

Cat Island DMDF

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US Army Corps of Engineers
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Cat Island DMDF

- Green Bay History
- Project History
- Issue
- Solution
- Results



Green Bay History



1939



2018



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Project History

1988 - Lower Green Bay Remedial Action Plan (RAP) – Cat Island restoration identified as the top priority project for habitat restoration.



2014 – Construction begins



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Game Plan

- 4.7 miles of breakwater
- 3 Cells
- 20 – 30 years of storage
- Open ended Cells - Provide natural beach



Game Plan - Win/Win

- Corps needs a place for dredged material – Annually dredge about 250k CY
- Dredging costs \$17.50/CY to \$9/CY (Hydraulic vrs Mechanical)



Success



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2016 Issue

- Turbidity longer lasting and therefore traveled farther due to variability of dredged material characteristics (sand vrs fines)
- Needed to find a way to keep material in the cell and control turbidity during dredge material placement



Solutions

- Turbidity Curtain
- Berm
- GEO tube
- Hay bales
- Straw Wattle
- Hesco Barrier



Hescos



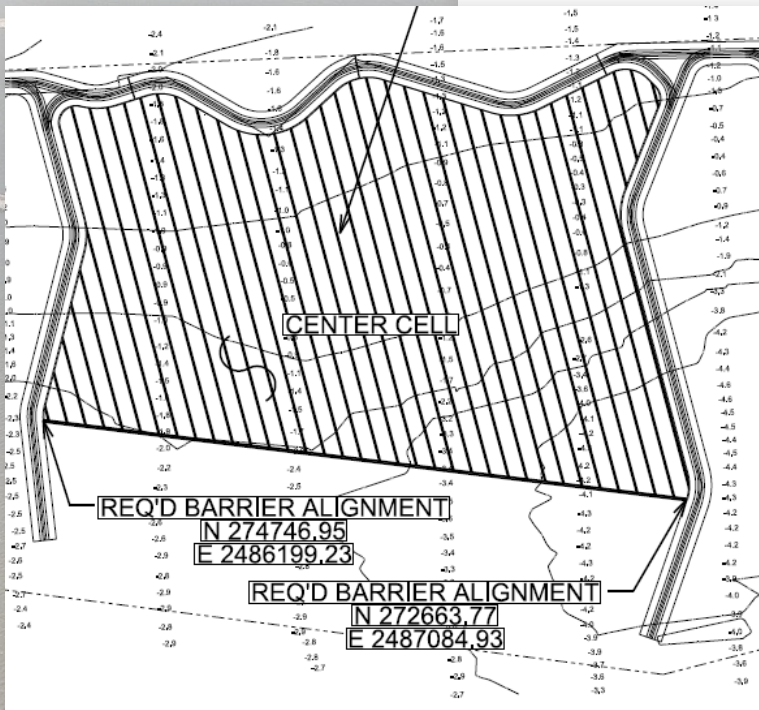
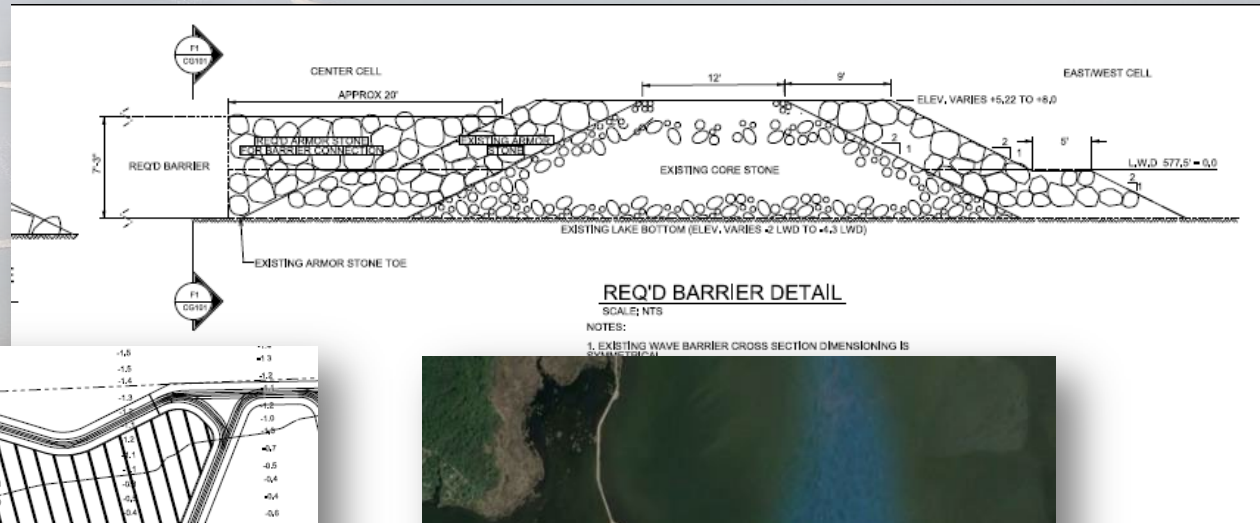
- Turbidity control
- Durability – multi year use
- Consolidation of materials
- Partner goals - Round Rock



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Scope of Work - 2017

Middle Cell



Construction - 2017



2,200 ft
Rested on sand bottom



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Middle Cell



Water Depth Issues



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Construction



Middle Cell



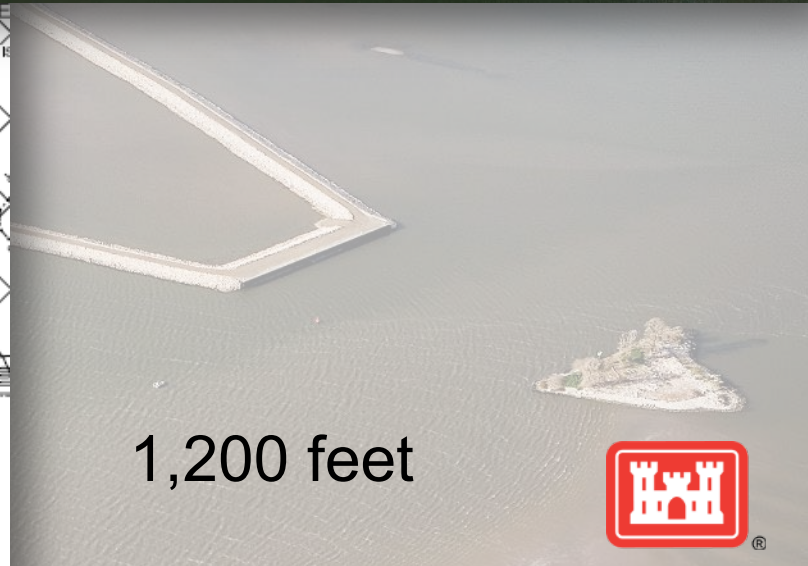
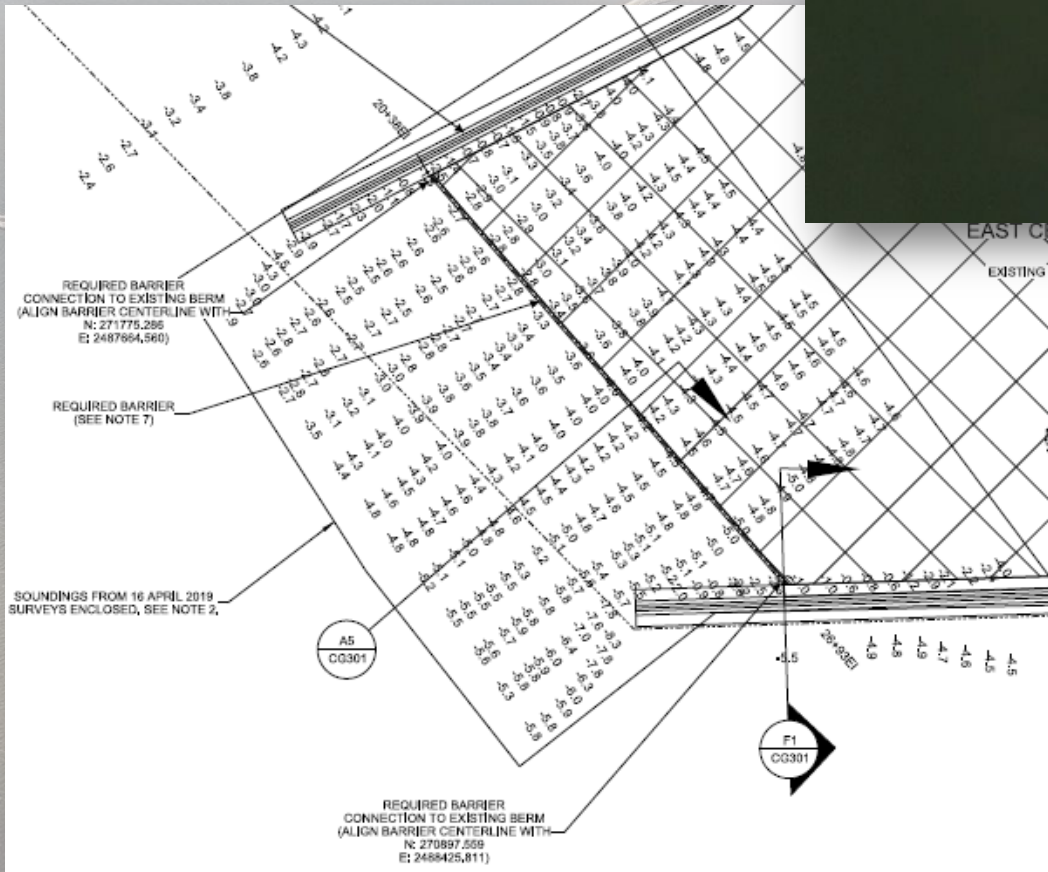
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Middle Cell



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FY19 SE Cell

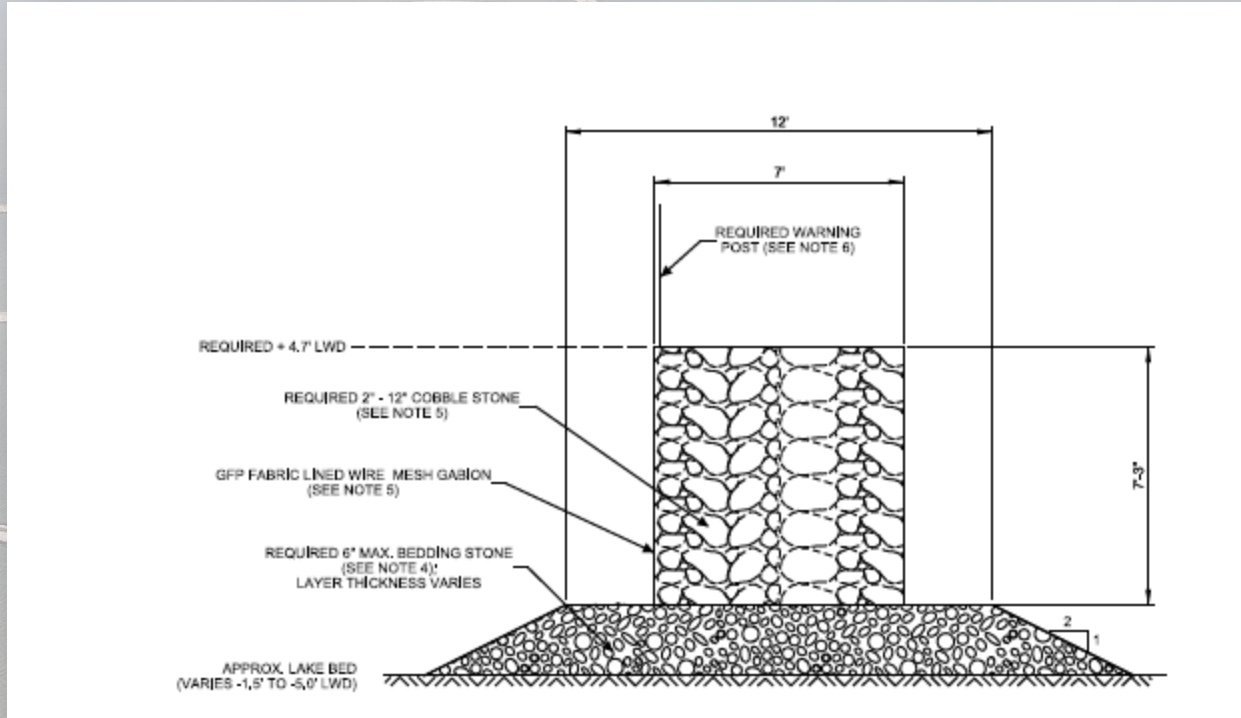


1,200 feet



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FY19



Gravel Bed to raise above water level
Acted as a filter
1,200 feet



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FY19



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FY19



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FY20



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FY21



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Going forward

- Continue filling SE cell
- When lake levels drop – return to middle cell
- Fill middle cell to maximum
- Remove Hescos – leave rock to create shoreline

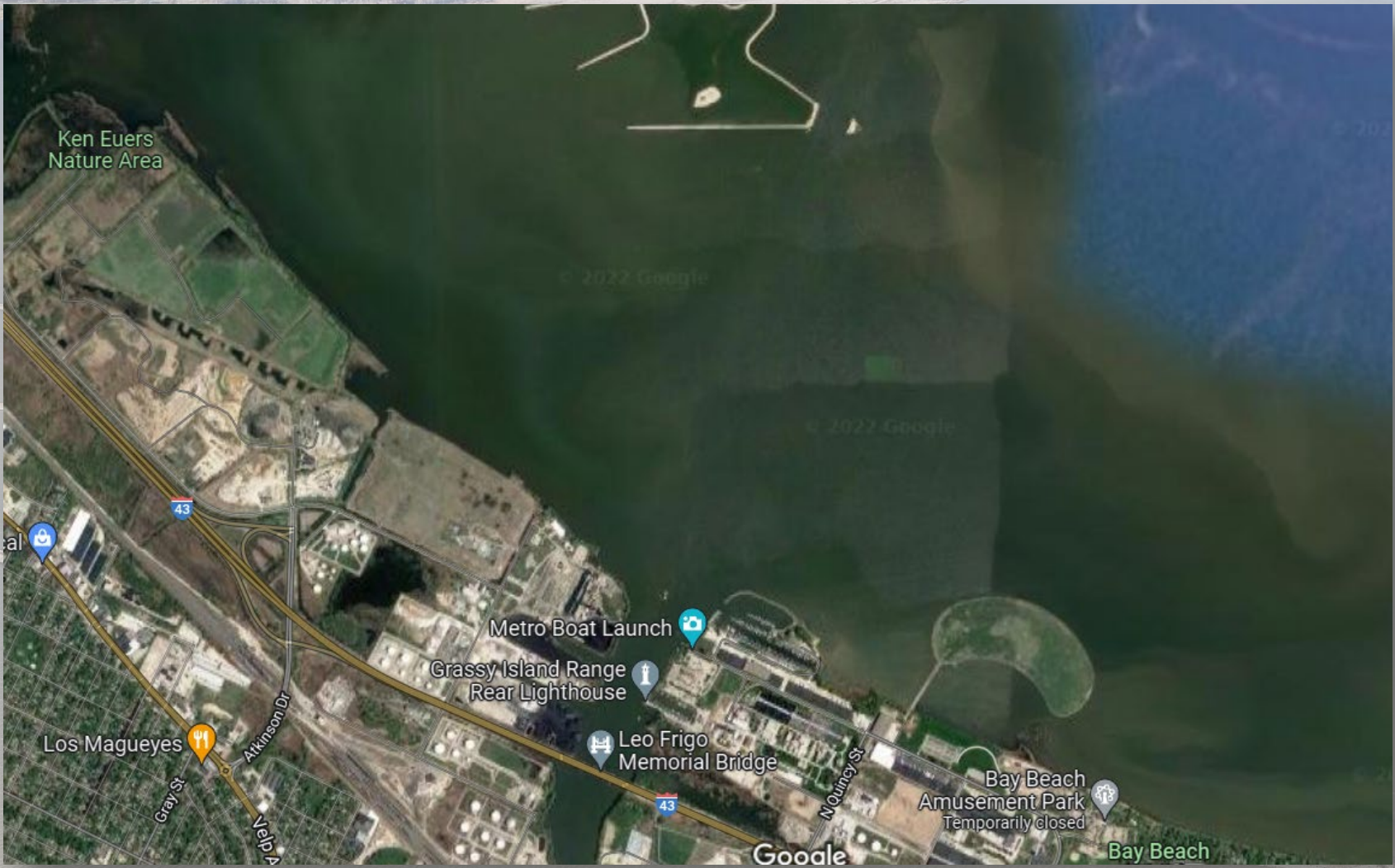


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Questions?



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