



TECHNICAL MEMORANDUM

100 Pearl Street Arcade Infill

Zoning Authorizations pursuant to Sections 91-841 and 91-842

CEQR No. 16DCP084M

November 27, 2019

1 Introduction

This Technical Memorandum assesses the potential effects of proposed City Planning Commission authorizations requested by GFP Real Estate (the "Applicant") pursuant to New York City Zoning Resolution (the "ZR") Sections 91-841 (Authorization for retail uses within existing arcades) and 91-842 (Authorization to modify design requirements) to facilitate the enlargement of the building known by the street address of 100 Pearl Street and located at Manhattan Block 30, Lot 19 (the "Project Site") in Lower Manhattan.

These authorizations (the "Discretionary Actions") and two Chairperson certifications (together with the Discretionary Actions, the "Proposed Actions") are being requested to facilitate the rehabilitation of a 26-story, 764,460 gross-square-foot ("gsf") commercial office building with ground-floor retail (the "Building") on the northeastern end of the block bounded by Pearl Street to the north, Hanover Square to the northeast, Water Street to the south, and Coenties Slip to the southwest (see **Figure 1**). The Project Site features a 7,467.13-square-foot ("sf") single- and double-height through-block arcade connecting Water Street and Pearl Street, and a 5,349.06-sf single-height arcade with frontage on Water Street and Hanover Square (collectively the "Arcades"). The Applicant proposes to infill the Arcades and other ground-floor spaces with new retail and office lobby uses (the "Proposed Project").

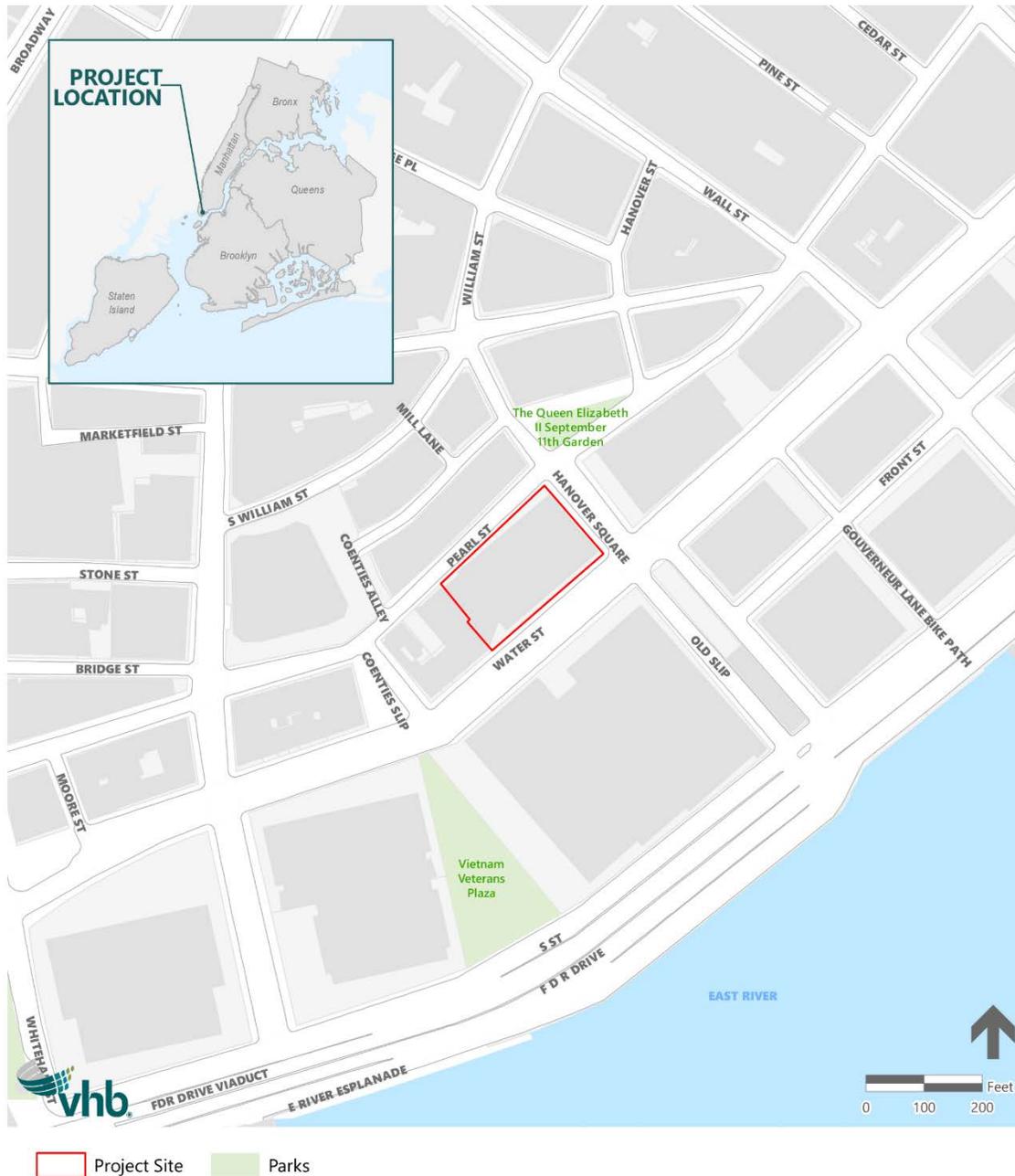
The Project Site was identified and analyzed in the Water Street Upgrades Text Amendment Environmental Assessment Statement (EAS),¹ as follows:

- › An EAS dated January 15, 2016 (Negative Declaration dated January 19, 2016);
- › A revised EAS dated April 22, 2016 (revised Negative Declaration dated April 25, 2016); and
- › A revised EAS dated June 17, 2016 (the "Final Revised EAS") (revised Negative Declaration dated June 20, 2016).

¹ CEQR No. 16DCP084M

The Discretionary Actions are subject to environmental review under the State Environmental Quality Review Act ("SEQRA") and the City Environmental Quality Review ("CEQR"). This Technical Memorandum assesses whether the Proposed Actions would result in any significant adverse environmental impacts that were not identified in the Final Revised EAS and the corresponding revised Negative Declaration. This Technical Memorandum concludes that the Proposed Actions would not result in any significant adverse environmental impacts or in conclusions different than those identified in the Final Revised EAS, therefore additional analysis is not warranted.

Figure 1 Project Site Location



2 Background

The Project Site was identified as a Projected Development Site in the environmental assessment for the Water Street Upgrades Text Amendment (the "Text Amendment") in 2016. The New York City Economic Development Corporation, Department of City Planning, and the Alliance for Downtown New York proposed the Text Amendment to amend ZR Section 91-80 et seq. (Public Access Areas), ZR Article IX, Chapter 1 Appendix A (Lower Manhattan District Plan Maps), ZR Section 37-625 (Design changes), and ZR Section 37-73 (Kiosks and Open Air Cafes) to facilitate the infill of existing arcades with retail use and the improvement of existing plazas in the Water Street commercial corridor in Community District 1, Manhattan. The goal of the text amendment is to foster more diverse, small-scale retail opportunities, increased pedestrian amenities, a more engaging streetscape, and improved open space along Water Street to enhance the Water Street Corridor and east side of Lower Manhattan. An EAS for the Text Amendment was initially completed on January 15, 2016 and a corresponding Negative Declaration was issued on January 19, 2016. The EAS and Negative Declaration determined that the Text Amendment would have no significant adverse environmental impacts.

Subsequently, the City Planning Commission modified the Text Amendment to limit permitted residential uses on the ground floor to lobbies; exclude Use Group 5A (hotel use) from arcade infill areas; increase the number of establishments required on the longest frontage of arcade infill areas; add signage requirements for indoor public spaces; establish a 45-day referral period for Community Board review of certification applications for arcade infill; clarify requirements for periodic compliance reporting; and make clarifying edits to the language and wording of the Text Amendment.

A revised EAS and technical memorandum, reviewing the City Planning Commission's modifications to the Text Amendment, were completed on April 22, 2016. A revised Negative Declaration was issued on April 25, 2016, superseding the previous version. This revised Negative Declaration determined that the Text Amendment, as modified by the City Planning Commission, would have no significant adverse environmental impacts. The City Planning Commission approved the modified Text Amendment on April 25, 2016 (N 160166 ZRM).

The City Council then further modified the Text Amendment to

- › Create a special permit for infill projects of 7,500 square feet or more;
- › Require an authorization for infill projects at 200 Water Street and 75 Wall Street;
- › Exclude Use Group 7A, 7B, 8B, 9A, 10A, 12A, 12B, and 12C uses – except bicycle rental or repair shops and studios for art, music, dance, and theater – from arcade infill areas;
- › Limit the street wall width of bank or loan offices and drug stores;
- › Impose lighting, transparency and building wall treatment requirements for portions of arcades that remain unenclosed;

- › Require notification of the Community Board, Borough President, and local Council Member prior to holding events in public spaces;
- › Establish a 45-day referral period for local Council Member review of certification applications for arcade infill;
- › Impose conditions for the issuance of building permits for plaza improvements, impose requirements for periodic compliance reporting, and require that such reports be sent to the local Council Member;
- › Add a finding to the authorization to modify design requirements; and
- › Make clarifying edits to the language and wording of the Text Amendment.

The Final Revised EAS, reviewing the City Council's modifications to the Text Amendment, was completed on June 17, 2016. A revised Negative Declaration was issued on June 20, 2016, superseding the previous version. This revised Negative Declaration determined that the Text Amendment, as modified by the City Council, would have no significant adverse environmental impacts. The City Council approved the Text Amendment on June 21, 2016.

The Proposed Project requires the Discretionary Actions—an authorization for retail uses within existing arcades (ZR Section 91-841) and an authorization to modify design requirements (ZR Section 91-842). The Discretionary Actions are subject to environmental review under CEQR. The Applicant is also seeking two non-discretionary Chairperson certifications: a certification pursuant to ZR Section 91-821 (Certification for outdoor cafes within arcades) and ZR Section 91-83 (Certification for retail uses within existing arcades). This Technical Memorandum assesses whether the Proposed Actions would result in any significant adverse environmental impacts that were not identified in the Final Revised EAS and the corresponding revised Negative Declaration.

3 Description of the Project Site

The Project Site, consisting of Block 30, Lot 19, is located on the block bounded by Pearl Street to the north, Hanover Square to the northeast, Water Street to the south, and Coenties Slip to the southwest within the Financial District neighborhood of Manhattan (see **Figure 2**). The Project Site is located within a C5-5 commercial district and the Special Lower Manhattan District.

The Building is a 26-story approximately 717,035-zoning-sf (20.17 FAR) commercial office building. It has a height of 394 feet without setback. The Building has a single lobby with entrances on Water Street and Hanover Square.

The Project Site features two Arcades: a 7,467.13-sf single- and double-height through-block arcade connecting Water Street and Pearl Street, and a 5,349.06-sf single-height as-of-right arcade with frontage on Water Street and Hanover Square (see **Figure 3**). The south side of the through-block arcade features a gift store, while the north side includes a barbershop and a vacant space. Six metal benches and two bicycle racks are located roughly in the center of the space. Two planters are located near each of the Water Street and Pearl Street frontages of the through-

block arcade. A bar and restaurant and a custom framing store front on the single-height as-of-right arcade.

Along the Building's Pearl Street frontage, there is a shoe repair store, optician store, and a dry cleaner. Entrances to the Building's loading berths and garage are also located on Pearl Street.

Figure 2 Project Site Location



Project Site
 ## Block
 ## Project Block (with Lots labeled)

Figure 3 100 Pearl Street Ground Floor Existing Conditions



4 Description of the Proposed Actions

As noted above, the Proposed Actions consist of the following:

- › An authorization for retail uses within existing arcades (ZR Section 91-841)
- › An authorization to modify design requirements (ZR Section 91-842)
- › A certification for retail uses within existing arcades (ZR Section 91-83)
- › A certification for outdoor cafes within arcades (ZR Section 91-821)

The Proposed Actions are being sought to facilitate the enlargement of the building on the Project Site to include a total of 11,491 gsf of retail uses at the ground floor, which is 568 gsf more than what was analyzed in the Final Revised EAS. **Figure 4** demonstrates the portions of the ground floor that are subject to these actions. The certification pursuant to ZR Section 91-83 (Retail uses within existing arcades) is needed to establish that the Proposed Project meets the requirements of ZR Section 91-83, which sets forth requirements for the design and use of a horizontal enlargement including the provision of a compensating amenity.

The authorization pursuant to ZR Section 91-841 (Authorization for retail uses within existing arcades) is needed to authorize infill within the approximately 933-sf area identified as Area B as shown on Map 9 of ZR Article IX, Chapter 1, Appendix A (see **Figure 4**). The City Planning Commission may authorize an enlargement within Area B pursuant to ZR Section 91-841 if:

- › The requirements of ZR Section 91-831 (Ground floor requirements) are met;
- › A compensating amenity is provided pursuant to the provisions of ZR Section 91-832 (Plaza improvements), ZR Section 91-834 (Indoor public spaces) or ZR Section 91-835 (Alternative improvements);

- › Sufficient unobstructed space exists adjacent to the proposed enlargement to facilitate pedestrian circulation; and
- › The enlargement will maintain a visual or physical connection to Water Street from another street, public park, or publicly accessible open area.

Under ZR Section 91-842 (Authorization to modify design requirements) the City Planning Commission may modify design requirements for the enlargement if the Commission finds that the location, use, access, size, and treatment of the enlargement would result in a superior urban design relationship with the surrounding streets, buildings and open areas; the usefulness and attractiveness of the publicly accessible open area, required open area or indoor public space will be assured by the proposed layout and design, and that such modification will result in a superior urban design relationship with surrounding streets, buildings and public open areas; and any waiver of required amenities and circulation paths is the minimum necessary to create a better site plan. This authorization is needed to adapt the indoor public space regulations under ZR Section 91-834 (which are based on outdoor public plaza regulations) to an indoor public space.

Finally, the certification pursuant to ZR Section 91-821 (Certification for outdoor cafes within arcades) is needed to allow café seating, which may have waiter or table service, within the Indoor Public Space.

Figure 4 100 Pearl Street Land Use Actions Diagram

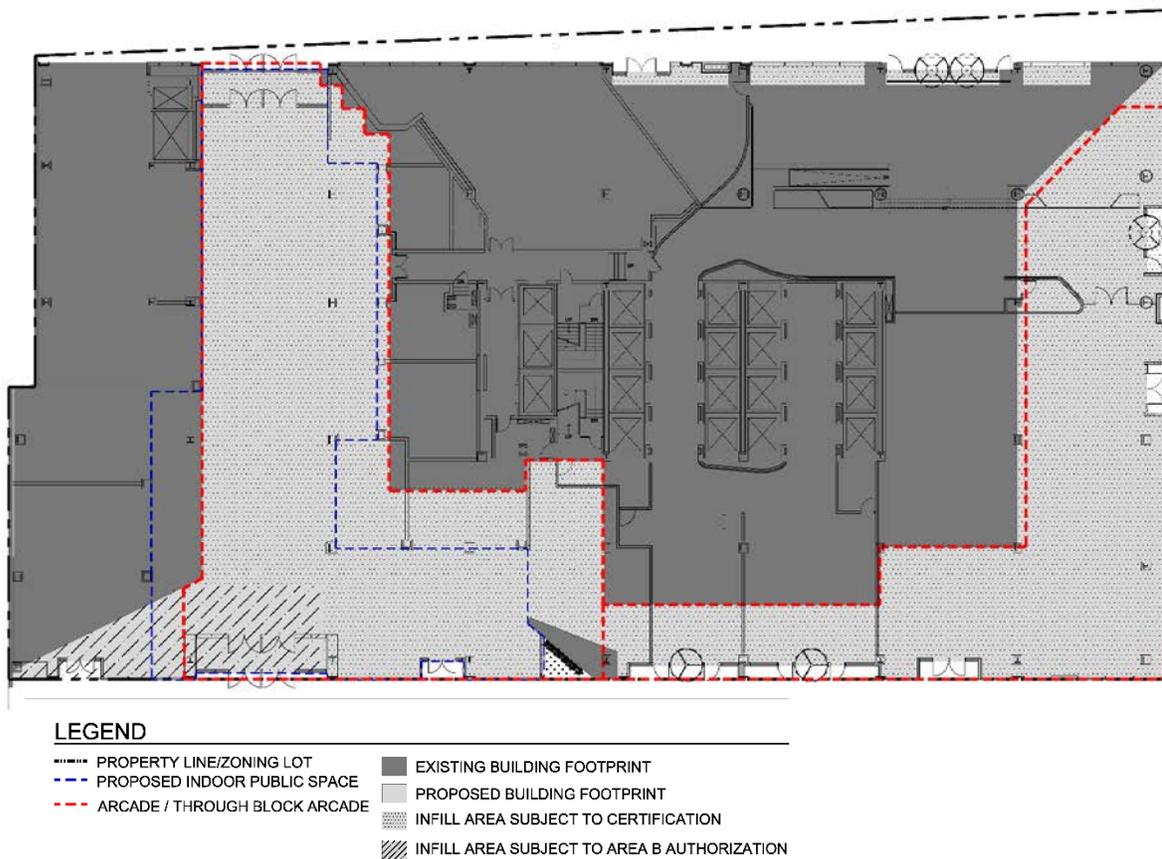


Figure 5 100 Pearl Street Proposed Ground Floor Improvements



5 Description of the Proposed Project

With the Proposed Actions, the Applicant would enclose most of the Arcades and enlarge the Building’s ground floor for new retail, office, and indoor public space uses (see **Figure 5**). The through-block arcade would be maintained as a public passage but redesigned with interior retail frontage, including a variety of food service establishments and integrated public seating, trees, and planting. Overall, the ground floor of the Proposed Project would include 6,966 gsf of office lobby space; 11,491 gsf of retail space; and 6,298 gsf of indoor public space. A 54-sf portion of the Arcades will remain as unenclosed.

Figure 6 depicts illustrative images of the Building’s Water Street frontage under existing conditions and the Proposed Project. **Figure 7** illustrates the existing conditions and the Proposed Project from the corner of Pearl Street and Hanover Square. With the Proposed Project, the Arcades will be infilled to create additional office lobby space and improved retail space while maintaining a through-block indoor public space between Water Street and Pearl Street.

Figure 6 Existing and Proposed Arcade Infill from Water Street

Existing



Proposed



Figure 7 Existing and Proposed Arcade Infill from Pearl Street

Existing



Proposed



6 Purpose and Need of the Proposed Actions

The Proposed Project is located in a C5-5 commercial district and within the Special Lower Manhattan District. The Building previously utilized floor area bonuses in exchange for providing the Arcades. Since these floor area bonuses are no longer available today, the Project Site is overbuilt. Prior to the Text Amendment, new floor area could not be added to the Project Site without reducing an equivalent amount of floor area elsewhere on the Project Site. The Text Amendment, approved by City Council on June 21, 2016, allows the infill of existing arcades by Chairperson certification and City Planning Commission authorization subject to certain provisions, such as inclusion of indoor public space. These horizontal enlargements are not included as floor area and are therefore permitted for an overbuilt site like the Project Site.

According to the Applicant, the Building's ground floor presents several challenges. The Applicant believes the Arcades conceal existing retail and service establishments and obscure entrances to the building. Retail spaces within the through-block arcade lack the necessary depth to support vibrant retail activities and have resulted in substantial vacancies. Finally, the utilization of the arcades is weather dependent, limiting public use in poor weather conditions.

With a horizontal enlargement of the Building's existing arcades, the ground floor would be reconfigured to provide 11,491 gsf of new retail uses, an additional 568 gsf of retail space than was analyzed in the Final Revised EAS. The indoor public space would have a variety of locations for public seating, numerous food service establishments, and greenery, all of which would create a vibrant public space serving neighborhood residents and workers. It is the Applicant's opinion that creating the indoor public space and retail spaces will better serve the general public, tenants, and visitors to the Project Site than the current arcade configuration.

7 Analysis

As shown in **Figure 8**, the Final Revised EAS analyzed the cumulative effects of 17 enlargements that the Text Amendment was projected to facilitate. The Project Site was considered Projected Development Site 4 and was assumed to be redeveloped with: 9,530 gsf of retail infill within the Arcades and other unenclosed spaces at the ground floor, 1,393 gsf of retail use within existing enclosed ground-floor spaces outside of the Arcades, and 10,244 gsf of office infill area within the Arcades at the second-floor level, for a total of 21,167 gsf of new development at the Project Site. It is assumed that the Final Revised EAS accounted for the 3,857 gsf of existing office lobby space, although that was not explicitly stated. The Final Revised EAS was based on an anticipated build year of 2026.

As discussed above, the Applicant proposes an enlargement with new retail, indoor public space, and office lobby uses at the ground floor of the Project Site. No new floor area is proposed at the second story of the Building. The Proposed Project includes 568 gsf more retail use than what was analyzed in the Final Revised EAS

because the Applicant proposes to expand retail uses within the Building’s existing footprint. However, the Proposed Project does not include any of the additional second-floor office uses that were analyzed in the Final Revised EAS. Therefore, the change between the Final Revised EAS and the current proposal is an additional 568 gsf of retail uses, an addition of 3,109 gsf of office lobby use on the ground floor, and a reduction in office uses of 10,244 gsf from the second floor (for an overall reduction of 7,135 gsf of office use from what was analyzed in the Final Revised EAS) (See Figure 9).

Figure 8 Development Scenario from Final Revised EAS

Table B-2: Development Scenario – No-Action and With Action Conditions

Projected Development Sites				No-Action Condition	With-Action Condition			Incremental Difference	
Site No.	Building Address	Block	Lot	Total No-Action Retail (gsf)	Total Proposed GF Retail Infill (gsf)	Total Proposed Additional GF Retail (gsf)	Total New Office/ Residential Space (Second Floor) (gsf)	Net New GF Retail (gsf)	Net New Office/ Residential Space (Second Floor) (gsf)
1	1 New York Plaza	4	7501	-	8,488	3,868	-	12,356	-
2	2 New York Plaza	5	7501	-	4,299	8,723	3,656	13,022	3,656
3	4 New York Plaza	5	10	-	3,313	7,731	-	11,044	-
4	7 Hanover Square	30	19	-	9,530	1,393	10,244	10,923	10,244
5	55 Water Street	32	7501	-	10,628	8,699	-	19,327	-
6	77 Water Street	33	1	-	14,986	-	4,161	14,986	4,161
7	32 Old Slip	35	1	-	12,004	3,213	-	15,217	-
8	95 Wall Street	33	11	-	3,007	-	-	3,007	-
9	75 Wall Street	31	7501	-	5,179	1,239	5,179	6,418	5,179
10	100 Wall Street	38	1	-	3,560	-	-	3,560	-
11	110 Wall Street ¹	37	8	7,500	3,163	9,122	-	4,785	-
12	160 Water Street ¹	70	43	3,454	3,235	3,454	-	3,235	-
13	180 Water Street ¹	70	32	10,502	2,405	10,502	-	2,405	-
14	200 Water Street ²	75	1	-	4,462	-	2,016	4,462	2,016
15	175 Water Street	71	7501	-	3,315	-	3,727	3,315	3,727
16	85 Broad Street	29	1	-	12,930	-	-	12,930	-
17	111 Wall Street	35	10	-	4,908	-	-	4,908	-
18	86 Water Street / 10 Hanover Square	31	1	-	-	-	-	-	-
19	88 Pine Street	38	17	-	-	-	-	-	-
20	180 Maiden Lane	37	23	-	-	-	-	-	-
				21,456	109,413	57,944	28,983	145,901	28,983

NOTES

- 1 110 Water Street, 160 Water Street and 180 Water Street have vacant retail space on the ground floor (No-Action Retail)
- 2 For Site 14 at 200 Water Street, the second floor space within the existing arcade would likely be new residential space, consistent with the residential use on upper floors.

Figure 9 Increment for Analysis

	Current GSF	Final Revised EAS GSF	Proposed Project GSF	Increment GSF
Retail	6,842	10,923	11,491	568
Office Space (1st and 2nd Floors)	3,857	14,101	6,966	-7,135
Lobby Office Space	3,857	3,857*	6,966	+3,109
Second Floor Office Space Infill	-	10,244	0	-10,244
Indoor Public Space	0	3,908	6,298	+2,390

* It is assumed that the Final Revised EAS took into account the existing Office Lobby Space although it was not explicitly stated

The following technical areas were below CEQR thresholds for analysis and were screened from further study in the Final Revised EAS: Socioeconomic Conditions, Community Facilities, Shadows, Natural Resources, Water and Sewer Infrastructure, Solid Waste and Sanitation Services, Energy, Greenhouse Gas Emissions, Noise, Public Health, and Neighborhood Character. With only 568 gsf of additional retail space and an overall reduction of 7,135 gsf of office space from what was analyzed in the Final Revised EAS, the additional gsf does not trigger any thresholds for those analysis categories and no additional analysis is warranted in the technical areas that were screened from further study in the Final Revised EAS.

This Technical Memorandum analyzes the effect of an additional 568 gsf of retail uses and a reduction of 7,135 gsf of office space infill on each of the technical areas studied in the Final Revised EAS to evaluate whether the Proposed Actions would result in any significant adverse environmental impacts. This Technical Memorandum concludes that the Proposed Actions would not result in any significant adverse environmental impacts nor would it result in conclusions different than those identified in the Final Revised EAS, and therefore additional analysis is not warranted.

Land Use, Zoning and Public Policy

According to the *CEQR Technical Manual*, a land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project and determines whether a proposed project is compatible with those conditions or whether it may affect them.

The Final Revised EAS analyzed the effects on land use, zoning, and public policy of (i) new retail and office uses within existing arcades and (ii) improvements to existing plazas. The Final Revised EAS found that these infill uses would be compatible with existing land uses and contribute to an active commercial corridor.

The Proposed Actions would result in a slightly greater amount of retail use than what was analyzed in the Final Revised EAS (and a reduction in office use). However,

the Proposed Project uses would be consistent with the ground-floor uses anticipated in the Final Revised EAS.

The Proposed Actions would not change the zoning regulations applicable to the Project Site as compared to the regulations analyzed in the Final Revised EAS. Finally, the Proposed Project would advance the goals of the Text Amendment by upgrading underutilized arcades, fostering a more pedestrian-friendly and vibrant streetscape, and producing a high-quality indoor public space.

Waterfront Revitalization Program: Since the Final Revised EAS was completed and the corresponding revised Negative Declaration was issued in June 2016, the Consistency Assessment Form (the "CAF") for New York City's Waterfront Revitalization Program has been revised. As shown in the attached CAF for the WRP number WRP #19-050, the Proposed Project is consistent with all applicable policies of the Waterfront Revitalization Program. Therefore, the Proposed Project would not result in any significant adverse impacts related to the Waterfront Revitalization Program. Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action, hereby concurs with the applicant that the actions will not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy.

For the reasons above, the Proposed Actions would not result in any significant adverse land use, zoning, or public policy impacts.

Open Space

The *CEQR Technical Manual* defines open space as publicly or privately-owned land that is publicly accessible and designated for leisure, play or sport, or land set aside for the protection and/or enhancement of the natural environment. The Manual outlines that an open space assessment is conducted to determine whether a Proposed Project would result in the displacement or physical alteration of an open space (direct impact) and/or result in an increase in population that would overburden available open space (indirect impact). However, direct impacts do not always result in significant adverse impacts where the proposed project improves open space and increases its functionality.

The Final Revised EAS concluded that the Text Amendment would result in the displacement or physical alteration of open space, but would not have adverse effects, since the infill would result in the improvement of some of these open spaces and bring ground-floor activity closer to pedestrians. It also found that the Text Amendment would not result in adverse indirect open space impacts.

The Final Revised EAS assumed that 8,908 sf of the Arcades would be infilled, leaving 3,908.19 sf of enclosed indoor public space.² The Proposed Actions would maintain a 54-sf portion of the Arcades as unenclosed, and the Proposed Project would

² Water Street Upgrades Text Amendment. *New York City Environmental Quality Review Revised Environmental Assessment Statement and Supplemental Report*. New York, NY. June 17, 2016. p 83.

include a 6,298-sf indoor public space, which is significantly larger than the 3,908.19-sf indoor public space assumed in the Final Revised EAS.

Direct Effects: The Proposed Project would create an approximately 6,298-sf indoor public space – substantially larger than the 3,908.19-sf indoor public space assumed in the Final Revised EAS – with tables, chairs, greenery, and other amenities that would improve the functionality of the current Arcades as public open space.

Indirect Effects: The Proposed Actions would result in 568 gsf more retail uses and 7,135 gsf less office use overall than what was analyzed in the Final Revised EAS and would therefore result in approximately 28 fewer employees at the Project Site.³ Additionally, the Proposed Project would increase the amount of open space on the Project Site by 2,390 sf from what was analyzed in the Final Revised EAS. Therefore, the Proposed Actions would increase minimally the open space ratio in the 0.25-mile study area from what was analyzed in the Final Revised EAS, and the open space ratio would remain above the planning goal of 0.15 acres of open space per 1,000 non-residents.

For the reasons above, the Proposed Actions would not result in any significant adverse open space impacts.

Historic and Cultural Resources

The *CEQR Technical Manual* identifies architectural resources as historically important buildings, structures, objects, sites, and districts. Archaeological resources are defined in the *CEQR Technical Manual* as physical remains, usually subsurface—such as burials, foundations, artifacts, wells, and privies of the prehistoric, Native American, and historic periods. A historic and cultural resources assessment is warranted when a project would result in new construction or significant physical alteration of a building and/or in-ground disturbance in an area not previously excavated.

Direct Effects: The Final Revised EAS assumed that construction on the Project Site would comply with the Department of Buildings Technical Policy and Procedure Notice #10/88 (“TPPN #10/88”) to avoid any damage to the State/National Register-listed historic resources within 90 feet of the Project Site, would not involve any in-ground disturbance, and would not alter any historic resource’s setting or visual prominence within the surrounding streetscape.

The continued applicability of TPPN #10/88 would not be affected by the Proposed Actions. Furthermore, no in-ground disturbance would take place as a result of the Proposed Actions. Therefore, the Proposed Actions would not create any direct effects on historic or cultural resources.

As assumed in the Final Revised EAS, the Proposed Actions would continue to involve infill along certain building walls facing Pearl Street, across the street from

³ Estimate of workers based on standard rates used in prior EIS documents, including the East Midtown Rezoning FEIS, Atlantic Yards FEIS, Western Rail Yards FEIS, Brownsville Ascend Charter School EA, Coliseum Redevelopment FSEIS, 125th Street Corridor Rezoning FEIS, West 57th Street Rezoning FEIS, and others; office employment estimated based on one employee per 250 sf of office space

historic resources. The Proposed Actions would not change the character of infill along Pearl Street compared to what was analyzed in the Final Revised EAS, and therefore would not create any indirect effects on historic or cultural resources.

For the reasons above, the Proposed Actions would not result in any significant adverse impacts to historic or cultural resources.

Urban Design and Visual Resources

The *CEQR Technical Manual* defines the urban design of a neighborhood as the totality of its components including streets, buildings, open spaces, wind, natural resources, and visual resources that may affect a pedestrian experience of public space. A visual resource is defined as the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

The Final Revised EAS found that projected development would not affect the arrangement or orientation of the streets within the project area and that the infill of existing arcades would activate the Corridor and enhance the pedestrian experience at the street level.

It is the Applicant's opinion that the Proposed Actions would improve the pedestrian experience by enhancing the sense of place by creating a lighter, greener public space with various seating and retail options (see **Figure 10**).

Figure 10 Existing and Proposed Arcade Infill from Pedestrian Viewpoint

Existing



Proposed

INDOOR PUBLIC SPACE



Consistent with the Final Revised EAS, the Proposed Project would not result in any disruption to the street grid, street trees, or obstruct view corridors. The street wall would also not extend any closer to the street than it is currently located. It is the Applicant's opinion that the Proposed Project, with its new retail uses and indoor public space, would attract pedestrians and activate the Water Street corridor, as anticipated in the Final Revised EAS.

For the reasons above, the Proposed Actions would not result in any significant adverse impacts to urban design or visual resources.

Hazardous Materials

The *CEQR Technical Manual* defines hazardous materials as any substances that pose a threat to human health or the environment. There is a potential for significant impacts related to hazardous material when elevated levels of hazardous material exist on a site and a proposed project would increase pathways to human or environmental exposure. The Final Revised EAS concluded that development generated by the Text Amendment would not result in significant adverse hazardous materials impacts.

The Proposed Actions would result in a similar amount of construction activity as analyzed in the Final Revised EAS. There would also not be any in-ground disturbance as a result of the Proposed Actions. Therefore, the Proposed Project would not change the likelihood of exposure of people or the environment to hazardous materials compared to what was analyzed in the Final Revised EAS. Therefore, the Proposed Actions would not result in any significant adverse hazardous materials impacts.

Transportation

As described in the CEQR Technical Manual, a transportation analysis assesses whether a proposed project may affect traffic operations and mobility, public transportation facilities, and pedestrian elements and flow. The Final Revised EAS analyzed the vehicle, pedestrian, and transit trips anticipated to be generated by new retail uses across 17 projected development sites and determined that detailed assessments were not warranted.⁴

The Proposed Actions would result in 568 gsf more retail use and 7,135 gsf less office use than as analyzed in the Final Revised EAS.

Within Manhattan, south of 110th Street, the CEQR threshold for conducting a transportation analysis is whether a project would introduce 15,000 gsf of new retail space. As the Proposed Project would result in an increase of only 568 gsf of retail use and 7,135 gsf less office use no additional analysis is required and the conclusions of the Final Revised EAS are unchanged.

For the reasons above, the Proposed Actions would not result in any significant adverse transportation impacts.

Air Quality

According to the *CEQR Technical Manual*, ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. An air quality assessment determines a proposed project's effects on ambient air quality as well as the effects of ambient air quality on the project. A project may have an effect on air quality, during operation and/or construction.

The Final Revised EAS analyzed the HVAC capacity of existing buildings and concluded that the existing capacity would accommodate future demand resulting from infill at the sites affected by the Text Amendment. It also concluded that the Text Amendment would not result in any significant adverse mobile source air quality impacts.

Mobile Sources: The number of vehicle trips passing through the Project Site's surrounding intersections would continue to remain below 50 peak-hour vehicle trips, as assumed in the Final Revised EAS, therefore the Proposed Actions would not result in any significant adverse air quality impacts related to mobile sources.

Stationary Sources: The Proposed Project would not result in the need for new emission stacks because the Building's HVAC capacity can accommodate the HVAC demand of the Proposed Project, therefore the Proposed Actions would not result in any significant adverse air quality impacts related to stationary sources.

Construction

⁴ Anticipated new office space was not anticipated to result in an increased number of employees in the study area and was therefore not considered in the Final Revised EAS.

A construction assessment considers whether a proposed project would affect technical areas such as transportation, air quality, noise, and historic and cultural resources during temporary construction activities. The Final Revised EAS assumed that all infill would comply with the Air Pollution Control Code, Noise Control Code, Citywide Construction Noise Mitigation regulations, and U.S. Environmental Protection Agency noise emission standards. Additionally, the Final Revised EAS assumed that construction on the Project Site would not involve in-ground excavation or significant structural work; comply with TPPN #10/88; and have a duration of one year or less. These assumptions remain accurate with respect to the Proposed Project. Therefore, no additional analysis is warranted, and the Proposed Actions would not result in any significant adverse construction impacts.

8 Conclusion

The Proposed Project is one of the projected developments that was analyzed in the Final Revised EAS, which did not anticipate any significant adverse environmental impacts. The Proposed Project does not involve any new physical development, use of the Project Site, or construction activities that were not previously considered in the Final Revised EAS. Overall, the Proposed Project would result in less development than was previously analyzed, due to the presence of less office space in the Proposed Project than in the Final Revised EAS. Based on the above, the Proposed Actions are not expected to result in any significant adverse impacts or conclusions different than those identified in the Final Revised EAS, and no further analysis is warranted.

Appendix I- WRP Consistency Assessment Form

(Attached)

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the [New York City Waterfront Revitalization Program](#) (WRP) which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: _____

Name of Applicant Representative: _____

Address: _____

Telephone: _____ Email: _____

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

2. Purpose of activity

C. PROJECT LOCATION

Borough: _____ Tax Block/Lot(s): _____

Street Address: _____

Name of water body (if located on the waterfront): _____

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission

Yes No

- | | | |
|---|--|--|
| <input type="checkbox"/> City Map Amendment | <input type="checkbox"/> Zoning Certification | <input type="checkbox"/> Concession |
| <input type="checkbox"/> Zoning Map Amendment | <input type="checkbox"/> Zoning Authorizations | <input type="checkbox"/> UDAAP |
| <input type="checkbox"/> Zoning Text Amendment | <input type="checkbox"/> Acquisition – Real Property | <input type="checkbox"/> Revocable Consent |
| <input type="checkbox"/> Site Selection – Public Facility | <input type="checkbox"/> Disposition – Real Property | <input type="checkbox"/> Franchise |
| <input type="checkbox"/> Housing Plan & Project | <input type="checkbox"/> Other, explain: _____ | |
| <input type="checkbox"/> Special Permit | | |
- (if appropriate, specify type: Modification Renewal other) Expiration Date: _____

Board of Standards and Appeals

Yes No

- Variance (use)
- Variance (bulk)
- Special Permit
- (if appropriate, specify type: Modification Renewal other) Expiration Date: _____

Other City Approvals

- | | |
|--|---|
| <input type="checkbox"/> Legislation | <input type="checkbox"/> Funding for Construction, specify: _____ |
| <input type="checkbox"/> Rulemaking | <input type="checkbox"/> Policy or Plan, specify: _____ |
| <input type="checkbox"/> Construction of Public Facilities | <input type="checkbox"/> Funding of Program, specify: _____ |
| <input type="checkbox"/> 384 (b) (4) Approval | <input type="checkbox"/> Permits, specify: _____ |
| <input type="checkbox"/> Other, explain: _____ | |

State Actions/Approvals/Funding

- State permit or license, specify Agency: _____ Permit type and number: _____
- Funding for Construction, specify: _____
- Funding of a Program, specify: _____
- Other, explain: _____

Federal Actions/Approvals/Funding

- Federal permit or license, specify Agency: _____ Permit type and number: _____
- Funding for Construction, specify: _____
- Funding of a Program, specify: _____
- Other, explain: _____

Is this being reviewed in conjunction with a [Joint Application for Permits?](#) Yes No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? Yes No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? Yes No
3. Is the project located on publicly owned land or receiving public assistance? Yes No
4. Is the project located within a FEMA 1% annual chance floodplain? (6.2) Yes No
5. Is the project located within a FEMA 0.2% annual chance floodplain? (6.2) Yes No
6. Is the project located adjacent to or within a special area designation? See [Maps – Part III](#) of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F). Yes No
 - Significant Maritime and Industrial Area (SMIA) (2.1)
 - Special Natural Waterfront Area (SNWA) (4.1)
 - Priority Maritime Activity Zone (PMAZ) (3.5)
 - Recognized Ecological Complex (REC) (4.4)
 - West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (2.2, 4.2)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder or Not Applicable (N/A). For more information about consistency review process and determination, see **Part I** of the [NYC Waterfront Revitalization Program](#). When assessing each policy, review the full policy language, including all sub-policies, contained within **Part II** of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).

For those policies checked Promote or Hinder, provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.

		Promote	Hinder	N/A
I	Support and facilitate commercial and residential redevelopment in areas well-suited to such development.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	In areas adjacent to SMIA's, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	<input type="checkbox"/>	<input type="checkbox"/>	

		Promote	Hinder	N/A
2	Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.	Support and encourage in-water recreational activities in suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Minimize conflicts between recreational boating and commercial ship operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Protect and restore the quality and function of ecological systems within the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Protect and restore tidal and freshwater wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8	Maintain and protect living aquatic resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Promote	Hinder	N/A
5	Protect and improve water quality in the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1	Manage direct or indirect discharges to waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in <i>New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms</i>) into the planning and design of projects in the city's Coastal Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Prevent and remediate discharge of petroleum products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Provide public access to, from, and along New York City's coastal waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Provide visual access to the waterfront where physically practical.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Protect scenic resources that contribute to the visual quality of the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.2	Protect and enhance scenic values associated with natural resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.2	Protect and preserve archaeological resources and artifacts.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: David Quart

Address: One Penn Plaza, 7th Floor

Telephone: 212-857-7317 Email: dquart@vhb.com

Applicant/Agent's Signature: 

Date: 7/11/19

Appendix II- WRP Consistency Assessment Form

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Policy 1.1: Encourage Commercial and Residential Redevelopment in Appropriate Coastal Zone Areas.

The Proposed Actions would result in new ground-floor retail and office lobbies with frontage on Water Street, Pearl Street, and Hanover Square. This additional retail and residential development would improve the pedestrian experience by providing new retail and service amenities in an existing high-density central business district. The Proposed Project's indoor public space will maintain a public pedestrian passageway and add interior retail frontage complimented by a variety integrated public seating and greenery.

The Proposed Actions would introduce new retail development in the Water Street Corridor of the Lower Manhattan central business district and improve the public use and benefit of the Arcades. The Proposed Actions are related to a wider effort by the New York City Economic Development Corporation, Department of City Planning, and the Alliance for Downtown New York to foster more diverse, small-scale retail opportunities along Water Street and to enhance the Water Street Corridor and east side of Lower Manhattan. By improving the Arcades at the Project Site, the Proposed Actions would contribute to the City's efforts to encourage commercial and residential development in the area, helping to attract new industries to the Water Street Corridor and to revitalize its long-term competitiveness, while also contributing to a better quality of life for workers and the area's residents.

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

The Proposed Actions would result new ground-floor retail and office lobbies with frontage on Water Street, Pearl Street, and Hanover Square. This area of the Coastal Zone is well served by public transportation: over a dozen buses have stops on Water Street adjacent to the Project Site and in the surrounding area; entrances to the 1, R, W, 2, 3, 4, 5, and J subway trains are located within three to six blocks of the Project Site; the Staten Island Ferry terminal is located three blocks to the southwest of the Project Site; and the Wall Street/Pier 11 ferry stop, which serves all six NYC Ferry routes, is located three blocks to the east of the Project Site.

Policy 1.5: Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2

As discussed under WRP Policy 6.2, the Proposed Project will be designed with consideration of climate change and sea level rise.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

Policy 6.1: “Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.”

As described in the next section, the Proposed Project will be designed to minimize losses caused by flooding and erosion and increase resilience to flooding caused by climate change.

Additionally, simultaneous with the implementation of the Proposed Project, the Applicant plans to relocate sensitive building features from the basement to the second story to make the Building more resilient to flooding.

Policy 6.2: “Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in the New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city’s Coastal Zone.”

Much of the Project Site is located within the National Flood Insurance Program’s (NFIP) 100-year floodplain while the northwestern portion of the Project Site is within the 500-year floodplain, as mapped in the Preliminary Flood Insurance Rate Map (PFIRM) for New York County, NY dated January 30, 2015 (Map Number 3604970184G) (see **Figure A1**). The height of the 100-year floodplain is 11 feet NAVD88. The height of the 500-year floodplain is 14.8 feet. The corner of the Building near the intersection of Water Street and Hanover Square abuts the Limit of Moderate Wave Action (LiMWA) line.

Figure A1: Flood Zone Map



Project Site LiMWA Zone VE Zone AE 0.2 % Annual Flood

Based on sea level rise (SLR) estimates from the New York City Panel of Climate Change's 2015 report, Building the Knowledge Base for Climate Resiliency, predicted flood elevations for various SLR scenarios were determined, as depicted in **Table 1**. All SLR calculations are provided in the flood elevation worksheets attached.

Table 1 100-Year Floodplain Elevations with Sea Level Rise

Decade	Low Estimate – 10th percentile (ft)	Mid-Range – 25th to 75th percentile (ft)		High Estimate – 90th percentile (ft)
2020	11.2	11.3	11.7	11.8
2050	11.7	11.9	12.8	13.5
2080	12.1	12.5	14.3	15.8
2100	12.3	12.8	15.2	17.3

The lowest floor elevation of the Proposed Project, which consists of office lobbies and retail space, would be constructed at an elevation of 7.7 feet, which is 3.3 feet lower than the 100-year flood height. However, the Proposed Project would incorporate floodproofing measures. The Building's entire ground floor would utilize dry flood-proofing measures. Building entrances, loading berths, and the parking garage entrance would be protected using temporary flood control devices. Glass facades along Hanover Square and Water Street would be dry flood-proofed with substantially impermeable marine glass up to 8 feet from the sidewalk, extending to the first mullion above the height of the design flood elevation (DFE) of 13 feet (and constructed per NYC Building Code Appendix G standards). This marine glass will conform to flood performance requirements to withstand hydrostatic, hydrodynamic, and debris impact force per ASCE 24, FEMA Technical Bulletin 3-93, and FEMA 3-936. The rest of the ground floor would be dry flood-proofed with a concrete curb poured to the level of the design flood elevation.

To improve the Building's resiliency further, sensitive building features such as the electrical switchgear, emergency generator, fire pumps, gas pumps, fire alarms, and security systems (which are currently located in the basement) would be relocated to the second floor at an elevation of 24 feet, 8 inches.

As such, the Proposed Project would be consistent with this policy.

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Worksheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. HighTab 4 contains primary results. Tab 5, "Future Flood Level Projections" contains background computations. The remaining tabs contain additional results, to be used as relevant. Non-highlighted cells have been locked.

Background Information	
Project Name	100 Pearl Street Arcade Infill
Location	Manhattan
Type(s)	<input checked="" type="checkbox"/> Residential, Commercial, Community Facility <input type="checkbox"/> Parkland, Open Space, and Natural Areas <input type="checkbox"/> Tidal Wetland Restoration <input type="checkbox"/> Critical Infrastructure or Facility <input type="checkbox"/> Industrial Uses <input type="checkbox"/> Over-water Structures <input type="checkbox"/> Shoreline Structures <input type="checkbox"/> Transportation <input type="checkbox"/> Wastewater Treatment/Drainage <input type="checkbox"/> Coastal Protection
Description	The applicant is proposing a horizontal enlargement of the project building's existing arcades. The ground floor would be reconfigured to provide 11,491 gsf of new retail uses and office lobbies, an additional 568 sf from the Final Revised EAS.
Planned Completion date	2019

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet Error."

Last update: June 7, 2017

Establish current tidal and flood heights.

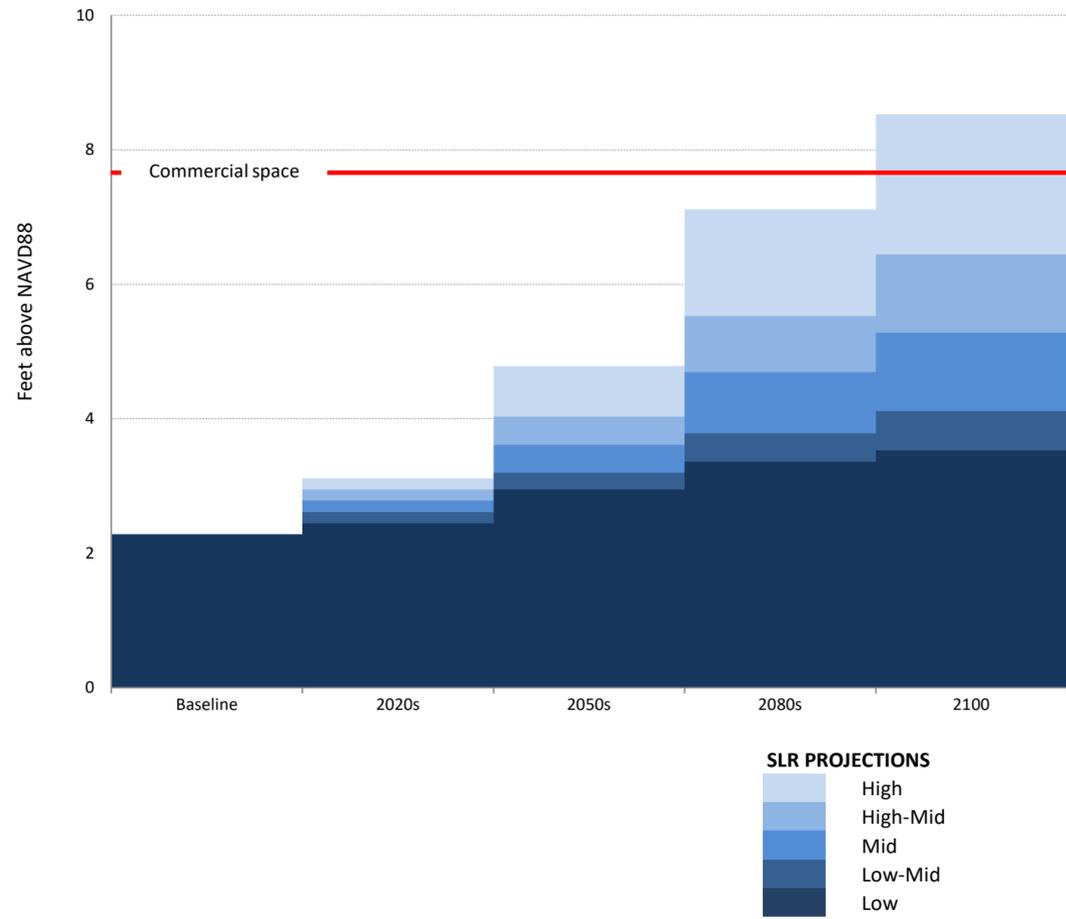
	FT (NAVD88)	Feet	Datum	Source
MHHW	2.28	5.05	MLLW	<i>NOAA.gov</i>
1% flood height	11.00	11.00	NAVD88	<i>FEMA Preliminary Flood Viewer</i>
<i>As relevant:</i>				
0.2% flood height	14.80	14.80	NAVD88	<i>FEMA NYC FIS Report</i>
MHW	1.96	4.73	MLLW	<i>NOAA.gov</i>
MSL	-0.20	2.57	MLLW	<i>NOAA.gov</i>
MLLW	-2.77	0.00	MLLW	<i>NOAA.gov</i>

Data will be converted based on the following datums:

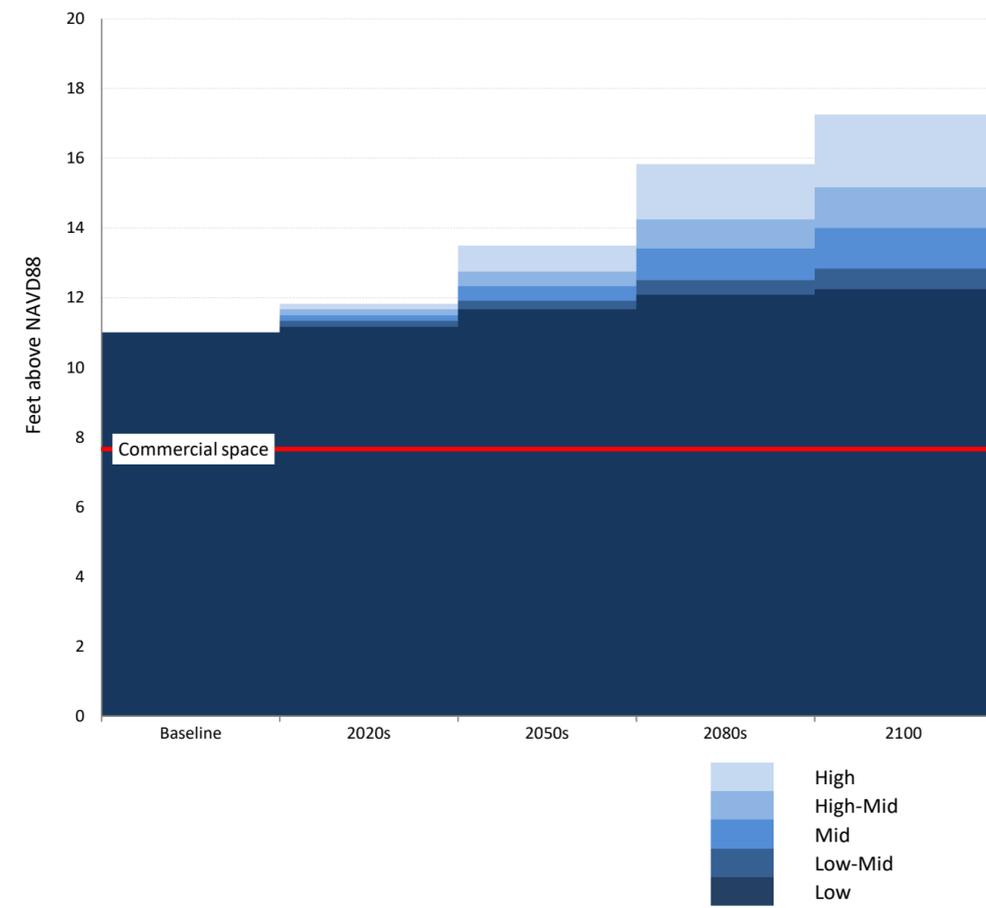
Datum	FT (NAVD88)
NAVD88	<i>0.00</i>
NGVD29	<i>-1.10</i>
Manhattan Datum	<i>1.65</i>
Bronx Datum	<i>1.51</i>
Brooklyn Datum (Sewer)	<i>0.61</i>
Brooklyn Datum (Highway)	<i>1.45</i>
Queens Datum	<i>1.63</i>
Richmond Datum	<i>2.09</i>
Station	The Battery
MLLW	-2.77

Assess project vulnerability over a range of sea level rise projections.

Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise



	SLR (ft)					
	Low	Low-Mid	Mid	High-Mid	High	
Baseline	0.00	0.00	0.00	0.00	0.00	2014
2020s	0.17	0.33	0.50	0.67	0.83	2020s
2050s	0.67	0.92	1.33	1.75	2.50	2050s
2080s	1.08	1.50	2.42	3.25	4.83	2080s
2100	1.25	1.83	3.00	4.17	6.25	2100

MHHW+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High	
Baseline	2.28	2.28	2.28	2.28	2.28	Baseline
2020s	2.45	2.61	2.78	2.95	3.11	2020s
2050s	2.95	3.20	3.61	4.03	4.78	2050s
2080s	3.36	3.78	4.70	5.53	7.11	2080s
2100	3.53	4.11	5.28	6.45	8.53	2100

1%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High	
Baseline	11.00	11.00	11.00	11.00	11.00	Baseline
2020s	11.17	11.33	11.50	11.67	11.83	2020s
2050s	11.67	11.92	12.33	12.75	13.50	2050s
2080s	12.08	12.50	13.42	14.25	15.83	2080s
2100	12.25	12.83	14.00	15.17	17.25	2100

0.2%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	14.80	14.80	14.80	14.80	14.80
2020s	14.97	15.13	15.30	15.47	15.63
2050s	15.47	15.72	16.13	16.55	17.30
2080s	15.88	16.30	17.22	18.05	19.63
2100	16.05	16.63	17.80	18.97	21.05

	0	1
Commercial space	8	7.66
B	0	0
C	0	0
D	0	0
E	0	0
F	0	0
G	0	0
H	0	0

SLR (in)

Low	Low-Mid	Mid	High-Mid	High
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

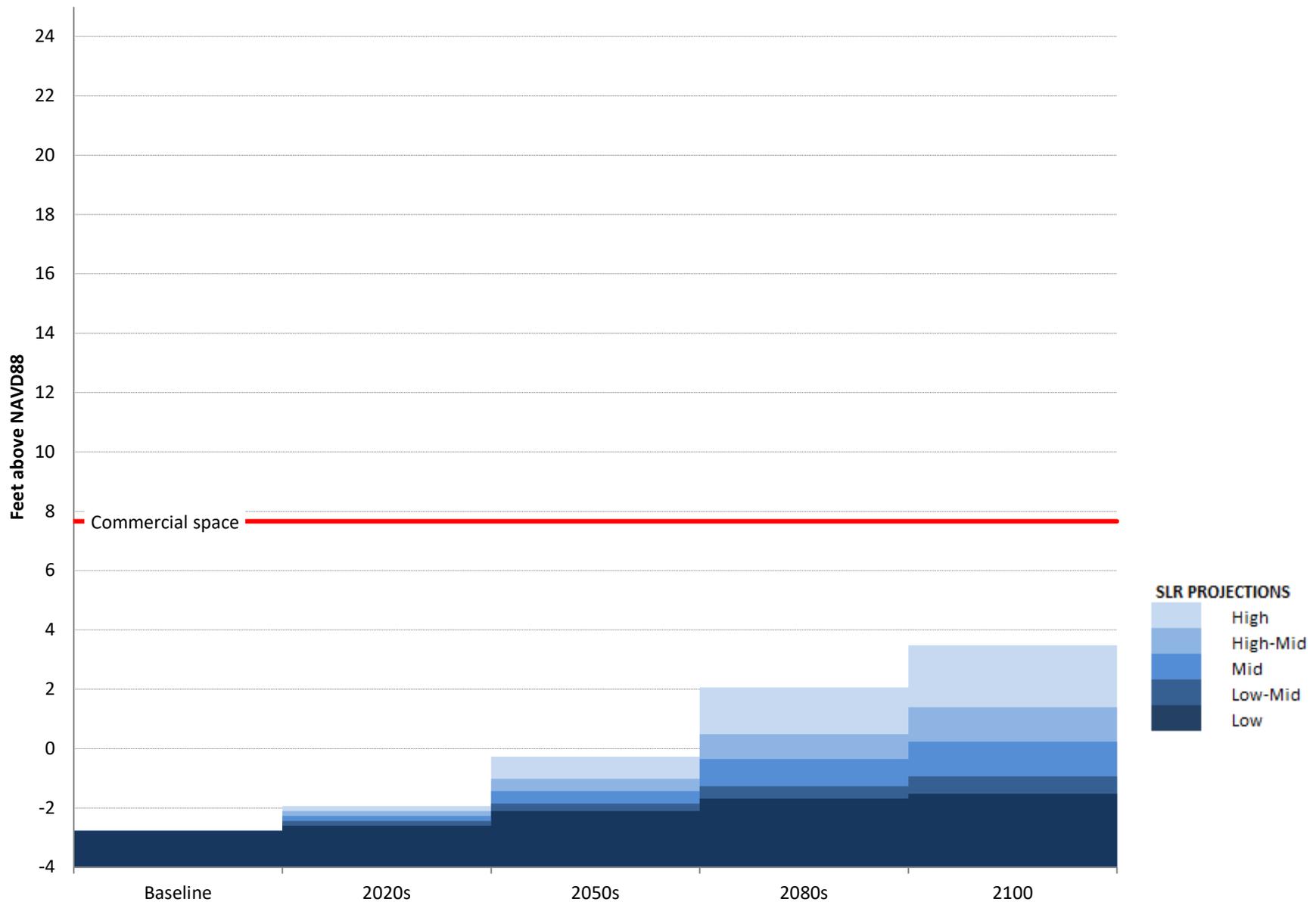
MLLW+SLR (ft above NAVD88)

Low	Low-Mid	Mid	High-Mid	High
-2.77	-2.77	-2.77	-2.77	-2.77
-2.60	-2.44	-2.27	-2.10	-1.94
-2.10	-1.85	-1.44	-1.02	-0.27
-1.69	-1.27	-0.35	0.48	2.06
-1.52	-0.94	0.23	1.40	3.48

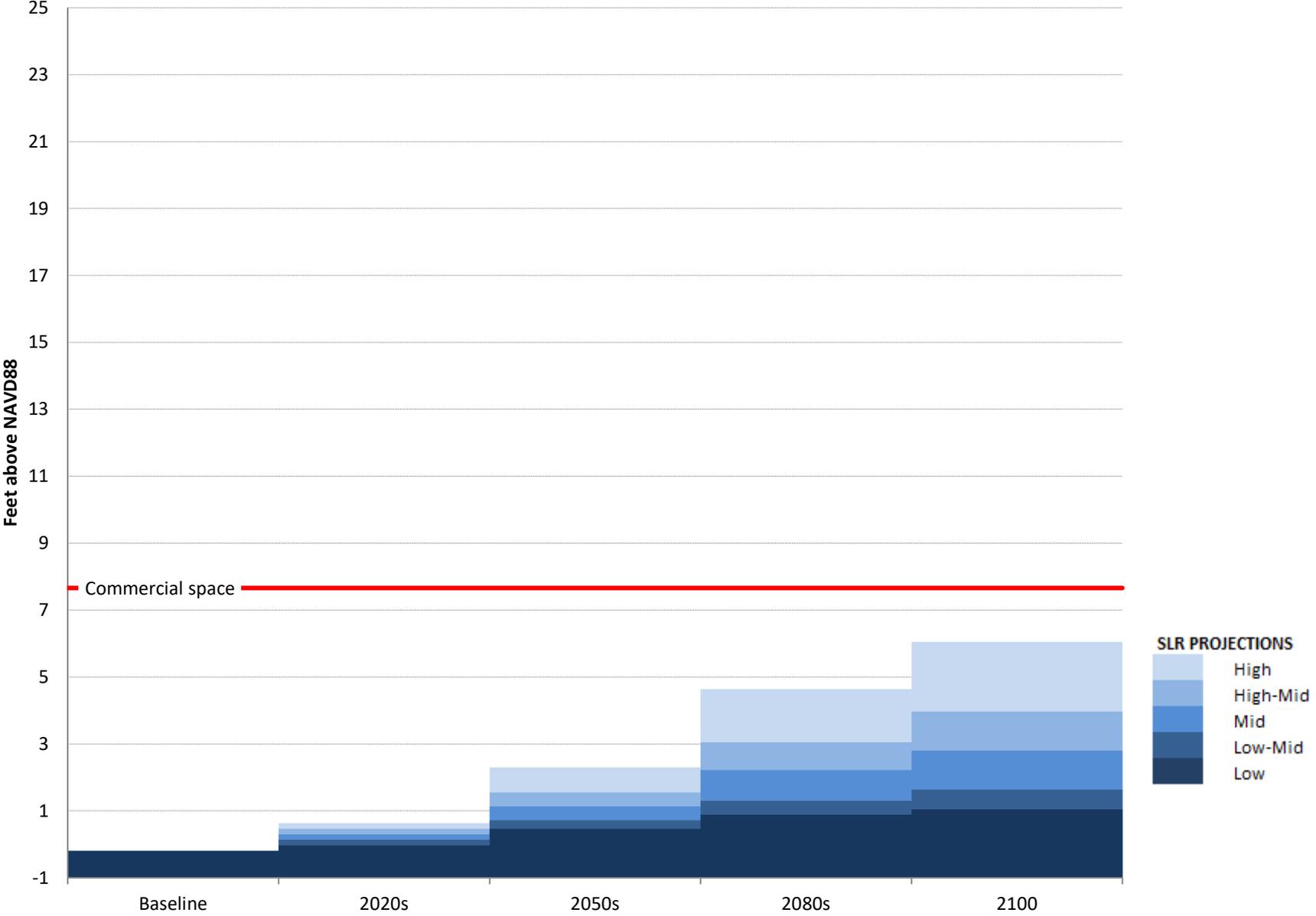
MSL+SLR (ft above NAVD88)

Low	Low-Mid	Mid	High-Mid	High
-0.20	-0.20	-0.20	-0.20	-0.20
-0.03	0.13	0.30	0.47	0.63
0.47	0.72	1.13	1.55	2.30
0.88	1.30	2.22	3.05	4.63
1.05	1.63	2.80	3.97	6.05

Mean Lower Low Water + Sea Level Rise



Mean Sea Level + Sea Level Rise



0.2% Flood Elevation + Sea Level Rise

