

THE INNOVATION & DESIGN BUILDING

Drydock Avenue
South Boston, Massachusetts



Supplemental Submission #1

June 18, 2014

Submitted to:
Boston Redevelopment Authority
One City Hall Square
Boston, Massachusetts 02201

Submitted by:
Jamestown, L.P.
25 Drydock Avenue, 4th Floor
Boston, Massachusetts 02210

INTRODUCTION

An Expanded Project Notification Form for the Innovation and Design Building project was submitted to the Boston Redevelopment Authority on May 15, 2014. Since then the Proponent, Jamestown, L.P., has received several comments and questions from public agencies, stakeholder groups, and community members. This supplemental submission is intended to address several of the comments the Proponent has received to date.

Topics covered in this submission are as follows:

1. Project Description and General Information
 - i. Aligning Private Investment with the Public Mission of the BMIP
 - ii. Effect of the Proposed Commercial Use Allocation
 - iii. Retail Vision
 - iv. Retail Demand
2. Transportation
 - i. Travel Demand Management
 - ii. Parking
 - iii. New Study Intersection
 - iv. Distribution Pattern of Project Trips
3. Sustainability
 - i. Sustainable Design Summary
 - ii. Climate Preparedness

1. PROJECT DESCRIPTION AND GENERAL INFORMATION

ALIGNING PRIVATE INVESTMENT WITH THE PUBLIC MISSION OF THE BMIP

The Boston Design Center and Bronstein Center buildings comprise a significant publicly-owned economic development asset and a unique resource for manufacturing, research and development, and maritime-related enterprises and the jobs they produce. These buildings, which Jamestown has renamed the Innovation and Design Building (IDB), currently have a combined vacancy rate of 40% and require significant capital investment to fulfill their full job-producing potential. The evolution of Boston's economy provides an opportunity to realize this potential by harnessing a new range of uses that are not only compatible with, but in fact seek proximity to more traditional industrial uses. These include makerspaces, tech-oriented research and development, design studios, and other "innovation economy" uses and enterprises.

In rebranding and repositioning the IDB, Jamestown, L.P. seeks to apply an approach it has used successfully elsewhere to introduce more of these "innovation economy" uses to a traditional industrial setting. To do so requires investing in new service retail and restaurant uses, new mechanical systems that provide greater thermal comfort in workspaces, improved loading facilities, and multi-modal commuting access for employees. These improvements will help attract not only office users to the building, but also additional manufacturing and research and development users, thus using private investment to fulfill the economic development mission of the Boston Marine Industrial Park (BMIP).

This investment will also produce several collateral benefits. It will make the building fully accessible to persons with disabilities; it will improve pedestrian, bicycle, car share, and transit access; it will improve the building's energy performance and climate change resilience; and it will significantly extend the useful life of this publicly-owned asset.

THE EFFECT OF THE PROPOSED COMMERCIAL USE ALLOCATION

The BRA has requested a commercial allocation of 206,388 square feet for Bronstein Center (Parcel I) under the Chapter 91 Master License for the BMIP. This is intended to ratify approximately 91,474 square feet of existing commercial uses and to accommodate 114,914 square feet of additional commercial use in the Bronstein portion of the IDB complex. Anticipated commercial uses include new retail and restaurant uses, primarily on the IDB's ground floor, and upper floor office-oriented uses which are compatible with the industrial uses that exist in the complex and elsewhere within the BMIP.

The Boston Design Center building (referred to as BDC, or Parcel F) is currently authorized to include 140,912 square feet of commercial uses, so combining this existing authorization for BDC and the proposed additional allocation for Bronstein, the IDB complex will include a total of 347,300 square feet of commercial use. This represents 25% of the total gross floor area of the IDB. Of this total commercial allocation, approximately 110,000 square feet is expected to be leased to retail and restaurant uses (including existing retail and restaurant tenants) that will support existing tenants of the IDB and the BMIP and will help attract new tenants to vacant space. The remaining 237,300 square feet of the total IDB commercial allocation will comprise upper floor office-oriented uses.

Currently, approximately 549,958 square feet of space in the IDB is vacant, and the improvements proposed for IDB are intended to support efforts to lease up vacant space in the complex. Thus, in addition to the new commercial allocation requested for Bronstein, the proposed improvements will

support the lease up of approximately 435,044 square feet of space to uses considered to be general industrial or marine industrial in nature.

It is also important to note that, if the requested commercial allocation is granted for Bronstein (Parcel I), approximately 2.3% of the 5% commercial allocation for the BMIP that is allowed under the Chapter 91 Master License will remain available for assignment to specific parcels in the future.

RETAIL VISION

As described above, Jamestown, L.P. estimates that approximately 110,000 square feet, or 7.9% of the total gross floor area of IDB, will ultimately be dedicated to retail uses. The primary intent of these retail uses (which include restaurant uses) is to provide a better overall environment and better amenities for the people who work in and visit the IDB complex today, and for the additional occupants who will call IDB home upon lease up of the vacant space in the complex. Jamestown, L.P. is not encouraging destination retail uses at IDB which would generate significant additional traffic to the site during the workweek by people not otherwise visiting the BMIP. It is anticipated that retail hours of operation will generally reflect occupancy patterns of the IDB complex, with peak occupancy for employees and visitors occurring during the workweek.

The three broad categories of retail use that Jamestown, L.P. will consider at IDB are as follows:

1. Home Furnishings Retail

The Boston Design Center is open to the public today. Consumers may visit showrooms and browse products, either on their own or with a designer. Currently, consumers must purchase product from trade showrooms through a designer, either through their own designer or through BDC's "Designer On Call" program. Consumers can also purchase product directly from the "BDC To Go" showroom on the sixth floor. Some showrooms have expressed interest in selling directly to consumers in addition to the trade (designers), and Jamestown would like to enable this transactional business, primarily on the ground floor of IDB. Retail showrooms at IDB would be of high quality and would function harmoniously alongside the existing trade showroom community at Boston Design Center.

2. Amenity Retail Serving Building Occupants & BMIP

In addition to the home furnishings retail described above, Jamestown, L.P. intends to provide amenity retail uses aimed at meeting the daily needs of people on site and within walking distance of the IDB. These amenity retail uses could include food and beverage establishments, such as a coffee shop or café, a newsstand, or a sundry shop, among other things. In addition to serving building tenants, these support retail uses will assist the Proponent in its efforts to lease up vacant space in the building.

3. Retail of Locally Designed or Produced Goods

The final category of retail that Jamestown, L.P. anticipates at IDB includes retail uses that are subordinate to and supportive of a local production use. Examples could include a canning facility with a small retail storefront, or a gallery/shop featuring products produced in a makerspace at the IDB complex.

RETAIL DEMAND

As determined by a survey of existing subtenants at Bronstein Center and Boston Design Center, there are an estimated 1,746 employees working at the IDB complex today. At full occupancy, and assuming 206,388 square feet of total commercial use at Bronstein, the Proponent estimates that approximately 2,700 to 4,700 people will work at the complex on a daily basis (depending on the density of new commercial and industrial uses, which can vary widely). In addition to building employees, Boston Design Center receives approximately 150 visitors on an average weekday, typically interior designers and their clients. The Proponent also expects some workers in neighboring buildings – such as 27 Drydock Avenue, 22 Drydock Avenue, 88 Black Falcon Avenue, One Harbor Street, and 12 Channel Street – to visit IDB restaurant space(s) at lunch time, given the limited food retail options available elsewhere in the BMIP. In total, at full occupancy the Proponent expects as many as 5,000 people on site at the IDB complex on any given weekday.

Assuming up to 5,000 people on site at IDB each weekday, a 95% capture rate for those on site given limited food retail alternatives, an average \$1,460 in annual lunch expenditures per person and \$400 in food sales per square foot (per the *“Facilities of Public Accommodation Commercial Retail & Restaurant Market Demand and Supply Analysis”* prepared by Byrne McKinney & Associates, Inc. for the Boston Redevelopment Authority and Greater Boston Chamber of Commerce in June 2006), the Proponent estimates that the IDB can support approximately 17,338 square feet of food and beverage uses. This is fairly consistent with the Expanded Project Notification Form, which on page 1-7 cites an estimated 20,000 square feet of food and beverage uses at the complex.

The IDB Expanded Project Notification Form also references up to 90,000 square feet of other retail uses. These other retail uses would include both home furnishings retail and retail of locally designed or produced goods, as described in the section above. It is expected that the customer base of the home furnishings retail stores would be comprised primarily of designers and clients/consumers who are already visiting the Boston Design Center on a regular basis. Retail uses promoting locally designed and produced goods would be secondary to the production uses they support and are not expected to draw significant additional traffic to the site and the BMIP.

2. TRANSPORTATION

TRAVEL DEMAND MANAGEMENT

Please refer to Exhibit A, a memorandum prepared by Howard/Stein-Hudson Associates, Inc., for information pertaining to travel demand management.

PARKING

Please refer to Exhibit A, a memorandum prepared by Howard/Stein-Hudson Associates, Inc., for information pertaining to parking.

NEW STUDY INTERSECTION

Please refer to Exhibit A, a memorandum prepared by Howard/Stein-Hudson Associates, Inc., for information pertaining to the new study intersection.

DISTRIBUTION PATTERN OF PROJECT TRIPS

Please refer to Exhibit A, a memorandum prepared by Howard/Stein-Hudson Associates, Inc., for information pertaining to the distribution pattern of project trips.

3. SUSTAINABILITY

SUSTAINABLE DESIGN SUMMARY

Please refer to Exhibit B, a memorandum prepared by The Green Engineer, Inc., for a summary of sustainable design measures.

CLIMATE PREPAREDNESS

Please refer to Exhibit C, a memorandum prepared by Cosentini, for information pertaining to climate preparedness measures.

Exhibit A

Memorandum by Howard/Stein-Hudson Associates, Inc.



MEMORANDUM

To:	Katie Scallon, Jamestown Dana Griffin, Jamestown	Date:	June 18, 2014
From:	Elizabeth Peart Guy Busa Kelly Chronley	HSH Project No.:	2014004
Subject:	Innovation and Design Building (IDB) Expanded Project Notification Form - Response to Comments		

As part of the City's Article 80 process, Jamestown submitted an Expanded Project Notification Form (EPNF) for the Innovation and Design Building (IDB) Project on May 15, 2014. This memo addresses transportation-related comments received on the EPNF from City agencies, the Impact Advisory Group (IAG), and the public during recent meetings. The comments and responses are aggregated by topic rather than by specific comment.

Travel Demand Management

Comment

Provide more detail on the proposed travel demand management program.

Response

The Proponent is committed to implementing Transportation Demand Management (TDM) measures to minimize automobile usage and Project-related traffic impacts. The Proponent, however, also acknowledges the industrial nature of the BMIP and is committed to preserving truck access and will work with EDIC to ensure that IDB building improvements and transportation demand management efforts, as presented below, do not impede truck circulation within the park.

The following items are key elements of the TDM program:

Seaport Transportation Management Association

The Proponent is already an active member of the Seaport Transportation Management Association (TMA) and has recently provided financial support for the South Boston Waterfront Transportation Study, currently being overseen by A Better City (ABC), the City, Massport, MassDOT, the MBTA, and local developers. To encourage the use of non-automobile travel, the Proponent will help promote TMA activities to tenants of the IDB. The TMA regularly holds interactive transportation fairs and commuter events, with participation from the MBTA, Zipcar, MassBike, water taxi providers, MassDOT, and others.

Shuttle Service

To provide maximum commuter flexibility for IDB tenants, the Proponent will be implementing a new shuttle connection between IDB and South Station starting in June 2014. In August, a second route will be started between IDB and North Station. The anticipated schedule is to operate the shuttles on a continuous loop

uring peak periods, operating with 20-30 minute headways. The shuttle vehicles have seating capacity for 25 persons.

The Proponent understands that a sub-task within the on-going South Boston Waterfront Transportation Study is to assess private shuttle operations in the Waterfront and propose a consolidation plan. The Proponent is willing to share shuttle resources with other developers in the area and be part of a consolidation plan. The Proponent will continue to work cooperatively with the City and will support a shuttle improvement plan for the area.

Transit Use

To further encourage transit use, the Proponent is committed to installing an MBTA Fare Vending Machine in the IDB, where transit riders can add value to CharlieCards/CharlieTickets, purchase subway, bus, and commuter rail passes, and commuter boat passes.

Car-Sharing

As presented in Figure 2-8 of the EPNF, two companies, Zipcar and Enterprise, provide nearby car-sharing services in the study area, offering short-term rental service for members. While there are seven Zipcars and two Enterprise cars in the larger study area, only one Zipcar is located within the BMIP. The Proponent is committed to creating two additional car-share locations on-site at IDB and will work with the service provider to assign the appropriate vehicle size/type for the local tenants.

Bicycles

To promote bicycle use, the Proponent recently installed two new Hubway bike share stations at the IDB and will be adding secure employee bicycle storage spaces, shower/changing facilities, and visitor bike racks. The new entry plazas will incorporate bicycle storage safely away from loading activity. As a member of the Seaport TMA, the Proponent will encourage participation in bicycle promotion activities, such as the annual bicycle commuter breakfast and free bike safety checks.

Water Transportation

Within Boston Harbor, several water transportation services are available including water taxis and regularly scheduled ferries. In the BMIP, however, there is no public water transit service. The Proponent understands that the City is actively pursuing expansion of the Harbor's water transportation network and would welcome the introduction of public water transit service to the BMIP. The Proponent will work with the City to establish a docking/terminal facility for such service.

Electric Vehicle Charging Stations

As demand mandates, the Proponent will work with BRA and EDIC to provide electric vehicle charging stations at appropriate parking locations.

Orientation Materials

The Proponent will provide orientation packets to new tenants containing information on available transportation choices, including transit routes/schedules and nearby Hubway and Zipcar locations. On-site property management staff will work with tenants as they move in to help facilitate transportation for new arrivals. The Proponent will encourage tenants to subsidize MBTA transit passes for employees.

Parking

Comment

Provide more clarification on the availability of parking capacity to serve the increased parking demand associated with the future lease-up of current vacant space and the change in land use within the IDB site.

Response

As presented in the EPNF, the Proponent currently has rights to an estimated 1,511 parking spaces through long-term leases with EDIC. Of these, 511 are tenant-controlled (with approximately 175 of these designated as short-term visitor parking, primarily serving Boston Design Center), and 1,000 of the spaces are available in the BMIP garage on a first-come, first-served basis. The total number of parking spaces allocated to IDB will not change under Build Conditions.

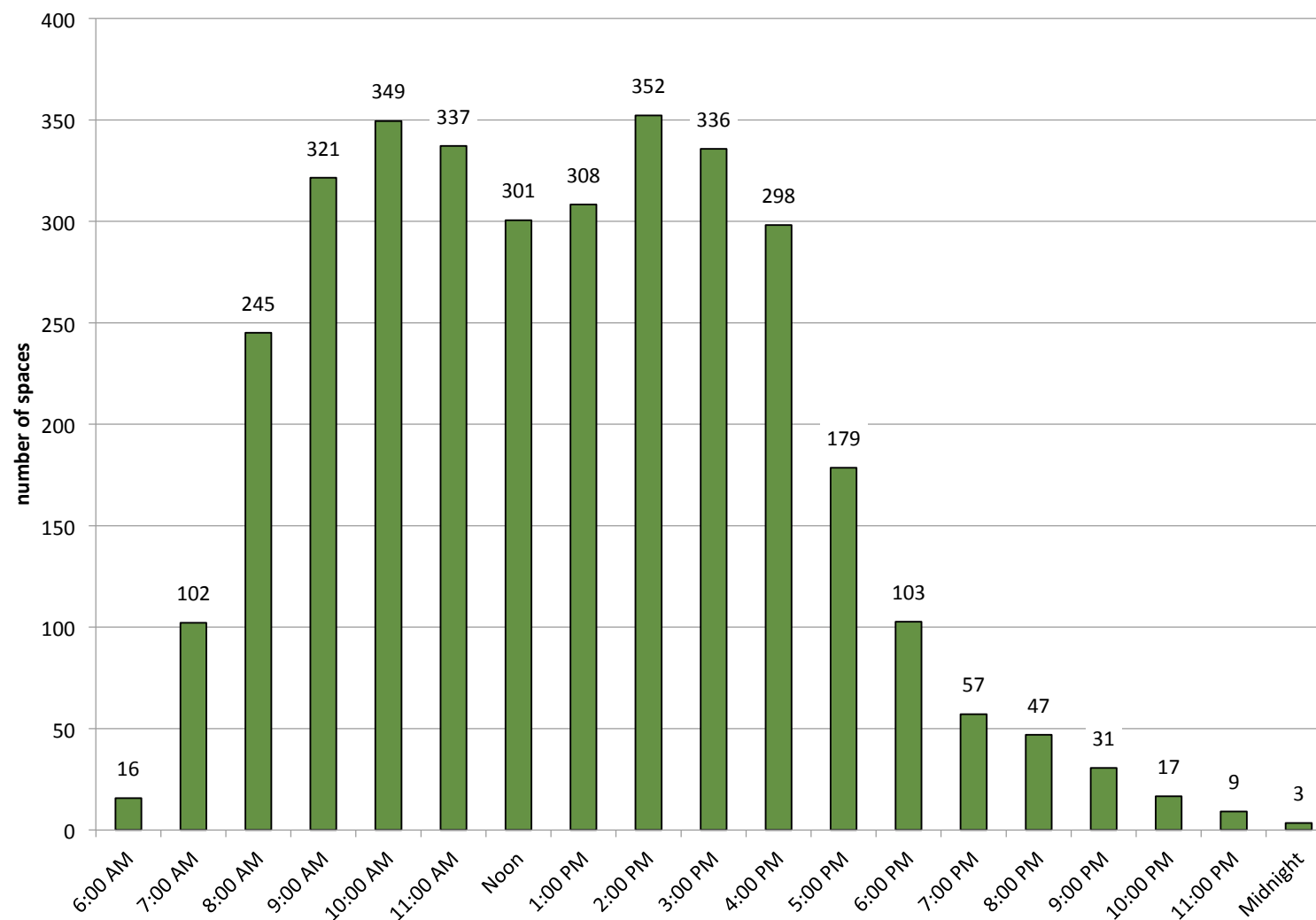
The Proponent acknowledges, however, that the first-come, first-served designation of the garage spaces does not ensure that all 1,000 spaces in the BMIP garage will be available when needed by tenants of the IDB site. Through discussions with the BMIP garage operator, it is understood that the garage currently has surplus capacity of about 200-300 parking spaces on a typical day.

To estimate the aggregate net new parking demand associated with IDB's lease-up and use changes, information from the following three data sources was used: 1) time-of-day parking demand profiles from the Urban Land Institute¹ for the Project's various land uses, 2) peak period parking rates from the Institute of Transportation Engineers (ITE) Parking Generation Manual, 4th Edition, and 3) site specific travel mode shares, as presented in Table 2-14 of the EPNF. The overall methodology is based on "shared" parking activity, which occurs when a group of parking spaces is used (or shared) by different parkers throughout the day, such as in the BMIP garage or the Parcel F1 lot. The analysis results are illustrated in Figure 1, which shows IDB's net new parking demand throughout the day and a peak parking demand of about 352 spaces occurring at about 2:00 p.m.

The Proponent understands that approximately 200 current monthly permit holders at the BMIP garage are users from outside the park. Transferring these permits back to BMIP tenants would provide another 200 available parking spaces in the garage. The 200-300 available spaces in the garage and the reclamation of 200 outside permits for BMIP tenants use, would, together, provide sufficient capacity for about 400-500 new parkers, and would serve the net new demand from the IDB Project and other growth within the BMIP.

As noted, the set of travel mode shares used in this parking analysis are from Table 2-14 of the EPNF, as adopted in prior South Boston development studies prepared by Massport (for Commonwealth Flats Development Area) and Boston Global Investors (Seaport Square) and approved by the BTDC. However, the adopted auto mode shares (generally 35-50% depending on land use) are higher than indicated by two recent surveys of BMIP employees at 27 Drydock (16% drive) and at MassChallenge (23%). Lower auto shares translate into lower parking demands. The study team concludes that the net new parking demand, while

¹ Smith, Mary S. "Shared Parking", Second Edition, Washington D.C.; ULI – the Urban Land Institute and the International Council of Shopping Centers, 2005.



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estimated to be 352 spaces from the lease-up and use changes, will, in reality, be lower than projected. As described in under the travel demand management section, above, the Proponent will continue to work to reduce the auto-dependency of building occupants by encouraging alternate means of transportation.

New Study Intersection

Comment

The intersection of Black Falcon Avenue/88 Black Falcon Avenue should be included in the study area.

Response

The twelve study area intersections presented in the EPNF were identified in cooperation with the Boston Transportation Department (BTD). To respond to the additional request to quantify the Project's impacts on the Black Falcon Avenue/88 Black Falcon Avenue intersection, however, the study team conducted a comprehensive evaluation of this location, including collection of new data and assessment of Existing, No-Build, and Build Conditions.

Note that because of the unique geometry at this multi-legged intersection and the lack of signage/names for each approach, this intersection has been designated herein as Black Falcon Avenue/88 Black Falcon Avenue. The intersection is at the eastern end of Drydock Avenue as it curves toward the south to Black Falcon Avenue and accommodates movements to/from Coastal Cement, the surface driveway to 88 Black Falcon Avenue, and the ramp to upper level parking at 88 Black Falcon Avenue.

Existing and Future Volumes

Intersection turning movement counts including vehicles, bicycles, and pedestrians were collected on Tuesday, June 10, 2014. The Existing Condition peak hour volumes for all study intersections, including the new location, are shown in Figure 2 and Figure 3, for the a.m. and p.m. peak hours, respectively.

Pedestrian volumes are shown in Figure 4 and Figure 5, for the a.m. and p.m. peak hours, respectively. Bicycle volumes are shown in Figure 6 and Figure 7, for the a.m. and p.m. peak hours, respectively.

The estimation of future volumes was based on methodologies presented in the EPNF. (Because of the non-standard geometry, the intersection approaches have been modeled in Synchro as a series of three unsignalized intersections.) No-Build intersection volumes are shown in Figure 8 and Figure 9, for the a.m. and p.m. peak hours, respectively.

The vehicle trip distribution patterns are shown in Figure 10 and Figure 11, for entering and exiting vehicles, respectively. (Note that the distribution has been revised since the EPNF and now includes increased Project trips on Harbor Street, as addressed in the next section.) The associated net new Project generated vehicle trips are shown in Figure 12 and Figure 13, for the a.m. and p.m. peak hours, respectively. The resulting Build Conditions volumes are shown in Figure 14 and Figure 15, for the a.m. and p.m. peak hours, respectively.

Existing and Future Intersection Operations

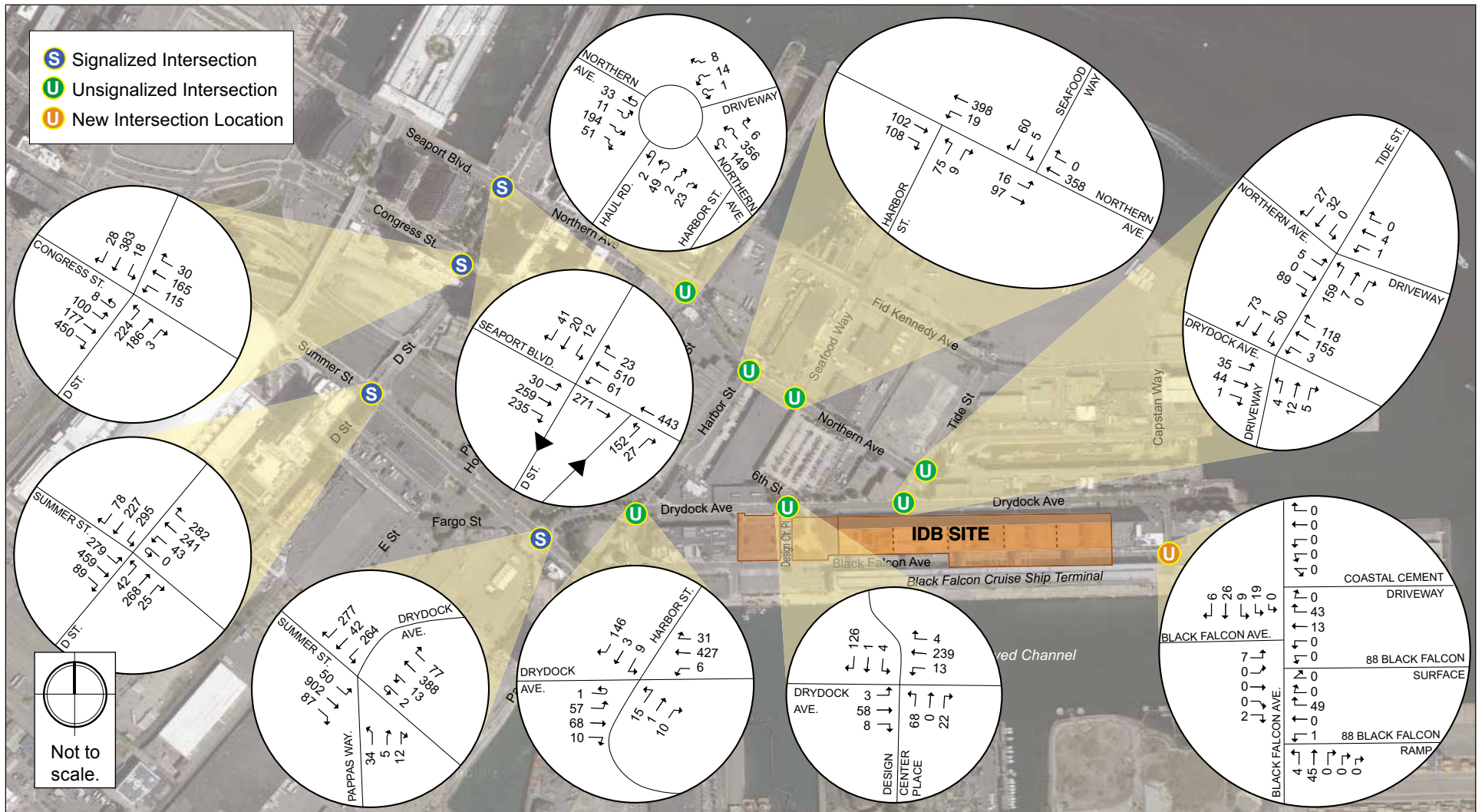
The resulting peak hour capacity analysis summaries for Existing, No-Build, and Build Conditions are shown in Tables 1-3, respectively. The tables show level of service (LOS), average delay, volume to capacity ratio,

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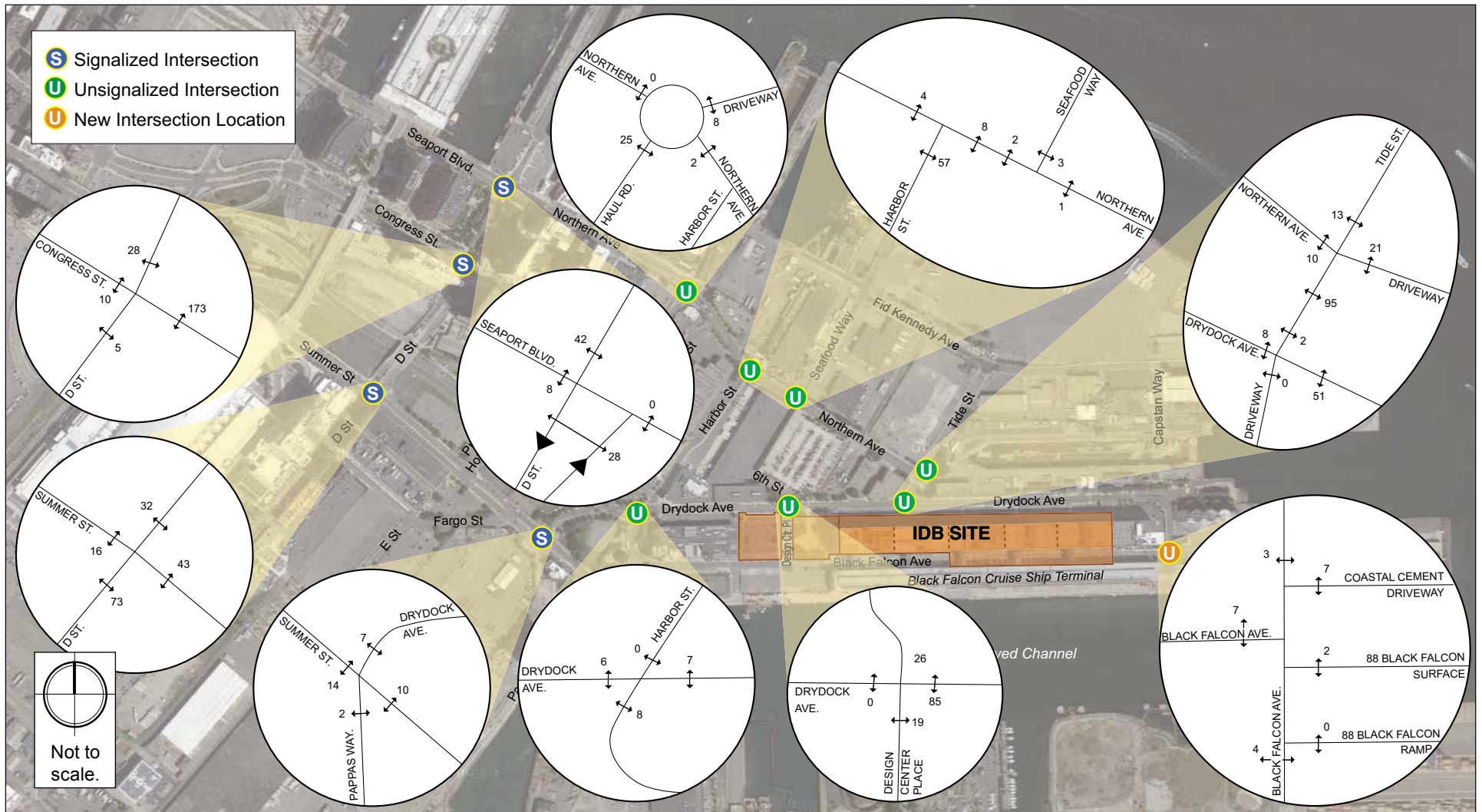
and 95th percentile queue length for the overall intersection and each approach. The results show that all approaches to this intersection operate at LOS B under Existing Conditions, No-Build Conditions, and Build Conditions.

The addition of net new Project vehicle trips will not affect operations at Black Falcon Avenue/88 Black Falcon Avenue intersection.

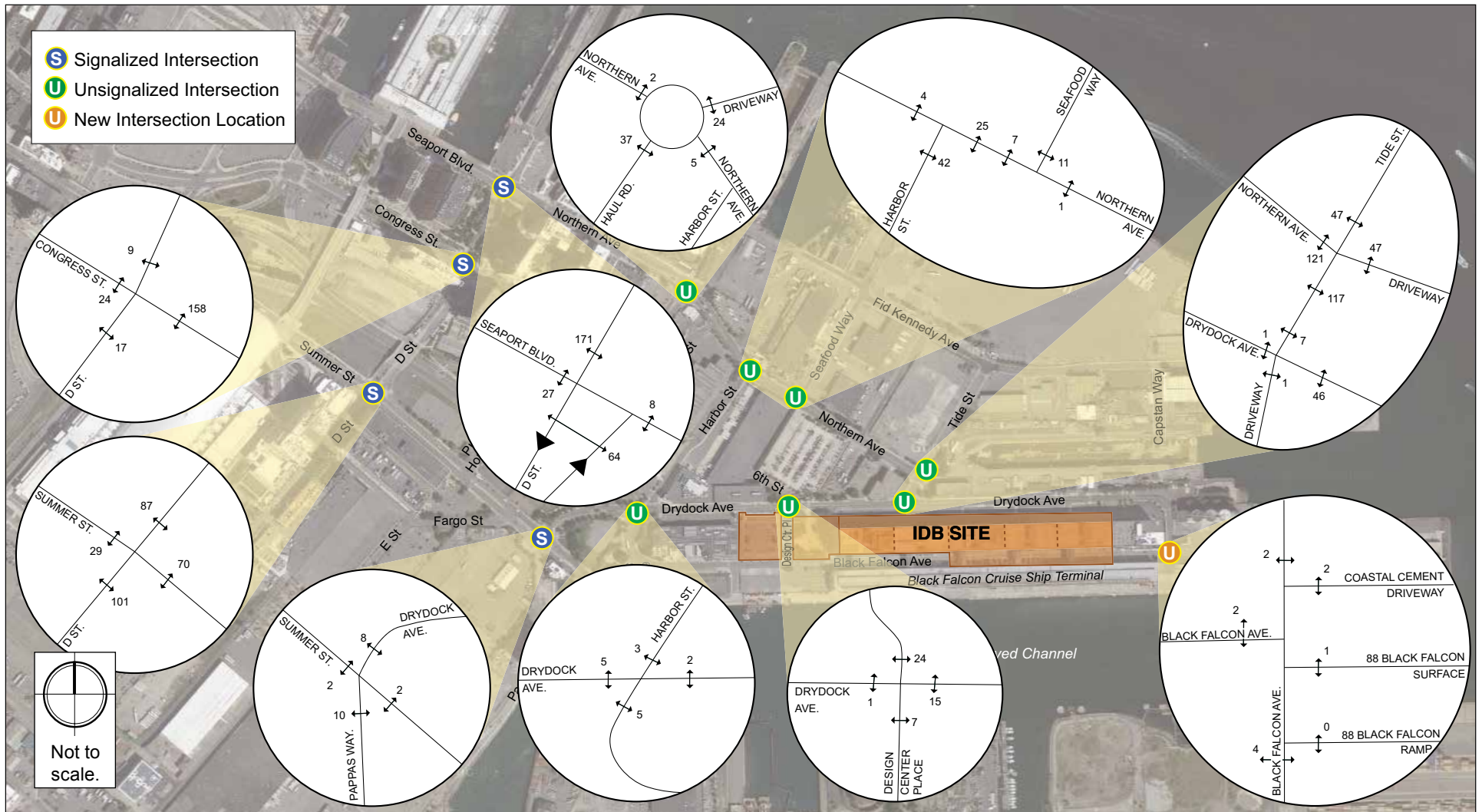
Existing Conditions (2014) Intersection Volumes, a.m. Peak Hour (7:45-8:45 a.m.)



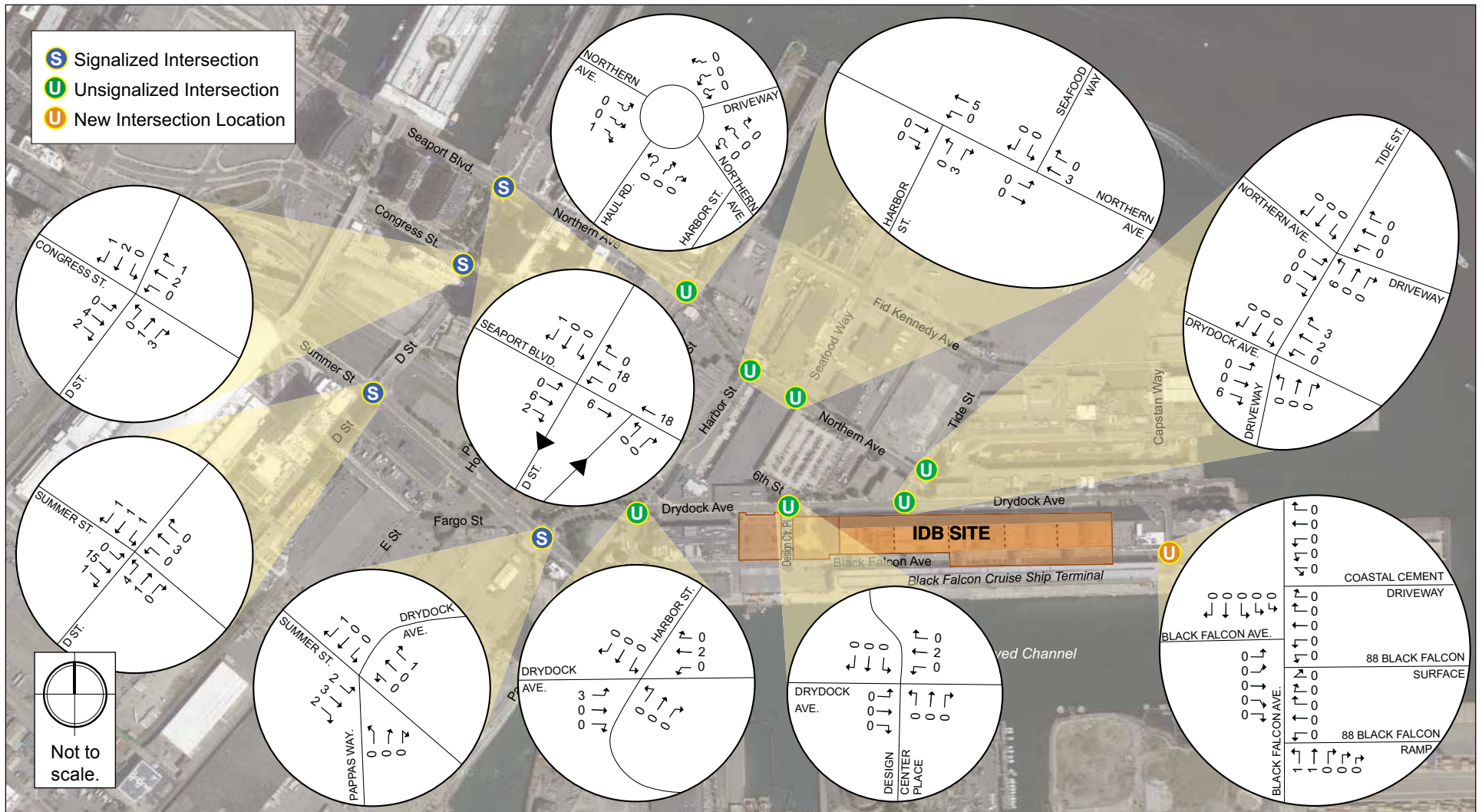
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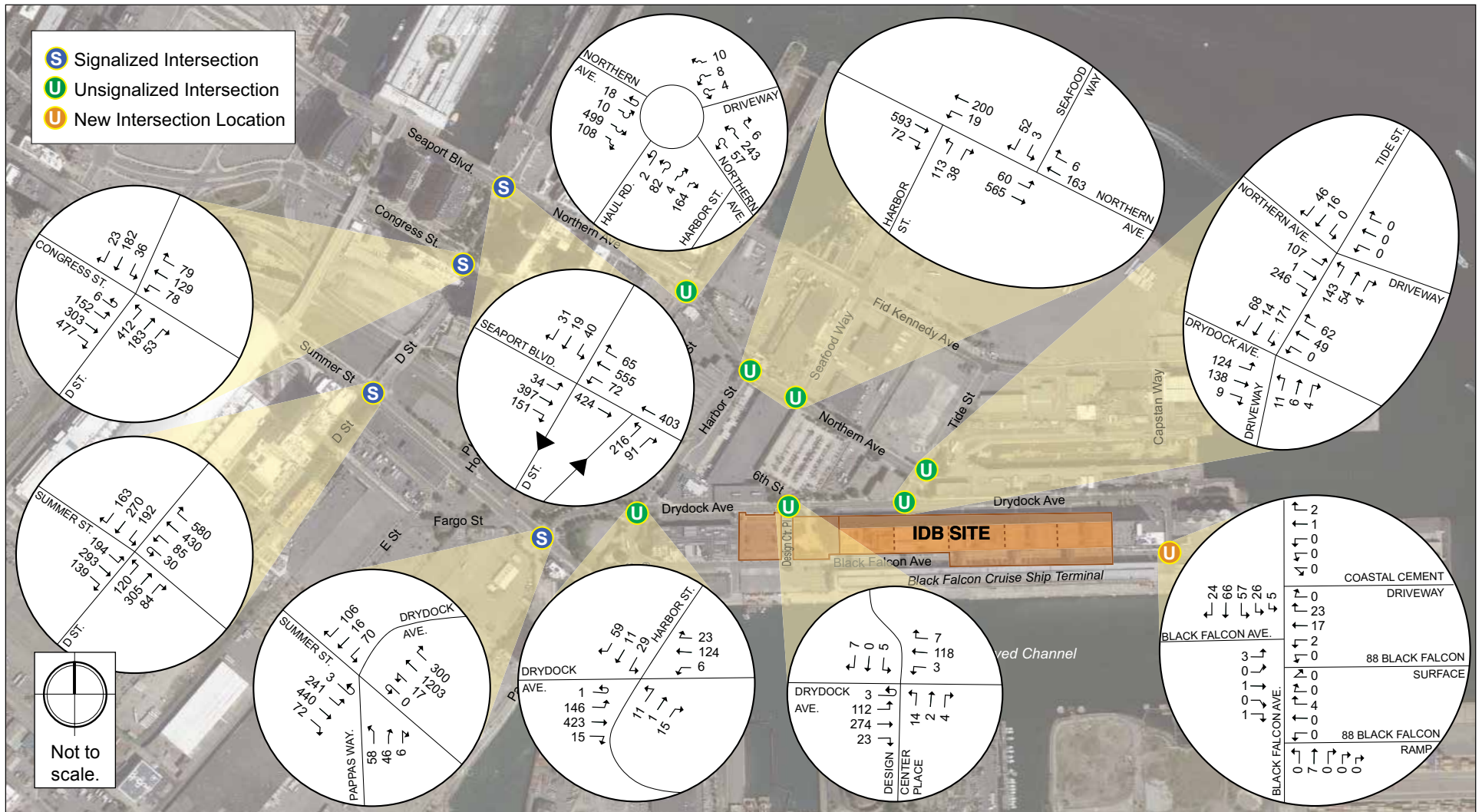
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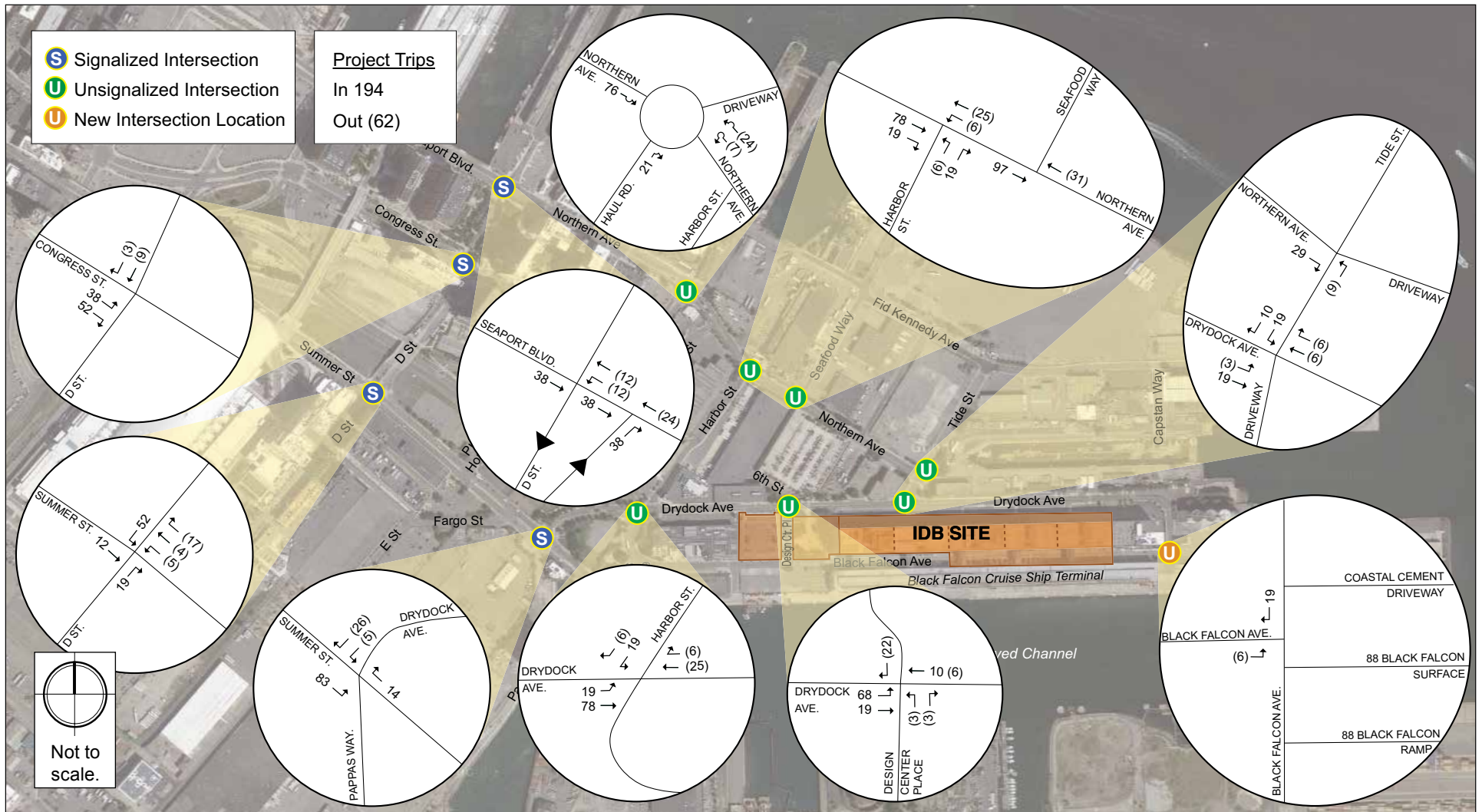
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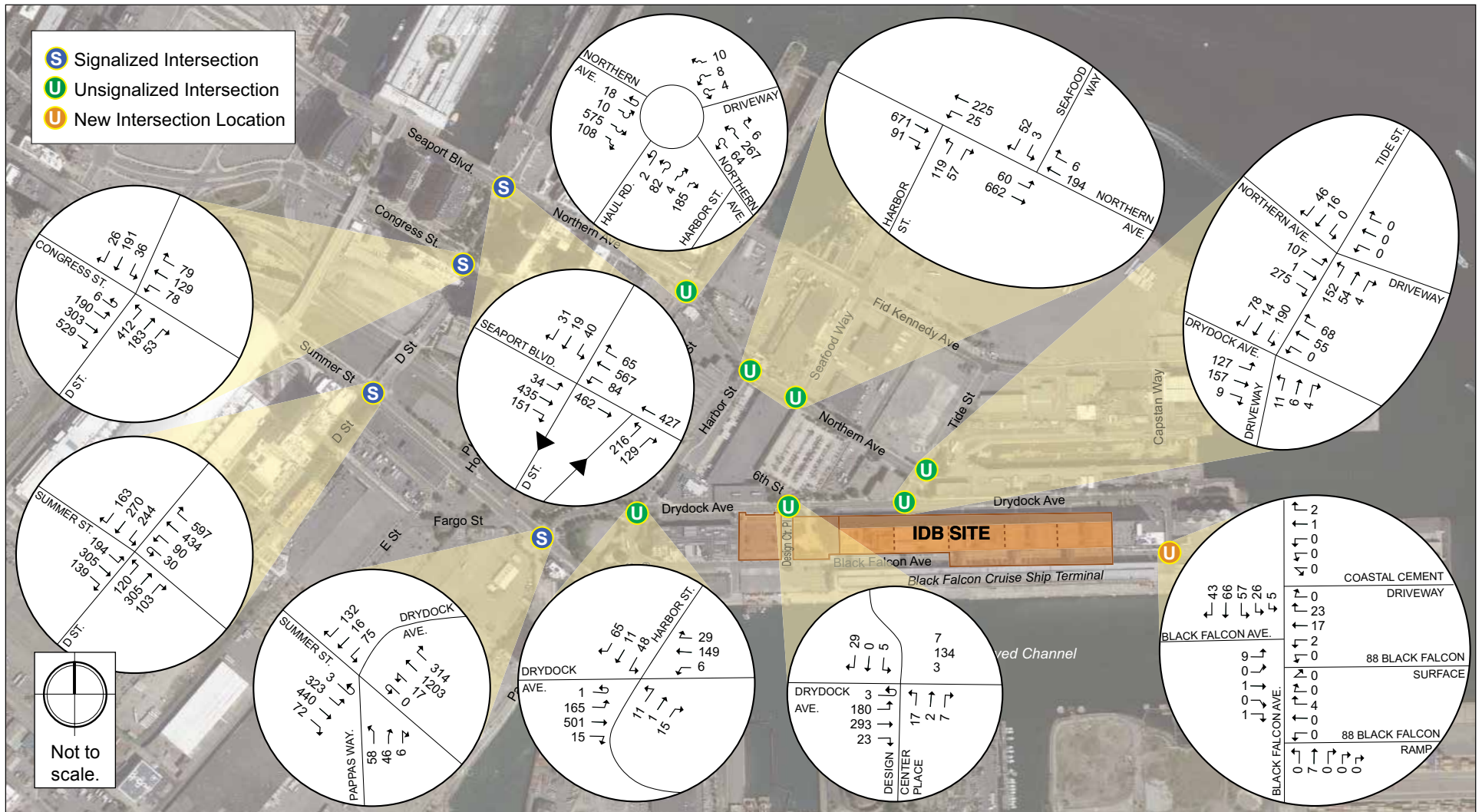
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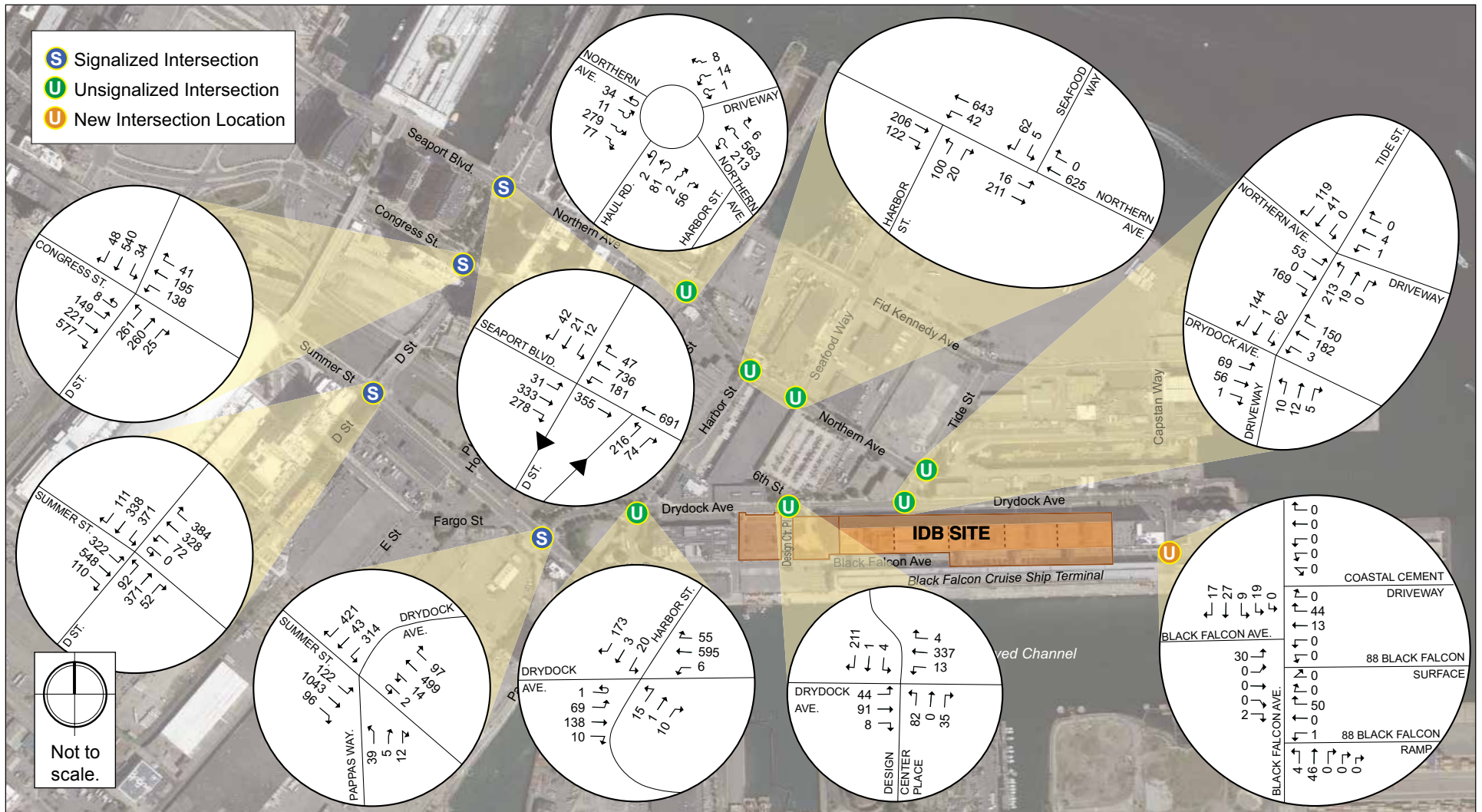
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Table 1. Black Falcon Avenue: Existing Conditions (2014), Capacity Analysis Summary

Intersection	LOS	Delay (seconds)	V/C Ratio	95% Queue Length (feet)
<i>a.m. Peak Hour</i>				
Black Falcon Avenue/88 Black Falcon Avenue				
Black Falcon EB left/thru/right	A	7.6	0.03	-
Coastal Cement WB left/thru/right	A	8.5	0.02	-
88 Surface Drive WB left/right	A	9.1	0.06	5
88 Ramp WB left/right	A	8.4	0.01	1
Black Falcon NB left/thru/right	A	8.4	0.11	-
Black Falcon SB left/thru/right	A	8.9	0.27	-
<i>p.m. Peak Hour</i>				
Black Falcon Avenue/88 Black Falcon Avenue				
Black Falcon EB left/thru/right	A	7.8	0.03	-
Coastal Drive WB left/thru/right	A	0.0	0.00	-
88 Surface Drive WB left/right	B	10.9	0.11	9
88 Ramp WB left/right	A	9.1	0.09	7
Black Falcon NB left/thru/right	A	9.3	0.35	-
Black Falcon SB left/thru/right	A	8.8	0.13	-

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is the maximum after two cycles.

m = 95th percentile queue is metered by upstream traffic signal.

Light grey shading indicates LOS E or LOS F.

Table 2. Black Falcon Avenue: No-Build Conditions (2014), Capacity Analysis Summary

Intersection	LOS	Delay (seconds)	V/C Ratio	95% Queue Length (feet)
<i>a.m. Peak Hour</i>				
Black Falcon Avenue/88 Black Falcon Avenue				
Black Falcon EB left/thru/right	A	7.7	0.03	-
Coastal Cement WB left/thru/right	A	8.5	0.02	-
88 Surface Drive WB left/right	A	9.1	0.07	5
88 Ramp WB left/right	A	8.4	0.01	1
Black Falcon NB left/thru/right	A	8.4	0.12	-
Black Falcon SB left/thru/right	A	9.0	0.28	-
<i>p.m. Peak Hour</i>				
Black Falcon Avenue/88 Black Falcon Avenue				
Black Falcon EB left/thru/right	A	7.8	0.03	-
Coastal Cement WB left/thru/right	A	0.0	0.00	-
88 Surface Drive WB left/right	B	10.9	0.11	9
88 Ramp WB left/right	A	9.1	0.09	7
Black Falcon NB left/thru/right	A	9.4	0.36	-
Black Falcon SB left/thru/right	A	8.8	0.13	-

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is the maximum after two cycles.

m = 95th percentile queue is metered by upstream traffic signal.

Light grey shading indicates LOS E or LOS F.

Table 3. Black Falcon Avenue: Build Conditions (2014), Capacity Analysis Summary

Intersection	LOS	Delay (seconds)	V/C Ratio	95% Queue Length (feet)
<i>a.m. Peak Hour</i>				
Black Falcon Avenue/88 Black Falcon Avenue				
Black Falcon EB left/thru/right	A	8.1	0.06	-
Coastal Cement WB left/thru/right	A	8.6	0.02	-
88 Surface Drive WB left/right	A	9.1	0.07	5
88 Ramp WB left/right	A	8.4	0.01	1
Black Falcon NB left/thru/right	A	8.5	0.12	-
Black Falcon SB left/thru/right	A	9.2	0.31	-
<i>p.m. Peak Hour</i>				
Black Falcon Avenue/88 Black Falcon Avenue				
Black Falcon EB left/thru/right	A	8.4	0.08	-
Coastal Cement WB left/thru/right	A	0.0	0.00	-
88 Surface Drive WB left/right	B	10.9	0.11	9
88 Ramp WB left/right	A	9.1	0.09	7
Black Falcon NB left/thru/right	A	9.7	0.37	-
Black Falcon SB left/thru/right	A	8.9	0.15	-

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is the maximum after two cycles.

m = 95th percentile queue is metered by upstream traffic signal.

Light grey shading indicates LOS E or LOS F.

Distribution Pattern of Project Trips

Comment

The vehicular trip distribution, as presented in Figure 2-16 and Figure 2-17 of EPNF, should include assignment of trips to Harbor Street.

Response

The distribution pattern presented in the EPNF for new vehicle trips was based on origin-destination data from the BTM, vehicle counts at the two BMIP gateway intersections (Northern Avenue/Massport Haul Road and Summer Street/Drydock Avenue), and knowledge of the local area roadway network. Within the BMIP, the vehicles were distributed based on parking supply locations.

While trip distribution was based on sound assumptions, the Proponent acknowledges that some variation in trip distribution will occur on a day-to-day basis and that new trips may use Harbor Street. To understand the impact of this potential variation, the study team revised the trip distribution pattern, reassigning a total of 20% of the Project trips onto Harbor Street, as shown in Figure 10 and Figure 11, for entering and exiting vehicles, respectively. Only volumes at the two intersections of Northern Avenue/Harbor Street and Drydock

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Avenue/Harbor Street are affected by the revised distribution; volumes at the remaining intersections remained unchanged.

The associated net new Project generated vehicle trips are shown in Figure 12 and 13, for the a.m. and p.m. peak hours, respectively. The resulting Build Conditions volumes are shown in Figure 14 and Figure 15, for the a.m. and p.m. peak hours, respectively. The revised intersection level of service analysis for the two affected intersections are shown in Table 4.

Table 4. Harbor Street: Build Conditions (2014), Capacity Analysis Summary

Intersection	LOS	Delay (seconds)	V/C Ratio	95% Queue Length (ft)
a.m. Peak Hour				
Drydock Avenue/Harbor Street				
Drydock EB left/thru thru/right	A	2.3	0.17	15
Drydock WB left/thru/right	A	0.7	0.02	1
Harbor NB left/thru	F	>50.0	0.32	29
Harbor NB right	B	12.2	0.05	4
Harbor SB left/thru/right	F	>50.0	0.80	148
Northern Avenue/Harbor Street				
Northern EB thru/right	A	0.0	0.51	0
Northern WB left/thru	A	1.8	0.05	4
Harbor NB left/right	F	>50.0	0.93	204
p.m. Peak Hour				
Drydock Avenue/Harbor Street				
Drydock EB left/thru thru/right	A	3.7	0.17	15
Drydock WB left/thru/right	A	0.2	0.01	0
Harbor NB left/thru	F	>50.0	>1.00	84
Harbor NB right	B	10.1	0.02	2
Harbor SB left/thru/right	F	>50.0	>1.00	412
Northern Avenue/Harbor Street				
Northern EB thru/right	A	0.0	0.23	0
Northern WB left/thru	A	1.6	0.06	5
Harbor NB left/right	E	44.5	0.65	101

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is the maximum after 2 cycles.

m = Volume for the 95th percentile queue is metered by the upstream signal.

Light grey shading indicates a decline in LOS from No-Build Conditions into LOS E or LOS F.

As presented in the Expanded PNF, several minor street approaches at BMIP study intersections were forecast to operate at LOS E or LOS F under Build Conditions. This level of operation is not uncommon for unsignalized side streets (with stop signs) that intersect arterial roadways such as Drydock Avenue or Northern Avenue. The HCM analysis for unsignalized intersections incorporates more conservative parameters than what is typically

experienced in an urban environment, such as critical gap². Given the methodology, it is important to recognize that the forecasted delays/queues under LOS E or LOS F are likely overestimated when compared to real world conditions.

Drydock Avenue/Harbor Street

Under revised Build Conditions at the intersection of Drydock Avenue/Harbor Street, the Drydock Avenue approaches will continue to operate at LOS A during each peak hour.

As under No-Build Conditions, the northbound Harbor Street approach will continue to operate at LOS F under Build Conditions during each peak hour. The volume on the northbound Harbor Street approach, however, will remain less than 30 vehicles per hour.

During the a.m. peak hour, the southbound Harbor Street approach will worsen to LOS F under Build Conditions, compared to LOS D under No-Build Conditions. During the p.m. peak hour, the southbound Harbor Street approach will worsen to LOS F under Build Conditions, compared to LOS E under No-Build Conditions.

These results, however, assume that the southbound Harbor Street approach operates with one lane. While the southbound roadway is one lane wide on the approach to Drydock Avenue, it widens out at the mouth allowing right turning vehicles (the predominant move on this approach) to pass by a vehicle waiting to turn left/travel through, effectively decreasing the approach delay and the v/c ratio.

Northern Avenue/Harbor Street

At the Northern Avenue/Drydock Avenue intersection, the Northern Avenue approaches will continue to operate at LOS A during each peak hour.

During the a.m. peak hour, the northbound Harbor Street approach will worsen to LOS F under Build Conditions, compared to LOS E under No-Build Conditions. During the p.m. peak hour, the northbound Harbor Street approach will worsen to LOS E under Build Conditions, compared to LOS C under No-Build Conditions.

All v/c ratios, however, remain under 1.0 indicating that the Harbor Street approach, even with the reported LOS E/LOS F, operates under capacity.

Based on the conservative methodology and the interpretation of the results presented above, the study team concludes that traffic operations at the Harbor Street intersections will not be significantly affected by the net new Project trips.

² The critical gap is the minimum length of time interval in the major street traffic stream that allows intersection entry for one minor street vehicle.

Exhibit B

Memorandum by The Green Engineer, Inc.



The Green Engineer, Inc

Sustainable Design Consulting

Memorandum

To: Tracy Shriver, Elkus Manfredi
From: Sarah Michelman, TGE
Date: June 16, 2014
Re: Sustainable Design Approach
Project: Innovation and Design Building

Sustainable Design Summary

Proposed scope of work:

The project scope of work is limited to minimal site improvements to improve both the loading function and the employee/visitor access on the existing site. By separating the building services, (loading areas), from the employee and visitor access routes, the project is able to improve the pedestrian experience, increase landscaping and provide additional short term bike storage locations. The project site is in a dense urban area on the busy and expanding Boston waterfront located on the Silver line MBTA route. Additionally, the site permeability will be improved and stormwater runoff will be reduced.

The proposed interior scope of work is limited to upgrades to the main and elevator lobby modifications. Upgrades will be made to the building ventilation serving these and future tenant areas. New lighting will be installed and will target lighting power densities 20-25% below code within the renovated lobby areas.

To the extent possible the specified products and materials will have recycled content and be regionally obtained. The new interior finishes specified for installation in the lobbies will meet applicable VOC limits, not contain added urea formaldehyde and be CRI and/or FloorScore compliant.

The construction practices will ensure occupied building areas will be adequately protected from construction activities. Demolition and construction waste will be diverted from area landfills.

Future development:

Jamestown, L.P. is committed to developing projects that are sustainably designed, energy efficient, environmentally conscious and healthy for the employees and visitors. When future core and shell work is pursued the project has identified target sustainability goals which span the seven LEED CS v2009 rating system categories and enable the project to be sustainably designed.

When the existing plumbing fixtures are replaced project will specify low flow and high efficiency replacement plumbing fixtures. Additionally, if the developer chooses to locate shower and changing rooms for employee use the shower fixtures will be low flow.



When existing building systems equipment is replaced, the new equipment will be selected to optimize energy performance and will not use refrigerants that are harmful to the environment.

During future construction phases of the project the Construction Management teams engaged to perform the work will endeavor to divert 75% of the Construction and Demolition waste from area landfills and procure materials that have recycled content and/or are extracted and manufactured within 500 miles of the project site to the extent possible.

The air quality will be monitored during future construction phases of the project. Low emitting materials will be specified within the design documents for future core and shell related projects to maintain and improve air quality throughout the public areas.

Exhibit C

Memorandum by Cosentini



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PROJECT MEMORANDUM

TO: Katie Scallon, Jamestown, L.P.

FROM: Vladimir Yarmarkovich, PE

SUBJECT: Climate Preparedness: The Innovation and Design Building, South Boston, MA

DATE: 06/18/2014

Per the updated FEMA maps yet to be adopted, the Innovation and Design Building is located within flood zone AE12. Existing first floor elevation has been field surveyed at +12' (NAVD88) throughout the building.

The critical building equipment includes boilers, fuel oil tanks and electric switchgear, which are located in various rooms inside the building on the first floor along the south elevation. Electric transformers and generators are located outside the building along Black Falcon Avenue on grade. All of this equipment is currently at or near elevation 12'.

Given the current scope of work, the existing equipment is functioning and in use and it is not intended to be replaced. Therefore, due to cost and the need to support existing tenants, it is not proposed to raise the existing equipment at this time. As this equipment is upgraded or replaced in future scope it will be raised to an elevation of approximately 15' NAVD88 to be located 3' out of the flood plain, accommodate for future rise in sea level, and be protected from potential storm surges. Interior clear space allows for the equipment to be raised and maintain proper access and clearances.