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Minor Modification to the Final Environmental Impact Statement of the South Richmond Watershed Drainage Plans CEQR No. 01DEP004R

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This minor modification to the Final Environmental Impact Statement (FEIS) for the South Richmond Watershed Drainage Plans has been completed in compliance with the requirements of the *New York City Environmental Quality Review (CEQR)* process as set forth in Executive Order 91 of 1977 and its amendments and Article 8 of the Environmental Conservation Law establishing the *State Environmental Quality Review Act (SEQRA)* as set forth in 6NYCRR Part 617. As lead agency, the New York City Department of Environmental Protection (DEP) has determined that the proposed additional actions described below would not have potential significant adverse impacts on the environment and thus constitutes a minor modification to the proposed project.

On March 22, 2001, a Draft Scope of Work (DSOW) was prepared and circulated to all involved and interested parties. On May 10, 2001 a public meeting was held on the DSOW and the public comment period remained open until May 29, 2001 to receive written comments. Substantive comments received on the proposed methodologies were incorporated into the Final Scope of Work (FSOW) which was issued on June 29, 2001. The Draft Environmental Impact Statement (DEIS) for the South Richmond Watershed Drainage Plans was published for public review on October 9, 2002. As part of the public review process, a public hearing was held on October 24, 2002 to receive oral and written comments on the DEIS. The written comment period remained open after the close of the public hearing until January 10, 2003. A Final Environmental Impact Statement (FEIS) was published on July 14, 2003. The FEIS was prepared to address the range of potential environmental impacts as defined by the Scope of Work and comments that were raised during the public comment period.

PROJECT DESCRIPTION

DEP is proposing a minor modification to the South Richmond Watershed Drainage Plans. The proposed modification would relocate the proposed extended wetland detention best management practice (BMP) B-2 to Mount Loretto Pond from Cunningham Pond within the Mount Loretto Preserve (see Figure 1). The purpose of the proposed modification is to eliminate disturbance to Cunningham Pond, an AR-15 Class 1 designated waterbody, at the request of the New York State Department of Environmental Conservation (NYSDEC).

In 2003, the South Richmond Watershed Drainage Plans FEIS, CEQR No. 01DEP004R, was prepared by DEP acting as lead agency, pursuant to the *CEQR* process. The FEIS analyzed the proposed BMP at Cunningham Pond as well as a comprehensive drainage plan for the collection, conveyance and management of stormwater and the collection, conveyance and treatment of wastewater for the following 10 watersheds:

- Mill Creek;
- Butler Manor;
- Conference House Park;
- Jack's Pond;
- Wood Duck Pond;
- Arden Heights Woods;
- South Shore Golf Course;
- Village Greens;
- Rossville; and
- Clay Pit Ponds/Port Mobil.

Each drainage plan incorporates principles and practices from DEP's Staten Island Bluebelt Program. The Bluebelt Program was initiated in the late 1980s as a multi-purpose program to protect and preserve streams, ponds, and other wetlands areas—allowing them to perform their natural functions of conveying, storing and filtering stormwater—while also improving local stormwater management in Staten Island's watersheds. The drainage plans also include a system of sanitary wastewater collection lines and a stormwater management system to collect, manage and treat stormwater prior to discharge into local waterways through BMPs. BMPs, such as created wetlands, outlet stilling basins, pocket wetlands, sand filters and extended detention basins, lessen the impacts of urban stormwater discharges into natural areas and are more cost-effective than conventional piped storm sewers.

PROPOSED MINOR MODIFICATION

Under the proposed modification, proposed BMP B-2 would manage runoff from the same drainage area and would provide extended detention as stated in the 2003 FEIS. However, the outlet would be relocated about 200 feet to the east and would discharge to Mount Loretto Pond, instead of Cunningham Pond, as originally proposed. Mount Loretto Pond is upstream of Cunningham Pond and east of Cunningham Road. The western boundary extends along a main access road into Mount Loretto Preserve (see Figure 1). Under existing conditions, Mount Loretto Pond is bordered by herbaceous cover and shrubs and is subject to periodic inundation and fluctuations in water volume during storms and seasonal low flows.

Under the proposed modification, a four to five foot deep forebay would be constructed at the point of controlled stormwater discharge from Hylan Boulevard into BMP B-2, thereby providing velocity attenuation and sediment capture. The area affected by the forebay would consist of successional woodland along Hylan Boulevard. A landscaped drainage channel, connecting the forebay to Mount Loretto Pond, would be constructed below the forebay and the pond would provide extended detention. Under the modification, Mount Loretto Pond would remain largely unchanged (see Hydrology analysis below for additional information).

Additionally, a weir with a micropool at the outlet of Mount Loretto Pond would be constructed under Cunningham Road, along the west edge of the pond. The outfall and BMP structures would be at or below the existing grade to ensure physical and visual integration with existing natural open space. The weir would set the surface water elevation and would control outflow from the pond, to be conveyed downstream (west) to Cunningham Pond. With the modification, Cunningham Road would be reconstructed to allow for 1.5 feet of clearance between the peak water surface elevation and the top of the culvert under the roadway, thereby protecting the roadway from flooding. Per NYSDEC, DEP would restore wetland around Cunningham Road and the affected areas of Mount Loretto Pond, as needed. Maintenance access through Cunningham Road would be provided for the proposed weir and access through Hylan Boulevard would be provided for the proposed forebay.

As stated in the 2003 FEIS, required permits for this proposed BMP include a United States Army Corps of Engineers (USACE) wetland permit and a NYSDEC watershed level permit. Upon permit approval, construction duration for the proposed modification would be a maximum of four months. Construction of the proposed modification is anticipated to begin in FY2012. The proposed modification and related schedule is necessary to allow for the construction of the proposed storm sewers in Hylan Avenue and tributary streets and to provide an outlet for this 130-acre area.

POTENTIAL IMPACTS FROM PROPOSED MODIFICATION

This section summarizes the proposed modification and evaluates potential impacts that could result from the proposed modification in the design and construction plans for BMP B-2.

For several of the *CEQR* technical analyses, the proposed modification would not substantially change the analyses described in the 2003 FEIS. Thus, they are not discussed in this Minor Modification. These technical analyses include the following:

- Landuse, Zoning and Public Policy;
- Socioeconomic Conditions;
- Open Space;
- Community Facilities and Services;
- Shadows;
- Historic and Cultural Resources;
- Urban Design and Visual Resources;
- Hazardous Materials;
- Water and Sewer Infrastructure;
- Solid Waste and Sanitation Services;
- Energy;
- Transportation;
- Air Quality;
- Greenhouse Gas Emissions;
- Noise;

- Public Health; and
- Neighborhood Character.

For the technical analyses related to Natural Resources and Construction, the proposed modification during design and construction activities have the potential to result in changes to the impacts disclosed in the 2003 FEIS, and are therefore discussed in this Minor Modification.

NATURAL RESOURCES

Introduction

Under the proposed modification, BMP B-2 would manage runoff from the same drainage area and would provide extended detention as stated in the 2003 FEIS. However, the outlet would be relocated about 200 feet to the east and would discharge to Mount Loretto Pond, instead of Cunningham Pond, as originally proposed. Mount Loretto Pond is upstream of Cunningham Pond and east of Cunningham Road. Implementation of the proposed modification would require land disturbance within the Mount Loretto Preserve, similar to what was assessed and disclosed in 2003. The potential direct or indirect impacts to vegetation or wildlife habitats and individuals, and potential changes in hydrology or water quality from the proposed stormwater inputs to Mount Loretto Pond are discussed below.

A literature review and field investigations were conducted to document the current natural resource conditions at the proposed modified BMP site and area within 400 feet of the site. The field survey was conducted on September 20, 2011 and focused on the Mount Loretto Preserve in the vicinity of Mount Loretto Pond. The investigation was used to identify dominant wetland and terrestrial ecological communities and individual wildlife and vegetation species. The literature review includes the following:

- Information obtained from governmental and nongovernmental sources, including the New York Natural Heritage Program (NYNHP) Environmental Resource Mapper; U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI); list of federally threatened, endangered, candidate, and proposed species for Richmond County; New York State Breeding Bird Atlas (2000-2005); NYSDEC Herp Atlas Project; and National Audubon Society 2010 Christmas Bird Count.
- Information contained within the South Richmond Watershed Drainage Plans FEIS (DEP 2003).
- Information from the 1987 wetland designation report (AR-15 Tottenville Wetlands).
- Information from peer-reviewed literature pertaining to the area's natural resources.

Existing Conditions

Land Cover and Wetlands

Mount Loretto Pond is a three-acre, freshwater pond located along the northern portion of the Mount Loretto preserve and is part of an extensive freshwater wetland mapped by NYSDEC as

AR-15, or Tottenville Wetlands. This large system includes Camden and Calcutta Ponds north of Hylan Boulevard, and multiple ponds south of Hylan Boulevard within the Mount Loretto Unique Area. Mount Loretto Pond is mapped by the USFWS's NWI as 2.55 acres of "palustrine, unconsolidated bottom, permanently flooded, diked/impounded wetland" and 0.11 acres of "palustrine, emergent, seasonally flooded/saturated, diked/impounded wetland." Mount Loretto Pond drains into Cunningham Pond through a pipe below Cunningham Road. Cunningham Pond discharges via a weir to a shallow stream that flows south along the western boundary of the preserve. Drainage from the preserve ultimately flows into Raritan Bay.

An increase in uncontrolled stormwater runoff from development in the surrounding area, flow impediments and filling have led to progressive growth of both ponds in Mount Loretto, as shown in aerial photographs from the 1950s. These hydrologic changes have resulted in an increase in ponding in the Mount Loretto Preserve and a transition from fields to ponds and wetlands in low-lying areas.

Ecological Communities and Vegetation

Mount Loretto Pond contains duckweed on the surface and clusters of standing dead trees at its edges. Surrounding terrestrial ecological communities are best described as successional southern hardwoods, successional old field, and unpaved road/path, as defined by Edinger et al. (2002). The pond's riparian zone has a dense shrublayer of arrowwood, with patches of buttonbush, highbush blueberry, and silky dogwood. Willows are also present in standing water within the riparian zone. Sweetgum, pin oak, and red maple are scattered around the outer edges of the pond, with Virginia creeper, Japanese honeysuckle, and multi-flora rose throughout the understory. Closer to Hylan Boulevard and along the edges of Cunningham Road, the vegetation resembles a narrow fragment of southern successional hardwood forest, with hackberry, Chinese elm, oaks, sassafras, and white ash in the canopy and sub canopy. Large pin oaks (about 30 inches diameter at breast height [dbh]) and a multi-trunk Chinese elm (about 36 inches dbh) are present at the junction of Cunningham Road and Hylan Boulevard, which is the main pedestrian entrance to the preserve. Portions of this edge are covered with porcelainberry and Asiatic bittersweet. To the south and east, Mount Loretto Pond is bordered by successional old field that is dominated by mugwort and roughleaved goldenrod.

Wildlife

Mount Loretto Preserve is recognized for its multiple habitats that support relatively diverse wildlife populations in an urban/suburban setting, as stated in the 2003 FEIS. Mount Loretto Pond and its adjacent riparian shrubs and woods offer habitat for a variety of marsh birds, waterfowl, reptiles and amphibians. The transition zone between the pond and the old field to the south and east provides habitat for species that prefer shrublands and forest edges.

Mammals utilizing Mount Loretto Pond as habitat are generalist species, which are tolerant of fragmented habitats and urbanized settings. These include raccoon, white-footed mouse, Norway rat, opossum, groundhog, gray squirrel, muskrat, and feral/domestic cat. White-tailed deer may also use the site, given the increasing presence of deer on Staten Island. Eastern gray squirrel and

eastern cottontail were the only mammal species observed during the September 2011 field survey.

With respect to birds, as stated in the 2003 FEIS, the species most likely to nest in the riparian habitat immediately surrounding Mount Loretto Pond or in the cavities of standing dead trees within the pond include those listed in Table 1. Many of the bird species that nest near Mount Loretto Pond are migratory and overwinter at more southern latitudes. The 2010 Christmas Bird Count documented 107 species of birds wintering in Staten Island. Of these, the following species are considered to have the potential to occur around or on Mount Loretto Pond on the basis of their habitat association: mallard, wood duck, northern shoveler, bufflehead, hooded merganser, ruddy duck, ring-necked pheasant, red-tailed hawk, American coot, mourning dove, red-bellied woodpecker, downy woodpecker, hairy woodpecker, blue jay, American crow, black-capped chickadee, tufted titmouse, white-breasted nuthatch, northern mockingbird, European starling, cedar waxwing, white-throated sparrow, dark-eyed junco, northern cardinal, house finch, and American goldfinch. Species that are expected to occur on or around Mount Loretto Pond during spring and/or fall migration include: green-winged teal, spotted sandpiper, marsh wren, tree swallow, northern rough-winged swallow, barn swallow, willow flycatcher, warbling vireo, red-eyed vireo, common yellowthroat, scarlet tanager, wood thrush, yellow warbler, American redstart, black-throated blue warbler, black-throated green warbler, black and white warbler, magnolia warbler, Nashville warbler, Canada warbler, northern parula, ovenbird, Swainson's thrush, hermit thrush, veery, white-throated sparrow, swamp sparrow, and yellow-rumped warbler, among others. In addition, white-rumped sandpiper, pectoral sandpiper, and osprey have been noted around the ponds of Mount Loretto during migration (Fowle and Kerlinger 2001). Birds observed during the September 20, 2011 field reconnaissance survey included wood duck, great egret, great blue heron, belted kingfisher, hairy woodpecker, downy woodpecker, northern flicker, blue jay, black-capped chickadee, American robin, gray catbird, common yellowthroat and black and white warbler.

Table 1: Bird Species Documented during 2000-2005

Common name	Scientific name
Canada Goose	<i>Branta canadensis</i>
Gadwall	<i>Anas strepera</i>
American Black Duck	<i>Anas rubripes</i>
Mallard	<i>Anas platyrhynchos</i>
Ring-necked Pheasant	<i>Phasianus colchicus</i>
Green Heron	<i>Butorides virescens</i>
Killdeer	<i>Charadrius vociferus</i>
Upland Sandpiper*	<i>Bartramia longicauda</i>
American Woodcock	<i>Scolopax minor</i>
Rock Pigeon	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Eastern Screech-Owl	<i>Megascops asio</i>
Chimney Swift	<i>Chaetura pelagica</i>

Belted Kingfisher	<i>Megaceryle alcyon</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Northern Flicker	<i>Colaptes auratus</i>
Willow Flycatcher	<i>Empidonax traillii</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
White-eyed Vireo	<i>Vireo griseus</i>
Warbling Vireo	<i>Vireo gilvus</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Purple Martin	<i>Progne subis</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Barn Swallow	<i>Hirundo rustica</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Brown Thrasher	<i>Toxostoma rufum</i>
European Starling	<i>Sturnus vulgaris</i>
Yellow Warbler	<i>Dendroica petechia</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Yellow-breasted Chat*	<i>Icteria virens</i>
Eastern Towhee	<i>Pipilo erythrophthalmus</i>
Chipping Sparrow	<i>Spizella passerina</i>
Field Sparrow	<i>Spizella pusilla</i>
Song Sparrow	<i>Melospiza melodia</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Blue Grosbeak	<i>Passerina caerulea</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Orchard Oriole	<i>Icterus spurius</i>
Baltimore Oriole	<i>Icterus galbula</i>
House Finch	<i>Carpodacus mexicanus</i>
American Goldfinch	<i>Spinus tristis</i>
Source: New York State Breeding Bird Atlas, 2000-2005. Notes: *State-listed species	

With respect to amphibians and reptiles, the species with the potential to occur within or around Mount Loretto Pond include redback salamander, northern two-lined salamander, red-spotted newt, Fowler's toad, spring peeper, bullfrog, green frog, pickerel frog, snapping turtle, musk turtle, eastern mud turtle, spotted turtle, eastern box turtle, red-eared slider, painted turtle, northern water snake, northern brown snake, common garter snake, and northern black racer (Gibbs et al. 2007; Pehek 2007; Mitchell et al. 2006; Gibbs et al. 2007). The southern leopard frog (NY Species of Special Concern) and eastern mud turtle (NY Endangered) were documented in the Herp Atlas block in which Mount Loretto Pond is located (see Table 2), and suitable habitat for these species may be present at the site. However, NYNHP Environmental Resource Mapper shows no records of either species within a half mile of Mount Loretto Pond.

Table 2: Reptiles and Amphibians Potentially Occurring at Mount Loretto Pond

Common Name	Scientific Name
Spotted salamander	<i>Ambystoma maculatum</i>
Red-spotted newt	<i>Notophthalmus viridescens</i>
Redback salamander	<i>Plethodon cinereus</i>
Northern two-lined salamander	<i>Eurycea bislineata</i>
Fowler's toad	<i>Bufo fowleri</i>
Spring peeper	<i>Pseudacris crucifer</i>
Bullfrog	<i>Rana catesbeiana</i>
Green frog	<i>Rana clamitans</i>
Southern leopard frog*	<i>Rana sphenoccephala</i>
Pickerel frog	<i>Rana palustris</i>
Snapping turtle	<i>Chelydra serpentina</i>
Musk turtle	<i>Sternotherus odoratus</i>
Eastern mud turtle*	<i>Kinosternon subrubrum</i>
Spotted turtle*	<i>Clemmys guttata</i>
Eastern box turtle*	<i>Terrapene Carolina</i>
Northern diamondback terrapin	<i>Malaclemys terrapin</i>
Red-eared slider	<i>Trachemys scripta</i>
Painted turtle	<i>Chrysemys picta</i>
Eastern fence lizard*	<i>Sceloporus undulatus</i>
Northern water snake	<i>Nerodia sipedon</i>
Northern brown snake	<i>Storeria dekayi</i>
Common garter snake	<i>Thamnophis sirtalis</i>
Northern ringneck snake	<i>Diadophis punctatus</i>
Northern black racer	<i>Coluber constrictor</i>
Sources: New York State NYSDEC Herp Atlas Project in the Arthur Kill Census Quadrant; September 2011 field survey; South Richmond Drainage Plan FEIS, DEP (2003). Notes: *State-listed species. Boldface indicates species that are unlikely to occur in the study area on the basis of their habitat requirements (Mitchell et al. 2006, Gibbs et al. 2007).	

With respect to fish, a 1987 wetland designation report included a number of potential and observed small fish species in AR-15 ponds and open marshes including: bullheads, pumpkinseeds, mummichogs, yellow perch, and gambusia. It is expected that Mount Loretto Pond would support freshwater fish such as these species and bluegill.

Endangered, Threatened, and Special Concern Species

The only federally protected species listed by the USFWS for Richmond County are four species of marine turtles. These turtles would only occur offshore, not within the study area.

With respect to State-listed species, a number of State-listed bird species have been documented during the 2000-2005 Breeding Bird Atlas in the block in which the study area is located include the yellow-breasted chat and upland sandpiper. The osprey, a species of special concern, has also been noted in the study area during autumn migration (Fowle and Kerlinger 2001). State-listed reptiles and amphibians documented by the NYSDEC Herp Atlas Project in the Arthur Kill quadrant include southern leopard frog, northern fence lizard, eastern mud turtle, eastern box turtle, and spotted turtle. A summary of the potential species and their habitats is provided below.

- Yellow-breasted chat was documented as a “probable” breeder during the 2000-2005 Breeding Bird Atlas in the block in which Mount Loretto Pond is located. Nesting of this species within New York City is extremely rare, but they are noted as a breeding species of the Mount Loretto area (Fowle and Kerlinger 2001). Suitable nesting habitat for yellow-breasted chats is present on the southerly side of Mount Loretto Pond, particularly where the pond borders the old field.
- Upland sandpiper is a declining grassland bird that nests in prairies and agricultural fields. Breeding habitat for upland sandpipers is extremely limited in southern New York, and the species was confirmed breeding in only one census block in all of New York City, Long Island, Westchester and Rockland Counties during the 2000-2005 Breeding Bird Atlas (McGowan 2008b). Upland sandpiper was documented in the Breeding Bird Atlas block in which Mount Loretto Pond is located, but the record was limited to the observation of a single individual, and nesting was not confirmed. Upland sandpipers are also considered highly unlikely to occur around Mount Loretto Pond due to their limited population in the area and the absence of suitable habitat.
- Osprey is a species of special concern in New York. Populations in the state have recovered significantly in recent decades following steep range-wide declines that occurred throughout the mid-1900s (Nye 2008). Ospreys generally nest on inland ponds and lakes larger in size and with fewer disturbances than is present around Mount Loretto Pond.
- The southern leopard frog is a New York State species of special concern. The NYSDEC Herp Atlas Project documented the southern leopard frog in census blocks on Staten Island and Long Island, in portions of the lower Hudson Valley, and in two locations in western New York. The species is thought to be extremely

rare on Long Island and possibly extinct in the rest of New York (Feinberg and Burke 2011). Southern leopard frogs inhabit open grassy areas near marshes and ponds, and typically breed in ditches, wet meadows, seasonal ponds, wooded swamps, and sediment basins (Gibbs et al. 2007). Mount Loretto Pond and its surrounding area may provide habitat for the species, however, the NYNHP Environmental Resource Mapper has no record of southern leopard frogs within the half-mile study area.

- The northern fence lizard, which is listed as threatened, is uncommon in New York State (Gibbs et al. 2007). The northern fence lizard was documented by the NYSDEC Herp Atlas in the Mount Loretto Pond census block, but suitable habitat for the species (dry, open woodland) is absent at Mount Loretto Pond and its occurrence in the study area is therefore unlikely.
- Distribution of the eastern mud turtle in New York State, which is listed as endangered, is limited to populations on Staten Island and Long Island (Gibbs et al. 2007). The NYSDEC Herp Atlas Project documented the eastern mud turtle in the Mount Loretto Pond census block. Eastern mud turtles typically inhabit open or regenerating habitats such as old fields, usually near ponds or streams (Mitchell et al. 2006, Gibbs et al. 2007). Therefore, any eastern box turtles in the vicinity of Mount Loretto Pond would be expected along the pond's southern side and near the successional old field. The NYNHP Environmental Resource Mapper also has no records of this species at the site or within the half-mile study area.
- The eastern box turtle, listed as a special concern species, is relatively common in New York, but the populations are recognized as in decline (Gibbs et al. 2007). The NYSDEC Herp Atlas Project documented the eastern box turtle in the Mount Loretto Pond census block. Eastern box turtles live in a variety of open or regenerating habitats such as old fields, usually near ponds or streams (Mitchell et al. 2006, Gibbs et al. 2007). Therefore, eastern box turtles are considered to have the potential to occur near Mount Loretto Pond. However, the NYNHP Environmental Resource Mapper shows no records of the species at the project site within the half-mile study area.
- Spotted turtles are in decline and listed as a species of special concern in New York. Spotted turtles inhabit vernal pools, upland forest, and wet meadows or swamps during the different stages of their annual cycle (Gibbs et al. 2007). The study area around Mount Loretto Pond lacks vernal pools and upland forest, and thus spotted turtles would unlikely inhabit the pond. In addition, the NYNHP Environmental Resource Mapper shows no records of spotted turtles within the half-mile study area of the proposed BMP.

The Future without the Proposed Project

In the future without the proposed project, it is assumed that the conditions of the project site would not change and the proposed modification would not occur. No substantive changes are expected to occur to natural resources in and within 400-feet of Mount Loretto Pond.

The Future with the Proposed Project Modification

Land Cover and Wetlands

The site of the proposed modified BMP is not heavily wooded and therefore, significant tree clearing would not be required. The portion of Mount Loretto Preserve that would be impacted is predominantly successional woodland, directly adjacent to Hylan Boulevard, and is not delineated as a wetland, per NWI and NYSDEC maps. Under the proposed modification, the existing 0.57 acres of successional woodland, consisting of hackberry, Chinese elm, pin oak, sassafras and white oak, would be cleared and converted to a landscaped wetland and would convey stormwater from the proposed forebay to the Mount Loretto Pond. For the limited number of trees along Hylan Boulevard that would be impacted during construction, DEP would develop a tree replacement plan for tree removal associated with the proposed BMP modification, in conjunction with NYSDEC. Therefore, the proposed modification would not result in potential significant adverse impacts to land cover and wetlands.

Ecological Communities and Vegetation

As presented above, the proposed modification would not impact any significant ecological communities or sensitive individual plant species and would instead enhance wetland habitat for ecological communities. The proposed modification would require limited clearing along the shoreline edge of Mount Loretto Pond and the upland connection between the pond and Hylan Boulevard. The narrow fragment of successional woodlands along Hylan Boulevard and the edges of Cunningham Road is comprised of hackberry, Chinese elm, oaks, sassafras, and white ash trees. While the proposed modification would require tree clearing in order to provide an outlet for the BMP, this clearing would be limited and similar to that described in the 2003 FEIS which identified the clearing of upland woods and trees as part of BMP B-2 that are common to the South Richmond area. The proposed modified design would also plant replacement trees such as pin and white oaks, black cherry and gray birch in the area around the proposed BMP. Therefore, the proposed modification would not result in potential significant adverse impacts to ecological communities and vegetation.

Wildlife

The expected habitat change from successional woodland to a wetland on the northern border of Mount Loretto Pond would not significantly alter existing wildlife habitat at Mount Loretto Preserve. The important assemblages of bird, mammal, reptile and amphibian habitat of the preserve's interior would remain unchanged. The proposed BMP would expand wetlands, diversify habitat and the pond would not be adversely impacted. Projected water quality improvement (see Hydrology section below) and improved conveyance would also improve primary biological activity and conditions for aquatic wildlife, increasing food availability for fish, waterfowl, turtles and other species.

Therefore, the proposed modification would not result in significant adverse impacts on wildlife.

Endangered, Threatened, and Special Concern Species

The preferred habitats for the existing endangered, threatened and special concern wildlife and bird species listed above are not found in or around Mount Loretto Pond and therefore, the proposed modification would not impact these species. For example, the osprey, a species of special concern, has been noted in the study area during autumn migration (Fowler and Kerlinger 2001); however, ospreys generally nest on inland ponds and lakes larger in size and with fewer disturbances than is present around Mount Loretto Pond.

The only federally protected species listed by the USFWS for Richmond County are four species of marine turtles. These turtles would only occur in Raritan Bay and not within the study area.

A number of State-listed bird species have been documented in the 2000-2005 Breeding Bird Atlas as present within the study area. Potential impacts of the proposed modification on these species are described below along with a description of State-listed reptiles and amphibians documented by the NYSDEC Herp Atlas for the study area.

- Suitable nesting habitat for yellow-breasted chat is present on the southerly side of Mount Loretto Pond, particularly where the pond borders the old field. No construction activities would occur on the southerly side of the pond. The yellow-breasted chat is a field species and would not utilize the pond for habitat. Therefore, the proposed BMP construction would not impact habitat for yellow-breasted chat.
- Upland sandpipers are also considered highly unlikely to occur around Mount Loretto Pond due to their limited population in the area and the absence of suitable habitat. Therefore, the proposed BMP would not impact potentially present upland sandpipers.
- Mount Loretto Pond and its surrounding area may provide habitat for the southern leopard frog species, however, the NYNHP Environmental Resource Mapper has no record of southern leopard frogs within the half-mile study area.
- The northern fence lizard was documented by the NYSDEC Herp Atlas in the Mount Loretto Pond census block, but suitable habitat for the species (dry, open woodland) is currently absent at Mount Loretto Pond and its occurrence in the study area is therefore unlikely.
- Any eastern mud turtles in the vicinity of Mount Loretto Pond would be expected along the pond's southern side and near the successional old field. The NYNHP Environmental Resource Mapper also has no records of this species within the study area.
- Eastern box turtles are considered to have the potential to occur near Mount Loretto Pond. However, the NYNHP Environmental Resource Mapper shows no records of the species within the study area.

- The study area around Mount Loretto Pond lacks vernal pools and upland forest, and thus spotted turtles would unlikely inhabit the pond. In addition, the NYNHP Environmental Resource Mapper shows no records of spotted turtles within the study area.

In summary, the preferred habitats for the endangered, threatened and special concern wildlife and bird species described above are not present at the site of the proposed BMP B-2. These include yellow-breasted chat, upland sandpiper, southern leopard frog, northern fence lizard, Eastern mud turtle, Eastern box turtle, and spotted turtle. Although osprey, a species of special concern, has been noted in the study area during autumn migration (Fowler and Kerlinger 2001), they generally nest on inland ponds and lakes larger in size than Mount Loretto Pond and in areas of less disturbance and human presence than what is present at the site of the proposed BMP. Therefore, the proposed project would not result in potential significant adverse impacts to any State-listed, endangered, threatened, or special concern species.

Under the proposed modification, stormwater input into Mount Loretto Pond would improve water quality and habitat for primary producers, such as macro invertebrates. In addition, the proposed modification would not result in potential significant adverse impacts to land cover and wetlands, ecological communities and vegetation, or wildlife. Therefore, the proposed project would not result in potential significant adverse impacts to natural resources.

Hydrology

Because excavation of the pond would not occur and because a new pond would not be created, groundwater would not be affected by the proposed modification. However, because the proposed modification would relocate BMP B-2 from Cunningham Pond to Mount Loretto Pond, water levels in Mount Loretto Pond were monitored for one year. During this time, a one-foot variation in the water level was observed between elevation 6.5 and 7.5 feet (see Figure 1), with a brief increase in elevation to 8.5 feet during the winter. The proposed 50-foot weir structure underneath Cunningham Road would be set at elevation 7.5 feet, with a low flow orifice at elevation 6.5 feet, which accounts for one foot of extended detention. Under the proposed modification, the projected maximum water surface elevation in Mount Loretto Pond would be 8.6 feet, the same maximum elevation as under existing conditions. Therefore, under the proposed modification, water surface elevation would maintain the same potential fluctuation as under existing conditions. The proposed planting buffer would be consistent with these fluctuations. Cunningham Pond would continue to receive water from Mount Loretto Pond, which occurs under existing conditions. Cunningham Road would be raised in the vicinity of the weir to provide enough cover for the outlet structure, and the elevation would be set so as to be higher than the pond elevation at the weir during a 100-year storm to avoid flooding. Therefore, the proposed modification would not result in potential significant adverse impacts to hydrology.

Water Quality

Water quality modeling was presented in the 2003 FEIS. The 2003 water quality analysis concluded that implementation of the proposed drainage plan would result in improvements in local water quality, including reductions in fecal coliform concentrations, biological oxygen demand, and improvements in dissolved oxygen in the local ponds and waterways of the Butler Manor watershed. These modeled improvements were attributable to the proposed sanitary sewers that would convey wastewater to a wastewater treatment plant (WWTP), as opposed to septic systems as is the case under current conditions, and the proposed BMPs. The modeling disclosed water quality benefits of the proposed drainage plan at all modeled locations including those downstream of Hylan Boulevard (i.e., within Mount Loretto Preserve). Relocating BMP B-2 to Mount Loretto Pond would not affect the conclusions of the 2003 FEIS with respect to water quality conditions and it is expected that projected water quality conditions in the Butler Manor watershed with this proposed modification would be similar to 2003 projections. Therefore, the proposed modification would not result in potential significant adverse impacts to water quality.

Therefore, consistent with the findings of the 2003 FEIS and the CEQR Technical Manual, it is concluded that no potential significant adverse impacts to natural resources would occur under the proposed modification.

CONSTRUCTION IMPACTS

Construction activities associated with the proposed modification would be similar to those examined in the 2003 FEIS, would be a maximum of 4 months and thus short-term and temporary in duration. Short-term and temporary construction activities would include clearing and grading area 0.57 acres in size, installation of the BMP and outfall structure, and final landscaping. There would also be limited work within Cunningham Road to install the proposed weir and the outlet structure which would involve excavation, installation of the structure, and final grading and paving of Cunningham Road. With the exception of the connections to the sewers in Hylan Boulevard, all proposed construction activities would take place within NYSDEC Mount Loretto property and would require a Concurrent Use and Occupancy Agreement with the State in order to construct and install the proposed BMP.

With respect to the potential construction period impacts associated with this activity, the following key conclusions of the 2003 FEIS would also apply to this modification, including:

- Surface water quality would be protected with a sedimentation and erosion control plan;
- Natural resources including trees and wetlands would be protected through a number of measures including delineating limits of construction and restore based on coordination with NYSDEC; and
- Traffic, air quality or noise impacts associated with construction would be limited and temporary.

Open Space

Construction of the proposed BMP would be short-term and temporary in duration, lasting a maximum of four months. During this construction period, there would be a limited and temporary reduction in the accessibility of the affected areas of the Mount Loretto open space. These areas include the edge of the preserve, in the area between Mount Loretto Pond and Hylan Boulevard, in addition to a small portion Cunningham Road. The total affected area would be approximately 0.57 acres. This affected area would not be accessible to the public, however, no trails or access facilities would be affected by construction. All areas of the preserve that would temporarily be affected by construction would be restored to existing conditions and public access would resume to pre-construction conditions, including access along Cunningham Road. The proposed weir would be below-ground and the intake at the edge of Mount Loretto Pond would be the only new visible structure after construction completion. Therefore, because construction would be short-term and temporary in duration, the proposed minor modification would not result in potential significant adverse impacts to open space in Mount Loretto Preserve during construction.

Natural Resources

Water Quality

The proposed project requires clearing and grading of approximately 0.57 acres. All potential water quality impacts with respect to Mount Loretto Pond, due to these activities, would be avoided through implementation of Bluebelt construction practices, project permitting and a SWPPP. With respect to soil erosion and sediment control, the Bluebelt project employs extensive management practices that are implemented during construction to minimize erosion and sedimentation. These practices were described in detail in the 2003 FEIS. In addition, the proposed modification would also be required to prepare a Stormwater Pollution Prevention Plan (SWPPP), to be approved by NYSDEC before construction activities could precede. Therefore, because construction would be short-term and temporary in duration, the proposed minor modification would not result in potential significant adverse impacts to surface water quality in the surrounding area during construction.

Vegetation

To avoid any potential significant adverse impacts on rare plant species, pre-construction field surveys would be performed by the DEP Bluebelt Restoration Specialist in the spring season. These investigations would be performed for the purposes of determining if the plant species of concern may be within the area of disturbance. If any of these species are observed, DEP would implement procedures to maintain the health of the specimen either by avoiding disturbance in that area (e.g., field delineation and construction fencing), or performing plant relocation. In addition, a plant salvage program would be employed as necessary to relocate plants to another part of the site, protect from construction impacts and then replant in appropriate areas. On-site trees that

are not proposed to be cleared would be protected by tree guards to avoid potential impacts from construction operations. Per NYSDEC, DEP would restore wetland around Cunningham Road and the affected areas of Mount Loretto Pond, as needed. Therefore, because construction would be short-term and temporary in duration and with protection measures described above, the proposed minor modification would not result in potential significant adverse impacts to vegetation during construction.

Wildlife

In the short term, there would be a temporary construction-period disruption to wildlife use of the site. However, many of the birds, mammals, reptiles, and amphibians in this area are urban-adapted species and are tolerant of some level of disturbance. Moreover, the proposed construction area, between Hylan Boulevard and Mount Loretto Pond, already has human presence, including a built street with vehicular traffic. Wildlife habitat is therefore already shaped by these background conditions. Sensitive species that inhabit Mount Loretto Preserve are more likely to be found in the interior or south of the Mount Loretto Pond where it borders a successional old field and outside of areas to be directly affected by construction.

Seasonal restrictions on certain activities could be considered to further ensure the project would not result in any significant impacts to wildlife during sensitive periods such as nesting. In addition, DEP also has an active wildlife rescue program that typically traps and removes turtles, for example, from a BMP construction site prior to commencement of work. Under this relocation program, the project site would be surveyed for wildlife prior to construction by a DEP representative and/or the project Restoration Specialist. Wildlife encountered would then be live-captured and relocated in a humane manner to an adjacent area of similar habitat. If necessary, the services of a professional wildlife removal service would also be used to safely relocate individuals. Therefore, because construction would be short-term and temporary in duration and with protection measures described above, the proposed minor modification would not result in potential significant adverse impacts to wildlife species during construction.

Endangered, Threatened, and Special Concern Species

With respect to protected wildlife species, land disturbance and construction activities in the woodland fragment between Mount Loretto Pond and Hylan Boulevard would be unlikely to have any impacts on key habitats or individual species. Project construction in late summer or early fall could have the potential to discourage osprey from foraging for fish in Mount Loretto and Cunningham Ponds. However, temporary loss of this small food source for migrating osprey would not have a potential significant adverse impact on the species either at the individual or population level and seasonal restrictions on certain activities would be considered. Other state-listed species, including the upland sandpiper, yellow-breasted chat and frog species, would not be impacted during construction, due to the absence of suitable habitat and the short-term and temporary nature of the proposed construction. Therefore, because construction would be short-term

and temporary in duration, proposed minor modification would not result in potential significant adverse impacts to endangered, threatened and special concern species.

Overall, all natural resources would be protected through a number of measures described above and construction would be short-term and temporary in duration. Therefore, the proposed minor modification would not result in potential significant adverse impacts on natural resources in the surrounding area during construction.

Traffic and Air Quality

With respect to traffic, the proposed modification would result in only minor and temporary disruptions along Cunningham Road with very limited effects on traffic. Vehicular traffic along the affected portion of Cunningham Road would require temporary diversion via Kenny Road for access to Cunningham Road, south of the project site. Traffic management measures would be employed during construction as required by the New York City Department of Transportation (DOT) and/or NYSDEC. With respect to air quality, all the appropriate dust controls would also be implemented to reduce the generation and dispersions construction period dust. Therefore, because construction would be short-term and temporary in duration, the proposed minor modification is not expected to result in potential significant adverse impacts on traffic and air quality in the surrounding area during construction.

Noise

Regarding noise, construction noise is regulated by the New York City Noise Control Code and by the Environmental Protection Agency's noise emission standards for construction equipment. These Federal and local requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards. Except under exceptional circumstances, construction activities must be limited to weekdays between the hours of 7 AM and 6 PM. Construction materials would be handled and transported in such a manner as to not create any unnecessary noise. Compliance with these noise control measures would be ensured by including them in contract documents as specifications for the project contractors. Given the limited intensity and duration of construction at this site and the protection measures that are in place, no significant construction period impacts are expected to occur as a result of the proposed modification. Therefore, the proposed minor modification is not expected to result in potentially adverse noise impacts in the surrounding area during construction.

In summary, all construction impacts associated with this proposed project are expected to be similar to those examined in the 2003 FEIS and would be temporary and short-term in duration. Therefore, consistent with the findings of the 2003 FEIS and with the *CEQR Technical Manual*, the proposed modification would not result in potential significant adverse impacts during construction.

STATEMENT OF NO SIGNIFICANT EFFECT


DEP has determined that the proposed actions in this Minor Modification to the South Richmond Watershed Drainage Plans FEIS are not anticipated to have any potential significant adverse impacts on the quality of the environment. No significant adverse impacts are anticipated to occur to natural resources. Any construction impacts with respect to open space, natural resources, traffic, air quality and noise would be temporary and short-term in duration, all construction activities would comply with appropriate governing regulations and therefore not be considered significant effects on the environment or public health.

Supporting Statements

The above determination is based on an FEIS that finds that the project, as proposed, would not result in significant effects on the environment.

For further information, please contact:

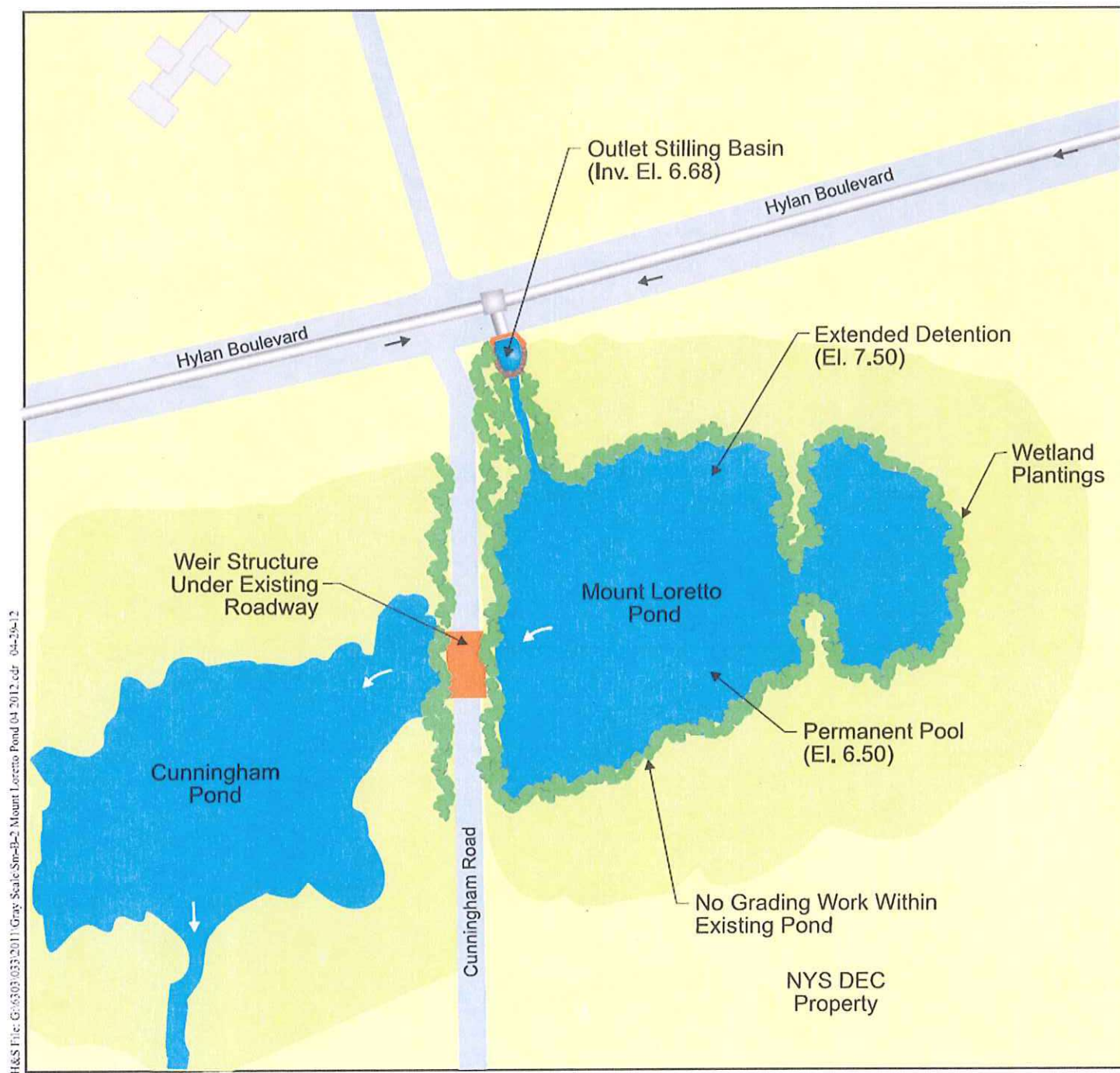
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**Figure 1: BMP B-2 – Mount Loretto Pond
Extended Detention BMP**