2013
Facilities Engineering Award of Excellence

Riverfront Cold Storage Facility
Why Relocate to the Riverfront?

- Lake Pontchartrain
- Inner Harbor Navigation Canal (IHNC)
- Cold Storage Facility at Jourdan Road Terminal
- IHNC Lock
- Gulf Intracoastal Waterway
- Lake Borgne
- Mississippi River Gulf Outlet
- Mississippi River
- X CLOSED

Cold Storage Facility at Jourdan Road Terminal
Without the MRGO, the IHNC lock is the only passage for deep draft vessels from the Mississippi River to the JRT.
Port of New Orleans
Existing Cold Storage Facility
Jourdan Road Terminal

Terminal Operator: New Orleans Cold Storage (NOCS)
Louisiana’s Poultry Industry
Cold Storage Product Flow

1. Move from local and regional farmers, producers and processors
2. Blast frozen in cold storage warehouses
3. Shipped via truck, rail and vessel to restaurants and grocers
Short-Term Solution

Move cold storage operations to the Poland Avenue Terminal.
Long-Term Solution

Construct a new cold storage facility at Henry Clay Avenue Terminal.

Former Henry Clay Avenue Wharf and Shed
The Vision Becomes Reality

PONO Riverfront Cold Storage Facility

New Orleans

Mississippi River
PONO Cold Storage Facilities

Henry Clay Avenue Terminal

Jourdan Road Terminal
Largest Blast Freeze Operation in the Northern Hemisphere
### Riverfront Cold Storage Facility

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area</td>
<td>142,000 SF</td>
</tr>
<tr>
<td>Wharf Area</td>
<td>296,328 SF</td>
</tr>
<tr>
<td>Marshalling Yard Acreage</td>
<td>3.5</td>
</tr>
<tr>
<td>Freezer Acreage</td>
<td>101,640 SF</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td>$40.5 million</td>
</tr>
<tr>
<td>Years Useful Life</td>
<td>50+</td>
</tr>
<tr>
<td>Start of Design to Substantial Completion</td>
<td>June 2012 – June 2012</td>
</tr>
</tbody>
</table>
Project Intermodal Access

- Henry Clay Avenue Refrigerated Terminal
- Nashville Avenue Terminal Complex
- Napoleon Avenue Container Terminal
- Intermodal Rail Terminal
- Milan Street Wharf
- Louisiana Avenue Terminal Complex
- First Street Wharf

US HWY

Upriver Facilities

PONO Main Access at Felicity Street

Henry Clay Avenue Truckway

Mississippi River

Railroad

Clarence Henry Truckway

Henry Clay Avenue Terminal
Site Plan
Facility Under Construction
Temperature Control from Trucks to Ships

- Trucks sealed to dock doors
- 35°F dock area
- -10°F blast freezer cells
- -15°F warehouse
- 50°F @ vestibules

Building Section - View Looking East
Scale: 1" = 20'-0"
Shipping and Receiving Dock
Rack Freezing System
Truck Bays - Interior
Blast Freezer Entrance
Freezer Warehouse
Battery Stations and Washer
Truck Bays - Exterior
Site Constraints

Riverside

Landside

Required Piles
Foundation Plan
Other Challenges

• High River Conditions – seasonal fluctuations in Mississippi River

• Vapor Barrier and Under Floor Heat System

• Blast Freezer Changes

• Existing Rail System – maintain active rail service running directly through the project site during construction.
Leadership In Energy and Environmental Design (LEED) Standards

Employed for energy savings and operational efficiencies including:

- Light-emitting diodes (LED) lighting with centralized control and motion sensor systems

- Intricate sequence of systems that reduce energy demand such as:
  - Wider doors that allow trucks to open directly into the building
  - Air doors to reduce warm air infiltration
  - Dehumidifiers
Riverfront Cold Storage Facility
First Design Build Project
at the Port of New Orleans

Project Management Institute
Atlanta Chapter
2012 Project of the Year Award
## Total Project Costs at Henry Clay Site

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPJV Design-Build Contract</td>
<td>$35,126,609</td>
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<tr>
<td>Design Build – Other Engineering</td>
<td>$2,076,674</td>
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<tr>
<td>Shed and Foundation Demolition</td>
<td>$662,465</td>
</tr>
<tr>
<td>Substructure Bracing and Revetment</td>
<td>$1,345,252</td>
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<tr>
<td>Degrading Bank Line</td>
<td>$972,796</td>
</tr>
<tr>
<td>Comfort Station</td>
<td>$308,582</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$40,492,378</strong></td>
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</tbody>
</table>
## Project Funding Sources

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>$40,492,378</strong></td>
</tr>
<tr>
<td><strong>State Reimbursement (CDBG funds)</strong></td>
<td><strong>-$23,500,000</strong></td>
</tr>
<tr>
<td><strong>FEMA Funding</strong></td>
<td><strong>-$2,791,388</strong></td>
</tr>
<tr>
<td><strong>Site Selection Expenses</strong></td>
<td><strong>$3,239,342</strong></td>
</tr>
<tr>
<td><strong>Net Project Costs to PONO</strong></td>
<td><strong>$17,440,332</strong></td>
</tr>
</tbody>
</table>
Time-Lapsed Construction Sequence
Thank you!

Questions and Comments?