

EVALUATION OF SECTION 404(b)(1) GUIDELINES (SHORT FORM)

PROPOSED PROJECT: Matagorda Ship Channel Deficiency Study and Environmental Assessment (Nov 2017)

	Yes	No*
1. Review of Compliance (230.10(a)-(d))		
A review of the proposed project indicates that:		
a. The placement represents the least environmentally damaging practicable alternative and, if in a special aquatic site, the activity associated with the placement must have direct access or proximity to, or be located in the aquatic ecosystem, to fulfill its basic purpose (if no, see section 2 and information gathered for EA alternative).	X	
b. The activity does not appear to:		
1) Violate applicable state water quality standards or effluent standards prohibited under Section 307 of the Clean Water Act;	X	
2) Jeopardize the existence of Federally-listed endangered or threatened species or their habitat; and	X	
3) Violate requirements of any Federally-designated marine sanctuary (if no, see section 2b and check responses from resource and water quality certifying agencies).	X	
c. The activity will not cause or contribute to significant degradation of waters of the U.S. including adverse effects on human health, life stages of organisms dependent on the aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, aesthetic, an economic values (if no, see values, Section 2)	X	
d. Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem (if no, see Section 5)	X	

	Not Applicable	Not Significant	Significant*
2. Technical Evaluation Factors (Subparts C-F) (where a 'Significant' category is checked, add explanation below.)			
a. Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C)			
1) Substrate impacts		X	
2) Suspended particulates/turbidity impacts		X	
3) Water column impacts		X	
4) Alteration of current patterns and water circulation		X	
5) Alteration of normal water fluctuation/hydroperiod		X	

	Not Applicable	Not Significant	Significant*
6) Alteration of salinity gradients		X	
b. Biological Characteristics of the Aquatic Ecosystem (Subpart D)			
1) Effect on threatened/endangered species and their habitat		X	
2) Effect on the aquatic food web		X	
3) Effect on other wildlife (mammals, birds, reptiles and amphibians)		X	
c. Special Aquatic Sites (Subpart E)			
1) Sanctuaries and refuges	X		
2) Wetlands		X	
3) Mud flats	X		
4) Vegetated shallows	X		
5) Coral reefs	X		
6) Riffle and pool complexes	X		
d. Human Use Characteristics (Subpart F)			
1) Effects on municipal and private water supplies	X		
2) Recreational and Commercial fisheries impacts		X	
3) Effects on water-related recreation		X	
4) Aesthetic impacts		X	
5) Effects on parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves	X		

	Yes
3. Evaluation of Dredged or Fill Material (Subpart G)	
a. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material (check only those appropriate)	
1) Physical characteristics	X
2) Hydrography in relation to known or anticipated sources of contaminants	X
3) Results from previous testing of the material or similar material in the vicinity of the project	X
4) Known, significant sources of persistent pesticides from land runoff or percolation	
5) Spill records for petroleum products or designated (Section 311 of Clean Water Act) hazardous substances	X

6) Other public records of significant introduction of contaminants from industries, municipalities or other sources	X
7) Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities	

List appropriate references:

According to the Corps of Engineers, New Orleans District Geotechnical Report the physical characteristics from drive penetration tests indicate the sands to be medium to very dense. Visual inspection indicated the sands to be fine to very fine beach sands, similar to those encountered and tested along the Texas coastline from Galveston to Port Mansfield (USACE, 2017). The Texas Commission on Environmental Quality (TCEQ) (2014) Integrated Report of Surface Water Quality for the Clean Water Act Sections 305(b) and 303(d) has designated water quality segments for individual components of the Matagorda Bay system. Table 1 provides the status of 305 (B) and 303 (D) within the vicinity of the project area: Segment ID 2451-01 – Northern Matagorda Bay/Powderhorn Lake and Segment ID 2451-02 – Remainder of segment. The designated uses within the water segments, as defined by Texas Surface Water Quality Standards (TSWQS), include uses such as aquatic life, recreation, general, fish consumption, and oyster waters. Table 1 also includes the water segments listed on the 303(d) list TCEQ (2014).

Table 1. 305(B)/303(D) Water Quality Assessment Status for Matagorda Bay/Powderhorn Lake

Segme	Name	Uses	Level of Use Support	Use Impairment or	303(d) Status
2451-	Northern	Contact Rec	Full	None	None
	Powderhorn	General	Full	None	
2451-	Remainder of segment	Oysters	Full	None	
		Aquatic Life	Full	None	

Inventory data from 2014 indicate the quality of water in the vicinity of the project is generally considered to be good; Aquatic Life Use, Fish Consumption Use, Contact Recreation Use and General Use are fully supported or of no concern.

Review of the Environmental Data Resources, Inc. data base information, historical aerial photographs, and historical topographic maps, as well as the August 2007 Site Inspection Report for the Former Matagorda Peninsula Bombing Range did not reveal any significant environmental concerns such as spills or toxic releases. The review, however, did indicate that part of the project area was used as an aerial gunnery range (Aerial Gunnery Range No. 2) during World War II and that munitions and explosives of concern (MEC) were collected in 1946. There has been no MEC recovery since 1946 and no incidents have been recorded. Further review indicated that when applying the Munitions Response Site Prioritization Protocol (MRSP), the aerial gunnery range within the project area appears to have a relatively low potential risk of finding MEC. The MRSP's application results in assignment of a relative priority of 1 to 8, with 1 representing the highest possible relative risk category. Aerial Gunnery Range No. 2 is rated as a 7, a very low risk category. In summary, no Recognized Environmental Conditions were noted and there is a low potential of finding MEC.

	Yes	No
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b. An evaluation of the appropriate information in 3a above indicates that there is reason to believe the proposed dredged or fill material is not a carrier of contaminants, or that levels of contaminants are substantively similar at extraction and placement sites and not likely to degrade the placement sites, or the material meets the testing exclusion criteria.	X	
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List appropriate references:

	Yes
4. Placement Site Delineation (230.11(f))	
a. The following factors as appropriate, have been considered in evaluating the placement site:	
1) Depth of water at placement site	X
2) Current velocity, direction, and variability at placement site	X
3) Degree of turbulence	X
4) Water column stratification	X
5) Discharge vessel speed and direction	X
6) Rate of discharge	X
7) Fill material characteristics (constituents, amount, and type of material, settling velocities)	X
8) Number of discharges per unit of time	X
9) Other factors affecting rates and patterns of mixing (specify)	

List appropriate references:

- 1) Impacts to the physical substrate from discharge of dredged material were minimized by confining them to two designated placement areas (PA) for beneficial use. Approximately 4,894,000 cubic yards (cy) of fine sand material would be hydraulically dredged. Approximately 3,667,000 cy would be placed beneficially in a 344-acre placement area adjacent to the west jetty for beach restoration (Figure 4) and 1,227,000 cy of material would be placed adjacent to Sundown Island on the northwestern side in a 73-acre placement area (Figure 5). Approximately 37,000 tons of existing stone from the existing rock dikes would be reused. Additionally, approximately 110,000 tons of new stone is needed for the channel slopes. A total of 1,950 linear feet (1.4 acres) of jetty stone would be removed and reused for the flare construction on the bay side. The flare extensions would tie into the foreshore dikes on the Matagorda Bay side and would be 850 feet on the west side and 860 feet on the east side. To the best of our knowledge, all dredged/fill material is free of contaminants.

	Yes	No
b. An evaluation of the appropriate factors in 4a above indicates that the placement site and/or size of mixing zone are acceptable.	X	

	Yes	No
5. Actions to Minimize Adverse Effects (Subpart H)		
All appropriate and practicable steps have been taken, through application of recommendations of 230.70-230.77 to ensure minimal adverse effects of the proposed discharge.	X	

List actions taken: Silt fence will be placed along the project as needed to contain runoff material during construction activities.

	Yes	No*
6. Factual Determination (230.11)		
A review of appropriate information as identified in items 2-5 above indicates that there is minimal potential for short- or long-term environmental effects of the proposed discharge as related to:		
a. Physical substrate at the placement site (review Sections 2a. 3, 4, and 5 above)	X	
b. Water circulation, fluctuation and salinity (review Sections 2a. 3, 4, and 5)	X	
c. Suspended particulates/turbidity (review Sections 2a. 3, 4, and 5)	X	
d. Contaminant availability (review Sections 2a. 3, and 4)	X	
e. Aquatic ecosystem structure and function (review Sections 2b and c, 3, and 5)	X	
f. Placement site (review Sections 2, 4, and 5)	X	
g. Cumulative impacts on the aquatic ecosystem	X	
h. Secondary impacts on the aquatic ecosystem	X	

7. Evaluation Responsibility
a. This evaluation was prepared by: Michael Brown Position: Biologist, Corps of Engineers

8. Findings	Yes
a. The proposed placement site for discharge of or fill material complies with the Section 404(b)(1) Guidelines.	X
b. The proposed placement site for discharge of dredged or fill material complies with the Section 404(b)(1) Guidelines with the inclusion of the following conditions:	

List of conditions:

c. The proposed placement site for discharge of dredged or fill material does not comply with the Section 404(b)(1) Guidelines for the following reason(s):	
1) There is a less damaging practicable alternative	
2) The proposed discharge will result in significant degradation of the aquatic ecosystem	
3) The proposed discharge does not include all practicable and appropriate measures to minimize potential harm to the aquatic ecosystem	
Date _____	_____ DOUGLAS C. SIMS, RPA Chief, Environmental Compliance Branch

NOTES:

- * A negative, significant, or unknown response indicates that the permit application may not be in compliance with the Section 404(b)(1) Guidelines.

Negative responses to three or more of the compliance criteria at the preliminary stage indicate that the proposed projects may not be evaluated using this “short form” procedure. Care should be used in assessing pertinent portions of the technical information of items 2a-e before completing the final review of compliance.

Negative response to one of the compliance criteria at the final stage indicates that the proposed project does not comply with the Guidelines. If the economics of navigation and anchorage of Section 404(b)(2) are to be evaluated in the decision-making process, the “short form” evaluation process is inappropriate.

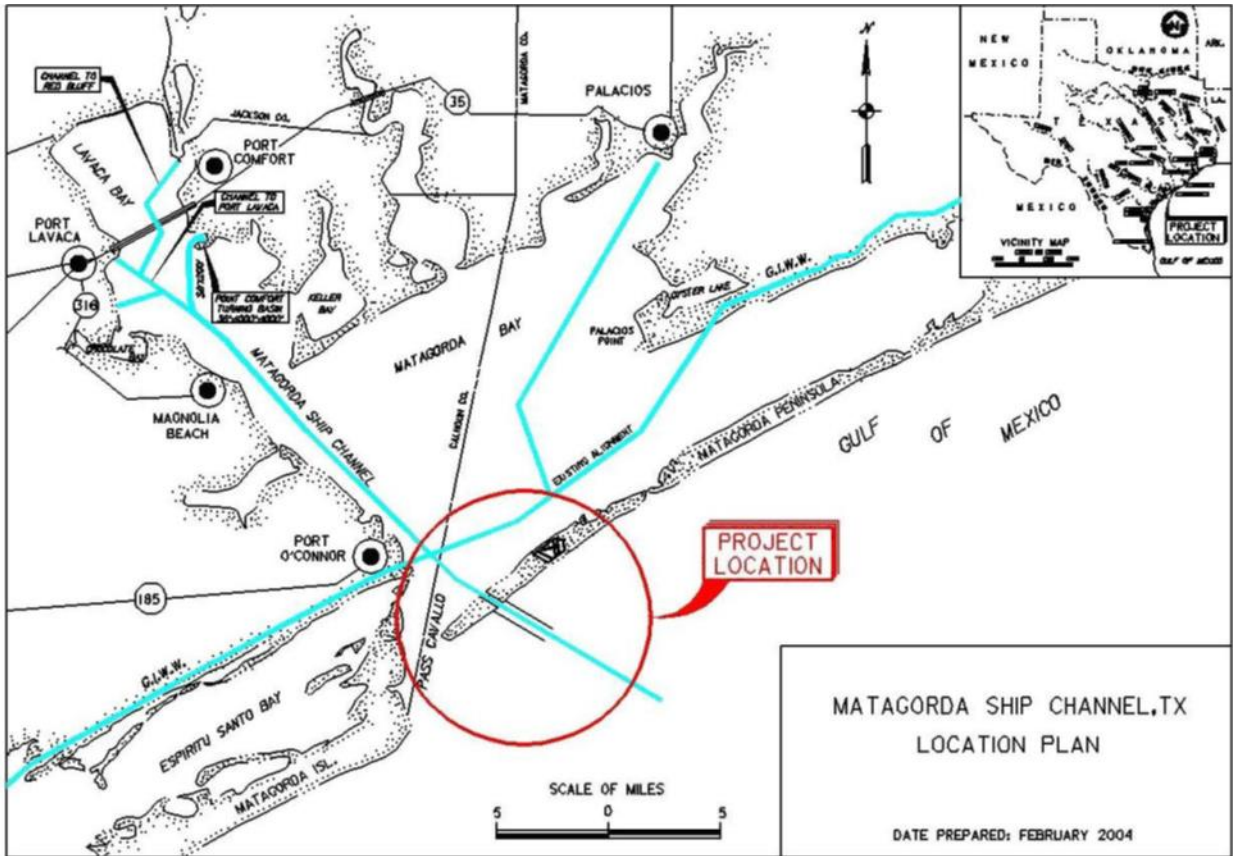


Figure 1: Location of the Matagorda Ship Channel Entrance Channel.



Figure 2. View of Matagorda Ship Channel Entrance and Sundown Island.

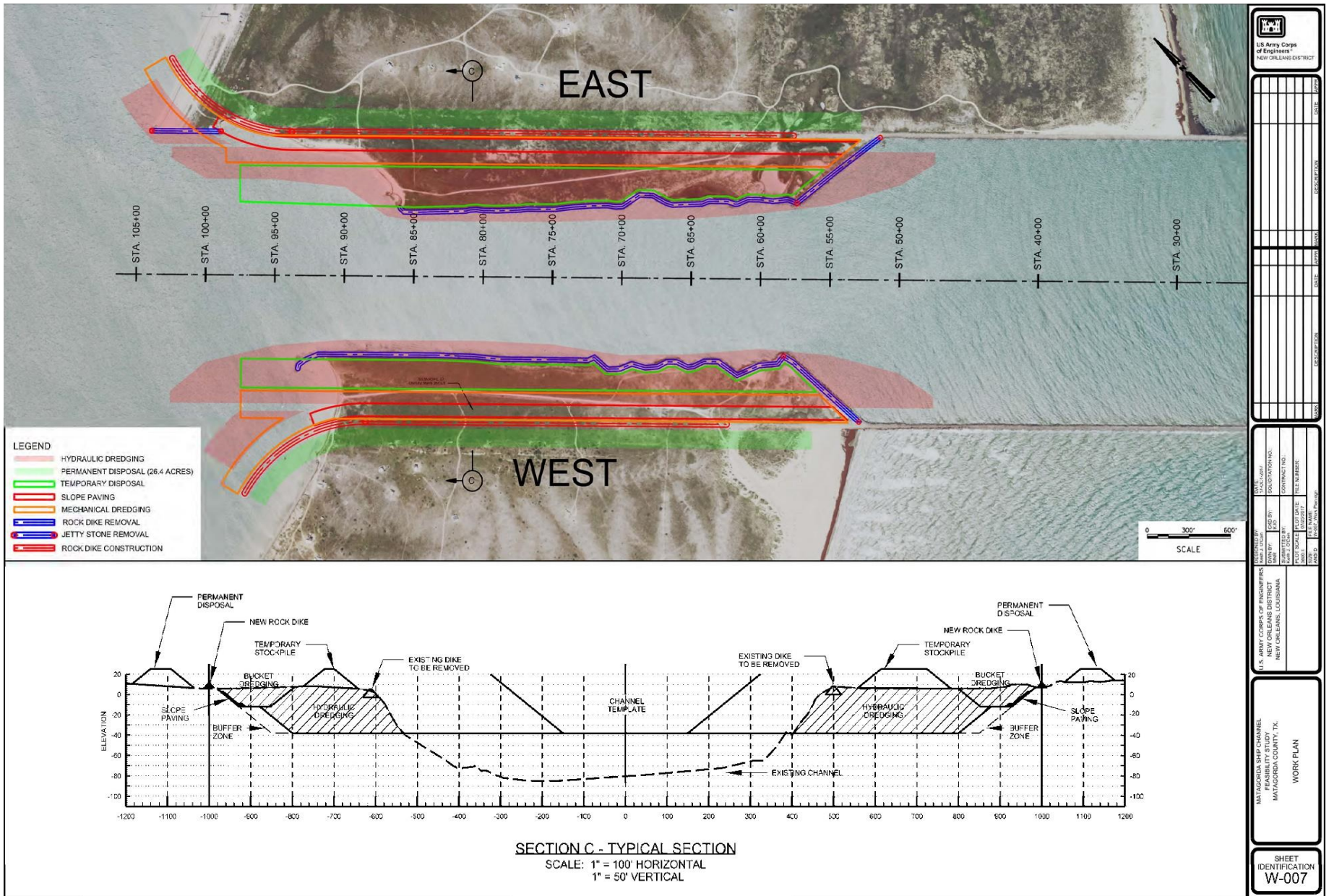


Figure 3 - Plan for Removal of Bottleneck.

U.S. Army Corps of Engineers
 NEW ORLEANS DISTRICT

DATE: 08/11/2011	DESIGNED BY: [REDACTED]	SCALE: [REDACTED]
DATE: 08/11/2011	DRAWN BY: [REDACTED]	SCALE: [REDACTED]
DATE: 08/11/2011	CHECKED BY: [REDACTED]	SCALE: [REDACTED]
DATE: 08/11/2011	APPROVED BY: [REDACTED]	SCALE: [REDACTED]

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT
 NEW ORLEANS, LOUISIANA

MATAGORDA SHIP CHANNEL
 FEASIBILITY STUDY
 MATAGORDA COUNTY, TX

WORK PLAN

SHEET IDENTIFICATION
 W-007

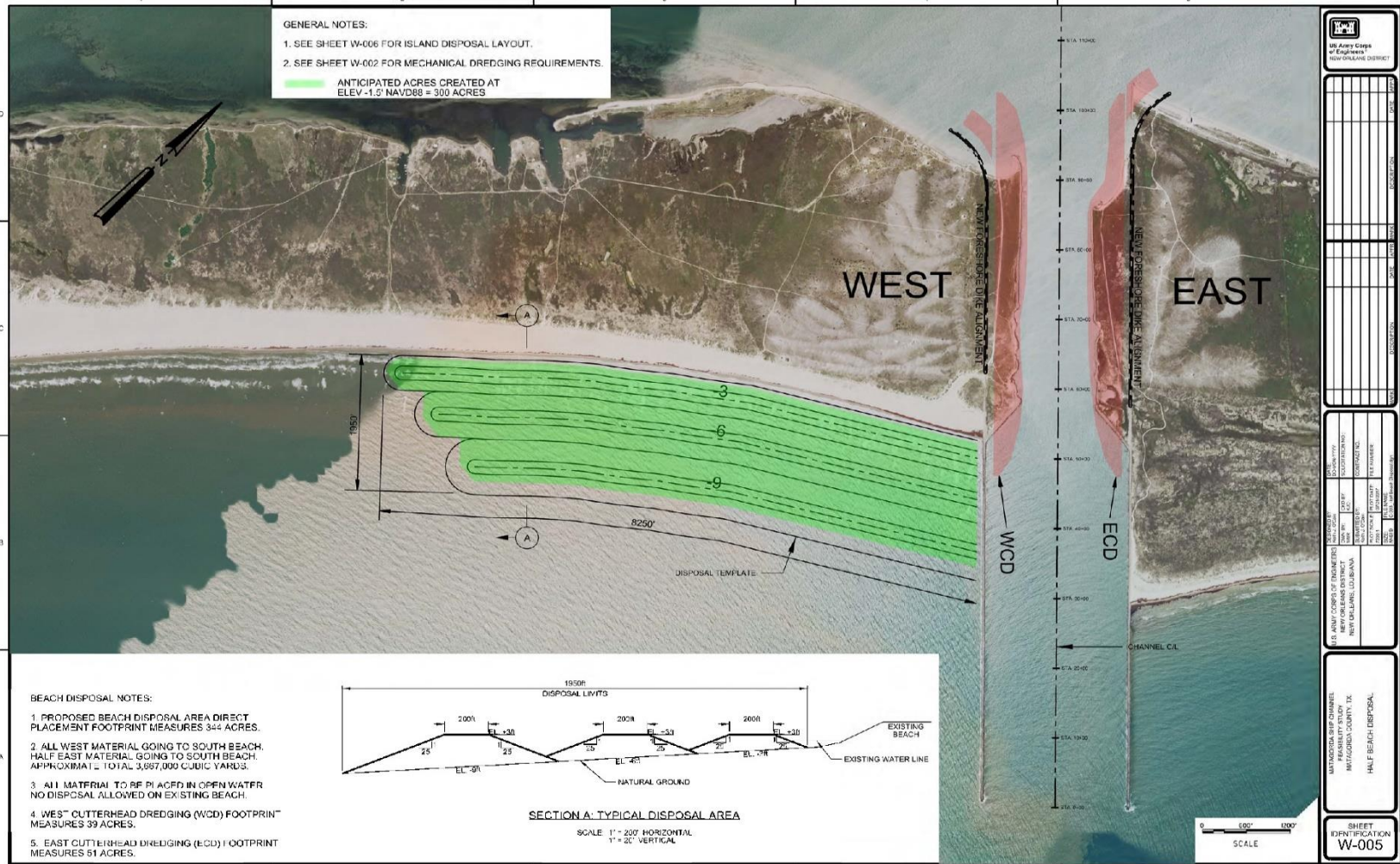


Figure 4. Beach Restoration Placement Area

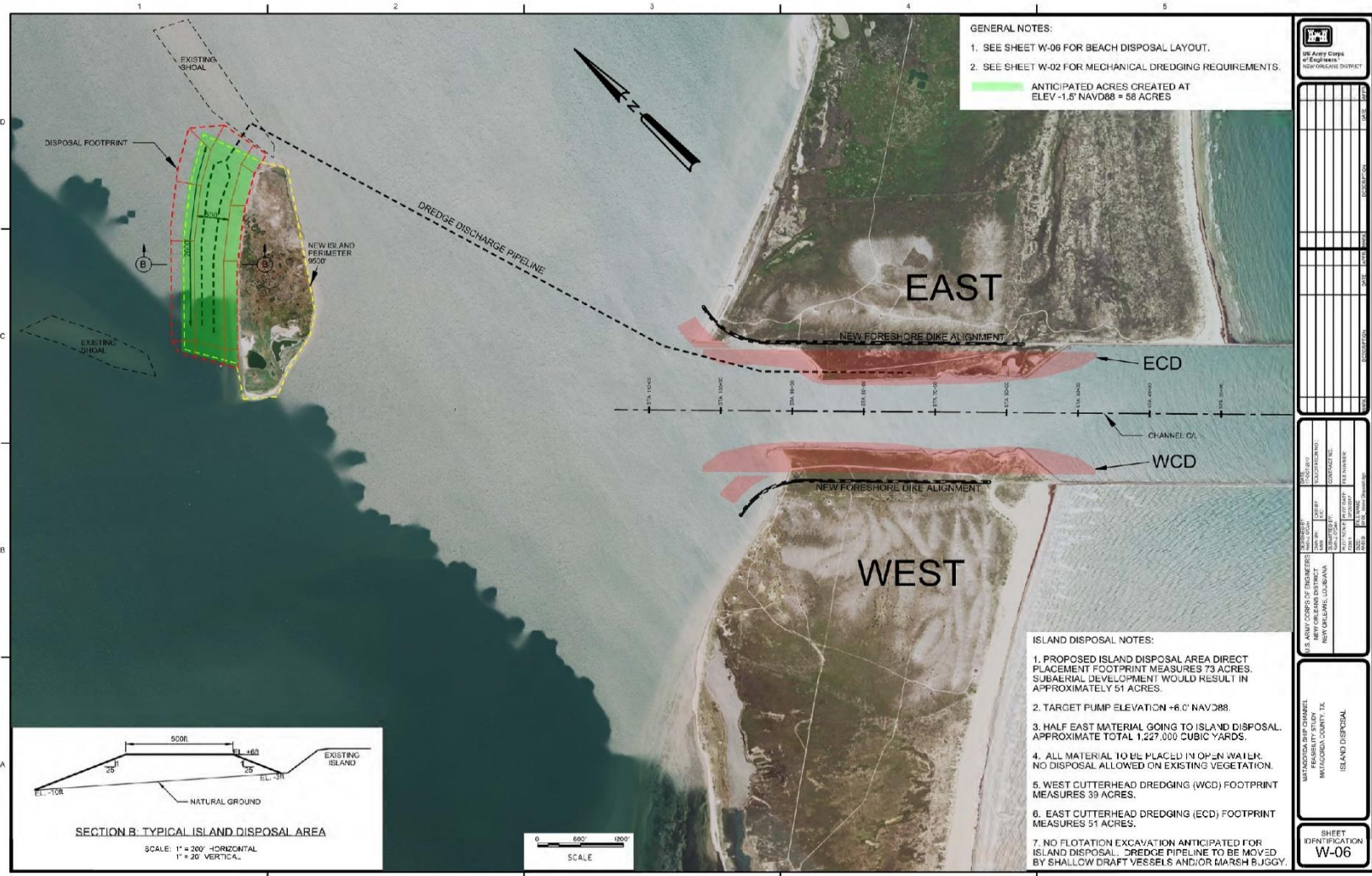


Figure 5. Sundown Island 73-acre Placement Area