



Public Notice

U.S. Army Corps Of Engineers Galveston District	Permit Application No:	SWG-2011-01183
	Date Issued:	Revised Proposal 28 August 2013
	Comments Due:	26 September 2013

**U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
AND
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

PURPOSE OF PUBLIC NOTICE: To inform you of a revised proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. The proposed project was originally placed on public notice in May of 2012, followed by revision of the project proposal by the applicant. The U.S. Army Corps of Engineers (Corps) is not the entity proposing or performing the proposed work, nor has the Corps taken a position in favor or against the proposed work.

This project is additionally being reviewed by the Corps pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 408) and Section 204(f) of the Water Resources Development Act (WRDA) of 1986, as described at the end of this public notice. A draft Environmental Assessment (EA) addressing potential Section 408/204(f) project impacts is available for public comment for 30 days on the Corps website provided at the end of this public notice.

AUTHORITY: This permit application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA).

APPLICANT: Port of Houston Authority (PHA)
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POC: Mr. Mark Vincent

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POC: Mr. Carl Sepulveda

LOCATION: The project is located in the Bayport Ship Channel and in upper Galveston Bay, in Chambers County and Harris County, Texas. The project can be located on the U.S.G.S. quadrangle maps entitled: Bacliff, Texas; League City, Texas; and Morgans Point, Texas.

LATITUDE & LONGITUDE (NAD 83):

Latitude: 29.614 North; Longitude: -94.99 West

REVISED PROJECT DESCRIPTION: The applicant now proposes to use hydraulic pipeline dredges to deepen and widen the Bayport Ship Channel (BSC), deepen the BSC Turning Basin and existing Flare, place the new work (construction) dredged material in dredged material placement area (PA) 15 and use a portion of it to raise PA 15 perimeter levees, use material borrowed from PA 15 and PA 14/15 Connection to construct a levee stability berm, periodically maintenance dredge the improved project, and place maintenance dredged material in PA 14, PA 15, PA 14/15 Connection (after completion of construction by the Corps), Mid-bay PA, and Atkinson Island Marsh Cells M-7/8/9, M-10, and M-11 (after completion of construction by the Corps).

Since the Corps' May 2012 issuance of an initial public notice and a public notice extending the time to comment, the applicant has withdrawn the following elements of their original proposal: 1.) deepen the Flare Easing (widening) planned by the Corps as a separate project; 2.) construct a 475-acre New Beneficial Use (BU) Marsh west of the Houston Ship Channel (HSC) and north of the BSC; and 3.) place new work dredged material in PA 14, PA 14/15 Connection, and Marsh Cell M-11 to construct or raise levees.

The BSC is currently Federally maintained by the Corps to a depth of -40 feet mean low tide (MLT) plus 2 feet of advance maintenance and 2 feet of allowable overdepth dredging at a bottom width (all widths are bottom widths) of 300 feet, and is approximately 4.1 miles in length from the Turning Basin to the intersection with the HSC. Channel side slopes are maintained at a horizontal:vertical ratio of 2.5:1. The Flare, the wide channel turning segment connecting the BSC to the HSC, is Federally maintained by the Corps with 2.5:1 side slopes to a depth of -40 feet MLT plus 7 feet of advance maintenance and 2 feet of allowable overdepth dredging, from the confluence of the Flare and HSC to approximately Station 214+00. In the early 2000s the BSC was mined for PA levee-building materials by the Corps to -51 feet MLT plus 2 feet of overdepth dredging from approximately Station 150+00 to the HSC. Existing PAs and beneficial use of dredged material (BU) sites currently used by the Corps for placement of maintenance dredged material from the BSC are PA 14, PA 15, Marsh Cell M-5/6, and Mid-bay PA.

Specifically, the applicant now proposes to use hydraulic pipeline dredges to:

- Widen the BSC to a bottom width (all widths are bottom widths) of 350 feet in the channel reach extending from approximately Station 25+58 to Station 115+00, by dredging an additional 50 feet of width to the north of the existing channel, with 3:1 (horizontal:vertical ratio) side slopes.

- Widen the BSC to a width transitioning from 350 to 400 feet in the channel reach extending from Station 115+00 to Station 135+00, by dredging an additional 50 to 100 feet of width to the north of the existing channel, with 3:1 side slopes.
- Widen the BSC to a width of 400 feet in the channel reach extending from Station 135+00 to Station 214+00 (approximate), by dredging an additional 100 feet of width to the north of the existing channel, with 3:1 side slopes. Dredge a small area east of the start of the northern Flare beginning at approximately Station 221+00 to blend in the widened side slope on the north side of the channel to approximately Station 214+00.
- Deepen the BSC, Turning Basin, and existing Flare to -45 feet mean low tide (MLT) plus 2 feet of advance maintenance and 2 feet of allowable overdepth, from the confluence of the Flare and the HSC at Station 239+04, through the Turning Basin.
- Place all 3.7 Million Cubic Yards (MCY) of new work material from initial construction in upland confined PA 15, using approximately 48 percent of the material to increase the height of PA 15 levees. The existing levees would be raised to a crest width of 25 feet at +30 feet MLT, with a wider base. PA 15 levee segments on the north and south sides would be raised over their existing bases, and the west side (channel-side) levee segment would be raised with material for the wider base placed towards the inside of PA 15. The west levee segment would be raised and reshaped by degrading the existing levee crown elevation to approximate elevation +18 feet MLT, and reusing that material and new work material to construct the revised cross section. The east levee segment would be raised and reshaped by placing new work material towards the inside of PA 15, and building a stability berm towards the outside. The stability berm would be constructed on the PA 15 levee and in Atkinson Island Marsh Cell M-7/8/9 with approximately 180,000 cubic yards (CY) of material borrowed from the interior of PA 15 and/or PA 14/15 Connection.
- Periodically maintenance dredge the deepened and widened BSC and the deepened Turning Basin and Flare, maintaining side slopes at a ratio of 2.5:1. Place maintenance dredged material in PA 14, PA 15, PA 14/15 Connection (after the Corps completes construction of perimeter levees), Atkinson Island Marsh Cells M-7/8/9, M-10, and M-11 (after the Corps completes construction of perimeter levees), and Mid-bay PA.

Before the placement of dredged materials in any site, the applicant would coordinate with the Corps Operations Branch to balance the maintenance needs of the channels and PAs. The 3.7 MCY of new work dredged material would consist of approximately 2.4 MCY of clay material, 520,000 CY of silty sands, 320,000 CY of sandy silts, and 460,000 CY of other unconsolidated silty material. The revised proposal to place new work dredged

material only in PA 15 resulted from more detailed geotechnical information indicating that a wider, shorter levee cross section would be needed. This would necessitate construction of an exterior stability berm for the eastern levee segment. All other segments would be able to support raising over the existing cross section, or would employ wider bases constructed to the interior. Construction of the stability berm would require an adjacent 50-foot-wide temporary construction corridor. The proposed levee raising at PA 15 would provide approximately 9.2 MCY of additional dredged material placement capacity. Project construction would begin in January 2014, and the construction period for the new work dredging and placement would be approximately 11 months. Over the 10-year period following construction of the proposed project, total maintenance dredged material quantity would be approximately 11.8 MCY, of which 2.1 MCY would be additional material due to the improved channel. Maintenance dredged material would consist of fine grained silts, sands, and clays.

Permanent project impacts to aquatic resources from widening and deepening would consist of excavation of 287.3 acres of unvegetated bay bottom, including 4.6 acres of oyster habitat. Construction of the stability berm for PA 15 would result in permanent fill impacts to 9.23 acres of wetlands and temporary impacts to 4.7 acres of wetlands.

The stability berm would extend over an area where tidal marsh developed as a result of previous levee construction for PA 15. A survey of this area by the applicant's wetland scientist consultants was performed on May 30, 2013, to delineate the extent of wetlands within the planned footprint of the stability berm. Field data was collected on June 5, 2013 to apply the Corps Galveston District's Tidal Fringe Hydrogeomorphic (HGM) interim model to estimate the functional capacity of the wetlands that would be permanently impacted. The approximately 9.23 acres of tidal marsh within the proposed footprint of the stability berm consist of high marsh dominated by more salt tolerant species such as sea oxeye (*Borrchia frutescens*) and some brackish-condition species such as marshhay cordgrass (*Spartina patens*), low marsh with a greater predominance of smooth cordgrass (*Spartina alterniflora*), and Salicornia flats areas at the lowest elevations dominated by dwarf saltwort (*Salicornia bigelovii*). Approximately 4.7 acres of wetlands exist within the footprint of the proposed temporary construction corridor. Construction and equipment access would be prohibited within the wetlands located east of the construction corridor. The new PA 15 spillbox outfall pipes would empty into the existing drainage channels within the M-7/8/9 wetlands.

A portion of the wetlands present in the PA 14/15 Connection could be impacted during excavation of borrow material to construct the stability berm, but would not constitute new impacts since the approximately 27 acres of PA 14/15 Connection salt marsh wetlands have already been mitigated for through creation of a BU marsh at Bolivar under the Corp's Expansion of PAs 14 and 15 Project (*Final Environmental Assessment, Expansion of Placement Areas 14 and 15, Houston Ship Channel, Chambers County, Texas*, dated January 2010). Construction staging areas and construction access routes would not impact wetlands or other special aquatic sites. A summary of the proposed permanent impacts to aquatic resources and the applicant's HGM analysis results are provided below:

Table 1. Impacts to Galveston Bay.

Water Name: Galveston Bay/Bayport Ship Channel			
Water Classification: Waters of the U.S.			
Center Latitude/Longitude: 29.614° North/ -94.99° West			
Regulated under: RHA Section 10 and CWA Section 404			
Affected Areas			
Area	Impact	Bay Bottom Acres	Oyster Habitat Acres
Existing Channel	Deepening	180.8	0
100-foot Widening (includes transition to 50 feet)	Widening and Deepening	68.0	4.6
50-foot Widening	Widening and Deepening	38.5	0
Total		287.3	4.6
Total Cut		287.3*	4.6*
Total Fill		0	0

*Bay bottom excavation acreage includes oyster habitat excavation acreage.

Table 2. Tidal marsh in footprint of proposed PA 15 stability berm.

Water Name: Galveston Bay (Marsh Cell M-7/8/9)					
Water Classification: Waters of the U.S. – Wetlands, Tidal Marsh					
Center Latitude/Longitude: 29.64°North/ -94.95° West					
Regulated under: RHA Section 10 and CWA Section 404					
Affected Areas					
Habitat Areas		Tidal Fringe HGM (interim) Functional Capacity Units			
Type	Acres	Biota	Botanical	Physical	Chemical
Open Water*	0.14				
Tidal Marsh					
High	5.28	4.5	5.3	3.8	5.3
Low	2.27	1.7	1.8	1.6	2.0
Salicornia	1.68	0.9	0.5	1.0	0.9
Total Marsh (total fill)	9.23	7.1	7.5	6.3	8.1

*Open water areas are PA spill box drainage flow.

AVOIDANCE AND MINIMIZATION: The applicant provided the following statement describing how they have avoided and minimized environmental impacts during development of their dredged material placement proposal: Avoidance and minimization of aquatic resource impacts were considered in planning dredged material placement options through criteria to minimize environmental impact, provide environmental benefit, and use the material beneficially. The range of placement alternatives considered included an existing terrestrial site, new bay PAs with and without marsh features, and existing bay PAs. Existing information such as existing facilities, previous oyster reef mapping, pipelines, remaining PA capacity, and bay bottom foundation data were used to facilitate the development and location of alternatives. The alternatives were conceived in conjunction with the Beneficial Uses Group (BUG), a group comprised of State and Federal resource agencies that coordinate with the Applicant on beneficially using dredged material from projects. Another key consideration for alternatives was the need for additional placement capacity in the bay. New PA alternatives did not involve new impacts to wetlands or special aquatic sites but would potentially impact oyster reefs; therefore the areas for new PAs were surveyed for oyster reef habitat. Existing PA alternatives were considered in accordance with the actions to minimize adverse effects under Subpart H of the CWA Section 404(b)(1) Guidelines in 40 CFR 230. Placement alternatives were evaluated considering the environmental, engineering, and economic criteria and constraints, and the objectives for beneficial use and capacity, while minimizing adverse environmental impacts.

MITIGATION: The applicant offers oyster habitat compensatory mitigation at Fisher's Reef in Trinity Bay, Chambers County, Texas, as follows: The Oyster Habitat Mitigation Plan includes placing 3,710 cubic yards (CY) of cultch (limestone, clean, crushed concrete rubble, or other material acceptable to the Texas Parks and Wildlife Department) within 4.6 acres on Fisher's Reef for natural recruitment of oyster larvae to compensate for the excavation of oyster habitat in Galveston Bay. The reef at Fisher's Reef would be restored by adding cultch to previous hard bottom which was covered by silt from Hurricane Ike. Monitoring of the Fisher's Reef restoration site for the proposed project mitigation would be conducted pre- and post-restoration to assess success of the project. Criteria for restoration success would include one structural endpoint (reef acres restored), and one functional endpoint (oysters per square meter). Details of the Oyster Habitat Mitigation Plan are provided in Attachment 1, in 12 sheets.

The applicant has added a Tidal Marsh Mitigation Plan to compensate for permanent adverse impacts to 9.23 acres of tidal marsh proposed to be filled during construction of the stability berm. The mitigation consists of creation of 8.25 acres of tidal fringe salt marsh in Scott Bay, at the Baytown Nature Center, Harris County, Texas. Specifically, an area of Scott Bay adjacent to the current shoreline that was historically upland and salt marsh, but has since subsided, would be filled with 52,000 to 58,000 CY of material to intertidal elevation, graded to meet the existing shoreline, and then planted with smooth cordgrass (*Spartina alterniflora*). The constructed marsh would be protected by a riprap-armored containment levee cresting at approximately +4.1 feet MLT. The 0.29-acre containment levee would be sufficiently porous or have sufficient gaps to allow tidal

exchange at elevations below the levee crest. The 4.7 acres of tidal marsh within the temporary construction corridor in Marsh Cell M-7/8/9 would be restored after completion of construction of the stability berm through restoration of project contours and elevations and replanting. See the Tidal Marsh Mitigation Plan provided in Attachment 2, in 27 sheets.

CURRENT SITE CONDITIONS: Galveston Bay is an estuary where freshwater flows mix with salt water of the Gulf of Mexico. With a surface area of approximately 600 square miles, the bay is characterized by shallow water depths, generally ranging from 5 to 12 feet. Dredged navigation channels, with depths ranging from 12 to 45 feet, are located throughout the bay system. The part of the BSC originally excavated from dry land is referred to as the land cut. The BSC is oriented east-west, from the open waters of Galveston Bay at the east end, to within the land cut on the west end. The land cut end is surrounded by developed land consisting of the Shoreacres community to the north, the Bayport Ship Channel Container Terminal (BSCCT), and two privately owned liquid cargo terminals to serve the petrochemical complex located next to the BSCCT on the west end of the land cut. The Bayport Ship Channel Cruise Terminal is located at the entrance to the land cut.

NOTES: A wetland delineation and Tidal Fringe HGM analysis have been conducted by the applicant, however this information has not been verified by the Corps as of the date of this public notice. The applicant's plans are enclosed in 6 sheets.

A preliminary review of this application indicates that an Environmental Impact Statement (EIS) is not required. Since permit assessment is a continuing process, this preliminary determination of EIS requirement will be changed if the Corps determines that data or information brought forth in the coordination process is of a significant nature.

Our evaluation will also follow the guidelines published by the U.S. Environmental Protection Agency pursuant to Section 404 (b)(1) of the Clean Water Act (CWA).

OTHER AGENCY AUTHORIZATIONS: Consistency with the State of Texas Coastal Management Plan is required. The applicant has stated that the proposed activity complies with Texas' approved Coastal Management Program goals and policies and will be conducted in a manner consistent with said program.

This project would result in a direct impact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria for the project. Therefore, Texas Commission on Environmental Quality (TCEQ) certification is required. Concurrent with Corps processing of this application, the TCEQ is reviewing this application under Section 401 of the CWA and in accordance with Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the Corps and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. Any comments concerning this application may

be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O. Box 13087, Austin, Texas 78711-3087. The public comment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of work is made available for review in the TCEQ's Austin office. The complete application may be reviewed in the Corps office listed in this public notice. The TCEQ may conduct a public meeting to consider all comments concerning water quality if requested in writing. A request for a public meeting must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requester, or of persons represented by the requester; and a brief description of how the application, if granted, would adversely affect such interest.

NATIONAL REGISTER OF HISTORIC PLACES: The project area was investigated for Historic Properties as documented in the report titled "*Marine Archeological Survey for the Proposed Bayport Ship Channel Improvement and Flare Projects, Harris and Chambers Counties, Texas.*" The results of this investigation are currently being coordinated with the Texas State Historic Preservation Officer.

THREATENED AND ENDANGERED SPECIES: Preliminary indications are that no known threatened and/or endangered species or their critical habitat will be affected by the proposed work.

ESSENTIAL FISH HABITAT: This notice initiates the Essential Fish Habitat consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act for the revised proposal. Our initial determination is that the proposed modified action would not have a substantial adverse impact on Essential Fish Habitat or Federally-managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Programs of the Corps, and other pertinent laws, regulations, and executive orders. The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people.

SOLICITATION OF COMMENTS: The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, issue with conditions, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice is being distributed to all known interested persons in order to assist in developing facts upon which a decision by the Corps may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: The purpose of a public hearing is to solicit additional information to assist in the evaluation of the proposed project. Prior to the close of the comment period, any person may make a written request for a public hearing, setting forth the particular reasons for the request. The District Engineer will determine if the reasons identified for holding a public hearing are sufficient to warrant that a public hearing be held. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF PERMIT APPLICATION COMMENT PERIOD: All comments pertaining to this public notice must reach this office on or before **26 September 2013**. Extensions of the comment period may be granted for valid reasons, as determined by the District Engineer, provided a written request is received by the limiting date. **If no comments are received by that date, it will be considered that there are no objections.** Comments and requests for additional information concerning the permit application should be submitted to:

Ms. Denise Sloan
Regulatory Branch, CESWG-PE-RB
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229
Phone: 409-766-3962
FAX: 409-766-6301
Email: PermitApplicationSWG.2011.01183@usace.army.mil

SECTION 408/204(f) DRAFT ENVIRONMENTAL ASSESSMENT PUBLIC COMMENT PERIOD: Section 14, Rivers and Harbors Act of 1899 (33 U.S.C. 408); taking possession of, use of, or injury to harbor or river improvements; and Section 204(f), WRDA 1986;

Federal Assumption of Maintenance of navigational improvements in harbors or inland harbors of the United States undertaken by a non-Federal interest. The proposed BSC project Section 408/204(f) draft EA is presented for public comment to support the requirements of these authorities and can be viewed at:

PHA website address for Draft Bayport 408 EA:

<http://www.deepeningportofhouston.com/resources-bayport.html>

Corps website address for Draft Bayport 408 EA:

<http://www.swg.usace.army.mil/BusinessWithUs/PlanningEnvironmentalBranch/DocumentsforPublicReview.aspx>

The Corps' Final Environmental Impact Statement for PHA's Proposed Bayport Ship Channel Container/Cruise Terminal, May 2003, is available at:

http://go.shoalest.com/BPT_FEIS_Main; and http://go.shoalest.com/BPT_FEIS_Backup

Public comments on the Section 408/204(f) draft EA will be accepted for 30 days, from **28 August to 26 September 2013**, and should be addressed to:

Ms. Andrea Catanzaro

Environmental Section, CESWG-PE-PR

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