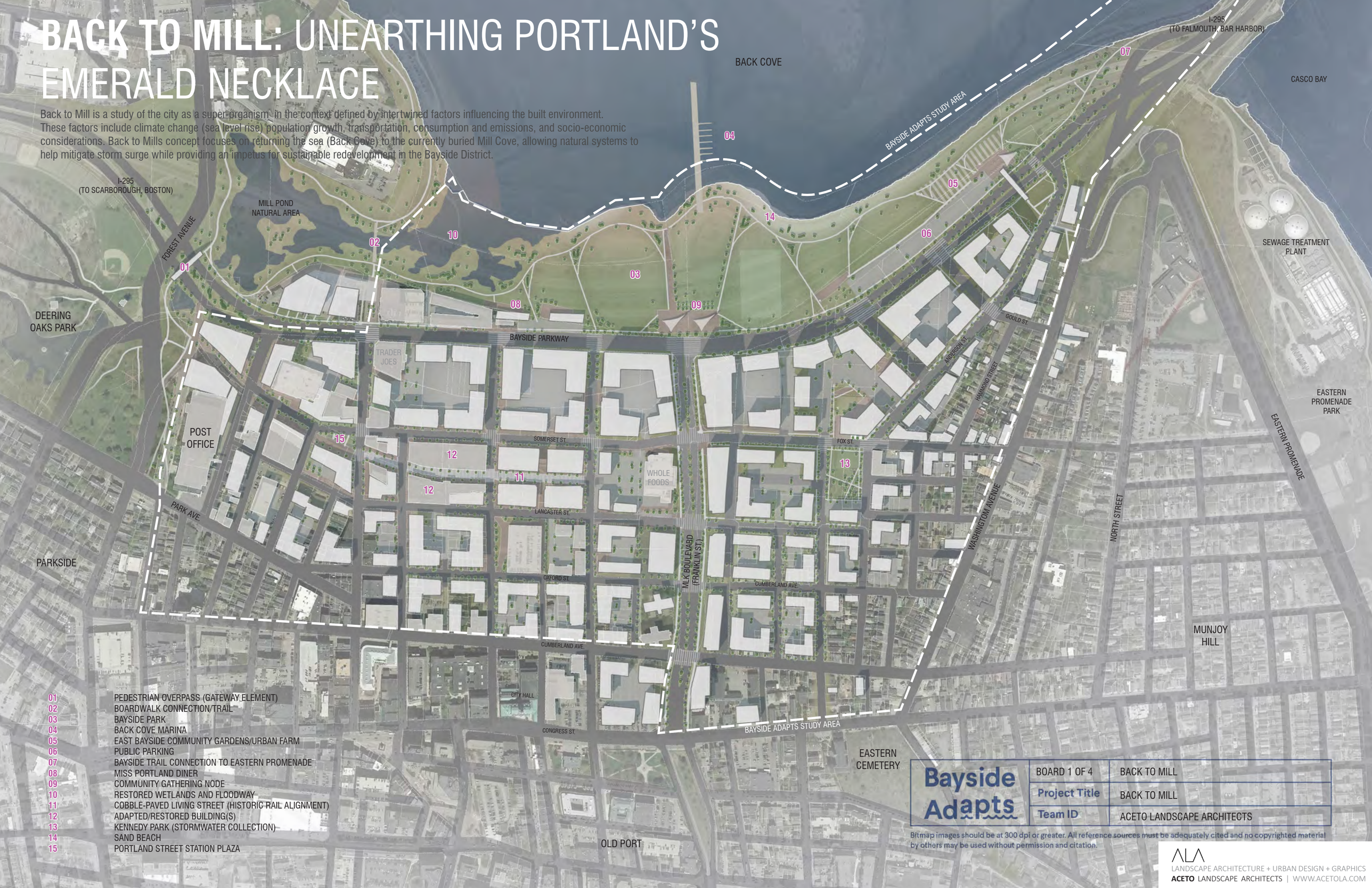
BACK TO MILL: UNEARTHING PORTLAND'S EMERALD NECKLACE

Back to Mill is a study of the city as a super-organism, in the context defined by intertwined factors influencing the built environment. These factors include climate change (sea level rise) population growth, transportation, consumption and emissions, and socio-economic considerations. Back to Mills concept focuses on returning the sea (Back Cove) to the currently buried Mill Cove, allowing natural systems to help mitigate storm surge while providing an impetus for sustainable redevelopment in the Bayside District.



01 PEDESTRIAN OVERPASS (GATEWAY ELEMENT)
02 BOARDWALK CONNECTION/TRAIL
03 BAYSIDE PARK
04 BACK COVE MARINA
05 EAST BAYSIDE COMMUNITY GARDENS/URBAN FARM
06 PUBLIC PARKING
07 BAYSIDE TRAIL CONNECTION TO EASTERN PROMENADE
08 MISS PORTLAND DINER
09 COMMUNITY GATHERING NODE
10 RESTORED WETLANDS AND FLOODWAY
11 COBBLE-PAVED LIVING STREET (HISTORIC RAIL ALIGNMENT)
12 ADAPTED/RESTORED BUILDING(S)
13 KENNEDY PARK (STORMWATER COLLECTION)
14 SAND BEACH
15 PORTLAND STREET STATION PLAZA

Bayside Adapts	BOARD 1 OF 4	BACK TO MILL
	Project Title	BACK TO MILL
	Team ID	ACETO LANDSCAPE ARCHITECTS

LANDSCAPE ARCHITECTURE + URBAN DESIGN + GRAPHICS
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2020

THE SURGE: Rapidly rising sea level combined with strengthened storm surge and a glut of impervious paved surfaces and other manmade interventions lead to widespread flooding and property damage across the Bayside district.

2030

THE RETREAT: Perpetually inundated infrastructure and property damage force the Bayside community to come to terms with rising sea level. The first step to a sustainable Bayside is unshackling natural systems. Here, the historic Mill Cove is unearthed from Interstate 295, and roads are re-aligned to accommodate the flooding.

IT'S ALIVE!: YOUR CITY IS A SUPER-ORGANISM

2050

RECONNECT: A sea wall and berming is introduced along the newly re-aligned Bayside Parkway. The local street grid is reconstituted to historic alignments and reconfigured with pervious paving bio-detention swales and gardens to help mitigate localized flood risk. Mill cove expands, reconnected with the Deering Oaks waterway.

2100

PROTECT: The fully integrated sea wall allows for full redevelopment of the Bayside district, creating a network of walkable streets, tight-knit neighborhoods. Dense, mixed-use blocks encourage walking and transit, contributing drastically to overall reduction in global carbon emissions.

1 meter rise *

3 meter rise **

5 meter rise *

Bayside Adapts	BOARD 2 OF 4	IT'S ALIVE!
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* impact mapping data derived from document titles Impact of Sea Level Rise on Portland, ME, Natural Resources Council of Maine,map by Greg Lashoto

** 3 meter area interpolated from above referenced map

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BACK COVE

BAYSIDE MARINA

MILL COVE

DAYLIGHT HISTORIC MILL POND

PORTLAND FENS

DEERING OAKS PARK

POST OFFICE

PORTLAND STREET TRANSIT STATION PLAZA

TRANSIT CORRIDOR

HISTORIC COASTLINE CIRCA 1850

CONGRESS ST.

EASTERN CEMETARY

OLD PORT

ELEVATE PARKWAY BLOCKS

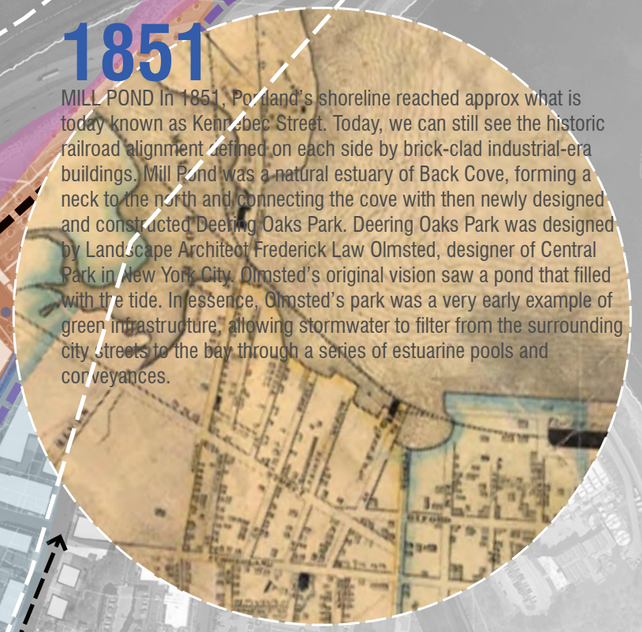
ARMOR AND ACTIVATE SEAWALL

CONNECT

INVEST

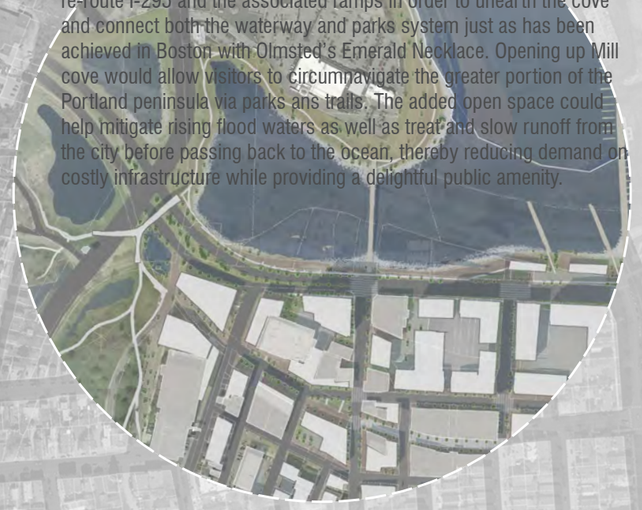
1851

MILL POND In 1851, Portland's shoreline reached approx what is today known as Kennebec Street. Today, we can still see the historic railroad alignment defined on each side by brick-clad industrial-era buildings. Mill Pond was a natural estuary of Back Cove, forming a neck to the north and connecting the cove with then newly designed and constructed Deering Oaks Park. Deering Oaks Park was designed by Landscape Architect Frederick Law Olmsted, designer of Central Park in New York City. Olmsted's original vision saw a pond that filled with the tide. Inessence, Olmsted's park was a very early example of green infrastructure, allowing stormwater to filter from the surrounding city streets to the bay through a series of estuarine pools and conveyances.



2070

MILL COVE NATURAL AREA: In the future, Portland may choose to re-route I-295 and the associated ramps in order to unearth the cove and connect both the waterway and parks system just as has been achieved in Boston with Olmsted's Emerald Necklace. Opening up Mill cove would allow visitors to circumnavigate the greater portion of the Portland peninsula via parks ans trails. The added open space could help mitigate rising flood waters as well as treat and slow runoff from the city before passing back to the ocean, thereby reducing demand on costly infrastructure while providing a delightful public amenity.



BAYSIDE FLOATS: ELEVATE THE BLOCK

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2100: THE BIG DIG

On the cusp of the 22nd century, Bayside has adapted to global climate change. A resilient Bayside continues the New England tradition of walkable urbanism, streets designed for a slower pace, and sensible infrastructure based on natural systems. An emerald necklace of parks, open space, and trails connects the Eastern Promenade to Back Cove, Mill Cove, Deering Oaks, and the Greater Portland. The buried arterial streets open up additional land for transit lines, walking, and bicycle commuting, thereby reducing overall carbon emissions in Portland, improving air quality and encouraging a more resilient, localized economy.

BACK COVE
BAYSIDE ADAPTS STUDY AREA
I-295 (TO FALMOUTH, BAR HARBOR)
CASCO BAY
I-295 (TO SCARBOROUGH, BOSTON)
MILL POND NATURAL AREA
FOREST AVENUE
DEERING OAKS PARK
SEWAGE TREATMENT PLANT
BAYSIDE PARKWAY
GOULD ST.
ANDERSON ST.
HAMMOND STREET
EASTERN PROMENADE PARK
EASTERN PROMENADE
POST OFFICE
SOMERSET ST.
FOX ST.
CENTER FOR ARTS + CULTURE
PARK AVE.
LANCASTER ST.
WASHINGTON AVENUE
NORTH STREET
PARKSIDE
OXFORD ST.
MLK BOULEVARD (FRANKLIN ST.)
CUMBERLAND AVE.
CITY HALL
CONGRESS ST.
BAYSIDE ADAPTS STUDY AREA
MUNJOY HILL
EASTERN CEMETERY
OLD PORT

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15	PORTLAND STREET STATION PLAZA
16	UNDERGROUND PARKING
17	UNDERGROUND DETENTION
18	STORMWATER COLLECTION PARK
19	BURIED ARTERIAL
20	TUNNEL ENTRANCE
21	BACK BAY PROMENADE
22	PAVILIONS
23	FENS
24	PRIVATE STORMWATER GARDENS
25	LIVING STREET(S)

Bayside Adapts

BOARD 4 OF 4	2100: THE BIG DIG
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