### **LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY East Coast Memorial October 29, 2021**





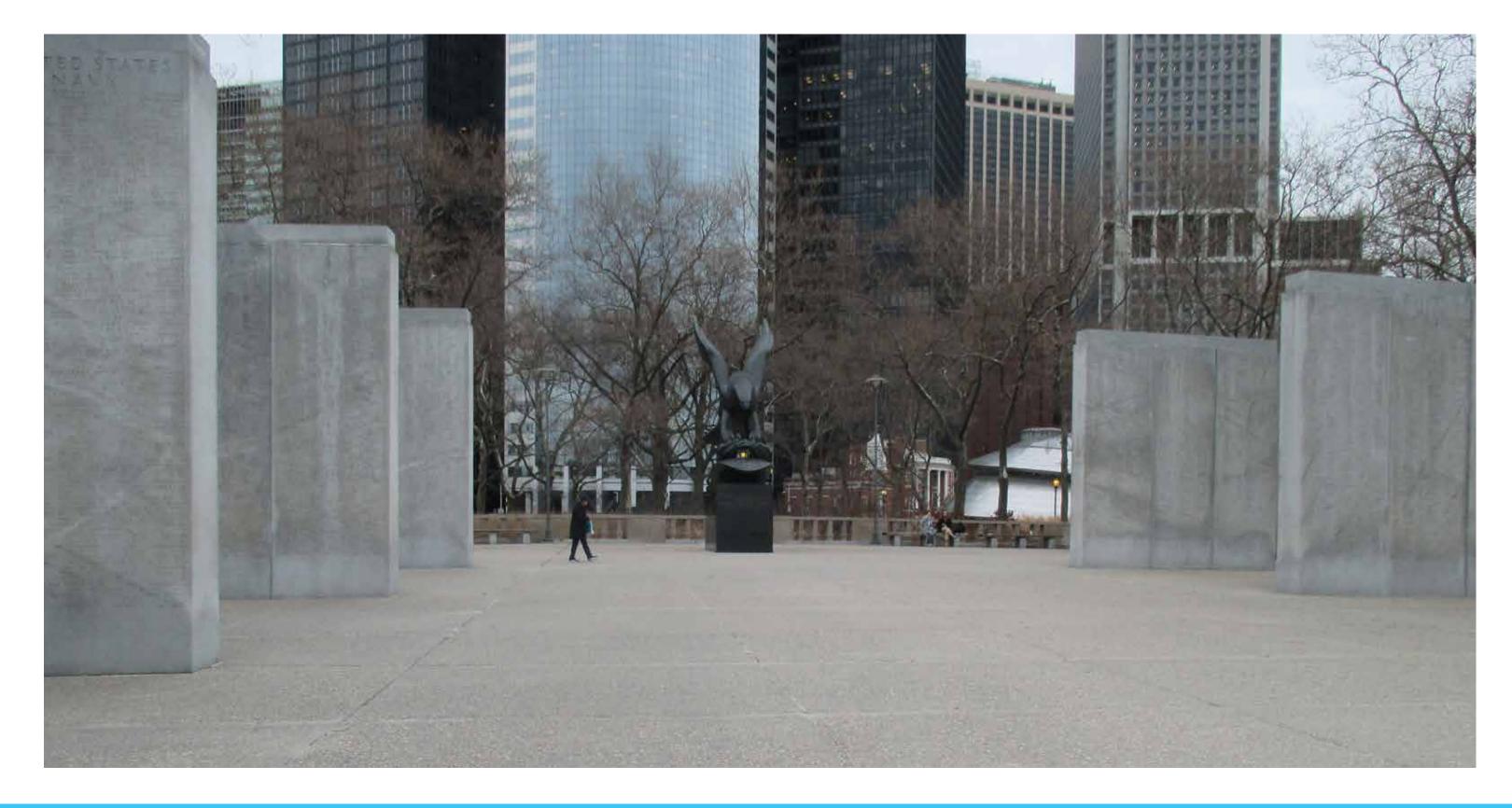


# **Lower Manhattan Coastal Resiliency projects**





### EAST SIDE COASTAL RESILIENCY





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY



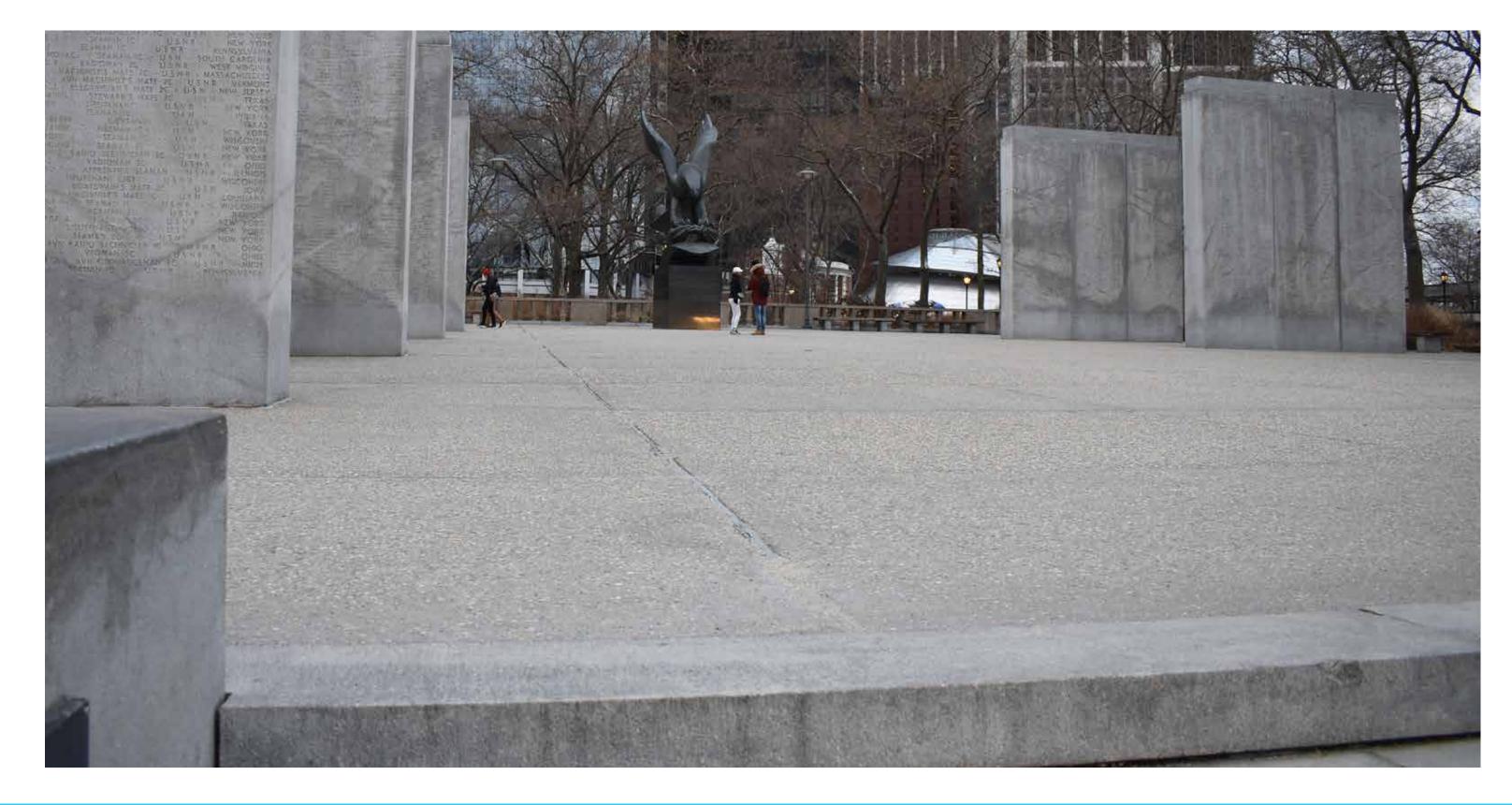


LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY



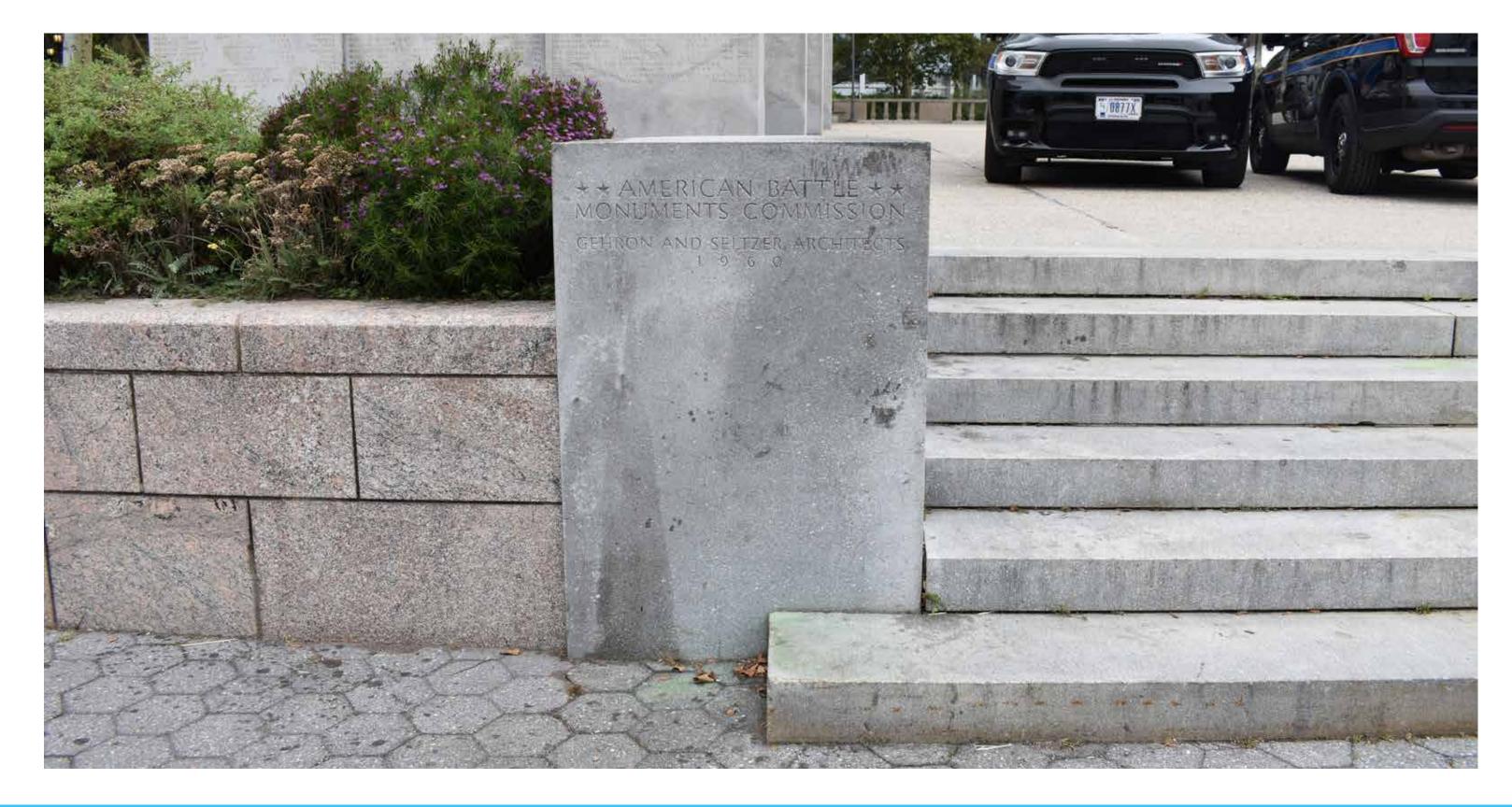


LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY



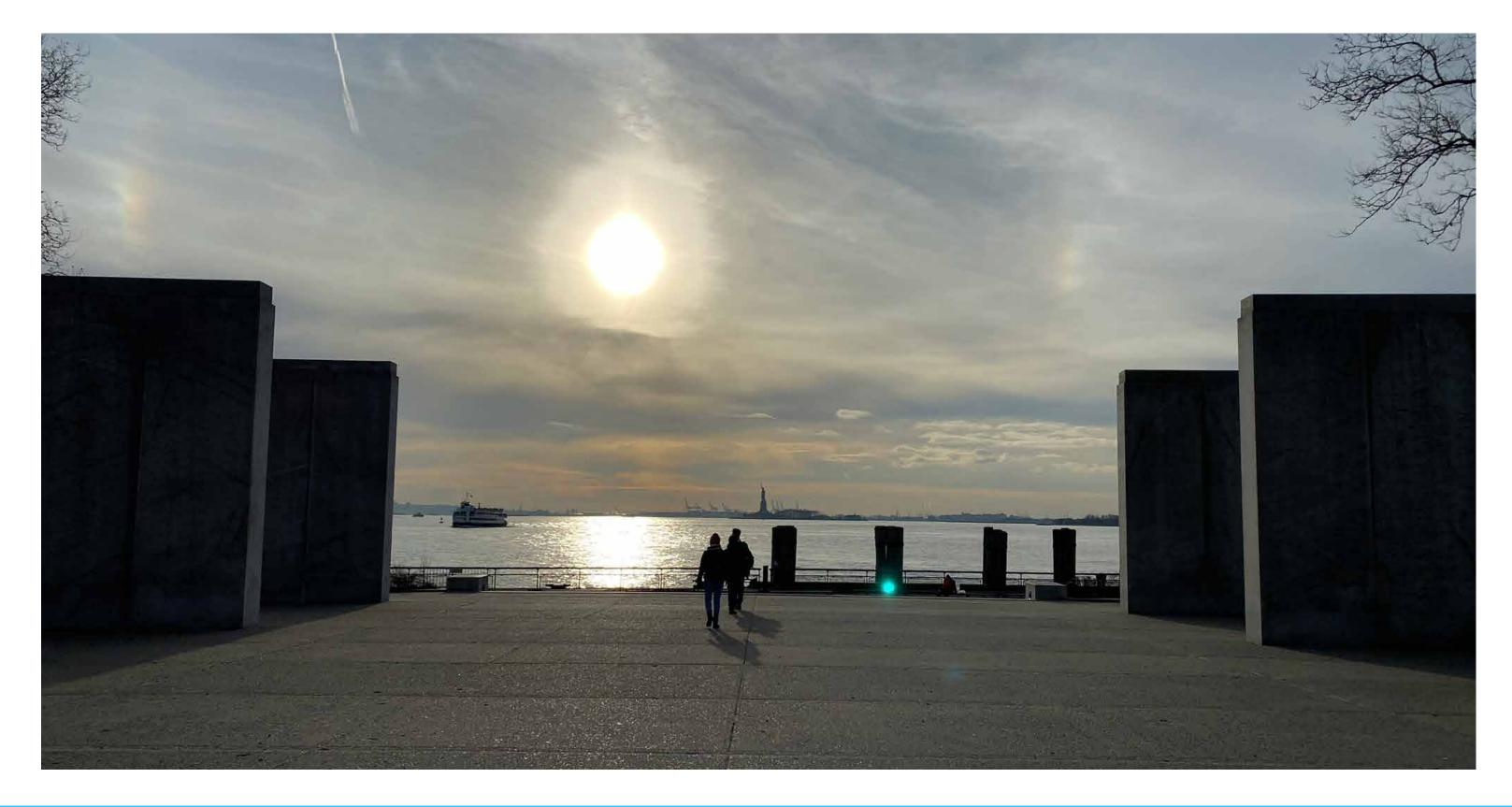


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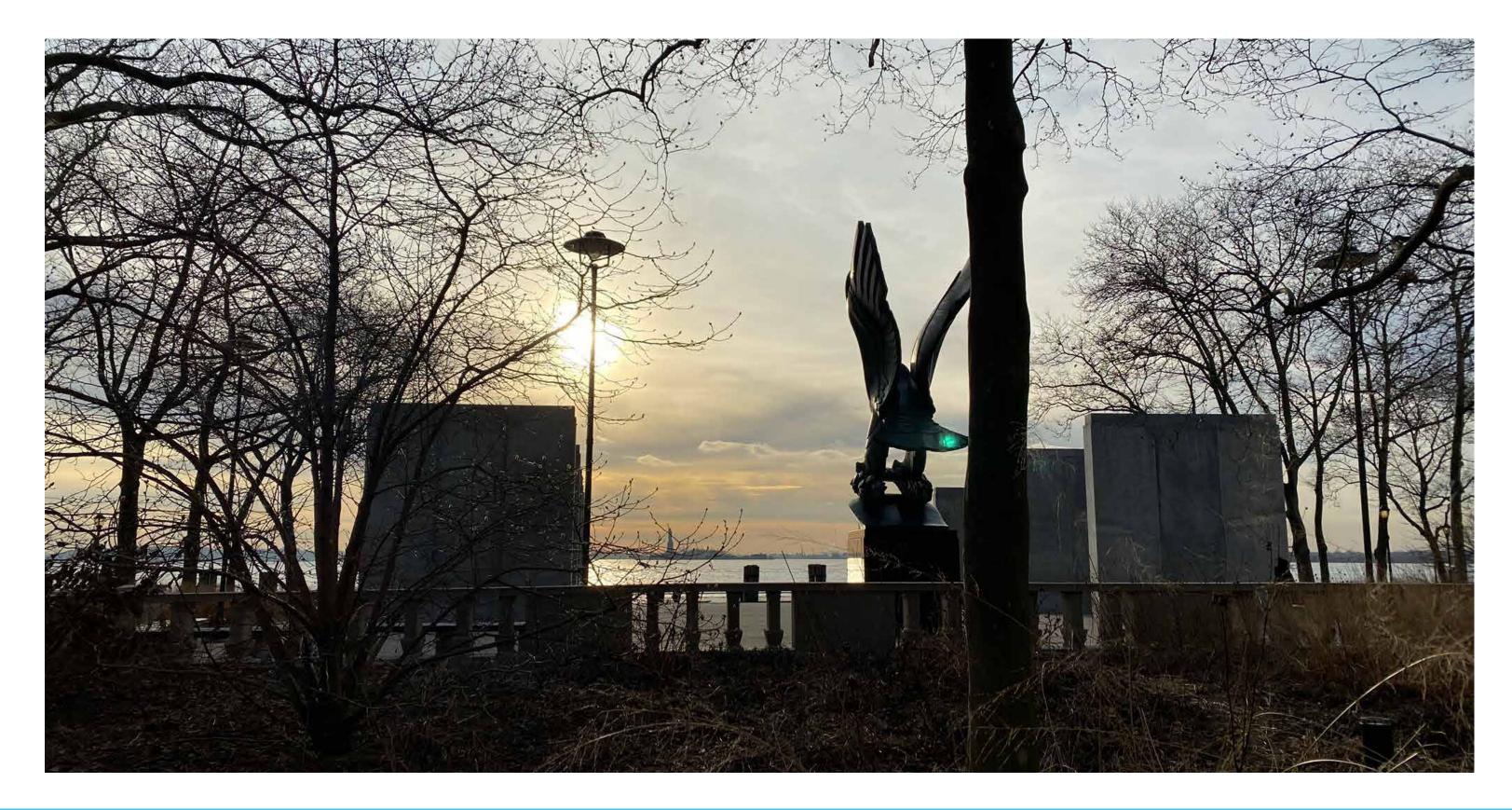


LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY





LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY

# **Existing Condition**



NEW YORK HARBOR



LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

### LEGEND **RAMPS WITH HANDRAILS** SUBWAY TUNNEL **GRANITE BACKED BENCH** BACKED BENCH **BACKLESS BENCH** LIGHT -0 EXISTING TREE • AYSCAF SOUTHSTREET USCOAST THE VIEW AT THE BATTERY



# **Proposed Design**





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

### LEGEND **RAMPS WITH HANDRAILS** SUBWAY TUNNEL **NEW / RESTORED PLANTING** GRANITE BACKED BENCH BACKED BENCH **BACKLESS BENCH** LIGHT -0-EXISTING TREE • PROPOSED TREE PLAYSCAP SOUTHSTREET USCOASI THE VIEW AT THE BATTERY



### East Coast Memorial

# **Existing Condition**



### LEGEND

- GRANITE BACKED BENCH
- BACKED BENCH
- BACKLESS BENCH



EAST COAST MEMORIAL LIGHT

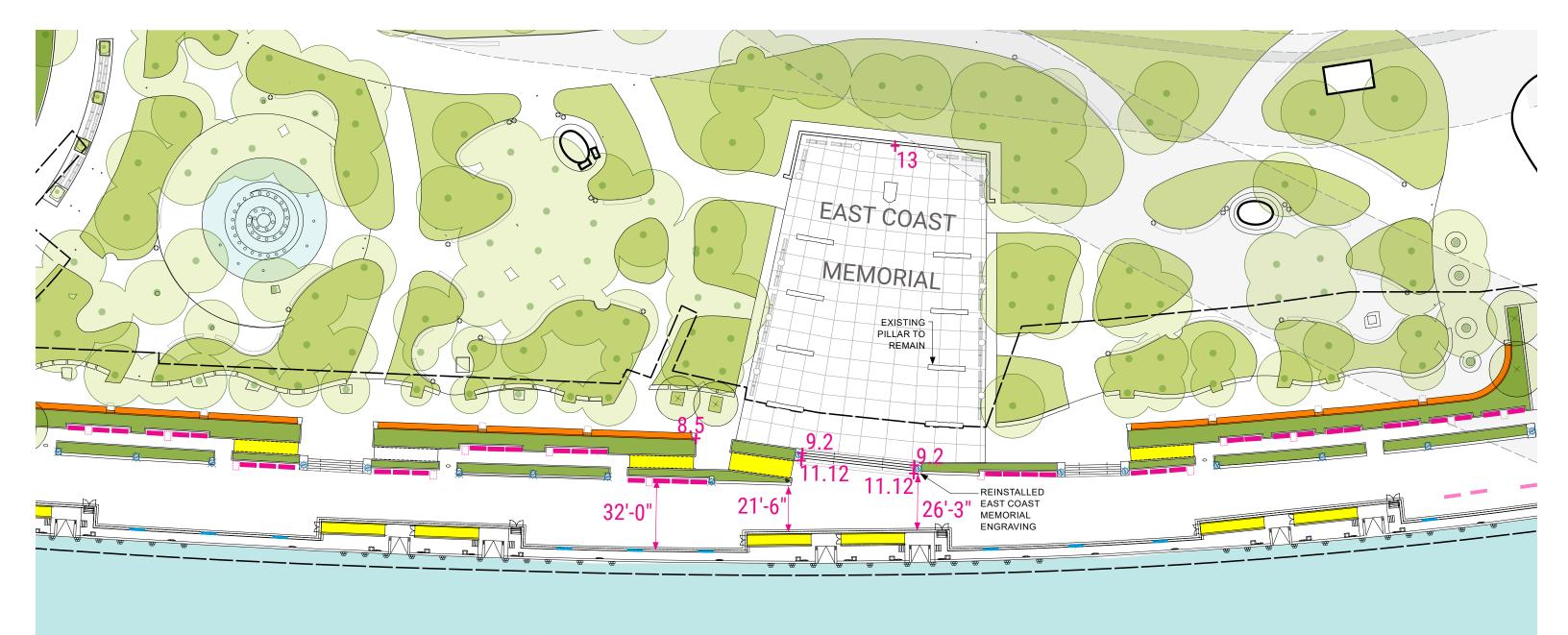
🔶 RIVERSIDE LUMINAIRE LIGHT

RAMPS WITH HANDRAILS NEW / RESTORED PLANTING EXISTING TREE

LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

East Coast Memorial

# **Design Concept**



### LEGEND

- GRANITE BACKED BENCH
- BACKED BENCH
- BACKLESS BENCH



EAST COAST MEMORIAL LIGHT

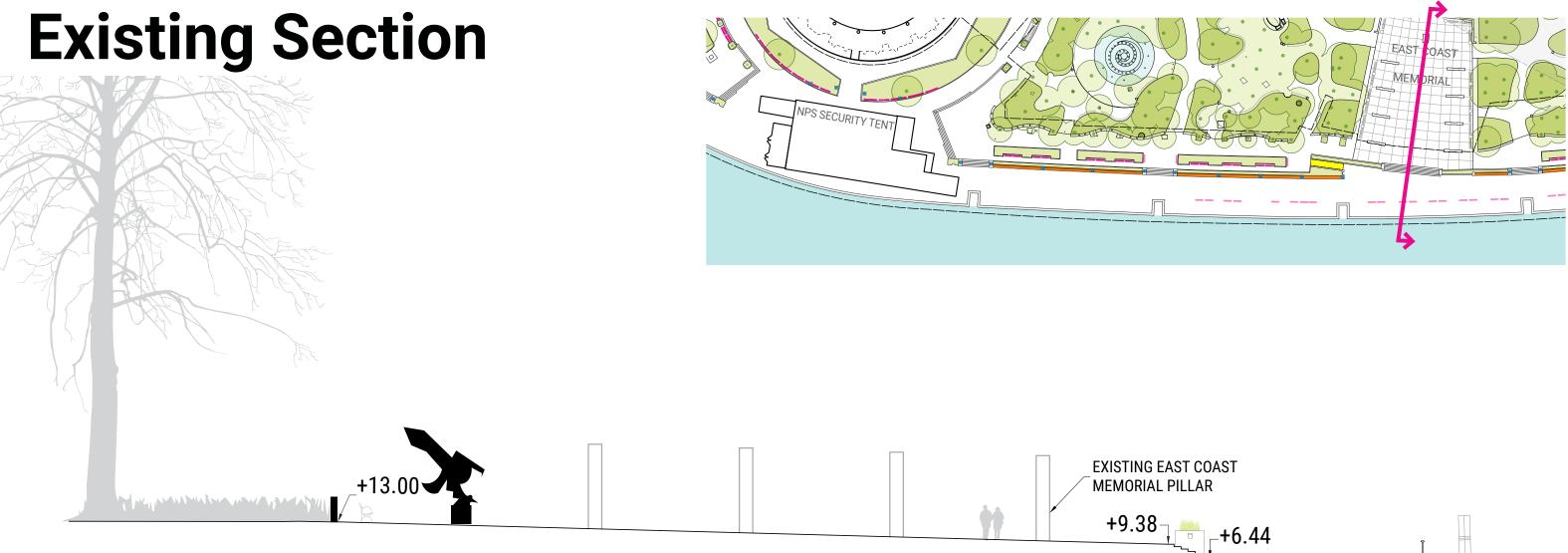
♦ RIVERSIDE LUMINAIRE LIGHT

RAMPS WITH HANDRAILS NEW / RESTORED PLANTING • EXISTING TREE

PROPOSED TREE

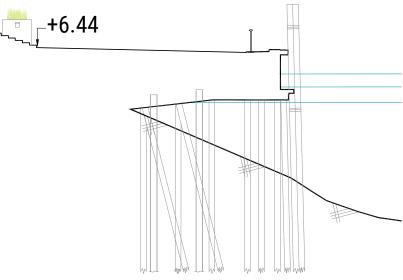
LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

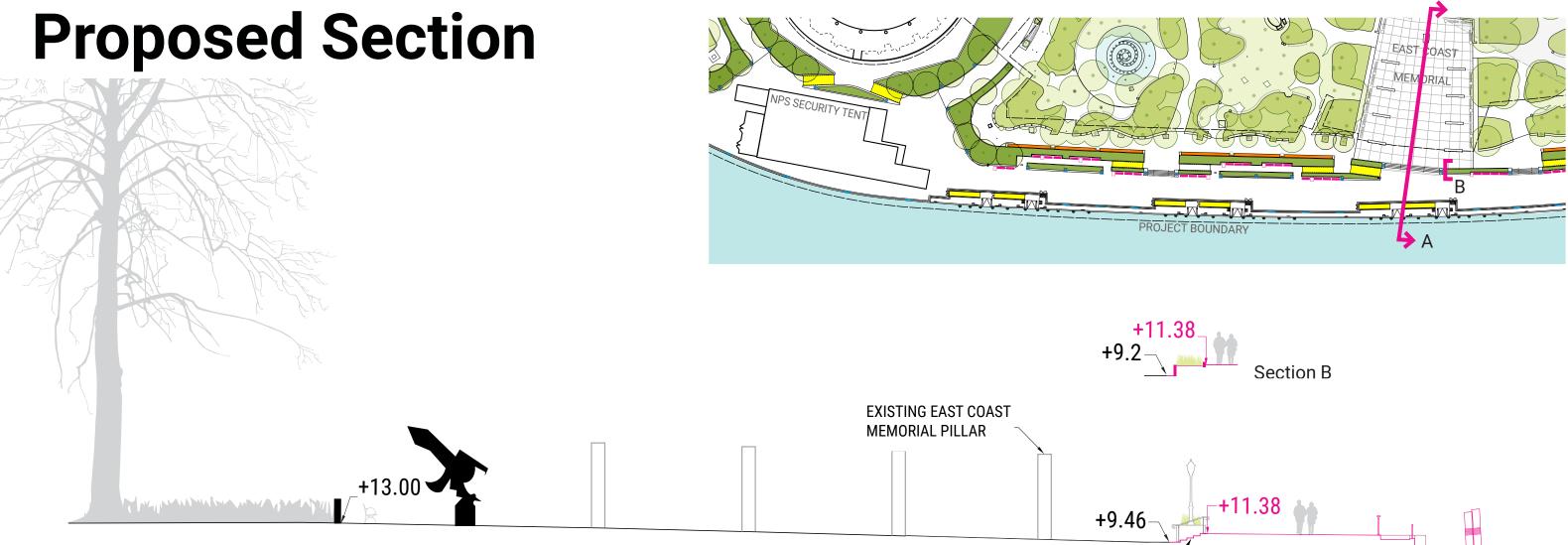
East Coast Memorial





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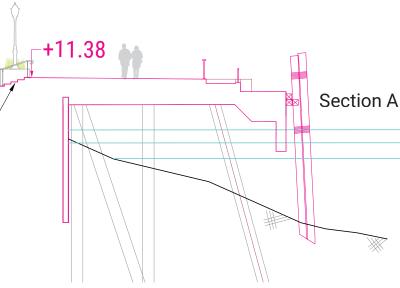




SALVAGED GRANITE STEPS ---/ \*GRADE CHANGE RESULTS IN 2 FEWER STEPS



LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY



**East Coast Memorial** 

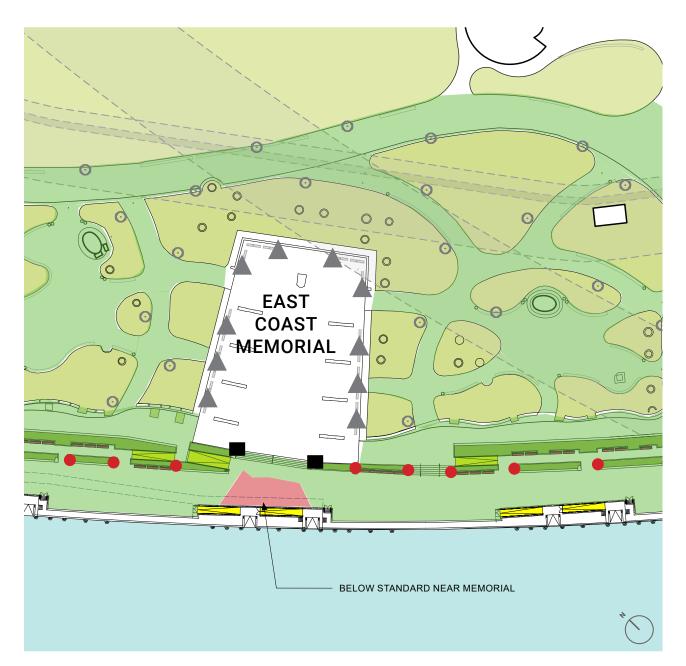
# **East Coast Memorial Proposed Lighting**

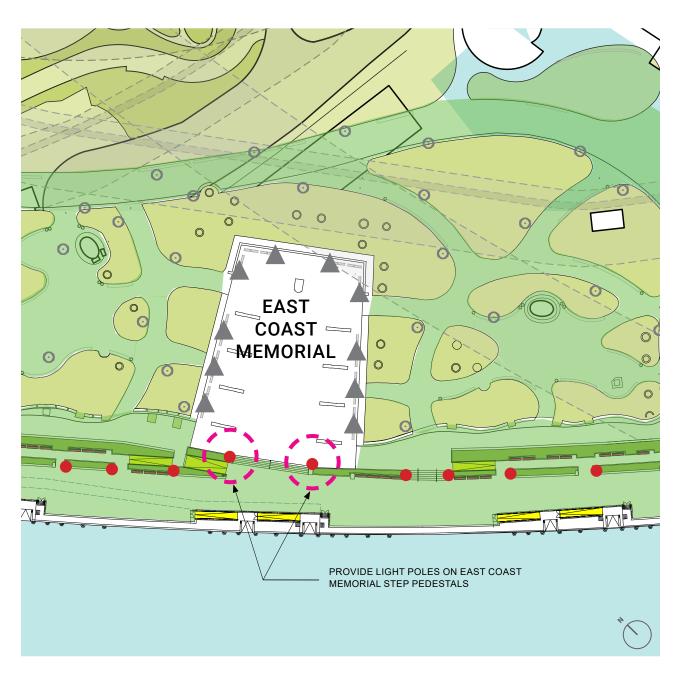
### INSUFFICIENT LIGHT LEVELS USING EXISTING RECESSED LIGHTING

PHOTOMETRICS AS CURRENTLY DESIGNED

### PROPOSED NEW LIGHTING

REPLACE RECESSED LIGHT FIXTURE WITH NEW LIGHT POLES ON PEDESTALS





### LEGEND

≦/ED

- ACCEPTABLE LIGHT LEVELS
- **BELOW-STANDARD LIGHT LEVELS**

**Stantec** 

- EXISTING RIVERSIDE LUMINAIRE ON B-POLE (NYCDOT MAINTAINED)
  - EXISTING EAST COAST MEMORIAL LAMPPOST (NYCDOT MAINTAINED)
- PROPOSED RIVERSIDE LUMINAIRE ON B-POLE (NYCDOT MAINTAINED)
- RECESSED LIGHT FIXTURE (NYCDPR OWNED AND MAINTAINED)

#### LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

#### N B-POLE (NYCDOT MAINTAINED) DWNED AND MAINTAINED)

#### **East Coast Memorial**

# **East Coast Memorial Existing Lighting**

### **RECESSED LIGHT FIXTURE**

(NYCDPR OWNED AND MAINTAINED)





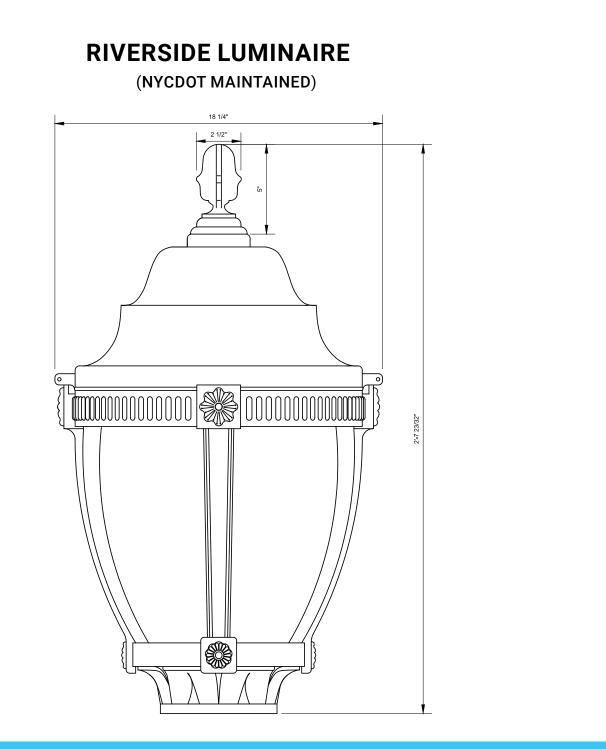




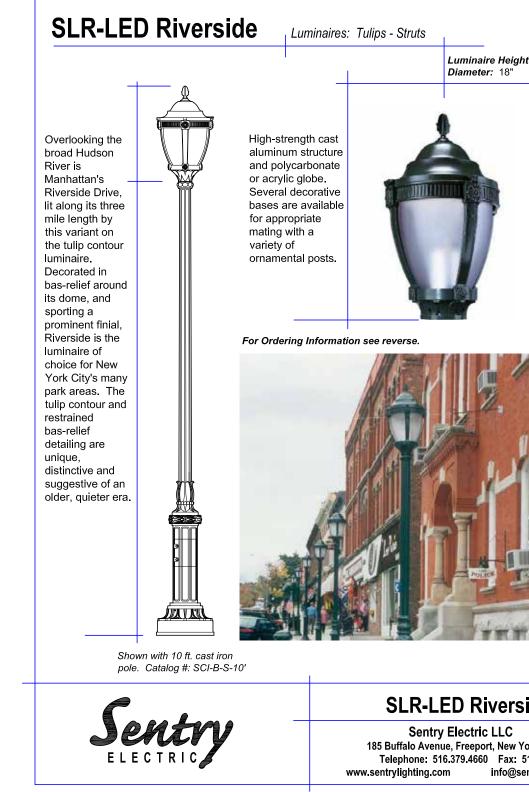
LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

(NYCDOT MAINTAINED)

### **Existing Wharf Front Lighting / Proposed East Coast Memorial Lighting SLR-LED Riverside** Luminaires: Tulips - Struts



**Stantec** 





LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY

Luminaire Height: 29 1/2" to 38 1/2"

SLR-LED utilizes the most current solid state technology to deliver high lumen output, exceptional light distribution superior visual comfort, extended service life, and energy reduction.

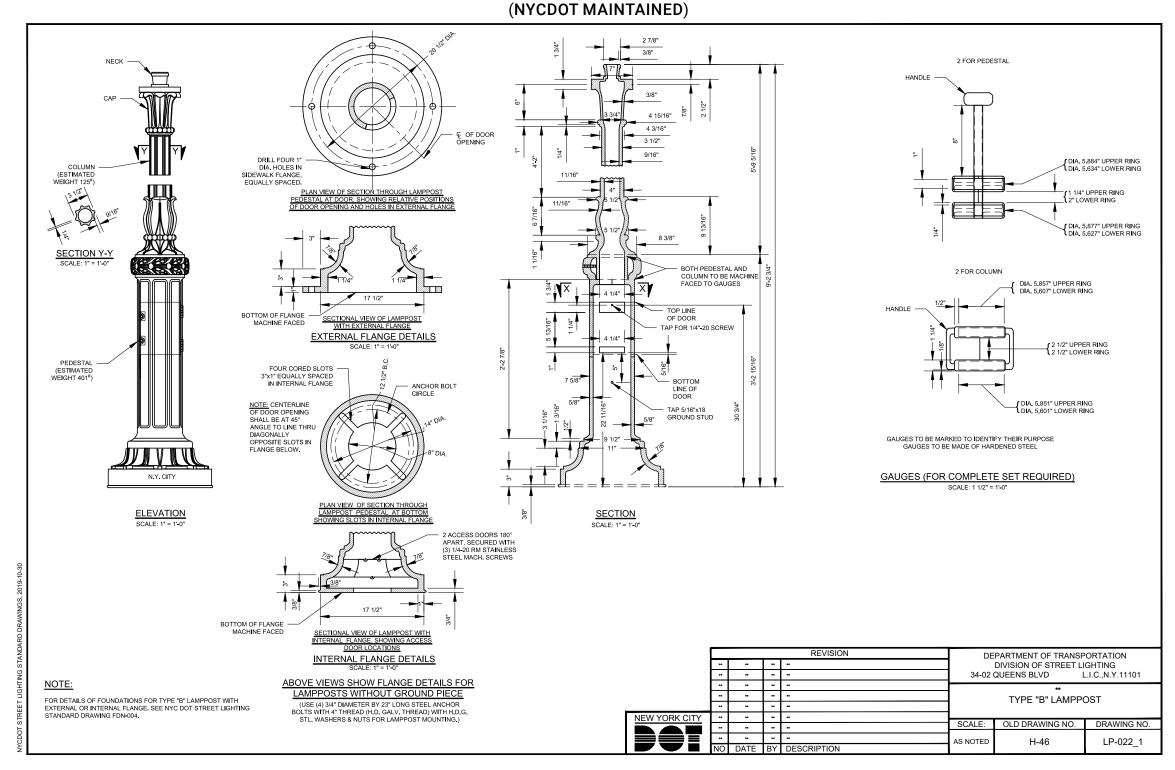
### **SLR-LED** Riverside

185 Buffalo Avenue, Freeport, New York, 11520 Telephone: 516.379.4660 Fax: 516.378.0624 info@sentrylighting.com

> L-12-5 @ 2020

#### East Coast Memorial

### **Existing Wharf Front Lighting / Proposed East Coast Memorial Lighting RIVERSIDE LUMINAIRE**



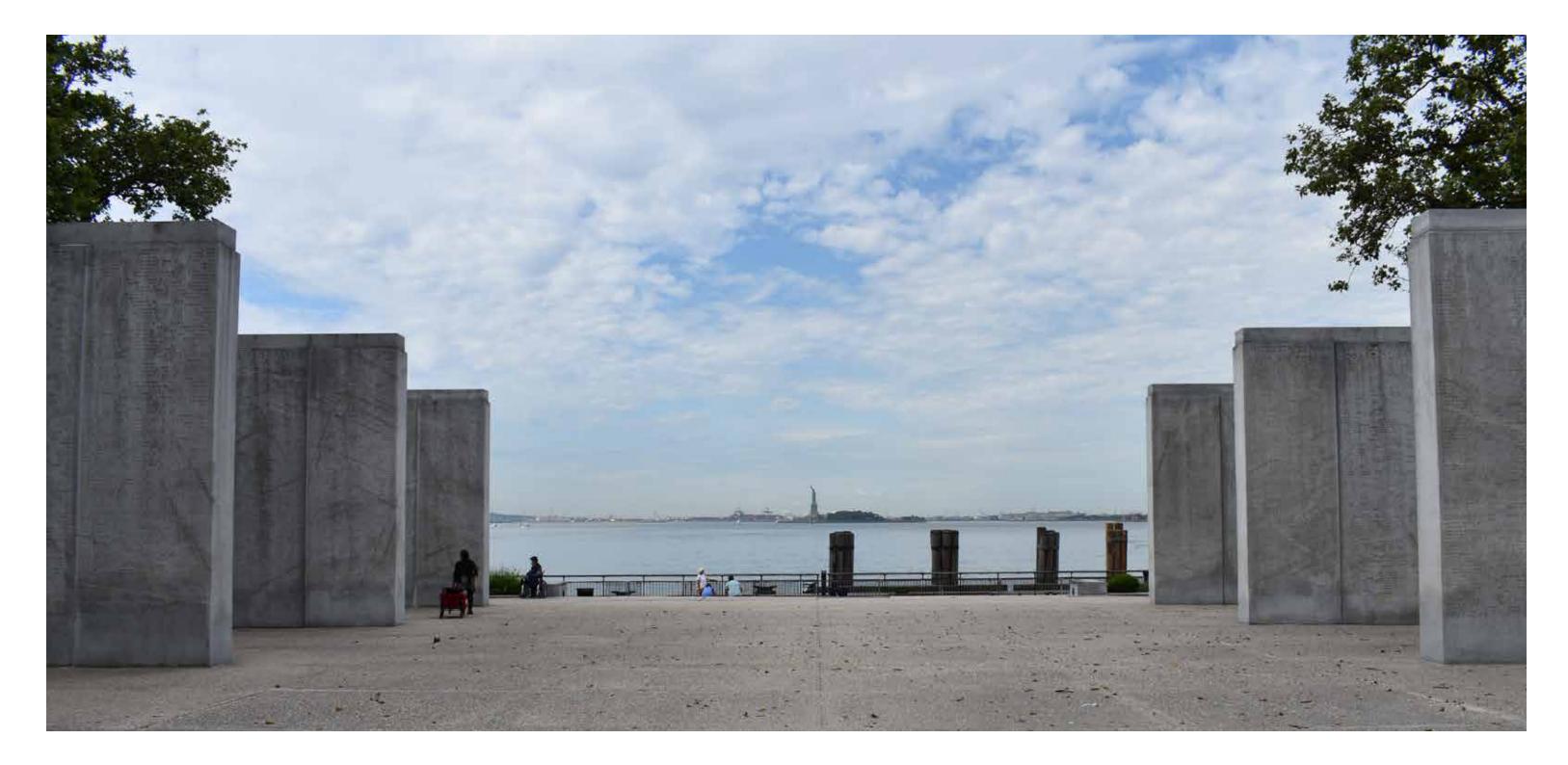
LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY

≦/EDC

Stantec

#### East Coast Memorial

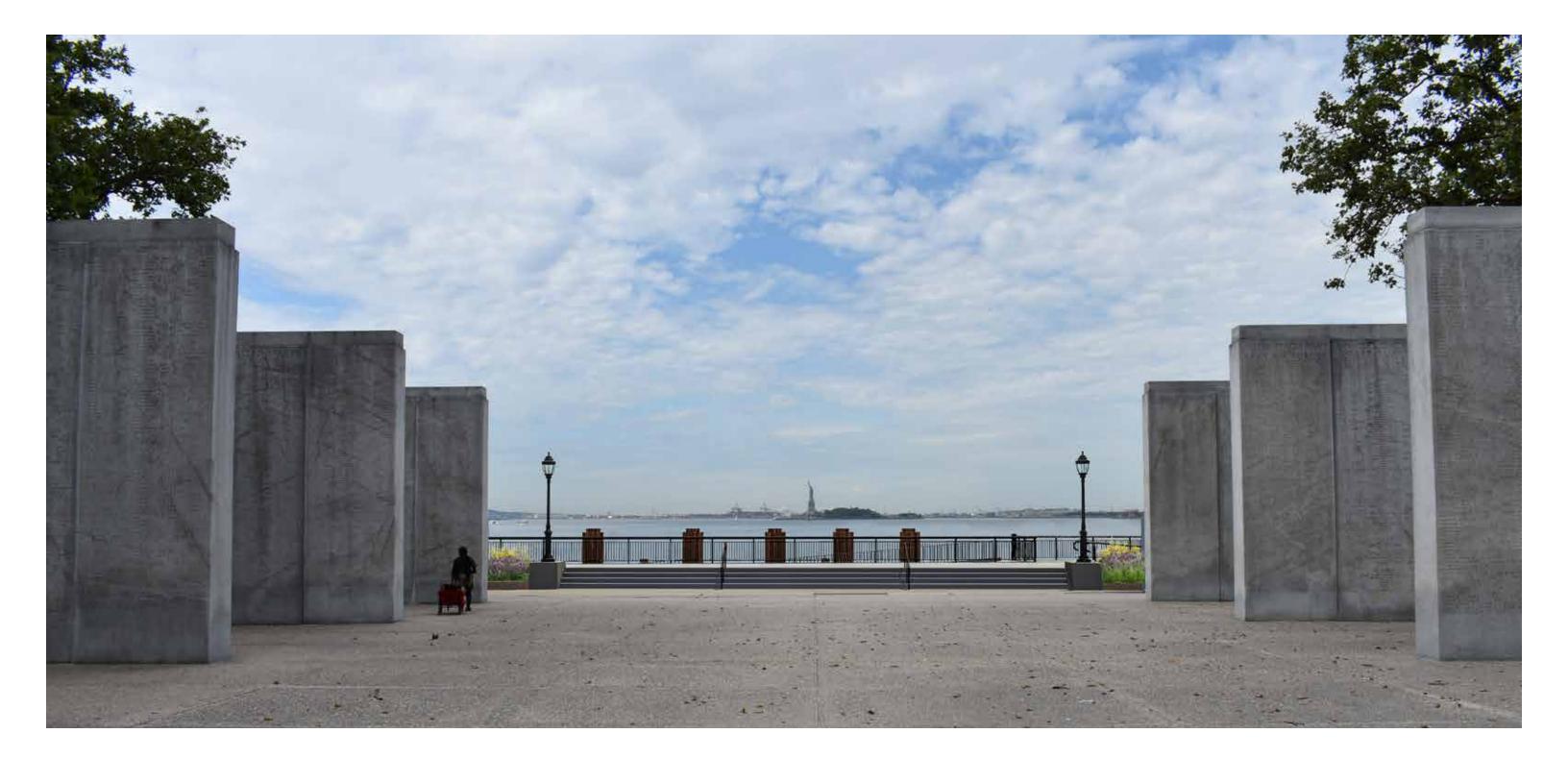
# **Existing Wharf**





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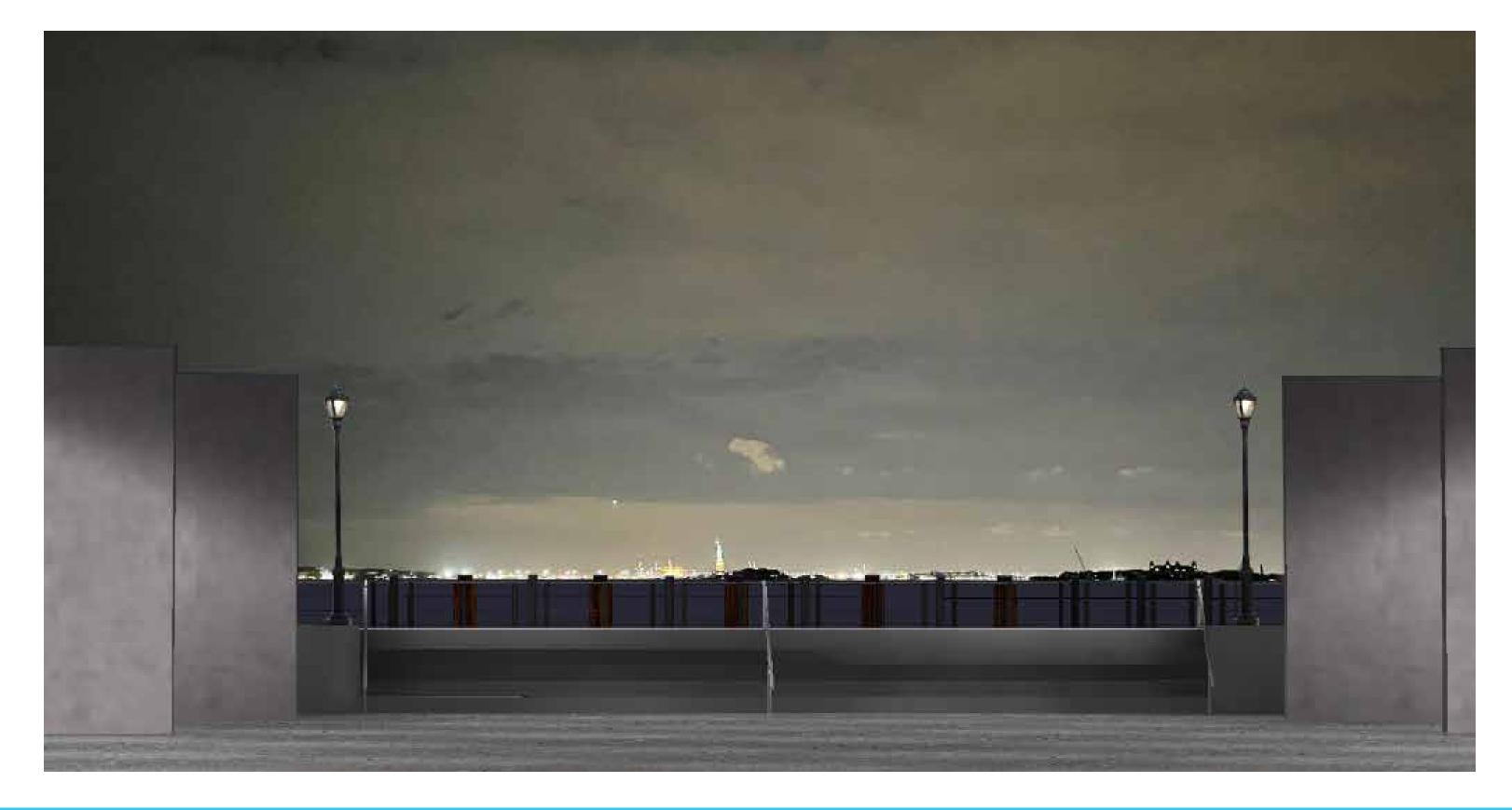
# **Proposed Design with Lights in View**





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# **Night View**





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

# **Existing Drainage**





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

### LEGEND



**RAMPS WITH HANDRAILS EXISTING PLANTING** EXISTING STORM SEWER

EXISTING DRAINAGE STRUCTURES



EXISTING TREE

**RIVERSIDE LUMINAIRE** EAST COAST MEMORIAL LIGHT

**East Coast Memorial** 

# **Proposed Drainage Design**

• Proposed cross slopes at base of East Coast Memorial range from 1.2%-3.4%

- Longitudinal slope is 1%
- Limit of construction to meet expansion joint at edge of pillars to accommodate consistent grades at the base of the memorial

• Runoff from the East Coast Memorial collected via catch basins at base of stairs (similar to existing)

### CATCH BASIN EXAMPLE







LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

### LEGEND



RAMPS WITH HANDRAILS EXISTING PLANTING NEW / RESTORED PLANTING EXISTING STORM SEWER PROPOSED STORM SEWER PROPOSED CATCH BASIN



MANHOLE AND TIDE GATE



0

EXISTING TREES



RIVERSIDE LUMINAIRE EAST COAST MEMORIAL LIGHT

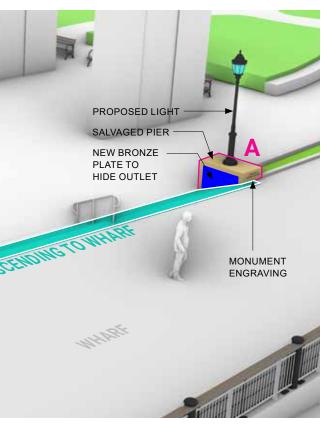
**East Coast Memorial** 

# Materiality

**EXISTING STEPS PROPOSED STEPS** EASTCOASTMENORIAL EASTCOASTMENORIAL INTERIOR FACE B 6 GRANITE STEPS DESCENDING TO WHARF EXPOSED OUTLET EXISTING GRANITE PIER MONUMENT ENGRAVING SALVAGED PIER WHARF INTERIOR FACE

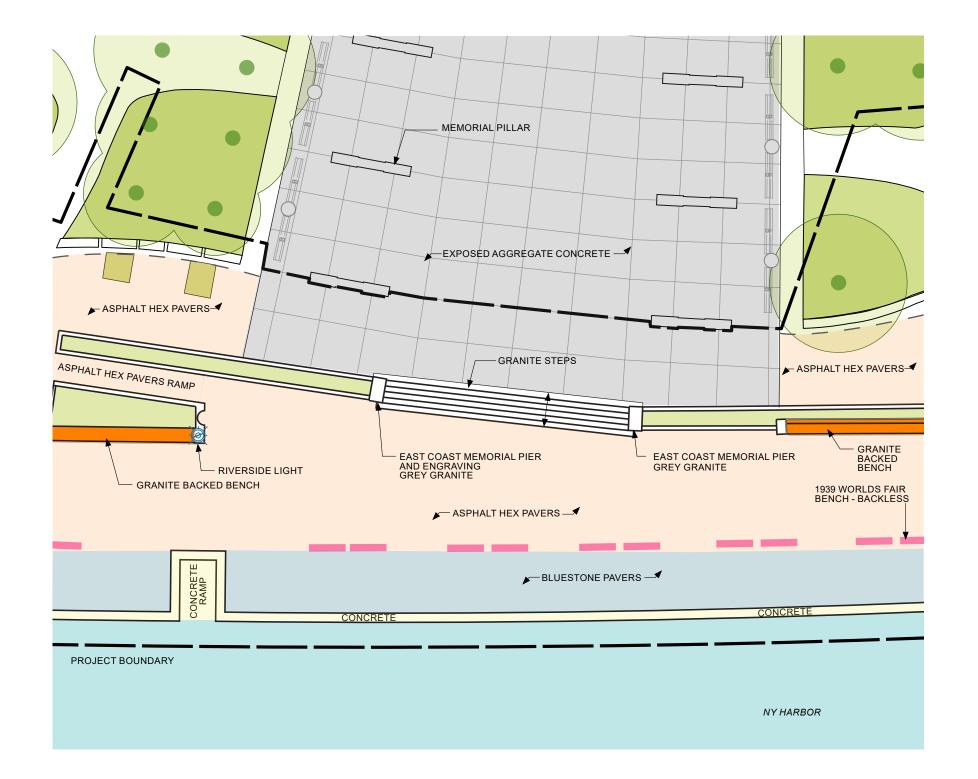


LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY



**East Coast Memorial** 

# **Existing Materials**

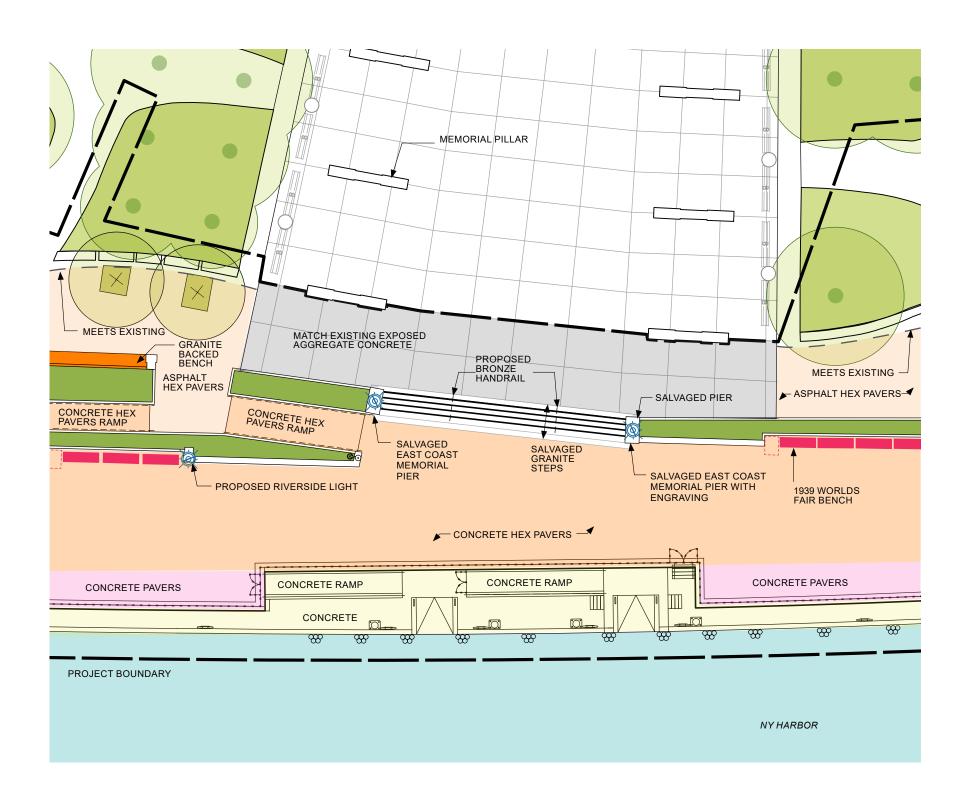




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### **Proposed Materials**





LOWER MANHATTAN COASTAL RESILIENCY PROJECT - BATTERY

**East Coast Memorial** 

# **East Coast Memorial**



### Existing

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Proposed

### LEGEND

PLANTING

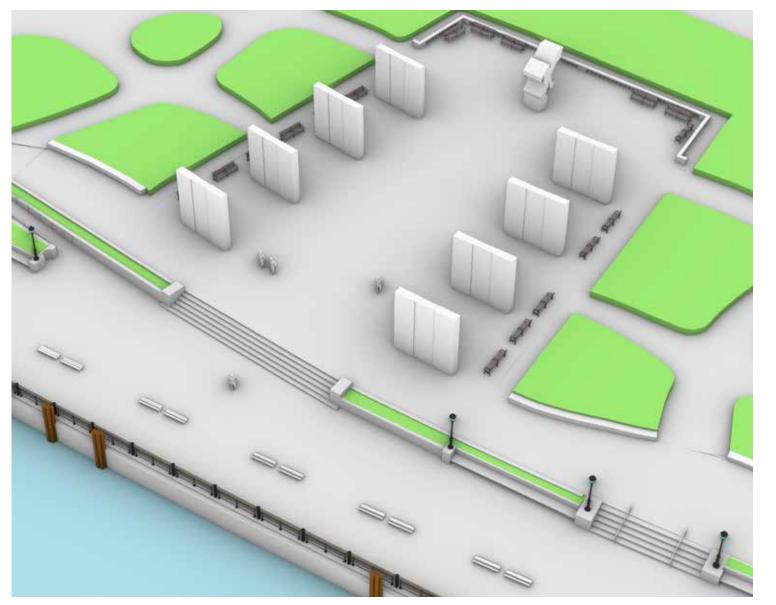


LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY



East Coast Memorial

# **East Coast Memorial**



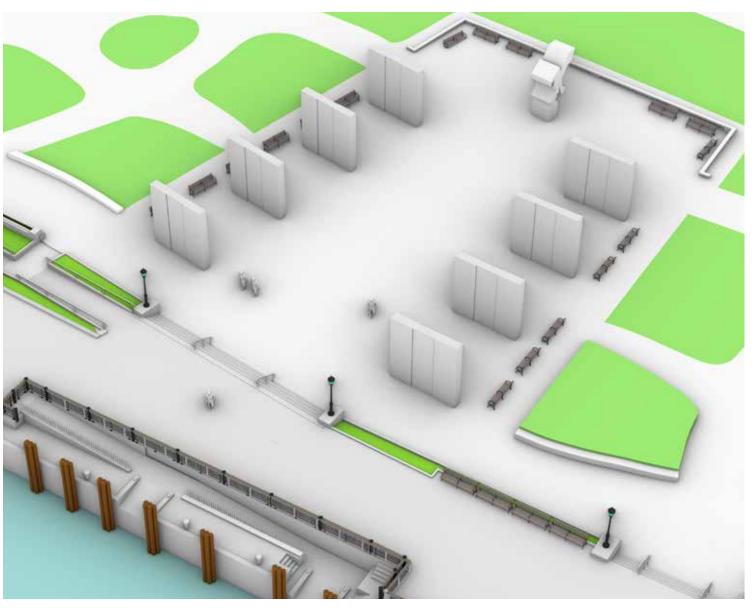
### Existing

### LEGEND

PLANTING



LOWER MANHATTAN COASTAL RESILIENCY PROJECT – BATTERY



Proposed