

# **HARBOR COMMITTEE**

## **Town of Bar Harbor**

Agenda

Monday, November 13, 2023

Online Meeting via Zoom

4:00 - 6:00 PM

### **ITEM 1**

CALL TO ORDER - 4:00 PM, online via Zoom

### **ITEM 2**

APPROVAL OF MINUTES - no minutes from October 9; no quorum for meeting

### **ITEM 3**

ADOPTION OF AGENDA

### **ITEM 4**

OLD BUSINESS:

- A. Officer Election - Jeff Miller
- B. Harbor Ops update from Harbor Master - Chris Wharf
- C. Continue Discussion on Marina planning in light of October 9 update from GEI

### **ITEM 5**

NEW BUSINESS

- A. Frenchman Bay Boating Company application to build seasonal floating walkway off the Shore Acres Road - Bob Collier

### **ITEM 6**

PUBLIC COMMENT

### **ITEM 7**

ITEMS FOR NEXT MEETING

### **ITEM 8**

ADJOURNMENT

Join Zoom Meeting

<https://us02web.zoom.us/j/83745704089?pwd=dVU3azlhYm1zU3pybDFTWjVPUWZ5dz09>

Meeting ID: 837 4570 4089

Passcode: 741855

Phone 1 929 205 6099 US (New York)

**Anyone with a disability wishing to attend this meeting who may have questions about how to do so should contact the Town of Bar Harbor. PLEASE CALL 207-288-4098.**

# *Ferry Terminal Property Masterplan*

Town of Bar Harbor

October 9, 2023

**Daniel Bannon, P.E., CFM**  
Project Manager / Senior Waterfront Engineer  
GEI Consultants, Inc. - Portland, ME  
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GEI



Consultants

# Outline

1. Background
2. Masterplan Development
3. Masterplan Concepts
  1. Overarching Themes
  2. Plan Components
  3. Project Phasing Options
4. Next Steps



# A Brief Site History

- 1956
  - Pier constructed
  - Purpose-built pier facility for MV-Bluenose
- Early 1980's
  - Site adapted for RO-RO use for new Ferry (Bluenose II, then CAT)
- 2009
  - Ferry service to Bar Harbor ceases
- 2019
  - Acquisition of site by Town
- 2021
  - Ferry service resumes with The Cat



# Acquisition by Town

- Acquired by the Town of Bar Harbor from the Maine State Ferry Service in 2019
- Multiple studies undertaken to assess the potential redevelopment options for the site
- Lease with Bay Ferries for continued ferry service through



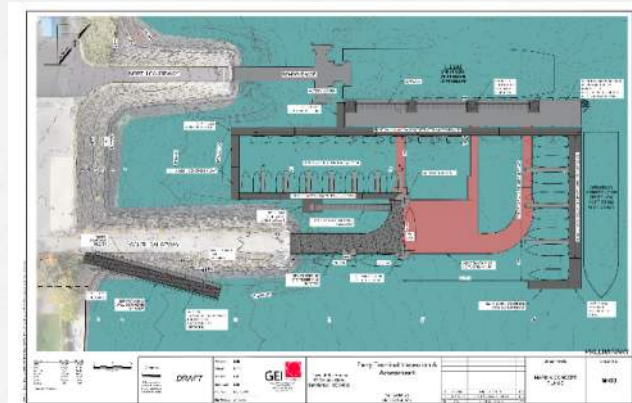
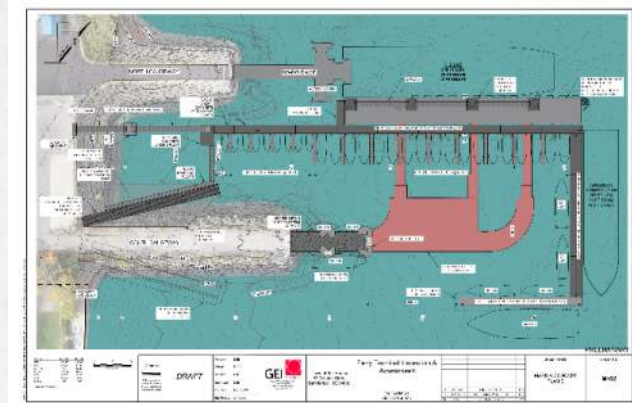
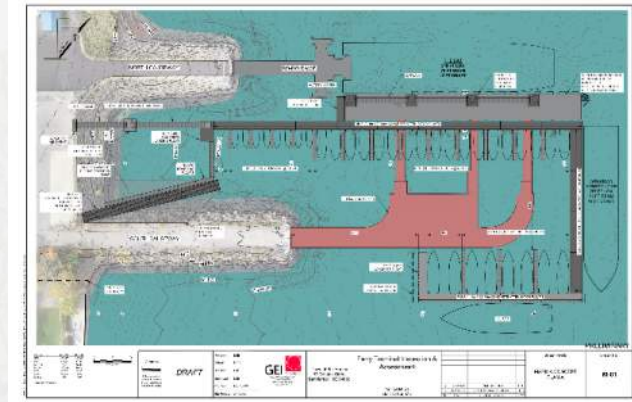
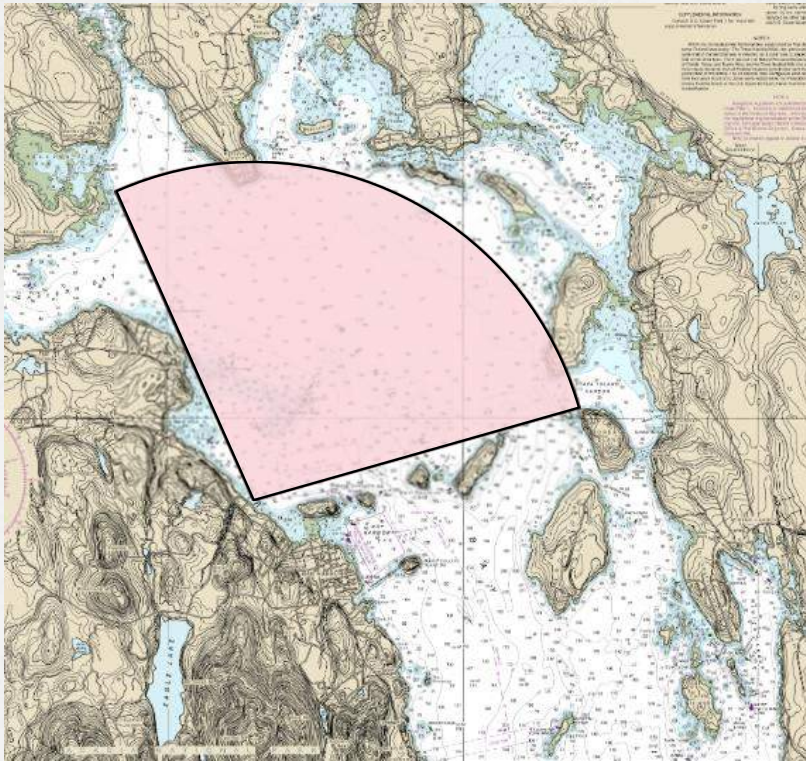
## 2020 Pier Inspection

- Above and Underwater Inspection performed by GEI in 2020
- Pier structures found to be in a deteriorated state



# Marina Concept Planning

- Conceptual design for future marina at site



## Recent History

- 2021 - Town council votes to demolish pier structures
- 2022 - Limited repairs to north pier, demolition of former passenger building
- 2022 - The Town applied for and received a Maine Coastal Program Shore and Harbor Planning Grant to fund Master Plan





## Project Goals

- Develop cohesive masterplan for marina at project site that considers development of both landside and waterside features
- Expand public access to the water
- Support the working waterfront
- Provide public open space
- Support local economic interests



## Design Considerations

1. Coastal Environmental Conditions
2. Landside Facilities
3. Waterside Facilities
4. ADA Accessibility
5. Pedestrian, Bicycle, Vehicle and Boating Access
6. Connectivity to the Downtown / Other Area Destinations
7. Long-Term Maintenance and Operations Capabilities
8. Current Town Lease Agreement with Bay Ferries
9. Actionable Items and Future Funding Opportunities



# Master Planning Process

Sept 2022	Project Kickoff
Oct–Nov 2022	Background Data Collection and Initial Public Engagement
Dec 2022–May 2023	Concept Development & Stakeholder Outreach
Jun–Aug 2023	Concept Plan Refinement & Ongoing Stakeholder Outreach
Oct 2023	Draft Masterplan Presentation
Oct–Dec 2023	Develop final deliverables
Dec 31, 2023	Submit final deliverables



## Stakeholder Feedback

- Phone interviews and in-person meetings held with a range of stakeholders
- Major comments:
  - Options for phased implementation
  - Consider possibilities of ferry service continuing into the future or not continuing
  - Separation between commercial and recreational marina use
  - Launching for both trailered boats and hand-carry paddlecraft
  - Small vehicle rated pier structure with hoist/jib crane for commercial uses
  - Parking to support facility use
  - Waterfront open space for public access
  - Bicycle and pedestrian friendly



Overarching Themes

Flexibility for Future  
Development

Accommodation of  
Mixed Uses

Sustainable  
Development



# Basis of Design

## 1. Design Standards:

- ASCE MOP 50 – Design of Small Craft Harbors
- SOBA – Design Handbook for Recreational Boating and Fishing Facilities

## 2. Site Conditions

- Based on October 2020 survey and inspection, historic plans
- Major buildings onsite assumed to remain (e.g. customs building)
- Footprint of marina kept similar to existing structure footprint. Demolition of pier assumed. Full demolition likely to occur in phases.



# Basis of Design

## 3. Uses:

- Green space and public access space
- Efficient, smooth circulation
- Accommodation for wide range of vehicle types: passenger cars, trucks/trailers, tour buses
- ADA Compliant access and open spaces
- Boat launch is high priority
- Maintaining or discontinuing north berth for The CAT
- Recreational and commercial vessel slips: 30', 35', 50', 70' slips
- Clear separation between recreational and commercial use
- Megayachts which can reach 140' to 180'
- Possible small cruise ships
- Cruise tendering for larger ships



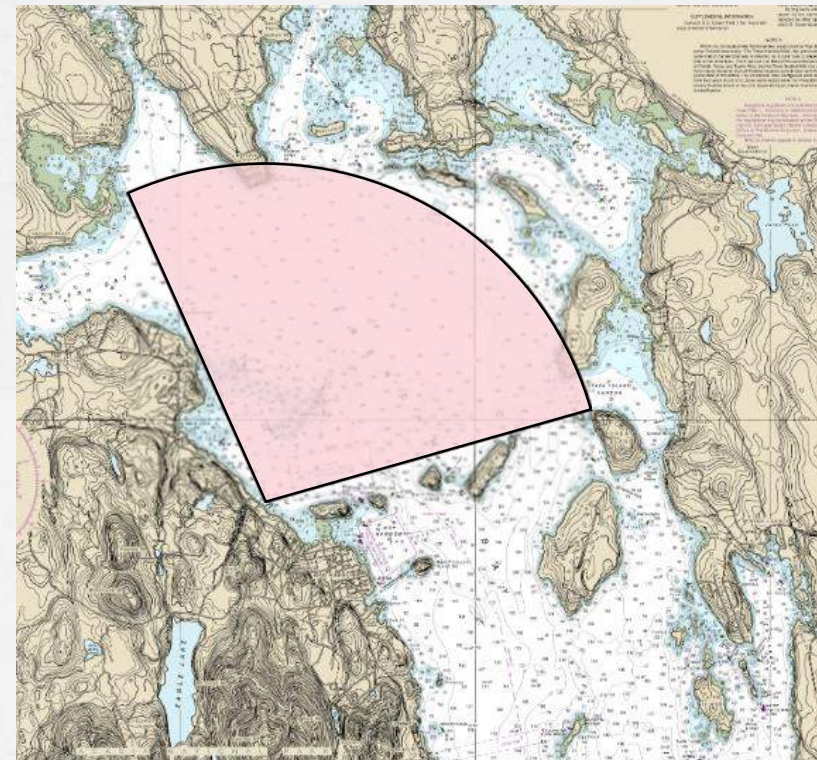
# Basis of Design

## 4. Exposure:

- Most exposed from NNW to ENE
- ~5 mi maximum fetch
- Provide wave protection along North, East, and potentially South

## 5. Components of design

- All-tide boat ramp
- Floating docks and slips in a variety of sizes, with several larger berths
- ADA compliant access
- Fixed pier with hoist/jib crane
- Marina facilities and amenities
- Parking and vehicle circulation to support facility use





# Coastal Risk Analysis

- Assessed risks of flooding to various site features from tidal elevations, storm surge and sea level rise
- Sea Level Rise recommendations following Maine Climate Council’s 2020 report “Maine Won’t Wait: A Four-Year Plan for Climate Action”
- Generally, site is at high elevation and has limited risk in the near-term.
- Marina design will need consider storm exposure and future range of water elevations.

Existing Top of Embankment at End of North Causeway Approximate EL 13 NAVD88	NAVD88	Commit to Manage				Prepare to Manage			
		2030	2050	2070	2100	2030	2050	2070	2100
Base Flood Elevation	17.00	17.80	18.50	19.40	20.90	18.40	20.00	22.00	25.80
Highest Observed Water Level (February 7, 1978)	10.24	11.04	11.74	12.64	14.14	11.64	13.24	15.24	19.04
0.2% SWEL	9.70	10.50	11.20	12.10	13.60	11.10	12.70	14.70	18.50
1% SWEL	9.30	10.10	10.80	11.70	13.20	10.70	12.30	14.30	18.10
2% SWEL	8.80	9.60	10.30	11.20	12.70	10.20	11.80	13.80	17.60
10% SWEL	7.80	8.60	9.30	10.20	11.70	9.20	10.80	12.80	16.60
Highest Annual Tide	7.34	8.14	8.84	9.74	11.24	8.74	10.34	12.34	16.14
MHHW	5.40	6.20	6.90	7.80	9.30	6.80	8.40	10.40	14.20
MHW	4.97	5.77	6.47	7.37	8.87	6.37	7.97	9.97	13.77
NAVD88	0.00	0.80	1.50	2.40	3.90	1.40	3.00	5.00	8.80
MSL	-0.30	0.50	1.20	2.10	3.60	1.10	2.70	4.70	8.50
NGVD29	-0.63	0.17	0.87	1.77	3.27	0.77	2.37	4.37	8.17
MLW	-5.59	-4.79	-4.09	-3.19	-1.69	-4.19	-2.59	-0.59	3.21
MLLW	-5.97	-5.17	-4.47	-3.57	-2.07	-4.57	-2.97	-0.97	2.83
Lowest Observed Water Level (March 21, 2007)	-8.88	-8.08	-7.38	-6.48	-4.98	-7.48	-5.88	-3.88	-0.08

Existing Top of Embankment at End of South Causeway Approximate EL 16 NAVD88	NAVD88	Commit to Manage				Prepare to Manage			
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Page 1



# Hand-Carry Launch

- Separate launch lane for canoes, kayaks, paddleboards, etc.
- Reduces the potential for conflict and increases safety
- Motor and hand-carry vessels can utilize same ramp with curbs and boarding floats providing separation
- Limits site impact and construction costs



# Parking

Masterplan	Option 1	Option 2
Standard Parking Spaces	41	53
ADA Parking Spaces	2	4
Boat Trailer Spaces	51	71

- Masterplan to balance need for parking with proposed green space
- Parking needs dependent on proposed facility use
- Parking for boat trailers, slip holders at proposed marina, and general public access
- 9' x 18' standard vehicle spaces
- 12' x 40' boat trailer spaces
  - SOBA recommends 20-30 spaces per launch lane for high turnover facilities, and 30-50 for low turnover facilities
  - Stakeholder feedback suggests lower range parking demand at this facility



## Shared-Use Pathway and Downtown Connections

- Establish an ADA compliant connection between existing path on Route 3 and waterfront of site
- Promotes access from downtown Bar Harbor for pedestrians and cyclists



# Marina

- Separate commercial and recreational use
- Fuel dock with upland underground storage tanks
- Small vehicle rated pier structure with hoist/jib crane for direct loading onto vessels.



	Option 1		Option 2	
	Commercial	Recreational	Commercial	Recreational
30-ft slips	0	12	0	10
50-ft slips	7	14	17	13
70-ft slips	1	5	3	6
Exterior Berthing Length (LF)	615		1,060	



## Facilities and Amenities

- Flexibility to provide various types of facilities or amenities to support, complement, or enhance site use
- Balance with green space area
- Potential to utilize existing buildings on leased portion of site in future
- Examples include:
  - Bathrooms/showers
  - Storefront (ships store, food & beverage, etc.)
  - Storage facility
  - Harbor Master building



# Waterfront Open Space



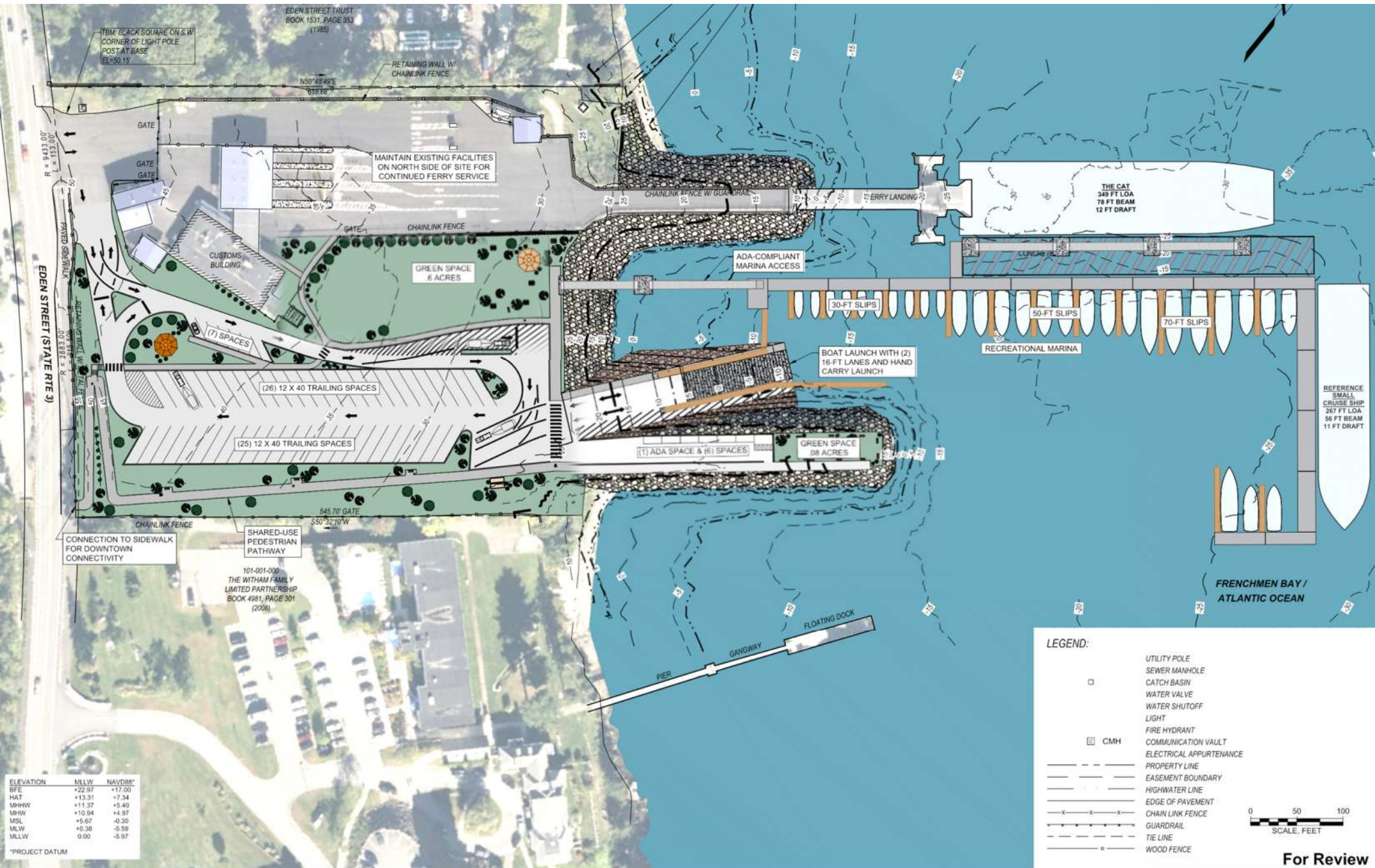
## Stormwater Management and Erosion Control

- Stormwater and erosion control and management during and following construction
- Opportunity to provide passive stormwater harvesting system (raingarden)
  - Trap and filter stormwater runoff
  - Use of earthwork grading, engineered soils, and specified plants
- Opportunity for naturalized shoreline areas “living shorelines” to soften upper edge





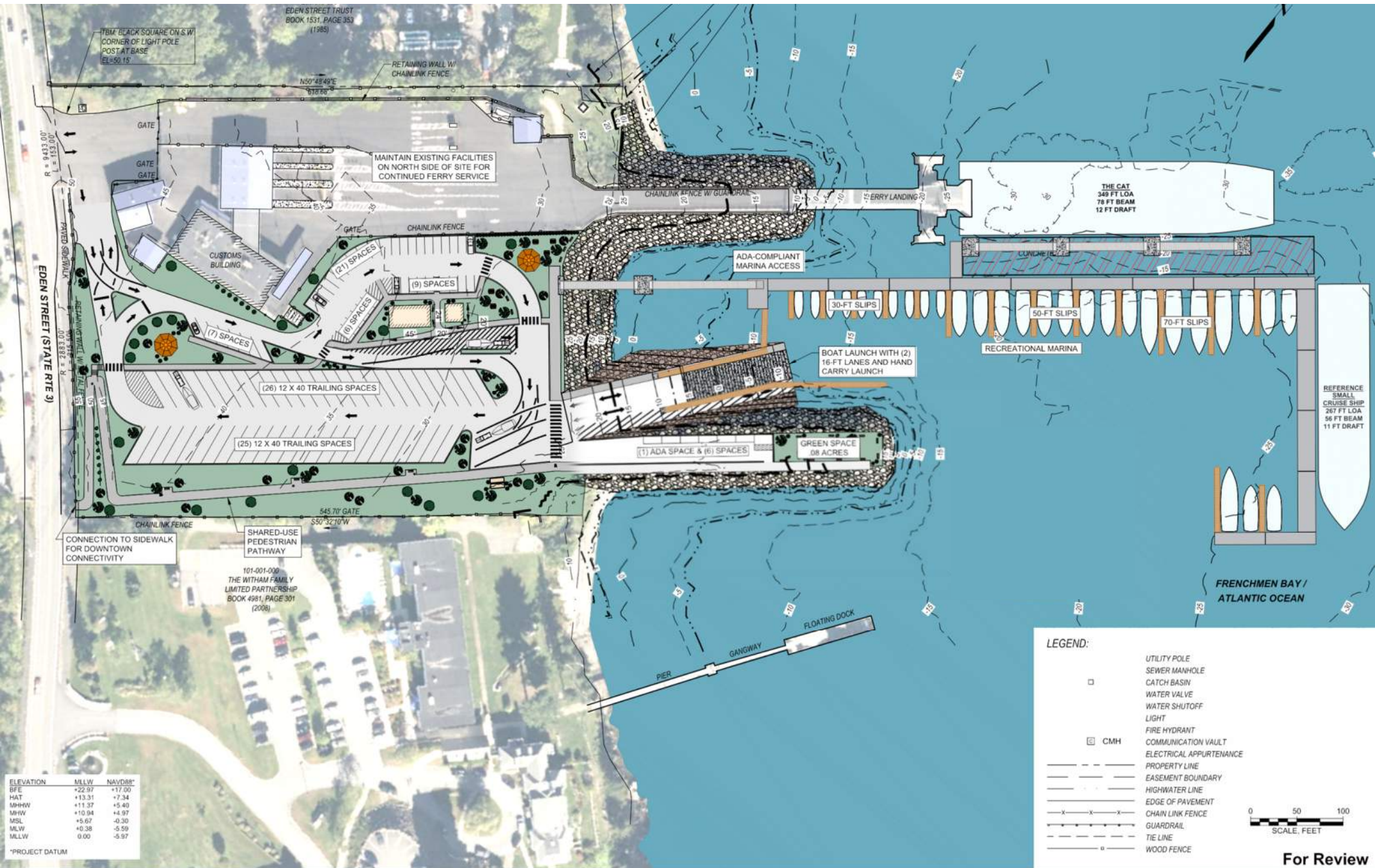
# Masterplan Concept A – Continued Ferry Service



## 3. Masterplan Concepts



# Masterplan Concept A – Continued Ferry Service



ELEVATION	MLLW	NAVD88*
BFE	+22.97	+17.00
HAT	+13.31	+7.34
MHHW	+11.37	+5.40
MHW	+10.94	+4.97
MSL	+5.67	-0.30
MLW	+0.38	-5.59
MLLW	0.00	-5.97

\*PROJECT DATUM

**LEGEND:**

- UTILITY POLE
- SEWER MANHOLE
- CATCH BASIN
- WATER VALVE
- WATER SHUTOFF
- LIGHT
- FIRE HYDRANT
- CMH COMMUNICATION VAULT
- ELECTRICAL APPURTENANCE
- PROPERTY LINE
- EASEMENT BOUNDARY
- HIGHWATER LINE
- x-x-x- EDGE OF PAVEMENT
- x-x-x- CHAIN LINK FENCE
- x-x-x- GUARDRAIL
- x-x-x- TIE LINE
- WOOD FENCE

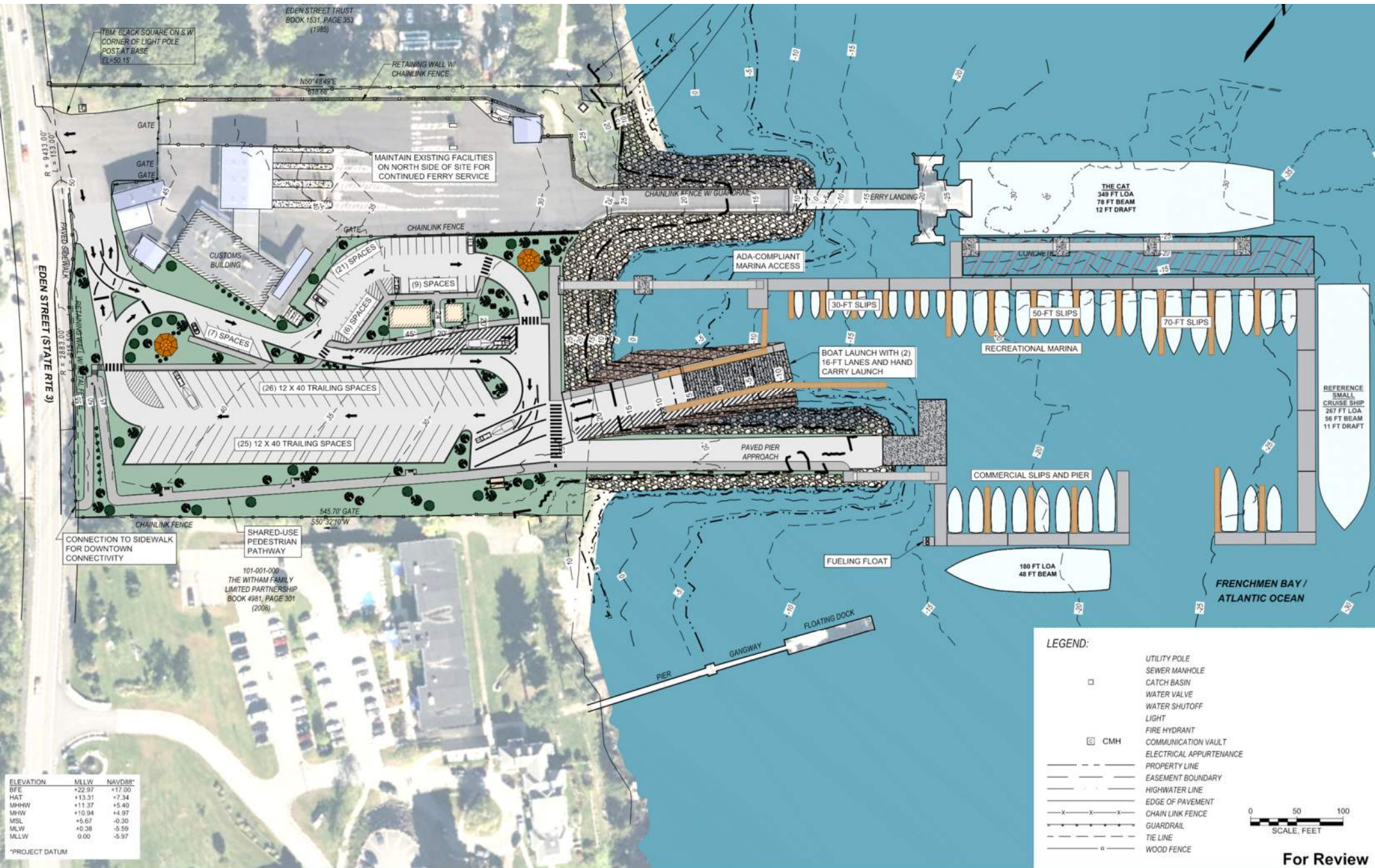
0 50 100  
SCALE, FEET

For Review

## 3. Masterplan Concepts



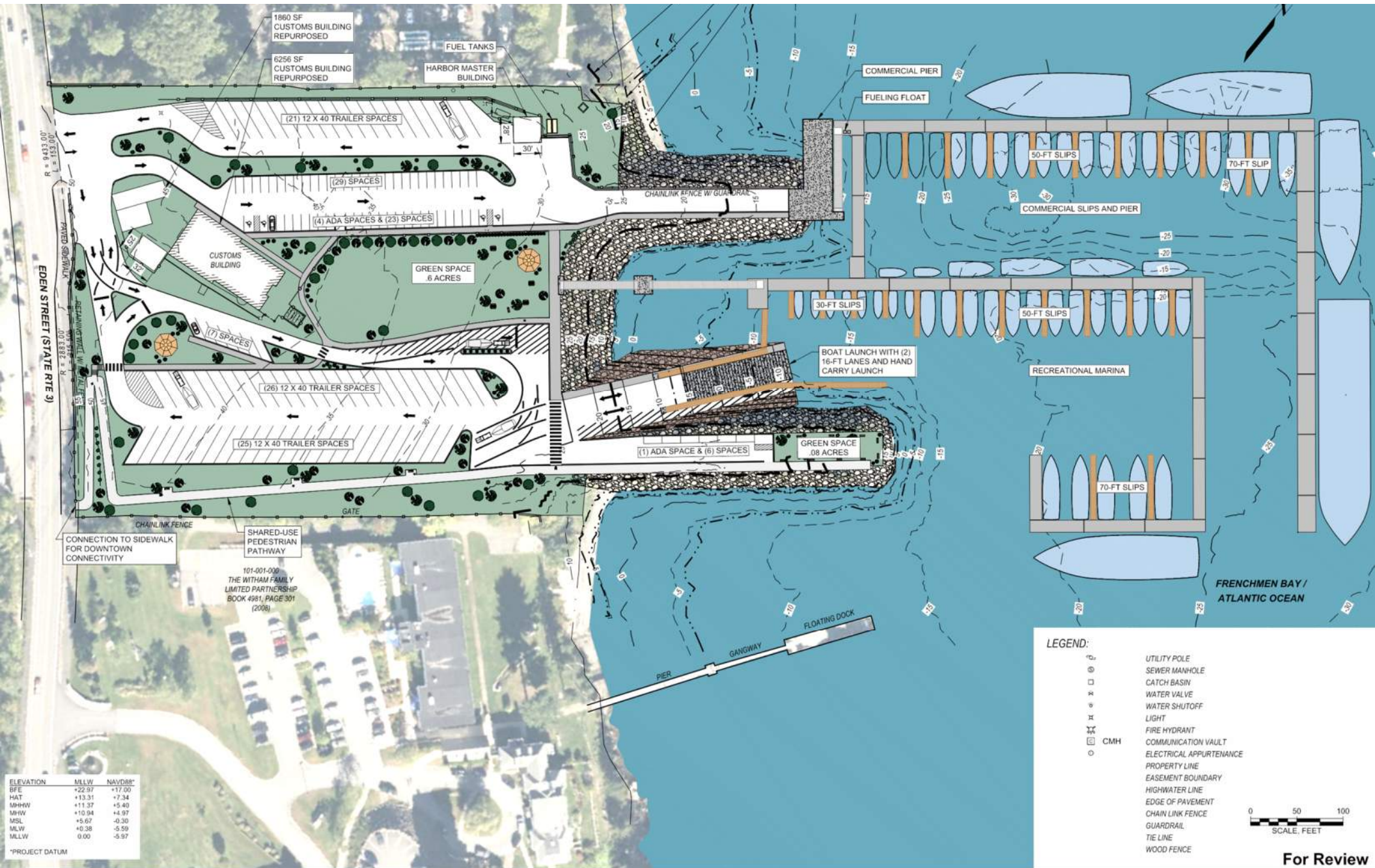
# Masterplan Concept A – Continued Ferry Service



## 3. Masterplan Concepts



# Masterplan Concept B – If Ferry Service Not Continued

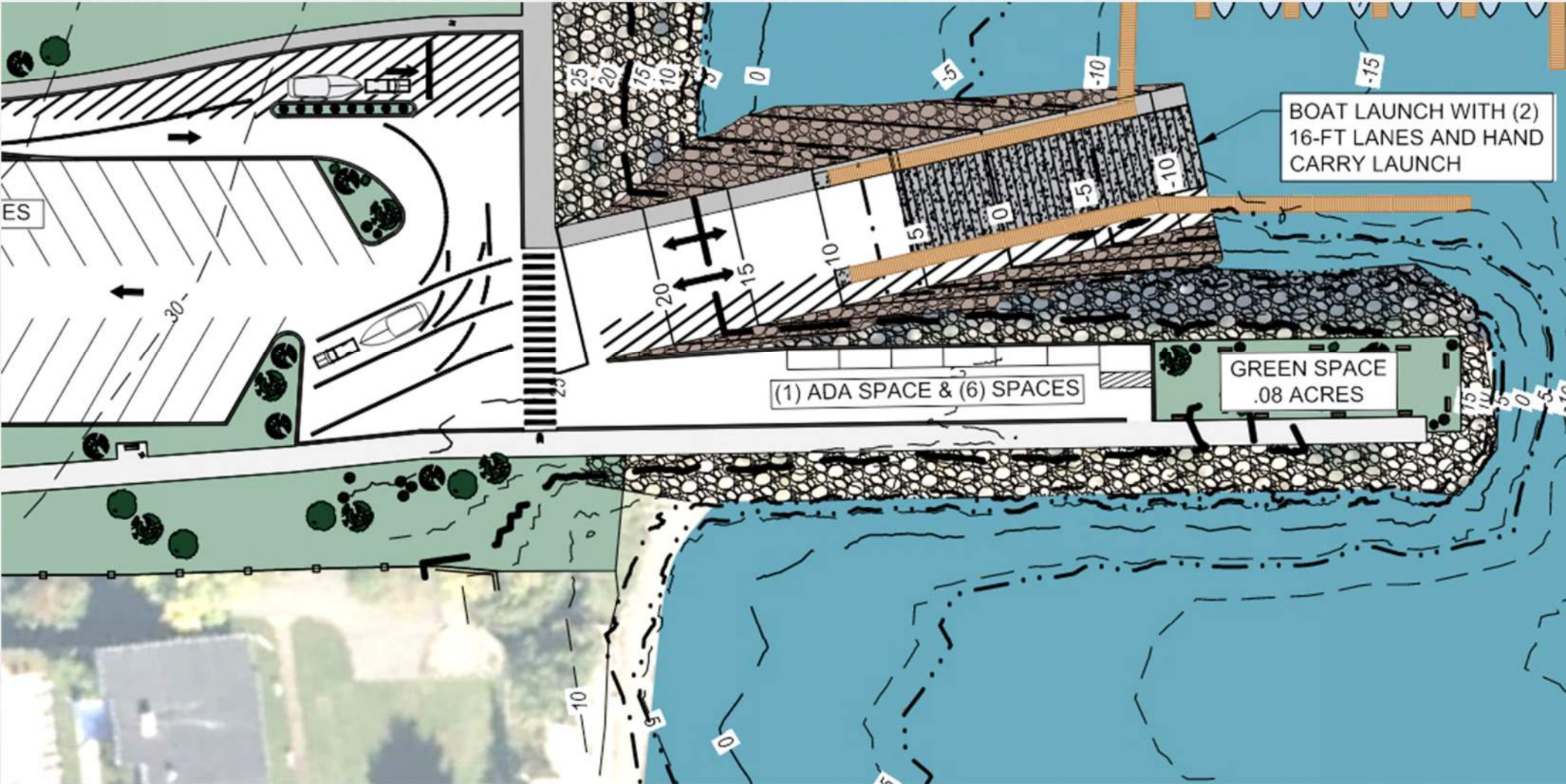


For Review

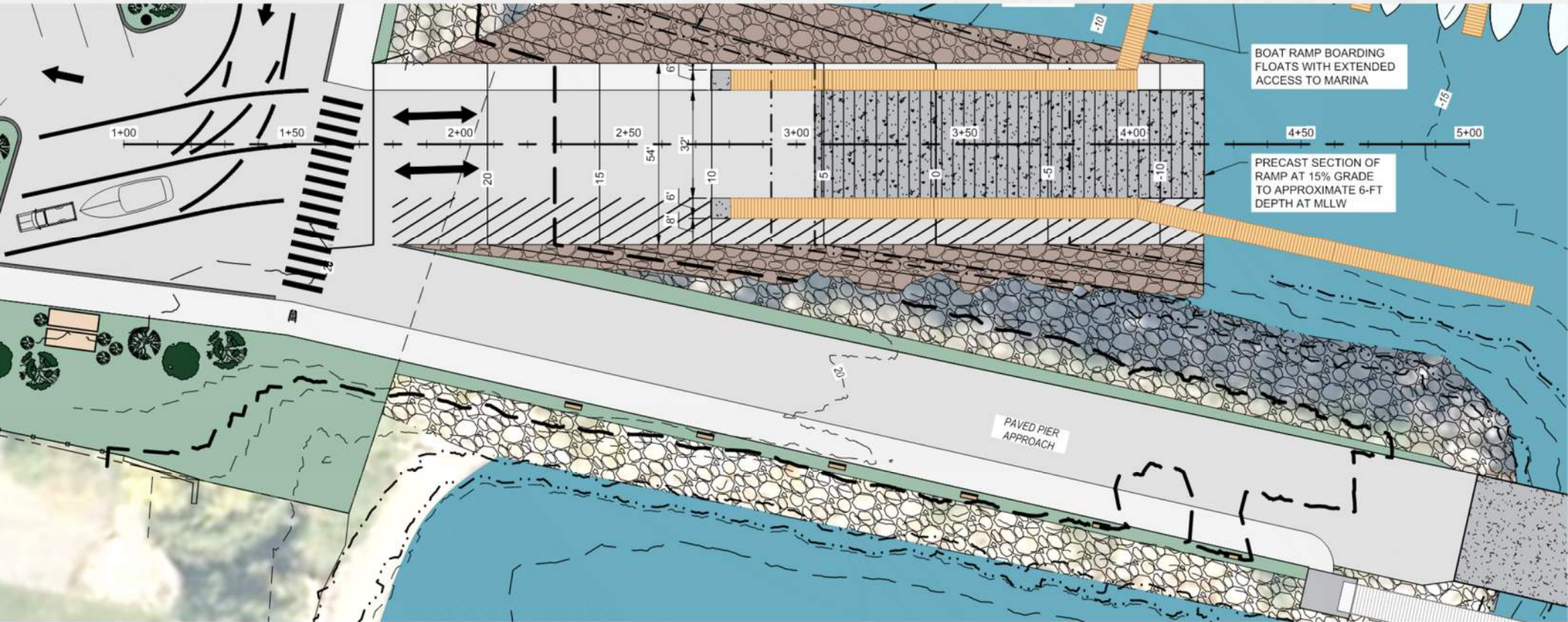
## 3. Masterplan Concepts



# Boat Launch

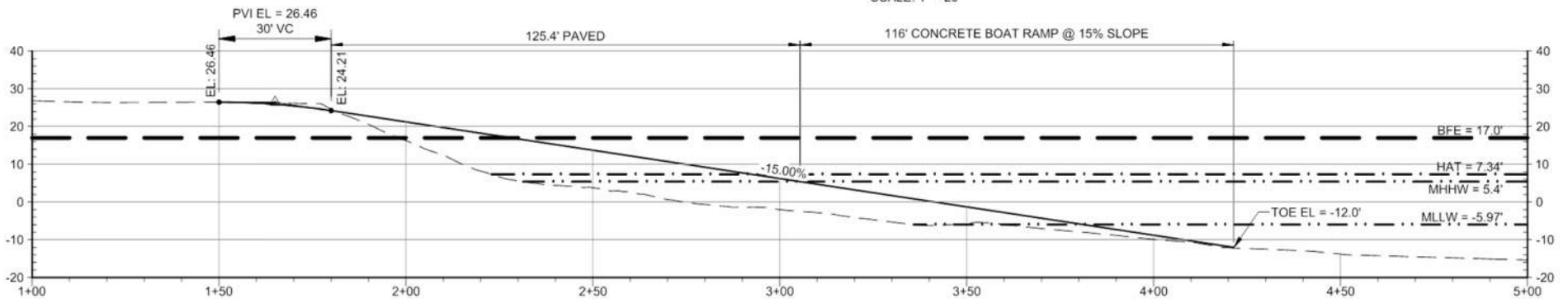


# Boat Launch

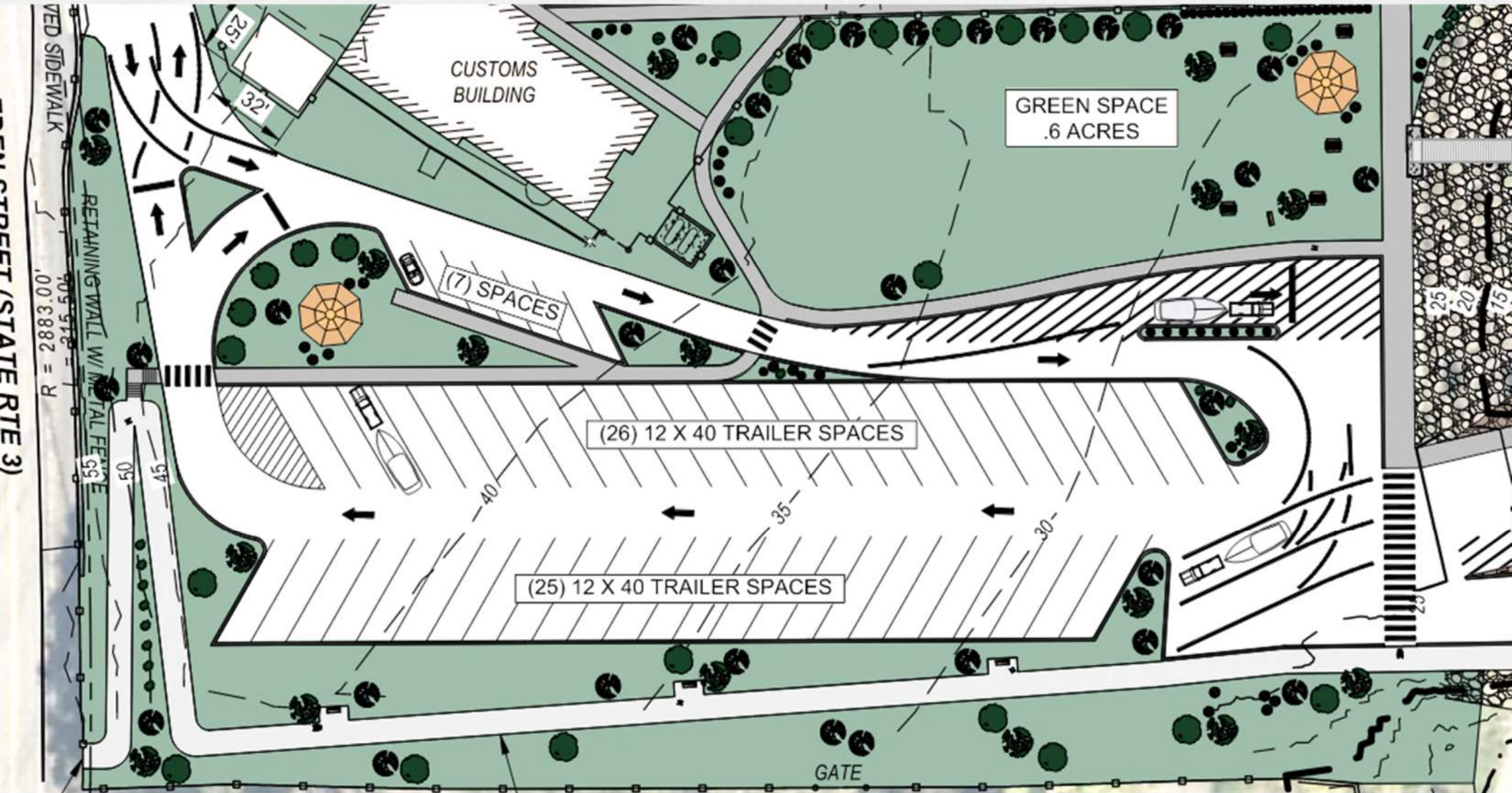


BOAT LAUNCH PLAN

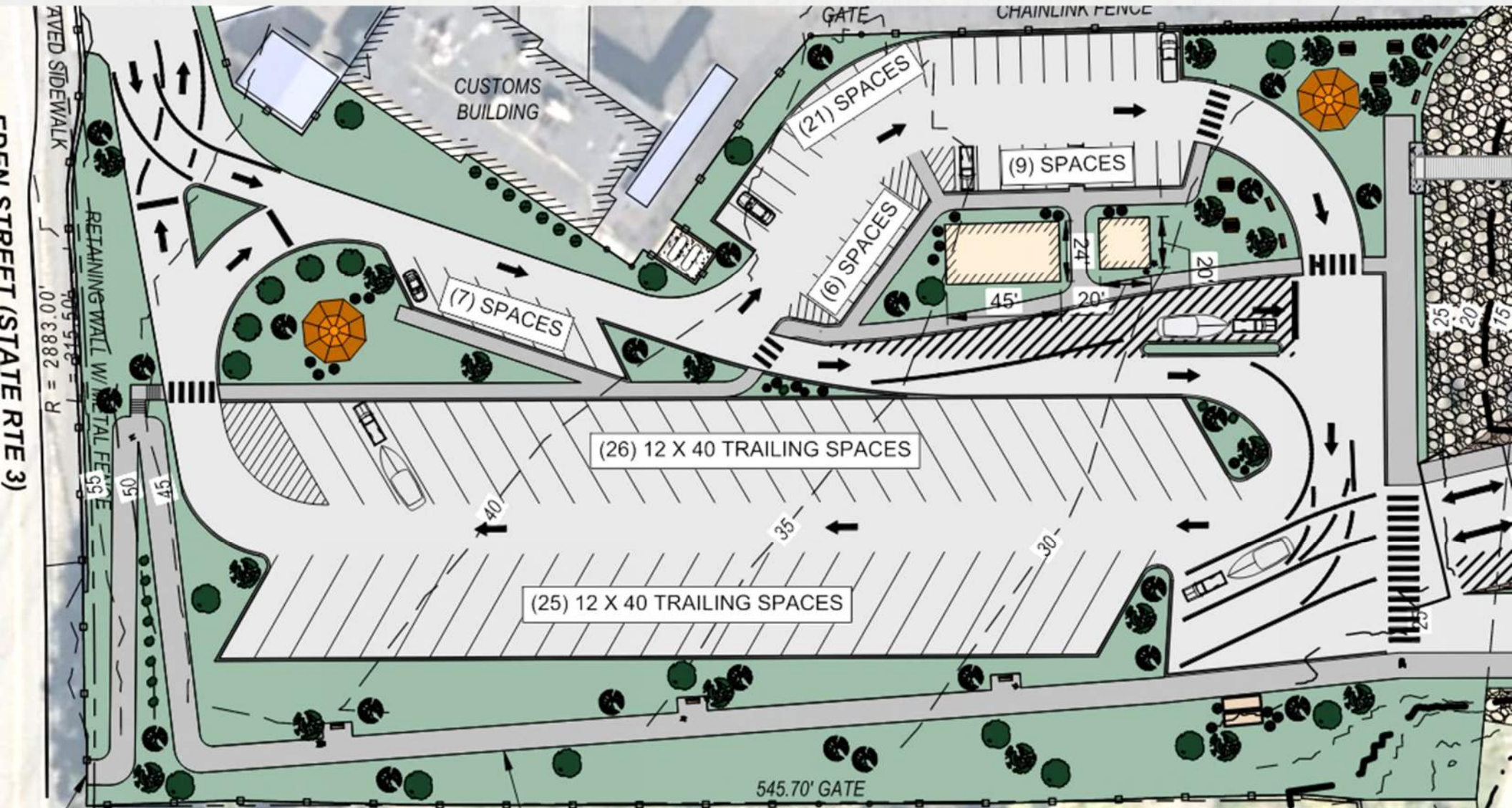
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# Site Circulation and Parking

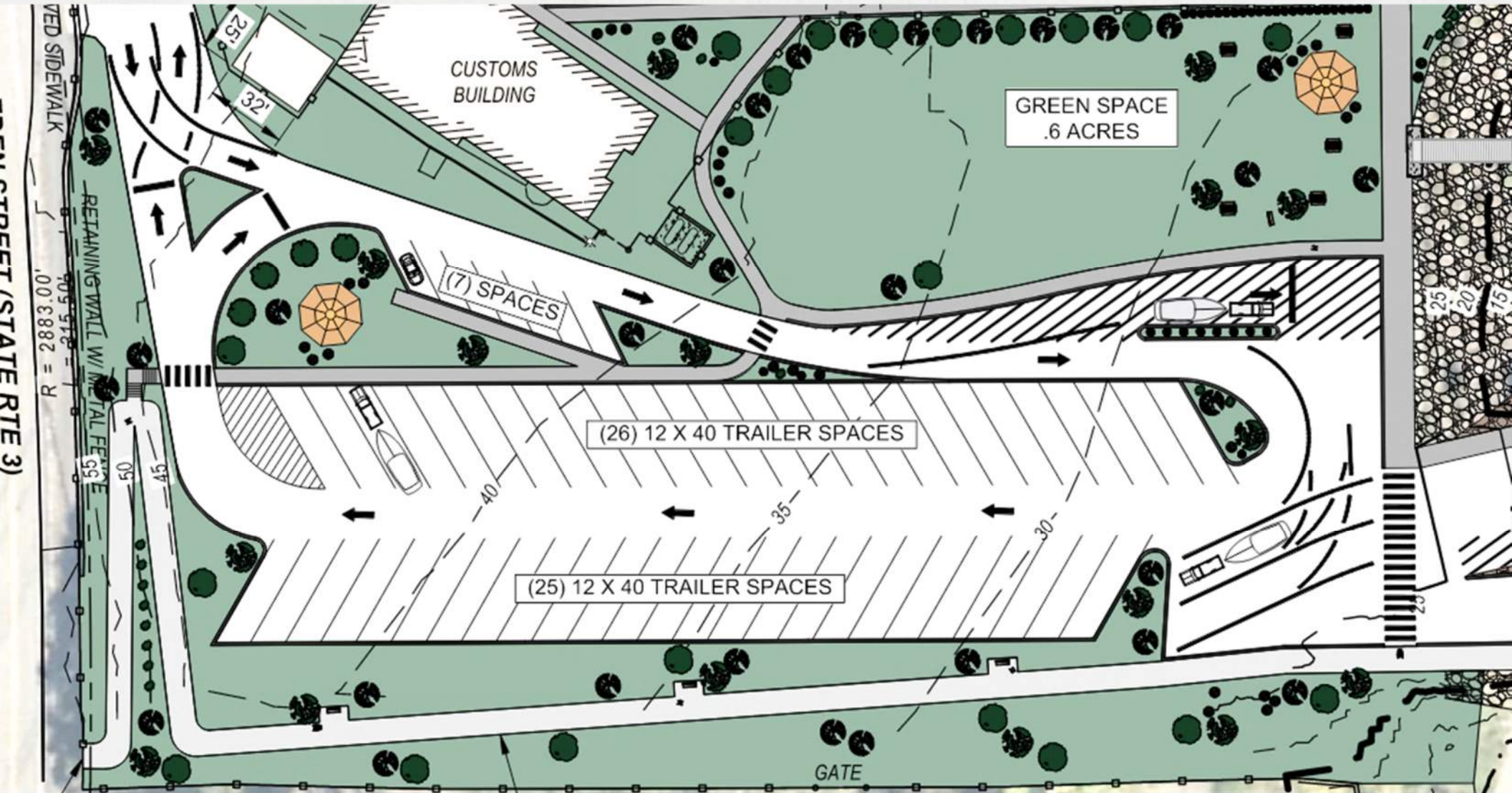


# Site Circulation and Parking

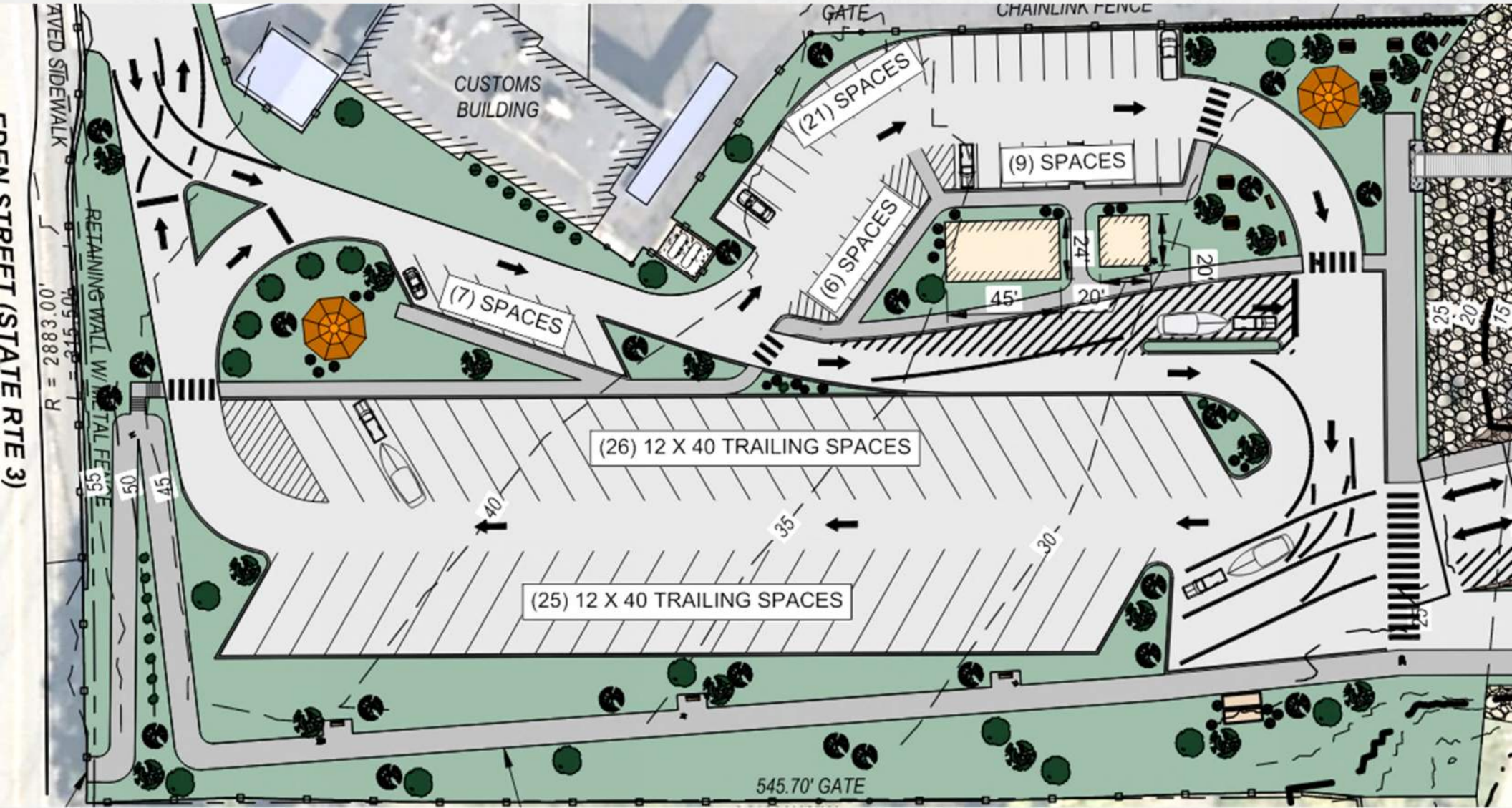




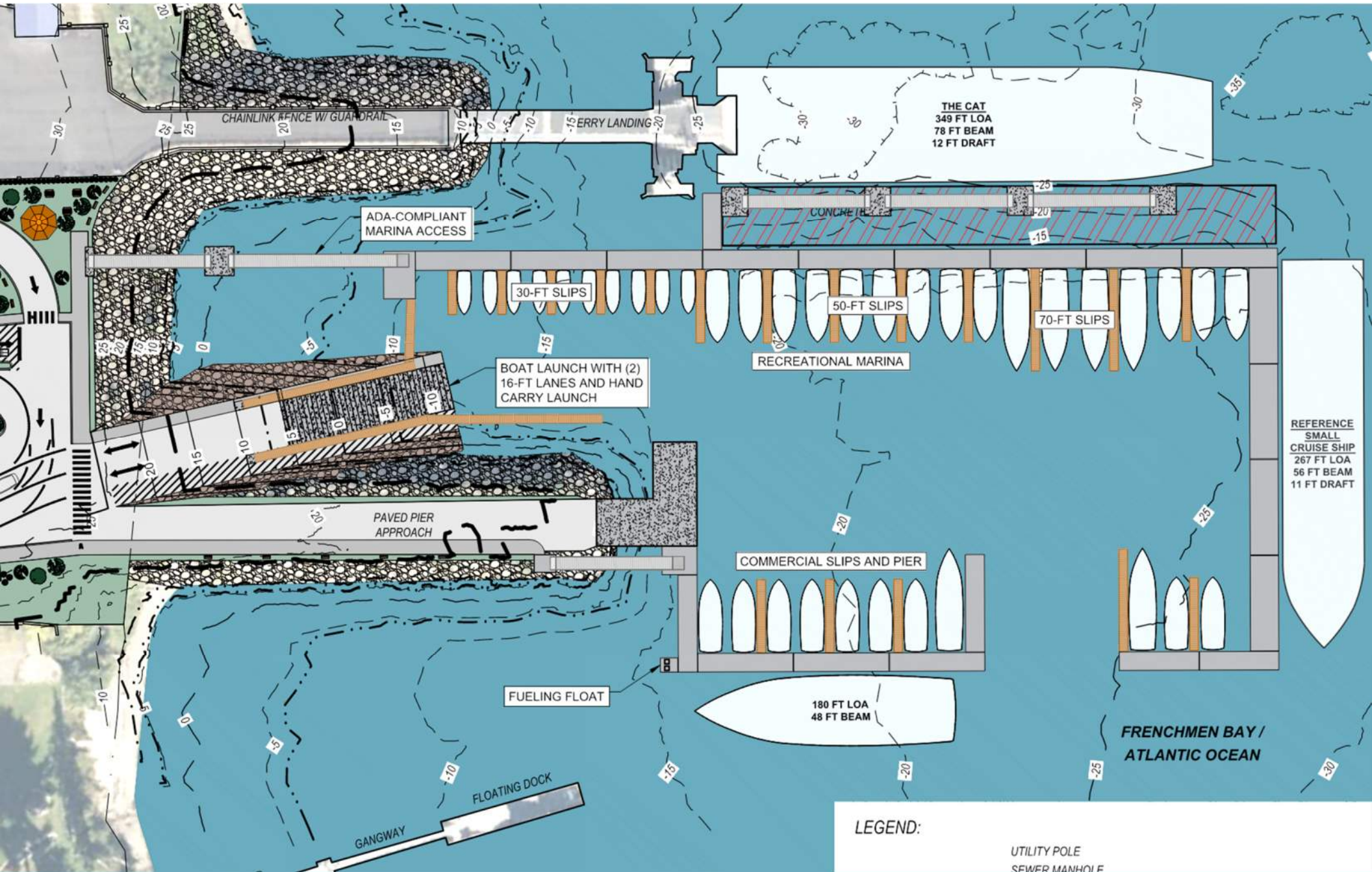
# Pedestrian Amenities, Open Space, and Features



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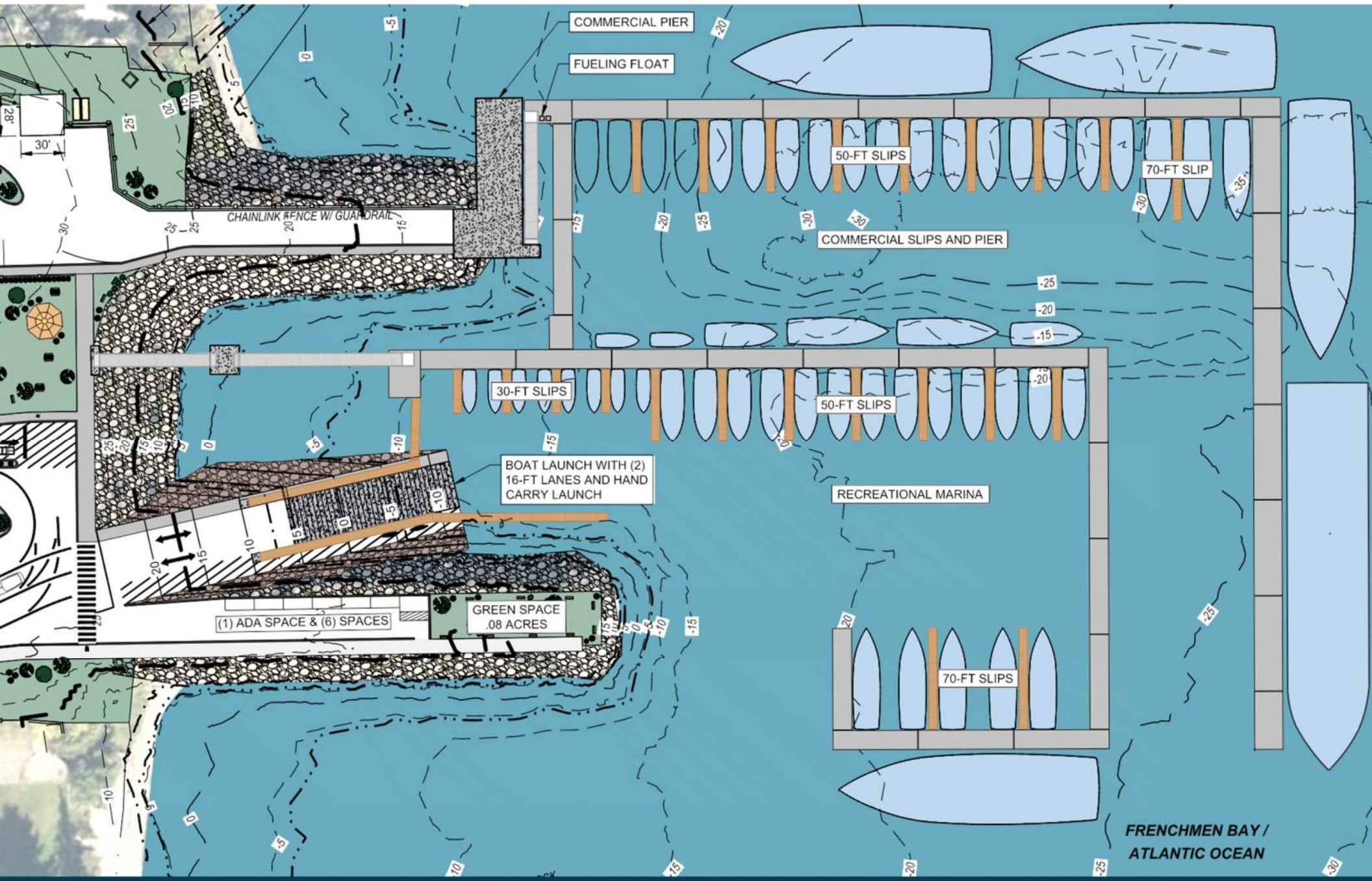
# Marina Development



## 3. Masterplan Concepts



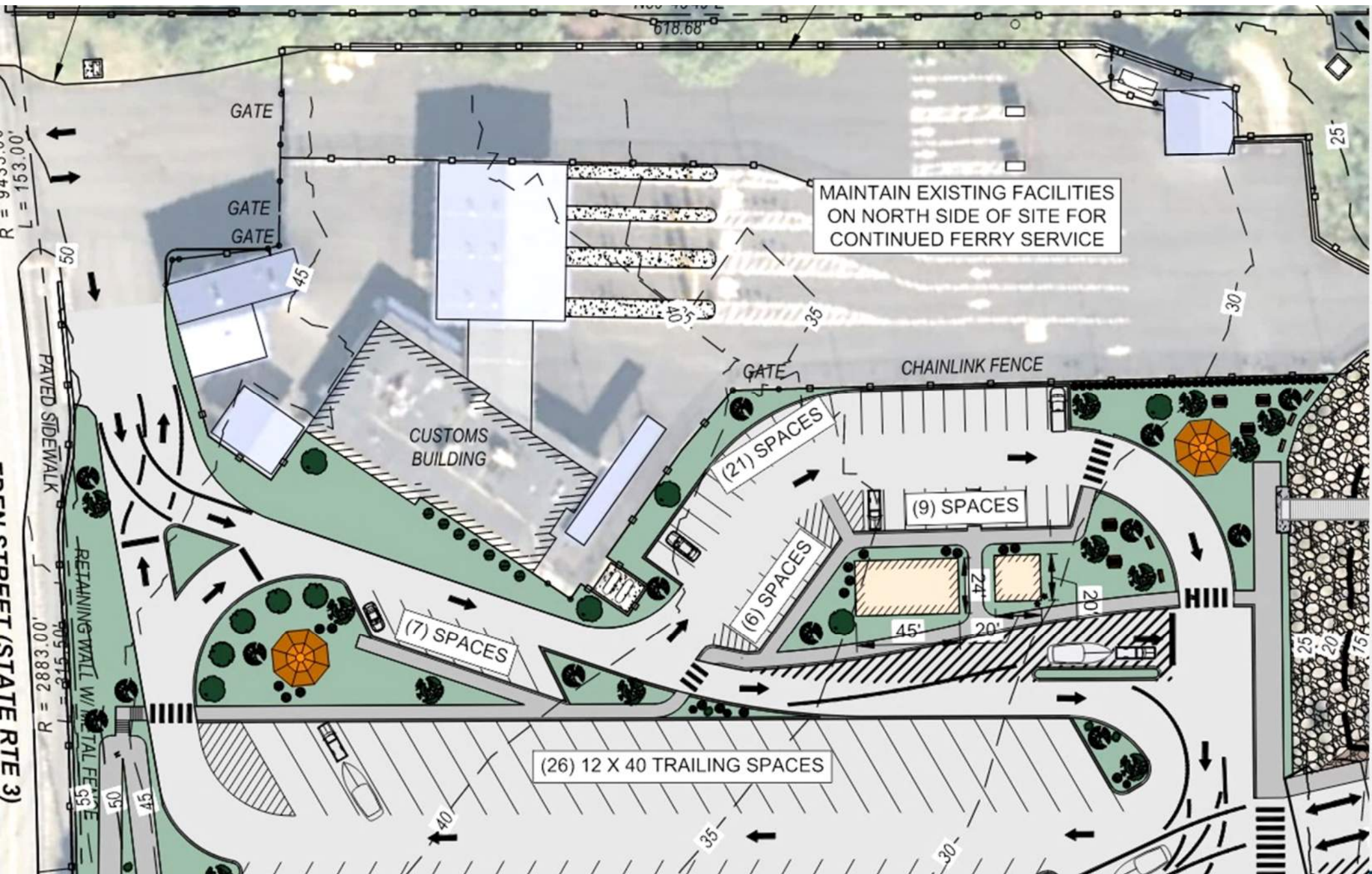
# Marina Development – If Ferry Service Not Continued



## 3. Masterplan Concepts



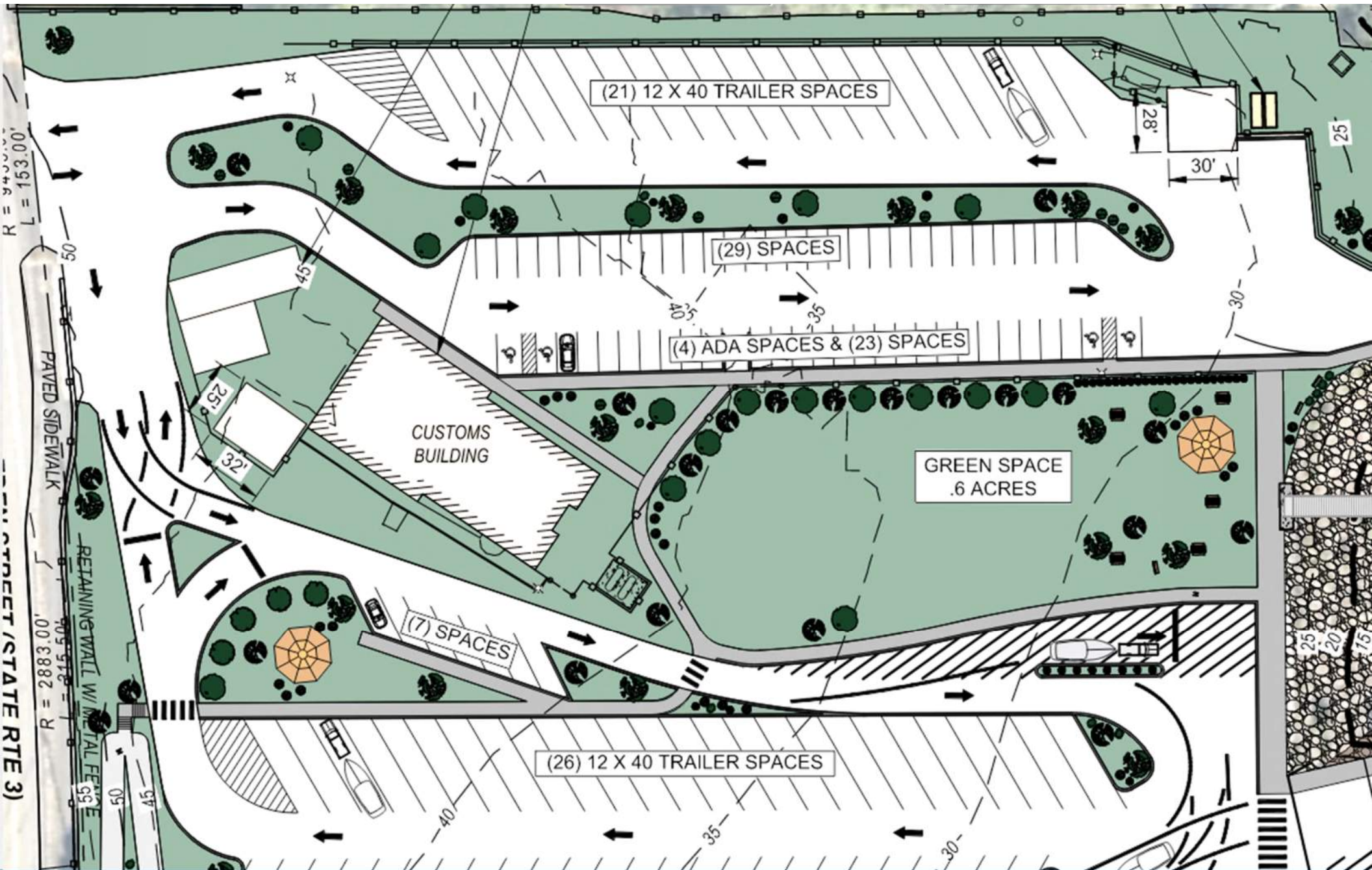
# North Side Unchanged if Ferry Service Continues



## 3. Masterplan Concepts



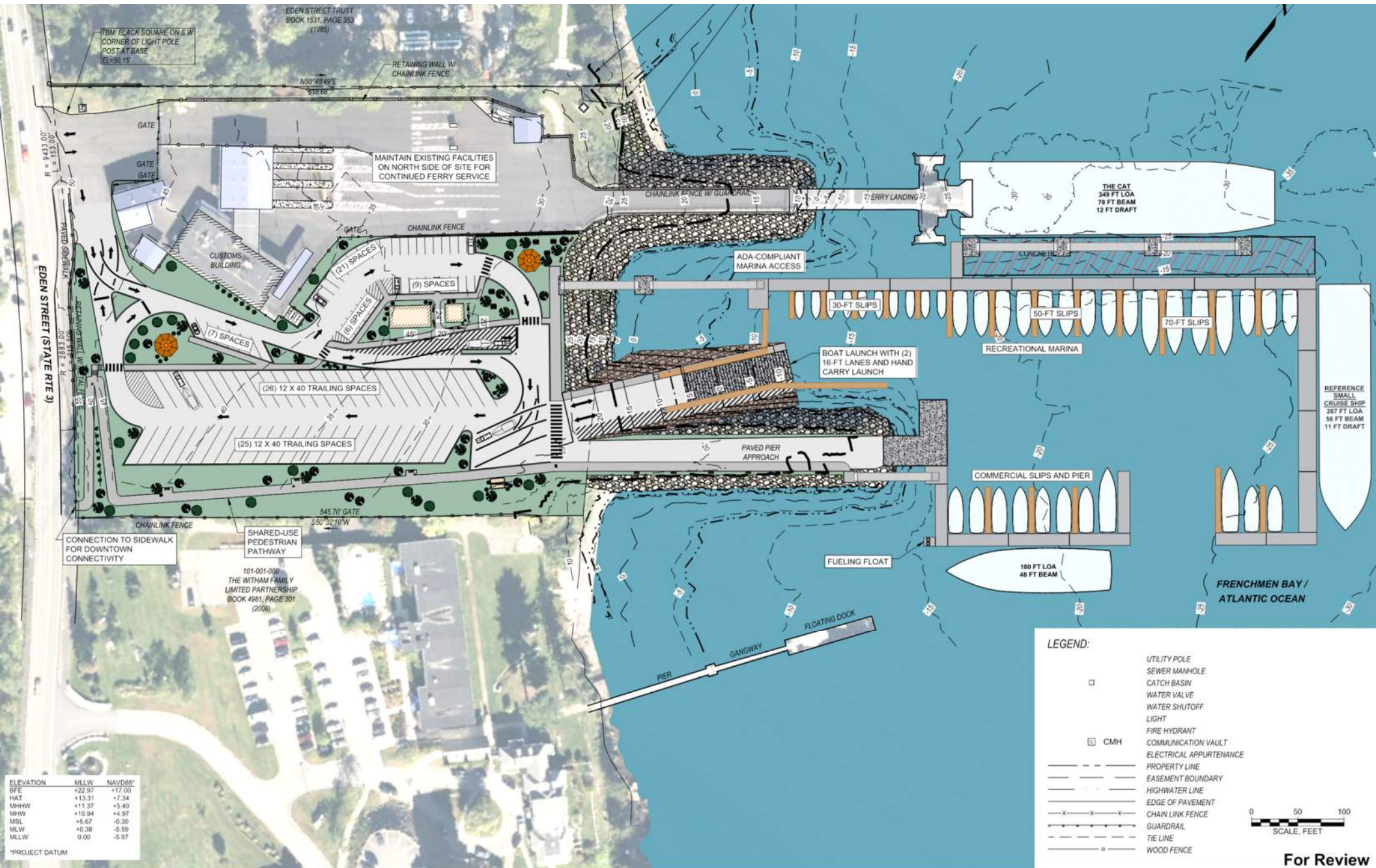
# North Side Development if Ferry Service Not Continued



## 3. Masterplan Concepts



# Masterplan Concept A – Continued Ferry Service

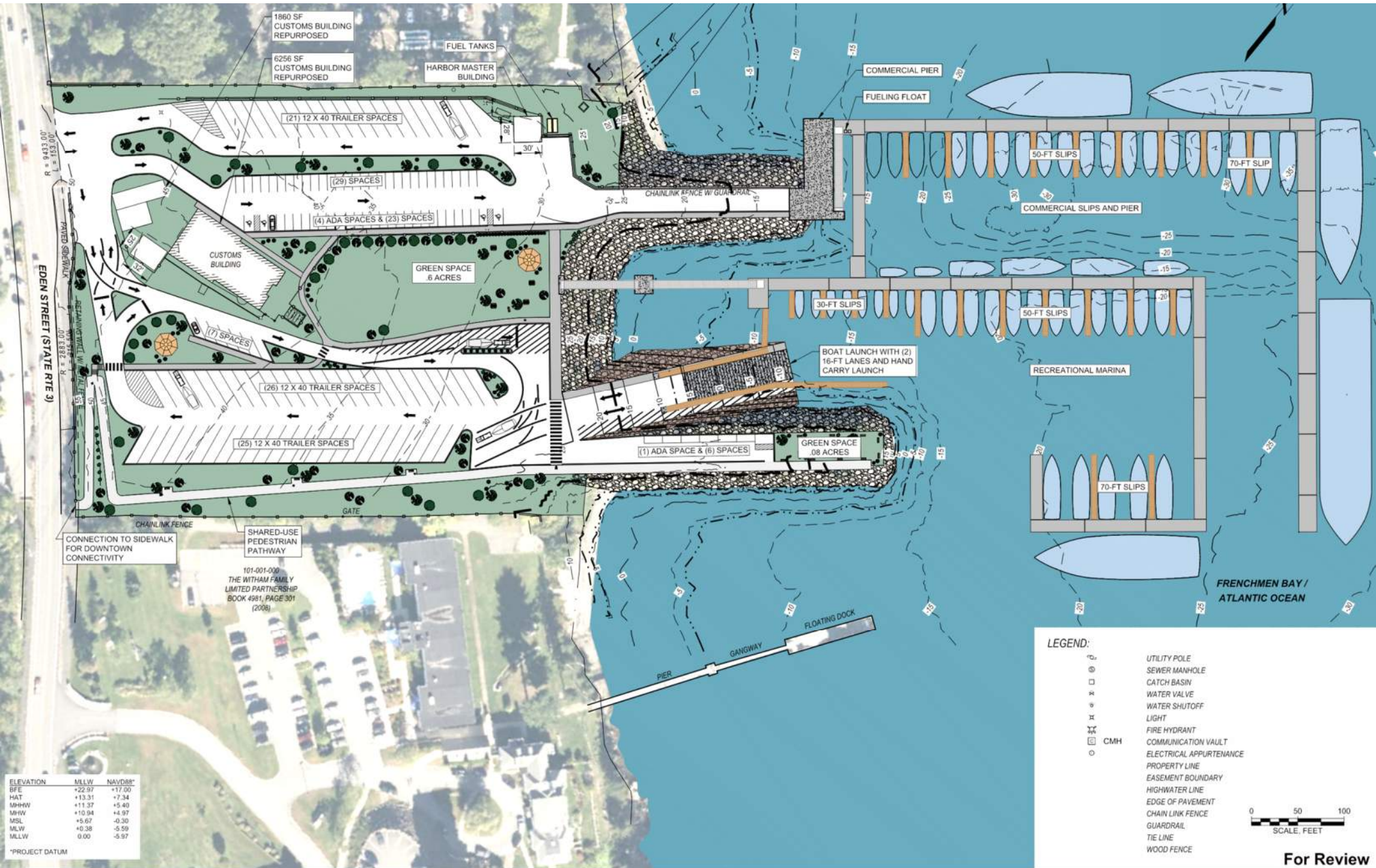


For Review

## 3. Masterplan Concepts



# Masterplan Concept B – If Ferry Service Not Continued

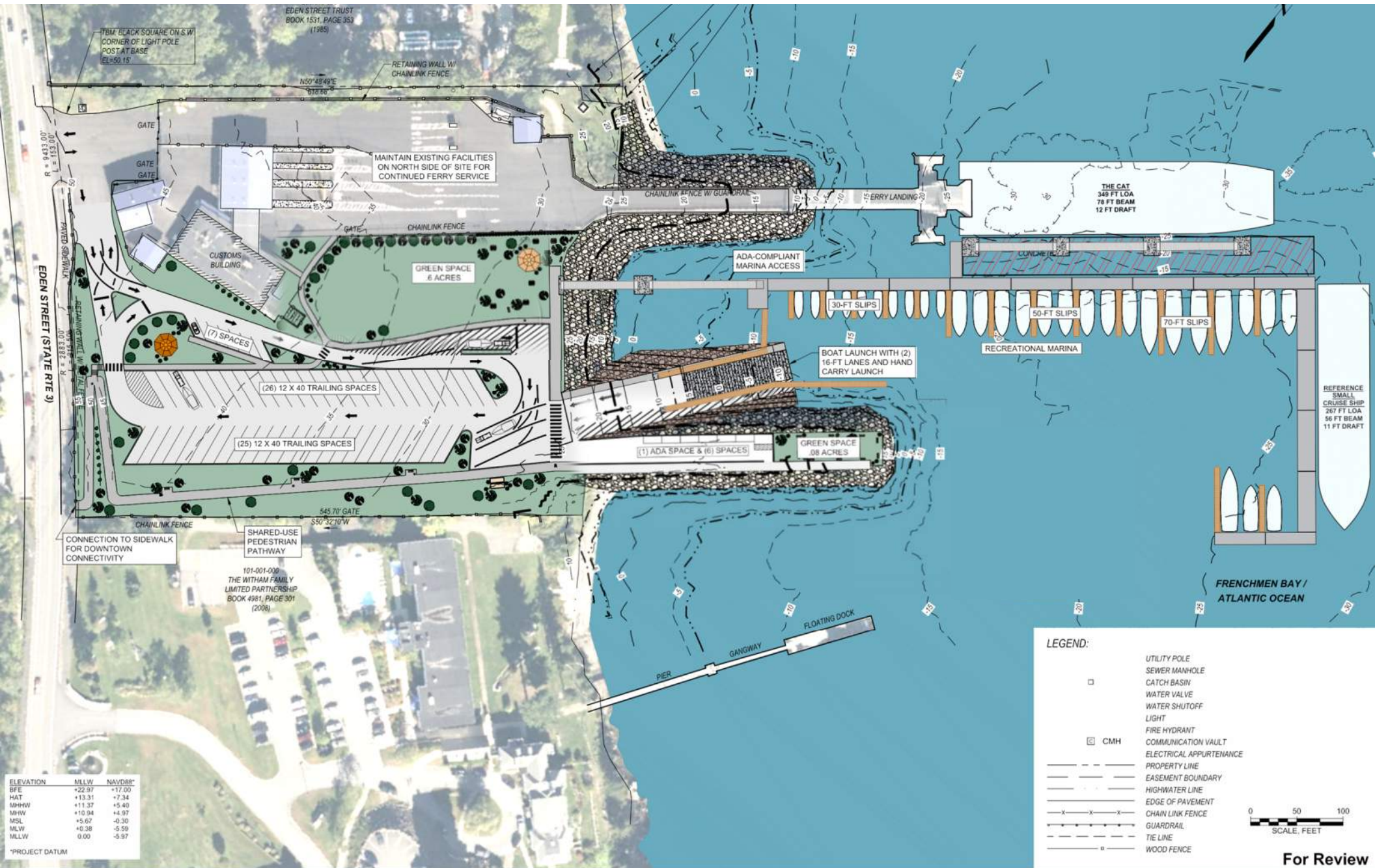


## 3. Masterplan Concepts





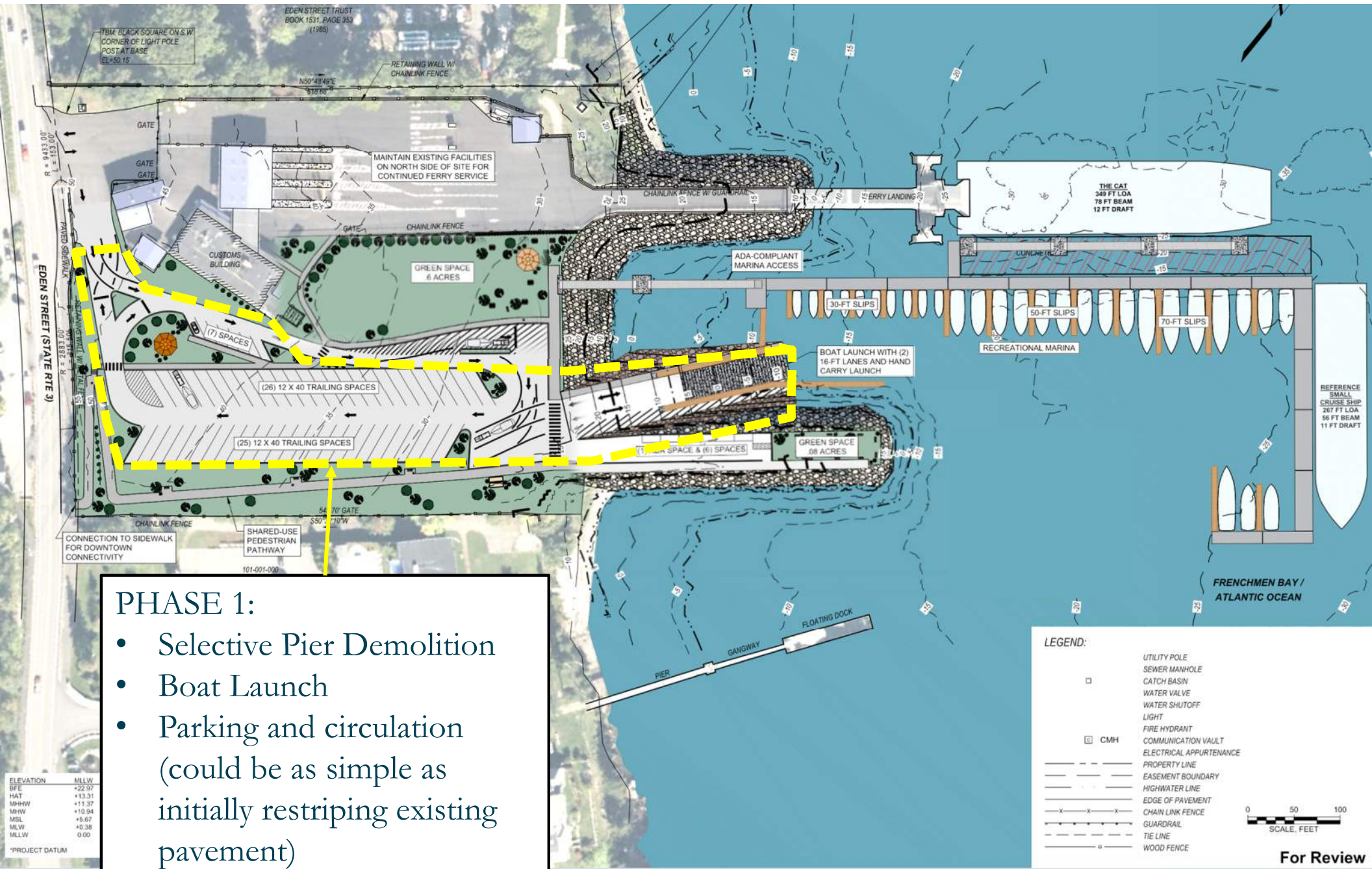
# Possible Project Phasing



## 3. Masterplan Concepts



# Possible Project Phasing



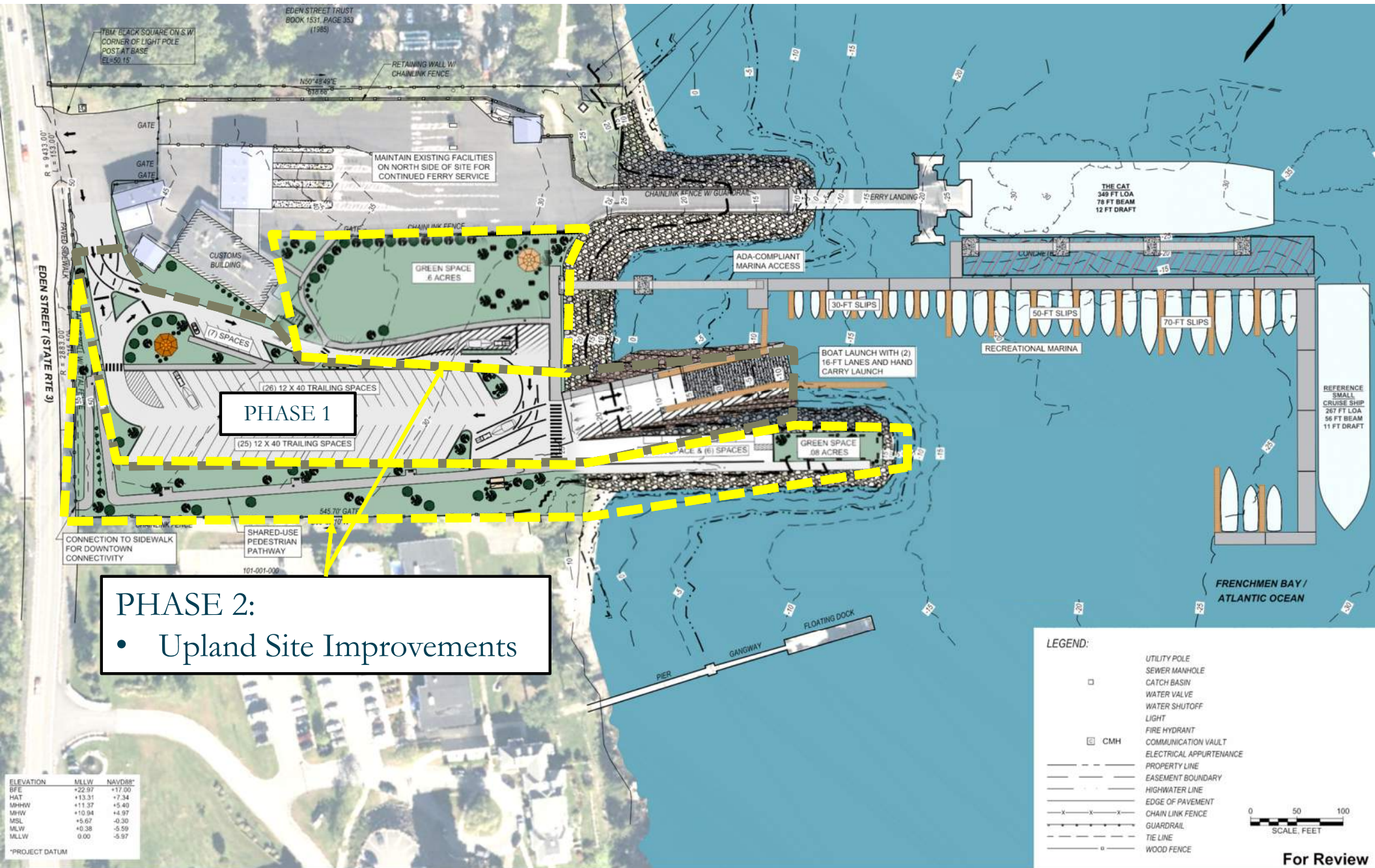
## PHASE 1:

- Selective Pier Demolition
- Boat Launch
- Parking and circulation (could be as simple as initially restriping existing pavement)

## 3. Masterplan Concepts



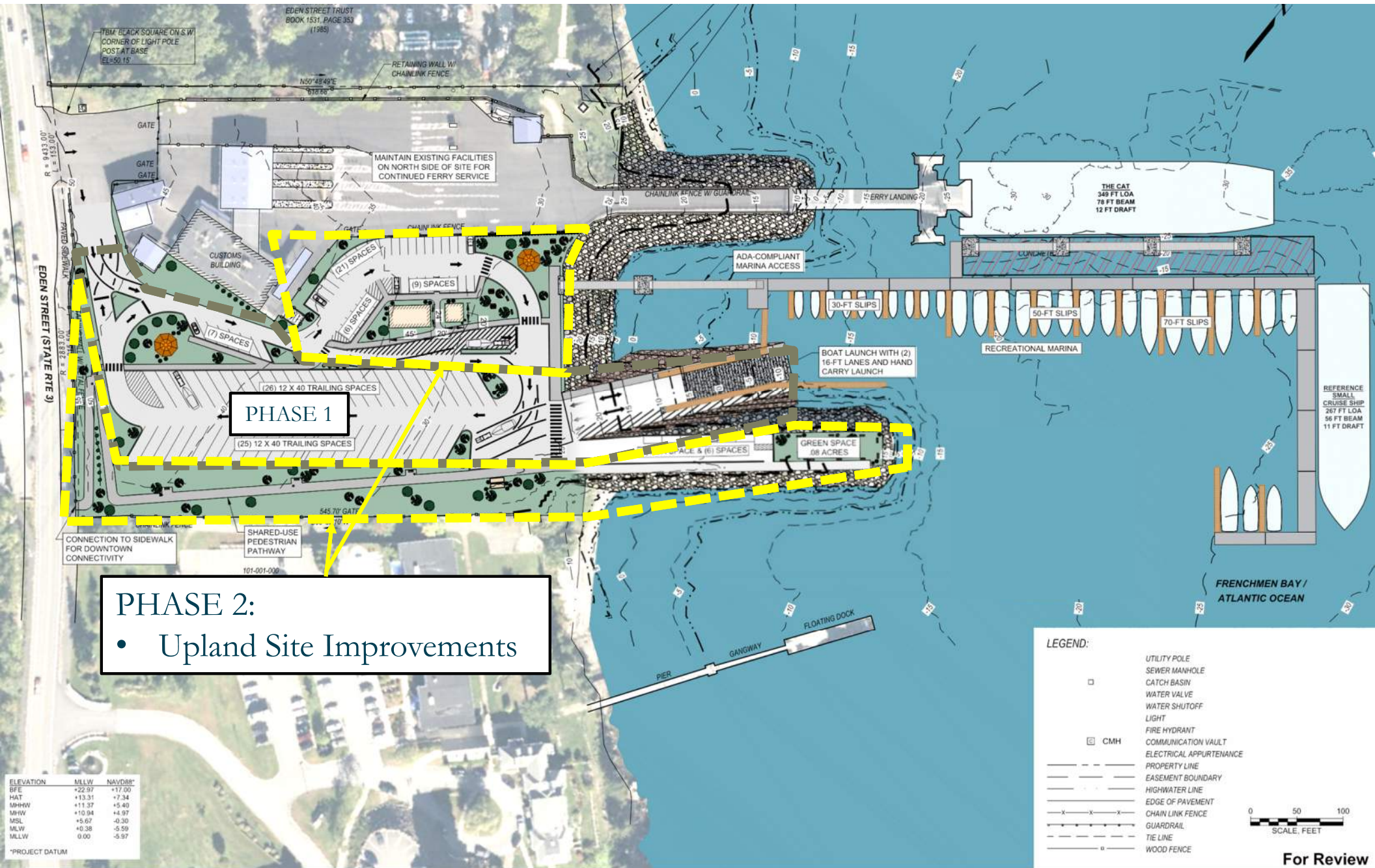
# Possible Project Phasing



## 3. Masterplan Concepts



# Possible Project Phasing



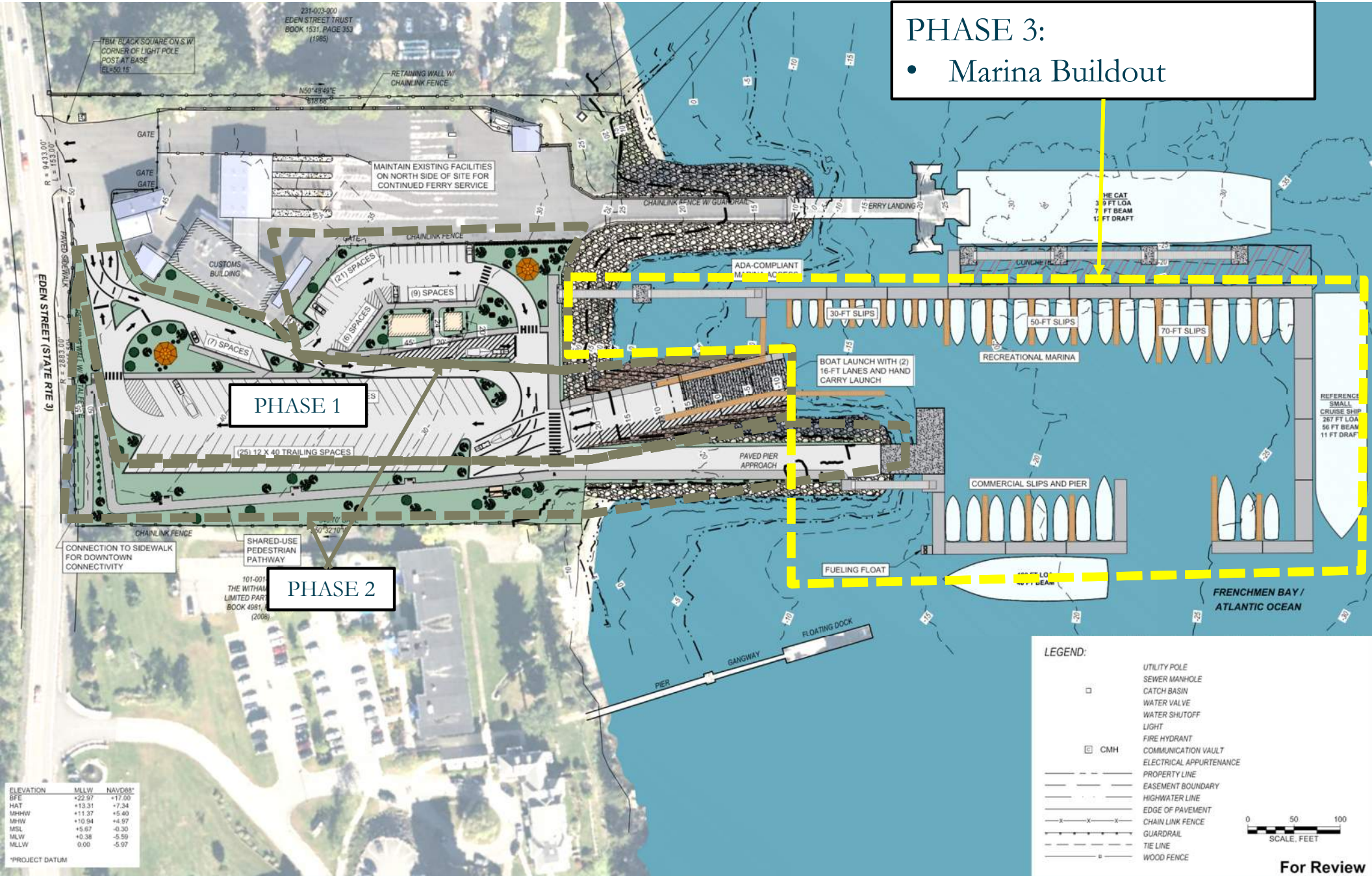
## 3. Masterplan Concepts



# Possible Project Phasing

**PHASE 3:**

- Marina Buildout

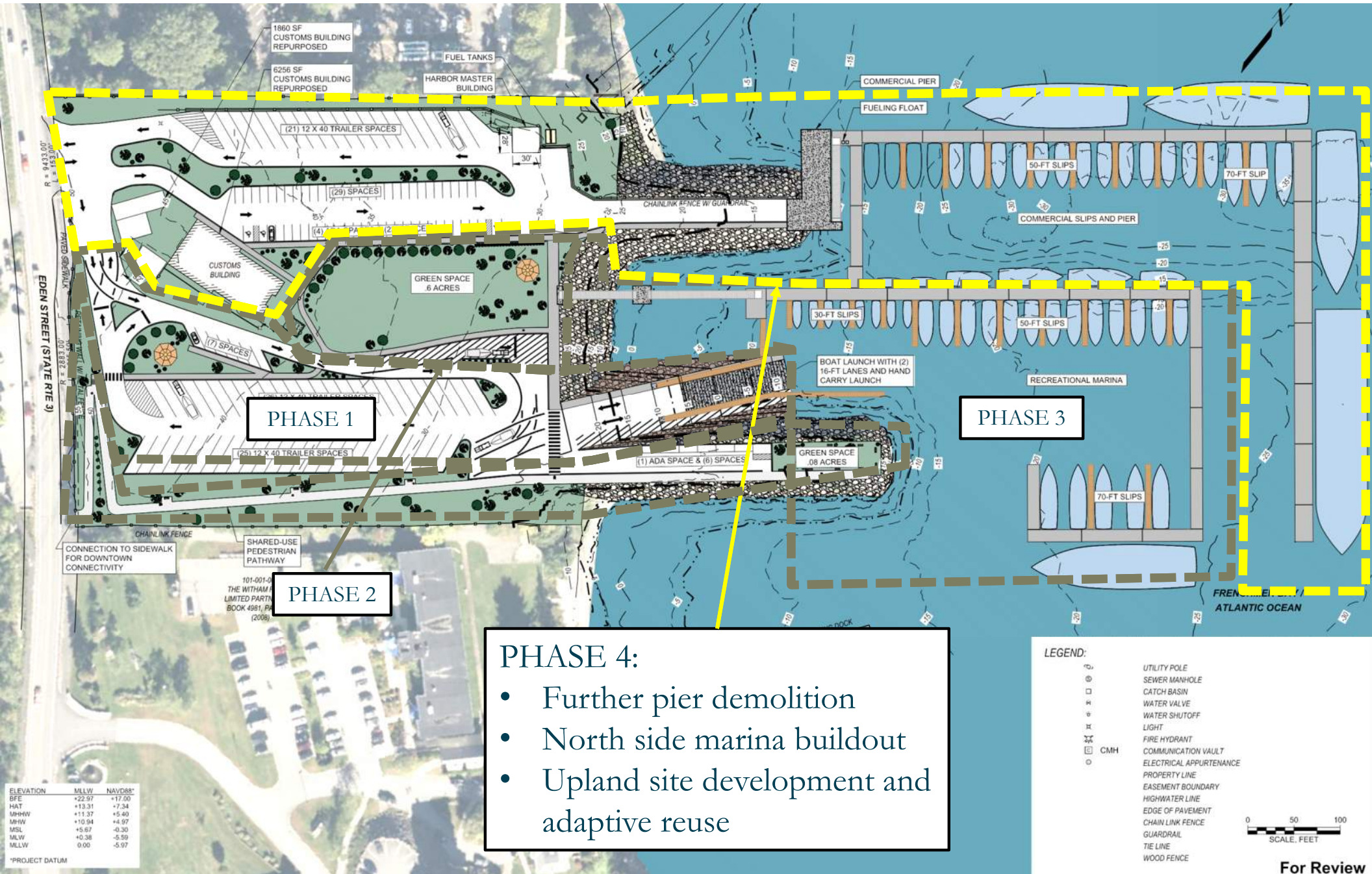


For Review

## 3. Masterplan Concepts



# Possible Project Phasing



For Review

## 3. Masterplan Concepts



# Possible Project Phasing

Phase	Masterplan Components	Ferry Service	Permitting	Possible Funding	Timing
1	<ul style="list-style-type: none"> <li>South Pier and Connecting Bridge Demolition</li> <li>Boat Ramp Construction</li> <li>Site Access Road and Boat Ramp Parking Upgrades</li> </ul>	Yes	<ul style="list-style-type: none"> <li>Maine DEP</li> <li>USACE</li> <li>Submerged Lands</li> <li>Town</li> </ul>	<ul style="list-style-type: none"> <li>MaineDOT SHIP Grant</li> <li>Maine DACF Boating Facilities Fund</li> </ul>	Within 1-3 years or as funding allows
2	<ul style="list-style-type: none"> <li>Additional upland &amp; waterfront site improvements (green space, parking, buildings, shared-use path)</li> </ul>	Yes	<ul style="list-style-type: none"> <li>Maine DEP</li> <li>Town</li> </ul>	<ul style="list-style-type: none"> <li>Coastal Communities Grant, Shore and Harbor Planning Grant</li> <li>Recreational Trails Program</li> <li>Land and Water Conservation Fund</li> <li>Public-private partnerships (leasing of buildings)</li> </ul>	Within 1-3 years or as funding allows
3	<ul style="list-style-type: none"> <li>South marina development with recreational and commercial facilities</li> </ul>	Yes	<ul style="list-style-type: none"> <li>Maine DEP</li> <li>USACE</li> <li>Submerged Lands</li> <li>Town</li> </ul>	<ul style="list-style-type: none"> <li>USFWS Boating Infrastructure Grant</li> <li>Harbor Management and Access Grant</li> <li>MaineDOT SHIP Grant</li> </ul>	Likely 5+ years
4	<ul style="list-style-type: none"> <li>North marina and upland facility buildout</li> <li>Adaptive reuse of Customs Building</li> </ul>	No	<ul style="list-style-type: none"> <li>Maine DEP</li> <li>USACE</li> <li>Submerged Lands</li> <li>Town</li> </ul>	<ul style="list-style-type: none"> <li>To be determined</li> </ul>	Would only occur if lease with Bay Ferries is not renewed. Current lease through October 2026.



# Next Steps

- Completion of masterplan
  - Receive feedback from Draft Presentation
  - Update masterplan to incorporate feedback
  - Prepare masterplan report
  - Submit final deliverables by December 31, 2023 to meet Maine Coastal Program grant deadline
- After completion of masterplan
  - Town formally adopt plan
    - Not a commitment to this exact plan, many details can be determined still during final design.
  - Funding for final design, permitting of initial phases (e.g. boat ramp, selective demolition of pier)
  - Ongoing coordination with Bay Ferries about future plans beyond current lease
  - Seek grant applications for implementation of early phases





# THANK YOU!

## Questions?

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Project Manager / Senior Waterfront Engineer

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GEI



Consultants

Consulting  
Engineers and  
Scientists