A. INTRODUCTION

This chapter examines the potential effects of the proposed Fresh Kills Park on the urban design and visual resources of the project site and surrounding Staten Island communities. The proposed project would necessitate alterations to the urban design and streetscape of the project site—Fresh Kills Landfill—and would modify views to surrounding locations. However, the project site is not open to the public and views of the site are therefore limited to vantage points from the surrounding areas. Since the project site contains extensive waterfront and is not open to the public, there are currently no public waterfront views from the project site. With the proposed project, the waterfront would be open to the public and there would be an extensive landscape enhancement and planting program over the site. For these reasons, the overall effects of the proposed project with respect to urban design and visual resources are expected to be positive.

This chapter has been prepared in accordance with the State Environmental Quality Review Act (SEQRA), which requires that State agencies consider the effects of their actions on urban design and visual resources and follows the guidance of the 2001 New York City Environmental Quality Review (CEQR) Technical Manual. As defined in the manual, urban design components and visual resources determine the "look" of a neighborhood—its physical appearance, including the street pattern, the size and shape of buildings, their arrangement on blocks, streetscape features, natural resources, and noteworthy views that may give an area a distinctive character. The following analysis addresses each of these characteristics for existing conditions and the future without and with the proposed project through the 2016 and 2036 Build years.

B. METHODOLOGY

In accordance with the 2001 *CEQR Technical Manual* and the Final Scope of Work for this GEIS (August 2006), this analysis considers the effects of the proposed project on the following elements that collectively form the area's urban design and visual resources features:

- Block Form and Street Pattern. This urban design feature refers to the shape and arrangement of blocks and surroundings streets, such as a grid pattern with regularly sized, rectangular blocks. These features set street views, define the flow of activity through an area, and create the basic format on which building arrangements can be organized.
- Building Arrangement. This term refers to the way that buildings are placed on zoning lots and blocks. The buildings can have small or large footprints, be attached or detached and separated by open uses, and varied in their site plans. This urban design feature helps to convey a sense of the overall form and design of a block or a larger area.
- Building Bulk, Use, and Type. Buildings are usually described by these characteristics. A building's bulk is created from an amalgam of characteristics that include its height, length, and width; lot coverage and density; and shape and use of setbacks and other massing elements. The

general use of a building (e.g., residential, manufacturing, commercial office) gives an impression of its appearance and helps to understand its visual and urban design character. Building type refers to a distinctive class of buildings and suggests distinguishing features of a particular building. Examples of building type include: industrial loft, church, gas station, rowhouse.

- Streetscape Elements. Streetscape elements are the distinctive physical features that make up a streetscape, such as street walls, building entrances, parking lots, fences, street trees, street furniture, curb cuts, and parking ribbons. These features help define the immediate visual experience of pedestrians.
- Street Hierarchy. Streets may be classified as expressways, arterials, boulevards, collector/distributor streets, or local streets, and they may be defined by their width, type of access, and the presence or absence of at-grade pedestrian crossings. Street hierarchy helps convey a sense of the overall form and activity level of a neighborhood.
- Topography and Natural Features. Topographic and natural features help define the overall visual character of an area and may include varied ground elevation, rock outcroppings and steep slopes, vegetation, and aquatic features. These components would form the bulk of the urban design analysis.

This analysis also considers the effects of the proposed project on the area's visual resources, which the *CEQR Technical Manual* defines as unique or important public view corridors, vistas, or natural or built features. Visual resources can include waterfront views, public parks, landmark structures or districts, or natural features, such as a river or geologic formations.

As also recommended by the 2001 CEQR Technical Manual, this analysis evaluates impacts in two areas—the project site and a surrounding study area. The project site is an approximately 2,163-acre parcel of land located on the Arthur Kill waterfront. The study area comprises, roughly, a ½-mile radius around the project site, and includes the Travis, Springfield, and Arden Heights neighborhoods and portions of William T. Davis Wildlife Refuge, Arden Heights Woods, and LaTourette Park. To the west of the project site, the ½-mile study area extends across the Arthur Kill into New Jersey. Urban design resources in this portion of the study area consist almost entirely of warehousing and manufacturing facilities.

C. EXISTING CONDITIONS

PROJECT SITE

The project site is an approximately 2,163-acre parcel of land located on the Arthur Kill waterfront, and bounded to the east by Richmond Avenue, to the north by William T. Davis Wildlife Refuge, and to the south by Arthur Kill Avenue. The site includes the waterways of Little Fresh Kill, Great Fresh Kill, Richmond Creek, and a segment of the Main Creek. There are approximately 210 acres of open water on the site and about several miles of shorefront. The site also contains extensive wetland areas, totaling approximately 360 acres of both tidal and freshwater designated wetlands. Public views to the project site from the study area are currently limited by a series of berms and fences along Richmond Avenue and Arthur Kill Road, as well as the inaccessibility of the north and west. Currently, the most prominent and accessible views of the site are from the West Shore Expressway.

URBAN DESIGN

Natural Features, Block Shapes, Street Patterns, and Streetscape Elements

The project site is defined not by block shapes or streets, but by natural features; specifically, the creeks that cross it, which separate the site into distinct quadrants. As a landfill, the site was not platted like a conventional urban development pattern i.e., it is not divided into City street grid blocks. Instead, the site is traversed by the New York City Department of Sanitation (DSNY) access roads in a generally curvilinear fashion, which tend to skirt the base of each mound, but also climb up mounds and respond rationally to grade changes (see Figure 8-1, Photograph 1). Streets were also not laid out in a discernable pattern, but rather in a utilitarian manner to provide access to active areas of the landfill (see Figure 8-1, Photograph 2). Fresh Kills streets fall into two main categories: paved roads, primarily around the base of the mounds and through DSNY's main staging grounds; and truck routes of compacted sand, stone, or gravel that traverse the mounds (see Figure 8-2, Photographs 3 and 4). None of the streets feature formal streetscape elements, such as lighting, pavement markings, sidewalks, or street furniture. Traffic is unregulated, except by check points at entrances and a single light that controls one-way truck movement through the constructed passage underneath the West Shore Expressway (see Figure 8-3, Photograph 5). Two bridges provide for water crossing.

Most of Fresh Kills' natural features are man-made or significantly altered by human activity. Its dramatic topography was created during landfill operations when millions of tons of waste were placed in mounds that are now hundreds of feet tall. Only 45 percent of the site, however, is actually landfill. The remainder is composed of wetlands, creeks and tidal flats, open meadows, and woodlands. At Fresh Kills, it is these features that predominate over conventional urban design elements (see Figure 8-3, Photograph 6).

Building Uses, Shapes, and Forms

Most buildings on the project site or in the adjacent area support landfill closure operations, and many of them will continue to be operated through the 2016 and 2036 analysis years. They are industrial in nature, ranging in size and shape from 100,000-square-foot, one-story sheds to small temporary trailers, but include a fair number of mid-sized warehouse and factory-like buildings (see Figure 8-4, Photograph 7). Buildings have generally been concentrated into clusters on flat land that is off-mound and at water's edge (see Figure 8-4, Photograph 8). Located on Landfill Section 1/9 are the DSNY landfill gas and purification system, DSNY Staten Island District 3 garage and borough repair shop (separated from the project site), the DSNY leachate treatment plant, and a construction operations area, Landfill Section 3/4 houses the DSNY Staten Island waste transfer station (also off-site) construction operations area, and a landfill gas (LFG) flare station (see Figure 8-5, Photograph 9). The DSNY Staten Island District 2 garage (also off-site), and a LFG flare station are located on Landfill Section 6/7, while one LFG flare station is located on Landfill Section 2/8. Each of these facilities comprises a complex array of structures of various sizes, shapes, and functions. Adjacent roads expand amorphously into large paved areas in order to provide sufficient room for associated materials storage, construction staging grounds, and parking (see Figure 8-6, Photograph 10). Buildings are generally placed back from roads at some distance from one another, and many buildings are no longer used and derelict (see Figure 8-6, Photograph 11).

In addition to buildings, the site is characterized by an extensive above-ground infrastructure system with a significant visual presence on the site (see Figure 8-7, Photograph 12). This infrastructure includes piping to collect landfill gas and leachate, stormwater detention ponds,

groundwater monitoring wells, gas monitoring stations, and a significant stretch of bulkheaded waterfront, where much of the solid waste arrived by barge during landfill operations. Much of the water's edge—for instance, along the north and south sides of Fresh Kills west of the West Shore Expressway and along the confluence immediately east of the West Shore Expressway—is reinforced by wood pylons and concrete and steel rip-rap bulkheads, now severely deteriorated (see Figure 8-7, Photograph 13). Other portions of the water's edge are characterized by protective netting, originally designed to catch floatables.

Many of these existing facilities are an essential part of the landfill's post-closure care, and must remain operational for decades.

VISUAL RESOURCES

As stated previously, visual resources can include waterfront views, public parks, landmark structures or districts, or natural features, such as river or geologic formations.

One of the defining features of the Fresh Kills site is the provision of panoramic views in all directions. It would be difficult to describe every worthy viewshed, but there are several vistas of particular significance.

Looking north from the top of Landfill Section 3/4 affords a stunning view up Main Creek as it winds its way through the William T. Davis Wildlife Refuge (see Figure 8-8, Photograph 14). Here, the creek dramatically meanders through a series of ever-changing braided channels, surrounded by dense vegetation. Looking east from the top of this landfill section provides a wide view of Main Creek and the unique two-humped profile of Landfill Section 6/7.

From Landfill Section 1/9, an observer can see the famous skyline of downtown Manhattan. Looking west from this mound affords a unique view of the New Jersey industrial shoreline, including a century-old derelict ship area (see Figure 8-8, Photograph 15). Also available from this area are views of the Isle of Meadows and Blazing Star Historic Shipyard. Once closure operations are completed, this mound will be the highest point for miles around.

A view east from Landfill Section 2/8 overlooks LaTourette Park, a striking portion of Richmond Creek which slowly zigzags through a complex wetland zone (see Figure 8-9, Photograph 16).

Looking north from the top of Landfill Section 6/7 affords a dramatic view of the Main Creek-Richmond Creek confluence, and the bridges that span Fresh Kills at the center of the site.

Currently the best views of the site are from the West Shore Expressway. Looking east from the highway provides a close-up view of Landfill Section 3/4, which abuts the expressway. Crossing the bridge provides a beautiful view of the Fresh Kills Creek and associated wetlands stretching along both sides of the highway and into the distance. Further south along the expressway, drivers can see the Landfill Section 1/9 rise in the distance.

The Fresh Kills site as it exists today is an immense visual resource for Staten Island. Its vast scale, winding creeks and variegated wetlands, along with the surreal presence of large engineered mounds, create an unusual landscape. In its current condition as a restricted-access landfill, however, these extraordinary vistas are largely inaccessible to the public.

STUDY AREA

URBAN DESIGN

Natural Features, Street Patterns, and Block Shapes

As described above, the study area extends approximately ½-mile from the project site, and includes the Travis, New Springville and Arden Heights neighborhoods. The topography of the study area is relatively flat compared to the project site, as it lacks engineered grading. Noteworthy natural features in the study area include the William T. Davis Wildlife Refuge in the north, LaTourette Park at the southeast corner, and Arden Heights Woods in the south.

Street patterns vary throughout the study area. In the south, Arden Heights is a primarily residential neighborhood. Its streets are generally laid out in a fine-grained rectilinear grid, dominated by collector/distributor streets and local streets (see Figure 8-10, Photographs 17 and 18, and Figure 8-11, Photograph 19). The main east-west corridor, Arthur Kill Road, is heavily trafficked, but is a narrow, two-lane road with little or no shoulder. The Korean War Veterans Parkway extends north-south through the eastern portion of the neighborhood, and is a major limited-access arterial. But with the exception of Korean War Veterans Parkway and Arthur Kill Road, the street and block pattern is primarily small-grained and rectilinear.

The eastern portion of the study area—comprising New Springville neighborhood and a series of commercial developments—has a variety of street and block patterns that is representative of a suburban/urban development pattern. Directly adjacent to the site is a wide commercial district which includes the Staten Island Mall (see Figure 8-11, Photograph 20). The area is served by relatively few streets. Richmond Avenue—a major arterial along the eastern edge of the project site—is a principal thoroughfare in this part of the study area, and carries a large volume of traffic. The streets that extend east from Richmond Avenue are boulevards and collector/distributor streets that connect with Forest Hill Road, mainly serving automobile traffic (see Figure 8-12, Photograph 21). East of Staten Island Mall is an area of small irregular residential blocks created by curvilinear cul-de-sacs. North of the Mall, in New Springville, the street pattern regularizes into a fine-grained rectilinear quasi-grid, interrupted only by occasional cul-de-sacs (see Figure 8-12, Photograph 22).

The northern portion of the study area is entirely composed of the William T. Davis Wildlife Refuge. There are no city blocks, and Travis Avenue is the only street that crosses the area. The northwestern portion of the study area is a primarily residential neighborhood (see Figure 8-13, Photograph 23). Victory Boulevard serves as the spine of the neighborhood, with local streets and cul-de-sacs extending off at a northwest-southeast angle to create roughly diagonal rectangular-shaped blocks. This pattern is interrupted by the West Shore Expressway. Very few public streets cross the area, and there are also private roads serving the manufacturing facilities in the area. There are also a number of vacant lots in this neighborhood, unlike other residential communities in the study area.

Streetscape

Despite its residential focus, the streetscape in Arden Heights lacks most residential street amenities. For example, Arthur Kill Road does not have shoulders or sidewalks and has few crosswalks (see Figure 8-14, Photograph 24). There are few traffic lights, and thus drivers tend to move quickly along Arthur Kill Road. Along the project site on the north side of Arthur Kill Road is a thicketed wooded area, a berm, and fencing, built to block views of the landfill. Several

commercial strip mall nooks are carved out of the northern edge, with large curb cuts, parking lots and utilitarian lighting. Many of the small local streets in Arden Heights also lack basic streetscape amenities, such as sidewalks, although in contrast there are a number of very wide streets (see Figure 8-15, Photograph 25).

Richmond Avenue, at 6 to 8 lanes wide, is busy, wide, and unwelcoming to pedestrians (see Figure 8-15, Photograph 26). Sidewalks are provided along the eastern side of Richmond Avenue, but its western side—which borders the project site—does not have sidewalks. The avenue is lined by large parking lots, deep set-backs, and wide curb cuts. Most collector/distributor streets in the area are similarly lined with large warehouses, gas stations, and other uses with large setbacks and unfriendly facades (see Figure 8-16, Photography 27). New Springville is more accommodating, and includes sidewalks and benches for the largely residential community.

Building Uses, Shapes and Forms

Buildings in Arden Heights are primarily residential single-family houses, both attached and detached (see Figure 8-17, Photograph 28). Much of the housing was built in the form of large subdivisions, although other—apparently older—areas were developed individually, platted into small, equally sized parcels. Subdivisions tend to have one-way streets and cul-de-sacs with attached single-family homes or town houses (see Figure 8-17, Photograph 29). Some on-street parking is available, but most is collected into small lots dispersed around the development. In contrast, independently developed areas have deep, narrow plats with long narrow detached single family houses and a small front yard (see Figure 8-18, Photograph 30). Houses have garages facing the street, and there is on-street parking. Arden Heights also features three commercial development pockets along Arthur Kill Road. They consist primarily of one-story buildings that have large set-backs and are surrounded by parking lots.

As stated above, buildings along Richmond Avenue are primarily of the "big box" retail variety. Most structures are very large, one-story warehouses or commercial structures with large setbacks and limited lot coverage, located in the center of enormous parking lots (see Figure 8-18, Photograph 31). The east portion of the study area features high-rise residential development, but residential structures in this portion of the study area are generally a mixture of subdivisions and independent development of small single-family homes of both the attached and detached variety. Buildings in the residential mid-rise area near LaTourette are up to eight stories tall, with large setbacks and extensive landscaping and parking lots. New Springville, by contrast, consists almost entirely of detached single-family homes on long, narrow lots with small front yards and garages facing the road (see Figure 8-19, Photograph 32).

Travis is an older, lower-density neighborhood. There are single-family and two-family detached homes, yielding a much lower FAR. Lots are also more irregularly shaped, although blocks are somewhat regular. Homes vary significantly in their setback and relationship to the streets (see Figure 8-19, Photograph 33 and Figure 8-20, Photograph 34). Mature trees are common, and a small neighborhood park—Schmul Park—provides basketball courts, a baseball diamond, and playing fields. There is a finer-grained mixture of residential and commercial uses than other neighborhoods in the study area, especially on Victory Boulevard.

VISUAL RESOURCES

With the exception of the project site, the principal visual features of the study area are its large parks and other open spaces. No prominent historic resources have been documented in the

study area (see Chapter 7, "Historic Resources"). In contrast, the William T. Davis Wildlife Refuge—as mentioned above—is a stunning natural open space of meandering streams, lush wetlands, and dense woodland (see Figure 8-21, Photograph 35). Similarly, LaTourette Park (see Figure 8-21, Photograph 36) and Arden Heights Woods Park are impressive natural area preserves. Presently, the public has little opportunity to view such resources because circulation is restricted to the perimeter, blocked by buildings or landforms, or otherwise inaccessible. The Fresh Kills project site itself is largely not visible to the casual passerby, as it has been obstructed by a large berm along the lengths of Richmond Avenue and Arthur Kill Road (see Figure 8-22, Photograph 37).

D. THE FUTURE WITHOUT THE PROPOSED PROJECT: 2016 AND 2036

2016

PROJECT SITE

In the future without the proposed project, it is expected that the project site would remain a landfill going through completion of final closure construction through 2016. No other development is expected on the project site absent the closure of the landfill. A detailed description of that closure plan is presented in Chapter 1, "Project Description." As described in that chapter, it is expected that the remaining closure construction at Landfill Sections 6/7 and 1/9 will be completed by 2016.

Urban Design

Absent the proposed project, there would be no changes to urban design on the project site. As stated above, the project site would remain a landfill undergoing final closure construction.

Visual Resources

As stated above, absent the proposed project, the project site would remain a landfill going through completion of final closure construction; thus, there would be no changes to minimal resources on the project site. Visual images would change as closure construction activity is completed and final grading, seeding, and grass cover takes hold. Once the vegetative cover is established, views to the project site from the surrounding area would not be expected to change significantly in the future without the proposed project.

STUDY AREA

Urban Design

In the future without the proposed project, the study area is not expected to significantly change through 2016. Although there are a number of projects anticipated to be completed in the study area by 2016, these projects would not involve any alterations to block form, streetscape, street pattern or hierarchy, natural resources, or topography. A number of these projects, described in Chapter 2, "Land Use," are road improvement projects but would not alter alignments or configurations or create new streets. These projects would, however, improve road and traffic conditions in the study area as well as streetscapes. However, overall, they would not have impacts on the area's urban design features.

Fresh Kills Park GEIS

Visual Resources

Views from the project site from and to visual resources of the surrounding area would not be expected to change in the future without the proposed project. A stated above, none of the projects in the study area that are expected to be complete by 2016 will affect view corridors, vistas, or natural or built features.

2036

PROJECT SITE

Absent the proposed project, it is anticipated that the project site would remain a closed landfill through 2036. It is expected that all landfill closure structures and final cover will be in place by 2016. In the future without the proposed project, no other development or uses are expected on the project site through the 2036 analysis year. During this time, it is assumed that all landfill closure monitoring and maintenance obligations would continue to be performed by DSNY.

Urban Design

Beyond the changes anticipated by 2016 (e.g., completion of final cover), no changes to urban design on the project site are expected to take place by 2036 in the future without the proposed project. As noted above, in the future without the project, the project site would remain a closed landfill.

Visual Resources

As stated above, beyond the changes anticipated by 2016, no changes to visual resources are expected to take place by 2036 in the future without the proposed project. As noted above, in the future without the proposed project, the project site would remain a closed landfill. Views of and from the project site to visual resources within the surrounding area would therefore not be expected to change in the future without the proposed project.

STUDY AREA

Urban Design

There is only one known project in the study area that may be completed after 2016 and by the 2036 analysis year. If constructed, the West Shore Light Rail would begin at the north shore of Staten Island, and would extend north along the West Shore Expressway corridor and also utilizing the existing rail right-of-way in Staten Island's northwestern corner. The light rail would then cross the Bayonne Bridge to the north, linking with the Hudson-Bergen light rail line in Bayonne, New Jersey. This project would not significantly alter the urban design character of the study area, and would not involve any major alterations to block form, streetscape, street pattern or hierarchy, natural features, or topography.

Visual Resources

As noted above, there is only one known project in the study area that may be complete after 2016 and by the 2036 analysis year. This project, the West Shore Light Rail, would not result in any significant changes in the visual resources of the area. The light rail would most likely be visible from portions of the study area. However, it would not obstruct any views of otherwise impact any visual resources found within the study area.

E. THE FUTURE WITH THE PROPOSED PROJECT: 2016 AND 2036

2016

PROJECT SITE

Urban Design

The proposed park would be a significant improvement over the conditions in the future without the proposed project. Construction of the proposed park would incorporate an enormous isolated block of land into the urban fabric of Staten Island. A new vehicular entrance at Forest Hill Road would provide access to an approximately 5-mile park roadway network that would not only service park destinations but provide a new connection between Richmond Avenue and the West Shore Expressway. New ramps and service roads would provide new access points for northbound and southbound travelers.

In addition to primary park roadways and West Shore Expressway service roads, some new internal roads (not to become part of the city street grid) and parking areas would be created to support the new park uses. Existing DSNY maintenance roads would continue to serve on-going landfill maintenance work, but they would be reconstructed as necessary to also serve as multi-use pedestrian/bike paths.

The new park roadways would be an extension of Staten Island's irregular street pattern into the project site. The alignment of the proposed road would wind around the site constraints such as landfill infrastructure and extensive wetlands. A curvilinear alignment is, however, in keeping with park goals of providing an enjoyable driving experience and views. New park roadways would be accompanied by an attractive landscape buffer along much of their length, that would serve as a visual amenity. Portions of the road that are on-landfill may have more limited plantings because of the need to protect the final cover system, but in general, the road would be vegetated and visually appealing.

With the exception of West Shore Expressway service roads, park roads would not have curbs and sidewalks like standard city streets. There would also be about 20 miles of pedestrian and biking trails.

In addition to the park roadways, North Park, South Park and portions of Creek Landing are anticipated to be built by 2016. In 2016 with the proposed project, broad expanses of land currently used as the buffer area for Fresh Kills Landfill and inaccessible to the public, would be reconstructed as functioning wetlands and upland habitat areas. Some would be converted to passive and active recreational facilities such as picnic lawns and soccer fields. The proposed project would also involve substantial alterations to the naturalized waterfront of Fresh Kills and its tributaries, Main Creek and Richmond Creek. The proposed changes would involve regrading and planting to convert silted areas to functioning wetlands, and the construction of piers and boat launches to enable public access.

Buildings, industrial uses, and parking lots on the waterfront would be replaced with major new waterfront amenities. As part of Creek Landing, the area south of Landfill Section 3/4 would be converted from an underutilized, industrial waterfront into a landscaped waterfront that is publicly accessible. Specifically, most of DSNY's Plant 2, currently a collection of construction trailers and parking lots, would be converted into a new open space that would feature restaurants, sports fields, lawns, boating facilities and cultural attractions. One or two buildings

in good repair would be adaptively-reused as a visitor center or other cultural attractions. The paved and bulkheaded waterfront would be rebuilt as a marina, overlook area, and event space, with a multi-purpose market roof, parking and new landscaping. The proposed plan also includes an esplanade, boardwalks, enhanced marshland, fishing pier and boat launch. Overall, the proposed project would introduce active uses along the waterfront and greatly enliven the water's edge, which is now underutilized and inaccessible. It would also create a more ecologically healthy littoral system.

In order to take advantage of flat land and to prevent further impact to the natural resources of the site, new buildings would be sited in areas that are currently paved. Existing developed sites are primarily located at the center of the site and new buildings would therefore be largely not invisible from outside the site, except from the West Shore Expressway. They would be visible from within the park site, however, and are therefore intended to be attractive park structures. The buildings foreseen in the master plan are low structures—from one to two stories—attractive and in keeping with adjacent neighborhoods. They would replace unsightly trailers and manufacturing-type structures in landfill construction staging areas such as Plant 2. Some existing landfill-related buildings would remain, such as the flare stations on Landfill Sections 3/4 and 2/8. These would be screened by vegetation or fences or other creative measures. The majority of existing industrial buildings, however, would be demolished. New park-related buildings would dramatically improve the appearance of built areas in the future park.

Although the park proposes to introduce new roadways and buildings to the site, a typical block form and street pattern would not be the result, for the reasons described above. The large site would remain criss-crossed with irregular, curvilinear roadways, and buildings clustered on already-developed land at the waterfronts.

The lighting of the park areas, while not currently designed, is expected to be consistent with the lighting of other large-scale parks within the city, with both low-scale light fixtures providing ambient illumination and larger-scale fixtures along roads and surrounding playing fields and recreational facilities. Lighting would be restricted to programmed areas and paths; the majority of the site—intended for habitat with people and habitat without people—would not be lit. Lighting, therefore, would not be expected to have any significant adverse impacts on neighboring areas.

Upland enhancement would include a new vegetation cover, which would significantly diversify and improve the aesthetics of the landfill cover. The upland areas would also be altered with new landforms for recreational and ecological purposes. The existing above-ground infrastructure system—composed of elements such as groundwater and landfill gas monitoring wells—must remain as part of ongoing landfill operations, but would be retrofitted to be flush with the ground otherwise less visible. In general, topographic and natural features on-site would be enhanced through re-grading and re-vegetation, and would be made available to the public for the first time by providing public access.

Overall, there would be no significant adverse impacts with respect to the urban design of the project site, which the proposed project would provide a dramatic improvement in the visual conditions of the site when compared to the future without the project.

Visual Resources

The Fresh Kills site, given its large size and unique topography, as is an immense visual feature for Staten Island. Its vastness, winding creeks, and wetlands, along with the large, engineered mounds, together create an unusual landscape. Enhancement of these degraded wetland and

upland areas would improve not only the environmental conditions at the site, but also its visual quality. More important from the public's perspective, the construction of the proposed project would provide physical and visual access to these areas for the first time, enabling appreciation of stunning panoramic views in all directions.

With the proposed project it is expected that there would be an overall visual improvement at the site. There would be the introduction of flowering wetland vegetation, flowering meadow vegetation, and diverse forms of woodland. Under the proposed project, large areas currently dominated by invasive common reed would be cleared to create the proposed wetlands of more natural composition of wetlands—with open water, emergent, and edge plantings, with a greater diversity of wetland species and a planted transition zone between the open water and the edge. The wetland would contain a natural mix of herbaceous emergents, grasses and shrubs to promote landscape complexity.

Large upland areas of the landfill sections currently dominated by a monoculture of grasses would be replaced with a diversity of grass species, including flowering grasses. Currently the site is devoid of woodland except for isolated patches of trees; the proposed park would plant thousands of trees and create valuable woodland landscape on site for the first time. The vegetative communities of the site would be a more complex set of communities than currently exists. A greater diversity of vegetation would provide habitat for more birds and other animals, and thus be more visually appealing.

While tree and wetland clearing and regrading is required, it is expected that the visual landscape of the site would be enhanced through the planting program and the introduction of more diverse and flowering plants. The most affected period for visual resources would be during the initial stages of growth when the site is cleared and as planted species begin to take root. It is expected that it would require two to three growing seasons for the proposed wetland and grassland vegetation to become established and blend naturally with its surroundings. It is expected that new tree plantings would become visually appealing within one to three growing seasons, although the slower growth of woody species would necessitate 10 years or more for the appearance of a developed woodland with true visual appeal.

The ecological enhancement that would occur on site would drastically enhance both the environmental and aesthetic qualities of Fresh Kills. The creation of attractive open spaces would soften the visual intrusion of the landfill sections on the adjacent neighborhoods, and provide a new aesthetic for the site.

The proposed project would also be expected to create new views to the surrounding community from the site. Views from the top of mounds would be made accessible to the public for the first time, and would be enhanced with restored wetlands and woodlands. Views along existing and new roads would be designed such that driving through the park becomes a unique visual experience, with views of dramatic topography and landscapes. Iconic views to the William T. Davis Wildlife Refuge, the Green Belt, and Arden Heights Woods would also be emphasized.

Overall, there would be no significant adverse impacts to the urban design of the project site, as proposed uses would represent a significant improvement when compared to the future condition without the development of the park.

One of the potential near-term elements of the park is the use of wind turbines. Up to six wind turbines may be sited on higher elevations of the landfill sections in North, East, and South Parks. The proposed wind turbine poles would be cylindrical in shape and measure about 15 feet in diameter and 230-300 feet in height. The blades would be about 230 to 320 feet in diameter.

Thus, the maximum total height of the structure would be about 460 feet. The poles, rotors and blades would be finished in a non-reflective white or gray.

Based upon the assumptions made for this GEIS, the color and finish of the turbines could minimize their visibility, but it is expected that the wind turbines would be visible from most locations in the park. The turbines would add a dramatic built element to existing daytime views of the park, however the perceived size and prominence of the turbines would be a function of the viewer's location. Visual quality is typically an important feature for park visitors, but it is not clear whether the turbines would be considered aesthetically pleasing or displeasing. It is likely that, to some visitors, the turbines would exemplify the environmental ethics behind Fresh Kills Park and be an attraction to park visitors, much like a sculpture or other art installation. It is also possible that the turbines would be perceived as a visual intrusion upon the natural landscape. As described in Chapter 1, "Project Description," it is expected that any wind turbines proposed for the site would be operated as a concession and would be subject to a separate environmental review.

STUDY AREA

Urban Design

Off-site and within the study area, the proposed project would not involve any changes to block form; street pattern or hierarchy; building arrangement, bulk, use, or type; topography; natural resources; or streetscape elements. The only effect on the urban fabric of the area outside the park is alterations to existing intersections at the periphery of the site. The new park roadways proposed by 2016 would add a western leg to the Richmond Avenue/Forest Hill Road intersection. In addition, this intersection would experience an expansion in the number of lanes on existing legs, in order to accommodate new turning movements and increased anticipated volumes. These expansions would occur within the existing curb lines. Two new park entrances and parking areas off of Arthur Kill Road would convert two existing private intersections into public intersections, and necessitate the retrofit of existing curb cuts or new curb cuts. Two new parking areas off of Wild Avenue would necessitate new curb cuts and other small alterations—such as stop signs—necessary for safe ingress and egress.

As described above, the uses proposed for the project site would be compatible with existing uses in the study area; the park amenities would improve the quality of life of nearby residents by providing new recreational facilities and improved connectivity between Richmond Avenue and the West Shore Expressway. By 2016, the proposed park would lessen the barrier Fresh Kills Landfill has imposed upon southwestern Staten Island for over 50 years, replacing it with attractive recreational, cultural and ecological amenities and incorporating this large public land into Staten Island's urban fabric. The proposed project would also introduce active uses in a currently inaccessible parcel of land, enlivening the entire study area.

Visual Resources

From the study area, views into the project site would change from a mostly industrial view of large landfill construction staging grounds, landfill-processing facilities, utilitarian structures, and parking fields to a view of landscaped open spaces interspersed with attractive park structures—recreational, cultural, and commercial—as well as enhanced waterfront and wetlands. This positive change in views would be most notable from the West Shore Expressway, where the public is currently able to view the site. Views of the project site from other locations in the study area are currently blocked by large vegetated berms—such as along

Richmond Avenue and Arthur Kill Road—built to screen the landfill from adjacent neighborhoods. These visual barriers would remain—however new pedestrian and vehicular access points would make them porous and permit views from the top of the berms. Overall, the proposed project would not have any significant adverse impacts on visual resources or significant views; however, it would represent a significant improvement in the visual character of the project site.

Assuming placement on higher elevations of the landfill sections, and in the higher elevations of North and South Parks, the wind turbines assumed in this GEIS would be visible from numerous locations in the study area, notably Richmond Avenue and the West Shore Expressway. The turbines would be less noticeable from surrounding neighborhoods such as Arden Heights or Travis because of existing topographic features, buildings and vegetation, although the top of the turbines (the rotors) would likely be visible. It is assumed that local residents, who are familiar with the landscape, would be sensitive to these changes in the viewshed. The wind turbines—which would be unique in New York City—could be perceived as an aesthetic resource for the community and a positive identifying feature of the borough.

Commuters and through travelers are typically moving, have a relatively narrow field of view, and are destination oriented. Drivers would generally be focused on the road and traffic conditions, but do have the opportunity to observe roadside scenery, and the turbines would be a potential source of distraction, possibly leading to increased likelihood of accidents. As described in Chapter 1, "Project Description," any wind turbine proposed for the project site is assumed to be a privately operated concession that would be subject to a separate environmental review.

2036

PROJECT SITE

Urban Design

The second phase of the proposed project—to be built by 2036—would see the construction of the park road connection to Richmond Hill Road that would parallel Richmond Avenue on the west side of the berm and cross over East Mound at the approximate position of Yukon Avenue, joining the remainder of the park roadway system and providing a second connector between eastern Staten Island and the West Shore Expressway. As mentioned above, the park roadway would have a curvilinear alignment and would not have typical City Street features, recognizing the landfill and wetland constraints. It would also offer other amenities such as a wide landscape corridor and access to an extensive pedestrian/bike path system.

By 2036 the Signature Bridge would be constructed, completing the circular configuration of the Confluence Loop Park Road. The Signature Bridge would facilitate intra-park circulation as well as access to and from the West Shore Expressway.

Park areas anticipated to be constructed between 2016 and 2036 include East Park, West Park, The Point, and the remainder of Creek Landing.

East Park and West Park are intended to be passive in character and would not entail urban development in terms of the creation of city streets or blocks. The existing landfill section 6/7 flare station would remain, but would be screened with a fence or vegetation. A major feature of the West Park design is the September 11 monument, including a possible earthwork design at the location of the recovery activities.

The 50-acre Point is a large waterfront area that would provide sports fields, event spaces, lawns, art works, and other cultural and commercial facilities such as restaurants and market roofs. The Point would be the largest concentration of destination-oriented programs in Fresh Kills Park. It would be accessible to and visible from the West Shore Expressway and the future Signature Bridge, thus serving as a major gateway for Fresh Kills Park.

Structures with larger footprints and ample parking would be provided here. The Point is also the proposed location for the main park administrative center, a structure intended to house park functions as well as a community center to foster the public's participation in the stewardship and development of the park. The Point's active recreation programs and multi-use sports facilities and fields would have the ability to host athletic events and be an active area in daytime and evening.

As stated above, new park buildings would replace most existing landfill-related buildings in the Plant 1 area. They would be one to two stories tall, built in accordance with the approved 2005 Design Guidelines, and aesthetically distinctive. The DSNY landfill gas and purification system, DSNY Staten Island District 3 Garage and Borough Repair Shop, the DSNY leachate treatment plant in the vicinity of West Park would remain due to ongoing landfill operations, but they would be screened by vegetation or fences or other creative measures, and would not be obtrusive. The majority of existing industrial buildings, however, would be demolished. New park-related buildings would dramatically improve the appearance of built areas in the future park.

Visual Resources

As stated above, the Fresh Kills site as it exists today is an immense visual resource for Staten Island. Between 2016 and 2036, there would be the continued creation of environmental-visual resources in the form of more flowering wetland vegetation, flowering meadow vegetation, and woodland. The portions of the project built from 2017 to 2036 would be expected to increase the diversity of visual amenities, however: Whereas the portions of the park built by 2016 would be predominately passive, increasing the acreage of beautiful natural areas, the portions of the park built after 2016 would include more intensely programmed development, such as The Point and the remainder of Creek Landing. The Signature Bridge would also provide a dramatic and unique visual resource—both from a distance and for travelers using the internal Loop Park Road and crossing the bridge. Although the Signature Bridge would block some currently available views to the Arthur Kill from the West Shore Expressway, the overall impacts of the proposed park with respect to views to the water and wetland visual resources is positive in terms of opening up new public views.

2036 would also see the opening of Landfill Sections 6/7 and 1/9, from which a large number of new viewsheds would be provided. East and west mounds are the two tallest mounds on site, and would provide some the best vistas. A major feature of the West Park design is the September 11 monument, including a possible earthwork design at the location of the recovery activities. From here, park visitors would have a panoramic view of New York City, New York Harbor, and New Jersey. From East Mound, visitors would be at a particular advantage to see the stunningly beautiful confluence of Main and Richmond Creeks, with the Isle of Meadows and Arthur Kill in the distance.

STUDY AREA

Urban Design

By 2036, for the off-site study area, the proposed project would involve very few changes to block form; street pattern or hierarchy; building arrangement, bulk, use, or type; topography; natural resources; or streetscape elements within the study area surrounding the project site. The extension of the Park Road to connect with Richmond Hill Road would add a new western leg to the existing intersection at Richmond Avenue and Richmond Hill Road, as well as require alterations to existing legs including the addition of new lanes. Overflow parking may be built alongside Richmond Avenue and Arthur Kill Road, but the street network would remain unaltered in other ways. As described above, the uses proposed for the project site would be compatible with existing uses in the study area; the park amenities would improve the quality of life of nearby residents by providing new recreational facilities and improved connectivity between Richmond Avenue and the West Shore Expressway.

Visual Resources

From the study area, views into the project site would change from a mostly industrial view of large landfill construction staging grounds, landfill-processing facilities, utilitarian structures, and parking fields to a view of landscaped open spaces interspersed with attractive park structures—recreational, cultural, and commercial—as well as enhanced waterfront and wetlands. The change in views would be most notable from the West Shore Expressway, where the public is currently able to view the site. Views of the project site from other locations in the study area are currently blocked by large vegetated berms—such as along Richmond Avenue and Arthur Kill Road—built to screen the landfill from adjacent neighborhoods. These visual barriers would remain—however new pedestrian and vehicular access points would make them publicly accessible and allow views from the top of the berms. Overall, the proposed project would not have any significant adverse impacts to visual resources or significant views, but would represent a dramatic improvement in the visual character of the project site.

CONCLUSIONS

PROJECT SITE

The proposed park would provide a dramatic improvement in the urban design of the project site, creating new upland and wetland habitats, recreational waterfront activities, passive and active athletic facilities and dining and entertainment amenities. Lands along the creeks would be converted from an underutilized waterfront into new or enhanced landscapes supported by regional recreational and entertainment facilities. Expansive views within the project site of attractive and enhanced ecological landscapes would also be created.

The proposed project would require changes to some building types and forms as well as their arrangement and use on the project site. Although many existing buildings associated with landfill operations would be retained (off-site), such as the leachate treatment plant, the number of on-site structures related to the landfill would be reduced and the context of the area would be greatly altered by the addition of park-related structures, enhanced landscape, and recreational spaces. The buildings to be constructed would be permanent and aesthetically pleasing in contrast with today's utilitarian and industrial structures, and would be primarily sited on Main Creek and Fresh Kills. These structures would house recreational, educational and entertainment

uses, and would greatly expand public access on the site and recreational opportunities available on Staten Island.

The proposed park would also create a public streetscape across the site where currently none exists. Existing DSNY roads, which are currently off-limits to the public, would be redeveloped for public use as paths. The proposed park roads would include a landscape ribbon, lighting, and other pedestrian and public amenities. New paths and trails built in conjunction with the park road system would create cycling and running opportunities and a street life in this area would evolve during both daytime and evening hours.

Of additional significance is the ecological enhancement that would occur on site, drastically enhancing not just the environmental but the aesthetic qualities of Fresh Kills. The creation of attractive open spaces would soften the visual intrusion of the landfill's massive infrastructure on the adjacent neighborhoods; new, highly productive ecosystems would enhance the environmental functionality of the site and aesthetics. Overall, no significant adverse impacts would occur on the project site, as proposed uses would provide a dramatic improvement compared to the future condition without the development of the park.

Lastly, the proposed project would be expected to enhance views from the surrounding community to the site and views from the site of the region. Views from the top of landfill sections, or mounds, would be made accessible to the public for the first time. Views along existing and new roads would be designed such that driving through the park is a unique visual experience, with views of dramatic topography and landscapes. Iconic views to the William T. Davis Wildlife Refuge, Blazing Star Historic Shipyard, the Staten Island Greenbelt, and Arden Heights Woods would also be emphasized.

STUDY AREA

The uses proposed for the project site would be compatible with and complementary to existing uses in the study area, increasing recreational opportunities for Staten Islanders and New York metro region residents, enlarging valuable natural areas such as the Staten Island Greenbelt, and enhancing the visual quality of the neighborhood. The proposed roads would serve to provide connectivity with this area of Staten Island.

Views from the surrounding neighborhood are expected to be greatly enhanced as the proposed project would attract positive attention and serve as a visual amenity. At final build-out, views from surrounding roads such as Richmond Avenue and Arthur Kill Road would allow casual passersby to become active spectators, eyewitnesses to the dramatic transformation of landfill to lifescape. Views from the entire park perimeter—of both land and water—would be greatly improved with the project. For the study area as a whole, the proposed project would not have any significant adverse impacts on visual resources, as the project would represent a dramatic improvement in the visual character of the project site.



DSNY access roads traverse the site in response to mound shape



Utilitarian street layout

2

Urban Design - Project Site Natural Features/ Block Shapes/ Street Patterns/ Streetscape



Paved road



Unpaved truck route (view south from 1/9)

Urban Design - Project Site Natural Features/ Block Shapes/ Street Patterns/ Streetscape



Entrance check point at Muldoon Avenue



Landscape features predominant over conventionally urban design elements

Urban Design - Project Site Natural Features/ Block Shapes/ Street Patterns/ Streetscape

FRESH KILLS PARK • GEIS



DSNY operations-related buildings on site



Building "clusters"

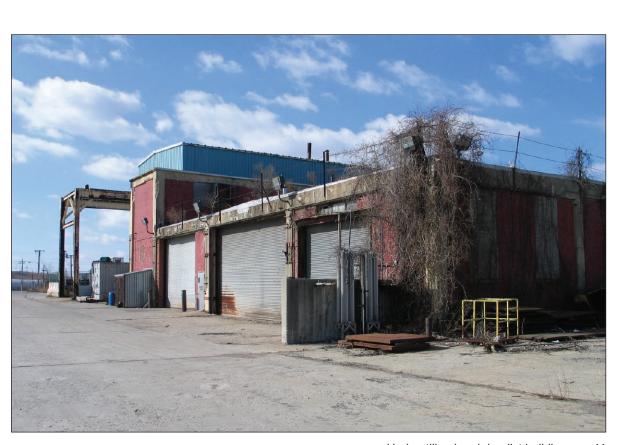
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Flare Station, North Mound



Former central area multi-use paved surfaces



Underutilized and derelict buildings

Urban Design - Project Site Building Uses, Shapes, and Forms



Above-ground infrastructure networks have a visual presence on site



Bulkheads at Fresh Kills

Urban Design - Project Site Building Uses, Shapes, and Forms

Figure 8-7



View northeast of William T. Davis Wildlife Refuge and the Manhattan skyline beyond



View southwest from West Mound

15

Visual Resources - Project Site



View north from East Mound



Arden Heights (lower left) residential areas are generally a rectilinear grid



Street grid in Arden Heights

Urban Design - Study Area Natural Features, Street Patterns, Block Shapes



Cul de sac in Arden Heights



Commercial strip along Richmond Avenue

Urban Design - Study Area Natural Features, Street Patterns, Block Shapes

Figure 8-11



Yukon Avenue, through the Staten Island Mall shopping strip



The regularized residential streets and blocks north of Staten Island Mall, in New Springville

Urban Design - Study Area Natural Features, Street Patterns, Block Shapes

FRESH KILLS PARK • GEIS



Travis neighborhood in middleground



Arthur Kill Road at Aspen Knolls Way



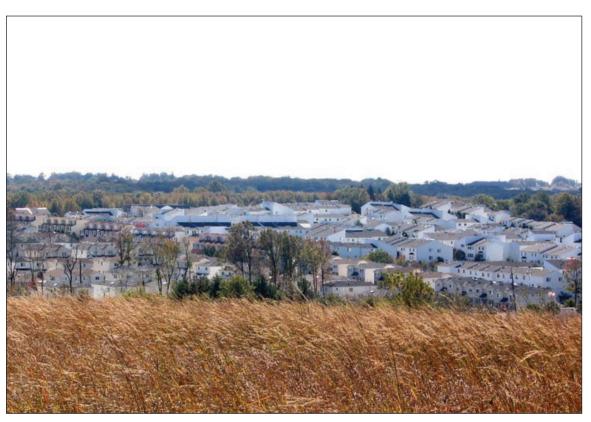
Older Arden Heights developments provide some pedestrian amenities



Richmond Avenue is a hostile pedestrian environment



Independence Avenue, through the Staten Island Mall shopping strip



Arden Heights subdivisions as seen from Fresh Kills landfill





Condominiums in Arden Heights

29

Urban Design - Study Area Building Uses, Shapes, and Forms



Detached, single-family homes in Arden Heights





Big box retail on Richmond Avenue (right) and adjacent middle-rise condominiums

31

Urban Design - Study Area Building Uses, Shapes, and Forms



Single-family home in New Springville





Single-family home in Travis

33

Urban Design - Study Area Building Uses, Shapes, and Forms



Victory Boulevard in Travis



William T. Davis Wildlife Refuge



La Tourette Park, south of Staten Island Mall

36



Planted berm along Richmond Avenue