | thru	D	45.4	0.88	350	472	>800	D	46.5	0.90	380	496	>800	D	47.8	0.91	406	505	>800	-	-	-	-	-	-
Maffa EB thru | thru | thru/right*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E	59.8	1.03	255	316	>800
Maffa EB [right]	C	30.1	0.18	44	80	195	C	30.1	0.18	54	128	195	C	30.0	0.19	47	97	195	–	–	–	–	–	–
Cambridge NB right | right	D	50.0	0.95	214	260	485	F	160.9	1.26	232	249	485	F	231.2	1.42	234	251	485	D	38.7	0.96	196	274	485
Alford SB left | left	D	54.5	0.64	111	185	330	E	75.3	0.91	202	302	330	E	75.8	0.91	201	284	330	E	64.7	0.90	163	232	330
Alford SB thru | thru	B	12.0	0.27	99	168	330	B	12.3	0.29	125	204	330	B	12.4	0.30	142	213	330	C	32.0	0.62	119	178	330
58. (U/S*) Cambridge Street/Spice Street	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**B**	**17.9**	**0.57**	–	–	–
Cambridge EB left*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	8.5	0.57	106	194	175
Cambridge EB [left]/thru | thru/right	A	0.8	0.34	66	160	175	A	0.8	0.36	183	270	175	A	0.8	0.42	217	258	175	A	2.2	0.44	91	193	175
Cambridge WB left/thru | thru/right	A	1.0	0.21	12	54	210	A	1.1	0.23	184	264	210	A	1.3	0.23	23	103	210	B	14.1	0.48	97	175	210
Spice NB left/thru/right	C	15.4	0.26	45	85	465	C	18.9	0.54	291	302	465	C	24.2	0.62	286	298	465	D	45.8	0.60	94	179	465
Beacham Extension SB left/thru/right	B	13.4	0.02	1	8	100	C	20.0	0.02	2	9	100	C	23.3	0.02	1	9	100	F	85.2	0.18	42	87	330
59. (S*) Maffa Way/Beacham Street Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**A**	**9.9**	**0.59**	-	-	-
Maffa EB left/thru | thru| thru/right	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	21.8	0.64	114	208	300
Beacham Extension NB thru/right	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	7.7	0.57	160	252	115
60. (S*) Main Street/Beacham Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**C**	**23.2**	**0.76**	-	-	-
Main WB thru | thru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	26.7	0.98	215	265	>800
Beacham Extension NB left	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	2.1	0.29	43	77	115
Beacham Extension NB left/thru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	2.1	0.29	43	79	115
61. (S*) Maffa Way/MBTA Bus Only Entrance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**A**	**3.9**	**0.47**	-	-	-
Maffa EB thru | thru| thru/right	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	2.6	0.45	62	159	>800
Bus Only SB thru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E	68.7	0.84	55	116	115

1. Queue shown is the longest reported average for the movement/approach. Queues derived from average of five SimTraffic simulations.
(S) signalized intersection (U) unsignalized intersection
* Indicates that lane/signal was added as part of Build – Mitigated condition. [] indicates that lane/movement was removed as part of Build – Mitigated condition.

Table 2-45: Capacity Analysis Summary, Saturday Afternoon. Peak Hour, Rutherford Avenue, Boston

Intersection	Existing (2013) Conditions						No Build (2023) Conditions						Build (2023) Conditions						Build (2023) with Mitigation Conditions					
	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)	LOS	Delay (s)	V/C	50% Queue Length[1] (ft)	95% Queue Length[1] (ft)	Storage Area (ft)
54. (S) Austin Street/New Rutherford Avenue (Route 99)	**D**	**49.5**	**0.63**	–	–	–	**D**	**51.1**	**0.68**	–	–	–	**D**	**51.1**	**0.68**	–	–	–						
Gilmore Bridge EB left/thru | thru	C	33.3	0.48	399	563	>800	D	37.2	0.57	511	652	>800	D	37.2	0.57	441	594	>800						
Gilmore Bridge EB right	C	33.2	0.42	29	160	200	D	37.8	0.53	65	245	200	D	37.8	0.53	58	232	200						
Austin WB left/thru | thru/right	E	69.3	0.69	171	250	>800	E	70.4	0.71	168	243	>800	E	70.4	0.71	181	276	>800						
New Rutherford NB left	E	77.4	0.77	128	218	775	E	78.1	0.79	147	252	775	E	78.1	0.79	144	245	775						
New Rutherford NB thru/right	E	62.6	0.53	101	185	475	E	62.7	0.54	100	187	475	E	62.7	0.54	102	217	475						
New Rutherford SB left/thru	D	51.6	0.34	422	851	800	D	49.8	0.33	587	804	800	D	49.8	0.33	605	750	800						
New Rutherford SB right | right	E	65.6	0.81	597	716	100	E	64.2	0.82	628	652	100	E	64.2	0.82	630	640	100						
55. (S) New Rutherford Avenue (Route 99)/Route 1 Ramps	**C**	**25.6**	**0.58**	–	–	–	**C**	**25.4**	**0.61**	–	–	–	**C**	**25.1**	**0.66**	–	–	–						
New Rutherford EB thru | thru | thru | thru	B	19.7	0.47	233	406	>800	C	20.1	0.51	282	498	>800	C	21.8	0.61	455	640	>800						
New Rutherford EB right	B	19.2	0.37	111	268	150	B	19.9	0.42	149	285	150	C	20.8	0.47	185	268	150						
New Rutherford WB left	E	72.1	0.79	247	369	400	E	73.3	0.80	264	401	400	E	73.0	0.80	302	477	400						
New Rutherford WB thru | thru | thru	A	5.9	0.14	41	79	>800	A	5.1	0.15	46	139	>800	D	4.7	0.20	69	311	>800						
Route 1 ramp NB left | left	D	53.6	0.60	127	185	>800	D	53.1	0.60	138	207	>800	D	53.1	0.60	135	209	>800						
Route 1 ramp NB right | right	C	21.8	0.16	12	64	100	C	22.2	0.17	16	77	100	C	22.2	0.18	2	22	100						
56. (S) New Rutherford Avenue (Route 99)/Chelsea Street (City Square)	**D**	**48.0**	**0.58**	–	–	–	**D**	**45.6**	**0.65**	–	–	–	**D**	**46.7**	**0.78**	–	–	–						
New Rutherford EB left	E	60.2	0.74	133	228	200	E	61.1	0.75	147	241	200	E	59.2	0.75	145	243	200						
New Rutherford EB thru | thru | thru	B	19.5	0.36	107	184	800	C	22.1	0.39	121	224	800	C	25.6	0.46	151	353	800						
New Rutherford EB right	F	122.8	0.41	296	486	800	F	101.2	0.53	362	577	800	F	98.6	0.78	534	699	800						
New Rutherford WB thru | thru | thru	C	20.3	0.28	177	289	>800	C	22.2	0.33	216	328	>800	C	23.1	0.39	262	419	>800						
New Rutherford WB right	B	19.9	0.19	11	77	250	C	21.3	0.20	12	84	250	C	21.3	0.20	15	91	250						
Chelsea SB left	D	53.3	0.79	197	274	200	D	52.6	0.79	216	282	200	D	52.6	0.79	223	284	200						
Chelsea SB thru	D	43.8	0.66	220	391	475	D	42.9	0.66	255	454	475	D	42.9	0.66	315	550	475						
Chelsea SB right	C	34.6	0.08	71	131	475	C	33.7	0.08	80	161	475	C	33.7	0.08	84	142	475						

No Mitigation Required

No Mitigation Required

No Mitigation Required

1. Queue shown is the longest reported average for the movement/approach. Queues derived from average of five SimTraffic simulations.
(S) signalized intersection (U) unsignalized intersection
* Indicates that lane/signal was added as part of Build – Mitigated condition. [] indicates that lane/movement was removed as part of Build – Mitigated condition.

Table 2-68: No Build (2023) Conditions Ridership and Capacity Summary, Non-core Area, Weekday

Time	Non-core Policy Capacity	Headway (min)	Ridership between North Station- Community College			
			NB	NB % of Capacity	SB	SB % of Capacity
5-6 a.m.	2,088	10	341	16.4%	1,070	51.2%
6-7 a.m.	4,536	7.5	1,208	26.6%	2,784	61.4%
7-8 a.m.	9,432	5	1,874	19.9%	5,835	61.9%
8-9 a.m.	9,432	5	1,978	21.0%	7,667	81.3%
9-10 a.m.	2,610	8	1,381	52.9%	4,150	159.0%
10-11 a.m.	2,610	8	1,140	43.7%	2,334	89.4%
11 a.m. – 12 p.m.	2,610	8	1,254	48.0%	2,009	77.0%
12-1 p.m.	2,610	8	1,431	54.8%	1,923	73.7%
1-2 p.m.	4,253	8	1,825	42.9%	1,838	42.9%
2-3 p.m.	5,895	8	2,308	39.2%	2,005	34.0%
3-4 p.m.	7,255	6.5	3,369	46.4%	2,121	29.2%
4-5 p.m.	9,432	5	5,313	56.3%	2,205	23.4%
5-6 p.m.	9,432	5	6,778	71.9%	2,563	27.2%
6-7 p.m.	4,536	7.5	4,158	91.7%	1,331	29.3%
7-8 p.m.	2,088	10	2,563	122.7%	889	42.6%
8-9 p.m.	2,088	10	2,160	103.4%	908	43.5%
9-10 p.m.	2,088	10	1,571	75.2%	605	29.0%
10-11 p.m.	2,088	10	1,399	67.0%	447	21.4%
11 p.m. – 12 a.m.	2,088	10	958	45.9%	204	9.8%
12-1 a.m.	2,088	10	291	13.9%	76	3.6%

Table 2-69: No Build (2023) Conditions Ridership and Capacity Summary, Core Area, Saturday

Time	Core Policy Capacity	Headway (min)	Ridership between Downtown Crossing - State			
			NB	NB % of Capacity	SB	SB % of Capacity
5-6 a.m.	2,916	10	517	17.7%	432	14.8%
6-7 a.m.	2,916	10	404	13.9%	874	30.0%
7-8 a.m.	2,916	10	723	24.8%	1,330	45.6%
8-9 a.m.	2,916	10	1,195	41.0%	1,418	48.6%
9-10 a.m.	2,916	10	1,103	37.8%	1,703	58.4%
10-11 a.m.	2,916	10	1,370	47.0%	1,668	57.2%
11 a.m. – 12 p.m.	2,916	10	1,748	60.0%	1,801	61.8%
12-1 p.m.	2,916	10	1,806	61.9%	1,926	66.0%
1-2 p.m.	2,916	10	1,852	63.5%	1,808	62.0%
2-3 p.m.	2,916	10	1,949	66.8%	1,825	62.6%
3-4 p.m.	3,240	9	2,145	66.2%	2,029	62.6%
4-5 p.m.	3,645	8	2,264	62.1%	1,997	54.8%
5-6 p.m.	3,645	8	2,111	57.9%	2,148	58.9%
6-7 p.m.	3,240	9	1,746	53.9%	1,568	48.4%
7-8 p.m.	2,916	10	1,479	50.7%	1,324	45.4%
8-9 p.m.	2,916	10	1,457	50.0%	1,094	37.5%
9-10 p.m.	2,916	10	1,323	45.4%	1,004	34.4%
10-11 p.m.	2,916	10	1,551	53.2%	948	32.4%
11 p.m. – 12 a.m.	2,916	10	1,287	44.2%	744	25.5%
12-1 a.m.	2,916	10	594	20.4%	319	10.9%

Table 2-70: No Build (2023) Conditions Ridership and Capacity Summary, Non-core Area, Saturday

Time	Non-core Policy Capacity	Headway (min)	Ridership between North Station – Community College			
			NB	NB % of Capacity	SB	SB % of Capacity
5-6 a.m.	2,088	10	162	7.7%	282	13.5%
6-7 a.m.	2,088	10	273	11.8%	686	29.6%
7-8 a.m.	2,088	10	454	17.4%	1,004	38.5%
8-9 a.m.	2,088	10	974	37.3%	1,159	44.4%
9-10 a.m.	2,088	10	587	22.5%	1,744	66.8%
10-11 a.m.	2,088	10	733	28.1%	1,539	58.9%
11 a.m. – 12 p.m.	2,088	10	894	34.2%	1,929	73.9%
12-1 p.m.	2,088	10	865	37.0%	1,961	75.1%
1-2 p.m.	2,088	10	947	36.3%	1,636	62.7%
2-3 p.m.	2,088	10	1,186	45.4%	1,580	60.5%
3-4 p.m.	2,320	9	1,491	57.1%	1,579	60.5%
4-5 p.m.	2,610	8	1,724	66.0%	1,457	55.8%
5-6 p.m.	2,610	8	1,862	71.3%	1,214	46.5%
6-7 p.m.	2,320	9	1,619	69.8%	952	41.0%
7-8 p.m.	2,088	10	1,427	68.3%	876	41.9%
8-9 p.m.	2,088	10	1,252	60.0%	671	32.1%
9-10 p.m.	2,088	10	1,252	60.0%	536	25.6%
10-11 p.m.	2,088	10	1,349	64.6%	553	26.5%
11 p.m. – 12 a.m.	2,088	10	1,240	59.4%	353	16.9%
12-1 a.m.	2,088	10	601	28.8%	145	6.9%

2.4.2.4 BUILD CONDITIONS

Similar to the Existing and No Build Conditions, a full day of ridership data (weekday and Saturday) was analyzed for the peak core area loadpoint between Downtown Crossing and State stations and the peak northerly non-core area loadpoint between North Station and Community College for the Build (2023) Condition. To estimate Build ridership, expected Project patron and employee trips were added to No-Build ridership.

As shown in Figure 2-101 and Figure 2-102, the Project trips do not cause the Orange Line to exceed capacity within the core area at any point throughout a typical weekday or Saturday. Outside the core area, weekday Project trips do not cause any additional periods to exceed capacity, as shown in Figure 2-103 and Figure 2-104. As in the No Build (2023) Condition, on a typical weekday, ridership exceeds capacity during the 9:00 a.m. to 10:00 a.m. period in the southbound direction in the core area, and exceeds capacity during the 9:00 a.m. to 10:00 a.m. period (southbound), the 7:00 p.m. to 8:00 p.m. period (northbound), and the 8:00 p.m. to 9:00 p.m. period (northbound) in the non-core area. On a typical Saturday, additional Project trips cause the Orange Line to exceed capacity in the southbound direction during the 12:00 p.m. to 1:00 p.m. period; however, capacity is exceeded by just five passengers over the course of an hour, which equates to less than one passenger per train. Build (2023) Condition ridership and capacity are shown in Tables 2-71, 2-72, 2-73, and 2-74.

Table 2-71: Build (2023) Conditions Ridership and Capacity Summary, Core Area, Weekday

Time	Core Policy Capacity	Headway (min)	Ridership between Downtown Crossing - State			
			NB	NB % of Capacity	SB	SB % of Capacity
5-6 a.m.	2,916	10	569	19.5%	1,228	42.1%
6-7 a.m.	3,888	7.5	2,120	54.5%	3,468	89.2%
7-8 a.m.	9,432	5	3,887	41.2%	6,369	67.5%
8-9 a.m.	9,432	5	5,338	56.6%	7,729	81.9%
9-10 a.m.	3,645	8	2,204	60.5%	4,136	113.5%
10-11 a.m.	3,645	8	1,885	51.7%	2,797	76.7%
11 a.m. – 12 p.m.	3,645	8	1,965	53.9%	2,297	63.0%
12-1 p.m.	3,645	8	2,121	58.2%	2,439	66.9%
1-2 p.m.	4,770	8	2,397	50.3%	2,468	51.7%
2-3 p.m.	5,895	8	2,987	50.7%	3,018	51.2%
3-4 p.m.	6,737	6.5	4,312	59.4%	3,233	44.6%
4-5 p.m.	9,432	5	6,056	64.2%	4,296	45.5%
5-6 p.m.	9,432	5	7,241	76.8%	5,092	54.0%
6-7 p.m.	5,088	7.5	4,530	89.0%	2,513	49.4%
7-8 p.m.	2,916	10	2,886	99.0%	1,786	61.2%
8-9 p.m.	2,916	10	2,454	84.2%	1,547	53.0%
9-10 p.m.	2,916	10	1,874	64.3%	1,213	41.6%
10-11 p.m.	2,916	10	1,447	49.6%	1,345	46.1%
11 p.m. – 12 a.m.	2,916	10	1,264	43.3%	644	22.1%
12-1 a.m.	2,916	10	450	15.4%	201	6.9%

Table 2-72: Build (2023) Conditions Ridership and Capacity Summary, Non-core Area, Weekday

Time	Non-core Policy Capacity	Headway (min)	Ridership between North Station - Community College			
			NB	NB% of Capacity	SB	SB % of Capacity
5-6 a.m.	2,088	10	394	18.9%	1,105	52.9%
6-7 a.m.	4,536	7.5	1,263	27.8%	2,822	62.2%
7-8 a.m.	9,432	5	1,910	20.2%	5,874	62.3%
8-9 a.m.	9,432	5	2,007	21.3%	7,715	81.8%
9-10 a.m.	4,253	8	1,436	55.0%	4,254	163.0%
10-11 a.m.	2,610	8	1,207	46.2%	2,457	94.1%
11 a.m. – 12 p.m.	2,610	8	1,338	51.3%	2,134	81.8%
12-1 p.m.	2,610	8	1,528	58.5%	2,059	78.9%
1-2 p.m.	4,253	8	1,937	45.6%	1,987	46.7%
2-3 p.m.	5,895	8	2,448	41.5%	2,163	36.7%
3-4 p.m.	7.255	6.5	3,542	48.8%	2,262	31.2%
4-5 p.m.	9,432	5	5,423	57.5%	2,342	24.8%
5-6 p.m.	9,432	5	6,886	73.0%	2,665	28.3%
6-7 p.m.	4,536	7.5	4,300	94.8%	1,475	32.5%
7-8 p.m.	2,088	10	2,730	130.7%	1,087	52.1%
8-9 p.m.	2,088	10	2,313	110.8%	1,079	51.7%
9-10 p.m.	2,088	10	1,768	84.7%	763	37.0%
10-11 p.m.	2,088	10	1,617	77.4%	617	29.6%
11 p.m. – 12 a.m.	2,088	10	1,192	57.1%	337	16.2%
12-1 a.m.	2,088	10	455	21.8%	150	7.2%

Table 2-73: Build (2023) Conditions Ridership and Capacity Summary, Core Area, Saturday

Time	Core Policy Capacity	Headway (min)	Ridership between Downtown Crossing - State			
			NB	NB % of Capacity	SB	SB % of Capacity
5-6 a.m.	2,916	10	552	18.9%	493	16.9%
6-7 a.m.	2,916	10	445	15.3%	945	32.4%
7-8 a.m.	2,916	10	767	26.3%	1,398	47.9%
8-9 a.m.	2,916	10	1,250	42.9%	1,484	50.9%
9-10 a.m.	2,916	10	1,199	41.1%	1,801	61.8%
10-11 a.m.	2,916	10	1,489	51.1%	1,769	60.7%
11 a.m. – 12 p.m.	2,916	10	1,887	64.7%	1,914	65.6%
12-1 p.m.	2,916	10	1,971	67.6%	2,057	70.5%
1-2 p.m.	2,916	10	2,036	69.8%	1,951	66.9%
2-3 p.m.	2,916	10	2,153	73.8%	1,986	68.1%
3-4 p.m.	3,240	9	2,333	72.0%	2,181	67.3%
4-5 p.m.	3,645	8	2,475	67.9%	2,175	59.7%
5-6 p.m.	3,645	8	2,276	62.4%	2,314	63.5%
6-7 p.m.	3,240	9	1,899	58.6%	1,744	53.8%
7-8 p.m.	2,916	10	1,678	57.5%	1,472	50.5%
8-9 p.m.	2,916	10	1,602	54.9%	1,243	42.6%
9-10 p.m.	2,916	10	1,496	51.3%	1,197	41.1%
10-11 p.m.	2,916	10	1,744	59.8%	1,195	41.1%
11 p.m. – 12 a.m.	2,916	10	1,514	51.9%	949	32.6%
12-1 a.m.	2,916	10	717	24.6%	548	18.8%

Table 2-74: Build (2023) Conditions Ridership and Capacity Summary, Non-core Area, Saturday

Time	Non-core Policy Capacity	Headway (min)	Ridership between North Station – Community College			
			NB	NB % of Capacity	SB	SB % of Capacity
5-6 a.m.	2,088	10	198	9.5%	344	16.5%
6-7 a.m.	2,088	10	315	15.1%	758	36.4%
7-8 a.m.	2,088	10	498	23.9%	1,072	51.4%
8-9 a.m.	2,088	10	1,029	49.3%	1,225	58.8%
9-10 a.m.	2,088	10	683	32.7%	1,842	88.4%
10-11 a.m.	2,088	10	852	40.8%	1,639	78.7%
11 a.m. – 12 p.m.	2,088	10	1,033	49.4%	2,042	98.0%
12-1 p.m.	2,088	10	1,129	54.1%	2,093	100.2%
1-2 p.m.	2,088	10	1,132	54.2%	1,778	85.4%
2-3 p.m.	2,088	10	1,390	66.6%	1,740	83.6%
3-4 p.m.	2,320	9	1,678	72.3%	1,730	74.8%
4-5 p.m.	2,610	8	1,935	74.1%	1,635	62.8%
5-6 p.m.	2,610	8	2,027	77.7%	1,380	53.1%
6-7 p.m.	2,320	9	1,772	76.4%	1,128	48.8%
7-8 p.m.	2,088	10	1,626	77.9%	1,024	49.2%
8-9 p.m.	2,088	10	1,397	66.9%	819	39.4%
9-10 p.m.	2,088	10	1,425	68.2%	729	35.1%
10-11 p.m.	2,088	10	1,542	73.8%	803	38.7%
11 p.m. – 12 a.m.	2,088	10	1,466	70.2%	558	27.0%
12-1 a.m.	2,088	10	725	34.7%	374	18.2%

2.4.2.5 ANALYSIS RESULTS: PROJECT PEAK FULL NETWORK ANALYSIS

In addition to the analysis of a full day of Orange Line service at the peak core area and northerly non-core area loadpoints, described in Section 2.4.2.4, the Proponent also analyzed one hour of weekday data for the entire Orange Line network between Back Bay and Oak Grove stations. This analysis has also been previously shared with and reviewed by MassDOT and the MBTA. These stations are where Project patrons are expected to utilize the Orange Line. Approximately 80% of Project patrons and employees that use the Orange Line are expected to access the Orange Line from the south. For purposes of this analysis, all of these patrons are assumed to board the Orange Line at Back Bay station and alight at Wellington Station because of the availability of the Wynn shuttle at this location; Back Bay station is the southernmost core-area station as well as a major commuter rail station. The remaining 20% of patrons are assumed to board at Oak Grove station and alight at Malden Center station due to the availability of the Wynn shuttle at that location.

The time period analyzed was 7:00-8:00 p.m. This represents the first full hour after the p.m. peak period, so existing ridership is similar to peak period ridership, and is also the approximate peak period of the Project. Ridership generally declines after the 7:00 p.m. hour.

Existing (2012) Conditions in Project p.m. Peak Hour

As shown in Table 2-75, estimated ridership does not exceed capacity in the core area from 7:00-8:00 p.m. on weekdays, but does exceed MBTA policy capacity at two loadpoints outside the core area because the policy capacity decreases from 140% of total seats to 100% of total seats (a reduction of 828 passengers) outside of the core area. The two loadpoints at which the policy capacity is estimated to be exceeded are between North Station and Community College and between Community College and Sullivan Square. However, the estimated ridership would still be well below the core-area policy capacity at these loadpoints.

Note that Assembly Station was not open at the time of the data collection, and is not reflected in Table 2-75. Southbound data is not included because a 10-minute headway at this hour is sufficient for all conditions in the southbound direction.

No Build (2023) Conditions in Project p.m. Peak Hour

To assess the impact of additional estimated ridership due to ambient growth in the greater Boston area and the impact of other projects along the Orange Line, a No Build analysis was conducted. In order to estimate No Build (2023) Condition, existing ridership was increased by 11.6%. As shown in Table 2-76, No Build ridership is compared with capacity using the increased ridership. The over-capacity conditions between North Station and Community College persist in the No Build (2023) Condition.

Table 2-75: Existing (2012) Conditions, Orange Line Northbound Ridership, 7:00-8:00 p.m., Weekday

Load Point	Capacity	Northbound Ridership	Northbound % of Capacity
Oak Grove - Malden	*2,088*	68	3.3%
Malden – Wellington	*2,088*	1,429	68.4%
Wellington - Sullivan	*2,088*	1,772	84.9%
Sullivan – Community College	*2,088*	2,237	107.1%
Community College – North Station	*2,088*	2,297	110.0%
North Station – Haymarket	**2,916**	**2,211**	**75.8%**
Haymarket – State	**2,916**	**2,287**	**78.4%**
State – Downtown Crossing	**2,916**	**2,437**	**83.6%**
Downtown Crossing – Chinatown	**2,916**	2,224	76.3%
Chinatown – Tufts	2,916	2,074	**71.1%**
Tufts – Back Bay	**2,916**	1,856	**63.6%**

Orange cell shading indicates a core area loadpoint (Back Bay-North Station). Policy capacity = 140% of seats in core area, 100% of seats outside core area.

Table 2-76: No Build (2023) Conditions, Orange Line Northbound Ridership, 7:00-8:00 p.m., Weekday

Load Point	Capacity	Northbound Ridership	Northbound % of Capacity
Oak Grove - Malden	2,088	76	3.6%
Malden – Wellington	2,088	1,595	76.4%
Wellington - Sullivan	2,088	1,978	94.7%
Sullivan – Community College	2,088	2,496	119.6%
Community College – North Station	2,088	2,563	122.8%
North Station – Haymarket	2,916	2,467	84.6%
Haymarket – State	2,916	2,552	87.5%
State – Downtown Crossing	2,916	2,720	93.3%
Downtown Crossing – Chinatown	2,916	2,482	85.1%
Chinatown – Tufts	2,916	2,315	79.4%
Tufts – Back Bay	2,916	2,071	71.0%

Orange cell shading indicates a core area loadpoint (Back Bay-North Station). Policy capacity = 140% of seats in core area, 100% of seats outside core area.

Build (2023) Conditions in Project p.m. Peak Hour

To assess the impact of estimated Project-generated Orange Line trips, Build trips were added to No Build passenger volumes. The addition of estimated Project trips causes the Orange Line to exceed policy capacity by 21 passengers between Wellington and Sullivan Square stations, as shown in Table 2-77.

Table 2-77: Build (2023) Conditions, Orange Line Northbound Ridership, 7:00-8:00 p.m., Weekday

Load Point	Capacity	Northbound Ridership	Northbound % of Capacity
Oak Grove - Malden	2,088	109	5.2%
Malden – Wellington	2,088	1,595	76.4%
Wellington - Sullivan	2,088	2,145	102.7%
Sullivan – Community College	2,088	2,663	127.6%
Community College – North Station	2,088	2,730	130.7%
North Station – Haymarket	2,916	2,634	90.3%
Haymarket – State	2,916	2,719	93.3%
State – Downtown Crossing	2,916	2,887	99.0%
Downtown Crossing – Chinatown	2,916	2,649	90.8%
Chinatown – Tufts	2,916	2,482	85.1%
Tufts – Back Bay	2,916	2,238	76.8%

Orange cell shading indicates a core area loadpoint (Back Bay-North Station). Policy capacity = 140% of seats in core area, 100% of seats outside core area.

2.4.3 WYNN SHUTTLES

During the Proponent's post-FEIR consultation with MassDOT, MassDOT requested additional analysis of the anticipated interaction between the Proponent's patron and employee shuttle buses and MBTA bus and Orange Line Service at the MBTA's Wellington and Malden Center Orange Line stations. As further described below, that analysis, in consultation with MassDOT and the MBTA demonstrates that (1) patrons and employees will be fully accommodated by the Project shuttle bus service during both peak and off-peak periods; (2) the Project patron and employee shuttle buses will interact in a timely way with Orange Line service at Wellington and Malden Center Orange Line stations; and (3) the Project patron and employee shuttle buses will not interfere with MBTA bus operations at Wellington and Malden Center Stations, as a result of improvements identified in consultation with the MBTA, and to be implemented by the Proponent, as demonstrated by an analysis of MBTA and Project Shuttle curbside operations and interactions in consultation with the MBTA.

Separate patron and employee shuttle bus service to and from the Wellington and Malden Center MBTA stations directly to the Project will make the MBTA Orange Line a convenient travel choice for patrons and employees.

Employees choosing to drive their own cars to work will park off-site in one of three facilities (Malden Center; Station Landing, Medford; and Everett) and transfer to an employee shuttle bus. In total, six shuttle bus routes are planned as described below.

2.4.3.1 WYNN PATRON SHUTTLES

Two separate patron shuttle bus routes will operate between the Project (main entrance) and the MBTA Orange Line stations at Wellington and Malden Center. The patron shuttle bus routes to Wellington Station and Malden Center Station are shown in Figure 2-105 and Figure 2-106. As discussed, in Section 2.1.2, ten percent of patrons are expected to travel to Wynn Everett via the Orange Line. The 10% has been further disaggregated to the Wellington and Malden Center stations by examining the Wynn Everett market distribution. Of all patrons utilizing the Orange Line, it is expected that 80% will use Wellington Station and 20% will use Malden Center Station.

Based on the trip generation characteristics for the Project, an hourly ridership demand profile has been developed for the patron shuttle buses. Using these profiles, the associated required frequency of shuttle bus service has been calculated on an hour-by-hour basis.

The shuttle bus frequency is also a function of shuttle vehicle capacity – the smaller the vehicle, the higher the number of shuttle bus trips necessary to meet the passenger demand. It is likely that 15-passenger vehicles will be used for the Malden Center patron shuttle buses and 30-passenger vehicles will be used for the Wellington patron shuttle buses. However, as the shuttle operating plan evolves, the bus sizes will be adjusted consistent with demand.

For each shuttle route listed below, the hourly ridership and shuttle frequency over a 24-hour period are graphed in as follows:

- Wynn Patron Shuttle to/from Wellington Station – Friday Conditions (Figure 2-107)
- Wynn Patron Shuttle to/from Wellington Station– Saturday Conditions (Figure 2-108)
- Wynn Patron Shuttle to/from Malden Center Station – Friday Conditions (Figure 2-109)
- Wynn Patron Shuttle to/from Malden Center Station – Saturday Conditions (Figure 2-110)

The graphs show hourly ridership demand by direction on the primary vertical axis (left side) and the associated shuttle bus trips per hour (per direction) on the secondary vertical axis (right side). Another way to depict shuttle bus trips per hour is by headway, the time between vehicle arrivals. For example, in Figure 2-107, four shuttle bus trips per hour per direction represents a headway in each direction of 15 minutes (four trips/60 minutes).

Operating characteristics of the proposed shuttle buses are presented in Table 2-78 and 2-79 including stops, routing, ridership, travel times, headway, and vehicles required to maintain headways. The vehicles required to maintain headway were calculated by dividing the cycle time by the headway. In this case, the cycle time is defined as the round trip travel time plus 10%.

Table 2-78: Patron Shuttle Route Characteristics between Wynn Everett and MBTA Wellington Station

Characteristics			
Passengers	Wynn patrons arriving via MBTA Orange Line at Wellington Station		
Stops	Wynn Everett, Wellington Station		
Routing	Route 16, Route 99		
Daily Ridership			
Friday	3,720 one-way person trips		
Saturday	4,420 one-way person trips		
One-way Travel Time			
Off-peak	About 10 minutes		
Peak	About 20 minutes		
Headway	Headway will vary from 6-30 minutes, depending on time of day. See Figures 2-107 and 2-108 for shuttle trips by hour.		
Vehicles Required to Maintain Headway	Headway in Minutes	Vehicles during Off-Peak	Vehicles during Peak
	30 (off-peak only)	1	-
	20 (off-peak only)	2	-
	15	2	3
	12	2	4
	10	3	5
	8.5 (peak only)	-	6
	7.5 (peak only)	-	6
	6.5 (peak only)	-	7

Table 2-79: Patron Shuttle Route Characteristics between Wynn Everett and MBTA Malden Center Station

Characteristics			
Passengers	Wynn patrons arriving via MBTA Orange Line at Malden Center Station		
Stops	Wynn Everett, Malden Center Station		
Routing	Route 60 – Commercial Street – Route 16 – Route 99		
Daily Ridership			
Friday	930 one-way person trips		
Saturday	1,104 one-way person trips		
One-way Travel Time			
Off-peak	About 20 minutes		
Peak	About 30 minutes		
Headway	Headway will vary from 12-30 minutes, depending on time of day. See Figures 2-109 and 2-110 for shuttle trips by hour.		
Vehicles Required to Maintain Headway	Headway in Minutes	Vehicles during Off-Peak	Vehicles during Peak
	30 (off-peak only)	2	-
	20	3	4
	15	3	5
	12 (peak only)	-	6

2.4.3.2 WYNN EMPLOYEE SHUTTLES

Employee Off-site Parking and MBTA Shuttle

Three separate employee shuttle bus routes will operate between the Project's employee entrance and off-site employee parking facilities in Medford adjacent to Wellington Station, Malden at a downtown garage, and potentially in Everett at a location to be determined.

The employee shuttle bus routes serving the Wellington and Malden parking facilities are shown in Figure 2-111 and Figure 2-112, respectively. The Wynn shuttle bus to the Wellington employee parking facility will also carry employees to and from the MBTA's Wellington Station. Employees arriving at Wellington Station via the Orange Line will walk from the station to the parking facility; the walking route is shown in Figure 2-111.

While no specific parking site has been identified for the Everett employee parking lot, the plan is to locate it in the industrial southeast

quadrant of Everett, generally south of Revere Beach Parkway (Route 16) and east of Broadway (Route 99). That area can be seen in Figure 2-112, which also shows the preliminary neighborhood employee bus shuttle route discussed below.

Table 2-80 shows the predicted modes of Project employee travel on Fridays and Saturdays by percentage and person trips. As shown, 41%, of employees are expected to drive and park at the employee off-site parking facilities and 20% of employees are expected to travel to the Project via the Orange Line. Another 20% of employees will use the neighborhood shuttle, and the remaining 19% will use the other travel modes listed in Table 2-80.

Table 2-80: Daily Employee Person Trips by Travel Mode

Travel Mode	Friday		Saturday	
SOV	**Person Trips**	**Travel Mode Share**	**Person Trips**	**Travel Mode Share**
Private Automobiles	2,776	41%	3,338	41%
Taxis	0	0%	0	0%
Subtotal – SOV	2,776	41%	3,338	41%
Non-SOV	**Person Trips**	**Travel Mode Share**	**Person Trips**	**Travel Mode Share**
Orange Line to Wynn Employee Shuttle	1,354	20%	1,628	20%
Employee Neighborhood Shuttle	1,354	20%	1,628	20%
Water Transportation	204	3%	244	3%
MBTA Bus	678	10%	814	10%
Premium Park and Ride	204	3%	244	3%
Walk/Bike	204	3%	244	3%
Subtotal – Non-SOV	3,998	59%	4,802	59%
TOTAL	6,774	100%	8,140	100%

Because employees (except a limited number of Wynn executives and employees with disabilities) who choose to drive must park at one of the off-site parking facilities and transfer to a shuttle, 100% of employees (except a limited number of Wynn executives and employees with disabilities) will arrive at the Project Site via non-SOV modes. When the driving trip segment to the off-site parking facilities is considered, however, 41% will arrive via SOV modes and 59% via non-SOV modes.

To provide the most efficient employee shuttle operations, all Project employees utilizing the Orange Line will be required to use Wellington Station.

Neighborhood Employee Shuttle

In addition to the employee shuttle buses described above, a separate employee shuttle bus route will serve the local neighborhood. At this time, the employee neighborhood shuttle is anticipated to operate separately from other shuttle buses, but shuttle segments may be combined to best serve employee demand. A preliminary route for this shuttle is shown in Figure 2-113. Because preference in hiring will be given to Everett residents, it has been assumed that 20% of employees will use this service. Specific routing and stops will be identified as workers are hired. This route will operate 24 hours/day.

Analysis of Shuttle Service Capacity

Based on the trip generation characteristics for the Project, an hourly ridership demand profile has been developed for the employee shuttle buses. Using these profiles, the associated required frequency of shuttle bus service has been calculated on an hour-by-hour basis.

The shuttle bus frequency is also a function of shuttle vehicle capacity – the smaller the vehicle, the higher the number of shuttle bus trips necessary to meet the passenger demand. It is likely that 15-passenger vehicles will be used for the Malden Center employee shuttle buses and 30-passenger vehicles will be used for the Wellington employee shuttle buses. However, as the shuttle operating plan evolves, the bus sizes will be adjusted consistent with demand.

For each employee shuttle route listed below, the hourly ridership and shuttle frequency over a 24-hour period are graphed in as follows:

- Wynn Employee Shuttle to/from Wellington Parking Facility – Friday Conditions (Figure 2-114)
- Wynn Employee Shuttle to/from Wellington Parking Facility– Saturday Conditions (Figure 2-115)
- Wynn Employee Shuttle to/from Malden Parking Facility– Friday Conditions (Figure 2-116)
- Wynn Employee Shuttle to/from Malden Parking Facility– Saturday Conditions (Figure 2-117)

Because the location of the Everett off-site employee parking facility has not yet been determined and the specific operating characteristics (stops, routing, travel times) of the neighborhood shuttle are not yet known,

ridership demand graphs have not been developed for these two routes. However, the ridership demand over the day will be similar to that exhibited on the employee shuttle to and from the Malden parking facility, with a peak Friday demand of about 40 employees per hour on Friday and 55 employees on Saturday, indicating that a headway of 15-30 minutes will be required depending on the time of day.

While the current analysis in this memorandum reflects a thorough evaluation of available data and anticipated conditions, the shuttle bus operating plan will necessarily evolve as operational data is generated. However, employee travel timing will be managed to ensure sufficient capacity and optimize the efficiency of shuttle operations through measures such as employee travel time restrictions and assigning employees to specific parking lot locations.

Operating characteristics of the proposed employee shuttles are presented in Table 2-81, Table 2-82, Table 2-83, and Table 2-84 including stops, routing, ridership, travel times, headway, and vehicles required to maintain headways. The vehicles required to maintain headway were calculated by dividing the cycle time by the headway. In this case, the cycle time is defined as the round trip travel time plus 10%.

Table 2-81: Employee Shuttle Characteristics between Wynn Everett and Wellington Parking Facility

Characteristics			
Passengers	Wynn employees who have parked at Wellington parking facility or utilize the MBTA Orange Line		
Stops	Wynn Everett, Wellington/Station Landing parking facility		
Routing	Route 16 – Route 99		
Daily Ridership			
Friday	2,270 one-way person trips		
Saturday	2,926 one-way person trips		
One-way Travel Time			
Off-peak	About 10 minutes		
Peak	About 20 minutes		
Headway	Headway will vary from 12-30 minutes, depending on time of day. See Figures 2-114 and 2-115 for shuttle trips by hour.		
Vehicles Required to Maintain Headway	Headway in Minutes	Vehicles during Off-Peak	Vehicles during Peak
	30 (off-peak only)	1	-
	20 (off-peak only)	2	-
	15	2	3
	12	2	4

Table 2-82: Employee Shuttle Characteristics between Wynn Everett and Downtown Malden Parking Facility

Characteristics			
Passengers	Wynn employees who have parked at Malden parking facility		
Stops	Wynn Everett, Malden Center parking facility		
Routing	Route 60 – Commercial Street – Route 16 – Route 99		
Daily Ridership			
Friday	922 one-way person trips		
Saturday	1,188 one-way person trips		
One-way Travel Time			
Off-peak	About 20 minutes		
Peak	About 30 minutes		
Headway	Headway will vary from 15-30 minutes, depending on time of day. See Figures 2-116 and 2-117 for shuttle trips by hour.		
Vehicles Required to Maintain Headway	Headway in Minutes	Vehicles during Off-Peak	Vehicles during Peak
	30 (off-peak only)	2	-
	20	3	4
	15 (peak only	-	5

Table 2-83: Employee Shuttle Characteristics between Wynn Everett and Everett Off-site Employee Parking Facility (To Be Determined)

Characteristics	
Passengers	Wynn employees who have parked at Everett off-site parking facility
Stops	Wynn Everett, Everett off-site employee parking facility
Routing	TBD
Daily Ridership	
Friday	922 one-way person trips
Saturday	1,188 one-way person trips
One-way Travel Time	
Off-peak	About 5 minutes
Peak	About 10 minutes
Headway	Headway will vary from 15-30 minutes, depending on time of day.
Vehicles Required to Maintain Headway	One vehicle

Table 2-84: Employee Shuttle Characteristics between Wynn Everett and Everett Neighborhood Locations (To Be Determined)

Characteristics	
Passengers	Wynn employees who live in Everett neighborhood
Stops	TBD
Routing	See Figure 2-109 for preliminary routing plan
Hours of Operation	24 hours
Daily Ridership	
Friday	922 one-way person trips
Saturday	1,188 one-way person trips
One-way Travel Time	TBD
Headway	Headway will vary from 15-30 minutes, depending on time of day.
Vehicles Required to Maintain Headway	TBD

2.4.3.3 COMPARISON OF MBTA BUS SERVICE CAPACITY WITH WYNN SHUTTLE BUS CAPACITIES

During the Proponent's post-FEIR consultation with MassDOT and the MBTA, MassDOT, and the MBTA requested additional information about the extent to which the Proponent's proposed patron and employee shuttle bus service would duplicate bus service already provided by the MBTA. As explained further below and as already been shared with MassDOT and the MBTA, that is not the case. The Wynn

shuttle buses will provide distinctive functions for patrons and employees.

MBTA buses on Route #104 and Route #105 both travel between Malden Center Station and Sullivan Square Station and will serve Wynn Everett with a stop on Broadway (Route 99) southbound near the main entrance. The MBTA routes travel different roadway segments and primarily serve residential areas of Malden and Everett with a connection to either Orange Line station. Route #104 travels Ferry Street between Broadway (Route 99) and Malden Center and Route #105 travels Main Street between Broadway (Route 99) and Malden Center.

While certain of Wynn's patron and employee shuttle buses will also travel on the segment of Broadway (Route 99) south of Revere Beach Parkway (Route 16), for the most part the shuttle routes will be different from MBTA bus Route #104. From Malden Center, the Wynn shuttle buses will travel south on Commercial Street, east on Route 16, and then south on Broadway to the Project Site, as shown in Figure 2-112 and Figure 2-114.

Route #104 operates between 5:10 a.m. and 1:00 a.m. with 14-minute peak headways and Route #105 operates between 5:00 a.m. and 7:00 p.m. with 70-minute headways. Project employees who live in neighborhoods near Route #104 and Route #105 stops are expected to use these buses to travel to work. For travel to and from Malden Center Station, the Project employee shuttle buses will be faster (there are no intermediate stops planned on the Project shuttle routes) and more frequent than the MBTA bus. Therefore, it is expected that all Project patrons and employees travelling to and from Malden Center Station will utilize the Proponent's shuttle buses.

No MBTA bus provides direct service between Wellington Station and Broadway near the Project. The Project's employee and patron shuttles will provide this direct service, as described above.

In summary, while segments of the existing MBTA bus routes do coincide with segments of Wynn's proposed Malden Center shuttle bus routes, the Wynn shuttle buses will provide faster and more frequent connections for patrons and employees and will provide services at later hours and/or more directly connecting to other Orange Line stations.

2.4.3.4 WELLINGTON AND MALDEN CENTER STATIONS

During the Proponent's post-FEIR consultation with MassDOT and the MBTA, MassDOT and the MBTA requested additional evaluations to ensure that the Proponent's shuttle buses interact with Orange Line service at Wellington and Malden Center stations in a sufficiently timely manner so as to attract and retain riders. That evaluation, already shared with, and reviewed by, MassDOT and the MBTA appears below.

As a measure of how the Project shuttle system (with the routings and headways described in earlier sections) will provide well-timed service with the Orange Line, Table 2-85 presents a summary of average wait times for patrons who have arrived at Wellington and Malden Center stations via the Orange Line and will board an available shuttle bus to Wynn Everett. Average wait times are calculated as half of the scheduled headway.

Table 2-85:Average Wait Times for Patron Shuttle at Wellington and Malden Center Stations

Condition	<5 min.	5-9 min.	10-14 min.	15 min.	Total
From Wellington Station to Project					
Friday					
Patrons riding shuttle to Project	263	1,145	313	86	1,806
Percent of patrons by wait time	15%	63%	17%	5%	100%
Saturday					
Patrons riding shuttle to Project	487	1,706	0	58	2,250
Percent of patrons by wait time	21%	76%	0%	3%	100%
From Malden Center Station to Project					
Friday					
Patrons riding shuttle to Project	3	187	240	21	451
Percent of patrons by wait time	1%	41%	53%	5%	100%
Saturday					
Patrons riding shuttle to Project	28	419	57	60	564
Percent of patrons by wait time	5%	74%	10%	11%	100%

As shown in Table 2-85, most patrons utilizing the Orange Line will wait 9 minutes or less for a shuttle bus to the Project. At Wellington Station, the longer wait times occur during the morning hours (between 7:00

a.m. and 12:00 p.m.) when projected Project shuttle bus ridership is relatively low. The average wait time (based on headways presented in Figure 2-107 and Figure 2-108) at Wellington Station is 8 minutes on Friday and 6 minutes on Saturday.

At Malden Station, where projected shuttle bus ridership is expected to be lower than at Wellington Station, the planned shuttle bus headways are also lower (as presented in Figure 2-109 and Figure 2-110), resulting in slightly longer average wait times of 10 minutes on Friday and 9 minutes on Saturday.

The patron shuttle bus services to and from Wellington and Malden Center stations will maintain service schedules similar to that of the Orange Line. Patron shuttle service will begin at 6:00 a.m., 45 minutes after the start of Orange Line service and provide service throughout the day. The last shuttles from the Project back to the MBTA stations will coordinate with the Orange Line's last train.

An hour-by-hour listing of patron shuttle frequency, average patron wait time, shuttle ridership, and Orange Line frequency is presented in Table 2-86 for Wellington Station under Friday conditions, Table 2-87 for Wellington Station under Saturday conditions, Table 2-88 for Malden Center Station under Friday conditions, and Table 2-89 for Malden Center Station under Saturday conditions.

The number of Orange Line trains per shuttle bus run varies due to the variability of headways in the shuttle service, which is governed by expected demand for the service as described in this Section 2.1.3.3 describing the proposed operating characteristics of the Wynn shuttle bus service.

During the morning commuter peak periods on Fridays, when demand for the shuttle is low, one shuttle bus will arrive per 8-12 arriving Orange Line trains. Note that 8-12 trains in both directions are equivalent to 4-6 trains each going northbound and southbound. Shuttle bus frequency increases throughout the day and into the evening. During the Friday evening Wynn casino peak period, shuttle bus headways range from 9-15 minutes, or about one shuttle bus for every two Orange Line trains.

During the evening casino peak period on Saturdays, shuttle buses will operate on headways of as low as 7-15 minutes at Wellington and Malden Center stations, respectively, resulting in short wait times. During these periods, shuttle bus service will be frequent enough that

shuttle buses are expected to arrive about as often as Orange Line trains do.

Table 2-86: Patron Shuttle – Wellington Station to Wynn Everett - Friday

Time	Shuttle Frequency from Wellington (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
5:00 a.m. – 6:00 a.m.	0	0	0	12
6:00 a.m. – 7:00 a.m.	2	15	30	16
7:00 a.m. – 8:00 a.m.	2	15	28	24
8:00 a.m. – 9:00 a.m.	2	15	30	24
9:00 a.m. – 10:00 a.m.	3	10	64	15
10:00 a.m. – 11:00 a.m.	3	10	80	15
11:00 a.m. – 12:00 p.m.	3	10	87	15
12:00 p.m. – 1:00 p.m.	4	7.5	91	15
1:00 p.m. – 2:00 p.m.	4	7.5	110	15
2:00 p.m. – 3:00 p.m.	4	7.5	119	15
3:00 p.m. – 4:00 p.m.	4	7.5	104	17
4:00 p.m. – 5:00 p.m.	4	7.5	79	24
5:00 p.m. – 6:00 p.m.	4	7.5	101	24
6:00 p.m. – 7:00 p.m.	6	5	128	20
7:00 p.m. – 8:00 p.m.	6	5	151	17
8:00 p.m. – 9:00 p.m.	6	5	152	17
9:00 p.m. – 10:00 p.m.	6	5	147	12
10:00 p.m. – 11:00 p.m.	6	4.2	147	12
11:00 p.m. – 12:00 a.m.	7	4.2	112	12
12:00 a.m. – 1:00 a.m.	5	6	56	12
1:00 a.m. –	4	7.5	43	12

Time	Shuttle Frequency from Wellington (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
2:00 a.m.				
2:00 a.m. – 3:00 a.m.	0	0	0	4[3]
3:00 a.m. – 4:00 a.m.	0	0	0	0
4:00 a.m. – 5:00 a.m.	0	0	0	0
Total Daily	85	N/A	1,859	349

1) For shuttle route, trips per hour in one direction only from Wellington Station to Wynn Everett.
2) For Orange Line, trips per hour in both the northbound and southbound directions.
3) MBTA Orange Line service stops at 2:14 a.m. late night Friday.

Table 2-87: Patron Shuttle – Wellington Station to Wynn Everett - Saturday

Time	Shuttle Frequency from Wellington (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
5:00 a.m. – 6:00 a.m.	0	0	0	12
6:00 a.m. – 7:00 a.m.	2	15	29	13
7:00 a.m. – 8:00 a.m.	2	15	28	15
8:00 a.m. – 9:00 a.m.	2	15	37	15
9:00 a.m. – 10:00 a.m.	3	10	64	15
10:00 a.m. – 11:00 a.m.	3	10	81	15
11:00 a.m. – 12:00 p.m.	5	6	100	15
12:00 p.m. – 1:00 p.m.	5	6	123	15
1:00 p.m. – 2:00 p.m.	5	6	143	15
2:00 p.m. – 3:00 p.m.	6	5	163	15
3:00 p.m. – 4:00 p.m.	6	5	146	15
4:00 p.m. – 5:00 p.m.	6	5	172	15
5:00 p.m. – 6:00 p.m.	6	5	133	15
6:00 p.m. – 7:00 p.m.	6	5	124	13
7:00 p.m. – 8:00 p.m.	6	5	157	12
8:00 p.m. – 9:00 p.m.	6	5	104	12
9:00 p.m. – 10:00 p.m.	6	5	125	12
10:00 p.m. – 11:00 p.m.	8	3.8	151	12
11:00 p.m. – 12:00 a.m.	7	4.2	190	12
12:00 a.m. – 1:00 a.m.	7	4.2	93	12

Time	Shuttle Frequency from Wellington (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
1:00 a.m. – 2:00 a.m.	6	5	45	12
2:00 a.m. – 3:00 a.m.	0	0	0	4[3]
3:00 a.m. – 4:00 a.m.	0	0	0	0
4:00 a.m. – 5:00 a.m.	0	0	0	0
Total Daily	103	N/A	2,208	291

1) For shuttle route, trips per hour in one direction only from Wellington Station to Wynn Everett.
2) For Orange Line, trips per hour in both the northbound and southbound directions.
3) MBTA Orange Line service stops at 2:14 a.m. late night Friday.

Table 2-88: Patron Shuttle – Malden Center Station to Wynn Everett - Friday

Time	Shuttle Frequency from Malden Center (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
5:00 a.m. – 6:00 a.m.	0	0	0	12
6:00 a.m. – 7:00 a.m.	2	15	8	16
7:00 a.m. – 8:00 a.m.	2	15	7	24
8:00 a.m. – 9:00 a.m.	2	15	8	24
9:00 a.m. – 10:00 a.m.	3	10	16	15
10:00 a.m. – 11:00 a.m.	3	10	20	15
11:00 a.m. – 12:00 p.m.	3	10	22	15
12:00 p.m. – 1:00 p.m.	3	10	23	15
1:00 p.m. – 2:00 p.m.	3	10	28	15
2:00 p.m. – 3:00 p.m.	3	10	30	15
3:00 p.m. – 4:00 p.m.	3	10	26	17
4:00 p.m. – 5:00 p.m.	3	10	20	24
5:00 p.m. – 6:00 p.m.	3	10	25	24
6:00 p.m. – 7:00 p.m.	3	10	32	20
7:00 p.m. – 8:00 p.m.	4	7.5	38	17
8:00 p.m. – 9:00 p.m.	4	7.5	38	17
9:00 p.m. – 10:00 p.m.	4	7.5	37	12
10:00 p.m. – 11:00 p.m.	4	7.5	37	12
11:00 p.m. – 12:00 a.m.	4	7.5	28	12
12:00 a.m. – 1:00 a.m.	3	10	14	12
1:00 a.m. – 2:00 a.m.	3	10	6	12
2:00 a.m. – 3:00 a.m.	0	0	4	4[3]

Time	Shuttle Frequency from Malden Center (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
3:00 a.m. – 4:00 a.m.	0	0	0	0
4:00 a.m. – 5:00 a.m.	0	0	0	0
Total Daily	62	N/A	465	349

1) For shuttle route, trips per hour in one direction only from Malden Center Station to Wynn Everett.

2) For Orange Line, trips per hour in both the northbound and southbound directions.

3) MBTA Orange Line service stops at 2:14 a.m. late night Friday.

Table 2-89: Patron Shuttle – Malden Center Station to Wynn Everett - Saturday

Time	Shuttle Frequency from Malden Center (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
5:00 a.m. – 6:00 a.m.	0	0	0	12
6:00 a.m. – 7:00 a.m.	2	15	7	13
7:00 a.m. – 8:00 a.m.	2	15	7	15
8:00 a.m. – 9:00 a.m.	2	15	9	15
9:00 a.m. – 10:00 a.m.	2	15	16	15
10:00 a.m. – 11:00 a.m.	2	15	20	15
11:00 a.m. – 12:00 p.m.	3	10	25	15
12:00 p.m. – 1:00 p.m.	3	10	31	15
1:00 p.m. – 2:00 p.m.	4	7.5	36	15
2:00 p.m. – 3:00 p.m.	4	7.5	41	15
3:00 p.m. – 4:00 p.m.	4	7.5	36	15
4:00 p.m. – 5:00 p.m.	4	7.5	43	15
5:00 p.m. – 6:00 p.m.	4	7.5	33	15
6:00 p.m. – 7:00 p.m.	4	7.5	31	13
7:00 p.m. – 8:00 p.m.	4	7.5	39	12
8:00 p.m. – 9:00 p.m.	4	7.5	26	12
9:00 p.m. – 10:00 p.m.	4	7.5	31	12
10:00 p.m. – 11:00 p.m.	5	6	38	12
11:00 p.m. – 12:00 a.m.	5	6	48	12
12:00 a.m. – 1:00 a.m.	5	6	23	12
1:00 a.m. – 2:00 a.m.	5	6	8	12
2:00 a.m. – 3:00 a.m.	0	0	3	4[3]

Time	Shuttle Frequency from Malden Center (shuttle trips/hour)[1]	Average Wait Time for Shuttle (minutes)	Shuttle Ridership (riders/hour)	Orange Line Frequency (Northbound and Southbound) (train trips/hour)[2]
3:00 a.m. – 4:00 a.m.	0	0	0	0
4:00 a.m. – 5:00 a.m.	0	0	0	0
Total Daily	63	N/A	552	291

1) For shuttle route, trips per hour in one direction only from Malden Center Station to Wynn Everett.
2) For Orange Line, trips per hour in both the northbound and southbound directions.
3) MBTA Orange Line service stops at 2:14 a.m. late night Friday.

MBTA Bus and Wynn Shuttle Bus Interactions at Wellington and Malden Center Stations

As is discussed in Section 2.5.1, the Proponent has collaborated with MassDOT and the MBTA since the FEIR on an evaluation of the interaction of existing MBTA bus service and the Proponent's shuttle bus service at the Wellington and Malden Center stations, and improvements to those stations by the Proponent, to assure that those services are both able to utilize those stations without operational difficulties. Layover schedules for each bus bay analyzed at the Wellington and Malden Center stations are included in Appendix B.

The Proponent will continue to work with the MBTA's Bus Operations, Real Estate, and Parking personnel to finalize the plans developed to date in collaboration with the MBTA that are described in the following sections.

Wellington Station

The existing configuration of the curbside area adjacent to Wellington Station is shown in Figure 2-118. Analysis of the usage of the existing bus bays indicated that there are not currently opportunities for the Project's patron shuttles to share curb space with any of the existing bus routes acceptable to the MBTA. As a result, the Proponent has developed, in consultation with the MBTA, a plan to provide the Proponent's patron shuttles with exclusive curb space.

The plan includes the construction of a fourth curb north of the existing shuttle/taxi/general auto pick-up/drop-off curb. The general pick-up/drop-off and taxi activity would occur at that location, and the Proponent's patron shuttle bus and other private shuttles would use the existing third curb, as shown in Figure 2-118. The reconfiguration of the parking lot to

accommodate the fourth curb will result in additional revenue-generating parking spaces for the MBTA at Wellington Station. The MBTA's Director of Parking has indicated that the MBTA is in the process of upgrading the revenue control system at Wellington Station. The Proponent will work with the MBTA to incorporate the upgrades to revenue control in the proposed plan.

Malden Center Station

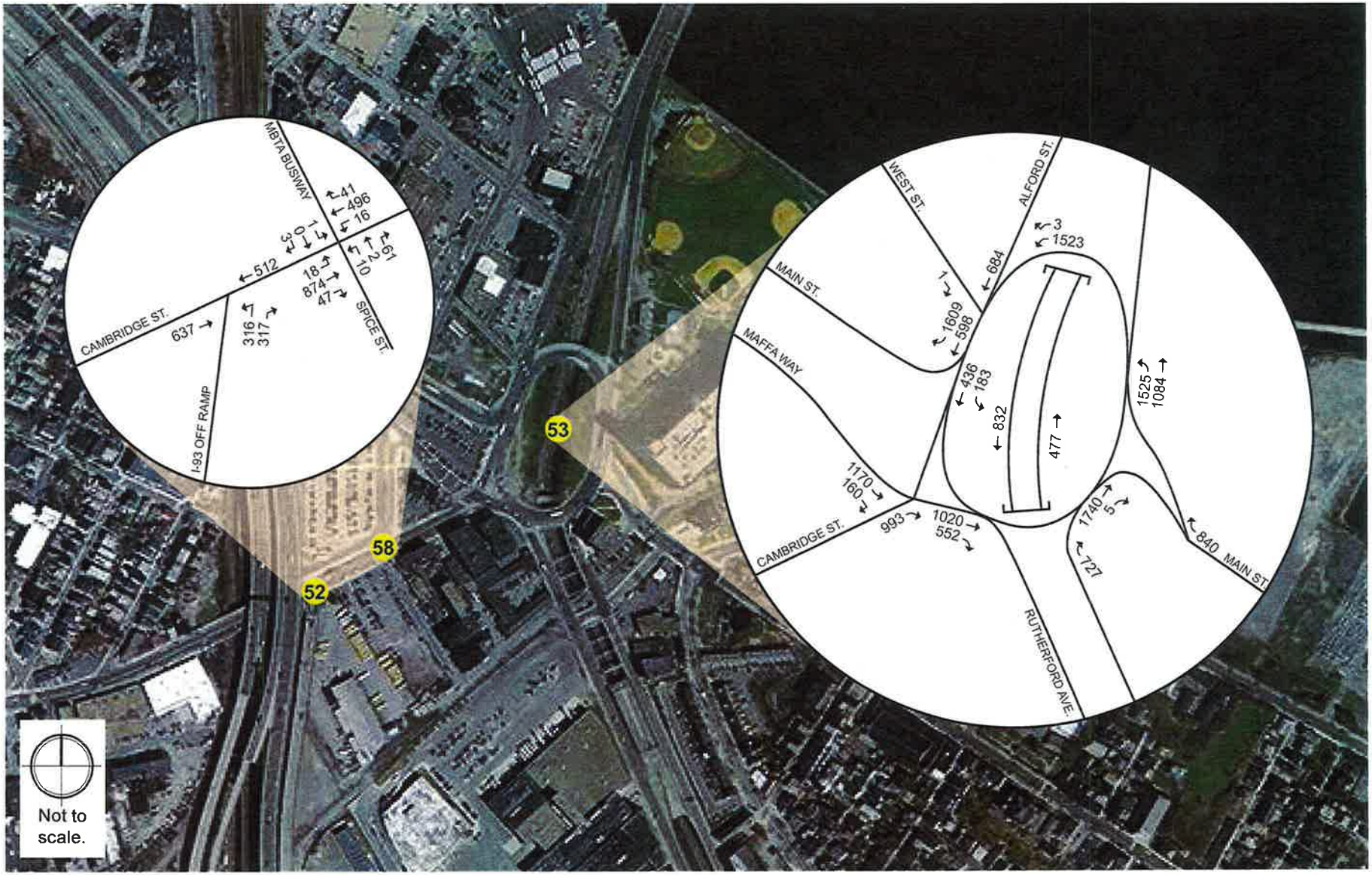
At Malden Center Station, the plan developed in consultation with the MBTA to accommodate the Proponent's shuttle buses is for them to berth along the southern curb in the western bus bay, where enough space will still remain for an MBTA bus to lay over. This layout also ensures that MBTA buses will still be able to turn into the busway when a Wynn shuttle bus is parked along the southern curb of the busway.

The curb configuration at Malden Center Station is shown in Figure 2-119. The proposed Wynn shuttle bus berth at Malden Station is located along the busway on the west side of station. This busway is not used as frequently as the busway on the east side of the station. The southern curb in the western bus bay is not devoted to any bus stop. It is frequently used as a place for buses to lay over between trips. Each of the three sections of this southern curb is long enough to hold two MBTA buses.

As shown in Figure 2-119, the proposed Wynn shuttle bus berthing location is far enough south so that one bus may layover in this area while still allowing buses to turn into the busway. As laid out in Figure 2-119, this southern curb can still be used by one MBTA bus while providing a dedicated Project shuttle berth location and allowing MBTA buses to turn into the busway without conflict. The Proponent will reconstruct the sidewalk from the station along this curb to ensure that it is ADA-compliant. The Proponent may also place a passenger shelter on MBTA property near the corner of the busway and Centre Street (Route 60).

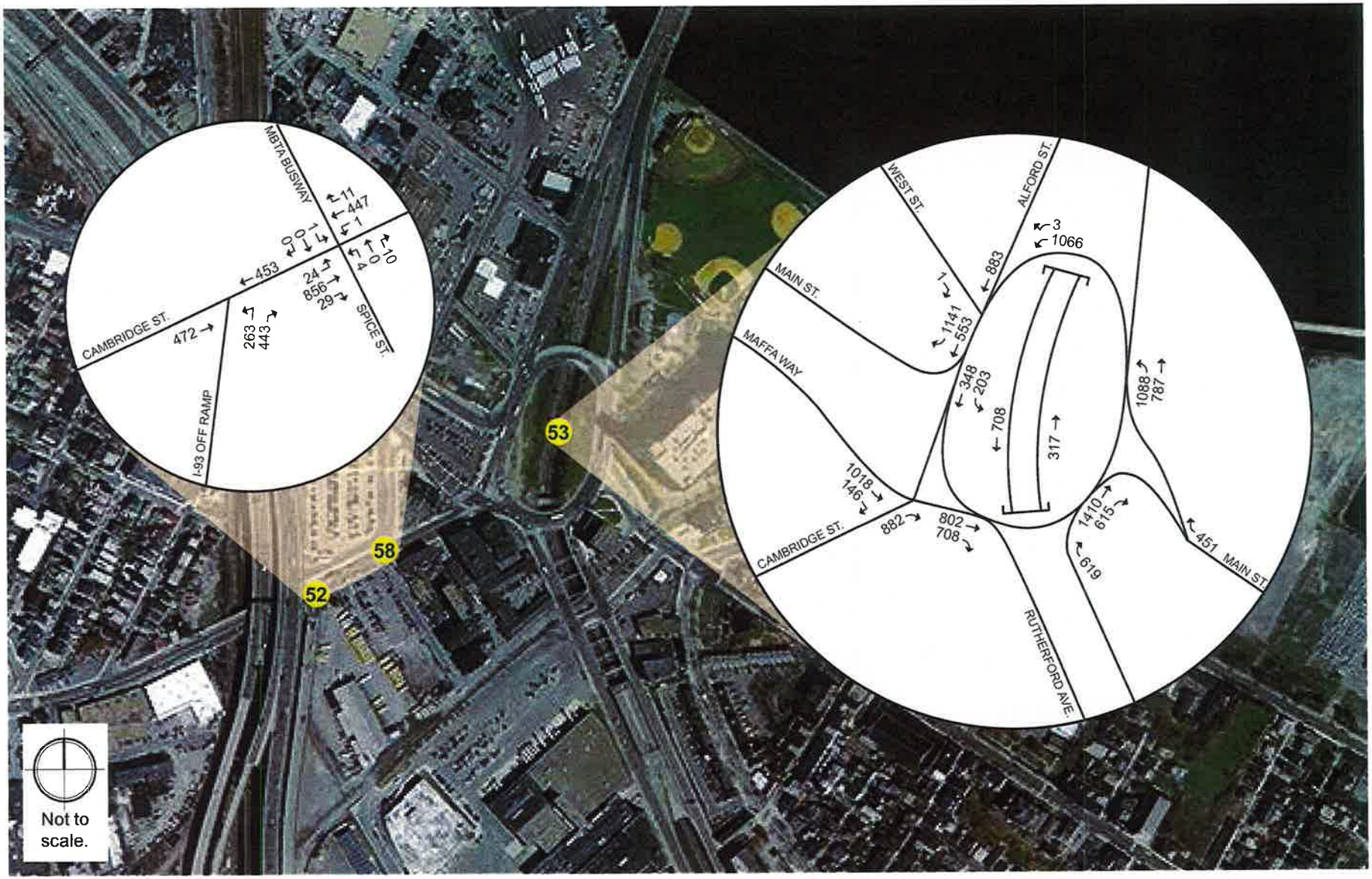
2.4.3.5 PREMIUM PARK AND RIDE SERVICE

The Proponent will establish a new bus service called Premium Park and Ride, which will provide service between come number of the Massport Logan Express parking facilities located in Braintree, Framingham, and/or Woburn or similar facilities and the Project. The PPR service is modeled on Massport's Logan Express service, which provides a non-stop bus ride between Logan Airport and one of four Massport parking lot locations in



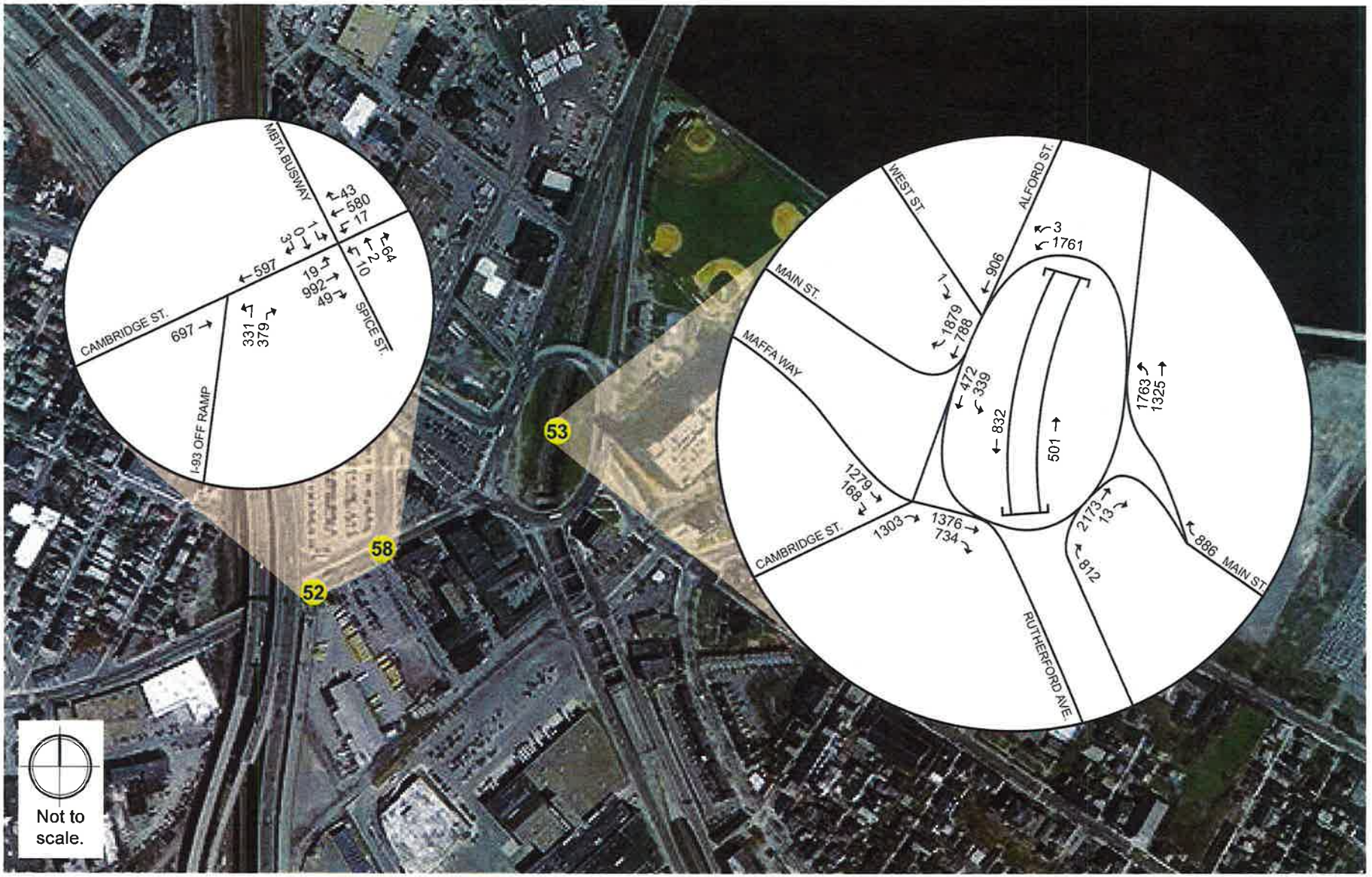
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-68
Existing (2014) Conditions Friday Peak Hour Traffic Volumes (4:30-5:30 p.m.), Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



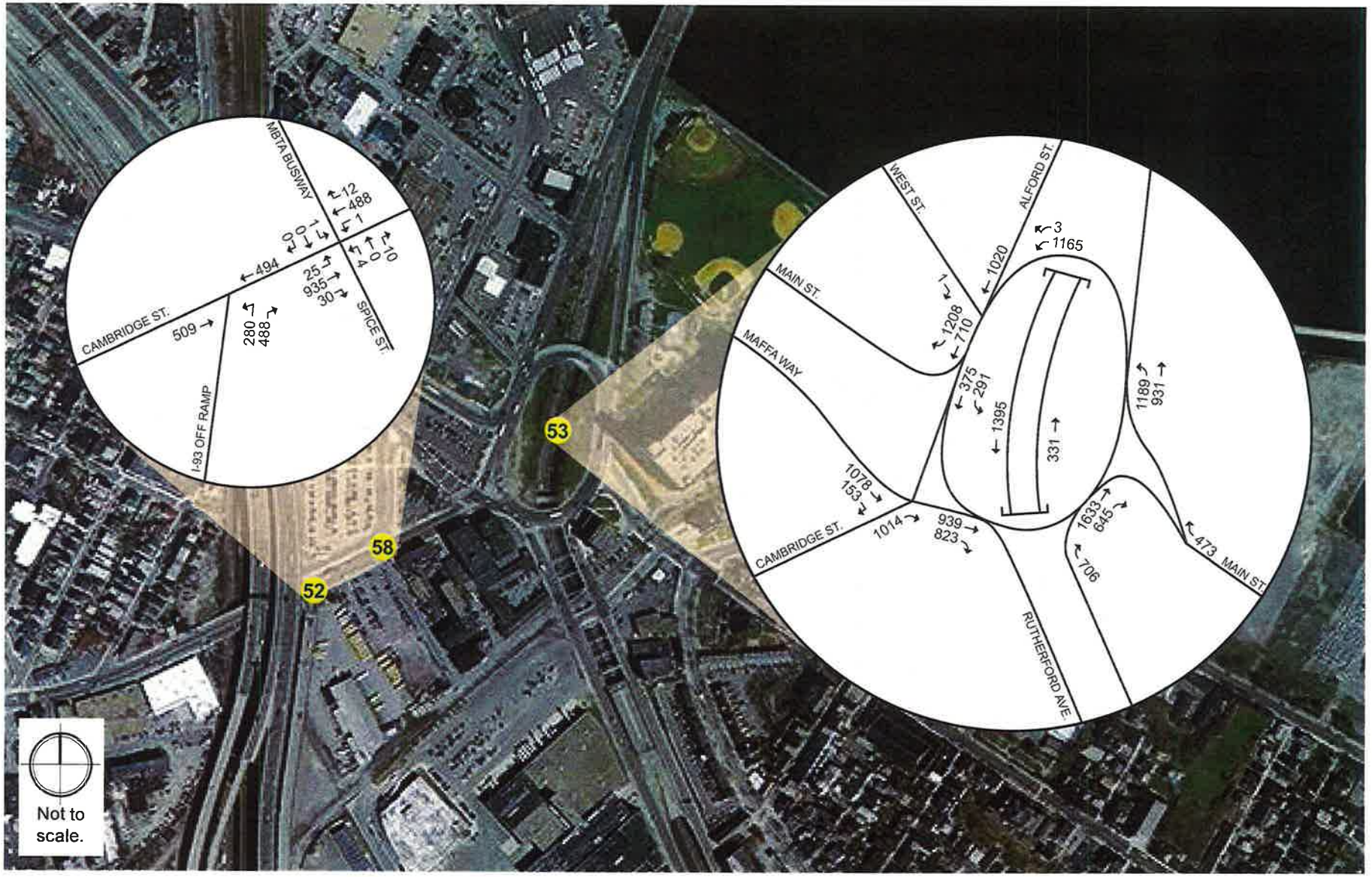
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-69
Existing (2014) Conditions Saturday Peak Hour Traffic Volumes (2:45-3:45 p.m.), Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



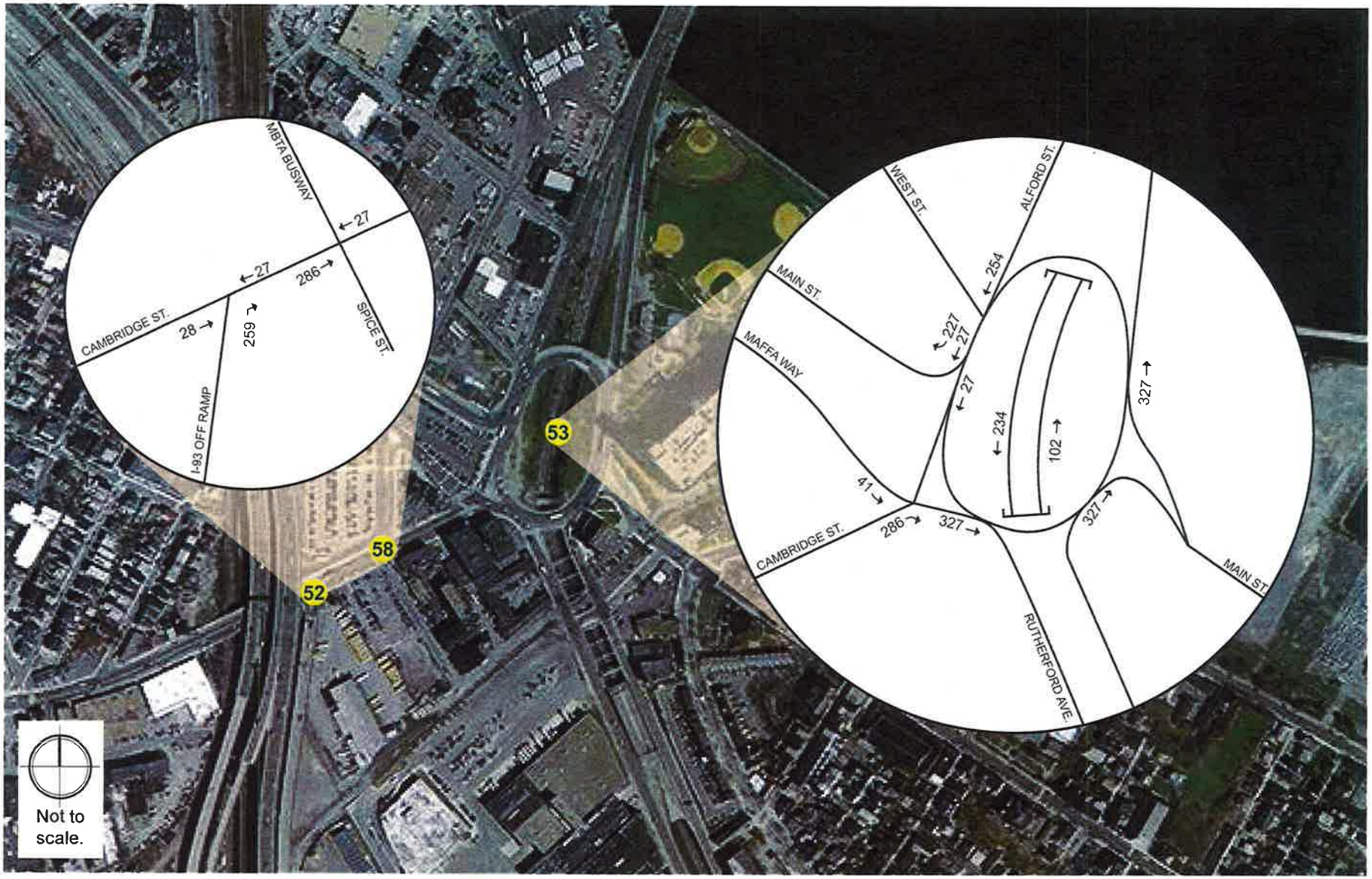
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-70
No Build (2023) Conditions Friday Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



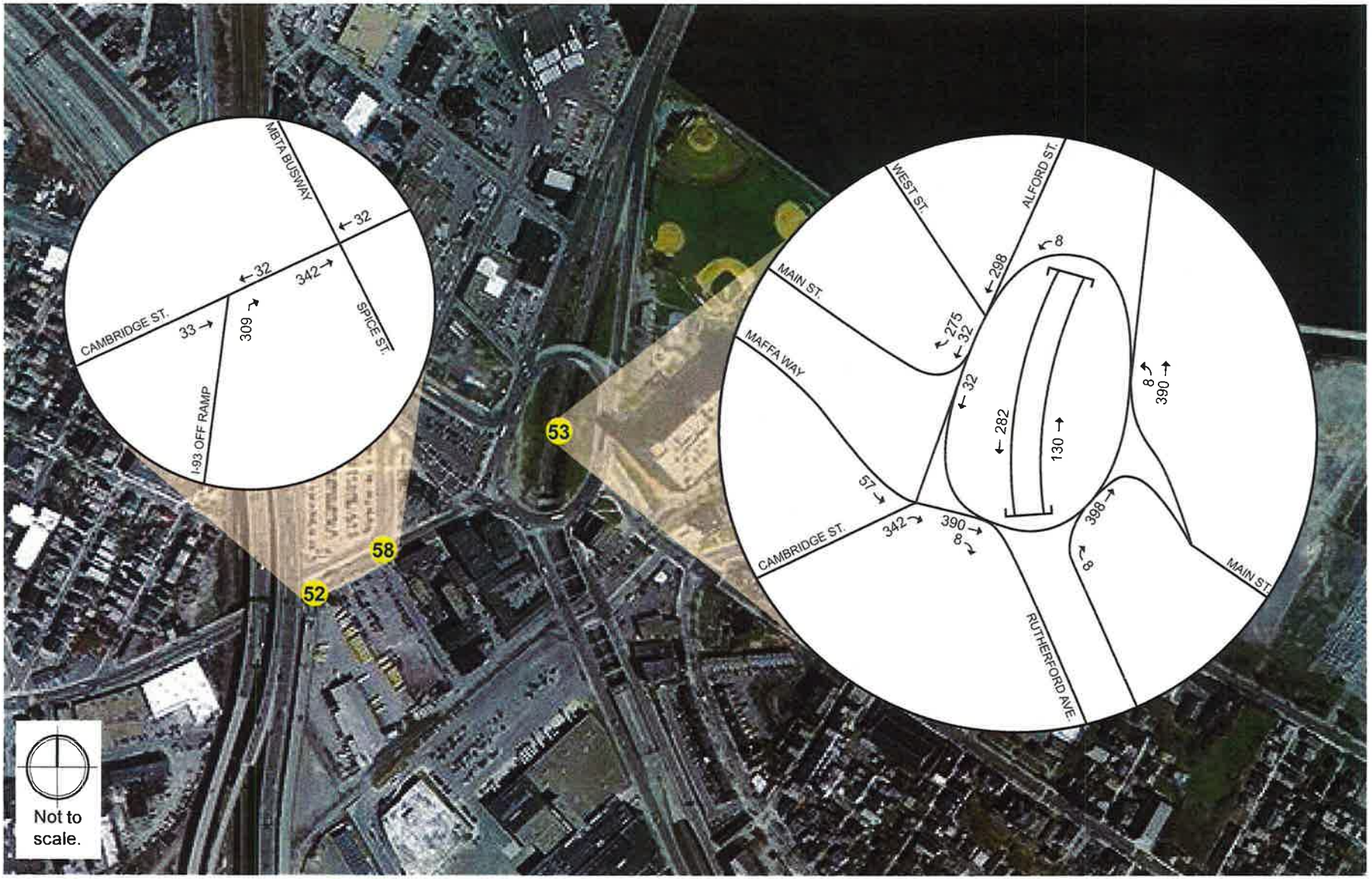
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-71
No Build (2023) Conditions Saturday Afternoon Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



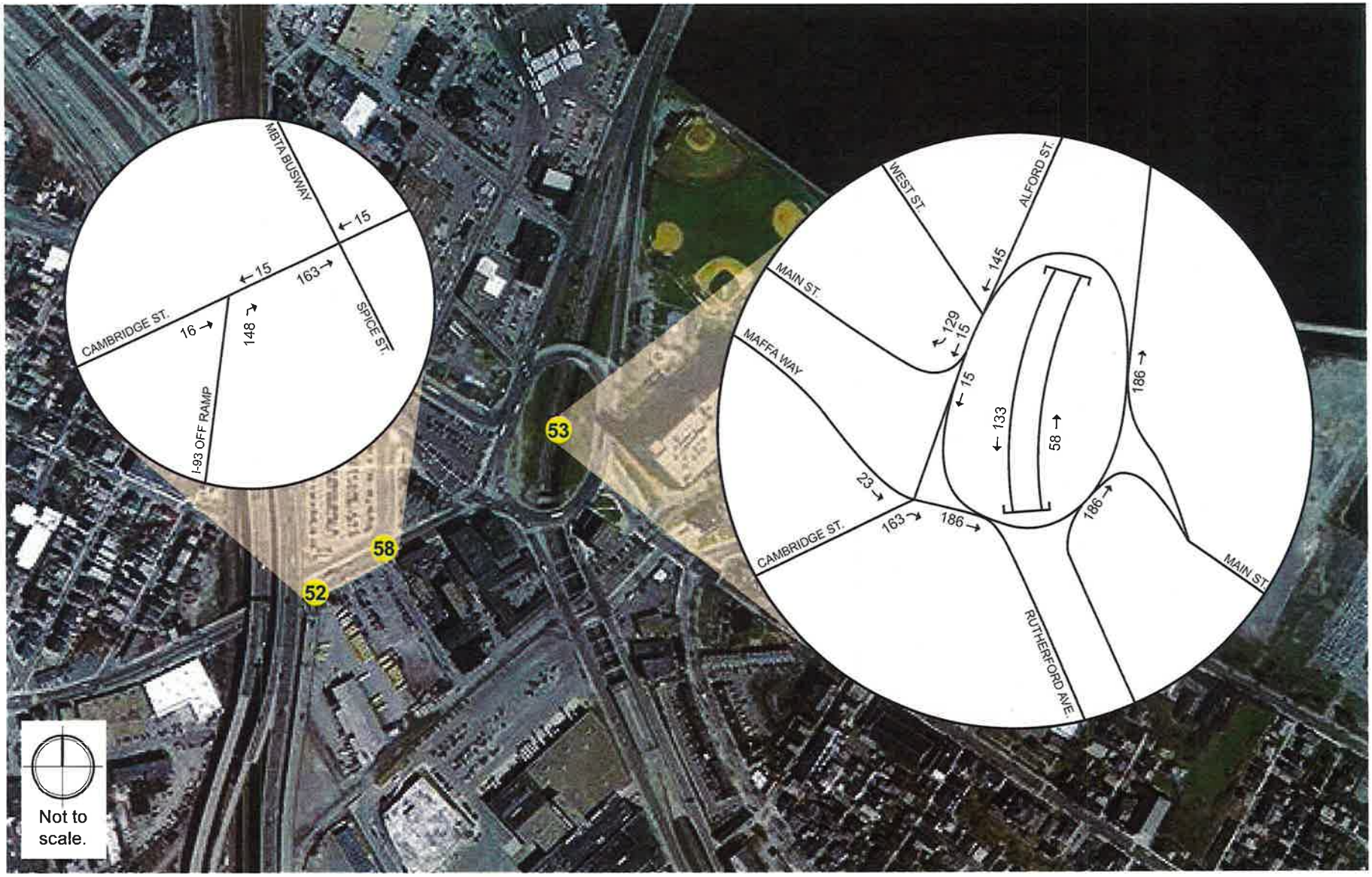
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-72
Friday p.m. Peak Hour Project-generated Trips, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



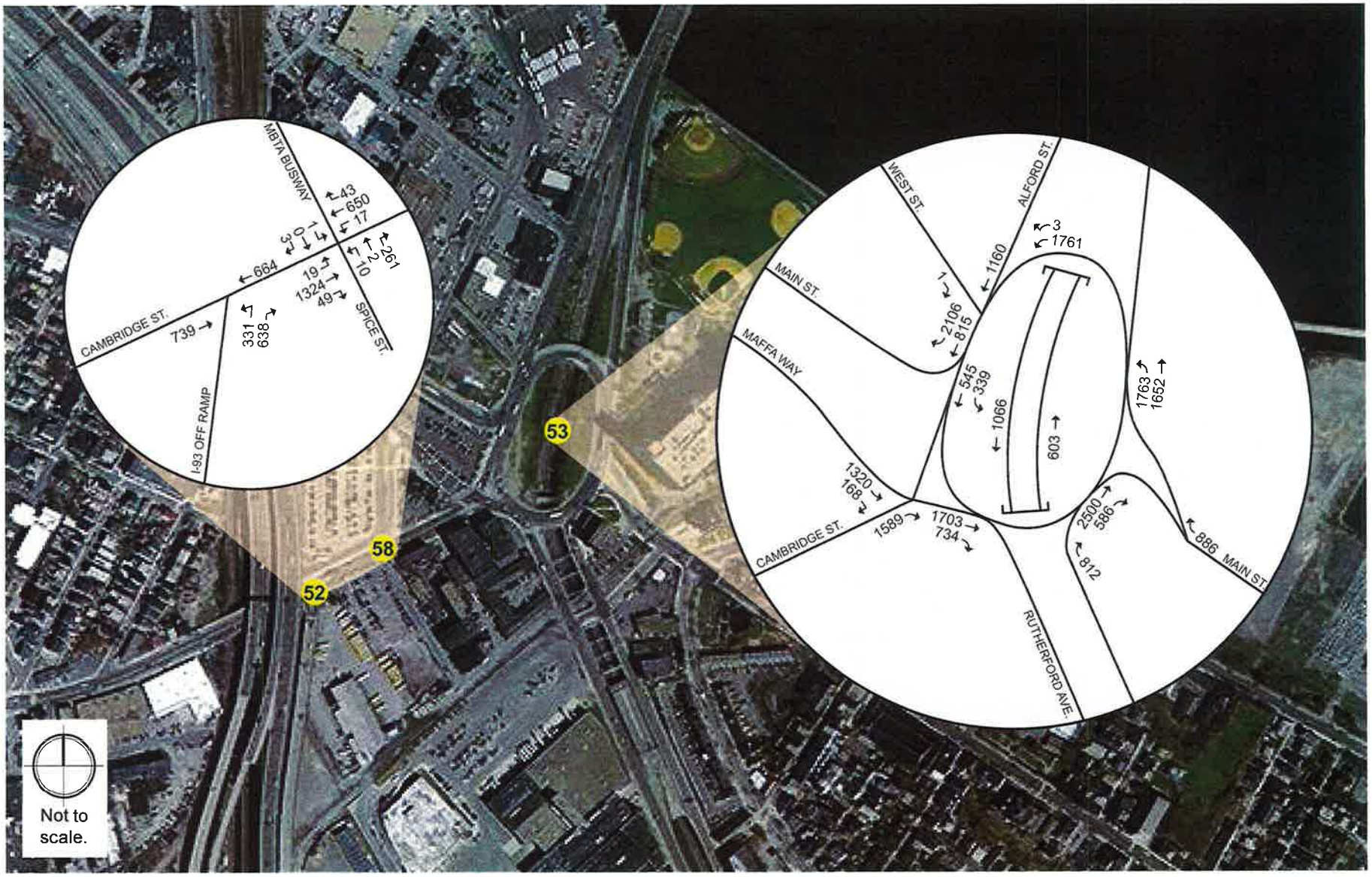
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-73
Saturday Afternoon Peak Hour Project-generated Trips, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



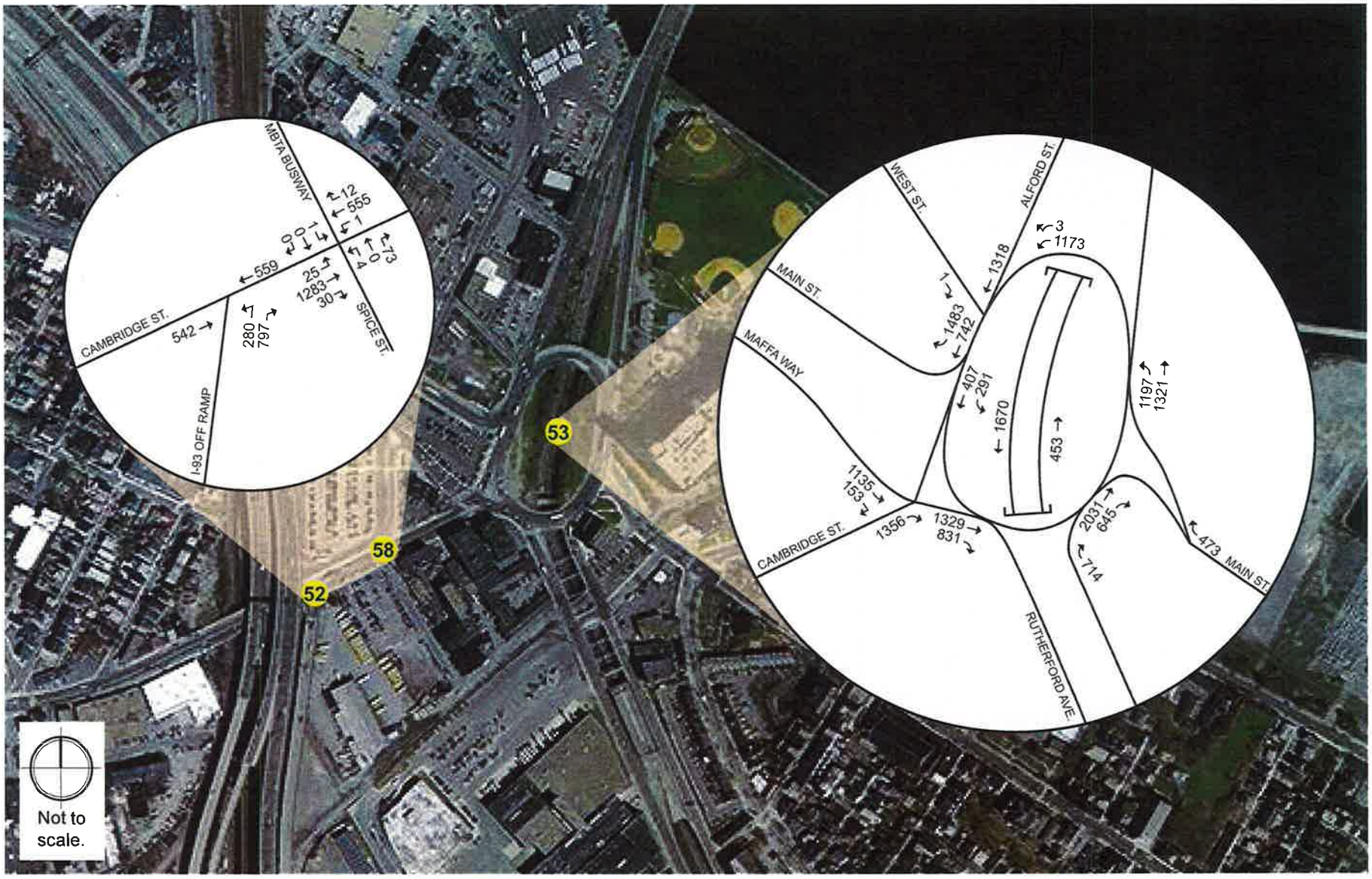
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-74
Friday p.m. "Real" Peak Hour Project-generated Trips, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



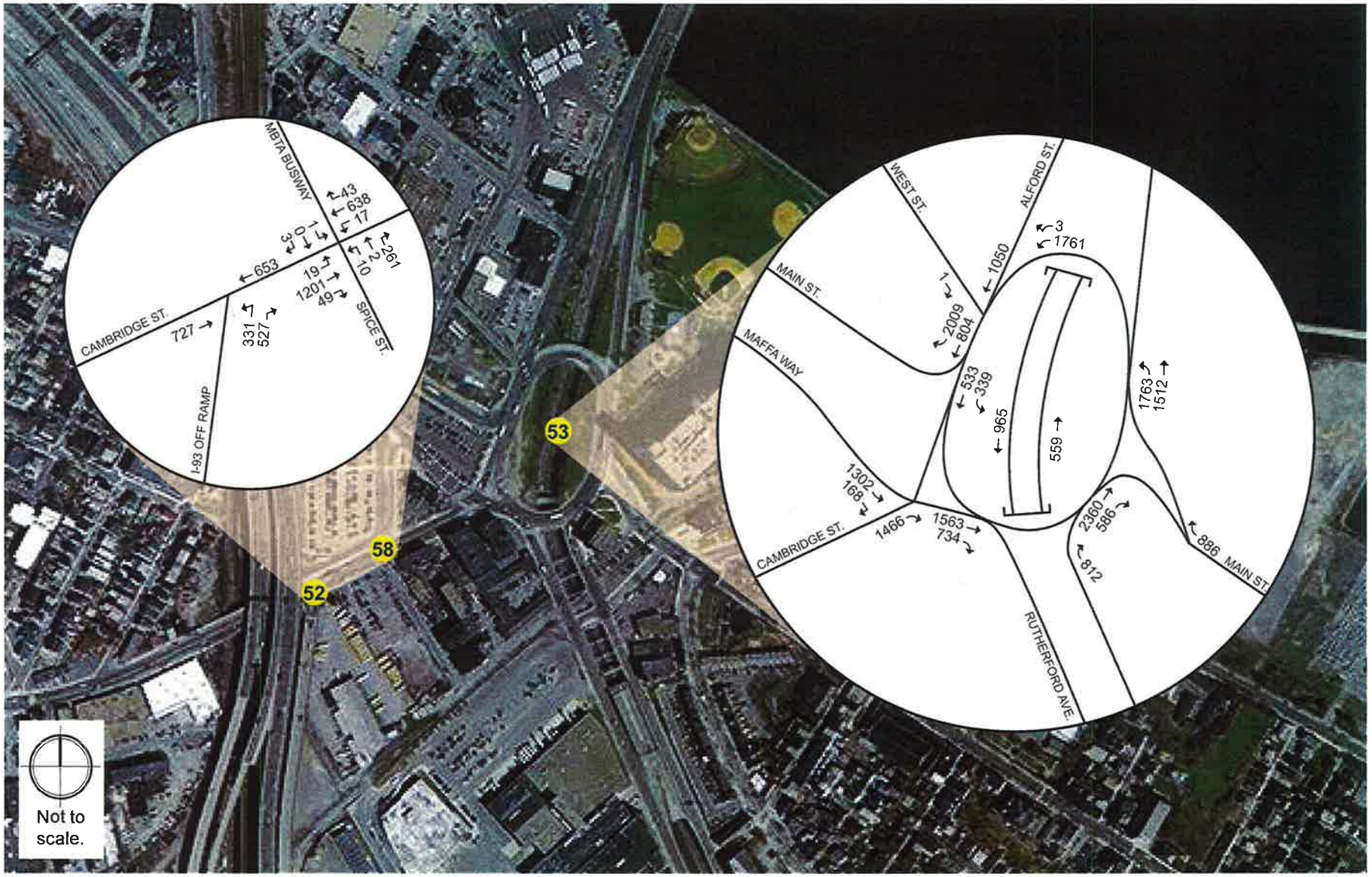
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-75
Build (2023) Conditions Friday Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



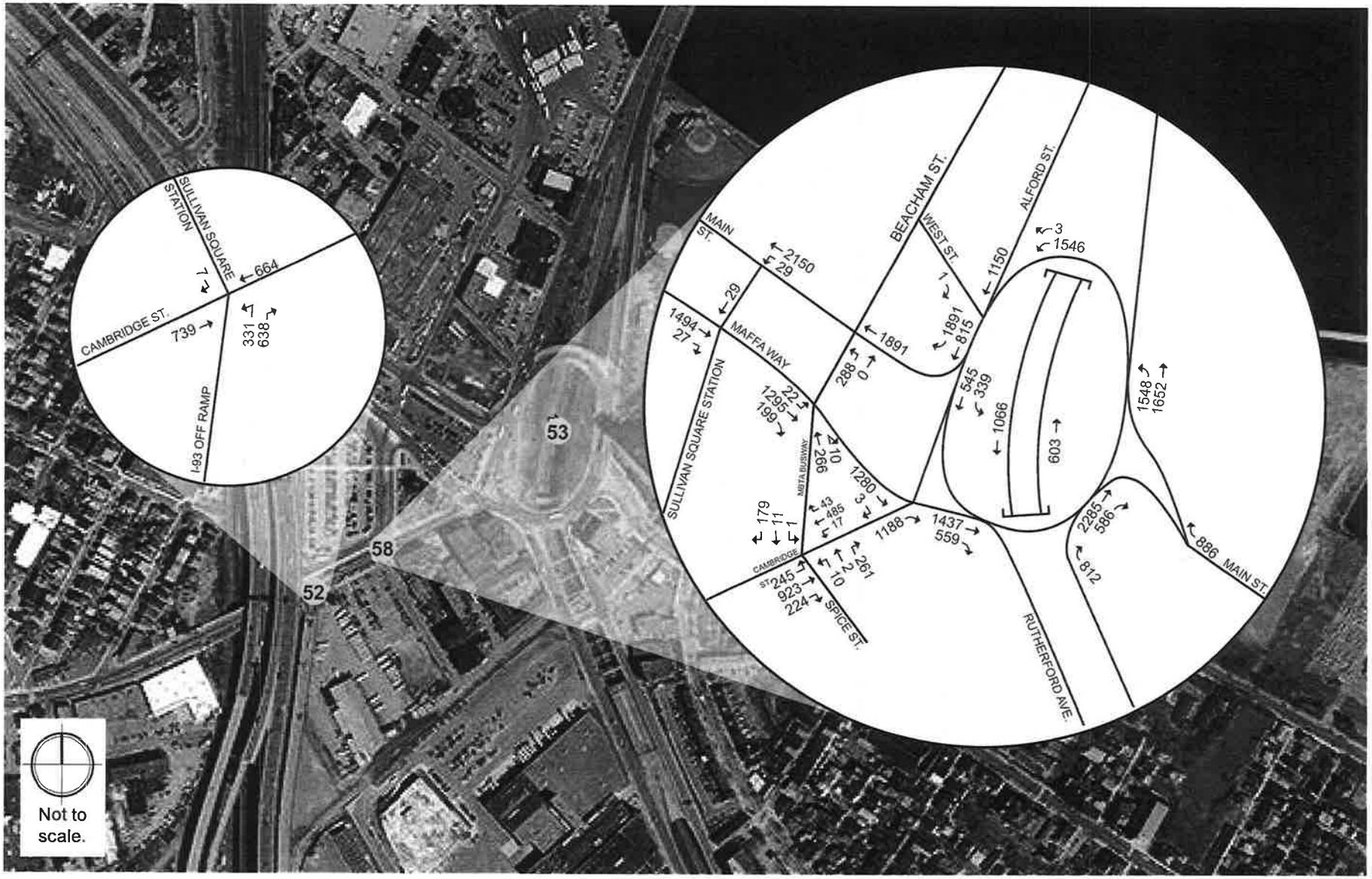
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-76
Build (2023) Conditions Saturday Afternoon Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



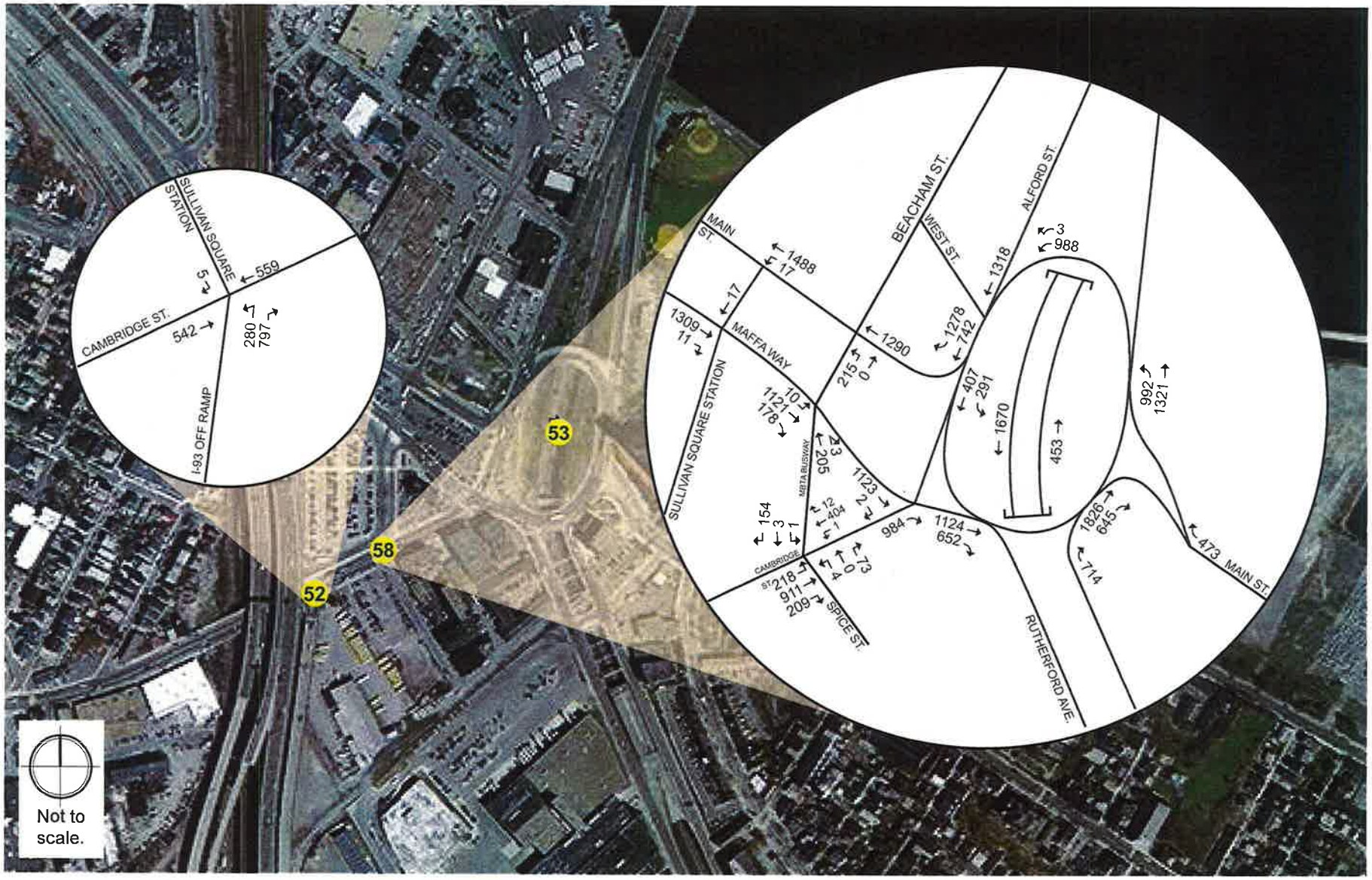
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-77
Build (2023) Conditions Friday "Real" Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



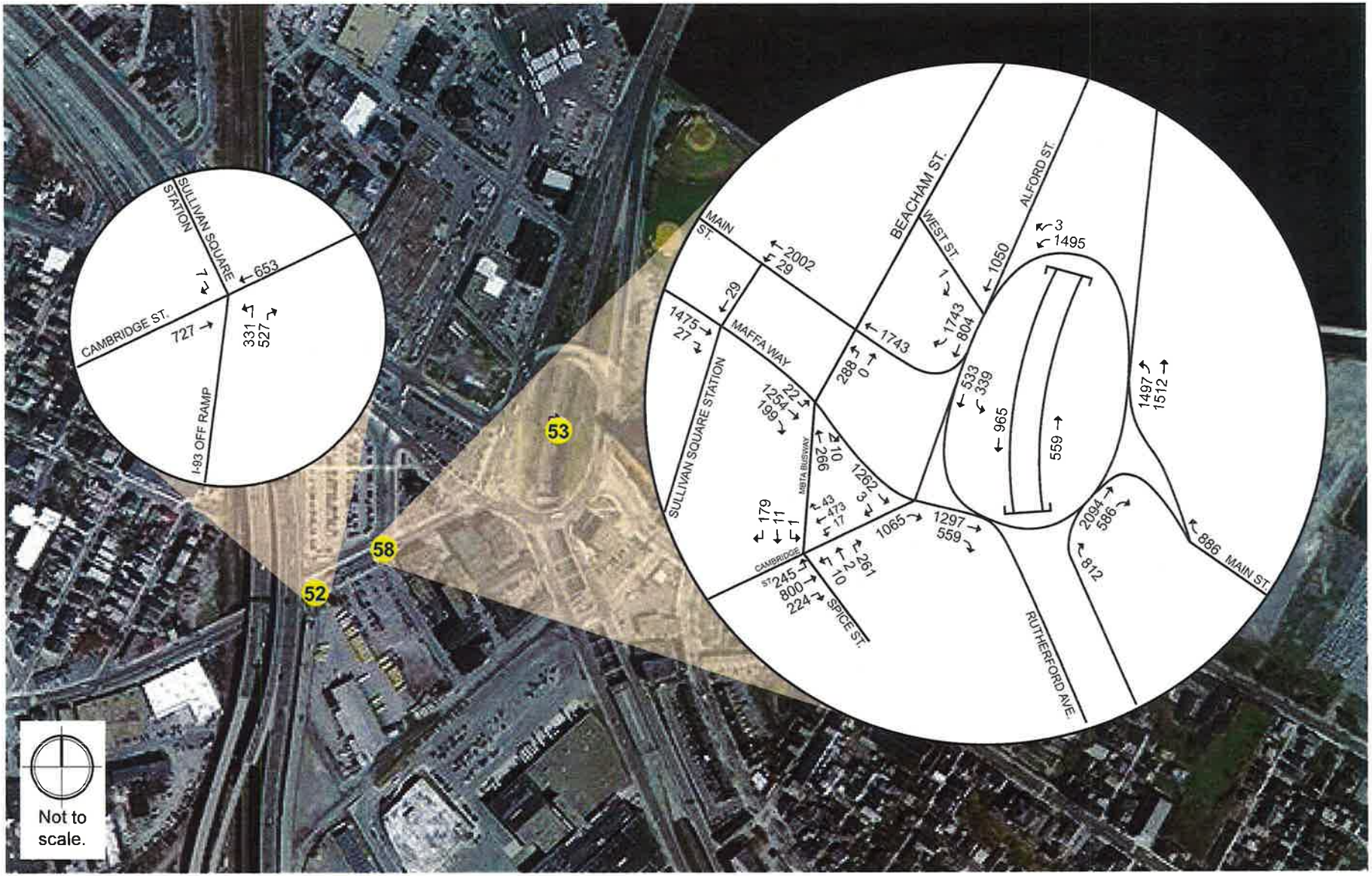
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-78
Build Mitigated (2023) Conditions Friday Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



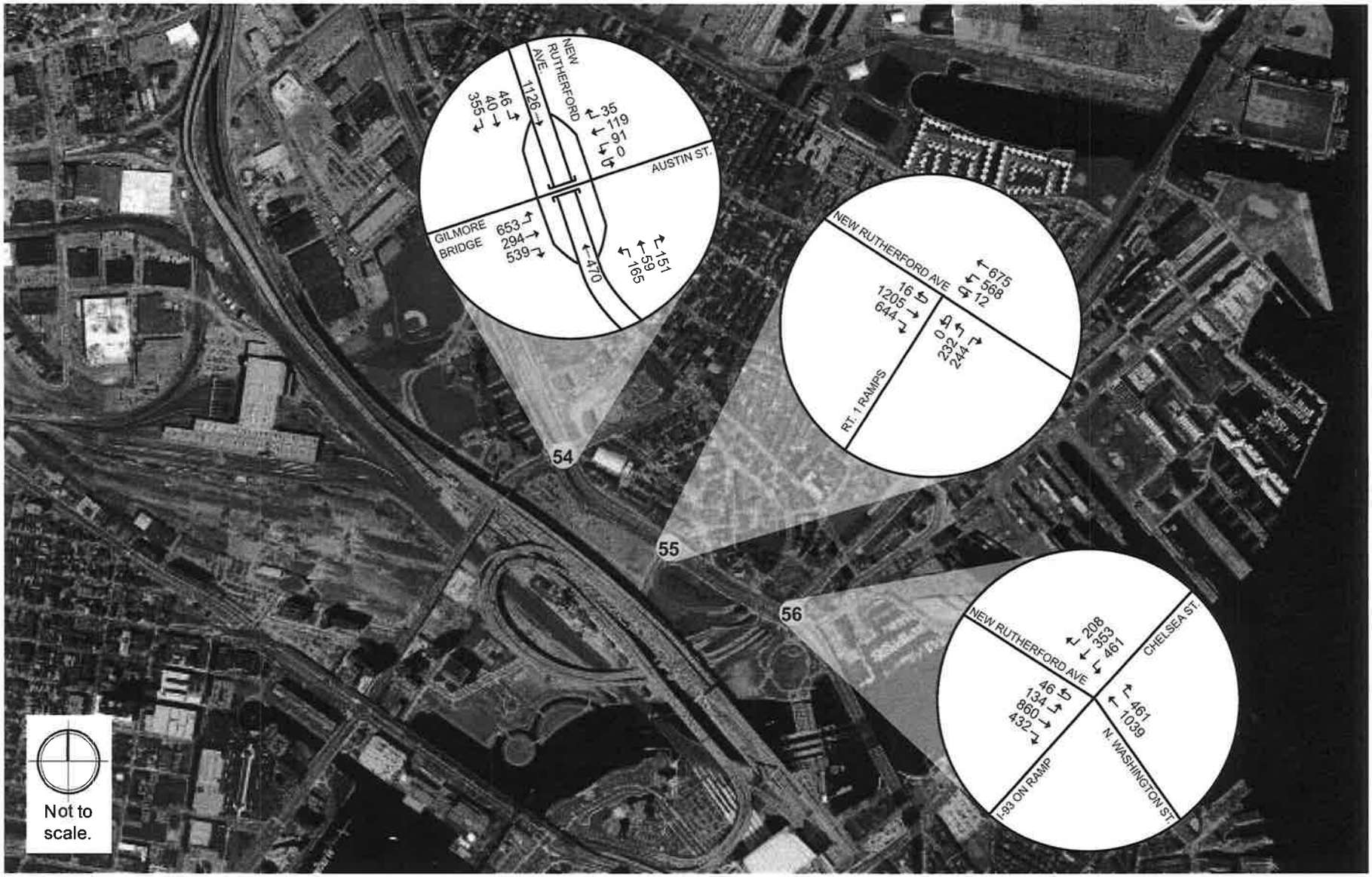
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-79
Build Mitigated (2023) Conditions Saturday Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



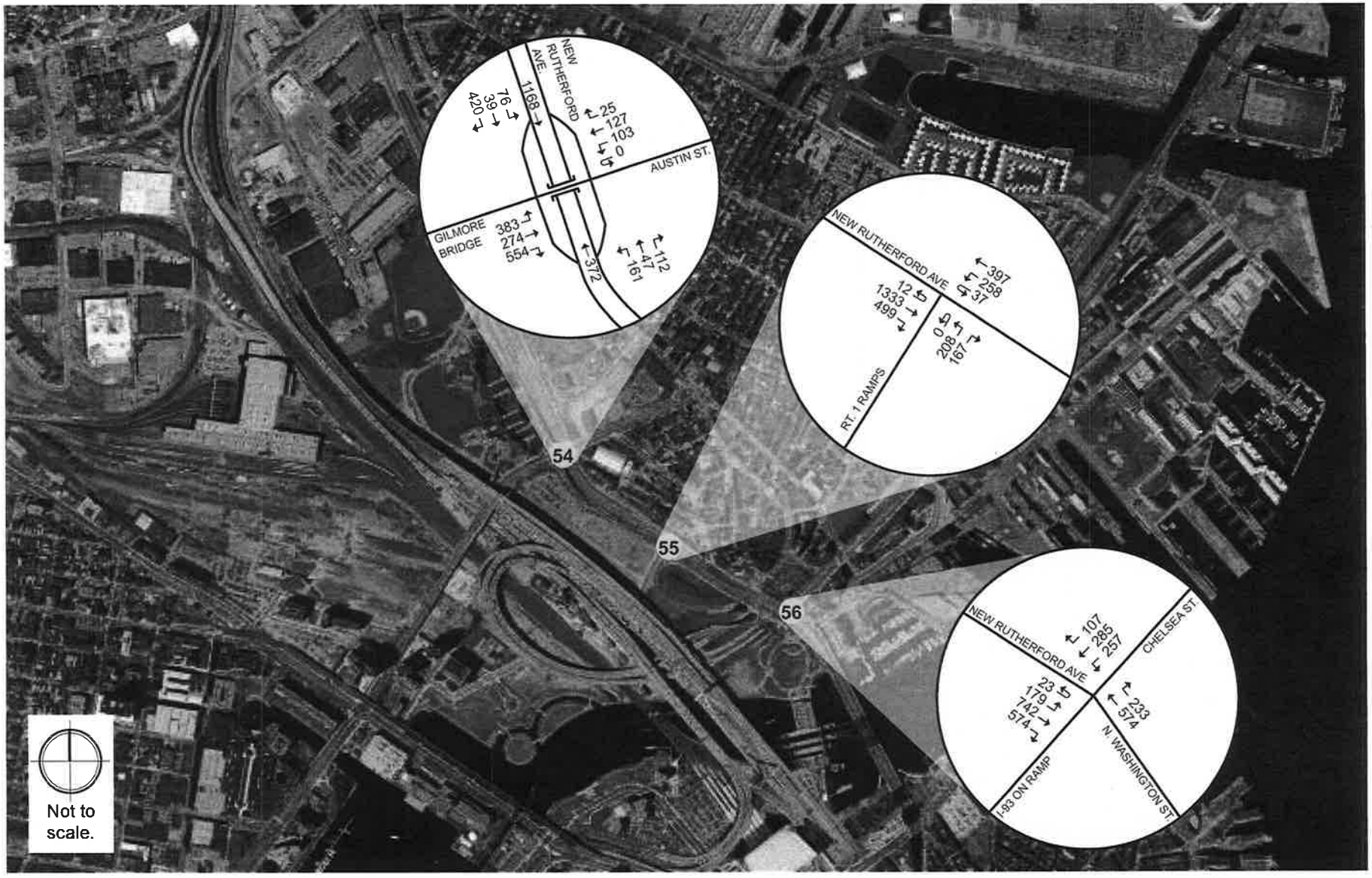
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-80
Build Mitigated (2023) Conditions Friday "Real" Peak Hour Traffic Volumes, Sullivan Square Area, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



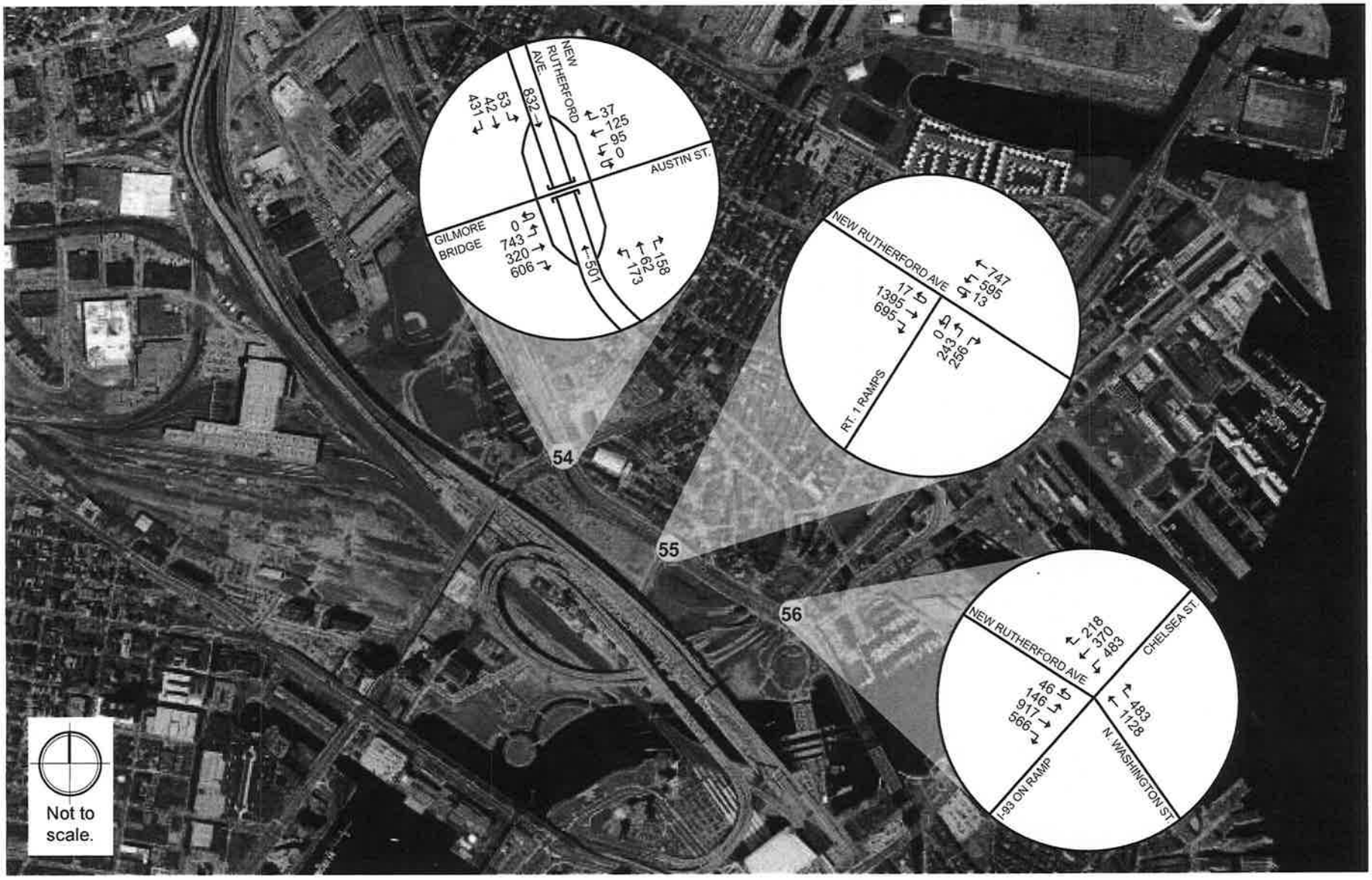
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-81
Existing (2014) Conditions Friday Peak Hour Traffic Volumes (4:30-5:30 p.m.), Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



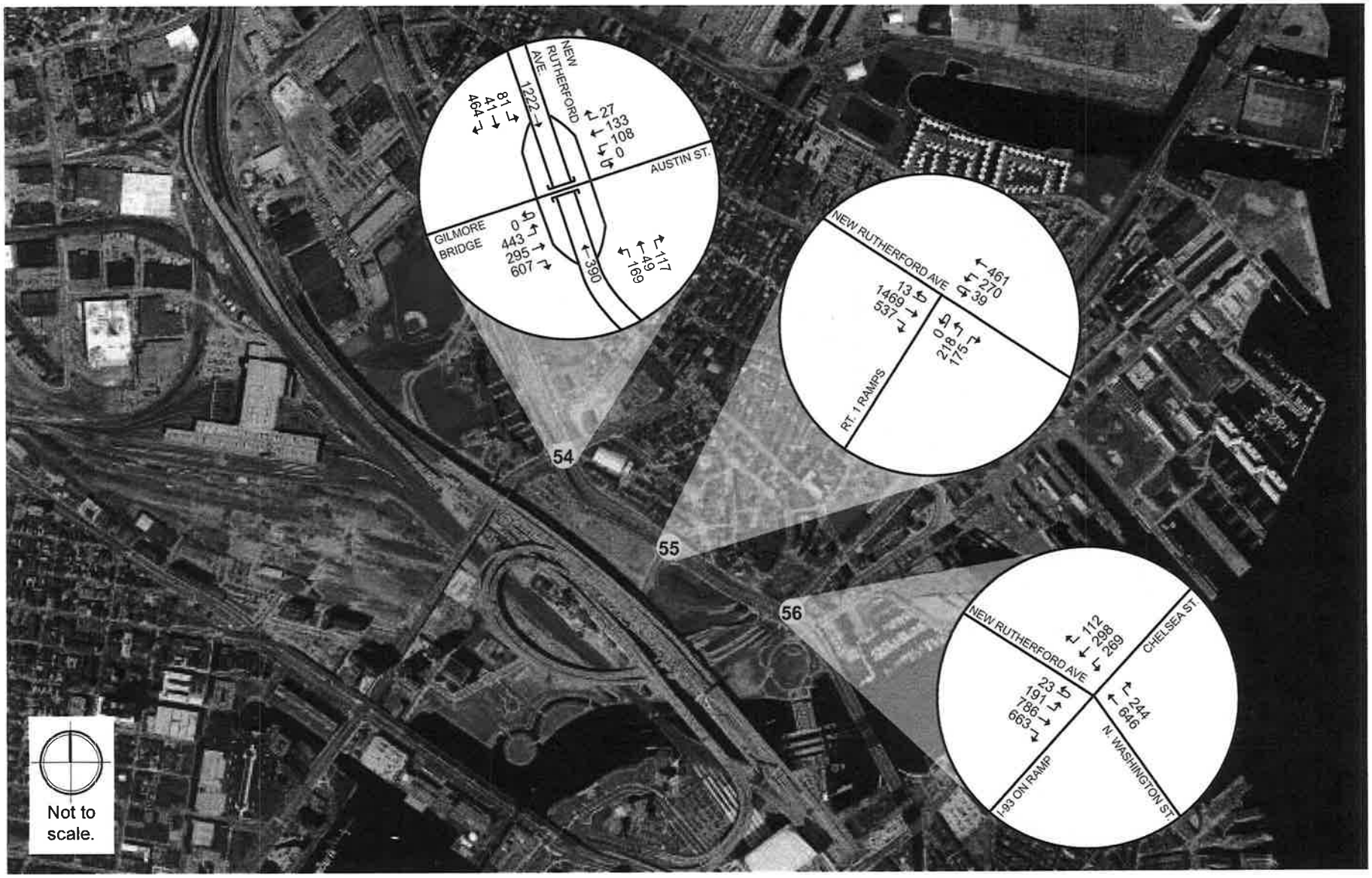
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-82
Existing (2014) Conditions Saturday Peak Hour Traffic Volumes (2:45-3:45 p.m.), Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



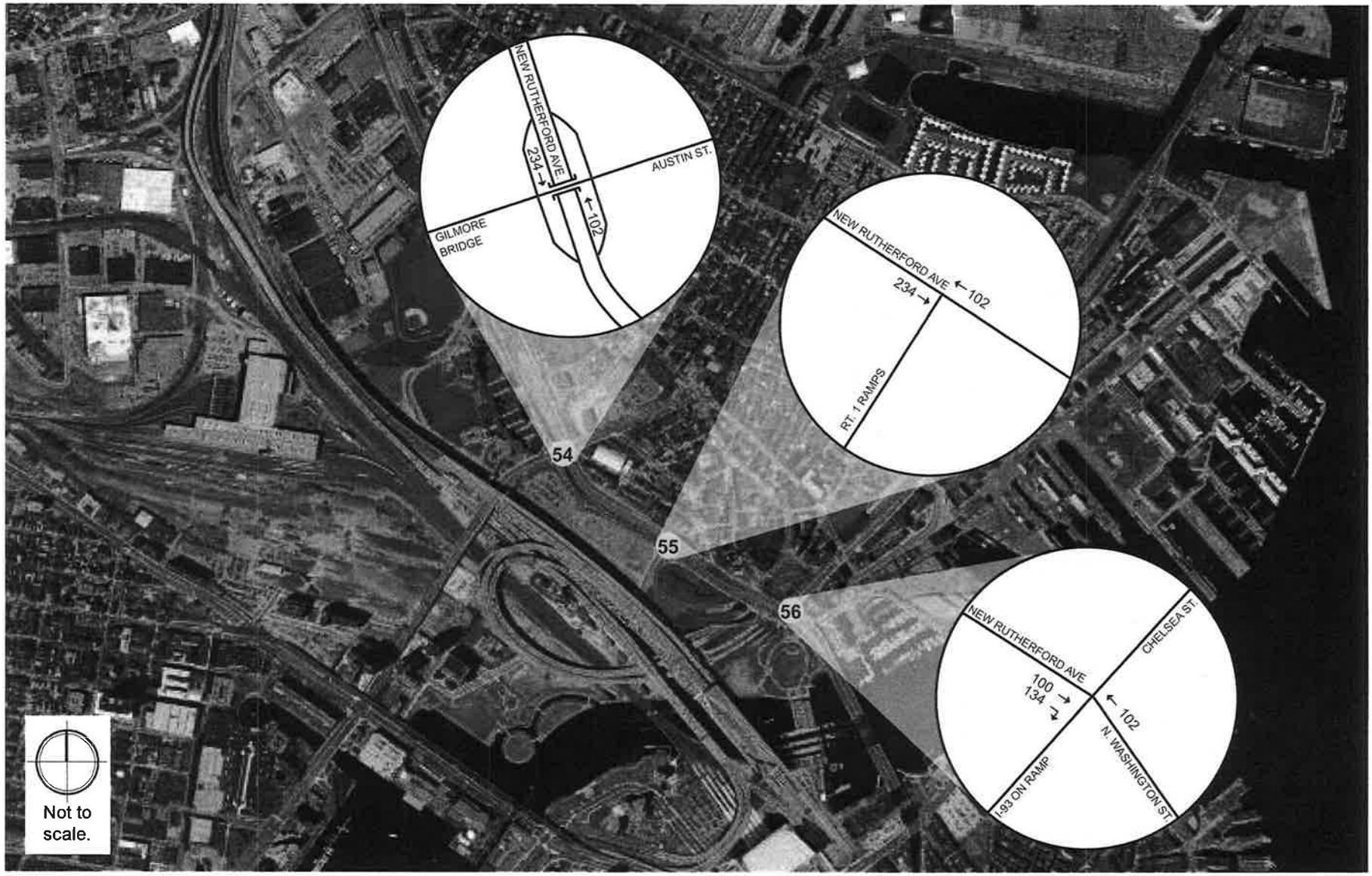
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-83
No Build (2023) Conditions Friday Peak Hour Traffic Volumes, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



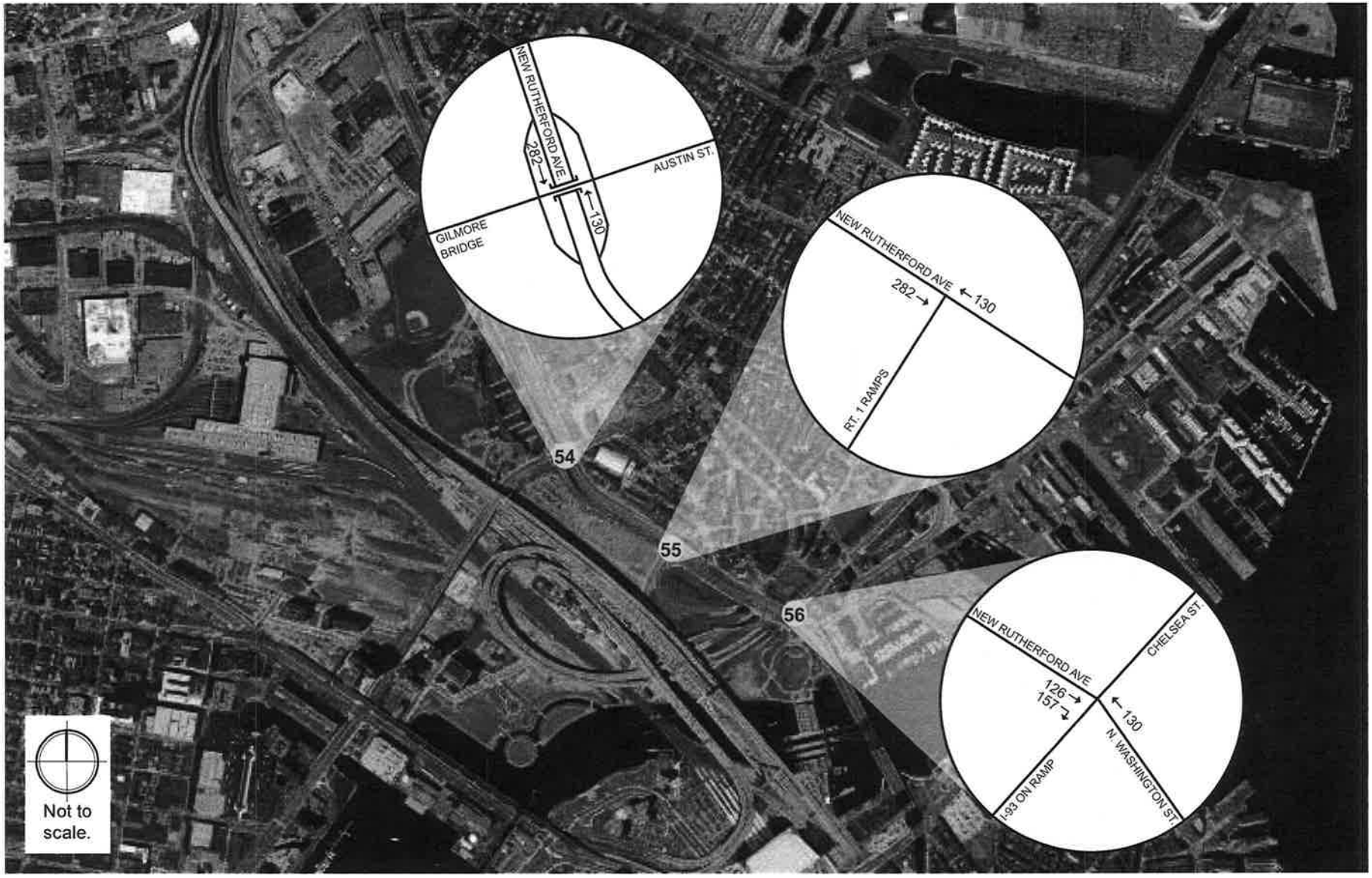
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-84
No Build (2023) Conditions Saturday Afternoon Peak Hour Traffic Volumes, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



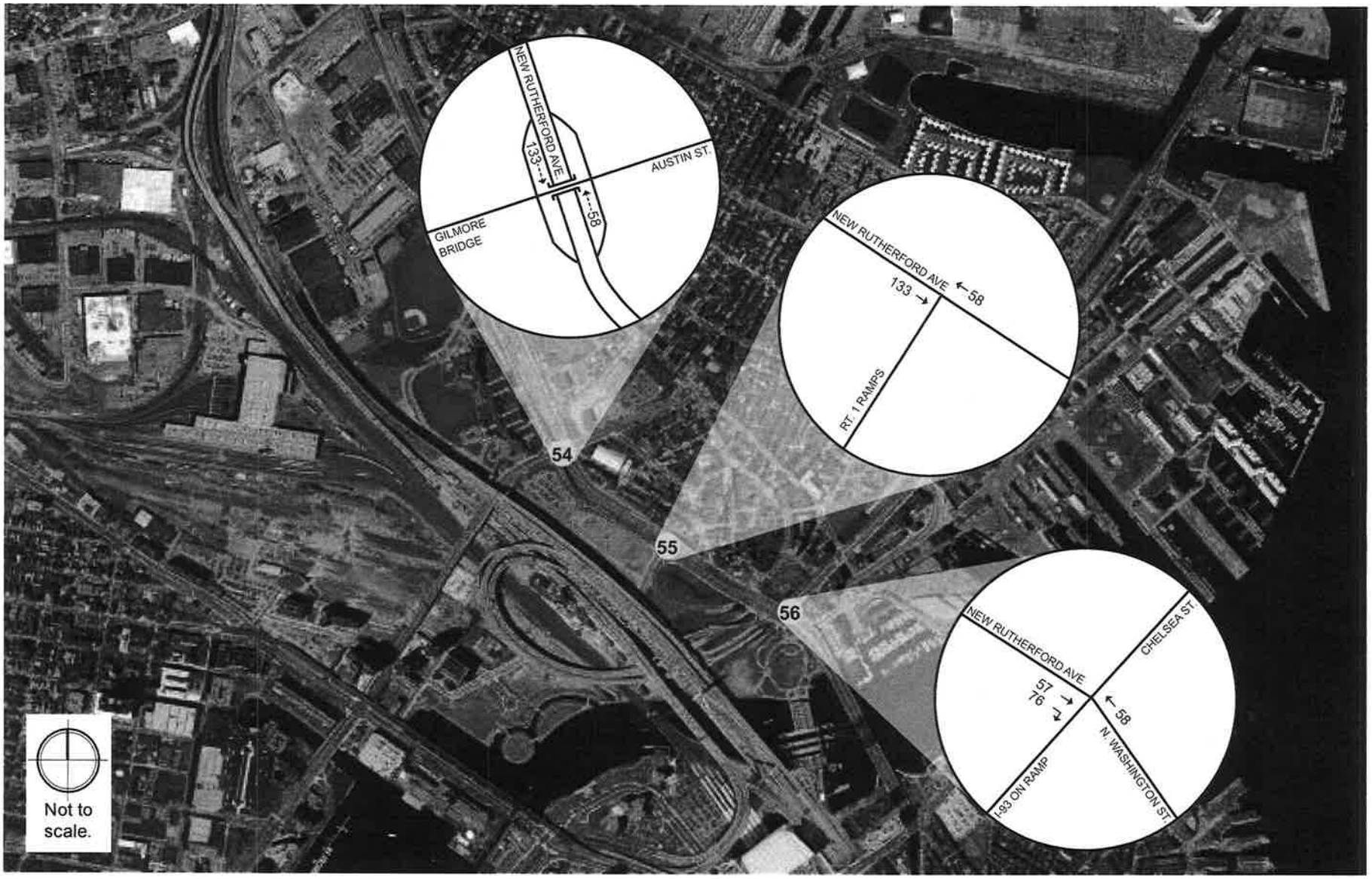
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-85
Friday p.m. Peak Hour Project-generated Trips, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



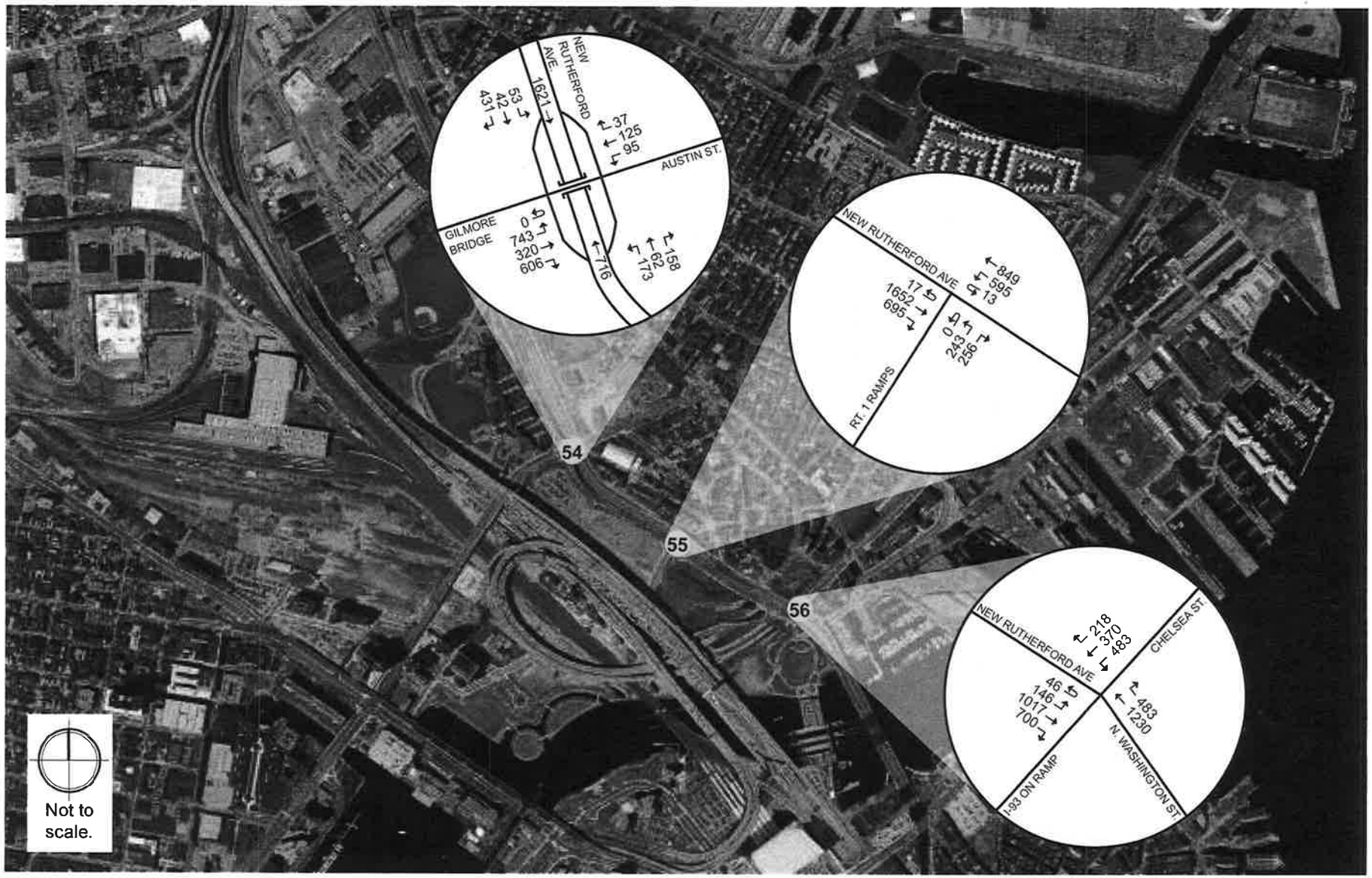
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-86
Saturday Afternoon Peak Hour Project-generated Trips, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



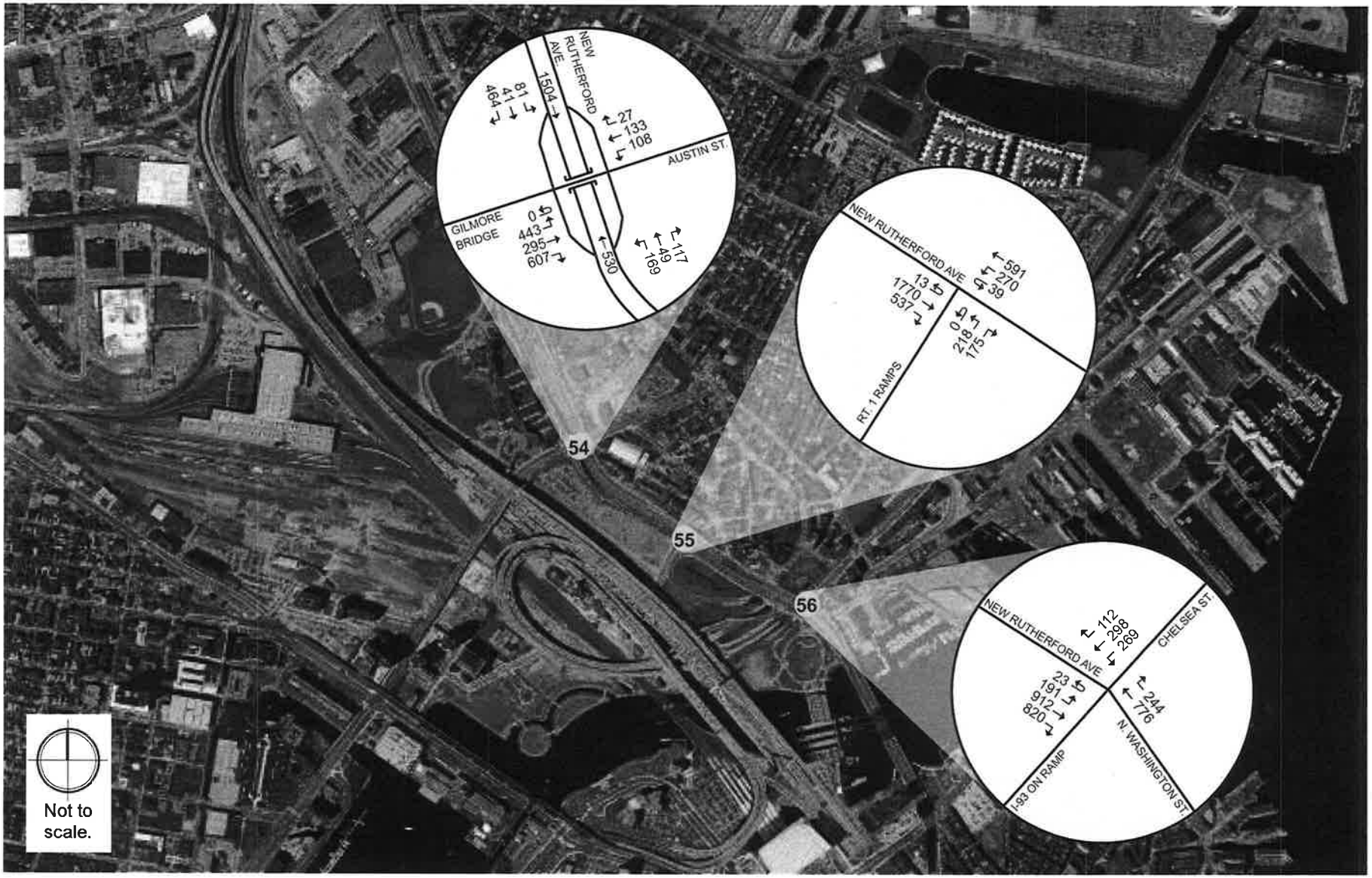
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-87
Friday p.m. "Real" Peak Hour Project-generated Trips, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



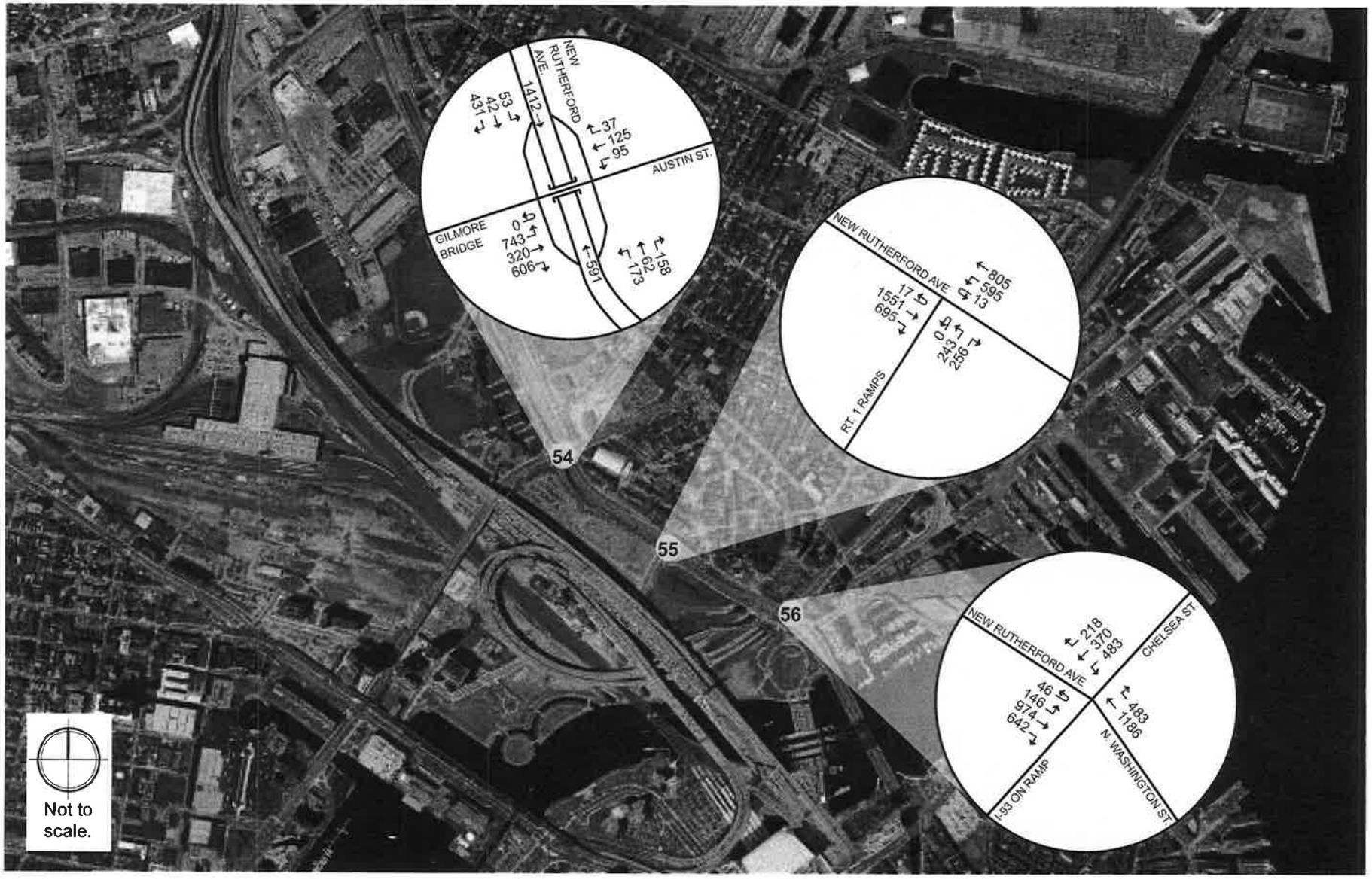
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-88
Build (2023) Conditions Friday Peak Hour Traffic Volumes, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



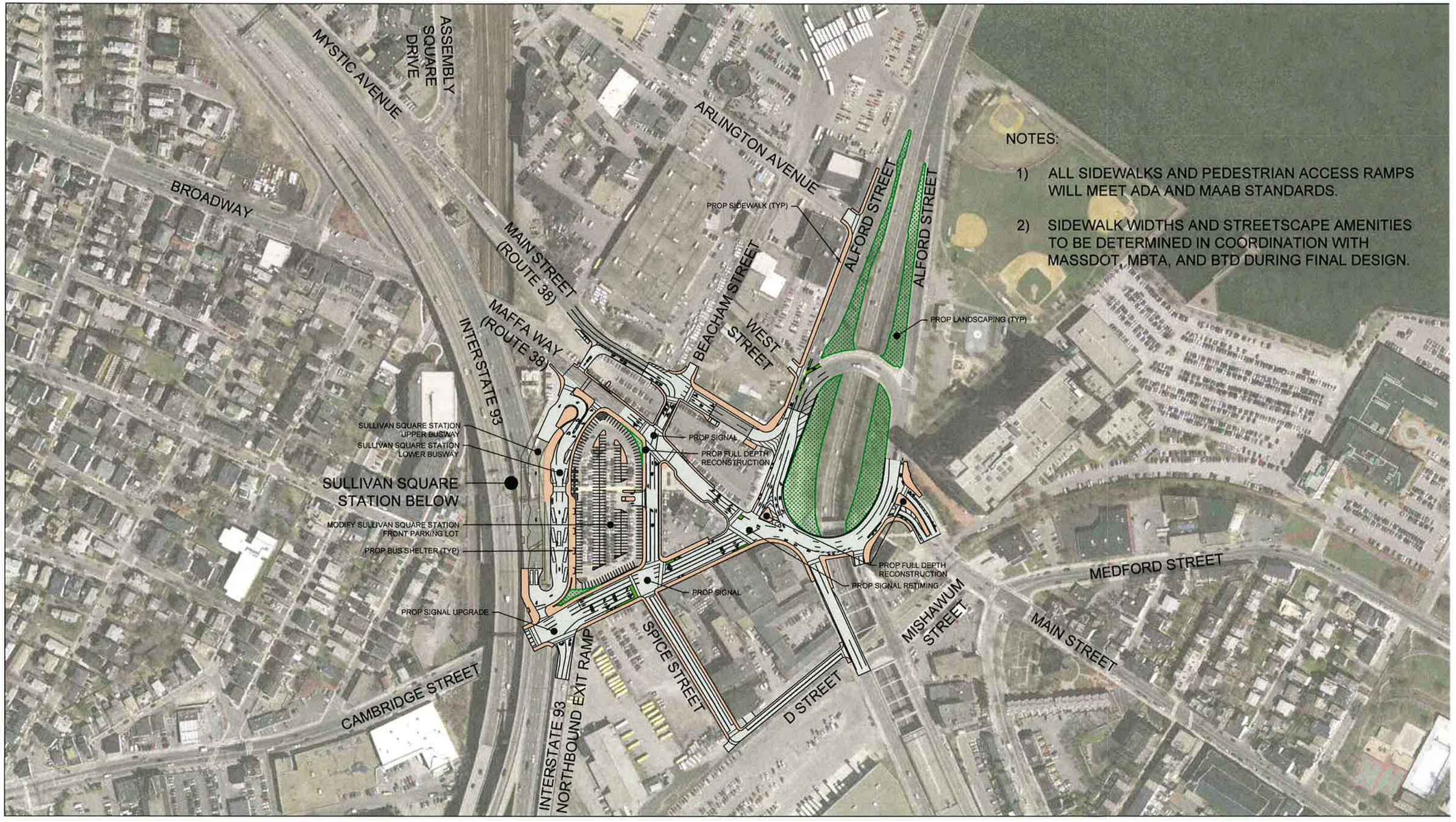
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-89
Build (2023) Conditions Saturday Afternoon Peak Hour Traffic Volumes,Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



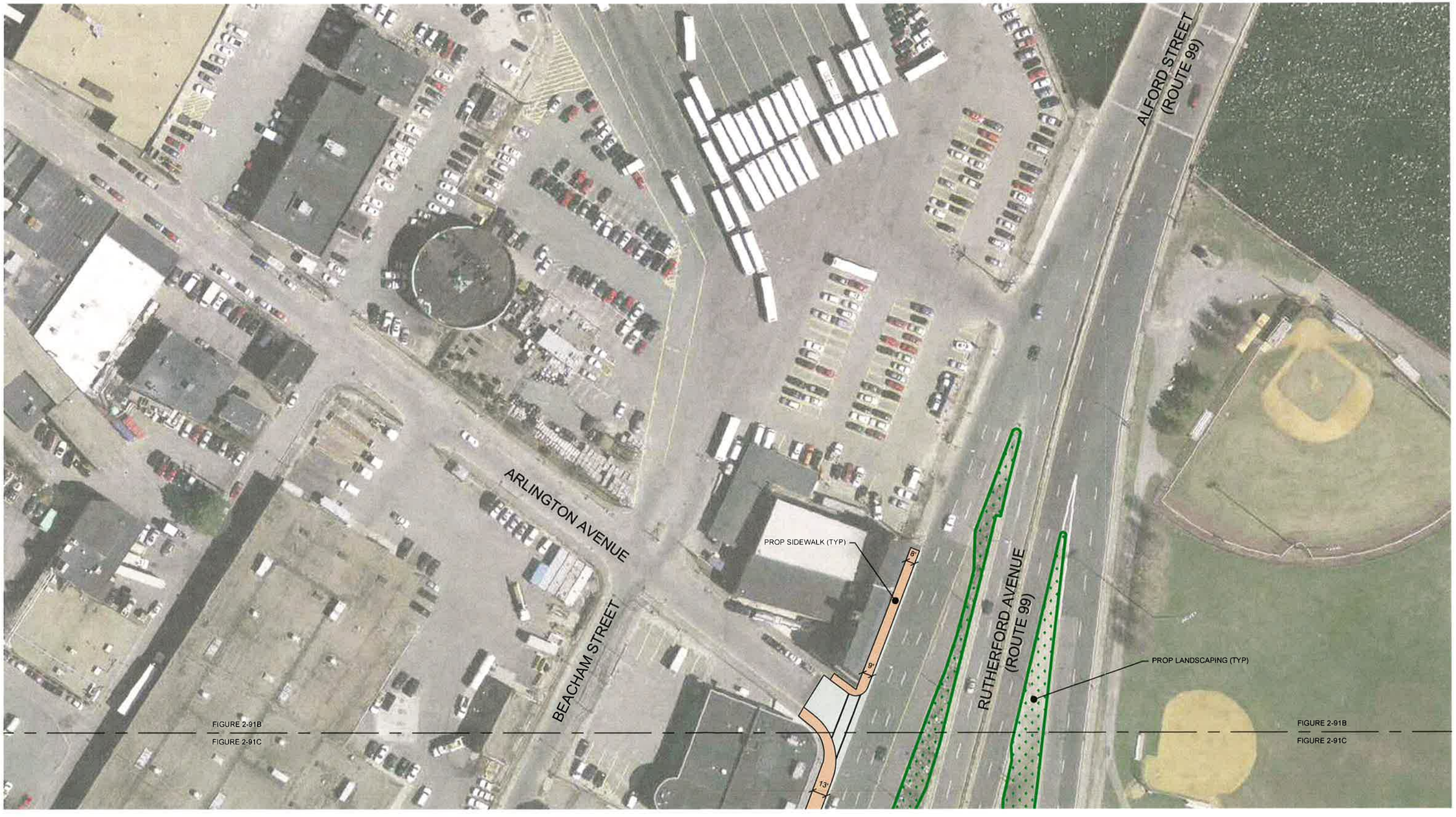
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-90
Build (2023) Conditions Friday "Real" Peak Hour Traffic Volumes, Rutherford Avenue, Boston
Source: Howard/Stein-Hudson Associates, Inc., 2015



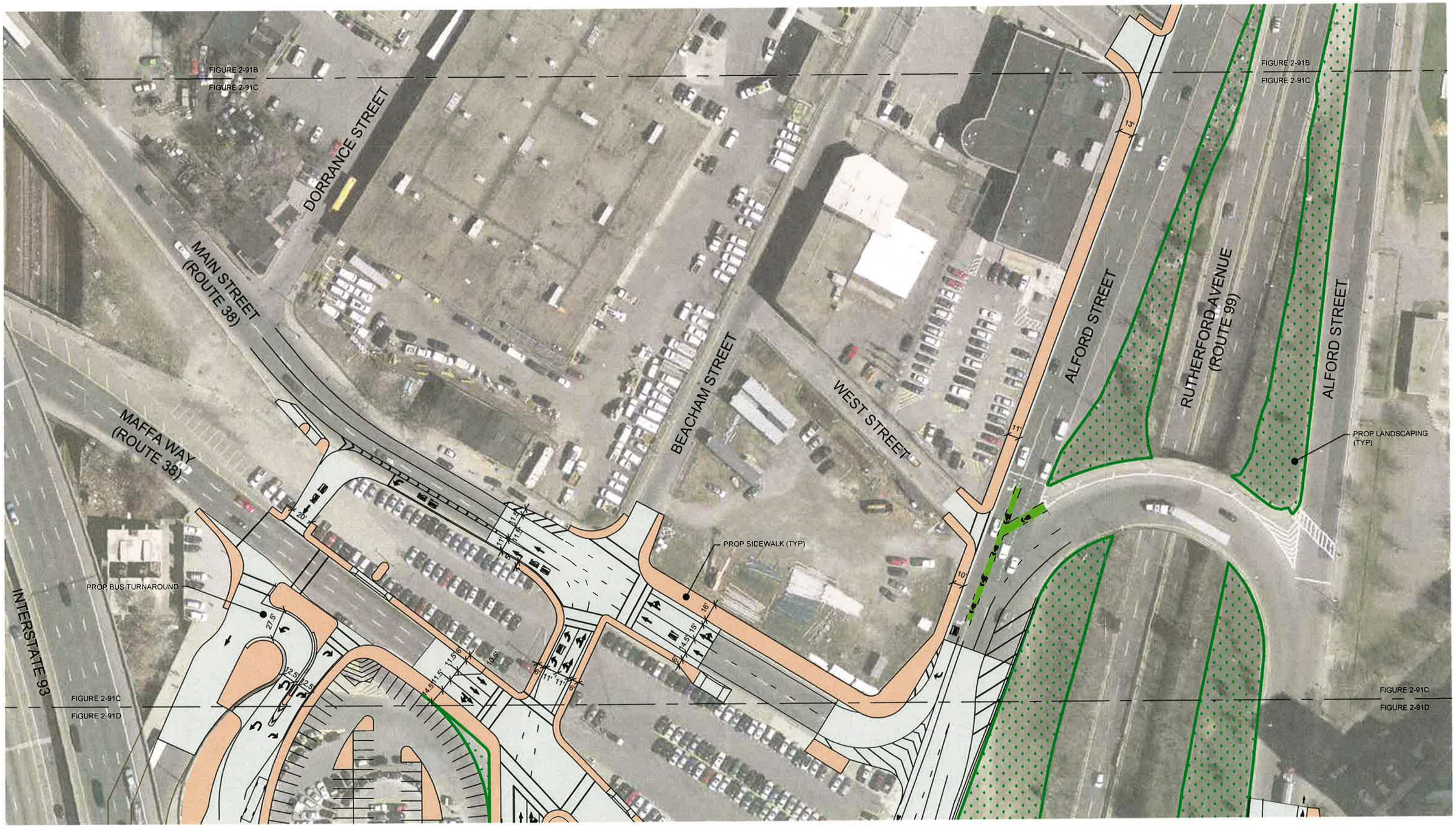
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-91A
Sullivan Square Conceptual Improvement Plan (250-scale)
Source: Howard/Stein-Hudson Associates, Inc., 2014



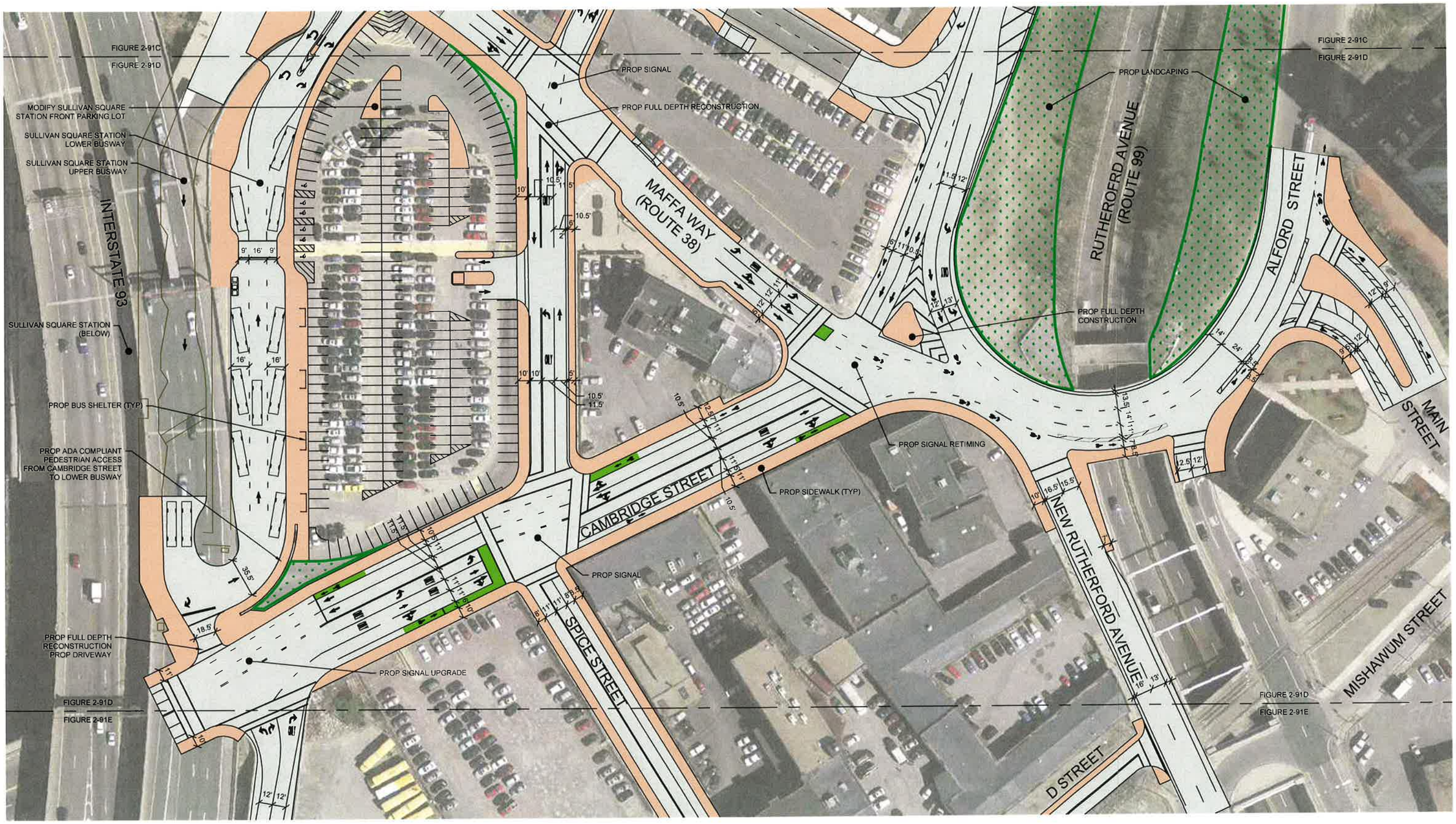
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-91B
Sullivan Square Conceptual Improvement Plan (80-scale)
Source: Howard/Stein-Hudson Associates, Inc., 2014



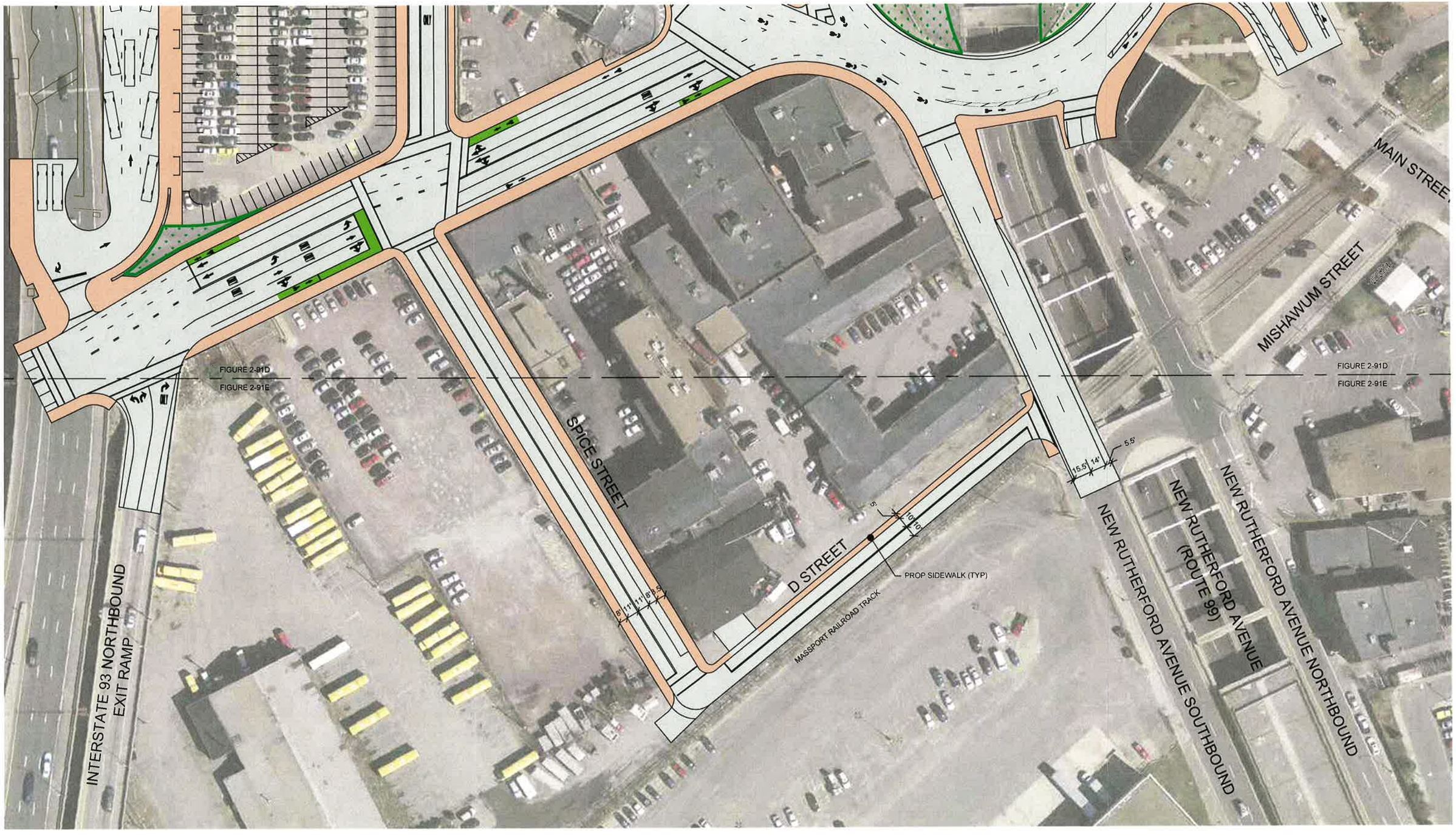
Wynn Resort in Everett
Everett, Massachusetts

Figure 2-91C
Sullivan Square Conceptual Improvement Plan (80-scale)
Source: Howard/Stein-Hudson Associates, Inc., 2014



Wynn Resort in Everett
Everett, Massachusetts

Figure 2-91D
Sullivan Square Conceptual Improvement Plan (80-scale)
Source: Howard/Stein-Hudson Associates, Inc., 2014



Wynn Resort in Everett
Everett, Massachusetts

Figure 2-91E
Sullivan Square Conceptual Improvement Plan (80-scale)
Source: Howard/Stein-Hudson Associates, Inc., 2014

3.3 DRAFT SECTION 61 FINDINGS

Massachusetts General Laws Chapter 30, Section 61 requires state agencies and authorities, when approving, providing land or funding for, or undertaking a project, to evaluate and determine whether the project causes any damage to the environment, and to make a written finding describing that determination and confirming that all feasible measures have been taken to avoid, minimize and mitigate any damage to the environment. Under the MEPA regulations, an agency's Section 61 findings are directed to those aspects of the project that are within the subject matter scope of the agency's respective permit or within the geographic area subject to a land transfer.

State agencies expected to make Section 61 findings for the Project prior to issuing approvals for implementing the Project include MassDEP, MassDOT, DCR, MWRA, and the MGC.

The following draft Section 61 findings reflect the mitigation measures related to each of the following agencies' jurisdictions. As required by the Secretary's Certificate, the estimated costs and implementation schedule for these mitigation measures are included in the draft Section 61 findings.

3.3.1 DRAFT MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SECTION 61 FINDINGS

Introduction

These Section 61 Findings for Wynn Resort in Everett (EEA #15060) have been prepared in accordance with the provisions of M.G.L. c. 30, Section 61 and 301 CMR 11.00 and cover potential state agency actions of the Massachusetts Department of Transportation Highway Division, Rail and Transit Division/MBTA and Aeronautics Division.

The following permits and approvals will be required from the Department:

- Vehicular Access Permit (Category III) (Highway Division)
- Non-Vehicular Access Permit (Highway Division)
- Airspace Review (Aeronautics Division)
- Land Disposition and Easement Agreements (Rail and Transit Division/MBTA)

- Agreements and approvals necessary to construct improvements and to operate within MBTA transit stations and agreements and approvals necessary to relocate bus stops (Rail and Transit Division/MBTA)

Project Description

The Wynn Resort in Everett (the "Project") will consist of a luxury hotel with 629 rooms, a gaming area, retail space, food and beverage outlets, convention and meeting space, a spa and gym, and a parking garage and drop-off areas to be constructed on a waterfront parcel totaling approximately 33.9 acres located in Everett, Massachusetts, adjacent to the Mystic River (the "Project Site"). Extensive landscape and open space amenities are planned which include a public gathering area with an outdoor park-like open space, a pavilion, waterfront features, a public harborwalk, and water transportation docking facilities. The Proponent has also committed to certain off-site improvements including extensive transportation improvements and a multiuse path connector ("Gateway Park Connector") from the proposed harborwalk on the Project Site to the existing paths at the Massachusetts Department of Conservation and Recreation ("DCR") Gateway Park. The Project will be developed in a single phase.

MEPA History

The Expanded Environmental Notification Form ("ENF") for the Project was filed on May 31, 2013. The Secretary of Energy and Environmental Affairs (the "Secretary") issued the Certificate on the ENF on July 26, 2013. The Draft Environmental Impact Report ("DEIR") was filed with the MEPA Office on December 16, 2013 and the Secretary issued a Certificate on the DEIR on February 21, 2014, setting forth a scope for the Final Environmental Impact Report ("FEIR"). The FEIR for the Project was prepared and filed on June 30, 2014. The Secretary issued a Certificate on the FEIR specifying the scope for a Supplemental Final Environmental Impact Report ("SFEIR") on August 15, 2014. The SFEIR for the Project was filed on February 17, 2015. On _____, 2015, the Secretary issued a Certificate on the SFEIR finding that the SFEIR adequately and properly complied with the Massachusetts Environmental Policy Act and its implementing regulations.

Project Impact Evaluation

The proposed Project will result in the generation of new vehicle and transit trips to the Project. The increase in new vehicle trips is estimated at 1,368 trips in the Friday p.m. peak hour of the resort (9:00-10:00 p.m.), and 1,810 trips in the Saturday p.m. peak hour (10:00-11:00 p.m.). New vehicle trips will result in increased volumes on several roadways under MassDOT or DCR jurisdiction, including Route 16 at Wellington Circle, Santilli Circle and Sweetser Circle, elsewhere along Route 16, and the I-93 off ramp at Sullivan Square. Improvements

are proposed at Wellington Circle, Santilli Circle and Sweetser Circle, other intersections along Route 16, and at Sullivan Square. Based on MassDOT's evaluation of the assessments presented and reviewed under MEPA, MassDOT finds that the roadway improvements and other measures proposed will adequately mitigate the Project's vehicular traffic impacts.

Based on the proposed Transportation Demand Management ("TDM") program, many trips to the Project will occur on transit and non- single occupancy vehicles ("SOVs"). New transit and other non-SOV person trips are estimated at 979 trips in the Friday p.m. peak hour. In addition, improvements are proposed at the Sullivan Square Station, Wellington Station, and Malden Center MBTA Stations and at bus stops along Lower Broadway/Alford Street (Route 99) in the City of Everett to enhance bus and/or shuttle bus access and utilization.

Specific Mitigation Measures

As part of the MEPA review process, the Project has committed to specific mitigation measures related to MassDOT's jurisdiction as further described in the Secretary's Certificate. Those mitigation measures are listed below.

Table 3-1: Proposed Transportation Mitigation Measures by Wynn MA LLC[1]

Subject Matter	Improvement Measure	Estimated Cost	Schedule
Offsite Improvements – Everett:			
1. Revere Beach Parkway (Route 16)/Mystic View Road/Santilli Highway/ Route 99 Connector Improvements (Santilli Circle)	– Modify the approach from Frontage Road into the rotary to allow for two formal lanes. – Widen circle at Santilli Highway approach to allow for three travel lanes. – Provide improved pedestrian and bicycle connection from Frontage Road to Mystic View Road. – Reconfigure channelizing island on south side of rotary near Mystic View Road. – Provide traffic signal improvements at the signalized locations around the traffic circle.	$4.1 million	Prior to opening

[1] Note that off-site improvements will either be funded or constructed by the Proponent.

Subject Matter	Improvement Measure	Estimated Cost	Schedule
	– Provide landscaping improvements to the center of the circle. – Provide new guide signage and pavement markings. – Perform RSA during 25% design.		
2. Route 16/ Broadway/ Main Street (Sweetser Circle)	– Reconstruct circle and approaches to function as a two-lane modern roundabout – Reconfigure the existing Broadway (Route 99) northbound approach to allow for three travel lanes providing free flow access to Route 16 eastbound. – Provide shared use path on northwest side of rotary to improve bicycle access. – Install new signing to provide direction to bicyclists on how to navigate the rotary safely. – Provide landscaping and improvements on the north side of the circle. – Maintain pedestrian signal across Route 16 eastbound exit from rotary.	$2 million	Prior to opening
3. Broadway/ Beacham Street 4. Broadway/ Horizon Way 5. Broadway/ Lynde Street 6. Broadway/ Thorndike Street 7. Bow Street/Mystic Street 8. Bow Street/Lynde Street 9. Bow Street/ Thorndike Street 10. Beacham Street/Robin Street 11. Broadway/	– Reconstruct Lower Broadway as a 4-lane boulevard with turn lanes at major intersections – Upgrade/replace/install traffic control signals – Reconstruct sidewalks and bicycle lanes where required – Install street trees and lighting – Improve MBTA bus stops along Lower Broadway – Installation of technology along Broadway/Alford Street (Route 99), near	$4 million	Prior to opening

Subject Matter	Improvement Measure	Estimated Cost	Schedule
Bowdoin Street	project entrance, to allow for signal prioritization for buses (cost?)		
12. Broadway/ Norwood Street/Chelsea Street	– Optimize traffic signal timing, phasing and coordination	$75,000	Prior to opening
12. Lower Broadway Truck Route	– Upgrade Robin Street and Dexter Street to serve as a truck route – Provide full depth reconstruction of the existing roadway to accommodate heavy vehicles – Includes reconstruction of Robin Street and Dexter Street to include heavy-duty pavement, corner radii improvements, sidewalk reconstruction (where present), drainage system modifications (minor), signs and pavement markings.	$4.3 million	Prior to opening
13. Ferry Street/ Broadway (Route 99)	– Traffic signal retiming and optimization	$20,000	Prior to opening
Everett total: $14,495,000			
Offsite Improvements – Medford:			
1. Mystic Valley Parkway (Route 16)/Fellsway (Route 28)/Middlesex Avenue (Wellington Circle)	– Upgrade/replace traffic signal equipment/signs/pavement markings. – Optimize traffic signal timing, phasing and coordination. – Widen Route 28 northbound to provide an additional left turn lane. – Widen Route 16 westbound to provide an additional through lane in the middle of the intersection. – Reconstruct non-compliant sidewalks and accessible ramps around the intersection to	$4.0 million	Prior to opening

Subject Matter	Improvement Measure	Estimated Cost	Schedule
	improve pedestrian access. – Provide landscape improvements.		
2. Mystic Valley Parkway (Route 16)/Route 16 Connector 3. Mystic Valley Parkway (Route 16)/Mystic Avenue	– Traffic signal retiming and optimization	$20,000	Prior to opening
Road Safety Audit	– Perform Road Safety Audit at the intersection of Mystic Valley Parkway (Route 16)/Route 16 Connector	$15,000	Prior to opening
Wellington Circle study	– Funding for study of long-term alternatives for reconstruction of Wellington Circle.	up to $1.5 million	Prior to opening
Medford total: $5,535,000			
Offsite Improvements – Boston:			
1. Alford Street/Main Street/Sever Street/ Cambridge Street (Sullivan Square) 2. Cambridge Street/I-93 northbound off-ramp	– Optimize signal timing for Maffa Way/Cambridge Street; interconnect and coordinate traffic signals, widen the Main Street approach to provide two lanes – Reconstruct busway between Cambridge Street and Maffa Way – Reconstruct the southbound approach of Alford Street at Cambridge Street. – Install new traffic signals at Cambridge Street/Spice Street/MBTA Busway and Maffa Way/Busway. Upgrade/replace traffic signal equipment/signs/ pavement markings. – Optimize traffic signal timing, phasing and coordination.	$10.0 million	Prior to opening

Subject Matter	Improvement Measure	Estimated Cost	Schedule
	– Reconstruct Spice Street and D Street. – Reconstruct sidewalks on west side of rotary between Sullivan Square station and Alford Street Bridge. – Reconstruct sidewalks and upgrade lighting and streetscape in rotary between Cambridge Street and Main Street (east). – Provide bicycle lanes on Cambridge Street. – Reconstruct MBTA lower busway and parking area at Sullivan Square station, including new traffic signal at Maffa Way/station entrance. – Construct BUS ONLY left-turn lane from Main Street into Sullivan Square Station.		
3. Traffic Signal Interconnect Conduit from Sullivan Square to Austin Street	– Install conduit, pullboxes, and wiring	$525,000	Prior to opening
4. Dexter Street/Alford Street (Route 99)	– Upgrade/replace traffic signal equipment/signs/pavement markings. – Optimize traffic signal timing, phasing, and coordination.	Included in cost of Lower Broadway (Route 99) Improvements	Prior to opening
5. Rutherford Avenue (Route 99)/Route 1 Ramps	– Optimize traffic signal timing and phasing	$20,000	Prior to opening
6. Sullivan Square Landscaping	– Improve landscaping within the rotary at Sullivan Square and immediately north of the rotary adjacent to Rutherford Avenue	$350,000	Prior to opening
Long-term Commitment to Sullivan Square	– Provide payments of $2.5 million per year into the Sullivan Square mitigation fund	$25 million over 10 years	Annually

Subject Matter	Improvement Measure	Estimated Cost	Schedule
Long-term Commitment – Sullivan Square	– Provide payments to the City of Boston for each vehicle above Friday afternoon and evening period projections	$20,000 per additional vehicle trip, not to exceed $20,000,000 over 10 years	Monitor and Report no later than 30 days after the first anniversary of Project opening and for 10 years thereafter
Boston total: $35,895,000 - $55,895,000			
Offsite Improvements – Revere:			
1. Route 16/Route 1A/Route 60 (Bell Circle)	– Upgrade/replace traffic signal equipment/signs/pavement markings – Optimize traffic signal timing, phasing and coordination	$550,000	Prior to opening
Revere total: $550,000			
Offsite Improvements – Chelsea:			
1. Route 16/Washington Avenue	– Upgrade/replace traffic signal equipment/signs/pavement markings – Optimize traffic signal timing, phasing and coordination	$275,000	Prior to opening
2. Route 16/Everett Avenue 3. Route 16/Webster Avenue	– Optimize traffic signal timing, phasing and coordination	$30,000	Prior to opening
Chelsea total: $305,000			
Transportation Demand Management			
Transportation Demand Management	- Membership Fee with a Transportation Management Association	$10,000/year	At opening and ongoing
	- Employ a designated Transportation Coordinator for the Project to coordinate efforts, monitor success rates, and manage strategic implementation of traffic reduction	$50,000/year	At opening and ongoing

Subject Matter	Improvement Measure	Estimated Cost	Schedule
	programs. - Schedule employee shift beginnings and endings outside specified peak traffic periods. - Carpool/vanpool matching programs. - Dissemination of promotional materials, including newsletters about TDM program in print at the Project's on-site Transportation Resource Center, and online.		
	- Improvements to MBTA's Wellington Station to accommodate Wynn patron shuttle service at curbside.	$550,000	Prior to opening
	- Improvements to MBTA's Malden Center Station to accommodate Wynn patron shuttle service at curbside.	$25,000	Prior to opening
	- Patron Orange Line Shuttle Service to Wellington and Malden Center stations - 2 Locations, 20 Minute Headways, 20 Hrs./day, 30-50 passenger vehicles	$3,285,000/ year operating costs	At opening and ongoing
	- Employee Shuttle Buses - 2 Locations, 20 Minute Average Headways, 24 Hrs./day	$2,400,000/ year operating costs	At opening and ongoing
	- Premium Park & Ride Shuttle Buses - 3 Locations, 90 Minute Headways, 12 Hrs./day	$1,934,500/ year operating costs	At opening and ongoing
	- Neighborhood Shuttle Buses - Continuous Loop, 20 Minute Headways, 24 Hrs./day	$1,100,000/ year operating costs	At opening and ongoing
	- Water shuttle service to the Project Site	$3,303,000/ year operating costs	At opening and ongoing

Subject Matter	Improvement Measure	Estimated Cost	Schedule
	- On-site Full Service MBTA Fare Vending Machine	$35,000	At opening and ongoing
	- Participation in the MBTA Corporate Pass Program to the extent practical and as allowable pursuant to commercial tenant lease requirements	$400,000	At opening and ongoing
	- Electric vehicle charging stations within the proposed parking garage –. Annual operating cost of $166,500	Installation cost in Project Construction Costs	At opening and ongoing
	- Car sharing services in the garage at the Project Site	Included in Project Construction Costs	At opening and ongoing
	- Preferential parking for car/vanpools and alternatively fueled vehicles	Included in Project Construction Costs	At opening and ongoing
	- Offering a "Guaranteed-Ride-Home" in case of emergency to employees that commute to the Project by means other than private automobile.	$10,000/ year	At opening and ongoing
Transportation Demand Total: $13,269,000			
Water Transportation Vessels	- The Proponent will provide dock facilities and customized ferry vessels to support passenger water transportation service between the Project Site and key Boston Harbor landing sites.	Capital Costs: $8,600,000	At opening
Water Transportation Total: $8,600,000			
Annual Monitoring and Reporting Program	- Post-development traffic monitoring and employee survey program in order to evaluate the adequacy of transportation	$30,000	At opening and ongoing

Subject Matter	Improvement Measure	Estimated Cost	Schedule
	mitigation measures, including the TDM program.		
Sullivan Square traffic monitoring	- Post-development motor vehicle traffic counts in Sullivan Square as well as additional locations to determine whether Project-related vehicle trips through Sullivan Square have exceeded projections.	$20,000/year for 10 years	No later than 30 days after the first anniversary of Project opening and 10 years thereafter
Annual Monitoring and Reporting Program Total: $50,000			
Transportation Grand Total Capital Costs: $65,380,000-$85,380,000			
Transportation Grand Total Annual Operating Costs: $13,319,000			

Based upon its review of the MEPA documents, the projected Project impacts and the Department's regulations, the Department finds that the terms and conditions to be incorporated into the approvals required for this Project as specified above will constitute all feasible measures to avoid damage to the environment, including consideration of the potential effects of climate change, and will minimize and mitigate such damage to the maximum extent practicable for those impacts subject to the Department's authority. Implementation of the mitigation measures will occur in accordance with the terms and conditions set forth in the applicable permit or approval and the Table of Proposed Transportation Mitigation Measures by Wynn MA LLC above.

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Department of Transportation

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By

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[Date]