An aerial photograph of the Port Covington area in Philadelphia, showing a dense urban grid, a large body of water (the Schuylkill River), and various industrial and residential buildings. The image is dark and serves as a background for the text.

Port Covington

**PRESENTATION TO THE URBAN
DESIGN & ARCHITECTURE
REVIEW PANEL**

January 7, 2016



INTRODUCTION

CAROLINE PAFF

Sagamore Development
Vice President

PRESENTATION OVERVIEW

CONTEXT AND EXISTING CONDITIONS - Addison Palmer, STV Incorporated

PLAN FRAMEWORK - Mark Sardegna, Elkus Manfredi Architects

ECOLOGY - Chris Streb, Biohabitats

OPEN SPACE - Michael Blier, Landworks Studio Inc.

MULTI-MODAL INFRASTRUCTURE - RJ Eldridge, Toole Design Group

TRAFFIC - Barbara Mosier, STV Incorporated



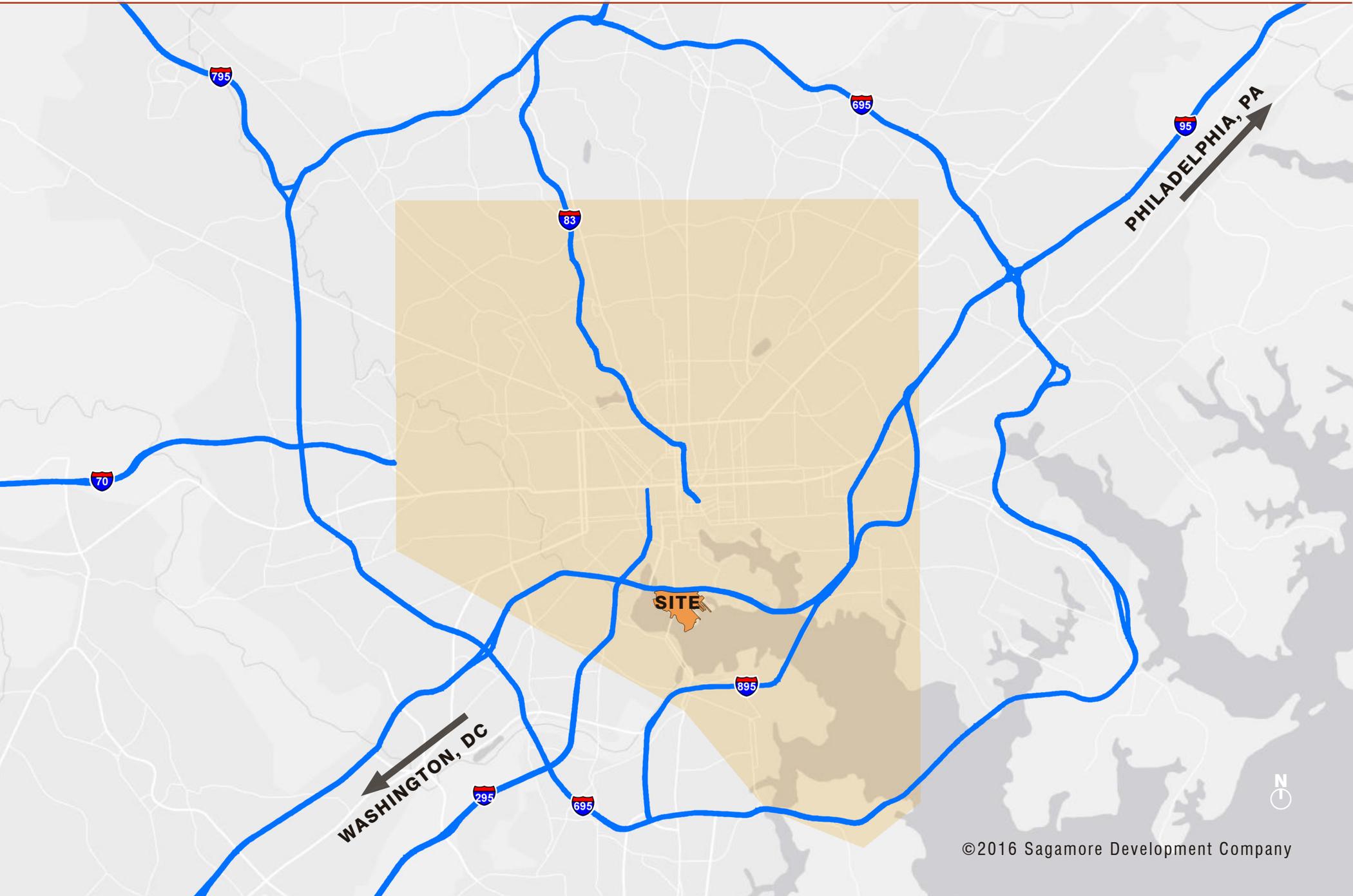
Port
Covington

**EXISTING
CONDITIONS**

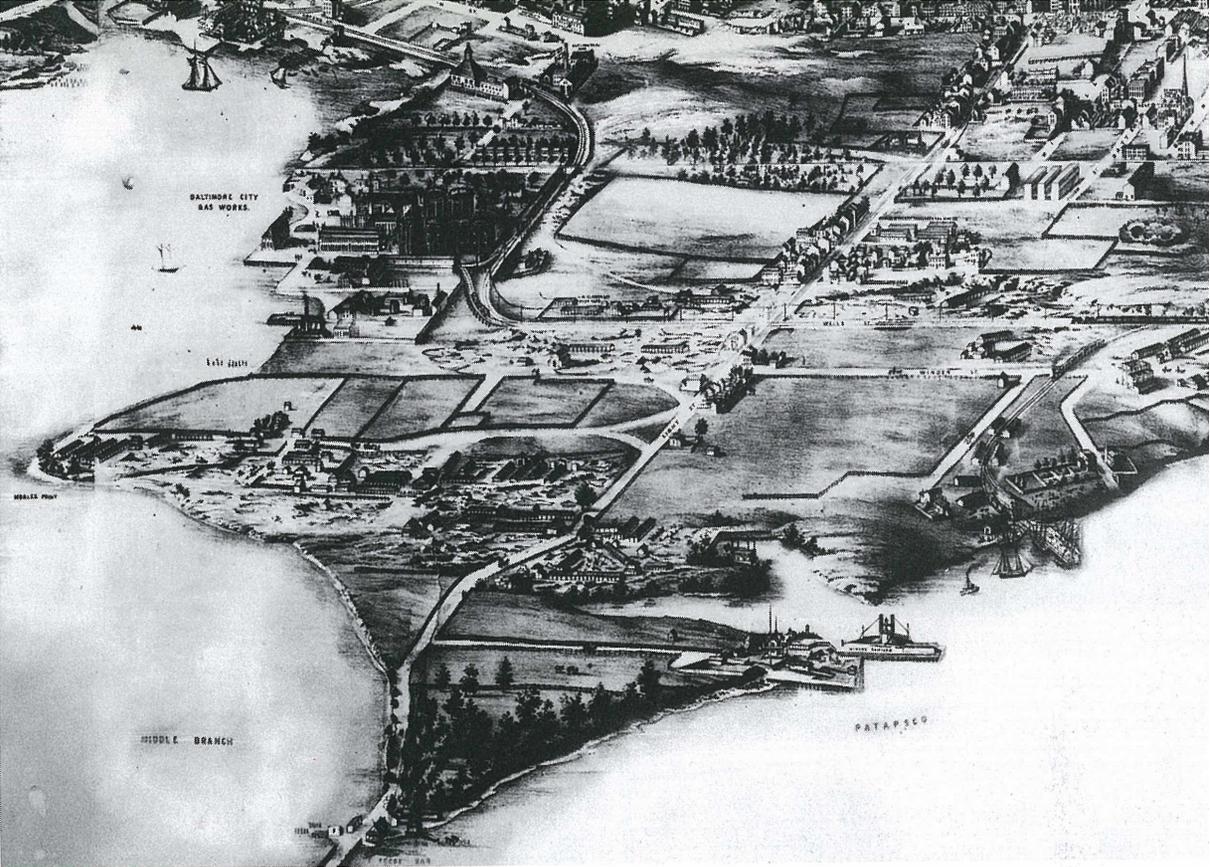
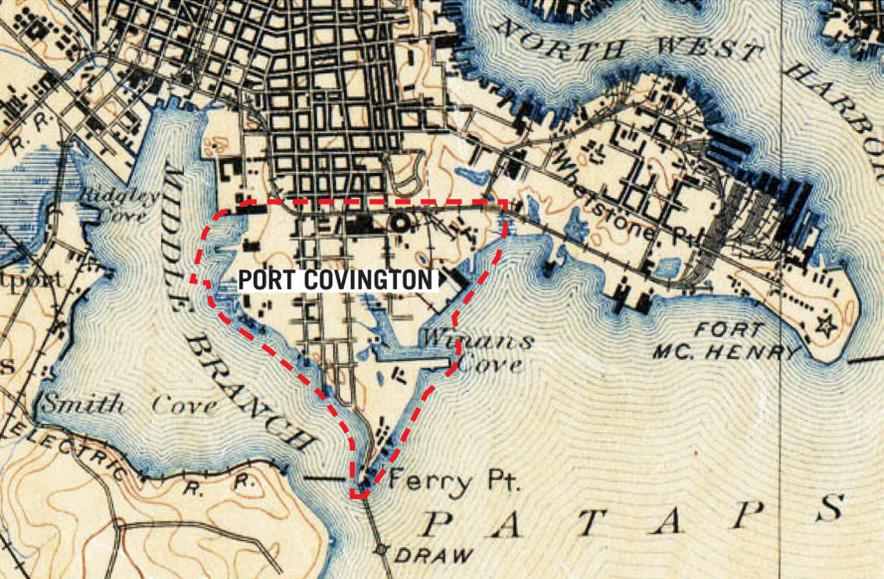
ADDISON PALMER

STV Incorporated
Regional Manager

REGIONAL CONTEXT MAP



HISTORY OF SITE



**PORT
COVINGTON
1850-1950**

HISTORY OF SITE



**PORT
COVINGTON
1950-2015**

EXISTING CONDITIONS



SOUTH BALTIMORE

95

**SWANN
PARK**

**SPRING GARDEN
SWING BRIDGE**

**CITY
GARAGE**

**SAGAMORE
SPIRITS**

**SOUTH
LOCUST
POINT**

CROMWELL STREET

**NICK'S
FISH
HOUSE**

**LOCKE
INSULATORS**

WINANS COVE

HANOVER STREET BRIDGE

**MIDDLE BRANCH
OF THE PATAPSCO
RIVER**

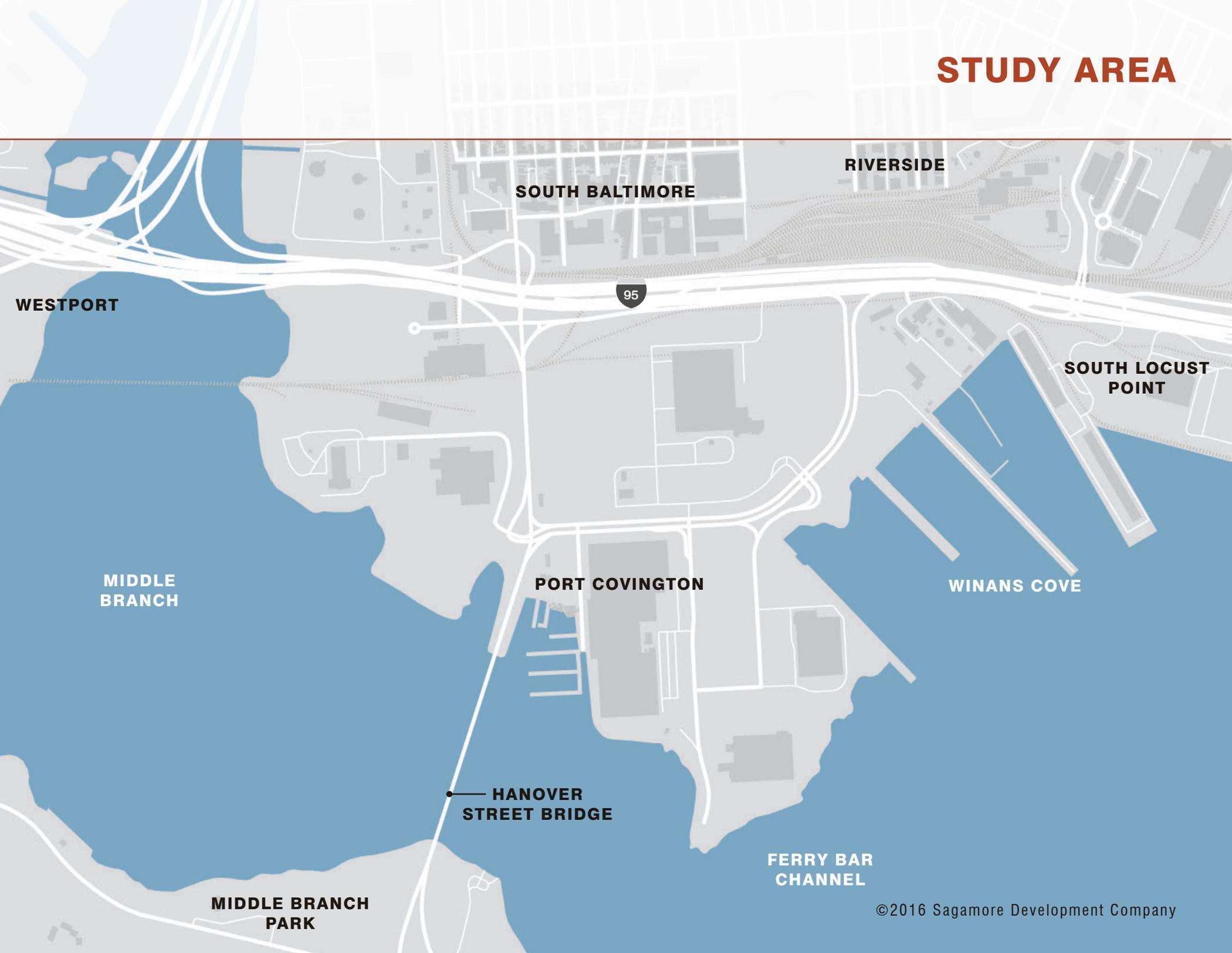
ENVIRONMENTAL CONSTRAINTS



LEGEND

-  I-95 Multi-Lane Highway
-  CSX Railroad Tracks
-  Hanover Street Commuter Route
-  1000-Foot Chesapeake Bay Critical Area
-  100-Foot Chesapeake Bay Critical Area Buffer
-  100-Year Floodplain
-  Habitat Protection Area

STUDY AREA



WESTPORT

SOUTH BALTIMORE

RIVERSIDE

95

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

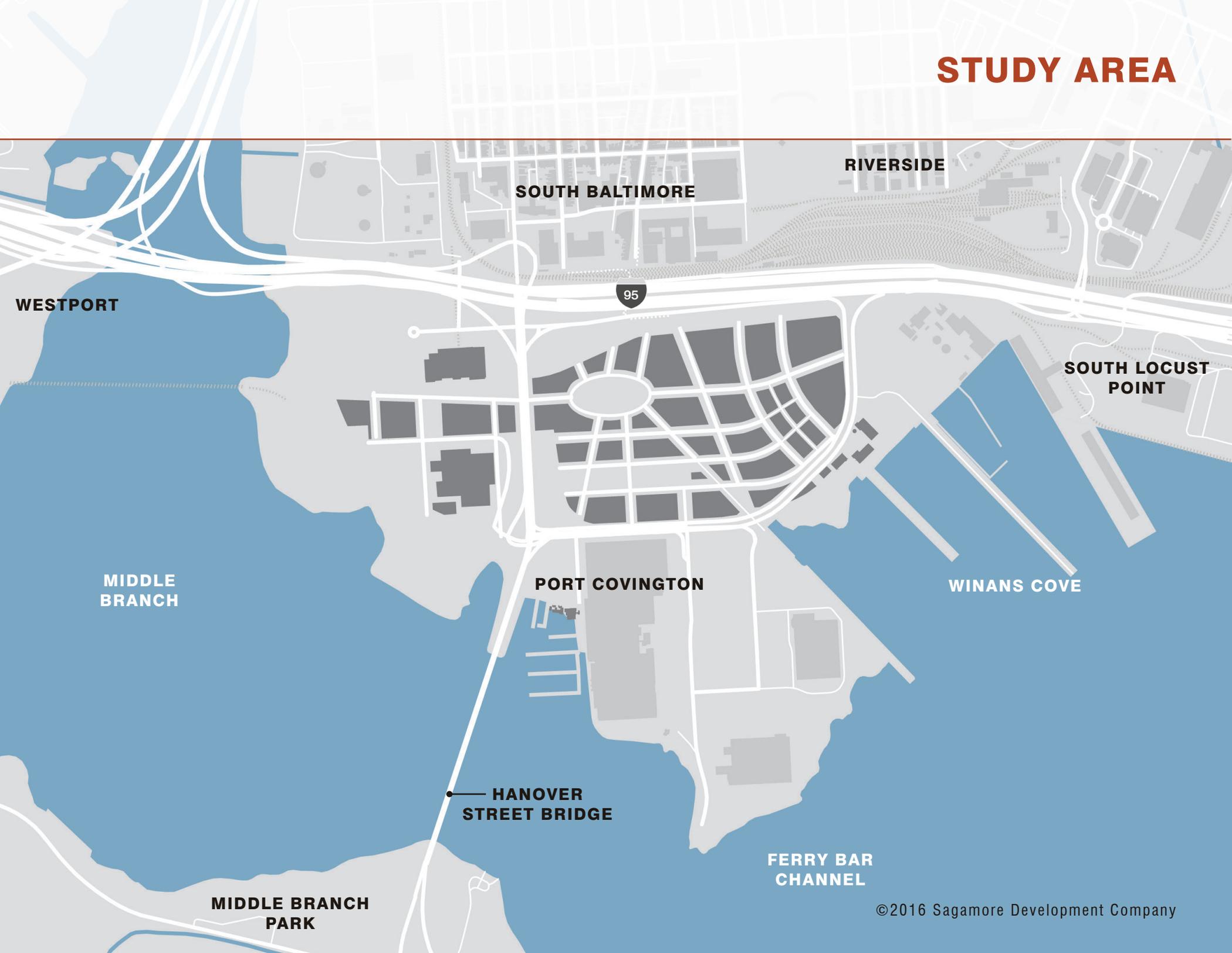
WINANS COVE

**HANOVER
STREET BRIDGE**

**MIDDLE BRANCH
PARK**

**FERRY BAR
CHANNEL**

STUDY AREA



SOUTH BALTIMORE

RIVERSIDE

**SOUTH LOCUST
POINT**

WINANS COVE

PORT COVINGTON

**MIDDLE
BRANCH**

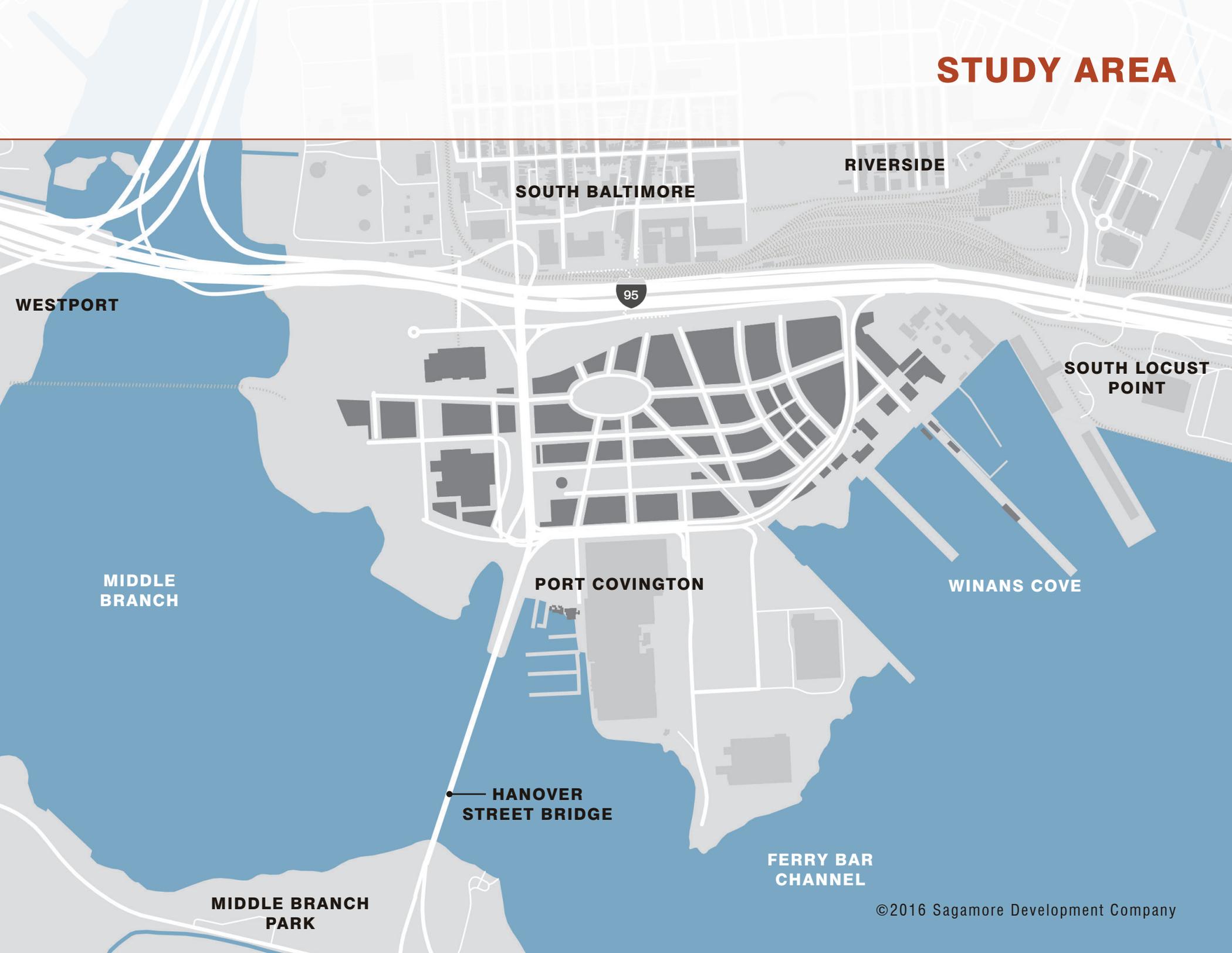
**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

WESTPORT

STUDY AREA



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

**SOUTH LOCUST
POINT**

95

**MIDDLE
BRANCH**

PORT COVINGTON

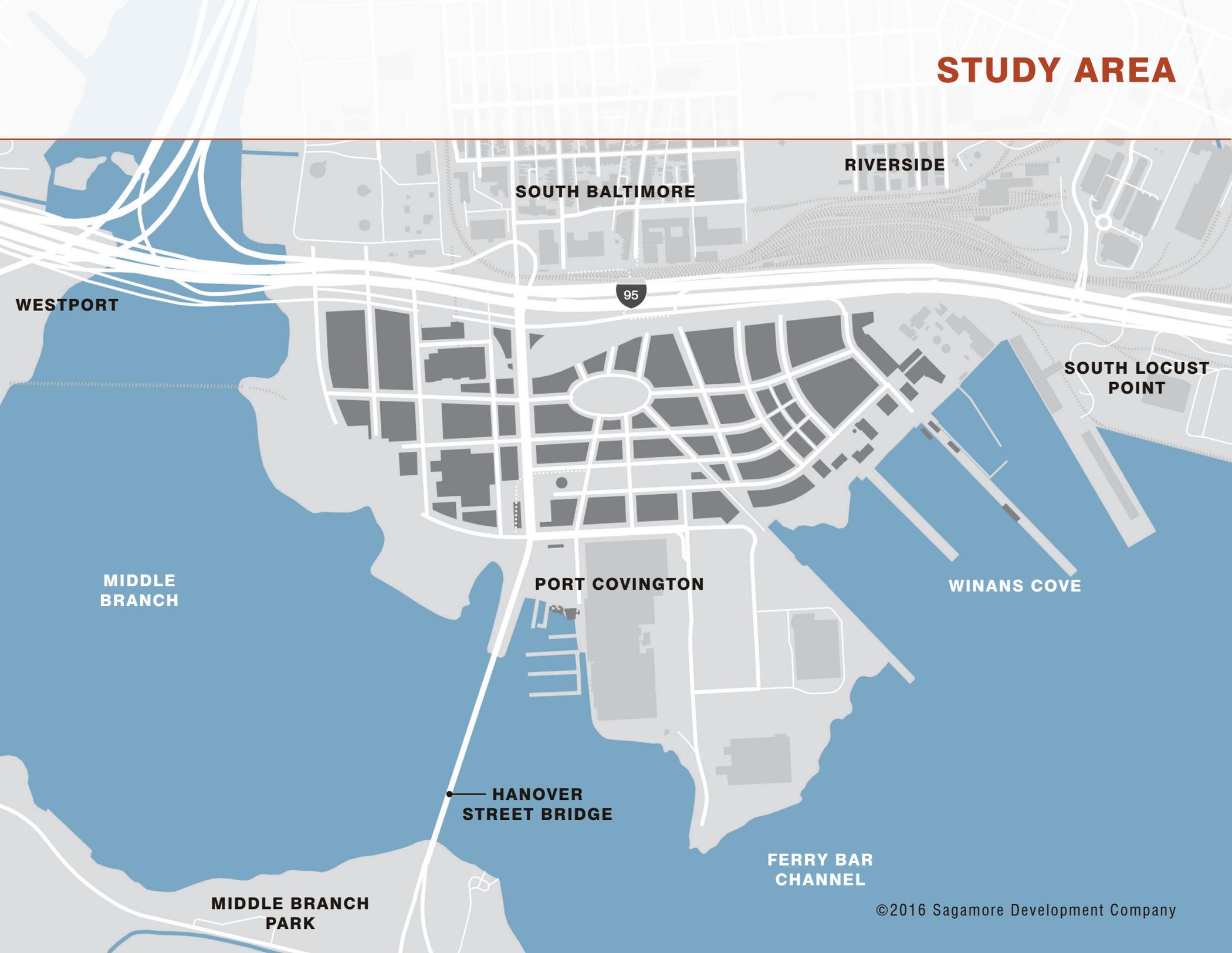
WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

STUDY AREA



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

95

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

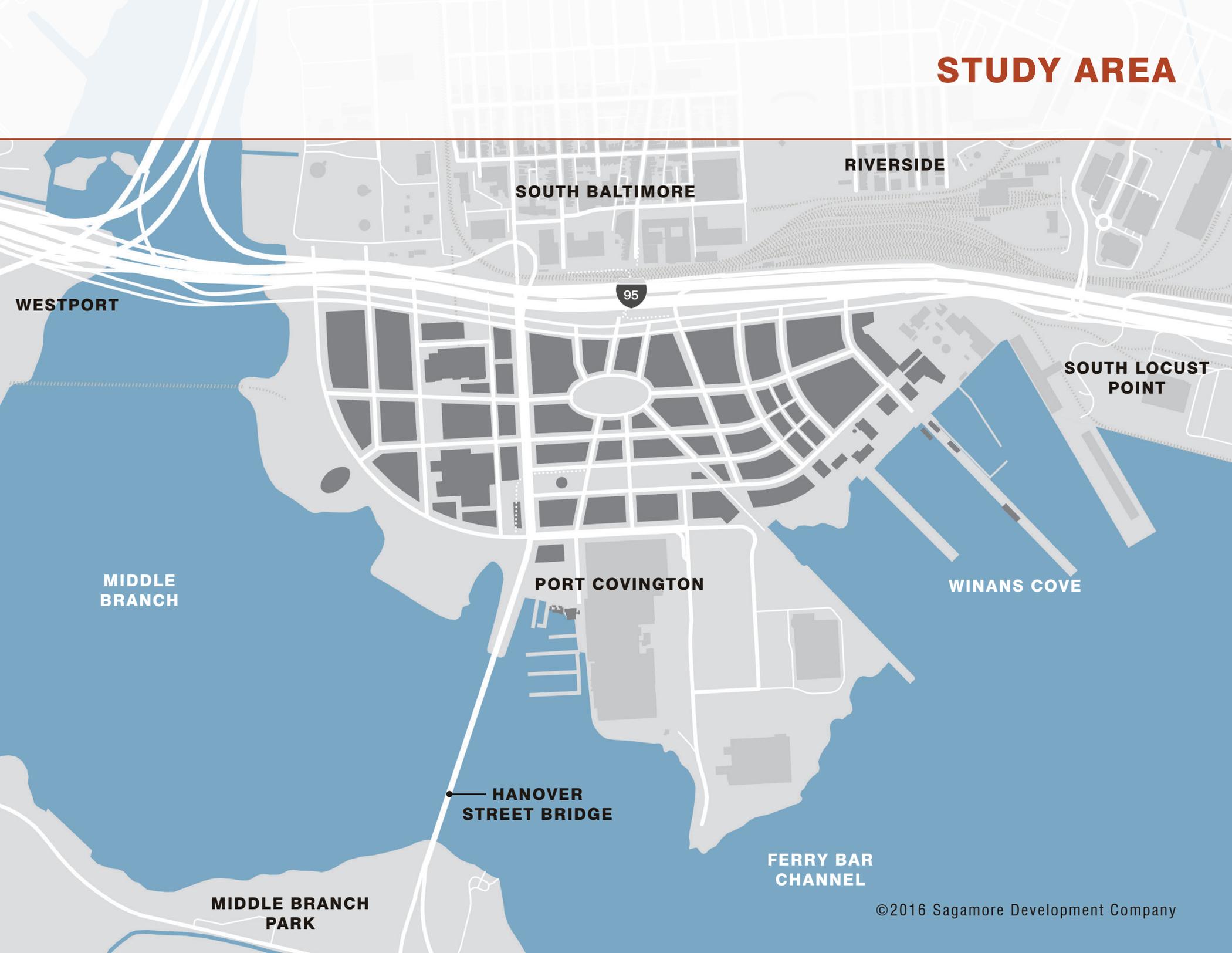
WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

STUDY AREA



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

95

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

URBAN DESIGN GOALS

Create a sense of arrival and make it a destination.

Make strong connections between uses, ecology and people.

Induce multi-modal behaviors through great design and investment in the public realm.

Include multiple points of view to ensure diversity and plan resiliency.

Innovate.



Port
Covington

FRAMEWORK

MARK SARDEGNA AIA, LEED AP

Elkus Manfredi Architects

Vice President

EXISTING CONDITIONS



FRAMEWORK PLAN



FRAMEWORK



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

**SOUTH LOCUST
POINT**

95

**MIDDLE
BRANCH**

PORT COVINGTON

WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

EAST WATERFRONT



WESTPORT

SOUTH BALTIMORE

RIVERSIDE

Restaurant
Retail
Entertainment
Hospitality

SOUTH LOCUST
POINT

95

MIDDLE
BRANCH

PORT COVINGTON

WINANS COVE

HANOVER
STREET BRIDGE

FERRY BAR
CHANNEL

MIDDLE BRANCH
PARK

EAST WATERFRONT



RESTAURANT ROW



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

**Residential
Retail
Parking**

95

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

RESTAURANT ROW

Residential
Retail
Parking



GREENWAY – SANCTUARY & STABLES



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

95

**Residential
Retail
Maker Space**

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

GREENWAY – SANCTUARY & STABLES



WEST END



Office
Residential
Commodity
Retail
Maker Space
Parking

SOUTH BALTIMORE

RIVERSIDE

WESTPORT

95

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

WINANS COVE

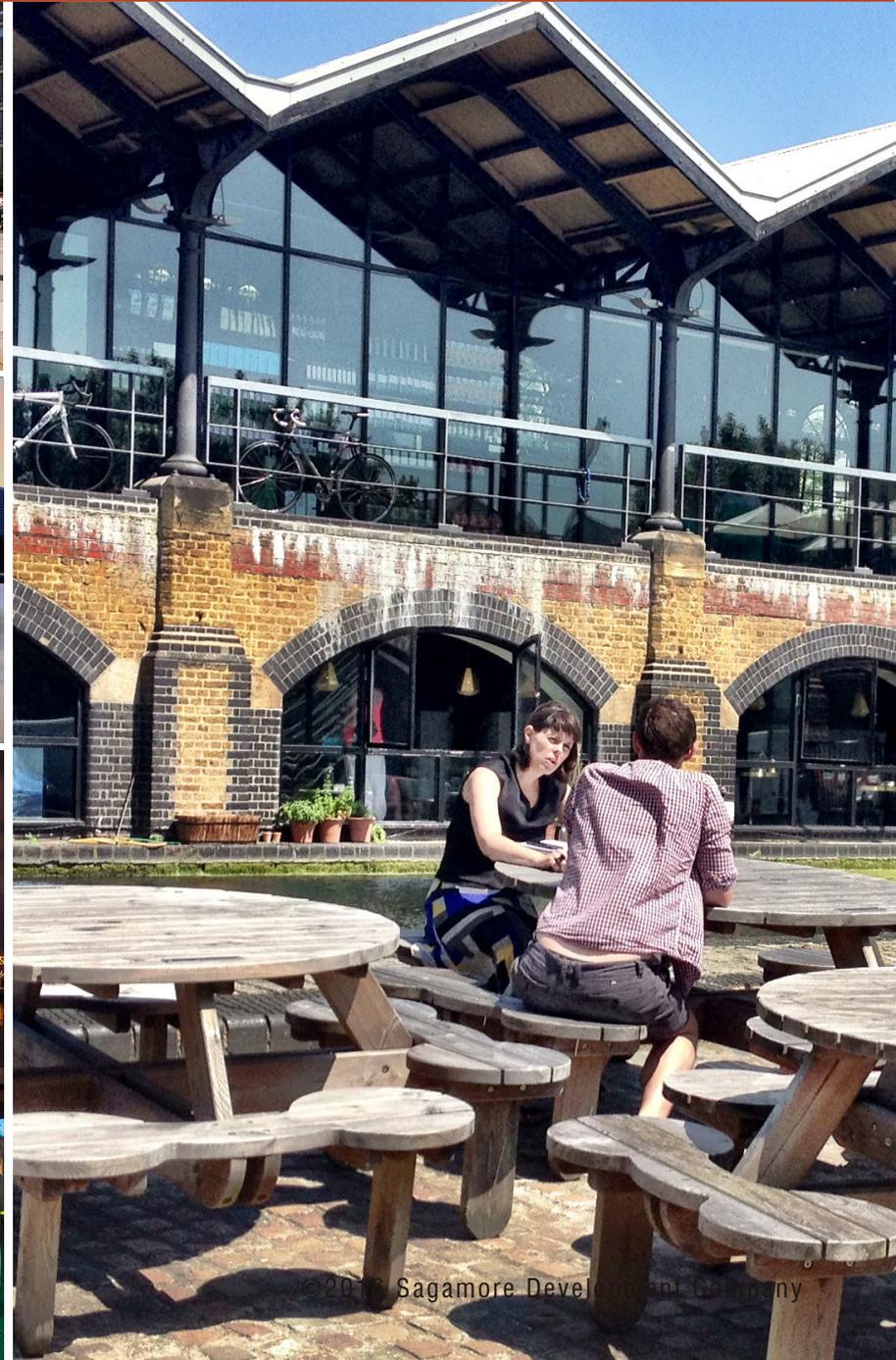
— **HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

WEST END

Office
Residential
Commodity
Retail
Maker Space
Parking



FOUNDERS' PARK



SOUTH BALTIMORE

RIVERSIDE

**Office
Residential
Retail
Parking**

95

**SOUTH LOCUST
POINT**

WESTPORT

**MIDDLE
BRANCH**

PORT COVINGTON

WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

FOUNDERS' PARK



HANOVER STREET & BRIDGE



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

SOUTH LOCUST POINT

95

MIDDLE BRANCH

PORT COVINGTON

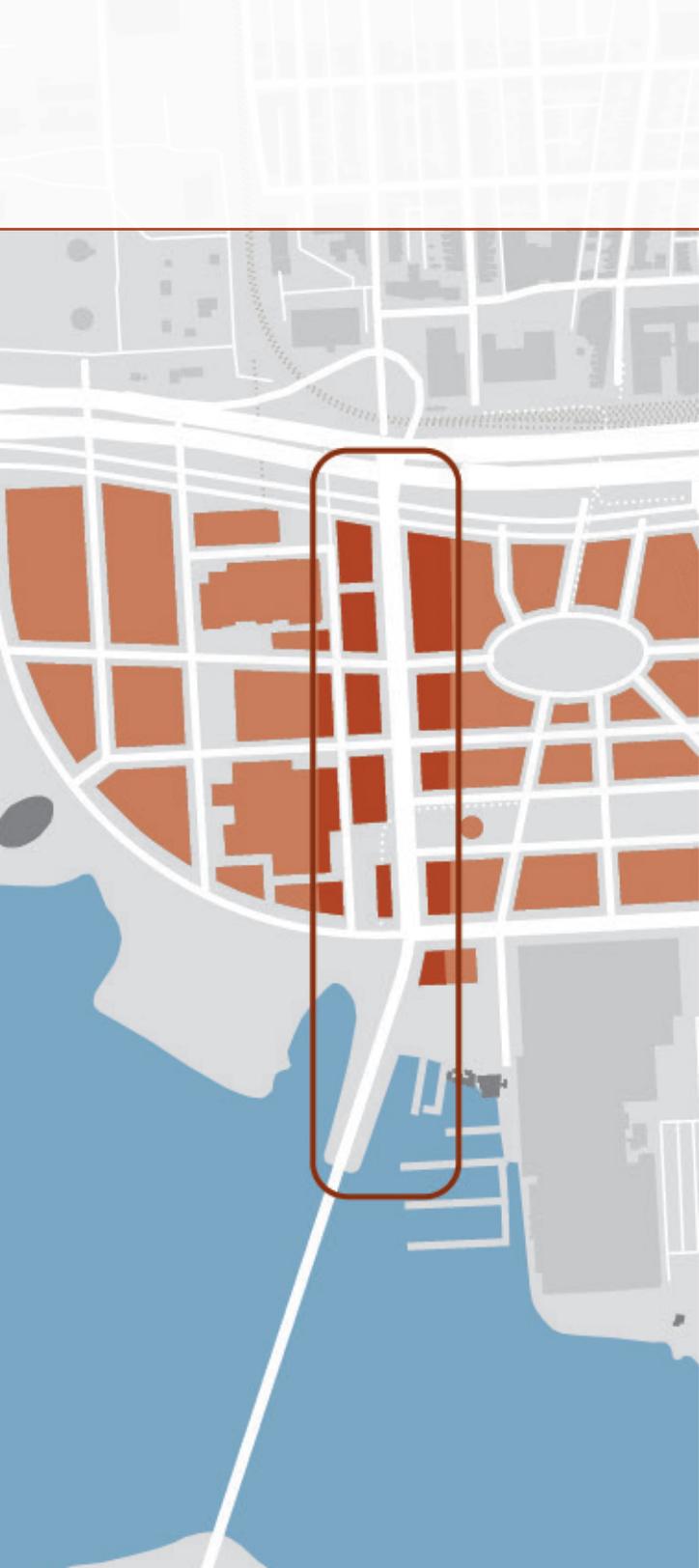
WINANS COVE

HANOVER STREET BRIDGE

FERRY BAR CHANNEL

MIDDLE BRANCH PARK

HANOVER STREET & BRIDGE



I-95 & MCCOMAS



SOUTH BALTIMORE

RIVERSIDE

WESTPORT

95

**SOUTH LOCUST
POINT**

**MIDDLE
BRANCH**

PORT COVINGTON

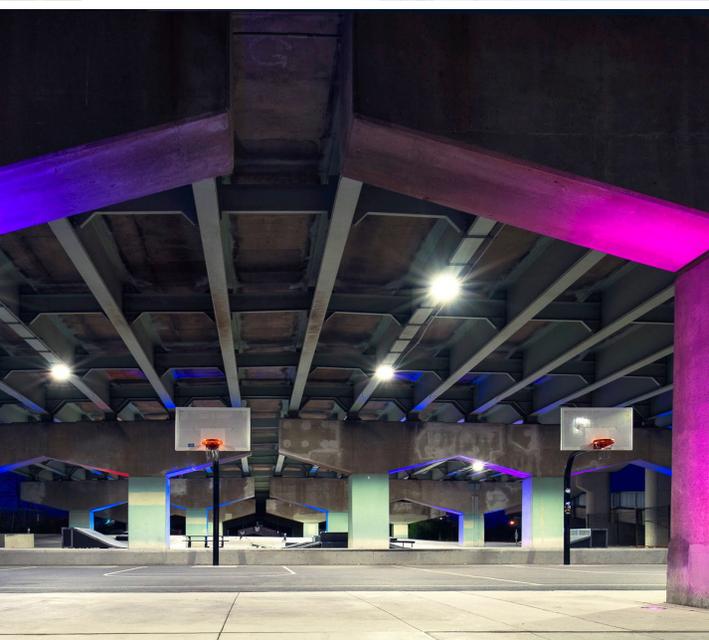
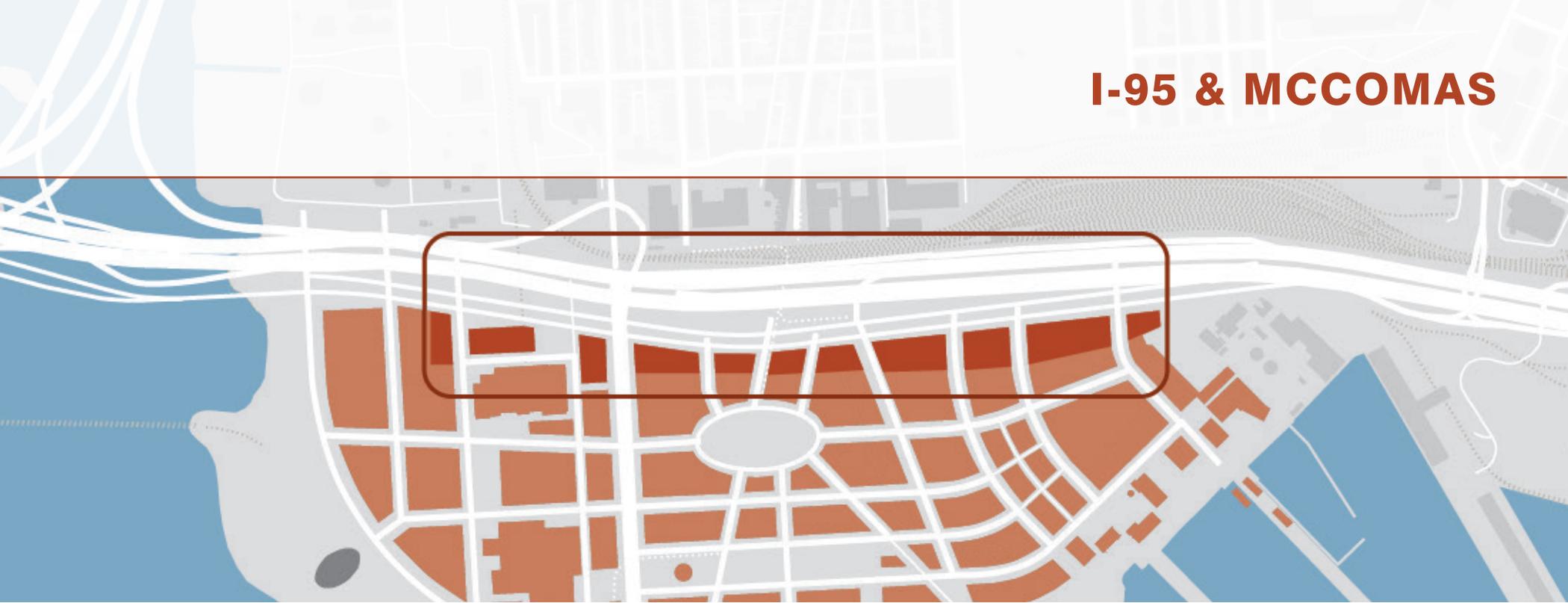
WINANS COVE

**HANOVER
STREET BRIDGE**

**FERRY BAR
CHANNEL**

**MIDDLE BRANCH
PARK**

I-95 & MCCOMAS



FRAMEWORK PLAN



Office
Residential
Commodity
Retail
Maker Space
Parking

SOUTH BALTIMORE

RIVERSIDE

Office
Residential
Retail
Parking

Residential
Retail
Parking

Restaurant
Retail
Entertainment
Hospitality

SOUTH LOCUST
POINT

WINANS COVE

Residential
Retail
Maker Space

PORT COVINGTON

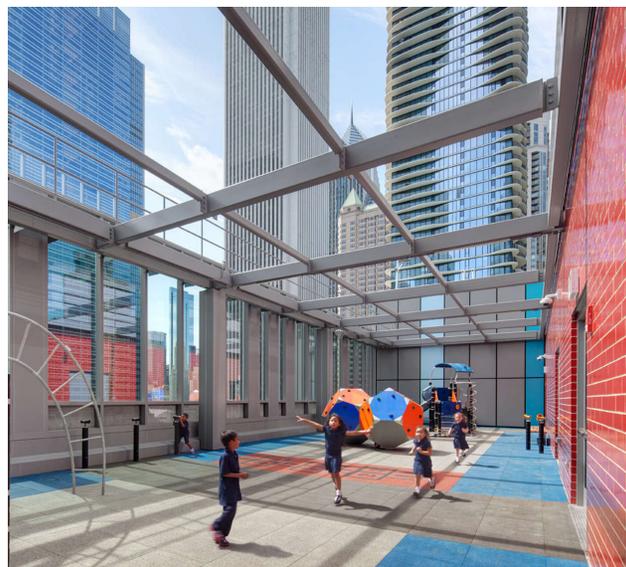
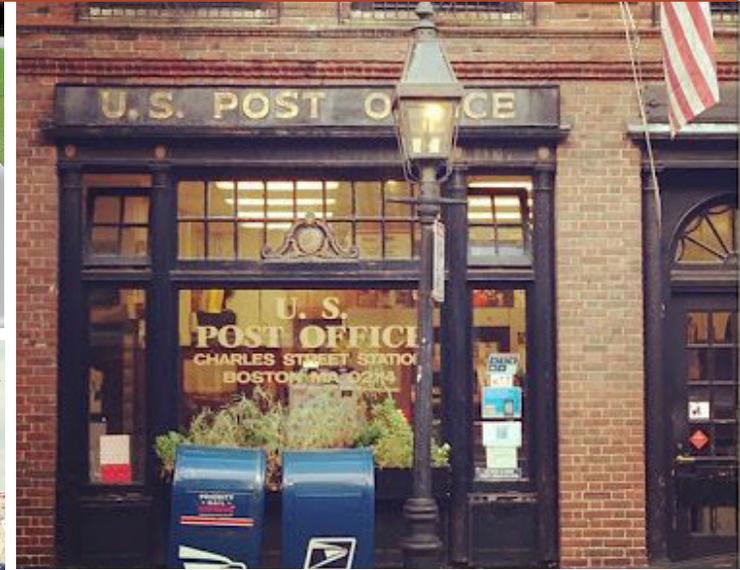
HANOVER
STREET BRIDGE

FERRY BAR
CHANNEL

MIDDLE
BRANCH

MIDDLE BRANCH
PARK

GOVERNMENTAL & SERVICES





Port
Covington

ECOLOGY

CHRISTOPHER STREB PE, LEED AP

Biohabitats, Inc.

Ecological Engineer

SITE CONTEXT



SHORELINE DEBRIS



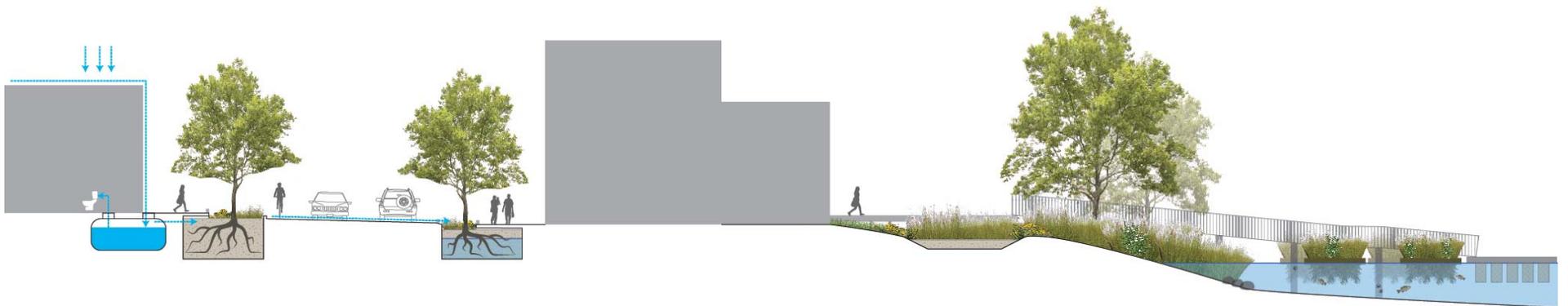
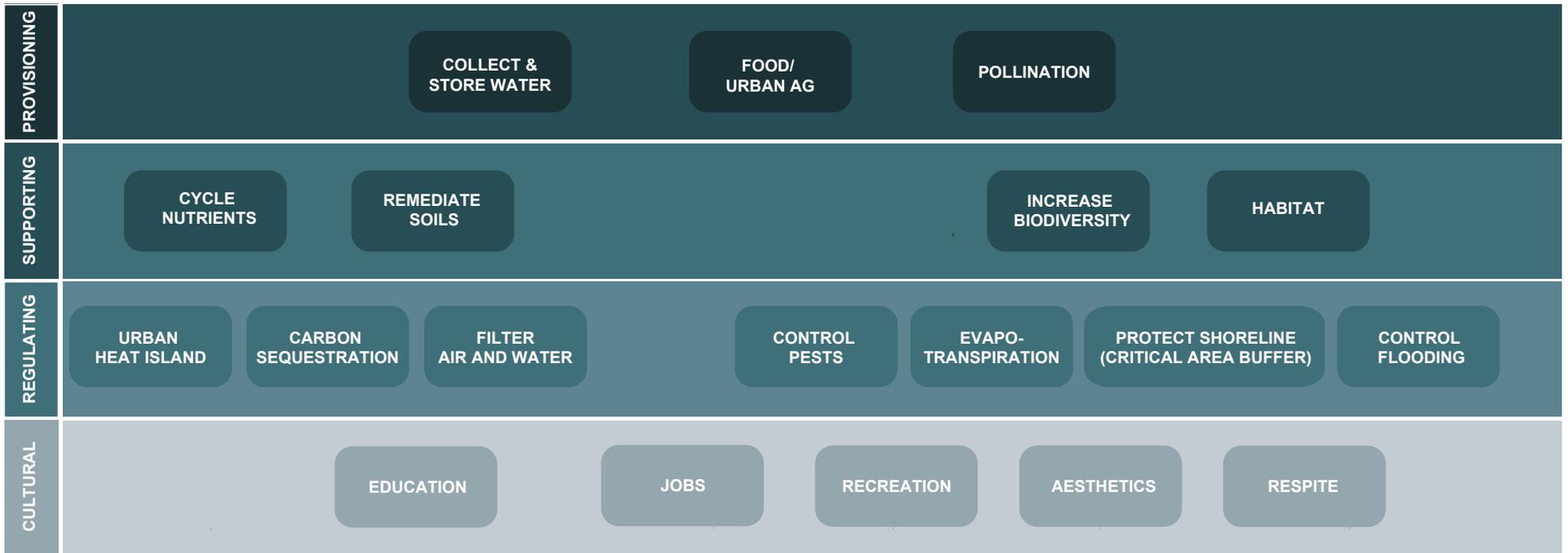
SHORELINE DEBRIS



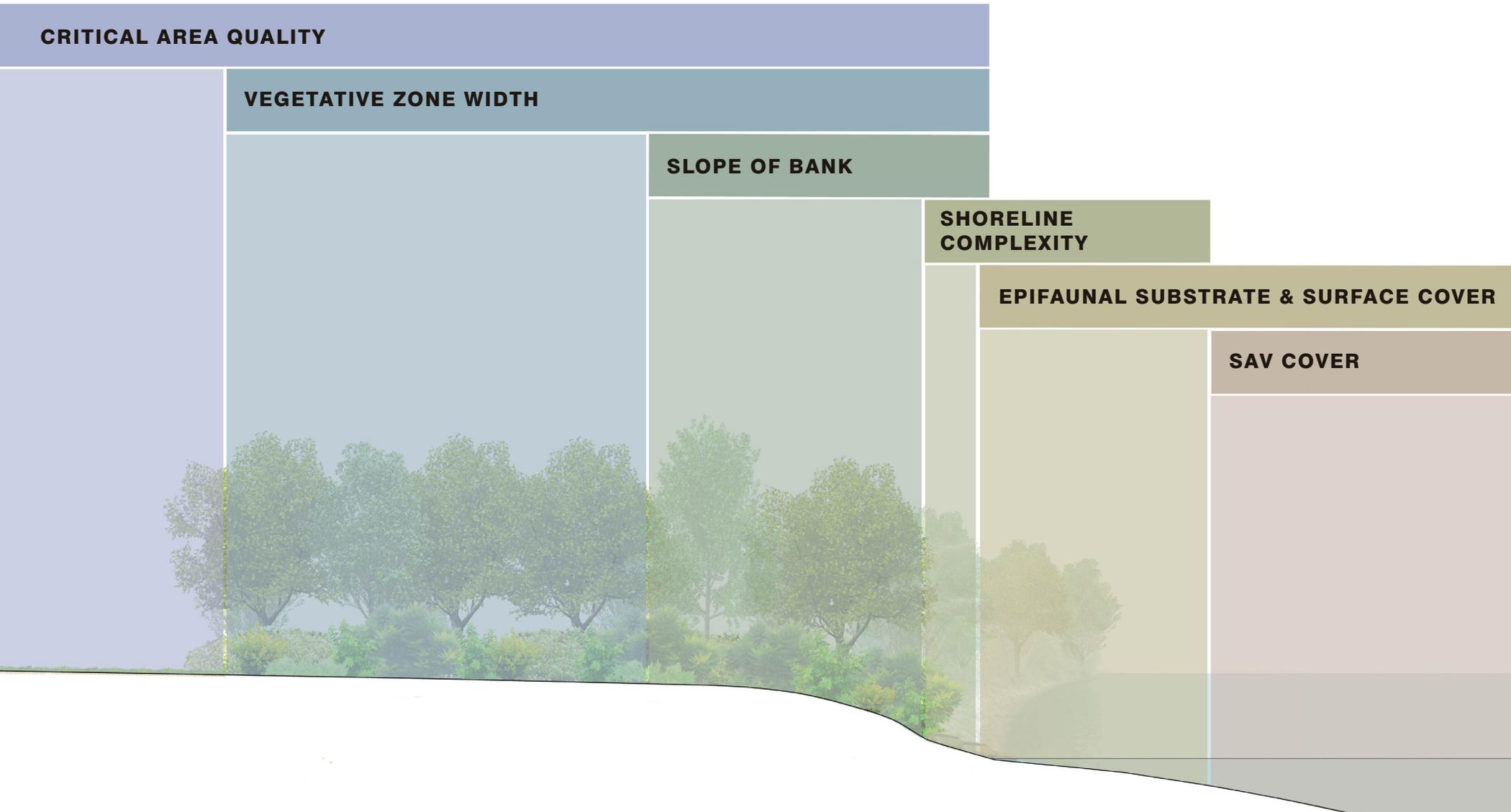
SHORELINE BULKHEAD



PORT COVINGTON ECOSYSTEM SERVICES



QHEI INSTRUCTIONAL BREAKDOWN



QHEI ASSESSMENT FORM

QUALITATIVE HABITAT EVALUATION INDEX (QHEI)

- Critical Area Quality
- Vegetative Zone Width
- Sunlight Availability
- Slope of Bank
- Bank/Shoreline Stability
- Fetch
- Shoreline Complexity
- Outfall Pipes
- Litter per m²
- Epifaunal Substrate & Surface Cover
- Offshore Slope
- Depth within 10m
- SAV Cover
- Water Clarity

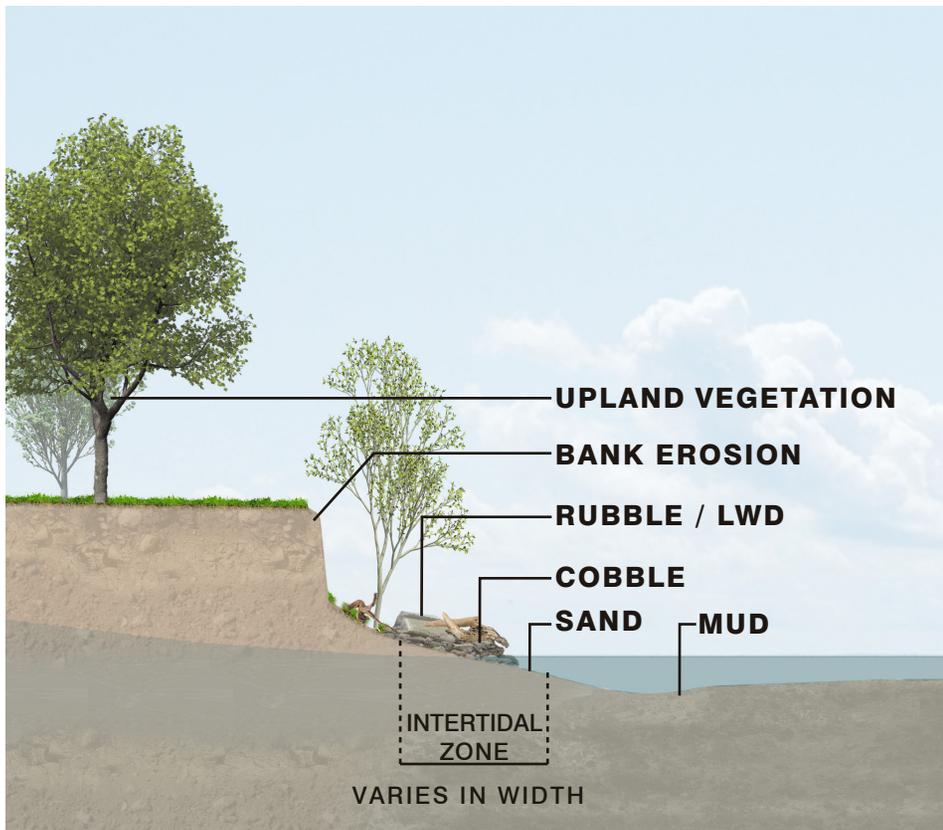
Quality Habitat Evaluation Index - Brackish Tidal Water Systems					
Location:				Typology:	
Latitude:			Longitude:		
Investigators:				Agency:	
Date:			Time:		AM PM
Physical Habitat Evaluation Index					
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor	
Critical Area Quality	Area has less than 10% impervious surface cover. Is low in human population density. Natural cover buffering between shoreline and floodplain.	Area has less than 50% impervious surface cover, low to mid human population density. Can be historically industrial, but not at present.	Features up to 80% impervious surface cover. Medium density commercial and high density residential neighborhoods present, and recently constructed sites.	Over 80% impervious surface cover. High density areas, industrial zones and construction sites.	
Score:	20 19 18 17	16 15 14 13 12	11 10 9 8 7 6	5 4 3 2 1 0	
Vegetative Zone Width	Width of shoreline vegetation > 18m. Scarce anthropogenic activity (parking lots, roadways, harbors).	Width of shoreline vegetation from 12-18m. Minimum anthropogenic activity in zone.	Width of shoreline vegetation from 6-12m. Visible anthropogenic influence, up to a medium density area.	< 6m of vegetation present from shoreline. Minimal vegetation, large presence of anthropogenic activity.	
Score:	20 19 18 17	16 15 14 13 12	11 10 9 8 7 6	5 4 3 2 1 0	
Vegetative Cover	> 75% of the shoreline surface is covered by native vegetation. Minimal vegetative disruption, allowing natural plant growth and succession.	50-75% of shoreline surface is covered by native vegetation. Evidence of disruption present, but not limiting full plant potential.	25-50% of shoreline surface is covered by native vegetation. Evidence of disruption is obvious, raw patches of soil present. Invasive species may be present.	<25% of shoreline surface is covered by vegetation. High presence of disruption, less than 5cm of standing vegetation, multiple raw patches present. Invasive species may be present.	
Score:	20 19 18 17	16 15 14 13 12	11 10 9 8 7 6	5 4 3 2 1 0	
Sunlight Availability	Sunlight highly available for marsh grasses, isolated amount of wooded trees.	Instances of tall wooded vegetation present, sunlight slightly limited for shoreline grasses.	High presence of shading from wooded vegetation or infrastructure. Sunlight limited to four hours a day.	Available sunlight is less than four hours per day. High presence of infrastructure or wooded vegetation limiting sunlight availability.	
Score:	20 19 18 17	16 15 14 13 12	11 10 9 8 7 6	5 4 3 2 1 0	

QHEI ASSESSMENT RESULTS

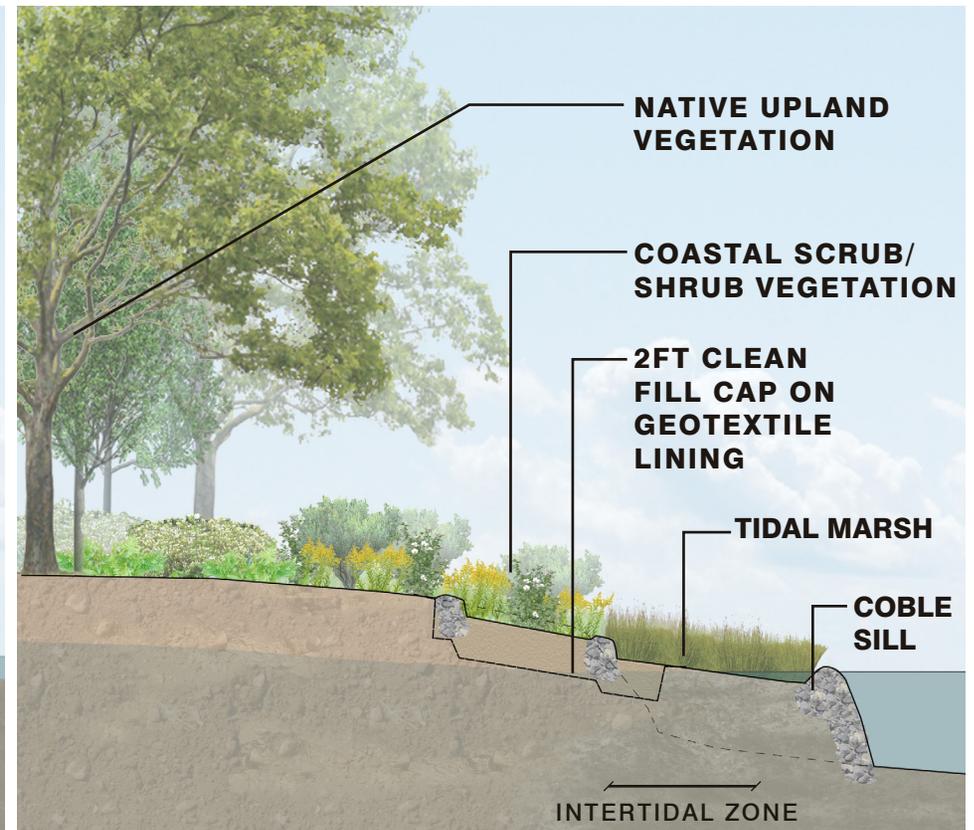
SHORELINE HABITAT QUALITY ASSESSMENT



SOFT SHORELINE CONDITIONS

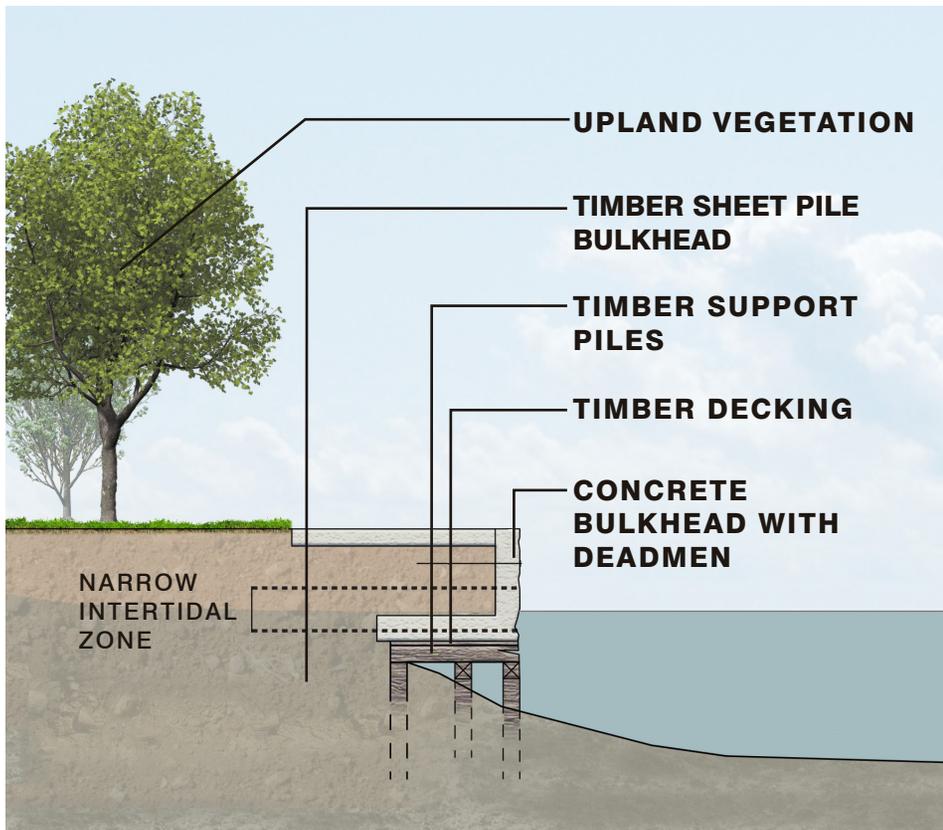


EXISTING CONDITIONS

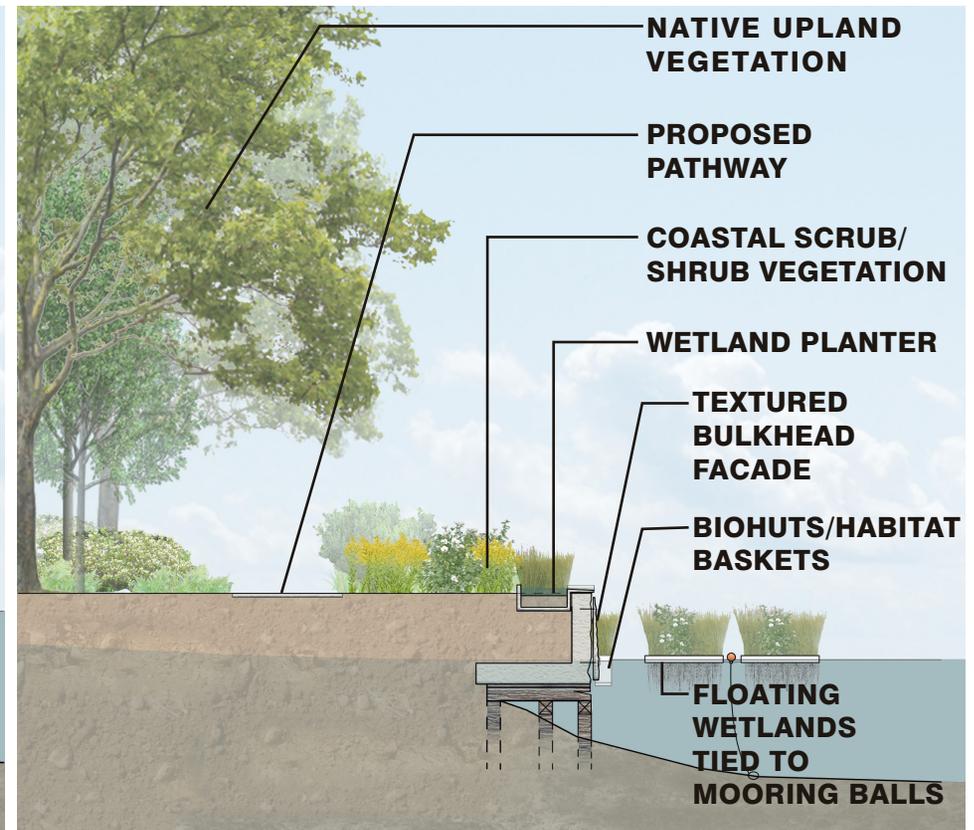


PROPOSED CONDITIONS

HARD SHORELINE CONDITIONS



EXISTING CONDITIONS



PROPOSED CONDITIONS

LIVING SHORELINE



PHOTO CREDIT: BIOHABITATS, INC.
©2016 Sagamore Development Company

LIVING SHORELINE



PHOTO CREDIT: BIOHABITATS, INC.
©2016 Sagamore Development Company



Port
Covington

OPEN SPACE

MICHAEL BLIER

Landworks Studio Inc.
Principal

OPEN SPACE ASPIRATIONS



ECOLOGICAL ASPIRATIONS

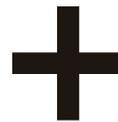
Enhance and Stabilize the Shoreline
Habitat Restoration and Expansion
Green Infrastructure
Improved Water Quality



LIFESTYLE ASPIRATIONS

Recreation
Entertainment
Water Access
Residential
Work Place

OPEN SPACE SYNTHESIS



ACTIVE ECOLOGY

Wetlands
Storm Water Management
Harbor Habitat
Diverse Planting
Ecological Corridors

HUMAN PERFORMANCE

Running Track
Sports Fields
Workout Course
Biking
Adventure Sports



HIGH PERFORMANCE OPEN SPACE SYSTEM

OPEN SPACE FOR DAY USES



OPEN SPACE FOR NIGHT USES



BUILDING A SYSTEM: OPEN SPACE STRUCTURE



OPEN SPACE PARKS

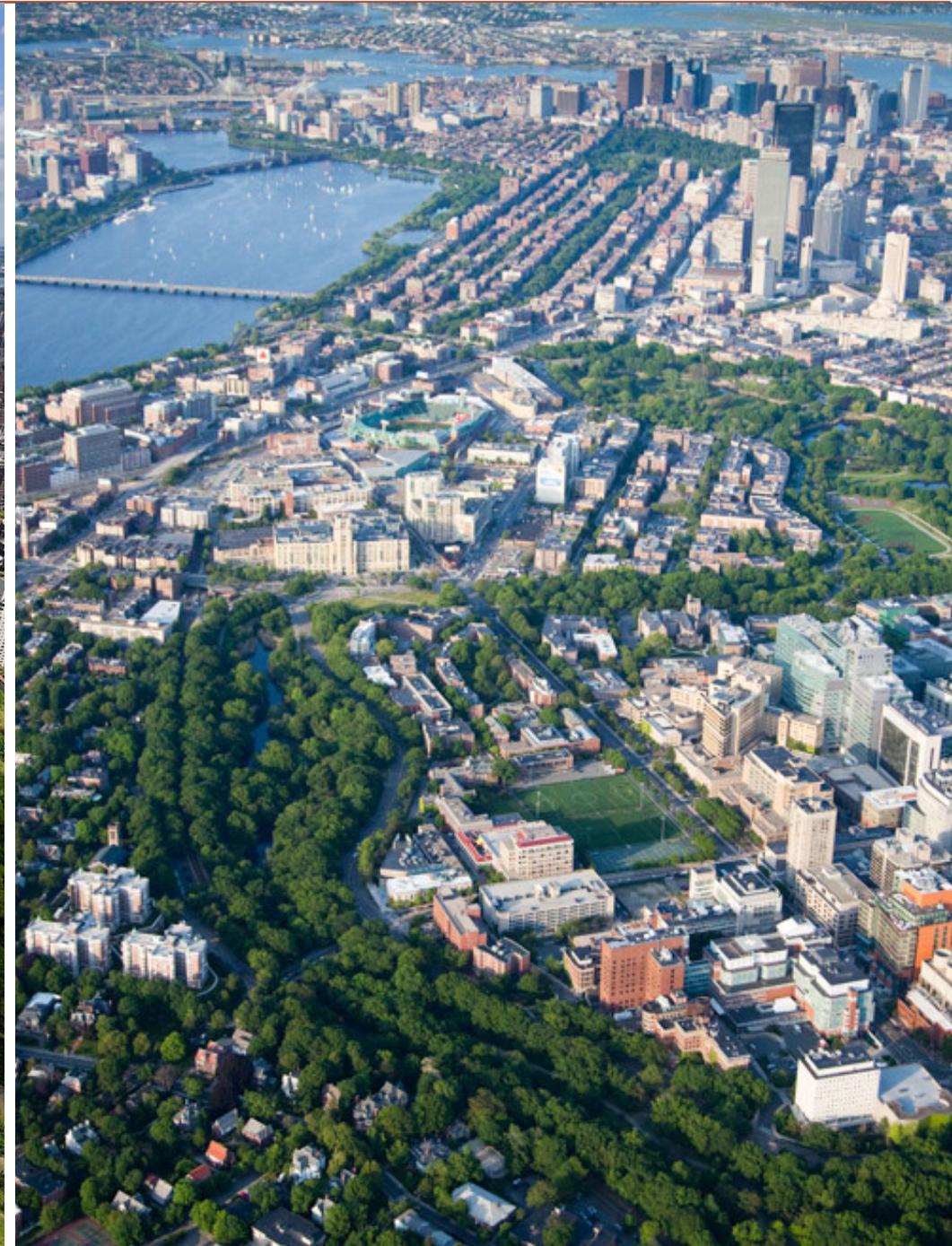
West Waterfront	35 Acres
Connection	1 Acre
Sports Park	7 Acres
Founders' Park	3 Acres
The Green	5 Acres
East Waterfront	8 Acres
Archaeological Pier	2 Acres

OPEN SPACE LAYERS

	Open Space Structure
---	----------------------

MIDDLE BRANCH PARK

BUILDING A SYSTEM: OPEN SPACE STRUCTURE



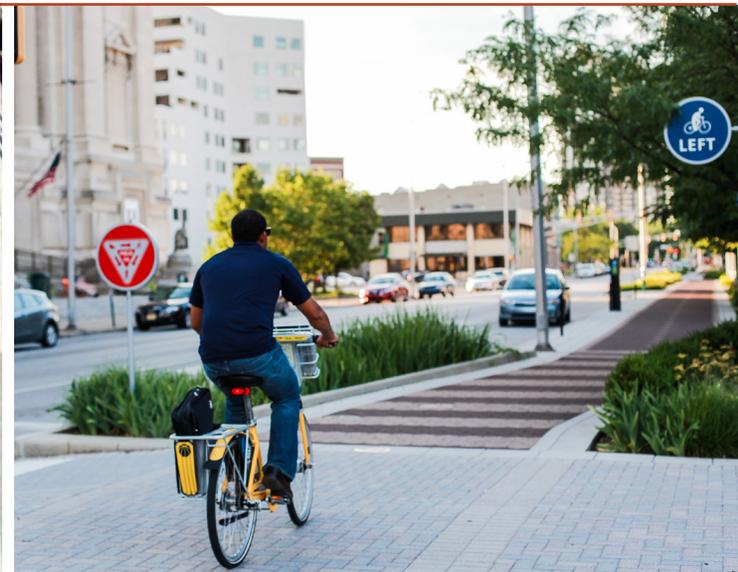
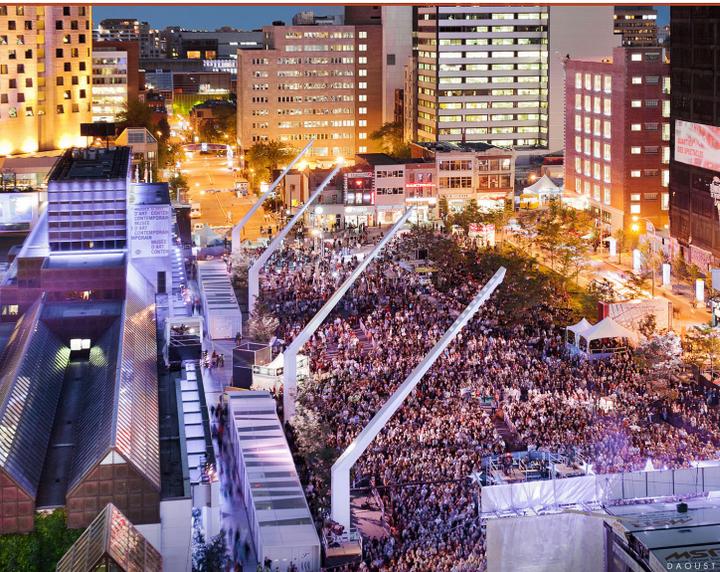
BUILDING A SYSTEM: NEIGHBORHOOD CONNECTIONS



OPEN SPACE LAYERS

- Open Space Structure
- Neighborhood Connections

BUILDING A SYSTEM: NEIGHBORHOOD CONNECTIONS

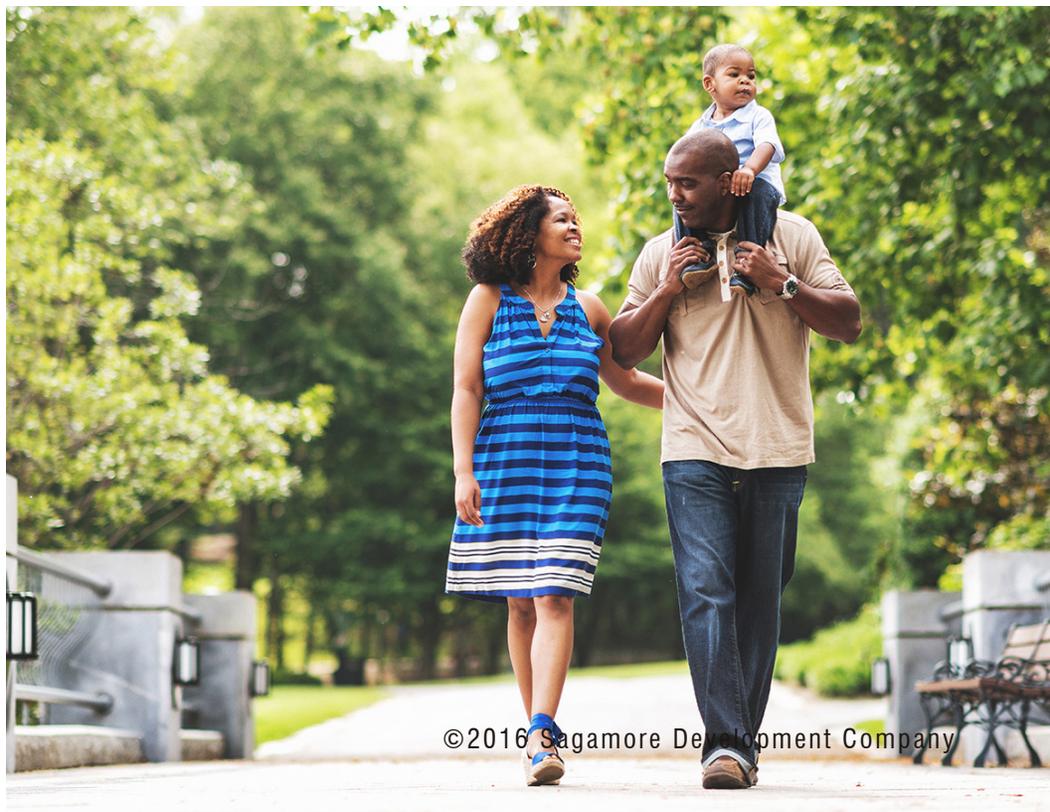


BUILDING A SYSTEM: PARK CONNECTIONS



- OPEN SPACE LAYERS**
- Open Space Structure
 - Neighborhood Connections
 - Park Connections

BUILDING A SYSTEM: PARK CONNECTIONS



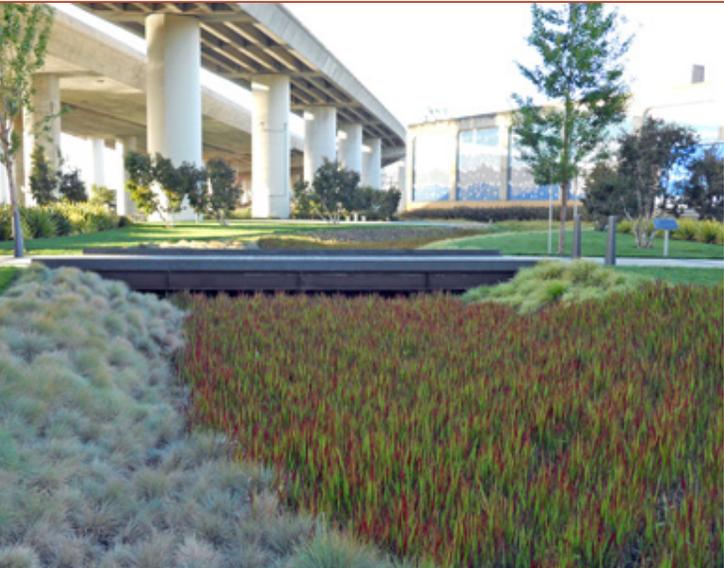
BUILDING A SYSTEM: ECO CORRIDOR



OPEN SPACE LAYERS

- Open Space Structure
- Neighborhood Connections
- Park Connections
- Eco Corridor

BUILDING A SYSTEM: ECO CORRIDOR



BUILDING A SYSTEM: HABITAT ENHANCEMENT



- OPEN SPACE LAYERS**
- Open Space Structure
 - Neighborhood Connections
 - Park Connections
 - Eco Corridor
 - Habitat Enhancement

BUILDING A SYSTEM: HABITAT ENHANCEMENT

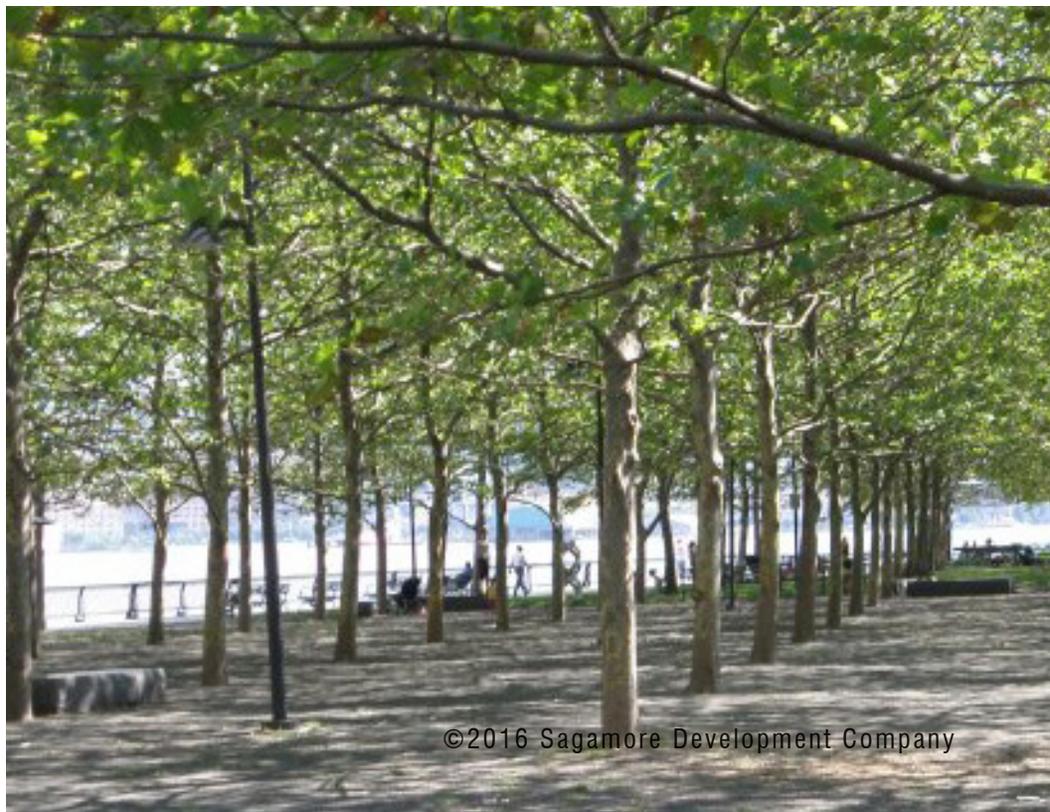


BUILDING A SYSTEM: STREET PLANTING



- OPEN SPACE LAYERS**
- Open Space Structure
 - Neighborhood Connections
 - Park Connections
 - Eco Corridor
 - Habitat Enhancement
 - Street Planting

BUILDING A SYSTEM: STREET PLANTING



MIXED USE OPEN SPACE



MIXED USE OPEN SPACE





MULTI-MODAL INFRASTRUCTURE

RJ ELDRIDGE

Toole Design Group
Chief Operating Officer

BARBARA MOSIER PE, PTOE

STV Inc.
Traffic Engineer

MULTIMODAL ASPIRATIONS

CREATE AN ACCESSIBLE, ACTIVE AND LIVABLE COMMUNITY



WALK



BICYCLE

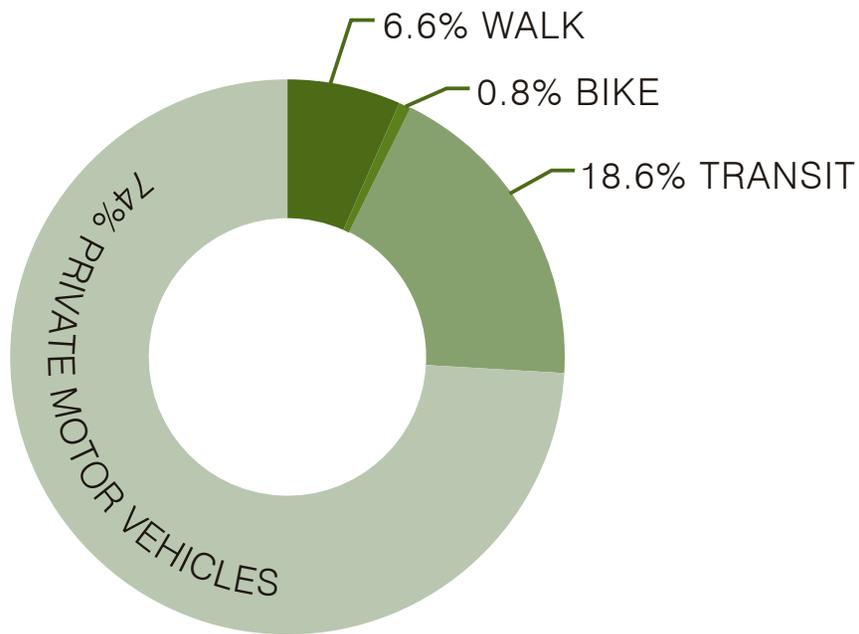


TRANSIT

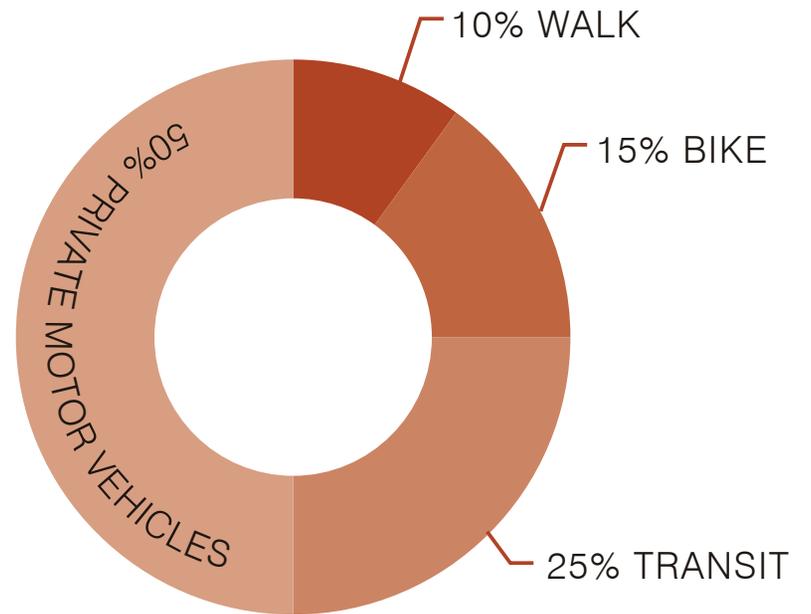


50% MODE SHARE

MULTIMODAL SPLIT



**CURRENT CITY OF
BALTIMORE MODE SHARE**



**PROPOSED
PORT COVINGTON
MODE SHARE**

MULTIMODAL CONNECTIONS

LIGHTING



HIGH QUALITY TRANSIT STOPS



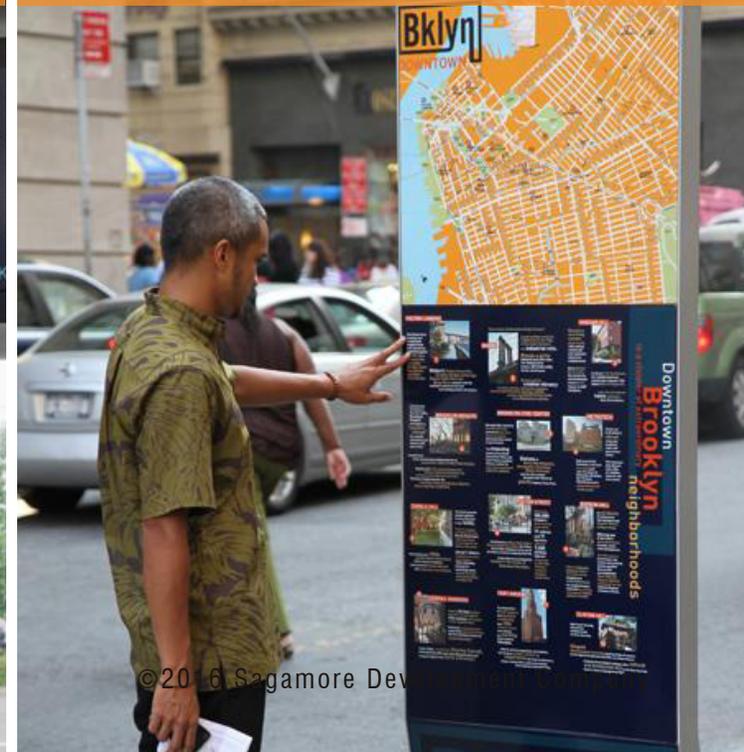
BIKE SHARE



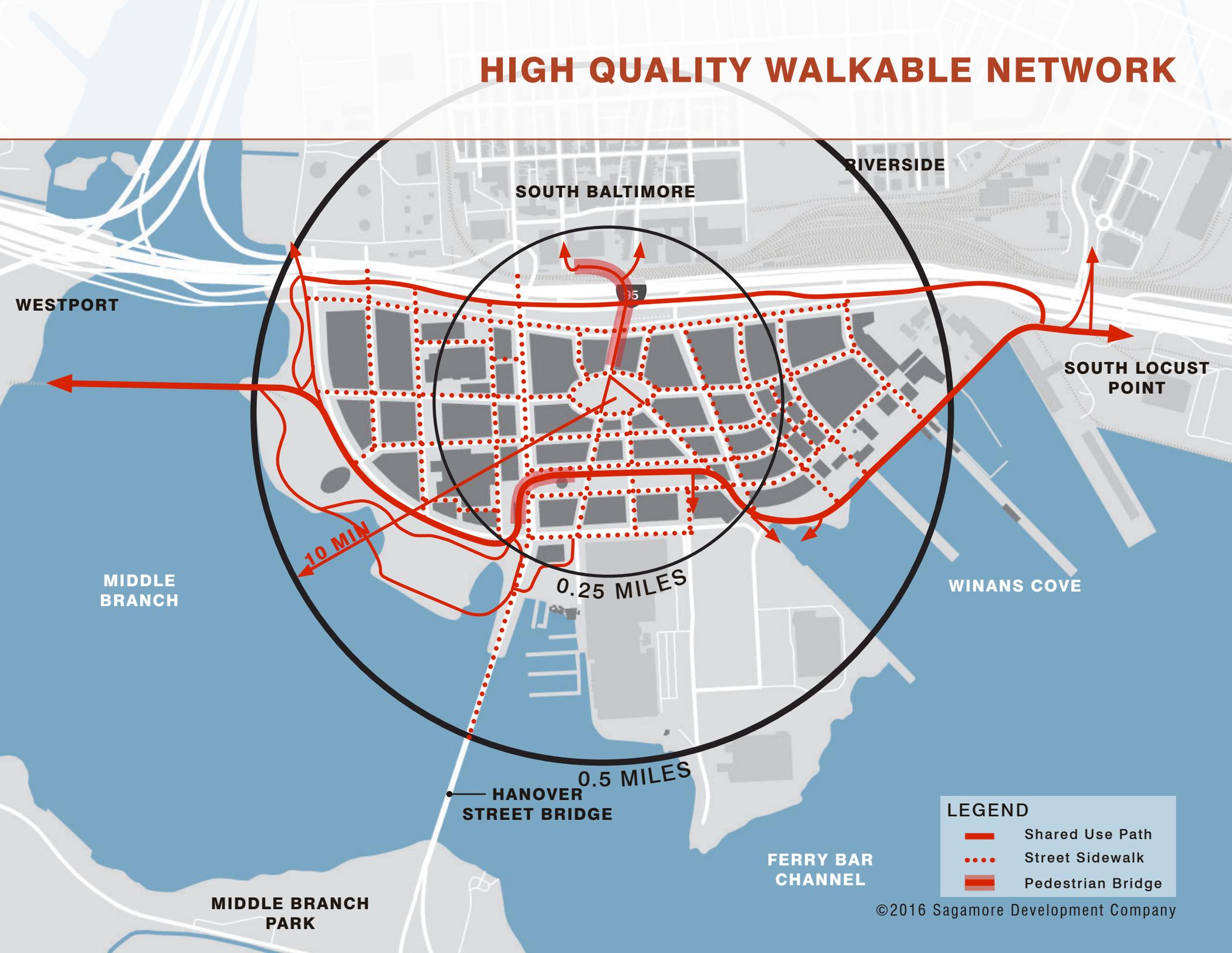
REAL TIME INFORMATION



WAYFINDING SIGNAGE



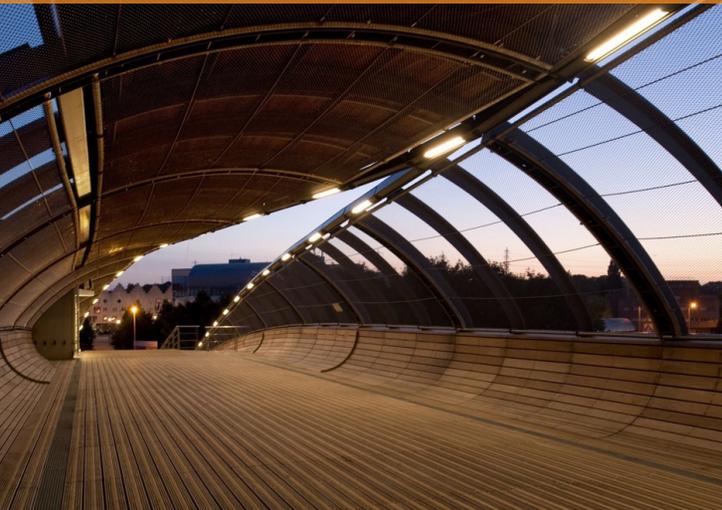
HIGH QUALITY WALKABLE NETWORK



LEGEND	
	Shared Use Path
	Street Sidewalk
	Pedestrian Bridge

WALKABILITY

CONNECTED



COMPELLING



SAFE



COMFORTABLE



ACTIVE



BICYCLE NETWORK CONNECTIVITY AND RANGE



HIGH QUALITY BICYCLE NETWORK



LEGEND

- Shared Use Path
- - - Protected Bicycle Lane Network
- Bicycle And Pedestrian Bridge

BICYCLE NETWORK

CONNECTED



COMFORTABLE



BIKE PARKING



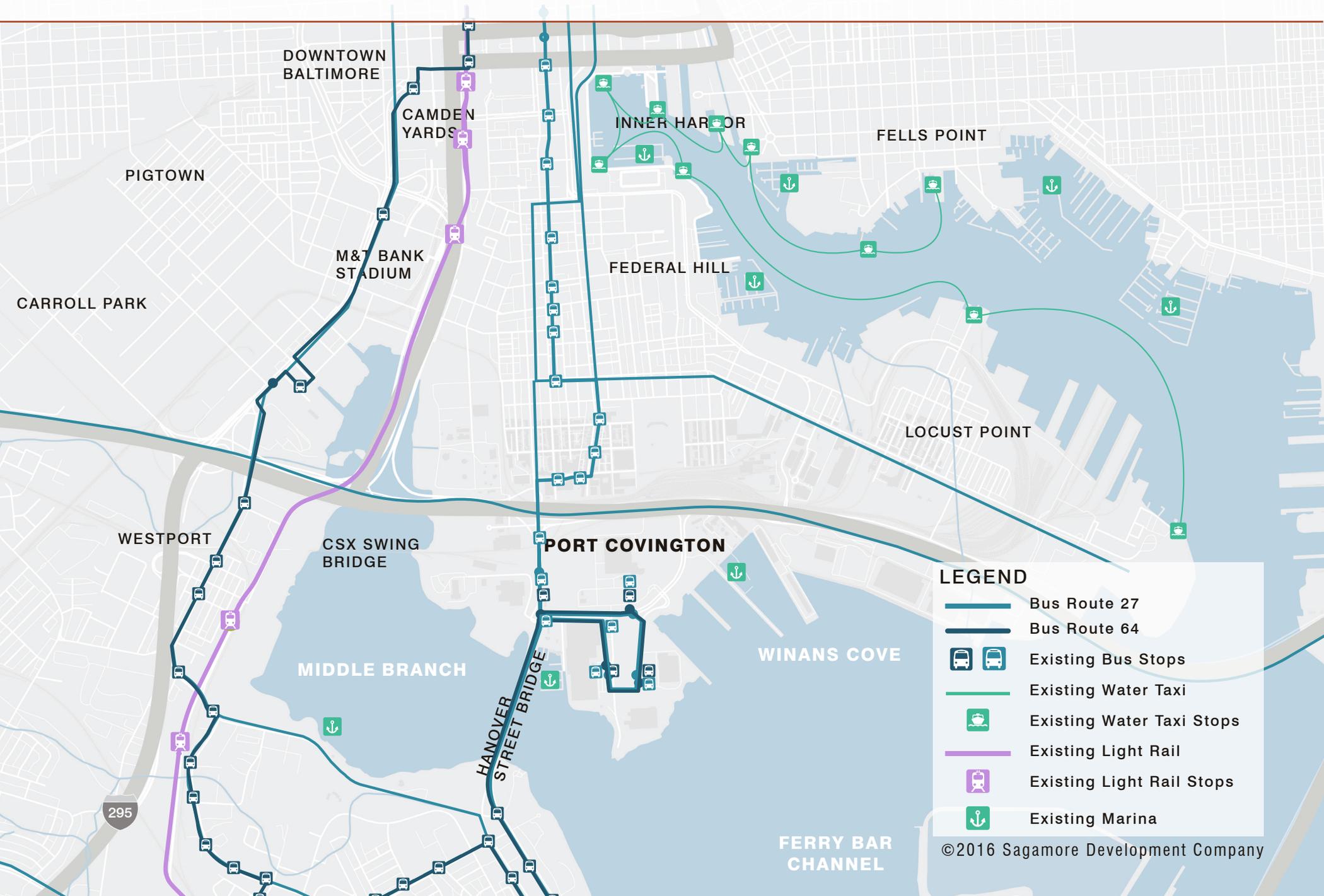
8-80



WELL USED



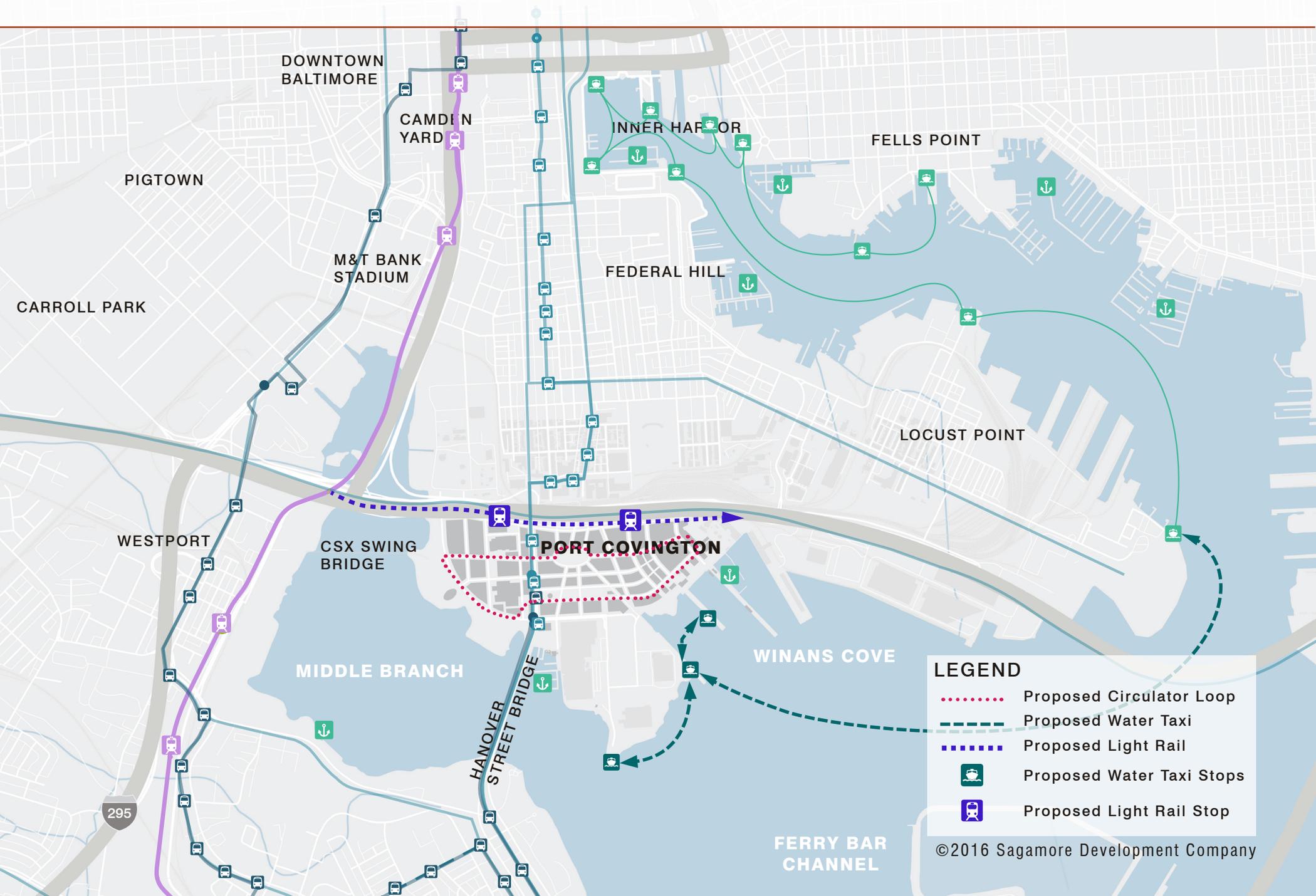
EXISTING MULTIMODAL TRANSPORTATION NETWORK



LEGEND

- Bus Route 27
- Bus Route 64
- Existing Bus Stops
- Existing Water Taxi
- Existing Water Taxi Stops
- Existing Light Rail
- Existing Light Rail Stops
- Existing Marina

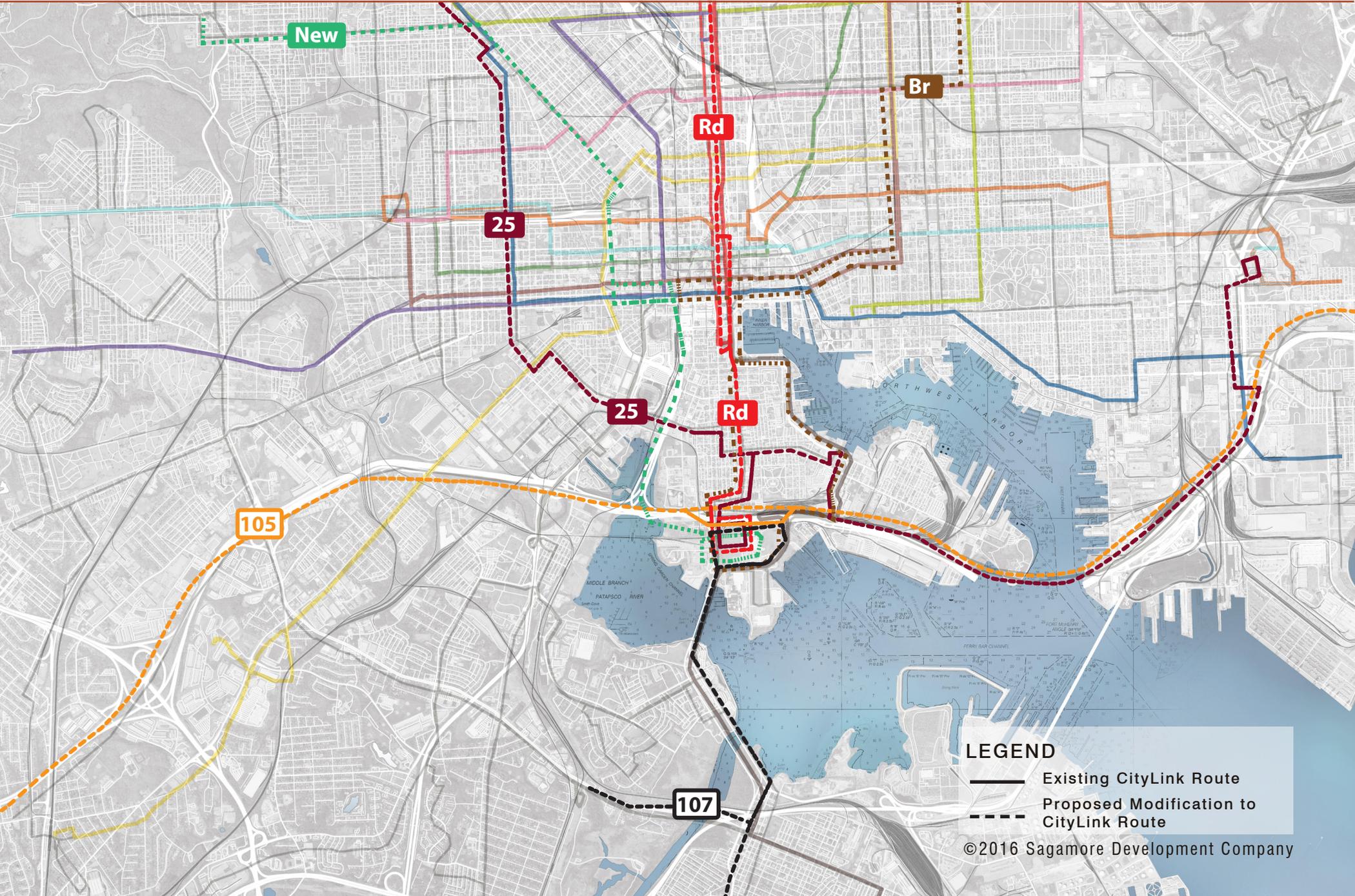
PROPOSED MULTIMODAL TRANSPORTATION NETWORK



LEGEND

- Proposed Circulator Loop
- - - - - Proposed Water Taxi
- - - - - Proposed Light Rail
-  Proposed Water Taxi Stops
-  Proposed Light Rail Stop

PROPOSED MODIFIED CITYLINK ROUTES



LEGEND

- Existing CityLink Route
- - - Proposed Modification to CityLink Route

TRANSIT CIRCULATION



LEGEND

- Modified Bus Route
- Modified Express Bus Route
- Proposed Light Rail/Metro Transit
- Proposed Light Rail Station
- Proposed Circulator
- Bike Share Station
- Proposed Water Taxi
- Proposed Water Taxi Stop

TRANSIT NETWORK

BIKE SHARE



BUS



REGIONAL



LIGHT RAIL



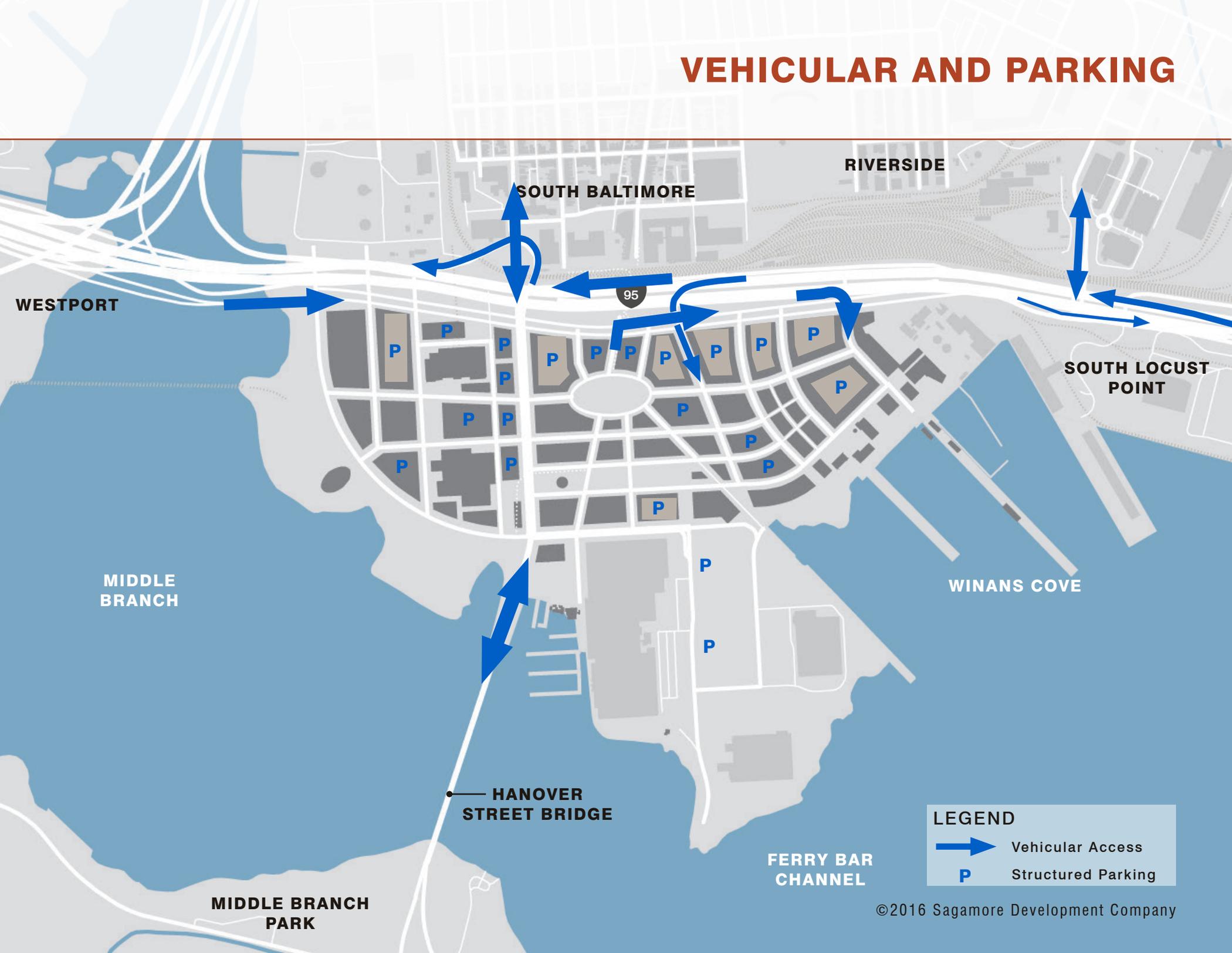
WATER TAXI



CIRCULATOR



VEHICULAR AND PARKING



WESTPORT

SOUTH BALTIMORE

RIVERSIDE

SOUTH LOCUST POINT

MIDDLE BRANCH

WINANS COVE

HANOVER STREET BRIDGE

FERRY BAR CHANNEL

MIDDLE BRANCH PARK

LEGEND

-  Vehicular Access
-  Structured Parking

STREET TYPOLOGIES



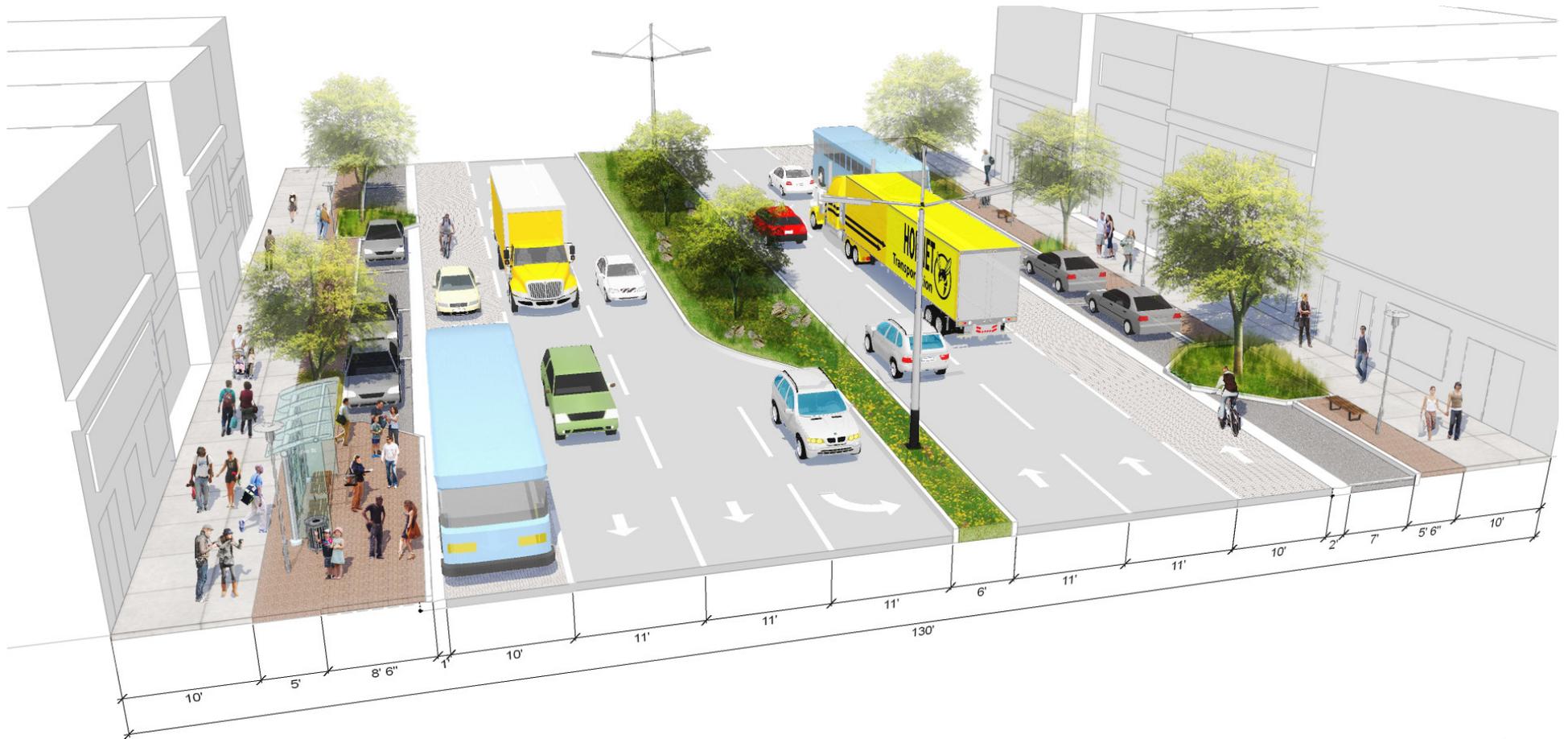
LEGEND

- Gateway Streets
- A Streets (Lifestyle)
- B Streets
- Pedestrian Only Streets
- Curbless Streets
- Entry Drive

ARTERIALS AND COLLECTORS



TYPICAL STREET SECTIONS



GATEWAY STREET

TYPICAL STREET SECTIONS

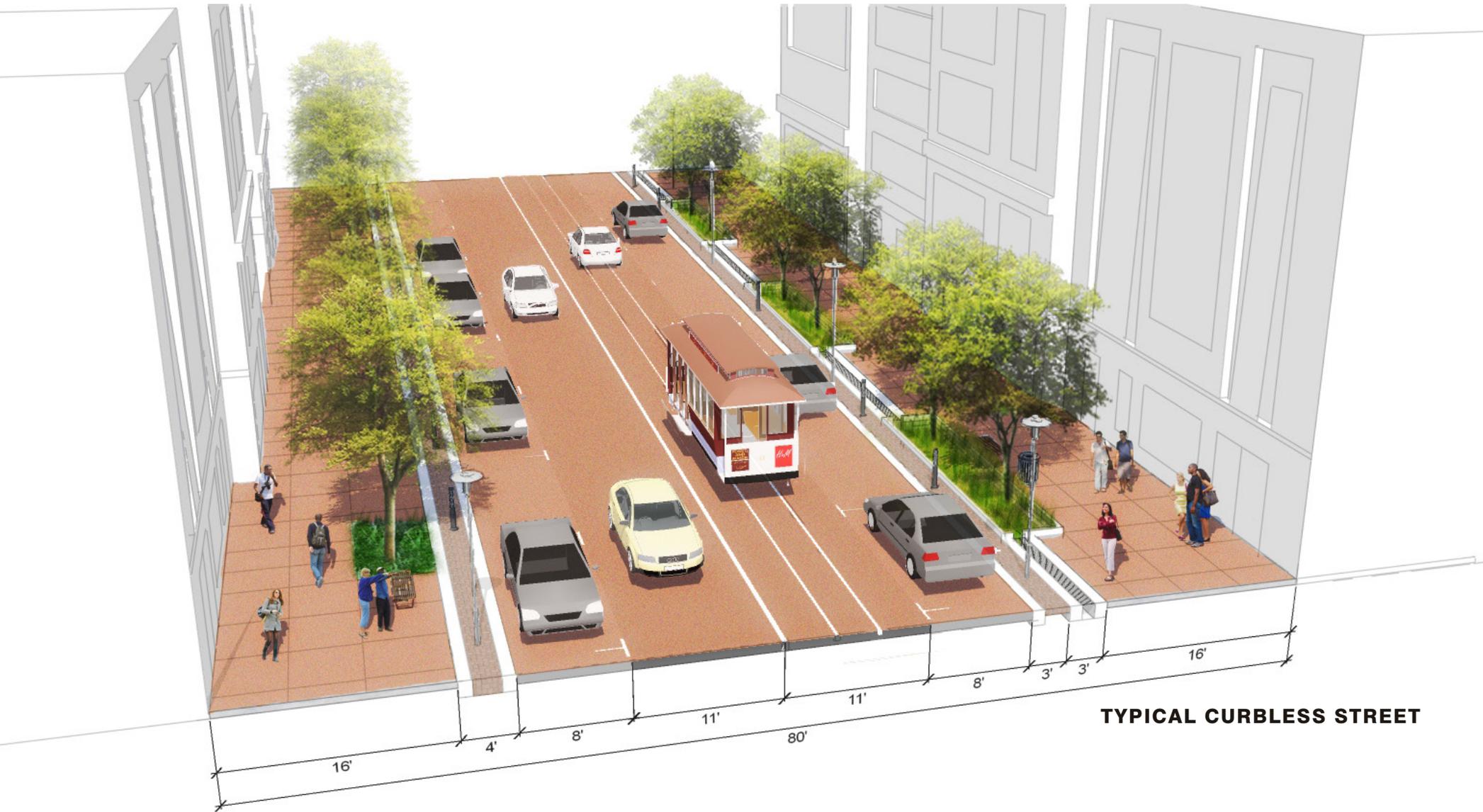


TYPICAL A STREET

TYPICAL STREET SECTIONS



TYPICAL STREET SECTIONS



TODAY- MASTERPLAN OVERVIEW AND SYSTEMS

EAST WATERFRONT PARK DESIGN

REVIEW BY DISTRICT

PHASING PLAN

COMPREHENSIVE MASTERPLAN



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OF THIS CITY.
WE ARE GOING TO HELP CREATE
SOMETHING GREAT IN THIS CITY.**

— KEVIN PLANK



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THANK YOU