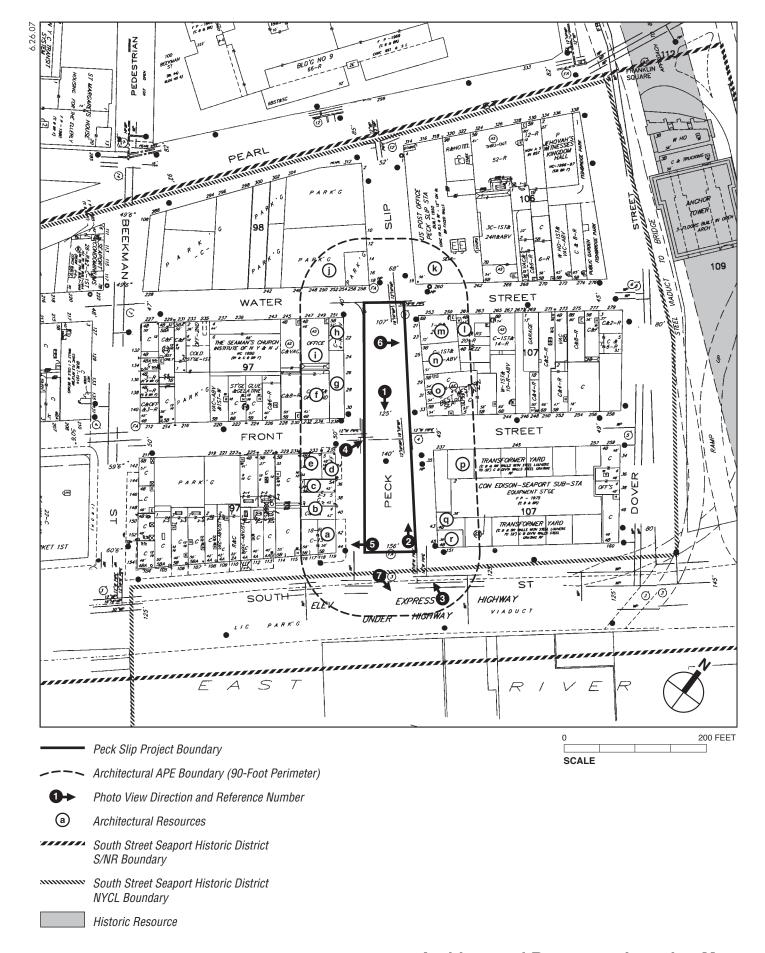
## A. INTRODUCTION

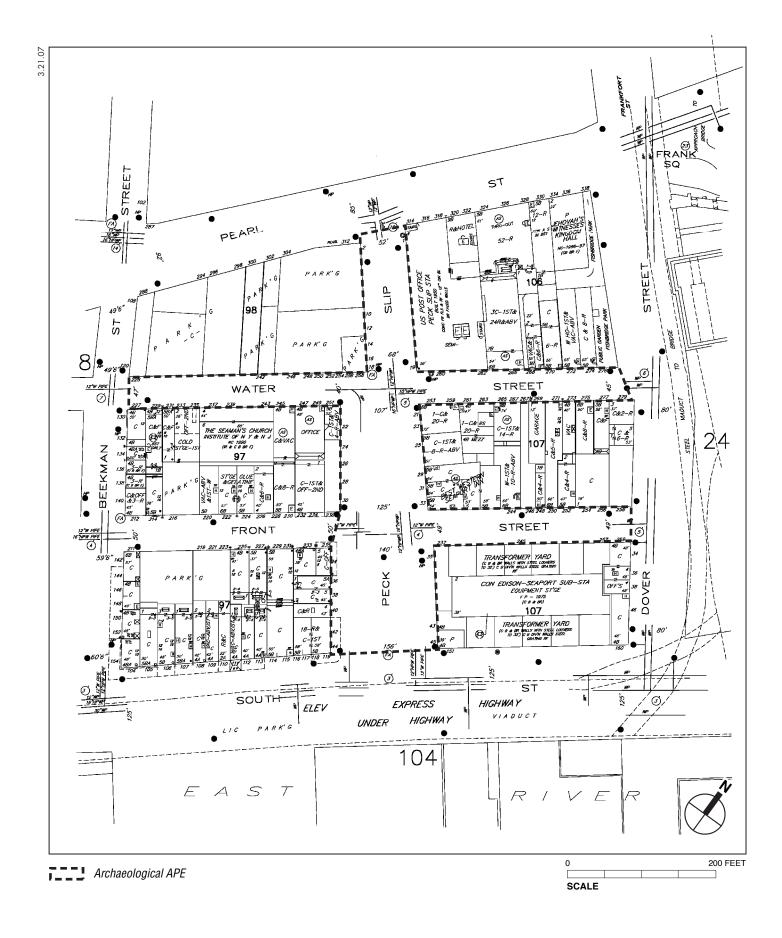
This attachment considers the potential of the Proposed Action (providing funding) for construction of a proposed public open space in Peck Slip on historic resources. The project site is the portion of Peck Slip between Water and South Streets in Lower Manhattan (see Figure 2B-1).

Cultural resources include archaeological and architectural resources. This assessment of cultural resources was conducted pursuant to Section 106 of the National Historic Preservation Act of 1966 (NHPA) because funds from a federal agency, the United States Department of Housing and Urban Development (HUD), are being sought to undertake the Proposed Action. The Lower Manhattan Development Corporation (LMDC) informed the New York State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation of its intent to coordinate the environmental reviews and Section 106 reviews and consultation. LMDC consulted with both SHPO and the City of New York, through the New York City Landmarks Preservation Commission (LPC), throughout the coordinated review process, including sharing designs, holding in-person meetings, and providing archaeological information. LMDC will also provide opportunities for public comment on the environmental assessment through publication and distribution of a notice of NEPA, SEQRA, and Section 106 findings. The City independently held several meetings with members of the community, including members of the local community board, to receive input on the proposed project design.

In accordance with Section 106 regulations, archaeological and architectural resource areas of potential affect (APEs) were defined. The archaeological APE is the area of planned construction and disturbance—the project site itself (see Figure 2B-1). In addition, based on consultation with SHPO and LPC, it was determined that the adjacent streetbeds (Water Street between Beekman and Dover Streets, Front Street between Peck Slip and Dover Street, Beekman Street between Water and South Streets, and Peck Slip between Pearl and Water Streets) should be included in the archaeological APE because these streetbeds will be affected by the New York City Department of Transportation (NYCDOT) street reconstruction project, a separate project, which will be in construction simultaneously with the proposed open space (see Figure 2B-2).

Based on a preliminary evaluation of the site, LPC recommended that an "archaeological documentary study be prepared to determine whether or not the project has the potential to impact potentially significant 18th-19th century historic resources"(letter dated December 18, 2006). SHPO also commented that "given the National Register Status of the surrounding historic district any future changes to the scope in these areas should also lead to additional archaeological consideration" (letter dated February 13, 2007). The Phase IA Archaeological Assessment Report reflects the comments of SHPO and LPC, and its findings are summarized below in "Existing Conditions" and its recommendations are described below in "Probable Impacts of the Proposed Action."





To account for potential effects due to on-site construction activities and the project's potential visual and/or contextual impacts, the architectural resources APE was defined as the area within 90 feet of the project site to account for potential construction-related impacts to architectural resources (see Figure 2B-1). The architectural resources APE does not include the NYCDOT street reconstruction because that project will be undertaken as a separate project regardless of the Proposed Action. Within the architectural resources APE, the architectural resources considered include properties listed on the State and National Registers of Historic Places (S/NR) or determined eligible for such listing, New York City Landmarks (NYCLs), New York City Historic Districts (NYCHDs) and properties determined eligible for NYCL status.

As discussed below, the entire project site is within the boundaries of the South Street Seaport Historic District (S/NR, NYCL) and Extension. As such, LMDC would make a final selection of street furniture and improvements in consultation with SHPO and LPC. The consultation process is designed to avoid any potential adverse impacts on the historic district. As described more fully below, the following cultural resources assessment finds that the Proposed Action would not be expected to have any significant adverse effects on archaeological or architectural resources on the project site or in the surrounding area.

# B. BACKGROUND HISTORY<sup>1</sup>

In 1621, the States-General in the Netherlands chartered the Dutch West India Company (WIC) to consolidate Dutch activities in the Atlantic World. New Amsterdam, situated at the tip of Manhattan at the confluence of the East and North (Hudson) Rivers, was an ideal company town with one of the finest harbors in all of North America. In 1626, the Dutch WIC purchased Manhattan from the Munsee for 60 guilders. In exchange for furs, entrepreneurs and government officials supplied Native Americans with a wide range of goods. Trade was the lifeblood of this settlement and merchandise from around the world arrived in New Amsterdam destined for Europeans and Native Americans alike.

In an era of speculation and opportunity, private traders converged on Manhattan after 1640, motivated by personal gain. After the English conquest of New Amsterdam in 1664, the colony was renamed New York and development of the waterfront continued. The Dongan Charter of 1680 had the most profound effect upon the transformation of the waterfront. This charter permitted the city government to raise money by selling water lots, "or the right to build wharves and 'make land' out into the rivers between the low and high watermarks, a distance of 200 feet" (Cantwell and Wall 2001: 225). These lots would be sold in the same manner as lots on solid ground. The Montgomery Charter of 1731 extended the range to 400 feet, well beyond the low water mark. The new owners of these lots were charged not only with filling them in, but also with building wharves, piers, and/or bulkheads along the shore to prevent further erosion caused by the swift river currents (Historical Perspectives 2001b). Landfilling activities in the APE are described below.

Land-making accomplished two goals. First, it extended the shoreline beyond the shallow water near the natural shore so that ships could dock at landside wharves instead of anchoring out in the East River. Second, the waterfront's close proximity to the trade ships led to the construction

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<sup>&</sup>lt;sup>1</sup> This section includes text from the *Phase 1A Archaeological Documentary Study of Peck Slip between Pearl and South Streets; Water Street between Beekman and Dover Streets; and Front Street between Peck Slip and Dover Street* prepared by AKRF, Inc. in April 2007.

of markets, storefronts, warehouses, and other commercial structures. In this way, the landfill had a crucial impact on the development of New York's burgeoning economy.

# 17TH CENTURY SITE HISTORY

In the 17th century, the East River shoreline was located between Pearl and Water Streets (often referred to as the high water mark), and therefore, most of the Peck Slip APE was beneath the East River. The original shoreline passed through the APE along Peck Slip and continued through Dover Street to the north. The low water mark—the location of the shoreline when tides are low and the shoreline expands—was at Water Street, and was marsh land that was likely inundated by the tides. A stream flowed out of Beekman's Swamp and emptied into the East River near the intersection of Peck Slip and Water Street.

A small portion of the APE on the eastern side of Peck Slip between Pearl (former Queen[e] Street) and Water Streets was within an approximately 35-acre plantation that changed hands several times in the early 1600s. In the 1650s, a house and several lots were sold in the area near Ferry Street, the branch of Peck Slip that ran north of Pearl Street. Pearl Street was the only extant street in the vicinity of the APE in the 17th century and was approximately 30 feet wide. It was either laid out or widened by 1689 and ran along the shore with a beach on one side and a bluff on the other.

Early landfilling projects dating to 1656 were intended to protect the shoreline from the river's currents with a wall of wooden planks and soil. The gradual extension of the shoreline ultimately resulted in the creation of Water Street which was laid out in the older parts of the city in the early 1690s. However, it was not constructed in the vicinity of the APE until the early 18th century.

A small marshy area known as Beekman's Swamp was located directly north of Peck Slip. It drained out into the East River via a small channel that ran directly through Ferry Street and into the northern portion of the APE. A small portion of the APE on the western side of Peck Slip between Pearl and Water Streets was occupied by a farm known as Beekman's Pasture. By the 1660s a "pier or roundout" extended into the portion of the APE along Water Street, west of Peck Slip. This pier may have been involved with the Ferry to Long Island, established between 1638 and 1642, providing service to Brooklyn. The exact location of the ferry is unknown. It was likely located at the foot of Pearl Street—much of which ran along Manhattan's original East River shoreline in the mid-17th century—and probably ran from what is now Peck Slip. However, the ferry landing may also have been located at the intersection of Pearl and Dover Streets. Because of the location of the original shoreline relative to the project area, it is likely that the ferry landing was situated within the APE regardless of the street from which it operated. A slaughterhouse was located along the waterfront east of Beekman Street from 1697 until 1721. The exact location of this slaughterhouse is unknown, although it may have been located within the APE.

#### 18TH CENTURY SITE HISTORY

In the early 18th century, the city began its slow growth northward. The newly created land south of Pearl and Cherry Streets was at lower elevations, and a steep slope separated the natural ground from the landfill in some locations. A bulkhead or wharf ran parallel to the new shoreline in the approximate location of modern Water Street (which had not yet been created in this area). In other areas, buildings were constructed atop wooden pilings, including Beekman's slaughterhouse, described above.

In 1728 Peck Slip began just south of Pearl Street with the land on either side filled out nearly to the line of present Water Street. As noted above, the portion of Peck Slip north of Water Street was known as Ferry Street. It was laid out as early as 1744 and it contained a drain, as early as 1764, that presumably emptied into the East River. Ferry Street was widened at the end of the 18th century and a brick drain was installed in the street in 1806. Several structures were located in this area of Peck Slip including two structures adjacent to either side of the slip; structures along the north side of Pearl Street; a wharf along the approximate line of Water Street west of Beekman Street; "Dally's Ship Yard" located between Pearl and Water Streets, just east of Beekman Street, which had not yet been continued south of Pearl Street. Further development along both sides of Pearl Street had occurred by 1731 extending to Peck Slip whose western side was identified as "Pek's W," meaning Peck's Wharf, and the eastern side as "Rosevett's W," Roosevelt's Wharf. Other ship yards were located east of Roosevelt's Wharf. A 1749 map shows water lot grants along either side of Peck Slip south of Pearl Street and continuing to modern Front Street suggesting that these piers and wharves were likely located within the APE.

Peck's Wharf, now Peck Slip, was named after Benjamin Peck, a local landowner who purchased water lots in 1737 contiguous to his houses on Pearl Street. His property included fast land south of Pearl Street and water lot Number 6 immediately south of the future Water and Front Streets along the western side of Peck Slip. Roosevelt's Wharf was presumably named after Jacobus Roosevelt who was granted water lot Number 1 on the eastern side of Peck Slip between future Water and Front Streets (within modern Block 107N) in 1751. Roosevelt had acquired Beekman's Swamp in 1732 or 1734 and the swamp was likely filled in and converted to solid ground the following year. A 1754 map depicts Roosevelt's Wharf as running along the east side of "Peck's Slip" between Pearl and Front Streets.

Peck Slip was officially laid out and graded in 1755 from Pearl Street to the high water mark, which was at that time located between Water and Front Streets. The street was filled out in 1759 using dirt and gravel; around 1765 a drain near Peck Slip was enlarged. The location of this drain is unknown but it is likely that it emptied into the East River somewhere near Peck Slip between Pearl and Water Streets and is probably located within the APE.

By the 1760s Water Street had been filled in throughout the entire APE with the exception of the opening to allow boats access to Peck Slip. Many wharves and piers extended into the East River from Water Street on either side of Peck Slip. A new ferry to Brooklyn was established at Peck Slip in 1774. By 1776 landfilling had occurred at Peck Slip between Water and Front Streets. Water Street itself was almost entirely continuous across the APE, with the exception of the northernmost portion of the Peck Slip inlet, which jutted into the southern half of the street. Additional piers west of the slip extended the shoreline almost down to the location of future Front Street while the area east of the slip was almost completely filled in to Front Street. A large pier had also been constructed along the length of the eastern side of Peck Slip extending all the way to Front Street. In the 1780s Peck Slip was widened by two feet on each side. In 1793 Peck Slip and its neighboring streets were regulated, making them level with each other. The southern end of Pearl Street was leveled out during the mid-18th century and Queen Street was formally merged with Pearl Street in 1794.

The Peck Slip Market, officially established in 1763, was the city's first brick market. It was located within the APE, along the eastern side of Peck Slip in the area north of Water Street, for approximately 30 years. No maps or plans of this market are extant, and its exact location is unclear. It has been documented that it stood on the "westerly side [of the street], at the head of Peck Slip," although some 18th century maps locate it in the center of the slip. Markets were

generally confined to the East River waterfront during most of New York City's early development. Until the mid-18th century, all of the City's markets were located along the East River and were constructed directly on the slips and piers that jutted out into the water. As shipping technologies improved and landfill extended the shoreline into deeper waters, the markets increased in size and extent as greater amounts of produce and other goods were being imported. Markets were influential in triggering the development of the waterfront and their close proximity to the trade ships led to the construction of storefronts, warehouses, and other commercial structures along the new waterfront. During the Revolutionary War, the Peck Slip Market was used as a warehouse, and in 1783 it was used as a meat market. After the war, the market was used by butchers but by 1786 the market was nearly deserted as a result of the construction of a new market at Catherine Slip, approximately five blocks away. The Peck Slip Market last appears on a 1789 map.

By 1797 Peck Slip was almost entirely filled in to Front Street. Front Street did not yet exist east of the slip. Buildings located in the path of Front Street became a problem for development. At that time, one or more stores obstructing the path of Front Street at Peck Slip were to be moved. Other buildings along Front Street partially extended into the streetbed.

Although the northern portion of Peck Slip had been filled in, additional piers were constructed on the eastern and western sides, extending south of Front Street, creating a new slip. Those piers were approved in 1797, at which time the City had resolved to "dig out" Peck Slip and clean it of "filth." The removal of the "filth" at Peck Slip in 1797 coincided with the passing of a regulation requiring the use of clean fill which arose in response to society's increasing concerns about the spread of disease throughout the late 1790s.

Water Street was continued through to the western side of Peck Slip in 1719 and was extended again in 1737. Water lot grant maps from 1749 and 1772 show that Water Street was 30 feet wide. Water lots granted in the 1750s included the stipulation that 15 feet would be reserved for the future extension of Water Street. Similar to Water Street, water lot grants from the 1750s reserved 40 feet for the future extension of Front Street. In 1772, Front Street was 40 feet wide and in 1780, portions of Front Street were filled out, although it was not yet a continuous thoroughfare. Front Street extended to the western side of Peck Slip by 1797. The streets in the APE were paved in the late 18th century.

#### 19TH CENTURY SITE HISTORY

Development along the East River began to change in the 19th century. In 1801 the construction of buildings along the wharves projecting into the river was no longer allowed and contributed to more buildings being built along the waterfront and around the slips. Creating land within the East River continued at a rapid pace. By 1804, all bulkheads at Peck Slip were to extend beyond the line of Front Street, which had been extended past Dover Street, east of Peck Slip, by that time. Several of the wharves adjacent to Peck Slip may have been incorporated into the Peck Slip streetbed, including "Farmer's Wharf" on the west side of the slip and "Walton's Wharf" on the east.

A public dumping ground may have been located at Peck Slip and Water Street in 1809 where garbage from the marketplace and the area's residents would be discarded into the water. It was probably used throughout the 18th and 19th centuries.

In 1809, the Common Council approved the construction of two additional piers. Because Front Street was interrupted by Peck Slip, it was determined that a bulkhead was necessary between

the piers on the east and west sides of Peck Slip. A pier on the west side of the slip was completed in 1810, before the land was divided into lots, sold, and developed with new buildings. By 1824 Peck Slip extended to Front Street. The areas on either side of the slip had been filled in with the exception of the Peck Slip inlet between Front and South Streets.

Peck Slip itself was raised and paved around 1816. A pier "in the middle of the basin" was constructed between 1816 and 1828 by which time the remainder of the western side of the slip had also been filled, making the slip much narrower. Because of the changing nature of the East River waterfront and the relocation of markets to elsewhere in the City, the need to maneuver ships in and out of Peck Slip decreased throughout the early 19th century. Peck Slip had been completely filled in to South Street by 1836.

The increase in the use of water-based transportation in the first half of the 19th century was brought about by the opening of the Erie Canal in upstate New York in 1825. However, this surge also forced the advancement of shipping technology, which ultimately contributed to the decline of the East River Waterfront. The relatively shallow waters of the East River were not conducive to new steamboat technology, and New York's shipping industry was soon relocated to the much deeper Hudson River. However, the area surrounding Peck Slip continued to be a hub for shallow-draft vessels, including barges and ferries, and also for fish markets. With its commercial decline, the slip had become a major hub for passenger ships starting in 1818 and ferries continued to run between Peck Slip and Brooklyn until the mid-19th century.

By the 1850s the city blocks bordering the streetbeds in the APE were almost entirely developed with brick and stone buildings. Dwellings with ground-floor stores were mostly concentrated on the eastern side of Peck Slip on either side of Water Street. In the early 1860s, buildings adjacent to the APE included churches, schools, and business and tenant houses, liquor stores, and boarding houses, especially along Pearl and Water Streets. The areas closer to the East River remained more industrial with iron and coppersmiths, lead pipe makers, stove makers, provisions dealers, merchants and ship chandleries, and boat makers.

By 1867 the ferries running from Peck Slip were no longer in use though the New Haven Steamboat and the Hartford and New Haven ferry lines were still in operation in 1897. Street cars became increasingly prominent in the area throughout the 19th century. Near the end of the century, a network of street car lines had been established with lines running through the APE down the eastern side of Peck Slip south of Pearl Street, along Water Street west of Peck Slip, and along Front and South Streets west of Dover Street, with additional lines added by 1879 that ran the length of Peck Slip. By 1912 these tracks and lines were no longer in use.

In 1857 Peck Slip was approximately 62 feet wide at Pearl Street and gradually widened to approximately 150 wide feet at the north side of South Street. The street widths remain the same throughout the remainder of the century. Pearl Street was widened in 1825 and in 1891 it was 43 feet wide west of Peck Slip and approximately 48 feet wide to the east. Throughout the mid- to late-18th century, Water Street was 30 feet wide. By 1857 it had been widened to approximately 40 feet and by 1891 it was 43 feet wide west of Peck Slip and approximately 48 feet wide east of Peck Slip. The street remained at that width for the remainder of the century. In 1807 the lots surrounding Front Street were raised to be even with the streetbed. In 1810 Front Street was extended across Peck Slip and by 1857 Front Street had been widened to approximately 45 feet on both sides of Peck Slip. By 1879 the street was widened to 49 feet at Dover Street and 50 feet near Peck Slip and by 1891, it was approximately 50 feet wide on the western side of Peck Slip and approximately 49 feet wide on the eastern side.

Utilities were first installed within the streetbeds of Peck Slip and Pearl, Water, Front Streets during the 19th century. New York did not have running water or a network of sewers until the mid-19th century. Therefore, utilities were not installed in the APE until several years after the area was filled out to South Street. Instead, water was obtained from public water pumps. The first water pipes in New York City were installed by the Manhattan Company, the precursor to the Chase Manhattan Bank. These wooden pipes carried water from local sources (i.e., the Collect Pond) to other areas of lower Manhattan. In the 1840s sewer networks had not yet been developed, and the use of privies continued until the 1850s. After the mid-19th century, as clean water was pumped in and waste was carried away, the city's sanitation efforts were greatly improved. In general, early water pipes were installed relatively close to the surface, at only two or three feet below grade, so that they were easily accessible to firemen.

#### 20TH CENTURY SITE HISTORY

There were few alterations to the APE during the 20th century. Around 1912, Block 107, Lot 60 at the southern end of Peck Slip was created. This trapezoidal area, located in the middle of Peck Slip approximately 40 feet from the curb on either side, has its northern and southern boundaries at Front and South Streets, respectively. The Peck Slip streetbed was not significantly altered during the 20th century. In 1976 the area of Peck Slip near the south side of Pearl Street was two feet narrower than it was in 1951. The streetbed is now 52 feet wide near the southern side of Pearl Street. The parts of Peck Slip south of this area do not appear to have been altered.

Pearl Street was widened between 1951 and 1976 for the first time since the early 19th century. Approximately 20 feet were truncated from the lot at the southwest corner of Peck Slip and Pearl Street. Therefore a small part of what is now part of Pearl Street may originally have been adjacent to and possibly part of the Peck Slip streetbed.

In 1923 Water Street measured 47 feet wide near Beekman Street, 45 feet wide at Dover Street, and 45 feet wide at the west side of Peck Slip, one foot wider than it appears on 19th century maps. In 1951, Water Street had the same dimensions except that the western side of Peck Slip Water Street was one foot wider at 46 feet wide. Current maps indicate that the area is now 40 feet wide, while the rest of the streetbed has remained unchanged.

In 1923 Front Street measured 49 feet near Dover Street, 50 feet at the west side of Peck Slip, and 49 feet on the eastern side, as it appears on 19th century maps. These dimensions have remained largely unchanged.

The construction of Franklin Delano Roosevelt (FDR) Drive on the south side of South Street in the 1930s-1940s led to the demolition of the piers and ferry slips that once jutted into the East River.

Twentieth century alterations to the APE include the installation of new utilities in the 1930s. Additional alterations include the installation of more recent water lines, usually installed at a depth of five feet, while sewer lines are placed at a depth of 10 feet or more. Twentieth century utilities—such as telecommunications and gas lines—are usually found at depths of 2-3 feet and electrical utilities are usually found 1-2 feet below grade, although they are occasionally as deep as 6 feet.

# C. EXISTING CONDITIONS

#### ARCHAEOLOGICAL RESOURCES1

#### GEOLOGICAL HISTORY

The island of Manhattan is located within the geographic bedrock region known as the Manhattan Prong of the New England (Upland) Physiographic Province. This region comprises heavily metamorphic and sedimentary rocks (including quartzite, dolomitic marble, marble, schist, and gneiss) that date to the Cambrian and Ordovician ages. The bedrock slopes downward from north to south and has been found to be approximately 100 feet below the earth's surface at the southern end of Manhattan. There were four major glacial periods that affected Manhattan until roughly 12,000 years ago when the Wisconsin period, the last glacial period, ended. The glacial movements brought about the creation of hundreds of sand hills, some of which were nearly 100 feet tall, that contrasted with the many small streams, rivers, and lakes which were fed by the glacial runoff. Most of the archaeological APE was originally within the East River and/or inundated by the river's changing tides.

Manhattan had a much narrower and more irregular shape prior to systematic landfilling that created a more uniform shoreline of piers and promenades that now exists. The southern tip of Manhattan was a rocky point jutting out into the harbor forming a small cove that was possibly used by Native Americans. In the immediate vicinity of the APE, the area that is now Water Street was the original, natural shoreline in the area between Fulton and Dover Streets. A small pond located directly north of the project site, near the northeast corner of Peck Slip and Pearl Street, was known as Beekman's Swamp. It drained into the East River via a small stream or brook that ran the length of Peck Slip between Cliff and Pearl Streets.

The glacial period left the Northeast blanketed in thick ice sheets for thousands of years. Human habitation of the area did not begin until approximately 11,000 years ago. Archaeologists have divided the time between the arrival of the first humans in northeastern North America and the arrival of Europeans more than 10,000 years later into three periods: Paleo-Indian (11,000-10,000 BP), Archaic (10,000-2,700 BP), and Woodland (2,700 BP-AD 1500) based on certain changes in environmental conditions, technological advancements, and cultural adaptations. The Woodland period ended with the arrival of the first Europeans in the early 1500s. With the introduction of European culture into the indigenous society, the way of life once maintained by the Native Americans was thoroughly and rapidly altered. Most of the Native Americans left lower Manhattan soon after the island was sold to the Dutch in 1626.

#### PRE-CONTACT PERIOD ARCHAEOLOGICAL RESOURCES

At the time of European contact, a portion of the archaeological APE was partially submerged by tidal marsh along the East River shoreline and a small stream which ran between the East River and a large swamp to the north. The remainder of the APE was underwater well into the historic period. Although there might have been periods of time when the water table was lower and the APE exposed, documentary research suggests that much of the coastal area of Lower

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<sup>&</sup>lt;sup>1</sup> This section includes text from the *Phase 1A Archaeological Documentary Study of Peck Slip between Pearl and South Streets; Water Street between Beekman and Dover Streets; and Front Street between Peck Slip and Dover Street* prepared by AKRF, Inc. in April 2007.

Manhattan was rocky and not ideally suited for pre-contact habitation. Furthermore, inundation, tidal action, and waterfront dredging along the APE's submerged shoreline and within the slips could have impacted any fragile pre-contact remains. It is highly unlikely that any pre-contact archaeological resources which may at one point have been located within the APE would have survived subsequent tidal action and dredging episodes. Therefore, the Phase 1A archaeological documentary study concluded that the archaeological APE has a low potential for the recovery of pre-contact period resources that would have research potential and would meet the criteria necessary for inclusion on the National Register of Historic Places.

#### HISTORIC PERIOD ARCHAEOLOGICAL RESOURCES

#### Peck Slip Streetbed

With the exception of the marketplace located on Peck Slip between 1763 and 1792, it does not appear that buildings were constructed within the modern Peck Slip streetbed, parts of which remained an active waterway until the 19th century. Structural remnants of the marketplace may still be extant beneath the modern streetbed. Other 18th and 19th century markets in Manhattan, including the Catherine Slip Market to the east, were constructed over cellars. Although there is no documentary evidence suggesting that such cellars may have existed at the Peck Slip Market, it is possible that cellars or vaults may have been located at the site. In addition, it is also possible that through time, small sheds and buildings—related to either the market or other commercial enterprises—were constructed and demolished on the various docks and piers within the APE. However, these structures would have been built on the surface of the docks and would not have included basements. Their dockside locations and commercial nature also significantly reduce the likelihood that any such buildings would have had associated domestic shaft features including privies, cisterns, and wells.

The Minutes of the Common Council make multiple references to buildings which impeded the continuation of Front Street near Peck Slip, although they do not indicate exactly where such buildings were located. Because Peck Slip remained an open water way, it is unlikely that these structures would have been located within the Peck Slip streetbed and it is probable that the structures were located on the side streets of Peck Slip or atop the many docks and wharves on either side.

However, it is also possible that 18th century buildings or shipyards which pre-date the filling in of Peck Slip in the area between Pearl and Water Streets may have been located in the Peck Slip streetbed. The Burgis View illustration shows such features to have been constructed at significantly lower elevations than the streetbed of Pearl Street at the time, and it is likely that subsequent landfilling episodes which evened out the landscape would have served to protect such resources, should they exist within the APE.

The practice of dredging in the 18th and 19th centuries coupled with the subsequent rapid extension of the East River shoreline could have significantly disturbed earlier historic-period archaeological resources within Peck Slip. However, oftentimes dredging did not clear the slip completely, and it is possible that some earlier archaeological resources survived within the APE. As Peck Slip featured a public market on its north side and a dumping board on its south side, it is possible that collections of debris, including animal bones and commercial and domestic refuse, are present below the surface. Because legislation that banned the practice of public dumping and required the use of clean fill in landfilling endeavors was passed after the project area had been filled out as far as Front Street, these resources—dating between the late 18th and early 19th centuries—are most likely to be found within the northerly portion of the

Peck Slip APE between the original high water line, just south of modern Pearl Street, and Front Street to the south. Clean fill is expected to have been used south of Front Street, which is reflected in soil boring logs from locations in the vicinity of the APE.

Although the archaeological APE has been disturbed by utility installations to varying depths, throughout the Peck Slip streetbed, the depth of the landfill and landfill retaining devices—which soil borings indicate extends to 20 to 35 feet throughout the site—far exceeds the depth of the disturbed soil. Furthermore, the relatively shallow depth of the utilities in Peck Slip—including the 5 by 4 foot sewer that runs down the center to depths of approximately 14 feet near Pearl Street, 10 feet below ground surface in the vicinity of Front Street and 6.5 feet below ground surface at South Street could have caused less disturbance of deeper soils than usually occurs in such instances.

Recent utility work in Beekman Street (immediately west of the APE) conducted by the New York City Department of Design and Construction (DDC) has resulted in the discovery of wooden water pipes located approximately 3.5 to 4 feet below the ground surface. The pipes were found within the streetbed of Beekman Street near its intersection with Water Street. It is important to note that these pipes and the other archaeological resources recovered at the site were found in an area that had been "disturbed" several times in the past.

In addition to the water pipes, the remains of the foundation of an old storeroom that contained a primary artifact deposit dating from the late 18th through the turn of the 19th century was found in the excavation of Beekman Street. The artifacts were located approximately 7.5 to 8 feet below the ground surface of Beekman Street, between Pearl and Water Streets. It was estimated that there were approximately 4,000 artifact fragments in the deposit. The remnants of an old pier were found approximately 7 to 8 feet below the ground surface at the intersection of Beekman and Water Streets, as well as an undisturbed pocket of pottery "wasters<sup>1</sup>" in Beekman Street between Water and Front Streets approximately 4 feet below the ground surface (Alyssa Loorya, personal communication: November 11, 2006). Therefore, because wooden water pipes and other 19th century archaeological resources have been identified in areas which have also been thought to be disturbed, the presence of similar resources in the APE cannot be ruled out.

Therefore, the Peck Slip streetbed, including the median currently used for parking, is believed to have moderate to high potential for the recovery of historic period archaeological resources in areas which have not been affected by the installation of subsurface utilities. These resources could include historic landfill and landfill retaining devices, wharves (possibly including Peck's, Roosevelt's, and Walton's wharves), docks, piers (possibly including those related to the original ferry to Brooklyn), bulkheads, structural remnants and refuse from the 18th century Peck Slip Market, early 19th century infrastructure (wooden water pipes, wells, pumps, and early brick sewers), and possibly derelict wooden ships, such as those found at other landfill sites in Lower Manhattan. Such resources could extend to depths of 20 to 35 feet throughout the APE.

#### Water Street Streetbed

The Burgis View illustration, depicting the project area in the early 18th century, indicates that many buildings and shipyards were located along Manhattan's waterfront in the vicinity of

<sup>&</sup>lt;sup>1</sup> Pottery "wasters" are ceramic dishes, cups, saucers, etc. that have been discarded because they cannot be sold due to gross imperfections. Potteries and/or merchants often discarded these pieces in the landfill.

modern Water Street, which at that time was occupied by a series of docks, wharves, and piers. These buildings would have included Beekman's slaughterhouse, which appears to have been located near Water Street, east of Beekman Street, although it is unclear if this building would have entered the modern streetbed of Water Street. Because Water Street was widened in the 19th century, buildings which were adjacent to the historic streetbed may now be located beneath the modern streetbed.

Because of the nature of early 18th century landfilling practices, it is likely that Water Street was constructed atop a large network of landfilling devices which were filled with historic landfill deposits. Because Water Street was filled in before sanitary legislation required the use of clean fill, it is also likely that the landfill deposits within the Water Street streetbed contain domestic and commercial refuse. Although the area has been disturbed by utility installations to varying depths of up to approximately 10 feet throughout the Water Street streetbed, the depth of the landfill and landfill retaining devices—which soil borings indicate extends to a depth of approximately 20 to 35 feet throughout the site—far exceeds the depth of modern disturbance/the disturbed soil.

Therefore, the Water Street streetbed is considered to have moderate to high potential for the recovery of historic period archaeological resources in all areas not disturbed by the installation of utilities. The resources include historic landfill and landfill retaining devices, wharves (possibly including portions of Peck's, Roosevelt's, and Walton's wharves), docks, piers bulkheads, domestic and commercial refuse, early 19th century infrastructure (wooden water pipes, wells, pumps, and early brick sewers), and possibly derelict wooden ships, such as those found at other landfill sites in Lower Manhattan. In addition, remnants of shipyards and/or warehouses dating to the early 18th century may also be present. Such resources could extend to depths of 20 to 35 feet throughout the APE.

#### Front Street Streetbed

The Minutes of the Common Council make several references to buildings impeding the continuation of Front Street near Peck Slip although it is not immediately clear where these buildings were located. However, it is likely that structures were constructed in the area that has since become the modern Front Street streetbed when the area was still the waterfront in the mid-18th century. These buildings were probably stores and warehouses and may have been constructed on piers that stretched out into the East River as well as on the fast land south of Water Street. The widening of Front Street in the 19th century could have resulted in a small portion of some of these buildings being included within the archaeological APE.

Because of the nature of late-18th and early-19th century landfilling practices, it is likely that Front Street was constructed atop a large network of landfilling devices filled in with historic landfill deposits. Because Front Street was filled in after sanitary legislation required the use of clean fill, it is less likely that the landfill deposits within the Front Street streetbed contain domestic and commercial refuse and it is possible, as confirmed by soil borings, that this area was filled with clean fill. Although the area has been disturbed by utility installations to varying depths of between 4.5 feet and 8.5 feet below ground surface throughout the Front Street streetbed, the depth of the landfill and landfill retaining devices—which soil borings indicate extends to depth of 20 to 35 feet throughout the site—far exceeds the depth of the disturbed soil.

Therefore, the Front Street streetbed is considered to have moderate to high potential for the recovery of historic period archaeological resources. The resources include historic landfill and landfill retaining devices, wharves (possibly including portions of Peck's, Roosevelt's, and

Walton's wharves), docks, piers bulkheads, domestic and commercial refuse, early 19th century infrastructure (wooden water pipes, wells, pumps, and early brick sewers), and possibly derelict wooden ships, such as those found at other landfill sites in Lower Manhattan. In addition, remnants of shipyards and/or warehouses dating to the early 18th century may also be present. Such resources could extend to depths of 20 to 35 feet throughout the APE.

#### ARCHITECTURAL RESOURCES

The known architectural resources located on the project site and in the study area are discussed below. There are no potential architectural resources on the project site or in the study area.

#### PROJECT SITE

The project site is the central area of Peck Slip between Water and South Streets (see Figures 2B-1 and 2B-3). This section of Peck Slip is a wide, Belgian block- and asphalt-paved corridor whose central area (the project site) is occupied by surface parking. The only differentiation between the project site and the adjacent Peck Slip roadbed is the presence of parked cars on the project site. The only structure on the project site is a small, non-historic parking attendant kiosk in the area northwest of South Street. Atop and alongside the kiosk are billboards advertising the project site's parking. A segment of Front Street extends northeast-southwest through the project site (see Figure 2B-1). The Belgian block pavers on the project site have been removed and relaid multiple times in relation to on-going utility work in this area of Manhattan and are irregularly spaced.

The entire project site lies within the boundaries of the South Street Seaport Historic District (S/NR, NYCL) and Extension (S/NR) (see Figure 2B-1). The boundaries of the S/NR historic district and the NYCL historic district are slightly different. The S/NR historic district and extension boundaries are Pearl and Front Streets on the northwest, the East River and Piers 13 and 15 through 18 on the southeast, the Brooklyn Bridge on the northeast, and Fletcher and John Streets on the southwest. The boundaries of the NYCL historic district are Pearl and Front Streets on the northwest, Peck Slip between Pearl and Water Streets and Dover Street on the northeast, South Street and Piers 15 through 17 on the southeast, and Fulton Street and the area mid-block between John and Fletcher Streets on the southwest. The South Street Seaport Historic District and Extension contains the largest concentration of early 19th century commercial buildings in New York City (see Figures 2B-4 and 2B-5). The district includes Greek Revival counting houses from the 1830s, most built with first stories of granite and postand-lintel construction, with brick above. A few of the counting houses have stone fronts. By the second half of the 19th century, when the South Street area had lost its prominence in New York's commercial life, many buildings were converted for the wholesale Fulton Fish market. In addition, a few structures were built later, including 116-119 South Street, which became the Meyers Hotel in 1881, and Richard Morris Hunt's 1873 red brick building with black brick decorative trim, at 21-23 Peck Slip (see Views 5 and 6 of Figure 2B-6).

#### AREA OF POTENTIAL EFFECT

All of the buildings in the APE are within the South Street Seaport Historic District and Extension. These buildings are described briefly below and are identified on Figure 2B-1.

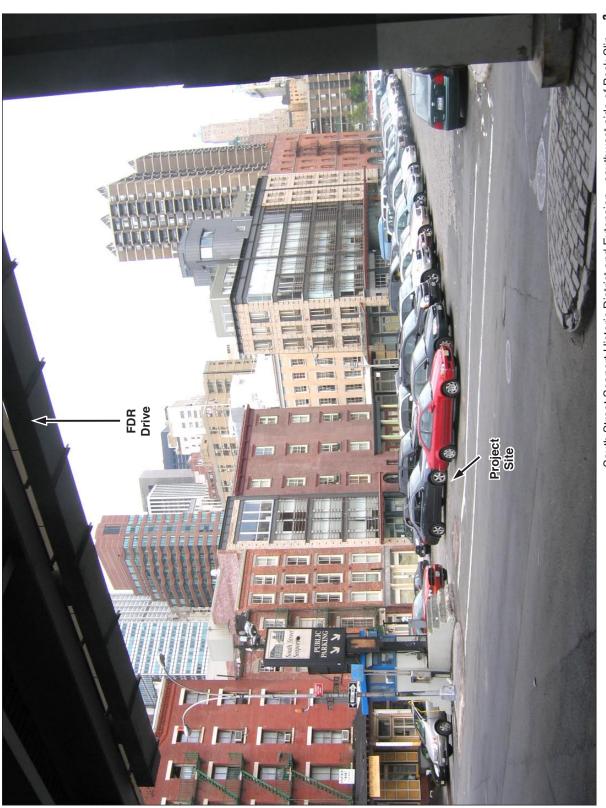
a. The 1873 corner building at 42-44 Peck Slip/118-119 South Street, designed by architect John B. Snook, has a chamfered corner entrance and a metal awning supported by wooden columns. Its ground floor has cast iron squared columns of varying widths.



View southeast across project site



View northwest across project site 2

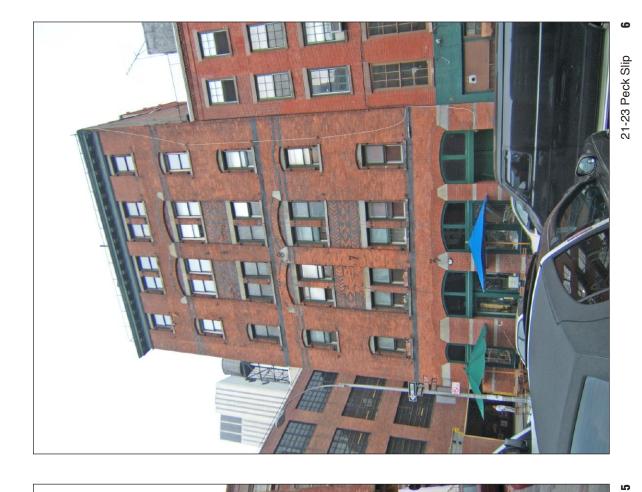


South Street Seaport Historic District and Extension - southwest side of Peck Slip



South Street Seaport Historic District and Extension - northeast side of Peck Slip 4

# **Architectural Resources** Figure 2B-6





**B** 

- Each façade has a large pediment with the date "1873" at its center. It became Meyer's Hotel in 1881.
- b. The buildings at 38 and 40 Peck Slip were built in 1813 as part of a group of three brick buildings (the third building was at 36 Peck Slip but it has since been demolished.). These buildings originally had three stories, each with a pitched roof. In 1872, an additional floor was added to 40 Peck Slip. 38 Peck Slip was also altered, increasing its height to five stories.
- c. The five-story building at 36 Peck Slip was designed by architect Cook + Fox and was built in 2007. The building is faced in tan brick although though most of its façade is characterized by large glass windows. It has an awning at the ground floor.
- d. The five-story corner building at 34 Peck Slip/235 Front Street was built in 1828-1829. It is faced in reddish brown brick and its Peck Slip façade has a filled in arched doorway. The building was altered in 1892 with the addition of cast iron square columns, sheet metal window lintels, and a sheet metal cornice. The building's peaked roof was lowered and a fifth floor was added.
- e. The four-story building at 233 Front Street was built in 1828-1829 on a water lot. The building's ground floor has a cast iron shopfront that was a later addition. The building's upper floors are faced in brick and its roof is pitched and has two pedimented dormers.
- f. The four-story building at 232-234 Front Street, built in 1816, has a cast iron ground floor façade and a corrugated metal awning. The building's upper floors are faced in brick with few decorative elements.
- g. The five-story building at 24-30 Peck Slip/236 Front Street, designed by Cook + Fox and completed in 2007, has a design similar to that of 36 Peck Slip. This building's southern portion is mostly faced in glass and exposed steel beams. A wide, flat awning extends along most of the building's Peck Slip and Front Street façades. The building's two northern bays are faced in tan brick like the building at 24-30 Peck Slip. A one- and two-story rooftop component is visible from the street.
- h. The five-story tenement building faced in orange brick at 22 Peck Slip/251 Water Street, designed by architect Carl F. Eisenbach in 1888, has arched ground floor entrances.
- i. The Greek Revival warehouse at 247-259 Water Street, built in 1837, has six large granite piers that support a deep architrave capped by a cornice. Diamond-shaped tie rod plates on the façade at the third and fourth floors identify where the floor meets the facade.
- j. 2-18 Peck Slip/246-258 Water Street is a surface parking lot. There are no structures on this lot.
- k. The Peck Slip Station of the U.S. Post Office, located at *1-19 Peck Slip/260-262 Water Street*, is a four-story, orange brick-faced building designed by Charles M. Spindler and built in 1950. It has banded windows along its Peck Slip façade that wrap around the corner to its Water Street façade. The Water Street façade also has wide, multi-paned windows set above garage entrances.
- 1. The four-story Greek Revival building at 261-263 Water Street was built in 1847. It is faced in brick and has large granite piers that support a smooth granite lintel.

- m. The six-story orange brick building at 21-23 Peck Slip/253-259 Water Street was designed by the Paris-trained architect Richard Morris Hunt and was built in 1873 to house "first class stores." The building has ground floor arched entrances and similarly arched windows on the upper floors.
- n. The paired five-story buildings at 25-27 *Peck Slip* were built in 1835-1836. The Greek Revival building's ground floor has been altered and its upper floors are faced in Flemish bond brickwork.
- o. The buildings at 29-33 Peck Slip/240-242 Front Street have been combined into one building. The paired five-story brick-faced buildings at 29 and 31 Peck Slip date from the early 1850s and have large star-shaped tie rod washers on its façade. The five-story brick building at 33 Peck Slip dates from 1856. Its upper floors align with the floors of the buildings at 29 and 31 Peck Slip. A corbelled roof spans all three buildings and extends around the corner to Front Street. The five-story building at 240 Front Street was built in 1851-1852 and has a ground floor cast iron storefront. The building is connected to the rear of 29 Peck Slip.
- p. The Con Edison substation building at 35 Peck Slip/237-257 Front Street, designed by architecture firm of Edward L. Barnes and built in 1974, occupies most of the block but is set back from the Peck Slip streetwall by a fence-enclosed area. The building's façade along Peck Slip has a decorative mural depicting two building facades and the Brooklyn Bridge.
- q. The four-story red brick building at 43 Peck Slip, designed by the firm of Edward L. Barnes, was built in 1974 as part of the adjacent Con Edison substation project. It has few decorative elements and most of its windows have louvers instead of glass.
- r. The four-story red brick building at 45 Peck Slip/151 South Street was built in 1806-1807. It was built, along with three adjacent buildings with a common hipped roof, on newly filled land.

# KNOWN RESOURCES VISIBLE FROM THE APE

Some buildings in the South Street Seaport Historic District and Extension that are outside the APE are also visible from some vantage points in the APE.

Portions of the **Brooklyn Bridge** (NHL, S/NR, NYCL) are visible in views northeast along Water, Front, and South Streets. The Brooklyn Bridge spans the East River between City Hall Park in Manhattan and Cadman Plaza in Brooklyn. Construction of the steel suspension bridge was originally conceived in 1867 by John A. Roebling, a German immigrant engineer who invented wire cable and was an accomplished bridge builder. The Brooklyn Bridge was the first physical link between Brooklyn and Manhattan. It opened in 1883 and was the longest suspension bridge at the time of its completion, spanning 1,595.5 feet between towers. The bridge was described as the "new eighth wonder of the world" and is considered one of the greatest engineering feats of the 19th century. It is characterized by two massive granite-clad towers with Gothic arches and a network of steel cables and vertical wires (see View 7 of Figure 2B-7).

The **Woolworth Building** (NHL, S/NR, NYCL) is also outside the study area and is at a greater distance from the project site. This 60-story neo-Gothic skyscraper at 233 Broadway is visible in views north from the project site. The Woolworth Building was built in 1910–13 to house the

View northeast toward the Brooklyn Bridge 7

headquarters of the Woolworth variety store chain. F.W. Woolworth intended it to be the world's tallest building and it was for a short time. It was designed by Cass Gilbert and is faced in terra cotta (see View 2 of Figure 2B-3).

# D. NO ACTION ALTERNATIVE

#### PROJECT SITE

The No Action Alternative assumes that there would be no construction activity on the project site and the site would remain in its current condition, thus there would be no changes to the areas of the South Street Seaport Historic District and Extension on the project site.

# AREA OF POTENTIAL EFFECT

Absent the Proposed Action, NYCDOT will upgrade utilities below the streetbeds of Water Street between Beekman and Dover Streets, Front Street between Peck Slip and Dover Street, Beekman Street between Water and South Streets, and Peck Slip between Pearl and Water Streets (see Figure 2B-2). The NYCDOT project will involve repaving the streetbeds of the affected streets.

At 250 Water Street, a 175,000-square-foot institutional building with 300 dwelling units will be developed northwest of the project site on a lot currently used as surface parking.

#### **OUTSIDE THE APE**

Outside the APE southeast of the project site, the East River Esplanade and Piers project will improve a two-mile segment of the East River waterfront between Whitehall Ferry Terminal and East River Park. Physical improvements will generally consist of pavement, street furniture, landscaping, and some small structures.

Cultural resources such as the South Street Historic District that are listed on the S/NR or that have been found eligible for listing are given a measure of protection under Section 106 of the National Historic Preservation Act (NHPA) from the effects of projects sponsored, assisted, or approved by federal agencies. Although preservation is not mandated, federal agencies must undertake a notice, review, and consultation process prior to affecting these resources. Properties listed on the Registers are similarly protected against effects resulting from projects sponsored, assisted, or approved by State agencies under the State Historic Preservation Act (SHPA). Thus, while cultural resources in the study area are protected by federal, state, and local regulations, it is possible that they may be altered in the future. Privately owned sites that are NYCLs, within NYCHDs, or pending designation, are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition can occur.

The status of cultural resources could change in the future without the Proposed Action. It is possible that some cultural resources in the study area could deteriorate, while others could be restored. In addition, future projects could affect the settings of cultural resources, or accidentally damage such resources through adjacent construction.

# E. PROBABLE IMPACTS OF THE PROPOSED ACTION

#### ARCHAEOLOGICAL RESOURCES

#### PRE-CONTACT PERIOD ARCHAEOLOGICAL RESOURCES

As described in "Existing Conditions," the project site has a low potential for the recovery of pre-contact period archaeological resources. Therefore, creation of the proposed open space and reconstruction of the surrounding streets is not expected to adversely affect any such resources.

#### HISTORIC PERIOD ARCHAEOLOGICAL RESOURCES

According to the Phase 1A archaeological documentary study, several types of potential archaeological resources could be impacted by the Proposed Action, depending upon the location, size, and depth of subsurface impacts. Adverse impacts could occur if construction disturbance extends into potentially sensitive levels. Conversely, adverse impacts may be avoided if disturbance is restricted to depths above potentially sensitive areas. Based on an analysis of the proposed depth and location of proposed new work in Peck Slip, as well as the depth and location of existing utilities, the proposed project has the potential to impact archaeological resources in several locations:

- Excavation for a proposed "water feature" with a manhole/catch basin would take place in a small area of the streetbed at the intersection of Peck Slip and Front Street to a depth of approximately 4 feet. A valve box for the water feature would involve the excavation of an approximately 2-foot area to a depth of approximately 2 feet. The construction of this water feature would also require some excavation for water and drainage pipes at a depth of approximately 18 inches. Both the valve box and pipes would be constructed in the immediate vicinity of the water feature. To date, the exact locations of the water feature and associated pipes and manhole have not yet been finalized. Once the locations are finalized, plans should be reviewed by an archaeologist to determine if they could impact potentially sensitive levels.
- The planting of new trees on the project site could result in disturbance to a depth of approximately 3 feet. This has the potential to impact archaeological resources and final plans should be reviewed by an archaeologist to determine if new trees would be located in sensitive areas.
- The installation of the north and south boundaries of the ship feature would require excavation to a depth of approximately 2 to 3 feet in certain locations. In the center of the ship feature, excavation would occur to a depth of approximately 2 feet. A post footing would be constructed near the intersection of Peck Slip and Water Street which would require excavation to a depth of approximately 4 feet.
- Installation of proposed utilities could take place in all streetbeds within the archaeological APE. If such installations are in-kind replacements of existing lines, it is not expected that archaeological resources would be affected. However, if the utilities would be constructed in areas that have not been previously disturbed or have had minimal disturbance, historic period archaeological resources could be affected.

The Phase 1A archaeological documentary study recommends that once plans for the proposed work at the project site—including the water feature, tree plantings, the ship feature components, and utility installations, and the adjacent NYCDOT streetbed reconstruction areas—are

finalized, these plans should be reviewed by an archaeologist to determine if they could impact potentially sensitive levels of the project site. Though the proposed work has been designed to avoid adverse impacts to historic resources, including archaeological resources, if such impacts could occur, Phase 1B archaeological testing would be undertaken for those areas. This testing should occur in all areas that have not been previously disturbed by the installation of modern utilities and that would be excavated or disturbed by the Proposed Action. If the scope of work changes in any way, all changes should be reviewed by an archaeologist. The goal of the testing would be to determine if any significant archaeological resources are present. All archaeological testing would be designed and conducted in consultation with SHPO and LPC, including preparation of a testing protocol to be submitted to SHPO and LPC for approval prior to testing. With this testing and compliance with any SHPO and/or LPC directive based on the results of such testing, no significant adverse impacts to archaeological resources are expected to occur with the proposed actions. As such, LMDC finds that the Proposed Action is not likely to adversely affect archaeological resources as Phase 1B testing would be undertaken in consultation with SHPO and LPC to avoid adverse impacts to potential archaeological resources.

Because there is a slight chance that archaeological resources may be present in areas that were not identified as sensitive in the Phase 1A, an unanticipated discovery plan will be prepared in consultation with SHPO and LPC to address any such resources.

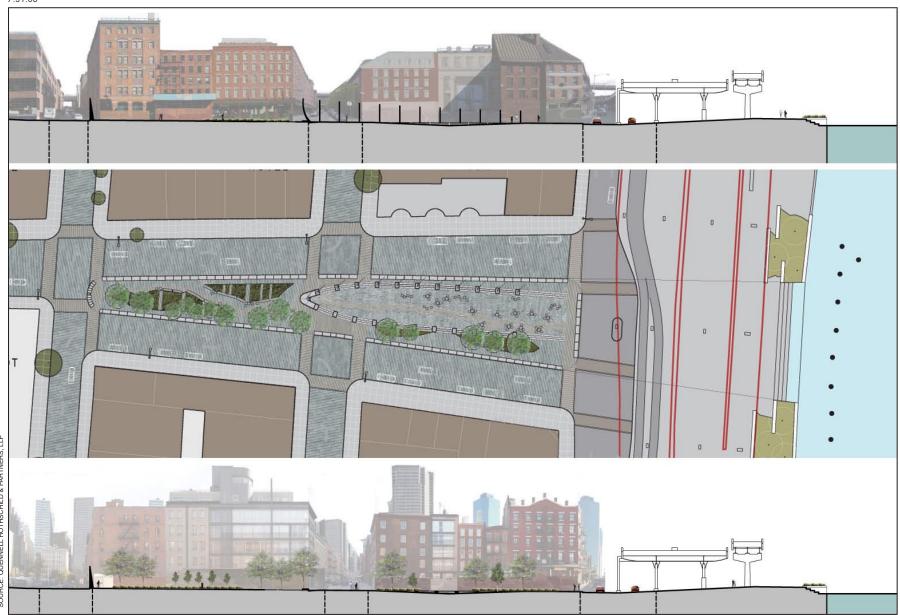
Therefore, overall, the Proposed Action is not expected to have significant adverse impacts on archaeological resources.

#### ARCHITECTURAL RESOURCES

# PROJECT SITE

The Proposed Action would be coordinated with NYCDOT's planned streetbed reconstruction project at Peck Slip, which is a separate undertaking being approved and funded by the Federal Highway Administration (FHWA). The Proposed Action would close the portion of Front Street that crosses Peck Slip and would remove the existing Belgian block- and asphalt-paved centrally-oriented surface parking from the project site. As part of the Proposed Action, Peck Slip's street geometry would be formalized by creating a median in Peck Slip with a paved and landscaped open space and installing new granite slab curbs that would define the north and south extent of the proposed open space. The granite Belgian block pavers at the project site's existing surface parking area would be salvaged and re-used in the proposed open space design (see Figures 2B-8 through 2B-11). Salvaged pavers would also be used for the reconfigured streetbeds and crosswalks with additional salvaged pavers to be laid to contrast the streetbed pattern and demarcate the extent of the crosswalk boundaries.

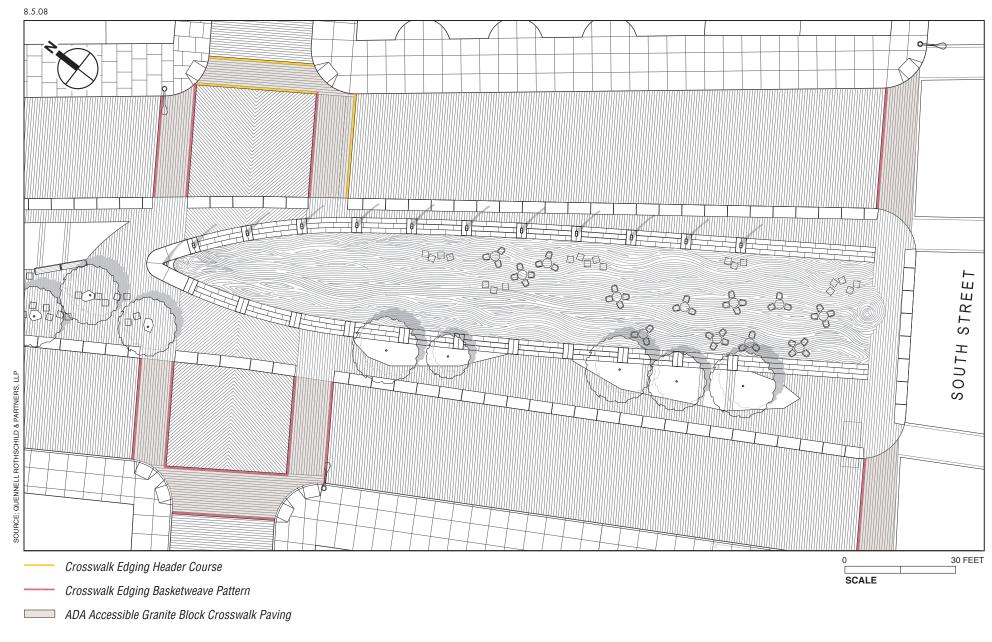
The landscaped open space has been designed in consultation with SHPO and LPC to be contextually appropriate to the South Street Seaport Historic District and Extension. The project site has two distinct areas. As currently planned, the portion of the project site between Water and Front Streets would be redeveloped as an open space paved with salvaged Belgian block pavers. This area would have walkways, benches and granite block seating, trees, and other landscaping elements (see Figures 2B-9). Trees and other plantings would be located near the project site's southern boundary and would be spaced so as to not obstruct important views to nearby and more distant architectural resources. A vertical stone element with a mast light would be located near Water Street.



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Site Plan Western Area



**NOTE:** FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Site Plan Eastern Area



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

The eastern portion of the project site—from Front Street to the west side of South Street would also be redeveloped as an open space using salvaged pavers and landscaping elements. It would include an area demarcated by granite steps in a shape reminiscent of a ship. The pavers within this ship-like area would be laid in a ripple pattern symbolizing water movement (see Figure 2B-10). Americans with Disabilities Act (ADA)-compliant pavers would be integrated into the ripple design. The granite steps at this part of the project site's northern boundary would be accented with slender vertical steel and wood rib-like elements with granite bases. They would range in height from 9 to 16 feet. These rib-like elements would be similar to the ribs of a ship, further evoking this area of Manhattan's waterfront history which included shipbuilding. Spaced at approximately 15-foot intervals, the rib-like vertical elements would maintain views to and across the project site to architectural resources within the surrounding historic district, and more distant views to architectural resources, including the Woolworth Building and the Brooklyn Bridge. An additional vertical, rib-like element with a mast light and a water feature would be located near the intersection of Front Street and Peck Slip. The southern boundary of this area of the project site would have granite elements spaced at the same interval as the bases of the rib-like elements at the northern boundary. These design components could be used as seating and would be supplemented by granite block seating and moveable wood crate seating. The eastern open space would also have trees and other plantings located near its southern boundary that would not obstruct important views to nearby and more distant architectural resources.

As described in "Existing Conditions," the project site, although part of the South Street Seaport Historic District and Extension, does not include any buildings apart from the single-story parking attendant kiosk. The Belgian block pavers that characterize the project site have been removed and re-laid many times and are not identified in the South Street Seaport Historic District designation report as contributing features to the historic district. As described above, the existing Belgian block pavers on the project site would be salvaged and reused in the proposed design. As there are no architectural resources on the project site, there would be no adverse physical impacts to architectural resources on the project site.

The proposed closure of the portion of Front Street that extends through Peck Slip would allow a larger open space to be developed on the project site. Although this portion of Front Street would be closed to automobile traffic, the design of the open space would maintain views and would provide pedestrian access to and across this area of the project site. Further, Peck Slip has a long history of changes to its physical form, as it has undergone extensive landfilling episodes through its history related to the changing needs of the surrounding area. The Proposed Action reflects the area's changing character that includes residential and commercial uses while improving physical and visual access to the East River waterfront.

## STUDY AREA

In general, the Proposed Action would be expected to enhance the context of surrounding architectural resources in the South Street Seaport Historic District and Extension by replacing a surface parking area with a new open space that would be designed to be appropriate to the context of the surrounding historic district.

The closure of the portion of Front Street where it extends through the project site would not be expected to adversely alter the physical, visual, or contextual character of the historic district as the proposed open space design in the area of Front Street would maintain existing views to and through the project site and into study area. Further, the proposed design would provide

pedestrian access to the project site where access is currently limited to automobile parking. The closure of this section of Front Street and its replacement with a new open space area would be expected to improve the physical and visual context of the nearby historic resources.

The proposed project elements would not compete visually with the historic resources in the historic district since existing views to historic resources would largely be maintained across the project site to other areas of the historic district. Views to the Woolworth Building and the Brooklyn Bridge would not be adversely affected by the proposed changes to the project site.

Within the 90-foot architectural APE, there are a number of contributing architectural resources within the South Street Seaport Historic District and Extension. These buildings could potentially be inadvertently adversely affected by ground-borne construction-period vibrations, falling objects, damage from heavy machinery, or other unanticipated potential construction-related impacts unless proper protection measures are put in place. Therefore, to avoid potential adverse physical impacts on these buildings, the Proposed Action would develop and implement a CPP in consultation with SHPO and LPC prior to the commencement of any demolition or construction activities on the project site. The CPP would follow the New York City Department of Buildings *Technical Policy and Procedure Notice (TPPN) #10/88*. With a CPP in place, it is not expected that there would be any adverse physical impacts to architectural resources.

Overall, the Proposed Action would be expected to enhance the context of surrounding architectural resources by creating a new public open space that would maintain and improve physical and visual access to the East River waterfront and eliminate unsightly street parking. The project components are being designed in consultation with SHPO and LPC to complement the historic character of the historic district's buildings and the area's ship building past and would add a new open space that would enhance pedestrian activity in this historically residential and commercial waterfront area. The project would not be expected to have adverse physical, visual, or contextual effects on architectural resources located in the surrounding study area. Therefore, it is not expected that the Proposed Action would result in any adverse impacts to cultural resources.