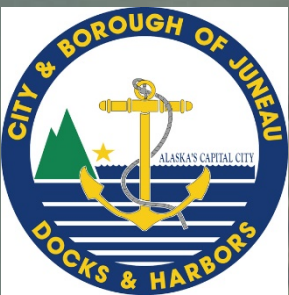


Amalga Harbor Improvements

Public Meeting - 6:00 pm
Tuesday, April 2, 2019
Mendenhall Valley Public Library



ENGINEERS, INC.

Project Purpose

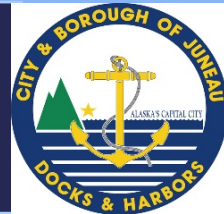
- The purpose of this project is to address the recreational boating needs of the community by improving safety and efficiency of the existing boat launch facility through installation of fish cleaning stations and Private Aids to Navigation (PATON) at Amalga Harbor.

Introduction

Project Team Roles and Responsibilities

Owner

Carl Uchytel, Port Director
Gary Gillette, Port Engineer
Erich Schaal, Deputy Port Engineer



Design Engineers

Dick Somerville, Project Manager
Brandon Ivanowicz, Design Engineer
Bre Lambert, Design/Environmental Engineer



Funding Agency



Tonight's Presentation Agenda & Objectives

- Project Scope, Purpose & Goals
- Project Status to Date
- Best Management Practices (BMP's) and Environmental Permit Requirements for Fish Waste Disposal
- Offsite, Offshore, In-Harbor & Upland Fish Waste Disposal Options
- Private Aid to Navigation (PATON)
- Identify other Objectives
- Next Steps

Project Scope, Purpose & Goals

- Decrease congestion and boat launch & retrieval wait times, increase safety and efficiency at boarding float
 - Eliminate impact of fish cleaning on boat launching - float is too short to support both simultaneously (**worst congestion at low tide**)
- Provide amenities for fish cleaning that meet Best Management Practice (BMP) guidelines – **provide additional cleaning tables**
- Provide Private Aid to Navigation (PATON) - **identify rock outcropping hazard within harbor**

Project Status to Date

- Cooperative Agreement between CBJ and ADFG SportFish - \$280,000 grant for recreational boating improvements including fish cleaning from ADFG
- Feasibility study performed (December 2015)
- (2) public meetings previously held (June 2015 & October 2018)
- Selection of preferred Alternative by CBJ & ADFG, 12'x75' Fish Cleaning Float at end of existing boarding float
- Contract for design awarded to PND Engineers by CBJ (October 2018)
- PND prepared 75% design level submittal of 12'x75' Fish Cleaning Float (November 2018)
- Contract for public involvement and additional research awarded to PND by CBJ (March 2019)

PND Scope - Phase II Public Involvement & Engineering Services

- Project Scoping – research BMP's and permit requirements for disposal
- Public Involvement – 3rd public meeting to solicit stakeholder and user input
- Prepare scoping report & recommendation for moving forward with Preferred Alternative to Harbor Board

- **Site Constraints**
- **Small Harbor Basin**
 - Minimal flushing
 - Relatively shallow, -8-ft MLLW dredged harbor basin
 - Exposed bedrock outcroppings
- **High use facility**
 - Operates at maximum capacity on warm summer days
 - Shared boat launch and fish cleaning facilities impacts efficiency
- **Remote**
 - No nearby Harbor Staffing
 - No City Utilities

EAGLE HARBOR

KAYAK RAMP

LOWER PARKING LOT

BOAT LAUNCH RAMP AND BOARDING FLOAT

UPPER PARKING LOT

FISH CLEANING TABLES

AMALGA HARBOR

ROCK OUTCROPPING

UNPERMITTED FLOAT w/
CLEANING TABLE ON CBJ
TIDELANDS

Existing Conditions - Site Aerial

Fish Waste Disposal Options Researched

- **Offsite Float Disposal** - floating cleaning station outside of Amalga
- **Offshore Disposal** – carcasses cleaned at Amalga and moved offshore by CBJ
 - Submarine Wastewater Disposal Pipe
 - Gut Barge
 - Gut Chute
- **Upland Disposal** – carcasses cleaned upland at Amalga and moved to another upland location by CBJ
 - Landfill
 - Compost
 - Existing Fish Processing Plant
- **In-Harbor Disposal** – connected to existing boarding float, current disposal method
- **No Disposal** – Remove existing fish cleaning tables

Offsite Fish Cleaning Stations

- Not supported by ADFG due to Marine Creel Harvest Study (letter July 2018)
- Many species must be brought to land before cleaning (lingcod, rockfish, king salmon, coho salmon, king crab, more?) – enforced by AK State Troopers
- Exposed weather/wave conditions at offshore sites
- Land Use and USACE permits required

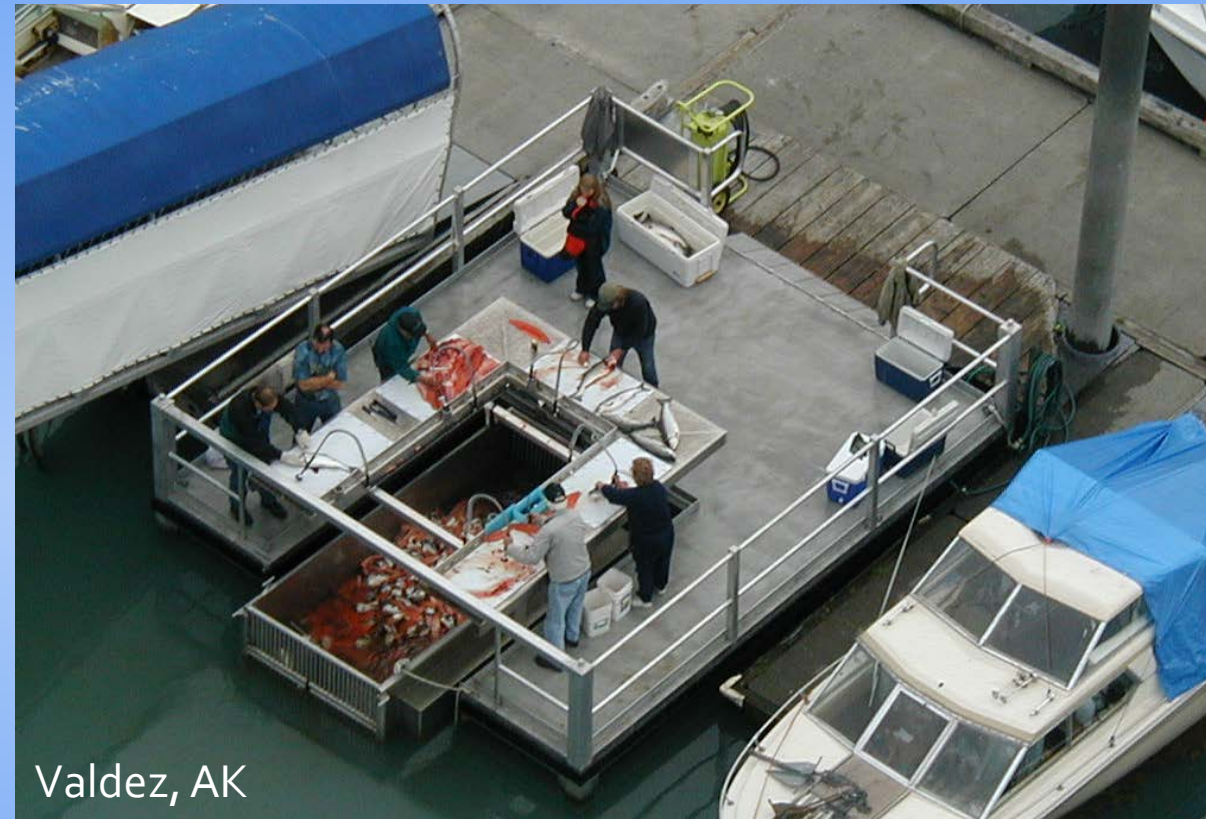


Offshore Disposal – Gut Barge



Valdez, AK

- Requires coverage under AKG523000 for disposal in State waters with ongoing permit inspections
- Disposal to occur between 0.25 and 3 miles nautical miles offshore at a depth of at least -60' MLLW.
- Waste must be ground to 1/2 inch or smaller – on site macerator
- Need to consider what to do with any process wastewater
- Must store waste awaiting disposal to avoid attracting bears, marine mammals and sea birds
- Harbor staff must tow barge offshore – personnel and vessel needed at Amalga Harbor



Valdez, AK

- **Gut Chute**

- Disposal requirements same as 'Gut Barge' but cleaning would take place uplands with waste transferred to in-water holding tank

Valdez, AK



Submarine Wastewater Outfall

- An option only if discharging greater than 30,000 lbs/yr or more than 1,000 lbs/day, ADEC does not have a permit available for smaller operations at this time – Amalga likely does not meet this quantity
- Requires grinding of fish waste to 1/2 inch or smaller – on site macerator
- Disposal to occur between 0.25 and 3 nautical miles offshore at a depth of at least -60' MLLW.
- Requires large pumping system to move waste.



Upland Disposal

- **Landfill**
 - Fish waste can be taken directly to a permitted landfill that will accept it
 - Need to consider how to store waste awaiting disposal to avoid attracting bears, marine mammals and sea birds
- **Compost**
 - Fish waste can be composted to create a usable product
 - May require a solid waste treatment permit or plan approval from ADEC depending on the volume of waste in
 - Need to consider where this would occur and ways to minimize animal attraction, odors and pathogens
- **Fish Processing Plant**
 - Find a permitted processing plant to dispose of waste
 - May require further cleaning of waste to avoid damage to processors equipment



Landfill

Upland Disposal

- Removes cleaning from float reducing congestion
- Parking/traffic flow redirected to Amalga Harbor Road
- Requires significant infrastructure – covered shelter, holding tank & grinder and wash water source
- CBJ pumping and disposal of fish waste



Covered shelter for cleaning tables

Covered Fish Cleaning Stations and Holding Tank



Underground holding tank

Existing Conditions - Site Aerial

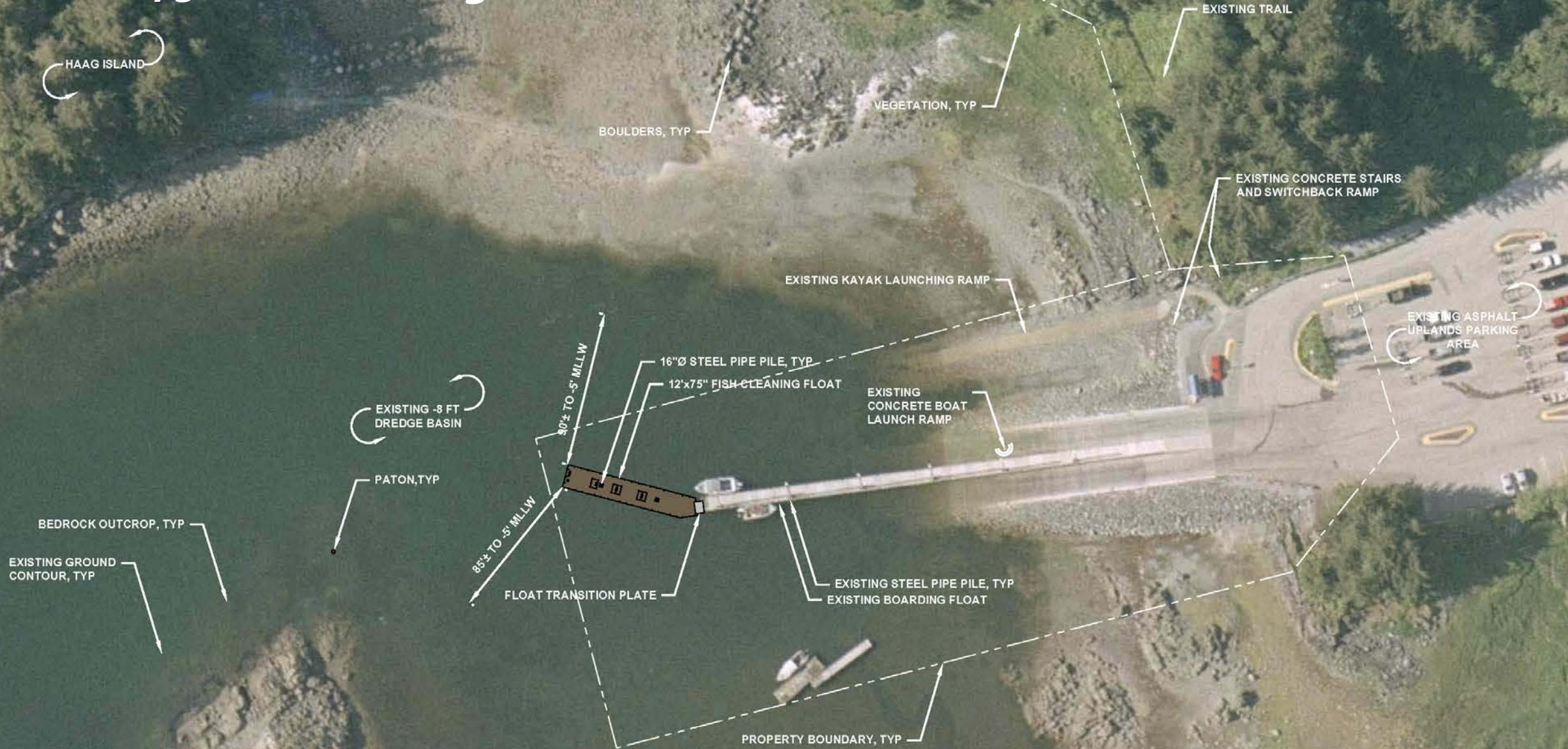
In-Harbor Disposal – Current Disposal Method

- (2) fish cleaning tables currently exist in Amalga Harbor. (1) at the seaward end of the boarding float and (1) on an unpermitted private float anchored on CBJ tidelands.
- State law requires that fish waste disposal not cause any impairment to water quality. Currently it is unknown if fish disposal at current levels within the harbor has resulted in any impairment to water quality.
- Residents have shared concerns about increased bear activity, foul odors, and drifting fish carcasses.
- The parking facility currently operates at maximum capacity. It is unknown how much fish waste would increase with each additional increase to the number of cleaning stations.



In-Harbor Disposal – Currently Preferred Alternative

12'x75' Fish Cleaning Float

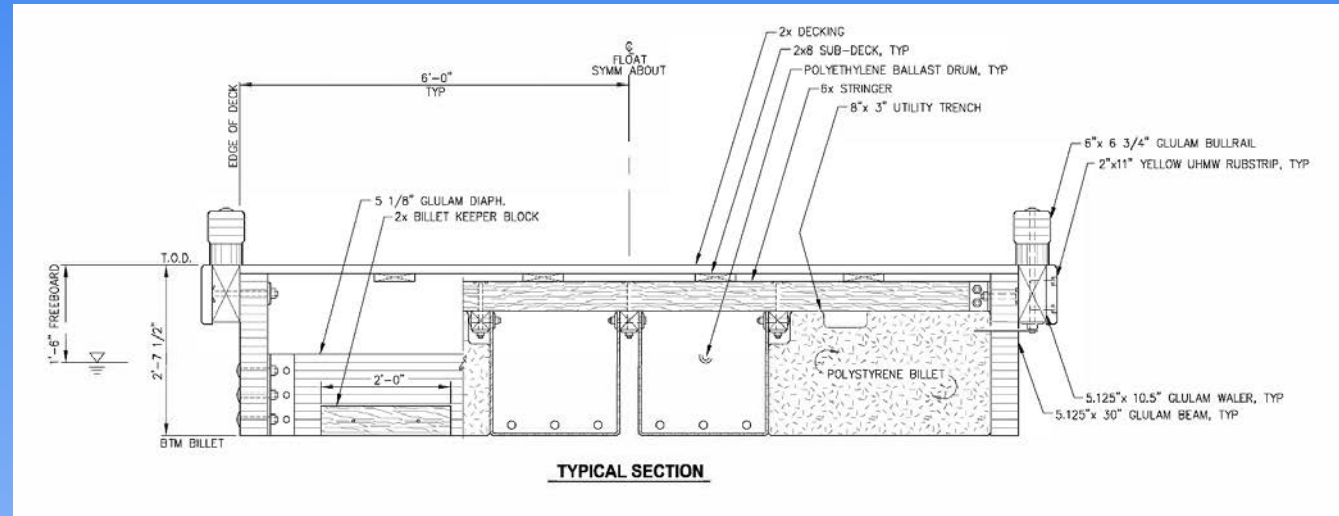


• In-Harbor Disposal – 12'x75' Fish Cleaning Float

- Additional float will free up boarding float for launch/retrieval activities
- Does not require additional CBJ personnel/vessel to manage
- Cleaning/carcass disposal occurs further offshore than at current float
- CBJ committed to having 'unpermitted' private float on tidelands removed if this option were constructed



FALSE ISLAND CRAIG, AK



HEAVY DUTY BALLAST
GLULAM FLOAT



FALSE ISLAND CRAIG, AK

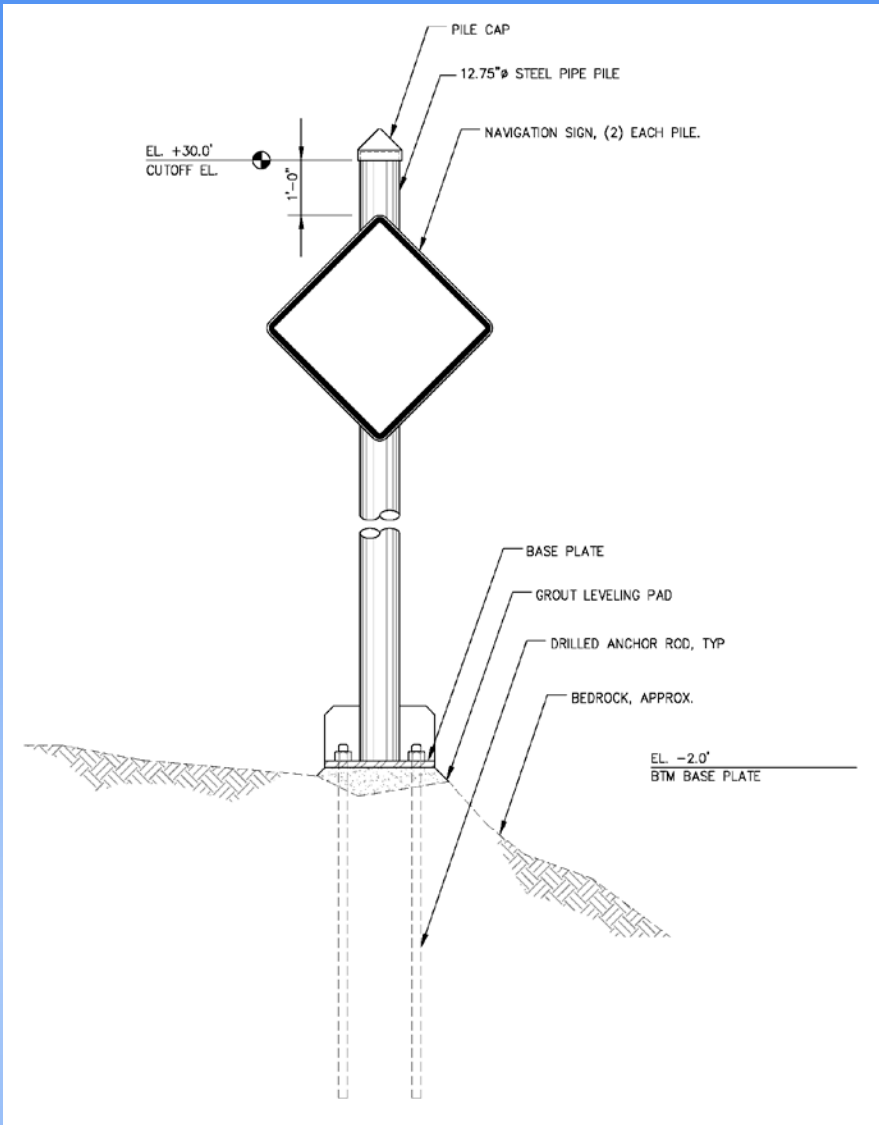
Preferred Alternative 12'x75' Fish Cleaning Float – Budget Estimate

BASE BID					
Item	Item Description	Units	Quantity	Unit Cost	Amount
1	Mobilization	LS	All Req'd	15%	\$36,150
2	Contingent Work – Marine Mammal Work Suspension	HR	2	\$750	\$1,500
3	12'x75' Fish Cleaning Float	LS	All Req'd	\$160,000	\$160,000
4	Furnish and Install 16" dia. Steel Pipe Pile	EA	2	\$12,000	\$24,000
5	Transition Plate	LS	All Req'd	\$12,500	\$12,500
6	Fish Cleaning Tables	LS	All Req'd	\$35,000	\$35,000
7	Life Ring and Fire Extinguisher Cabinets	LS	All Req'd	\$8,000	\$8,000
ESTIMATED BASE BID PRICE					\$277,150
CONTINGENCY (15%)					\$27,715
PERMITTING & FINAL DESIGN					\$45,500
CONTRACT ADMIN & CONSTRUCTION INSPECTION (20%)					\$27,715
RECOMMENDED PROJECT BUDGET – BASE BID					\$378,080

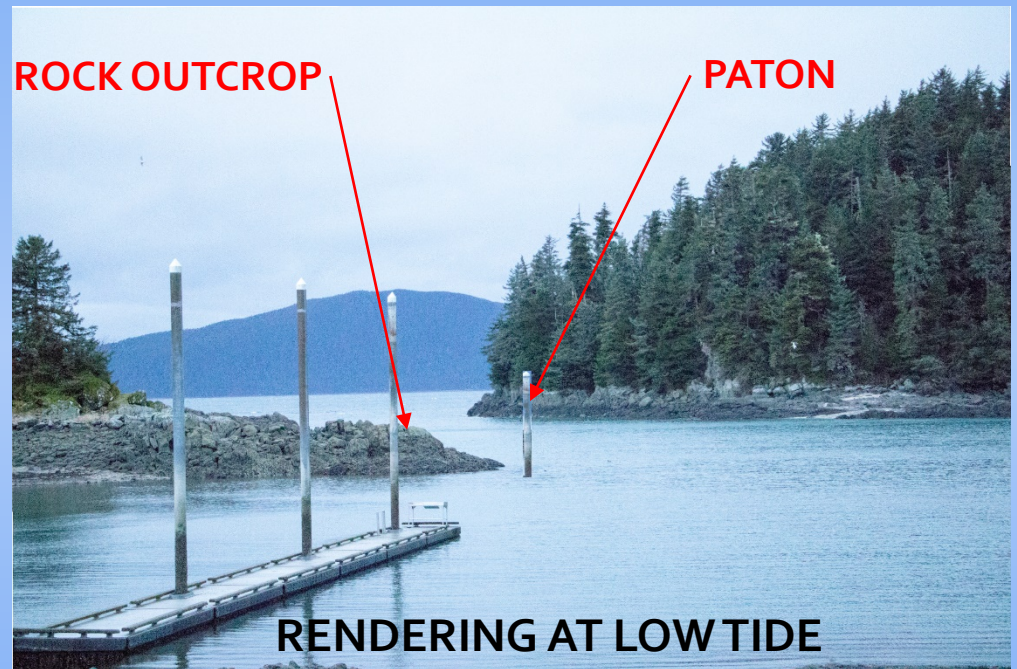
Add. Alt. 1					
Item	Item Description	Units	Quantity	Unit Cost	Amount
1	Private Aid to Navigation (PATON)	LS	All Req'd	40,000	\$40,000
ESTIMATED ADD. ALT. PRICE					\$40,000
CONTINGENCY (10%)					\$4,000
CONTRACT ADMIN & CONSTRUCTION INSPECTION (20%)					\$4,000
RECOMMENDED PROJECT BUDGET – ADD. ALT. 1					\$48,000

No Disposal Option

- **Remove existing fish cleaning tables from site**
 - Reduces congestion on boarding float
 - Does not meet needs of boating public who want to clean their fish on site
 - Will likely result in users cleaning fish on coolers or directly on boarding float



PATON



Next Steps

- Address questions, comments & suggestions
- Update concept options & preferred alternative
- Present preferred alternative to Harbor Board

Amalga Harbor Improvements

Thank you for attending and for your questions,
comments & suggestions!

