NAVAL SUPPORT ACTIVITY EAST BANK:
CREATING AN INTERNATIONAL DISASTER MANAGEMENT,
RECOVERY, AND RESILIENCE CENTER:
A CASE STUDY IN SUSTAINABLE REAL ESTATE DEVELOPMENT

Prepared for:
The Naval Support Activity New Orleans Advisory Task Force
May 2012

Author:
Christian Brierre
Candidate, Master of Sustainable Real Estate Development
Tulane University School of Architecture

Advisor:
Kelly Longwell
Coats Rose Professional Corporation
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Page</td>
<td>1</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>2</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>History of Naval Support Activity East Bank</td>
<td>5</td>
</tr>
<tr>
<td>Base Realignment and Closure (BRAC)</td>
<td>6</td>
</tr>
<tr>
<td>Site</td>
<td>8</td>
</tr>
<tr>
<td>Current/Proposed Ownership</td>
<td>10</td>
</tr>
<tr>
<td>Projected Sources and Uses</td>
<td>10</td>
</tr>
<tr>
<td>Potential Financing Mechanisms</td>
<td>12</td>
</tr>
<tr>
<td>H.R. 645:National Emergency Centers Establishment Act</td>
<td>12</td>
</tr>
<tr>
<td>Hazard Mitigation Grant Program</td>
<td>13</td>
</tr>
<tr>
<td>Transportation Funds</td>
<td>14</td>
</tr>
<tr>
<td>Federal/State Historic Tax Credits</td>
<td>15</td>
</tr>
<tr>
<td>New Markets Tax Credits</td>
<td>16</td>
</tr>
<tr>
<td>Energy Tax Credits</td>
<td>17</td>
</tr>
<tr>
<td>Restoration Tax Abatement Program</td>
<td>18</td>
</tr>
<tr>
<td>Industrial Development Bonds</td>
<td>19</td>
</tr>
<tr>
<td>Property Assessment Clean Energy Bonds</td>
<td>19</td>
</tr>
<tr>
<td>Enterprise Zone</td>
<td>20</td>
</tr>
<tr>
<td>Louisiana Quality Jobs Program</td>
<td>21</td>
</tr>
<tr>
<td>Potential Tenants and Tenant Funding Opportunities/Incentives</td>
<td>22</td>
</tr>
<tr>
<td>Sustainability Goals</td>
<td>23</td>
</tr>
<tr>
<td>Green Building Initiatives</td>
<td>23</td>
</tr>
<tr>
<td>LEED</td>
<td>23</td>
</tr>
<tr>
<td>SPIRiT</td>
<td>24</td>
</tr>
<tr>
<td>GreeNOLA</td>
<td>24</td>
</tr>
<tr>
<td>Onsite Measures</td>
<td>26</td>
</tr>
<tr>
<td>Land</td>
<td>27</td>
</tr>
<tr>
<td>Built Environment</td>
<td>27</td>
</tr>
<tr>
<td>Energy</td>
<td>28</td>
</tr>
<tr>
<td>Water</td>
<td>30</td>
</tr>
<tr>
<td>Materials and Resources</td>
<td>30</td>
</tr>
<tr>
<td>Air</td>
<td>31</td>
</tr>
<tr>
<td>Transportation</td>
<td>32</td>
</tr>
<tr>
<td>Community Fabric</td>
<td>33</td>
</tr>
<tr>
<td>Conclusion</td>
<td>33</td>
</tr>
<tr>
<td>Appendix A</td>
<td>39</td>
</tr>
<tr>
<td>Appendix B</td>
<td>42</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY:

This paper is a case study of the redevelopment of the Naval Support Activity East Bank site located at 4400 Dauphine Street in the Bywater neighborhood of New Orleans, Louisiana. Since Hurricane Katrina in August 2005, the City of New Orleans and the federal government have been trying to find the highest and best use for this federally owned site, which has since been subject to BRAC legislation, or Base Re-Alignment and Closure. The City created the New Orleans Advisory Task Force (NOATF) in November 2011 to oversee the process and come up with a plan for the acquisition, redevelopment, and operation of the new facility. Their plan is to create an international disaster management, recovery, and resilience center that could serve as a hub for not only disaster preparedness for the region, country, or potentially the world, but also a place for innovation and evolution of the disaster management industry. With these goals in mind, the NOATF has taken on a massive engagement of public and private partners that should help with the complex financing mechanisms, the ownership and management of the property, and the sustainability goals expected to be reached upon completion.
INTRODUCTION:

Over the course of the recent past, the world has suffered through various natural and manmade disasters, including the tsunami in Japan and subsequent nuclear meltdown, the earthquakes in Haiti, and, more locally, hurricanes Katrina, Rita, et al. In dealing with the aftermath of such disasters, government has slowly come to realize that no matter how prepared we think we may be, we are essentially powerless to the whims of these disasters. In response to these phenomena, much has been made of attempting to create a more formal disaster management, recovery, and resilience industry and, in doing so, also create a formal infrastructure behind that effort, including legislation (HR-645), specific sites for the implementation of this movement (NSA East Bank), and an overall incubation of this new industry.

Because of the massive undertaking and coordination needed to achieve this goal, it is important to understand that which went into creating it. In the following pages, it will become clear how complicated that process is and how many factors go into getting a project like this off of the ground. Hopefully, this paper will serve as a kind of guidebook to those developers looking to do a similar project and to demonstrate how sustainability is woven into every aspect. It should demonstrate the kind of sites to be evaluated, the general cost analysis needed, the financial levers and like programs to be taken advantage of, and finally the sustainable features to be aimed for in developing an international disaster management, recovery, and resilience center.
HISTORY OF NSA EAST BANK:

The Naval Support Activity East Bank site is a 20-acre site 3 miles from downtown New Orleans located at 4400 Dauphine Street in the Bywater neighborhood of the city. The portion of the site located on the east bank side of the Mississippi River, including the three major buildings involved in the redevelopment built in 1919, was opened as a depot at the beginning of World War I for the United States Army Quartermaster Corps. It remained under the control of the Quartermaster Corps until 1931 when two of the three major structures were leased to the Port of New Orleans. The lease to the port was ended because of World War II and the site was returned to complete military use in 1939.

After WWII, the Quartermaster Corps ceded control of the site and it became the New Orleans Port of Embarkation. Over the next couple of decades, it became known as the New Orleans Army Terminal and the New Orleans Army Base remaining in military hands. In the 1960s, due to an increased Navy presence, the installation was transferred to the Navy and in 1966 became Naval Support Activity.

In recent years, multiple installations like the NSA East Bank have been closed following Base Realignment and Closure legislation, described below, and NSA East Bank has become one of those sites. Its potential is undeniable and the NOATF has been working diligently to realize this potential.
**BASE REALIGNMENT AND CLOSURE (BRAC):**

Base Realignment and closure is a process that officially started in 1988 with the first round of military installation closures. There have been multiple rounds of closures in 1988, 1991, 1993, 1995, and 2005. Naval Support Activity East Bank was officially part of the 2005 closures.

Military assets have been going through a process like BRAC since the end of World War II with the Federal Property and Administrative Services Act of 1949. The process was initiated to control the military cost of operations and maintenance after war or military mobilization. It is essentially a cost-saving measure to get rid of surplus or obsolete installations. The second iteration came with the Defense Base Realignment and Closure Act of 1990 after the Cold War. It continued with Project Concise in 1974 and due to political, financial, operation challenges, evolved into the current Base Realignment and Closure process.

The BRAC process is relatively simple. To begin the process, the Department of Defense does a complete review of its military presence in the U.S. with regard to its installations. After doing so, the Secretary of Defense sends its list of recommended realignments and closures to the independent BRAC commission composed of nine U.S Congressmen. The commission then hears from interested parties, makes site visits, evaluates each site, and even has the power to add sites to
the list. After this step, the commission forwards it to the President. At this stage, the list can only be approved as whole, not base-by-base. Once the President has approved the list, he forwards it to Congress at which time they have 45 days to approve the list in its entirety. Should they accept, the list is approved and those bases on the list are green lit for realignment and closure and can be redeveloped at that time along with recommendations. Naval Support Activity East Bank was part of the 2005 round of BRAC and thus the process began for its redevelopment.¹

SITE:

As stated, the site’s address is 4400 Dauphine Street in New Orleans. It is located in a very attractive location a couple of miles from downtown New Orleans on the Mississippi River and the Inter Harbor Navigation Canal. It is also situated next to a rail yard currently owned by the Public Belt Railroad providing the site with easy access to alternate transportation should the NOATF be able to secure access. It also is within a few miles of Interstate-10, allowing for it to be very close to water, highway, and rail access, which add value to the projected reuse plan. Should the redevelopment go according to plan, a helipad will also be added onto the site, creating access to it by air as well. It is this type of universal access that makes this site a very valuable one for the purposes of the NOATF’s plan for a disaster center.

The site is situated on a 20-acre tract of land with three main buildings each about 500,000sf and various ancillary structures. A list of the existing buildings on the site is below:

- 3 General Navy Warehouses
- Recreation Pavilion
- Cargo Ramp
- Electrical Substation
- Transformer House
- Parking Garage Access Ramp
- 4 Pedestrian Bridges
- 4 Sentry Houses/Gates
- Handball Court
• CITGO/NEX Gas Station
• Racquetball Facility
• Pass and Tag Building

It is within the proposed plan to repurpose and reuse the buildings to their highest and best use, but as is the case on large-scale projects such as this, some may be demolished.

CURRENT/PROPOSED OWNERSHIP:
The Naval Support Activity East Bank is currently owned and operated by the U.S. Navy (federal government). It is the plan of the NOATF to coordinate the ownership of the site for the City of New Orleans through an Economic Development Conveyance.

An Economic Development Conveyance is the method by which the federal government transfers property. In general, these conveyances are done with some kind of consideration from the entity receiving the property and are conveyed for some specific purpose under the watch of another government department. Per the latest negotiations, this EDC will be at no cost to the city, which means the U.S. Navy will transfer ownership to the City of New Orleans without any consideration on the City’s part. This will be the first time that the federal government has done so. After this is completed, and the City has control of the site, it is the NOATF’s vision that the new developer will lease it from the City of New Orleans on a long-term basis, hopefully for a term of 50-75 years.

**PROJECTED SOURCES AND USES:**

Throughout the NOATF’s research to figure out the best use for the site, they have projected various sources and uses regarding the funding, construction, and completion of the site. Below are the projections for the latest plan for a disaster management, recovery, and resilience center as per the recently released Request For Proposal (RFP). Please note that these are projections. No funds have been committed and no developer has been attached to the project as of yet.

---

Below is the latest cost analysis done on the site as per the RFP:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remediation</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Demolition/Site Prep</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Construction/Renovation($100/sf)</td>
<td>$150,000,000</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$13,700,000</td>
</tr>
<tr>
<td>Soft Cost(30% Hard Cost)</td>
<td>$52,110,000</td>
</tr>
<tr>
<td>Contingency(5% Total Cost)</td>
<td>$11,290,000</td>
</tr>
<tr>
<td>GC Fee(3% Total Cost)</td>
<td>$5,211,000</td>
</tr>
<tr>
<td>Total Projected Cost</td>
<td>$242,311,500</td>
</tr>
</tbody>
</table>

As you can see above, The NOATF anticipates the project to cost approximately $250 million. In its research to find all applicable subsidies, the task force has identified a few major contributions the project could qualify for and many other subordinate methods of financing. Below are some estimates regarding those opportunities.

<table>
<thead>
<tr>
<th>FINANCIAL MECHANISM</th>
<th>FUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR-645</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>HAZMIT</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>TRANSPORTATION</td>
<td>$20,500,000</td>
</tr>
<tr>
<td>FHTC</td>
<td>BLDG 602</td>
</tr>
<tr>
<td></td>
<td>$1,047,600</td>
</tr>
<tr>
<td></td>
<td>BLDG 603</td>
</tr>
<tr>
<td></td>
<td>$6,349,620</td>
</tr>
<tr>
<td>SHTC</td>
<td>BLDG 602</td>
</tr>
<tr>
<td></td>
<td>$2,025,000</td>
</tr>
<tr>
<td></td>
<td>BLDG 603</td>
</tr>
<tr>
<td></td>
<td>$12,273,750</td>
</tr>
<tr>
<td>NMTC</td>
<td>$11,455,500</td>
</tr>
<tr>
<td>BROWNFIELD FUNDS</td>
<td>$5,228,000</td>
</tr>
<tr>
<td>BOND FINANCING</td>
<td>$27,704,877</td>
</tr>
<tr>
<td></td>
<td>$206,584,347</td>
</tr>
<tr>
<td>DEVELOPER EQUITY</td>
<td>$35,727,153</td>
</tr>
</tbody>
</table>

---

POTENTIAL FINANCING MECHANISMS:

A project of this size and scope requires a great deal of equity to be completed. We, as developers, must try to get as much equity from outside sources, including the government, private investors, and development partners. The NOATF has identified multiple sources that will provide a great deal of funding to the project and could be taken advantage of by similar developments in the future. The biggest of which are HR-645, the Hazard Mitigation Grant, and Transportation Funds along with Federal and State Historic Tax Credits and many others.

Below is the list of the financing mechanisms and a brief description of each:

1. **HR-645: NATIONAL EMERGENCY CENTERS ESTABLISHMENT ACT**

HR-645 is a House Bill introduced in January 2009 to set up six emergency centers across the country that would serve to coordinate disaster operations, management, and recovery. According to the bill, the centers are to provide:

1) “Temporary housing, medical, and humanitarian assistance to individuals and families dislocated due to an emergency or major disaster”

2) “Centralized locations for the training of first responders and the coordination of preparedness, response, and recovery efforts”

---

Each site considered has to also meet a number of requirements that would make it ideal for such a use. The NSA site meets those requirements and has demonstrated that it could anchor its region.

The bill is currently at the committee stage with the House Committee on Armed Services, the House Committee on Homeland Security, and the House Committee on Transportation and Infrastructure. If the bill were enacted, it would provide $60 million in funds to the project, making a substantial dent in funding required.

2. **HAZARD MITIGATION GRANT PROGRAM (HMGP)**

The Hazard Mitigation Grant Program (HMGP) is an initiative in place that pools the efforts of local, state, and the federal governments to reduce damage in case of a disaster and to assist in the rebuilding effort after such a disaster. “Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. A key purpose of the HMGP is to ensure that the opportunity to take critical mitigation measures to protect life and property from future disasters is not lost during the recovery and reconstruction process following a disaster. Program grant funds available under Section 404 of the Stafford Act provide States with the incentive and capability to implement mitigation measures that previously may have been infeasible.”

---

As with most grant programs, moneys available through the program must be applied for and awarded based on many criteria. Five criteria are crucial. They include:

- Conforms with the State Hazard Mitigation Plan;
- Provides beneficial impact upon the designated disaster area;
- Conforms with environmental laws and regulations
- Solves a problem independently or constitutes a functional portion of a solution; and
- Is cost-effective.

The NSA East Bank fulfills all of these criteria and is eligible for HMGP funds. It is a tough process to go through including application, award, disbursement, appeal, review, etc., but done correctly, the program does provide a great deal of funding for those costs that allowable under it. For this project, allowable costs include replacement windows, doors, generators, shutters, temporary waste storage system, water well with pneumatic tank, hardened chiller enclosure, fire protection system water tank storage and pump, and secondary roof membrane & rated copings. All of these items fall within HMGP guidelines and could potentially provide up to $60 million in funding.

3. **TRANSPORTATION FUNDS**

The U.S. Department of Transportation plays a major part in many development projects that involve a great deal of infrastructure building and improvement. The Department issues grants for the express purpose of improving
infrastructure and enhancing the transportation uses of the public. They achieve this goal through various grant programs in seven separate areas, including surface transportation improvement, accessibility to disadvantaged populations, fixed guide way systems, rail, surface transportation planning, bike/pedestrian, marine transport, air transport, and research. These programs have led to such grants as the Transportation Investment Generating Economic Recovery, or TIGER, grants, and similar grants.

The NOATF has calculated a potential $20,500,000 in transportation funds for the project. If they were to qualify for all the potential funds, it would be a considerable aid to the future developer and also create another layer of support from the federal government.

4. **FEDERAL/STATE HISTORIC TAX CREDITS**

Historic Tax Credits are “an indirect federal subsidy used to finance rehabilitation of historic and older buildings. Eligible taxpayers receive the subsidy by claiming an investment tax credit on their federal [and state] income tax returns.”6 This tax credit, unlike other tax credits, is generally a dollar for dollar, meaning for every qualified dollar spent, the taxpayer receives a dollar of tax credit.

This tax credit can be used in two ways. First, for a 10% tax credit, a rehabilitated building must only have been in existence since 1936. Second, for a 20% tax credit, the National Park Service must register the structure as an historic

---

building. These are only preliminary guidelines, however. Under the latest HTC guidelines, five criteria need to be met to allow for it:

- The project must be a Qualified Rehabilitated Building (QRB)
- The building must be National Park Service-certified
- The overall building rehabilitation must be substantial
- The costs must be Qualified Rehabilitation Expenditures (QREs)
- The HTC must be properly reported

In this project’s case, it qualifies for both the state and federal tax credits and stands to make a great deal of equity from many of the structures on site, but mainly the three major buildings on the site: 601, 602, and 603.

5. **NEW MARKETS TAX CREDITS**

The New Markets Tax Credit is a program designed to encourage investment in low-income communities. Congress created the credit to spur economic development in areas like those in and around the New Orleans area. The New Market tax credit is different from the historic tax credits in that it is based on a percentage of an equity investment into a community through a Community Development Entity (CDE). Basically, a 39% tax credit is given on a contribution of equity to a CDE for the purpose of economic development that is meted out over the course of seven years. It is given as 5% over the first three years and 6% over the next four years. To qualify as a CDE, an organization must:

- Exist as an organization when in the application process
- Have a primary purpose of serving low-income communities
• Represent low income community through an advisory board

New Market Tax Credits are awarded through the U.S. Treasury's Community Development Financial Institution (CDFI)\(^7\).

The NSA site qualifies on its projected retail space, which will compose a huge portion of the buildable square footage, and its location in a qualified census tract.

6. **ENERGY TAX CREDITS**

Energy Tax Credits are tax credits that go to the owner of a project (or tenant, depending on the improvement) for improving the energy performance of a new or existing commercial building. It is usually based on a dollar amount per square foot tax credit. The most notable energy tax credit is the Energy Star credit, which covered buildings placed in service between 2006 and 2008. This tax credit covered approximately $1.80 per square foot. When a developer considers the possibilities of a per square foot credit on a project this large, the investment makes a great deal of sense should he be able to afford the upfront cost. These tax credits are realized on the back end of the project, so the necessary steps must be taken to fund the construction at the start of the project.

There is also the Tax Incentive Assistance Project (TIAP) the provides a federal tax credit for taking advantage of certain energy-related improvements, such as commercial building energy efficiency measures, Combined Heat and Power

---

(CHP), hybrid heavy duty commercial vehicles, onsite renewable sources, and fuel cells and micro turbines\(^8\).

The NOATF is researching many of these options and hopes to take advantage of the tax credits available through this effort. Many could be applied to the site, however, the options are limiting as a question of upfront cost versus payback and extended value.

7. **RESTORATION TAX ABATEMENT PROGRAM\(^9\)**

The Restoration Tax Abatement Program is a government program meant to incentivize the rehabilitation of structures in Downtown Development Districts, Economic Development Districts, and Historic Districts for a reduction in property taxes on said building. If an owner takes advantage of it, his property taxes will essentially be frozen for five years at the pre-renovation/improvement valuation. This can be a very lucrative incentive for owners, depending on the amount of improvement done. This tax abatement can usually be extended for five more years and also can be used along with the Federal Historic Tax Credit Program.

The NSA site is a good candidate for this program as it is such a huge project. The current tax burden on the site is considerable, but the level of improvement will obviously ratchet up the property tax for the owner. This is similar to a PILOT, or

---


Payment In Lieu Of Taxes, program in its effect but it incentivizes property renovation/improvement specifically.

8. **INDUSTRIAL DEVELOPMENT BONDS**

Industrial Development Bonds are a mechanism used by governments to loan/fund certain projects that fit into the industrial development sector. In this case, the City of New Orleans could issue bonds for sale to come up with equity to either loan the owner/developer of the NSA site. This process is common for economic development projects to jumpstart the development of certain desirable projects, such as the NSA “East Bank.”

9. **PROPERTY ASSESSMENT CLEAN ENERGY BONDS**

Property Assessment Clean Energy, or PACE, bonds are a type of bond financing by which a municipality sells bonds to provide developers funding to retrofit existing structures with green retrofits for clean energy. These funds are provided by loan and paid back through a property tax bill adjustment in the future.

The NSA site is a perfect example of a site needing this type of financing. Buildings 601, 602, and 603 are prime examples of structures that could be retrofitted under the redevelopment plan to preserve the structures and add to their inherent sustainability.
10. ENTERPRISE ZONE

The Louisiana Enterprise Zone program is a very dynamic program. It is an employment-base program that offers tax credits, tax rebates, and investment tax credits. As it stands now, a $2500 tax credit is offered with every certified new job along with a sales tax rebate or use tax rebate on certified capital expenditures to go along with it. Another way to take advantage is the investment tax credit, which offers a 1.5% tax credit on qualified expenditures. These tax incentives can be taken advantage of by those developments that create a certain number of jobs within a certain time frame. ¹⁰

The NSA East Bank project is projected to create 1700 temporary construction jobs and as many as 2000 permanent jobs. This could create a substantial credit for the project.

The NOATF has every intention to create a great number of jobs that could be filled by those targeted by the Enterprise Zone program and, in the same vein, is dedicated to giving home grown businesses every opportunity to take part in the project.

11. LA QUALITY JOBS PROGRAM

“Louisiana’s Quality Jobs Program provides an annual rebate for up to 10-years of 5% of gross annual payroll for minimum hourly wage rates of $9.01, or 6% of gross annual payroll for minimum hourly wage rates of $11.59. The employer must offer a basic health plan (basic hospital care and basic physician care) within 90 days of qualifying for the program. For employees whose wages are less than $50,000 per year, the employer must pay at least 85% of the total premium for health insurance coverage for full-time employees, or at least 50% of the total premium for health insurance coverage for full-time employees and their dependents. For employees whose wages are equal to or greater than $50,000 per year, the amount of the employer decreases from contribution from 85% to 70% for those employees. In addition, the program also provides a rebate of state sales/use tax (4%) on materials for building materials, machinery and equipment purchased during the construction period and used exclusively on site.”

This program specifically targets the health and safety of employees in the state of Louisiana. It is hoped that all employees have health insurance in one form or another and keeps employers accountable to their employees with the guidelines contained herein.

---

POTENTIAL TENANTS/FUNDING/INCENTIVES:

The NOATF set its sight on this project with certain goals for not only itself, but also goals for its tenants. The overall outlook for the project is an International Disaster Management, Recovery, and Resilience Center. To achieve this goal, the NOATF hopes to lease the space to for-profit and non-profit companies with a focus on disaster-related products and services, a potential grocery store, and city, state, and federal tenants. The idea here is to foster the concepts and goals of the facility within a framework that would allow the collaboration of various entities with different roles in disaster related issues. To emphasize the attractiveness of such a facility to all possible tenants, the NOATF has also identified multiple sources of funding for lessees and many possible incentives:

1. SBA LOANS
2. EDA & LED REVOLVING LOAN FUND
3. LA QUALITY JOBS PROGRAM
4. LOUISIANA FASTSTART
5. DIGITAL MEDIA INCENTIVE
6. ENTERPRISE ZONE
7. LED SMALL BUSINESS LOAN PROGRAM
8. ON-THE-JOB TRAINING INCENTIVES
9. INCUMBENT WORKER TRAINING
10. CUSTOMIZED TRAINING
11. CITY OF NEW ORLEANS FRESH FOOD RETAILER
12. TIER-1 RE-ENTRY STATUS AFTER EVACUATION
SUSTAINABILITY GOALS:

GREEN BUILDING INITIATIVES:

The NOATF has been very proactive in outlining and planning for the most sustainable development possible by looking to the various green standards that exist and apply to the NSA East Bank site. In this case, they have adhered to three programs: LEED, SPiRiT, and GreeNOLA.

LEED:

Leadership in Energy and Environmental Design, or LEED, is a framework developed by the United States Green Building Council (USGBC) under which different projects are rated on a points system to achieve various certifications (LEED, silver, gold, and platinum) with regard to their green building standards and performance goals. LEED is used all over the world and promotes a fully integrated approach to green building that focuses on design, construction, and operation. From the start of the redevelopment plan of the NSA East Bank facility, the NOATF has had very lofty goals with regard to sustainability and LEED certification. The NOATF hopes with the measures outlined herein to achieve at least LEED Gold status, but hopefully the facility will achieve LEED Platinum certification. According to the latest LEED scorecard projected, the NOATF hopes to obtain LEED Platinum Certification.
SPIRIT\textsuperscript{12}:

SPIRiT, which is derived from Sustainable Project Rating Tool, is a rating system begun by the U.S. Army Corps of Engineers based on the LEED 2.0 rating system. It is strikingly similar to LEED, but the Corps tailored it to military needs and performance. SPIRiT is essentially military LEED certification.

SPIRiT will provide those principles as they apply to the site as a former military installation, but the redevelopment will most likely focus primarily on LEED principles and those of the GreeNOLA initiative.

GreeNOLA\textsuperscript{13}:

The most interesting of the three programs the NOATF has decided to take on is the GreeNOLA program. GreeNOLA is a program finalized in 2008 as a kind of regional specific type of green building standard. The program consists of a three step process that focuses on all types of buildings, but seeks to find the most sustainable way to develop these buildings for New Orleans and the surrounding region, taking into account the state the area is in after being devastated by Hurricane Katrina and the lessons we have learned since then.

The three steps to the process go beyond what LEED does in that it is not just a point system. It has the same high-minded goals when it comes to smart growth.


and green building, but it has a very specific goal in each step and it strives to accomplish something within each step.

Step One consists of being more active with existing environmental programs and holding ourselves more accountable when it comes to those programs. Step One is the first step towards sustainable development by reminding those involved in future development of the goals previously outlined that they may or may not have been involved with. It is important because the City of New Orleans needs to establish the baseline before moving forward with any new green goals.

Step Two is a more administrative vehicle. This step is to be implemented by various government entities to streamline the processes to allow for more efficient decision-making and implementation of green standards and practices across the region affected by not only Hurricane Katrina, but also the inefficiency and less than exemplary green building initiative that has taken place throughout the Gulf South.

Step Three is where the rubber hits the road with GreeNOLA as a green building standard. It is the process by which the city outlines various specific goals in six areas to strive for. Those areas include:

1. Green Buildings and Energy Efficiency
2. Alternative Energy
3. Waste Reduction, Reuse, and Recycling
4. Transportation and Clean Fuels
5. Environmental Outreach and Justice
6. Flood Risk Reduction
These goals are also to be on a specific timeline, another wrinkle to GreeNOLA not present in LEED certification. As the development entity identifies and attempts to implement their sustainability goals, they must do so on the short term (1 year), medium term (3 years), or long term (10 years). This adds a layer of accountability not found in most green building standards. It is the inclusion of extra measures like these that make GreeNOLA and programs like even more dedicated to a region’s smart growth and, in New Orleans’s case, smart recovery and regrowth.

When it comes to sustainable development, integrated, comprehensive approaches are the status quo. Developers look to find sustainable themes throughout the process from design, to financing, all the way through operation. Using three programs like LEED, SPiRiT, and GreeNOLA demonstrate the City of New Orleans's true commitment to a better, more sustainable built environment and its dedication to best practices.

**ON-SITE MEASURES:**

According to the NSA’s Sustainable Redevelopment Initiatives report\(^\text{14}\), when it comes to the actual site itself, the NOATF has identified eight specific areas it hopes to affect to achieve the standards it has set for itself. These areas include:

1. **LAND**
2. **BUILT ENVIRONMENT**
3. **ENERGY**

4. WATER

5. MATERIALS AND RESOURCES

6. AIR

7. TRANSPORTATION

8. COMMUNITY FABRIC

**LAND:**

This section of the onsite measures basically refers to the land itself and the goal of minimizing any effects that could be caused throughout demolition and construction. It focuses specifically on maintaining a clean site and landscaping the site to prevent de-naturalization, heat islands, and site contamination. These measures should provide a greener site and less cost related to landscaping and site decontamination itself. It should also preserve those parts of the site that are already landscaped or green space and create a more low impact development.

**BUILT ENVIRONMENT:**

The Built Environment on the site consists of mainly buildings 601, 602, and 603. These massive structures are to remain and be the centerpiece of the NSA East Bank's redevelopment. This portion is designed to improve the buildings onsite with many green retrofits and develop the site with suitable materials and resources that further the sustainability goals of the project. These include recycled materials, local materials, lower embodied energy materials, etc. The new developer should strive to use the greenest materials and resources available from hopefully more local
sources. Measures such as these contribute a great deal to the redevelopment of a large-scale site due to the volume of materials used. Every small step taken’s effect grows exponentially as scale increases for the project.

**ENERGY:**

Energy is probably the most innovative aspect of this project with regard to upgrades and redevelopment. Energy is the biggest draw for buildings in general and users as tenants. In the case of this site, the hope is to attain a net zero development that would further the mission of green developers everywhere of demonstrating that net zero is not only an attainable goal, but also a responsibility of those working toward a greener industry.

The goals set forth in the plan are very ambitious. They include:

- Lighting Controls
- Onsite Cogeneration Facilities
- Interior Upgrades
- Stricter HVAC Operation Standards
- Energy Usage Commissioning
- System Upgrades (HVAC, Chillers, Etc.)
- Direct Source Renewable Energy Systems (Solar, Geothermal, Hydroelectric, Wind)

While the items listed above encompass the main energy contributions on the site, the NOATF is still researching various other methods to achieve its goal of a Net Zero Energy Building (NZEB).
Net Zero Energy Building is a term used to describe a building that "produces as much energy as it uses over the course of a year." According to the National Institute of Building Sciences, this can be achieved in four areas:

1. Net Zero Site Energy
2. Net Zero Source Energy
3. Net Zero Energy Costs

Net Zero Site Energy is a building specific quantification used that basically is a one for one scenario. If a building uses “one unit” of energy, it must produce another to match.

Net Zero Source Energy concerns itself with energy distribution and production usage. Energy is used to produce energy shockingly, and the energy cost of that production and distribution is accounted for here. It is a more difficult metric to define, but it does bear study.

Net Zero Energy Cost is a metric used to assess cost of energy usage. In the case of a NZEB, the annual utility bill should be $0. This can be a net bill obviously.

Finally, Net Zero Energy Emissions concerns the measure of the emissions emitted from energy usage. In an NZEB, these emissions can either be non-existent by the use of cleaner energy or offset by an onsite renewable energy source.

The notion of NZEBs is still relatively new regarding building science. The goal of this site is to be an example of a Net Zero Energy Building for two reasons.

---

First, an NZEB would provide that infrastructure that would allow the building to continue operation during a disaster event. Second, the site would serve as a shining example to the industry and the international community.

**WATER:**

When it comes to water, the NSA East Bank is taking a macro look at water usage across the site. According to their plan, they would assess the water usage onsite and take steps toward decreasing usage and increasing efficiency of that usage. To accomplish this, the NOATF is investigating various systems, including reclaimed water systems, rooftop rainwater harvesting systems, and very high water efficient systems, such as conservation fixtures, faucet aerators, cooling towers, dishwashers, etc.

The evolution of green water systems in the state of Louisiana is a little behind on its adoption and implementation, but the NSA site is being vetted for various landscape irrigation systems, storm water management systems, and grey water/water reuse systems.

These are serious opportunities on this site because of its efficiency aspects, but also for the water independence it could provide during a disaster event.

**MATERIALS & RESOURCES:**

In the area of materials and resources, the NOATF hopes to implement a plan on three levels: demolition, materials, and operation.
They hope to use methods of demolition/deconstruction that would allow for a great deal of recyclable materials, bring down waste disposal costs, and create opportunities for various other methods of disposal and reuse.

Materials for the project will be scrutinized heavily to ensure that they are the most environmentally sound, made by environmentally conscious manufacturers, and add to the overall sustainable mindset of the entire project. The use of these materials is becoming a bigger part of green building. As manufacturers are slowly becoming more educated about the effects of their products on the environment and the buildings they help to develop, the market for such products and practices is becoming more commonplace.

The last part of this arena is operation. While the demolition and construction of this large site is being completed, the harmful effects of that process, including air quality, waste, etc., should be at a minimum. This will allow for another level of protection and environmentally conscious execution of the project.

**AIR:**

Air quality is a big part of construction and development nowadays with a focus on air quality within buildings to cater to the tenants. The NOATF's plan in this regard has two aspects: air quality during construction and air quality of the building after the project is complete.

Air quality measures taken during construction include assessing particulate levels in the air, contamination levels in the air around the site, and controlling those during the entire process.
The building itself will have the benefit of high efficiency HVAC, opportunities for displacement ventilation, cross ventilation and natural ventilation, as well as low volatile organic compound (VOC) materials throughout the buildings.

Such deliberate measures ensure the air quality of the NSA site will be within the ideal for those working to construct the site and the eventual tenants.

TRANSPORTATION:

Transportation in this respect has more to do with access really. Under their latest plan, the NOATF hopes to really focus on re-integrating the NSA site into the neighborhood and making it a community asset that is part of the fabric of the Bywater, not a fortressed behemoth, looming over Poland Avenue.

To accomplish this goal is fairly easy if you consider the steps needed for the previous initiatives. To do so, the NOATF would require that the developer focus on public transportation as an asset and use its location as a transportation hub.

As far as re-integration is concerned, the site, being a former military installation, is virtually cut off from the public. In the new plan, new pedestrian and bike paths would traverse the site, as well as provide locations for bike parking that should encourage less automotive traffic.

The final part of the transportation plan relates to parking. This part of the plan includes reducing parking onsite and the parking lots required. Under current zoning, there are certain parking requirements that are met by the expansive surface parking lots and the structured parking located in building 602. The redevelopment is aiming for less surface parking and the installation of permeable
pavement into the overall plan to create a more low impact development. This should allow for the development and use of more green space, which the site already has a great deal of, but which should be cultivated to its highest potential.

COMMUNITY FABRIC:

This aspect of the plan is a more high-minded goal of the redevelopment of the NSA site. This includes the re-integration mentioned above for the purpose of creating better access across the site as well as better access for the neighbors to access the Mississippi Riverfront. There is also a push to have the green space potentially used as a community event location. Given the wide swaths of riverfront property located here, there is certainly a great deal of opportunities for a festival-rich community like New Orleans to take advantage of.

The other part of this is the recruiting of tenants on the site and the cooperation of similar and complementary businesses. The overall plan references sustainability as a tenet and having the backing of the neighborhood and local business is imperative as the NOATF tries to create this center and incubate this disaster industry.

CONCLUSION:

As we have seen in the recent past, green building has become more and more common in the real estate development world. We know from various studies done over the history of green building in particular that buildings are a major source of energy use and other environmental effects. As we have slowly become
cognizant of this trend, developers, architects, contractors, and others in the real estate field have put a lot of weight into the green building movement and into cultivating the growth and technology involved in sustainable real estate development. This has also become a priority of government evidenced by the growing checks in the building code, evolution of zoning ordinances, and the higher incidence of public-private partnerships happening across the nation. The Naval Support Activity East Bank follows suit in this trend. If we consider the ways in which a development project can achieve sustainability, the NSA project has it all.

First, most people’s definition of sustainability is limited purely to the physical building itself. In this case, the NSA project is an adaptive reuse project that is making use of an obsolete site to re-imagine and redesign it to create a viable project. This demonstrates a less appreciated practice of sustainability in in-fill development. The NOATF has made it its mission to follow the leading sustainable design initiatives and principles to achieve those physical sustainability goals in an attempt to create a net zero facility, or, at the very least, LEED certification. By doing so, the NOATF also seeks to attain a level of operational efficiency that could demonstrate the value of this plan and its successful execution. This effort alone would probably put the NSA project in the running for various types of recognition for green building, setting an example for future developments, etc., but they did not stop there.

Financially, the NOATF is doing research on every type of subsidy, incentive, assistance, etc. that the project might qualify for to make it more feasible. As demonstrated above, the NOATF is also making it its mission to pull every financial
lever in the book to ensure that this project not only procures the funding it requires, but also makes efficient use of the programs that it can take advantage of. If we have learned anything from government spending/allocation, it is that efficiency with and smart use of federal dollars can sometimes be an issue. In the case of the NSA site, the NOATF hopes to create a groundbreaking project that is not only large in scale, but also large in efficiency and purpose.

The final part of this project’s sustainability mission is the makeup of everyone involved and the need for everyone’s commitment to the overall plan. In this case, three major entities exist: the government, the developer, and the community at large.

First, the government has decided to transfer ownership of the site via economic conveyance to the city at no cost (a first). Second, as demonstrated by the sources and uses above, the developer (private consideration) would be responsible for procuring millions of dollars to contribute to the project. This requirement of the developer does limit the pool of potential partners, but it does ensure that that partner will be in 100%. Third, the community would have a role in the entire development from construction to operation to long-term viability and success. Finally, the plan for the NSA site is to provide a space for the incubation of an industry whose sole purpose is essentially sustainability. Using this site for a disaster management facility not only fills the need of preparedness and survival in disaster events, but also allows for the growth and evolution of that industry that could be essential for the sustainability of a region, much like it could have been and could be in post-Katrina New Orleans.
As the need for more conscientious development grows across the globe, it is important for those of us that are in the real estate development industry to realize that sustainable development is of paramount importance moving forward. It is also important to realize that sustainability means a great deal more than solely green building. A project must be sustainable in every respect physically, financially, operationally, and as an entity all its own. It is for these reasons that the Naval Support Activity East Bank is such a groundbreaking project. It has brought into the process a level of understanding into the realm of sustainability and could be a leading example of true sustainability moving forward.
Additional Sources


URS. *Reuse/Redevelopment Plan for Naval Support Activity New Orleans East Bank*. 

APPENDIX A

New Orleans Advisory Task Force
My MSRED Research Project is a very interesting one that puts me in a very unique position to see how the local New Orleans government, a private developer, and various other players combine to oversee and execute the redevelopment of the Naval Support Activity “East Bank” into an International Disaster Management, Recovery, and Resilience Center.

For this project, the Naval Support Activity New Orleans Advisory Task Force will be my client. New Orleans Mayor Mitch Landrieu created the NSANOATF specifically for this project on November 29th, 2011 through Executive Order MJL 11-04. In this order, the City as a municipal corporation created the NSA New Orleans Advisory Task Force and the NSA New Orleans Advisory Task Force Advisory Committee.

According to the NSA’s NOATF website, the goal is to create a comprehensive plan for the NSA “East Bank” site and execute this plan to not only create this international disaster management, recovery, and resilience center, but also redevelop the site into a community asset. In doing so, they hope to reach various goals including enhancing the local economy and tax revenues, replace/increase civilian jobs and payroll, preserve and protect local character, develop according to the United New Orleans Plan, foster community support with open planning process, respond to the community needs, and incorporate economic feasibility, financial feasibility, and appropriate environmental standards throughout the project.

The NOATF delegation consists of nine (9) members of various backgrounds that should assist in reaching the goals outlined above. They are: 1) Deputy Mayor for Facilities, Infrastructure, and Community, 2) Chairman, New Orleans Regional Planning Commission, 3) Chairman, Board of Commissioners of the Port of New Orleans, 4) Chancellor, Xavier University, 5) President, Bywater Neighborhood Association, 6) President, New Orleans Industrial Development Board, Inc., 7) Chairman of the Board, New Orleans Chamber of Commerce, 8) Chairman of the Board, New Orleans Business Alliance, and 9) Team Lead, Strong Cities, Strong Communities.

As demonstrated by their various titles, the delegation is comprised of those individuals with various stakes in the project due to its site, use, location, and future development. This project also could provide the opportunity to see a developer, government, and assorted other players work together from the outset to build an impactful project.

This client is one of the more unique because the client itself was created for the project. I think the interesting part of this project is that it is, by their description, a “real-time” exercise. It will be invaluable experience for a young developer but will also be an opportunity to see a public-private partnership work towards sustainability while taking all of the various factors mentioned above into account and build a groundbreaking, innovative disaster facility.
ARTICLE BIBLIOGRAPHY:

5. “Naval Support Activity Notice Of Interest” Nola.gov. www.nola.gov/.../Instructions%20for%20Notice%20of%20Interest.as...
APPENDIX B

Market Analysis Strategy for NSA East Bank
Naval Support Activity East Bank Market Analysis Strategy

For my Directed Research Topic, I chose the redevelopment of the Naval Support Activity East Bank property located at 4400 Dauphine Street in the Bywater neighborhood of New Orleans, Louisiana. This is a 20-acre site located about 3 miles from downtown New Orleans that was part of the latest round of Base Re-Alignment and Closures in 2005 under BRAC legislation that has been closing obsolete or underutilized military sites since 1988. It has been used for many different purposes but now sits vacant under federal control just waiting for the right redevelopment plan.

As it stands currently, the New Orleans Advisory Task Force (NOATF) in cooperation with the City of New Orleans has been created to oversee this redevelopment and hopes to create an International Disaster Management, Recovery, and Resilience Center. Throughout the following paper, I hope to outline and explain the market analysis requirements and strategies to fully vet these ideas and come to some interesting conclusions regarding the City’s plan and execution of their vision.

In terms of scope, many questions arise as to which markets to study and why. For this site, it is important to be aware that it is an infill site in a seriously underserved market which makes it necessary to research residential, commercial, retail, and industrial market trends. A site this large, of this scope, and in this location could warrant any of these uses, and neglecting one for another would be a serious mistake on the NOATF’s part. As we have seen, there are basically four steps for analyzing a market: estimating demand, quantifying supply, assessing a site’s ability to compete, and determining the optimal programming for the site given those parameters. This site is an interesting one for various reasons and hopefully the NOATF has its ducks in a row when they complete their analysis as such.
I think that the first step here is to evaluate the regional economy in its entirety. New Orleans is a very complicated market in its current state. It has seen many fluctuations with regard to job market, income and spending capacity of its residents, and overall population growth. Since Hurricane Katrina, New Orleans has become a very complex regional market from the repopulation to new population perspective, not to mention the infusion of new jobs and new industries along with the re-growth of old ones. This unusual environment leads to a more specific regional market analysis that would most likely be best served by a very unique market analysis plan tailored to the general framework set up in a normal market. To be certain, the strategy here would be to do the normal market analysis with regard to demographic, household, and job growth research to gather data then carve out the necessary conclusions for such a complex environment then apply these to each specific market’s analysis.

In the case of the residential market, a market analyst would generally try to find data about housing market demand including job growth, population and household growth, demographic trends, age of householders, ownership trends, and household sizes and incomes. He would then have to figure out supply by checking census data for the area. Once he had done so, he could assess the competitive pedigree of this site with this use as it applies to programming. An analyst should be able to find such information through various means including REIS, Hanley Wood, MFS, Delta Associates, RealData, Census Statistics, MLS and other sales tracking sites, etc. For this site, given its location in a predominately residential area, may actually not prove optimal for residential, but it is critical to at least consider its possibility.

This brings us to the meat of what would, on first blush, be ideal programming for the site, industrial, office, and retail markets.
Industrial market drivers are very unique to that use. Demand is primarily driven by job growth and the growth of the industrial sector as a whole in the region, bringing in such factors as absorption, occupancy, and comparable rents. This site has the infrastructure to accommodate such a use due to the fact that it has access to rail, port, and highway. In this case, it would be best to research the viability of the site as a distribution center, shipping hub, or other industrial use. While it may not be a fit for heavy industrial or distribution, light manufacturing, warehouse, flex warehouse, showroom/warehouse, and R&D certainly could find a place on such a site given the space, transportation access, and existing infrastructure. Unfortunately, the other drivers of industrial markets do not necessarily coincide with the site location including freight activity, industry shifts, obsolete space, and land use changes. Good data on the job market could be sourced to a third party and the rest should be studied through CoStar, REIS, brokers, the Chamber of Commerce, utilities, and economic development offices to determine supply. Given the state the New Orleans market is in at the moment, aside from some warehouse and R&D, the NSA site is probably better suited to office and retail.

The office market could be a substantial gain in this market as it relates here. Given the current plans for redevelopment on the site as a disaster industry center that achieves various performance standards, office could be a big part of the tenancy. Office markets are driven by job growth demand-wise and, while there may not be any huge job growth that would warrant such a big development, the fact that the city is trying to redevelop it could allow for the city itself to be a tenant because of its institutional status, which is a big office driver. This space would also be Class-A space given its new renovation. This Class-A status also brings with it a better class of client with specific needs in mind. Other factors for office include access/commute times, clustering, proximity to executive housing/technical labor/major institutions, visibility/image, quality environment, etc. Most of these are
fulfilled because of the site’s location within the urban fabric. Also, because the City seeks to build a disaster industry business hub, probably the first of its kind, it can attract other office users that run businesses that are disaster related. The data for this sector would have to come from similar sources to industrial, but the model still fits.

Retail fits into this puzzle in a similar way that office does. For retail, we would first have to determine demand. In this case, one would have to look at consumers and retailers specifically in reference to trade area and competition, driving times, and perceived and real barriers. For this market, the best sources are GIS, ESRI Retail Goods and Services Expenditures, and ESRI Marketplace Profile. To be thorough, the tables to be generated should include expenditure potential of the area, potential capture rate, employee spending, visitor spending, total spending, and the supportable square feet by all these factors. All of this information should be studied to also figure out which retail sectors would fit best. I think in the case of the NSA site that neighborhood services would most likely fit best. There is a substantial need for a grocery store in the area and other basic services could potentially coordinate at the site.

After coordinating this information, the analysis should bear out certain conclusions as applied to any market. The interesting part about this site is its history and redevelopment as a huge former military installation to a re-integrated community asset. This requires a great deal of specific study and it also requires a special format. This site is a very unique example because it is striving to create a new industry in disaster management, recovery, and resiliency, so some of the normal guidelines for market analysis would have to be altered. However, the name of the game is still defining demand, assessing supply, finding site’s ability to compete, and defining optimal programming. Finding the optimal programming is the desired result and, through analyzing each market, we can find certain conclusions to that end. For this site, office, retail, and industrial probably serve best, but
with the uniqueness of the city's desired goals, some cursory information provided by the market analysis may not necessarily fit perfectly. That does not, however, preclude the site from this type of analysis altogether. It still should guide the redevelopment and create the proper framework to begin to define both the market and the programming. This helps on all ends to create a sustainable project physically, financially, and operationally.

This exercise allows a developer, or potential developer, to see a project from all angles. Market research is an integral part of development because it helps define a project’s potential regarding use and profitability. Going through each market should provide a list of potential programs that would serve not only the site, but also the community, or market, as a whole. After considering each, I think that the NOATF’s plan is actually spot on with regard to a potential program of government and private office, some industrial, and some retail. It would be interesting to see exactly what “disaster-related” companies are out there and whether it would make sense/be feasible for them to locate here. Hopefully, the NOATF’s execution of this plan and its ability to attract tenants is a foregone conclusion once the redevelopment gets underway.

SOME MAPS TO BEGIN MARKET ASSESSMENT:

Population Density:

![Population Density Map](image)

Median Household Income:

![Median Household Income Map](image)
Unemployment: