

A. INTRODUCTION

This chapter considers the potential for the proposed actions—minor modifications to the Two Bridges Large Scale Residential Development (LSRD)—to result in significant adverse impacts to historic and cultural resources, which include both archaeological and architectural resources. The three project sites are Site 4 (4A/4B) on Block 248, Lots 15, 70, and 76; Site 5 on Block 247, Lots 1 and 2; and Site 6A on Block 246, Lots 1 and 5 (see **Figure 7-1**). They are located within the existing Two Bridges LSRD in the Lower East Side neighborhood of Manhattan. The Two Bridges LSRD is bounded by Cherry Street, the mid-block between Montgomery and Clinton Streets, South Street, and the mid-block between Rutgers Slip and Pike Slip.

PRINCIPAL CONCLUSIONS

The proposed projects would not result in any significant adverse impacts to historic and cultural resources.

ARCHAEOLOGICAL RESOURCES

The Phase 1A Archaeological Documentary Study of the three project sites, prepared by AKRF, Inc. in July 2017, determined that undisturbed portions of Site 5 and Site 6A possess moderate to high sensitivity for landfill deposits and landfill-retaining structures and low to moderate sensitivity for historic period streetbed deposits and early wooden water mains. Site 4 (4A/4B) was determined to have low sensitivity for both types of resources. As described in greater detail below, the Phase 1A study made recommendations for further archaeological analysis in the form of archaeological monitoring at Site 5 and Site 6A and the preparation of an Unanticipated Discoveries Plan for Site 4 (4A/4B). All additional archaeological analysis would be conducted in coordination with the New York City Landmarks Preservation Commission (LPC). In a comment letter dated July 19, 2017, LPC concurred with the conclusions and recommendations of the Phase 1A Archaeological Documentary Study (see **Appendix F**).

In the event that archaeological monitoring confirms the presence of archaeological resources within the areas of archaeological sensitivity as identified in the Phase 1A study, then additional archaeological investigations (e.g., a Phase 2 Investigation or a Phase 3 Data Recovery as described above) would be conducted. Pursuant to City Environmental Quality Review (CEQR), should significant (e.g., National Register-eligible) archaeological resources be identified in any of the completed archaeological investigations, the disturbance or removal of such resources through the construction of the proposed projects would constitute a significant adverse impact. However, as outlined above, at this time only the potential for archaeological resources has been identified in certain locations on the project sites. As set forth in the 2014 *CEQR Technical Manual*, a “site’s actual, rather than potential sensitivity cannot be ascertained without some field



- Project Sites
- Boundary of Two Bridges LSRD
- Study Area (400-foot boundary)

- 1 Photograph View Direction and Reference Number
- A Manhattan Bridge
- B FDR Drive
- C East River Bulkhead



testing or excavation.”¹ The presence of any significant archaeological resources would be determined through additional archaeological investigations and consultation with LPC. With the completion of the Unanticipated Discoveries Plan for Site 4 (4A/4B), the completion of additional archaeological investigations at Sites 5 and 6A, and LPC concurrence with the conclusions of those investigations, the proposed projects would not result in significant adverse impacts to archaeological resources. The applicants would enter into a Restrictive Declaration requiring that these additional archaeological investigations (including any relevant Unanticipated Discoveries and Archaeological Monitoring Protocols) would be undertaken in consultation with LPC.

ARCHITECTURAL RESOURCES

There are no known or potential architectural resources on the project sites. Therefore, the proposed projects would not result in any direct or indirect effects to architectural resources on the project sites.

Portions of three architectural resources are located in the study area—the Manhattan Bridge, the FDR Drive, and the East River Bulkhead. The proposed projects would not eliminate or substantially obstruct important public views of the Manhattan Bridge or the FDR Drive, as views to all significant elements of these historic resources would be maintained and any changes to views from nearby vantage points would be consistent with the evolving nature of the built environment of New York City. Additionally, no incompatible visual, audible, or atmospheric elements would be introduced by the proposed projects to any historic resource’s setting. The proposed projects would not adversely affect the portion of the East River Bulkhead located in the study area. Because the bulkhead is at and below the water’s edge, it is only visible from locations immediately adjacent to the East River, and does not include any components visible from the project sites. There is no meaningful physical or visual relationship between the project sites and the East River Bulkhead.

None of the architectural resources in the historic and cultural resources study area have sunlight-sensitive features, and thus the proposed projects would not introduce significant new shadows or result in the significant lengthening of the duration of existing shadows over historic architectural resources or historic landscapes in the study area.

Construction of the new buildings on Site 5 and Site 6A would occur within 90 feet of portions of the FDR Drive, a historic resource that was designed to withstand the vibration effects of continuous vehicle usage. Between the DEIS and FEIS, ~~the applicants DCP would consult with LPC; and the New York City Department of Transportation (NYCDOT) to LPC determined whether that~~ a Construction Protection Plan (CPP) for this portion of the FDR Drive is warranted. ~~Should LPC and/or NYCDOT request the preparation of~~ Therefore, in consultation with LPC, the applicants for Site 5 and Site 6A would prepare a CPP it would be prepared in accordance with the guidelines of the New York City Department of Buildings (DOB)’s *Technical Policy and Procedure Notice (TPPN) #10/88*, as well as LPC’s guidance document, *Protection Programs for Landmarked Buildings*, and the National Park Service’s *Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction*. With the CPP in place, construction would not be expected to result in significant adverse impacts to the portion of the FDR Drive located within 90 feet of Site 5 and Site 6A. No other architectural resources are located within 90 feet of the project sites.

¹ *CEQR Technical Manual* (March 2014): page 9-10
(http://www.nyc.gov/html/oec/downloads/pdf/2014_ceqr_tm/09_Historic_Resources_2014.pdf).

Therefore, the proposed projects would not result in any significant adverse direct or indirect impacts to any historic architectural resources on the project sites or in the study area.

B. METHODOLOGY

ARCHAEOLOGICAL RESOURCES

The study area for archaeological resources includes those areas that would be disturbed by subsurface excavation and, for the purposes of this analysis, includes all three project sites in their entirety. Archaeological resources include material culture and other physical remnants of past human activities on a site. Precontact archaeological resources are those that are associated with Native American populations that used or occupied a site and date to the time before the region was colonized by European settlers. Archaeological resources can also include remains from activities that occurred during the historic period, which began with the European colonization of New York City in the 17th century. On sites where development (including the construction and demolition of buildings, landfilling, and other landscape modifications) occurred at some point during the past, archaeological resources may have been disturbed or destroyed by grading, excavation, infrastructure installation, and tidal action/erosion. However, some resources do survive in urban environments despite extensive development. Archaeological sites can be protected when covered with pavement. In both scenarios, archaeological deposits can be sealed beneath the ground surface, protected from further disturbance and archaeological investigations can be designed to further investigate those deposits.

Archaeological investigations typically proceed in a multi-phase process consisting of Phase 1—determining the presence or absence of archaeological resources through documentary research and field testing; Phase 2—gathering sufficient information to assess State and National Register eligibility; and Phase 3—mitigating unavoidable effects through data recovery or another form of mitigation. The need for advancing to an additional phase of work is dependent upon the results of the preceding phase. In urban contexts, the first phase of work is typically divided into two smaller phases, known as Phase 1A, which involves documentary research, and Phase 1B, which involves field testing to confirm the results of the Phase 1A study.

In comment letters dated February 16, 2017, and March 2, 2017 (see **Appendix F**), LPC determined that the project sites are potentially archaeologically significant and requested a Phase 1A Archaeological Documentary Study (Phase 1A Study) of the project sites to determine their archaeological sensitivity. Pursuant to LPC's request, AKRF, Inc. prepared a Phase 1A study of the project sites in June 2017.² The Phase 1A study had four major goals: (1) to determine the likelihood that the project sites were occupied during the precontact and/or historic periods; (2) to determine the effect of subsequent development and landscape alteration on any potential archaeological resources that may have been located within the project sites; (3) to make a determination of the project sites' potential archaeological sensitivity; and (4) to make recommendations for further archaeological analysis, if necessary.

² AKRF, Inc. (2017): "Two Bridges Large Scale Residential Development Site 4 (4A/4B) (Block 248, Lots 15, 70, and 76); Site 5 (Block 247, Lots 1 and 2); and Site 6A (Block 246, Lots 1 and 5), New York, New York: Phase 1A Archaeological Documentary Study." Prepared for: Cherry Street Owner, LLC and Two Bridges Senior Apartments LP, New York, NY; Two Bridges Associates, LP, Los Angeles, CA; and LE1 Sub LLC c/o Starrett Co., New York, NY.

In order to satisfy the four goals outlined above, documentary research was completed to establish a chronology of the project sites' development and landscape alteration through landfilling and to determine the extent of disturbance generated by the construction and demolition of historic and modern buildings within the project sites over time. Data was gathered from various published and unpublished primary and secondary sources, such as historic maps, historic and current aerial imagery, newspaper articles, and local histories. The study also summarized the results of previously conducted archaeological surveys, including a Phase 1A Study of portions of Site 4 (4A/4B) that was prepared by Historical Perspectives, Inc. (HPI) in 1995.³ These published and unpublished resources were consulted at various repositories, including the Main Research Branch of the New York Public Library (Local History and Map Divisions). Information on previously identified archaeological sites and previous cultural resources assessments was accessed through LPC's archaeology report database and the New York State Cultural Resources Information System (CRIS).

The conclusions and recommendations of the Phase 1A Study are summarized below. In a comment letter dated July 19, 2017, LPC concurred with the conclusions and recommendations of the Phase 1A Archaeological Documentary Study (see **Appendix F**).

ARCHITECTURAL RESOURCES

Under CEQR methodology, known architectural resources are defined as buildings, structures, objects, sites, and districts that are National Historic Landmarks (NHLs), have been listed on or determined eligible for listing on the State/National Registers of Historic Places (S/NR), are New York City Landmarks (NYCLs) and/or are New York City Historic Districts (NYCHDs), and properties that have been found by LPC to appear eligible for designation, considered for designation ("heard") by LPC at a public hearing, or calendared for consideration at such a hearing for NYCL designation (these are "pending" NYCLs).

The study area for architectural resources is determined based on a proposed action's area of potential effect on architectural resources, which accounts for both direct physical impacts and indirect, contextual impacts. Direct impacts include demolition of a resource and alterations to a resource that cause it to become a different visual entity. A resource could also be damaged by adjacent construction activities such as blasting, pile driving, falling objects, subsidence, collapse, or damage from construction machinery unless proper protection measures are put in place. Adjacent construction is defined as any construction activity that would occur within 90 feet of an historic resource, as noted in ~~the New York City Department of Building (DOB) *Technical Policy and Procedure Notice (TPPN) TPPN #10/88*~~.⁴

Indirect impacts are contextual or visual impacts that could result from project development. As described in the *CEQR Technical Manual*, indirect impacts can result from a change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature; screening or elimination of publicly accessible views; or introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an

³ HPI (1995): "Two Bridges Urban Renewal Area, Manhattan, New York, CEQR No. 94-HPD-019M: Phase 1A Archaeological Study." Prepared for: Ethan C. Eldon Associates, Inc.; Westbury, NY.

⁴ *TPPN #10/88* was issued by DOB on June 6, 1988, to supplement Building Code regulations with regard to historic structures. *TPPN #10/88* outlines procedures for the avoidance of damage to historic structures resulting from adjacent construction, defined as construction within a lateral distance of 90 feet from the historic resource.

historic structure if the features that make the resource significant depend on sunlight. Significant adverse direct or indirect impacts can occur if a project would cause a change in the quality of a property that qualifies it for S/NR listing or for designation as a NYCL.

Following the guidelines of the *CEQR Technical Manual*, to account for potential direct and indirect impacts, the architectural resources study area for the proposed actions has been defined as the area within 400 feet of the boundary of the Two Bridges LSRD (see **Figure 7-1**). Within this area, all known architectural resources have been identified, mapped, and are described below. In addition, a survey of the study area was undertaken to identify any buildings that could meet S/NR and NYCL eligibility criteria (“potential architectural resources”).

C. BACKGROUND AND DEVELOPMENT HISTORY

The Phase 1A study includes a thorough description of the history of the formation and development of the land making up the project sites. This history is briefly summarized in the following section.

Beginning in the Dutch colonial period in the 17th century and intensifying under British rule in the 18th century, European settlers began to expand the coastline of Lower Manhattan through the deposition of landfill and the construction of landfill-retaining structures, a process that continued well into the 19th century. Historic maps indicate that the project sites remained almost entirely under water until the mid-18th century. The original high water mark (the water level at high tide) was situated near what is now Cherry Street and the low water mark (the water level at low tide) was historically in the vicinity of Water Street, which formerly bisected Site 4 (4A/4B) and Site 5 and ran through the northern side of Site 6A. The project sites were rapidly filled out through the construction of waterfront structures (e.g., docks, piers, and wharves) that were often re-purposed as landfill-retaining structures as part of the process of creating land. The creation of land was tied to commerce and trade, and the East River waterfront was central to New York’s maritime and shipbuilding industries at the time that the project sites were filled.

The land to the north of the project sites was included within a large farm purchased by Harmanus Rutgers in 1728, and members of the Rutgers family continued to own portions of the farm through the early 19th century. In the late-18th and early 19th centuries, Harmanus Rutgers’ descendant Henry Rutgers was granted water lots to the south of the Rutgers Farm (including all of Site 5 and Site 6A) and was responsible for filling the lots and creating developable land. Several individuals were granted water lots making up Site 4 (4A/4B), including Thomas Buchanan, who constructed a dock along the eastern side of that site, forming the western side of Rutgers Slip, an important location for the shipping trade in the 18th and 19th centuries. As commerce increased and landfilling intensified, older docks, piers, and wharves were incorporated into newly made land as the shoreline was expanded further south and developed with new wharf structures. Rutgers Slip was gradually filled as part of this process.

Throughout the early 19th century, the newly made land was developed with both residences and industrial facilities. The project sites were developed with a number of buildings used for commercial and industrial purposes, many of which were associated with the shipping and shipbuilding industries. Water lines were available in the streets surrounding the project sites by the 1840s and sewer lines were installed in the years that followed. By the mid- to late-19th century, much of New York’s maritime trade had relocated to the Hudson River and the East River waterfront, including the project sites, were developed with factories producing a variety of goods, including candles, oil, rope, and flour, as well as iron foundries and coal and lumber yards.

The historic lots within the project sites were developed and redeveloped, often multiple times, throughout the late-19th and early 20th centuries. In the 20th century, many of the historic lots were redeveloped with garages or automobile repair facilities. By the mid-20th century, major municipal infrastructure projects were constructed, such as the FDR Drive and adjacent piers and the subway tunnel that currently runs beneath Rutgers Slip. In an attempt to alleviate poor living conditions and overcrowding that characterized the Lower East Side in the early 20th century, many of the blocks in the vicinity of the project sites were redeveloped with housing complexes that dramatically changed the landscape of the East River waterfront. The buildings on the project sites were gradually demolished in the second half of the 20th century and Water Street was de-mapped through the area as blocks were consolidated. Within Site 4 (4A/4B), Lot 70 was developed with a 10-story building in 1987, Lot 15 was developed with a 21-story residential building in 1995, and Lot 76 was developed with a one-story commercial building in 1996. The 26-story buildings making up the Lands End II housing development on Site 5 were constructed in 1979, and Rutgers Slip Open Space along the western side of Site 5 was likely constructed around the same time. The 19-story residential building at 275 South Street on Site 6A was constructed in 1978.

D. EXISTING CONDITIONS

PROJECT SITES

ARCHAEOLOGICAL RESOURCES

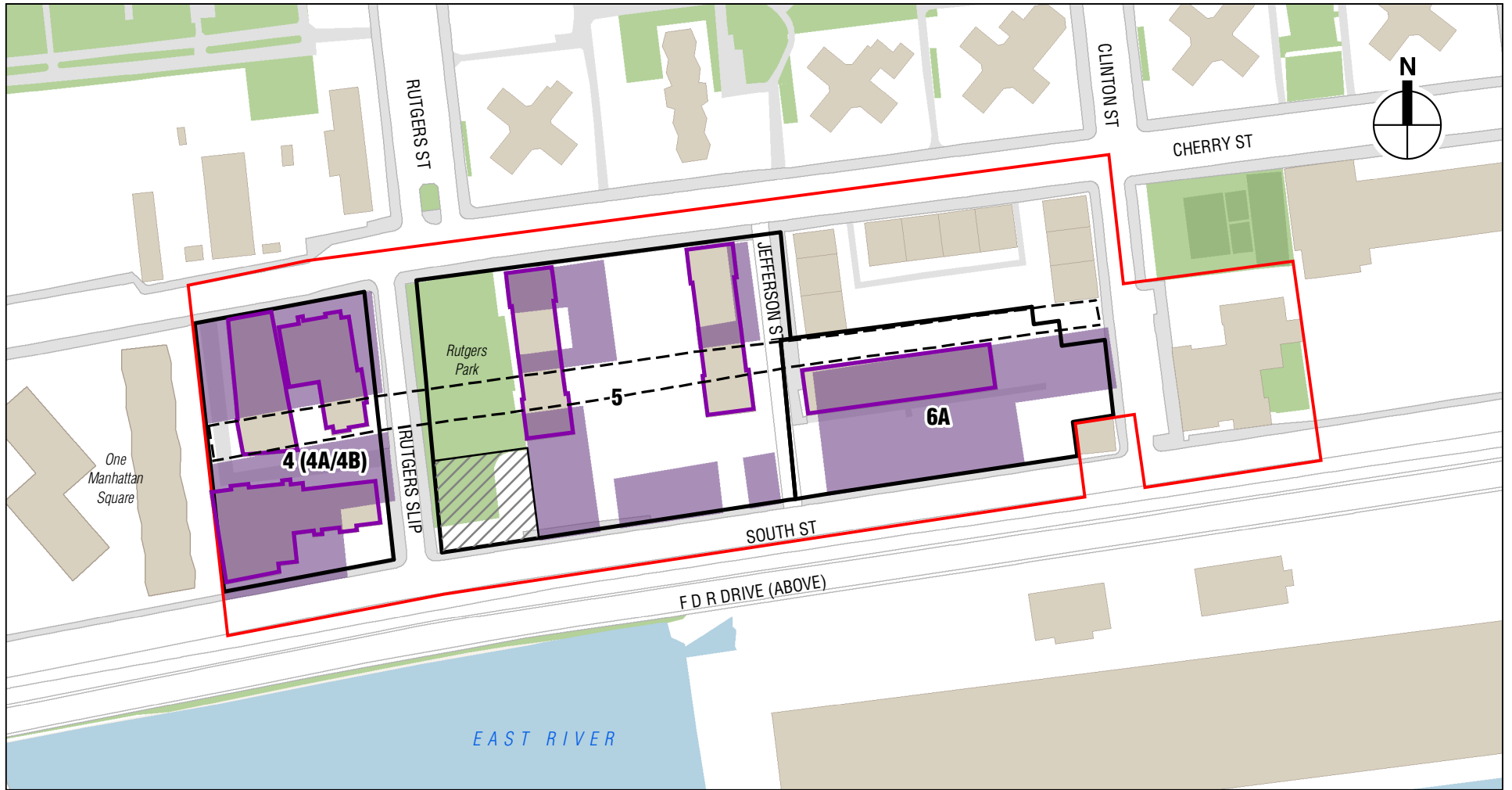
The East River waterfront was dramatically altered through the addition of landfill in the 18th and 19th centuries. The Phase 1A study completed by AKRF, Inc. in July 2017 included an extensive analysis of the occupation and development of the project sites as well as the disturbance that has occurred as a result of waterfront use (including dredging and slip maintenance) and waterfront construction associated with the active use of the East River waterfront; landscape modification associated with landfilling; the construction and demolition of buildings; the construction, grading, and maintenance of streetbeds; and the installation of utilities. Areas of archaeological sensitivity identified in the Phase 1A are summarized below and areas of known disturbance are depicted on **Figure 7-2**.







Precontact Archaeological Resources

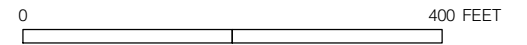
Prior to landfilling activities, the northern portions of the project sites were exposed land during low tide and it is likely that the project sites would have been dry, inhabitable land before the rise of sea levels that created Manhattan's shoreline several thousand years ago. However, any potential Native American archaeological resources in the vicinity that might have survived disturbance associated with dredging activities and the construction of docks, piers, and wharves (and associated pile-driving) would be very deeply buried. Therefore, because of previous disturbance, the project sites are considered to have low sensitivity for precontact archaeological resources.

Historic Period Archaeological Resources

The Phase 1A study summarizes three types of archaeological resources known to be present in landfill contexts along the East River waterfront: (1) landfill and landfill-retaining structures; (2) historic utilities, including wooden water pipes; and (3) historic shaft features associated with the occupation of the area before municipal water and sewer networks were installed in the 1840s and 1850s. The sensitivity determinations made in the Phase 1A study for each type of resource are summarized in **Table 7-1** and explained in greater detail in the following section.



-  Project Sites
-  Boundary of Two Bridges LSRD
-  Areas of Historic Basement Disturbance (Potential Sensitivity Below 10 Feet Below Ground Surface)
-  Modern Building Footprints within Project Sites (no Archaeological Sensitivity)
-  Former Streetbed of Water Street
-  Subway Fan Plant



Areas of Disturbance Associated with the Construction of Historic and Modern Buildings

Figure 7-2

Table 7-1
Summary of Historic Period Archaeological Sensitivity

Project Site	Sensitivity for Landfill/Landfill-Retaining Structures	Sensitivity for Wooden Water Mains and Streetbed Deposits	Sensitivity for Historic Shaft Features
Site 4 (4A/4B)	Low	Low	Low
Site 5	Moderate to high beneath areas of disturbance	Low to moderate in undisturbed portions of former streetbeds	Low
Site 6A	Moderate to high beneath areas of disturbance	Low to moderate in undisturbed portions of former streetbeds	Low

Sensitivity for Landfill and Landfill-Retaining Structures

As described above, all three project sites are wholly or partially situated on ground made up of landfill and landfill-retaining structures, although past disturbance has resulted in varying sensitivity at varying depths as described in the Phase 1A study. As a result of extensive disturbance resulting from the construction of historic and modern buildings, Site 4 (4A/4B) was determined to have low sensitivity for landfill resources and landfill-retaining structures. Those portions of Site 5 outside the footprints of existing buildings and beneath previous disturbance associated with historic building basement excavation and utility installation (see **Figure 7-2**) were determined to have moderate to high sensitivity for archaeological resources associated with landfill and landfill-retaining structures. Site 5 is also sensitive for archaeological resources associated with the construction, use, and subsequent filling of Rutgers Slip. Site 6A was also determined to have moderate to high sensitivity for archaeological resources associated with landfill and landfill-retaining structures beneath the depths of disturbance associated with the existing building and historic buildings with basements.

Wooden Water Mains and Artifact Deposits within Historic Streetbeds

The Phase 1A study determined that undisturbed portions of the former Water Street streetbed and portions of the historic streetbeds of both Rutgers Slip and Jefferson Street could potentially contain wooden water mains or other concentrations of historic period artifacts within 5 to 10 feet of the existing ground surface. Because the former streetbed of Water Street on Site 4 (4A/4B) is situated within the disturbed footprints of the existing buildings on that site, it was determined to have low sensitivity for archaeological resources associated with wooden water mains and streetbed artifact deposits. Those portions of the former Water Street, Rutgers Slip, and Jefferson Street streetbeds within Site 5 and Site 6A that are outside the footprints of existing buildings (see **Figure 7-2**) were determined to have low to moderate sensitivity for these types of archaeological resources in areas that have not been disturbed by modern utilities.

Historic Shaft Features

Prior to the installation of municipal water and sewer lines in the vicinity of the project sites, the sites' occupants would have relied on shaft features (e.g., privies, cisterns, and wells) for the purposes of water gathering and sanitation. Privies—the shaft features constructed beneath outhouses—are typically expected to be located at the rear of the historic property while wells and cisterns are typically located closer to a dwelling. These features would have remained in use until municipal water and sewer networks became available in the mid- to late-19th century, and possibly for decades after and were typically filled with refuse either during or following their periods of active use. Given the extent of disturbance across all three project sites and the lack of documented residential occupation of undisturbed historic lots, all three project sites were determined to have low sensitivity for historic shaft features.

ARCHITECTURAL RESOURCES

There are no known architectural resources on the project sites, and no potential architectural resources were identified on the project sites.

On Site 4 (4A/4B), Lot 70 is occupied by a 10-story orange and white brick-clad residential building (80 Rutgers Slip) that was built circa 1987, as well as accessory surface parking and open space. Lot 76 contains a partially vacant one-story brown brick-faced commercial building (235 Cherry Street) constructed in 1996 and a small open space area. Lot 15 contains a 21-story orange brick-clad residential building (82 Rutgers Slip) with enclosed accessory parking, built circa 1995, as well as a paved private but publicly accessible open space (see Views 1 and 2 on **Figure 7-3** and View 3 on **Figure 7-4**). Site 5 contains two 26-story apartment buildings, faced in brown brick, which were constructed circa 1979; paved surface parking areas; private playgrounds and landscaped seating areas; and the private Rutgers Slip Open Space that contains playgrounds, seating areas, and basketball courts (see Views 4 and 5 on **Figure 7-5**).

On Site 6A, Lot 1 is occupied by a 19-story residential building, faced in white brick, and an accessory surface parking lot facing South Street. The residential building was completed in 1978. Lot 5 is currently vacant (see Views 6 and 7 on **Figure 7-6**).

STUDY AREA

There are three known architectural resources in the study area.⁵ No potential architectural resources were identified in the study area.

A portion of the **Manhattan Bridge** (S/NR, NYCL-eligible)⁶ is a highly visible feature in the study area west of the project sites. The Manhattan Bridge is a two-level steel suspension bridge that spans the East River between Canal Street in Manhattan and Flatbush Avenue in Brooklyn. The final design of the bridge was the result of the work of several engineers and architects. Early plans for the bridge were designed by R.S. Buck, but in 1903 plans for the bridge were revised by Gustav Lindenthal in collaboration with Henry Hornbostel. These plans were later rejected, and the final design for the bridge was developed by Leon Moisseiff in 1904. Carrère and Hastings replaced Hornbostel as architectural consultants, but retained much of Hornbostel's design for the towers and anchorages. The bridge opened in 1909. The bridge has a massive granite pier immediately west of the study area that spans over Cherry Street. The bridge's arch and colonnade at the Manhattan Bridge Plaza at Canal Street were designed by Carrère and Hastings and built in 1910-1915. Those

⁵ The circa 1909 vacant LaGuardia Bathhouse, also known as the Whitehall Bathhouse, is located within the LaGuardia Houses open space. As part of the environmental review for the *Gouverneur Healthcare Services Major Modernization Project* (2008), in a 2008 comment letter, LPC determined that the bathhouse was NYCL-eligible and S/NR-eligible. However, as part of its review of the current project, LPC issued a July 27, 2017 comment letter noting that, based on their "receipt of additional information regarding the LaGuardia Bathhouse on 220 Madison Street," LPC determined that the site no longer appears S/NR-eligible or NYCL-eligible (see **Appendix F**). In February 2017, the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) was contacted and OPRHP determined that the bathhouse is not S/NR-eligible. Therefore, the LaGuardia Bathhouse is not identified as a known or potential architectural resource.

⁶ The entire Manhattan Bridge, including the Arch and Colonnade, are included in the S/NR designation. Only the Arch and Colonnade are included in the NYCL designation; however, the bridge itself has been determined NYCL-eligible by LPC.



View southwest from Cherry Street to one-story building on Site 4 (4A/4B) 1



View southwest to Site 4 (4A/4B) from Cherry Street and Rutgers Slip 2



View northwest to Site 4 (4A/4B) from South Street 3



Site 5 Project Site

View northwest to Site 5 from South Street 4



View northeast to Site 5 from Rutgers Slip and South Street 5



View northwest to Site 6A from Clinton and South Streets 6



View northwest to Site 6A from South Street 7

components of the structure, which are outside the study area, form a monumental gateway to the bridge (see Views 8 and 9 on **Figure 7-7**).

The **Franklin Delano Roosevelt (FDR) Drive** (S/NR-eligible) is 9.44 miles long, beginning at the end of the Battery Park underpass and running north along the East River to the 125th Street/Triborough Bridge exit. Originally known as the East River Drive, the FDR Drive meets National Register Criterion A in the fields of transportation and community/regional planning as an important link in New York City's transportation infrastructure. The FDR Drive, the West Side Highway, the Henry Hudson Parkway, the Harlem River Drive, and the Triborough Bridge approach form a crucial highway loop around Manhattan. Construction began on the FDR in 1934 under the direction of Robert Moses and was largely completed by 1967. Though segments of the structure have undergone alterations through the years, this linear resource has been determined to retain sufficient integrity overall to convey its historic significance (see View 10 on **Figure 7-8**).

South of the project sites is the **East River Bulkhead** (S/NR-eligible). The bulkhead along the East River waterfront from Whitehall Street to Jackson Street was originally constructed as part of a major seawall construction campaign that was conceived by the New York City Department of Docks under the leadership of George Brinton McClellan in the early 1870s (see View 10 on **Figure 7-8**). Like the S/NR-eligible bulkhead along the Hudson River waterfront between Battery Place and West 59th Street, which was part of the same construction initiative, surviving portions of the original East River bulkhead structure are significant for their engineering and architectural qualities, for their role in the development of the New York City waterfront, and for their association with McClellan. Between Pike Slip and Pier 35, the original granite bulkhead largely remains in good condition. The summary of the current condition of the bulkhead within the study area is based on the information provided in the 2007 *East River Waterfront Esplanade and Piers Final Environmental Impact Statement*. A small area of the bulkhead north of Rutgers Slip was replaced in 1897. The section of the bulkhead east of Pier 35 was constructed in 1910 and is currently not visible.

E. FUTURE WITHOUT THE PROPOSED PROJECTS

PROJECT SITES

In the future without the proposed projects, it is assumed the project sites would continue in their existing conditions and that the existing retail in the Lot 76 building (235 Cherry Street) on Site 4 (4A/4B) would be re-tenanted.

STUDY AREA

As described in Chapter 1, "Project Description," there are three No Build projects within the 400-foot historic and cultural resources study area that are expected to be completed by the 2021 Build year (see Table 1-4 and Figure 1-16). Immediately west of Site 4 (4A/4B) is One Manhattan Square, which is under construction and comprises two new 80- and 13-story primarily residential buildings. Both buildings are located in very close proximity to the Manhattan Bridge, a historic resource. The 80-story tower of the One Manhattan Square development in particular will affect the visual setting of the Manhattan Bridge. The other two No Build projects in the study area are open spaces. East of the project sites at 327 Cherry Street is P.S. 184—the Shuang Wen School. A new approximately 1.15-acre soccer field is proposed to be developed at P.S. 184—the Shuang Wen School, under the New York City Soccer Initiative. Located south of the project sites along the East River waterfront is Pier 35, which is being converted to a public pier, including a landscaped open space and an eco-habitat restoration as part of an EcoPark. Pier 35 is under construction and is expected to be completed ~~by 2017~~ in 2019. Pier 35 is one of the initiatives of



View of the Manhattan Bridge from Pike Slip 8



View south to the Manhattan Bridge from Pike Slip 9



View northeast from the Manhattan Bridge to the project sites showing the FDR Drive and East River Bulkhead in the foreground **10**

the overall East River Esplanade project that is expected to be completed by 2021. The project is located in close proximity to the East River Bulkhead and the FDR Drive, and would be required to comply with the Programmatic Agreement developed for the Esplanade Project.⁷ In addition, a portion of the Lower Manhattan Coastal Resiliency (LMCR) project, which is described in Chapter 2, “Land Use, Zoning, and Public Policy,” would be located south of the project sites and is anticipated to include a combination of integrated flood protection measures. Although this project has an anticipated build year of 2023, it has been identified due to its ongoing nature and proximity to the project sites.

In the future without the proposed projects, the status of architectural resources could change. S/NR-eligible resources could be listed on the Registers, NYCL-eligible properties could be calendared for a designation hearing, and properties pending NYCL-designation could be designated.

Section BC3309 of the New York City Building Code, “Protection of Adjoining Property,” provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. While these regulations serve to protect all structures adjacent to construction areas, they do not afford special consideration for historic resources. Section BC 3309.4.4 and a second protective measure, the DOB’s *TPPN #10/88*, applies to NYCLs, properties within New York City Historic Districts, and National Register-listed properties. *TPPN #10/88* and this sub-section of the Building Code supplements the standard building protections afforded by the Building Code by requiring a monitoring program to reduce the likelihood of construction damage to adjacent NYCLs and NR-listed properties (within 90 feet) and to detect damage at an early stage, so that construction procedures can be changed.

F. FUTURE WITH THE PROPOSED PROJECTS

PROJECT SITES

ARCHAEOLOGICAL RESOURCES

As described above, the Phase 1A study determined that Site 5 and Site 6A possess moderate to high sensitivity for landfill deposits and landfill-retaining structures beneath the depth of existing disturbance (see **Figure 7-2**) and low to moderate sensitivity for wooden water mains and streetbed deposits in undisturbed areas within the former streetbed of Water Street. Site 4 (4A/4B) was determined to have low sensitivity for both types of resources as a result of past disturbance. The Phase 1A study made the following recommendations for further archaeological analysis in the form of archaeological monitoring at Site 5 and Site 6A and the preparation of an Unanticipated Discoveries Plan for Site 4 (4A/4B). All additional archaeological analysis would be conducted in coordination with LPC. In a comment letter dated July 19, 2017, LPC concurred with the conclusions and recommendations of the Phase 1A Archaeological Documentary Study (see **Appendix F**).

⁷ The Programmatic Agreement is among the New York State Historic Preservation Office (SHPO), the Lower Manhattan Development Corporation (LMDC), and the Advisory Council on Historic Preservation (ACHP), which was signed on August 3, 2007.

Site 4 (4A/4B)

The proposed project on Site 4 (4A/4B) would result in the construction of a new residential building that would cantilever over two existing buildings on the project site—a 10-story residential building (80 Rutgers Slip) and a 1-story commercial building (235 Cherry Street). The proposed Site 4 (4A/4B) development would provide new open space amenities on the site, including pavers, plantings, and seating. Given the extensive disturbance that has occurred across Site 4 (4A/4B) and in the vicinity of the proposed building in particular, no additional archaeological analysis of Site 4 (4A/4B) was recommended in the Phase 1A study. However, it was recommended that an Archaeological Unanticipated Discoveries Plan be prepared for this site, in the event that intact landfill-retaining structures, wooden water pipes, or other archaeological deposits are encountered during construction. The plan would outline the steps that would be taken to document any unanticipated resources as well as all necessary coordination with LPC and other involved agencies. The Unanticipated Discoveries Plan would be prepared and reviewed by LPC prior to the start of the construction of the proposed project. Additional archaeological analysis would only be required in the event that intact landfill-retaining structures or landfill deposits are encountered during construction. In the event that no such archaeological resources are encountered, no additional archaeological analysis would be warranted at Site 4 (4A/4B).

Site 5

On Site 5, two new residential towers on a shared base with a below-grade parking garage would be constructed along the southern portion of the site, replacing an existing paved surface parking lot. The existing private Rutgers Slip Open Space would be enlarged by replacing an existing paved surface parking area and new play equipment, basketball courts, landscaping, walking paths, and seating would be installed. The Site 5 project would also enlarge the existing courtyard area between the 265 and 275 Cherry Street buildings and provide new landscaping, seating, and play areas. Given the depth of potential landfill resources—which may be more than 10 feet below the ground surface in areas disturbed by historic building basement excavation—the Phase 1A recommended archaeological monitoring during construction/excavation to document any encountered archaeological resources. In the event that disturbance greater than 2 feet below the ground surface would occur elsewhere on Site 5 in areas that have not been disturbed as a result of utility installation or historic building basement excavation (see **Figure 7-2**), additional monitoring would be necessary during construction depending on the location and potential depth of disturbance of the proposed work. An Archaeological Monitoring Plan would be prepared in consultation with LPC, prior to the start of monitoring, that would outline the scope of work.

Site 6A

On Site 6A, development associated with the proposed project would occur only on Lot 5, the eastern portion of the site. Similar to Site 5, archaeological monitoring was recommended during excavation to document any encountered archaeological resources. Resources associated with the former streetbed of Water Street would be expected to be encountered at shallower depths, within 10 feet of the ground surface. The extent to which that area has already been disturbed as a result of utility installation and would be disturbed as a result of the proposed project are unknown. Therefore, archaeological monitoring is recommended during construction/excavation in that location in the event that the final project plans would result in the disturbance of that area. An Archaeological Monitoring Plan would be prepared in consultation with LPC, prior to the start of monitoring, that would outline the scope of work.

Assessment of Impacts on Archaeological Resources

In the event that archaeological monitoring confirms the presence of archaeological resources within the areas of archaeological sensitivity as identified in the Phase 1A study, then additional archaeological investigations (e.g., a Phase 2 Investigation or a Phase 3 Data Recovery as described above) would be conducted in consultation with LPC. Pursuant to CEQR, should significant (e.g., National Register-eligible) archaeological resources be identified in sensitive areas through any of the completed archaeological investigations, the disturbance or removal of such resources through the construction of the proposed projects would constitute a significant adverse impact. As set forth in the *CEQR Technical Manual*, a “site’s actual, rather than potential, sensitivity cannot be ascertained without some field testing or excavation.”⁸ The presence of any significant archaeological resources would be determined through additional archaeological investigations and consultation with LPC. With the completion of the Unanticipated Discoveries Plan for Site 4 (4A/4B), the completion of additional archaeological investigations at Sites 5 and 6A, and LPC concurrence with the conclusions of those investigations, the proposed projects would not result in significant adverse impacts to archaeological resources. The applicants would enter into a Restrictive Declaration requiring that these additional archaeological investigations (including any relevant Unanticipated Discoveries and Archaeological Monitoring Protocols) would be undertaken in consultation with LPC.

ARCHITECTURAL RESOURCES

There are no known or potential architectural resources on the project sites. Therefore, the proposed projects would not result in any direct or indirect effects to architectural resources on the project sites.

STUDY AREA

Construction of the new buildings on Site 5 and Site 6A would occur within 90 feet of portions of the FDR Drive, a historic resource that was designed to withstand the vibration effects of continuous vehicle usage. Between the DEIS and FEIS, ~~the applicants would DCP consult with LPC; and NYCDOT to LPC determined whether that a CPP for this portion of the FDR Drive should be prepared is warranted. Should LPC and/or NYCDOT request the preparation of a CPP.~~ Therefore, in consultation with LPC, the applicants for Site 5 and Site 6A ~~it~~ would be prepared a CPP in accordance with the guidelines of *TPPN #10/88*, as well as LPC’s guidance document *Protection Programs for Landmarked Buildings* and the National Park Service’s *Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction*. With the CPP in place, construction would not be expected to result in significant adverse impacts to the portion of the FDR Drive located within 90 feet of Site 5 and Site 6A. No other architectural resources are located within 90 feet of the project sites.

In regard to the potential for indirect effects on historic resources, because the FDR Drive is an elevated roadway that extends along the length of the east side of Manhattan, views to this resource would be maintained along its length and any changes to views from nearby vantage points would be consistent with the evolving nature of the built environment of New York City. While the setting of the portion of the FDR Drive closest to the project sites would change with the introduction of three new, tall buildings, the FDR Drive is already located among buildings of varying heights and forms from different development periods, including the new, tall One Manhattan Square adjacent

⁸ *CEQR Technical Manual* (March 2014): page 9-10
(http://www.nyc.gov/html/oec/downloads/pdf/2014_ceqr_tm/09_Historic_Resources_2014.pdf).

to the project sites and currently under development. Therefore, the proposed projects would not adversely affect the FDR Drive.

The Manhattan Bridge is located at the western edge of the study area, approximately 370 feet west of Site 4 (4A/4B), the westernmost of the three project sites. As described above, the height and expanse of the Manhattan Bridge make it a visually prominent resource in the study area. However, the Manhattan Bridge is already located among a variety of buildings types and heights within the immediate vicinity of the bridge and in more distant views. Further, the bridge is visually separated from Site 4 (4A/4B), as well as the more distant Site 5 and Site 6A, by the One Manhattan Square project that is under construction. The Manhattan Bridge's stone pier at Cherry Street is located just outside the study area; however, it would remain prominent in views on Cherry Street from within the study area. Although the proposed projects would result in three new, tall buildings in proximity to the Manhattan Bridge's elevated span over the East River, the bridge would remain a prominent feature in the study area and along this part of the East River. Views of the Manhattan Bridge would be maintained from many nearby public vantage points in the study area, including views from the Pike Street/Slip bicycle path, the East River Esplanade, Pier 36, and along many study area streets. Further, changes to the setting of the Manhattan Bridge with the development of the proposed projects would be consistent with development changes throughout New York City that have occurred since the bridge was completed in 1909. Therefore, the proposed projects would not adversely impact the Manhattan Bridge.

The proposed projects would not adversely affect the portion of the East River Bulkhead located in the study area. Because the bulkhead is at and below the water's edge, it is only visible from locations immediately adjacent to the East River, and does not include any components visible from the project sites. There is no meaningful physical or visual relationship between the project sites and the East River Bulkhead.

The proposed projects would not replicate aspects of any of the architectural resources in the study area to create a false historical appearance. The proposed projects also would not isolate any historic resource from its setting or visual relationship with the streetscape, or otherwise adversely alter an historic resource's setting or visual prominence. Although the proposed projects would introduce three new, tall buildings to the project sites, the study area's historic resources are already located within the context of older and newer buildings, including nearby and more distant tall buildings. None of the architectural resources in the study area have sunlight-sensitive features, and thus the proposed projects would not introduce significant new shadows or result in the significant lengthening of the duration of existing shadows over historic architectural resources or historic landscapes in the study area. The potential for shadows-related effects on architectural resources with sunlight-sensitive features located at greater distances from the project sites is considered in Chapter 6, "Shadows." As described in that chapter, while project-generated shadow would fall on five architectural resources with sun-sensitive features outside the 400-foot historic and cultural resources study area, the incremental shadow would be too limited in duration and/or extent to significantly affect these resources.

Overall, the proposed projects would not result in any significant adverse direct or indirect impacts to any historic architectural resources on the project sites or in the study area. *