NAME: _____

DATE: _____

BOOK #: _____

Port Covington

EAST WATERFRONT PARK

PRESENTATION TO THE URBAN DESIGN & ARCHITECTURE REVIEW PANEL

March 3, 2016

SAGAMORE DEVELOPMENT

Port Covington

EAST WATERFRONT PARK
Introduction

CAROLINE PAFF
Sagamore Development
Vice President

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PRIOR ACTIONS

January 28, 2016	East Waterfront Park: Schematic Action: Recommend approval with comments

RELATED PROJECTS

June 25, 2015	301 East Cromwell Street - Sagamore Spirit Distillery: Final Action: Recommend approval with comments
January 7, 2016	Port Covington Masterplan: Introduction Action: Continued
January 28, 2016	Under Armour Masterplan: Introduction Action: Recommend approval with comments
February 18, 2016	Port Covington Masterplan: Hanover Street & West of Hanover Action: Continued

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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.

Make it walkable.

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

Innovate.

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JANUARY 28, 2016 - SITE PLAN

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The Ribbon Path: Explore options and clarify a strategy for the ribbon path and how it is expressed.

The Pier Park: Consider its connection to Whiskey and designing a shelter at the water taxi landing. Also, clarify the areas of the decayed pier the design will keep and distinguish these areas in the design.

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PRESENTATION OVERVIEW

EXISTING CONDITIONS - Addison Palmer, STV Incorporated

ECOLOGICAL CONTEXT - Chris Streb, Biohabitats

LANDSCAPE - Michael Blier, Landworks Studio Inc.

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Port Covington

EAST WATERFRONT PARK
Existing Conditions

ADDISON PALMER, RLA, LEED AP

STV Incorporated
Regional Manager

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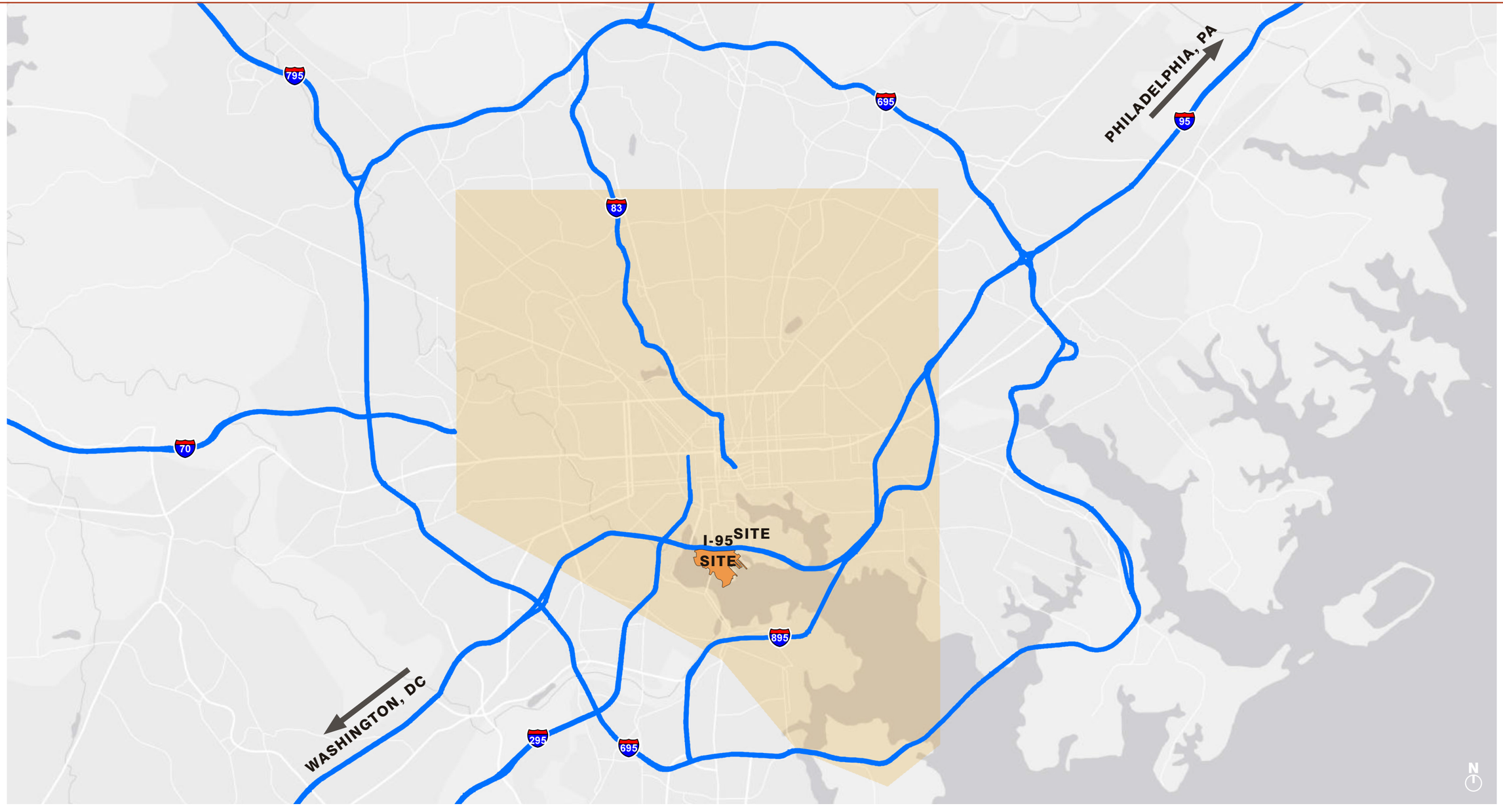
REGIONAL CONTEXT MAP



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EXISTING CONDITIONS

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ENVIRONMENTAL CONSTRAINTS

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EXISTING SITE CONDITIONS

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TODAY

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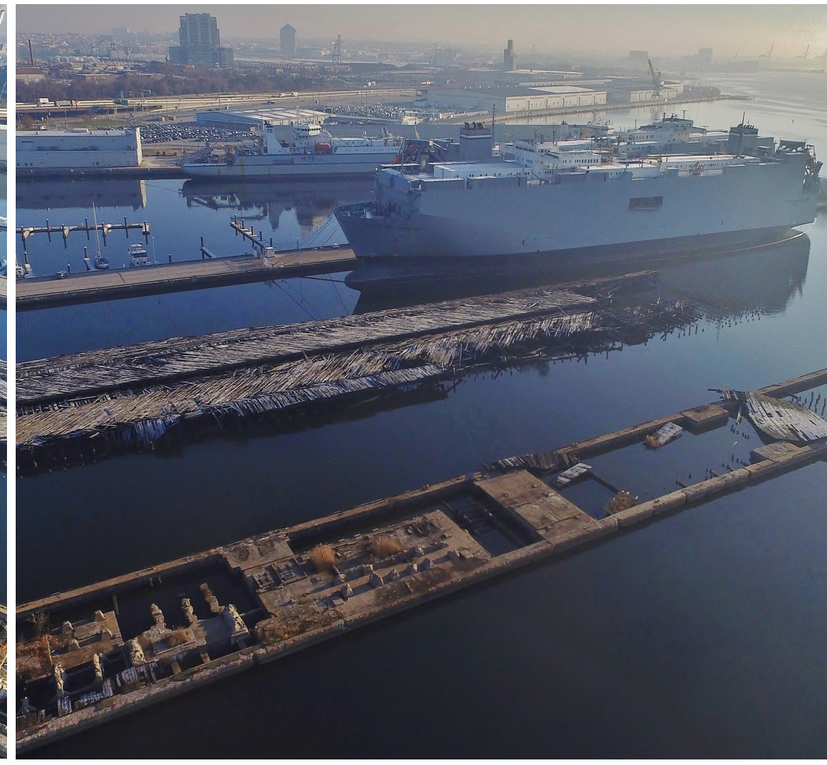
EXISTING CONDITIONS - AERIAL VIEWS



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EAST WATERFRONT PARK
Ecological Context

CHRIS STREB PE, LEED AP

Biohabitats Inc.
Ecological Engineer

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PORT COVINGTON ECOLOGICAL PRINCIPLES

LOCALLY ATTUNED

- An inspiring, innovative & ecologically sustainable community shaped by the natural landscape and cultural context of the Chesapeake Bay.

HIGH PERFORMANCE LANDSCAPE

- Ecologically adaptive, resilient and high performance urban community.

CELEBRATING WATER

- Holds water as a precious resource to be conserved, restored and celebrated.

COMMUNITY CATALYST

- Serves as a catalyst for community actions that promote ecological rejuvenation, health, and stewardship throughout the Middle Branch and Gwynns Falls watershed.

AUTHENTICITY

- Honest portrayal of the cultural, historical and ecological characteristics intrinsic to the site.

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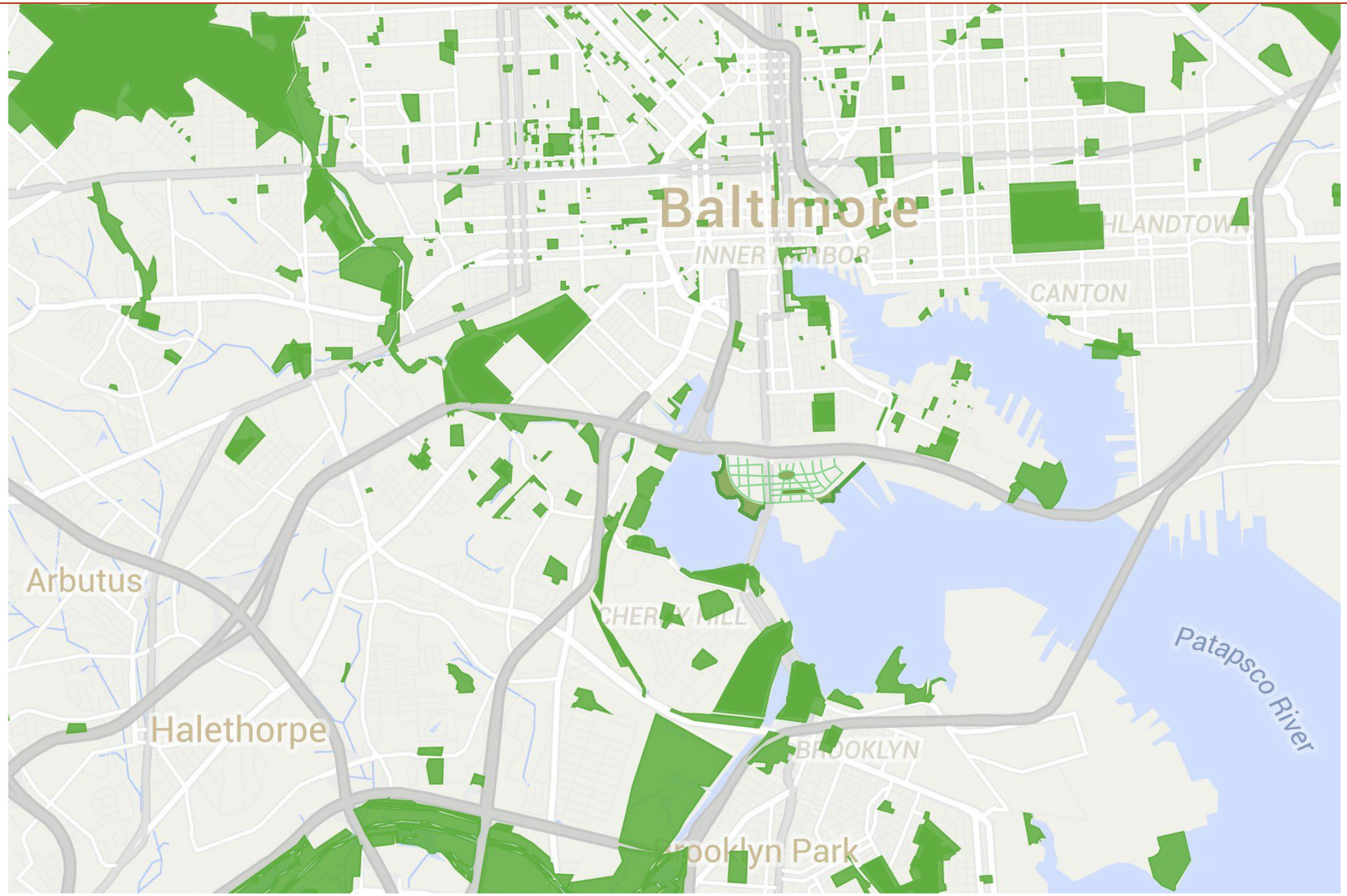
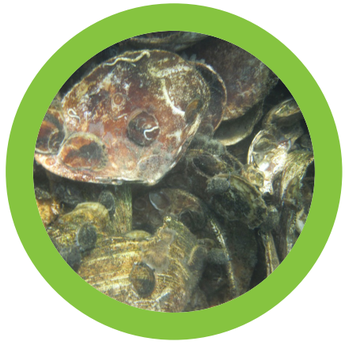
GREATER BALTIMORE URBAN WILDERNESS





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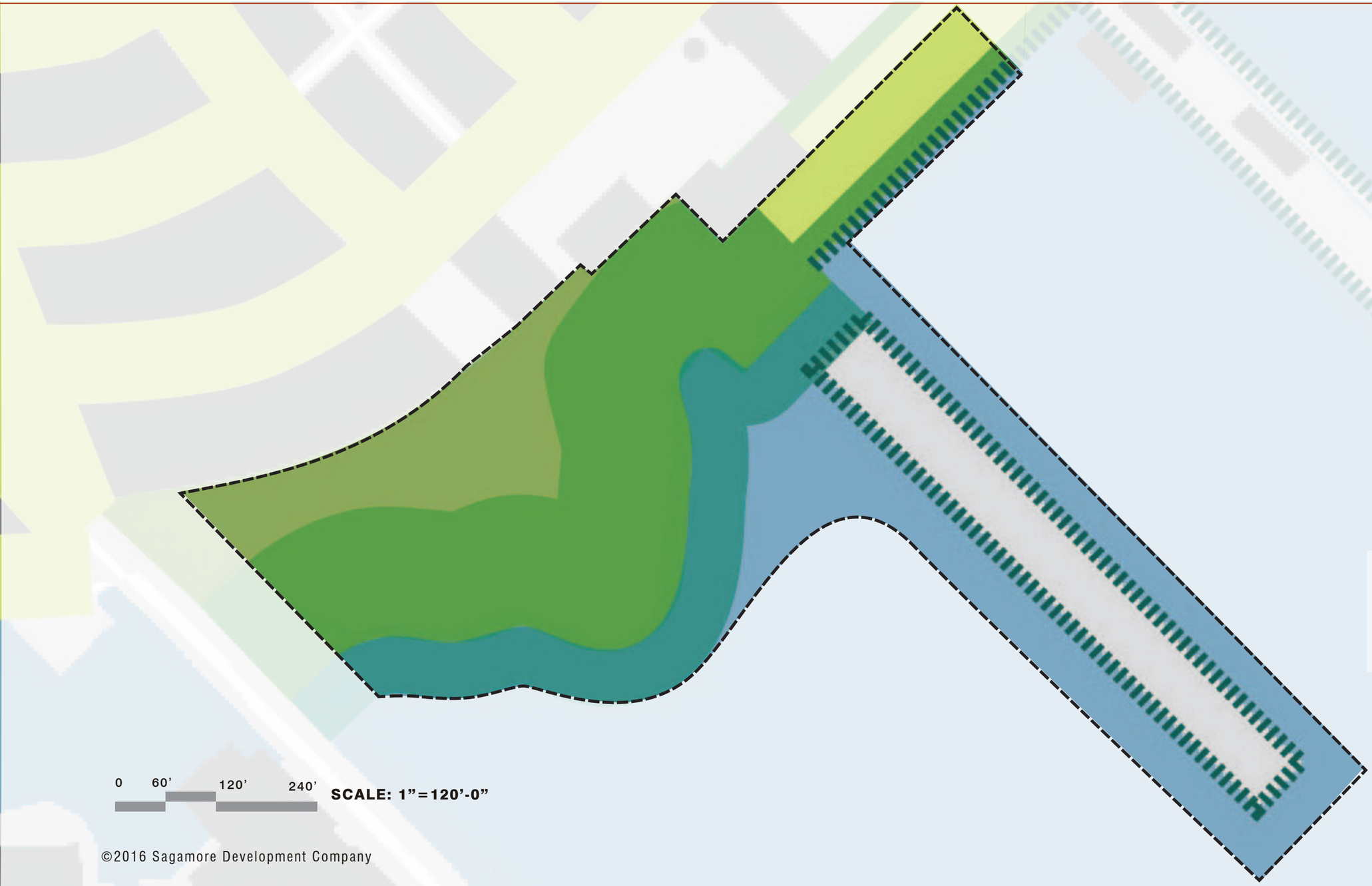
EAST WATERFRONT PARK ECOZONES



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ECOSYSTEM SERVICES - EAST PENINSULA PARK

		LANDSCAPE POSITION	METRICS
PROVISIONING	COLLECT, STORE & MANAGE WATER	UPLAND / SHORELINE (Native plantings and BMPs)	Volume of water captured vs volume used vs volume conveyed to storm drain
	FOOD/ URBAN AG	UPLAND (Planter boxes, green roofs)	Calories or lbs. grown on or near site vs imported, pre and post
	POLLINATION	UPLAND / SHORELINE (Living Shoreline and native plantings)	Pollinator surveys, pre and post; square feet of flowering plantings, pre and post
SUPPORTING	CYCLE NUTRIENTS/ WASTE	UPLAND (Compost)	Lbs. of nutrients imported/generated/exported; lbs sequestered on site; offsets; tons food waste directed to compost; lbs of materials reused on site
	HABITAT	UPLAND / SHORELINE (Living shoreline/gardens)	QHEI, # of types of habitat, species counts by habitat type, pre and post
	BUILD SOILS	UPLAND (Native planting zones/BMPs)	Cubic feet of amended soils, annual soil tests; cubc feet of soil organic matter from native plant roots
	INCREASE BIODIVERSITY	UPLAND / SHORELINE (Living shoreline /gardens)	Species counts by habitat (plant and wildlife) , pre and post
REGULATING	CONTROL FLOODING	SHORELINE (Living shoreline)	NOAA/ FEMA models - expected vs adapted; living shoreline sq ft
	EVAPOTRANSPIRATION	UPLAND / SHORELINE (Native plantings and BMPs)	itree analysis and output; volume of water captured on roofs versus released
	PROTECT SHORELINE (CRITICAL AREA BUFFER)	SHORELINE / UPLAND (Ntiave plantings)	Buffer width managed for habitat; QHEI; erosion measures pre and post
	DARK SKY COMPLIANCE	UPLAND / SHORELINE / BUILDINGS (Low intensity and timed lighting)	Pre and post measures, reduction versus typical comparable; wildlife surveys
	URBAN HEAT ISLAND	UPLAND (increased tree canopy and native plantings)	Annual/seasonal avg temps; albedo (pre and post); %IC vs %PC; NASA cities infrared analysis; micro-climate temp measurements across the site
	CARBON SEQUESTRATION	UPLAND / SHORELINE (increased tree canopy and native plantings)	Annual metric tons carbon generated vs sequestered offsets from trees; vegetation survey, pre and post; monitoring of trees for health and survival
	FILTER AIR AND WATER (SWM)	UPLAND / SHORELINE (BMPs)	itree analysis and output monitor water quality in stormwater practices
	CONTROL PESTS/ INVASIVE SPECIES	UPLAND / SHORELINE (through habitat creation)	IPM; survey of pests and nonnative invasive species, pre and post; adaptive mgt
CULTURAL	EDUCATION	UPLAND / SHORELINE (Signage, research, & outdoor classrooms)	Long term monitoring, number of educational programs (bio-blitzs) or annual student visits
	RESPITE	UPLAND / SHORELINE (Seating and trails)	Site user surveys; perception of opportunities, daily use
	AESTHETICS	UPLAND / SHORELINE (Native plantings, tree canopy)	Monumented photo sites, change over time; survey of user's perceptions of landscapes
	RECREATION	UPLAND / SHORELINE (trails connections)	Survey of pre-/post-constrction user numbers, events held; monitoring of sensitive species
	JOBS	UPLAND / SHORLINE / BUILDINGS (open space maintenance)	Jobs created: landscape maintenance, monitoring; annual & seasonal

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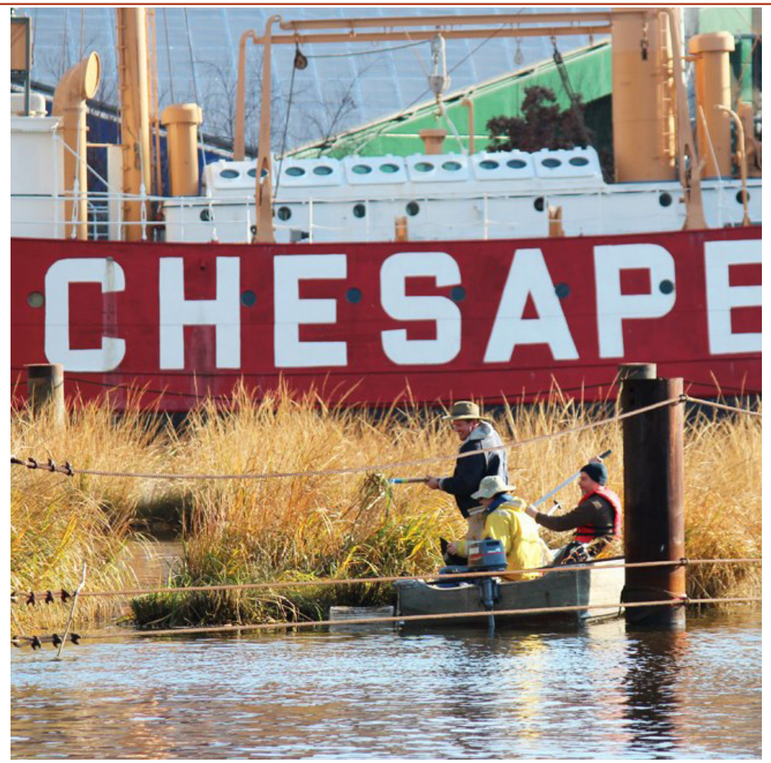
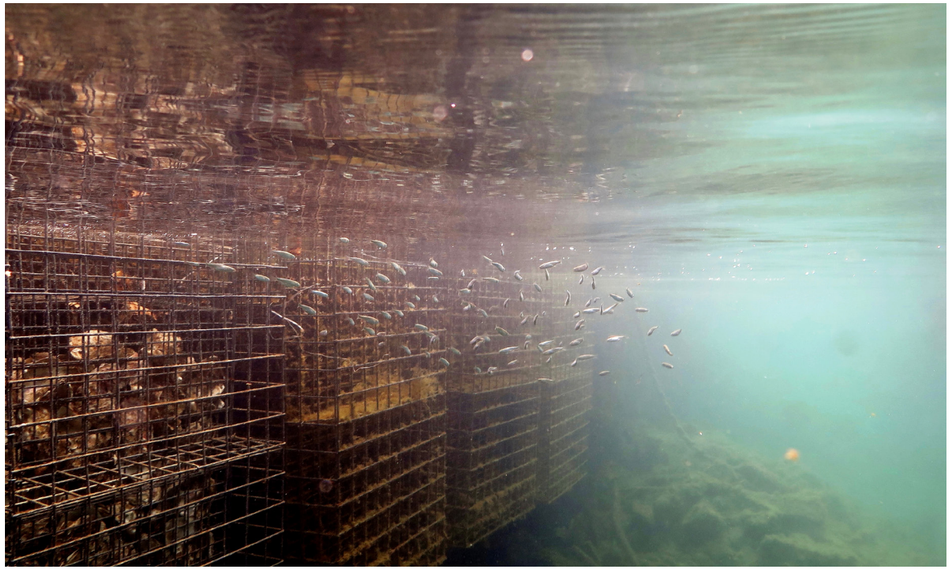
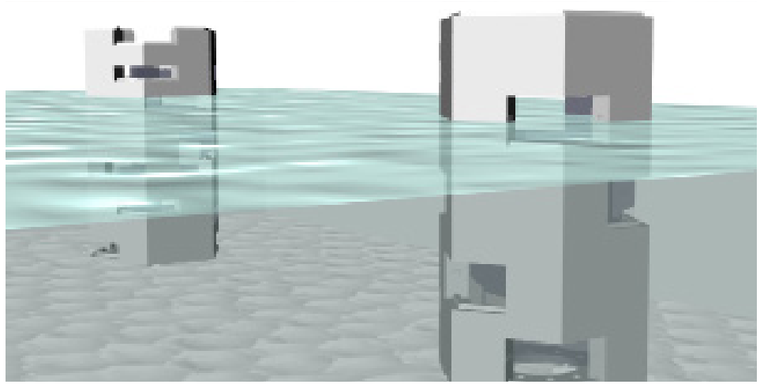
INNOVATION PLATFORM







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Port Covington

EAST WATERFRONT PARK
Landscape

MICHAEL BLIER
Landworks Studio Inc.
Principal

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EXISTING CONDITIONS

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JANUARY 28, 2016 – SITE PLAN

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SITE PLAN

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SITE PLAN – TREES HIDDEN

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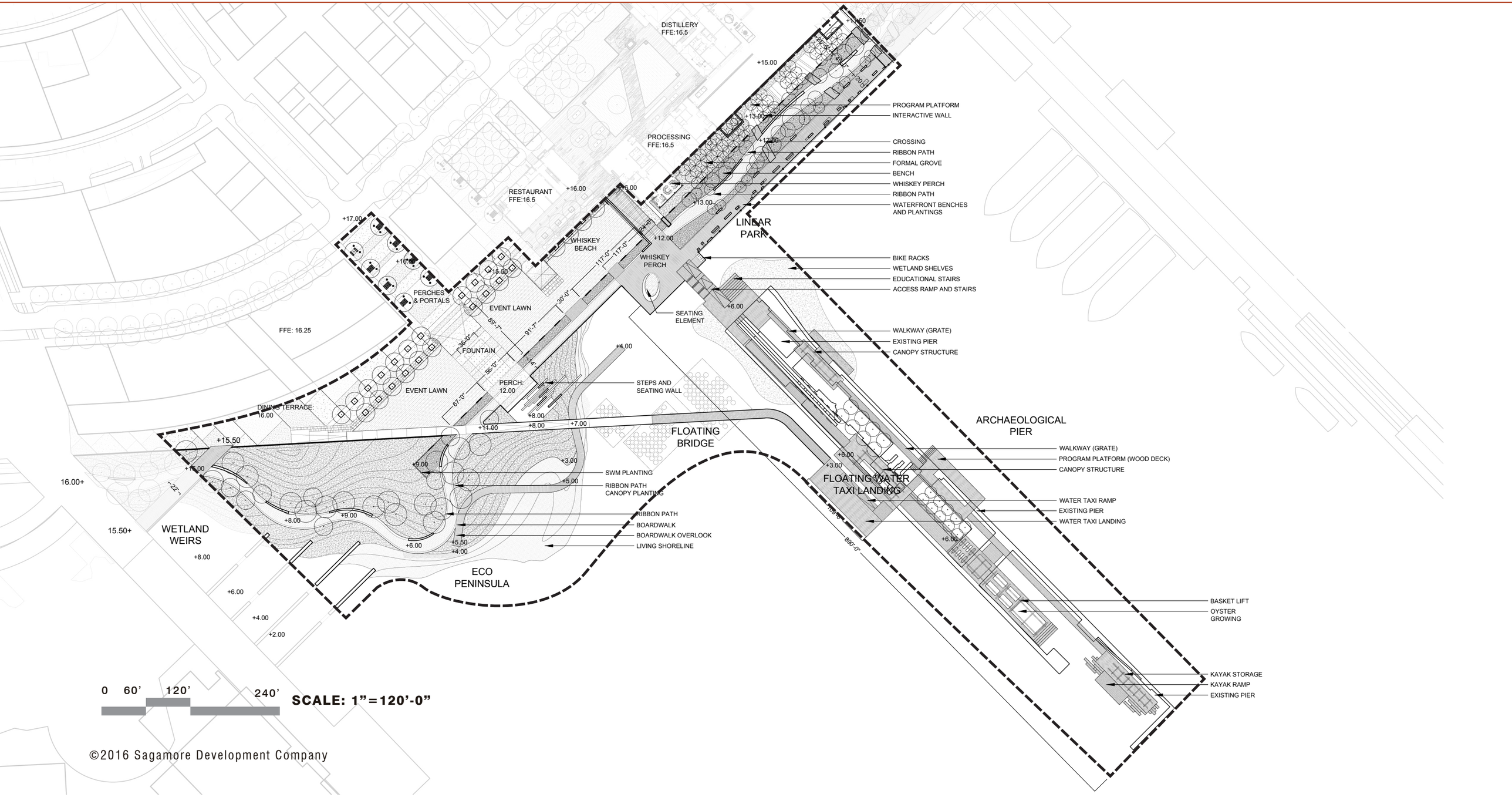
SITE PLAN



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JANUARY 28, 2016 – PERCHES & PORTALS SITE PLAN & PROGRAM

A DINING

B URBAN PERCH

C PERFORMANCE PERCH

D OVERLOOK

PERCHES & PORTALS SITE PLAN & PROGRAM

A DINING

B URBAN PERCH

C PERFORMANCE PERCH

D OVERLOOK

URBAN PERCH PLAN

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URBAN PERCH SECTION

WATER FEATURE
60’ - 0”

PERCH
40’ - 0”

PERCH STEPS
35’ - 0”

WALKWAY
12’ - 0”

MEADOW
60’ - 0”

PATH
10’ - 0”

INTERTIDAL MARSH
30’ - 0”

0 4 8 16

SCALE: 1/8” = 1’-0”

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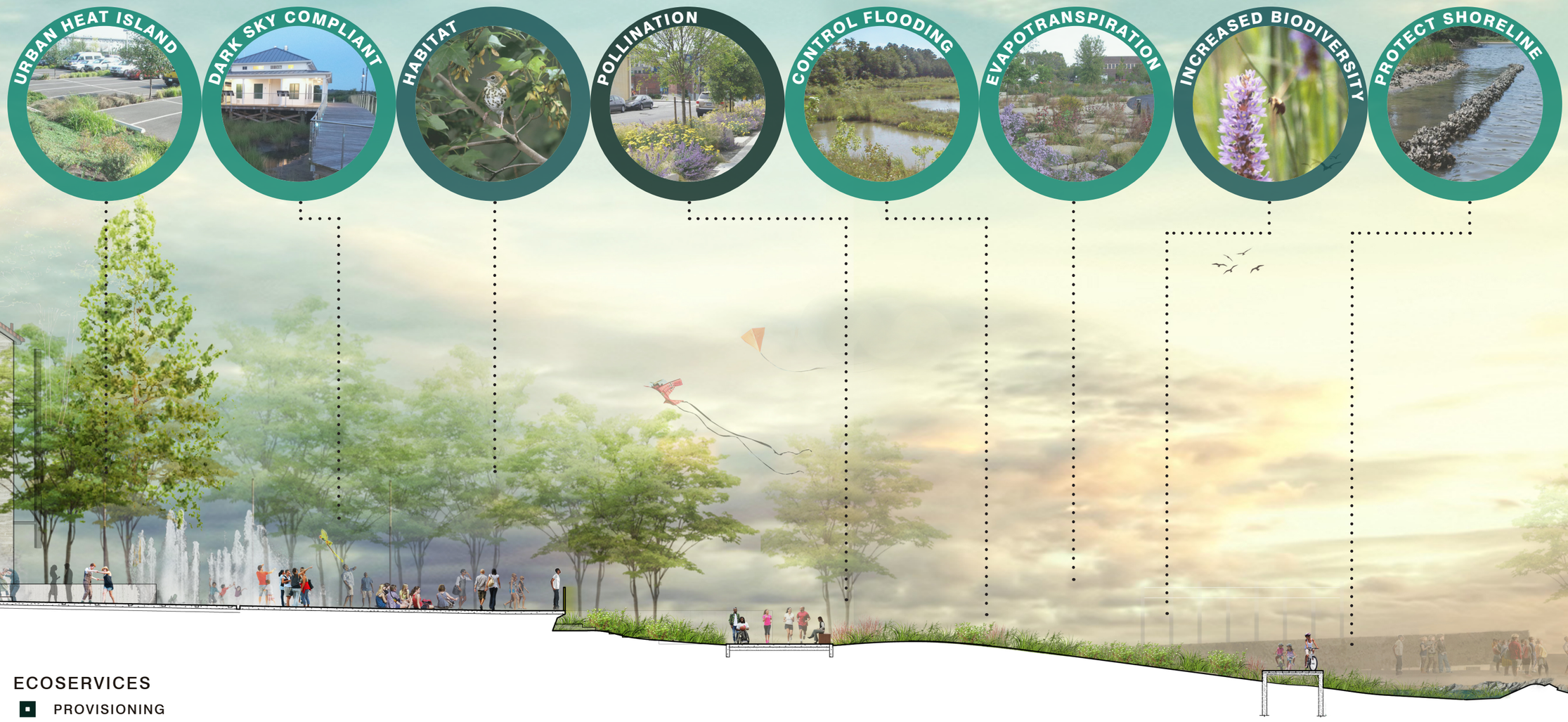
ECOSYSTEM SERVICES – URBAN PERCH



ECOSERVICES

- PROVISIONING
- SUPPORTING
- REGULATING

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PERCHES & PORTALS PERSPECTIVE

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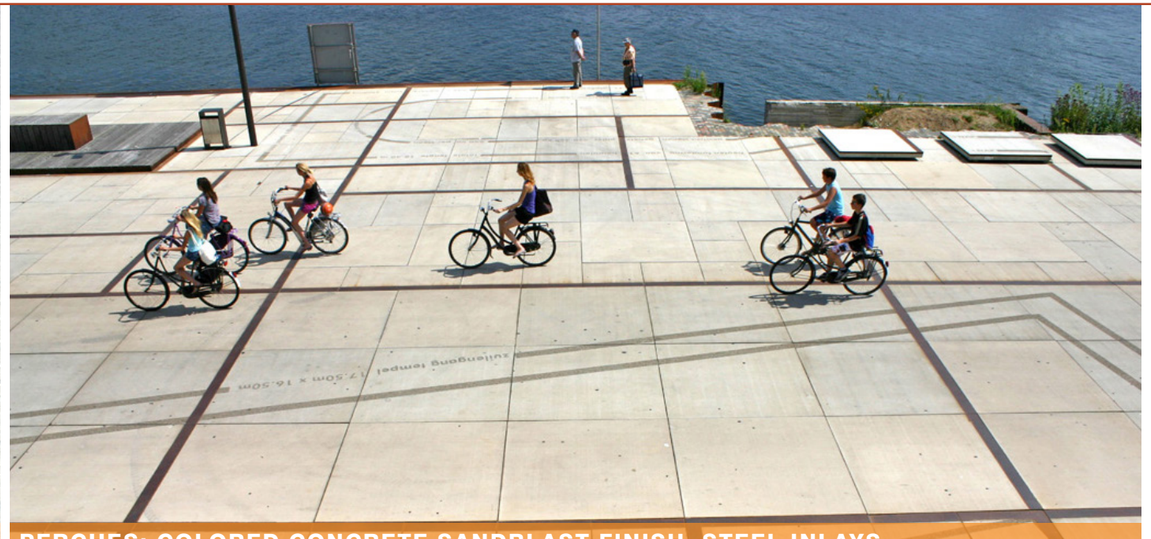
PERCHES & PORTALS MATERIALS

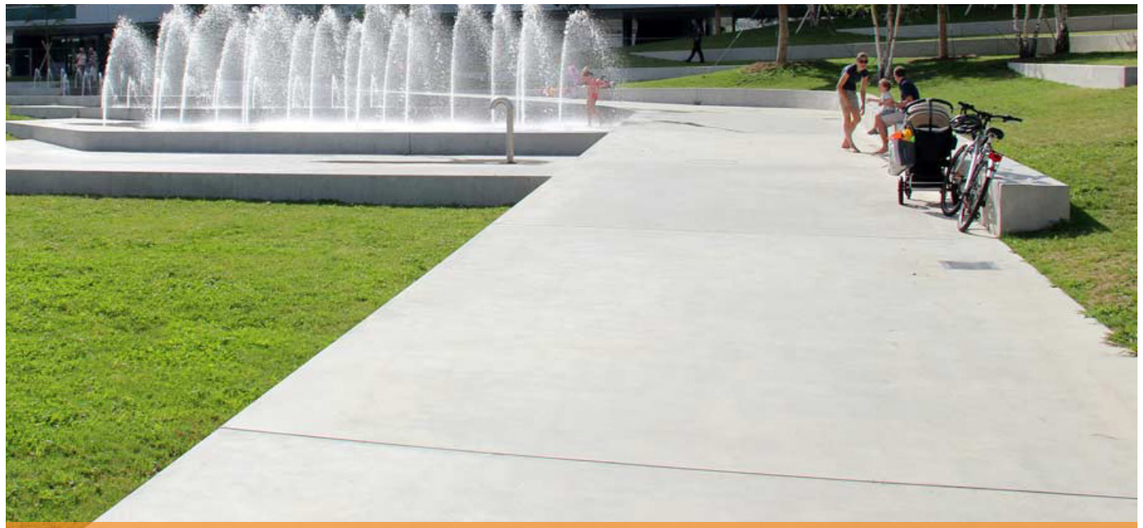
DINING TERRACE: COLORED CONCRETE WITH EXPOSED AGGREGATE



PERCHES: COLORED CONCRETE SANDBLAST FINISH, STEEL INLAYS

FOUNTAIN: STONE PAVERS

STAIRS: LIMESTONE BLOCK



WALKWAY: CIP CONCRETE

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JANUARY 28, 2016 – ECO PENINSULA SITE PLAN & PROGRAM

A WATERFRONT WALK

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B LIVING SHORELINE

C BOARDWALK

D BRIDGE CONNECTION

ECO PENINSULA SITE PLAN & PROGRAM

A WATERFRONT WALK

B LIVING SHORELINE

C BOARDWALK

D BRIDGE CONNECTION

LIVING SHORELINE AND RIBBON PATH PLAN

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LIVING SHORELINE AND RIBBON PATH SECTION

WOODLAND GROVE
VARIES

BENCH
2’ - 0”

RIBBON PATH
12’ MIN - 20’ MAX

MEADOW
25’ - 0”

INTERTIDAL MARSH
50’ - 0”

0 4 8 16

SCALE: 1/8” = 1’-0”

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ECOSYSTEM SERVICES – ECO-PENINSULA

ECOSERVICES

- PROVISIONING
- SUPPORTING
- REGULATING

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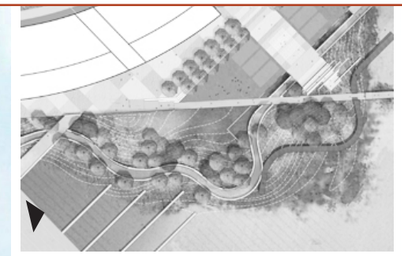
LIVING SHORELINE AND RIBBON PATH PERSEPECTIVE



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ECO PENINSULA MATERIALS

RIBBON PATH: CONCRETE EDGE, ASPHALT

BOARDWALK: IPE WOOD DECK

STAIRS: LIMESTONE AND WOOD BENCHES

STAIRS: IPE WOOD DECK

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JANUARY 28, 2016 – ARCHAEOLOGICAL PIER SITE PLAN & PROGRAM

A CONSTRUCTED WETLAND

B WATER TAXI LANDING

C OYSTER INFRASTRUCTURE

D KAYAK LANDING

EXISTING PIER

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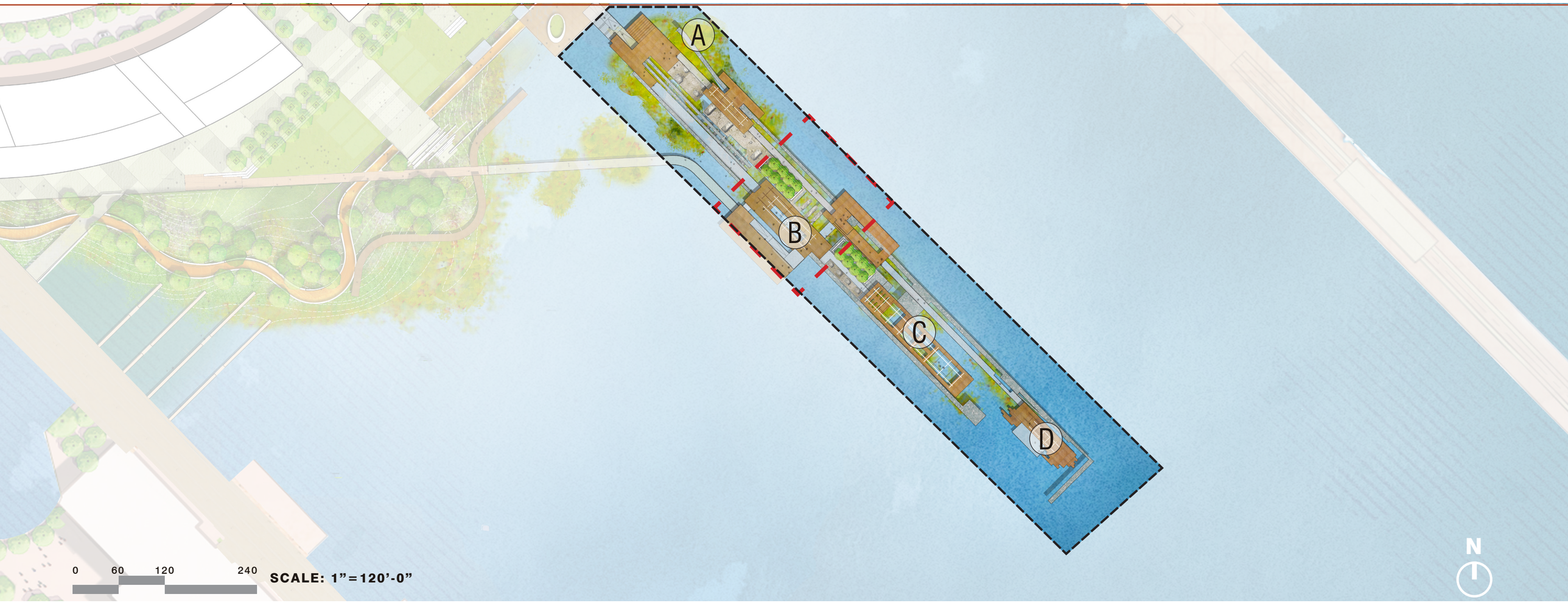
ARCHAEOLOGICAL PIER SITE PLAN & PROGRAM



A CONSTRUCTED WETLAND

B WATER TAXI LANDING

C OYSTER INFRASTRUCTURE

D KAYAK LANDING

ENLARGED EXISTING PIER

SCALE: 1” = 40’-0”

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ARCHAEOLOGICAL PIER PLAN

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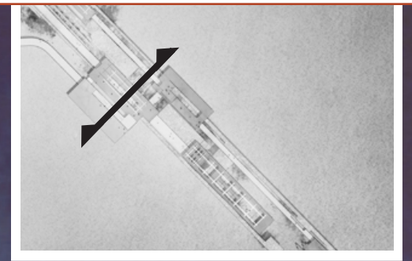
ARCHAEOLOGICAL PIER SECTION



0 4 8 16

SCALE: 1/8” = 1’-0”

WATER TAXI LANDING
30’

RAMP
10’

UPPER LANDING
15’

WETLAND
SHELF

PATH
15’

PARTIAL EXISTING PIER
30’ - 0”

PATH
8’

EXISTING PIER
80’ - 0”

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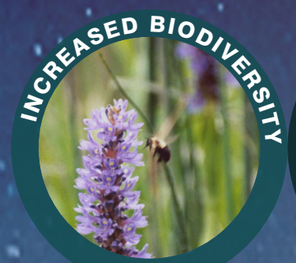
ECOSYSTEM SERVICES - ARCHAEOLOGICAL PIER



ECOSERVICES

- PROVISIONING
- SUPPORTING
- REGULATING

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ARCHAEOLOGICAL PIER PERSPECTIVE

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ARCHAEOLOGICAL PIER PERSPECTIVE

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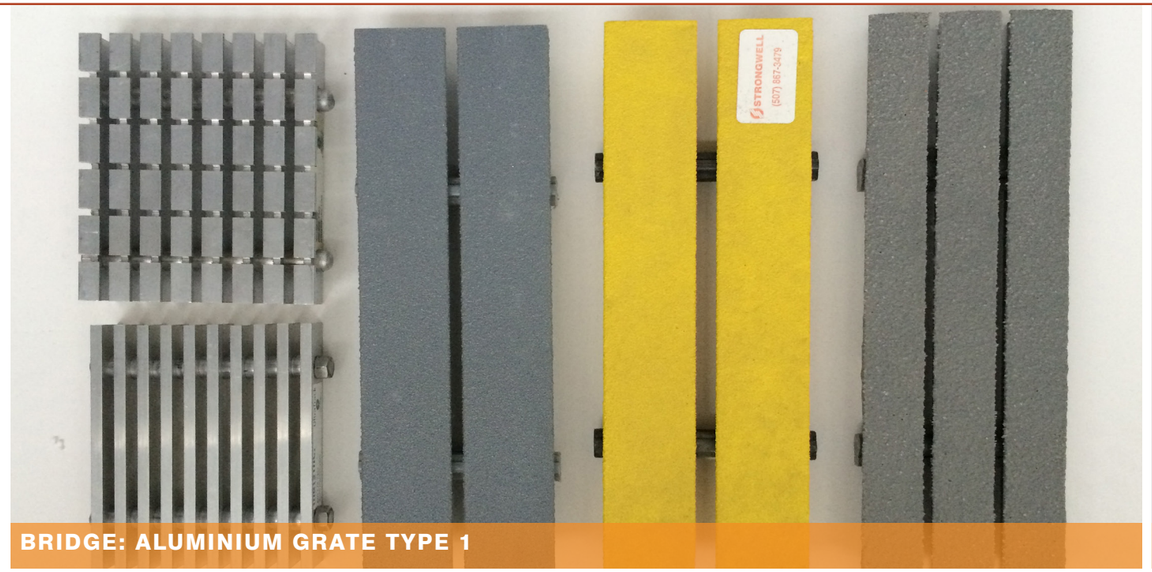
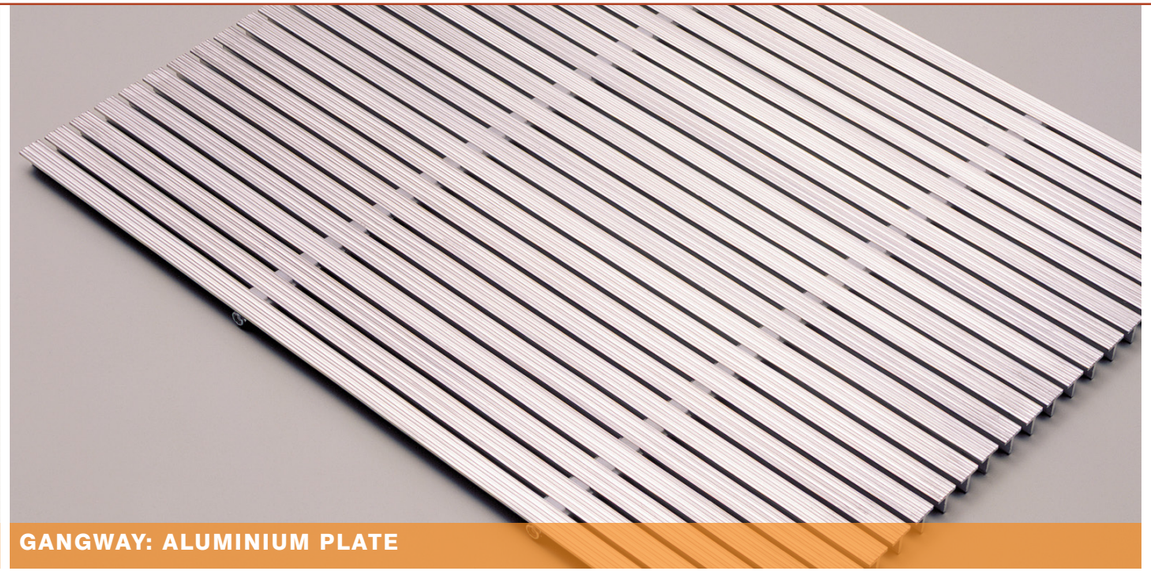
PIER MATERIALS

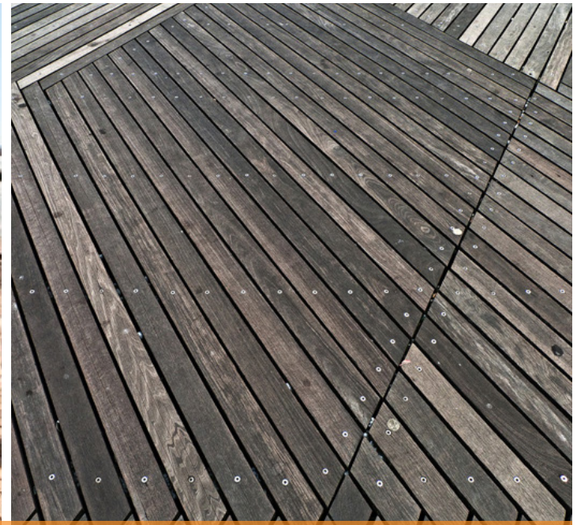


BRIDGE: ALUMINIUM GRATE TYPE 1



GANGWAY: ALUMINIUM PLATE

PLATFORMS: IPE WOOD DECK



KAYAK LANDING: POLYGRATE

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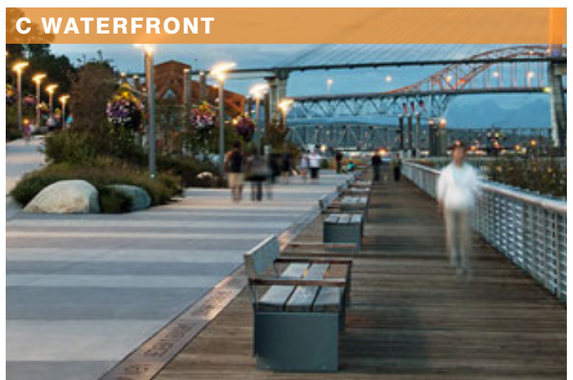
JANUARY 18, 2016 – LINEAR PARK SITE PLAN & PROGRAM

A RIBBON PATH

B ECO CORRIDOR

C WATERFRONT



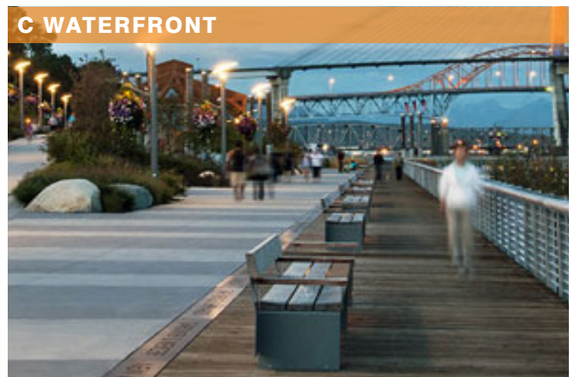
D PROGRAM ZONE

LINEAR PARK SITE PLAN & PROGRAM

A RIBBON PATH

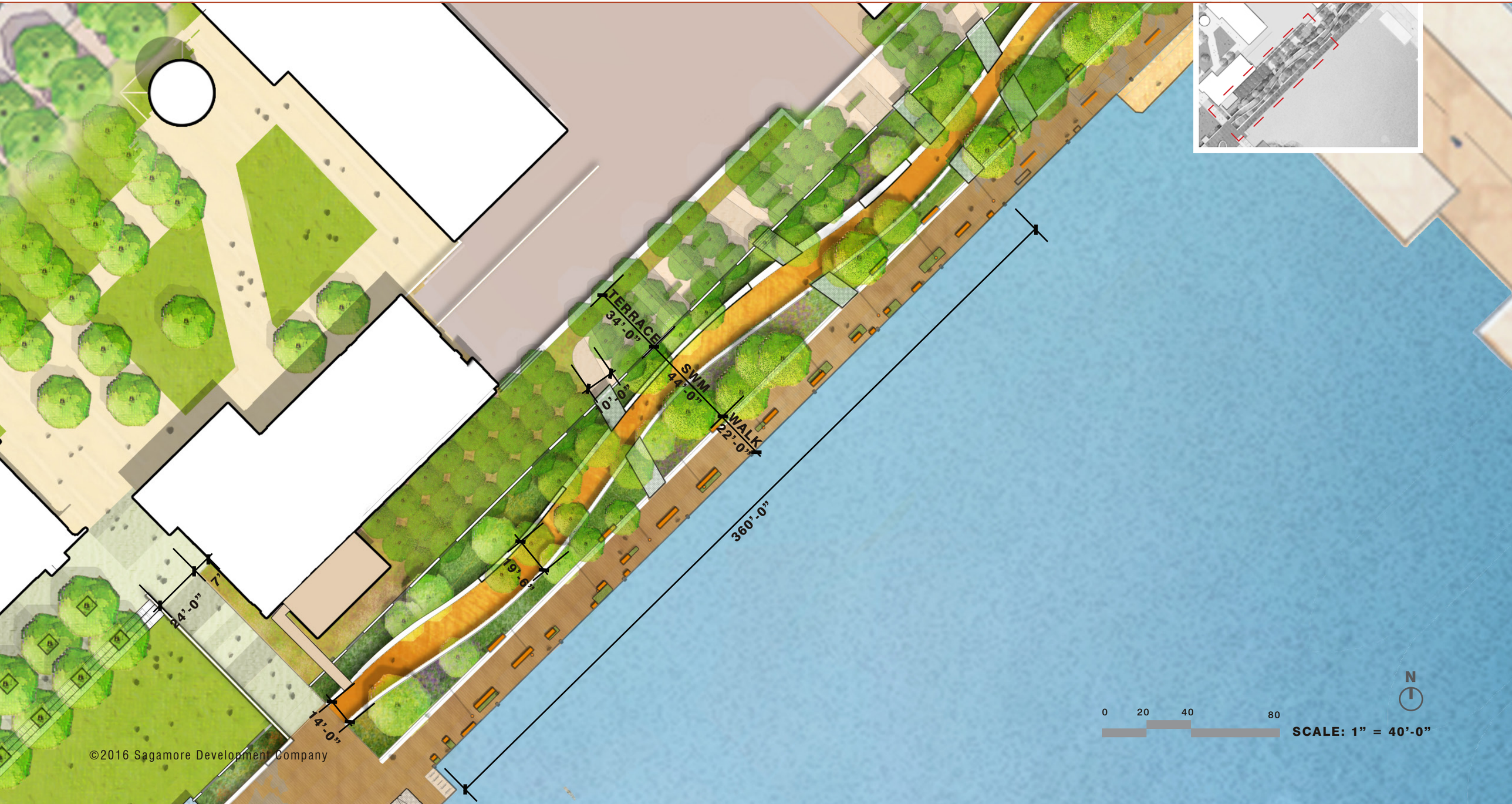
B ECO CORRIDOR

C WATERFRONT



D PROGRAM ZONE

LINEAR PARK



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LINEAR PARK SECTION

0 4 8 16

SCALE: 1/8” = 1’-0”

PROGRAM TERRACE
34’ - 0”

STORMWATER PLANTING
10’ (VARIES)

RIBBON PATH
12’ MIN - 20’ MAX

STORMWATER PLANTING
(VARIES)

WATERFRONT WALK
22’ - 0”

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ECOSYSTEM SERVICES - LINEAR PARK

ECOSERVICES

- PROVISIONING
- SUPPORTING
- REGULATING

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LINEAR PARK PERSPECTIVE

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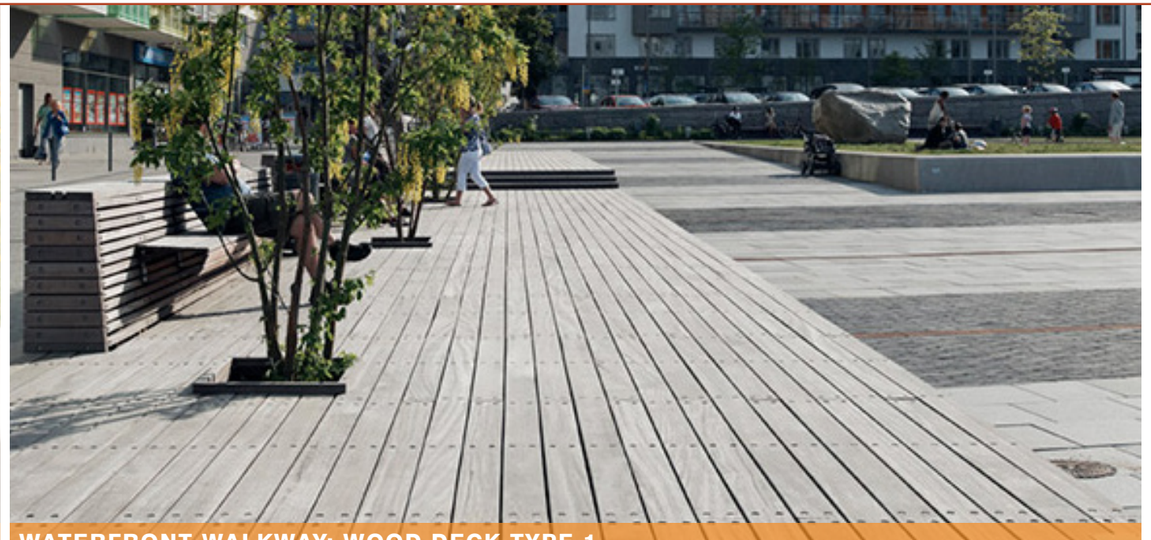
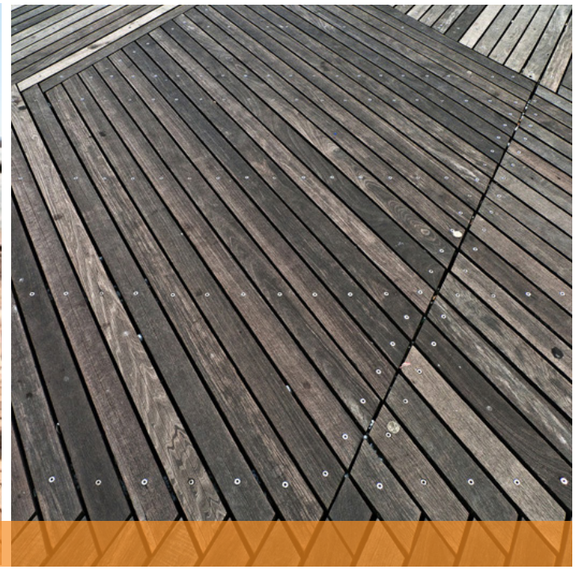
LINEAR PARK MATERIALS

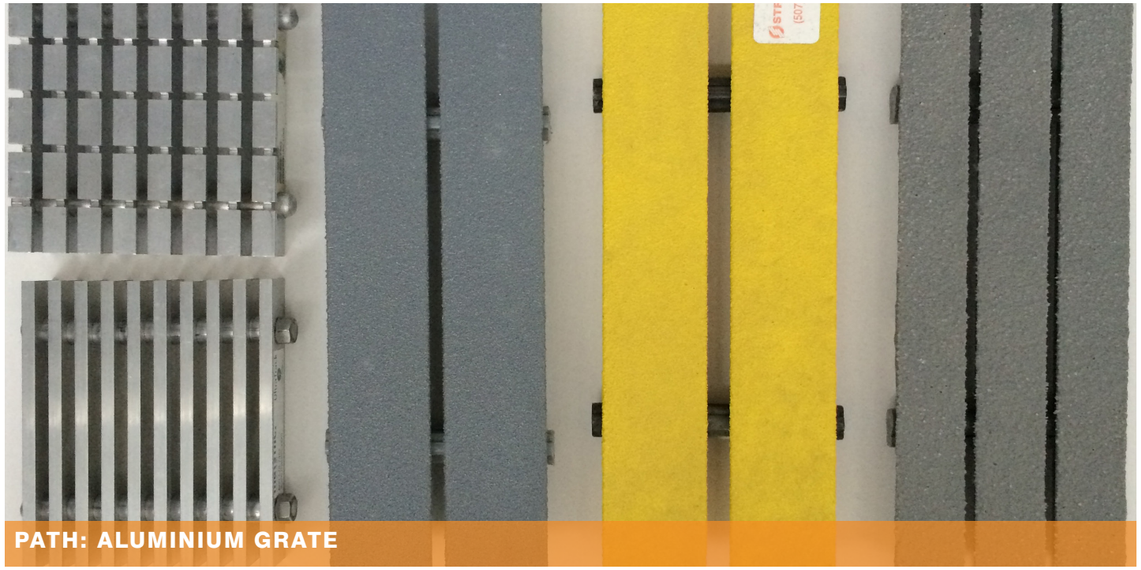
RIBBON PATH: CONCRETE EDGE, ASPHALT



WATERFRONT WALKWAY: WOOD DECK TYPE 1

PLATFORM: WOOD DECK TYPE 2





PATH: ALUMINIUM GRATE

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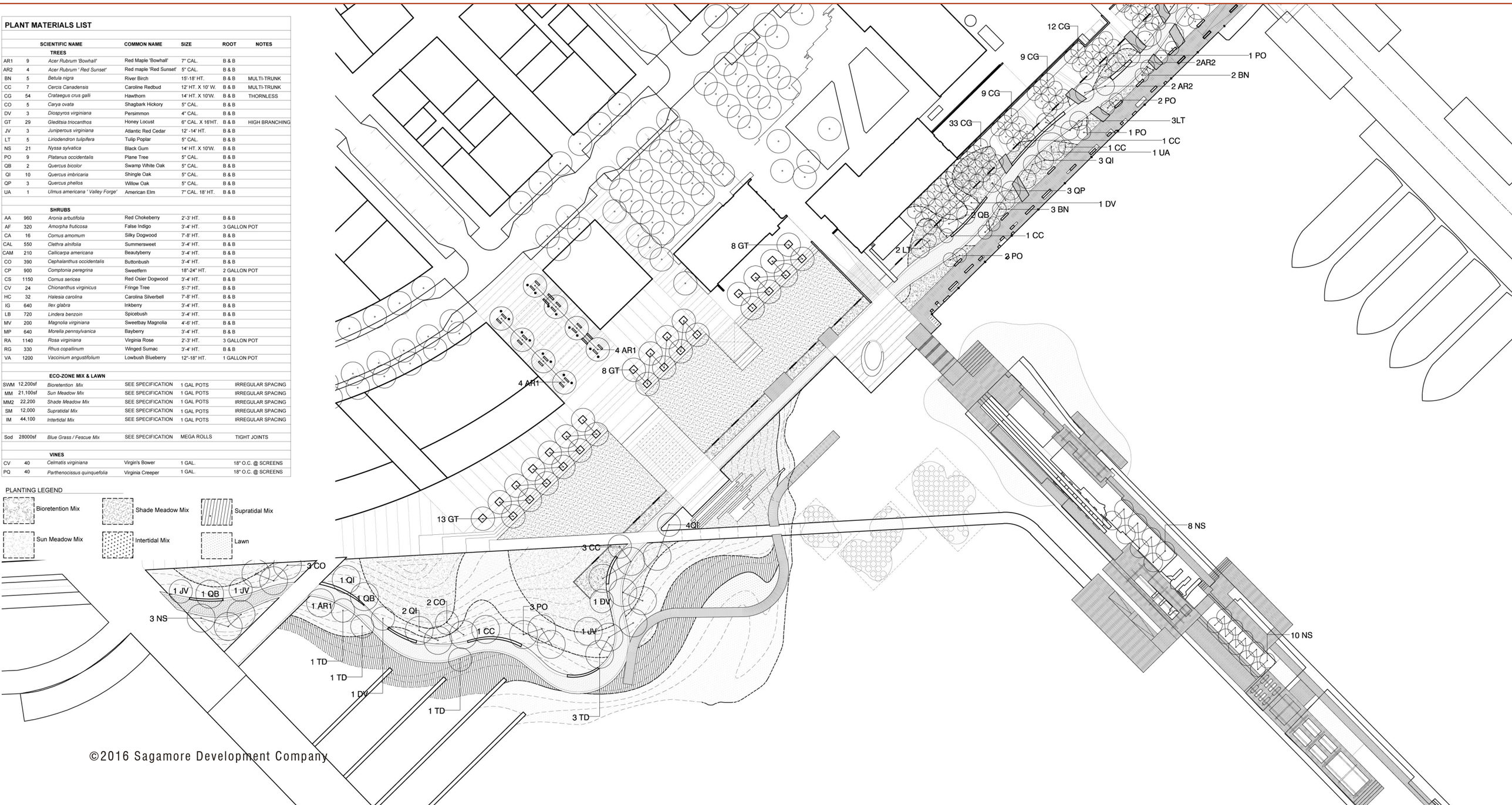
PLANTING PLAN

PLANT MATERIALS LIST

		SCIENTIFIC NAME	COMMON NAME	SIZE	ROOT	NOTES
		TREES				
AR1	9	*Acer Rubrum 'Bowhall'*	Red Maple 'Bowhall'	7" CAL.	B & B	
AR2	4	*Acer Rubrum ' Red Sunset'*	Red maple 'Red Sunset'	5" CAL.	B & B	
BN	5	*Betula nigra*	River Birch	15'-18' HT.	B & B	MULTI-TRUNK
CC	7	*Cercis Canadensis*	Caroline Redbud	12' HT. X 10' W.	B & B	MULTI-TRUNK
CG	54	*Crataegus crus galli*	Hawthorn	14' HT. X 10'W.	B & B	THORNLESS
CO	5	*Carya ovata*	Shagbark Hickory	5" CAL.	B & B	
DV	3	*Diospyros virginiana*	Persimmon	4" CAL.	B & B	
GT	29	*Gleditsia triocanthos*	Honey Locust	6" CAL. X 16'HT.	B & B	HIGH BRANCHING
JV	3	*Juniperous virginiana*	Atlantic Red Cedar	12' -14' HT.	B & B	
LT	5	*Liriodendron tulipifera*	Tulip Poplar	5" CAL.	B & B	
NS	21	*Nyssa sylvatica*	Black Gum	14' HT. X 10'W.	B & B	
PO	9	*Platanus occidentalis*	Plane Tree	5" CAL.	B & B	
QB	2	*Quercus bicolor*	Swamp White Oak	5" CAL.	B & B	
QI	10	*Quercus imbricaria*	Shingle Oak	5" CAL.	B & B	
QP	3	*Quercus phellos*	Willow Oak	5" CAL.	B & B	
UA	1	*Ulmus americana ' Valley Forge'*	American Elm	7" CAL. 18' HT.	B & B	
		SHRUBS				
AA	960	*Aronia arbutifolia*	Red Chokeberry	2'-3' HT.	B & B	
AF	320	*Amorpha fruticosa*	False Indigo	3'-4' HT.	3 GALLON POT	
CA	16	*Cornus amomum*	Silky Dogwood	7'-8' HT.	B & B	
CAL	550	*Clethra alnifolia*	Summersweet	3'-4' HT.	B & B	
CAM	210	*Callicarpa americana*	Beautyberry	3'-4' HT.	B & B	
CO	390	*Cephalanthus occidentalis*	Buttonbush	3'-4' HT.	B & B	
CP	900	*Comptonia peregrina*	Sweetfern	18"-24" HT.	2 GALLON POT	
CS	1150	*Cornus sericea*	Red Osier Dogwood	3'-4' HT.	B & B	
CV	24	*Chionanthus virginicus*	Fringe Tree	5'-7' HT.	B & B	
HC	32	*Halesia carolina*	Carolina Silverbell	7'-8' HT.	B & B	
IG	640	*Ilex glabra*	Inkberry	3'-4' HT.	B & B	
LB	720	*Lindera benzoin*	Spicebush	3'-4' HT.	B & B	
MV	200	*Magnolia virginiana*	Sweetbay Magnolia	4'-6' HT.	B & B	
MP	640	*Morella pennsylvanica*	Bayberry	3'-4' HT.	B & B	
RA	1140	*Rosa virginiana*	Virginia Rose	2'-3' HT.	3 GALLON POT	
RG	330	*Rhus copallinum*	Winged Sumac	3'-4' HT.	B & B	
VA	1200	*Vaccinium angustifolium*	Lowbush Blueberry	12"-18" HT.	1 GALLON POT	
		ECO-ZONE MIX & LAWN				
SWM	12,200sf	*Bioretention Mix*	SEE SPECIFICATION	1 GAL POTS		IRREGULAR SPACING
MM	21,100sf	*Sun Meadow Mix*	SEE SPECIFICATION	1 GAL POTS		IRREGULAR SPACING
MM2	22,200	*Shade Meadow Mix*	SEE SPECIFICATION	1 GAL POTS		IRREGULAR SPACING
SM	12,000	*Supratidal Mix*	SEE SPECIFICATION	1 GAL POTS		IRREGULAR SPACING
IM	44,100	*Intertidal Mix*	SEE SPECIFICATION	1 GAL POTS		IRREGULAR SPACING
Sod	28000sf	*Blue Grass / Fescue Mix*	SEE SPECIFICATION	MEGA ROLLS		TIGHT JOINTS
		VINES				
CV	40	*Celmatis virginiana*	Virgin's Bower	1 GAL.		18" O.C. @ SCREENS
PQ	40	*Parthenocissus quinquefolia*	Virginia Creeper	1 GAL.		18" O.C. @ SCREENS

PLANTING LEGEND

Bioretention Mix
Shade Meadow Mix
Supratidal Mix
Sun Meadow Mix
Intertidal Mix
Lawn



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UNDERSTORY PLANTING PLAN

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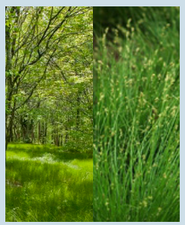
WINGED SUMAC
RHUS COPALLINUM

Height	7-15
Spread	10-20’
Form	Woody Shrub
Native	Yes

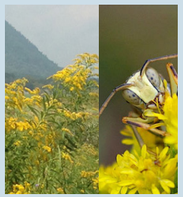


APPALACHIAN SEDGE
CAREX APPALACIA

Height	.5’
Spread	1’
Form	Grass-like
Native	Yes

LITTLE BLUESTEM
SCHIZACHYRIUM SCOPARIUM

Height	2-4’
Spread	1.5-2’
Form	Grass
Native	Yes



LATE GOLDENROD
SOLIDAGO CANADENSIS

Height	4-5’
Spread	4-5
Form	Perennial
Native	Yes

LIZARD’S TAIL
SOURUTUS CERNUUS

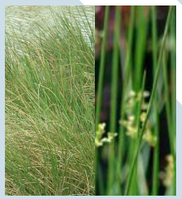
Height	1.5-4.5’
Spread	1-2’
Form	Perennial
Native	Yes

THREE SQUARE BULRUSH
SCIRPUS AMERICANUS

Height	2-4’
Spread	1-2’
Form	Grass-like
Native	Yes

MARSH HIBISCUS
HIBISCUS MOSCHEUTOS

Height	3-7’
Spread	2-4’
Form	Perennial
Native	Yes



SOFT RUSH
JUNCUS EFFUSUS

Height	1-2’
Spread	1’
Form	Grass-like
Native	Yes

CANOPY PLANTING PLAN

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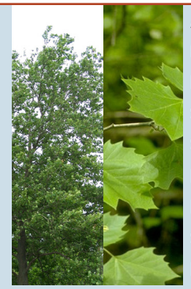
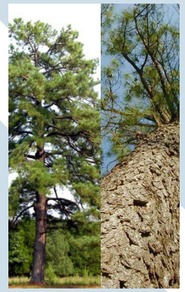


AMERICAN SYCAMORE
PLATANUS OCCIDENTALIS

Height	75-100’
Spread	50-70’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	No
Pollution	Yes

BLACK GUM
NYSSA SYLVATICA

Height	30-50’
Spread	20-30’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	No
Pollution	No

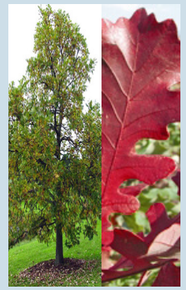


LOBLOLLY PINE
PINUS TAEDA

Height	40-90’
Spread	20-40’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	No
Pollution	Yes

SHINGLE OAK
QUERCUS IMBRICARIA

Height	40-60’
Spread	40-60
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	Yes
Pollution	Yes



BUR OAK
QUERCUS MACROCARPA

Height	60-90’
Spread	60-90’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	Yes
Pollution	Yes

EASTERN REDBUD
CERCIS CANADENSIS

Height	15-30’
Spread	15-25’
Shape	
Root	No Surface Roots
Flower	Purple
Salt	Yes
Pollution	Yes

WILLOW OAK
QUERCUS PHELLOS

Height	50-70’
Spread	40-60’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	Yes
Pollution	Yes

BLACK LOCUST
ROBINIA PSEUDOACACIA

Height	30-50’
Spread	20-35’
Shape	▼
Root	No Surface Roots
Flower	Tiny Yellow/Green
Salt	Yes
Pollution	Yes

GRADING PLAN

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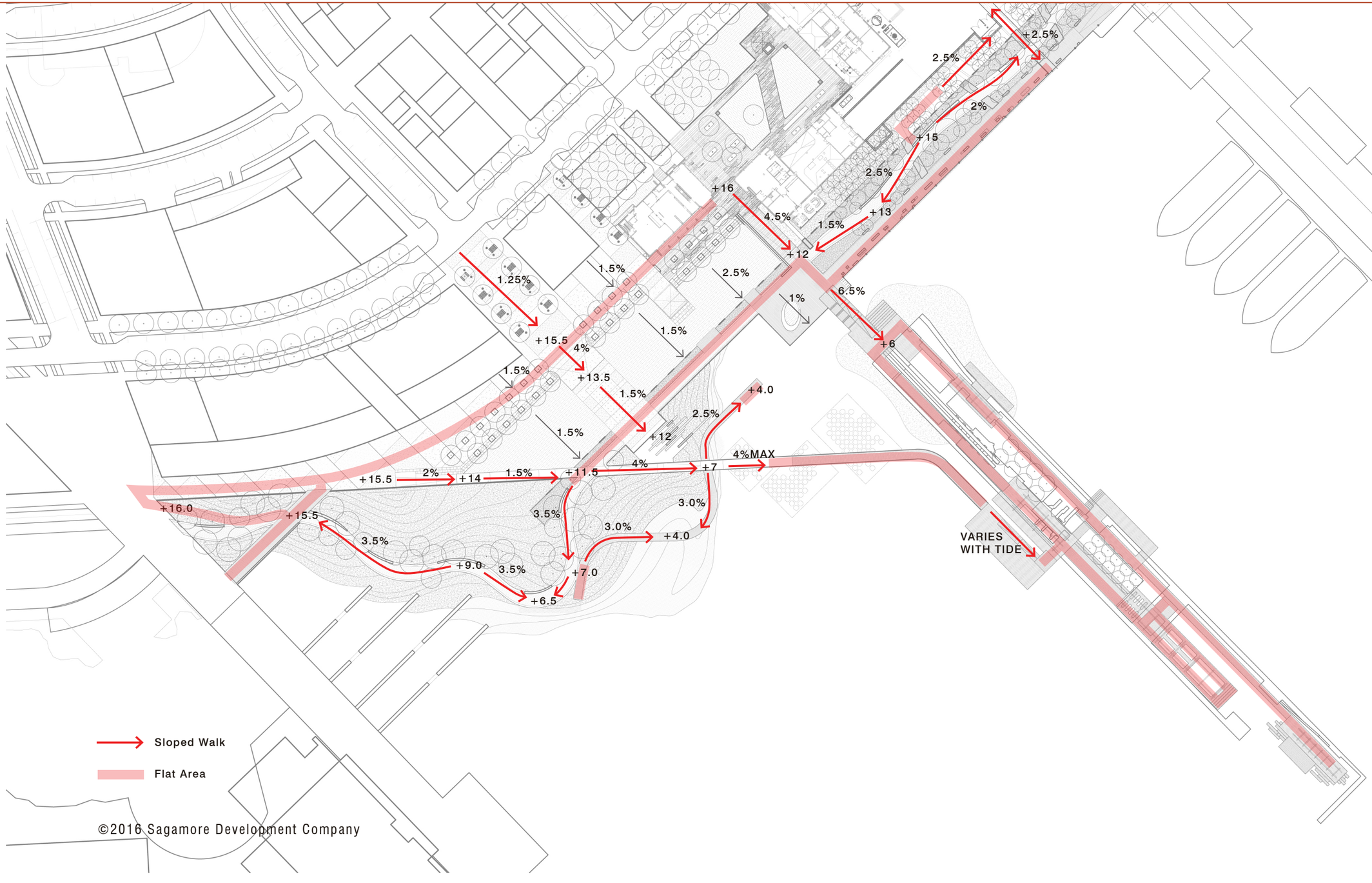
ADA ACCESSIBLE ROUTES



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SITE PLAN

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BIRDSEYE VIEW

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NEXT STEPS

Continued Final Design

Signage

Lighting

Next Great Baltimore Bench

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WE ARE FROM THIS CITY.
OF THIS CITY.
WE ARE GOING TO HELP CREATE
SOMETHING GREAT IN THIS CITY.
— KEVIN PLANK
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