The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A.Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
http://www.mass.gov/eea

January 29, 2021

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: McConnell Park Improvements
PROJECT MUNICIPALITY	: Boston (Dorchester)
PROJECT WATERSHED	: Boston Harbor
EEA NUMBER	: 16305
PROJECT PROPONENT	: Boston Parks and Recreation Department
DATE NOTICED IN MONITOR	: December 23, 2020

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR). However, as indicated in the Office of Coastal Zone Management (CZM)'s comment letter, concerns remain regarding the potential channelization of flood waters as a result of the grade changes proposed as part of the project. The City of Boston should continue to study the impacts the project may have on surroundings residential areas, particularly during less frequent, more intense coastal storm events.

Project Description

As described in the Environmental Notification Form (ENF), the project consists of improvements to the City of Boston's McConnell Park located in the Savin Hill Neighborhood of Dorchester. Improvements include upgrading park amenities; providing a dry parking area during extreme storm events; creating a dedicated emergency access route from Playstead to Denny Street via Springdale Street; and upgrading the stormwater management system to allow the park to recover from flood events more quickly. Amenity upgrades will include the reconstruction of a natural turf little

league field and softball field; construction of a new synthetic challenger league[1] field and an expanded and upgraded playground area. Improvements to the parking lot include an improved parking lot with designated emergency access; a pedestrian plaza with traffic calming measures; and tree planting to increase canopy shade. This project will construct a new emergency access route to connect Playstead Road and Denny Street via Springdale Street which is currently only exists as paper street[2] which runs through the parking lot. The project will provide striping of the parking lot with enforcement signage. Additional site improvements include street lighting and security cameras, paved walkways, spectator seating areas, portable restroom shelter, site furnishings, and planting areas.

Existing flood pathways enter the project site from Dorchester Bay through the third baseline of the central ballfield adjacent to the Harborwalk. The pathway traverses the topographic low points through the athletic fields towards the existing parking lot, across Springdale Street and into the rear properties of two residential abutters currently on the north side of Springdale Street. The project includes raising portions of the park at or above 18 ft Boston City Base (BCB) which is the projected base flood elevation in 2050, as described in the ENF. The project includes increasing the elevation of Springdale street by 2.5 to 3.5 feet to elevation 16.70 ft BCB and 17.41 ft BCB. The proposed parking area will be raised by up to four feet for a final elevation ranging between 17.00 ft BCB and 19.60 ft BCB. A multipurpose plaza space which also serves as access for the nearby Dorchester Bay Yacht Club which extends seaward from the parking area will also be raised by approximately 5 ft to elevation 18.80 ft BCB. All other areas of the park and the proposed amenities below elevation 18.00 ft BCB are being topographically graded in a way that is to ensure improved stormwater collection, drainage, and recovery time presently and in the future. The proposed contouring and topography throughout the athletic fields will range from 0 to 1 feet of fill and transition back to existing grades at the eastern limits of the park.

The project involves upgrading the stormwater management system to allow the park to recover from flood events more quickly. The proposed stormwater design includes the collection and treatment of stormwater to vegetated areas and into area drains, subsurface lateral collection pipes, storage chambers and deep sump hooded catch basins for treatment. Check valves will be installed at downstream drainpipe locations to mitigate upwelling during severe storm events.

Project Site

The approximately 7-acre project site is located at the base of Savin Hill and is bordered to the west by Interstate 93 (I-93), to the south and east by Massachusetts Department of Conservation and Recreation (DCR) owned Harborwalk and Dorchester Bay, and to the north by Springdale Street and a residential neighborhood. The existing park property consists of three natural turf softball fields on the western portion of the site, an impervious parking area and unofficial emergency access drive near the center of the site, and a lawn area with mature tree canopy to the east. The park is bisected by an impervious access drive which serves the adjacent Dorchester Yacht Club. The park also includes a children's playground on the southern edge of the park. Resource areas within the project site are limited to land subject to coastal storm flowage (LSCSF); however, the project site abuts DCR's harbor walk which is adjacent to Dorchester Bay and its coastal beach and coastal bank. The entire project site is LSCSF and is located in Zone AE with a base flood elevation of 11 ft and 12 ft NAVD88 (17.46/18.46 ft

[1] Challenger league is an adaptive baseball program for individuals with physical and intellectual disabilities.
[2] A paper street is a street or roadway that appears on maps but has not been built.

BCB) according to the Federal Emergency Management Act (FEMA) Flood Insurance Rate Map No. 25025C0091J.

Environmental Impacts and Mitigation

Environmental impacts associated with the project include the temporary disturbance of 6.1 acres of previously disturbed land and creation of 0.24 acres of new impervious surface (1.59 acres total). The project will result in the alteration of 6.1 acres (265,800 sf) of LSCSF. The project will add an additional 8 parking spaces (49 total). Measures to avoid, minimize and mitigate damage to the environment include upgrading the stormwater management system, improved tree canopy and installation of flood control measures. The project is intended to provide resiliency during future conditions as impacted by climate change, most notably, by elevating the parking lot area to the expected base flood elevation (BFE) for 100-year storm conditions in 2050 (which is the useful life identified for the project).

Jurisdiction and Permitting

This project is subject to MEPA review and preparation of an ENF pursuant to 301 CMR 11.03(3)(b)(1)(f) because it requires a State Agency Action and involves the alteration of one half or more acres of any other wetlands. The project requires a M.G.L. Chapter 91 License from the Massachusetts Department of Environmental Protection (MassDEP) and a Construction and Access Agreement from DCR because the project includes work along a shared property boundary with DCR.

The project requires an Order of Conditions from the Boston Conservation Commission, or in the case of an appeal, a Superseding Order of Conditions from MassDEP. It will require a National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit from the United States Environmental Protection Agency (EPA). The project may require Federal Consistency Review from CZM.

The project is not receiving Financial Assistance from the Commonwealth. Therefore, MEPA jurisdiction for any future review would be limited to those aspects of the project that are within the subject matter of any required or potentially required Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the ENF

The ENF provided a description of existing and proposed conditions, preliminary project plans, and an alternatives analysis, and identified measures to avoid, minimize and mitigate environmental impacts. Supplemental information was provided to the MEPA distribution list on January 7, 2021 in response to questions raised at the January 5, 2021 remote MEPA consultation meeting. For purposes of clarity, this supplemental information and original filing are referred to collectively as the ENF. Additionally, clarifying information in response to CZM's comment letter was provided to the MEPA Office on January 28, 2021 and January 29, 2021. As noted above, comments from CZM and MassDEP emphasize the importance of designing the project to avoid the channelization of flood pathways and maximizing efforts to infiltrate stormwater on-site to the greatest extent possible to avoid an increase in stormwater discharge onto and near Morrissey Boulevard. Comments from DCR are supportive of the

project and note that the project team at DCR will continue to work with the Proponent to finalize project design prior to construction.

Alternatives Analysis

As described in the ENF, the alternatives analysis considered a Renovation With No Grading Alternative, a Raise Grades and Infiltrate Stormwater Alternative and the Preferred Alternative as described above. The Renovation With No Grading Alternative would involve upgrading the amenities of the park including the ball fields, parking lot, emergency access drive and playground while keeping existing topographic elevations. This alternative was dismissed because although it would provide an emergency access way and upgrade the athletic fields and playground, it would not provide a dry parking area during storm events and would not alleviate existing flood pathways through the park which flood the existing parking lot and threaten the nearby residential neighborhood.

The Raise Grades and Infiltrate Stormwater Alternative would involve raising the grade of the entire park by a minimum of five feet (not just specific locations as in the Preferred Alternative) and constructing a retaining wall to protect the park and residential neighborhood during sever flood events. This Alternative also proposed to infiltrate all stormwater onsite. This scenario was deemed financially infeasible given the amount of fill required and unsuitable subsurface conditions; namely, geotechnical borings showed that subsurface conditions would not provide sufficient stability to support significant increases in grade and would limit stormwater infiltration. Additionally, as described in the ENF, the park is considered an urban fill site with clay-based soils which may contain foreign debris making infiltration of more stormwater less feasible. For these reasons, this alternative was dismissed.

The Preferred Alternative proposes raising elevations of strategic areas up to five feet to provide protection from projected flood risk scenarios in the most critical areas of the park, while making stormwater improvements to convey, collect, and treat stormwater before it leaves the site. The parking lot and emergency drive were selected as priority protection areas after analyzing current and future flood pathways. The proposed design allows other less critical park amenities to flood while protecting the highly used parking area during winter months. Additionally, one-way check valves located at key drainage structures will limit the up flow of stormwater to prevent excess water from entering the site. All collected stormwater will be treated to both City of Boston and MassDEP requirements prior to conveyance into Boston Harbor off-site.

Wetlands, Waterways and Stormwater

The project will impact approximately 265,800 sf (6.1 acres) of LSCSF. Additionally, the project may result in additional fill on jurisdictional filled tidelands and therefore may require a Chapter 91 License. The impacts are associated with the reconstruction of the ball fields, parking lot and access drive, and playground. To protect proximate wetland resource areas during construction, compost tubes and catch basin sediment protection measures will be placed around the perimeter of the work area at the interface with resource areas. The erosion controls will be monitored throughout the project and accumulated sediment will be removed. As described above, the project also includes upgrades to the stormwater management system. The Boston Conservation Commission will review the project for its consistency with the Wetlands Regulations (310 CMR 14.00) and associated performance

standards including the Stormwater Management Standards. MassDEP will review the project for its consistency with the Waterways Regulations (301 CMR 9.00).

The proposed stormwater system accommodates the first one inch of rainfall on-site and mitigates the impacts of increased impervious surface as required by the Boston Water and Sewer Commission (BWSC). However, as described in the ENF, geotechnical borings and test pits conducted in June 2020 produced findings indicating that much of the site is urban fill comprised of lean clay with peat below. As described in the ENF, these soil conditions are not suitable for infiltration beyond what is being proposed in the Preferred Alternative. The Preferred Alternative includes underground stormwater chambers that can allow infiltration. However, due to soil characteristics, there may be little or no actual infiltration taking place. Despite these limitations, the current stormwater design will provide for 60% peak discharge reduction for the 2-year storm, 35% reduction for the 10-year storm, 28% reduction for the 25-year, and 20% reduction for the 100-year storm event as compared to existing conditions. As discussed below, the project design is also intended to provide resiliency during future conditions as impacted by climate change. Comments from MassDEP and CZM emphasize the importance of infiltrating as much stormwater on-site as possible because of potential capacity problems at the Morrissey Boulevard outfall downstream of the site, to which stormwater from the park and residential neighborhood currently discharges. Additionally, comments from CZM and MassDEP note that the proposed best management practices (BMPs) for stormwater management do not treat bacteria. Therefore, the proponent should consider additional BMPs for treatment of stormwater. As described in BWSC's comment letter, the Proponent must fully investigate methods for retaining stormwater on-site before BWSC will consider a request to discharge additional stormwater to the BWSC's system.

Climate Change

Governor Baker's Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth (EO 569; the Order) was issued on September 16, 2016. The Order recognizes the serious threat presented by climate change and direct Executive Branch agencies to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The Order seeks to ensure that Massachusetts will meet GHG emissions reduction limits established under the Global Warming Solution Act of 2008 (GWSA) and will work to prepare state government and cities and towns for the impacts of climate change. I note that the MEPA statute directs all State Agencies to consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise, when issuing permits, licenses and other administrative approvals and decisions. M.G.L. c. 30, § 61.

Adaptation and Resiliency

As described in the ENF, the project is consistent with the resiliency solutions outlined in the *Coastal Resilience Solution For Dorchester*[3] report published by the City in October 2020. The proposed parking lot layout and elevations will raise the new parking lot, Springdale Street and multiuse plaza up to 5 feet, utilizing lightweight fill material and stabilized with geogrid, to achieve elevations of 17.00 ft to 19.60 ft BCB. This elevation change is intended to increase the resiliency of the parking lot,

[3] https://www.boston.gov/sites/default/files/file/2020/10/Climate%20Ready%20Dorchester-Final%20Report%20(Spreads%20for%20web).pdf

Springdale Street, and residential abutters. The intent of the project is to transition from existing elevations for the parking lot and access drive up to and above elevation 18.00 ft BCB which is the expected base flood elevation in 2050 for the 100-year storm, while considering existing topographical and private property limitations of surrounding abutters and accessibility requirements. All other areas of the park and the proposed amenities below elevation 18.00 ft BCB are being topographically graded to ensure improved stormwater collection, drainage, and flood recovery time. The proposed contouring and topography throughout the park will range from 0 to 1-foot of fill throughout the athletic fields and transition back to existing grades at the eastern limits of the park. As noted, the project will improve peak discharge rates for stormwater for the 2-year, 10-year, 25-year, and 100-year storms as compared to existing conditions; when considering climate change, the expected level of improvement under future conditions could be reduced (e.g., the project may see improvements for the 25-year storm, but not the 100-year storm, under future conditions). I encourage the Proponent to continue to consider climate change data and projections in designing the stormwater management system, and to size the system to ensure improvements in peak discharge rates for all storm scenarios under 2050 conditions.

As described in CZM's comment letter, the project site is already vulnerable to flooding in a 1% chance (100-year) annual storm, will be inundated during a 10% chance (10-year) annual storm with 9 inches of sea level rise (expected by 2030) and during high tide with 21 inches of sea level rise (expected by 2050, which is the proposed design life of the project). Comments from CZM note that, while elevation of the site is an important feature to address future climate conditions, the project should be aware of potential consequences of adding fill to achieve such elevations, including the possible channelization of coastal floodwaters onto and over Playstead Road in particular. This could exacerbate current conditions or create new flood conditions that nearby residences may not currently experience. In response, the Proponent submitted additional topographic analysis which indicates that the grade increases at an approximate slope of 5% up Playstead Road to where it meets Savin Hill Ave to the north. The Proponent asserts that the proposed project will result in an overall reduction in flood pathways and inundation depth for the park and residential area to the north. While the project improves current flooding conditions and will improve conditions during the 2050 100-year storm, during less frequent, more intense storm events, the narrowed flood pathway may result in channelization of floodwaters. Channelized floodwaters result in higher velocity flows which may be more structurally damaging to nearby residential properties. I strongly encourage the City to further explore opportunities to avoid flood channelization such as the incorporation of a berm along the northern side of the parking area which could potentially eliminate the flood pathway. Comments from CZM note that solid elements, such as granite block seat walls, may increase channelization and promote scour. Therefore, project should minimize the use of solid project components to the maximum extent practicable and should not inhibit public access along the Harborwalk.

Low Impact Development (LID) techniques utilized throughout the park design include minimizing disturbance to existing trees and shrubs and introducing bioretention basins where feasible with existing soil conditions. As discussed, proposed subsurface infiltration chambers located adjacent to the access drive and parking lot will hold stormwater on-site to further reduce the downstream and offsite pressures at the existing outlet culvert that runs parallel to the DCR Harborwalk and services much of the Savin Hill neighborhood.

Construction Period

All construction and demolition activities should be managed in accordance with applicable MassDEP's regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017). The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.00). All construction activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Proponent to reuse or recycle construction and demolition (C&D) debris to the maximum extent.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with State Agencies I have determined that an EIR is not required.

K. Theoharides

January 29, 2021
Date

Kathleen A. Theoharides

Comments received:

01/19/2021 Office of Coastal Zone Management (CZM)
01/19/2021 Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO)
01/19/2021 Department of Conservation and Recreation (DCR)
01/19/2021 Boston Water and Sewer Commission (BWSC)

KAT/EFF/eff

Boston Water and Sewer Commission

980 Harrison Avenue
Boston, MA 02119-2540
617-989-7000

January 15, 2021

Secretary Kathleen Theoharides
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office, Ms. Erin Flaherty
100 Cambridge Street, Suite 900
Boston MA 02114

Re: McConnell Playground Improvements
Environmental Notification Form

Dear Secretary Theoharides:

The Boston Water and Sewer Commission (Commission) has reviewed the Environmental Notification Form (ENF) for the proposed McConnell Playground improvements project located at Springdale Street in Dorchester. This letter provides the Commission's comments on the ENF.

The proposed project site is located on approximately six-acres of land and has three natural turf softball fields, children's playground, parking area, shade trees, an access road to the Dorchester Yacht Club and a harborwalk along the waterfront. The project proponent, Boston Parks & Recreation Department, proposes to reconstruct the softball fields, expand and upgrade the playground and improve the parking lot. Appurtenances also include Street lighting, security camera, spectator seating and stormwater management systems.

The Commission owns and maintains two 12-inch Ductile Iron Cement lined (DICL) water mains in Springdale Street and an 8-inch cast iron water main in Southview Street. The 12-inch water mains in Springdale Street were installed in 2010, one water main is served by the Commission's Southern High Pressure zone and the other is served by the Commission's Southern Low Pressure zone. The water main in Southview Street was installed in 1928, cleaned and cement lined in 1995 and is served by the Commission's Southern Low Pressure zone. Commission records also show that the DCR has an 8-inch DICL water main that extends across the site to the Dorchester Yacht Club. The water main was installed in 2000 and is served by the Commission Southern Low Pressure zone through a connection to the Commission's 8-inch water main in Denny Street. The water main in Denny Street was installed in 2000 and is a DICL pipe.

Sewers owned and maintained by the Commission are a 24-inch sewer in Springdale Street and a 12-inch sewer in Southview Street. The Commission also has sewers and drains that extend on-site including a 10-inch sewer in Bayside Road, a 96-inch by 120-inch storm drain and a 42-inch storm drain that extends from the existing parking area at the end of Denny Street to the 96-inch by 120-inch storm drain. Private sewers and storm drains on the site are a 4-inch sewer force main that serves the Dorchester Yacht Club and a 42-inch MassDot storm drain.

The ENF states that daily water demand for the proposed project is estimated to be 8,355 gallons per day (gpd) and wastewater generation are not applicable.

The Commission has the following comments regarding the ENF:

General

1. Prior to the initial phase of the site plan development, Boston Parks & Recreation Department should meet with the Commission's Design and Engineering Customer Services to review water main, sewer and storm drainage system availability and potential upgrades that could impact the development.

2. All new or relocated water mains, sewers and storm drains must be designed and constructed at Boston Parks & Recreation Department's, expense. They must be designed and constructed in conformance with the Commission's design standards, Water Distribution System and Sewer Use regulations, and Requirements for Site Plans. The site plan should include the locations of new, relocated and existing water mains, sewers and drains which serve the site, proposed service connections, water meter locations, as well as back flow prevention devices that will require inspection. A General Service Application must also be submitted to the Commission with the site plan.

3. The proponent estimates that daily sewage will be less than DEP's 15,000 gpd threshold. However, the proponent should be aware that if during the site plan permitting process it becomes apparent that wastewater flows will be 15,000 gpd or more, the Commission will invoke the requirement that the project participate in the 4 to 1 program.

   The proponent should also note that the 4 to 1 requirement must be addressed 90 days before the activation of the water service.

4. The design of the project should comply with the City of Boston's Complete Streets Initiative, which requires incorporation of "green infrastructure" into street designs. Green infrastructure includes greenscapes, such as trees, shrubs, grasses and other landscape plantings, as well as rain gardens and vegetative swales, infiltration basins, and paving materials and permeable surfaces. The proponent must develop a

maintenance plan for the proposed green infrastructure. For more information on the Complete Streets Initiative see the City's website at http://bostoncompletestreets.org/

5. The Commission's records indicate that there may be a green infrastructure feature or stormwater mitigation structure on this site. The Commission request that the Boston Parks & Recreation Department verify the structure and indicate the structure along with its tributary area on the site plan that is submitted to the Commission. In addition, the Boston Parks & Recreation Department should submit a maintenance plan to the Engineering Customer Service Division.

6. The Commission will require Boston Parks & Recreation Department to undertake all necessary precautions to prevent damage or disruption of the existing active water and sewer and drain lines on, or adjacent to, the project site during construction. As a condition of the site plan approval, the Commission will require Boston Parks & Recreation Department to inspect the existing sewer and drain lines on site by CCTV after site construction is complete, to confirm that the lines were not damaged from construction activity.

7. It is Boston Parks & Recreation Department's responsibility to evaluate the capacity of the water, sewer and storm drain systems serving the project site to determine if the systems are adequate to meet future project demands. With the site plan, Boston Parks & Recreation Department must include a detailed capacity analysis for the water, sewer and storm drain systems serving the project site, as well as an analysis of the impacts the proposed project will have on the Commission's water, sewer and storm drainage systems.

Water

1. Boston Parks & Recreation Department must provide separate estimates of peak and continuous maximum water demand for the irrigation of landscaped areas, and other uses for the project with the site plan. Estimates should be based on full-site build-out of the proposed project. Boston Parks & Recreation Department should also provide the methodology used to estimate water demand for the proposed project.

2. Boston Parks & Recreation Department should consider outdoor landscaping which requires minimal use of water to maintain. The Commission recommends that timers, soil moisture indicators and rainfall sensors be installed as part of the in-ground sprinkler systems,

3. Boston Parks & Recreation Department is required to obtain a Hydrant Permit for use of any hydrant during the construction phase of this project. The water used from the

hydrant must be metered. Boston Parks & Recreation Department should contact the Commission's Meter Department for information on and to obtain a Hydrant Permit.

4. Boston Parks & Recreation Department will also be required to install approved backflow prevention devices on the water services for the irrigation systems. Boston Parks & Recreation Department is advised to consult with Mr. James Florentino, Manager of Engineering Code Enforcement, with regards to backflow prevention.

5. The Commission is utilizing a Fixed Radio Meter Reading System to obtain water meter readings. For new water meters, the Commission will provide a Meter Transmitter Unit (MTU) and connect the device to the meter. For information regarding the installation of MTUs, Boston Parks & Recreation Department, should contact the Commission's Meter Department.

Sewage / Drainage

1. In conjunction with the Site Plan and the General Service Application Boston Parks & Recreation Department, will be required to submit a Stormwater Pollution Prevention Plan. The plan must:

   - Identify specific best management measures for controlling erosion and preventing the discharge of sediment, contaminated stormwater or construction debris to the Commission's drainage system when construction is underway.

   - Include a site map which shows, at a minimum, existing drainage patterns and areas used for storage or treatment of contaminated soils, groundwater or stormwater, and the location of major control structures or treatment structures to be utilized during the construction.

   - Specifically identify how the project will comply with the Department of Environmental Protection's Performance Standards for Stormwater Management both during construction and after construction is complete.

2. Developers of projects involving disturbances of land of one acre or more will be required to obtain an NPDES General Permit for Construction from the Environmental Protection Agency and the Massachusetts Department of Environmental Protection. Boston Parks & Recreation Department is responsible for determining if such a permit is required and for obtaining the permit. If such a permit is required, it is required that a copy of the permit and any pollution prevention plan prepared pursuant to the permit be provided to the Commission's Engineering Services Department, prior to the commencement of construction. The pollution prevention plan submitted pursuant to a

NPDES Permit may be submitted in place of the pollution prevention plan required by the Commission provided the Plan addresses the same components identified in item 1 above.

3. The Commission encourages Boston Parks & Recreation Department, to explore additional opportunities for protecting stormwater quality on site by minimizing sanding and the use of deicing chemicals, pesticides, and fertilizers.

4. The discharge of dewatering drainage to a sanitary sewer is prohibited by the Commission. Boston Parks & Recreation Department is advised that the discharge of any dewatering drainage to the storm drainage system requires a Drainage Discharge Permit from the Commission. If the dewatering drainage is contaminated with petroleum products, Boston Parks & Recreation Department, will be required to obtain a Remediation General Permit from the Environmental Protection Agency (EPA) for the discharge.

5. Boston Parks & Recreation Department must fully investigate methods for retaining stormwater on-site before the Commission will consider a request to discharge stormwater to the Commission's system. Under no circumstances will stormwater be allowed to discharge to a sanitary sewer.

6. The Massachusetts Department of Environmental Protection (MassDEP) established Stormwater Management Standards. The standards address water quality, water quantity and recharge. In addition to Commission standards, Boston Parks & Recreation Department will be required to meet MassDEP Stormwater Management Standards.

7. Sanitary sewage must be kept separate from stormwater and separate sanitary sewer and storm drain service connections must be provided. The Commission requires that existing stormwater and sanitary sewer service connections, which are to be re-used by the proposed project, be dye tested to confirm they are connected to the appropriate system.

8. The Commission requests that Boston Parks & Recreation Department install a permanent casting stating "Don't Dump: Drains to Boston Harbor" next to any catch basin created or modified as part of this project. Boston Parks & Recreation Department should contact the Commission's Operations Division for information regarding the purchase of the castings.

9. The Commission requires installation of particle separators on all new parking lots greater than 7,500 square feet in size. If it is determined that it is not possible to infiltrate all of the runoff from the new parking lot, the Commission will require the installation of a particle separator or a standard Type 5 catch basin with an outlet tee for

the parking lot. Specifications for particle separators are provided in the Commission's requirements for Site Plans.

Thank you for the opportunity to comment on this project.

Yours truly,

John P. Sullivan, P.E.
Chief Engineer

JPS/rja

cc: C. Cook, Boston Parks & Recreation Department
K. Ronan, MWRA via e-mail
K. Pedersen, BPDA via e-mail
M. Zlody, BED via e-mail
P. Larocque, BWSC via e-mail

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

MEMORANDUM

TO: Kathleen A. Theoharides, Secretary, EEA
ATTN: Erin Flaherty, MEPA Office
FROM: Lisa Berry Engler, Director, CZM
DATE: January 19, 2021
RE: EEA #16305, McConnell Park Improvements, Boston

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Environmental Notification Form (ENF) noticed in the *Environmental Monitor* dated December 23, 2020 and offers the following comments.

Project Description

With this ENF, the City of Boston, through its Parks and Recreation Department, proposes to reconstruct an existing active recreation park adjacent to I-93 and Savin Hill Beach in Dorchester to include fully lit natural turf fields; an accessible synthetic turf field; an inclusive playground; an improved and expanded parking area with a designated emergency drive; a pedestrian plaza; a portable restroom shelter; and improved on-site stormwater management. The nearly seven-acre project site includes filled tidelands and consists entirely of land subject to coastal storm flowage, which is coincident with the extent of the flood zone associated with a 1% chance annual storm (Zone AE elevations 11 and 12), according to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM). Portions of the project site, including the parking lot and emergency drive, which are the priority protection areas, will be elevated by up to four feet with fill to reduce the adjacent neighborhood's vulnerability to coastal flooding. This will protect the highly used parking lot and emergency drive while allowing the less critical park areas to flood. As a result of the project, impervious area will increase by almost one quarter of an acre and 8,355 gallons of water per day will be used. The project is partly funded by a $1-million Land and Water Conservation Fund Grant from the U.S. Department of the Interior.

Project Comments

Because the impacts of climate change are anticipated to increase and accelerate, the project site, which is already vulnerable to flooding in a 1% chance annual storm, will be inundated during a 10% chance annual storm with nine inches of sea level rise (expected by 2030) and during high tide with 21 inches of sea level rise (expected by 2050, which is the proposed design life of the project). The ENF identifies the project site's flood zones based upon the current FEMA FIRM and indicates that the project is being designed for future sea level rise, however it is not clear from the plans that the increases in sea level are incorporated into the design of the project. Based on the topographic analysis provided as part of the supplemental information package, the proposed fill and grading may result in the unintended channelization of flood waters into the Playstead Road area during major storm events, especially as sea level rises and base flood elevations increase. During permitting, the

proponent should include the projected flood zones with sea level rise based on the Boston Harbor Flood Risk Model, as shown on the Climate Ready Boston Map Explorer. The proponent should also describe how the project is designed to address these potential hazards, including potential side effects resulting from fill, such as the channelization of coastal floodwaters onto and over Playstead Road in particular. FEMA's post-storm damage assessments (i.e. Mitigation Assessment Team Reports) have cited flow channelization as one of the causes of damage to buildings and infrastructure during storm events. In addition, solid elements, such as granite block seat walls, may increase channelization and promote scour. Proposed fill, grading, or solid project components should avoid and minimize adverse impacts to existing wetland resource areas on or adjacent to the project site or inhibit public access along the Harborwalk.

The proposed project includes a stormwater system that will significantly reduce peak discharges during storm events. However, the anticipated impacts of climate change in addition to sea level rise include increased precipitation and more intense coastal storms. The supplemental information provided by the consultant indicates that the current capacity of the existing outfall at Morrissey Boulevard is limited and that it is not possible to calculate at what point the proposed stormwater system will be overwhelmed by stormwater, coastal floodwater, or a combination of both. Because the proposed stormwater management for this site relies on the Morrissey Boulevard stormwater system, the proponent should consider potential alternatives, such as improvements to the proposed stormwater system and/or discharge system, in coordination with DCR and the Boston Water and Sewer commission.

The site has limited ability for stormwater recharge because of the underlying urban fill material. However, the project presents an opportunity to treat stormwater to ensure that the water conveyed into Boston Harbor, which is impaired for bacteria, is not negatively impacted. The proposed best management practices (BMPs) for stormwater management do not treat bacteria; the proponent should consider additional BMPs for treatment of stormwater.

Federal Consistency

The proposed project may be subject to CZM federal consistency review. For further information on this process, please contact Robert Boeri, Project Review Coordinator, at robert.boeri@mass.gov or visit the CZM website at https://www.mass.gov/federal-consistency-review-program.

LBE/ts/elh/rh

cc: Andy Backman, Director of Regional Planning, Department of Conservation & Recreation
Phil DiPietro, Environmental Engineer, MassDEP-NERO
Nicholas Moreno, Executive Director, Boston Conservation Commission
Jill Provencal, Wetlands Section Chief, MassDEP-NERO

dcr
Massachusetts

January 12, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
Attn: Erin Flaherty, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EOEEA #16305 McConnell Park Improvements ENF

Dear Secretary Theoharides:

The Department of Conservation and Recreation ("DCR" or "Department") is pleased to submit the following comments in response to the Environmental Notification Form ("ENF") submitted by Boston Parks and Recreation (the "Proponent") for the McConnell Park Improvements (the "Project").

As described in the ENF, the Project seeks to improve Park facilities, including reconstruction of ball fields, improvements to parking facilities, street lighting, and traffic and pedestrian circulation. Boston's McConnell Park abuts the northern boundary of DCR's Malibu Beach.

Integration with Malibu Beach

The Department reviewed and also authorized as landowner the Notice of Intent and a Chapter 91 submittal for the Project, because proposed the City's work activities will occur along a boundary shared by the City of Boston and DCR. The Project team is coordinating with DCR's Design and Engineering staff to address the integration of design elements that impact coastal resources and visitor experience. DCR supports the Project and will continue to work with the Proponent during design and construction.

Thank you for the opportunity to comment on the ENF. Project work activities within the state reservation boundaries require a DCR Construction and Access Permit. Please contact the Director of Construction & Access Permitting, Sean Casey, at sean.casey@mass.gov regarding DCR Construction and Access Permits. Questions related to integration with Malibu Beach can be directed to Ginna Johnson at ginna.johnson@mass.gov.

Sincerely,

Jim Montgomery
Commissioner

Cc: Ginna Johnson, Sean Casey, Priscilla Geigis, Patrice Kish, Tom LaRosa (DCR)

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

January 19, 2021

Kathleen A. Theoharides, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

RE: Boston
McConnell Park Improvements
EEA # 16305

Attn: MEPA Unit

Dear Secretary Theoharides:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Environmental Notification Form (ENF) for the proposed McConnell Park Improvements in Boston. MassDEP provides the following comments.

Boston Parks and Recreation Department proposes to reconstruct McConnell Park, a park abutting Savin Hill Beach, or Savin Hill Bay basin, in the Dorchester neighborhood of Boston. The proposed project consists of the reconstruction of the existing ball fields, improvement of the parking lot, construction of a designated emergency drive, construction of a pedestrian plaza with traffic calming devices, and improvement of the tree canopy to increase shade. This project also includes improvements to on-site storm water management system.

The proposed work will impact 265,800 square feet, or approximately 6 acres, of Land Subject to Coastal Storm Flowage (LSCSF) and therefore trips the threshold for filing an ENF at 301 CMR 11.03(3)(b) f. It requires a Chapter 91 License from MassDEP and will seek funding from the U.S Department of the Interior.

Wetlands

The project proposes alteration of the entire 265,800 square feet of LSCSF, or land below elevation 11 NAVD88, at the site. Approximately 1,020 linear feet of Coastal Bank borders the

site but will not be affected by the project. The site will be regraded and elevated by four feet in some areas. The ENF states that the "proposed site and stormwater design presented incorporates strategic areas of increased grade up to three feet to provide protection from projected flood risk scenarios in the most critical areas of the park, coupled with conveying, collecting, and treating stormwater before leaving the site. The parking lot and emergency drive were selected as priority protection areas after analyzing current and future flood pathways. The proposed design scenario allows other less critical park amenities to flood while protecting the highly used parking area during winter months by the neighboring residences."

In response to comments from the review agencies during the MEPA meeting, the proponent has submitted supplemental information. This includes a narrative explaining the rationale for choosing the locations for fill, accompanied by diagrams showing how the site floods now, and showing incoming and outgoing travel paths for floodwaters, as compared to how it will flood post-construction. The proponent has also detailed the location of retaining walls located in the interior of the park and asserted that they will not adversely impact or aggravate flooding conditions at the site.

Stormwater

The project design proposes that storm water be captured by deep sump hooded catch basins or curb inlets and treated by planted biorentention basins and conveyed to underground storage chambers to minimize peak flows off-site. Check valves will be installed at downstream drainpipe locations to minimize the flow of flood waters from the ocean into the site during severe storm events. The proponent should clarify the precise extent of stormwater infiltration at the site. The ENF and the supplementary MEPA memorandum submitted January 6, 2021 state that stormwater recharge is not suitable on-site beyond what is proposed due to the soil classification and to minimize the potential for stormwater to infiltrate and leach through material containing urban fill and debris. This is supported by soil boring data showing unsuitable soils for infiltration for most of the system. The memorandum indicates that subsurface infiltration chambers will be constructed adjacent to the access drive and parking lot. It is not clear what specific subsurface chambers will function solely for storage and which will function to provide infiltration to fully to meet the stormwater standards. It is also unclear which of the subsurface chambers will be lined or unlined.

The new stormwater management system will treat and hold water before directing it to the harbor at a nearby outfall at Morrissey Boulevard. The proponent was asked to explain how the system would be limited by discharging to the Morrisey Boulevard outlet as well as the projected design functionality of the new system, or at what theoretical storm event the system will be overwhelmed and cease to function. The supplemental information contains the following response: "It is challenging to determine at what point in time or what storm event size in which the proposed McConnell Park stormwater system may become overwhelmed by ocean flooding as current stormwater calculations standards do not have the ability to consider future sea level rise or tidal flooding events. Thus, it is even more difficult to determine how stormwater and flood water from McConnell Park will impact the existing challenges at the Morrissey Boulevard outfall." Because the final discharge of the proposed stormwater management system for this

site is the Morrissey Boulevard stormwater system, the proponent should investigate further potential improvement alternatives, such as upgrades to the proposed discharge system.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Rachel.Freed@mass.gov at (978) 694-3258 for further information on wetlands issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@mass.gov or at (978) 694-3304.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Eric Worrall, Rachel Freed, Jill Provencal, Phil DiPietro, MassDEP-NERO