



# PROJECT LOCATION





The PDT is updating the Federal Standard for O&M and dredged material at the Agat SBH

- ❖ Agat Harbor was **constructed in 1989**
- ❖ *This will be the **1<sup>st</sup> time to perform maintenance dredging** at Agat SBH*
- ❖ Environmental evaluation of disposal alternatives will allow USACE to **update the Federal Standard** – identified as least cost and environmentally acceptable
- ❖ Use of the **Comprehensive Benefits** tool allows USACE to select the best alternative that provides the **most EJ benefits vs only economic costs**



# INITIAL FINDINGS

- Authorized depth is –9FT MLLW in Federal Channel, -11FT MLLW in Turning Basin
- Recent Hydrosurvey estimates **8,320 cubic yards (cy)** of sediment has collected, creating low spots in the channel
- 2022: USACE conducted sediment sampling to determine disposal alternatives in pre-consultation with USEPA
  - ❖ Results\*: Material is **>97.9% sand**
    - ❖ Received informal suitability determination for ocean disposal from USEPA, however, USEPA recommends beneficial reuse
    - ❖ ***May be suitable for beneficial reuse, e.g. beach nourishment***
    - ❖ Note, these results are highly uncommon in POH AOR
- USACE and USEPA are **requiring full consideration** of beneficial use of dredged material



# Agat Marina Concept

**Overview:** The dredging operation will utilize one booster pump stationed on the pier and additional booster pumps positioned along the shoreline. A barge-mounted dredge will be employed to perform excavation while maneuvering throughout the channel system.

**Objective:** Complete maintenance dredging of Agat Harbor in full compliance with environmental standards, while training Seabees in dredging operations and logistics, prepositioning stock for future missions, and collecting operational data to support long-term capability development.

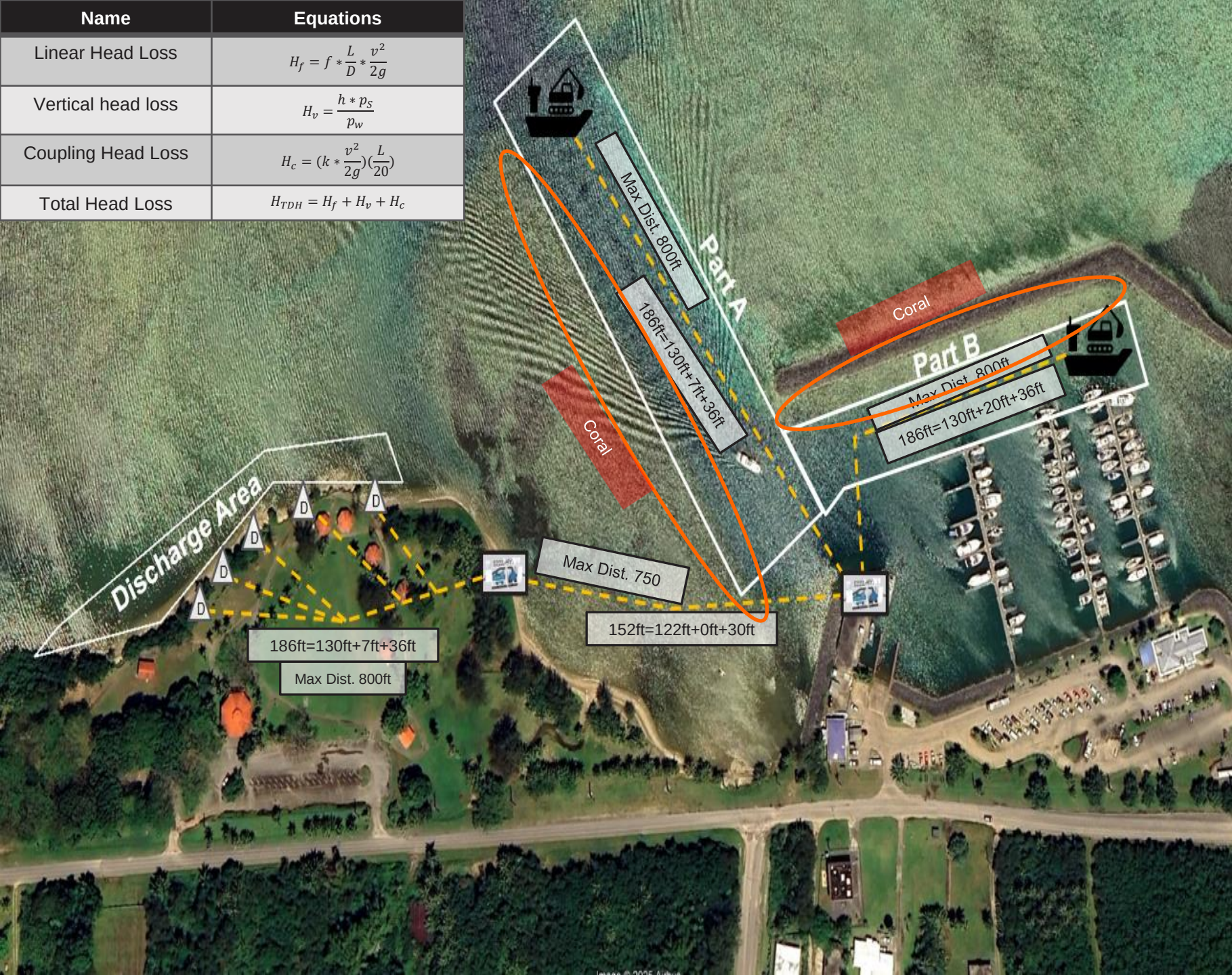
**Description:** The barge will conduct dredging operations by navigating up and down the defined channel areas. One booster pump will be installed on the pier to initiate material transport, while two to three additional booster pumps will be strategically placed along the shoreline. These shoreline boosters will increase pumping distance and maintain sufficient flow velocity, ensuring efficient sediment transport to the designated discharge location.

**• Production Rates:** For Areas A and B, the estimated production rate ranges between 250 and 290 cubic yards per hour (CYH), with target slurry velocities maintained between 10 and 15 feet per second. The effective discharge rate for sediment alone is expected to range from 90 to 150 CYH. Maintaining a slurry velocity closer to 15 ft/sec is critical for preventing material settling within the pipeline and ensuring optimal system performance. Potential delays to the project include logistical challenges, (particularly equipment repairs) and adverse weather conditions, both of which can impact production continuity and scheduling.

**• Suitable:** The project aims to remove approximately 8,000 cubic yards of sediment from the channel system, addressing navigability and hydraulic flow concerns.

**• Acceptable:** To reduce environmental impact (particularly to sensitive coral reef) areas a booster pumps will be installed on land (pier and shoreline), eliminating the need for floating pipeline sections in those zones. While this strategy adds logistical complexity by requiring more booster pumps, it ensures environmental compliance and protects marine habitats.

| Name               | Equations                                   |
|--------------------|---------------------------------------------|
| Linear Head Loss   | $H_f = f * \frac{L}{D} * \frac{v^2}{2g}$    |
| Vertical head loss | $H_v = \frac{h * p_s}{p_w}$                 |
| Coupling Head Loss | $H_c = (k * \frac{v^2}{2g}) (\frac{L}{20})$ |
| Total Head Loss    | $H_{TDH} = H_f + H_v + H_c$                 |







# PLANNING

•**Phase 1 (Planning and Testing):** Agat Harbor Dredging Project spans from project initiation through September 30, 2025, and focuses on planning, coordination, and testing activities necessary to prepare for execution. This phase ensures that all administrative, technical, and logistical components are properly aligned before contracts are executed and field operations begin. It concludes with the successful testing of the dredging configuration to confirm that the planned system will function effectively in Guam's operating environment.

•**Phase 2 (Preparation and Mobilization):** This phase begins with the submission of the barge contract and concludes upon completion of all mobilization activities. This phase transitions the project from administrative preparation to operational readiness. It involves finalizing acquisition and contracting actions, coordinating deployment of equipment and personnel, and conducting site preparation for the start of dredging operations. The primary objective is to ensure that all assets are positioned, tested, and mission-ready in Guam by May 1, 2026, marking the official start of dredging activities.

•**Phase 3 (Execution and Demobilization):** Agat Harbor Dredging Project begins with the Pre-Construction Briefing on May 1, 2026, and concludes upon the complete demobilization of personnel and equipment from the project site. This phase represents the execution phase of the operation, during which all dredging work will be carried out in accordance with the approved plan. It also includes project closeout activities, such as post-dredge surveys, interagency reporting, and coordination with Guam-based stakeholders. The primary objective of Phase Three is to remove a total of 8,000 cubic yards of sediment from designated areas within the harbor and deposit the material along the shoreline of Nimitz Beach.

| Project Timeline                                     |                                                   |
|------------------------------------------------------|---------------------------------------------------|
| <i><b>Phase 1: Planning and Testing</b></i>          |                                                   |
| 1June                                                | Completed Acquisition Plan/Coordination           |
| 15Juen25                                             | Initial Timeline                                  |
| 01AUG25                                              | Finalize Draft Statement of Work (SOW) & IGE      |
| 31OCT25                                              | Testing Complete                                  |
| 15NOV25                                              | Complete Internal Acquisition Reviews             |
| <i><b>Phase 2: Preparation and Mobilizations</b></i> |                                                   |
| 01DEC25                                              | Issue Request for Proposals (RFP)                 |
| 19JAN26                                              | Proposal Submission Deadline (NLT)                |
| 5FEB26                                               | Contract Award                                    |
| 15FEB26                                              | Equipment Begins to Mobilize To Guam              |
| 15APR26                                              | Equipment Arrives at Guam/First ERDC Reps Arrives |
| 24APR26                                              | Mobilization to Sight                             |
| <i><b>Phase 3: Execution and Demobilization</b></i>  |                                                   |
| 1MAY26                                               | Begin Dredging                                    |
| 21May26                                              | Begin Demobilization                              |



# COORDINATION

## Guam Agencies

- Guam
  - Port Authority: Access and Use of Port-Controlled Waters, Staging and Equipment Logistics, and Navigation Safety and Operational Deconfliction.
  - Other Government of Guam: Secure Land/Port Access and Use Authorization and Engage Local Stakeholder and Community.
  - Local Fire Department and Rescue Team: Emergency Response Coordination and Agat Harbor coordination.
- Honolulu District:
  - Coordination of Environmental Compliance
  - Coordination with the EPA
  - Environmental Monitoring and Turbidity Control

## Needs:

- Coordination with users, public announcement, small COSA at Agat Marina
- Local Cooperation Agreement
- **Signed Notice of Intent**
- Construction fence and Staging Area at Nimitz Beach Park
- Tree snail survey – partnership with NAVFAC Marianas (**Authorization Letters – Parks and Rec / DOAG**)
- Removal of concrete slabs
- GEPA Permit
- **\*\*\*Public Outreach of how dredge material will look after placed on site\*\*\*\*\***