



NATIONAL DESERT STORM
WAR MEMORIAL

SITE SELECTION STUDY

Contents

- I. Introduction
- II. First & Second Round Site Identification
- III. Third Round Detailed Site Analyses
 - Hains Point Area
 - Memorial Circle Area
 - Constitution Avenue Terminus Area
 - Site Selection Conclusions
- IV. Design Context

I. INTRODUCTION

Introduction

Operation Desert Storm/Desert Shield is the largest American war of the 20th Century without a memorial, despite more than half a million American servicemen and women taking part. In 2014, the U.S. Congress authorized a memorial to the war to be placed within the District of Columbia. This future memorial intends to create an educational, meaningful, and deeply moving sequential experience that educates visitors about the historical events of the war, identifies coalition countries and illustrates the historical significance of the 34-nation coalition that united to liberate Kuwait. This commemorative work would memorialize the names of those Americans who sacrificed their lives, reflect the unique environmental and battle conditions experienced by servicemen and women during the war, and leave visitors with an enduring memory of the historical significance and moral accomplishments of Desert Storm.

This Site Selection Study is intended to guide the location of the National Desert Storm and Desert Shield Memorial, which is anticipated to be known as the National Desert Storm Veterans War Memorial. The National Desert Storm War Memorial (NDSWM) Board developed a series of criteria in order to identify a suitable location for the memorial and that supports the stated purpose of the memorial. These criteria were then applied to the 100 potential memorial sites listed in the National Capital Planning Commission’s Memorials and Museums Master Plan. Many of the sites in the document did not meet the criteria; however, the Board identified eighteen sites and areas that merited further consideration based on overall location and size. The list was later narrowed to ten sites and areas for more intensive analysis. This Site Selection Study evaluates each of the eighteen initial sites considered, as well as provides more context and detail for the ten second-round sites. Two sites were selected for further analysis to explore potential concepts for how the site could accommodate a memorial.

The Memorial is authorized to be located in Area I as defined under the Commemorative Works Act. This law also states that "to the maximum extent possible, a commemorative work shall be located in surroundings that are relevant to the subject of the work."

Note: Some locations under review are determined sites while some are less-defined areas.

National Desert Storm Veterans War Memorial

Criteria	Details
District of Columbia	Per the enabling legislation, the memorial must be established within the District of Columbia
Program Suitability	The site should be at least 1.5 acres in size, although sites of approximately 2 acres are preferred. These sites would enable a memorial with a commemorative feature and educational element, and would accommodate a standing group of approximately 80-100 people for special events.
Accessibility	The site should be accessible to pedestrians, transit (tour buses), and visitors to the nation’s capital. The site should meet Architectural Barriers Act Accessibility Standards (ABAAS).
Site Prominence and Visibility	The site should be near other tourist destinations such as other memorials or visitor attractions. Similarly, the site should be easily seen by passersby.
Site Context	The site should be thematically connected to the memorial. Potential connections include proximity to other war memorials or commemorative works and connections to the L’Enfant Plan.
Infrastructure Requirements	The site should require minimal infrastructure improvements. Required changes, such as roadway improvements or relocated utility lines, would make potential sites more challenging.
Tranquility	The site should be a place that offers a tranquil environment for reflection. Conflicts with noise, traffic, and other potential distractions are not desirable.
Security & Maintenance	The site should provide a safe environment for both visitors and memorial features. The site should allow security elements, such as lighting and prominence. Additionally, the site should minimize potential maintenance issues of memorial features.
Resiliency & Sustainability	The site should be resilient to the environment and the potential effects of climate change. Additionally, the site should enable sustainable design practices.

Historical Context

In the wake of the end of the Cold War, international cooperation faced an uncertain future. Saddam Hussein's invasion of Kuwait in 1990 prompted the world to act, and the result was an unprecedented coalition that joined to liberate that country and prevent further violence and bloodshed. Upon return after a rapid victory, U.S. service members were greeted with a welcome of excitement and gratitude not seen in decades. Though 383 Americans never returned from Operation Desert Storm/Desert Shield, not only did the conflict liberate an occupied country with broad international support, but also **revived the public's faith in the U.S. military and helped to heal the wounds of the Vietnam War.**

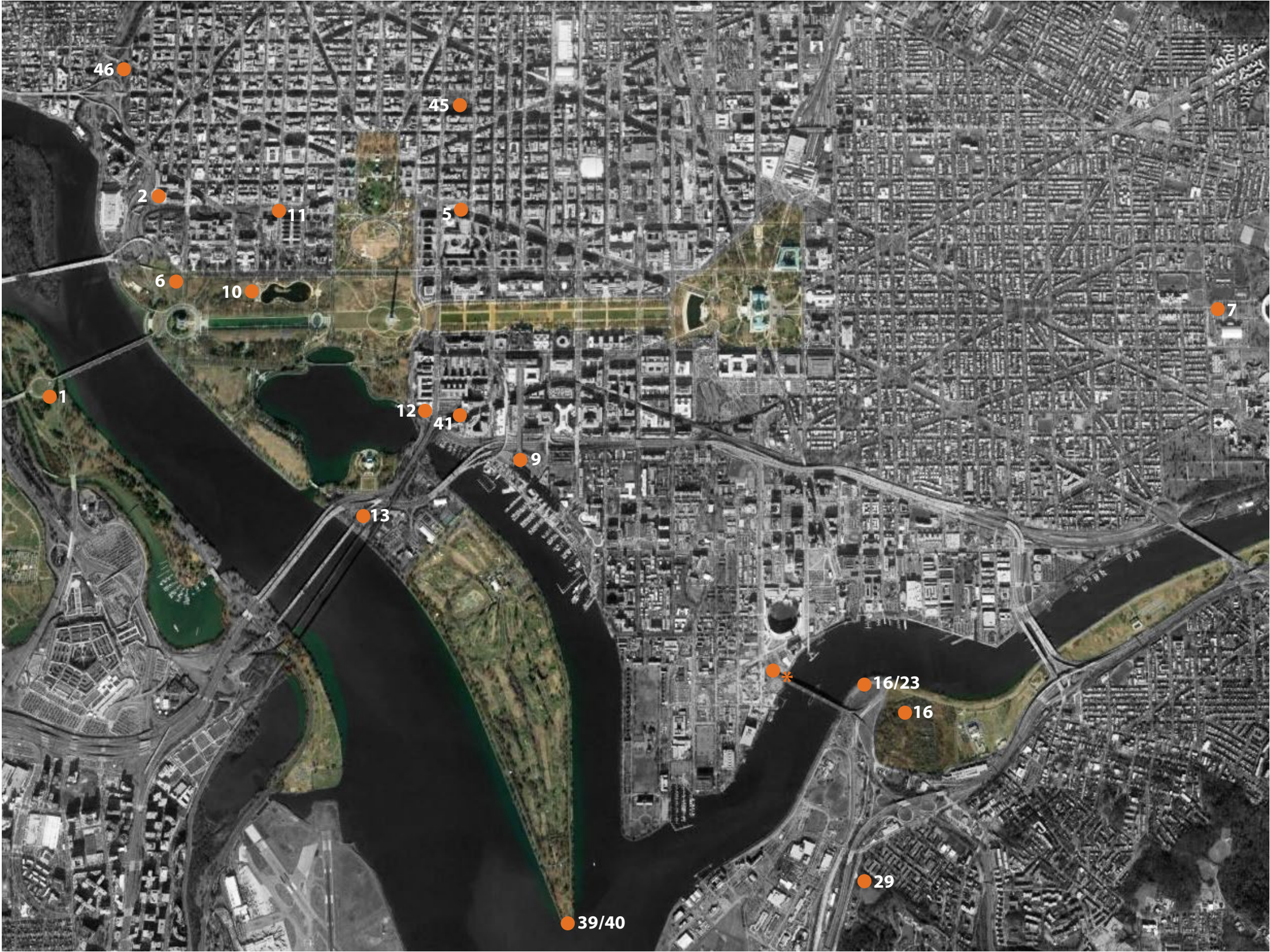


II. FIRST & SECOND ROUND SITE IDENTIFICATION

First Round Site Identification (18 Sites)

Site	Location
1	Memorial Circle area at George Washington Memorial Parkway
2	E Street Expressway Interchange that is southeast of the Kennedy Center
5	Freedom Plaza on Pennsylvania Avenue NW, between 13th and 14th Streets
6	Western terminus area of Constitution Avenue
7	East Capitol Street east of 19th Street
9	10th Street Overlook/Banneker Park
10	Situated within the reserve on the National Mall between the Vietnam Memorial and Constitution Gardens.
11	Walt Whitman Park (E Street Corridor) E Street between 19th and 20th Streets NW
12	Former Liberty Loan building between Maine Avenue west of 14th Street, SW
13	In East Potomac Park on the Potomac River at the rail bridges and Ohio Dr.
16	Anacostia River waterfront south shore in Anacostia Park SE
16/23	Poplar Point
29	St. Elizabeths
39/40	Hains Point Area
41	On Maryland Avenue SW between 12th and 14th Streets SW
45	Franklin Square, between I, K, 13th and 14th Streets NW
46	Rock Creek & Potomac Parkway at Pennsylvania Avenue
*NO SITE NUMBER	South Capitol Street Oval

Site numbers are from the Memorials and Museums Master Plan



First Round Site Selection: Consideration of Criteria

Site *	Location	Program Suitability	Accessibility	Site Prominence & Visibility	Site Context	Infrastructure Requirements	Tranquility	Security & Maintenance	Resiliency & Sustainability	Location
1	Memorial Circle area at George Washington Memorial Parkway	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I
2	E Street Expressway Interchange that is south-east of the Kennedy Center	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I
5	Freedom Plaza on Pennsylvania Avenue NW, between 13th and 14th Streets	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I
6	Western terminus area of Constitution Avenue	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I
7	East Capitol Street east of 19th Street	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
9	10th Street Overlook/Banneker Park	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
10	Situated within the Reserve on the Mall between the Vietnam Memorial and Constitution Gardens	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Reserve
11	Walt Whitman Park (E Street Corridor) E Street between 19th and 20th Streets NW	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
12	Former Liberty Loan building between Maine Avenue west of 14th Street, SW	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I
13	In East Potomac Park on the Potomac River at the rail bridges and Ohio Dr.	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I
16	Anacostia River waterfront south shore in Anacostia Park SE	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
16/23	Poplar Point	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
29	St Elizabeths	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
39/40	Hains Point	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
41	On Maryland Avenue SW between 12th and 14th Streets SW	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area I/Area II
45	Franklin Square, between I, K, 13th and 14th Streets NW	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
46	Rock Creek & Potomac Parkway at Pennsylvania Avenue	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II
*NO SITE NUMBER	South Capitol Street Oval	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	Area II

Site numbers are from the Memorials and Museums Master Plan



Meets Criteria



Partially Meets Criteria



Does Not Meet Criteria

Preliminary Conclusions

Based on the analysis, two areas merit further detailed exploration: Constitution Avenue Terminus Area and Memorial Circle Area; Hains Point Area was also evaluated. All of these sites require Area I designation. Specific memorial sites have been identified within each area.

Site 6: Constitution Avenue Terminus Area

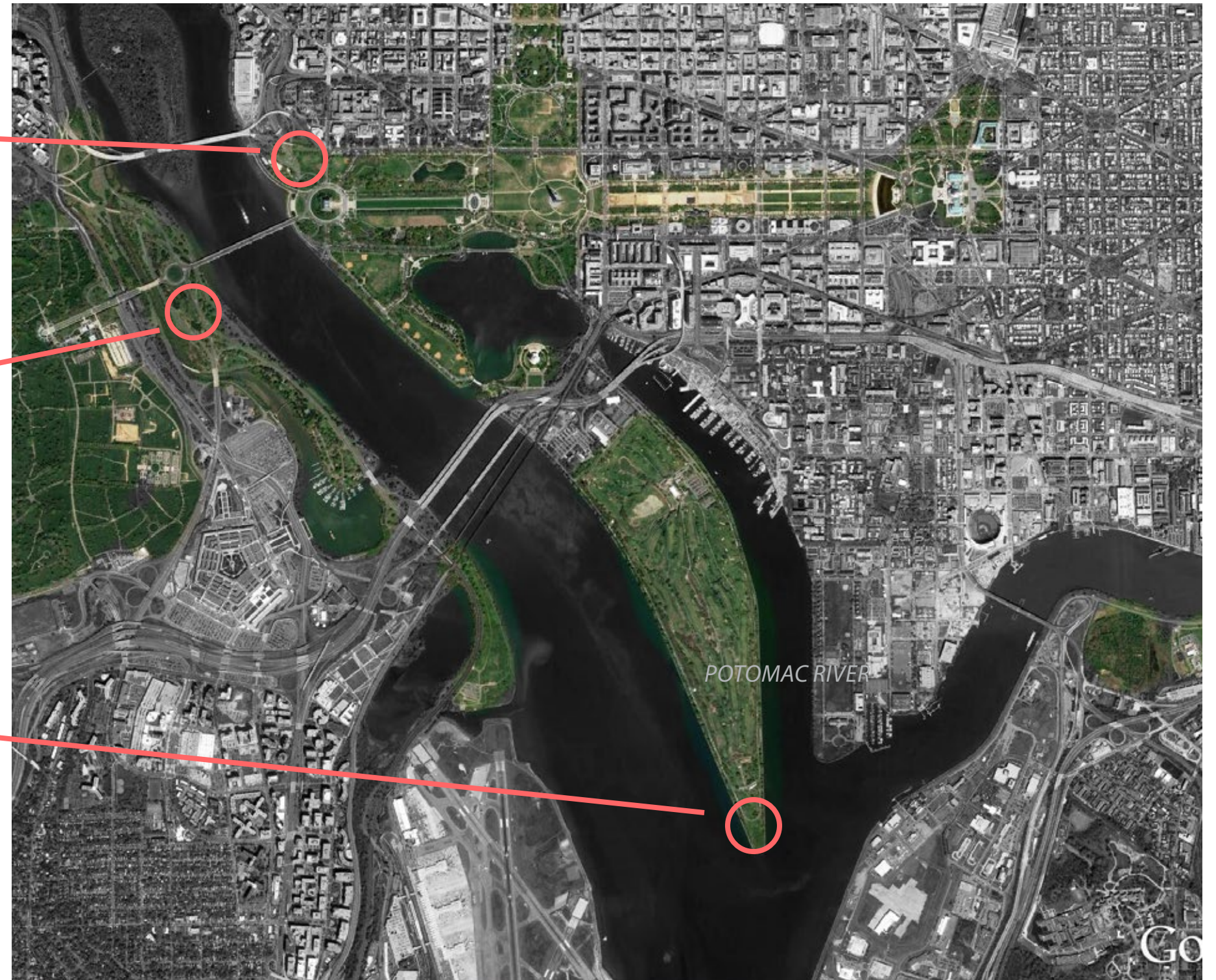
- 3.2 acres
- Accommodates desired program
- Links thematically to other 20th Century war memorials, including the adjacent Vietnam Veterans Memorial
- Offers access to transit and other nearby attractions
- Poses modest challenges in terms of resiliency due to floodplain location

Site 1: Memorial Circle Area

- 9.6 acres
- Accommodates desired program
- Links thematically to Arlington Memorial Cemetery
- Offers access to transit and parking
- Presents modest challenges in terms of tranquility, infrastructure requirements, and pedestrian access due to traffic patterns and volumes

Site 39/40: Hains Point Area

- 4.2 acres
- Lacks thematic connections to the city and other memorials
- Difficulties for access by all modes
- Sustainability concerns related to flooding and long-term resiliency



III. THIRD ROUND DETAILED SITE ANALYSES



**CONSTITUTION AVE
STUDY AREA**

**MEMORIAL CIRCLE
STUDY AREA**

**HAINS POINT
STUDY AREA**



HAINS POINT STUDY AREA



HAINS POINT SITE - 1922



HAINS POINT SITE - 1935

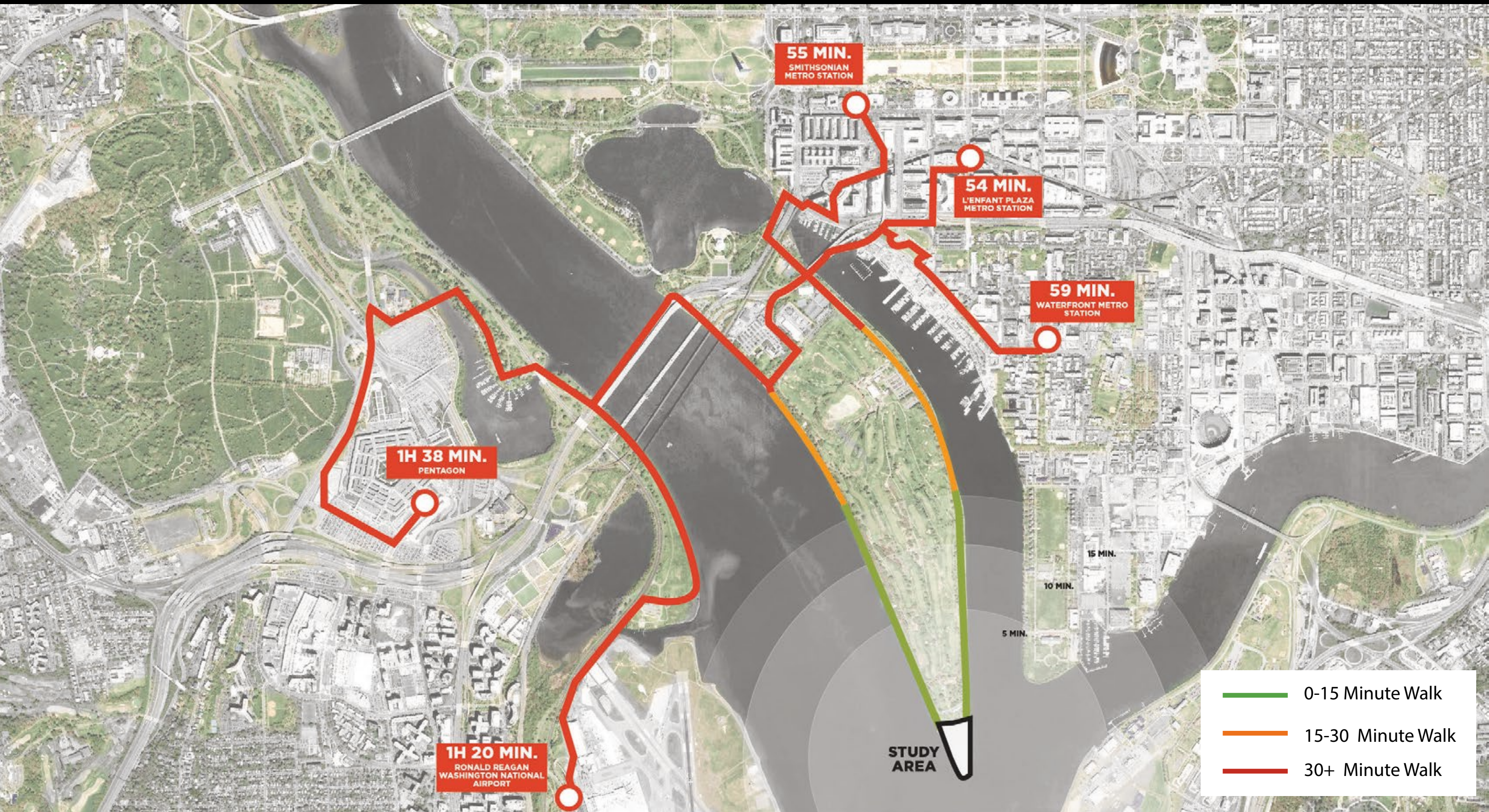


HAINS POINT SITE - 1985

HAINS POINT STUDY AREA - HISTORIC PHOTOGRAPHS



HAINS POINT STUDY AREA - ACCESS FROM LANDMARKS



HAINS POINT STUDY AREA - ACCESS FROM METRO

Detailed Site Analysis: Hains Point Area

Thematic Context



NATIONAL DEFENSE UNIVERSITY
The National Defense University conducts research into conflicts world wide, and Desert Storm/ Desert Shield provided a case study of unprecedented logistics and cooperation.

JOINT BASE ANACOSTIA BOLLING
This base hosts units from several branches of the armed forces, serving as a reminder of the military's effectiveness in joint operations.

Detailed Site Analysis: Hains Point Area

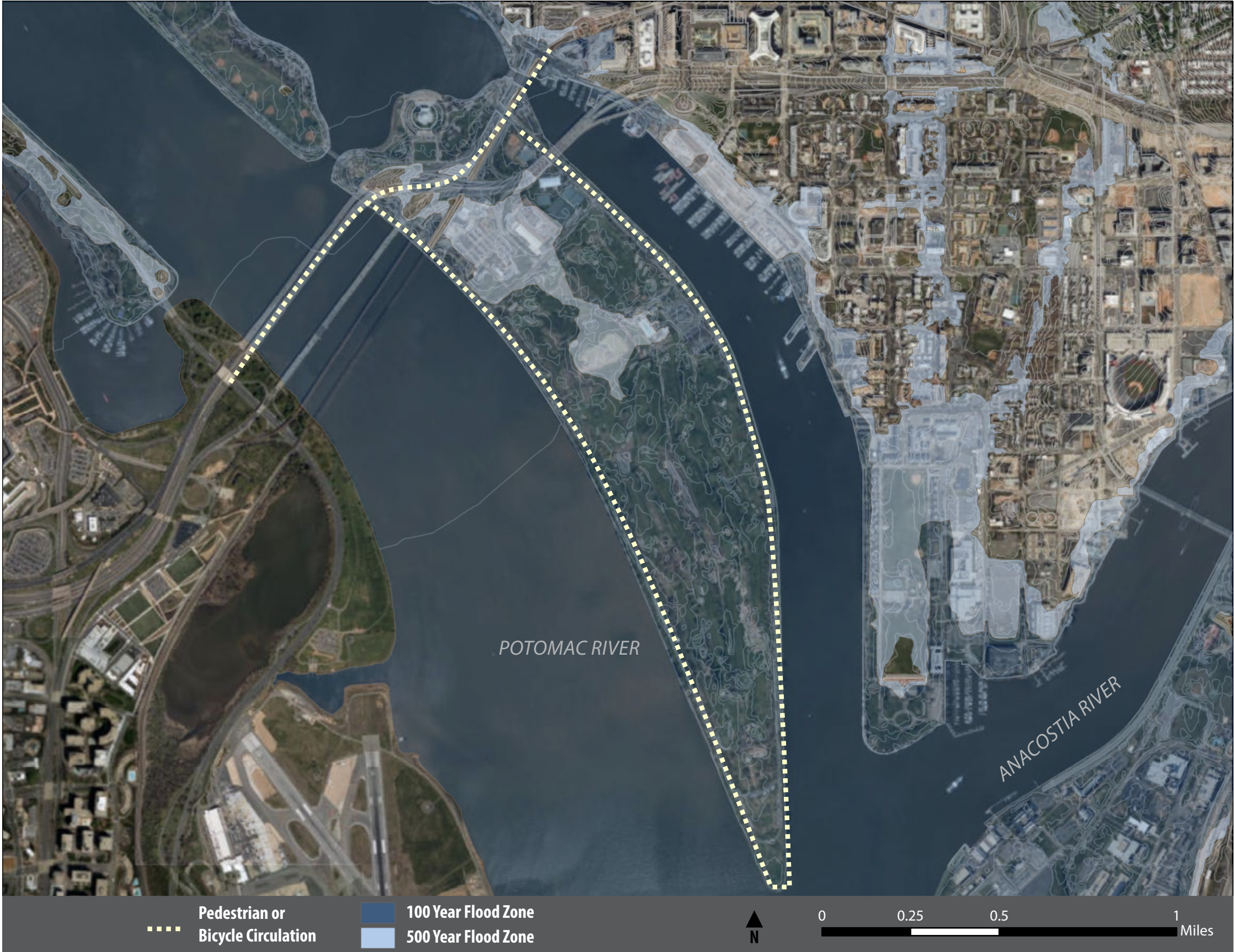
Visitor Context

- ▶ Located at south end of East Potomac Park
- ▶ Associated with Potomac River and Washington Channel
- ▶ Zero major visitor attractions within a half mile



Detailed Site Analysis: Hains Point Area

Circulation and Constraints

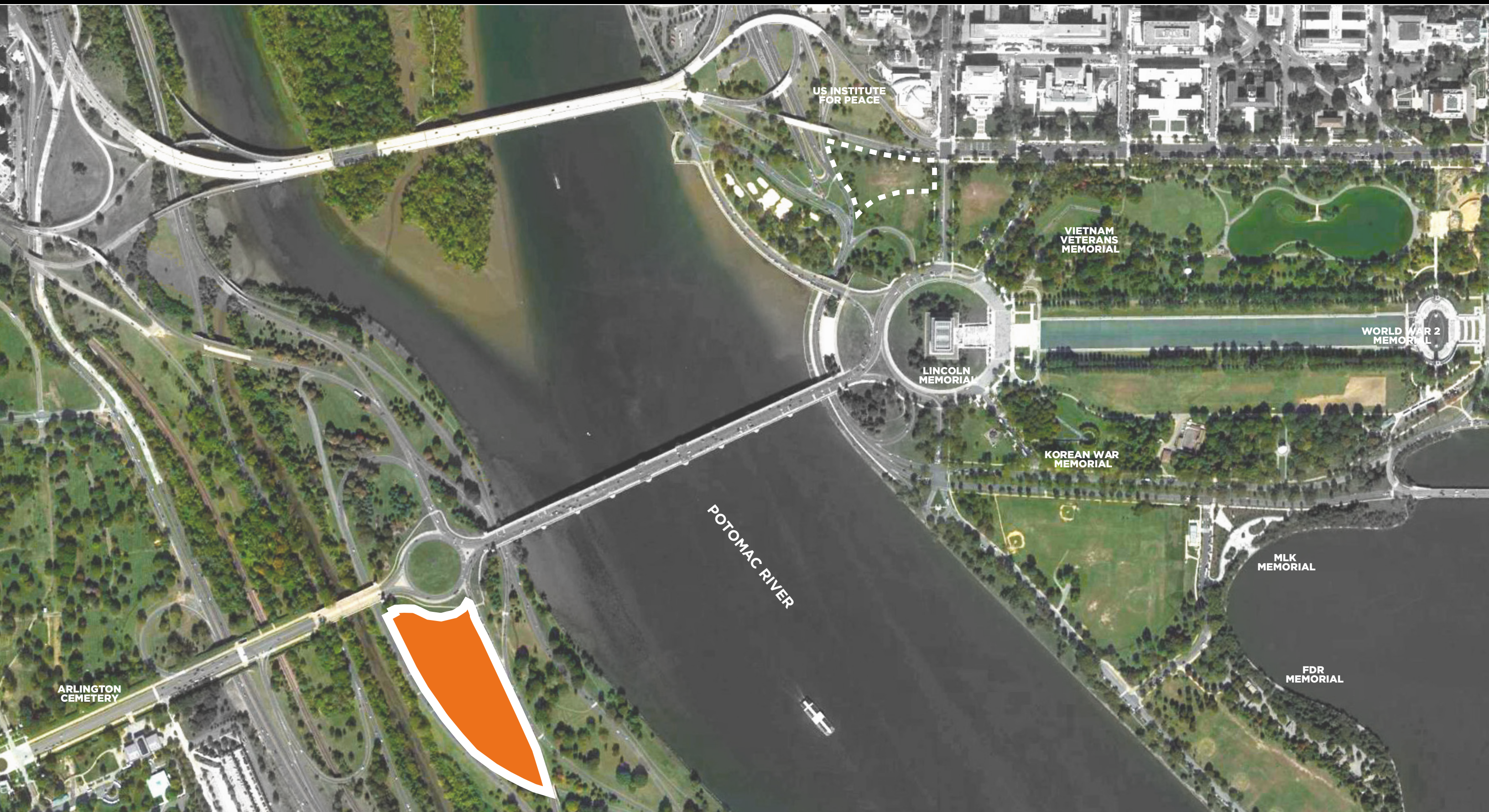


Site Concepts: Hains Point Area

Potential Future Memorial Sites



Potential commemorative sites



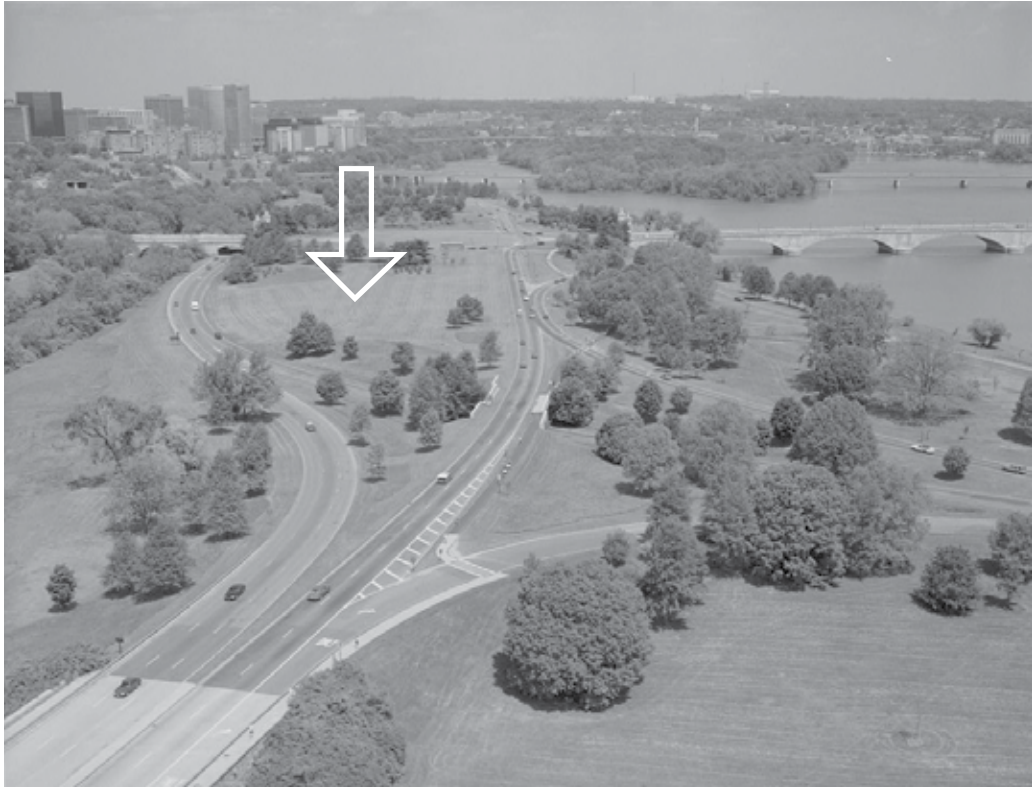
MEMORIAL CIRCLE STUDY AREA



MEMORIAL CIRCLE SITE - 1931



MEMORIAL CIRCLE SITE - CIRCA 1940



MEMORIAL CIRCLE SITE - 1973

MEMORIAL CIRCLE STUDY AREA - HISTORICAL PHOTOGRAPHS



MEMORIAL CIRCLE STUDY AREA - SITE PHOTOS



MEMORIAL CIRCLE STUDY AREA - SITE PHOTOS



MEMORIAL CIRCLE STUDY AREA - ACCESS FROM LANDMARKS



MEMORIAL CIRCLE STUDY AREA - ACCESS FROM METRO

Detailed Site Analysis: Memorial Circle Area

Thematic Context



Detailed Site Analysis: Memorial Circle Area

Visitor Context

- ▶ Located on Columbia Island
- ▶ Associated with Arlington National Cemetery and Women in Military Service for America Memorial
- ▶ Attractions with four million visitors within a half mile



Detailed Site Analysis: Memorial Circle Area

Circulation and Constraints

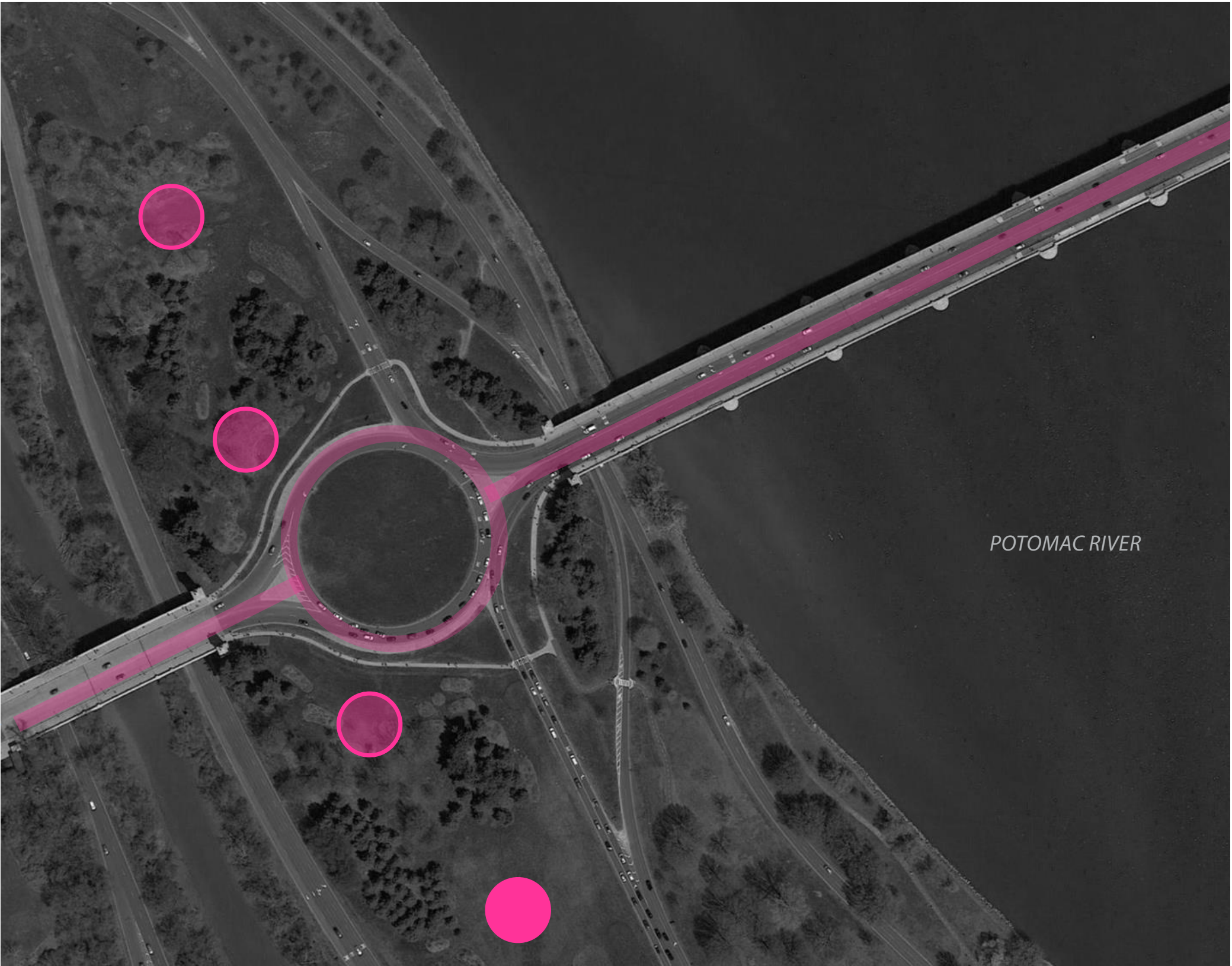


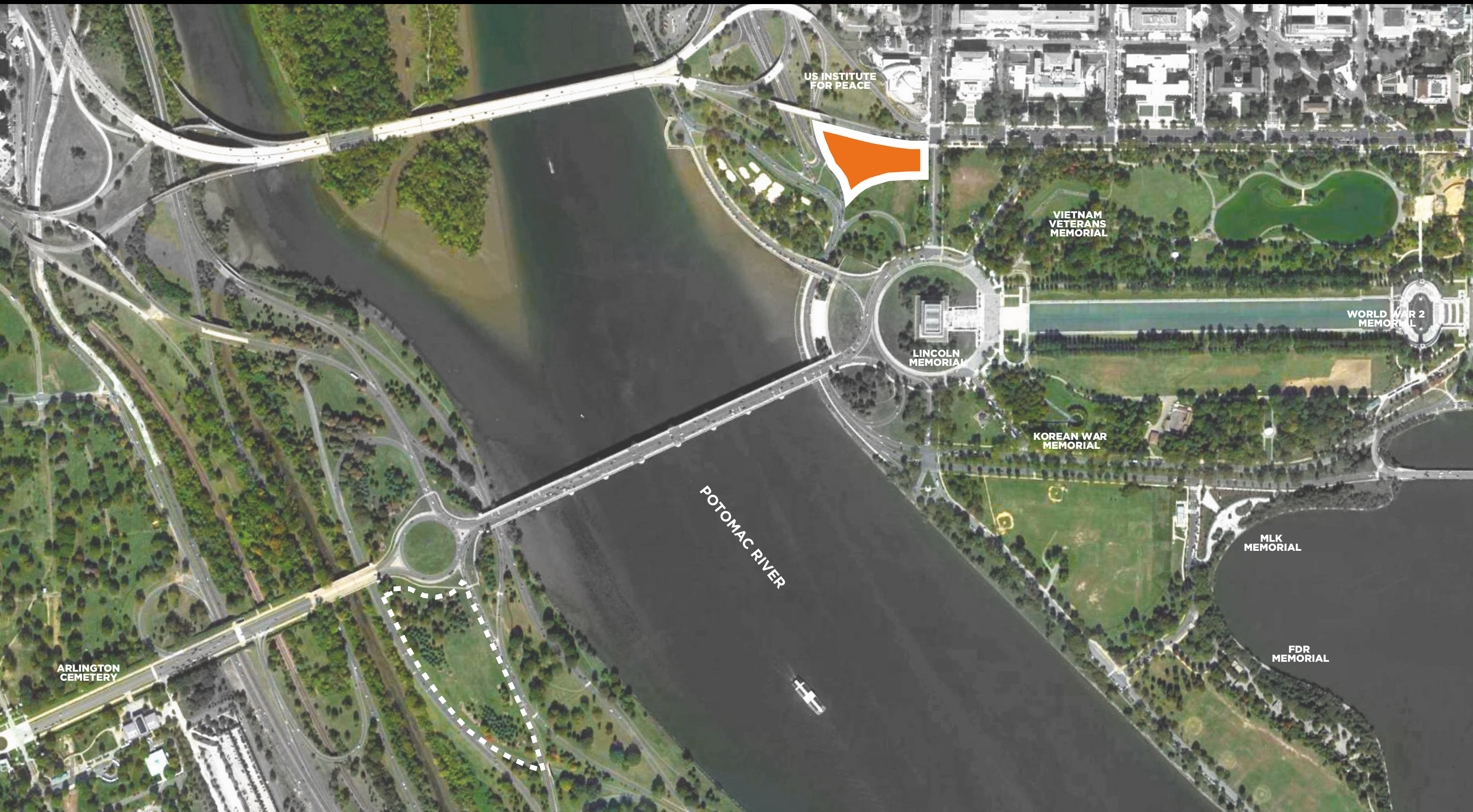
Site Concepts: Memorial Circle Area

Potential Future Memorial Sites

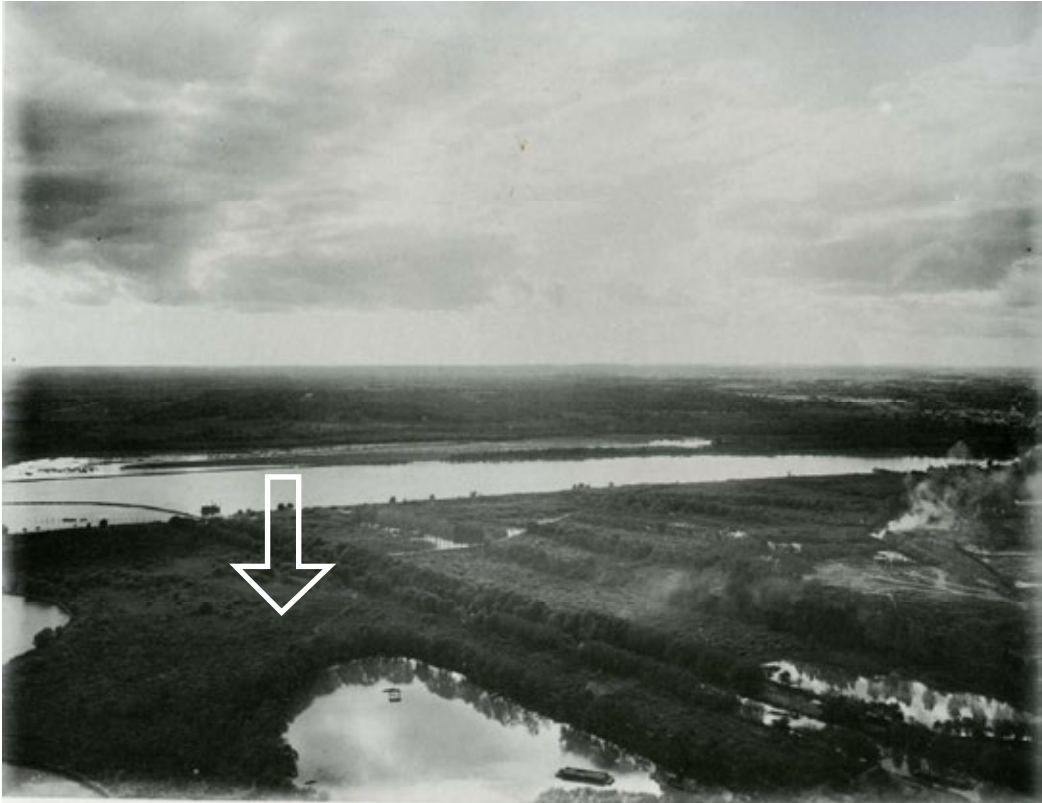
 Commemorative connection

 Potential commemorative sites

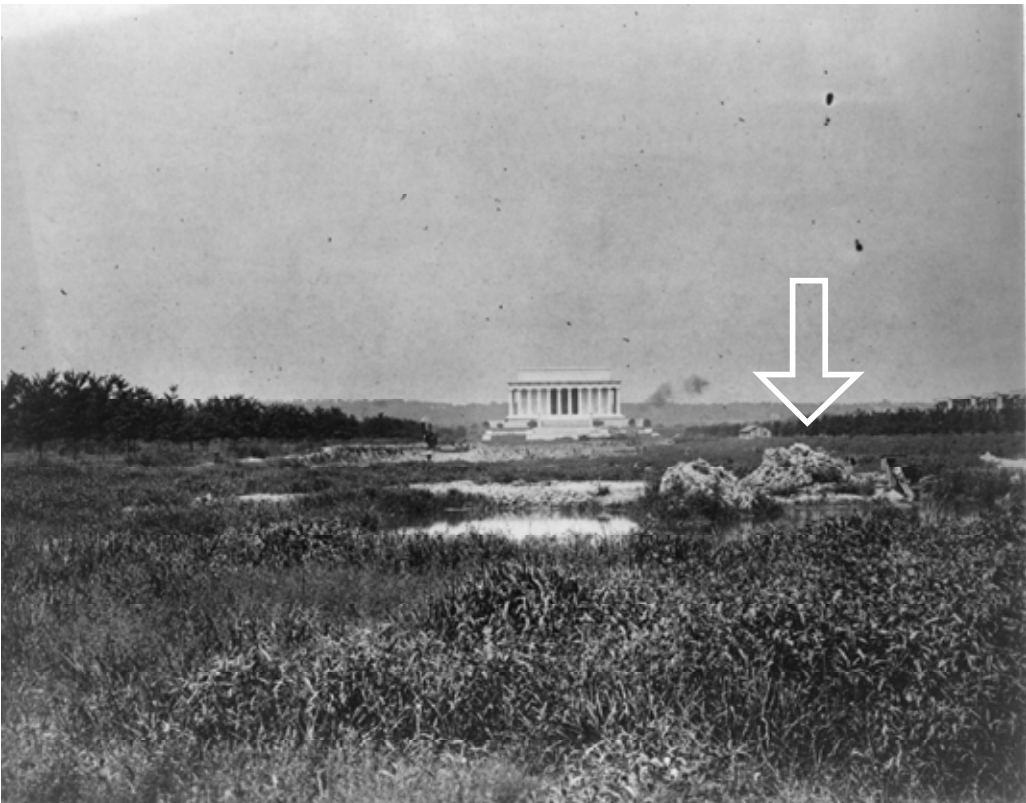




CONSTITUTION AVENUE STUDY AREA



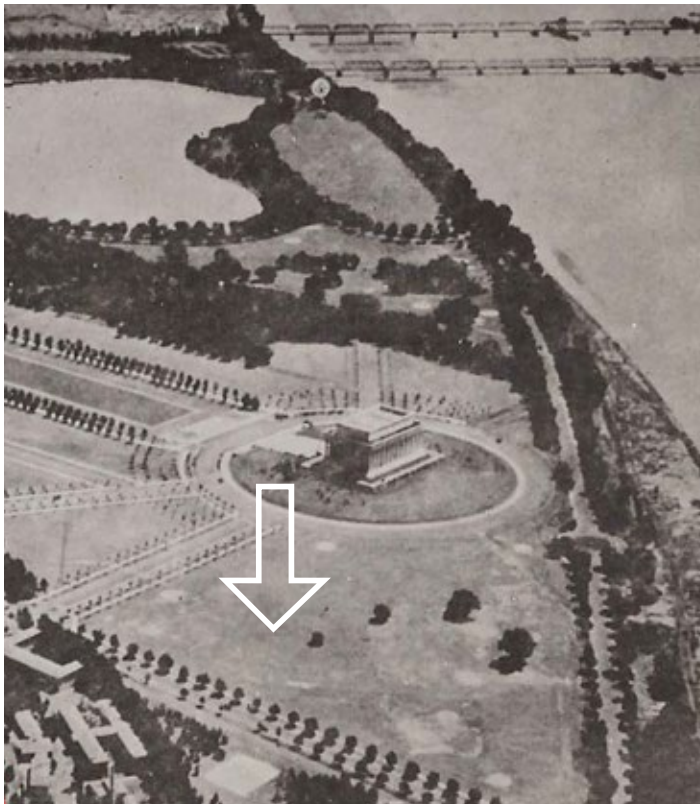
CONSTITUTION AVENUE SITE - MID 19TH CENTURY



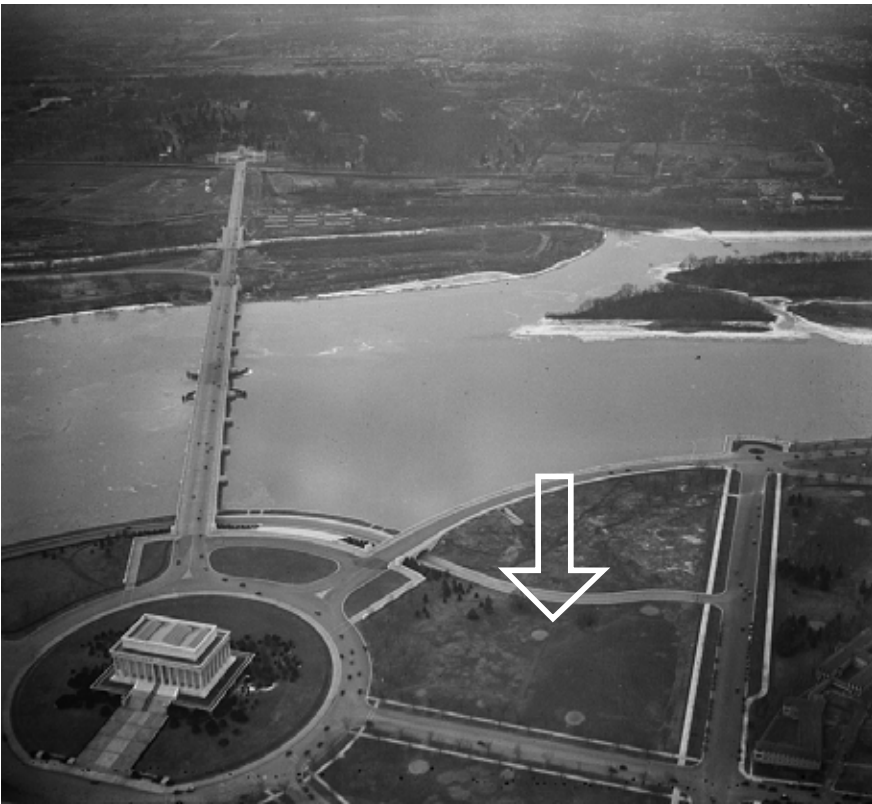
CONSTITUTION AVENUE SITE - 1917



CONSTITUTION AVENUE SITE - 1919



CONSTITUTION AVENUE SITE - 1925



CONSTITUTION AVENUE SITE - 1935

CONSTITUTION AVENUE STUDY AREA - HISTORIC PHOTOGRAPHS



CONSTITUTION AVENUE STUDY AREA - SITE PHOTOS



CONSTITUTION AVENUE STUDY AREA - SITE PHOTOS



CONSTITUTION AVENUE STUDY AREA - ACCESS FROM LANDMARKS



CONSTITUTION AVENUE STUDY AREA - ACCESS FROM METRO

Detailed Site Analysis: Constitution Avenue Terminus Area

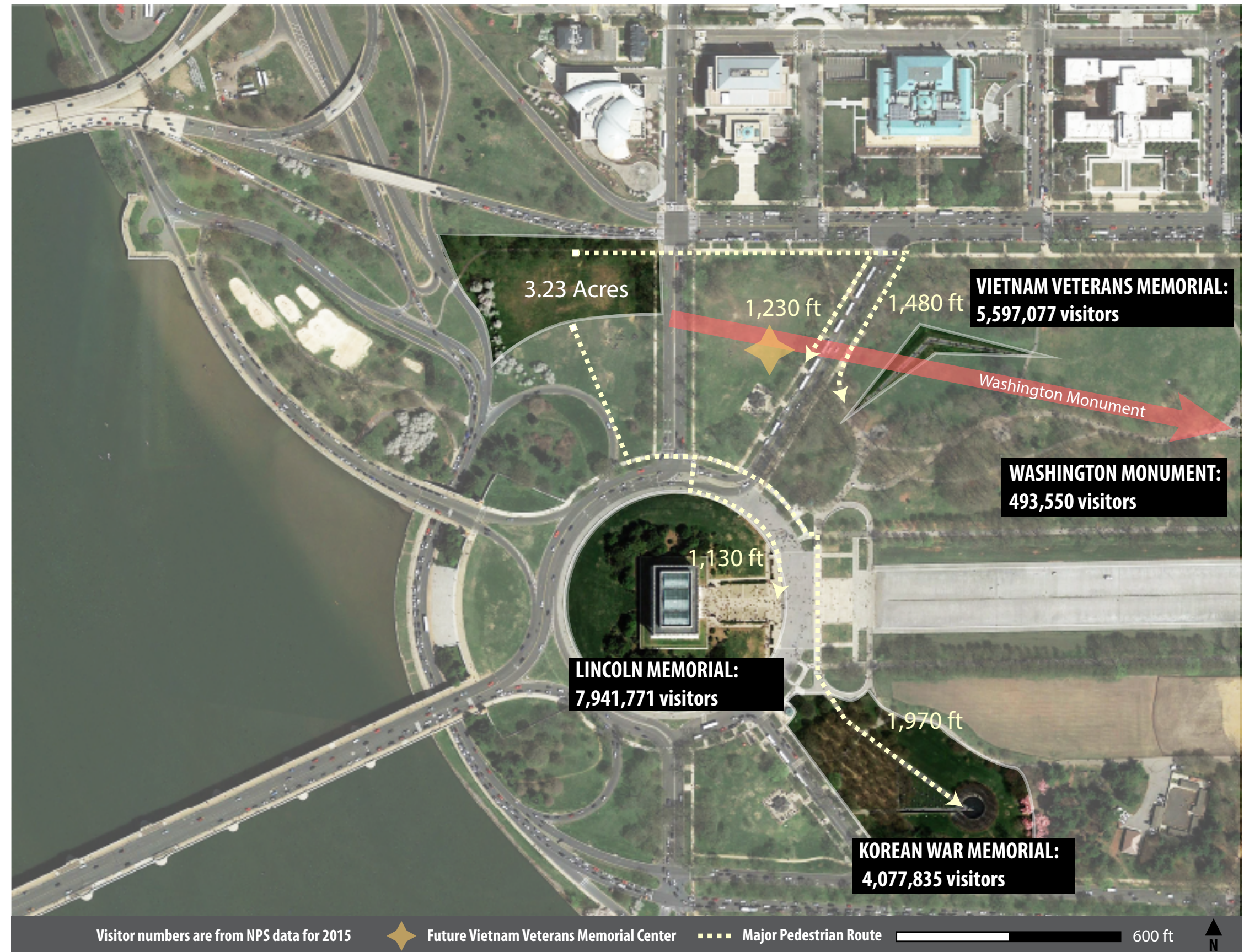
Thematic Context



Detailed Site Analysis: Constitution Avenue Terminus Area

Visitor Context

- ▶ Located beside the Lincoln Memorial and Vietnam Veterans Memorial
- ▶ Associated with the National Mall
- ▶ Attractions with eight million visitors within a half mile (18 million visitors cumulatively)



Detailed Site Analysis: Constitution Avenue Terminus Area

Circulation and Constraints



Constitution Avenue Terminus Area

Potential Future Memorial Sites



Potential commemorative sites



Approximate 'Reserve' Boundary

Monumental Core Framework Plan: Proposed Vision for Constitution Avenue Terminus Area



Monumental Core Framework Plan proposed future conditions for Constitution Avenue Terminus Area



Artist rendering from Monumental Core Framework Plan

- ▶ Stated policy to connect the Lincoln Memorial and John F. Kennedy Center for the Performing Arts
- ▶ Open space between the Lincoln Memorial and Kennedy Center are potential future memorial sites

Potential Implementation Steps of Monumental Core Framework Plan



Site Selection Conclusions

- ▶ Two sites provide appropriate settings and contexts for a compact and poignant memorial
- ▶ Hains Point Area poses too many risks for memorial placement, and the waterfront site is not appropriate for a monument to Desert Storm
- ▶ The Constitution Avenue Terminus Area Site provides the most ideal location because of its thematic links, size, proximity to other memorials and attractions east of the Potomac river, and accessibility



Constitution Avenue Terminus Area

- Desired memorial program accommodated to a high level
- Thematic nexus to the Vietnam Veterans Memorial and other 20th Century war memorials, including the Korean War Memorial and the World War II Memorial
- High visibility and access to other nearby attractions
- Proximity to Royal Embassy of Saudi Arabia, a key partner during the conflict
- Adjacent to U.S. Institute of Peace
- Minor challenges in terms of resiliency due to floodplain location are being addressed by the Army Corps of Engineers
- Excellent opportunities for "stitching back together" a number of disparate parcels over the long term



Memorial Circle Area

- Memorial program accommodated
- Thematic link to Arlington National Cemetery
- Access to transit and parking
- Modest challenges in terms of tranquility, infrastructure requirements, and pedestrian access due to traffic patterns and volumes



Hains Point Area

- Thematic connections to the city and other memorials lacking
- Difficulties for access by all modes
- Sustainability concerns related to flooding and long-term resiliency
- Waterfront setting inappropriate for Desert Storm Memorial

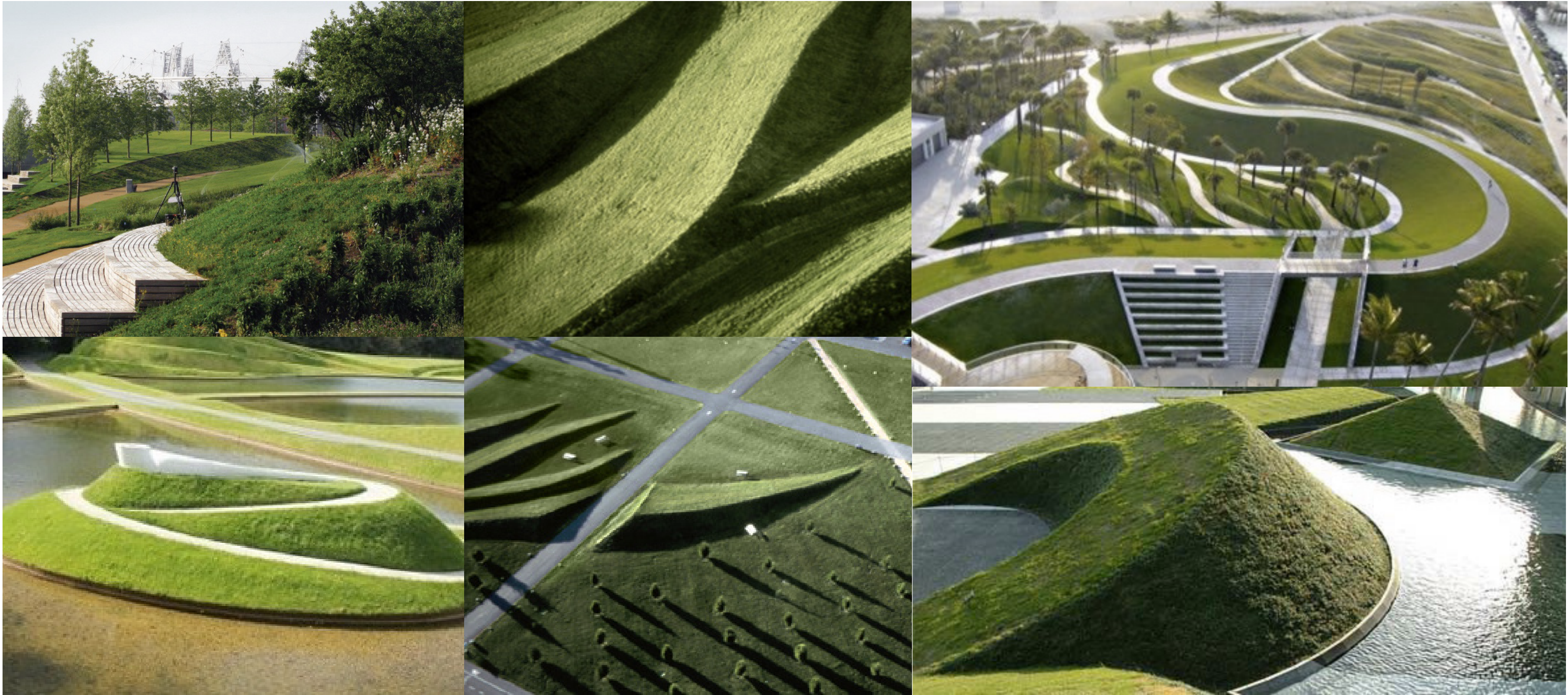
IV. DESIGN CONTEXT



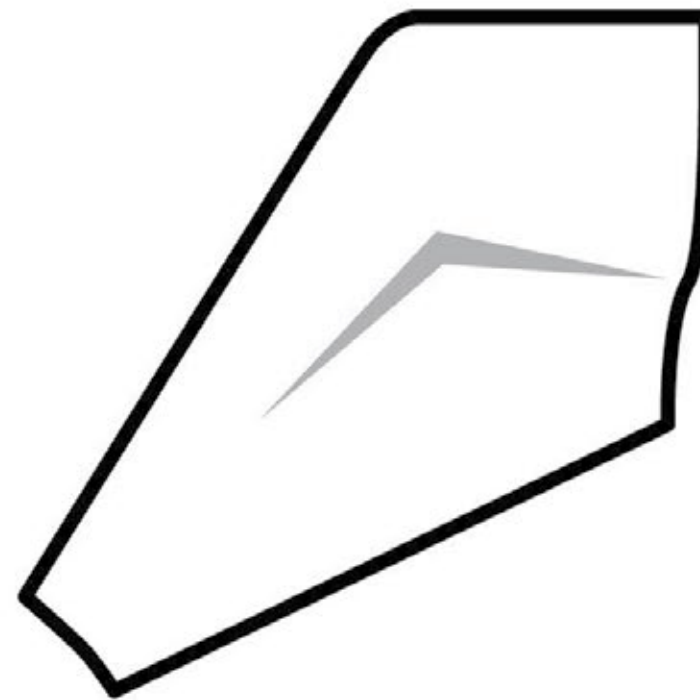
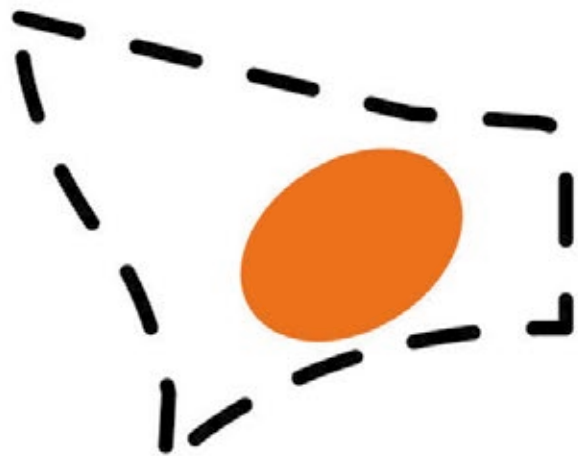
KUWAIT/DESERT LANDSCAPE

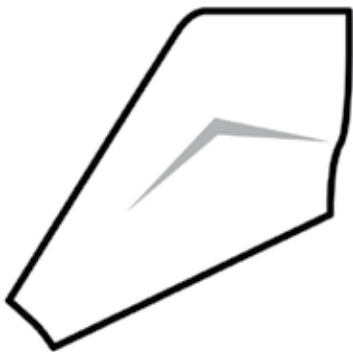


DESERT LANDFORMS



WHAT IS THE APPROPRIATE SCALE OF THE MEMORIAL?





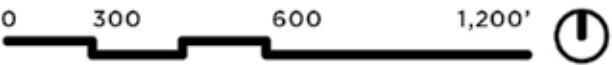
CONSTITUTION AVE SITE
3.8 ACRES
MEMORIAL AREA ~1 ACRE

VIETNAM MEMORIAL
7.4 ACRES

KOREAN WAR MEMORIAL
5.2 ACRES

WWII MEMORIAL
4.0 ACRES

MLK MEMORIAL
4.0 ACRES



SCALE COMPARISONS

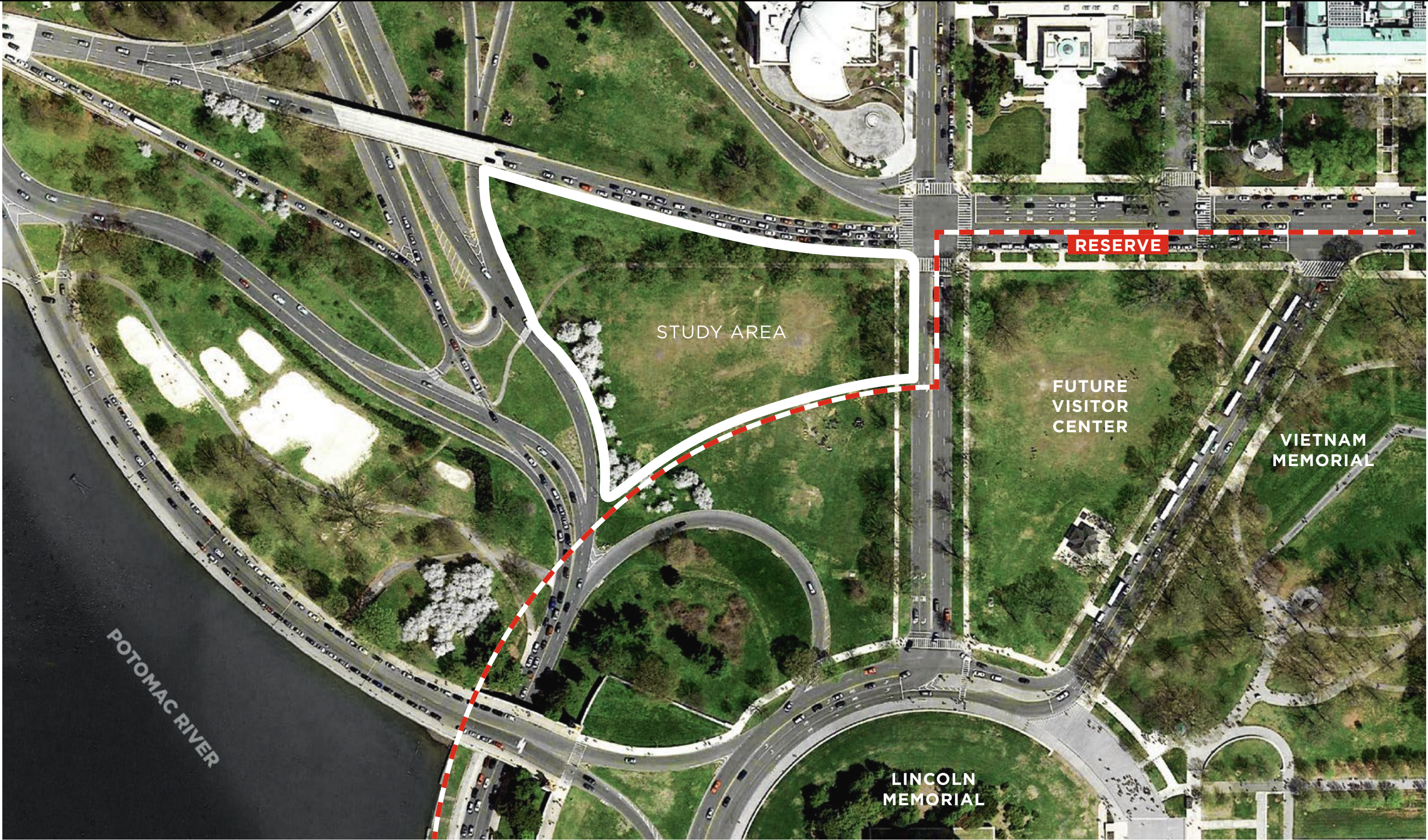
WHAT IS THE APPROPRIATE AMOUNT OF SHADE?



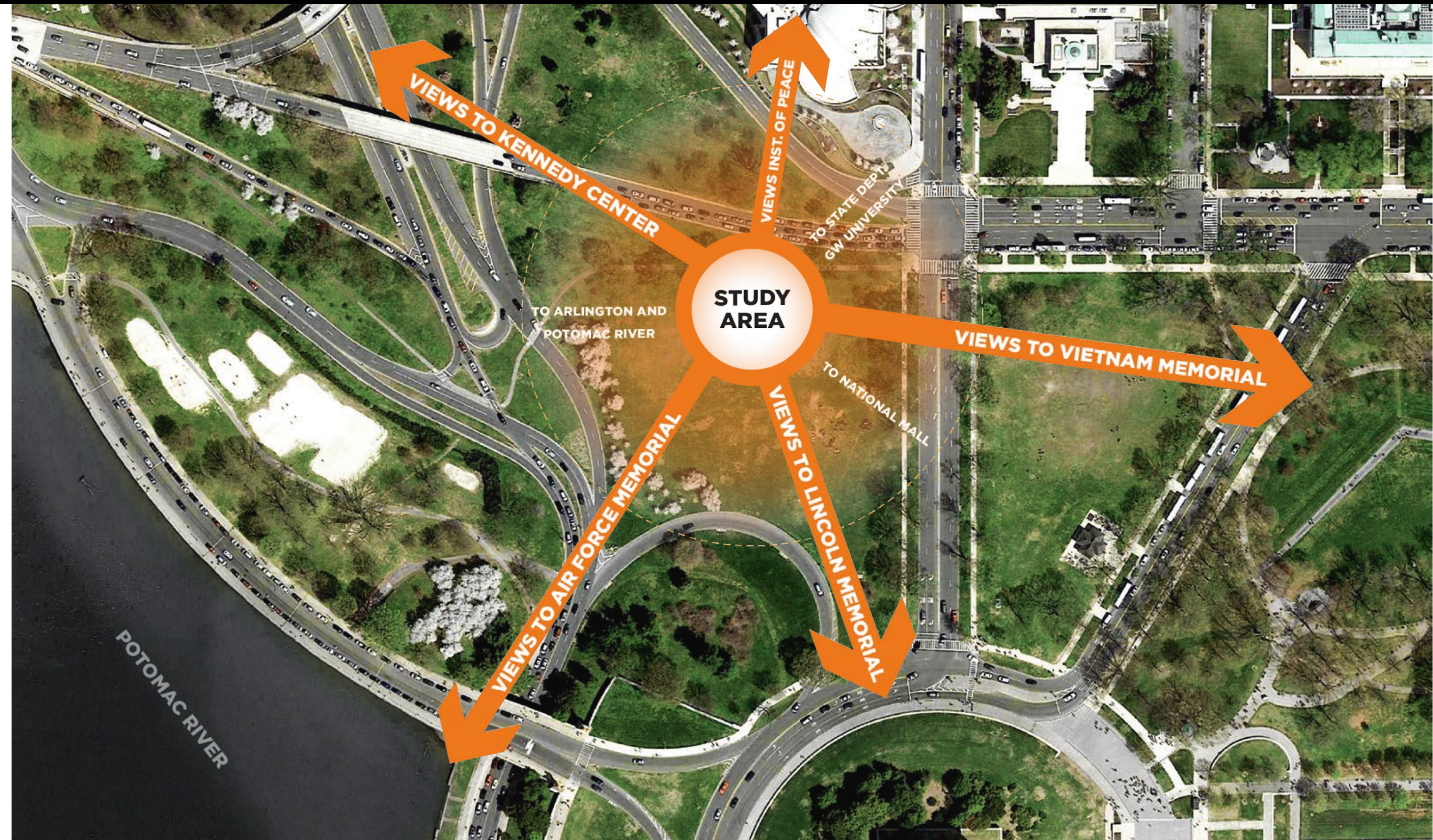
WHAT DETERMINES PLACEMENT OF A MEMORIAL?

CONDITIONS ANALYSIS

SITE INTEGRATION &
MEMORIAL EXPERIENCE



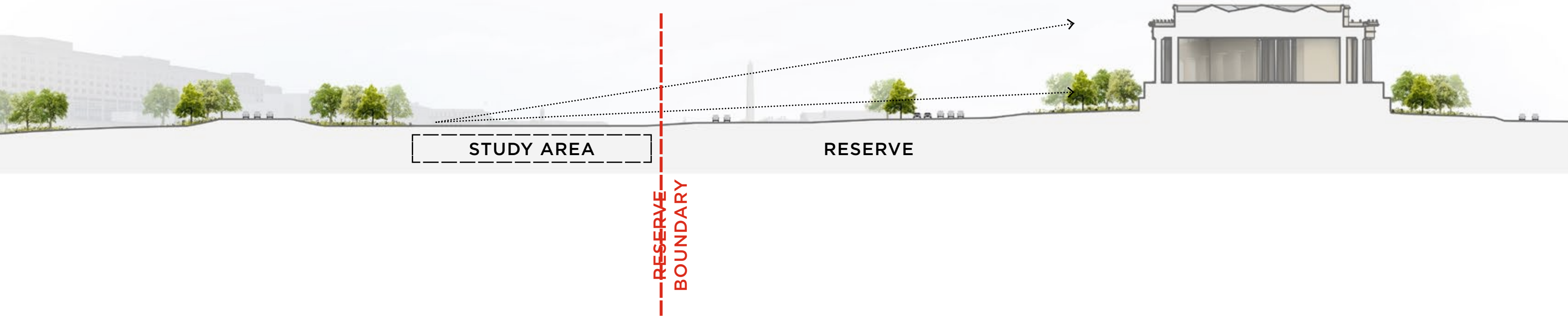
CONSTITUTION AVENUE STUDY AREA - AERIAL



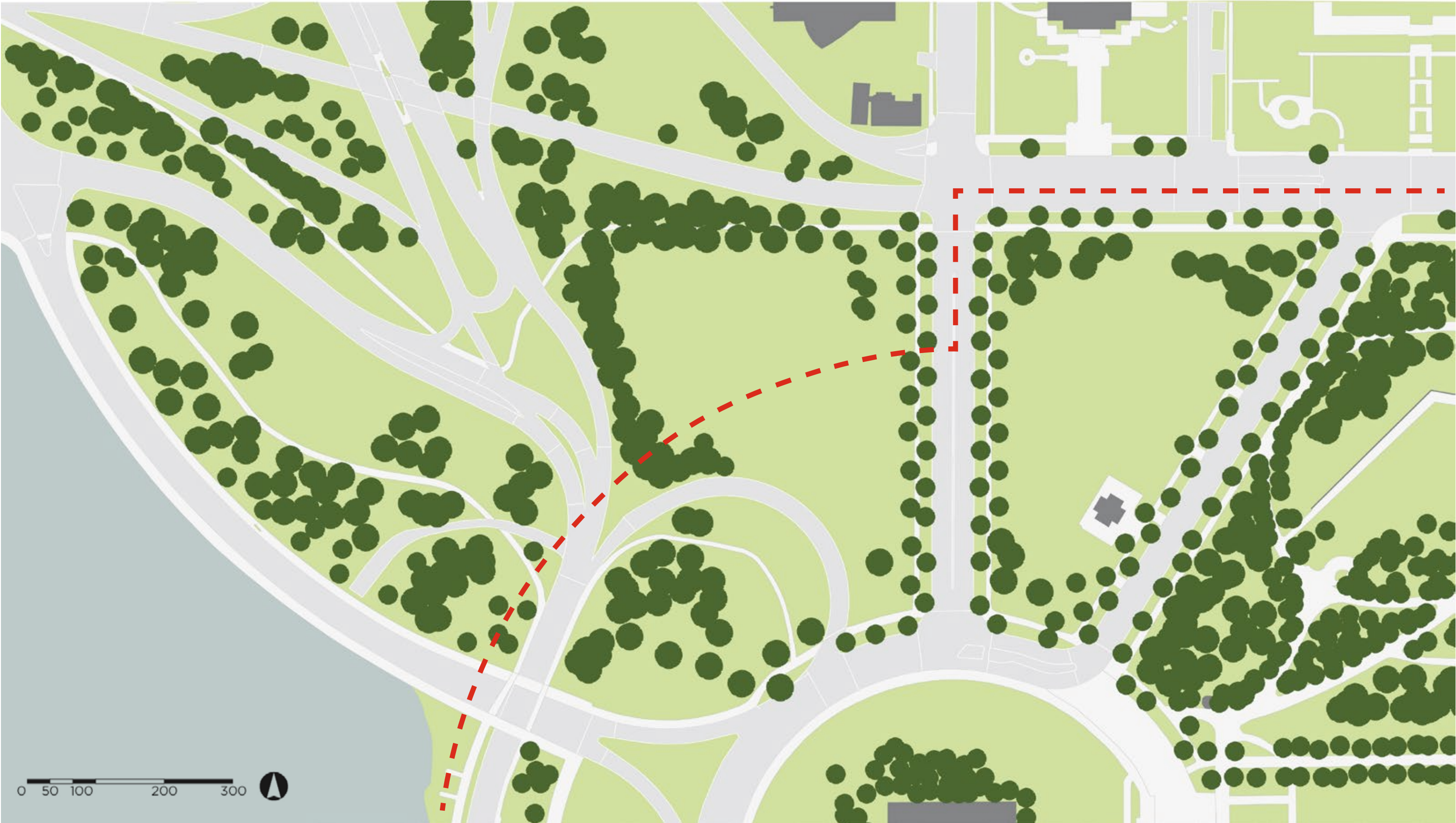
CONSTITUTION AVENUE STUDY AREA - VIEWS



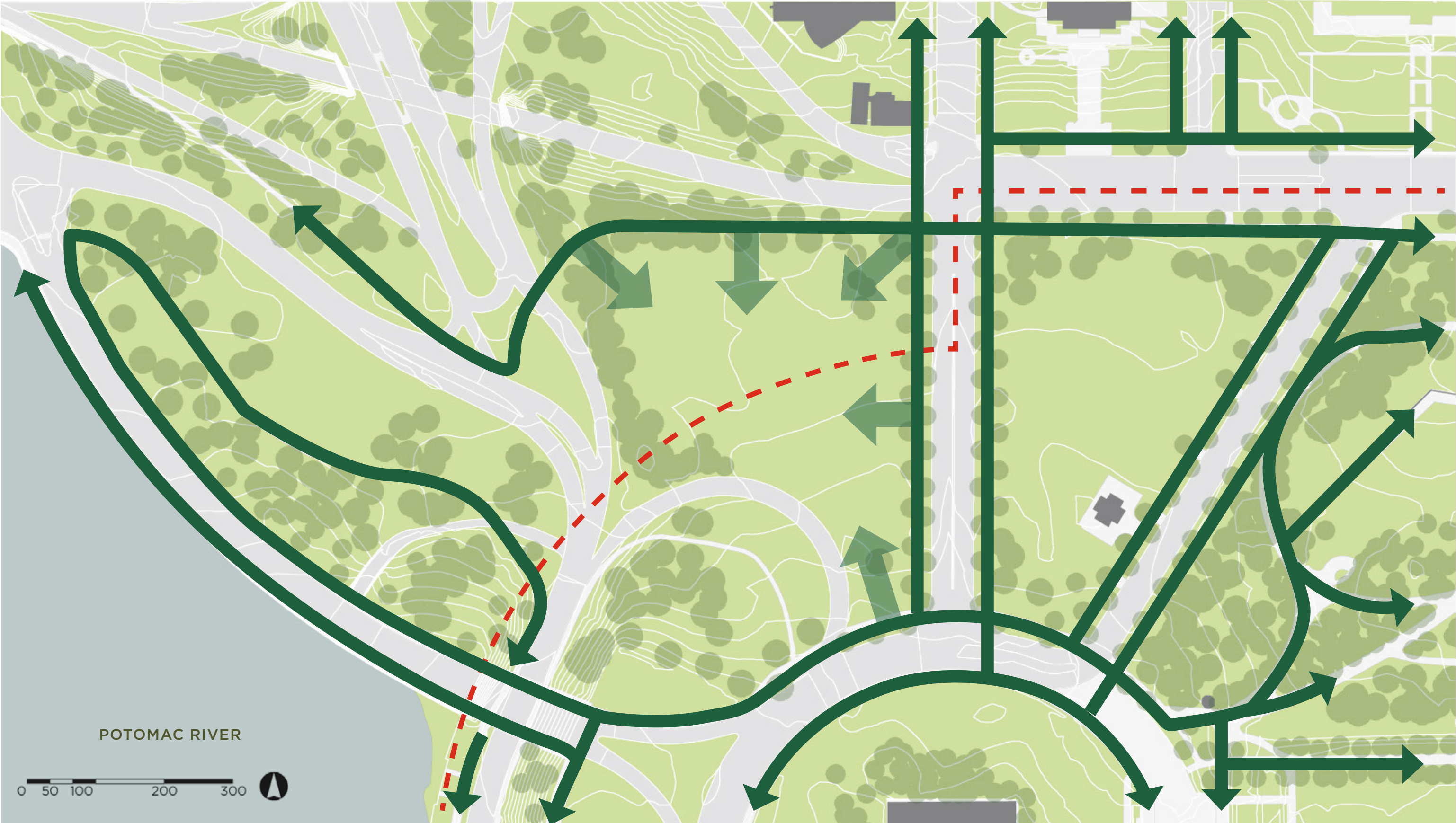
CONSTITUTION AVENUE STUDY AREA - VIEWS TO LINCOLN MEMORIAL



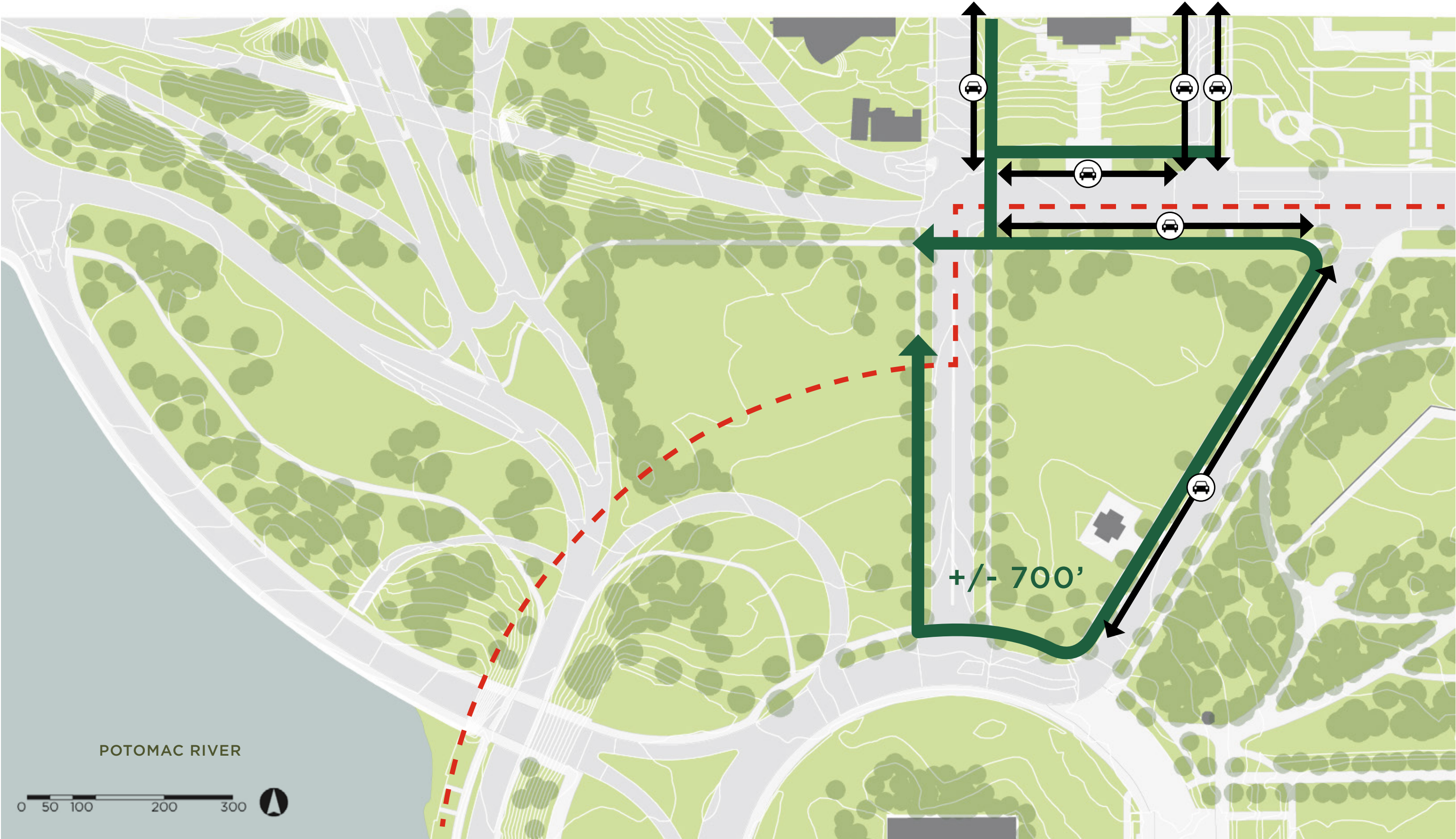
CONSTITUTION AVENUE STUDY AREA - EXISTING SECTION



CONSTITUTION AVENUE STUDY AREA - EXISTING VEGETATION



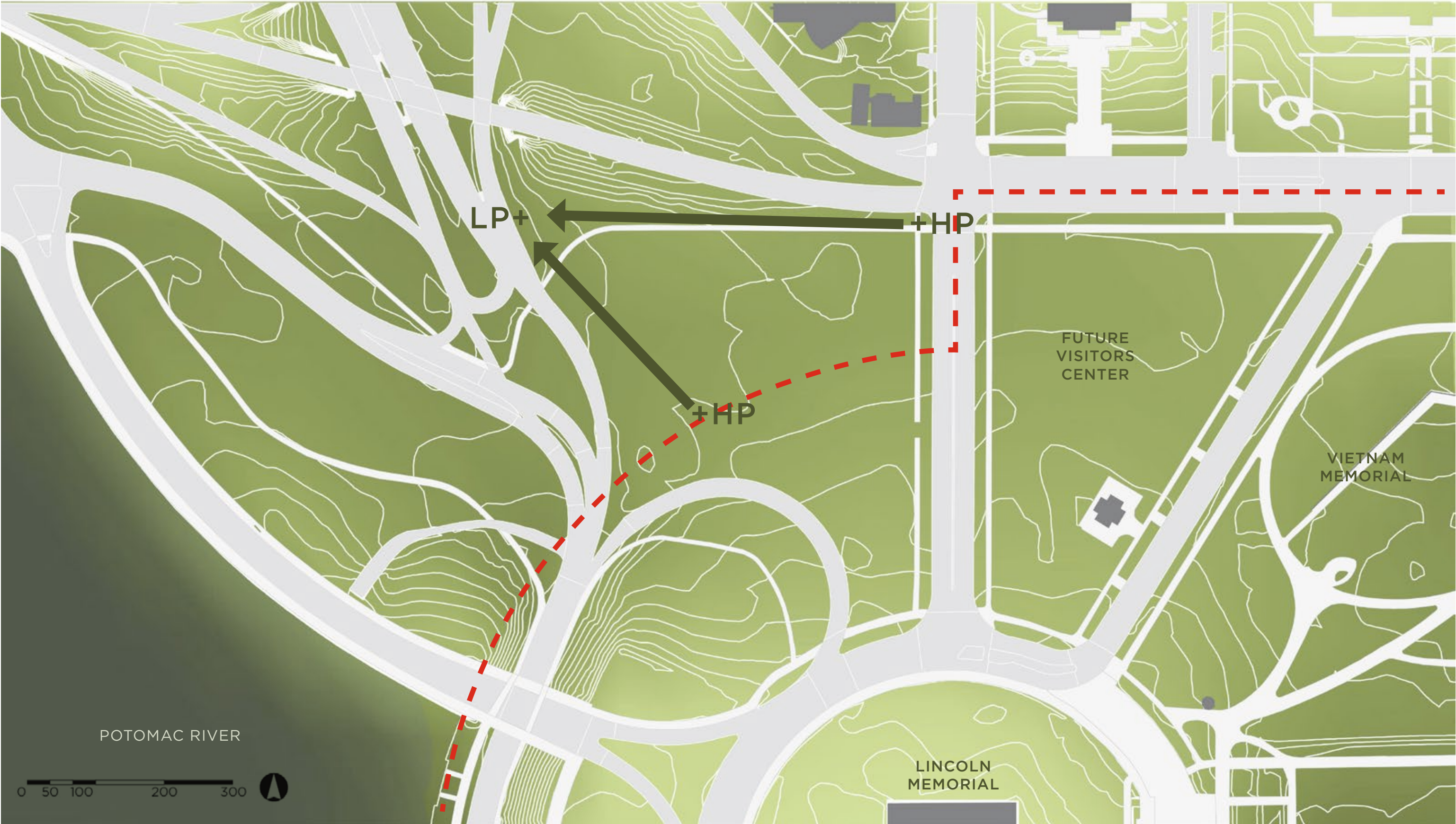
CONSTITUTION AVENUE STUDY AREA - PEDESTRIAN CIRCULATION



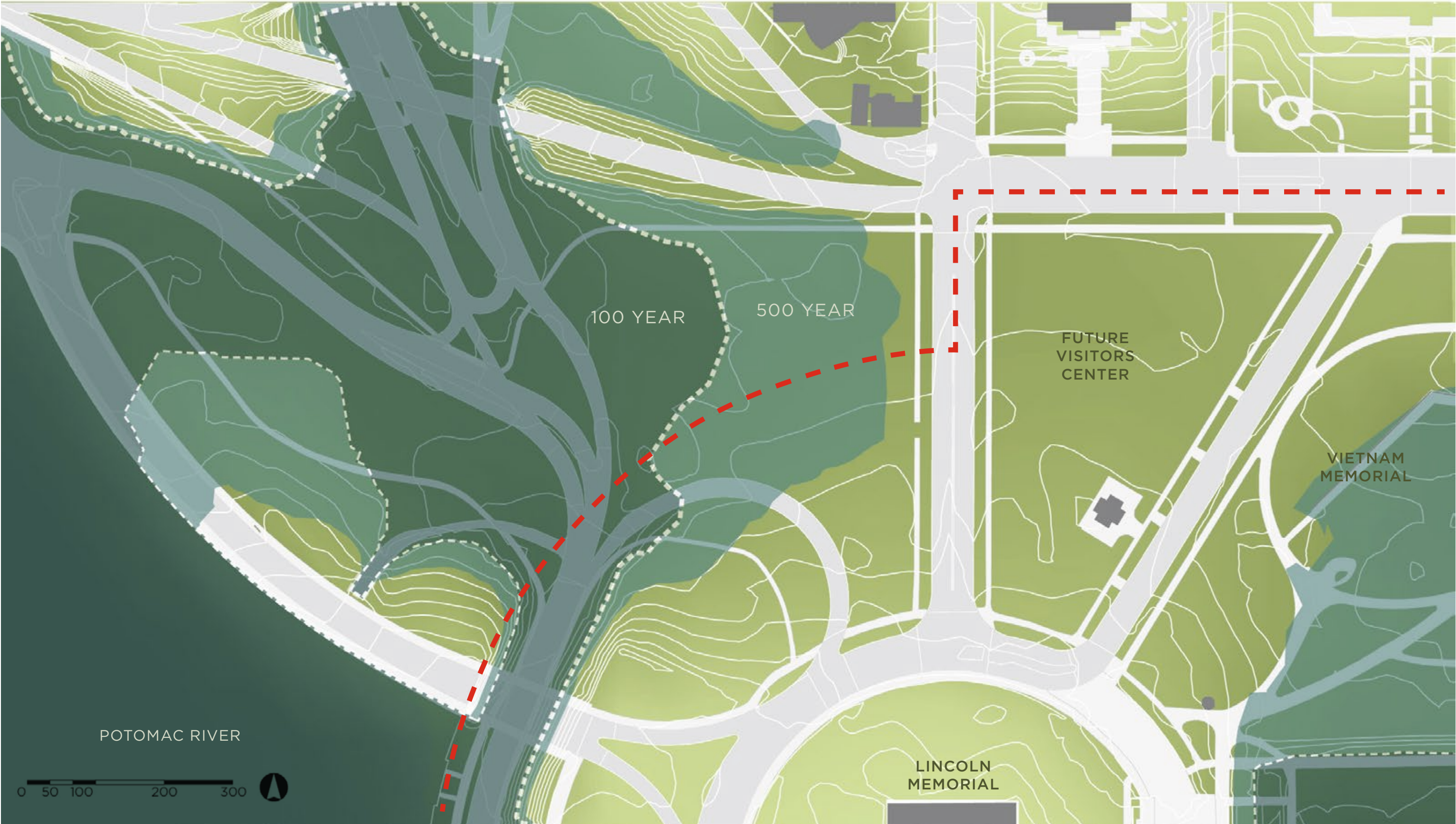
CONSTITUTION AVENUE STUDY AREA - DROPOFF/PARKING AREAS



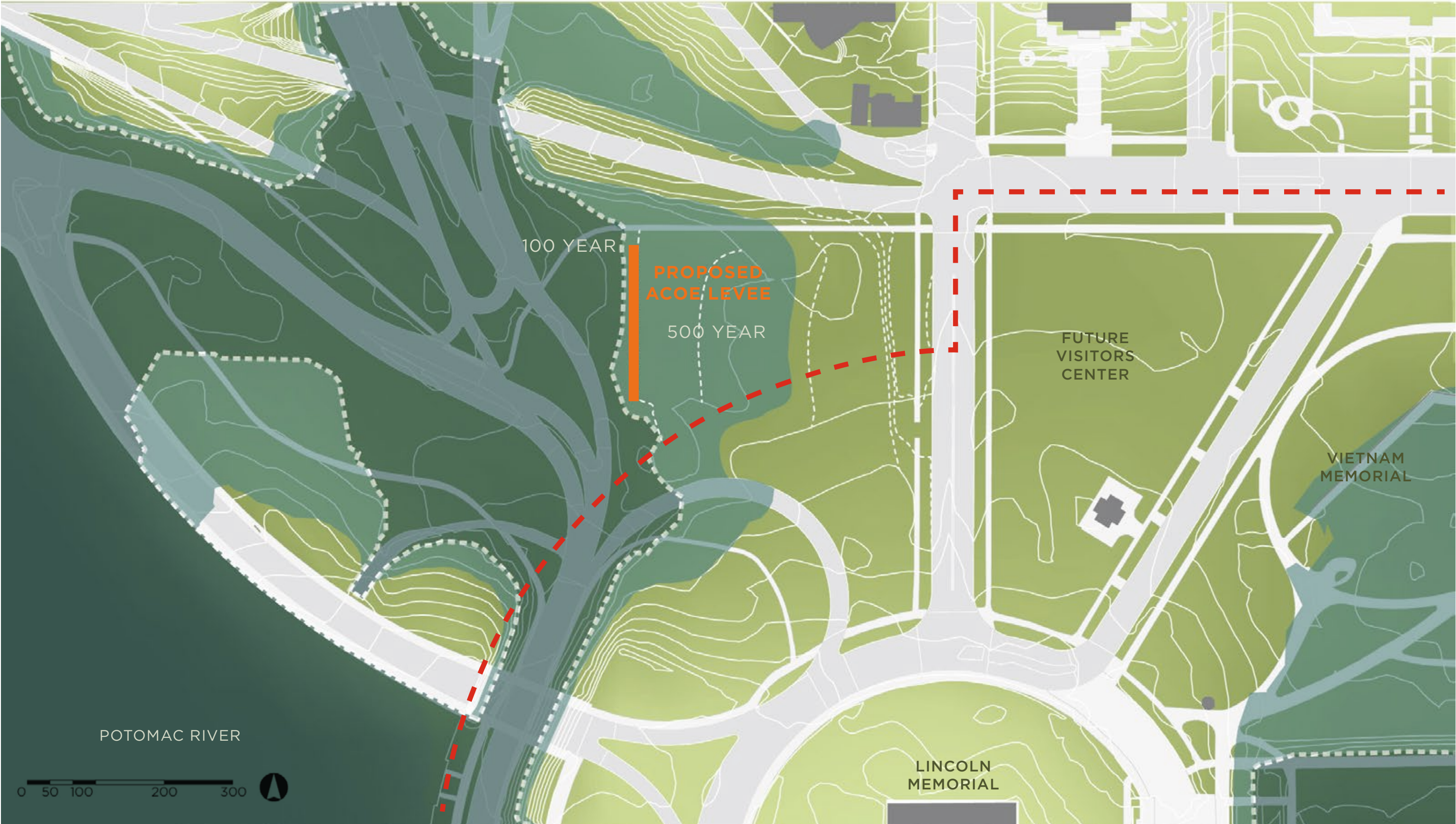
CONSTITUTION AVENUE STUDY AREA - NOISE CONSIDERATIONS



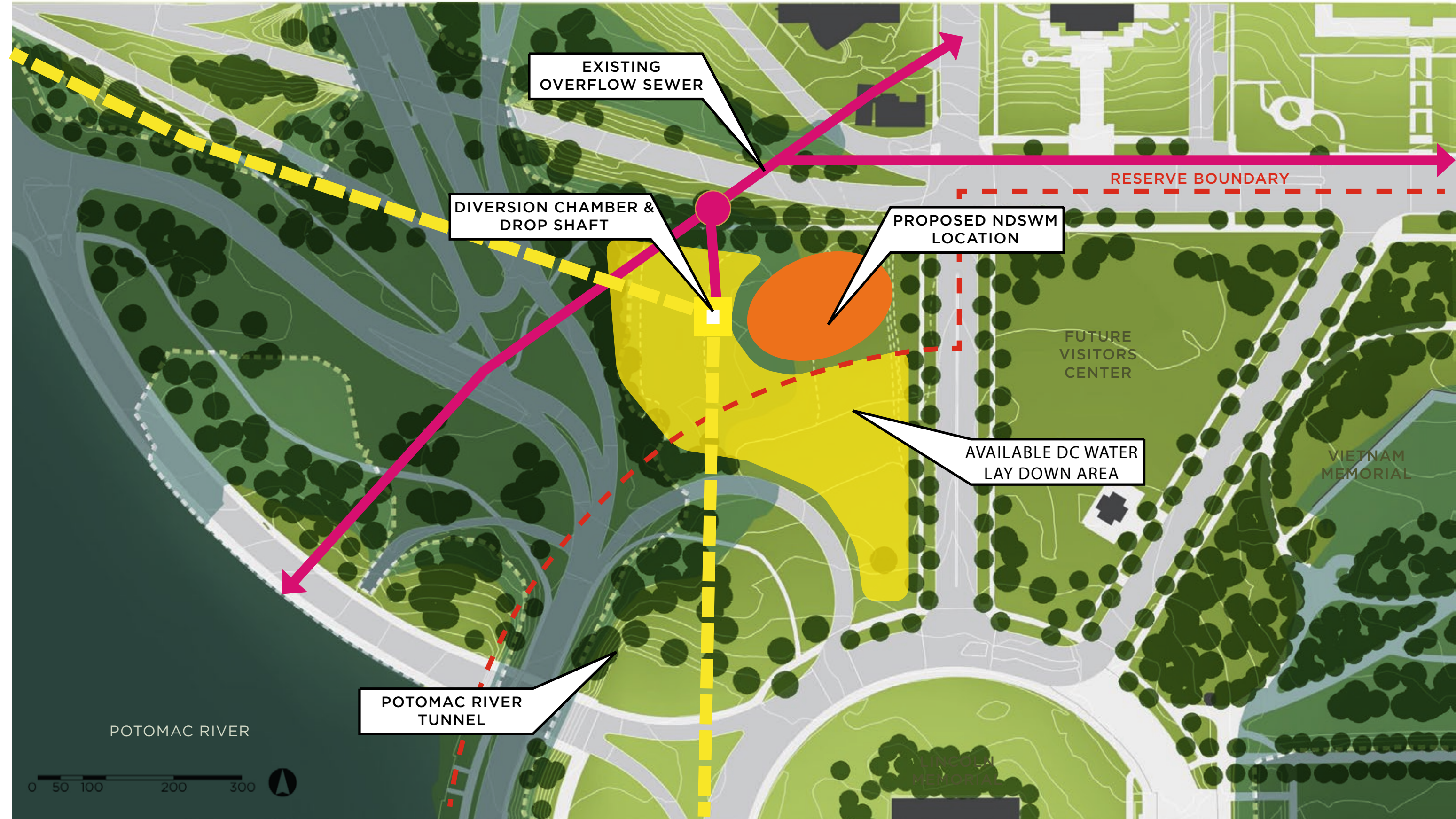
CONSTITUTION AVENUE STUDY AREA - TOPOGRAPHY



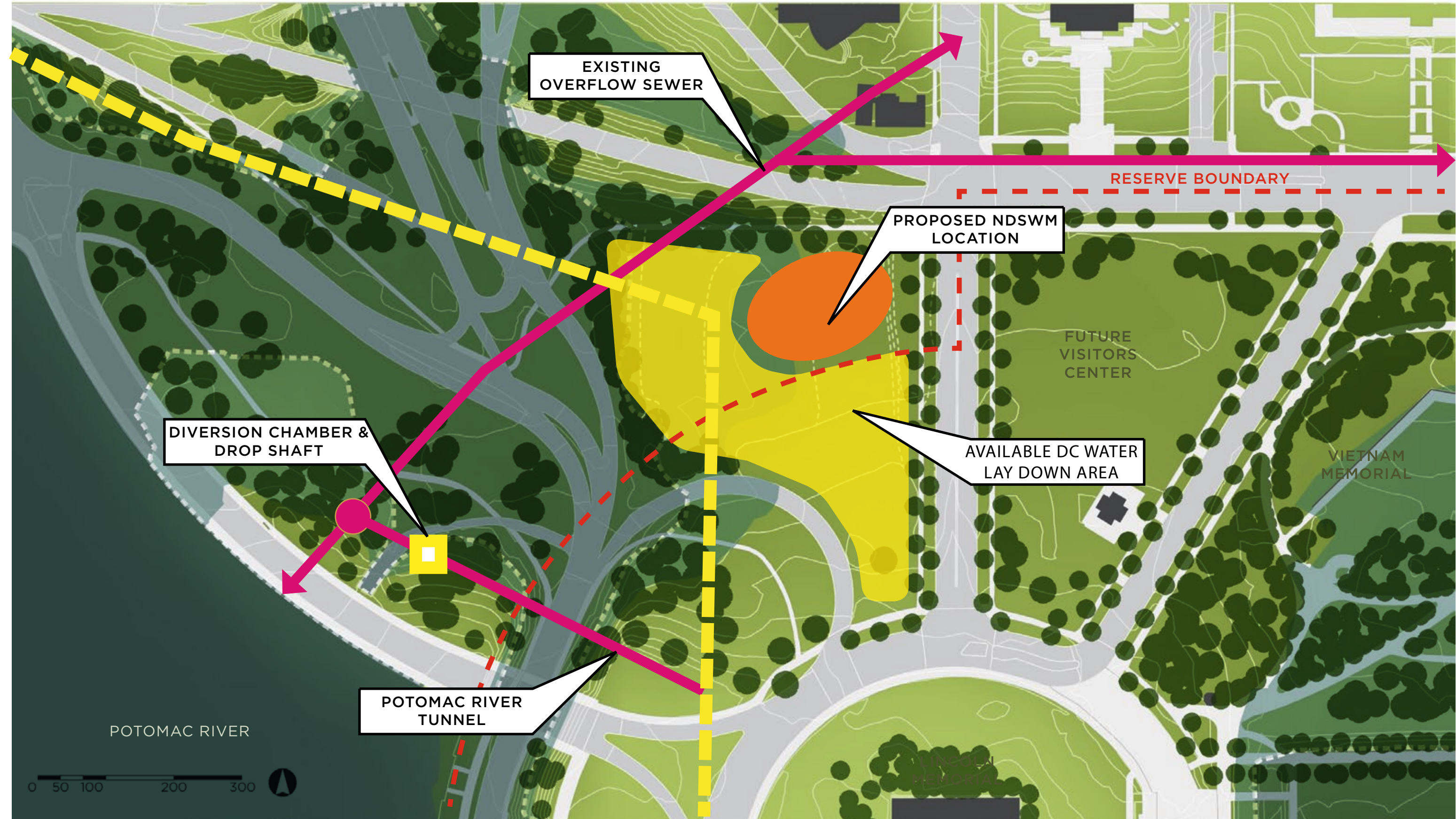
CONSTITUTION AVENUE STUDY AREA - EXISTING FLOOD LEVELS



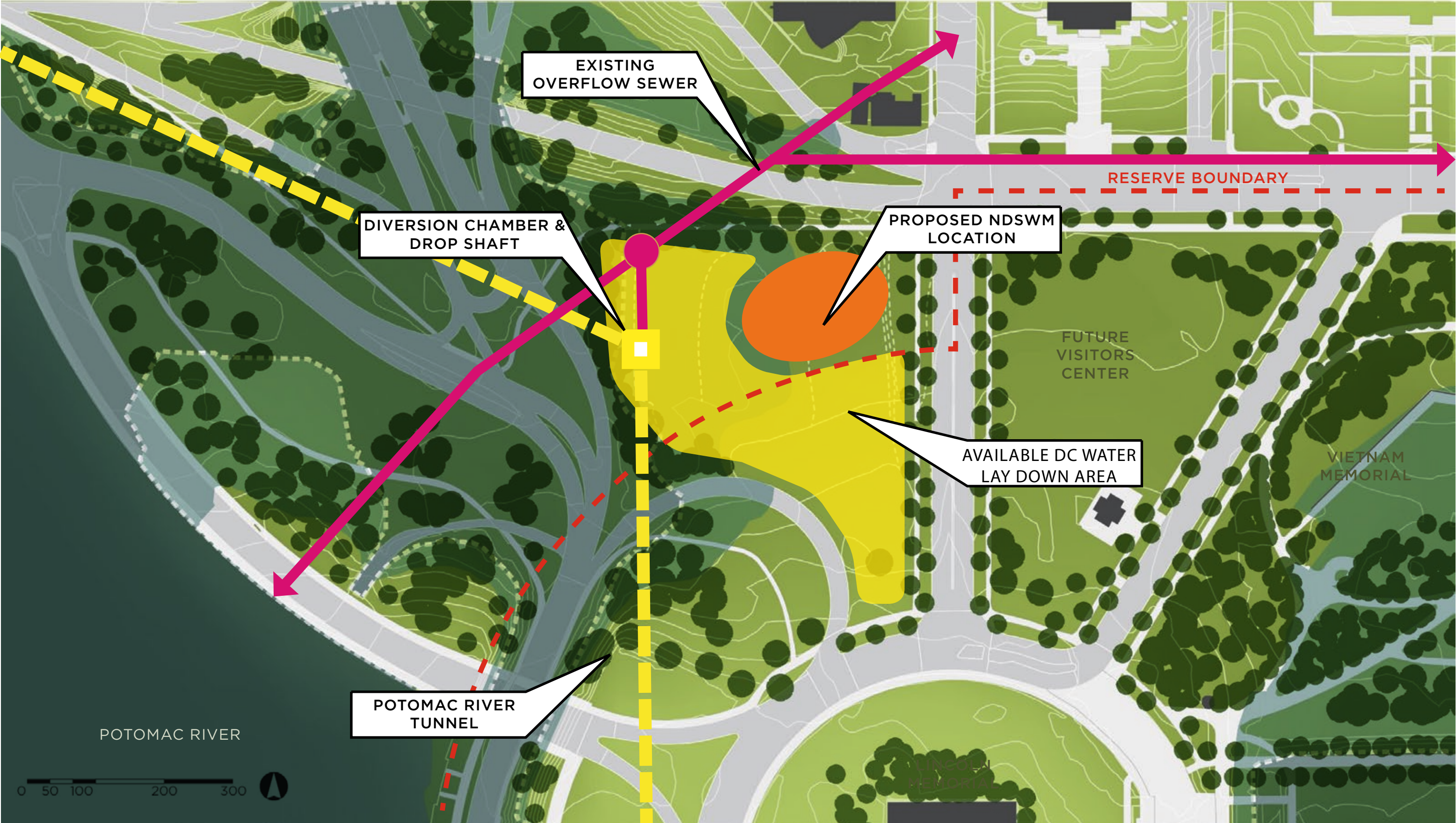
CONSTITUTION AVENUE STUDY AREA - FLOOD LEVELS POST ACOE LEVEE WORK



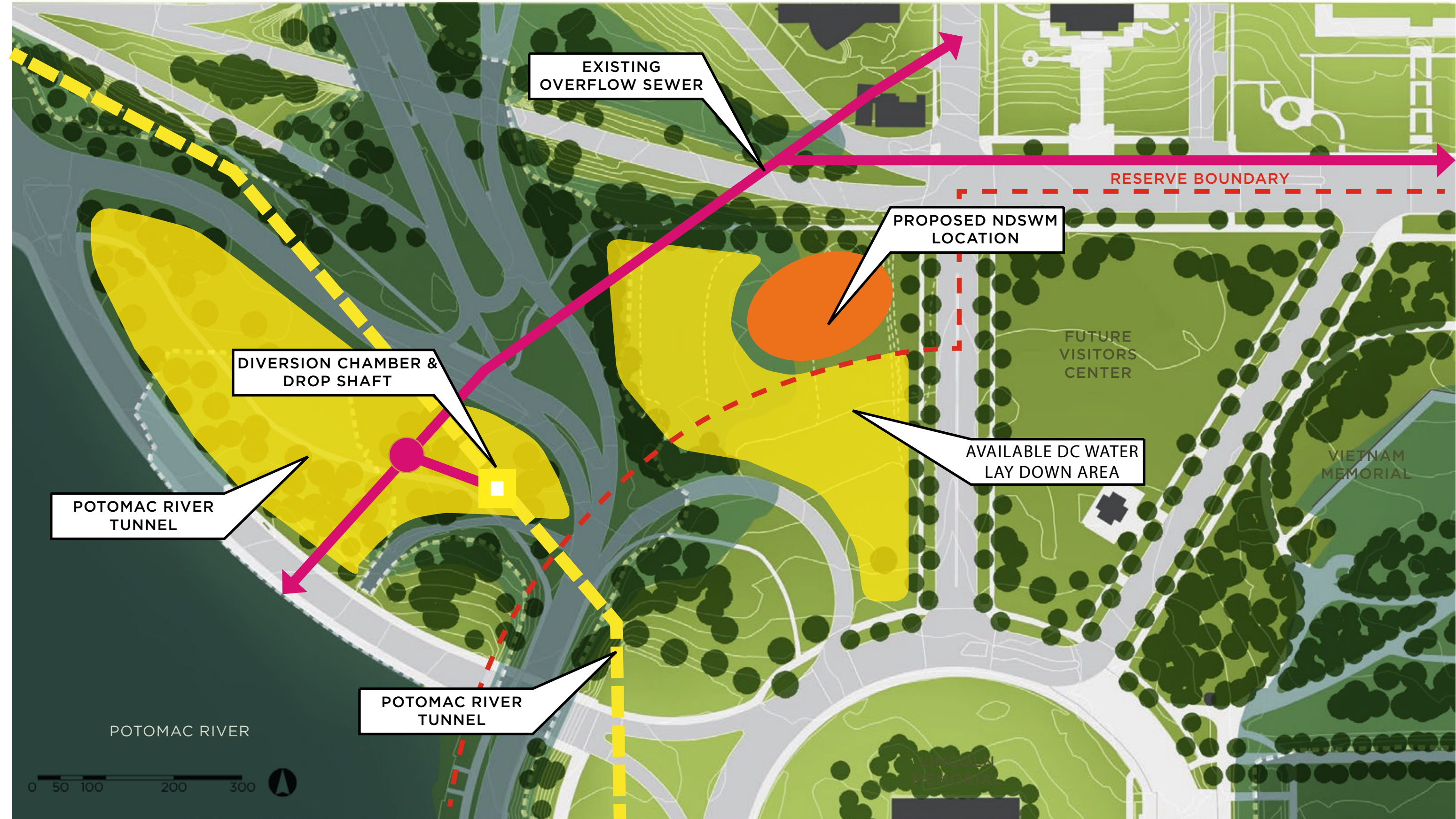
CONSTITUTION AVENUE STUDY AREA - DC WATER- OPTION 1



CONSTITUTION AVENUE STUDY AREA - DC WATER- OPTION 2



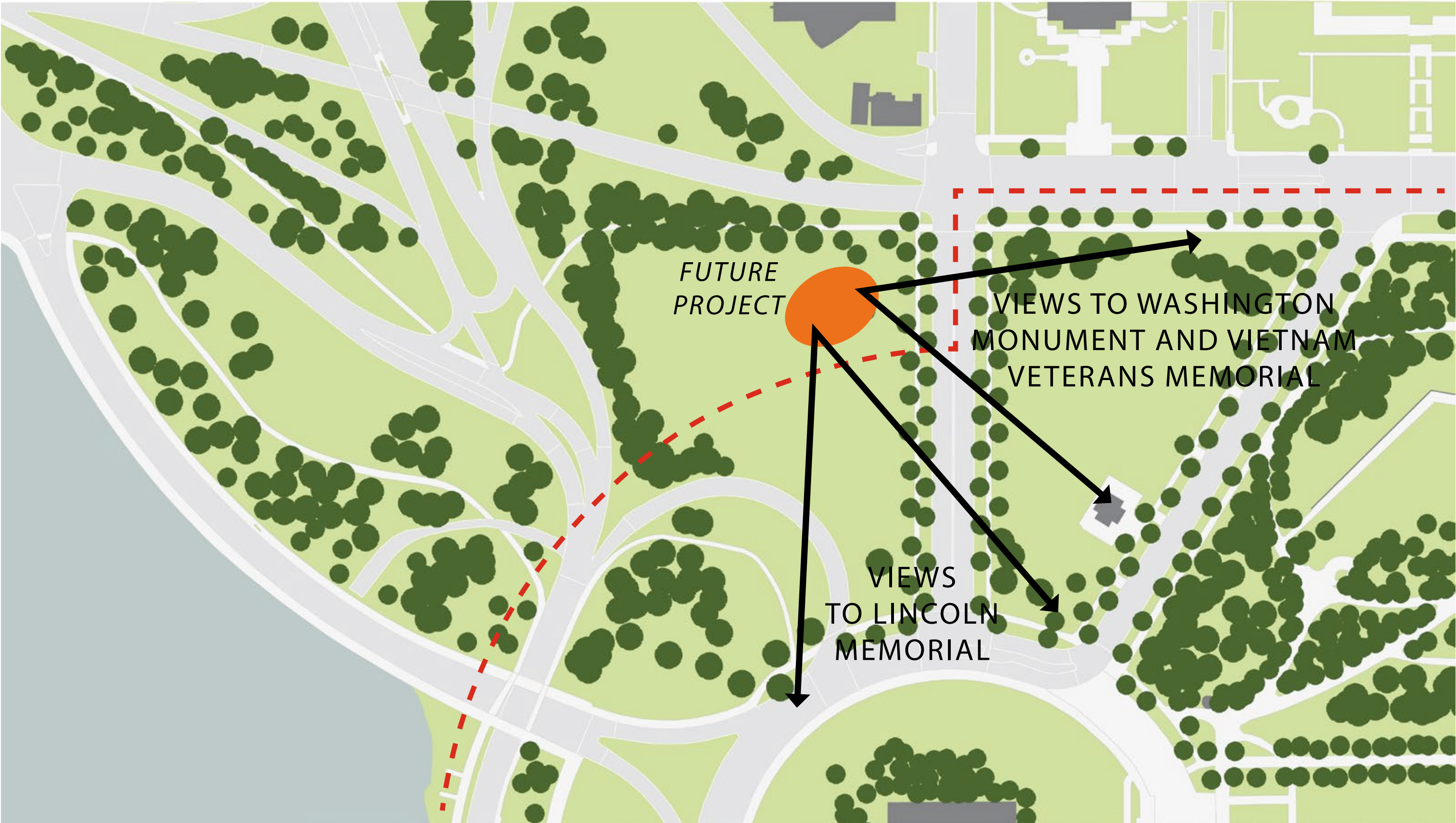
CONSTITUTION AVENUE STUDY AREA - DC WATER- OPTION 3



CONSTITUTION AVENUE STUDY AREA - DC WATER- OPTION 4

WHAT DETERMINES PLACEMENT OF A MEMORIAL?

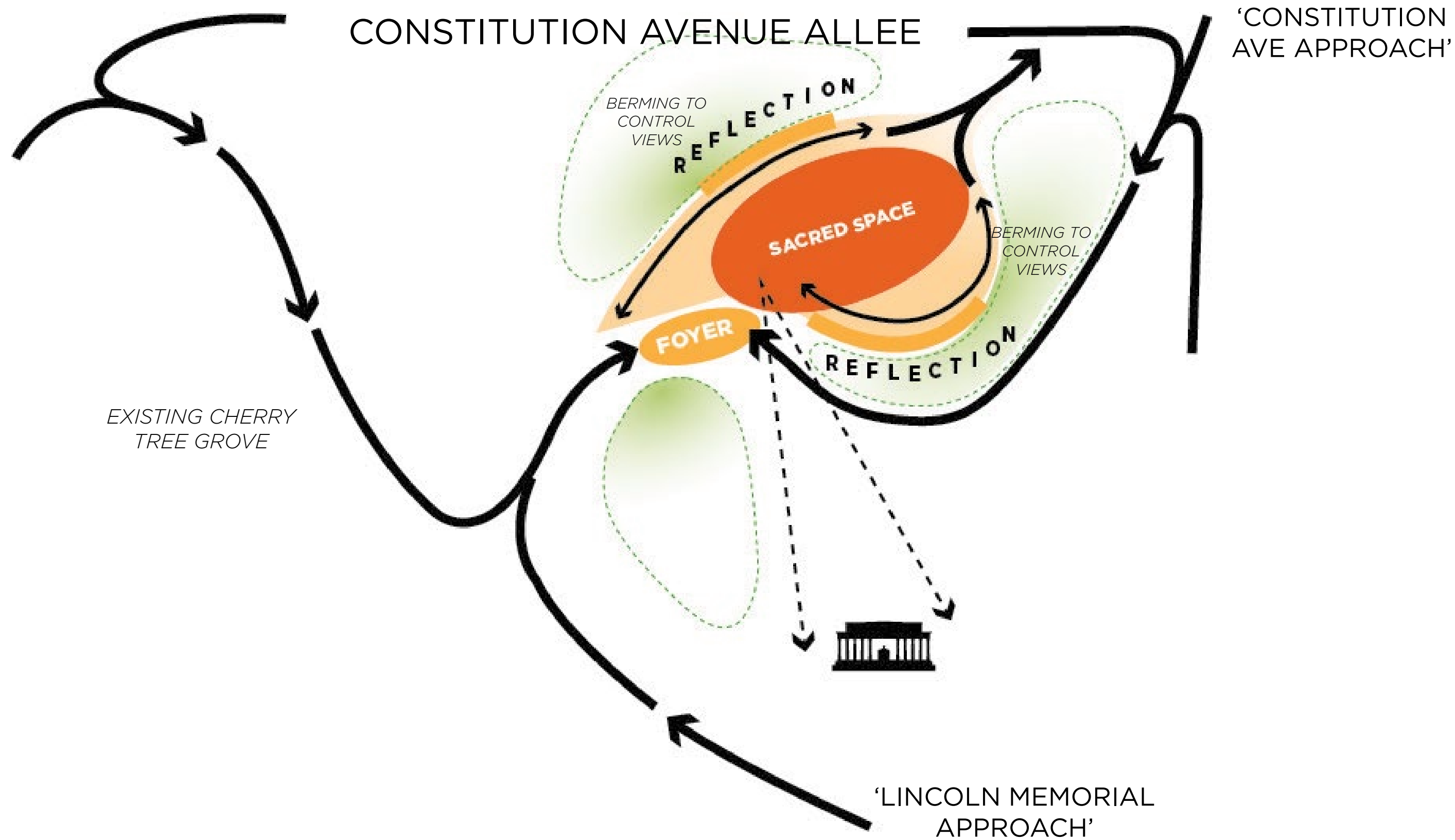
CONDITIONS ANALYSIS
**SITE INTEGRATION &
MEMORIAL EXPERIENCE**



CONSTITUTION AVENUE STUDY AREA - ORIENTATION



VIEW FROM LINCOLN MEMORIAL NORTH ON 23RD STREET NW



Design Parameters

The Memorial should:

- ▶ Be compact in size with a footprint of less than 1.0 acre within a site of less than 2.0 acres
- ▶ Serve as more than a stand-alone object and provide a place of reflection
- ▶ Maintain a generally low horizontal profile
- ▶ Be integrated within, and complementary to, the existing landscape
- ▶ Maintain existing trees, particularly designed rows or allees of trees, to the extent practicable
- ▶ Utilize existing circulation resources (sidewalks and pathways) to the extent practicable
- ▶ Provide minimal parking (likely to be universally accessible parking only)
- ▶ Be located outside of 100 year floodplain; if located within the 500 year floodplain, the Memorial must be flood resilient

THANK YOU

Please endorse the advancement of the
National Desert Storm Veterans War Memorial
on the Constitution Avenue Terminus Area site.