



# Ewen Park

## EWEN PARK STAIRCASE RECONSTRUCTION

Bounded by Riverdale Avenue, Johnson Avenue, South of West 232nd Street, in the Borough of the Bronx

In House Design  
September 22, 2022

Abel Bainnson Butz, LLP

**Total Budget:** \$4.0M CM Dinowitz FY22

**Project Size:** 0.3 Acre

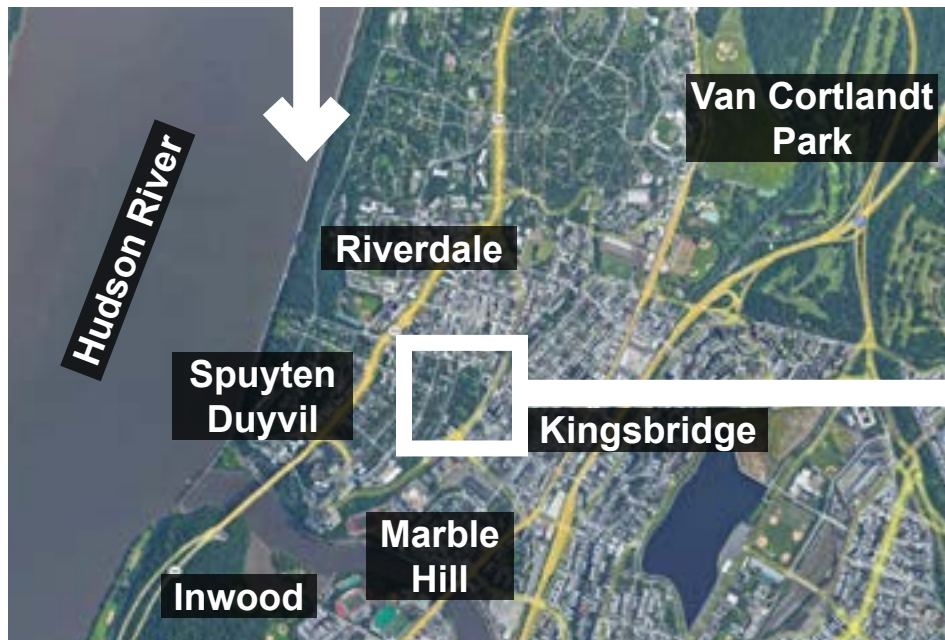
# Parks

# Goals

- Provide safe & code compliant stairway.
- Provide adequate lighting.
- Preserve the existing stepped walkway.



City NTS



Neighborhood NTS



Site NTS

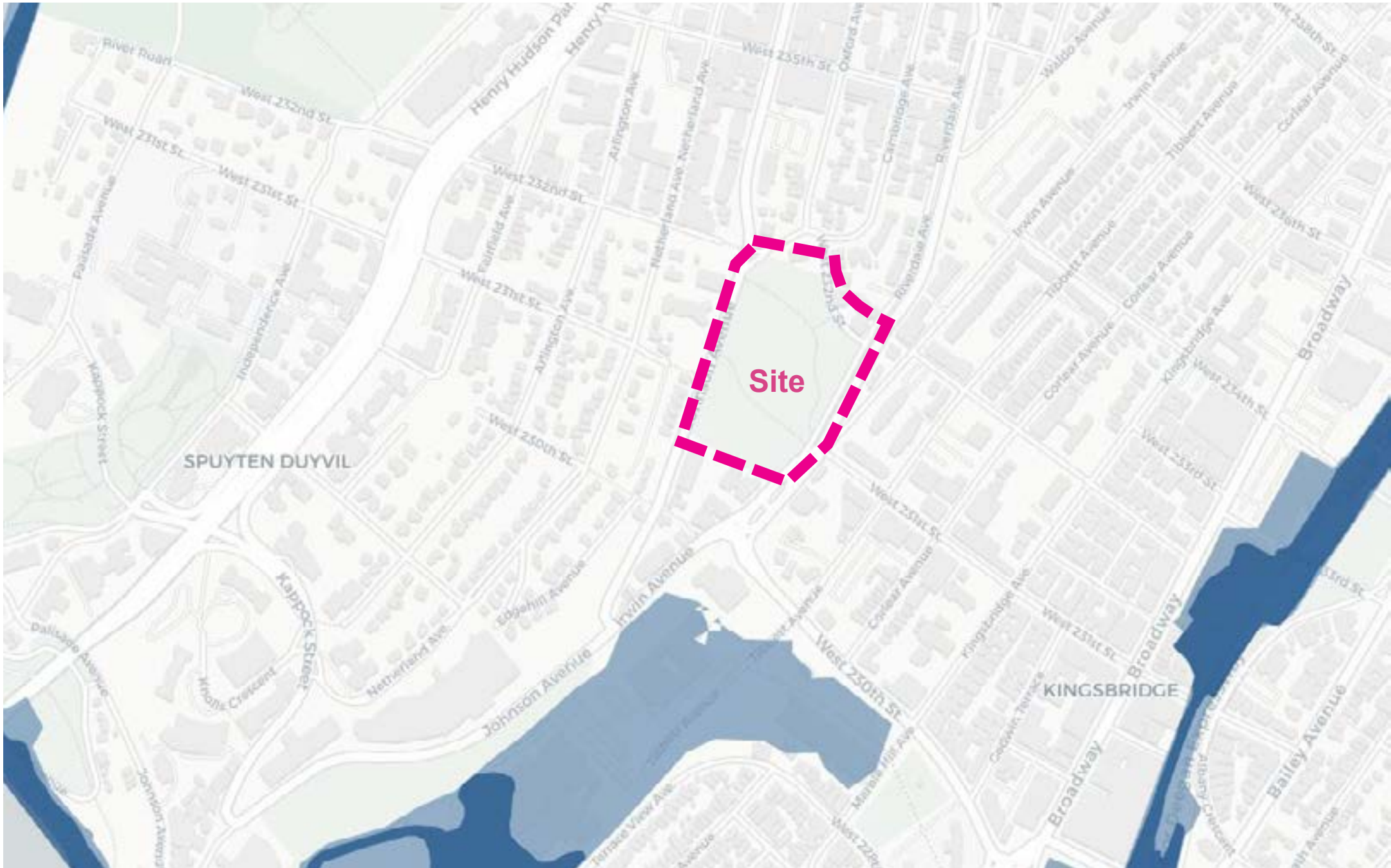


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### Ewen Park | Project Location





Base Flood Elevation (BFE):

# Flood Hazard Zones

## 2015 Preliminary Flood Insurance Rate Map

- V Zone (100-year floodplain subject to wave action)**  
Areas along coasts subject to inundation by the 1% annual chance flood event with additional hazards associated with storm-induced waves.
- A Zone (100-year floodplain)**  
Areas subject to inundation by the 1% annual chance flood event.
- Shaded X Zone (500-year floodplain)**  
Areas within the 0.2% annual chance floodplain, areas of 1% annual chance flooding where average depths are less than 1 foot, areas of 1% annual chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1% annual chance flood by a levee.
- Limit of Moderate Wave Action (LiMWA)**  
The inland limit of the area expected to receive 1.5ft or greater breaking waves during the 1% annual chance flood event. Data from 2015 PFIRMs.

## Future Floodplain 2050s

- Future 1% Annual Chance Floodplain (100-year)**
- Future 0.2% Annual Chance Floodplain (500-year)**

## Resources (Links):



NYC Parks: Design and Planning for Flood Resiliency



NYC MOCR: Climate Resiliency Design Guidelines (v4.0)



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Ewen Park | Flood Risk (Coastal)



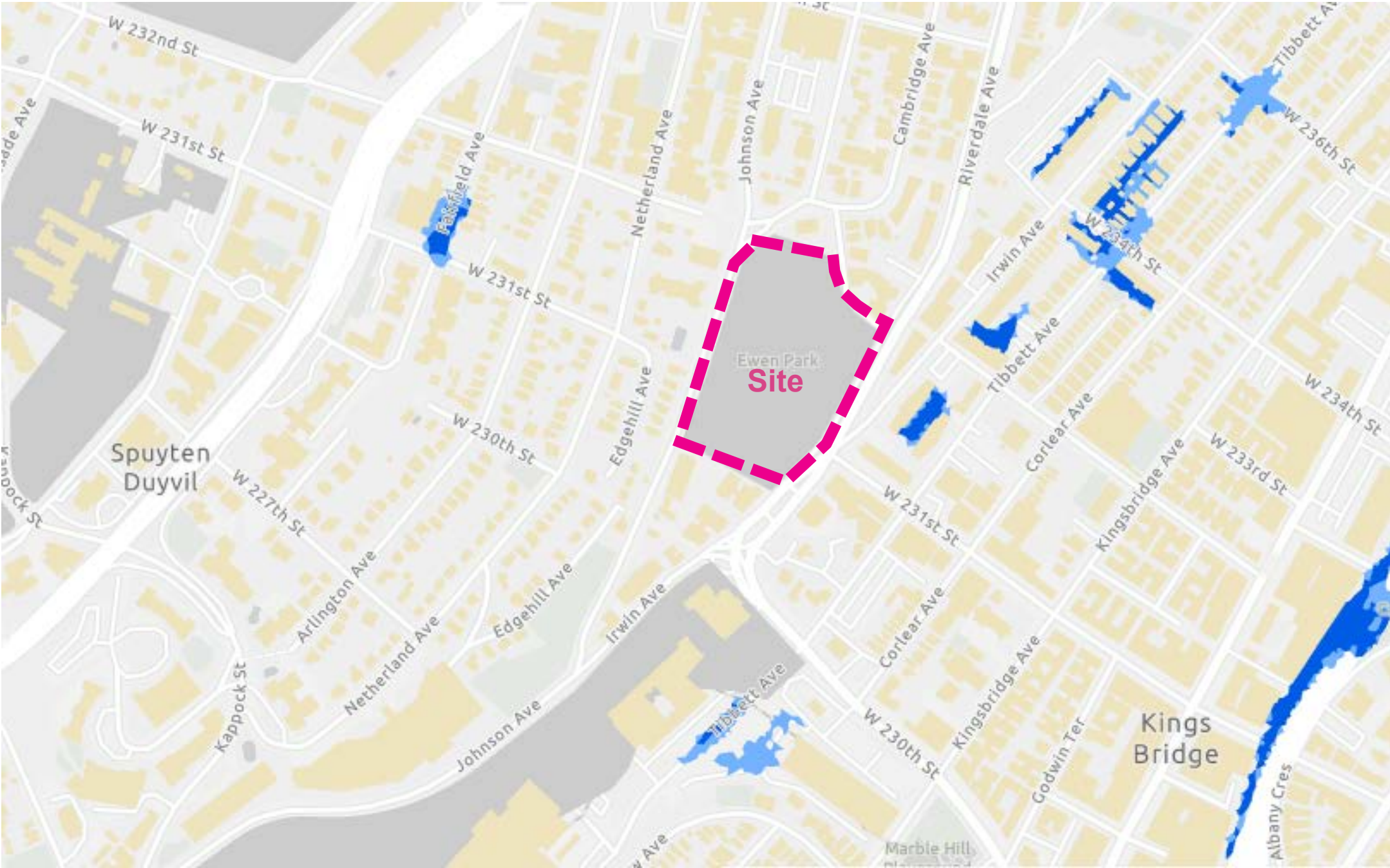
# NYC Stormwater Flood Maps (Moderate Flooding)

- Area not included in analysis
- Future High Tides 2050
- National Wetlands Inventory
- Deep and Contiguous Flooding (1ft and greater)
- Nuisance Flooding (greater or equal to 4 in and less than 1 ft)

This map:

- Reflects roughly two inches of rain falling in one hour (also referred to as the 10-year storm, with approximately 10 percent chance of occurrence in any given year)
- Shows a moderate rainstorm that City infrastructure was not designed to handle.
- Reflects 2.5 feet of sea level rise, which is a high estimate for the 2050s.
- Includes impacts of potential blocked storm drains and outfalls from sea level rise.

Flooding from a storm like this would temporarily disrupt transportation and enter buildings and basements, causing minor damages to contents and surfaces.



# NYC Stormwater Flood Maps (Extreme Flooding)

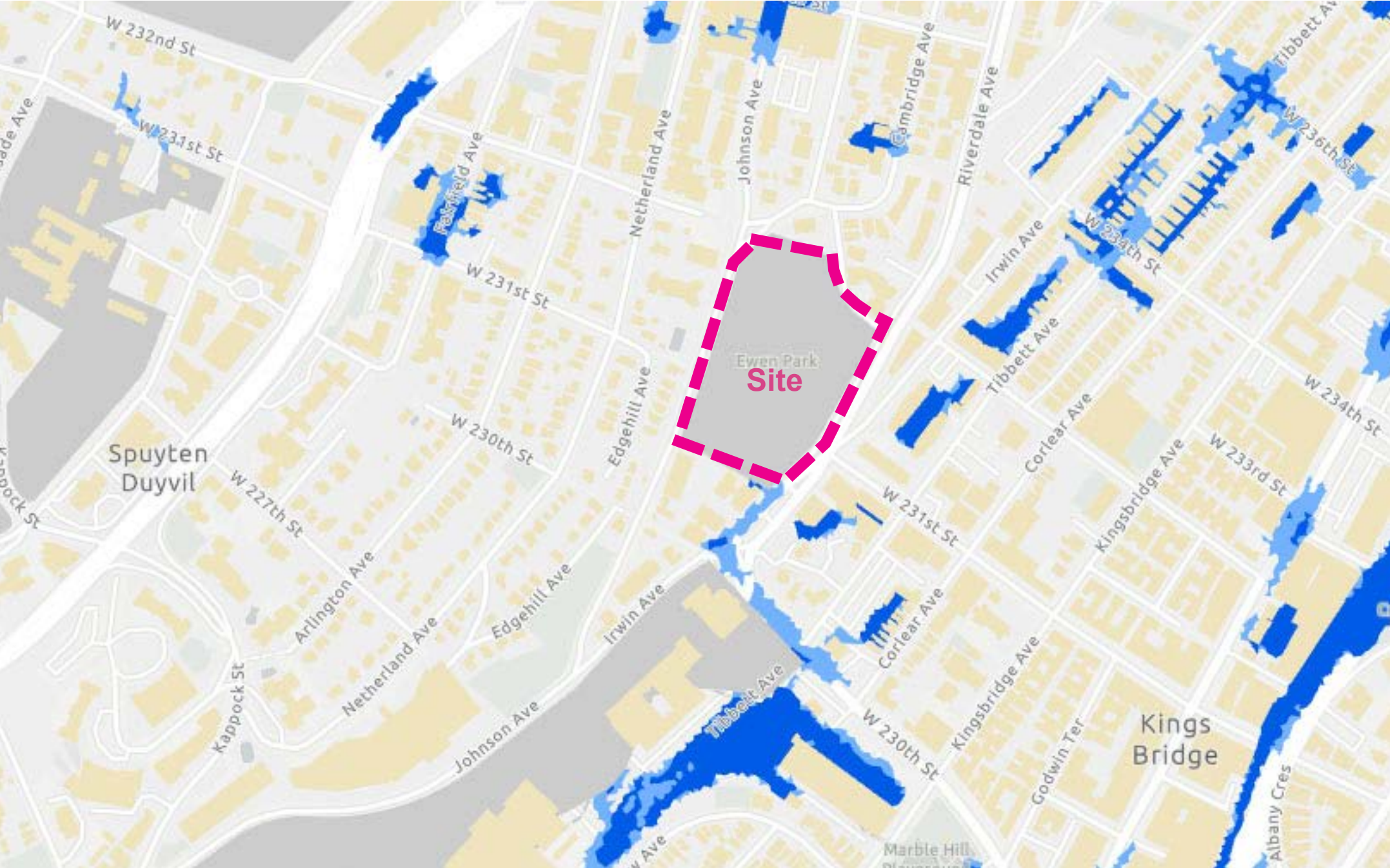
- Area not included in analysis
- Future High Tides 2080
- National Wetlands Inventory
- Deep and Contiguous Flooding (1ft and greater)
- Nuisance Flooding (greater or equal to 4 in and less than 1 ft)

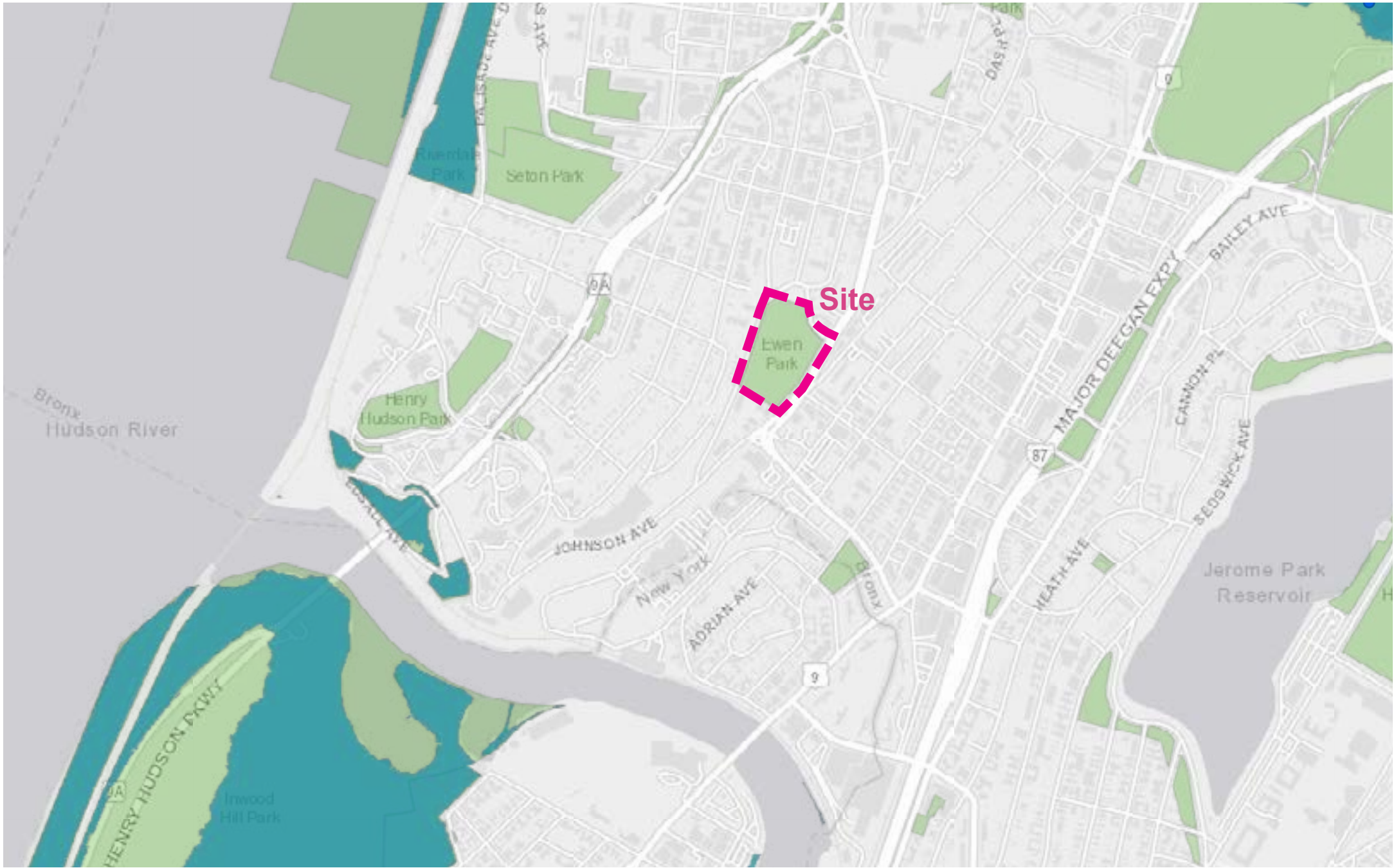
This map:

- Reflects roughly 3.5 inches of rain falling in one hour (also referred to as the 100 year storm, with approximately 1 percent chance of occurrence in any given year).
- Shows an extreme rainstorm that City infrastructure was not designed to handle.
- Reflects 4.8 feet of sea level rise, which is a high estimate for the 2080s.
- Includes impacts of potential blocked storm drains and outfalls from sea level rise.

Flooding from a storm like this would:

- Cause widespread damage and disruption to both private and public property.
- Disrupt roads, subways, regional rail, and potentially power/communication networks.
- Cause flooding across coastal neighborhoods due to sea level rise impacts.





# Municipal Separate Storm Sewer System (MS4) Legend:

## MS4 Drainage Areas



## Parks



## MS4 Outfalls

- MS4 Outfall
- CSO with MS4 Connection

A municipal separate storm sewer system (MS4) is a publicly-owned conveyance or system of conveyances (including but not limited to streets, ditches, catch basins, curbs, gutters, and storm drains) that is designed or used for collecting or conveying stormwater and that discharges to surface waters of the State.

**Note:** Any Parks site that directly discharges to surface waters of the State (e.g. East River, Harlem River, Hudson River, Jamaica Bay, Atlantic Ocean) is an MS4 site regardless of what the MS4 map shows. Parks properties immediately adjacent to or near bodies of water are likely to be downstream of combined sewer regulator points, making them MS4 sites.

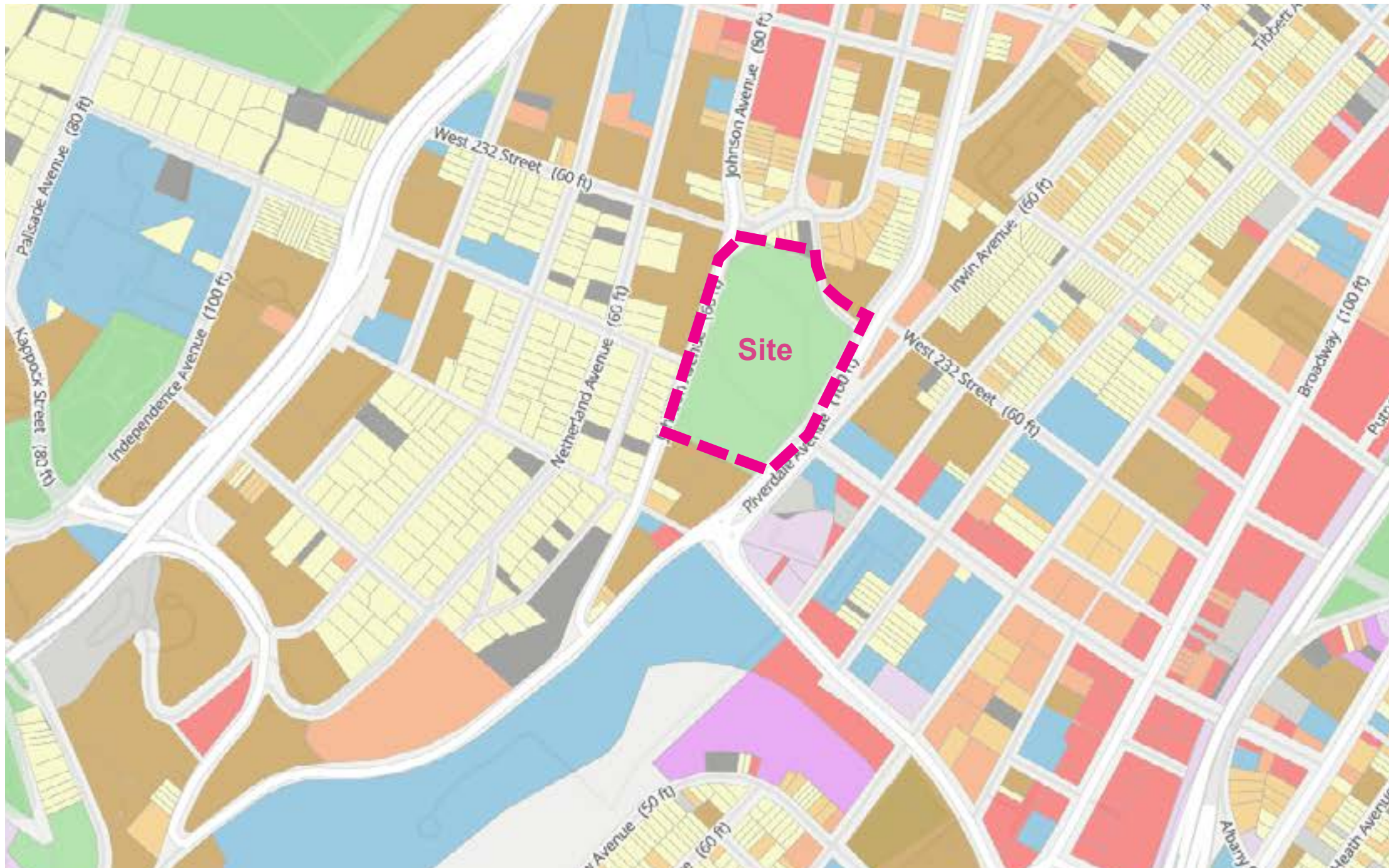


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# Ewen Park | Municipal Separate Storm Sewer System (MS4)





## Land Use Categories

- 1 And 2 Family Residential
- Multi-Family Residential Walk-Up
- Multi-Family Residential Elevator
- Mixed Residential & Commerical
- Commercial & Office Buildings
- Industrial & Manufacturing
- Transportation & Utility
- Public Facilities & Institutions
- Open Space & Outdoor Recreation
- Parking Facilities
- Vacant Land
- Other

NTS



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## Ewen Park | Surrounding Land Use





**Riverdale Playground**

- Basketball Court
- Baseball Field
- Handball Court
- Playground

**Spuyten Duyvil Playground**

- Basketball Court
- Bathroom
- Playground
- Spray Shower

**Seton Park**

- Baseball Field
- Basketball Court
- Bathroom
- Dog Run
- Football Field
- Playground
- Soccer Field
- Tennis Court

**Henry Hudson Park**

- Baseball Field
- Basketball Court
- Bathroom
- Dog Run
- Handball Court
- Playground
- Spray Shower

**MacLaughlin Playground**

- Playground
- Spray Shower

**Bailey Playground**

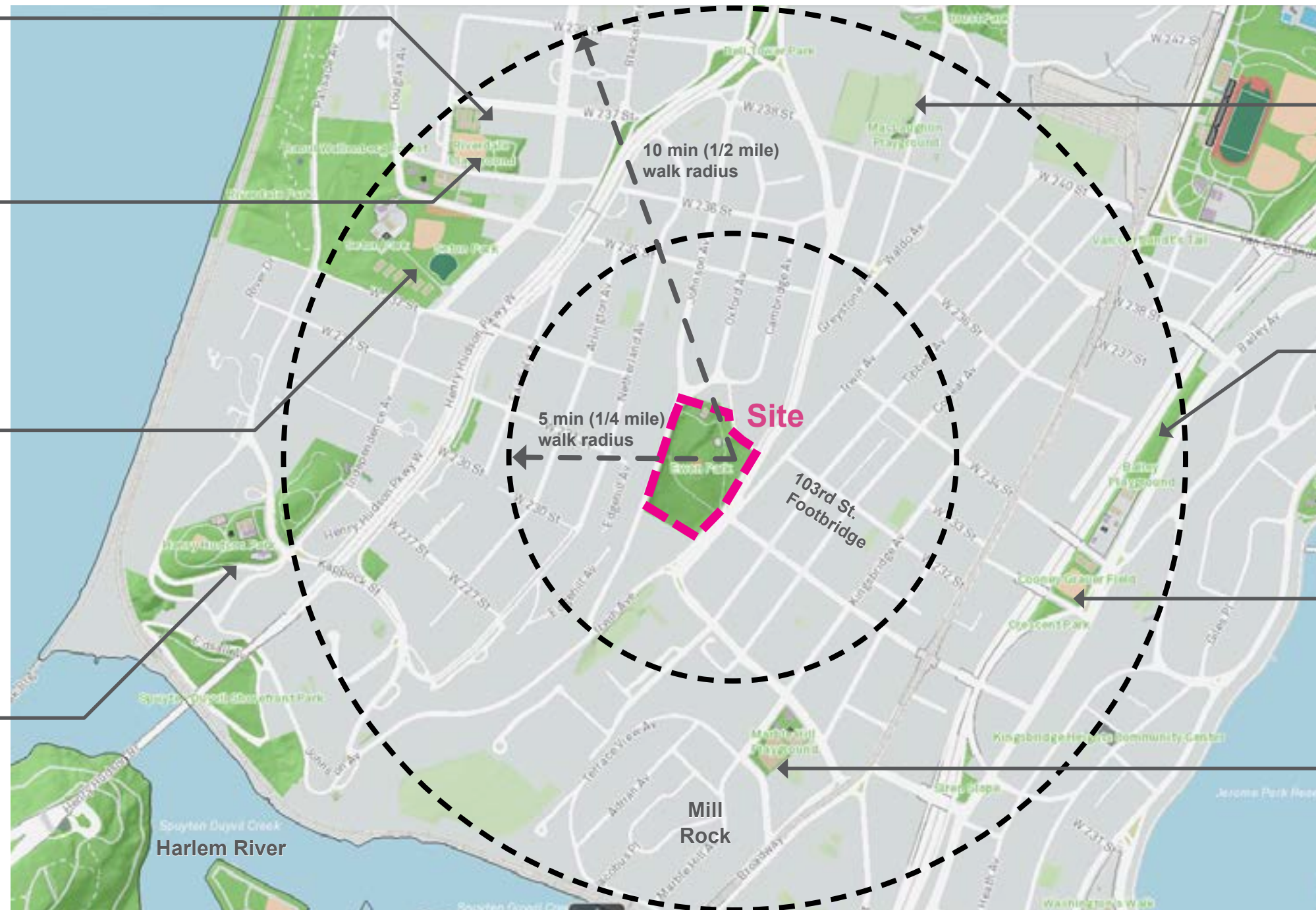
- Basketball Court
- Bathroom
- Handball Court
- Playground
- Spray Shower

**Cooney Grauer Field**

- Baseball Field

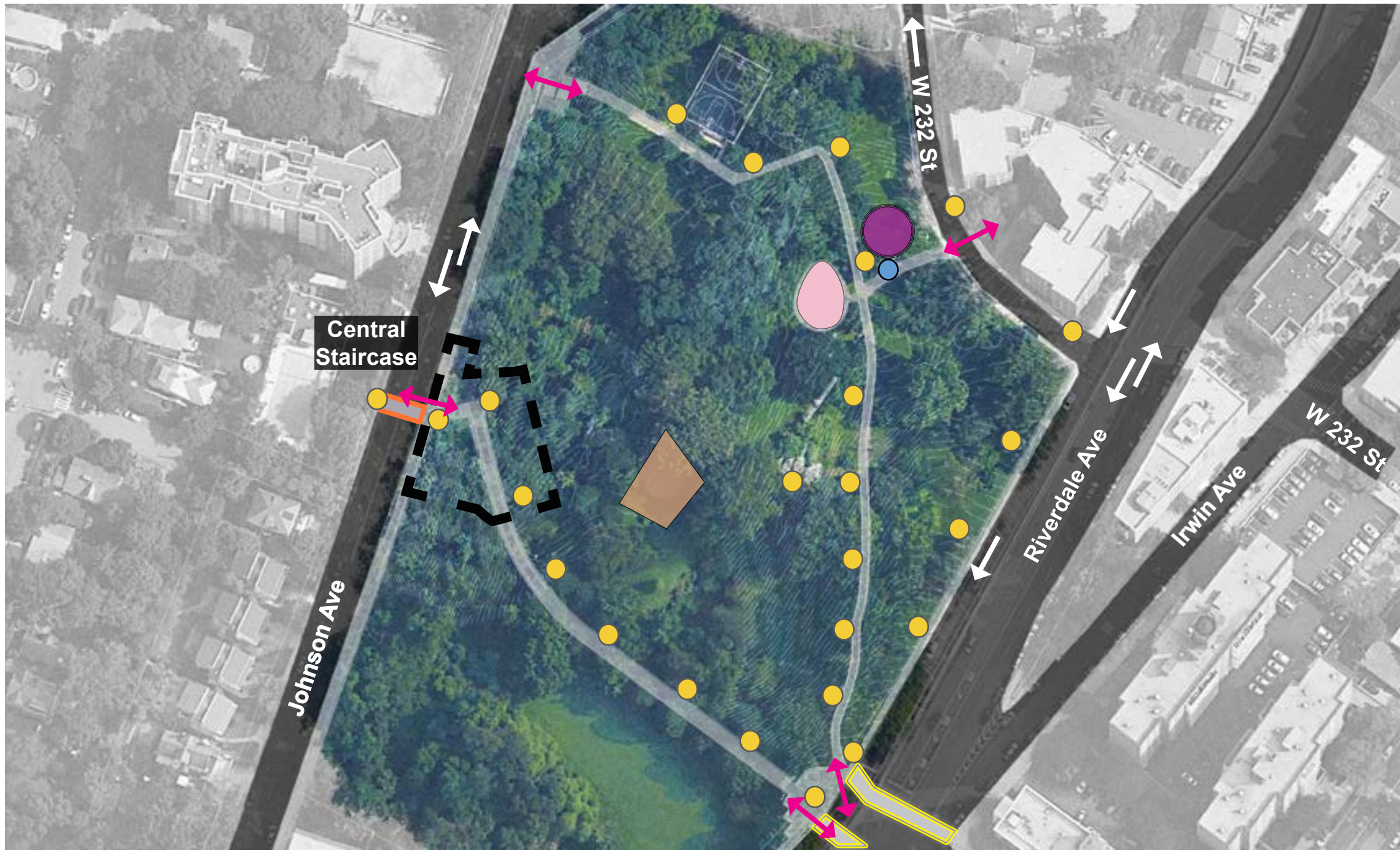
**Marble Hill Playground**

- Basketball Court
- Bathroom
- Playground
- Spray Shower



**Ewen Park | Neighborhood Context**



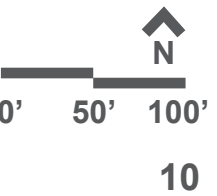


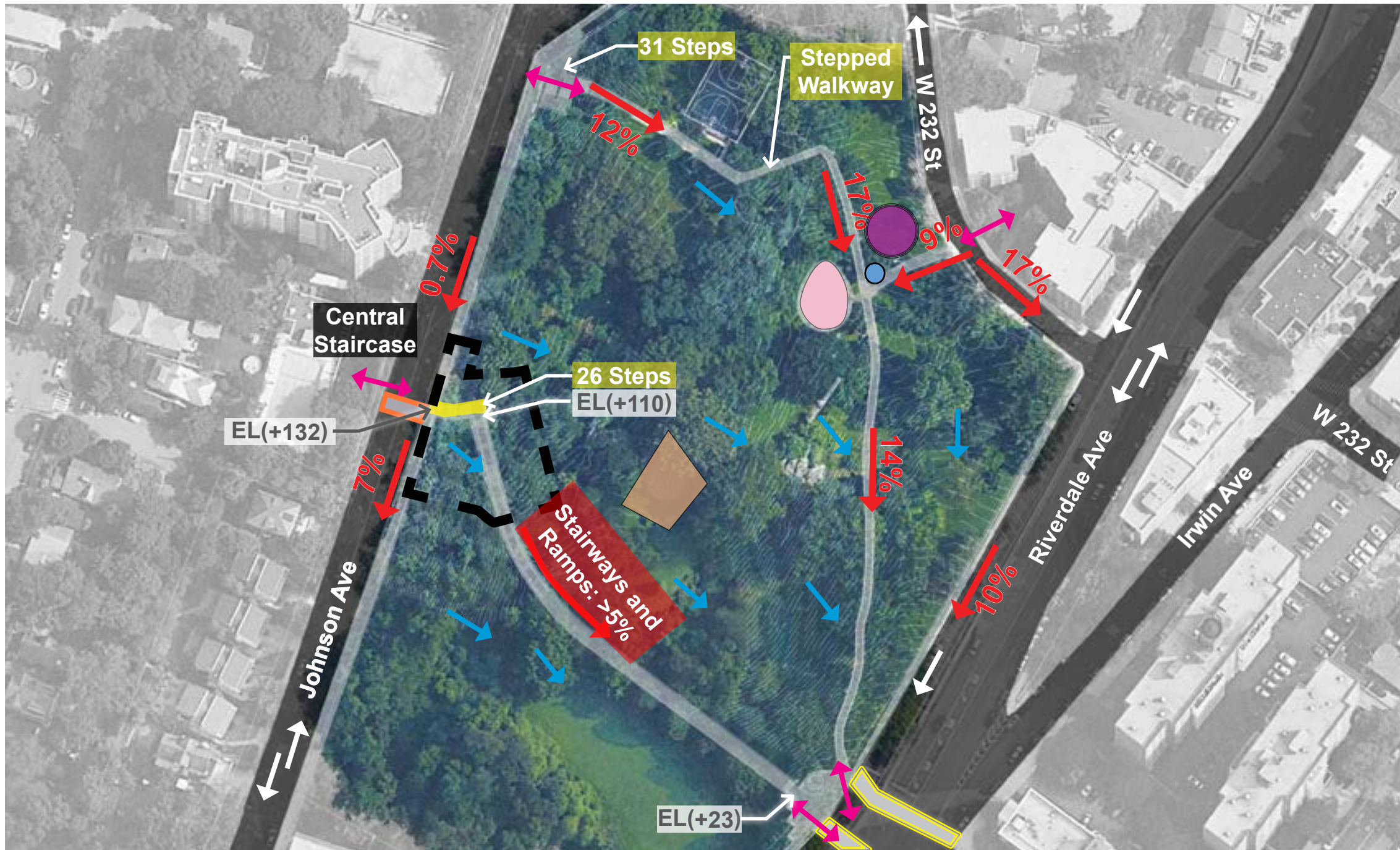
### Legend

- ■ ■ ■ Project Limit
- ↔ Park Entrance
- Playground
- Adult Fitness Area Under Construction
- ◇ Dog Run
- Lightpole
- Drinking Fountain
- Traffic
- ▭ Speed Bump
- ▭ Pedestrian Crosswalk



Ewen Park | Existing Conditions

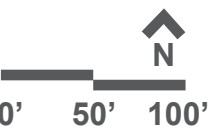


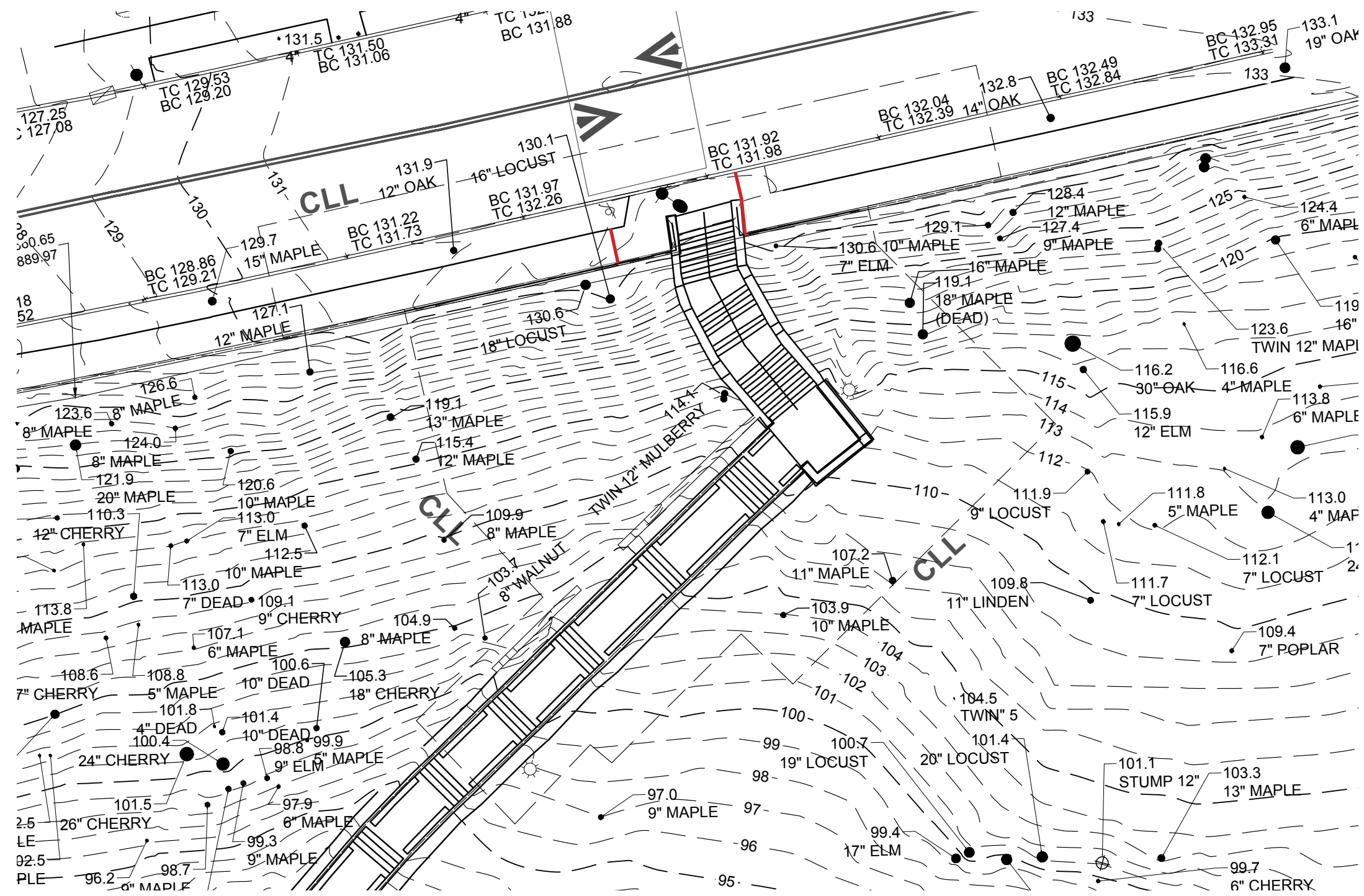


### Legend

- ■ ■ ■ Project Limit
- ➔ Drainage Direction
- Playground
- ◇ Dog Run
- Adult Fitness Area Under Construction
- Drinking Fountain
- ▬ Central Stairway to be Reconstructed
- (+130.0) Spot Elevation
- ➔ 17% Slope

**Heat Vulnerability Index**  
 Site is/ is not in high HVI area.





**Staircase Safety Concerns:**

- Staircase encroachment into the sidewalk; poor pedestrian circulation
- Risers, treads and railings are not code compliant, in very poor condition; uneven surface conditions
- Poor visibility; Inadequate lighting
- Step adjacent slopes- erosion and difficult site access
- Concentrated drainage flow down full length of stairway
- Stepped walkway railings are not code compliant

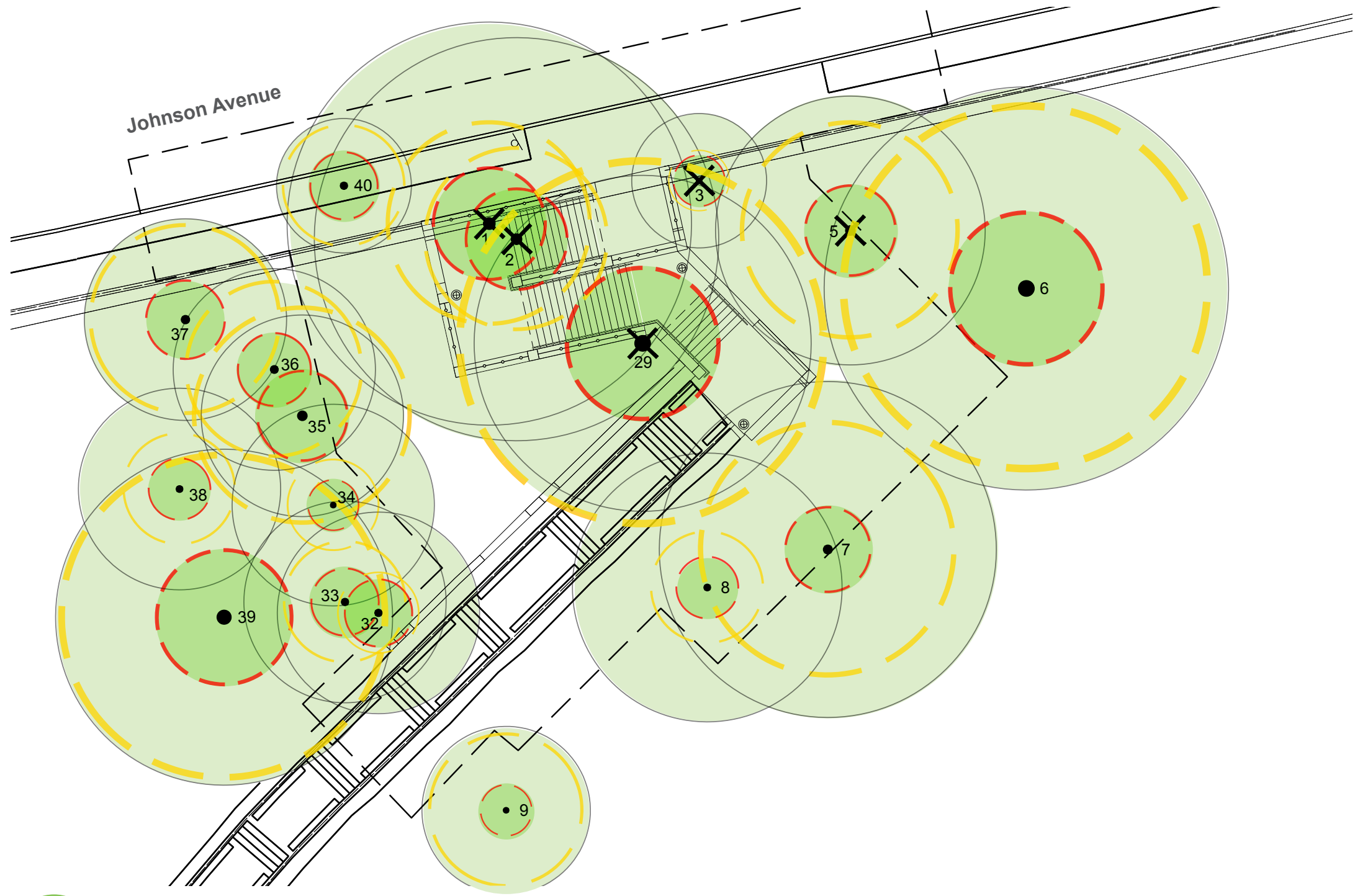


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**Ewen Park | Existing Staircase Conditions**





**Legend**

-  ← Canopy
-  ← Structural Root Zone
-  ← Critical Root Zone
-  Tree Removal due to design

**Total Cost of Tree Restitution: \$237,000**



**Ewen Park | Tree Inventory**

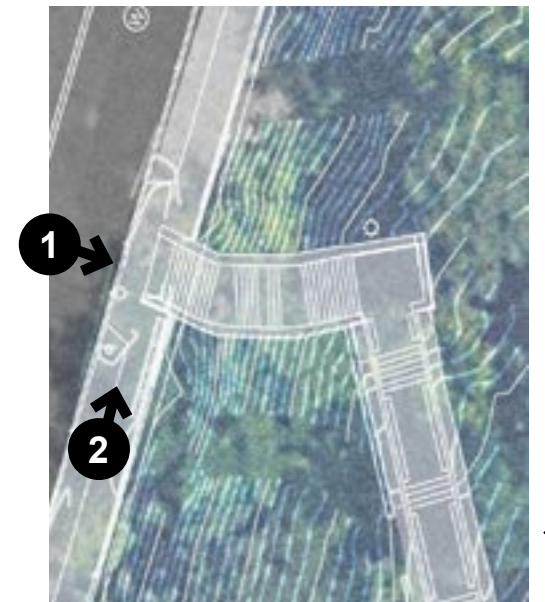




1 - Johnson Ave. Entry



2 - Johnson Ave. Entry looking north

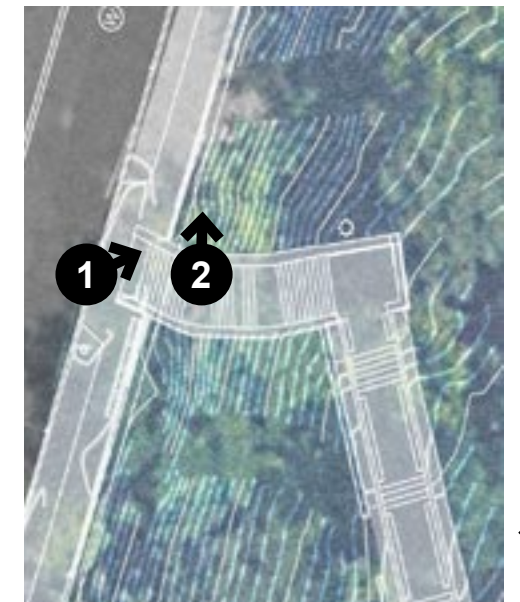




1 - Looking at entry cheekwall and sidewalk railing and curb wall



2 - Looking north along Johnson Ave at railing and curb wall

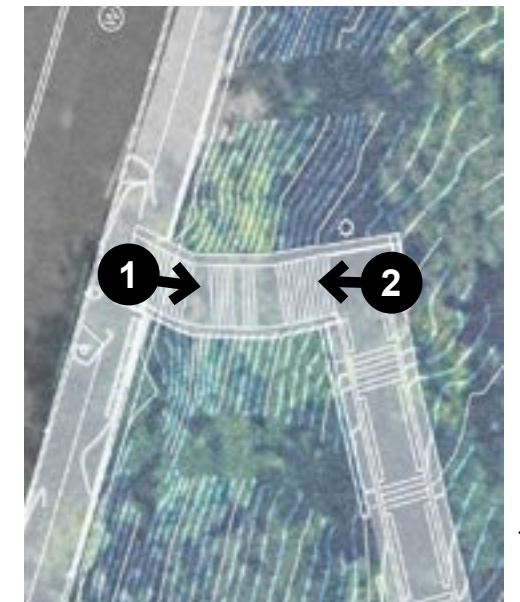




1 - Looking down stair



2 - Looking up stairway



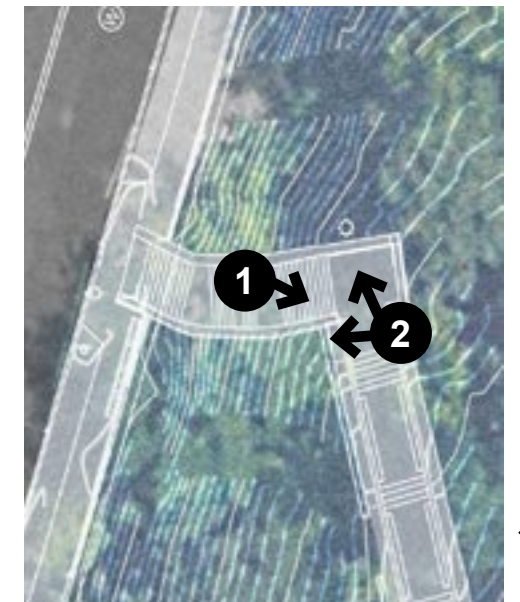




1 - Looking down at bottom landing entry



2 - Landing details

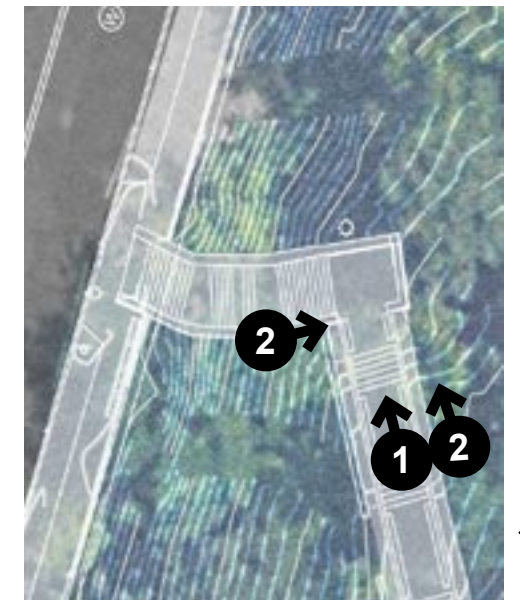




1 - Looking at lower entry landing at stepped walkway



2 - Looking at bottom landing, southeast corner condition

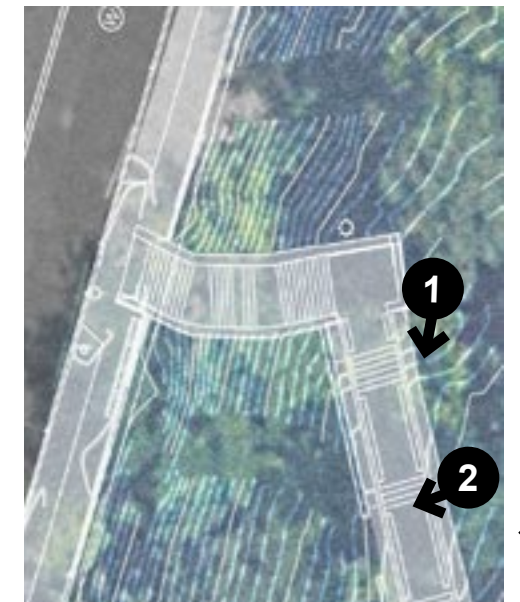




1 - Looking southwest at slope along stepped walkway



2 - Retaining wall at slope base

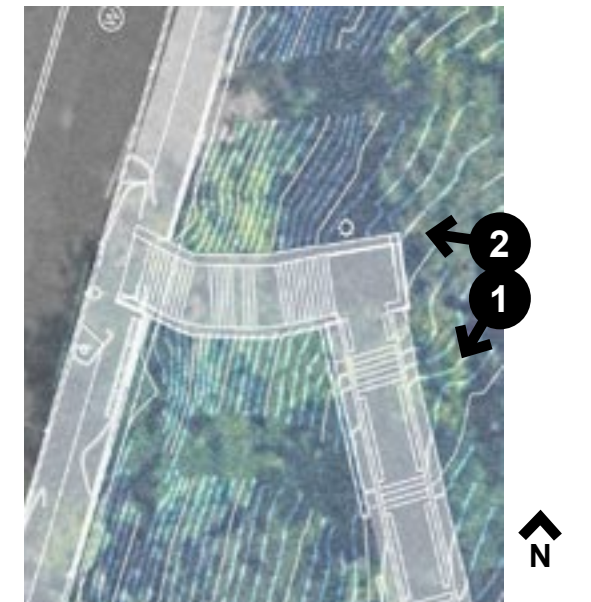


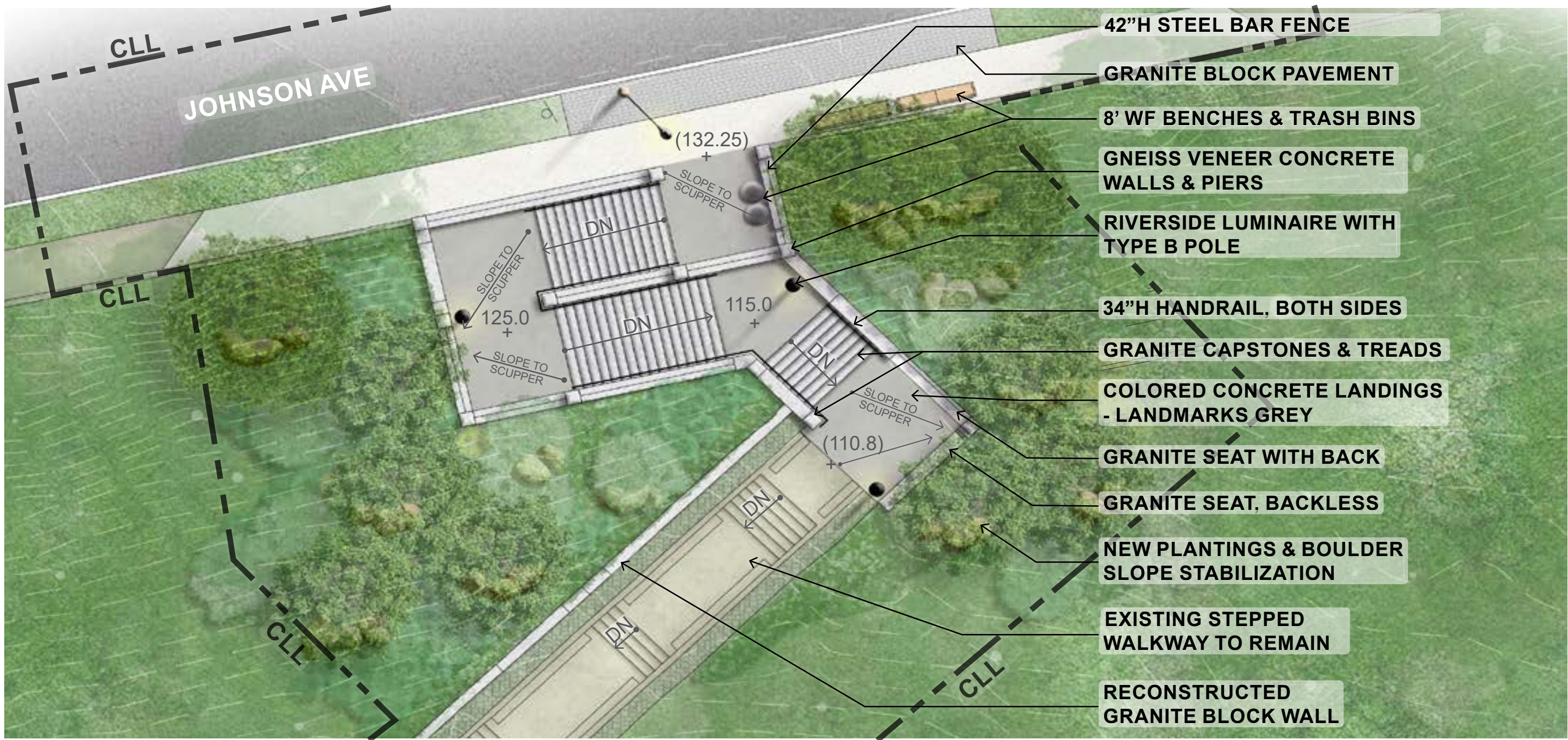


1 - Looking west at stairway from adjacent area linking to Walk



2 - Looking west towards slope north of stairway





42”H STEEL BAR FENCE

GRANITE BLOCK PAVEMENT

8’ WF BENCHES & TRASH BINS

GNEISS VENEER CONCRETE WALLS & PIERS

RIVERSIDE LUMINAIRE WITH TYPE B POLE

34”H HANDRAIL, BOTH SIDES

GRANITE CAPSTONES & TREADS

COLORED CONCRETE LANDINGS - LANDMARKS GREY

GRANITE SEAT WITH BACK

GRANITE SEAT, BACKLESS

NEW PLANTINGS & BOULDER SLOPE STABILIZATION

EXISTING STEPPED WALKWAY TO REMAIN

RECONSTRUCTED GRANITE BLOCK WALL



Ewen Park | Preliminary Staircase Plan







42"H STEEL BAR FENCE

GNEISS VENEER CONCRETE WALLS & PIERS

RIVERSIDE LUMINAIRE WITH TYPE B POLE

COLORED CONCRETE LANDINGS - LANDMARKS GREY

34"H PIPE HANDRAIL, BOTH SIDES

GRANITE CAPSTONES & TREADS

NEW PLANTINGS & BOULDER SLOPE STABILIZATION

GRANITE SEAT

7'-6"

16'-6"

9'-0"

9'-8"



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Ewen Park | Preliminary Staircase Rendering





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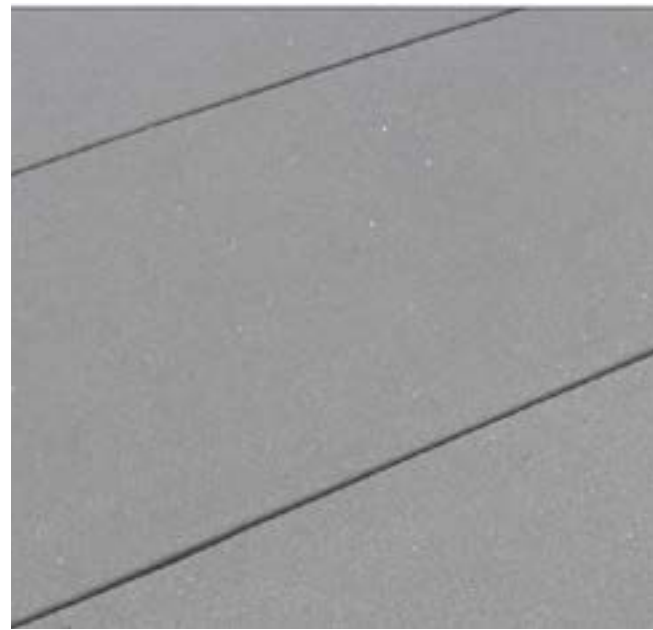
Ewen Park | Preliminary Staircase Rendering



**GRANITE TREADS AND CAPSTONES**



**GNEISS VENEER WALLS, MATCH EXISTING**



**CONCRETE PAVEMENT -  
LANDMARKS GREY**



**3'-6" HT. STEEL BAR FENCE**



**1939 WORLD'S FAIR BENCH W/ BACK AND ARMS,  
RPL SLATS**



**RIVERSIDE LUMINAIRE WITH  
B POLE POST**



**PIPE HANDRAIL**



**TRASH BINS**



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**Ewen Park | Site Materials**



*Quercus alba*



*Amelanchier laevis*



*Crataegus viridis* 'Winter King'



*Viburnum prunifolium*



*Hydrangea arborescens*



*Rhus aromatica* 'Gro-Low'



*Carex pennsylvanica*



*Polystichum acrostichoides*



*Aquilegia canadensis*



*Eurybia divaricata*



NYC Parks



Ewen Park | Plant Material



Ewen Park | Preliminary Staircase Plan

