



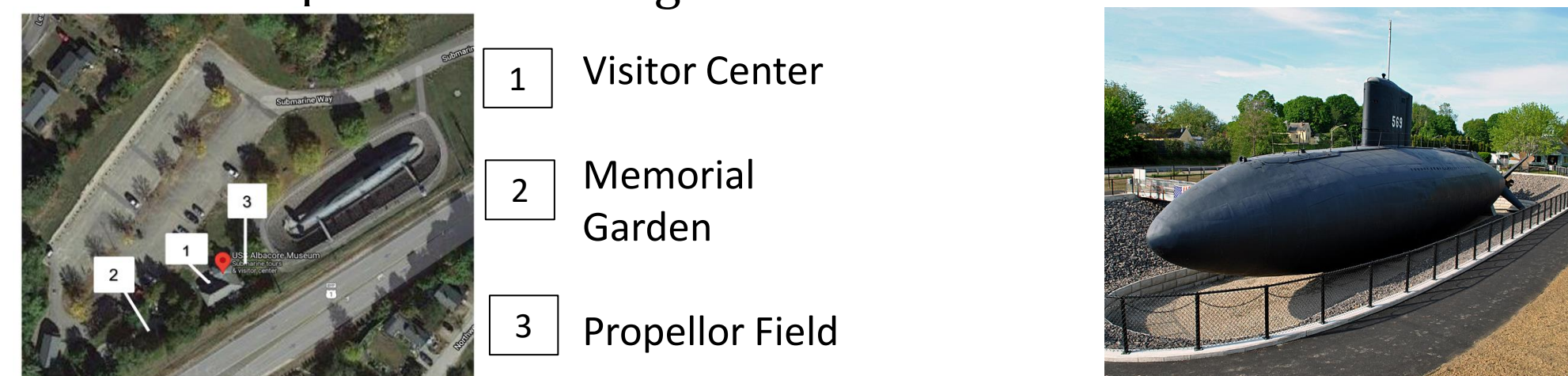
# The USS Albacore Park Expansion

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## Introduction

- USS Albacore Park:
  - Museum founded in 1985, consists of memorial garden, visitor center, and propellor field
  - Albacore submarine on display for its famous use of testing technology during WWII
  - Managed by Portsmouth Submarine Memorial Association
- Location:
  - Off Route 1 By-pass in Portsmouth, NH
  - 8.55 acre lot
- Purpose:
  - Outgrowing current footprint
  - Expand existing building in order to increase visitation and public knowledge

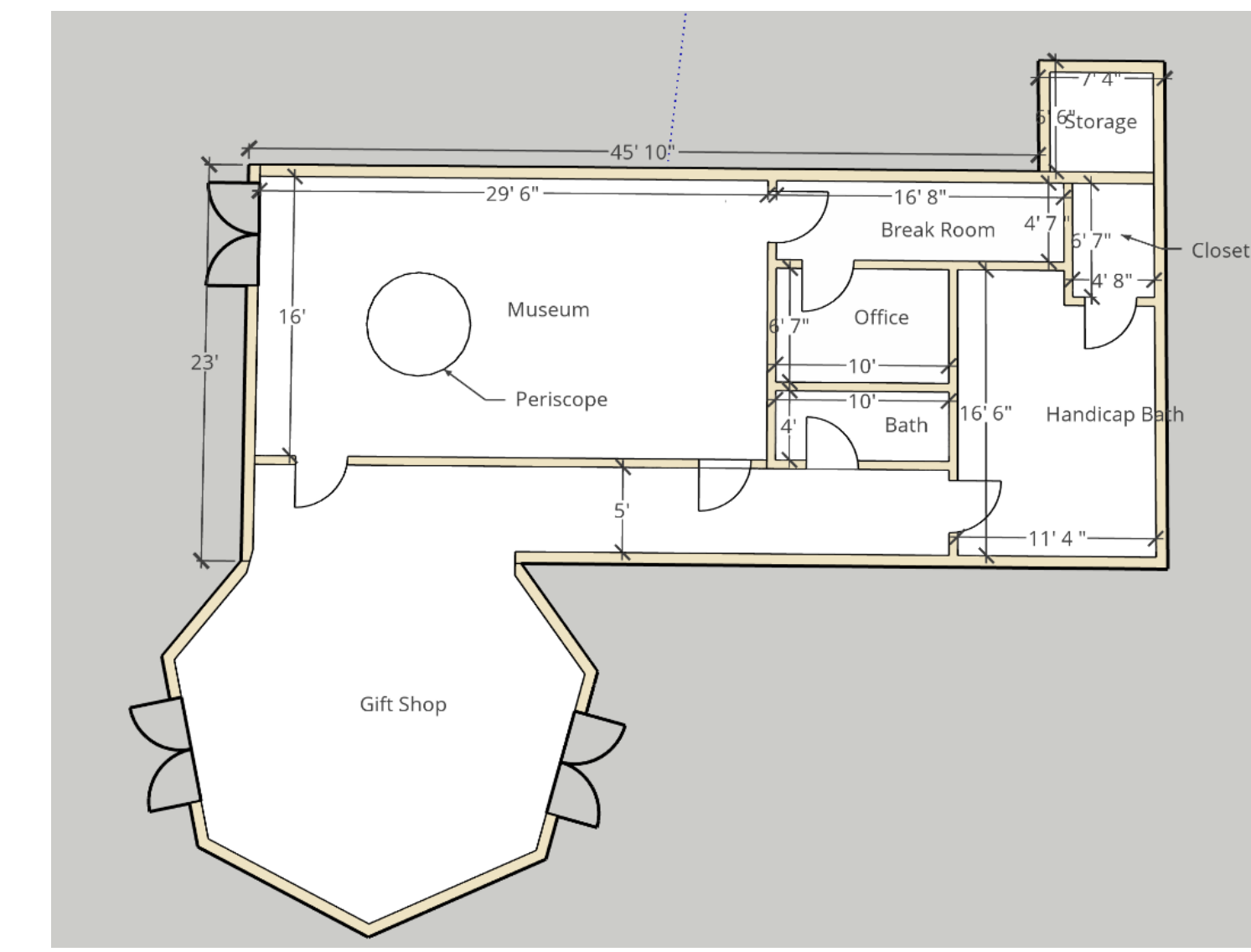


## Existing Conditions

Visitor Center Building



Existing Floor Plan



## Scope of Work

- Expand the current footprint by double the space
- Primary Goals:
  - More exhibit space
  - Addition of a learning center
- Secondary Goals:
  - Increase gift shop space
  - ADA accessible
- Direct foot traffic from submarine into gift shop post-tour
- Additional Tasks Included:
  - Site visits and site measurements
  - Prepare as-built plans
  - Propose a demo, site, and floor plan of proposed design
  - Provide a cost estimate of proposed design

## Proposed Concept Layouts



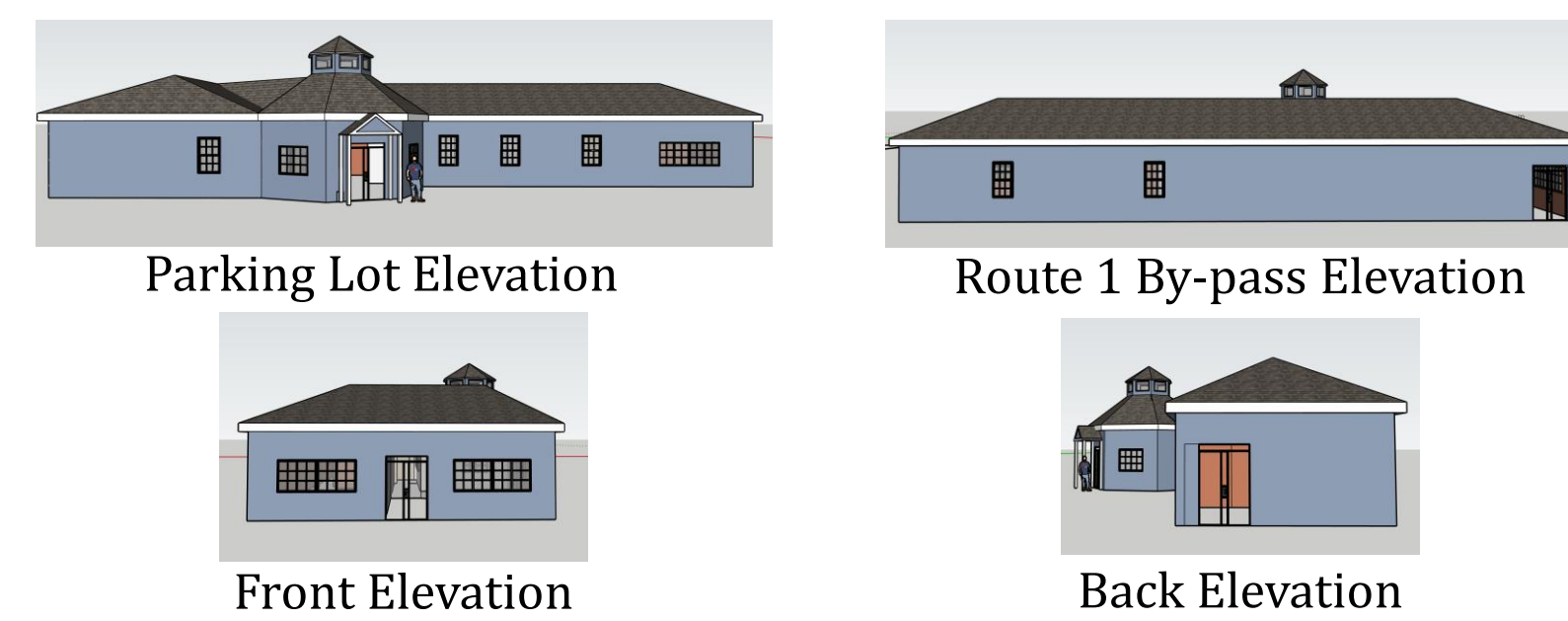
- Concept 1**
- Potential for unique viewing experience
  - New roof structure
- Concept 2**
- Roof structure stays the same
  - Will need roof cricket for runoff
- Concept 3**
- Preserves distinct lighthouse look
  - Additional cost to move structure
- Concept 4**
- Takes advantage of available space on site
  - Will need roof cricket for runoff

## Final Visitor Center Expansion

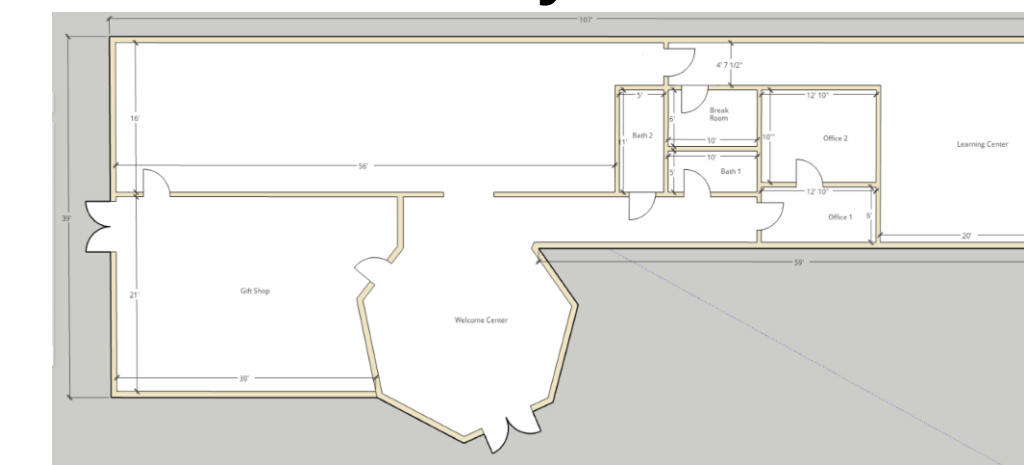
3D Rendering



Building Elevations

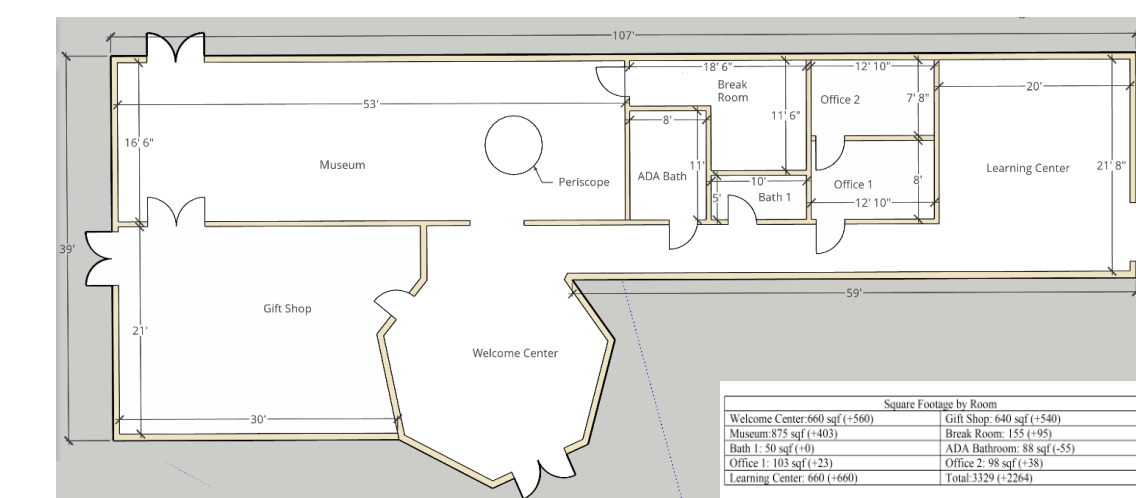


Preliminary Floor Plan



- Initial Approach:**
- Met spatial requirements requested by client
  - Preserved existing structure layout
  - Current layout provides optimal view of the submarine
  - Directed traffic through giftshop to enhance customer sales

Final Floor Plan



- Improvements:**
- Optimized traffic flow throughout building
  - Increased ADA Bathroom to meet code
  - Eliminated unnecessary hallway
  - Installed Emergency Exit located in learning center
  - Incorporated loading Dock

## Site Constraints

- Existing building located very close to Route 1
- Zoned as Residential
  - State Land Use Designation
- Restricted based on current layout of lot use
  - Submarine Location
  - Parking lot/existing structures
- Recent drainage work not to be altered
- Wetland zone restrictions



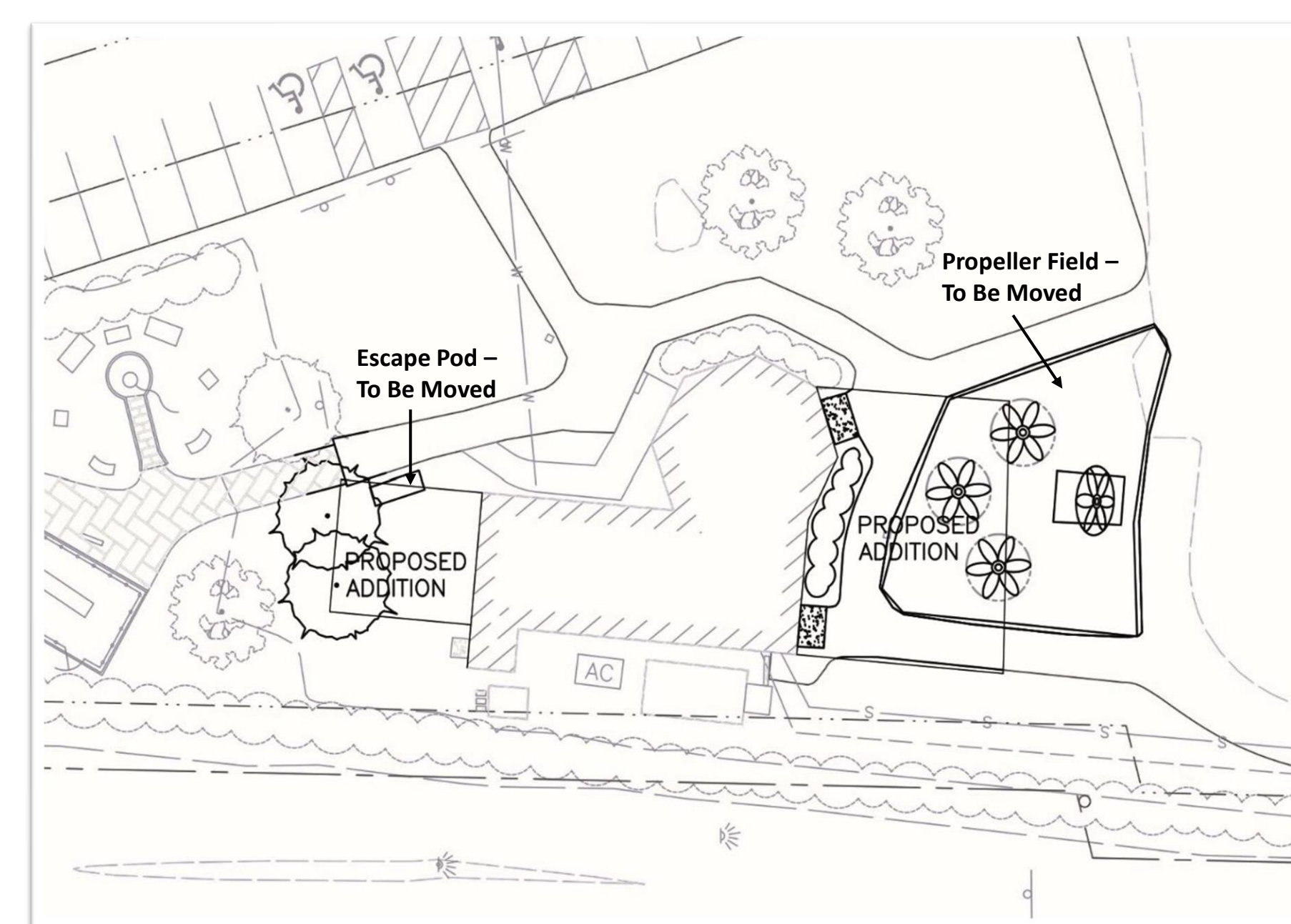
## Cost Estimate

- The Albacore Museum gave us a budget of \$800,000
- Cost estimate came out to \$723,300.00

Division:	Cost:
Architectural:	\$98,585.00
Accessories/Furniture:	\$37,200.00
Piping:	\$2,702.00
Mechanical:	\$41,100.00
Electrical:	\$47,850.00
Controls:	\$20,650.00
Site Work:	\$46,100.00
Rigging:	\$15,000.00
Landscaping:	\$1,800.00
Rigging:	\$15,000.00
Fencing:	\$9,400.00
Siding/Roof:	\$45,700.00
Building, Framing, Roofing	\$212,500.00
Contingencies (10%)	\$57,858.70
GC, Insurance, Fee (15%)	\$86,788.05
<b>Total:</b>	<b>\$723,300.00</b>

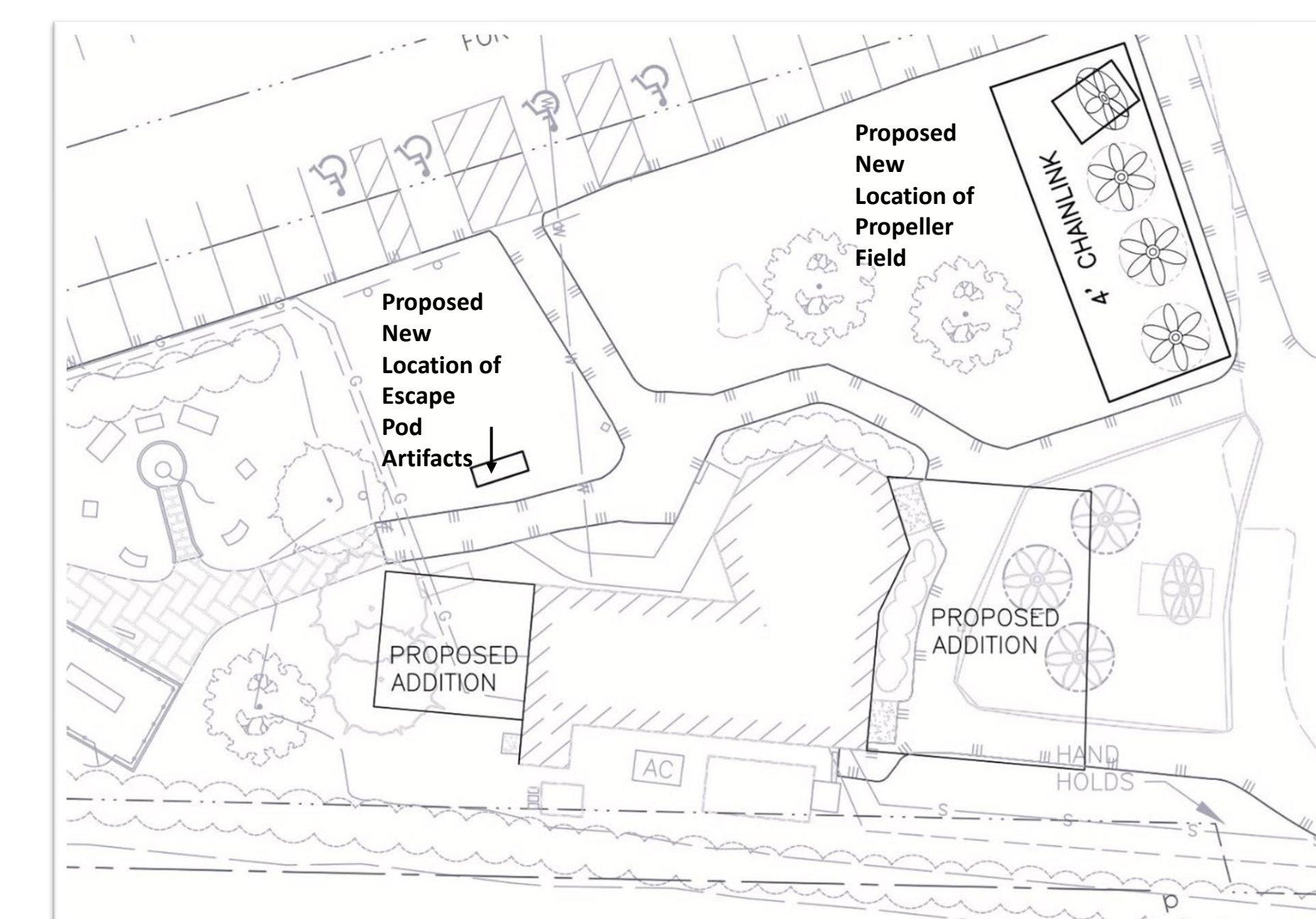
## Proposed Demolition and Site Plan

Demolition Plan



Proposed changes to the existing site

Site Plan



Proposed site after construction

## Acknowledgments

Patricia Violette, Executive Director/Curator (Project Sponsor)  
Kenneth Flesher, PE Civil Engineer (Project Faculty Advisor)  
Portsmouth Submarine Memorial Association Board

## References

- John Chagnon, Ambit Engineering:
  - Supplied existing site plan
- City of Portsmouth Building Codes
- Shanti Wolph, Chief Building Inspector of Portsmouth
- Felix DeVito, Registered Architect
- Chip Dean, Axis Construction Corp.
- Albacore Presentation and Report by Ryan Murphy, Emily Frazzoni, and Aaron Wolfson-Slepian, 2016-2017