

JEFFERSON PARISH DEPARTMENT OF SEWERAGE

ENGINEERING REPORT FOR ROSETHORN WASTEWATER TREATMENT PLANT HURRICANE ISAAC RECOVERY NEEDS

3/20/15

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The purpose of this report is to identify unmet infrastructure needs for addressing Hurricane Isaac Impacts at the Rosethorn Wastewater Treatment Plant in Jefferson Parish and to show that the unmet needs exceed HUD's \$400,000 threshold.

New Levee and Generator at Rosethorn Wastewater Treatment Plant

It has been determined that there is need to construct a new levee and a generator at the plant to address impacts from Hurricane Isaac and to mitigate impacts from future storm events.

Project Description:

The existing facility at the Jefferson Parish Rosethorn Wastewater Plant treats raw sewage flow from the Jean Lafitte area. The plant is located at 865 Jean Lafitte Blvd, in Jean Lafitte, LA in Jefferson Parish.

This project includes the following work at the plant to address Isaac impacts:

- Reconstruction of existing flood protection level to an elevation of + 9 ft.
- Restoration of embankment levee next to aeration basin and clarifier
- Drainage improvements at the plant site
- Roadway and access improvements
- Backup generator for plant

Project Justification and Recovery Rationale:

During Hurricane Isaac, the existing Rosethorn Plant levee was overtopped with floodwaters and the plant operations were severely disrupted. The floodwaters also damaged the levees and embankments next to plant structures and prevented Parish staff from being able to access the plant. In addition, there was a power outage at the plant that lasted about 1 week. The main consequence was the discharge of untreated raw sewage into the environment.

This project will address the impacts from Isaac as well as future storm impacts as follows:

- Having a new flood protection levee at elevation +9 ft. around the perimeter of the property will prevent floodwaters from inundating the plant and shutting down operations in future storm events like Isaac. It will also prevent erosion of embankments and will protect existing structures/equipment and will allow Parish staff to access the plant.
- Having drainage improvements will allow the site to properly handle rainwater and there will also be roadway improvements to ensure accessibility.
- Embankments next to critical plant structures will be stabilized to prevent future failures.



 Having a backup generator at the plant, will allow the plant to operate during power outages from future events.

Sources and Uses Statement

A more detailed cost estimate will be formulated as the project is further developed, however, it is our professional engineering opinion that the total project cost will be at least \$500,000.

The sources and uses statement for the project is shown below:

| Expenditures | |
|----------------------------|---------------|
| Engineering and Inspection | \$75,000.00 |
| Construction | \$425,000.00 |
| Total | \$500,000.00* |
| Funding Sources | |
| Parish Funds | \$0.00 |
| CDBG funds | \$0.00 |
| FEMA funds | \$0.00 |
| Total | \$0.00 |

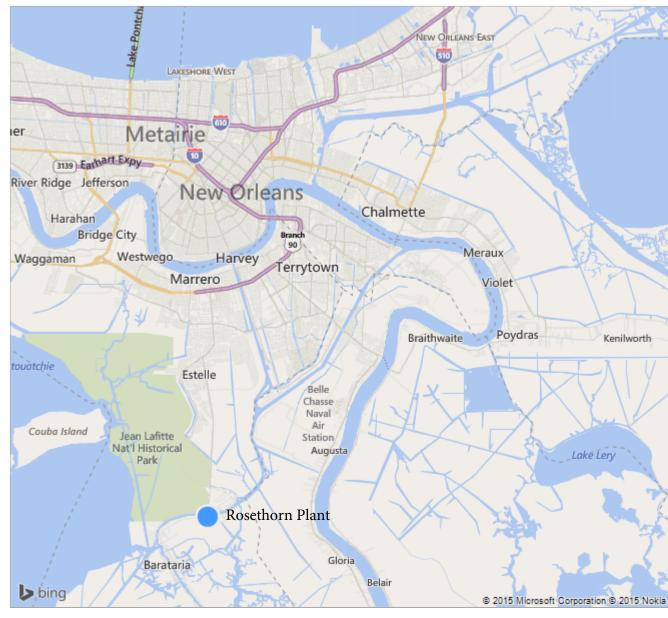
^{*} Total cost will be at least \$500,000.

Operation Budget Impact is not applicable.

As shown in the statement, there are no available funds to cover the project.

The Department of Sewerage has a very limited capital budget for normal capital improvements and does not have a budget for disaster recovery projects. We've attached the Parish capital budgets adopted since Hurricane Isaac. As shown, there is no Parish funding available for this Rosethorn Plant project.

The Parish did receive Isaac Disaster CDBG funding, however, the funding wasn't sufficient to also include this project. Also, the project isn't eligible for FEMA funding.



| | | | Total Project Budget | Expenditures to Date | Funds Requested 2016-2019 | b 6) | Requested Funding F/Y 2015 | Funding Sources |
|------------|-----|--|----------------------------|-------------------------|---------------------------------|------------|----------------------------------|---------------------------|
| Recreation | uo | | | | | | | |
| 46736 | 011 | PA System Project - 2015 | | 10,700 | | | 10,700 | Operating Budget Transfer |
| Total: | Rec | Total: Recreation | | 350,000 | | | 350,000 | |
| Sewerage | စ်] | | | | | | | |
| 49401 | 001 | Construction Management | | 15,785,241 | 11,285,241 | 3,600,000 | 000,000 | Roads & Sewerage Tax |
| 49403 | 001 | Administrative | 2, | 24,843,544 | 21,843,544 | 2,400,000 | 600,000 | Roads & Sewerage Tax |
| 49403 | 002 | Equipment Purchase | | 7,506,003 | 4,506,003 | 2,400,000 | 000,009 | Roads & Sewerage Tax |
| 49404 | 001 | Rehab Prog - Lining Contract | 2 | 26,141,515 | 16,266,515 | 8,000,000 | 1,875,000 | Roads & Sewerage Tax |
| 49404 | 003 | Rehab Prog - Point Repair Contract | 3 | 31,753,648 | 21,878,648 | 8,000,000 | 1,875,000 | Roads & Sewerage Tax |
| 49404 | 004 | Rehab Prog - High Voltage Switchgear | | 4,989,340 | 3,239,340 | 1,400,000 | 350,000 | Roads & Sewerage Tax |
| 49412 | 900 | Inspection & Technical Services | | 2,100,000 | 000,009 | 1,200,000 | 300,000 | Roads & Sewerage Tax |
| Total: | | Sewerage | 11. | 113,119,291 | 79,619,291 | 27,000,000 | 6,500,000 | |
| Street | | | | | | | | |
| 45629 | 21 | Ave D Beautification | | 19,008 | | | 19,008 | Operating Budget Transfer |
| 45638 | 002 | Lapalco Bridge Repairs & Upgrades | | 6,791,287 | 5,791,287 | | 1,000,000 | Operating Budget Transfer |
| 45638 | 021 | Causeway Bridge Repairs & Upgrades | | 300,000 | | | 300,000 | Operating Budget Transfer |
| 45638 | 023 | Bayou Segnette Bridge Repairs & Upgrades | | 300,000 | | | 300,000 | Operating Budget Transfer |
| 42000 | 13 | 2015 Unallocated 7/8ths Sales Tax | | 5,662,656 | | | 5,662,656 | Roads & Sewerage Tax |

| | Total Project Budget | Expenditures to Date | Funds Requested 2015-2018 | Requested Funding F/Y 2014 | Funding Sources |
|---------|----------------------------|-------------------------|---------------------------------|----------------------------------|---------------------------|
| | | | | | |
| acement | | 40,000 | | 40,000 | Operating Budget Transfer |
| | | 50,000 | | 50,000 | Operating Budget Transfer |
| acement | | 30,000 | | 30,000 | Operating Budget Transfer |

| Recreation | on | | | | |
|------------|-----|---|---------|---------|---------------------------|
| 46717 | 019 | 46717 019 Oakdale Plygrd - Switchgear Replacement | 40,000 | 40,000 | Operating Budget Transfer |
| 46721 | 800 | Waggaman Plygrd - Gym Floor | 90,000 | 50,000 | Operating Budget Transfer |
| 46721 | 600 | Waggaman Plygrd - Bleacher Replacement | 30,000 | 30,000 | Operating Budget Transfer |
| 46726 | 013 | 46726 013 Kings Grant - Gym Improvements | 85,000 | 85,000 | Operating Budget Transfer |
| 46726 | 014 | Kings Grant - Gym Metal Panel Repairs | 24,000 | 24,000 | Operating Budget Transfer |
| 46728 008 | 800 | Pard Plygrd - Gym Metal Panel Repairs | 24,000 | 24,000 | Operating Budget Transfer |
| 46728 | 600 | Pard Plygrd - A/C Unit Replacement | 15,000 | 15,000 | Operating Budget Transfer |
| 46736 | 600 | 46736 009 Harvey Plygrd - Driveway and Sidewalk | 20,000 | 50,000 | Operating Budget Transfer |
| 46736 | 010 | 46736 010 Harvey Plygrd - Fence Replacement | 20,000 | 50,000 | Operating Budget Transfer |
| Total: | Rec | Total: Recreation | 733,000 | 733,000 | |

| | Roads & Sewerage Tax | Roads & Sewerage Tax | Roads & Sewerage Tax | Roads & Sewerage Tax | Roads & Sewerage Tax |
|----------|-----------------------------|----------------------|----------------------|----------------------------------|------------------------------------|
| | 000,006 | 000,009 | 000,009 | 1,875,000 | 1,875,000 |
| | 4,500,000 | 3,000,000 | 3,000,000 | 10,000,000 | 10,000,000 |
| | 11,285,240 | 21,843,544 | 4,506,003 | 16,266,515 | 21,878,648 |
| | 16,685,240 | 25,443,544 | 8,106,003 | 28,141,515 | 33,753,648 |
| | 001 Construction Management | 001 Administrative | Equipment Purchase | 001 Rehab Prog - Lining Contract | Rehab Prog - Point Repair Contract |
| age | 100 | | 005 | | 003 |
| Sewerage | 49401 | 49403 | 49403 | 49404 | 49404 |
| | | | | | |

| | | | Total Project Budget | Expenditures to Date | Funds Requested 2015-2018 | s ted 918 | Requested Funding F/Y 2014 | Funding Sources |
|-----------------|------|--|--|-------------------------|---------------------------------|-----------------|----------------------------------|---------------------------|
| Sewerage | စျ | | | | | | | |
| 49404 (| 004 | 49404 004 Rehab Prog - High Voltage Switchgear | | 5,339,340 | 3,239,340 | 1,750,000 | 350,000 | Roads & Sewerage Tax |
| 49404 0 | 001a | 49404 001a Rehab Prog - Lining Contract | | 27,071,815 | 16,266,515 | 10,000,000 | 805,300 | Operating Budget Transfer |
| 49404 0 | 003a | 49404 003a Rehab Prog - Point Repair Contract | | 32,683,948 | 21,878,648 | 10,000,000 | 805,300 | Operating Budget Transfer |
| 49412 (| 900 | 006 Inspection & Technical Services | | 2,400,000 | 000,009 | 1,500,000 | 300,000 | Roads & Sewerage Tax |
| Total: Sewerage | Ser | verage | A CONTRACTOR OF THE PROPERTY O | 179,625,053 | 117,764,453 | 53,750,000 | 8,110,600 | |

| Street | | | | | | |
|--------|-----|--|-----------|-----------|-----------|---------------------------|
| 45638 | 000 | 007 Lapalco Bridge Repairs & Upgrades | 6,691,287 | 5,791,287 | 000'006 | Operating Budget Transfer |
| 45638 | 021 | 021 Causeway Bridge Repairs and Upgrades | 135,429 | 35,429 | 100,000 | Operating Budget Transfer |
| 45638 | 023 | 45638 023 Bayou Segnette Bridge Repairs & Upgrades | 378,370 | 278,370 | 100,000 | Operating Budget Transfer |
| 42000 | 012 | 2014 Unallocated - 7/8ths Sales Tax | 3,101,281 | | 3,101,281 | Roads & Sewerage Tax |
| 42061 | 001 | 42061 001 PW Rehab Drain Lines | 1,595,000 | 000'566 | 000'009 | Operating Budget Transfer |
| 45004 | 001 | 001 Concrete Raising | 4,678,767 | 4,578,767 | 100,000 | Operating Budget Transfer |
| 45004 | 005 | 45004 002 Concrete Utility Cuts | 5,927,154 | 5,827,154 | 100,000 | Operating Budget Transfer |
| 45004 | 003 | 003 Crack Sealing | 1,123,361 | 1,023,361 | 100,000 | Operating Budget Transfer |
| 45004 | 900 | 006 Major Projects (MP's) | 5,606,826 | 4,994,826 | 612,000 | Operating Budget Transfer |
| 45004 | 800 | 45004 008 Panel Replacement | 3,020,401 | 2,820,401 | 200,000 | Operating Budget Transfer |

Ordinance No. 24390

| | | | Total Projected Budget | Expenditures to Date | Funds Requested 2014-2017 | Requested Funding F/Y 2013 | Funding Sources |
|-------------------|---------|---|------------------------------|-------------------------|---------------------------------|----------------------------------|-------------------------------|
| 46730 | 900 | Bridge City - Field Lights | 40,000 | | | 40,000 | Operating Budget Transfer |
| 46736 | 800 | Harvey Playground - Tot Lot | 000'06 | | | 000'06 | Operating Budget Transfer |
| Total: Recreation | ecreati | noi | 301,500 | | | 301,500 | |
| Sewerage | 희 | | | | | | |
| 49401 | 001 | Construction Management | 15,046,532 | 9,646,532 | 4,500,000 | 000'006 | Fund Balance-Capital Projects |
| 49403 | 001 | Sewer Administrative | 23,559,897 | 16,066,102 | 5,500,000 | 793,795 | Fund Balance-Capital Projects |
| 49403 | 001 | Asphalt Needs | 23,559,897 | 16,066,102 | 5,500,000 | 000'009 | Roads & Sewerage Tax |
| 49403 | 005 | Equipment Purchase | | | | 000'009 | Roads & Sewerage Tax |
| 49404 | 001 | Rehab Prog - Lining Contract | 26,024,628 | 14,024,628 | 10,000,000 | 2,000,000 | Roads & Sewerage Tax |
| 49404 | 003 | Rehab Prog - Point Repair Contract | 31,412,575 | 19,412,575 | 10,000,000 | 1,000,000 | Roads & Sewerage Tax |
| 49404 | 003 | Rehab Prog - Point Repair Contract | 31,412,575 | 19,412,575 | 10,000,000 | 1,000,000 | Operating Budget Transfer |
| 49404 | 004 | Rehab Prog - High Voltage Switchgear | 3,860,256 | 10,256 | 3,500,000 | 350,000 | Fund Balance-Capital Projects |
| 49412 | 900 | Inspection & Technical Services | 3,464,788 | 164,788 | 3,000,000 | 300,000 | Fund Balance-Capital Projects |
| 49432 | 001 | CWSRF Loan | | | 4,204,425 | 000,009 | Operating Budget Transfer |
| Total: Sewerage | eweraç | 36 | 158,341,148 | 94,803,558 | 56,204,425 | 8,143,795 | |
| Streets | | | | | ſ | | |
| 46319 | 005 | Barataria-Bayou Boeuf PW 2003-008 | 1,084,577 | 687,650 | | 396,927 | Operating Budget Transfer |
| 46110 | 013 | Linear PK - Bike Path Hammond Hwy to Metairie Rd | | | | 22,596 | Operating Budget Transfer |