

ESA MEMO

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From: Steve Roberts
FAX: (504) 862-2517
Date: October 23, 2015

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act). The project, as proposed,
() Will have no effect on those resources
() Is not likely to adversely affect those resources.
This finding fulfills the requirements under Section 7(a)(2) of the Act.



27 Oct 2015

Acting Supervisor
Louisiana Field Office
U.S. Fish and Wildlife Service

Date

Subject: ESA Consultation for BCOE Review of Specifications for Passes of the Mississippi River, Southwest Pass (SWP), Plaquemines, Parish, Louisiana (OM-16-001 thru OM-16-010, and OM-16-275 through OM-16-278).

Dear Mr. Weller:

Attention: John Savell

The U.S. Army Corps of Engineers, New Orleans District (CEMVN) is planning maintenance dredging of Southwest Pass in the Mississippi River, Baton Rouge to the Gulf of Mexico, Louisiana project in the Fiscal year 2016. We are reinitiating informal Endangered Species Act (ESA) consultation and requesting new threatened & endangered species determination because the most recent consultation with your office concluded on January 15, 2015. Attached are the plans showing the areas of the proposed work.

Project Description

As in previous years, dredging would occur via hopper dredge and/or cutterhead dredge in Southwest Pass of the Mississippi River Mile 6.0 Above Head of Passes to Mile 19.5 Below Head of Passes. The authorized dimensions of the Southwest Pass navigation channel are -45 feet Mean Low Gulf (MLG) by 750 feet bottom width from Mile 10, then narrowing to 600 feet wide through the jetty channel and bar channel. Multiple disposal areas are designated in the drawings.

Prior Reports

The environmental impacts associated with maintenance dredging in Southwest Pass were addressed in the 1973 final Environmental Impact Statement (FEIS), entitled "Mississippi River, Baton Rouge to the Gulf, Louisiana," filed with the Council of Environmental Quality (CEQ) on June 26, 1974, and the October 1984 Final Supplement II, with a Record of Decision (ROD) signed on May 15, 1985.

The Final EIS, entitled "Deep-Draft Access to the Ports of New Orleans and Baton Rouge, Louisiana," addressed the deepening of the Mississippi River from the Gulf of Mexico to Baton Rouge to a depth of 55 feet over a 600-foot bottom width from the Gulf of Mexico to Mile 17.8 below head of passes in Southwest Pass and thence over a 750-foot bottom width in Southwest Pass and the Mississippi River to a turning basin in Baton Rouge, Louisiana. The ROD for the EIS was signed on December 23, 1986.

Coverage for disposal of dredged material at the Head of Passes is provided by Environmental Assessment (EA) #126 entitled “Additional Disposal Areas for Mississippi River Ship Channel, Gulf of Mexico to Baton Rouge, Louisiana.” The finding of no significant impact (FONSI) for this EA was signed on January 7, 1991.

Environmental Assessment (EA) #393, “Southwest Pass of the Mississippi River, Burrwood Bayou Outlet Additional Disposal Area and Flow Control Features” addressed the potential impacts associated with the proposed designation of a disposal area in Southwest Pass at the Burrwood Bayou outlet to East Bay. The FONSI for this EA was signed on December 8, 2003.

Occurrence of Protected, Threatened and Endangered Species

Protected species that may occur in Southwest Pass include the piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), pallid sturgeon (*Scaphirhynchus albus*), West Indian manatee (*Trichechus manatus*), and sea turtles.

Piping Plover

The piping plover, as well as its designated critical habitat, occurs along the Louisiana coast (<http://critical.habitat.fws.gov/crithab>). Piping plovers winter in Louisiana and may be present eight to ten months of the year (LDWF 2011). They depart for the wintering grounds from mid-July through late October and remain until late March or April. Piping plovers forage on intertidal beaches, mudflats, sand flats, algal flats, and wash-over passes with no or very sparse vegetation. They roost in unvegetated or sparsely vegetated areas, which may have debris, detritus, or micro-topographic relief offering refuge from high winds and cold weather. They also forage and roost in wrack deposited on beaches. Piping plovers could occur along the shoreline and in the intertidal areas of the project vicinity during winter migration, but are not permanent residents of the area. Critical habitat (Critical Habitat Unit LA-6) has been designated south of Pass a Loutre—mainly near the mouth of South Pass and in portions of East Bay between South and Southwest passes. Dredging and disposal areas associated with the proposed work do not lie within these critical habitat areas. Construction activities associated with the proposed project may cause piping plovers occurring near the project area to be temporarily displaced to nearby areas containing foraging and loafing habitat.

Red knot

The red knot (*Calidris canutus rufa*) was federally listed as a threatened species on December 11, 2014, as announced in the Federal Register Vol. 79, No. 238. The red knot is a medium-sized shorebird about 9 to 11 inches (23 to 28 centimeters) in length with a proportionately small head, small eyes, short neck, and short legs. The black bill tapers steadily from a relatively thick base to a relatively fine tip; bill length is not much longer than head length. Legs are typically dark gray to black, but sometimes greenish in juveniles or older birds in non-breeding plumage. Non-breeding plumage is dusky gray above and whitish below. The red knot breeds in the central Canadian arctic but is found in Louisiana during spring and fall migrations and the winter months (generally September through March).

During migration and on their wintering grounds, red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks. Observations along the Texas coast indicate that red knots forage on beaches, oyster reefs, and exposed bay bottoms, and they roost on high sand flats, reefs, and other sites protected from high tides. In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Coquina clams (*Donax variabilis*), a frequent and often important food resource for red knots, are common along many gulf beaches. Major threats to this species along the Gulf of Mexico include the loss and degradation of habitat due to erosion, shoreline stabilization, and development; disturbance by humans and pets; and predation.

The non-vegetated open water habitat impacted by the project is neither feeding or loafing habitat of the red knot. Further, red knots can easily avoid the project area and temporarily relocate to nearby beach and marsh habitat

Pallid Sturgeon

The pallid sturgeon is an endangered fish found in Louisiana, in both the Mississippi and Atchafalaya Rivers (with known concentrations in the vicinity of the Old River Control Structure Complex); it is possibly found in the Red River as well. The pallid sturgeon is adapted to large, free-flowing, turbid rivers with a diverse assemblage of physical characteristics that are in a constant state of change. Detailed habitat requirements of this fish are not known, but it is believed to spawn in Louisiana. Habitat loss through river channelization and dams has adversely affected this species throughout its range. Entrainment issues associated with dredging operations in the Mississippi and Atchafalaya Rivers and through diversion structures off the Mississippi River are two potential effects that should be addressed in future planning studies and/or in analyzing current project effects. Juvenile pallid sturgeon appear to be at risk for entrainment in hydraulic dredges, because of their benthic holding behavior and their relatively low burst swimming speed (Hoover et al. 2005). The density of pallid sturgeon in the lower Mississippi River Delta is thought to be low; however, sampling efforts in that area have not been extensive so population estimates in these areas are uncertain (USFWS 2010). Because pallid sturgeon are believed to be a strictly freshwater fish, they are probably absent from the Mississippi River Delta during low river flows when salt water from the Gulf of Mexico intrudes upriver along the bottom of the channel (salt water wedge). If project construction is planned during these events, impacts to pallid sturgeon due to dredging activities in the Mississippi River Delta are unlikely.

Although pallid sturgeon are unlikely to occur in the project area, the USFWS previously provided the following recommendations. These are not requirements, but their implementation may further reduce the unlikely chance of encountering pallid sturgeons or other species while conducting dredging activities.

1. To the extent possible, schedule dredging activities in the project area during low flow periods, when salt water occurs on the channel bottom further upriver than during normal or high river flows.
2. The cutterhead dredge should remain completely buried in the bottom material during dredging operations. If pumping water through the necessary to dislodge material or

to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased.

3. During dredging, the pumping rates should be reduced to the slowest speed feasibility while the cutterhead dredge is descending to the channel bottom.
4. If hopper dredges are utilized, explore the feasibility of using a rigid sea turtle deflector, which is designed to protect sea turtles by preventing them from entering the draghead, and evaluate the effectiveness of that device for pallid sturgeon and other fish species.

West Indian Manatee

West Indian manatees, also known as sea cows, are large aquatic mammals found in shallow, slow-moving rivers, estuaries, salt water bays, canals, and coastal areas. Range is generally restricted to the southeastern United States, although individuals may occasionally venture as far north as Massachusetts and as far west as Texas (USFWS 2011). They are rare visitors to coastal Louisiana, occasionally entering Lakes Pontchartrain and Maurepas, and associated coastal waters and streams during the summer months. Most manatee sightings in Louisiana occur east of the Mississippi River (Wilson 2003). They have also been reported in the Amite, Blind, Tchefuncte, and Tickfaw rivers, and in canals within the adjacent coastal marshes of Louisiana. It is extremely unlikely that manatees would be found in the project area or the surrounding shallow open waters; however, if manatees are observed within 100 yards of the "active work zone" during proposed dredging/disposal activities, CEMVN would implement the appropriate special operating conditions (e.g., no operation of moving equipment within 50 feet of a manatee; all vessels should operate at no wake/idle speeds within 100 yards of work area; siltation barriers, if used, should be re-secured and monitored; report manatee sightings or collisions), as provided by the USFWS, Lafayette, Louisiana Field Office. Special operating conditions for manatees in the Specifications for the proposed work are as follows:

Manatee Considerations

The West Indian manatee may be present in the project vicinity. The Contractor shall instruct all personnel associated with the project of the potential presence of manatees in the area, and the need to avoid collisions with these animals. All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees. Manatees are protected under the Marine Mammal Protection Act of 1972, and the Endangered Species Act of 1973. The Contractor shall be held responsible for any manatee harmed, harassed, or killed as a result of construction activities not conducted in accordance with these Specifications

Manatee Signs. Prior to commencement of construction, each vessel involved in construction activities shall display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8-1/2" x 11" reading, "CAUTION: MANATEE HABITAT/IDLE SPEED IS REQUIRED IN CONSTRUCTION AREA." In the absence of a vessel, a temporary 3' x 4' sign reading

"CAUTION: MANATEE AREA" shall be posted adjacent to the issued construction permit. A second temporary sign measuring 8-1/2" x 11" reading "CAUTION: MANATEE HABITAT. EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION" shall be posted at the dredge operator control station and at a location prominently adjacent to the issued construction permit.

The Contractor shall remove the signs upon completion of construction.

a. Special Operating Conditions if Manatees are Present in the Project Area.

(1) If a manatee(s) is sighted within 100 yards of the project area, all appropriate precautions shall be implemented by the Contractor to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease to ensure protection of the manatee. Construction activities shall not resume until the manatee has departed and the 50-foot buffer has been reestablished.

(2) If a manatee(s) is sighted in the project area, all vessels associated with the project shall operate at "no wake/idle" speeds at all times, and vessels will follow routes of deep water whenever possible, until the manatee has departed the project area. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits.

(3) If siltation barriers are used, they shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment.

b. Manatee Sighting Reports. Any sightings of manatees, or collisions with a manatee, shall be immediately reported to the Corps of Engineers. The point of contact within the Corps of Engineers will be Mr. Edward Creef, PHONE (504) 862-2521, FAX (504) 862-2317.

Sea Turtles

The National Marine Fisheries Service (NMFS) is responsible for aquatic marine endangered and threatened sea turtles. High levels of sediment in the water column and low prey availability probably preclude any high use of sea turtles in the lower Mississippi River Delta. However, all Contractor personnel associated with the project shall be instructed of the potential presence of sea turtles and the need to avoid contact with these animals. As a result of consultation under Section 7 of the Endangered Species Act of 1973, as amended, the USACE has agreed to report any sea turtle activity (sightings, collisions with, injuries or killings) to the NMFS, as specified in the Specifications.

Brown Pelican

The brown pelican (*Pelecanus occidentalis*), a year-round resident of coastal Louisiana that may occur in the project area, was removed from the Federal List of Endangered and Threatened Wildlife (i.e., “delisted”) by USFWS on November 17, 2009. Despite its recent delisting, brown pelicans—and other colonial nesting wading birds and seabirds—remain protected under the Migratory Bird Treaty Act of 1918. Portions of the proposed project area may contain habitats commonly inhabited by colonial nesting wading birds and seabirds. To minimize disturbance to pelicans and other colonial nesting birds and seabirds potentially occurring in the project area, CEMVN would observe restrictions on activity provided by the USFWS, Lafayette, Louisiana Field Office. Special operating conditions addressing pelicans and other colonial nesting wading birds and seabirds (reporting presence of birds and/or nests; no-work distance restrictions—2000 feet for brown pelicans, 1000 feet for colonial nesting wading birds, and 650 feet for terns, gulls, and black skimmers; bird nesting prevention and avoidance measures; marking discovered nests) are included in the Specifications for the proposed work, and are as follows:

Nesting Birds (Cutterhead disposal)

Colonial nesting wading birds (including but not limited to, herons, egrets, and Ibis) and seabirds/water-birds (including, but not limited to terns, gulls, Black Skimmers, and Brown Pelicans) are known to nest in the project area. The nesting birds and their nests must not be disturbed or destroyed. The nesting activity period extends from 15 February through 15 September. Dredging activity during this period may be subject to additional requirements as stated below.

Reporting

The presence of nesting wading birds and/or seabirds/water-birds within the minimum distances from the work area, as specified in the Specification shall be immediately reported to Mr. Ed Creef of the U.S. Army Corps of Engineers at (504) 862-2521.

No Work Distances

No-work distance restrictions are as follows:

- Terns, gulls, and Black Skimmers - 650 feet;
- Colonial nesting wading birds - 1000 feet; and,
- Brown Pelicans - 2000 feet.

Coordination by the New Orleans District personnel with the USFWS may result in a reduction or relaxing of these no-work distances depending on the species of birds found nesting at the work site and specific site conditions.

Bird Nesting Prevention and Avoidance Measures

The Contractor shall prepare and submit to the Contracting Officer's Representative, for approval, a plan, detailing the efforts that will be undertaken to prevent birds from

nesting within the minimum distances, as specified in paragraph "No Work Distances", from any work activity. The plan shall be submitted in accordance with paragraph "IMPLEMENTATION".

Nest prevention measures, if exercised, shall be intended to deter birds from nesting on the disposal area(s) and access corridor(s) without physically harming birds during the nesting activity period, as specified in paragraph "Nesting Birds". Nest prevention measures may be used in combination with and or adjusted to be most effective. The use of any harassment measures shall be in accordance with EM 385-1-1 (Safety and Health Requirements). At a minimum, nest prevention measures shall include the following:

Flagging/Streamers - Flagging and or streamers at least two (2) feet in length and which consist of reflective plastic/mylar type material shall be attached to the top of stakes at least three (3) feet in height. The stakes shall be driven into the ground at approximately 20-foot intervals. Flagging and or streamers shall be placed such that the flags/streamers move in a light wind.

Vehicular/Pedestrian Traffic/Air Cannons - At a minimum, one (1) all terrain vehicle (ATV) and/or one (1) person shall travel throughout the entire disposal area at least once per hour from dawn to dusk. In lieu of vehicular or pedestrian traffic, the Contractor has the option of using air cannons.

Upon the exercise of Option Item "Bird Nesting Prevention and Avoidance Measures", the Contractor shall begin work within 24 hours. Specific nest prevention measures used during the work shall be monitored for effectiveness and may require adjustment and/or modification. All equipment/supplies used for nest prevention shall be removed from the work site upon the completion of work and as directed by the Contracting Officer.

Discovery of Bird Nests at the Work Site

If bird nests are discovered at the work site, immediate notification shall be made in accordance with the Specifications. The Contractor shall immediately mark the bird nests with flagging on stakes 3-feet above the ground surface and no closer than 3 feet from the nest. The Contractor shall immediately implement safe work distances from the nest(s) as specified in the specifications, place flagging to create exclusion zone(s) around the nest(s), and advise all equipment operators of the bird nest(s) and exclusion zone(s).

Conclusion and Determination

Although threatened or endangered species may occur within the general project vicinity, their presence within the open waters of the proposed project areas is unlikely. The proposed project area does not contain critical habitat for federally-listed species, and the open water areas and comparable habitats surrounding the project area would allow them to avoid the project activities and temporarily relocate to these areas. The Southwest Pass of the Mississippi River, Baton Rouge to the Gulf of Mexico, Louisiana project has previously been disturbed and has undergone

routine maintenance dredging/disposal events in the past. Language in the project Specifications addresses federally-protected and threatened or endangered species that may occur in the project area.

For the reasons cited above, we believe that the project, would not likely adversely affect any federally-listed threatened or endangered species or their critical habitat. We respectfully request your concurrence with our determination. If you have any questions about the project or need additional information please call me at (504) 862-2517 or email steve.w.roberts@usace.army.mil.

Literature Cited

Gunter, G. 1981. Status of turtles on the Mississippi coast. Gulf Research Report 7(1): 89-92.

Hoover, J.J., Killgore, K.J., Clarke, D.G., Smith, H., Turnage, A., and Beard, J. 2005. "Paddlefish and sturgeon entrainment by dredges: Swimming performance as an indicator of risk," DOER Technical Notes Collection (ERDC TN-DOER-E22), U.S. Army Engineer Research and Development Center, Vicksburg, MS. <http://er.erd.c.usace.army.mil/dots/doer.html>

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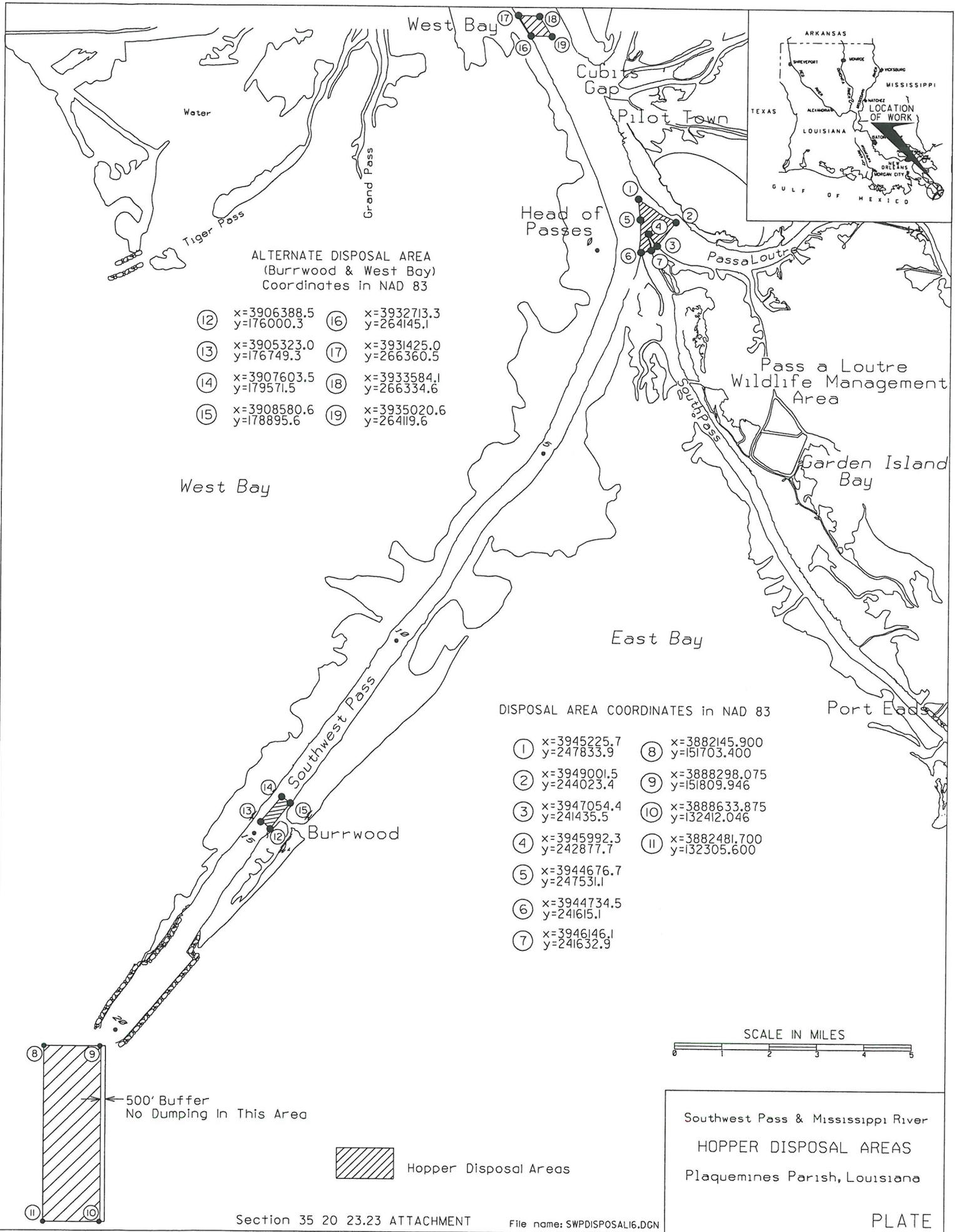
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Wilson, Jill. 2003. "Manatees in Louisiana." Louisiana Conservationist. July/August 2003.



ALTERNATE DISPOSAL AREA
(Burrwood & West Bay)
Coordinates in NAD 83

- | | | | |
|---|---------------------------|---|---------------------------|
| ⑫ | x=3906388.5
y=176000.3 | ⑯ | x=3932713.3
y=264145.1 |
| ⑬ | x=3905323.0
y=176749.3 | ⑰ | x=3931425.0
y=266360.5 |
| ⑭ | x=3907603.5
y=179571.5 | ⑱ | x=3933584.1
y=266334.6 |
| ⑮ | x=3908580.6
y=178895.6 | | |

DISPOSAL AREA COORDINATES in NAD 83

- | | | | |
|---|---------------------------|---|-------------------------------|
| ① | x=3945225.7
y=247833.9 | ⑧ | x=3882145.900
y=151703.400 |
| ② | x=3949001.5
y=244023.4 | ⑨ | x=3888298.075
y=151809.946 |
| ③ | x=3947054.4
y=241435.5 | ⑩ | x=3888633.875
y=132412.046 |
| ④ | x=3945992.3
y=242877.7 | ⑪ | x=3882481.700
y=132305.600 |
| ⑤ | x=3944676.7
y=247531.1 | | |
| ⑥ | x=3944734.5
y=241615.1 | | |
| ⑦ | x=3946146.1
y=241632.9 | | |



← 500' Buffer
No Dumping In This Area

Hopper Disposal Areas

Southwest Pass & Mississippi River
HOPPER DISPOSAL AREAS
Plaquemines Parish, Louisiana



PLATE
16-2

MISSISSIPPI RIVER MAINTENANCE DREDGING,
SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00





PLATE
16-3

MISSISSIPPI RIVER MAINTENANCE DREDGING,
SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00





PLATE
164

MISSISSIPPI RIVER MAINTENANCE DREDGING,
 SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
 NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00





PLATE
16-5

MISSISSIPPI RIVER MAINTENANCE DREDGING,
SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00



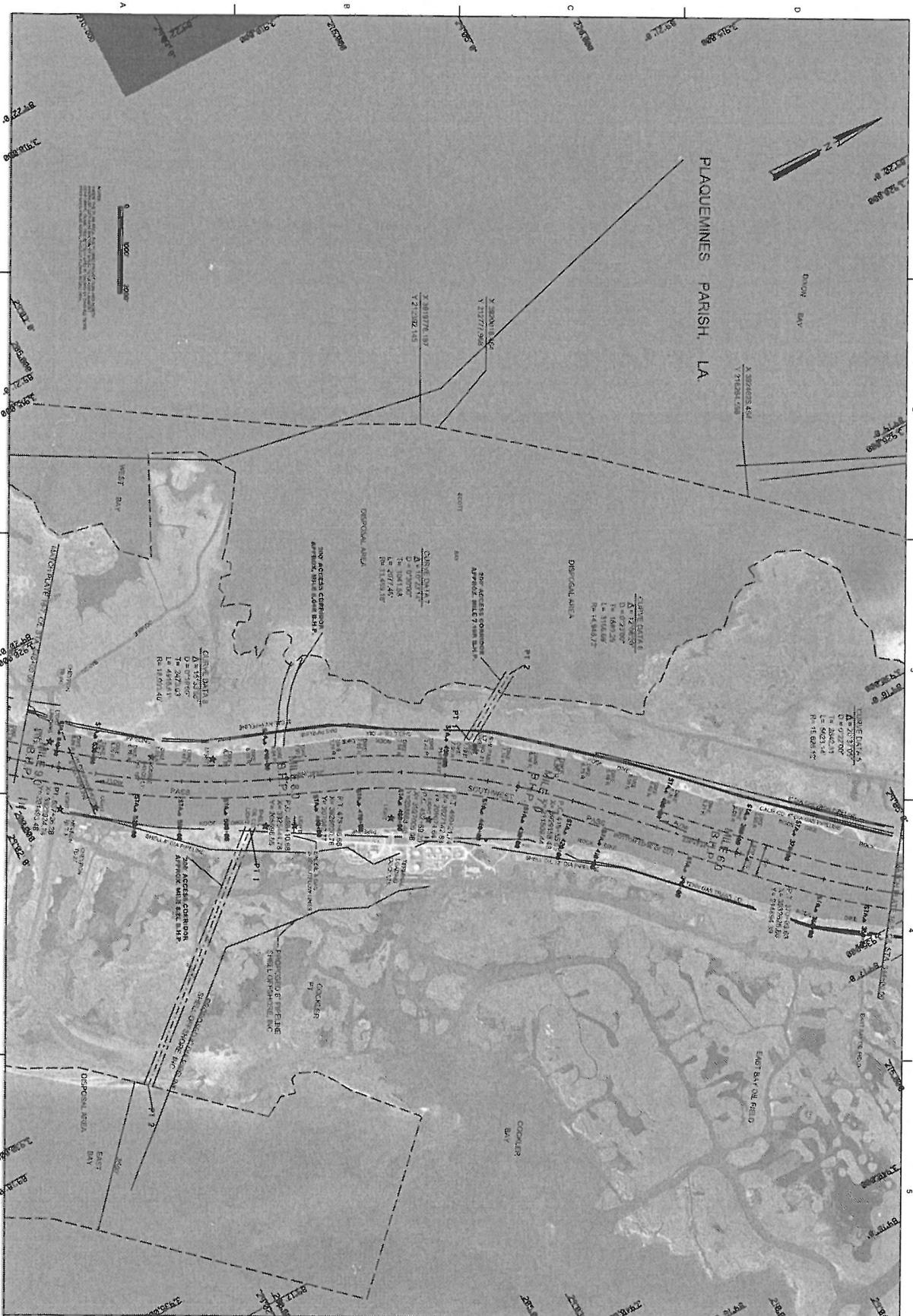


PLATE
16-6

MISSISSIPPI RIVER MAINTENANCE DREDGING,
SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00





PLATE
16-7

MISSISSIPPI RIVER MAINTENANCE DREDGING,
 SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
 NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00

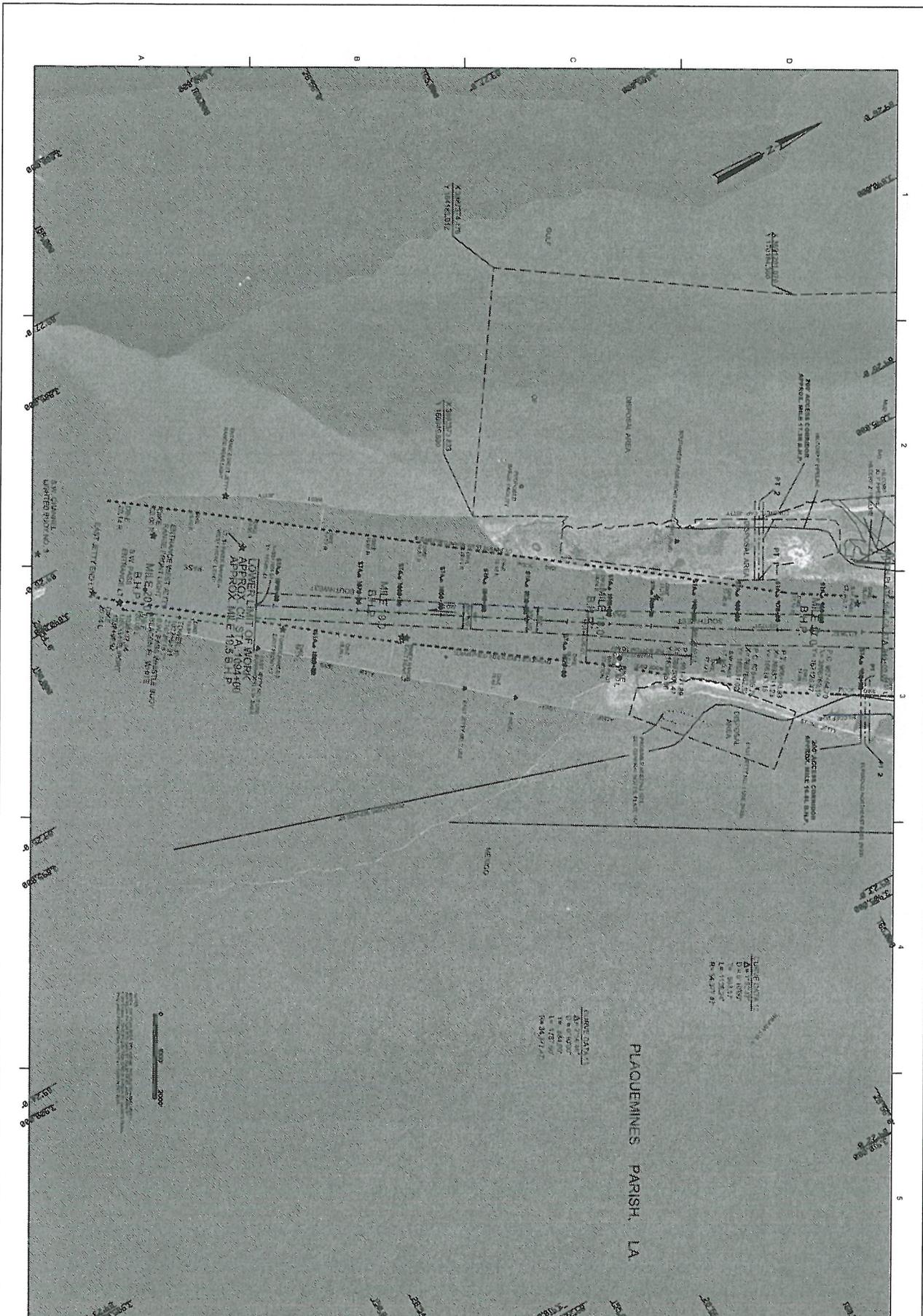




PLATE
16-8

MISSISSIPPI RIVER MAINTENANCE DREDGING,
SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00





MISSISSIPPI RIVER MAINTENANCE DREDGING,
 SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
 NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00

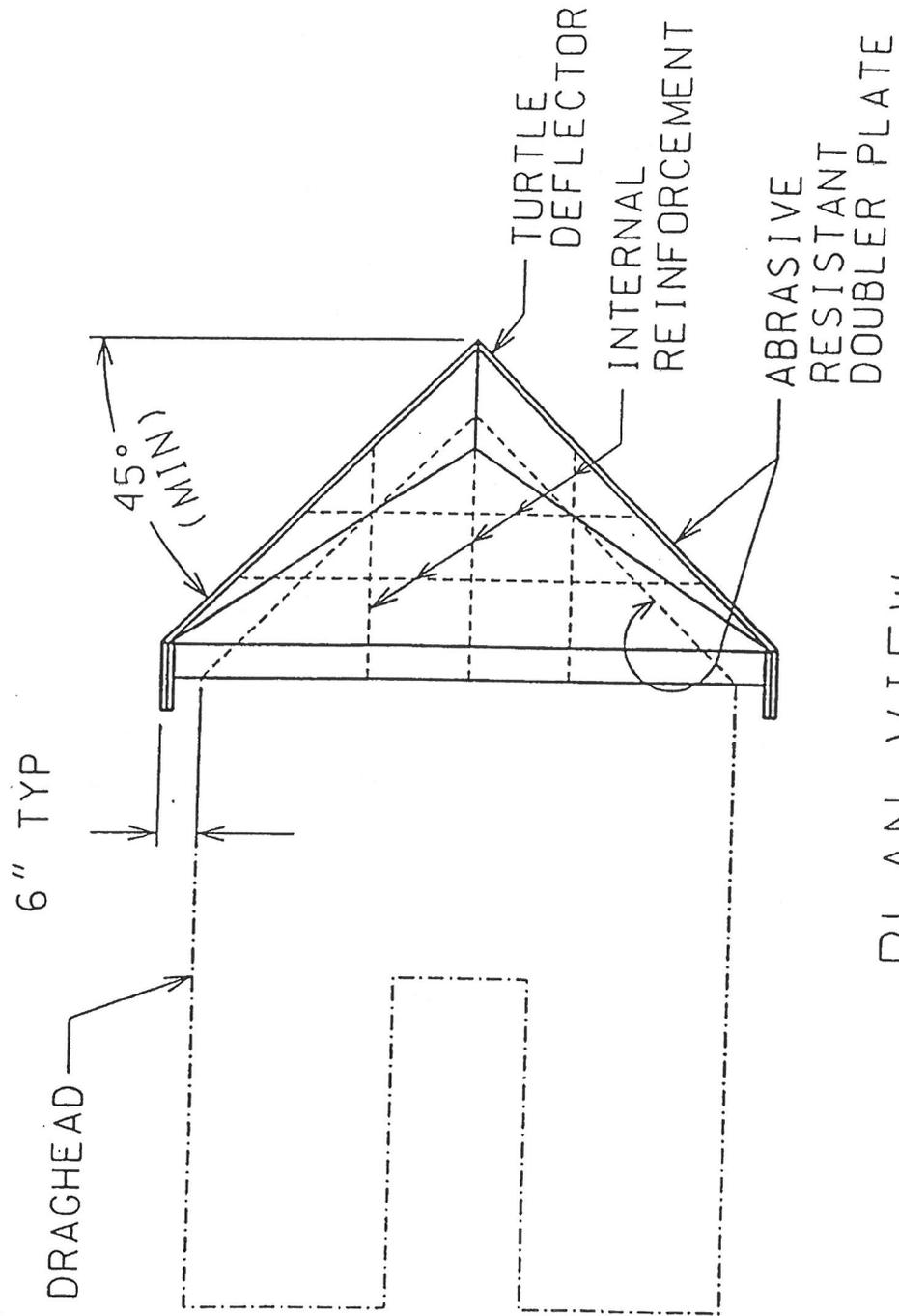
PLATE
 16-9



PLATE
16-10

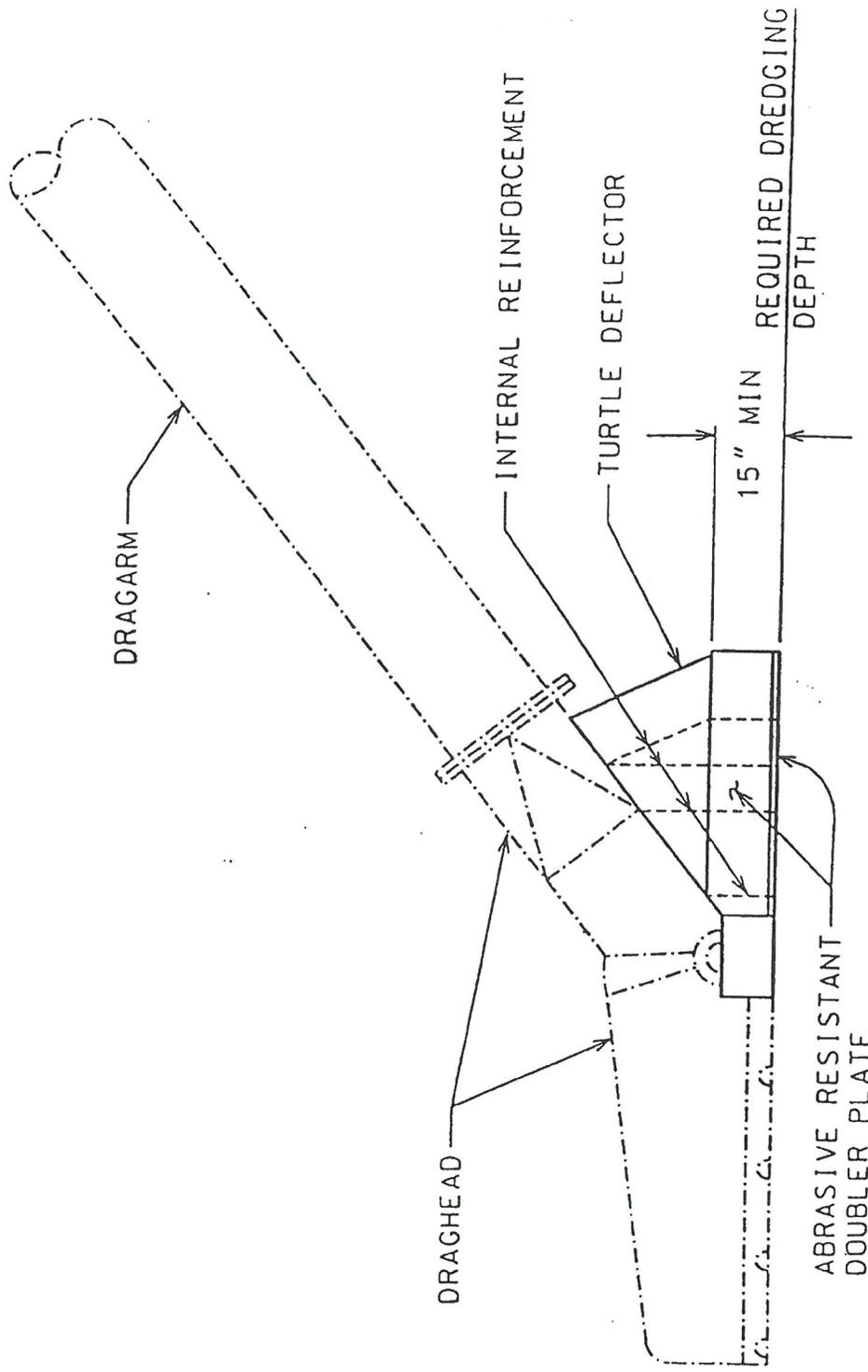
MISSISSIPPI RIVER MAINTENANCE DREDGING,
SOUTHWEST PASS CUTTERHEAD DREDGE RENTAL,
NON-CONTINUOUS MILE 6.0 AHP TO MILE 19.5 BHP, C/L STA. 2867+32 TO C/L STA. 1094+00





PLAN VIEW

RIGID TURTLE DEFLECTOR
SCALE: NONE



ELEVATION
 RIGID TURTLE DEFLECTOR
 SCALE: NONE

FIGURE 1: MINIMUM DREDGE PLANT LENGTH

