

CHAPTER 14: ENVIRONMENTAL SCREENING ANALYSES FOR ALL ALTERNATIVES

14.1 INTRODUCTION

As described in the April 8, 2005 Environmental Assessment Statement (EAS), construction of Shaft 33B and the associated water main connection is not anticipated to result in potential significant adverse impacts in certain impact categories. Therefore, these impact categories are not subject to detailed analyses in the EIS. These impact categories include:

- Shadows
- Natural Resources
- Solid Waste and Sanitation

The rationale for concluding that there is no potential for significant impact for these impact categories is described in greater detail in the following sections.

14.2 SHADOWS

The CEQR criteria for a shadows assessment state that actions that result in new shadows long enough to reach a publicly accessible open space (except within an hour and a half of sunrise and sunset), a historic landscape, a historic resource with sunlight dependent features, or an important natural feature would require analysis. The *CEQR Technical Manual* states that for actions less than 50 feet tall, no assessment of shadows is generally necessary unless the site is adjacent to a park, historic resource with sunlight dependent features, or important natural feature. The proposed project—construction of a shaft site and associated water main—would result in only minor above ground structures upon completion of construction; therefore, no analysis of the potential for these structures to result in adverse shadows impacts is warranted. During construction, it is anticipated that a 20-foot-tall construction barrier would be located on the shaft site perimeter. This barrier is below the 50-foot threshold discussed above. However, a screening analysis was conducted to determine if the construction barrier would result in significant adverse shadows impacts.

There are no open spaces adjacent to either the E. 54th Street/Second Avenue Shaft Site or the E. 61st Street Shaft Site. Therefore, there is no potential for construction-period adverse shadows impacts from use of a construction barrier at these sites. At the E. 59th Street/Second Avenue Shaft Site, the nearest open space, a landscaped area at an apartment building on the south side of E. 59th Street, is directly south of the potential Shaft Site. Since shadows cannot be cast south, no new shadow would fall on this space. The other open spaces nearby, Tramway Plaza and the multi-use area, are located farther than the potential shadow might reach from the construction barrier. Therefore, there is no potential for construction-period adverse shadows impacts from use of a construction barrier at this site.

The construction barrier at the preferred Shaft Site would be located in close proximity to a space shared jointly by the New York City Department of Transportation (NYCDOT) and as a public space. This area is a multi-use area that is under the jurisdiction of NYCDOT, which uses it for Bridge access and parking, but also is generally used for strolling and dog walking by members of the public. It is sometimes referred to as “14 Honey Locusts Park” (as reflected in a sign located on-site that indicates this name) or “Gateway Plaza.” This area is not mapped parkland. While the construction barrier would result in some shadow increment on the multi-use area, no significant adverse shadow impacts are anticipated. The shadow increment would not cover the entire multi-use area and would be off the area by approximately midday; this limited coverage would not affect the usability of the area. The *CEQR Technical Manual* considers the sensitivity of open space to shadow. Facilities such as children’s playgrounds and sprinklers, swimming pools, sitting or sunning areas, and play areas are considered sensitive to shadow. Open spaces considered not sensitive to shadow include those that are paved, contain no sitting areas, and either contain no vegetation or plant species that are shade-tolerant. The multi-use area is predominantly paved and contains no sitting areas. While the multi-use area does contain several trees, the shadow increment would be of limited coverage and would not remain on the multi-use area for the day. Therefore, no significant adverse shadows impacts are anticipated, and no further analysis is warranted.

14.3 NATURAL RESOURCES

A natural resources assessment is conducted when a natural resource is present on or near the project site and when an action involves the disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetland resources, including freshwater and tidal wetlands; upland resources, including beaches, dunes, and bluffs, thickets, grasslands, meadows and old fields, woodlands and forests, and gardens and other ornamental landscaping; and certain built resources, including piers and other waterfront structures. The potential Shaft Sites and potential water main routes are located in a fully developed area in Manhattan. There are no significant natural resources on the Shaft Sites or along the water main routes and it is not anticipated that the proposed project would result in any significant adverse impacts on natural resources.

Two trees would be removed to facilitate construction if the shaft were to be located at the preferred Shaft Site, and 11 trees would be removed at the E. 54th Street/Second Avenue Shaft Site if that site were selected. A varying number of trees could need to be removed for water main construction (depending on the water main route selected, if a sidewalk alignment were selected, and the extent of measures implemented to maintain traffic flow—see Section 5.6). However, no potential significant adverse impacts on natural resources are anticipated. After construction, the multi-use area would be restored in accordance with the NYCDOT and the community as applicable.

Where possible along the water main routes, the New York City Department of Design and Construction (NYCDDC) would replace any removed street trees in accordance with the

requirements of the New York City Department of Parks and Recreation (NYCDPR), which administers the street tree program in New York City. The replacement trees would in most cases be smaller than the trees that were lost. NYCDPR street tree replacement policy typically requires that areas affected by such construction be revegetated with additional street greenery to compensate for the loss of established plantings in the neighborhood. Where opportunities exist, NYCDPR policy most often results in the provision of street tree plantings several times more numerous than those removed to facilitate construction. Depending on the placement of the mains within the streetbed, however, NYCDDC may not be able to replace all street trees in the areas where the water main would be located very close to the sidewalk because sufficient clearance between the tree roots and the water mains must be maintained. In this case replacement trees may be provided in the neighborhood area, rather than in existing tree locations. In any event, NYCDDC, working with NYCDPR, would endeavor to provide more trees than the ones that were removed. The provision of additional trees would maintain the greenery of the Study Area, although the visual character of certain block segments would be altered.

The loss of street trees overall would not result in a potential significant adverse impact to natural resources, as the project would not:

- Directly or indirectly be likely to adversely affect a significant, sensitive or designated resource;
- Likely diminish habitat for a resident or migratory endangered, threatened, or rare animal species or species of special concern;
- Likely result in the loss of plant species that are endangered, threatened, rare, or vulnerable;
- Likely result in the loss of part of all of a resource that is important because it is large, unusual, or the only one remaining in the area where the action is to take place;
- Directly or indirectly be likely to cause a noticeable decrease in a resource's ability to serve one or more of the following functions: wildlife habitat, food chain support, physical protection (flood protection, e.g.); water supply; pollution removal; recreational use; aesthetic or scenic enhancement; commercial productivity; or microclimate support; or
- Directly or indirectly be likely to contribute to a cumulative loss of habitat or function which diminishes that resource's ability to perform its primary functions.

Because street trees are an important part of the urban fabric, an assessment of the potential for tree removal to affect urban design and streetscape is provided in the "Urban Design and Visual Resources" Sections of the EIS.

No permanent impacts to water resources are expected to occur as a result of the proposed project. Therefore, no further analysis is warranted.

14.4 SOLID WASTE AND SANITATION

According to CEQR criteria, a detailed solid waste and sanitation services assessment is appropriate if an action enacts regulatory changes affecting the generation or management of the City's waste or if the action involves the construction, operation, or closing of any type of solid waste management facility. Because the project would be unmanned, no generation of solid waste would occur during operation of the shaft. Construction of Shaft 33B will require removal of 2,700 cubic yards of soil from the site. Construction of the water main connections would require removal of 20,500 cubic yards of material from the street. Solid waste generated during construction would be disposed of in a manner consistent with New York City regulations and at a permitted solid waste management facility. As a result, no impact to solid waste management or sanitation services would be expected to occur.

