

PORT FREEPORT, TX ENTRANCE & JETTY CHANNEL WIDENING 2015



GREAT LAKES DREDGE & DOCK COMPANY | IT ALL STARTS WITH DREDGING™

OVEN

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PROJECT DETAILS

- Widen channel 200' to North (50% width increase)
 - 3 miles of Entrance channel
 - 1 mile of Jetty Channel
- 3.1 million CY dredged
- Offshore ODMDS #1 primary disposal
- 120,000 CY BU disposal at Quintana Beach
- Predominantly firm-stiff clay, some sand & silt







DREDGE EQUIPMENT

- 30" electric Cutter-suction dredge CALIFORNIA
 - Spider-barge to load scows
 - 8,000 CY dump scows
 - Towing and tending tugs
- Hopper dredge TERRAPIN ISLAND
 - 6,400 CY bin capacity







DREDGE CALIFORNIA

- 10 MW electricity
- Connected to Freeport LNG electric infrastructure
- 15,000' submersible power cable
- Benefits
 - reduced air emissions compared to diesel
 - Quiet, less disturbance to nearby residential areas



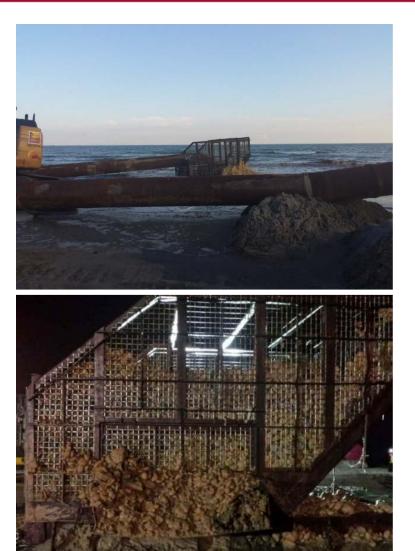




SPIDER BARGE

- Narrow jetty channel
 - Limited to one-side loading
 - Traffic coordination
 - Shallow outside channel limits
 - Close proximity to jetty





BU DISPOSAL QUINTANA BEACH

- Beach nourishment / shore protection
- Discharge screened to alleviate rock on beach
- Targeted relatively small sand lens available in dredge cut
- Significant clay content
- Beachfill ops cut short, removed excessive clay from beach







WIDENED INTO LAND CUT

- Inner jetty channel widened into land cut
- Excavated and side-cast upper slope material toward dredge California
- Protected wetland features in the vicinity
- Separated remnant rock debris from materials







DREDGE TERRAPIN ISLAND

- Entrance channel dredging
- Sea turtle exclusion measures
 - Complicated by stiff clay materials
- 2 trawlers working at all times to relocate sea turtles to mitigate risk of takes
- Concerted disposal coordination between hopper dredge & dump scows





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