Climate Screening Checklist

Background Information

- **Project Manager**: Gregory C. Wyka, PG
- **Site Name:** C Block
- **Site Number**: C224435
- **Site Location**: 21 Freeman Street, 37 Freeman Street, and 209 West Street, Brooklyn, NY
- **Site Elevation (average above sea level)**: Current land surface elevations (el.) range from about el. 2.2 (North American Vertical Datum of 1988 [NAVD88]) in the southwestern part of the site (at the shoreline with the East River) to about el. 12.30 in the southeastern part of the site next to West Street. The topography of the site gently slopes west towards the East River. The land surface elevations will be raised during construction above the base flood elevation to comply with FEMA regulations. After construction, land surface elevations will range from about el. 8 to el. 18.
- **ClimAID Region**: Region 4 – New York City and Long Island

- **Remedial Stage/Site Classification**: Remedial Design Stage, Class A
- **Contamination - Media Impacted/ Contaminants of Concern:**

  Based on the source, concentration, frequency, and locations of contaminants identified in soil, groundwater, and soil vapor across the site, the contaminants of concern for the site are volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), and metals in soil and/or groundwater, and chlorinated VOCs (CVOC) in soil vapor.
- **Proposed/Current Remedy:**

  A split Track 1/Track 2 and Track 4 remedy is proposed which includes installation of support of

excavation (SOE) systems, construction dewatering and pre-treatment of effluent, excavation and removal of soil/fill exceeding the Unrestricted Use (UU) Soil Cleanup Objectives (SCOs) in the Track 1/2 areas, and excavation and removal of soil exceeding Restricted Use Restricted Residential (RURR) SCOs and select Protection of Groundwater (PGW) SCOs, to the extent practical, to achieve a Track 4 remedy, confirmation/documentation soil sampling, installation of a site cover system, and installation of a sub-membrane depressurization system under one of the proposed new buildings.

- **What is the predicted timeframe of the remedy? Will components of the remedy still be in place in 10+ years?**

  Yes, the components of the remedy will be in place in 10+ years. The recommended split Track 1/Track 2 and Track 4 remedy is anticipated to take about 21 months to complete. A site-specific Environmental Easement will be recorded for the completed Track 4 area with the Office of the City Register of the City of New York to provide an enforceable means of ensuring the continual and proper management of remaining contamination and protection of public health and the environment in perpetuity or until released in writing by the (NYSDEC). It requires that the grantor of the Environmental Easement and the grantor's successors adhere to all Engineering Controls (EC)/Institutional Controls (IC) placed on the site by this NYSDEC-approved remedy.

- **Is the site in proximity to any sensitive receptors? (e.g. wetlands, waterbodies, residential properties, hospitals, schools, drinking water supplies, etc.)**

  Land use within a half-mile radius urban and includes residential, commercial, industrial, and institutional uses, and parks. Sensitive receptors, as defined in DER-10, located within a half mile of the site are listed below:

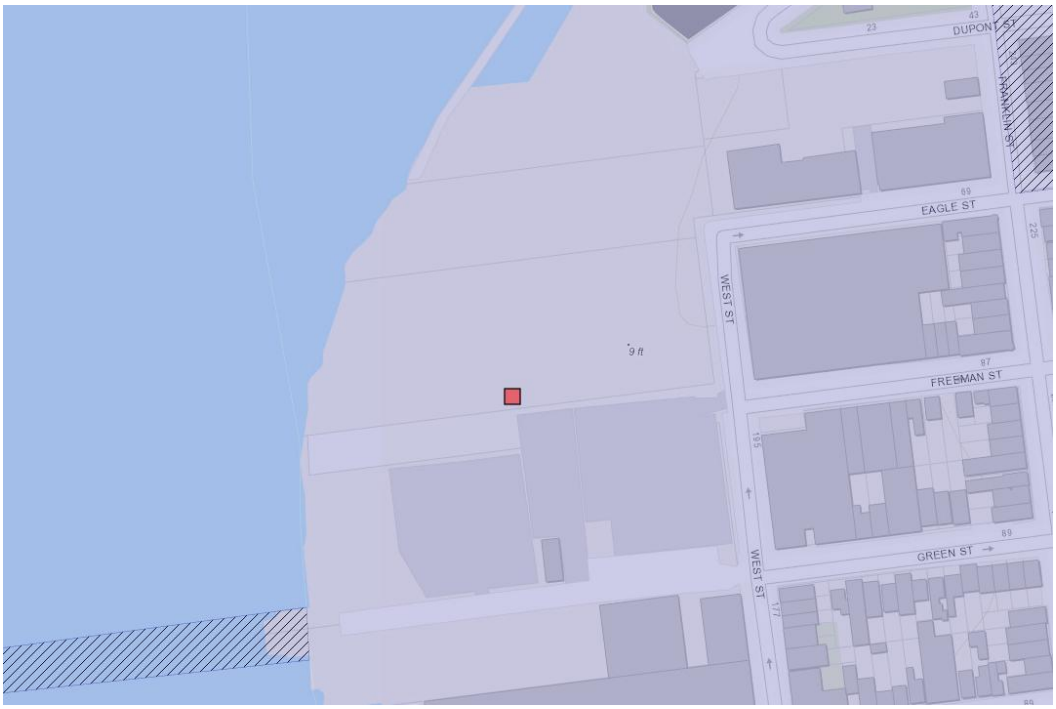
Number	Name (Approximate distance from site)	Address
1	Greenpoint Landing Esplanade (<1 foot northwest)	Near: 1 Eagle Street Brooklyn, New York
2	East River (<1 foot west; western site boundary)	N/A
3	Bunny Hill Greenpoint Daycare and Preschool (about 65 feet north)	213 West Street Brooklyn, New York
4	Greenpoint Childcare (about 0.1 miles south)	145 West Street Brooklyn, NY 11222
5	Newton Barge Playground (about 0.1 miles north)	3 Commercial Street Brooklyn, New York
6	Green Point Public Park (about 0.1 miles south)	143 India Street Brooklyn, New York
7	Greenpoint Playground (about 0.1 miles northeast)	243 Franklin Street Brooklyn, New York

Number	Name (Approximate distance from site)	Address
8	Public Park Playground (about 0.1 miles south)	21 India Street Brooklyn, New York
9	WNYC Transmitter Park (about 0.1 miles south)	Greenpoint Ave, Brooklyn, NY 11222
10	Carrusel Child Care Center 2 (about 0.2 miles southeast)	167 Franklin Street Brooklyn, NY 11222
11	Newtown Creek (about 0.2 miles north)	N/A
12	Greenpoint Garden Playhouse (about 0.2 miles southeast)	53 India Street Brooklyn, New York
13	Hunter's Point South Park and Kayak Ramp (about 0.2 miles north)	Near: 5627 2nd Street Long Island City, New York
14	Java Street Community Garden (about 0.2 miles northeast)	59 Java St, Brooklyn, NY 11222
15	Building Blocks of Greenpoint (about 0.3 miles south)	44 Kent St, Brooklyn, NY 11222
16	American Playground (about 0.3 miles southeast)	Milton St & 81 Franklin St, Brooklyn, NY 11222
17	The Goddard School of Greenpoint (about 0.3 miles northeast)	85 Commercial Street, Brooklyn, NY 11222
18	Carrusel Child Care Center Brooklyn (about 0.36 miles southeast)	168 Java Street Brooklyn, NY 11222
19	Helen Owen Carey Residence (about 0.4 miles east)	174 Java St, Brooklyn NY 11222
20	Iglesia Pentecostal El Tabor (about 0.4 miles east)	256 Franklin St #2R, Brooklyn NY 11222
21	Greenpoint Reformed Church (about 0.4 miles southeast)	136 Milton St, Brooklyn, NY 11222
22	Greenpoint Shul (about 0.4 miles southeast)	108 Noble St, Brooklyn, NY 11222
23	Green Bean Day Care & Learning Center (about 0.46 miles southeast)	161 Greenpoint Avenue Brooklyn, NY 11222

- **Is the site in a disadvantaged community (DAC) or potential environmental justice area (PEJA) (Use DECinfolocator: DECinfo Locator (ny.gov))?**

■ **Yes** □ **No**

The site is located in a disadvantaged community as shown below (map taken from the DECInfo Locator)



If the site is in a DAC or PEJA, will climate impacts be magnified? If yes, list how and why.

□ **Yes** ■ **No**

- **Should thresholds of concern be lowered to account for magnification of impacts? If yes, indicate how lower thresholds will be used in the screening.**

□ **Yes** ■ **No**

Climate Screening Table*

Potential Climate Hazards	**Relevant to the Site Location** (Y/N/NA)[1]	**Projected Change** (Reference data source/Model)[3]	**Potential to Impact Remedy** (Y/N)	**Is remedy/site already resilient?** (Y/N)[4]
Precipitation	Potentially – Based on the Resilience Analysis and Planning Tool (RAPT)	N/A – Based on RAPT	N	Y – During construction a site-specific Stormwater Pollution Prevention Plan (SWPPP) will be followed and enhanced measures will be taken before, during and after extreme weather events. In the long term, the development of the site will include improvement of the site drainage which will help to mitigate the effects of flooding.
Temperature [2] (Extreme Heat or Cold Weather Impacts)	N – Based on RAPT	N/A – Based on RAPT	N	N/A
Sea Level Rise	Y – Based on the National Oceanic and Atmospheric Administration (NOAA) Sea Level Rise Viewer	3 Feet Sea Level Rise – Based on NOAA	N/A	Y – The redevelopment of the site will include raising the land elevation above the base flood elevations published by FEMA, improvements to the site drainage, and floodproofing of new buildings which will help to mitigate the effects of flooding on the site and in occupied buildings
Flooding	Y – Based on FEMA National Flood Hazard Layer	Zone AE - 1% Annual Chance Flood Hazard (Based on FEMA's National Flood Hazard Layer Viewer)	N	Y – During construction a site-specific SWPPP will be followed and enhanced measures will be taken before, during and after extreme weather events. In the long term, The redevelopment of the site will include raising the land elevation above the base flood elevations published by FEMA, improvements to the site drainage, and floodproofing of new buildings which will help to mitigate the effects of flooding on the site and in occupied buildings
Storm Surge	Y – Based on the NOAA National	>6 feet above ground with Cat 1 – Based on	N/A	Y – Erosion and sedimentation controls will be followed during construction, and the future

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	Hurricane Center Storm Surge Risk Maps	NOAA		buildings will incorporate floodproofing and resiliency measures. In addition, the redevelopment of the site will include raising the land elevation above the base flood elevations published by FEMA and improvements to the site drainage, which are expected to protect the site from future storm surges
Wildfire	N – Based on RAPT	N/A	N/A	N/A
Drought	N – Based on RAPT	N/A	N/A	N/A
Storm Severity	N – Based on RAPT	N/A	N/A	N/A
Landslides	N – Based on RAPT	N/A	N/A	N/A
Other Hazards:	N – Based on RAPT	N/A	N/A	N/A

* Links to potential data sources can be found on the following page

[1] If the first column is N --> The rest of the columns will be N/A, the hazard is not applicable to the site.

[2] Extreme Heat: periods of three or more days above 90°F- Extreme Cold: Individual days with minimum temperatures at or below 0 degrees F (NYSERDA ClimAID report)

[3] List the projected change in specific terms or units e.g. inches of rain fall, feet of sea level rise, etc.

[4] If final column is Y, provide reasoning, if the final column is N --> Climate Vulnerability Assessment (CVA) required.

Required Next Steps (If no further action is required, provide justification):

No further actions are required. The vulnerability that was assessed is covered by the current development plans.

Potential Data Sources (not an exhaustive list)- from Superfund Climate Resilience: Vulnerability Assessment | US EPA

NYSERDA ClimAID report- Responding Climate Change in New York State (ClimAID) - NYSERDA

FEMA- National Flood Hazard Layer | FEMA.gov
NOAA- National Storm Surge Risk Maps - Version 3 (noaa.gov)

Department of Agriculture Forest Service Wildfire Risk to Communities
EPA Climate Change Indicators in the United States
EPA Climate Resilience Evaluation & Awareness Tool (CREAT) | U.S. Climate Resilience Toolkit

EPA National Stormwater Calculator
National Integrated Drought Information System U.S. Drought Portal
National Interagency Coordination Center National Interagency Fire Center
National Oceanic and Atmospheric Administration Coastal Services Digital Coast

- Resources to help communities assess coastal hazards, such as the Sea Level Rise Viewer for visualizing community-level impacts of flooding or sea level rise and downloadable LIDAR data National Oceanic and Atmospheric Administration National Centers for Environmental Information website

National Oceanic and Atmospheric Administration Sea Level Trends
National Weather Service Climate Prediction Center
National Weather Service National Hurricane Center
National Weather Service Sea, Lake, and Overland Surges from Hurricanes (SLOSH)
National Weather Service Storm Surge Hazard Maps
U.S. Federal Government Climate Resilience Toolkit: The Climate Explorer
U.S. Army Corps of Engineers Climate Prepardness and Resilience
U.S. Geological Survey Coastal Change Hazards Portal
U.S. Geological Survey Landslide Hazards Program
U.S. Geological Survey National Ground-water Monitoring Network Data Portal
U.S. Geological Survey National Climate Change Viewer
U.S. Geological Survey National Water Dashboard
U.S. Geological Survey StreamStats
NYS Department of State- Assess | Department of State (ny.gov)

NYSERDA NY Costal Floodplain Mapper- Home Page (ny.gov)

NYSDEC Costal Erosion Hazards- Coastal Areas Regulated By The CEHA Permit Program - NYDEC

NYSDOH Heat Index- health.ny.gov/environmental/weather/vulnerability_index/county_maps.htm