

PHASE V DREDGING, CAD CELL #4, NORTH TERMINAL EXTENSION



Photo by Ed Pepin

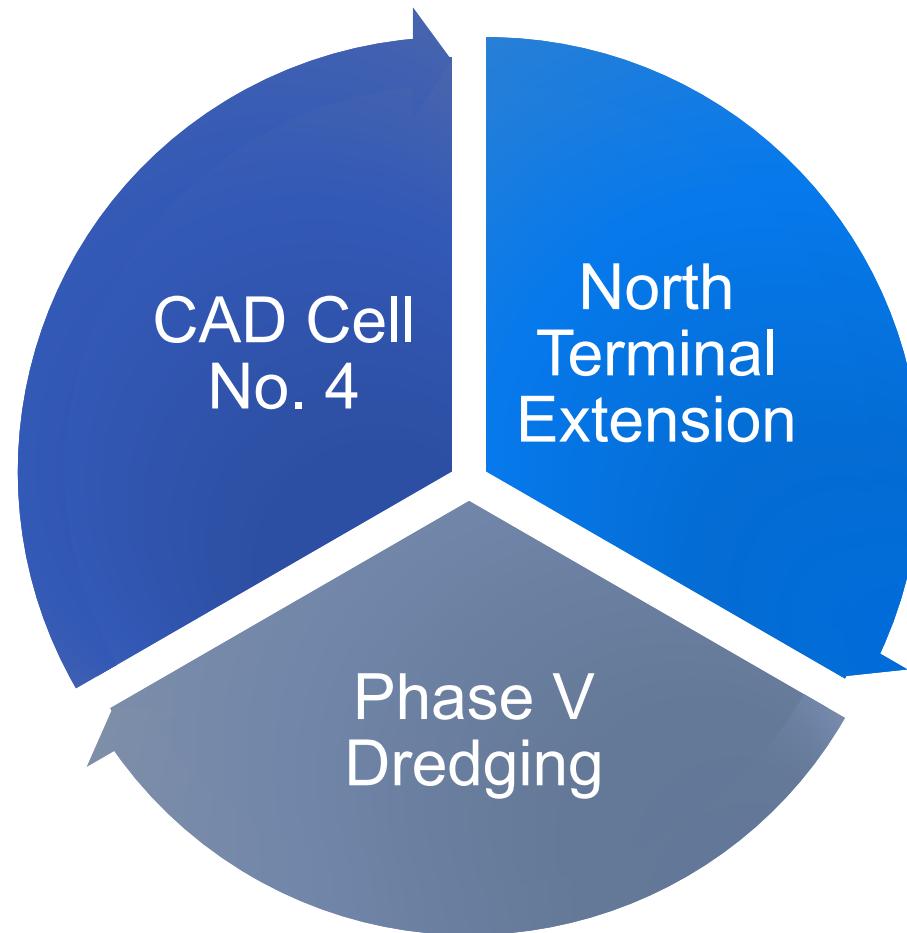
Presentation

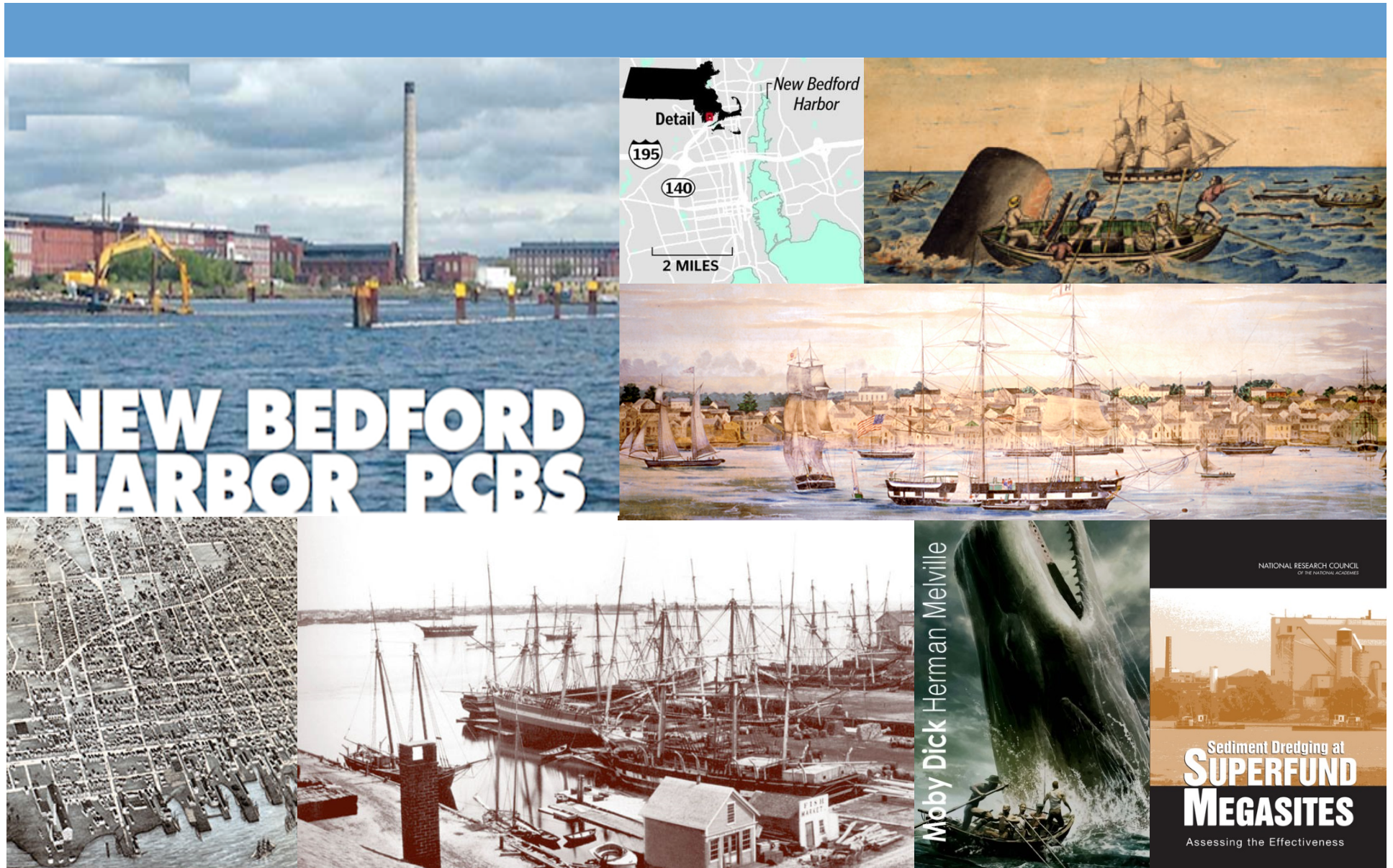
- Introduction
- Project Overview (CAD #4, North Terminal Extension, Phase V Dredging)
- Brief History of Dredging and CAD Cells in the Harbor
- Project Benefits and Details





Project Overview

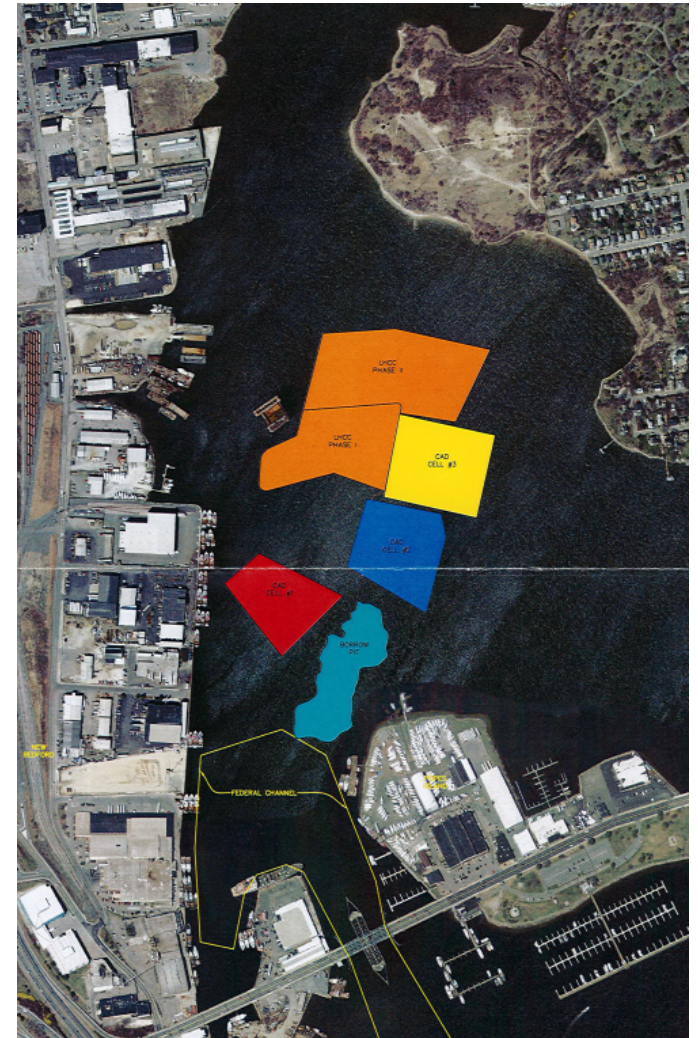




History of New Bedford / Fairhaven Harbor

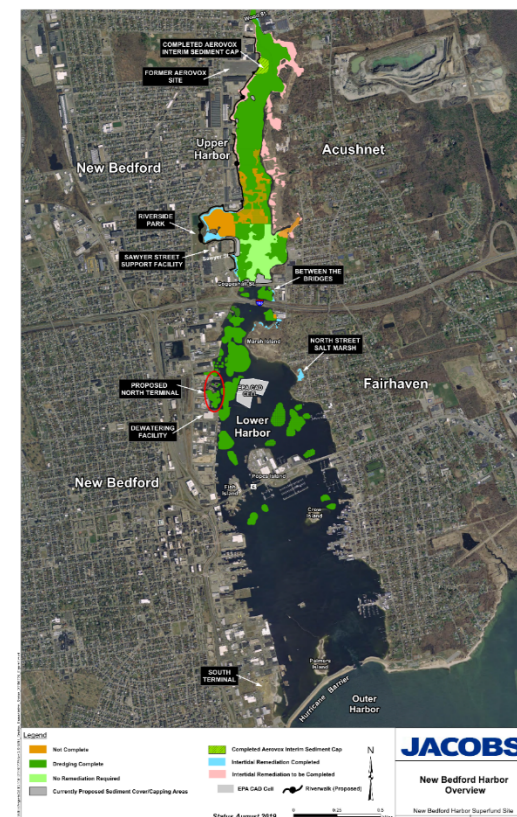
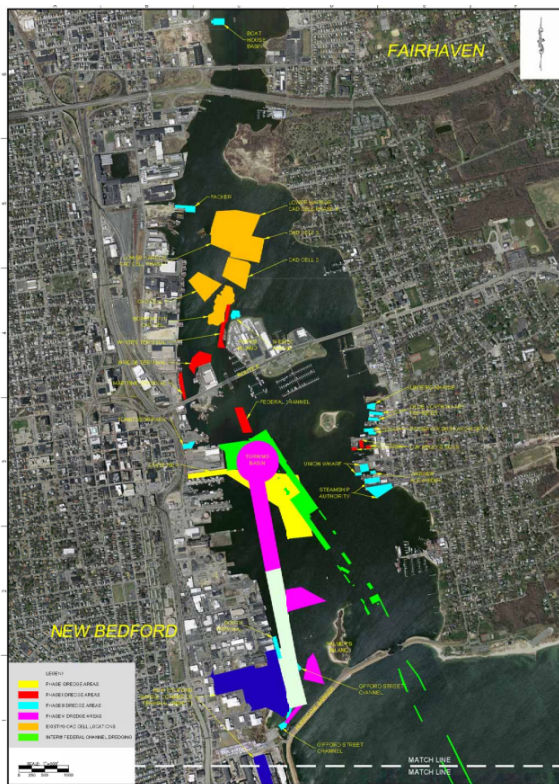
Superfund and State-Enhanced Remedy

- 1983: EPA declared more than 18,000 acres of New Bedford Harbor and Buzzards Bay a Superfund site
- 1998: A Record of Decision (ROD) was issued
- State-Enhanced Remedy (SER) Provision of ROD
 - DEP = Lead Agency for SER
 - Statement of Work (SOW) – 30 days for EPA consistency determination
 - Work Plan – to be provided 60 days prior to beginning the Work



State-Enhanced Remedy

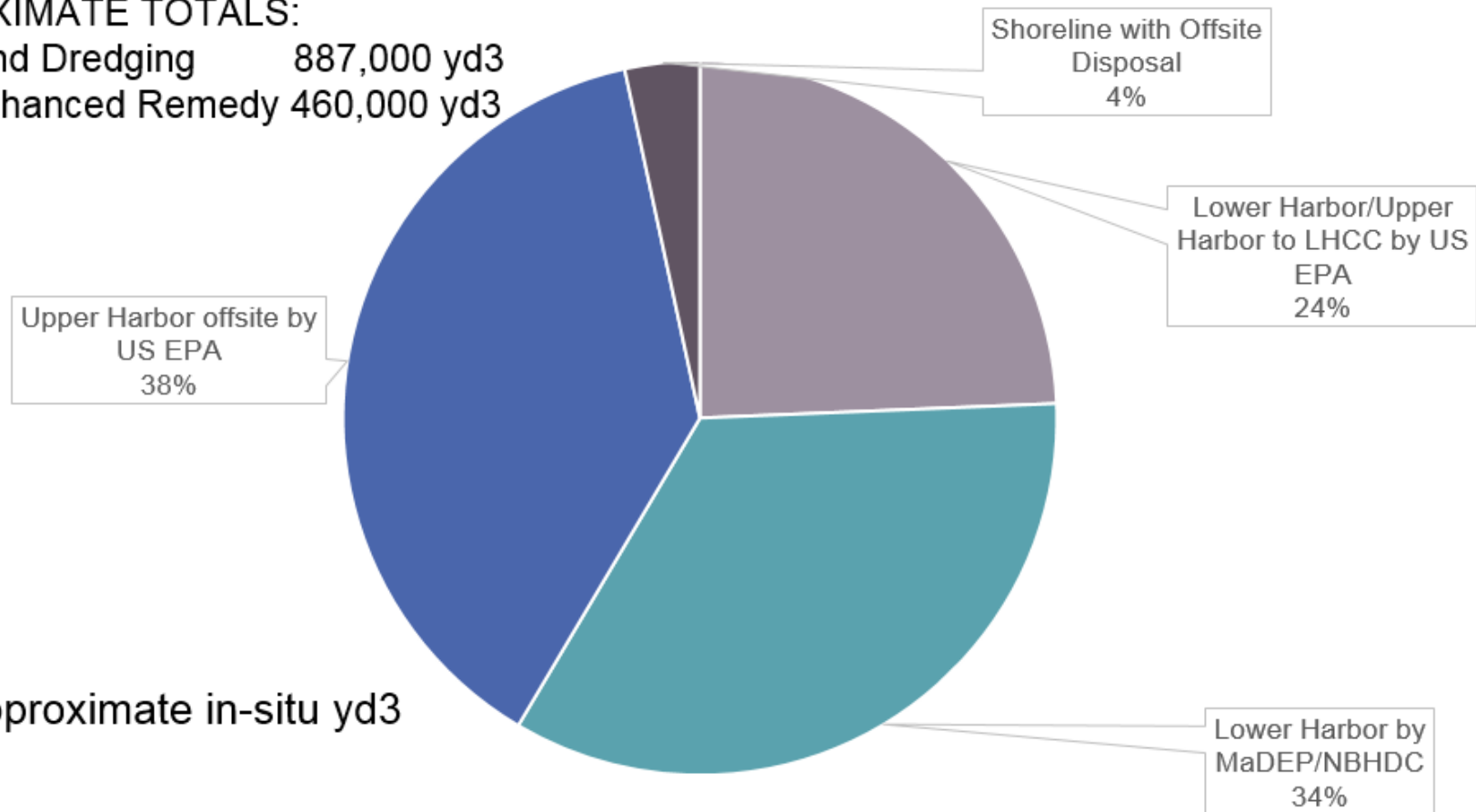
- Dredge Projects Phase I - IV
- CAD Cell Construction
- Interim Federal Channel Dredging
- Dredging of contaminated sediments that would otherwise remain in harbor



Dredging Progress Through April 2019 by SER and US EPA (Superfund) 1.35 Million Cubic Yards Complete*

APPROXIMATE TOTALS:

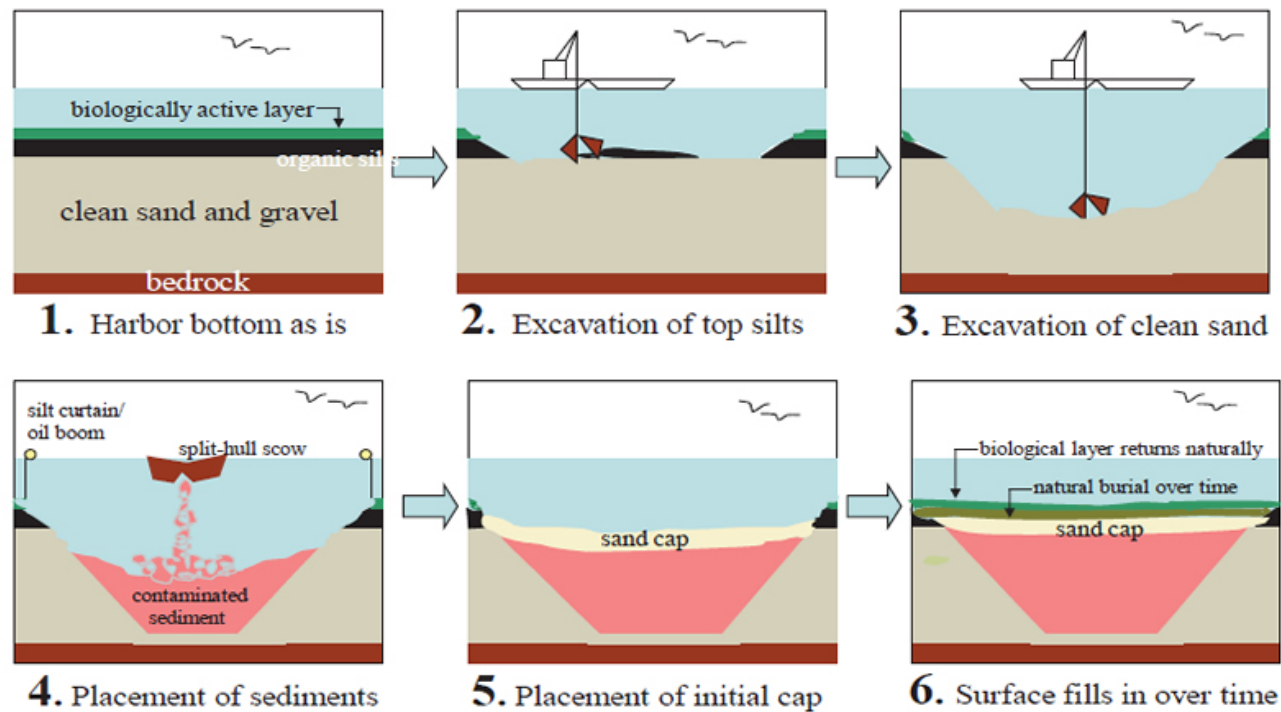
Superfund Dredging 887,000 yd3
State Enhanced Remedy 460,000 yd3



*approximate in-situ yd3

- Lower Harbor/Upper Harbor to LHCC by US EPA
- Lower Harbor by MaDEP/NBHDC
- Upper Harbor offsite by US EPA
- Shoreline with Offsite Disposal

Confined Aquatic Disposal (CAD) Cells



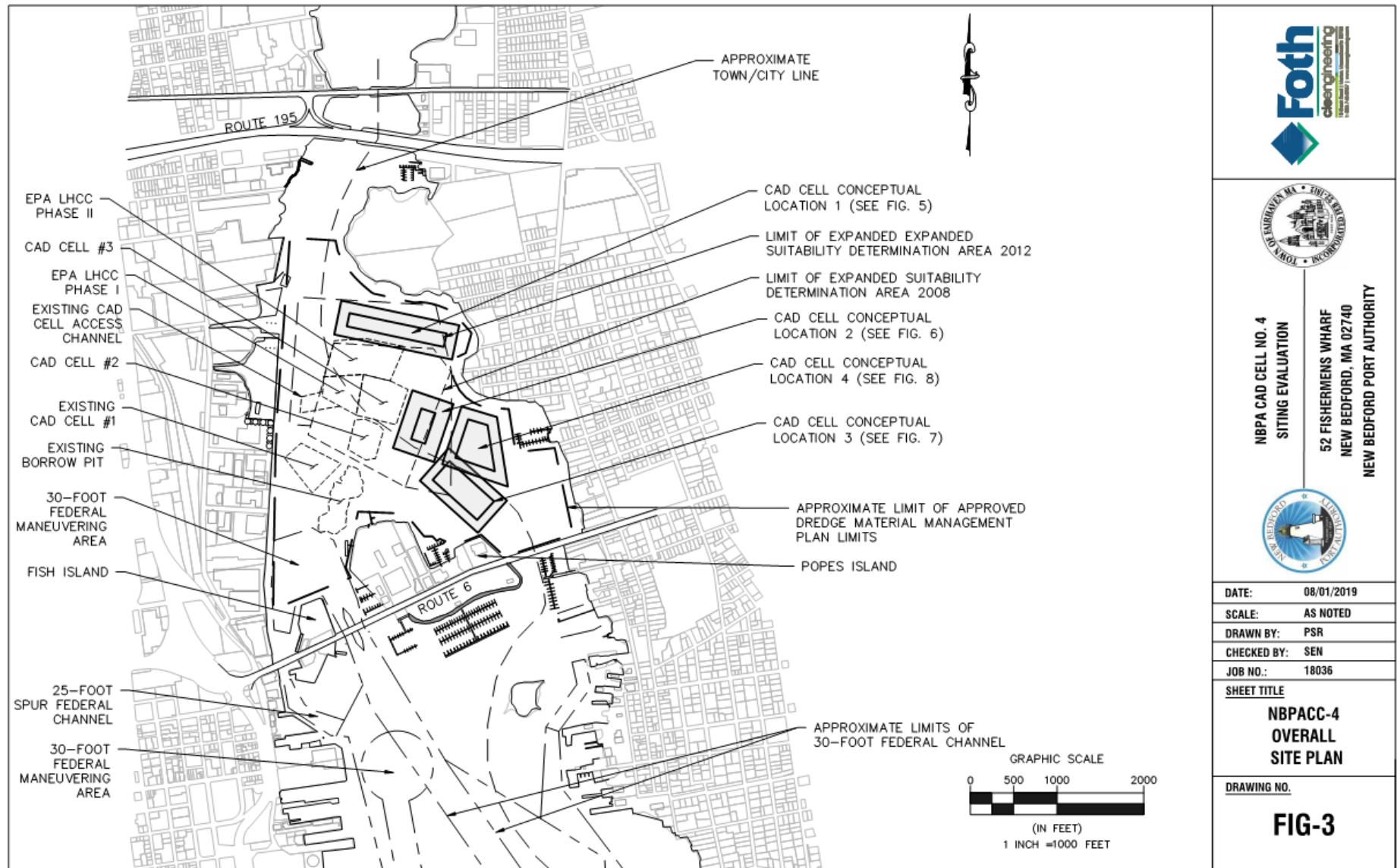
For illustrative purposes only – NOT TO SCALE

CAD Cell #4 Siting

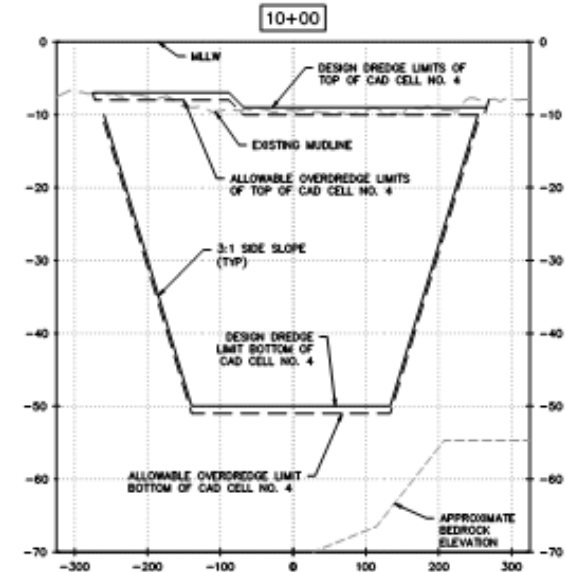
- **Siting Evaluation Based on:**
 - Location within DMMP
 - Geotechnical Properties of the Site Location
 - Potential for Interference with Existing Navigational Uses
 - Interaction with Existing and Planned CAD Cells
 - Depth to Rock
 - Proximity to Existing Navigational Channels
 - Thickness of Mud Layer to be Placed in CAD #2
 - Need for Transitional CAD Cell
 - Need for Channel to Access CAD Cell Location
 - Proximity to Shoreline / Residences



CAD Cell #4 Siting



- Capacity for 500,000 cy of dredged sediments
- Includes 50,000 cy for USACE top of CAD cell materials and 30,000 cy contingency
- Includes access channel / improves navigation
- Sediments to be placed in CAD Cell #4:
 - ✓ Significantly lower PCB concentrations compared to surface sediments in surrounding area
 - ✓ Lower levels of PCBs than in EPA CAD Cells



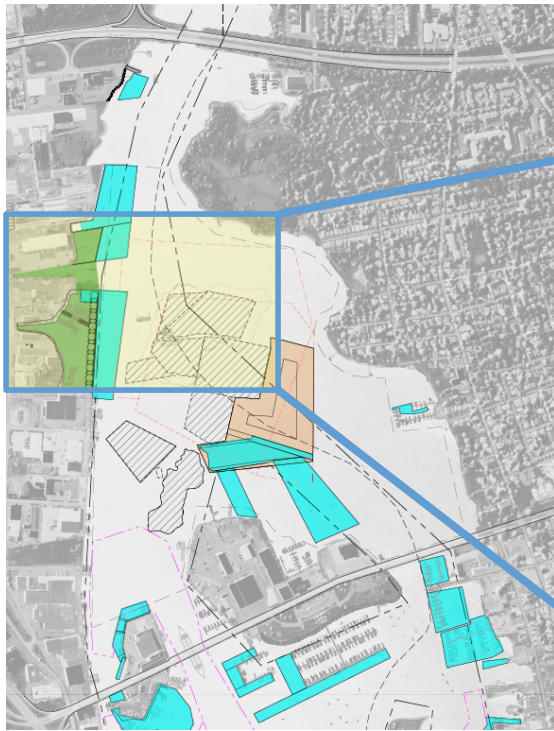
CAD Cell #4

- Construction Sequence:
 - Surface contaminated sediment dredged from footprint of CAD will be placed into an ex. CAD cell
 - Clean material that is dredged during construction of the CAD cell and that is not geotechnically suitable as backfill for the North Terminal will be disposed of at either the Cape Cod Bay Disposal site or the Rhode Island Sound disposal

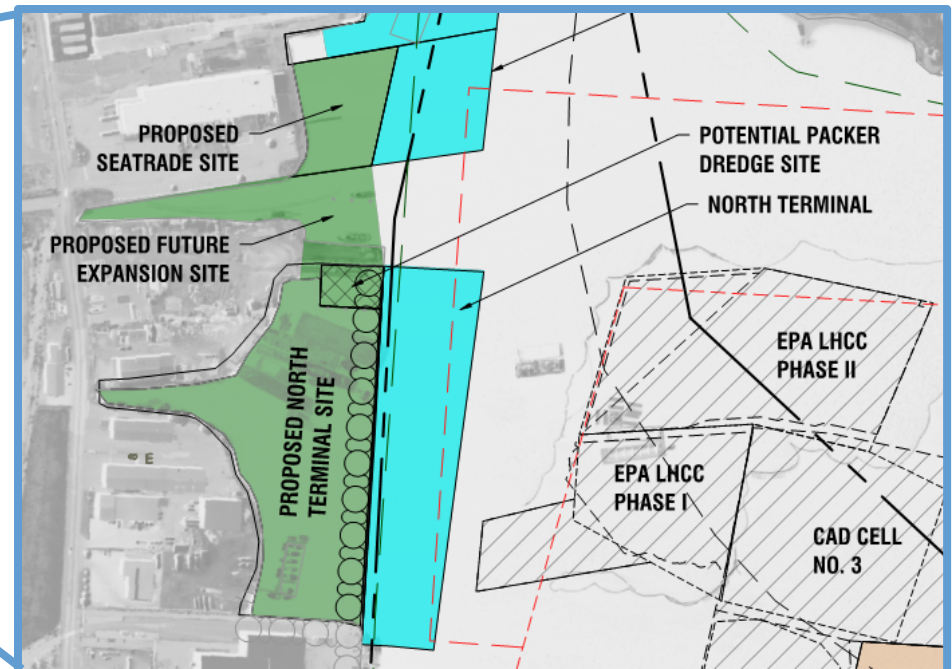


North Terminal Extension

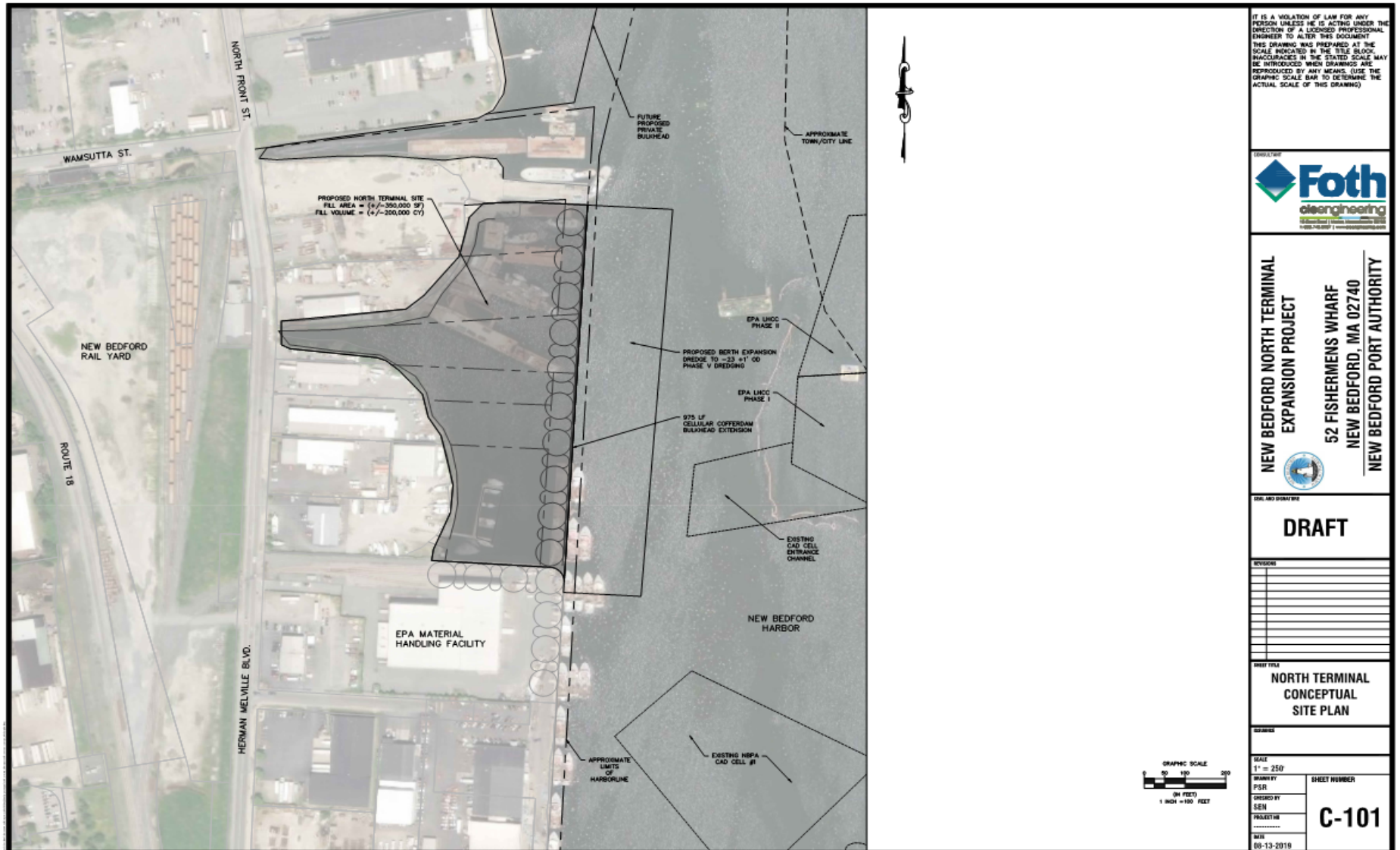
- Total Extension = 1,825 LF of bulkhead /commercial berth space
- Expanded Terminal Area = 484,000 SF
 - North Terminal , Future Extension, Seatrade
- BUILD Grant for \$15.4 M



North Terminal

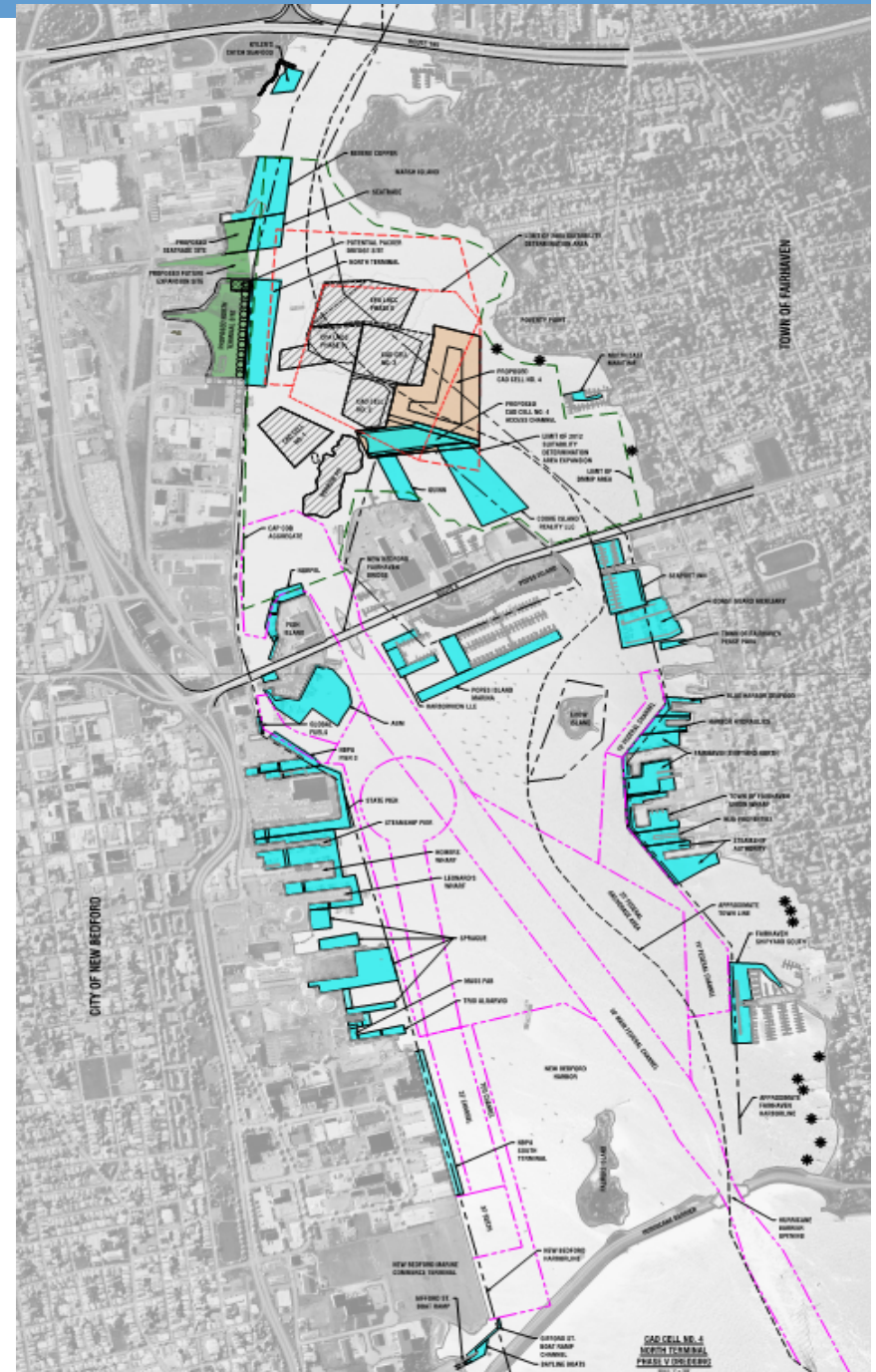


North Terminal Extension



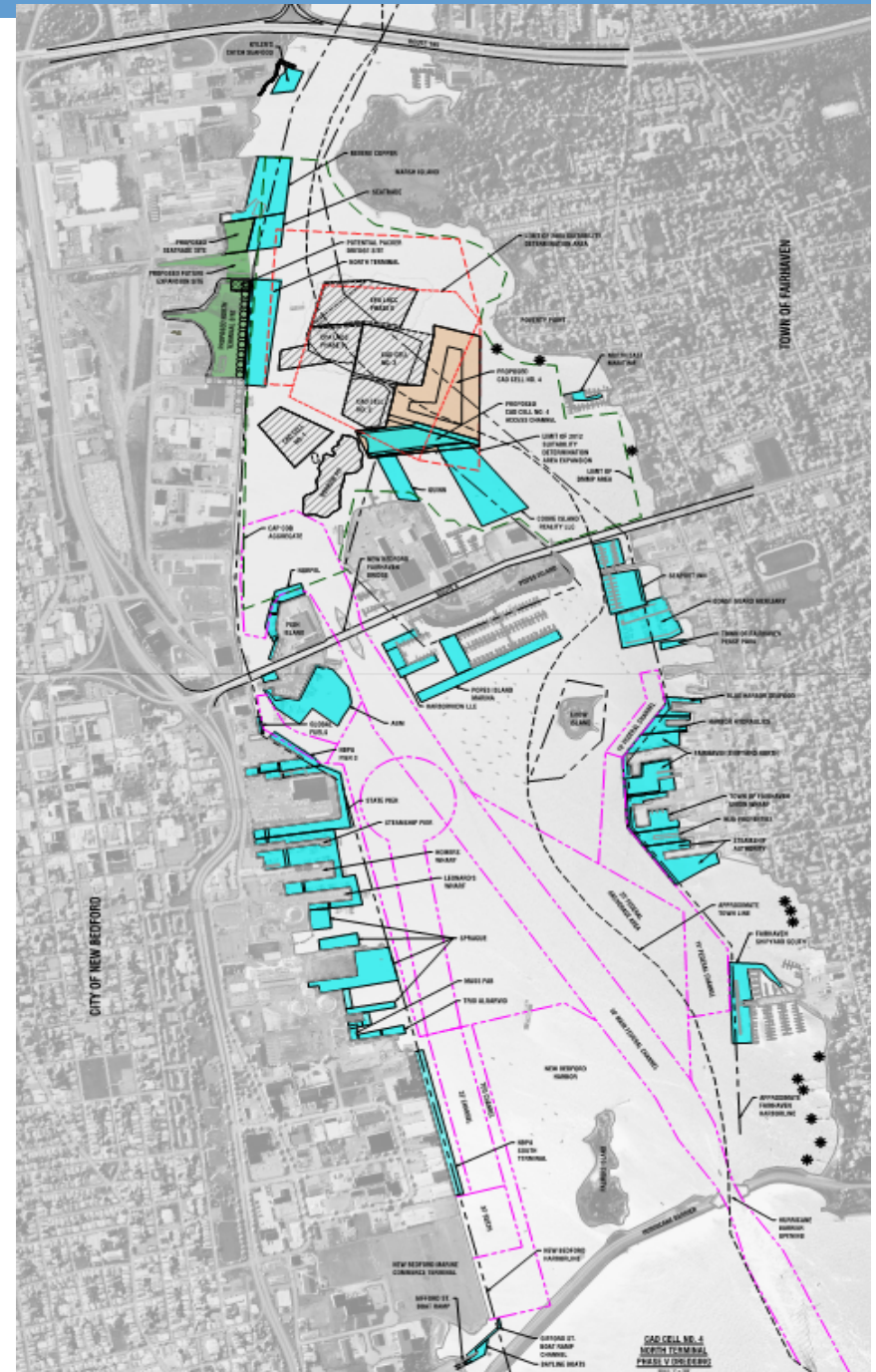
Phase V Dredging

- **Dredging**
 - Commercial industries
 - Marinas
 - Public infrastructure
 - Residential properties
- **Activating Underutilized Waterfront**
- **Economic Benefits**
 - 879 new jobs created
 - \$69.4 million in annual wages/responding/local consumption
 - \$286 million in business revenue
 - \$12.5 million in state/local taxes
- **Navigation**
- **Enhanced Clean Up for Harbor**
 - 420,000 CY +/- and 3,475,401 SF +/-

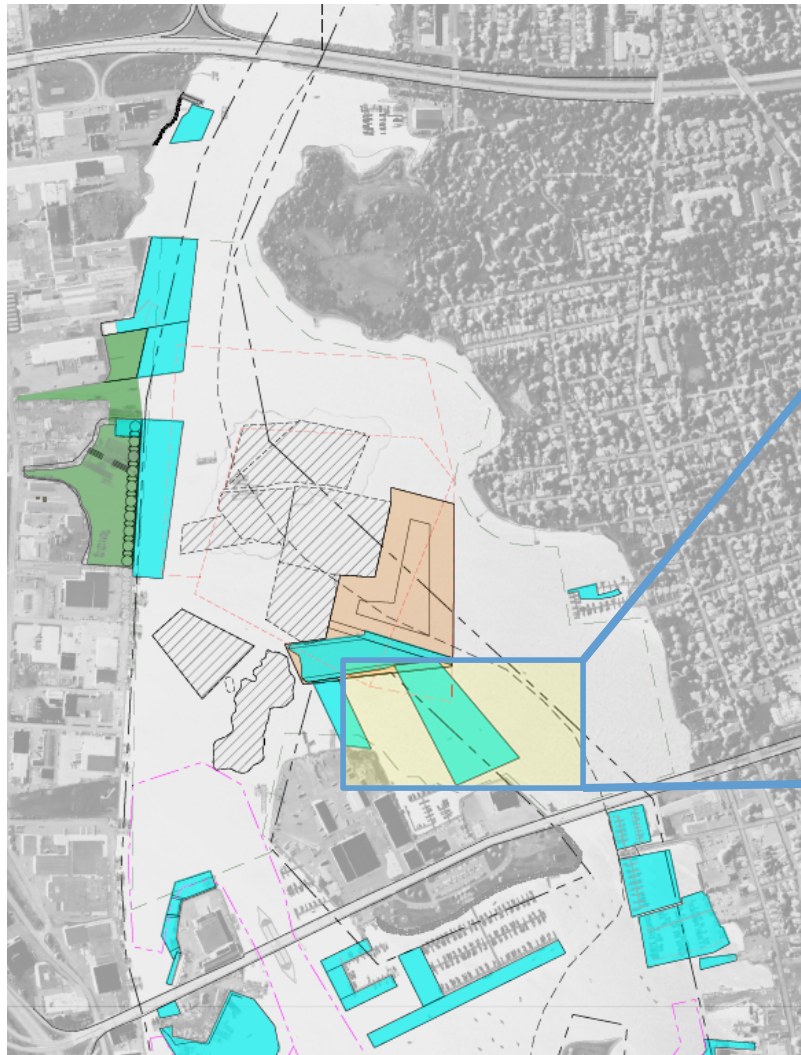


Phase V Dredging

- **47 Sites**= Total number of properties participating in Phase V
- **25 Sites** = Number of Fairhaven properties (12 commercial properties, 13 residential properties)
- **22 Sites** = Number of NB properties
- **420,000 CY** =Total volume of Phase V dredging with CAD cell disposal
- **192,000 CY** from Fairhaven sites/businesses (46% of Phase V dredging)
- **228,000 CY** from New Bedford sites/businesses (54% of Phase V dredging)



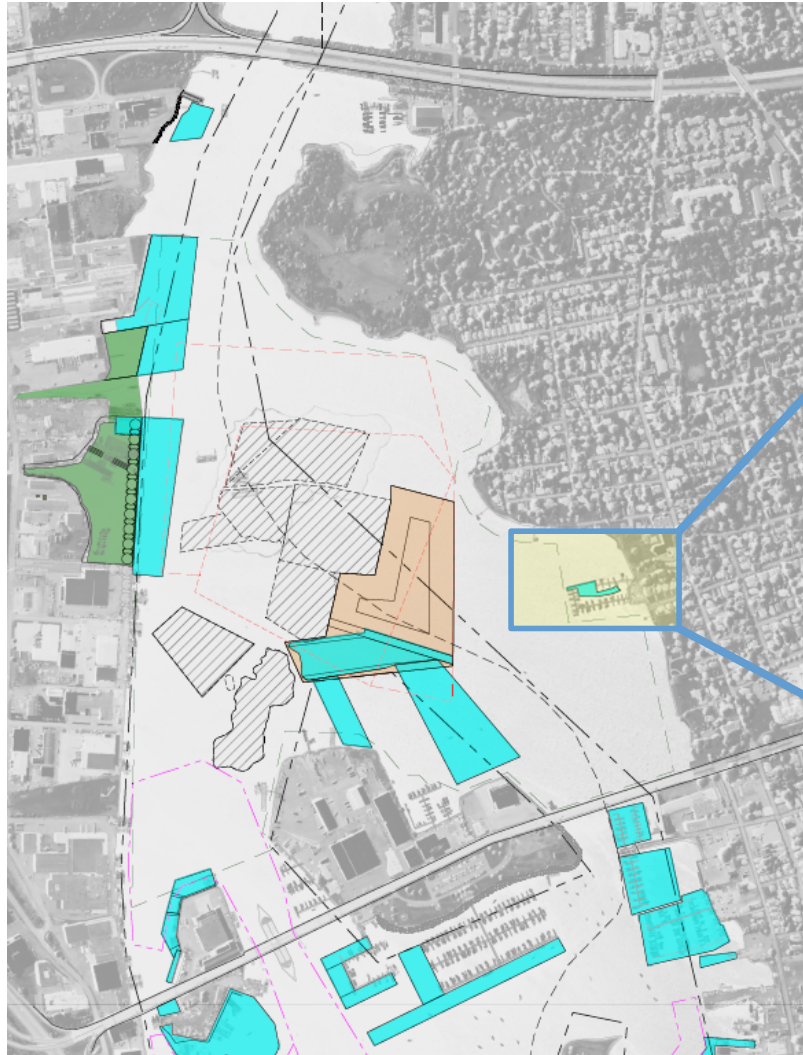
Economic Benefits of Phase V Dredging



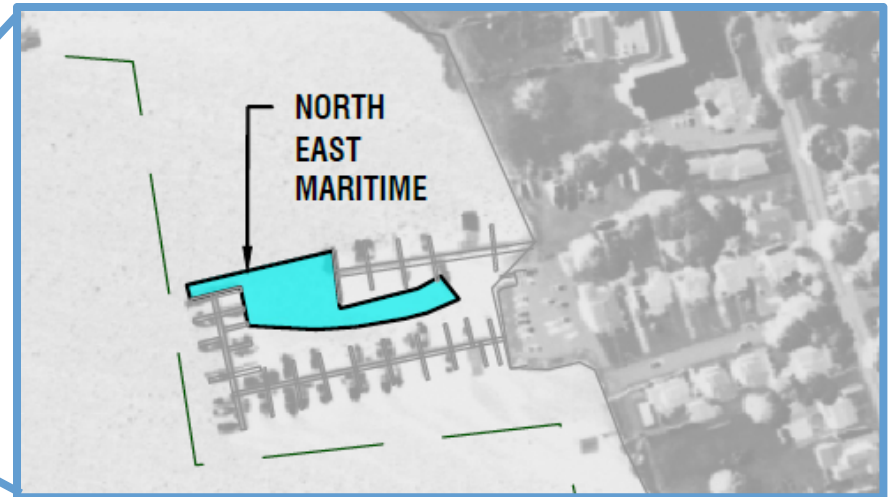
Cooke Island Realty LLC



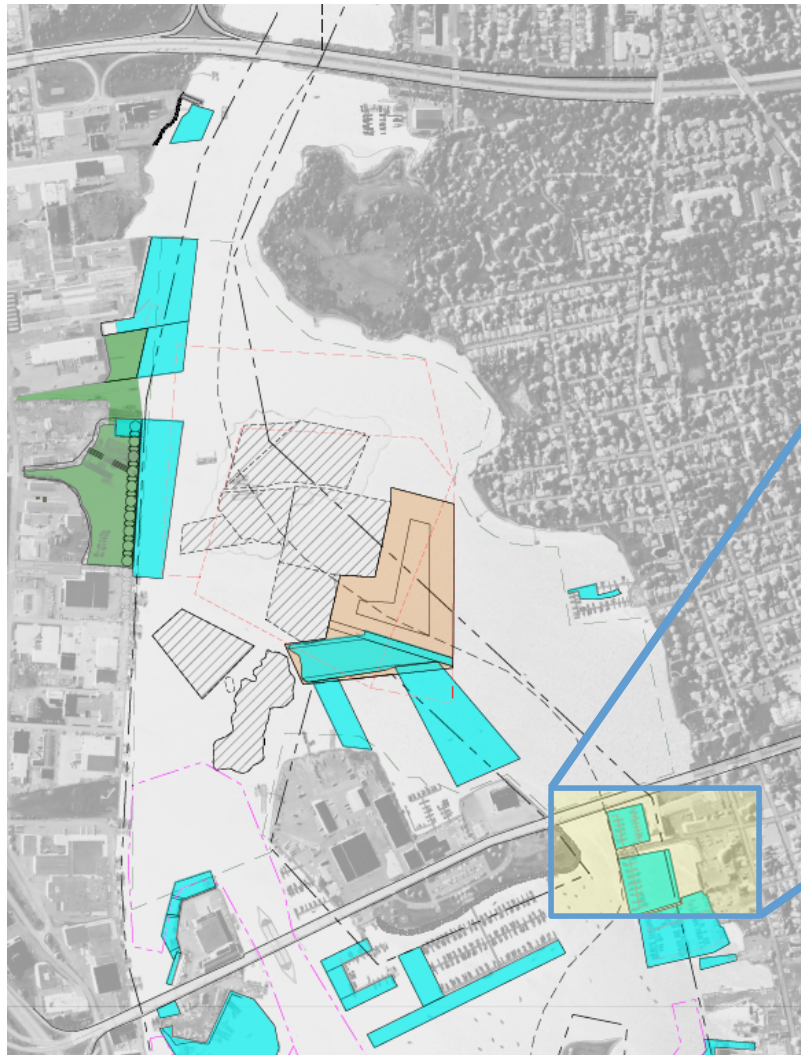
Economic Benefits of Phase V Dredging



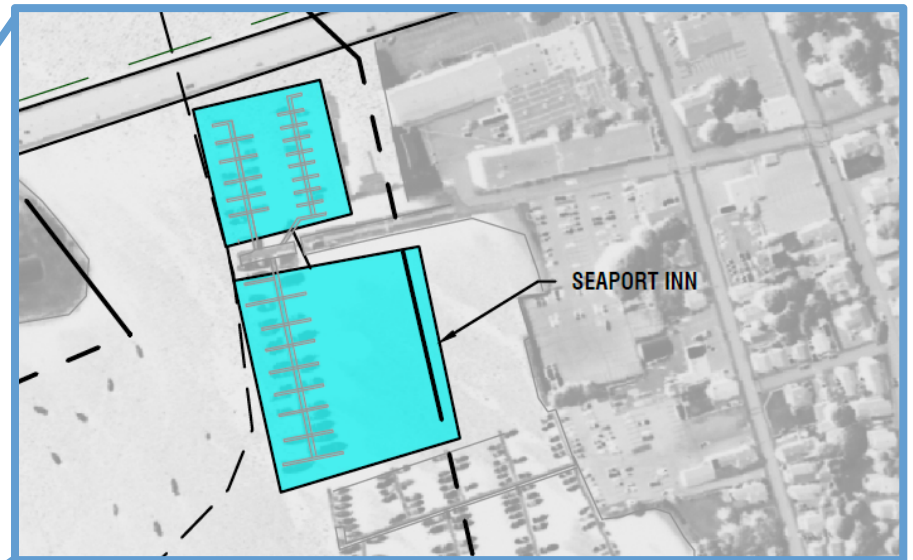
North East Maritime



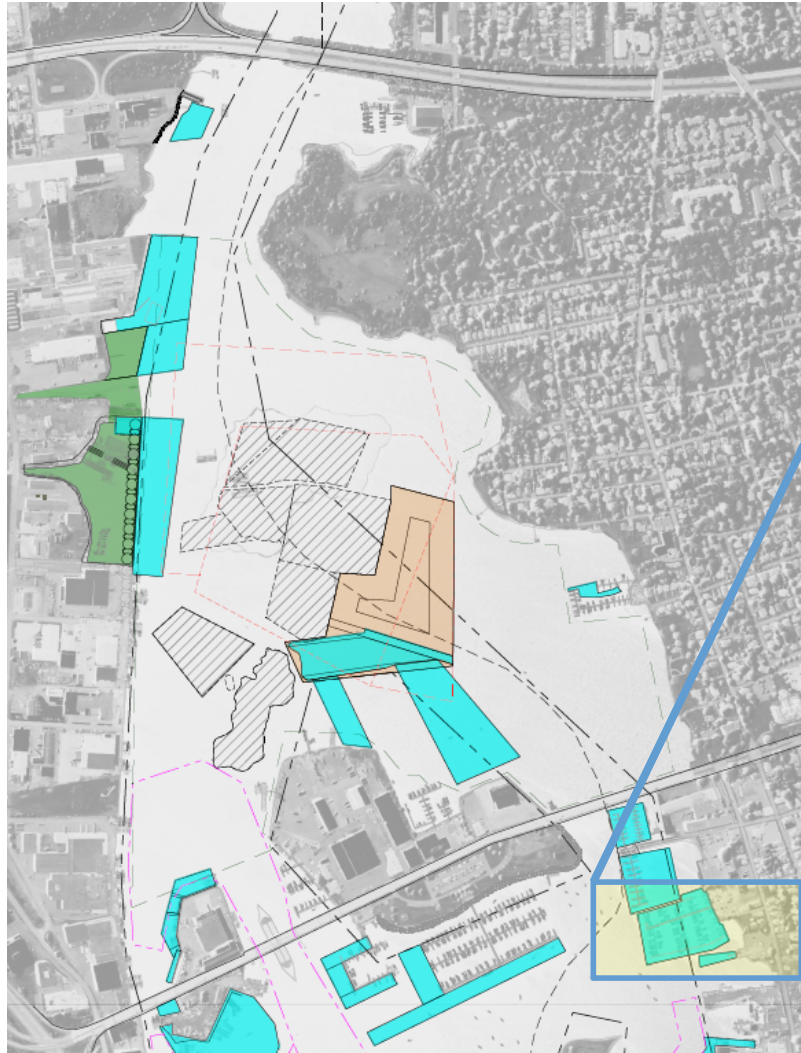
Economic Benefits of Phase V Dredging



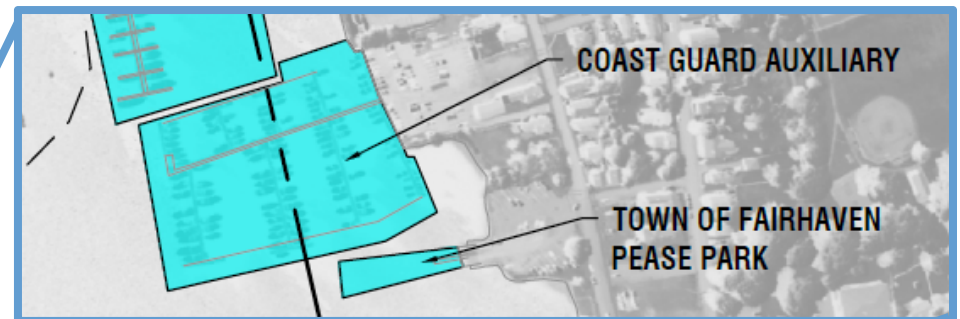
Seaport Inn



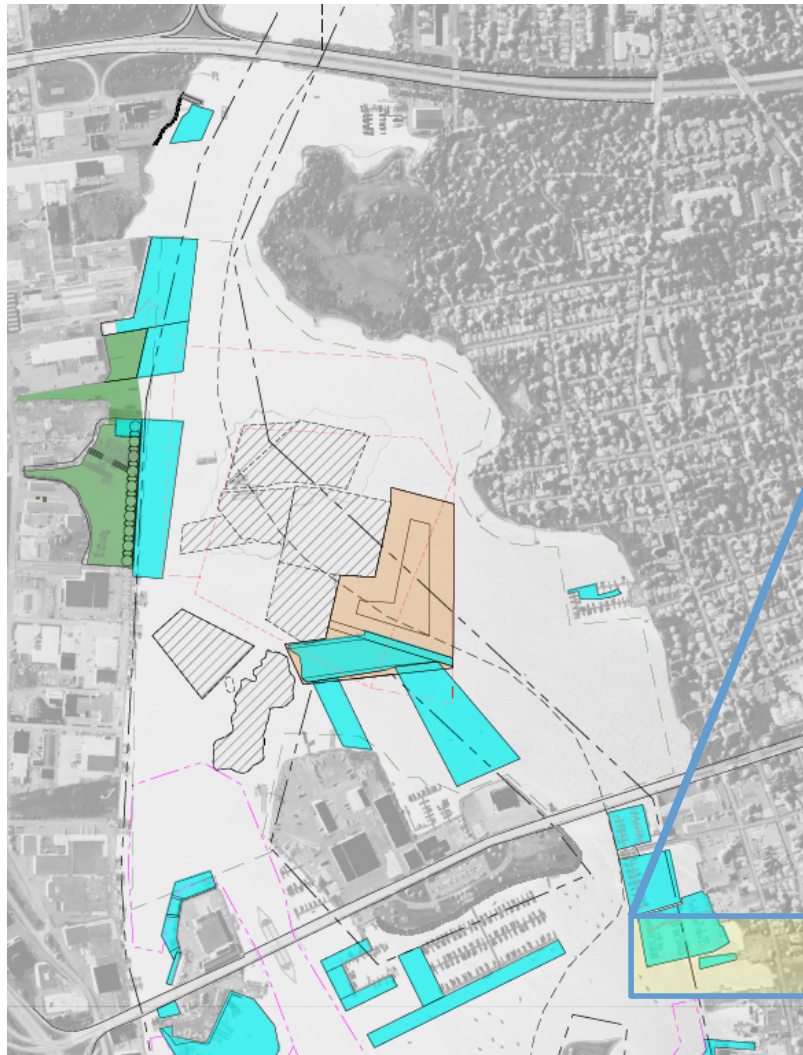
Economic Benefits of Phase V Dredging



Coast Guard Auxiliary



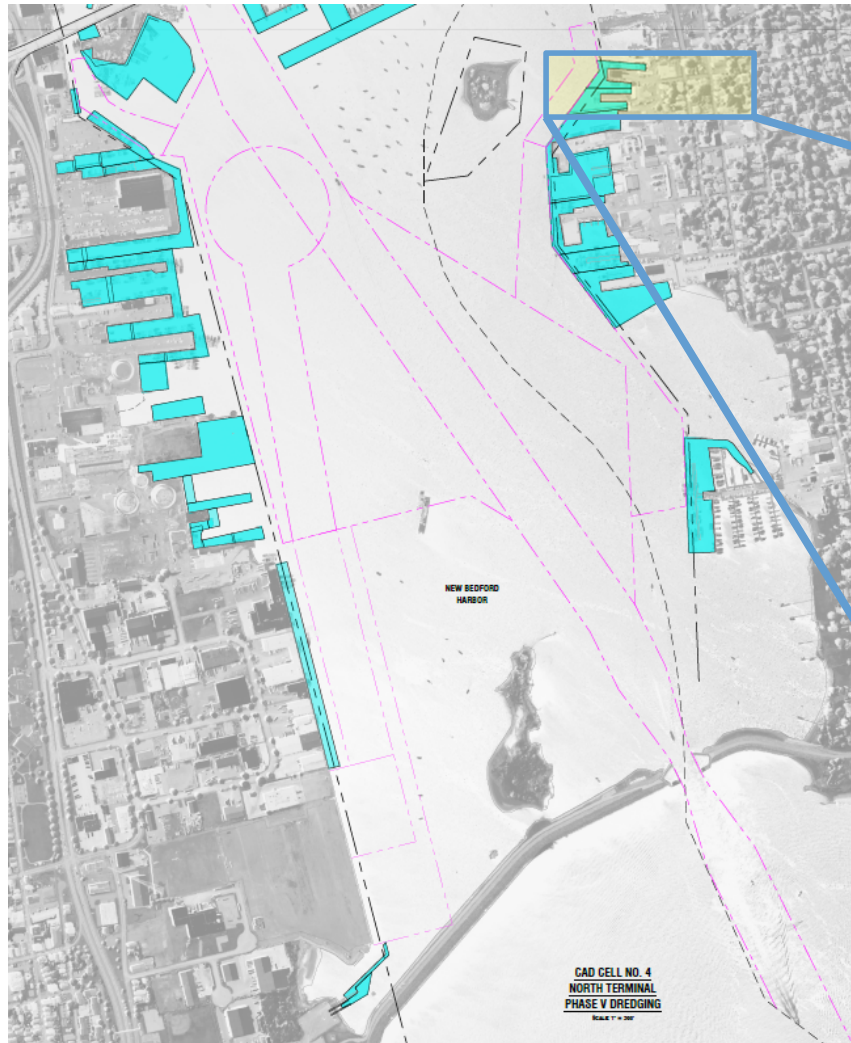
Economic Benefits of Phase V Dredging



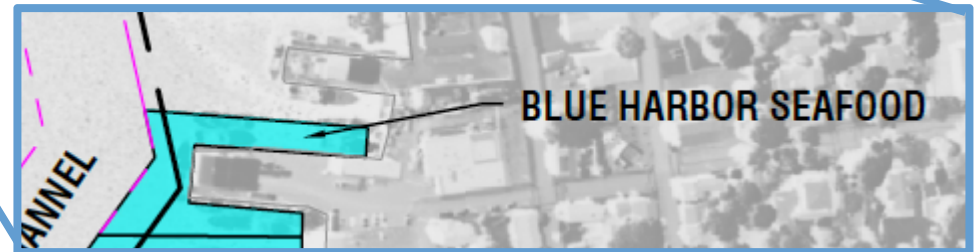
Town of Fairhaven
Pease Park



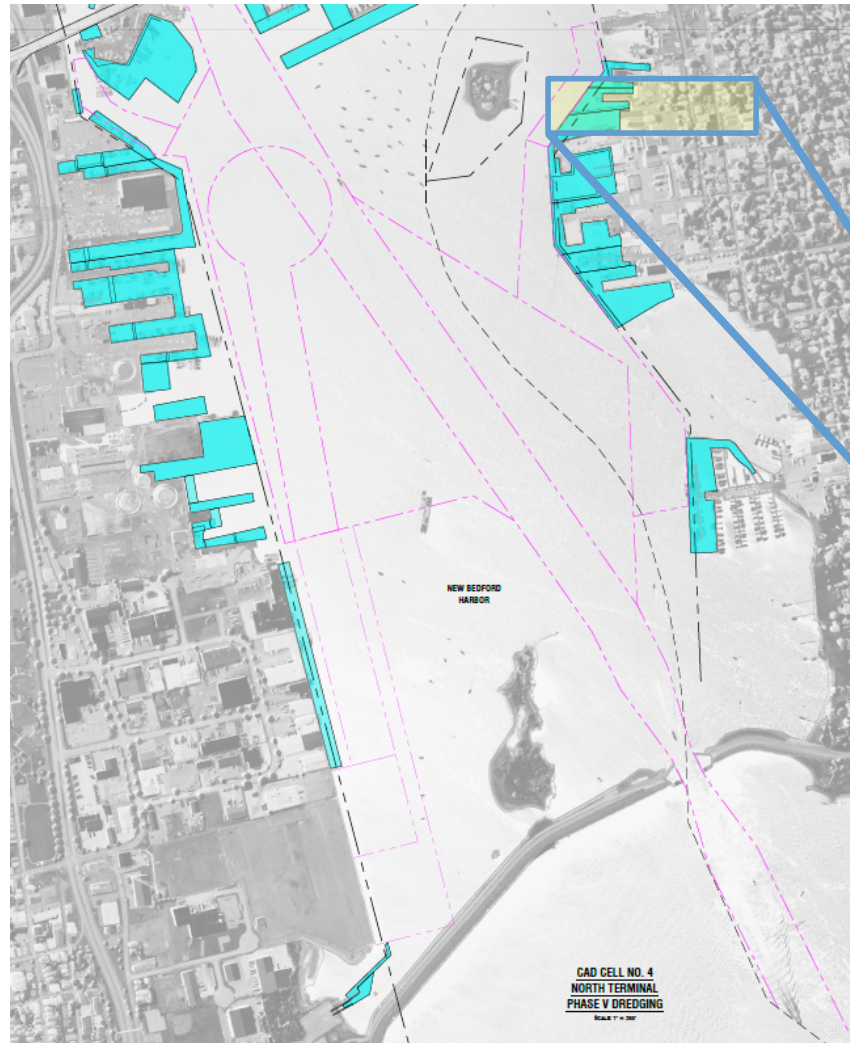
Economic Benefits of Phase V Dredging



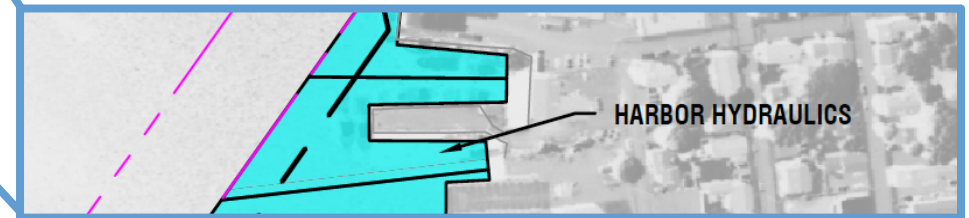
Blue Harbor Seafood



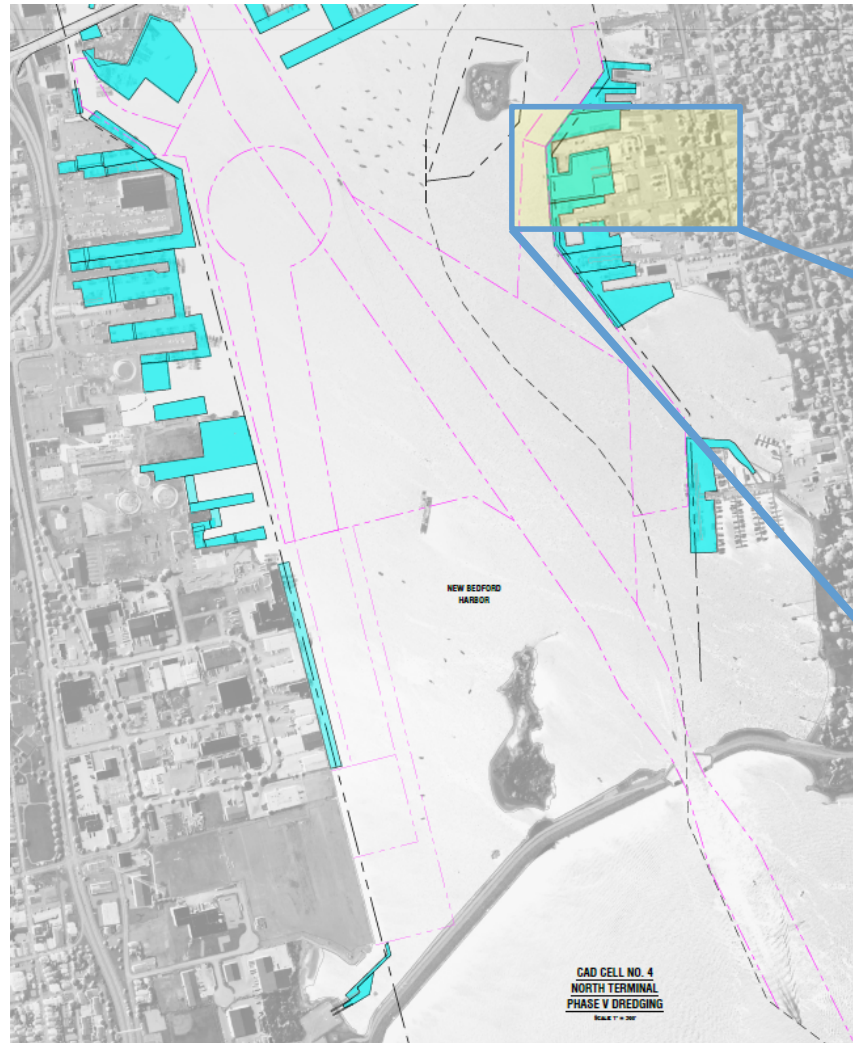
Economic Benefits of Phase V Dredging



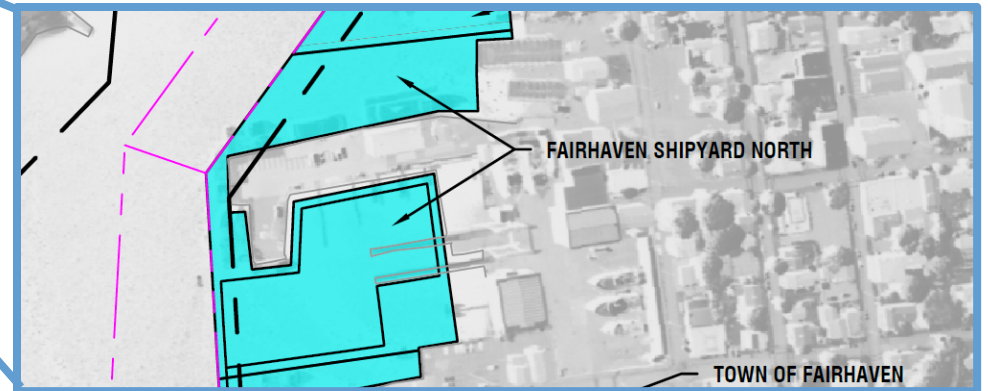
Harbor Hydraulics



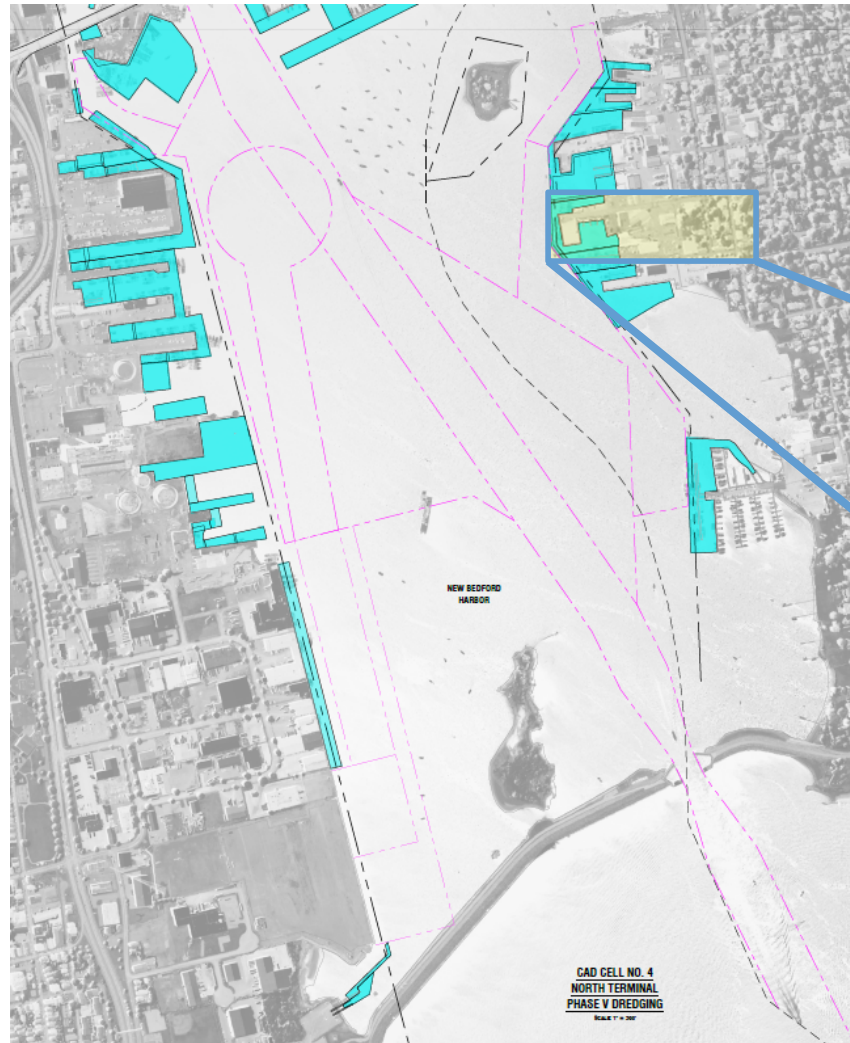
Economic Benefits of Phase V Dredging



Fairhaven Shipyard North



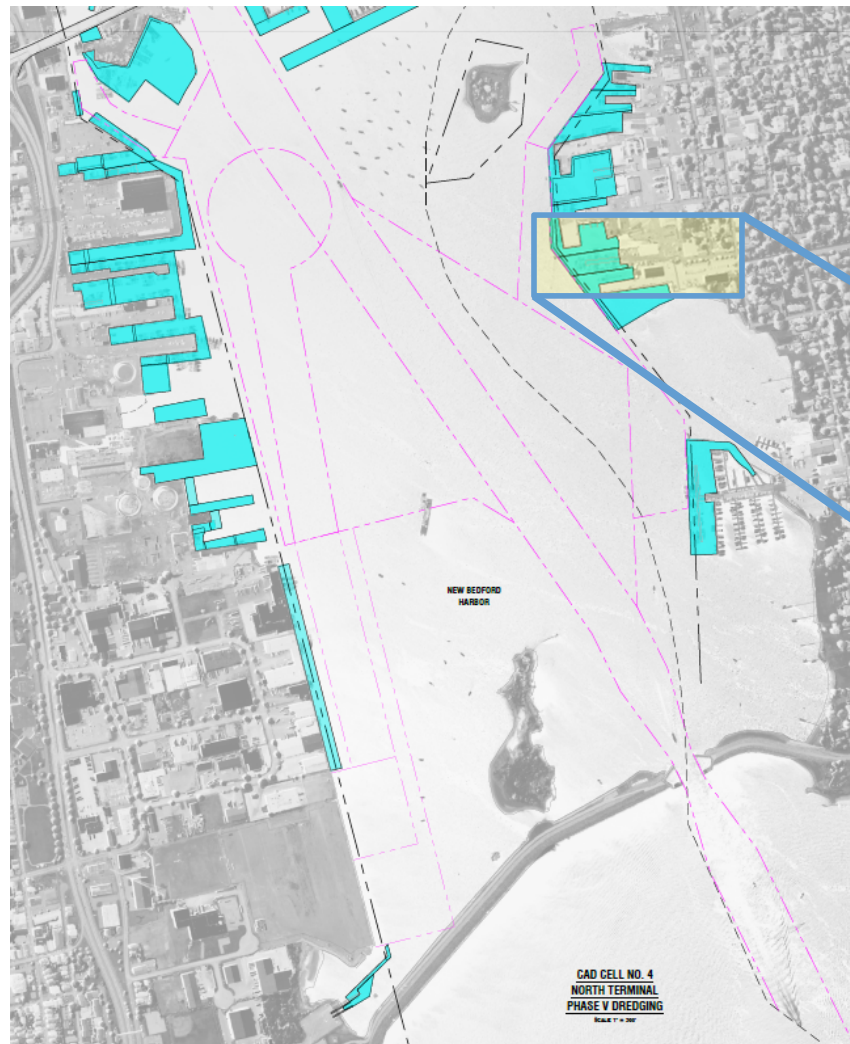
Economic Benefits of Phase V Dredging



Town of Fairhaven Union Wharf



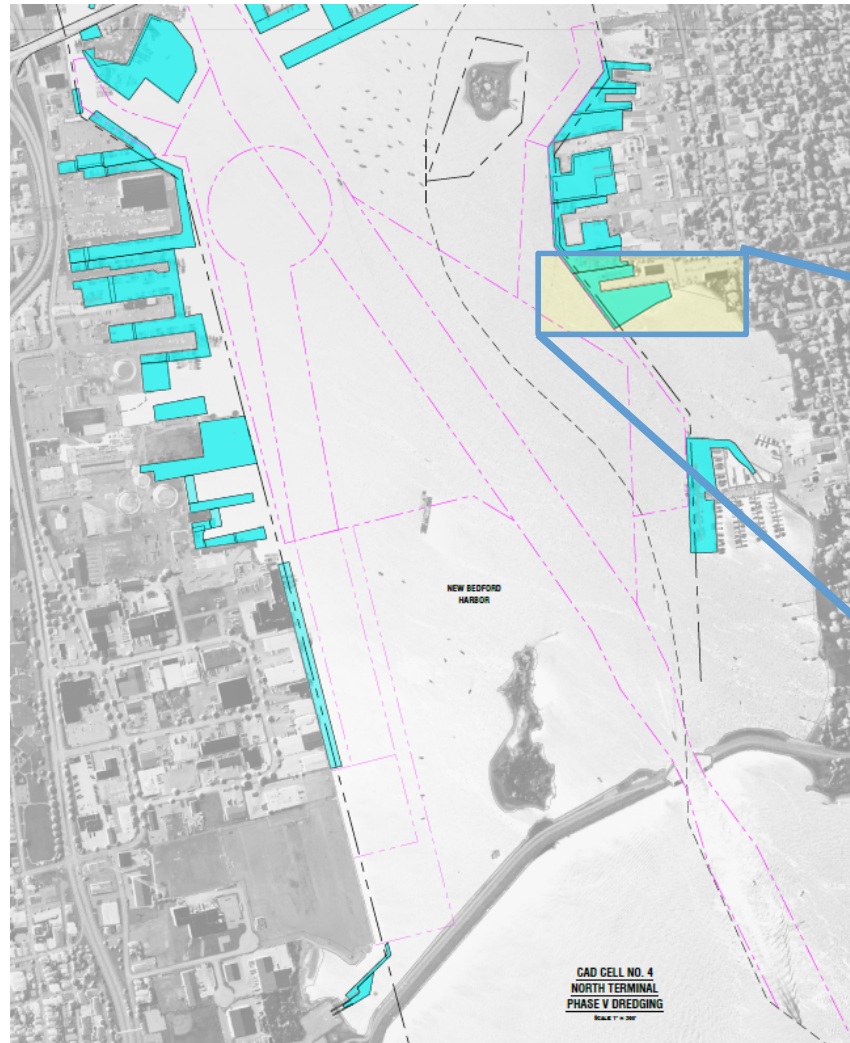
Economic Benefits of Phase V Dredging



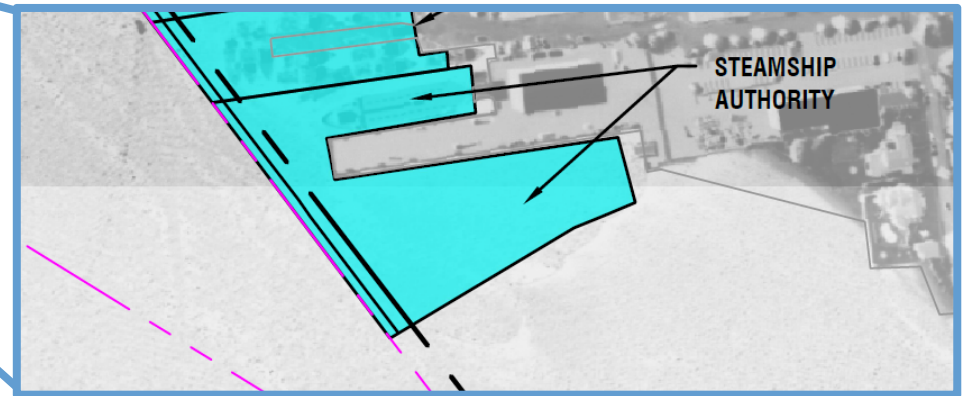
WJA Properties



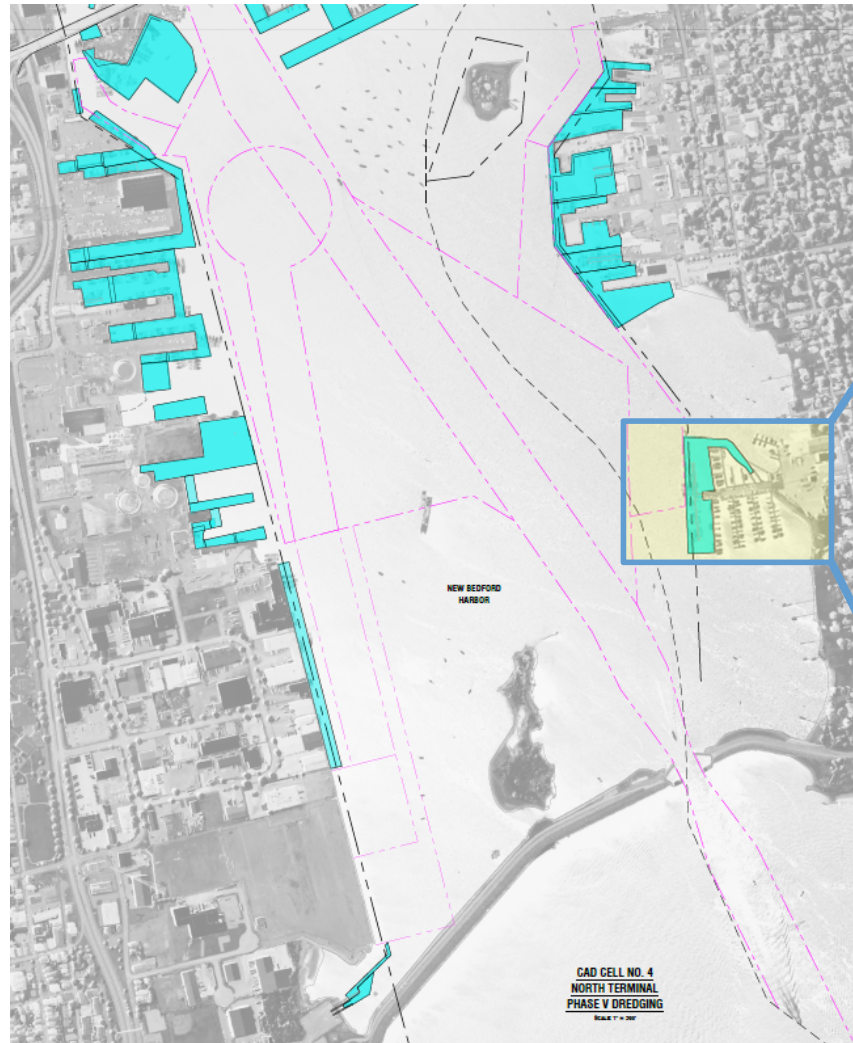
Economic Benefits of Phase V Dredging



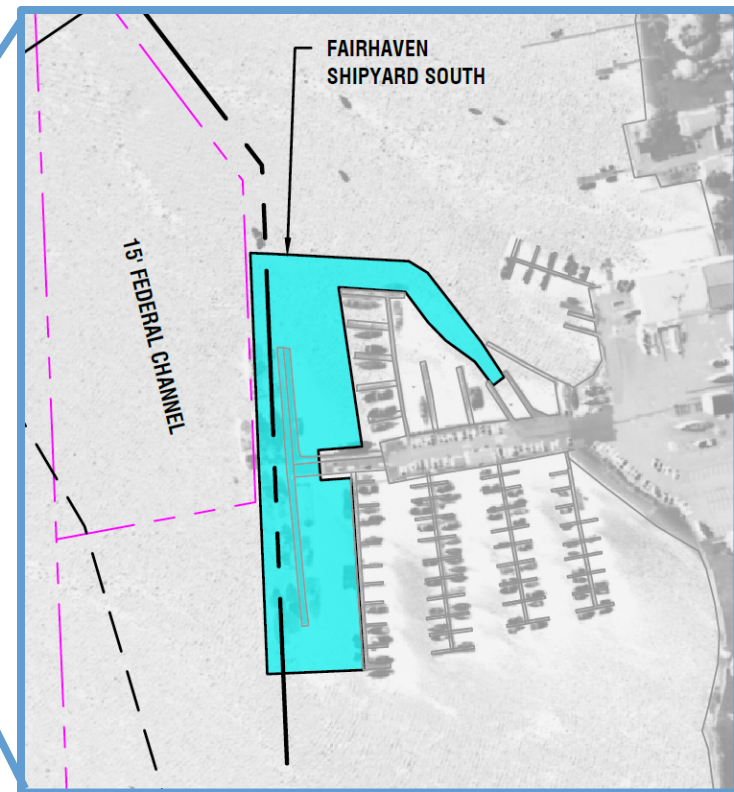
Steamship Authority



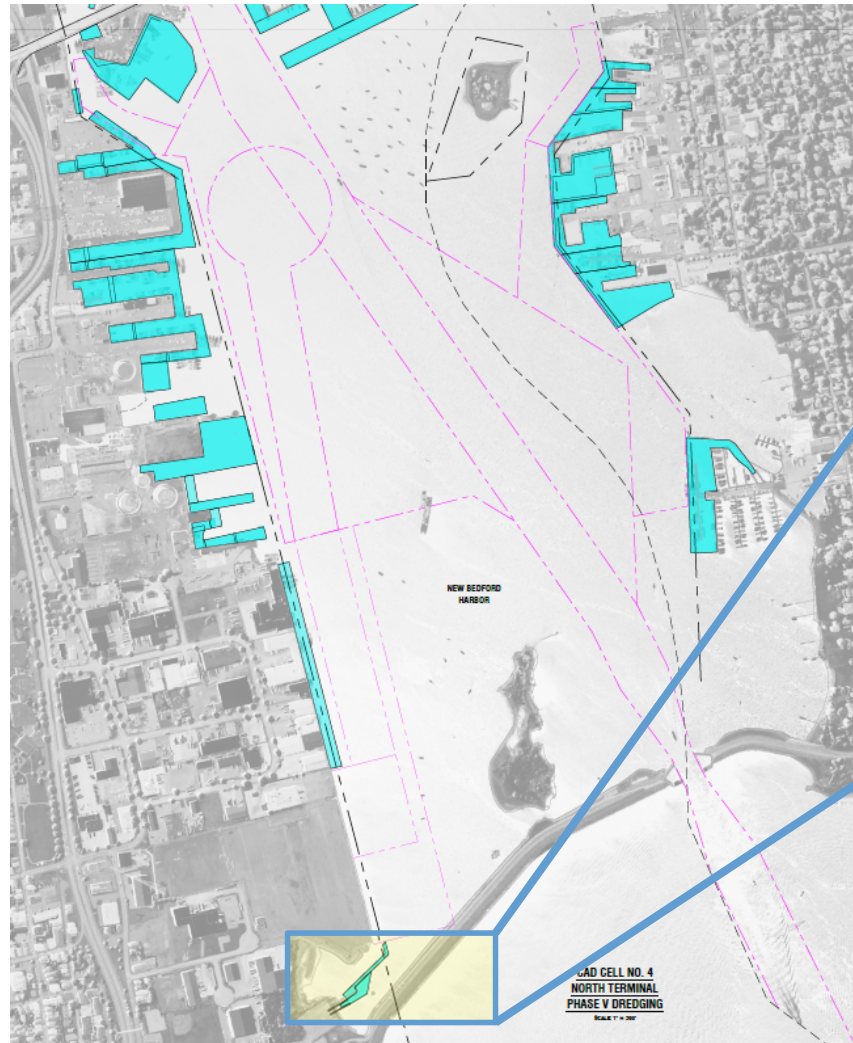
Economic Benefits of Phase V Dredging



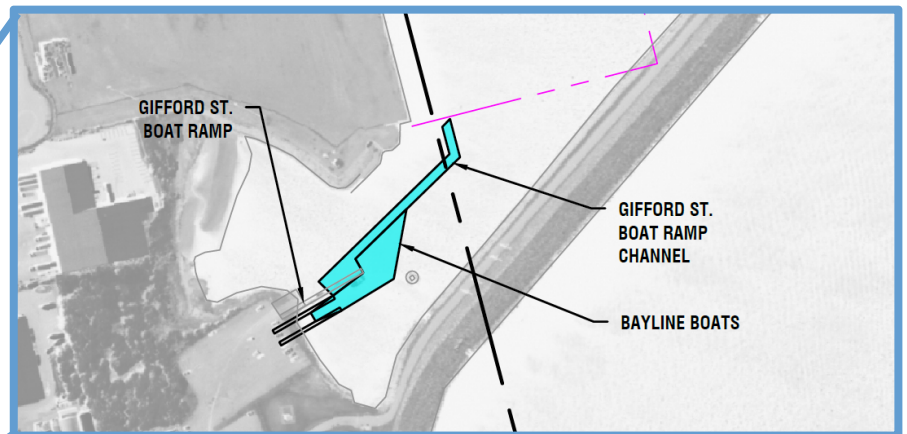
Fairhaven Shipyard South



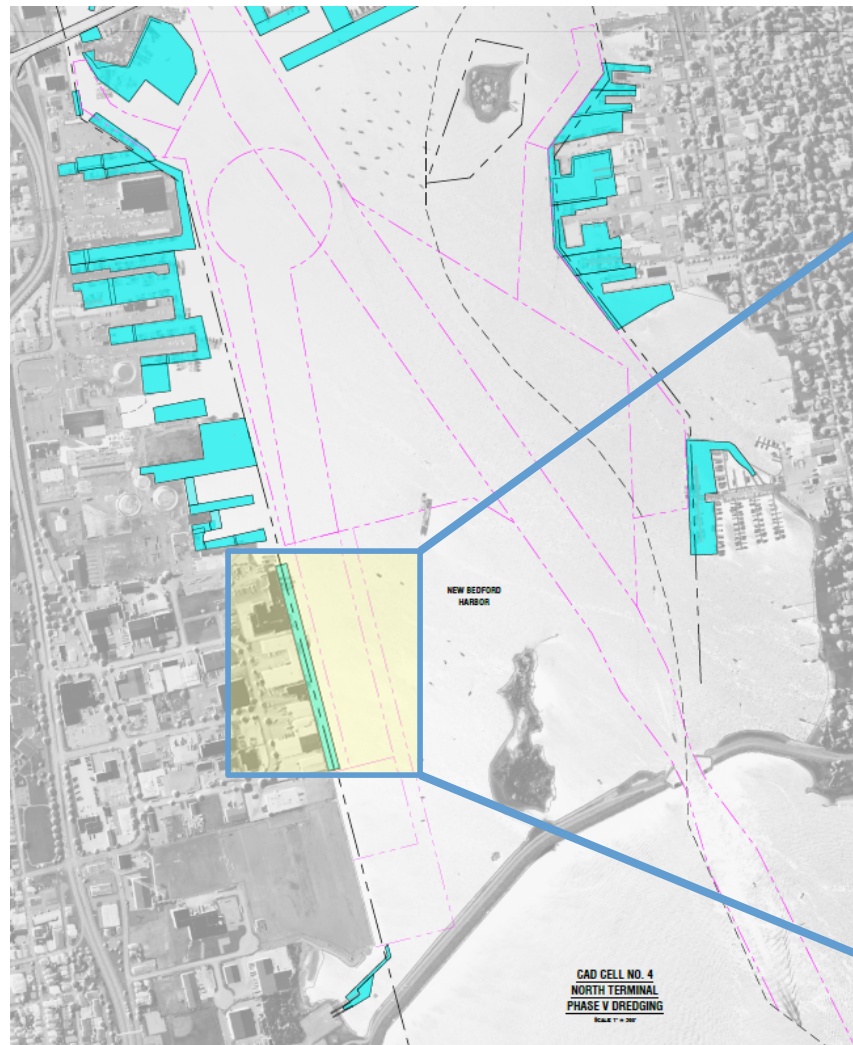
Economic Benefits of Phase V Dredging



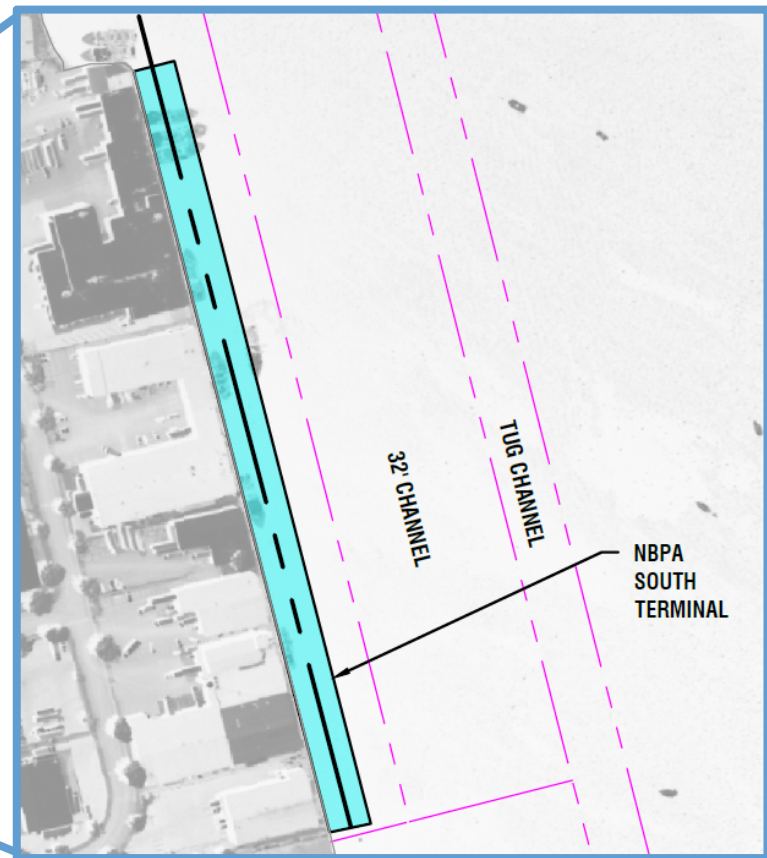
Bayline Boats



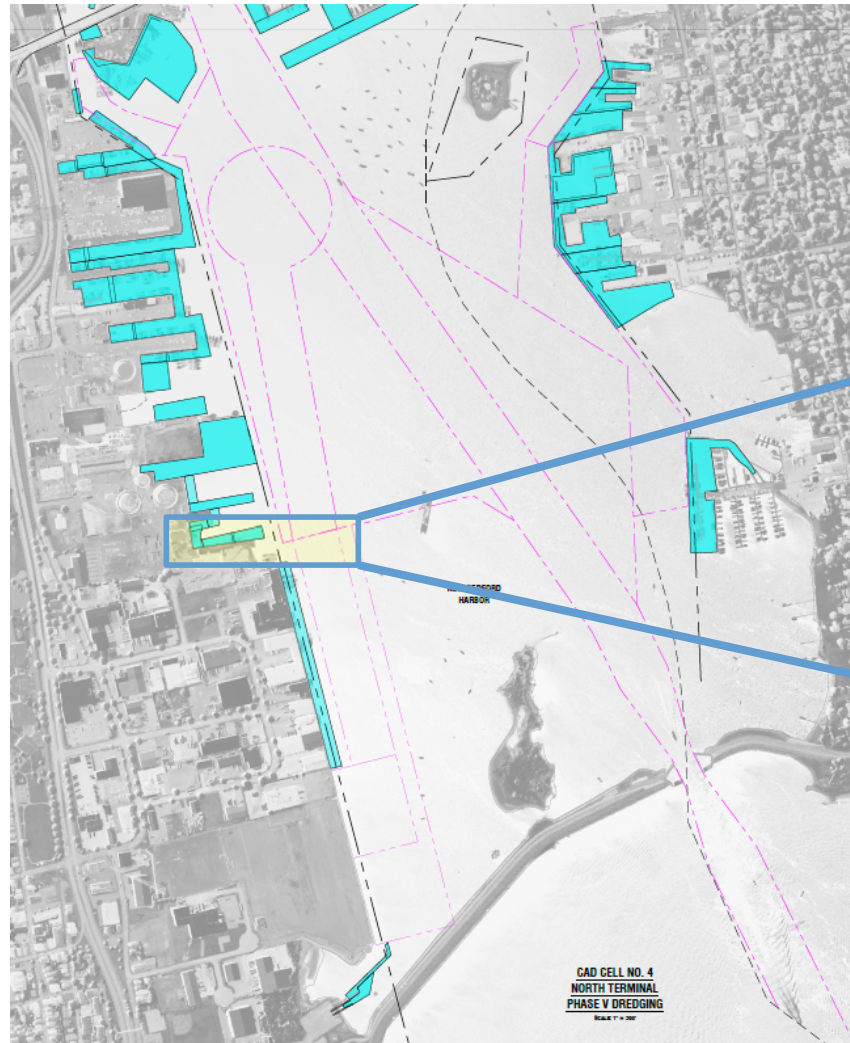
Economic Benefits of Phase V Dredging



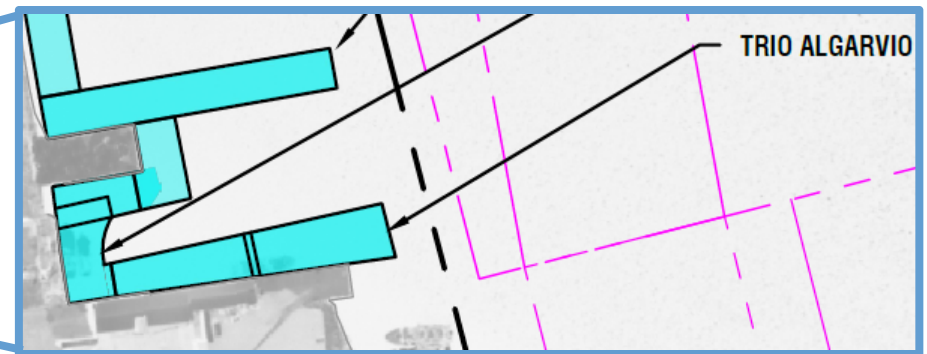
NBPA South Terminal



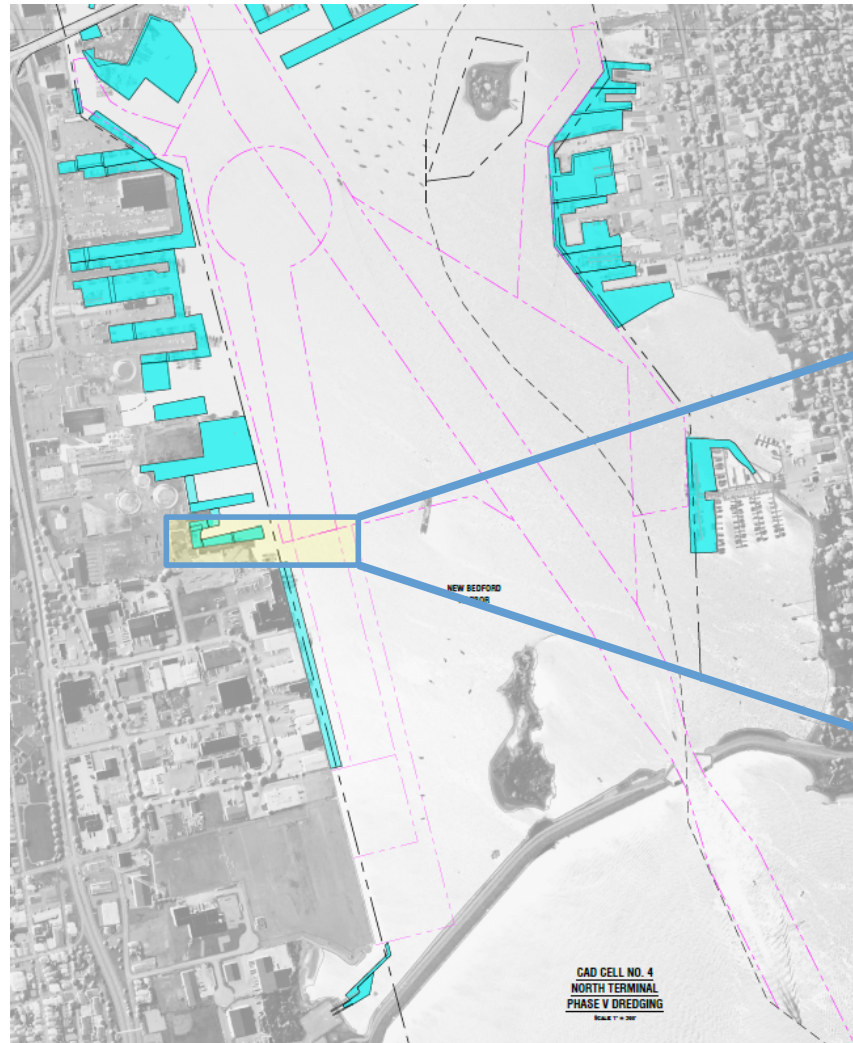
Economic Benefits of Phase V Dredging



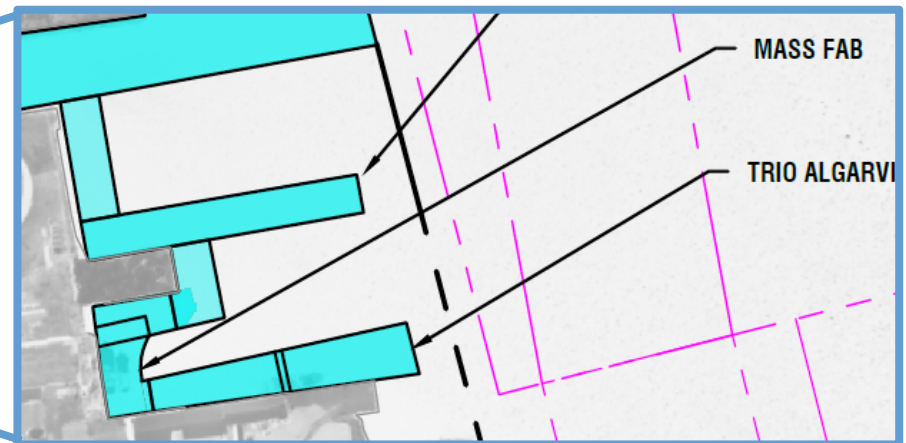
Trio Algarvio



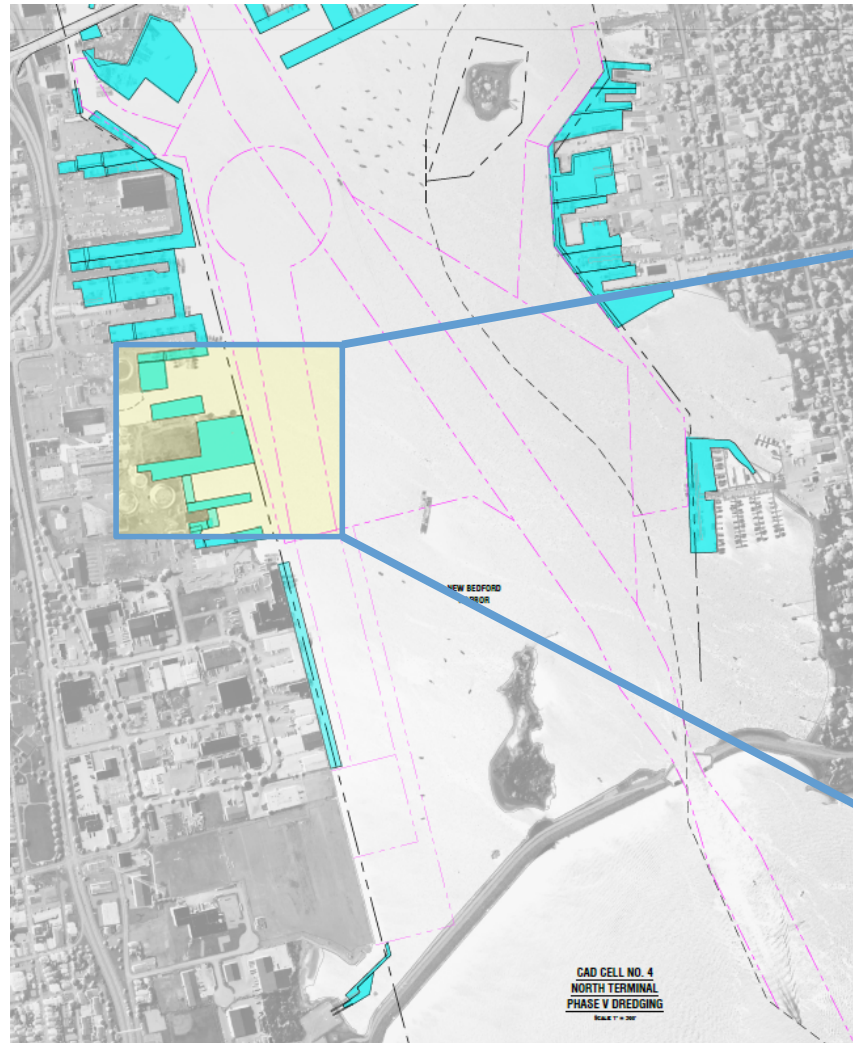
Economic Benefits of Phase V Dredging



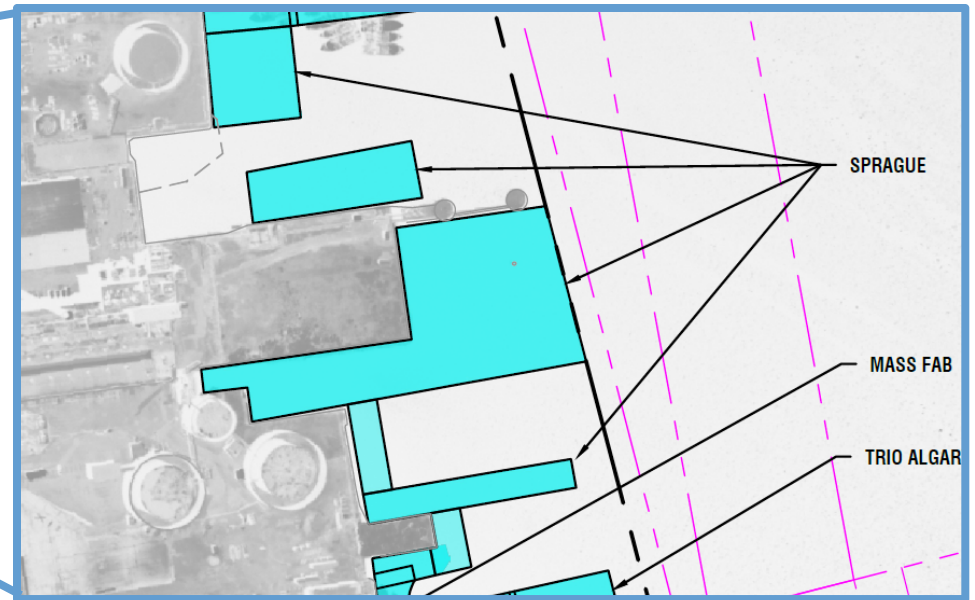
Mass Fabricating



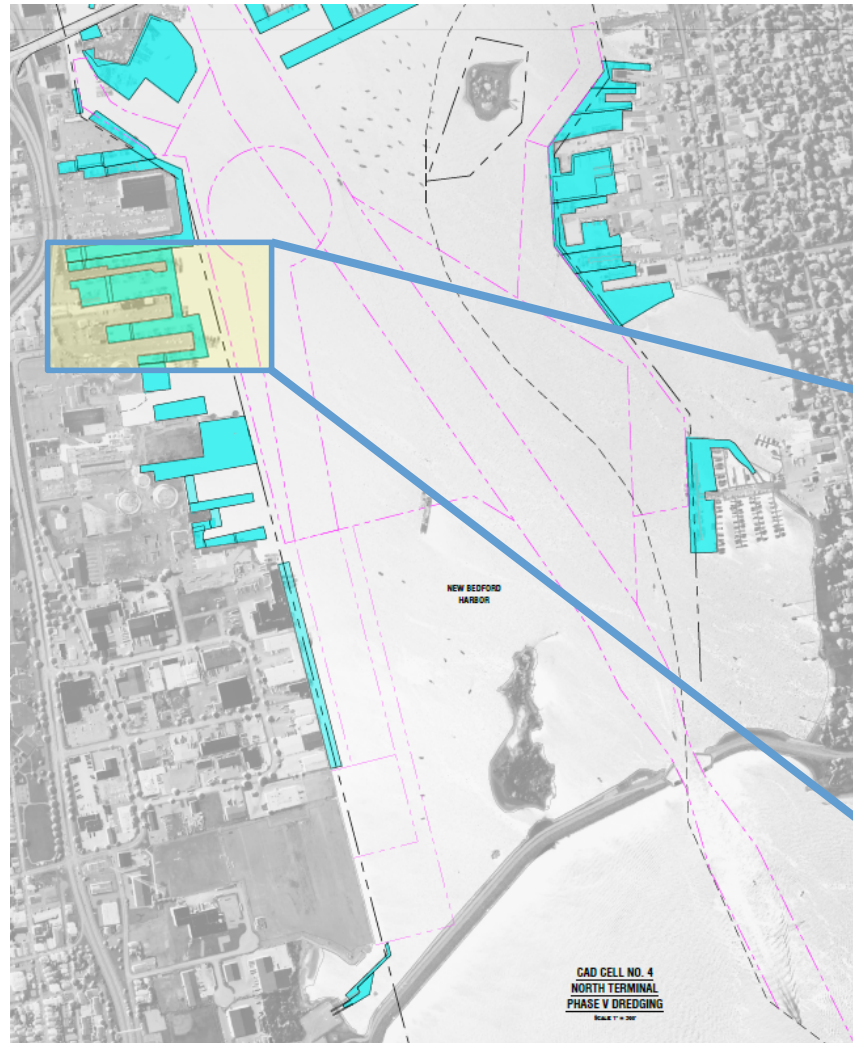
Economic Benefits of Phase V Dredging



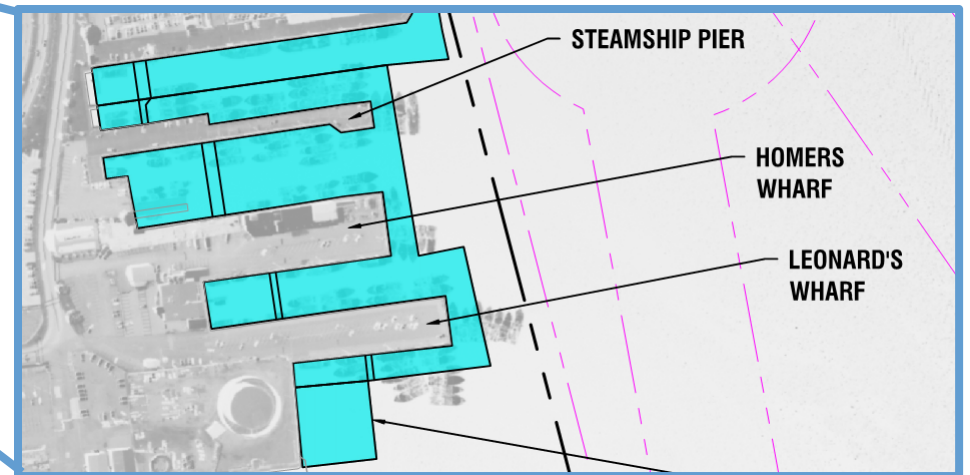
Sprague



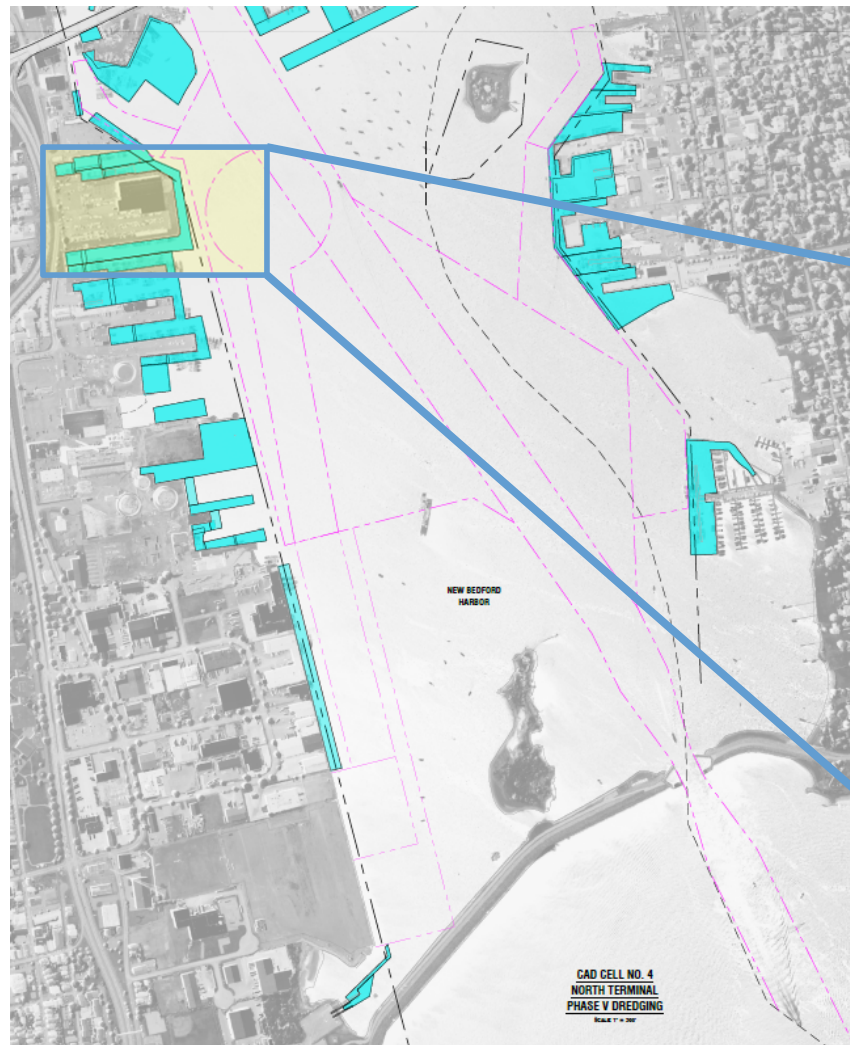
Economic Benefits of Phase V Dredging



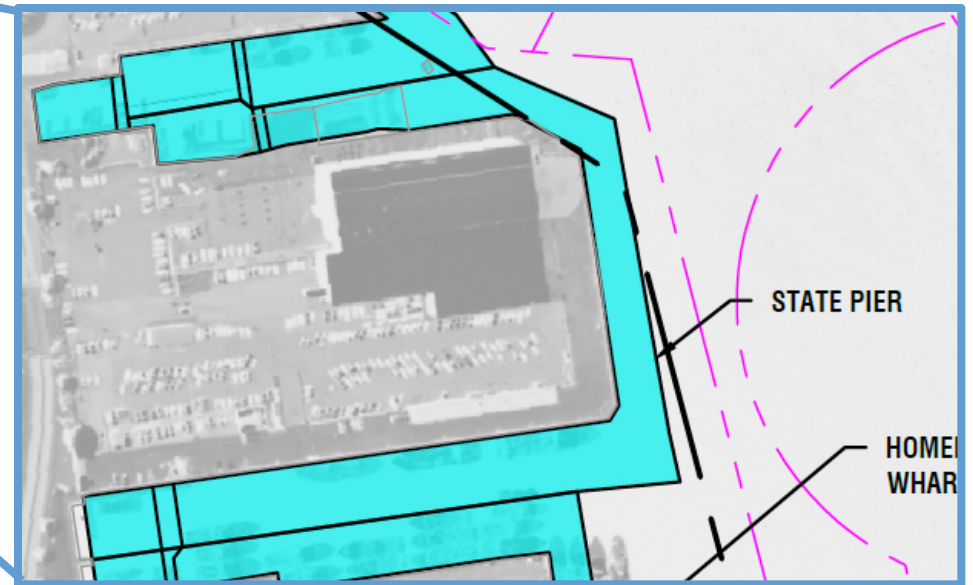
Steamship Pier, Homers Wharf, Leonard's Wharf



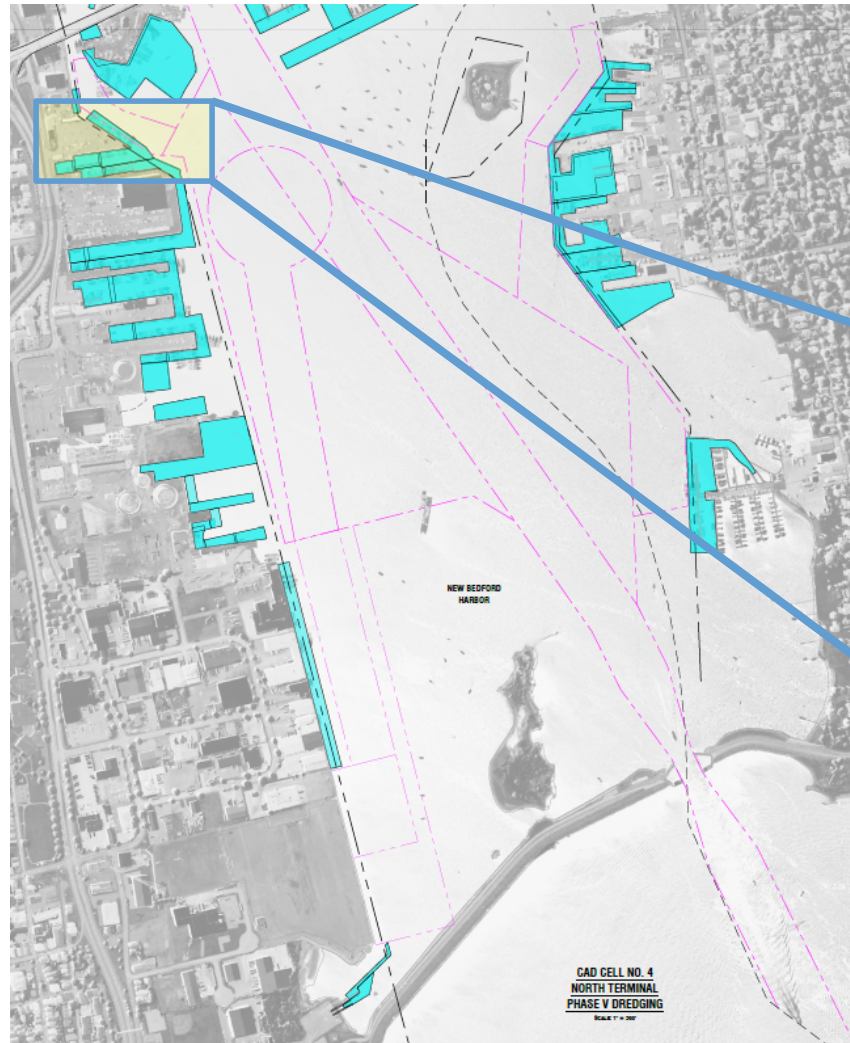
Economic Benefits of Phase V Dredging



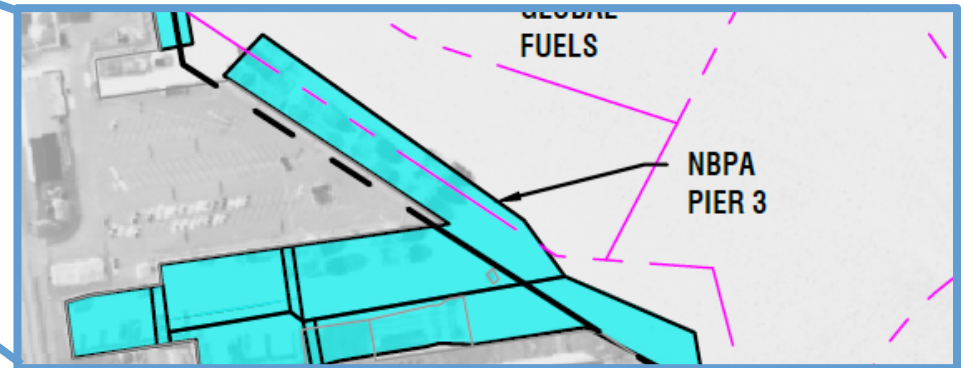
State Pier



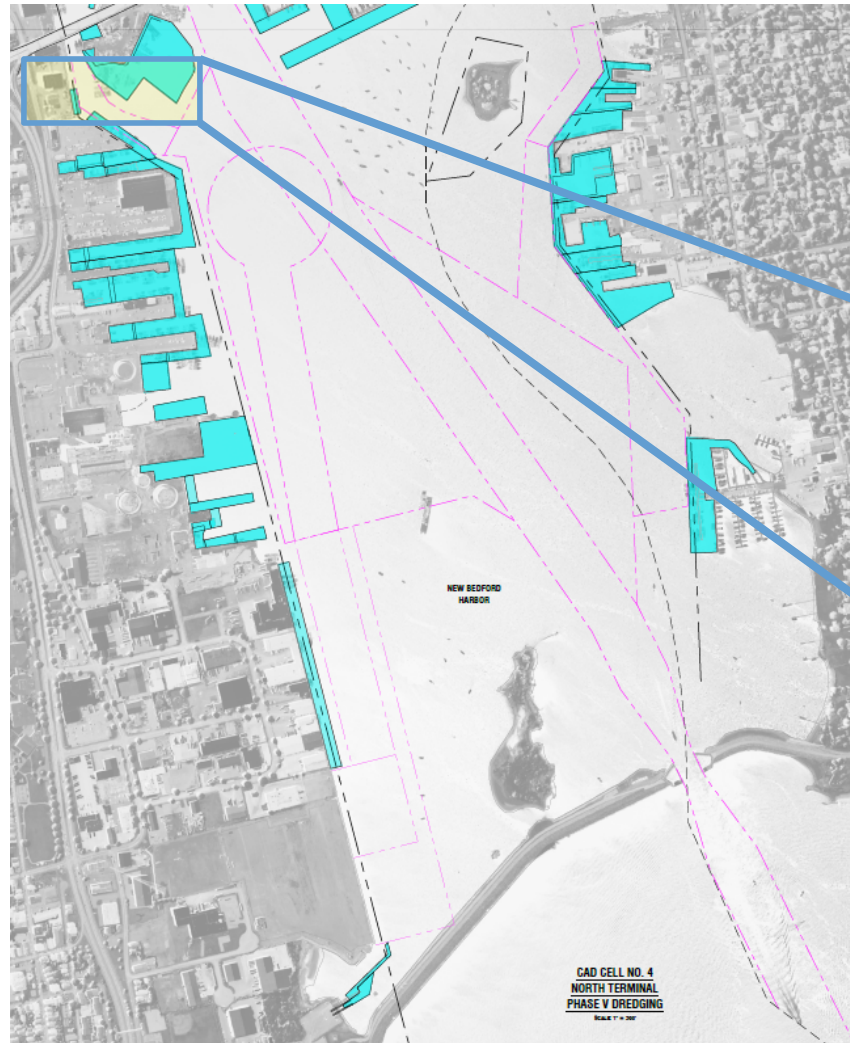
Economic Benefits of Phase V Dredging



NBPA Pier 3



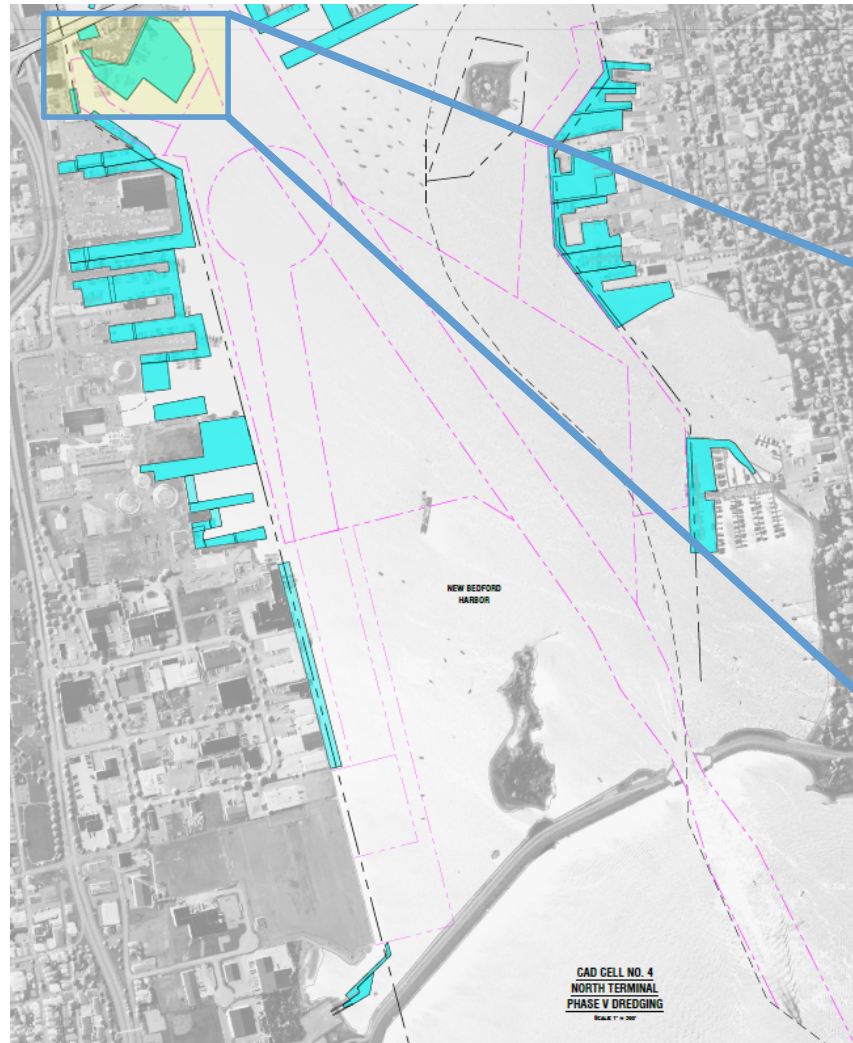
Economic Benefits of Phase V Dredging



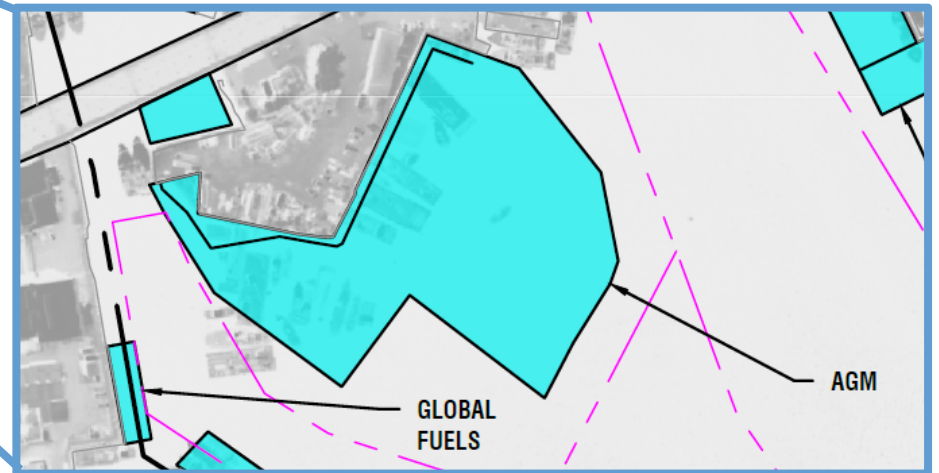
Global Fuels



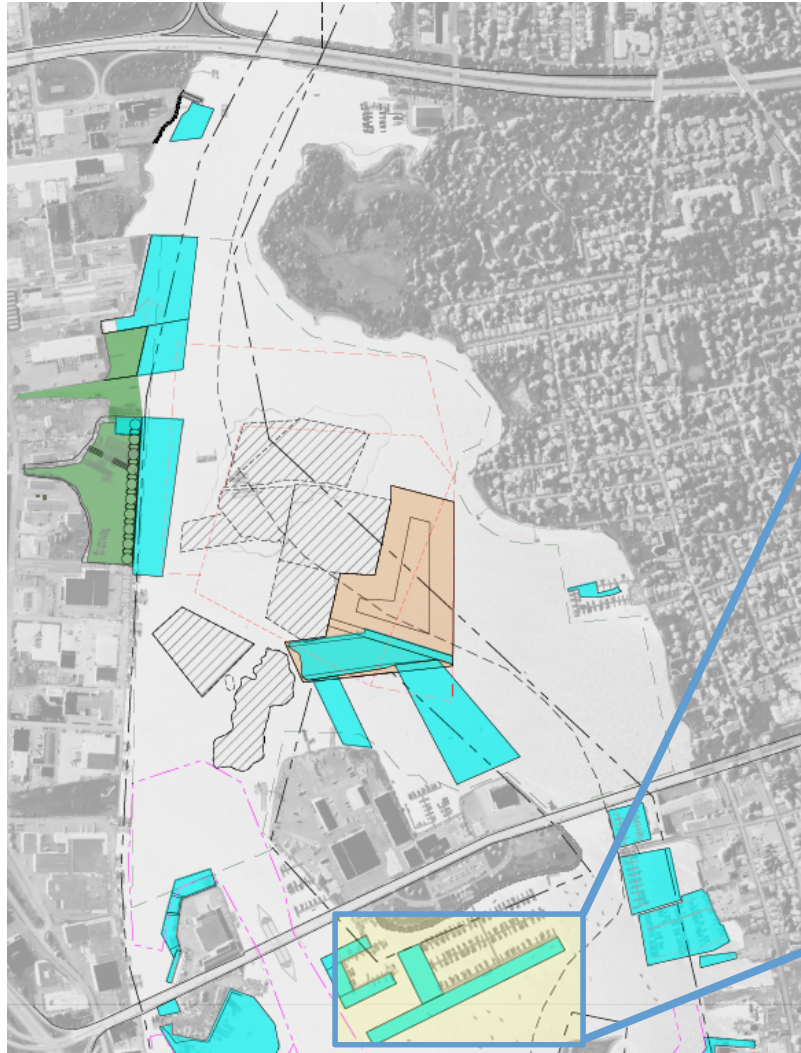
Economic Benefits of Phase V Dredging



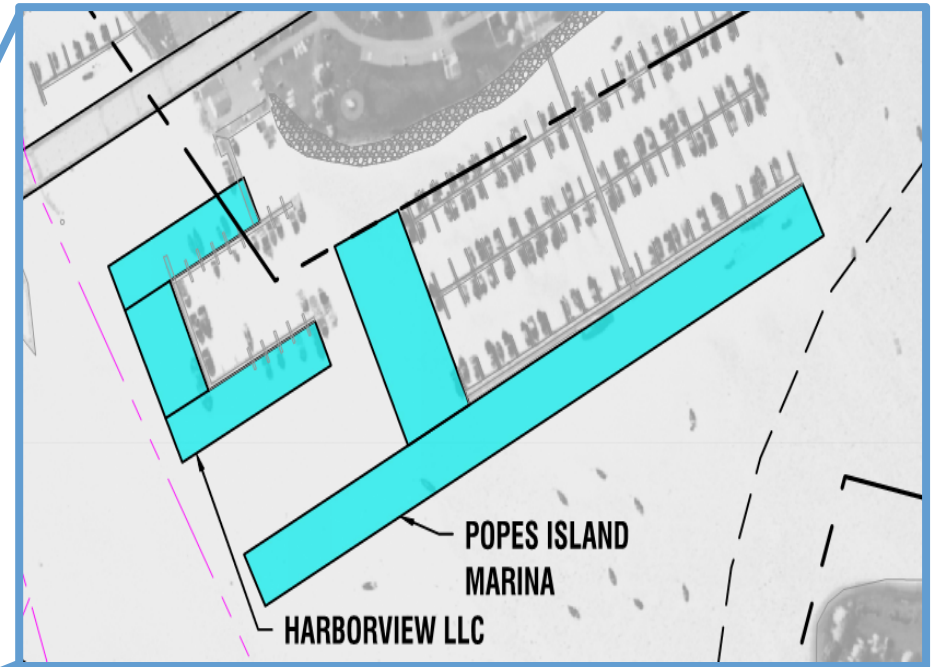
AGM Marine Contractors



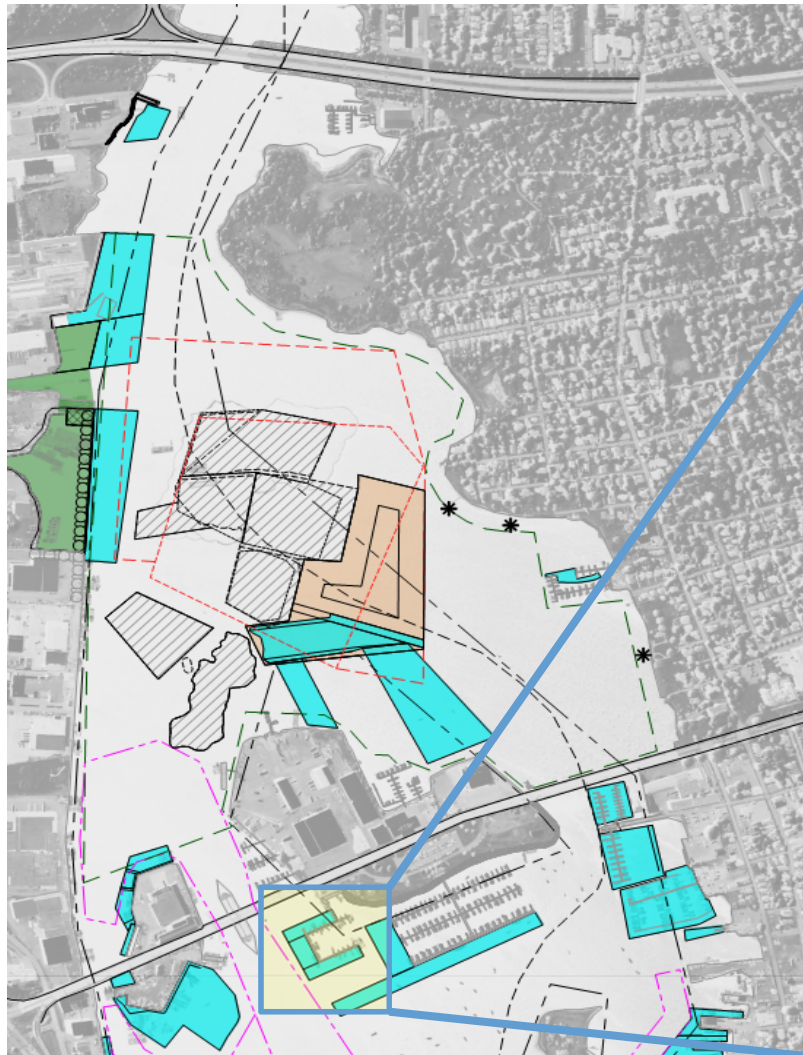
Economic Benefits of Phase V Dredging



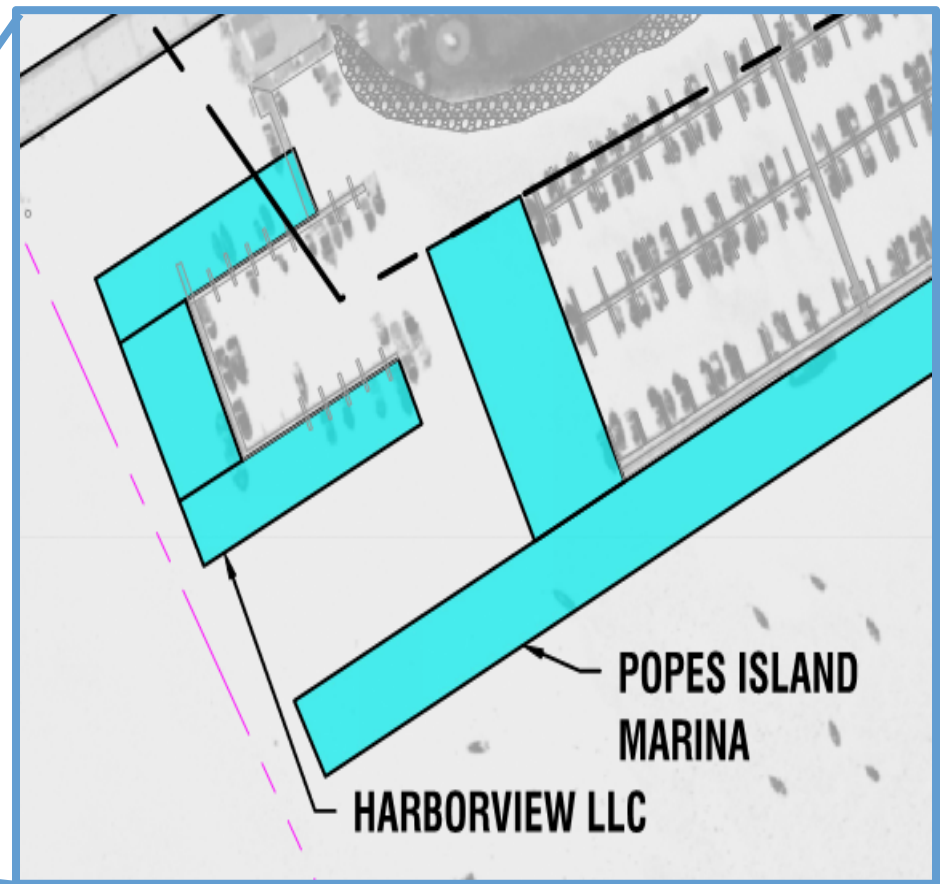
Popes Island Marina



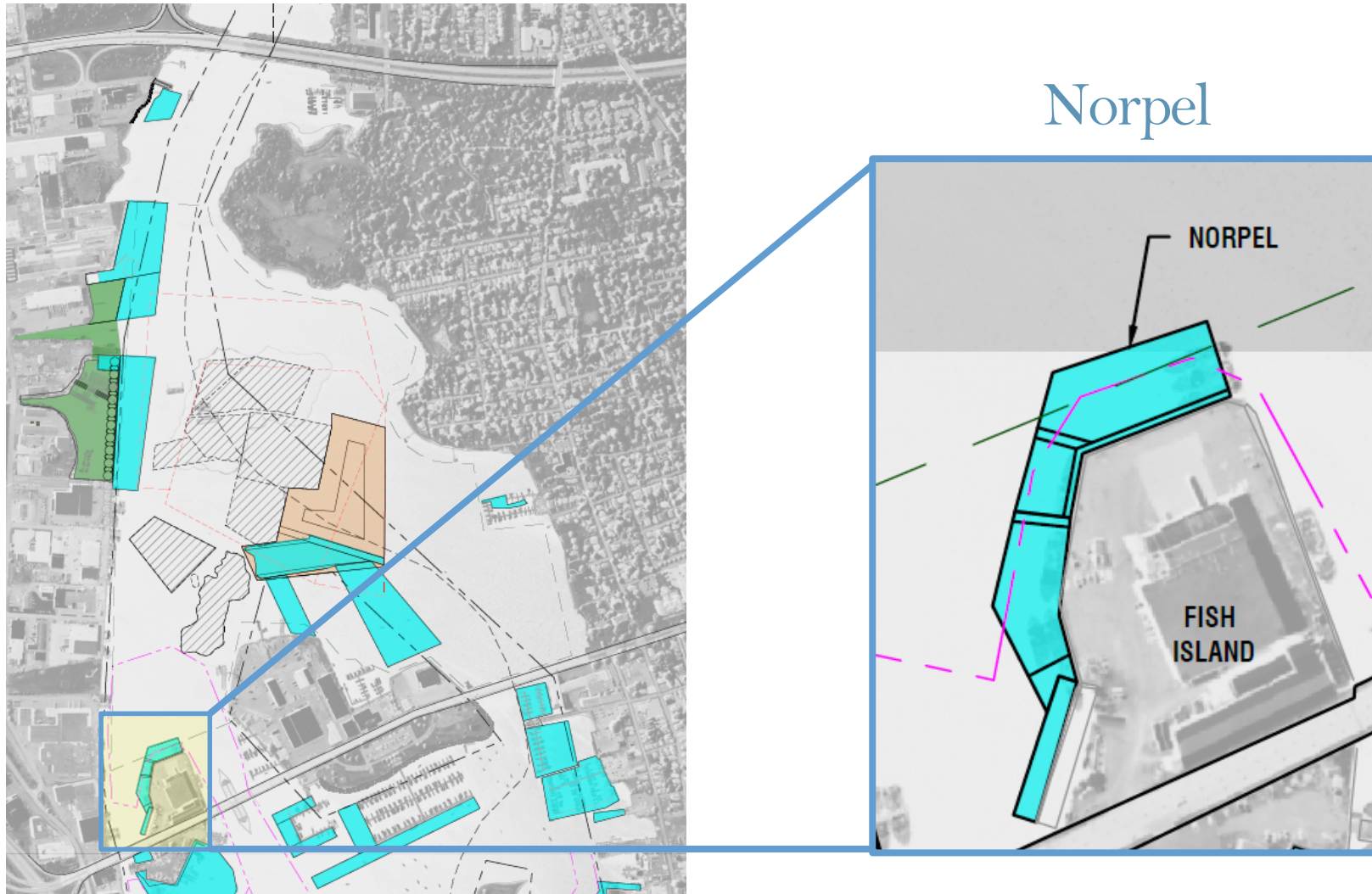
Economic Benefits of Phase V Dredging



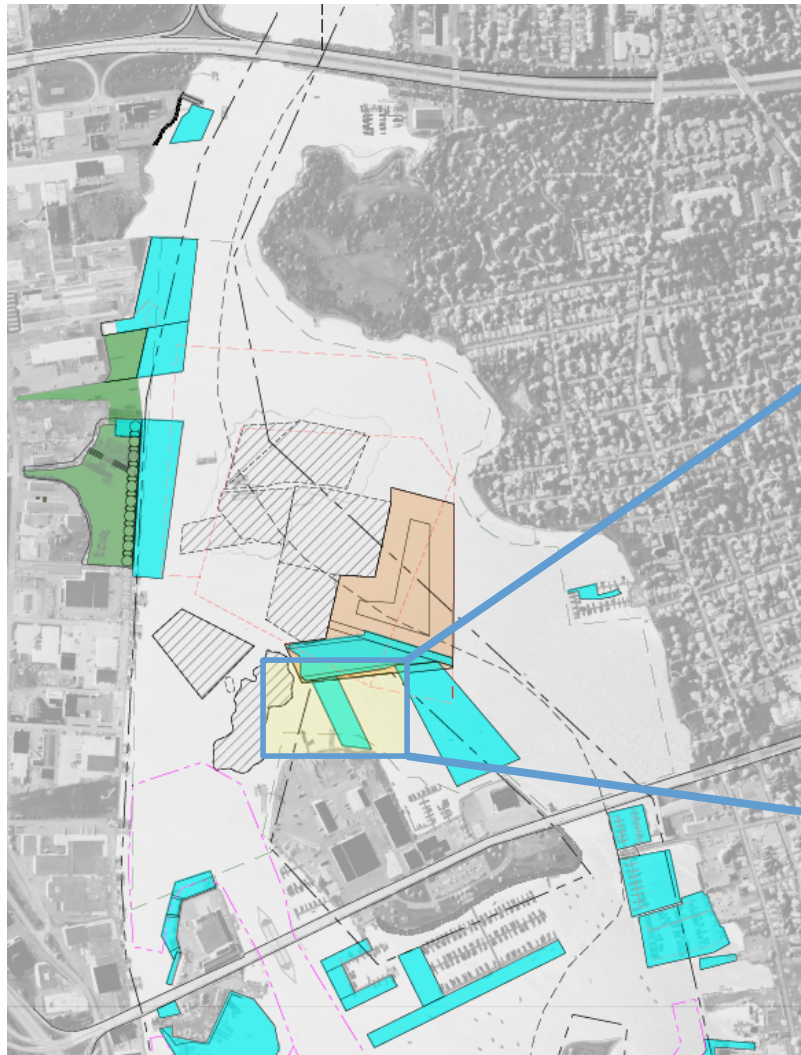
Harborview LLC



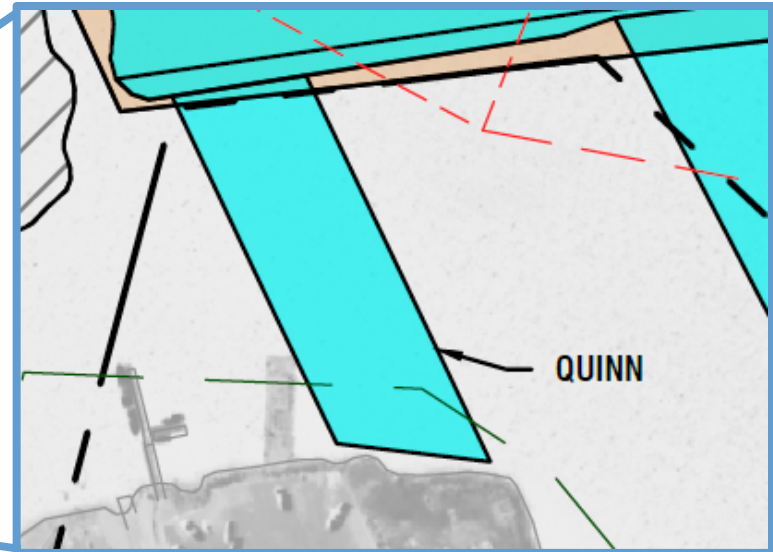
Economic Benefits of Phase V Dredging



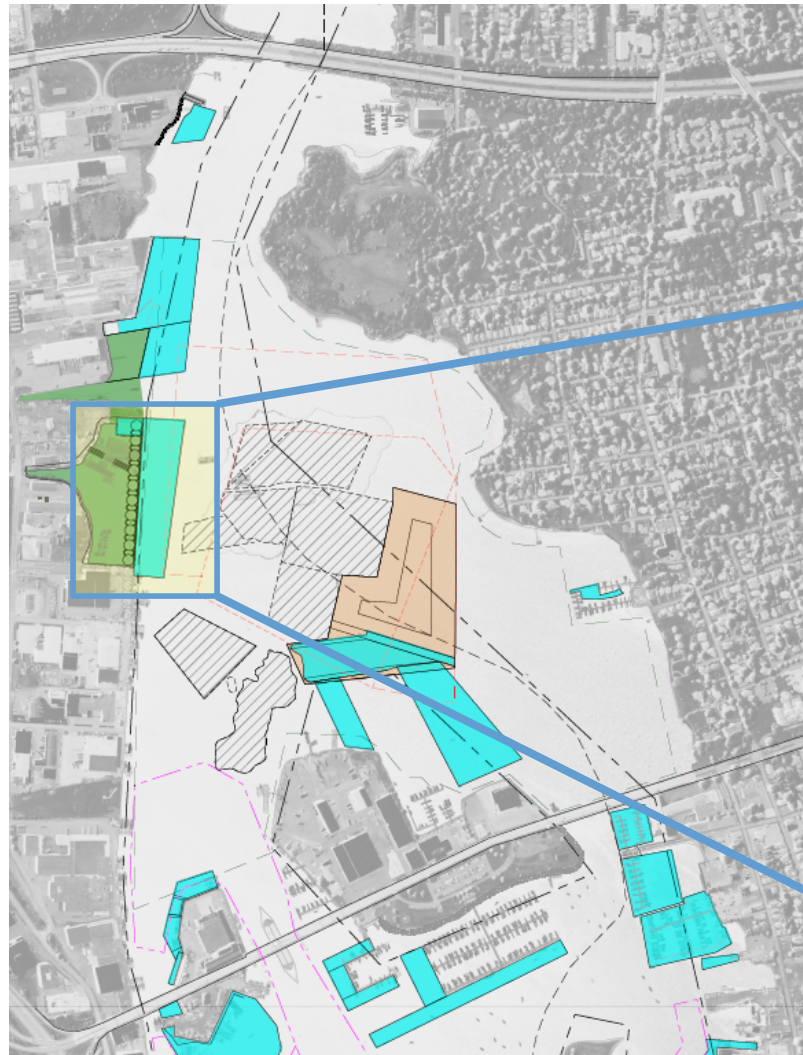
Economic Benefits of Phase V Dredging



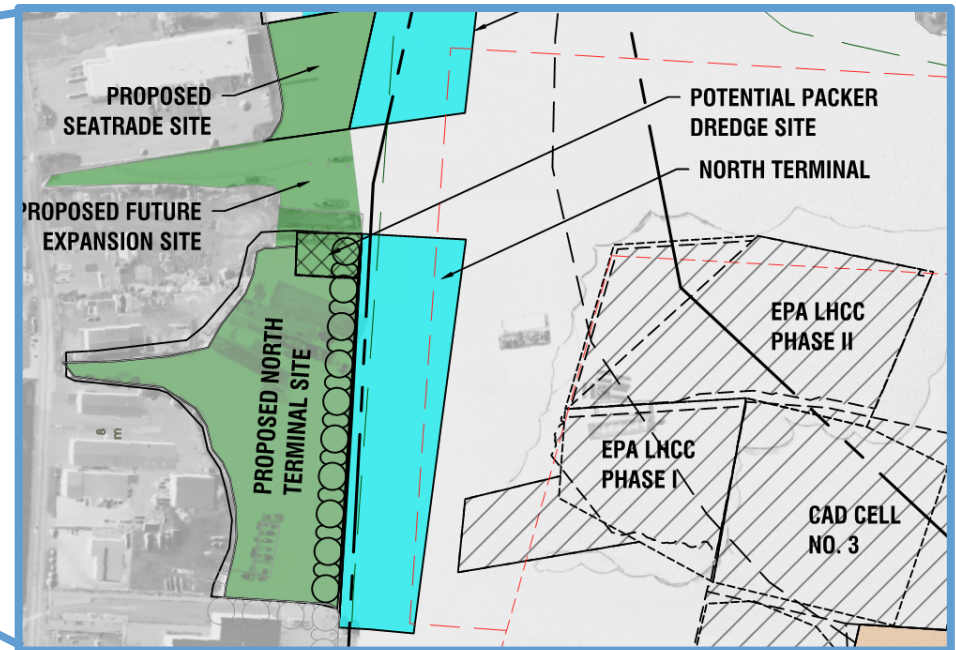
Quinn



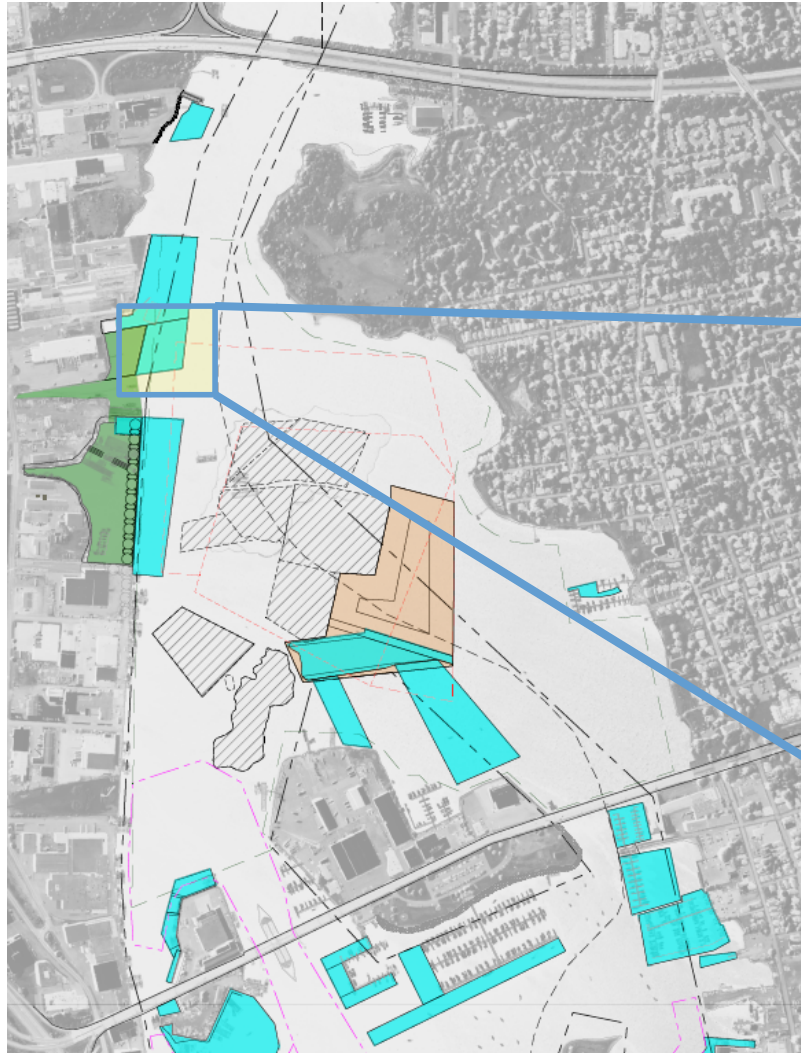
Economic Benefits of Phase V Dredging



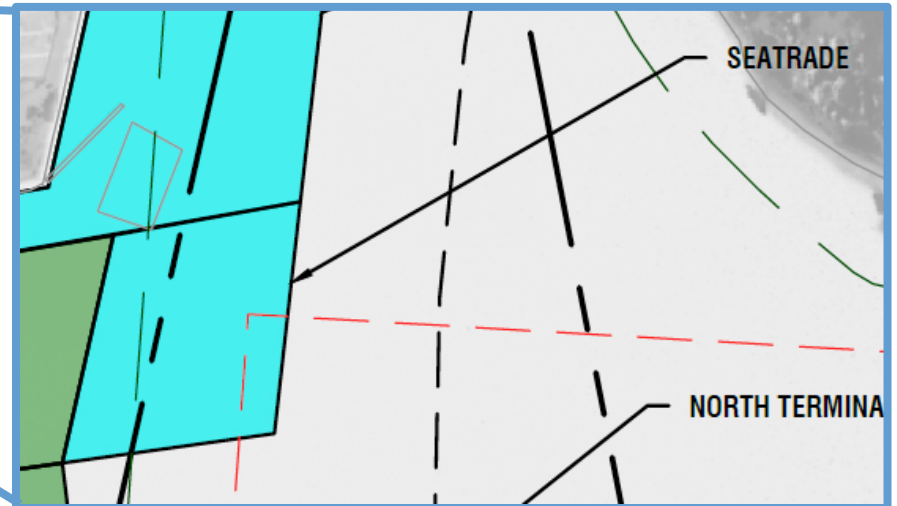
North Terminal



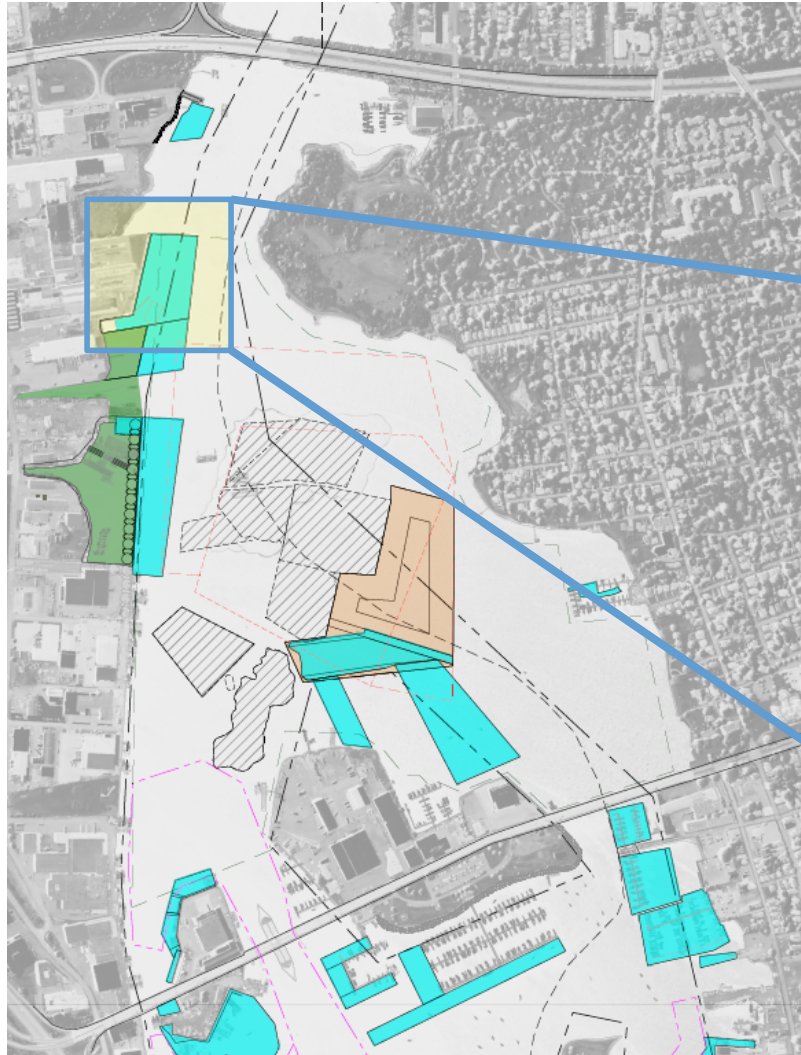
Economic Benefits of Phase V Dredging



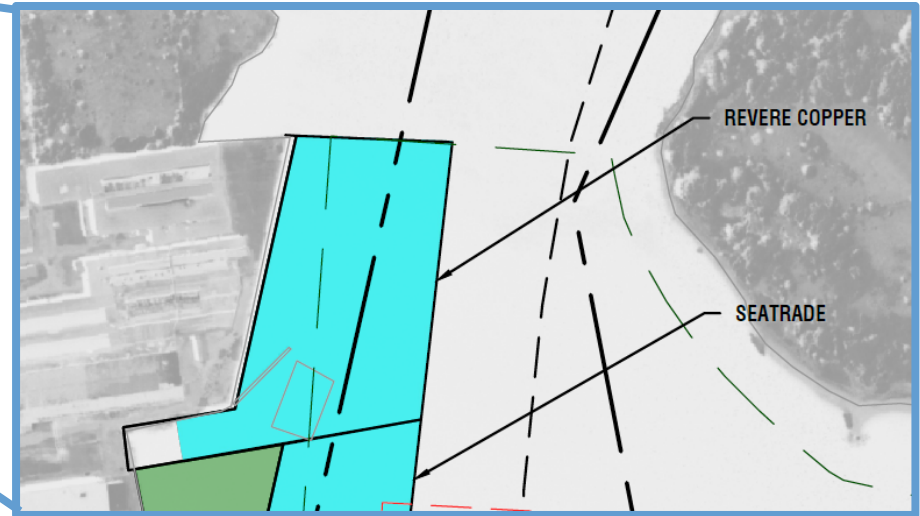
Seatrade



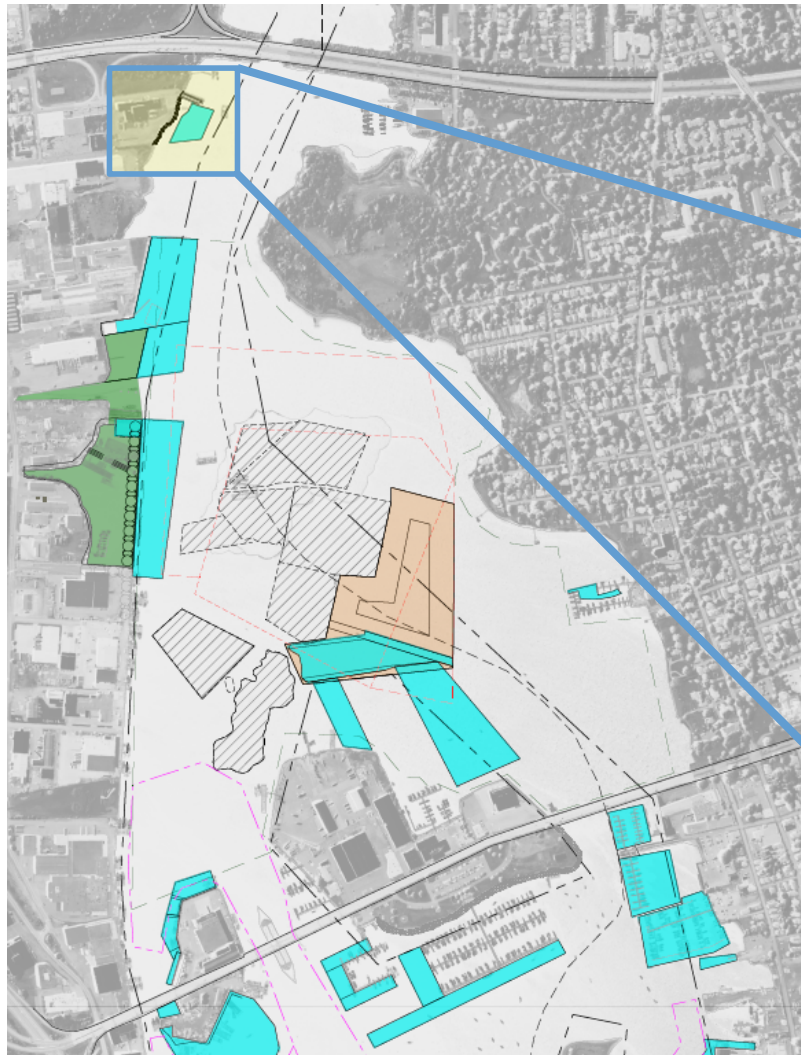
Economic Benefits of Phase V Dredging



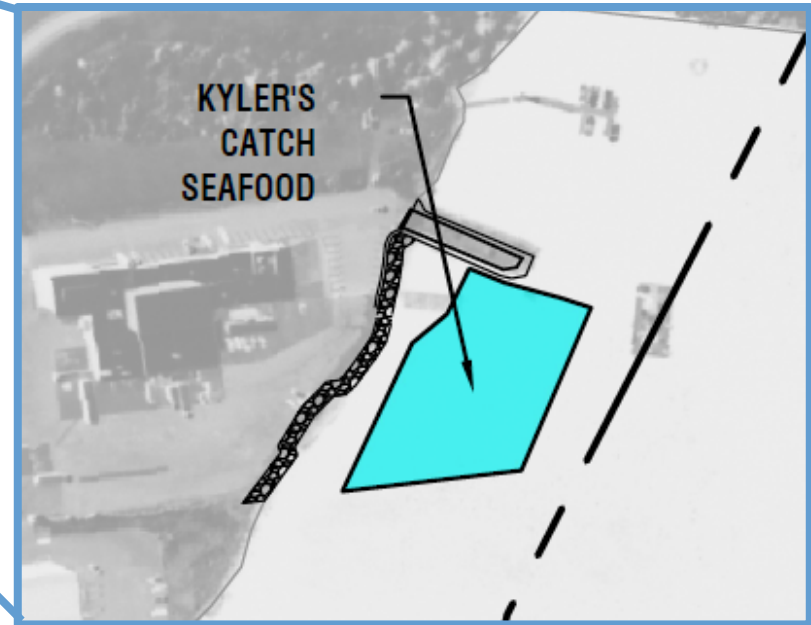
Revere Copper



Economic Benefits of Phase V Dredging

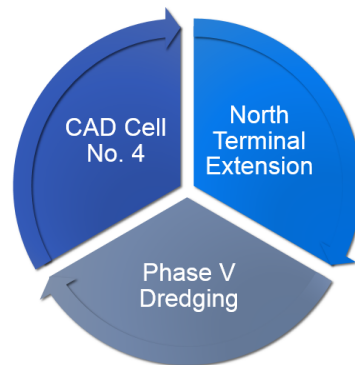


Kyler's Catch Seafood



Project Schedule

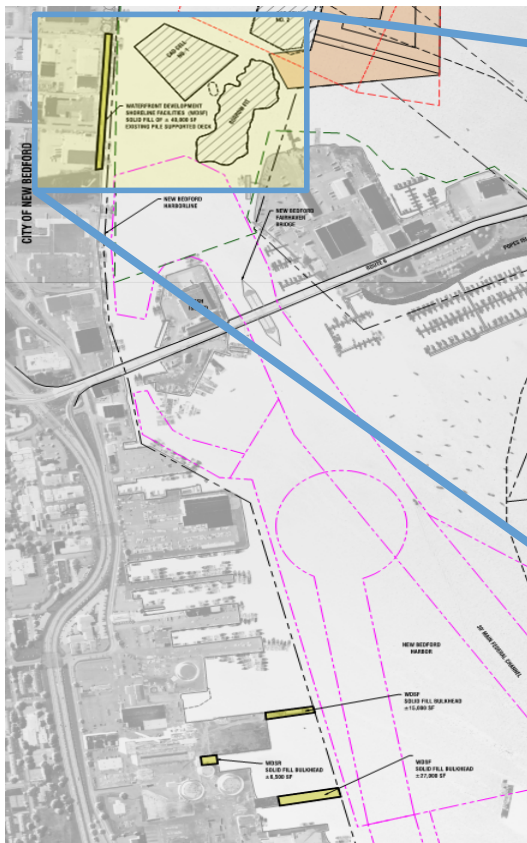
- Synergies between three aspects of single project
- Schedule Drivers:
 - Ties to State's Capital Plan
 - Potential opportunities when CAD cell is ready to accept dredge materials
 - BUILD Grant schedule
- Delays could impact cost to private owners



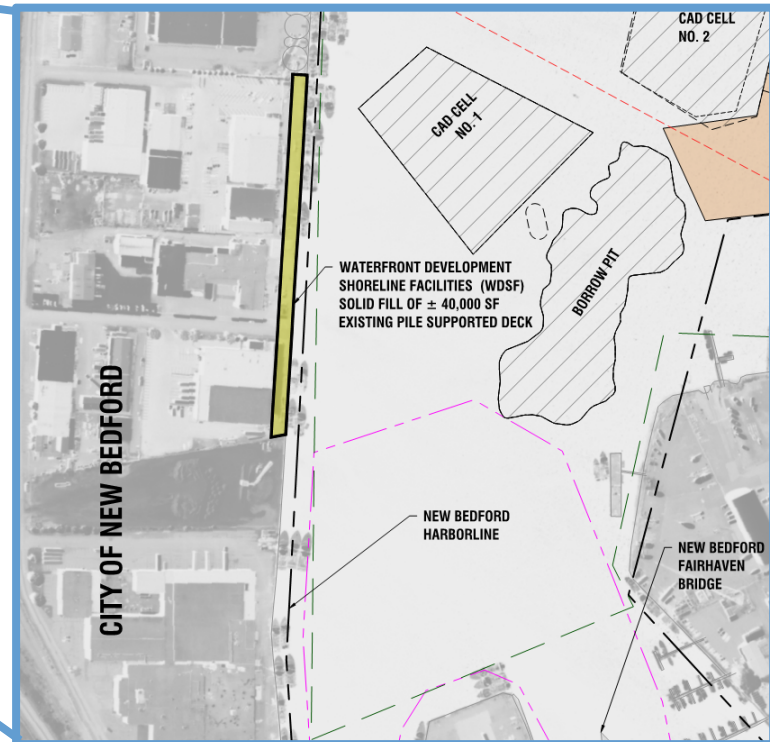
Milestone	MONTH-YEAR
Design, Engineering, and Permitting Complete (CAD Cell)	September 2019
Start CAD Cell Construction (Top of CAD)	January 2020
Top of CAD Cell 100% Complete	April 2020
Start CAD Cell Construction (Bottom of CAD)	April 2020
CAD Cell 100% Complete (Bottom of CAD)	October 2020
Start Terminal Construction	Spring 2020
Design, Engineering, and Permitting Complete (Phase V)	July 2020
Start Phase V Dredging	November 2020
Berth Dredging 100% Complete	December 2021
Terminal Construction Complete	Winter 2021-2022

Potential Waterfront Development Shoreline Facilities

- Eastern Fisheries
 - 1,000 LF solid fill bulkhead



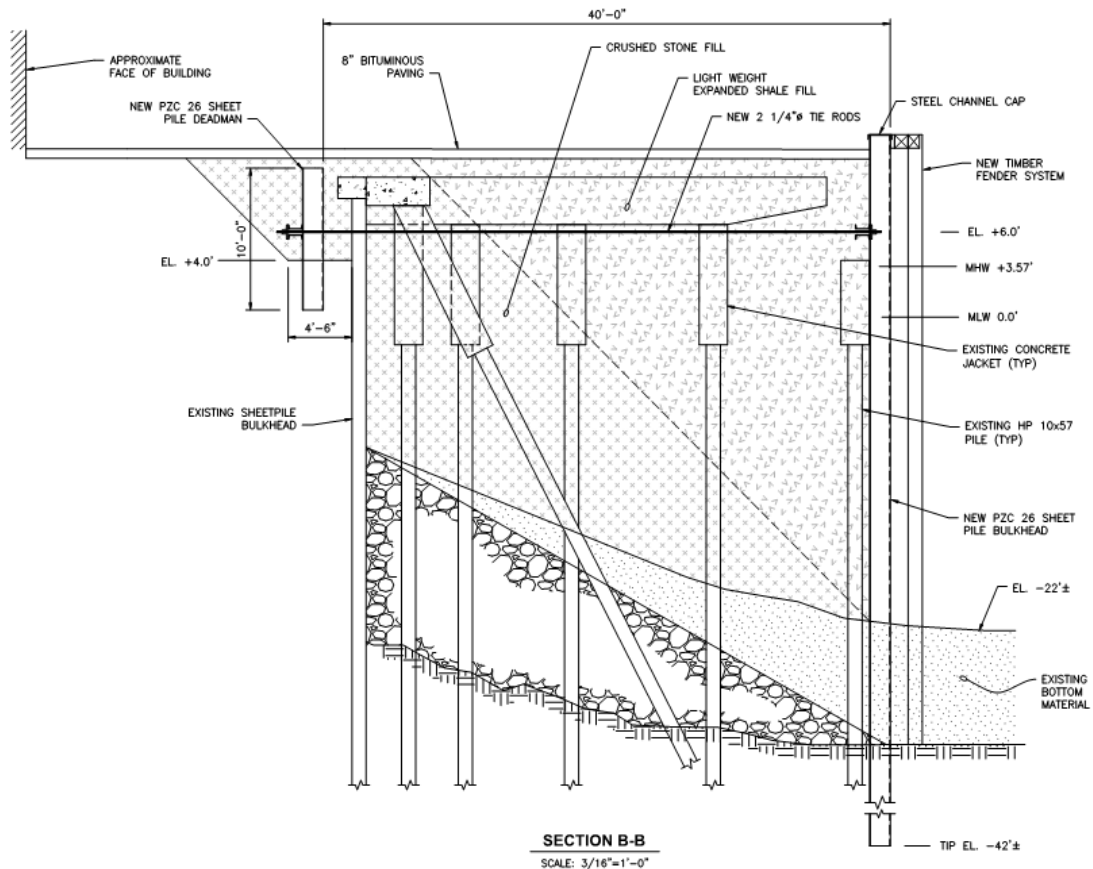
Eastern Fisheries



Potential Waterfront Development Shoreline Facilities

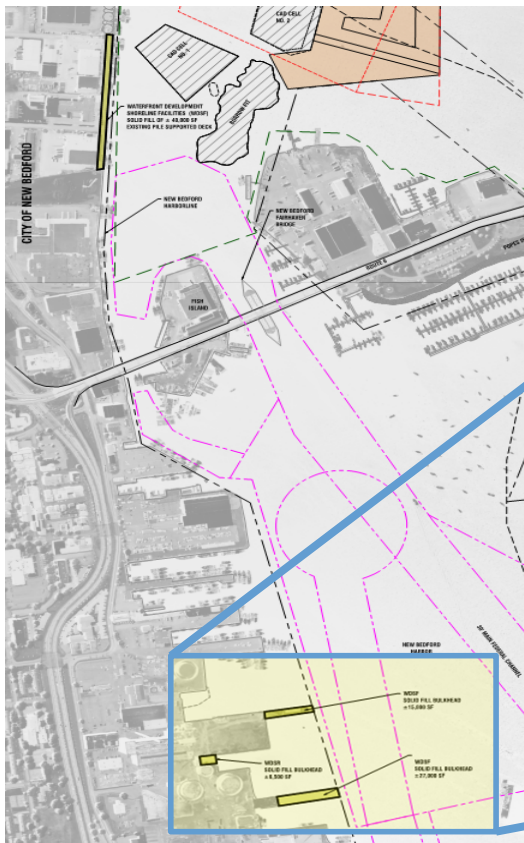
- Eastern Fisheries

- Ex. area below pier is stone rip rap covered with sediment
- Proposed bulkhead at fender line
- Approximately 40,000 SF of proposed fill



Concept plan provided by AGM Marine

- **Sprague Site**
 - 3 areas within this site



Sprague Site



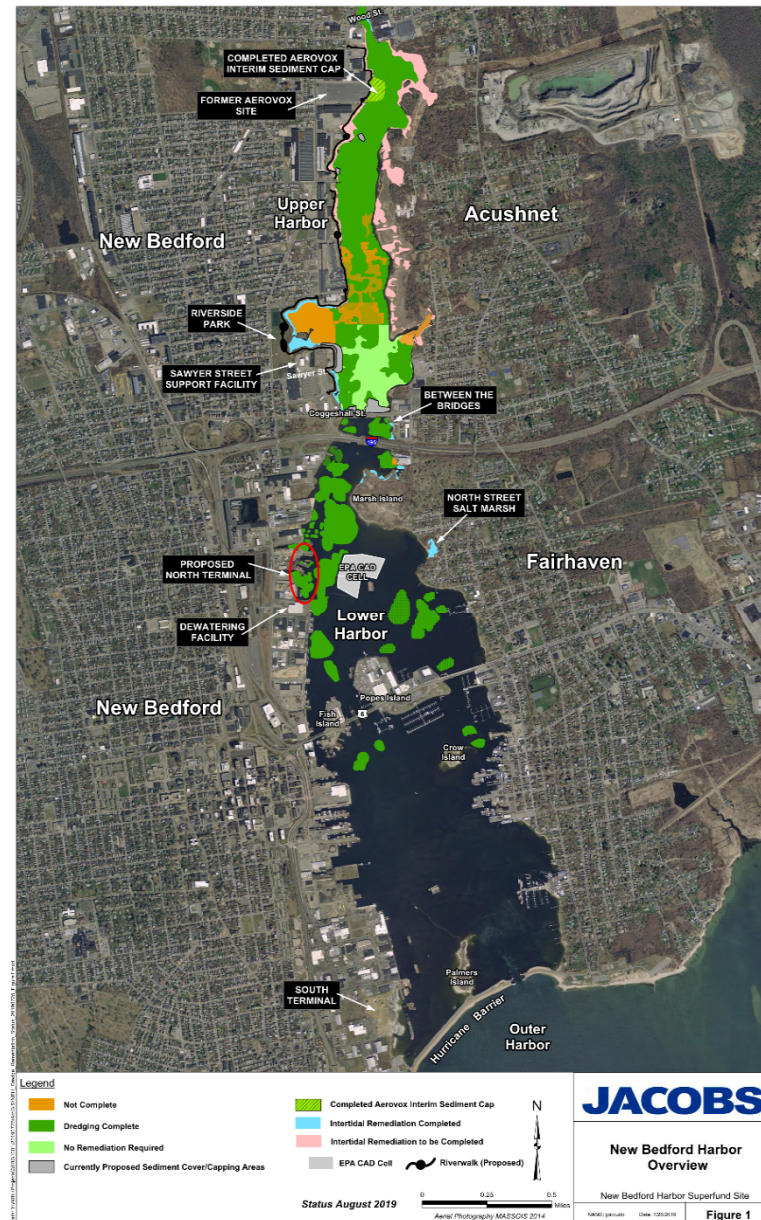
Maintaining navigational channels and depth is imperative for safe and efficient navigation by all port users and has a significant impact on daily operations for dozens of waterfront businesses.

This project ensures that the Port of New Bedford/Fairhaven remains a robust, full-service industrial working waterfront.

We thank you for your support of this important project!



EPA Status update



EPA Status update

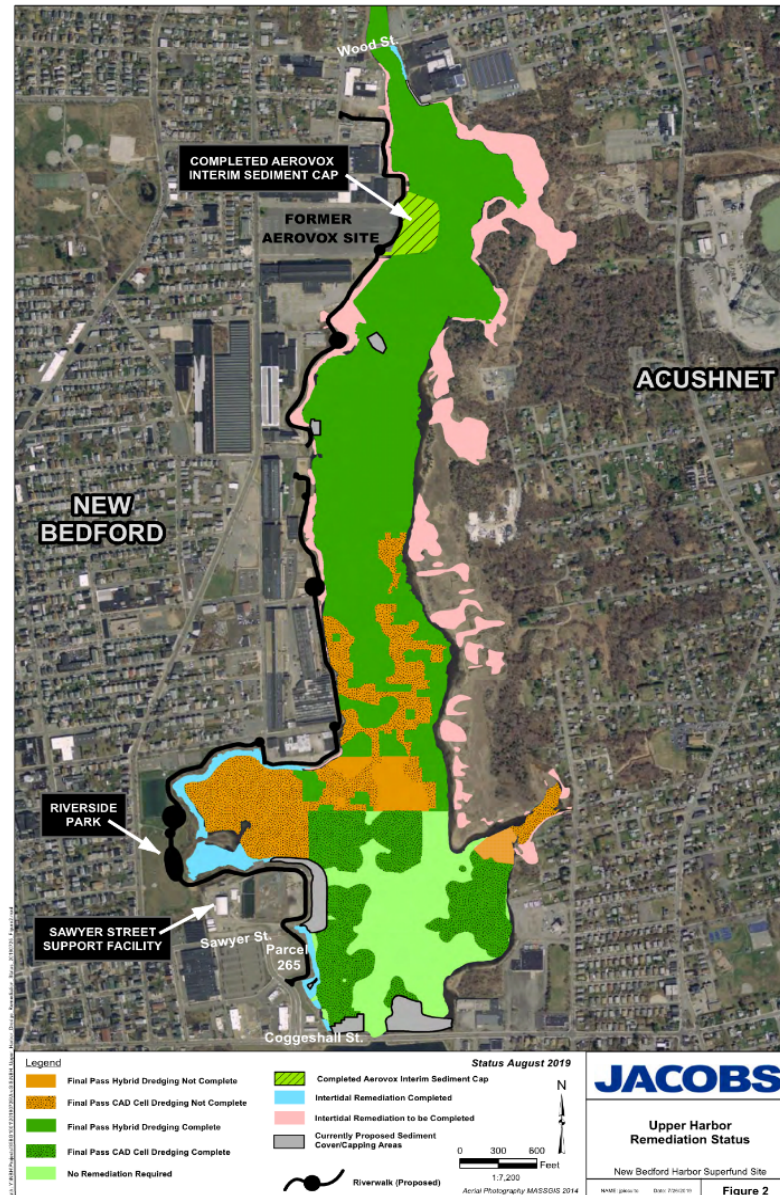


Figure 2

Thank you for support

- Senators Ed Markey & Elizabeth Warren
- Congressman Bill Keating
- Governor Charlie Baker & Lt. Governor Karyn Polito
- EOHED Secretary Mike Kennealy
- The New Bedford/Fairhaven Delegation, including: Senator Mark Montigny, Chairman Bill Straus, Antonio Cabral, Chris Markey, Paul Schmid, and Chris Hendricks
- Mayor Jon Mitchell & New Bedford Port Authority Commissioners Patricia Lareau, Richie Canastra, Jim Oliveira, Dr. Brian Rothschild, Davis Sullivan, Joseph Tavares
- New Bedford City Council Members Linda M. Morad, Joseph P. Lopes, Brian K. Gomes, Dennis Farias, Maria E. Giesta, Dana Ribeiro, Naomi R.A. Carney, Debora Coelho, Ian Abreu, Hugh Dunn, Scott J. Lima, William Brad Markey

Questions



PHASE V DREDGING, CAD CELL #4, NORTH TERMINAL EXTENSION



Photo by Ed Pepin