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June 26, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE / DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Waltham High School
PROJECT MUNICIPALITY	: Waltham
PROJECT WATERSHED	: Charles
EEA NUMBER	: 16097
PROJECT PROPONENT	: City of Waltham
DATE NOTICED IN MONITOR	: May 20, 2020

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and Section 11.08 of the MEPA Regulations (301 CMR 11.00), I have reviewed the combined Notice of Project Change (NPC)/Draft Environmental Impact Report (DEIR) and hereby determine that it **adequately and properly complies** with MEPA and its implementing regulations.

The NPC/DEIR described changes to the project, most notably the incorporation of an adjacent 6-acre parcel, referred to as Jericho Hill Parcel II, into the project site. As described below in greater detail, the addition of this parcel enabled the reconfiguration of the proposed layout, resulting in a new Preferred Alternative that eliminates direct impacts to wetland resource areas and reduces the amount of land alteration and impervious area. The NPC/DEIR indicated that these revisions were in made in response to the Scope issued in the Certificate on the Environmental Notification Form (ENF), which requested continued evaluation of alternatives that avoid significant impacts to wetland resource areas. Comments from the Massachusetts Department of Environmental Protection (MassDEP), interim Waltham Public Schools Superintendent George Frost, and the Waltham legislative delegation (State Representative Thomas M. Stanley, State Representative John J. Lawn, Jr., and State Senator Michael J.

Barrett) express support for the revised layout and associated reduction in impacts. Comments from residents also support the new Preferred Alternative, highlight the urgent need for a new facility, and indicate the new school will provide educational equality. Comments from the Waltham Land Trust and other residents identify concerns with the addition of the Jericho Hill II Parcel, currently serving as open space, into the project site without mitigating measures such as permanent protection of other land through a recorded conservation restriction or similar means. Comments from residents and abutters also continue to identify concerns with impacts to groundwater, loss of wildlife habitat, and traffic and congestion.

The MEPA process has provided, and will continue to provide, a valuable forum for the collection of all relevant points of view, but reconciling all of the identified (and sometimes competing) concerns is beyond the scope of the MEPA. The primary purpose of the MEPA process is to provide meaningful opportunities for public review of the potential environmental impacts of the Project and to refine the project in the subsequent DEIR and Final Environmental Impact Report (FEIR) process as design progresses. The MEPA process requires public disclosure of a project's environmental impacts as well as the measures that the Proponent will undertake to mitigate these impacts. MEPA review occurs before state agencies act to issue Permits or Financial Assistance for a proposed project to ensure that they are fully cognizant of the environmental consequences of their actions. MEPA review is not a permitting process, nor does it serve as an appeal for local decisions. It is not a zoning process, and it does not proscribe to a Proponent what, where, or how a project should be designed or built. While I expect that the FEIR will serve to provide further transparency and explanations of environmental impacts and mitigation, the many concerns about the design of the project will continue to be reviewed as the final design of the project proceeds to permitting before the City. This certificate is not intended to prejudge the outcome of those subsequent permitting procedures.

Project Description

As described in the ENF, the project includes the demolition of existing structures (a retreat house and conference center) and construction of a new high school building (414,850 gross square feet (sf); 484,240 gross sf including the parking structure) with associated site work, utilities, above- and below-ground parking, on-site access roadways, stormwater infrastructure, and two athletic fields (an existing natural field and a new synthetic turf field). The project is proposed to meet the full programmatic requirements for a 1,830-student, 9th-through-12th-grade high school. The project includes significant earthwork to achieve final design grades of the project, including significant bedrock excavation using a combination of hoe ramming and controlled blasting techniques. An early site preparation phase will include clearing, earthwork, blasting, grading, and preparation for the building construction followed by construction of the building. The existing high school building will be repurposed for other uses at a later time, no earlier than 2024.

As previously described in the ENF, the existing 388,000-sf Waltham High School was constructed in 1968 and does not meet current building, accessibility, and safety standards, nor does it accommodate educational programming needs and increases in student population. The ENF indicated that the existing high school will risk losing its accreditation in 2027 without significant investment in the building or the construction of a new high school. The NPC/DEIR noted the City's future needs related to the growing student population. The City is in need of additional space for either a Kindergarten (K) through 8th grade school or a middle school to relieve overcrowded conditions.

Following construction of the new high school, the City will repurpose the existing high school to meet these needs. For the purpose of evaluating environmental impacts, the DEIR assumed that the McDevitt Middle School (grades 6-8) and the Dual Language School at the Waltham Community and Cultural Center (formerly South School) (K-5) would be relocated to the existing high school building. It also assumed the existing high school building would house the District's Central Office and Parent Information Center (PIC). Renovation of the existing high school for these uses is not anticipated to commence until 2024 at the earliest.

Project Changes Since the ENF

Project changes include the incorporation of an adjacent 6-acre parcel (Jericho Hill II) into the project site and reconfiguration of the project layout. The addition of this parcel enabled relocating the athletic field and parking from the northcentral portion of the site to behind the building and shifting the building west by approximately 90-ft. The NPC/DEIR indicated the reconfiguration was in response to the Secretary's Scope which requested further evaluation of alternatives that avoid significant impacts to wetland resource areas. The revised layout locates all the significant programmatic elements on one side of the intermittent stream, avoids impacts to wetland resource areas, and retains an existing natural turf field located on the eastern portion of the site. As described below in greater detail, the NPC/DEIR also presented a revised plan to provide secondary emergency access to the site.

Project Site

The approximately 52.5-acre project site is comprised of three parcels located at 554 Lexington Street (46.5 acres) and one adjacent parcel known as Jericho Hill II located at 131R Lincoln Street (6 acres) in Waltham. The site is generally bounded by undeveloped land to the west (known as Sanderson Heights), residential areas to the north and south, and Lexington Street and residences to the east. The site was previously owned by the Stigmatine Fathers Inc. Trust and contains buildings associated with the Espousal Retreat House and Conference Center which will be demolished as part of the project. Existing development is located on the southern portion of the site. The remainder of the site is undeveloped and contains areas of relatively steep slopes. Topography ranges from an elevation of 106 ft at Lexington Street to 286 ft at the highest portion of the site near the northern property line. Site access is provided via a single driveway from Lexington Street.

An intermittent stream runs north to south through the center of the site and has associated areas of Bordering Vegetated Wetlands (BVW). The stream extends from a high point in the north central portion of the site to a point in the middle of the site where the stream enters underground piping that extends off the site and under Lexington Street to Chester Brook. The project site is not located in Priority and/or Estimated Habitat as mapped by the Division of Fisheries and Wildlife's (DFW) Natural Heritage and Endangered Species Program (NHESP) or an Area of Critical Environmental Concern (ACEC). The project site contains one building that is listed in the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth and is identified as MHC ID# WLT.138. The ENF contained correspondence from MHC dated February 19, 2019 which acknowledged the building would be demolished and indicated that no further MHC review is required for the project.

Environmental Impacts and Mitigation

As summarized in the table below, the revised project layout has eliminated impacts to wetland resource areas and reduced other environmental impacts.

Environmental Impact	ENF	NPC/DEIR	Net Change
Total Site Area (acres)	46.5	52.5	6
Land Alteration (acres)	12.95	10.2	-2.75
New Impervious Area (sf)	9.72	9.54	-0.18
Bordering Vegetated Wetlands (sf)	4,760	0	-4,760
Inland Bank (lf)	1,680	0	-1,680
New Trip Generation (average daily vehicle trips; adt)	1,491	1,851	360[1]
Parking Spaces	554	454	-100
Water Use (gallons per day; gpd)	30,550	6,380	-24,170
Wastewater Generation (gdp)	26,568	4,575	-21,993

Measures to avoid, minimize, and mitigate environmental impacts include: an upgraded stormwater management system, redesigning the project to eliminate wetland impacts, traffic signalization and roadway improvements, implementation of energy efficient building systems and features, and implementation of a construction management plan.

Jurisdiction and Permitting

The project is undergoing MEPA review and requires preparation of an ENF pursuant to Sections 11.03(1)(b)(2), 1.03(6)(b)(14), and 11.03(6)(b)(15) of the MEPA regulations because it requires a State Agency Action and will result in the following: creation of five or more acres of impervious area; generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location; and construction of 300 or more New parking spaces at a single location (respectively).[2] The project will receive Financial Assistance from the Massachusetts School Building Authority (MSBA).

The project requires an Order of Conditions from the Waltham Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from the Massachusetts Department of Environmental Protection (MassDEP)).[3] The project is subject to review by and requires permits from

[1] The trip generation has been revised since the ENF was filed to account for the trips associated with future reuse of the existing high school (360 adt).

[2] The ENF indicated the project also exceeded the threshold at 301 CMR 11.03(3)(b)(1)(b) – Alteration of 500 or more linear feet of bank along an inland bank. The project has been redesigned and no longer exceeds this threshold.

[3] The project also requires a Superseding Order of Resource Area Delineation (ORAD) from MassDEP. This is not considered an Agency Action as defined at 301 CMR 11.02.

several City of Waltham agencies, including: a Variance from the Zoning Board of Appeals (ZBA), Special Permit from the Board of Survey and Planning, Demolition and Construction Permits from the Building Department, Blasting Permit from the Fire Department, and approval for curb cuts and street opening from the Consolidated Public Works Department. It also requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA).

Because the project will receive Financial Assistance, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Review of the NPC/DEIR

The NPC/DEIR was responsive to the Scope and identified changes to the project to minimize environmental impacts as compared to the ENF. The NPC/DEIR described the proposed project and changes since the filing of the ENF. The NPC/DEIR identified existing conditions, described potential environmental impacts and mitigation measures, and provided a discussion of alternatives. It included updated site plans for existing and proposed conditions, a brief description of applicable statutory and regulatory standards and requirements, and an explanation of how the project will meet the standards. It included a list of required State Permits, Financial Assistance, or other State approvals and provided an update on the status of each of these pending actions. It provided figures depicting secondary emergency access and conceptual site plans for proposed off-site improvements. The NPC/DEIR provided clarification regarding the school district's Master Educational Plan and athletic field requirements. The list of priorities for athletic fields (sometimes referred to as the Athletic Field Master Plan; provided as Appendix 2.2) was created for planning purposes as a guide to evaluate alternatives and to identify locations which could accommodate additional athletic programs. The NPC/DEIR clarified it was not the intent to provide fields for all athletic programs on a single site.

The NPC/DEIR presented a revised plan to provide a secondary emergency access site which is not required by Code but was requested by the City's Police Chief and Fire Chief. The ENF previously indicated that the only viable alternative for providing secondary access without acquisition of additional land was a route through two abutting parcels owned by the City (Jericho Hill II and Sanderson Heights). The NPC/DEIR indicated that Sanderson Heights was eliminated from consideration because the property is not controlled by the Waltham School Department. The NPC/DEIR indicated that secondary emergency access will be provided via an existing easement as the City does not want to acquire additional land. The City has a water, sewer, and drain easement that extends from the end of Lincoln Street to the 554 Lexington Street property line, referred to as Lincoln Street Extension. The project will construct a 20-ft wide paved drive on the project site for use by emergency vehicles. The 20-ft paved drive which will connect the on-site internal roadway network to the edge of the 554 Lexington Street property line where it will connect to the abutting easement. The NPC/DEIR indicated the easement provides the City with maintenance rights and that the City may pave Lincoln Street Extension. Access to this emergency road will be gated at the property line abutting the easement and at the high school internal roadway. A six-foot high chain link fence will be installed along the southern boundary line to prevent students from walking through private properties.

Alternatives Analysis

The Scope required the City to reconsider the alternative site layouts presented in the ENF (Alternatives 1-5) in light of MassDEP's comments on the ENF, which noted that alternatives that avoid significant impacts to Bank or BVW should continue to be explored even if they result in increased impacts to upland areas or require increased blasting. Alternatives 1-5 were alternative site layouts specifically focused on reducing impacts to the intermittent stream and BVW. The Scope also required the City to evaluate alternatives to mitigate the loss of Bank and BVW. As noted above, the project has been revised to eliminate all impacts to wetland resource areas. The DEIR did not present any new alternatives, other than the revised Preferred Alternative. As summarized below, the NPC/DEIR compared the environmental impacts of the revised Preferred Alternative to the Alternatives described in the ENF, including Alternatives Option A-B and Alternatives 1-5.

Alternative	Alternative Description	Altered Bank (lf)	Altered BVW (sf)	New Land Alteration (ac)	New Impervious Area (ac)	Estimated Rock Removal (cy)	Length of Rock Walls (lf)
1	No Build	0	0	0	0	0	0
2	ENF Preferred Alternative	1,680	4,670	12.95	9.72	780,000	2,215
3	Replication Similar to Schematic Design	1,200	4,670	12.60	9.72	780,000	2,215
4	Intermittent Stream Replication Between Separated Development Areas	1,040	4,670	14.80	9.99	985,000	3,460
5	Existing Intermittent Stream to remain Between Separated Development Areas	0	0	14.75	13.8	930,000	3,430
Option A	Located school near Lexington Street within developed portion of site.	1,700	4,670	12.90	10.25	930,000	2,250
Option B	Located school further into project site.	1,300	4,670	13.8	11.25	950,000	2,620
Preferred Alternative	NPC/DEIR Revised Preferred Alternative	0	0	10.89	9.54	747,000	1,920

The NPC/DEIR identified the pros and cons of each of the alternatives. The NPC/DEIR indicated that the Preferred Alternative was selected based on the following criteria: fulfills the goals of the project to meet the educational needs for the children of Waltham; avoids impacts to wetland resource areas and will restore previously filled Bank and BVW; provides integrated design among the building, athletic field, and parking area; and allows for maintenance of the existing natural field area near Lexington Street, on the other side of the intermittent stream from the proposed school. Additionally, it will result in less land alteration, impervious area, earthwork/blasting, and removal of blast material compared to the other alternatives. Comments from MassDEP support the Preferred Alternative as it avoids impacts to wetland resource areas. The NPC/DEIR indicated the Preferred Alternative will increase the buffer to residential areas on the east side of the project (Lexington Street) but reduce the buffer to residential areas on the south side (Lincoln Street, Lincoln Terrace, and Glen Circle). Comments from abutters identify concerns regarding noise and light from the proximate athletic fields during sporting events. Comments also request additional analysis of alternative locations for the project, including 617 Lexington Street (adjacent to the existing high school) and 200 Trapelo Road (former Fernald Hospital). I note that these alternative locations were previously evaluated in the ENF and the Scope for the NPC/DEIR did not require further analysis.

Land

The project will alter 10.2 acres of land and will create 9.54 acres of new impervious area. The NPC/DEIR indicated that relocating the athletic field allows the existing natural field and north-central portion of the site to remain as undisturbed wooded area. It also reduced impervious area through elimination of previously proposed on-site access roads. I encourage the City to consider placing a conservation restriction on these portions of the site that will remain as undeveloped open space to ensure their permanent protection. The ENF previously proposed the use of porous pavers[4] in a pedestrian plaza area located adjacent to the athletic field. The NPC/DEIR asserts that porous pavers are no longer needed as the area of the pedestrian plaza and overall impervious area have been reduced. The NPC/DEIR included a new commitment to construct green vegetated roofs on the third floor of the building (approximately 3% of the overall roof area).

The NPC/DEIR included a copy of the updated geotechnical report (Appendix 3.1) which described additional geotechnical work that has occurred to evaluate subsurface conditions. The site contains steep topography and will require a significant amount of grading and controlled blasting, creation of a 1,920 lf rock wall cut face, and removal of 747,000 cubic yards (cy) of material from the site. The NPC/DEIR included figures that conceptually identified the proposed areas of cut and fill, areas that will require blasting, and approximate elevation changes necessary to achieve proposed grade given exiting topography. The majority of the cut material will be comprised of rock which will be crushed, processed, and re-used on-site. Limited fill material will be imported to the site. The NPC/DEIR confirmed that project specifications will prohibit the use of perchlorates in blasting materials to avoid impacts to water quality and wetlands.

As requested by the Scope, the NPC/DEIR provided information to address whether the project parcels are protected in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth (Article 97) (Appendices 3.2 – 3.4 of the NPC/DEIR). This information included

[4] Porous pavers are a cellular grid system filled with gravel or soil and grass that provide ground stabilization while reducing compaction of the soil to maintain permeability and improve stormwater quality through infiltration.

written opinions from the City's Law Department which state that the parcels at 554 Lexington Street and 131R Lincoln Street (Jericho Hill II) are not subject to the protections of Article 97. According to information provided with the NPC/DEIR, the City took the 554 Lexington Street parcels by eminent domain in 2018 for the purpose of educational use, open space, or combination thereof. In 2019, the City Council transferred the care, custody, and control of the parcels to the Waltham School Committee and the Waltham School Department for educational use and the purposes associated with educational use. In 2001, the City obtained the 131R Lincoln Street parcel (Jericho Hill II) through a friendly taking/purchase for municipal purposes. According to the NPC/DEIR, on March 9, 2020, the Waltham City Council transferred the care, custody, and control of the Jericho Hill II parcel to the Waltham School Committee and Waltham School Department for educational use and purposes associated with educational use. Comments received from residents identify concerns that this parcel was transferred without an opportunity for public input. Comments also identify concerns about development of the school building on a location that provided public open space and request that the City place a conservation restriction (CR) on the northerly portion of the project site to permanently protect it as publicly accessible open space.

Wetlands/Stormwater

The addition of the Jericho Hill II Parcel allowed the vast majority of the project to be sited on one side of the intermittent stream, eliminating all wetland impacts, including the need to fill and reroute the stream. The project will impact 1.44 acres of buffer zone. Work within the buffer zone includes removal of fill, construction of roadways and sidewalks, and earthwork required to achieve design grades. Comments from MassDEP are supportive of the revised project design which avoids impacts to wetland resource areas. The project also includes removal of historic fill to restore approximately 550 sf of BVW and 270 lf of bank associated with an intermittent stream. As noted during review of the ENF, these resource areas were identified through proceedings related to a Superseding Order of Resource Area Delineation (ORAD) for 554 Lexington Street. The NPC/DEIR noted that MassDEP is still processing the Superseding ORAD, which will determine the resource area boundaries on the site. Project plans provided with the NPC/DEIR depicted resource areas consistent with MassDEP's findings at the site investigations for the Superseding ORAD. Comments from MassDEP indicate the Superseding ORAD will be issued upon issuance of the MEPA Certificate. I note that a Superseding ORAD is not considered an Agency Action as defined at 301 CMR 11.03, and as such, may be issued prior to the completion of the MEPA review process.

The project will create 9.54 acres of impervious area (14.16 total acres). The NPC/DEIR indicated the stormwater model was updated to account for the project changes, including the addition of Jericho Hill II and the revised project layout. The stormwater management system will incorporate the following Best Management Practices (BMPs): bioretention swales, subsurface detention basins, hooded deep sump catch basins, and structural water quality units. The NPC/DEIR indicated the project will be considered a redevelopment per the MassDEP SMS and acknowledged that the site access road is considered a Land Use with Higher Potential Pollutant Loads (LUHPPL) for the purposes of applying the SMS. As such, the stormwater management system has been designed with suitable BMPs to treat the one inch water volume and provide adequate treatment prior to infiltration. The NPC/DEIR indicated the project will improve drainage conditions on abutting properties through installation of a drainage swale along the eastern side of the property line and site grading along the southern edge of the property which will intercept stormwater runoff from the site and direct it to the on-site drainage system.

The project is required to comply with the Total Maximum Daily Load (TMDL) for nutrients in the Upper/Middle Charles River, which requires no additional inputs of phosphorous to the river and a significant reduction from existing development. The NPC/DEIR provided phosphorus load calculations which indicate that the project will result in a post-development export of approximately 16 lbs/year of phosphorous. I refer the City to comments from the Charles River Watershed Association (CRWA) which encourage additional use of surface biofiltration strategies to ensure compliance with the TMDL. The NPC/DEIR indicated that site constraints (such as large amounts of cut land, proximity to groundwater and wetland resources, steep slopes, and compact site design footprint) limit opportunities to incorporate bioretention and water quality swales to further reduce nutrient loads.

Currently, all stormwater that leaves the site eventually discharges to Chester Brook. The on-site intermittent stream is a tributary that also discharges to Chester Brook. The project includes earthwork and 280 lf of bedrock cuts (i.e. rock walls) located parallel to and approximately 50-ft south of the intermittent stream. The NPC/DEIR indicated that this work is not anticipated to impact surficial flow within the stream channel due to the 50-ft setback distance and the lower bedrock wall heights in this area (ranging from 0 to 40-ft high). Earthwork and the rock wall will cut off flows from a 0.4 acre portion of the intermittent stream's contributing watershed (20.39 total acres). The flows from this area will combine with the rest of the site's runoff and will ultimately still discharge to Chester Brook. The NPC/DEIR indicated that this reduction is insignificant (2% of the existing intermittent stream watershed) and that the loss of tributary area is not anticipated to adversely affect the wetland system. The NPC/DEIR noted that potential impacts from existing fractures and/or joints within the bedrock will be further evaluated relative to possible impacts to surficial flow within the stream channel as project design progress.

Depths to groundwater across the site vary from between 1- to 12.5-feet in test pits and 8.2- to 12.5-feet in best borings. Portions of the rock wall, building, and below-grade parking structure will be below groundwater elevations. The project includes a permanent, below-slab and perimeter foundation system and a piped drainage system along the base of the rock wall to collect groundwater and incorporate it into the stormwater management system. The NPC/DEIR indicated that a series of test borings with observation wells and groundwater pump tests will be conducted to further understand hydrogeologic conditions in the bedrock and groundwater flow rates and to further evaluate groundwater flow and direction.

Traffic/Transportation

The NPC/DEIR indicated that trip generation and the number of parking spaces were revised to account for 360 additional trips and the elimination of 100 parking spaces associated with repurposing the existing high school. The NPC/DEIR confirmed that the Traffic Impact Analysis (TIA) previously included the future reuse of the existing high school as part of the future build conditions. The project will result in 1,851 new adt and 454 new parking spaces (650 total parking spaces). Approximately 450 of the 650 total parking spaces will be provided in a subsurface parking garage below the artificial turf field. Many comment letters on the ENF identified concerns with increased congestion on Lexington Street and referenced a report to the Waltham Traffic Commission which indicated the project will significantly increase traffic on Lexington Street to a point where it may exceed the street's capacity. The NPC/DEIR provided a response to the analysis performed by the City Traffic Commission.

As noted in the ENF, the project will signalize the site driveway's intersection with Lexington Street and installation of turning lanes on Lexington Street to mitigate the project's transportation impacts. The City proposes to increase the design speed on Lexington Street and to eliminate existing bike lanes on Lexington Street to accommodate the addition of turning lanes. A shared bike lane will be incorporated into the northern lane to offset the elimination of the dedicated bike lane. The NPC/DEIR indicated this portion of Lexington Street cannot accommodate both an exclusive bike lane and the proposed turning lanes without private land takings (presumably to widen the right of way). The NPC/DEIR did not provide figures or additional documentation to support this. I refer the City to joint comments from MassBike/WalkBoston and others which identify concerns that vehicle accommodations are being provided at the expense of the safety of bicyclists and pedestrians, especially given the increase in design speed along Lexington Street. I expect the City will continue to evaluate and will commit to measures that will improve safety for bicyclists and pedestrians along this corridor. These measures should be specifically identified in the FEIR and incorporated into the draft Section 61 Findings.

The NPC/DEIR indicated the City will investigate implementing adaptive signal control technologies at the signalized intersections along the Lexington Street corridor. I encourage the City to implement this measure which may reduce congestion and improve traffic operations in the area. The NPC/DEIR did not clarify whether the other measures identified in the TIA to improve operations on the Woodcliff Drive and Forest Street approaches, and at the Lexington Street/Lake Street/Bishops Forest Drive and Lexington Street/Existing School Exit Only Driveway intersections will be implemented as part of this project. This should be clarified in the FEIR and these measures should be incorporated into the draft Section 61 Findings.

Climate Change

The NPC/DEIR provided an analysis of stationary- and mobile-source GHG emissions and identified measures to mitigate the project's GHG impacts. As described below, it also included a general discussion of vulnerabilities of the site to the potential effects of climate change.

Greenhouse Gas Emissions

The NPC/DEIR included an updated GHG analysis based on the MEPA Greenhouse Gas Policy and Protocol (the Policy). The GHG Policy requires projects to quantify carbon dioxide (CO_2) emissions and identify measures to avoid, minimize or mitigate such emissions. The analysis quantified the direct and indirect CO_2 emissions associated with the project's energy use (stationary sources) and transportation-related emissions (mobile sources). The DEIR outlined and committed to mitigation measures to reduce GHG emissions. The stationary source GHG analysis evaluated CO_2 emissions for two alternatives as required by the Policy; the Base Case and the Design Case. The Base Case was designed to meet the minimum energy requirements of the 9th Edition of the Massachusetts Building Code, which references the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2013. The Design Case included additional energy-efficiency measures proposed in the Preferred Alternative. The City of Waltham has adopted the Massachusetts Stretch Energy Code (SC). Therefore, the project will be required to meet the applicable version of the SC in effect at the time of construction. The SC requires at least a 10-percent reduction in energy use compared to the base

Building Code requirements. According to the NPC/DEIR, the Town intends to design the project to exceed the energy efficiency requirements of the Building Code by at least 20%, which will make it eligible for an additional reimbursement from the MSBA. I refer the City to comments from DOER which indicate that the SC will include several new amendments that will become effective in August of this year. The NPC/DEIR indicated that an updated energy modelling analysis based on the new Building Code will be conducted during the design development phase.

The GHG analysis used eQuest modeling software to quantify stationary source emissions from the project. The NPC/DEIR included a summary of modeling inputs (e.g., R-values, U-values, efficiencies, lighting power density, etc.) for both the Base Case and Preferred Alternative. The NPC/DEIR identified those energy efficiency measures that will be incorporated into the project and were modeled in the GHG analysis, measures that were dismissed as infeasible or inappropriate (solar hot water, solar PV, ground source heat pumps, cogeneration, fuel cells), and measures that will be studied further during the advanced design stages. As presented in the NPC/DEIR, key building related energy efficiency measures proposed for the buildings include:

- High-performing building envelope insulated beyond Code (wall assembly U-factor=0.0357; roof assembly U-factor=0.0208);
- High-performing lighting systems and controls beyond Code, including reduced Lighting Power Densities (LPD) (0.5 watts/square foot), daylight and vacancy controls, and advanced digital lighting controls;
- Solar-ready rooftop and electrical system;
- Electric-Vehicle (EV) charging stations for 2% of parking spaces;
- A high efficiency mechanical HVAC system including:
    - Direct Outside Air Ventilation System (DOAS) with heat recovery (design effectiveness of 70% or better);
    - High efficiency air cooled chiller;
    - Demand control ventilation for all occupied spaces;
    - Temperate setback during unoccupied hours;
    - VFDs on pumps;
    - High performance condensing natural gas boilers (95% efficiency); and
    - High performance natural gas hot water boiler.

The NPC/DEIR included a commitment to design the rooftop and electrical system to be solar ready. It did not include a commitment to install or reserve rooftop space for a solar PV system. The NPC/DEIR noted that solar PV is not considered for the project as the City of Waltham cannot commit to rooftop PV at this time. It did not provide a feasibility analysis or financial assessment to support its dismissal. Additional analysis of solar PV is required in the FEIR. The NPC/DEIR indicated that repurposing the existing high school facility will not occur until 2023 at the earliest. The City will maintain and upgrade the building systems as needed until substantial retrofits are proposed as part of the building's reuse. The NPC/DEIR identified energy conservation measures that will be considered as part of future upgrades and retrofits.

The NPC/DEIR indicated the City will encourage and promote a Transportation Demand Management (TDM) program to reduce mobile source GHG emissions. The TDM program may include the following measures:

- Encouraging and incentivizing the use of buses;

- Limiting bus and vehicle idling at the school;
- Providing improved site circulation and intersection design to reduce idling times for vehicles;
- Encouraging the use of bicycles and pedestrian traffic to the school and providing numerous secure bike racks/storage;
- Providing vehicle charging stations for electrical vehicles;
- Offering preferred parking for carpool and low emission vehicles; and
- Providing assigned parking spaces to minimize travel time on-site.

The TDM plan was not included as a mitigation commitment nor incorporated in the draft Section 61 Findings. The City's commitment to implement the above TDM programs should be clarified in the FEIR.

Mobile GHG emissions were estimated using the standard methodology in the EEA/MassDOT Guidelines for EIR/EIS Traffic Impact Assessments and MOVES CO_2 emission factors. Mobile source GHG emissions were calculated for the 2024 No Build Condition, 2024 Build without TDMs Condition, and 2024 Build with TDMs Condition. There are discrepancies in the analysis as the NCP/DEIR states that the 2024 Build Case includes roadway mitigation measures *but not TDMs*. This discrepancy should be clarified in the FEIR. Additionally, the NPC/DEIR indicated that the 2024 No Build and 2024 Build cases *both* include emissions associated with new project-generated trips in addition to existing background traffic. It is unclear why project-generated emissions are included in the 2024 No Build scenario. Mobile source GHG emissions were calculated by subtracting the 2024 No Build values from those for the 2024 Build Cases. To accurately understand the mobile source GHG emissions associated with the project, the FEIR should exclude project-generated trips from the 2024 No Build Condition and should compare the GHG emissions associated with the 2024 Build Condition (with no roadway improvements or TDM measures) to the 2024 Build with Mitigation Condition (i.e. with roadway improvements and TDM measures), and propose additional mitigation measures, if necessary.

The GHG analysis indicates that the project will generate approximately 2,283 tons per year (tpy) of stationary source Base Case emissions. The Preferred Alternative, developed to demonstrate consistency with the Policy and the SC, will reduce stationary source emissions by 755 tpy, an approximate 33% reduction. Mobile source GHG emissions should be reevaluated in in the FEIR.

The NPC/DEIR modeled and conducted a 50-year life cycle cost analysis (LCCA) for an alternative that incorporated triple glazed window systems and two alternative HVAC systems: System 2: DOAS/variable air volume (VAV) and 4-pipe fan coil unit (FCU) with high efficiency natural gas condensing boilers, and System 3: DOAS/heat recovery and VRF (air source heat pump; ASHP) for heating and cooling (all electric). System 3 generally replaces proposed fossil fuel equipment with efficient electrification. Comments from DOER also note that maximizing electrification of space and water heating can significantly reduce the project's energy use and GHG emissions over time. The triple glazed window system alternative would contribute to a 19 tpy (1%) reduction in GHG emissions. The City has included triple glazing to be priced as an alternate due to the high first costs and payback period which extends beyond the 50-year life cycle. The alternative HVAC System 2 would contribute to an additional 118 tpy reduction in GHG emissions (5.2%) and System 3 would contribute to an additional 444 tpy reduction in GHG emissions (19.5%). The NPC/DEIR indicated the City dismissed these alternatives based on their facility management preferences on maintenance and experience with natural

gas heating over the all-electric ASHP heating system. Comments from DOER request evaluation of a scenario that examines electrification of space heating in conjunction with a more improved building envelope. Additional analysis of this scenario is required in the FEIR.

Adaptation and Resiliency

The City of Waltham is a participant in the Commonwealth's Municipal Vulnerability Preparedness (MVP) program. The MVP program is a community-driven process to define natural and climate-related hazards, identify existing and future vulnerabilities and strengths of infrastructure, environmental resources and vulnerable populations, and develop, prioritize and implement specific actions the municipality can take to reduce risk and build resilience. The NPC/DEIR indicated the City is currently developing a Hazard Mitigation Plan and a Municipal Vulnerability Plan (MVP). The NPC/DEIR indicated the site is vulnerable to the following climate change related events: winter storms, high winds, flooding, heat waves, droughts, and brush fire. The project has incorporated the following elements to minimize impacts from these vulnerabilities: light colored roof, vegetated green roof (3% of total roof area), covered parking area, native and drought resistant plantings, solar-ready rooftop, electric vehicle (EV) charging for 2% of parking spaces, emergency generator, and limited irrigation to reduce outdoor water use. The NPC/DEIR did not include a discussion of future climate conditions nor evaluate or specify whether the stormwater management system was designed to account for the potential impacts of increased precipitation frequency and volume due to climate change. This should be provided in the FEIR.

According to the NPC/DEIR, the new high school building will be designed to be certifiable at the silver level by the LEED (version 4; v4) rating system. The NPC/DEIR included a copy of the preliminary LEED scorecard (Appendix 9.3) that identified the project design criteria and associated credits under consideration for the project. I note the NPC/DEIR indicated the construction of on-site sidewalks and bikeway that connect to a public way and the provision of bike racks for 5% of the building occupants as design criteria incorporated to achieve Sustainable Sites / Location and Transportation LEED credits. These provisions appear to be inconsistent with plans disclosed in the NPC/DEIR to eliminate exclusive bike lanes along Lexington Street. This should be addressed in the FEIR, along with any additional mitigation measures that may be warranted to encourage non-vehicular (bicycle) travel to and from the site as part of TDM measures to offset transportation impacts.

Water Supply/Wastewater

The FEIR described the off-site improvements to the City's water and wastewater infrastructure and provided conceptual figures and plans for these improvements, including replacement of the 4,900 linear foot (lf) water main in Lexington Street and reconstruction of 375 lf of sewer main in Stanley Road. As previously described in the ENF, the City's sewer system eventually conveys flows to the Massachusetts Water Resources Authority's (MWRA) Deer Island Treatment Plant.

The DEIR stated that the total wastewater generation at the new high school (554 Lexington Street) has not changed since the ENF was filed (41,460 gpd). The DEIR included a memo from the City Engineer (Appendix 7.1) which stated that existing wastewater flow at the site is 1,866 gpd (based on review of water meter data). However, the DEIR stated that existing wastewater flow at the site is 14,945 gpd. The project will increase wastewater generation at this location by 26,515 gpd to 39,594

gpd, depending upon which number is used to for existing flow. The DEIR indicated that the future reuse of the existing high school (617 Lexington Street) will decrease wastewater generation at that location by 21,940 gpd. The DEIR indicated that total and net new wastewater demand at the new high school (554 Lexington Street) will remain unchanged from the ENF (47,000 gpd and 30,550 gpd, respectively). The DEIR did not provide updated calculations based on actual water meter data, which would result in an increased water demand for this location. The DEIR indicated that the future reuse of the existing high school (617 Lexington Street) will decrease water demand at that location by 24,170 gpd.

The memo from the City's Engineer and comments from MWRA state that approximately 158,376 gpd of infiltration and inflow (I/I) will need to be removed (calculated based on an increase in wastewater flows of 39,594 gpd) in order to achieve the 4:1 I/I removal rate required by MassDEP regulations and City. The memo from the City's Engineer stated that that the City has accumulated a bank of sewer gallons through private I/I mitigation projects that can be applied to City projects like this one. According to the memo, the sewer bank has adequate gallons to accommodate the Project and a withdrawal of 158,376 gallons will be credited to the City.

Construction Period

According to the NPC/DEIR, the project will be constructed in multiple phases over the course of four years, as follows: Phase 1: June 2020 – October 2020: Abatement and demolition of existing buildings; Phase 2: October 2020 – October 2021: Site clearing, tree and rock removal (blasting), site benching, potential traffic controls; Phase 3: August 2021 – June 2024: Construction of new high school, parking area, and athletic fields; and Phase 4: September 2024 – Open new high school to students. The NPC/DEIR included a draft construction management plan (Section 10) that outlined mitigation measures that will be implemented during the project to avoid or minimize impacts associated with construction traffic, noise and vibration, stormwater, air quality, rodent control, and other impacts. Mitigation measures identified in the NPC/DEIR include: erosion and sedimentation control measures, designated truck routes, scheduling deliveries during non-peak hours, noise and vibration control measures, dust control measures, prohibition of excessive idling of construction equipment, development of a rodent control program, and a commitment to reuse or recycle a minimum of 75-percent of construction debris. Groundwater encountered during construction will be pumped out of the excavations to a recharge pit where it will be recharged into the ground. In the event the groundwater is not absorbed, the contractor will pump the groundwater to a sedimentation tank, filter it through silt sacks, and discharge it to the City's sewer system.

The project will require the removal of 747,000 cy of material from the site. The NPC/DEIR indicated that blasting operations and onsite crushing/processing of material will continue for approximately twelve months. According to the NPC/DEIR, forty to seventy truckloads of material will be exported from the site each day during this time. The anticipated truck route is Lexington Street to Totten Pond Road to Interstate-95 (I-95). The ENF previously indicated that the construction period traffic will not have a significant impact on traffic flow or operations. All construction traffic will be coordinated to avoid peak commuter rush hours and adjacent school drop off and pick up times to the greatest extent practicable.

The NPC/DEIR noted that compliance with the Construction Monitoring Plan will be monitored through field inspection, meeting minutes, and periodic updates. Many comments request that I mandate

monitoring of construction period impacts by independent third parties or that I appoint a community liaison. While I strongly encourage the City to closely monitor construction period impacts and communicate with abutters and residents, this is an issue that is more appropriately addressed during review of the project at the local level. I also expect full compliance with MassDEP regulations governing noise, idling, air quality and other impacts. Comments from residents continue to identify concerns regarding the potential impacts of blasting. As noted in the NPC/DEIR, the project must comply with the blasting regulations pursuant to 527 CMR 1.00 which identify requirements for a blast analysis, blast design plan, pre-blast inspection surveys, allowable limits of effects of blasting, and blasting regulatory review. The NPC/DEIR indicated the City has voluntarily expanded the radius of the pre-blast inspection survey from 250-ft to 500-ft. The City does not restrict the noise from blasting or crushing operations. The NPC/DEIR indicated the project team is analyzing preferred locations for this equipment to minimize impacts on all abutters and to identify potential sound proofing or sound mitigation measures such as constructing sound barriers around the equipment. Additional information on these noise mitigation measures is required in the FEIR.

Conclusion

The MEPA regulations indicate that, upon review of a draft EIR, I may determine that the DEIR is adequate, even if certain aspects of the Project or issues require additional description or analysis in a final EIR, provided that I find the DEIR is generally responsive to the requirements of 301 CMR 11.07 and the Scope. Certain aspects of the Project or issues require additional description or analysis and will be addressed in the FEIR. Based on a review of the NPC/DEIR, the Scope for the DEIR, consultation with State Agencies, and review of comment letters, I have determined that the NPC/DEIR adequately and properly complies with MEPA and its implementing regulations. The Scope below identifies additional analysis and information that should be provided in the FEIR.

SCOPE

General

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Scope. The FEIR should clearly demonstrate that the City has sought to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible. I expect the FEIR will provide a comprehensive response to comments on the NPC/DEIR that specifically address each issue raised in the comment letter; references to a chapter or sections of the FEIR alone are not adequate and should only be used, with reference to specific page numbers or subsections, to support a direct response. The FEIR should identify measures the City will adopt to further reduce the impacts of the project since the filing of the NPC/DEIR, or, if certain measures are infeasible, the FEIR should discuss why these measures will not be adopted.

The information and analyses identified in this Scope should be addressed within the main body of the FEIR and not in appendices. In general, appendices should be used only to provide raw data, such as drainage calculations, traffic counts, capacity analyses and energy modelling, that is otherwise adequately summarized with text, tables and figures within the main body of the FEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in

electronic format, include links to individual sections. Any references in the FEIR to materials provided in an appendix should include specific page numbers to facilitate review.

Project Description and Permitting

The FEIR should include an updated description of the proposed project and describe any changes to the project since the filing of the NPC/DEIR. The FEIR should identify, describe, and assess the environmental impacts of any changes in the project that have occurred between the preparation of the NPC/DEIR and FEIR. The FEIR should include updated site plans for existing and post-development conditions at a legible scale. The FEIR should provide a brief description and analysis of applicable statutory and regulatory standards and requirements, and describe how the project will meet those standards. It should include a list of required State Permits, Financial Assistance, or other State approvals and provide an update on the status of each of these pending actions. The FEIR should include an update on local, regional or federal permitting as applicable. The FEIR should clarify the projected net net increase in water demand and wastewater flow. It should clarify whether the natural field will be used for overflow parking, and if so, the anticipated frequency with which this will occur.

The NPC/DEIR described the following access points to the site: two separate primary access driveways on Lexington Street (separated entrance and exit driveways), a secondary 40-ft wide exit to Lexington Street, and 20-ft wide secondary emergency access drive connecting the site to an adjacent off-site 20-ft wide easement. The FEIR should clarify whether the 40-ft wide access road to Lexington Street (located north of the main entrance to the site) will be gated and used only for emergency access or whether it will serve as a secondary access point. This access road should be depicted on project plans and figures. I note that I received many comments that identify concerns with the City's proposal to use a 20-ft wide water, sewer, and drain easement (Lincoln Street Extension) as a secondary emergency access drive. The FEIR should include specific references to the deed language that supports using the infrastructure easement as an emergency access roadway. It should clarify whether additional clearing or road widening is necessary to enable access by fire trucks. It should also clarify whether the City will need to acquire additional rights to use the easement as an emergency access road either through purchase or an eminent domain taking. The project plans depict steep topography on the project site near this easement. The FEIR should clarify how stormwater from the site will be collected to avoid exacerbating flooding on adjacent off-site properties.

The NPC/DEIR indicated Lexington Street cannot accommodate both an exclusive bike lane and the proposed turning lanes without private land takings (presumably to widen the right of way). The FEIR should identify the width of the right of way and the proposed roadway cross section along this location. The FEIR should identify alternative means to encourage bicycle travel to align with the City's commitment to installing bicycle racks on site.

Alternatives Analysis

The ENF and NPC/DEIR indicated that proposed alternatives were evaluated against criteria established by the School Building Committee, including the site's ability to allow adequate space to provide for the master plan which includes the school, 650 parking spots, and room for future expansion and relocation of as many off-site athletic fields to the site as possible/practical. The project site was selected in part because it met these criteria. The FEIR should clarify whether this is still applicable

given that the Jericho Hill II Parcel was incorporated into the site to enable revisions that would eliminate development from the northeastern portion of the site. To the extent the potential for future expansion is no longer a project goal, the City should address how this would impact the prior analysis of other locations considered for the site which would not require the use of designated public open space.

Land Alteration/Drainage

As noted above, the revised layout allows the existing natural field and north-central portion of the site to remain as undisturbed wooded area. Many comment letters identify concerns about development of open space which provides valuable natural resources and note that the project site (554 Lexington Street) was identified in the City's Open Space and Recreation Plan as a priority area for protection. The City should address in the FEIR whether it will consider placing a conservation restriction on the portion of the site which will remain undeveloped, or at an alternative off-site location, to permanently protect such land as publicly accessible open space.

The FEIR should include a more detailed narrative discussion of the stormwater management system and stormwater conveyance from the project site to Chester Brook. This should address how and where flows from the 0.4 acre portion of the stream's watershed combine with the rest of the site's runoff prior to discharge to Chester Brook. The FEIR should clarify the source data for the design storms used to design the stormwater management system. As discussed below, the City should evaluate sizing the stormwater management system to account for the potential impacts of increased precipitation frequency and volume due to climate change. I received comments from abutters that identify concerns the project will exacerbate flooding conditions. The NPC/DEIR indicated the project team will continue to investigate sources of [flood] water and will implement additional mitigation strategies where feasible so that the project improves conditions to the abutting properties. The FEIR should provide an update on this investigation and should identify any additional mitigation measures that were incorporated into the project. The NPC/DEIR noted that potential impacts from fractures and/or joints within the bedrock will be further evaluated to determine potential impacts to surficial flow within the stream channel. The FEIR should provide an update on this evaluation and identify a timeline for its completion.

Comment letters identify concerns regarding the presence of Per- and polyfluoroalkyl substances (PFAS) in the synthetic turf field. The NPC/DEIR indicated that the turf field will be in accordance with MassDEP regulations for PFAS but did not identify the applicable regulations or explain how the project would comply. This should be addressed in the FEIR.

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. 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.

The GHG Policy and requirements to analyze the effects of climate change through EIR review play an important role in this statewide strategy. These analyses advance proponents' understanding of a project's contribution and vulnerability to climate change.

Greenhouse Gas Emissions

The FEIR should include a revised GHG analysis which reflect any changes to the project since the NPC/DEIR. New construction offers many opportunities for building shell and mechanical system improvements and I expect the City will reconsider these measures to maximize the potential benefits of this new $122 million dollar construction. The project will be required to meet the version of the Building Code in effect at the time of construction. As noted in the NPC/FEIR and confirmed by DOER, an update to the Stretch Code (SC) will become effective in August 2020. The underlying code provisions will not change. The SC to take effect in August is based on ASHRAE 90.1-2013-Appendix G. However, there will be several new, or changed, Massachusetts amendments. I encourage the City to utilize the updated SC as it updates its GHG emissions calculations to accurately evaluate the GHG reduction benefits provided by proposed mitigation measures.

As requested by DOER, the FEIR should evaluate a scenario which includes electrification of space heating with an improved envelope. This scenario should evaluate whether additional improvements to the envelope could potentially eliminate or downsize HVAC systems. The FEIR should include a LCCA for this scenario and the scenario where the currently proposed building will be retrofitted to electric heating in the future. I refer the City to comments from DOER for additional guidance on this issue.

The City has committed to construct the building with solar-ready construction. The FEIR should provide a solar PV feasibility analysis that addresses the following:

- Include an estimate of available roof area for development of solar PV;
- Include a cost analysis to determine the overall financial feasibility of installation of solar, including potential payback periods;
- Propose an installation that can be supported by the maximum available roof area (excluding areas dedicated for mechanical equipment);
- State the assumed panel efficiency;
- Estimate electrical or thermal output of the potential system; and
- Estimate annual GHG reductions of renewable energy versus electricity or natural gas.

The analysis should provide conceptual roof plans that identify the "usable areas" for potential solar PV systems, rooftop HVAC equipment, and other appurtenances. The plans and an accompanying table should identify the extent of the roof that is required to be "solar ready" in order to comply with Building Code requirements after August 2020 (as applicable), the total rooftop area, and the maximum usable roof area for a solar installation. The analysis should include a narrative and data to support the adoption or dismissal of solar PV as a feasible measure to avoid, minimize or mitigate project-related GHG emissions and Damage to the Environment.

The FEIR should include a revised mobile source GHG analysis incorporates any changes to the TDM program and/or traffic mitigation measures. The FEIR should identify the specific roadway mitigation measures and TDM measures that are reflected in the analysis and these mitigation measures should be incorporated into the draft Section 61 Findings. The TDM program provided in the NPC/DEIR noted the City will encourage the use of bicycles and pedestrian traffic to the school and provide numerous secure bike racks/storage. It also stated that the Massachusetts Safe Routes to School (SRTS) Program will be included as part of the sustainability measures that will be implemented for the project.[5] The FEIR should clarify this commitment. The FEIR should expand upon the information presented in the NPC/DEIR to demonstrate a clear commitment to promoting safe and accessible pedestrian and bicycle access for students to and throughout the project site. It should include graphics (and supporting narrative) depicting internal circulation patterns (vehicles, pedestrian, and bicycles) and connection points to adjacent land uses and access roadways. Measures to promote safe and accessible pedestrian and bicycle access (including participation in the SRTS Program) should be incorporated into the draft Section 61 Findings.

Adaptation and Resiliency

The Northeast Climate Science Center at the University of Massachusetts at Amherst has developed projections of changes in temperature, precipitation and sea level rise for Massachusetts. The FEIR should identify the projected changes in temperature and precipitation for the Charles River Basin using this data which is available through the Climate Change Clearinghouse for the Commonwealth at www.resilientMA.org. I expect that the City will consider recent data identifying increases in climate change-induced storm intensity and precipitation volumes to design an appropriately-sized stormwater system to convey each design storm event. The stormwater management system will also be used to convey groundwater flow from the below-slab and perimeter foundation system and drainage system along the base of the rock wall. The FEIR should address how the projected change in precipitation may impact groundwater levels, flow rates, direction, and flooding. The FEIR should include a narrative discussion about how existing and future groundwater flow volumes above the invert elevations were accounted for and incorporated into the design of the stormwater management system. This evaluation should consider the future effects of climate change. The FEIR should also provide an update on the results of any additional test borings and groundwater pump tests that have been performed since the NPC/DEIR was submitted and a timeline for conducting any additional tests to better understand hydrogeologic conditions in the bedrock and groundwater flow rates and direction.

Construction Period

I received numerous comment letters that express concerns regarding noise, vibration, and traffic impacts associated with earthwork, blasting, and rock crushing during construction. According to the NPC/DEIR, construction activity will occur between 7:00 AM and 5:00 PM weekdays and 8:00 AM to 4:00 PM on Saturdays. Blasting will occur between 8:00 AM to 4:00 PM on weekdays for a continuous twelve month period. No blasting will occur on Saturdays, Sundays, or holidays. The FEIR should clarify whether noise or dust from construction activities will create a nuisance condition by interfering with enjoyment of property. I strongly encourage the City to consider reduced construction hours to minimize construction-related impacts to nearby residences. The FEIR should continue to analyze

[5] The SRTS Program is a federally funded initiative of the Massachusetts Department of Transportation (MassDOT) that encourages elementary and middle school students to safely walk and bike to/from school.

potential noise and vibration impacts associated with blasting and crushing operations, and propose appropriate mitigation measures. The NPC/DEIR indicated that the project team is modeling the noise generating equipment and is analyzing preferred locations for equipment to minimize impacts on abutters and to identify potential sound proofing measures such as sound barriers around equipment. The FEIR should provide an update on this analysis and should identify specific mitigation measures that will be implemented to address these impacts.

The FEIR should provide a figure identifying the approximately 500-ft pre-blast inspection survey radius or identify when this information will become available and how it may be viewed by stakeholders. The FEIR should describe the blasting notification procedure for abutters to be used by the contractor. It should identify an approximate timeframe for completing the pre-blast surveys. The FEIR should provide details of how the survey will be conducted and clarify whether property owners will be provided with copies of the completed survey. It should also identify a process for addressing noise, vibration, or dust complaints from abutters during the construction phase of the project.

The FEIR should address how the project will ensure compliance with the Massachusetts Idling regulation at 310 CMR 7.11. Because this project will occur in close proximity to residential areas, I urge the City to minimize potential noise and air quality impacts by requiring that construction vehicles limit engine idling, use ultra-low sulfur diesel fuel, and be retrofit with emissions control equipment, including emission control equipment identified in the Commonwealth's Clean Air Construction Initiative.

Mitigation and Draft Section 61 Findings

The FEIR should include a section that summarizes all proposed mitigation measures and provides draft Section 61 Findings for each State Agency Action. It should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

In order to ensure that all GHG emissions reduction measures adopted by the Proponent as the Preferred Alternative are actually constructed or performed by the Proponent, the Secretary requires proponents to provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their equivalent, have been completed. The commitment to provide this self-certification in the manner outlined above should be incorporated into the draft Section 61 Findings included in the FEIR.

Response to Comments

The FEIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the FEIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the scope of the FEIR beyond what has been expressly identified in this certificate.

Circulation

The Proponent should circulate the FEIR to those parties who commented on the ENF or NPC/DEIR, to any State and municipal agencies from which the City will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. Per 301 CMR 11.16(5), the City may circulate copies of the FEIR to commenters in CD-ROM format or by directing commenters to a project website address. However, the City must make a reasonable number of hard copies available to accommodate those without convenient access to a computer and distribute these upon request on a first-come, first-served basis. The City should send correspondence accompanying the CD-ROM or website address indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. The FEIR submitted to the MEPA office should include a digital copy of the complete document. A copy of the FEIR should be made available for review at the Waltham Public Library.[6]

K. Theoharides

June 26, 2020
Date

Kathleen A. Theoharides

Comments received:

5/27/2020	Anonymous
6/1/2020	Alicia Hutton
6/1/2020	Alison Guzman
6/1/2020	Angie Benoit
6/1/2020	Anonymous
6/1/2020	Brandice Proskoczilo
6/1/2020	Carol Baclawski
6/1/2020	Celeste Woodside
6/1/2020	Christin Piccirilli
6/1/2020	Christina McCalla
6/1/2020	Christy Kahana
6/1/2020	Donald Lucente
6/1/2020	Donna Fils-Aime
6/1/2020	Donna Weitz
6/1/2020	Jeffrey Esposito
6/1/2020	Jose Guzman
6/1/2020	Kathi Martuza and Kester Cotton
6/1/2020	Kit Fintzel
6/1/2020	Kristen Mullin
6/1/2020	Lynelle Cortellini-Devine
6/1/2020	Melissa Abell-Bardsley
6/1/2020	Michelle Campbell
6/1/2020	Nadene Stein
6/1/2020	Rebecca Cyr
6/1/2020	Ron Ayers
6/1/2020	Sarah Remage-Healey
6/1/2020	Tom King
6/1/2020	Valerie Sharp
6/2/2020	Amy Corbett
6/2/2020	David Westner (1 of 2)
6/2/2020	Jaclyn Davidson
6/2/2020	Kathleen Simpson
6/2/2020	Robert Hanley
6/3/2020	Elizabeth Homan
6/3/2020	Elizabeth Lear
6/3/2020	Jennifer Roy
6/4/2020	Heather Johnson
6/4/2020	Interim Superintendent George Frost
6/4/2020	Michelle Kern
6/4/2020	Rachel Weinstein (1 of 4)
6/4/2020	Rachel Weinstein (2 of 4)
6/5/2020	Ben Kuchler
6/6/2020	Megan Letendre

[6] Requirements for hard copy distribution or mailings will be suspended during the Commonwealth's COVID-19 response. Please consult the MEPA website for further details on interim procedures during this emergency period: https://www.mass.gov/orgs/massachusetts-environmental-policy-act-office.

6/8/2020	Amy Brown (1 of 3)
6/8/2020	Amy Brown (2 of 3)
6/8/2020	Amy Brown (3 of 3)
6/8/2020	Mayor Jeannette McCarthy
6/8/2020	State Rep. Thomas M. Stanley, State Rep. John J. Lawn, State Senator Michael J. Barrett
6/10/2020	City Councilor Sean Durkee
6/10/2020	Laura Cannon
6/11/2020	Michele DesAutels
6/12/2020	Orlando Medeiros
6/12/2020	Waltham Historical Commission
6/15/2020	Christopher Matteodo
6/15/2020	Luisa Pandolfi
6/15/2020	Orlando Medeiros
6/15/2020	Steve Wolff
6/16/2020	Rachel Weinstein (3 of 4)
6/17/2020	Bill Fowler
6/17/2020	David King
6/17/2020	Maureen Bagge Fowler
6/17/2020	Orlando Medeiros
6/17/2020	Paula Hughes
6/17/2020	Philip Chorman
6/17/2020	Rachel Weinstein (4 of 4)
6/17/2020	Robert Hargrove
6/17/2020	Waltham Land Trust
6/18/2020	Alex Urquhart
6/18/2020	Carolina Lara
6/18/2020	Christine Reynolds
6/18/2020	David Westner (2 of 2)
6/18/2020	Doug MacDonald
6/18/2020	Jacob Katz
6/18/2020	James Devin
6/18/2020	Laura Urquhart
6/18/2020	Paula McNiece
6/18/2020	Reva Dolobowsky
6/18/2020	Sharon Katz
6/18/2020	Susan Parrella
6/18/2020	Tammy Inman
6/18/2020	Tom Haley
6/19/2020	Massachusetts Water Resources Authority (MWRA)
6/19/2020	Alysia Parkes
6/19/2020	Charles River Watershed Association (CRWA)
6/19/2020	Erika Kuno
6/19/2020	Isabel Brassil
6/19/2020	Jeannie Joe
6/19/2020	Jennifer Rose
6/19/2020	Pat Seminara
6/19/2020	Karen Pruy
6/19/2020	Karina Hines
6/19/2020	Karina Hines
6/19/2020	Kristen Thibodeau
6/19/2020	Margaret Schadelbauer
6/19/2020	Massachusetts Department of Environmental Protection (MassDEP)
6/19/2020	Massachusetts Historical Commission (MHC)
6/19/2020	Mike Chen
6/19/2020	Patricia Roche and David Brountas
6/19/2020	Paul Katz
6/19/2020	Pradip Mallik
6/19/2020	Rachel Gagne
6/19/2020	Robert Coleman
6/19/2020	Shelli Barry
6/19/2020	Tammy Rose
6/19/2020	Thomas Maclellan
6/19/2020	Larry Sumner
6/19/2020	Carol Dunbar
6/19/2020	WalkBoston and MassBike
6/19/2020	Patrick Rooney
6/19/2020	Zac Borrelli
6/19/2020	JP Jones
6/19/2020	Kaj Telenar
6/26/2020	Department of Energy Resources (DOER)

KAT/PRC/prc