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

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

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.

JANUARY 28, 2016 - SITE PLAN

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.

PRESENTATION OVERVIEW

EXISTING CONDITIONS - Addison Palmer, STV Incorporated

ECOLOGICAL CONTEXT - Chris Streb, Biohabitats

LANDSCAPE - Michael Blier, Landworks Studio Inc.

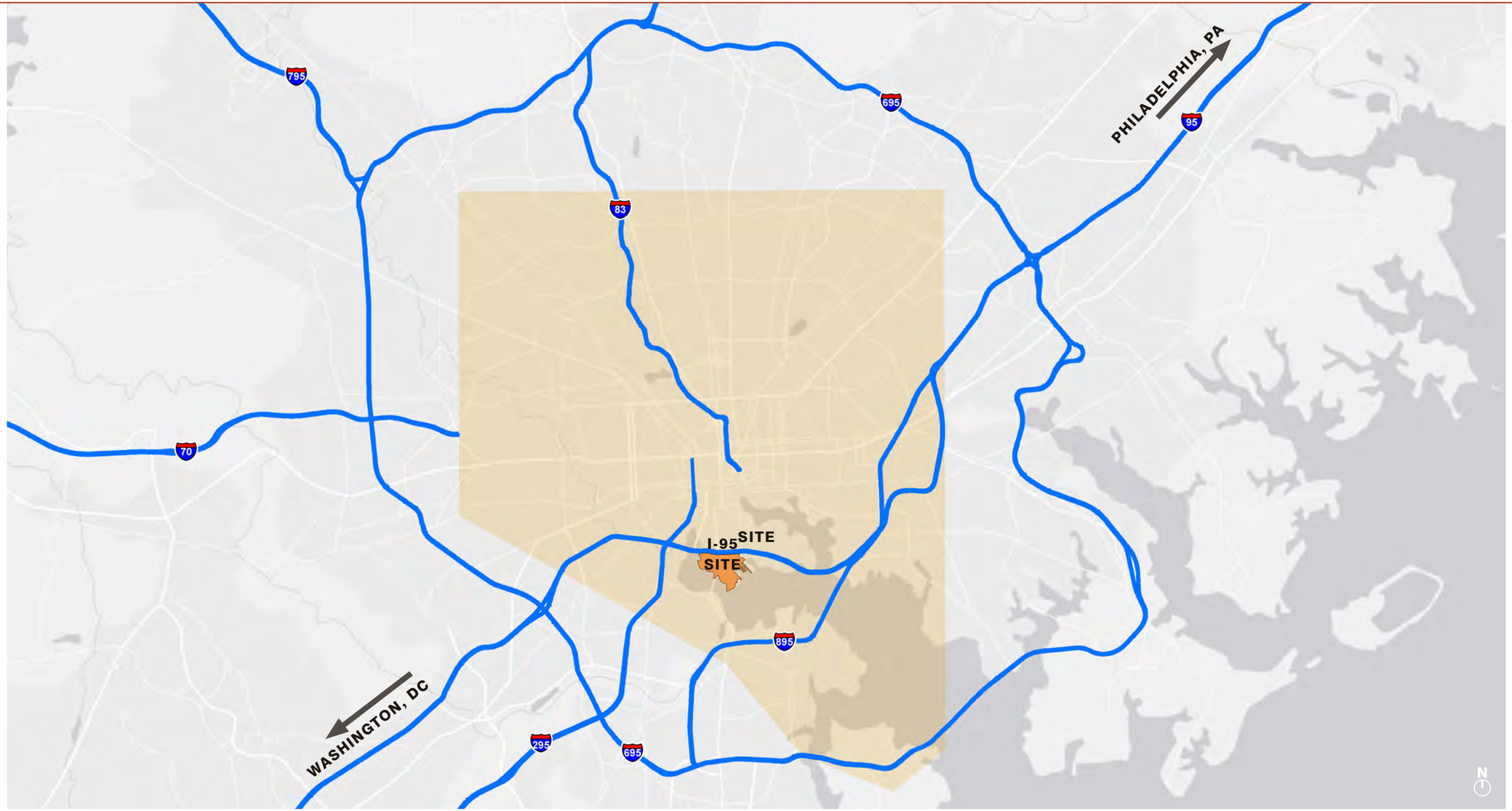
Port Covington

EAST WATERFRONT PARK
Existing Conditions

ADDISON PALMER, RLA, LEED AP

STV Incorporated
Regional Manager

REGIONAL CONTEXT MAP



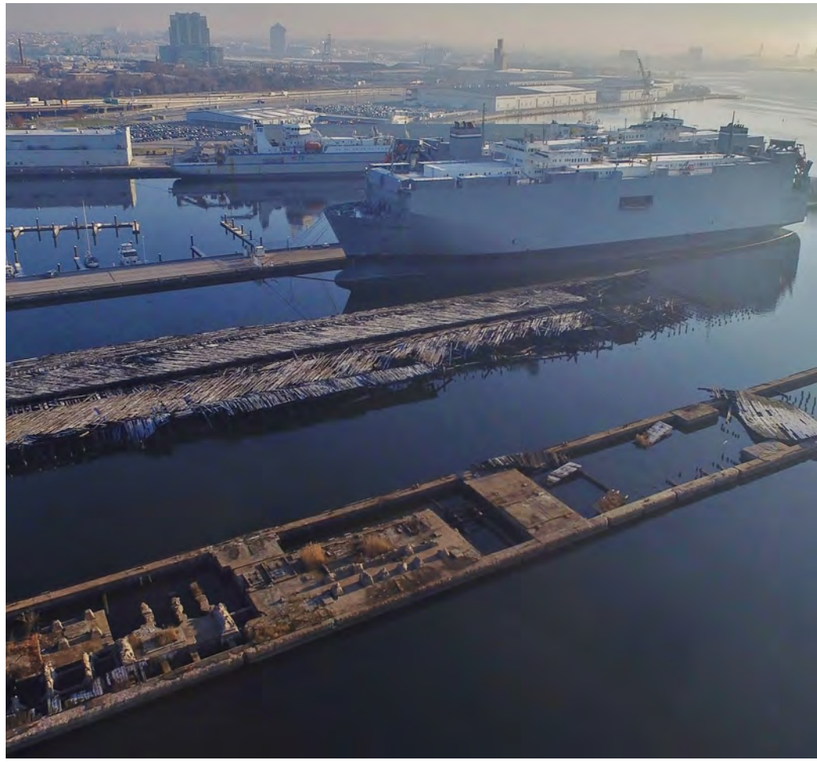
EXISTING CONDITIONS

ENVIRONMENTAL CONSTRAINTS

EXISTING SITE CONDITIONS

TODAY

EXISTING CONDITIONS - AERIAL VIEWS



Port Covington

EAST WATERFRONT PARK
Ecological Context

CHRIS STREB PE, LEED AP

Biohabitats Inc.
Ecological Engineer

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

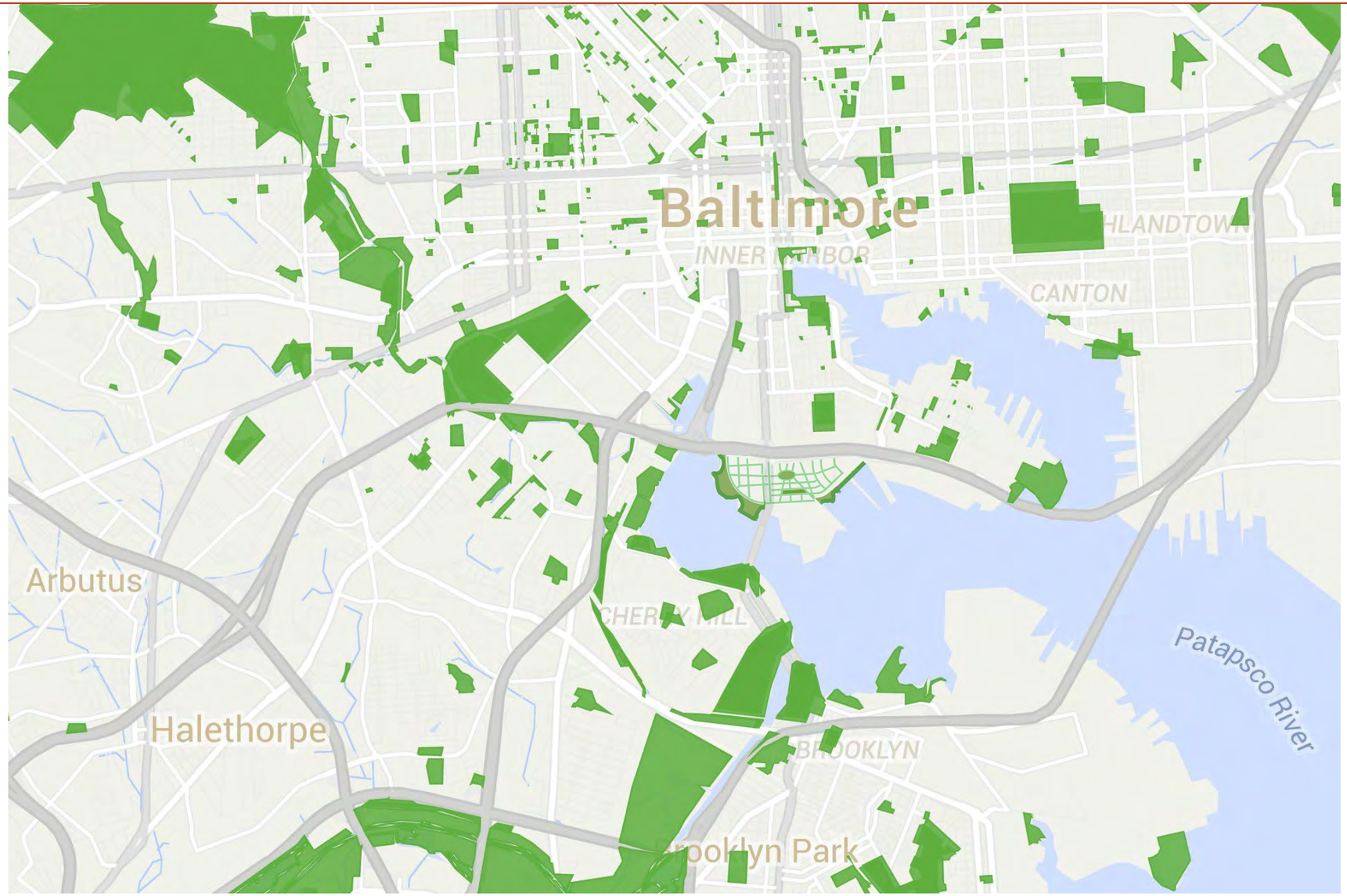
- Serves as a catalyst for community actions that promote ecological rejuvenation, health, and stewardship throughout the Middle Branch and Gwynns Falls watershed.

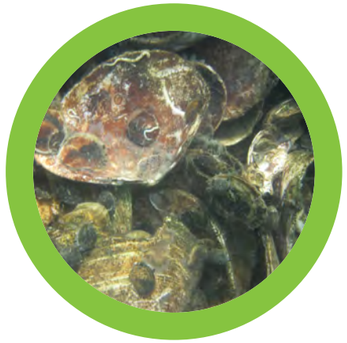
AUTHENTICITY

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

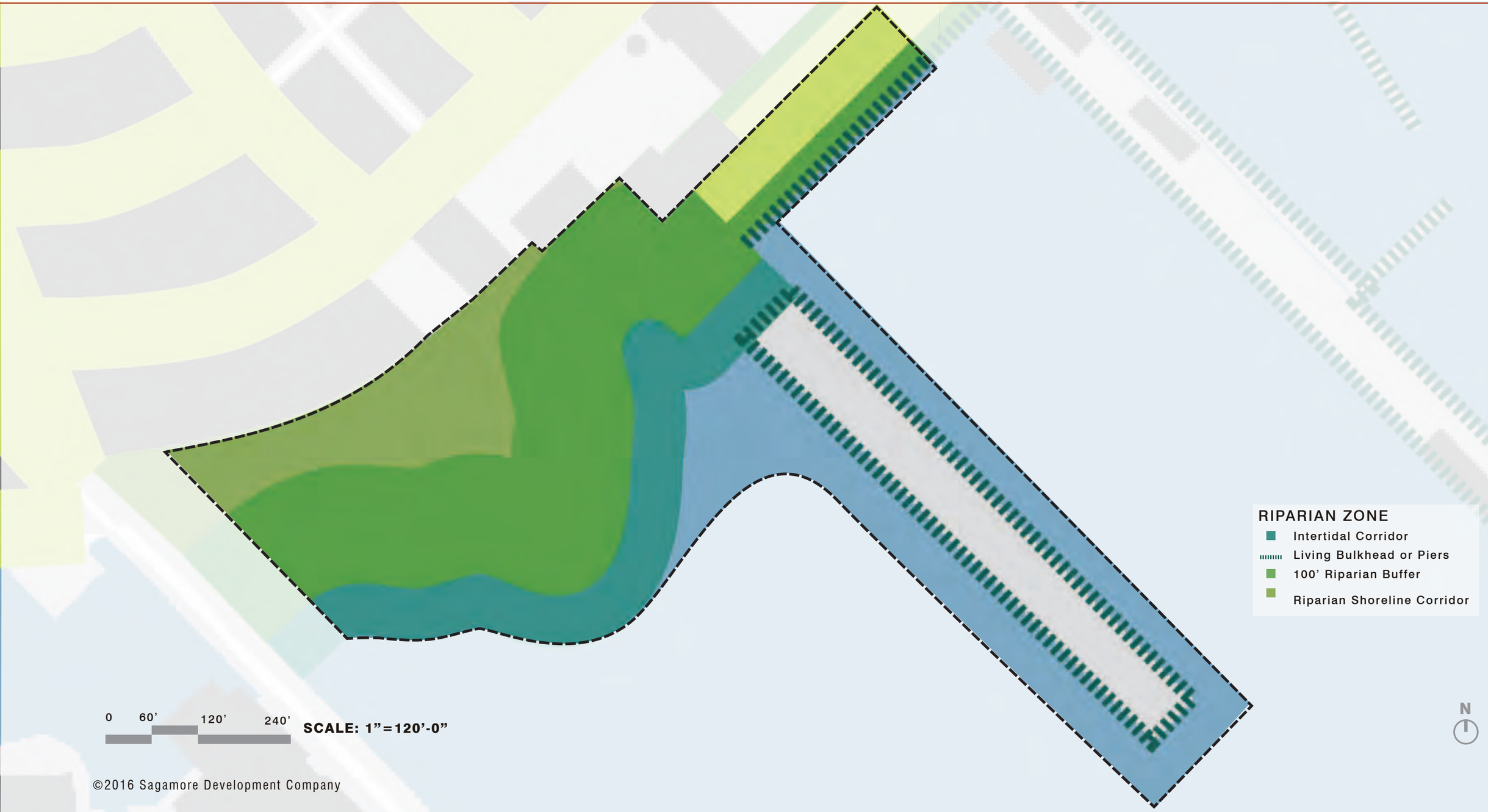
Photograph copyright ©Jennifer Dowdell

GREATER BALTIMORE URBAN WILDERNESS





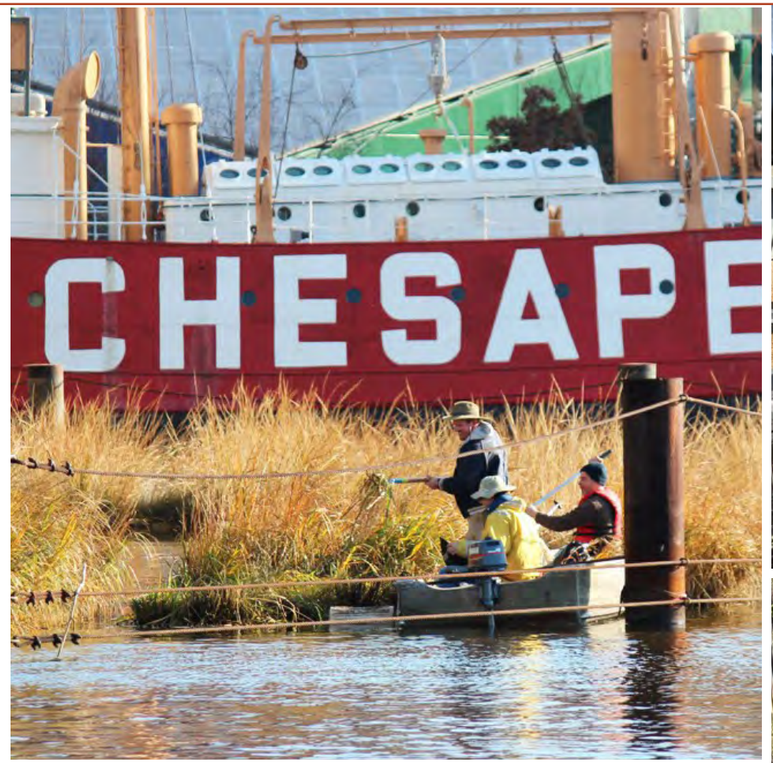
EAST WATERFRONT PARK ECOZONES

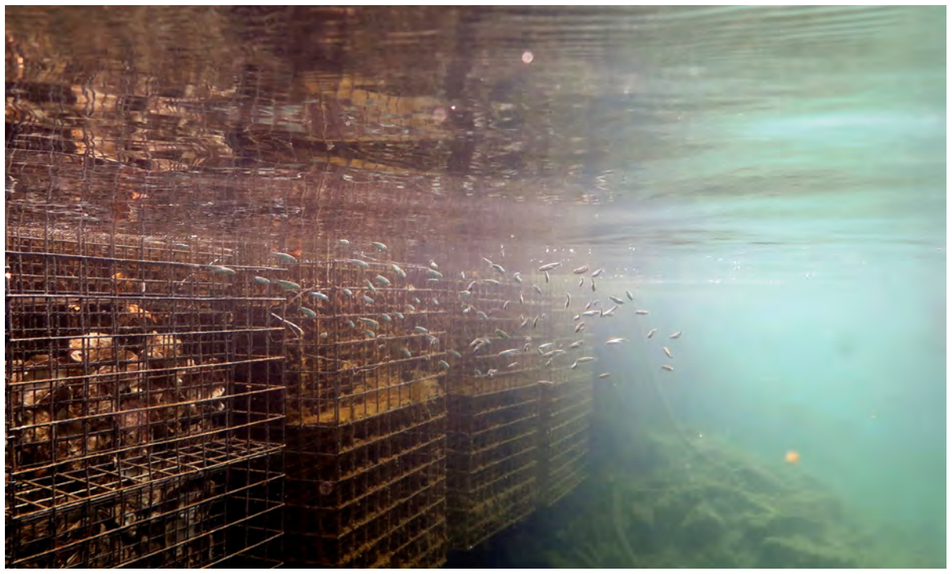


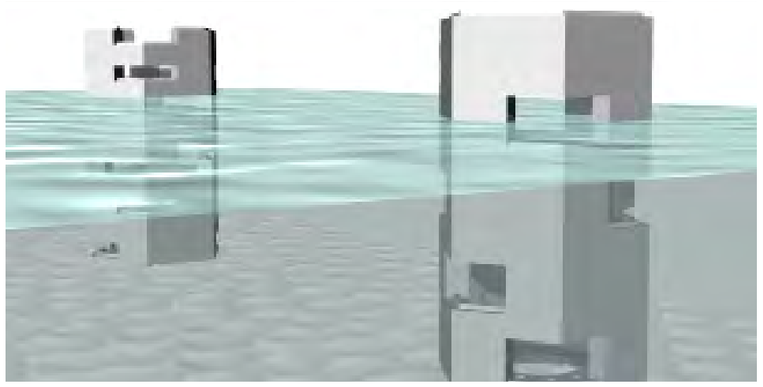
ECOSYSTEM SERVICES - EAST PENINSULA PARK

		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

INNOVATION PLATFORM







Port Covington

EAST WATERFRONT PARK
Landscape

MICHAEL BLIER
Landworks Studio Inc.
Principal

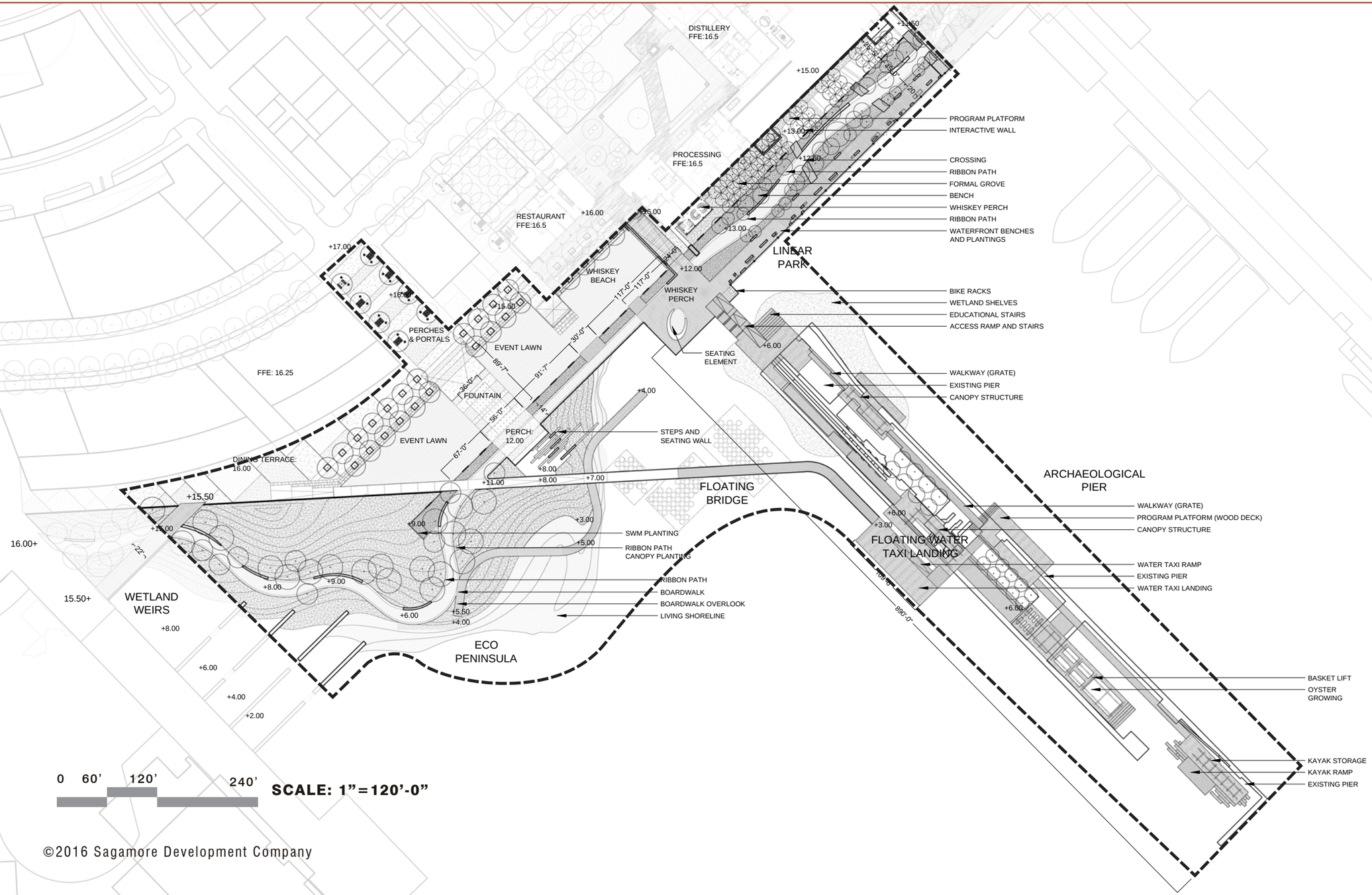
EXISTING CONDITIONS

JANUARY 28, 2016 – SITE PLAN

SITE PLAN

SITE PLAN – TREES HIDDEN

SITE PLAN



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

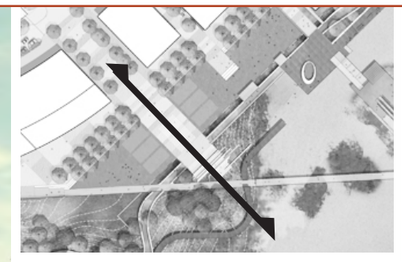
B URBAN PERCH

C PERFORMANCE PERCH

D OVERLOOK

URBAN PERCH PLAN

URBAN PERCH SECTION



WATER FEATURE
60’ - 0”

PERCH
40’ - 0”

PERCH STEPS
35’ - 0”

WALKWAY
12’ - 0”

MEADOW
60’ - 0”

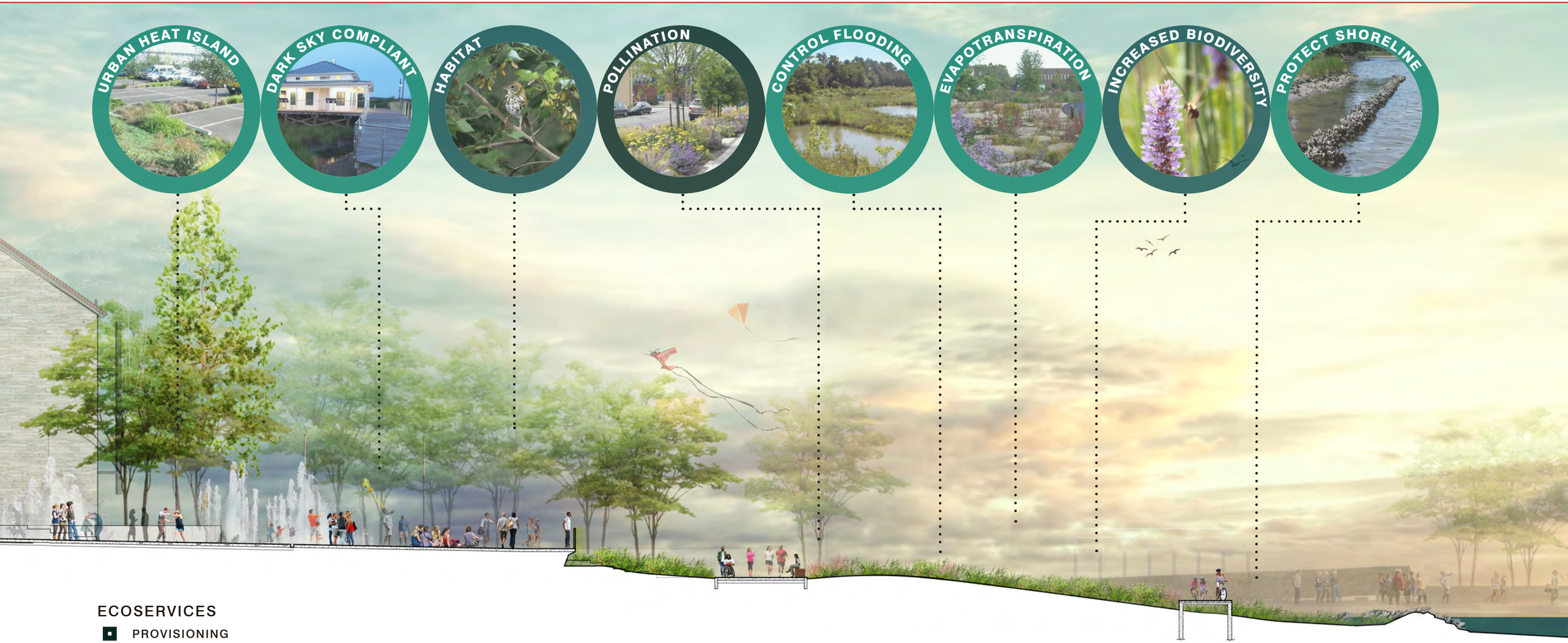
PATH
10’ - 0”

INTERTIDAL MARSH
30’ - 0”

0 4 8 16

SCALE: 1/8” = 1’-0”

ECOSYSTEM SERVICES – URBAN PERCH

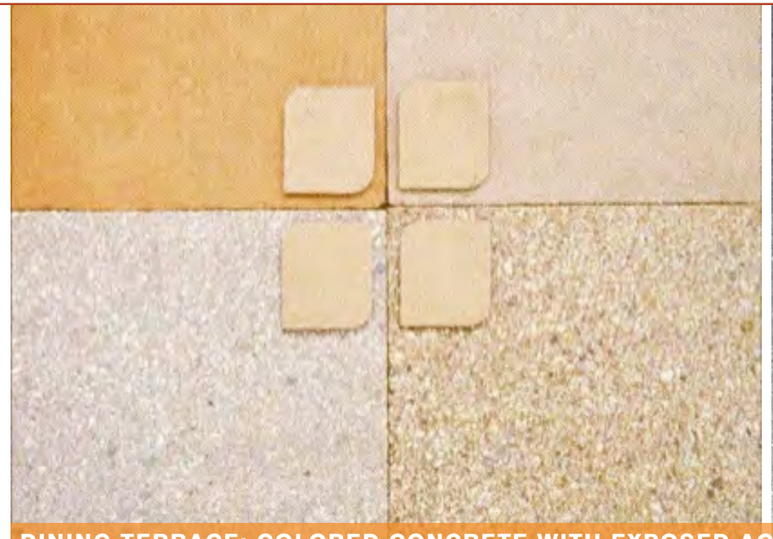


ECOSERVICES

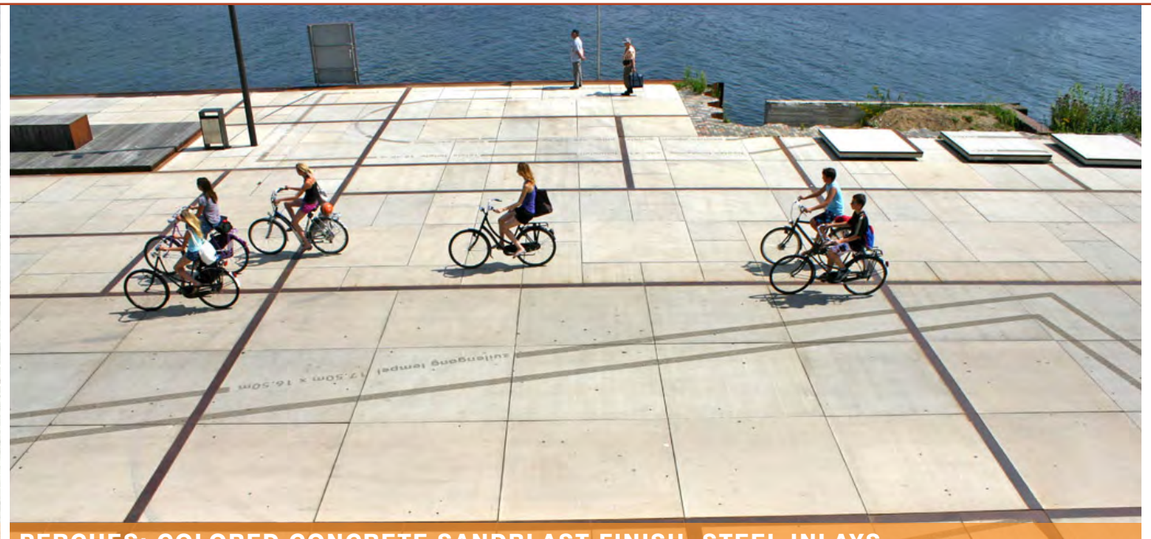
- PROVISIONING
- SUPPORTING
- REGULATING

PERCHES & PORTALS PERSPECTIVE

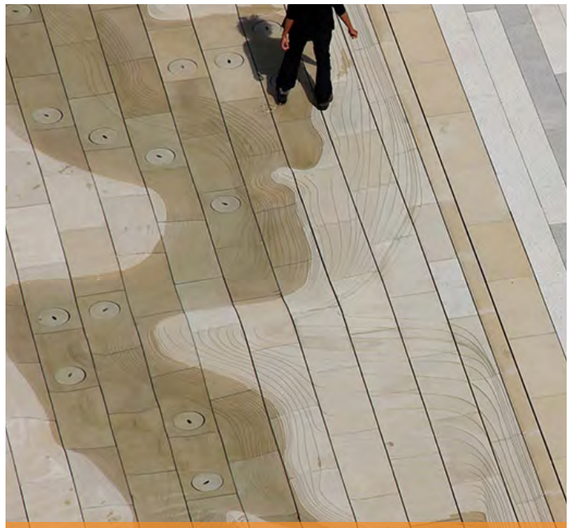
PERCHES & PORTALS MATERIALS



DINING TERRACE: COLORED CONCRETE WITH EXPOSED AGGREGATE

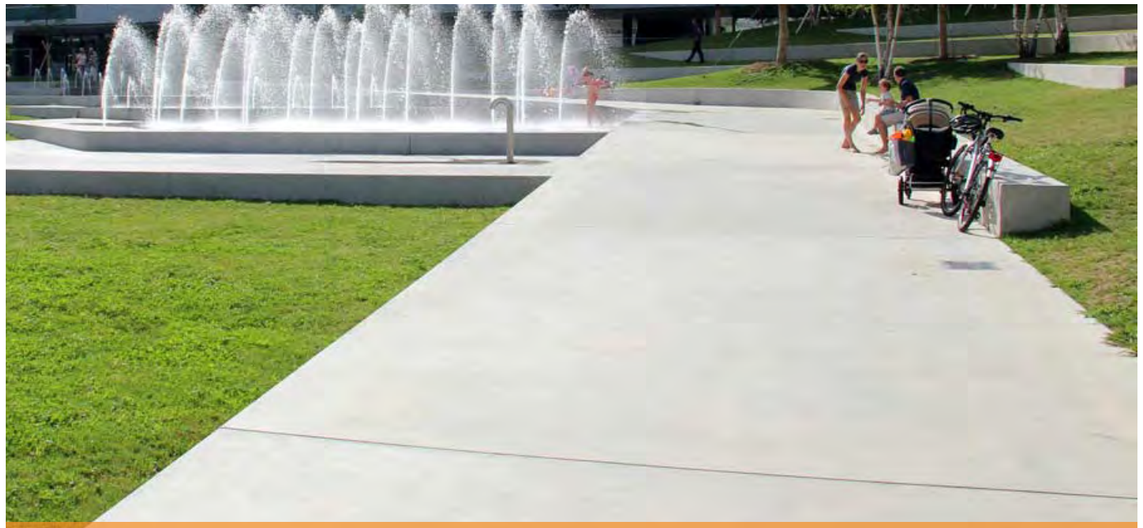


PERCHES: COLORED CONCRETE SANDBLAST FINISH, STEEL INLAYS



FOUNTAIN: STONE PAVERS

STAIRS: LIMESTONE BLOCK



WALKWAY: CIP CONCRETE

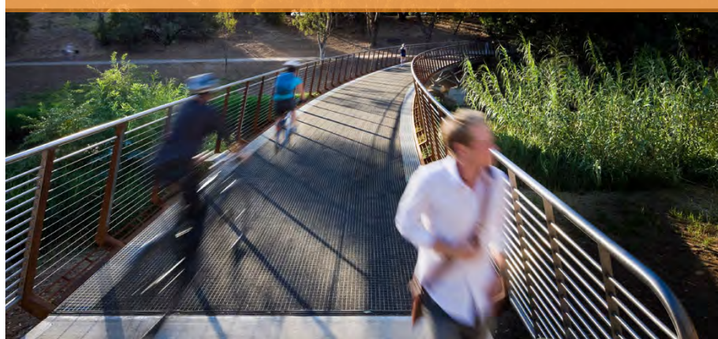
JANUARY 28, 2016 – ECO PENINSULA SITE PLAN & PROGRAM

A WATERFRONT WALK

B LIVING SHORELINE

C BOARDWALK

D BRIDGE CONNECTION



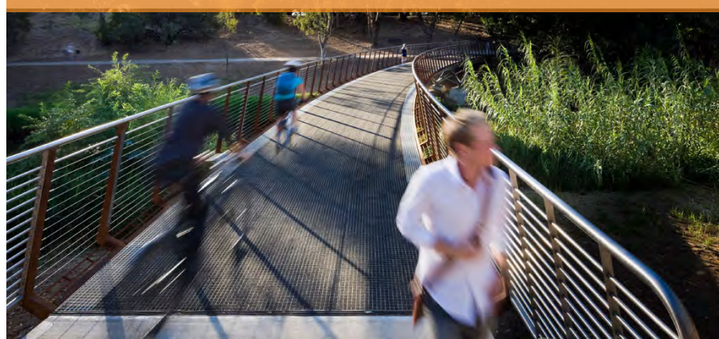
ECO PENINSULA SITE PLAN & PROGRAM

A WATERFRONT WALK

B LIVING SHORELINE

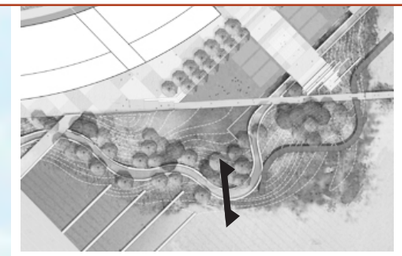
C BOARDWALK

D BRIDGE CONNECTION



LIVING SHORELINE AND RIBBON PATH PLAN

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

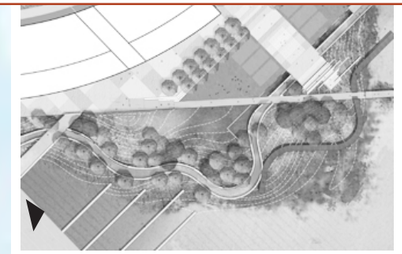
SCALE: 1/8” = 1’-0”

ECOSYSTEM SERVICES – ECO-PENINSULA

ECOSERVICES

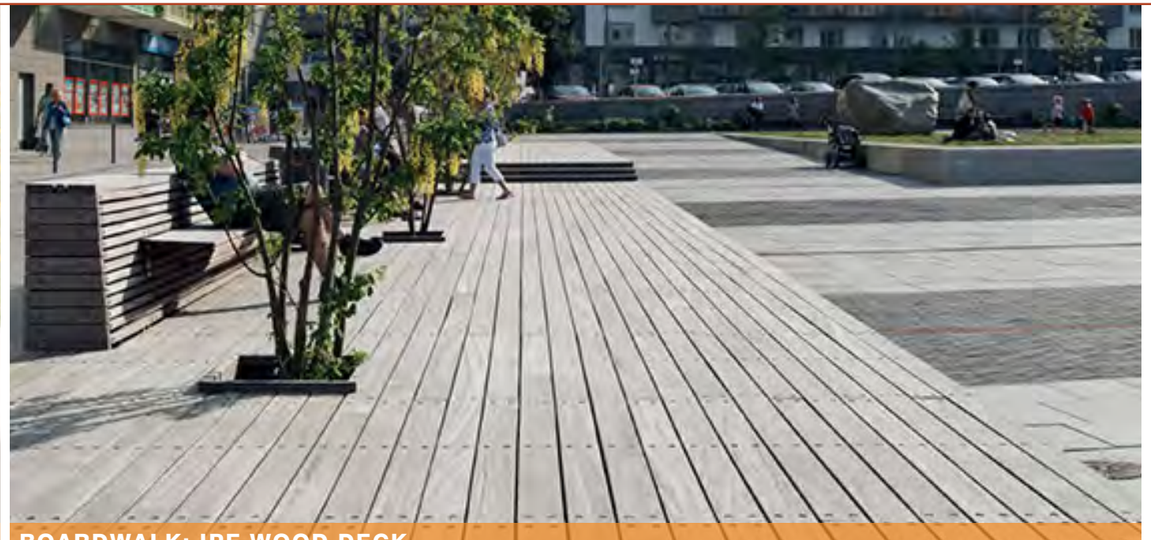
- PROVISIONING
- SUPPORTING
- REGULATING

LIVING SHORELINE AND RIBBON PATH PERSEPECTIVE



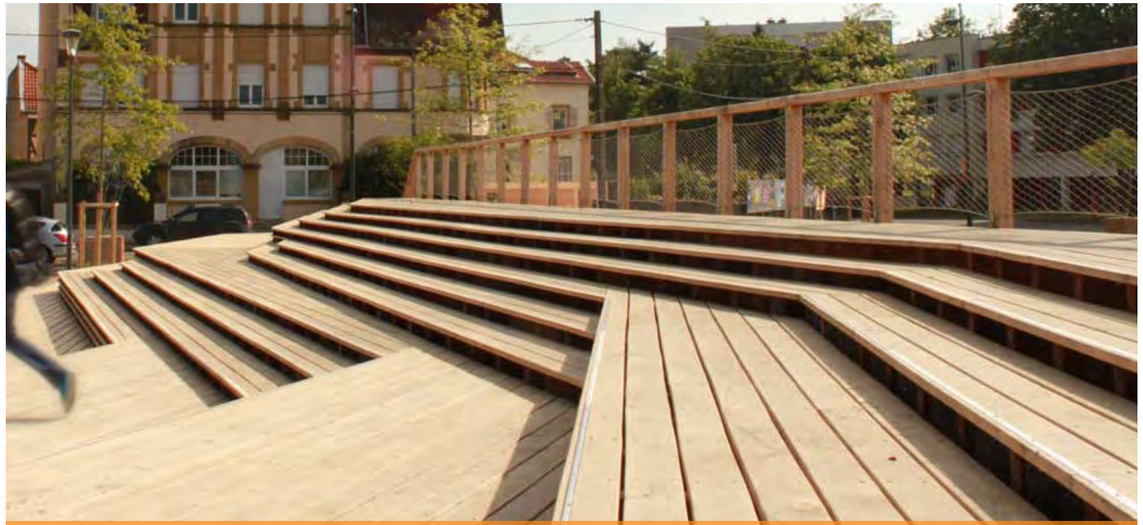
ECO PENINSULA MATERIALS

RIBBON PATH: CONCRETE EDGE, ASPHALT



BOARDWALK: IPE WOOD DECK

STAIRS: LIMESTONE AND WOOD BENCHES



STAIRS: IPE WOOD DECK

JANUARY 28, 2016 – ARCHAEOLOGICAL PIER SITE PLAN & PROGRAM

A CONSTRUCTED WETLAND

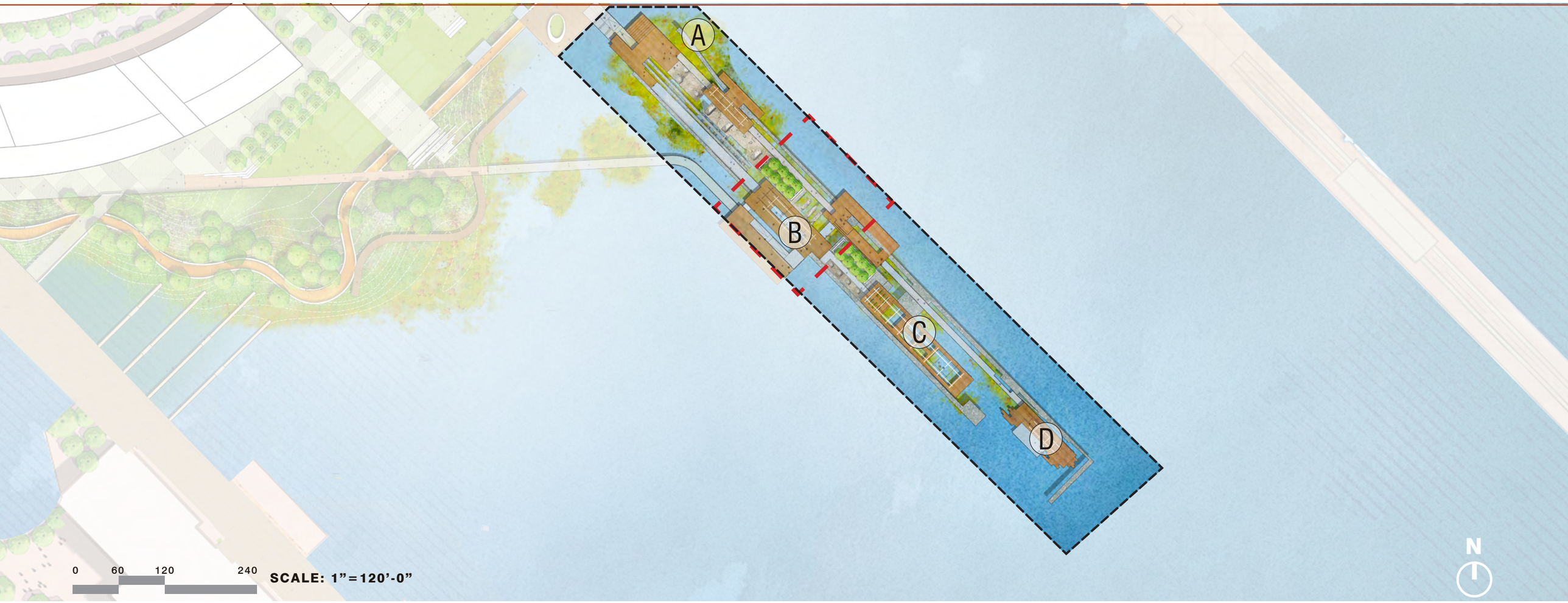
B WATER TAXI LANDING

C OYSTER INFRASTRUCTURE

D KAYAK LANDING

EXISTING PIER

ARCHAEOLOGICAL PIER SITE PLAN & PROGRAM



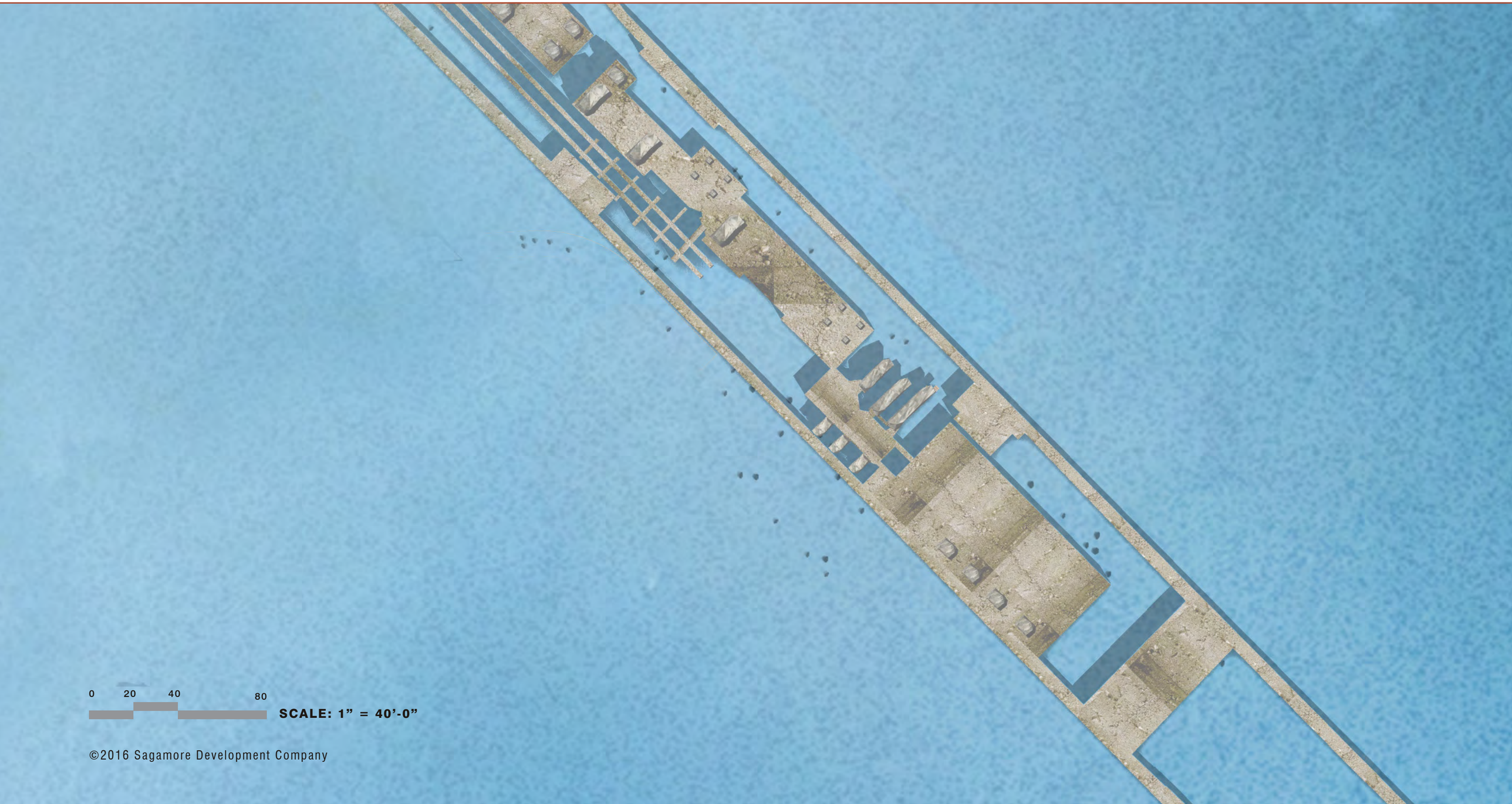
A CONSTRUCTED WETLAND

B WATER TAXI LANDING

C OYSTER INFRASTRUCTURE

D KAYAK LANDING

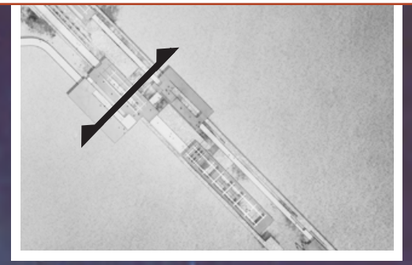
ENLARGED EXISTING PIER

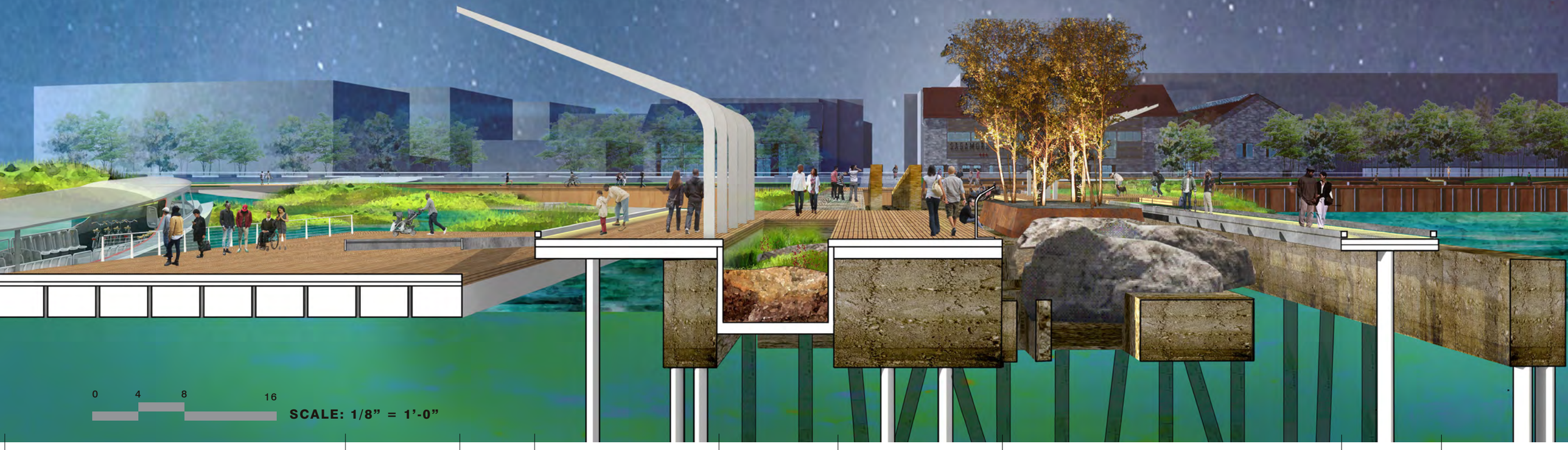


SCALE: 1” = 40’-0”

ARCHAEOLOGICAL PIER PLAN

ARCHAEOLOGICAL PIER SECTION



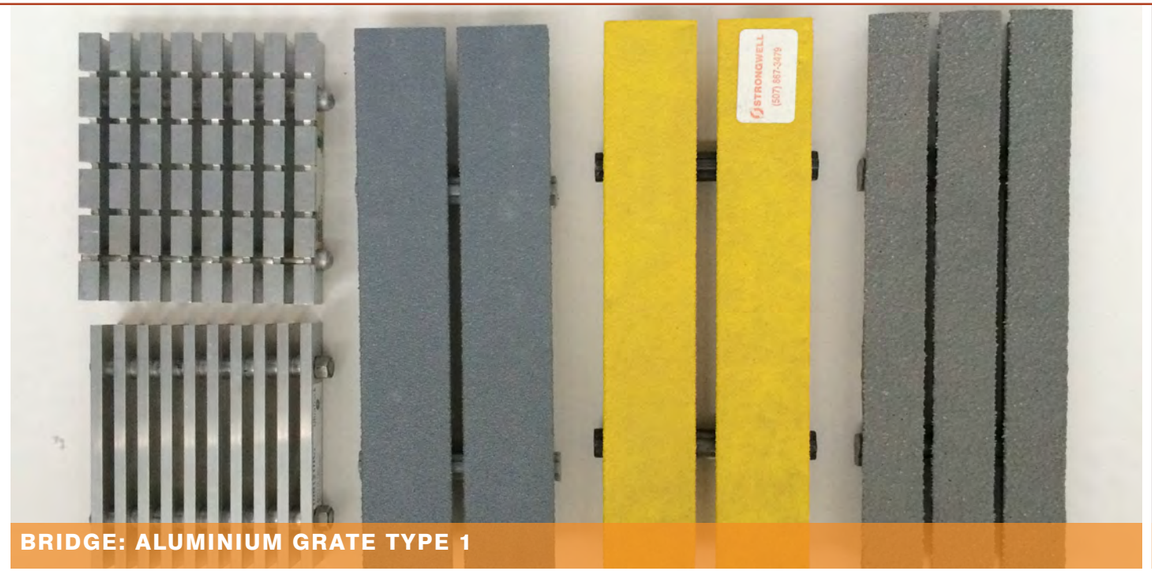


ECOSYSTEM SERVICES - ARCHAEOLOGICAL PIER

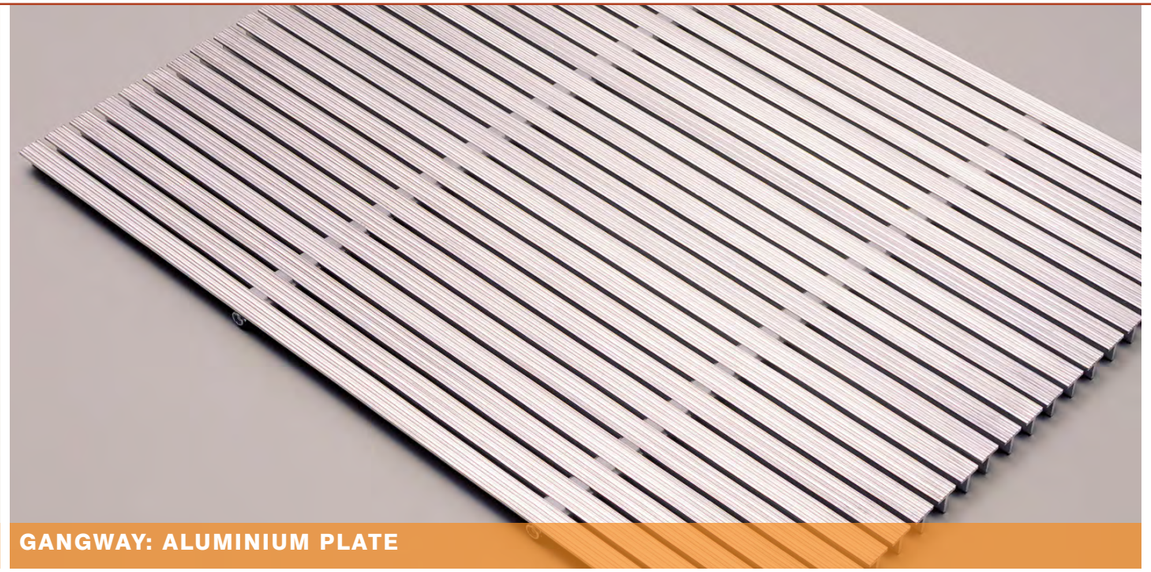
ARCHAEOLOGICAL PIER PERSPECTIVE

ARCHAEOLOGICAL PIER PERSPECTIVE

PIER MATERIALS

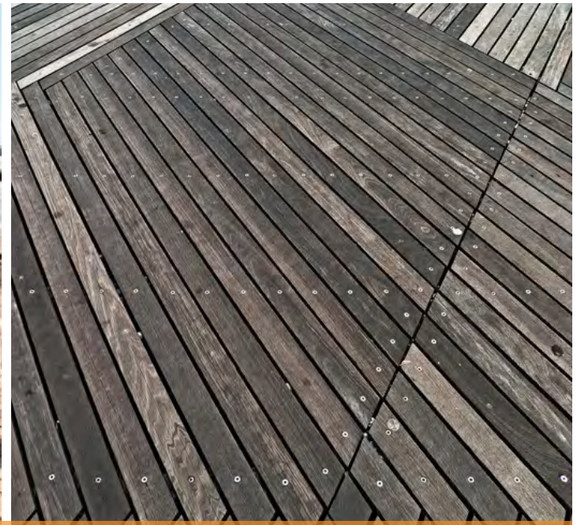


BRIDGE: ALUMINIUM GRATE TYPE 1



GANGWAY: ALUMINIUM PLATE

PLATFORMS: IPE WOOD DECK



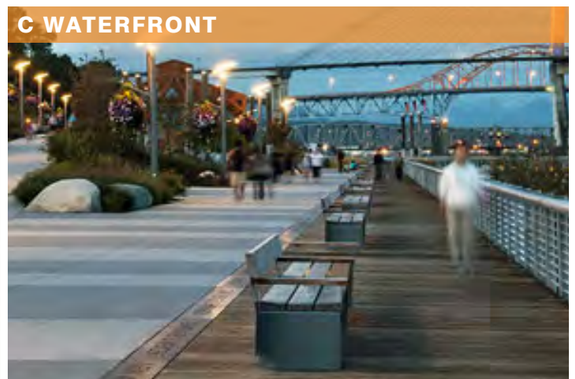
KAYAK LANDING: POLYGRATE

JANUARY 18, 2016 – LINEAR PARK SITE PLAN & PROGRAM

A RIBBON PATH

B ECO CORRIDOR

C WATERFRONT



D PROGRAM ZONE

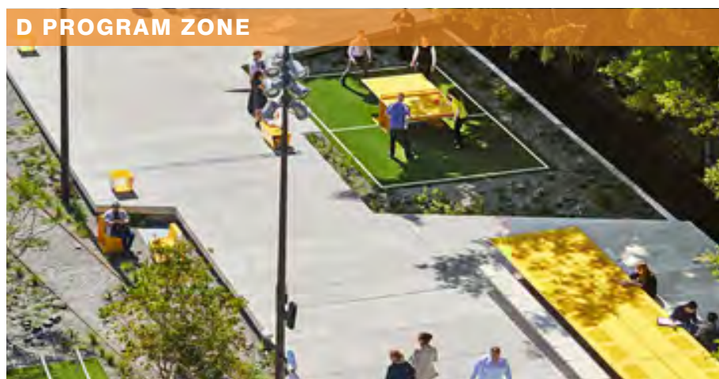
LINEAR PARK SITE PLAN & PROGRAM

A RIBBON PATH

B ECO CORRIDOR

C WATERFRONT

D PROGRAM ZONE



LINEAR PARK

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”

ECOSYSTEM SERVICES - LINEAR PARK

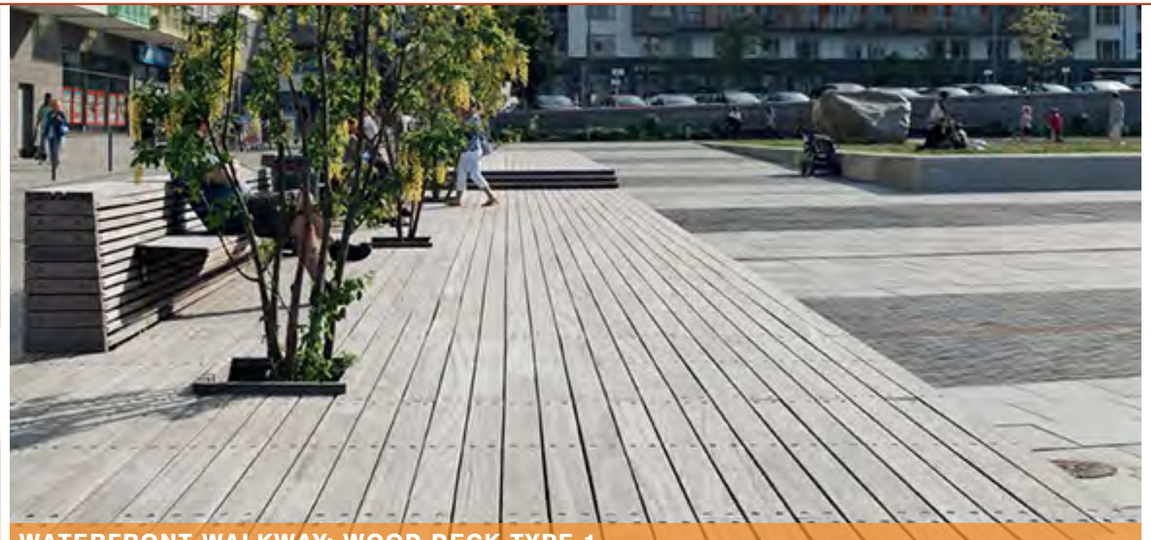
ECOSERVICES

- PROVISIONING
- SUPPORTING
- REGULATING

LINEAR PARK PERSPECTIVE

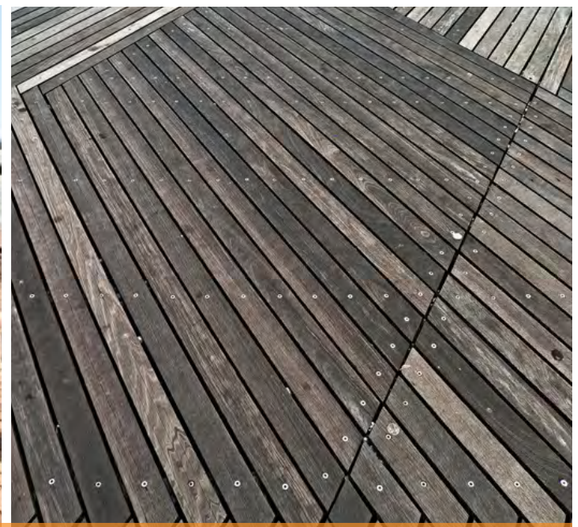
LINEAR PARK MATERIALS

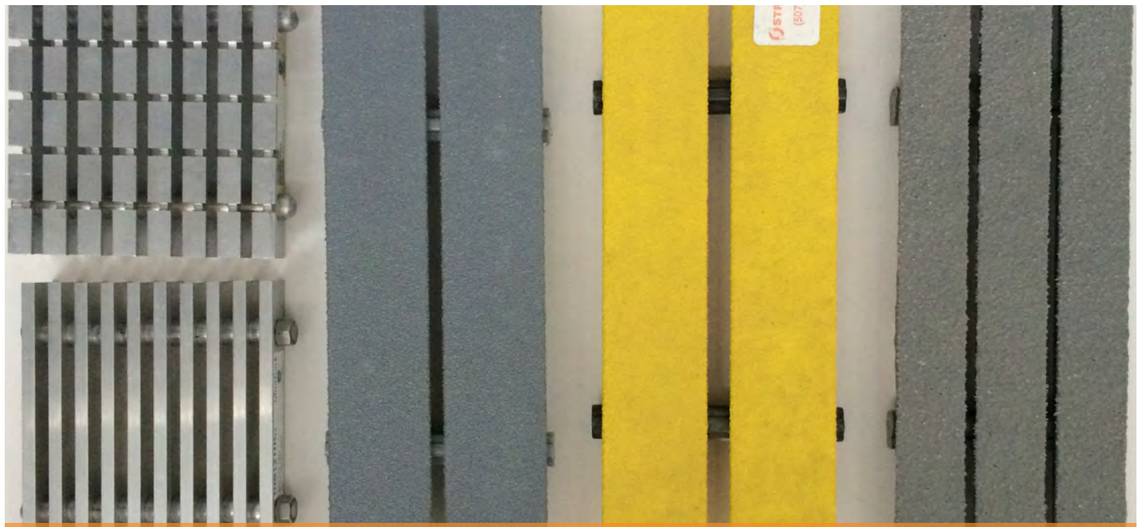
RIBBON PATH: CONCRETE EDGE, ASPHALT



WATERFRONT WALKWAY: WOOD DECK TYPE 1

PLATFORM: WOOD DECK TYPE 2





PATH: ALUMINIUM GRATE

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

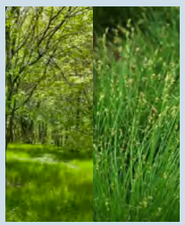
PLANTING LEGEND

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

UNDERSTORY PLANTING PLAN

WINGED SUMAC
RHUS COPALLINUM

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

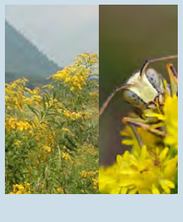


APPALACHIAN SEDGE
CAREX APPALACIA

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

LITTLE BLUESTEM
SCHIZACHYRIUM SCOPARIUM

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

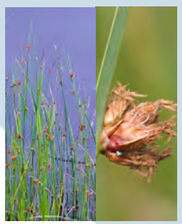


LATE GOLDENROD
SOLIDAGO CANADENSIS

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

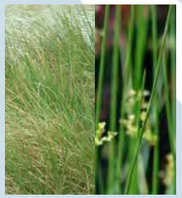


THREE SQUARE BULRUSH
SCIRPUS AMERICANUS

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

MARSH HIBISCUS
HIBISCUS MOSCHEUTOS

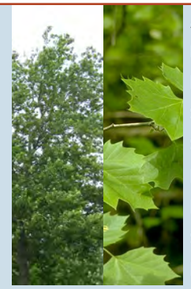
Height	3-7’
Spread	2-4’
Form	Perennial
Native	Yes



SOFT RUSH
JUNCUS EFFUSUS

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

CANOPY PLANTING PLAN



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

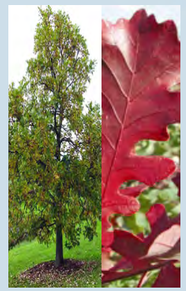
Height	30-50’
Spread	20-30’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	No
Pollution	No

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

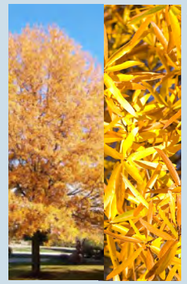


BUR OAK
QUERCUS MACROCARPA

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

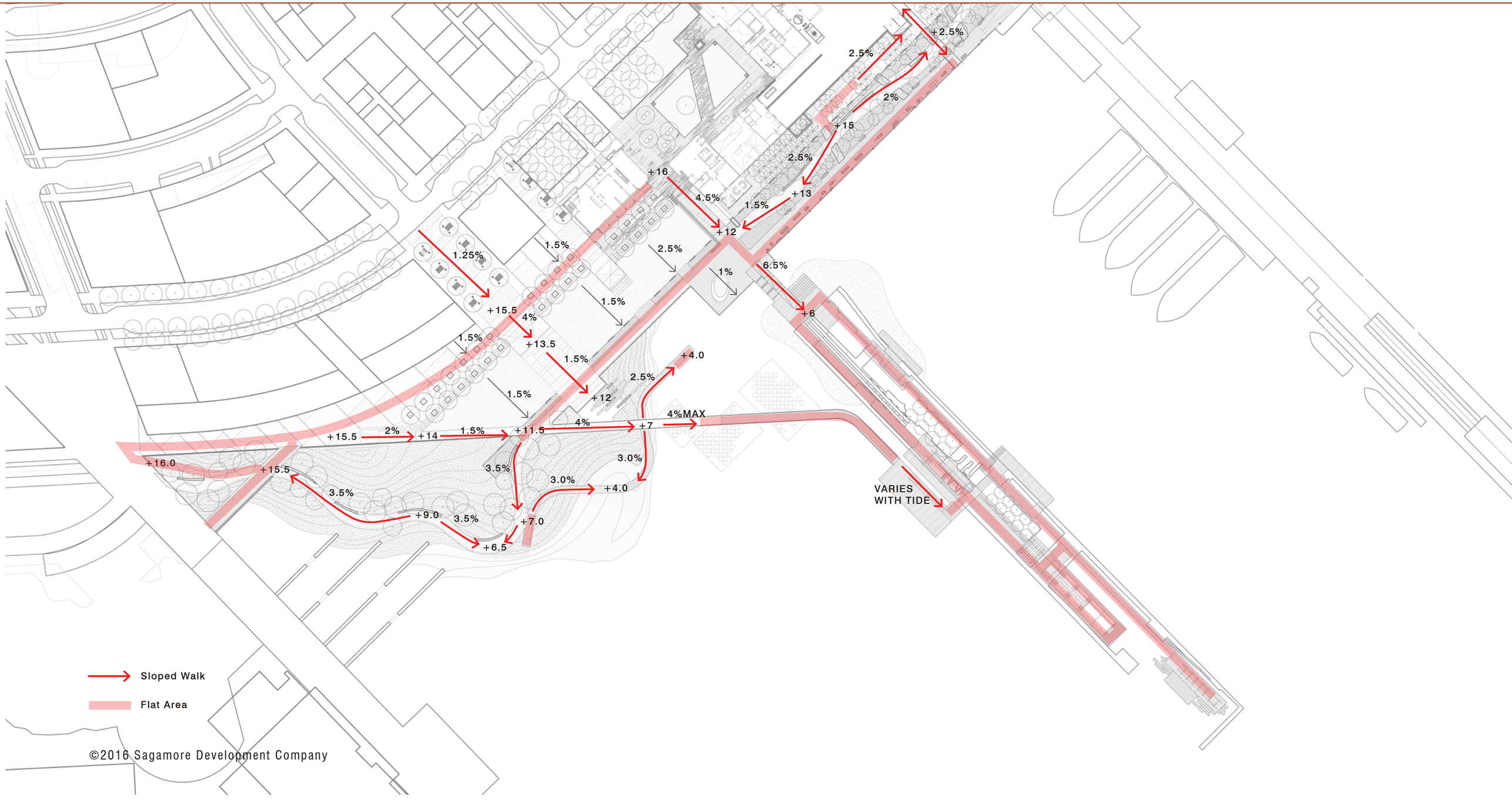
Height	50-70’
Spread	40-60’
Shape	▲
Root	No Surface Roots
Flower	N/A
Salt	Yes
Pollution	Yes

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

ADA ACCESSIBLE ROUTES



SITE PLAN

BIRDSEYE VIEW

NEXT STEPS

Continued Final Design

Signage

Lighting

Next Great Baltimore Bench


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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