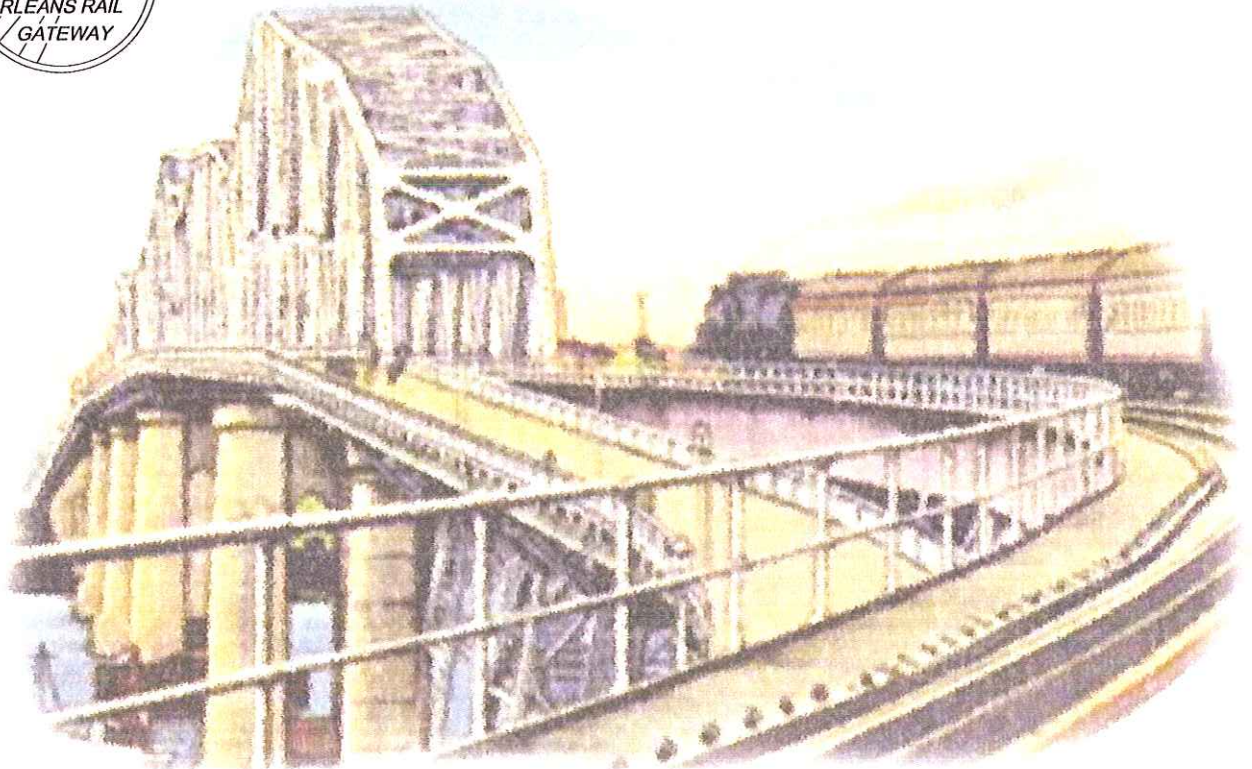


NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS

Prepared for

*The Regional Planning Commission
The Louisiana Department of Transportation and Development
And The Association of American Railroads*

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In association with
Wilbur Smith Associates *and* Parsons Transportation Group



NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS

Public/Private Partnership



Participating Partners



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<u>SECTION 9 – FLOODING CAUSED BY HURRICANE KATRINA</u>	None

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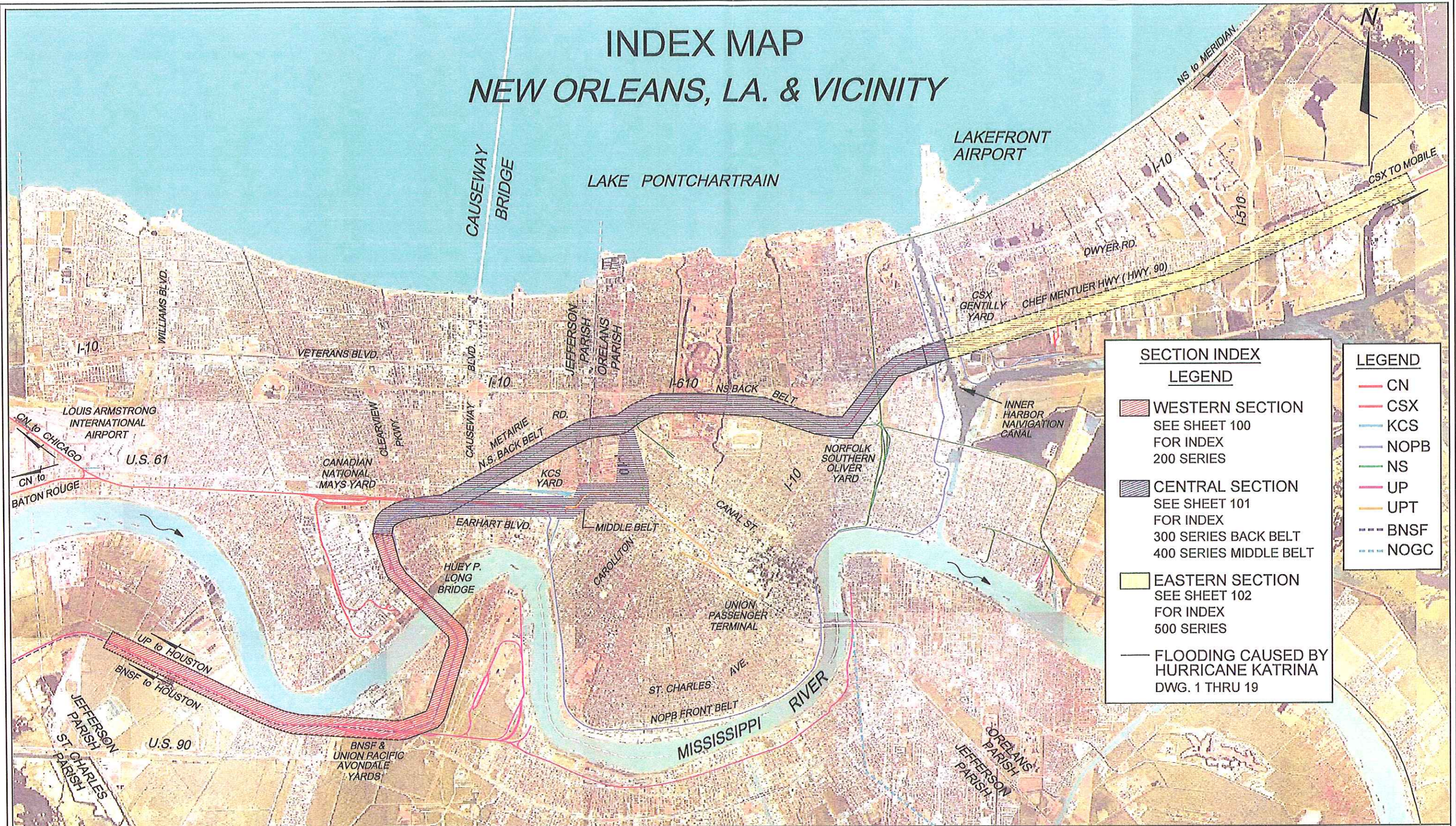
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NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Map of New Orleans Rail Gateway

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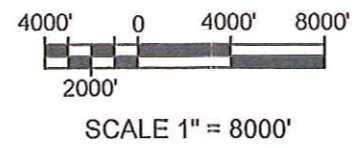
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**NEW ORLEANS
RAIL GATEWAY**



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SHEET M1

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Executive Summary

PROBLEM STATEMENT

In order to support the continuing growth of the Nation's economy, significant investments in transportation will be critical. The American Association of State Highway and Transportation Officials (AASHTO) forecast a doubling of truck traffic by the year 2035 and a rail - freight increase of 57 percent by 2020. Freight railroads are an important part of our state and local economies. In 2005, the railroad industry handled more than 119 million tons of freight and paid their Louisiana employees more than \$239 million.

The New Orleans Rail Gateway within Jefferson and Orleans Parishes needs to be upgraded to more efficiently handle today's traffic volumes and to support future economic growth. This rail network stretches from Avondale in the west and via the Huey P. Long Bridge through the City of New Orleans. It is the fourth largest rail gateway in the country and is a key link in the national transportation system. The Gateway provides a vital link in the east/west distribution of freight rail traffic and allows access to Mexico and north into Canada. It services the Port of South Louisiana and Port of New Orleans, which are the nation's No. 1 and No. 5 ports, respectively. The Gateway is serviced by six of the seven national Class I railroads¹.

The current Rail Gateway evolved to its present state through a series of mergers and asset improvements, most notably the Huey P. Long Bridge in 1935 and the New Orleans Union Passenger Terminal in 1954. In addition to the bridge and the station building, improvements included extensive installation of trackage and signaling. In the intervening years, rail traffic patterns have changed and community development has evolved to the point where the outdated design and insufficient capacity of the Gateway routinely delays rail and highway traffic. In addition, the existing rail network is unable to accommodate much additional traffic. This congestion, in addition to effecting efficiency, has a negative impact on the community as measured in delays at crossings, and decreased regional competitiveness.

This Feasibility Analysis discusses a series of improvements that will result in significant improvements for both the community and the railroads. These improvements include an improved quality of life from reduced road congestion, improved safety from enhanced emergency access/evacuations, construction jobs and improved air quality. Railroads stand to benefit from more efficient operations and added capacity for future growth.

¹ *The Surface Transportation Board identifies Class I railroads as those generating operating revenues of \$319.3 million or more.*

CURRENT STATUS

There have been several studies of the Gateway over the years. Most recently, the New Orleans Rail Gateway Study was completed in 2002 and a follow-up study of the Gateway by the Association of American Railroads (AAR) was completed in 2004. These two studies identified a number of interrelated “choke points” located along the Gateway:

- UP/BNSF Avondale Rail Yard – lack of track capacity and centralized traffic control
- West Bridge Junction – outdated switch controls and track capacity
- Huey P. Long Bridge – maintenance requirements necessitates single track operation
- East Bridge Junction – lack of track capacity and outdated switch and controls
- Back Belt/Marconi Drive – lack of track capacity
- Almonaster Rail Bridge – frequent maintenance causes delays
- CSX Gentilly Yard – lack of track capacity

The New Orleans Rail Gateway Study (2002) proposed physical and operational improvements to the rail network. Because there was not a consensus among the study participants as to what should be done, none of the studies recommendations have been implemented. However, the 2002 study prompted improved communication between the Class I railroads. Now there are scheduled shift change conference calls three times per day for coordination and improved operations.

In 2006 the Association of American Railroads (AAR), a trade association representing the major railroads servicing the metro New Orleans area, conducted simulation modeling of the New Orleans Rail Gateway. This modeling considered current and future rail operations with and without the track and signal improvements being proposed in this report.

Three separate Rail Traffic Controller (RTC) simulations were performed to determine the likely operating results from implementing various improvement projects across the Gateway, stretching from the Avondale Yard on the west to the Gentilly Yard on the east. The proposed improvements were developed by the railroads and represented their best current proposals for reducing delays at the “choke point” locations and improving train operations across the network and between railroads.

Results of the simulations were reviewed by the rail carriers in March 2007, and found to be valid representations of rail traffic movements assuming the improvements were to be provided. The simulations were performed to represent rail movements over a five-day period, which allows each simulation to include variations in performance that occur from day to day. The simulations were based on actual current train operations of each railroad.

The simulations found that significant improvements in operating performance would result from making improvements to either the Back Belt or the Front Belt, but that a greater level of improvement would result from implementation of a new Middle Belt route². For further simulation data see *Section 3* of this report.

² For a description of the “Middle Belt” route see page no. ES-8.

The railroads have established collaborative procedures to improve inter-railroad communications but this alone won't address the congestion being experienced in the Gateway. After conducting simulation modeling of the rail network the participating railroads have determined that the terminal infrastructure needs upgrading.

Improvements to the Rail Gateway will benefit not only the east-west throughput of freight traffic but will provide for improved freight flow across the East Bridge Junction (EBJ) benefiting the Port of New Orleans.

FEASIBILITY ANALYSIS

Six Class I railroads provide freight rail service to the New Orleans Rail Gateway. The BNSF and Union Pacific (UP) provide service from the west; the Norfolk Southern (NS) and CSX Transportation (CSX) provide service from the east with the Canadian National (CN) and Kansas City Southern (KCS) providing service from the north. Service to the Port of New Orleans is provided by the New Orleans Public Belt Railroad (NOPB). Passenger rail through the New Orleans Rail Gateway is provided by Amtrak. Amtrak operates three trains to New Orleans along Gateway freight lines; the *Crescent*, the *City of New Orleans* and the *Sunset Limited*. The New Orleans Union Passenger Terminal operates the Union Passenger Terminal building and approximately three miles of track along the approach to the Terminal. The New Orleans Union Passenger Terminal is a governmental entity of the City of New Orleans.

The New Orleans Rail Gateway Infrastructure Plan was developed on behalf of the Regional Planning Commission (RPC) for Jefferson, Orleans, Plaquemines, St. Bernard and St. Tammany Parishes, the Louisiana Department of Transportation and Development (DOTD), the New Orleans Public Belt Railroad (NOPB), and the six Class I railroads. This plan identified a range of improvements to alleviate rail congestion, increase rail capacity, upgrade signal and communication equipment, improve passenger service, and eliminate highway conflicts. The RPC, Louisiana DOTD, and the participating railroads have realized that further effort will be required to accomplish the physical and operational improvements to the Gateway and that this effort will require the creation of a public/private partnership.

The first step of the Gateway Infrastructure Plan was to conduct this Feasibility Analysis to ascertain the viability of proposed projects to support freight growth and passenger rail service. An evaluation/inventory of each proposed rail improvement project and existing rail/roadway crossing was performed.

Rail projects evaluated were those proposed by the various railroads in their combined report dated October 29, 2004. All presently existing road at-grade crossings within the limits of the Rail Gateway were evaluated. The results of these evaluations are included in *Section 2* of this report.

DESCRIPTION OF THE NEW ORLEANS RAIL GATEWAY

The New Orleans Rail Gateway connects freight rail traffic along an east-west corridor across the Continental United States as well as to the north into Canada with local service to the Port of New Orleans and Port of South Louisiana.

The Gateway begins on the west bank of the Mississippi River at approximately the St. Charles/Jefferson Parish line. From here it proceeds easterly along tracks of the Union Pacific (UP) and BNSF through the Avondale Yard at West Bridge Junction (WBJ) and crosses the Mississippi River on the Huey P. Long Bridge (HPLB); which is owned and operated by the New Orleans Public Belt Railroad. At the base of the bridge it traverses the East Bridge Junction (EBJ) to the Back Belt tracks owned and operated by the Norfolk Southern Railroad. The Gateway proceeds along the Back Belt through Metairie entering the City of New Orleans at the 17th Street Canal. It proceeds through the City of New Orleans, along the Back Belt, to where it connects with CSX trackage at Elysian Fields Avenue. From here it follows CSX trackage crossing the Inner Harbor Navigation Canal on the Almonaster Bridge, traversing the CSX Gentilly Yard and proceeding easterly through New Orleans East to its terminus, for study purposes, at Industrial Parkway.

From the EBJ there are two routes through the City of New Orleans, the Back Belt as described above or the Front Belt. The Front Belt proceeds east from the EBJ entering the City of New Orleans adjacent to the Mississippi River. It follows along the river to the Industrial Canal where it turns north to intersect CSX trackage at the Almonaster Bridge.

Along its route through metro New Orleans the Rail Gateway provides connections to three additional rail routes. At the West Bridge Junction (WBJ) it connects with down river rail traffic on the west bank of the Mississippi River. At the East Bridge Junction (EBJ) it provides a connection with the Front Belt and Port of New Orleans dock facilities and with the CN railroad tracks north to Canada. At the NE Tower Norfolk Southern tracks connect to the northeast United States.

For the purposes of this report the Gateway has been divided into three sections; Western, Central and Eastern (*see page MI*). A detailed analysis of projects in each section is included in *Sections 1* and *2* of this report. Analysis has shown that the various improvements are inter-related due to the network nature of railroad operations. The absence of one or more individual features could negate potential improvements from other components.

For projected project costs of Rail Gateway and other identified rail projects see the following project descriptions and cost estimates on Pages *ES - 21* through *ES - 23*

EXISTING SECTIONS AND PROPOSED IMPROVEMENTS

WESTERN SECTION

The Western Section begins on the west bank of the Mississippi River at Live Oak Boulevard east of the St. Charles/Jefferson Parish line. From here it proceeds eastward along tracks of the Union Pacific and BNSF railroads through the Avondale Yards and crosses the Mississippi River on the Huey P. Long Bridge; which is owned and operated by the New Orleans Public Belt Railroad. The principle rail users of the western section are the Union Pacific, BNSF, New Orleans Public Belt and Amtrak. There are approximately 25 train movements per day not counting 40 to 50 switching operations at the Avondale Yards. Total length of the western section is approximately 8.3 miles.

Estimated construction costs for identified projects in the Western Section are:

• Rail improvement projects:	\$ 87.0M
• Eliminate rail/road conflict projects:	\$ 34.7M
Total:	\$121.7M

For a more detailed description of Western Section projects see *Section 1, Pages 1 through 4; Section 2, Pages 3 through 48, and; Appendix 3, Sheet Nos. 200 through 210.*

CENTRAL SECTION

The Central Section of the New Orleans Rail Gateway begins at the base of the Huey P. Long Bridge (HPLB) on the east bank of the Mississippi River in Jefferson Parish and ends at the Almonaster Bridge crossing the Inner Harbor Navigation Canal (Industrial Canal).

From the base of the HPLB to the Almonaster Bridge there are two existing and one additional potential rail routes. The Front Belt and Back Belt routes exist today and a Middle Belt route could be created by connecting existing New Orleans Union Passenger Terminal (NOUPT) east bound and west bound mains beneath the I-10/Carrollton Avenue overpass. All three routes will be discussed.

For a more detailed description of Central Section projects see *Section 1, Pages 1-4 through 1-17; Section 2, Pages 2-49 through 2-150, and; Appendix 3, Sheet Nos. 300 through 316 and 400 through 407.*

The Front Belt (Riverfront Route)

The Front Belt begins at the base of the Huey P. Long Bridge and runs eastward along tracks owned and maintained by the New Orleans Public Belt Railroad (NOPB) to Southport Junction and then turns south towards the Mississippi River and enters the City of New Orleans. In the City of New Orleans, it parallels the Mississippi River, through the French Quarter, to the west side of the Inner Harbor Navigation Canal (Industrial Canal) and then turns north, lake bound, to join the CSX tracks at the Almonaster Bridge.

Tracks along this route are owned and operated by the NOPB except for a short length in Jefferson Parish operated by the CN Railroad.

The majority of the Front Belt consists of single tracks within restricted right-of-way and is nearly at operational capacity.

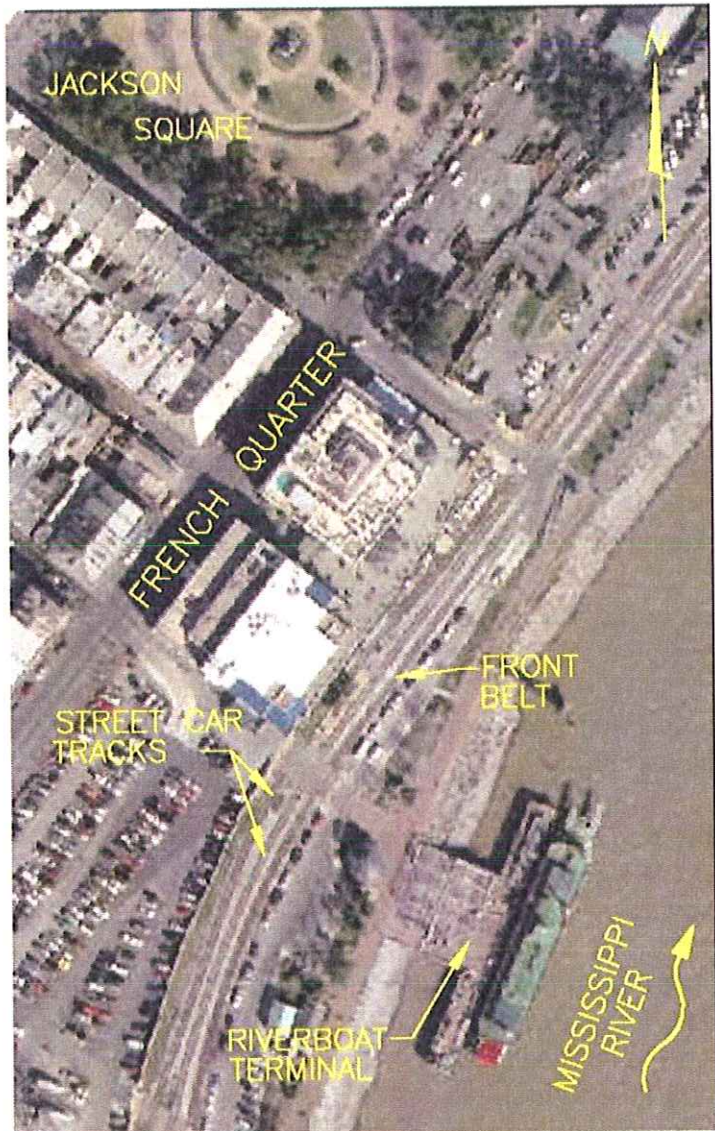
Switching operations along the riverfront would make the operation of thru trains difficult and would require the construction of additional tracks on the land side of the existing NOPB tracks. Because the riverfront area of New Orleans is fully developed, commercial and residential, construction of additional tracks would be extremely difficult and expensive.

The Front Belt traverses an area of downtown New Orleans that is highly congested with tourist and automobile traffic, the French Quarter up river to past the Morial Convention Center. There are a number of tourist venues that require crossing the tracks in order to access them;

- Moon Walk to view the Mississippi River
- Waldenberg Park
- Aquarium of the Americas
- Spanish Plaza

In addition to these locations both Cruise Ship and Riverboat terminals and the River Walk Shopping Center are located on the riverside of the Front Belt tracks. Increased train movements through this area would cause major safety concerns.

The total distance along the Front Belt is 18 miles or approximately nine miles longer than along the existing Back Belt tracks (described below). In addition to the increased distance there are in excess of 20 roadway crossings along this route.



French Quarter at Jackson Square

The major impediments to the use of this route for additional rail traffic are:

- Highly congested pedestrian/tourist area of downtown New Orleans; French Quarter upriver to the Morial Convention Center.
- Nine miles further than along the Back Belt, increasing operational expenses.
- 20+ roadway crossings.
- Large portions of single track.
- Existing route is at or near operational capacity.

For these reasons use of the Front Belt as the major route for gateway traffic does not seem practical.

Although the Front Belt will not be included in the Rail Gateway, modifications to its track layout at Southport Junction are proposed. (See description of the Middle Belt in *Section I*).

Existing **Back Belt** Route

The Back Belt is the existing through route for most freight rail traffic through New Orleans. It begins at the base of the Huey P. Long Bridge (HPLB) and proceeds through the East Bridge Junction (EBJ), along the NS tracks through Metairie and Orleans Parish ending at the Almonaster Bridge crossing the Industrial Canal, a distance of approximately 9.9 miles.

Trackage along this section of the New Orleans Rail Gateway is operated by the New Orleans Public Belt (NOPB), CN, Norfolk Southern, CSX, and KCS Railroads. Amtrak is a major user of tracks along the Back Belt except for that portion through the Metairie neighborhood in Jefferson Parish.



Back Belt Tracks through Metairie

The portion of the Back Belt that transverses the Jefferson Parish neighborhood of Old Metairie has been an irritant to the community for years, primarily because of the obstruction to the flow of traffic caused by the number of daily train movements (20 to 24 train movements). A proposed solution would be to raise the rail embankment, above its existing elevation, beginning at Causeway Boulevard to a maximum of approximately seven feet at Metairie Road and to construct five underpass structures. Except for a vertical clearance of 15 feet at Metairie Road the vertical clearance at all other structures would be limited to 12'-6" needed for passage of emergency vehicles only. The embankment would be landscaped to provide a visual screen from the adjacent neighborhood. Other than Metairie Road all other crossings are residential streets where truck traffic is prohibited. Each crossing would have a drainage pumping station with emergency power back up.

The majority of the "choke points" to the movement of rail traffic through the New Orleans Rail Gateway occur along the Back Belt tracks.

Estimated construction costs for identified projects in the Central Section along the Back Belt are:

- Rail improvement projects: \$ 98.2 M
 - Eliminate rail/road conflict projects: \$ 75.9 M
- Total:** \$174.1 M

For a more detailed description of Back Belt projects see *Section 1, Pages 1-5 through 1-9; Section 2, Pages 2-49 through 2-118 and 2-125 through 2-150, and; Appendix 3, Sheet Nos. 300 through 316.*

Proposed Middle Belt Route

The Middle Belt will proceed east from the HPLB along the south side of the existing CN mainline, pass beneath the Earhart Boulevard structures at the Orleans Parish line, proceed north to Airline Drive, and along Airline Drive into the City of New Orleans. At the Tulane Avenue/Airline Drive interchange two tracks will turn north passing thru the interchange and proceeding north along I-10 to intersect with the existing Back Belt tracks at East City Junction (ECJ). The existing tracks to the Union Passenger Terminal will remain. Total length of the Middle Belt route from the EBJ to the ECJ is 4 miles or 1 mile further than the Back Belt route between these same locations.



Along Airline Drive Looking East – One Track Would be Added on the Right Side Hollygrove Neighborhood on the Right.

To provide clearance for the two freight tracks, horizontal and vertical, the Tulane Avenue/Airline Drive roadway interchange will have to be reconstructed. (See *Sheet No. 405 of Project Plans*).

Beginning at the base of the HPLB the Middle Belt will cross the EBJ in much the same manner as the Back Belt crosses it today except that two thru tracks will be provided under this new design. Instead of proceeding to cross the CN main, as the Back Belt presently does, the Middle Belt will turn to the east and parallel, immediately south of, the CN mainline to Southport Junction.

From the EBJ six additional tracks will be constructed south of and parallel to the existing CN mainline track. The existing CN main (track 1) will be designated for Amtrak operations. The next six tracks in order will be designated for; (2) CN siding, (3) freight siding/interchange, (4) westbound main, (5) eastbound main, and (6) and (7) two freight siding/interchange tracks.

Currently two primary emergency evacuation routes, I-10 and Airline Drive, cross the existing Back Belt via depressed underpasses that are equipped with drainage pumps. Should the Middle Belt be constructed, the Back Belt could be removed allowing these two underpasses to be eliminated. Their related pumping capacity could then be directed elsewhere in the community.



Looking North – East Side I-10/Carrollton Avenue Overpass

The Middle Belt would also eliminate the need for flood gates at the 17th Street Canal allowing train operation to continue long after other transportation modes must shut down in advance of storms.

The construction of the Middle Belt will facilitate the construction of a future Light Rail system. There are two proposed alignments for a future Light Rail system from the Airport to Downtown New Orleans. One of these alignments requires crossing the existing Back Belt tracks directly beneath the Causeway Boulevard/Airline Drive overpass. Operational policies and safety concerns of the freight railroads will not permit the Light Rail to cross the Back Belt tracks at-grade. This will require a rail overpass structure be constructed at the Causeway Boulevard/Airline Drive overpass. The construction of the Middle Belt will allow the Back Belt tracks to be removed eliminating the need for this rail overpass structure.

The Middle Belt will replace the section of the Back Belt between EBJ and ECJ. The remainder of the route from ECJ to the Almonaster Bridge will be along the existing Back Belt tracks.

Total construction cost of identified projects within the Central Section utilizing the Middle Belt/Back Belt route:

- Rail projects: \$ 94.5M
 - Roadway projects: \$113.5M
- Total: \$208.0M**

For a detailed description of Middle Belt projects see *Section 1 Pages 1-9 through 1-13; Section 2, Pages 2-119, and; Appendix 3, Sheet Nos. 400-407.*

EASTERN SECTION

The Eastern Section begins at the Inner Harbor Navigation Canal (Industrial Canal) and proceeds east along tracks of the CSX Railroad ending at Industrial Parkway, a distance of approximately 7.7 miles.

There are approximately 20 to 24 daily train movements operating along double tracks which extend to immediately east of Industrial Parkway, the eastern limits of the eastern section. This section of track is utilized by CSX as a connection to the east coast at Jacksonville, Florida. Prior to Hurricane *Katrina* the Amtrak Sunset Limited also utilized this track but has been discontinued since the storm.

Estimate Construction costs for identified projects in the Eastern Section are:

• Rail Improvement projects:	\$ 95.0M
• Eliminate rail/road conflict projects:	\$ 30.6M
Total:	\$125.6M

For a more detailed description of Eastern Section projects see *Section 2, Pages 2-151 through 2-198 and Appendix 3, Sheet Nos. 500-514.*

WEST BANK RAILROAD

New Orleans and Gulf Coast Railway Company (NOGC)

At the June 13, 2006 meeting of the Regional Planning Commission (RPC) Board the study team was tasked with presenting a discussion of the New Orleans and Gulf Coast Railway Company (NOGC) located on the west bank of the Mississippi River. The New Orleans and Gulf Coast Railway is a former Union Pacific Railroad branch line that services industry along the west bank of the Mississippi River from Avondale south along the river to the end of tracks at Myrtle Grove. The total length of this line is approximately 32 miles. In addition to this main line the NOGC operates a spur track that runs along the east side of the Harvey Canal on the west edge of Peters Road. This spur track is not presently in service because of general disrepair.

A report titled *Plaquemines Parish Intermodal Feasibility Study* (PPIFS) was completed in December 2002 by DMJM/Harris for the Regional Planning Commission (RPC). It examined rail operations from the West Bridge Junction (WBJ) at the west bank base of the Huey P. Long Bridge (HPLB) to various sites along the Mississippi River for the construction of a containerized cargo port (Millennium Port) down river of Belle Chase, Louisiana.

Since the PPIFS study was completed interests in a single large containerized port facility has waned, although further development along the river is still a distinct possibility.

The PPIFS study investigated three alternatives:

- Upgrade the existing route
- Alternate Rail Route 1 – Western Bypass

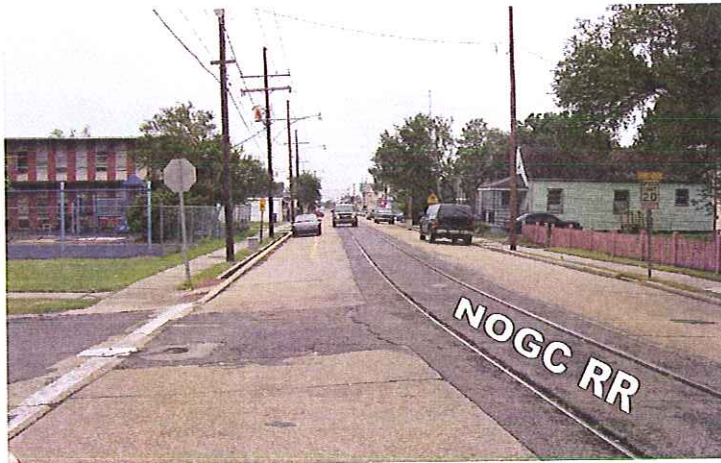
- Alternate Rail Route 2 – Harvey Canal Corridor (east side), Recommended by the *Plaquemines Parish Intermodal Feasibility Study* (PPIFS)

This report will discuss each of these three alternatives and one additional alternative:

- Alternate Rail Route 3 – Harvey Canal Corridor (west side)

Existing Route

Beginning at the base of the HPLB the NOGC rail line runs through the City of Westwego, along 4th Street, through the City of Gretna to the Gouldsboro Yard. From here the rail line turns south, runs along the middle of Madison St. and along Belle Chasse Highway (LA 23) to its end at Myrtle Point, down river from Belle Chasse, Louisiana.



NOGC Railroad Tracks along 4th Street in Gretna
(looking north)

The portion of rail line which runs through the City of Gretna, along Madison Street and Belle Chasse Highway has been the source of community concerns for years.

The physical location of this rail line places trains in the middle of residential streets and hinders access to adjacent homes and access by emergency vehicles.

The PPIFS study found that along this route there are 95 public and 192 private at-grade road crossings, a bascule bridge crossing the Harvey Canal and a vertical lift bridge at the Algiers Canal/Intercostals Waterway.

Over the years the use of this rail line has changed. Services that use to be required are no longer necessary (businesses have relocated). Between the City of Gretna and the Mississippi River, a distance of 6.3 miles, there is only one rail customer, Packard Pipes Co. at the corner of Belle Chase Highway and Engineers Road. The NOGC estimates that service to this customer is limited to about 20 train cars per year.

An altogether new alignment may be more desirable for future rail traffic growth rather than improving the existing line due to the following features:

- Safety issues involved with trains traveling in residential streets
- Limited train speeds
- Maintenance costs associated with in excess of 280 roadway/driveway crossings
- No available right-of-way for relocations along existing route
- Only one customer along the existing route from the City of Gretna to Belle Chasse, La.

An upgrade of the existing route will not address the public safety issues therefore the relocation of this track better serves the public interest.

Alternate Rail Route 1 – Western Bypass

(See Map ES-13)

This alternate routed a new rail line west from the Mississippi River, crossing Bayou Barataria and the Intercoastal Waterway, into Lake Salvador and Lake Cataouache, crossing the back protection levee into Avondale, and crossing the U.S. Highway 90/I-49 corridor to the existing Union Pacific/BNSF Avondale Yard. The total distance of this alternate is 18 miles with an anticipate Construction Cost of **\$846 M + \$15 M** for R/W.

Alternate Rail Route 2 - Harvey Canal Corridor Alternative (East side):

(See Map ES-13)

This alternate would construct a new rail line along the rear of the industrial/commercial corridor along Peters Road to the east of the Harvey Canal, crossing the outfall and Intercoastal Waterway and connecting to LA 23 south of Alvin Callender Naval Air Station.

It would require the construction of approximately 9.0 miles of new track with an anticipated Construction Cost of **\$140M + \$20M** for right-of-way.

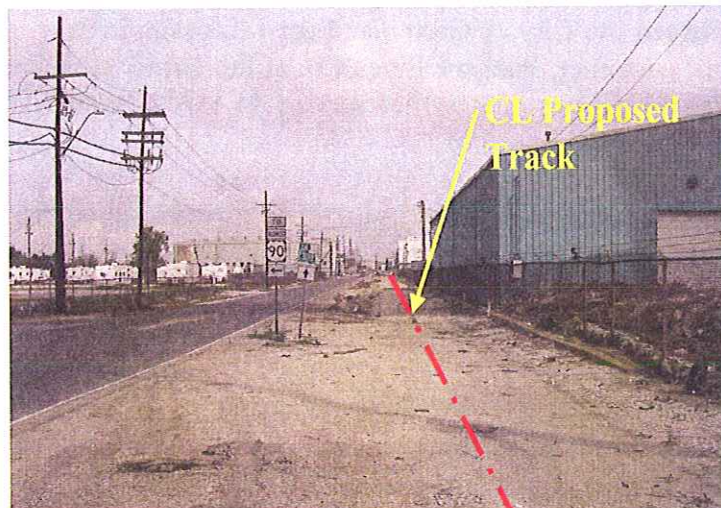


Looking South along St. Joseph Street
New Trackage along Right Side of Picture

Alternate Rail Route 3 - Harvey Canal Corridor Alternative (West of Canal)

(See Map ES-13)

This alternative would reconstruct a single-track rail line along the west side of the Harvey Canal.



Looking North from beneath the West Bank Expressway

The alternate route along the west of the Harvey Canal has an advantage because it does not impact residential development and will minimize the required purchase of developed commercial/ industrial properties.

Total length of rail line for this option is approximately 10 miles with an anticipated Construction Cost of **\$180 M + \$5M** for right-of-way.

For a more detailed description of Alternate Rail Routes 1, 2, and 3 see *Section 1*.

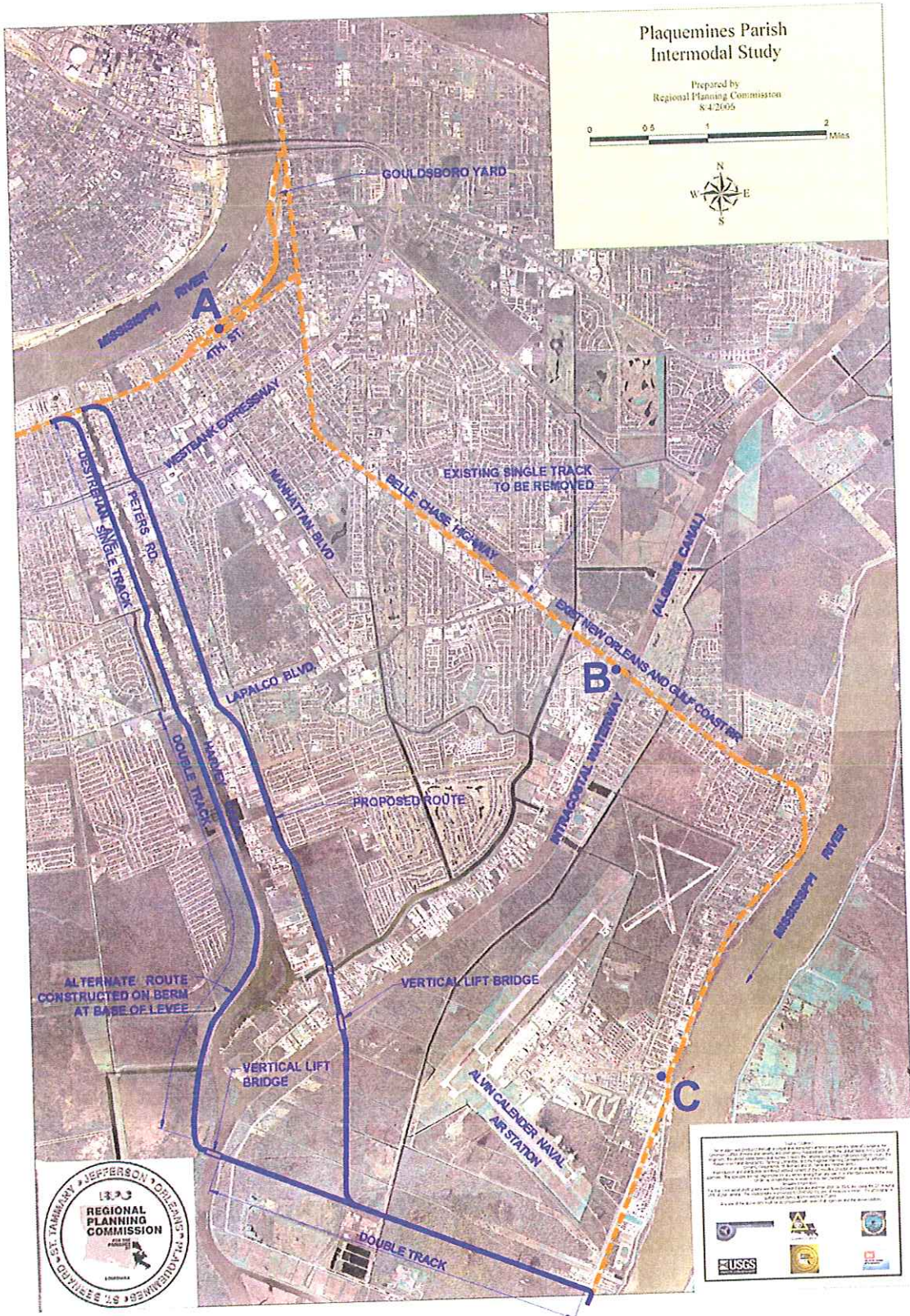


Figure ES-1, Relocation of New Orleans and Gulf Coast Railway Company

BENEFITS OF GATEWAY INFRASTRUCTURE IMPROVEMENTS

The Gateway Program will generate substantial long-term economic and environmental benefits for the region and for the nation. The elimination of choke points will allow increased rail throughput, and will help to keep pace with increasing demand for freight transportation services. At the same time, the project can decrease highway congestion and reduce the need for future highway improvements. Finally, by eliminating existing flood gates, the project will add additional capacity for emergency evacuations long after other modes are shut down (air) or become overly-congested (highway) in advance of approaching storms.

Public Benefits

The most direct public benefit of the Gateway Program will be the reduction in grade crossing delay time and risk experienced by highway vehicles. The cost associated with these delays can be reduced from \$1,162,000 to only \$199,000 per year, yielding an annual savings of \$963,000 for auto and truck operators. There also will be reduced accident costs as a result of grade crossing elimination.

The program will have other significant public benefits that can be quantified in a more thorough environmental study. These include improved commercial competitiveness, reduced fuel consumption and reduced emissions from idling vehicles, and reduced neighborhood noise from train operations by the use of visual/acoustical barriers or buffer zones. The proposed improvements will enhance the ability of rail to facilitate emergency evacuation by rail and as well as over highway evacuation routes. The project can improve the flow of current and/or future rail passenger service by reducing bottlenecks and allowing faster running times. Finally, the project includes features that could later be used to construct a light rail line westward to the airport.

Upon completion of the Gateway Program of projects the New Orleans Metropolitan Area will realize numerous direct **public benefits**. Grouped by area, these benefits will be:

- **Western Section**

- Elimination of four roadway grade crossings will improve public safety, access for emergency vehicles and improve flow of traffic between River Road and U.S. Highway 90.
- Removal of extensive truck traffic from the residential neighborhood along Avondale Garden Road.

- **Central Section**

Of the three routes investigated during this analysis the Front Belt was not considered feasible for inclusion into the Rail Gateway. The other two routes, the Back Belt and Middle Belt both had a number of public benefits. The Middle Belt not only offered the same benefits as the Back Belt but many more that were not only local but regional in nature.

- **Back Belt Route**

- Elimination of eleven (11) roadway grade crossings will improve emergency vehicular response time, safety and travel times.
- Elimination four flood gate structures.

In addition to these the **Middle Belt Route** will allow additional benefits (see Map ES-16):

1. Elimination of the roadway underpass structures of the Back Belt tracks at the I-10 and the Causeway Boulevard/Airline Drive interchange. Each of these underpass structures is on one of the designated evacuation routes for the Metropolitan New Orleans area.
2. The removal of the queue for trains awaiting clearance to proceed through the Gateway, from the area of the New Orleans City Park.
3. Facilitate improvements to the major drainage at the Hoey's, Monticello and Palmetto Canals.
4. Provide improved constructability for future light rail at the Causeway Boulevard/Airline Drive interchange.
5. Provide improvements to the roadways at the Airline Drive/Tulane Avenue interchange.
6. Provide improvement of the very tight curvature of the Airline Drive west bound on ramp.
7. Provide provision for a future connection to the eastbound Gateway between the Front and Middle Belts in the southeast quadrant of Southport Junction.

In connection with the construction of the Middle Belt some track relocation work will occur along the Front Belt. This track relocation will eliminate one of the two track crossings on Jefferson Highway and doing this will allow for the construction of a less expensive overpass structure in the future. (See 7 on *Map ES-16*).

- **Eastern Section**

There are six roadway crossings through the East Section. The Gateway Program of projects is proposing the closure of three of these and grade separation of the remaining three. This will greatly enhance public safety and emergency vehicle access and response time.

- **Relocation of the New Orleans and Gulf Coast Railroad**

The selection of either Alternate Rail Route Nos. 2 or 3 will allow the existing rail line through the City of Gretna and along LA 23 to be abandoned. This will allow for:

- Elimination of over 200 roadway grade crossings.
- The removal of over 2.2 miles of railroad track from along city streets.
- The removal of train traffic from residential neighborhoods.

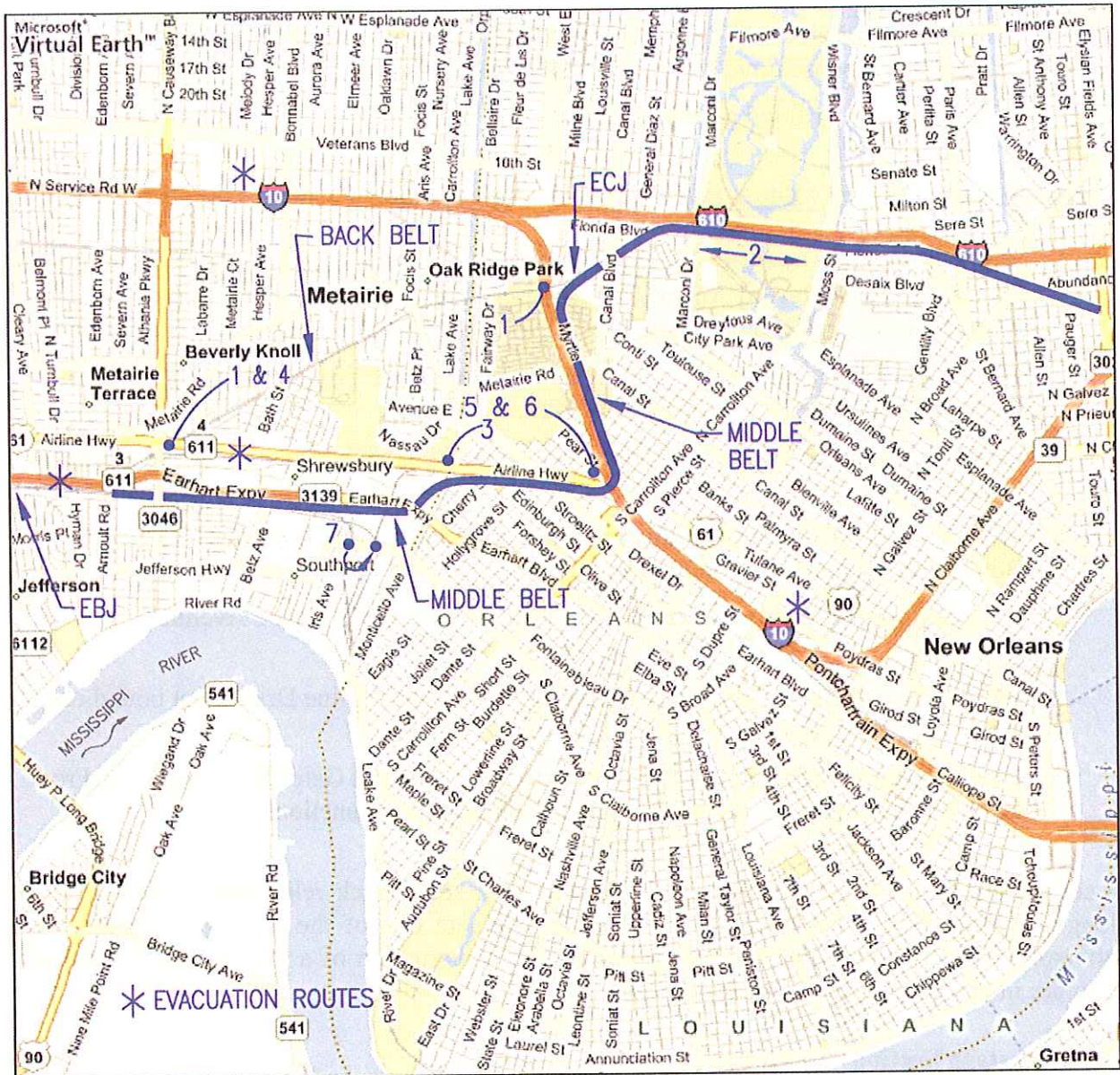


Figure ES-2 Location of Benefits for Middle Belt Construction

Railroad and Private Benefits

Railroads are the private partners in this public-private partnership, and railroads companies and their customers will benefit from the proposed Gateway improvements. Additional track, new crossovers, signal upgrades, and elimination of rail-highway crossings will expedite rail operations and provide greater freight throughput. The nation's railroads, the Port of New Orleans, and rail shippers will benefit from a more efficient railroad system that has fewer delays, faster transit times, and better on-time deliveries. Total train operating time across the Gateway will be reduced almost 25 percent from a present average of 145.9 hours per day to 104.6 hours per day with the upgraded Middle Belt alignment.

This increased throughput and more efficient operations will result in enhanced productivity and resource savings. The most direct measures will be reduced fuel consumption and reduced operating hours that will translate to reduced railroad operating costs. The railroads will save an estimated \$350,000 per year in fuel costs, and \$777,000 per year in crew costs. There also will be savings in locomotive operating and maintenance costs and reductions in freight car fleet requirements. Railroad shippers will benefit from the faster travel times and reduced delays, and could experience a reduction in business inventory requirements. Finally, elimination of grade crossings will reduce the exposure to risk for both railroads and the highway users.

LIGHT RAIL TRANSIT

This feasibility analysis included consideration of possible alignments for light rail. Current regional plans include consideration of light rail transit from the airport to downtown New Orleans. There are two corridors identified for this light rail line:

1. Along the south side of Airline Drive.
2. Immediately north and parallel to the existing CN main line track.

Operating policies and safety concerns of the freight railroads will not allow the light rail line to cross any freight rail tracks at grade.

Due to the existing Back Belt tracks, the Airline Drive alignment at Causeway Boulevard would have to swing out from under the existing Causeway Boulevard bridge structure in order to achieve the needed vertical clearance over the Back Belt tracks. This would increase the cost of construction at this location appreciable. With the Middle Belt alignment the Back Belt tracks would be removed and would not be a factor for either of the two prospective routes. The light rail alignment can be found on Middle Belt Drawings 400 to 405 of the Project Plans.

POSSIBLE MITIGATION/ENHANCEMENT (M/E) PROJECTS

Mitigation measures are those steps taken to reduce the impact of a project in the surrounding neighborhoods. They are done to minimize or offset the impacts to some degree. Enhancements are projects that the community has requested in addition to mitigation projects that may be outside the immediate impact area but have a relationship to the project. They are designated as (M) Mitigation or (E) Enhancement projects below.

Western Section:

- W11, Willswood Lane, reconstruction or remodeling of the Norbert Rillieux Elementary Public school buildings and play facilities (M).

Central Section:

Back Belt Route:

- Construct soundwalls, provide landscaping and improve drainage (E) – Requested by the Regional Planning Commission.

Middle Belt Route:

- Improved recreational facilities in the Hollygrove neighborhood (E) – Requested by Orleans Parish Council.
- Improvements to the St. Patrick playground and possibly other New Orleans Recreation Department (NORD) facilities (E) – Requested by Orleans Parish Council.
- Provisions for a future rail overpass structure, along Airline Drive, for light rail track access to the New Orleans Union Passenger Terminal (M) – Required by the Regional Planning Commission.
- Right of access to Norfolk Southern right-of-way along spur track between Canal Boulevard and Carrollton Avenue for extension of Lafitte Corridor multi-use path (E) – Requested by Orleans Parish Council.
- Right of access to Norfolk Southern right-of-way on west side of People’s Avenue between Leon C. Simon and Chef Menteur Highway/Rails with Trails project (E) – Requested by Orleans Parish Council.
- Streetcar right of access to cross the Norfolk Southern track on St. Claude Avenue at Press Street for future Desire Streetcar Extension (E) – Requested by Orleans Parish Council.

Front Belt Route:

- Reconfiguration of existing rail tracks at the Port of New Orleans Intermodal Rail Facility (E) – Requested by the Port of New Orleans.

West Bank Rail Projects:

- Extension of the railroad track to Plaquemines Parish east bank along the Harvey Canal to the Mississippi River. See the program of projects outlined in the Plaquemines Parish Intermodal Feasibility Study by DMJM Harris December 2002 and this feasibility analysis (E) – Requested by Plaquemines Parish President.

CONCLUSIONS OF THIS FEASIBILITY ANALYSIS

Simulation modeling of the New Orleans Rail Gateway conducted by the Washington Group for the AAR and confirmed by this study showed that if this rail gateway is to continue to be a relevant part of the national rail network major infrastructure improvements are required.

This study has identified a program of projects for infrastructure improvements and makes the following recommendations.

Western Section:

- Construct all identified rail improvement projects:
 - W1 Centralized Traffic Control (CTC) Extensions, Livonia and Avondale Subdivisions.
 - W2 New Main Track, Avondale Yard (South).
 - W3 New BNSF Mainline.
 - W4 Extend Switching Lead, Avondale Yard (North).

- W5 Signal and Track Improvements, West Bridge Junction.
- W6 Track and Interlocking Improvements on Huey P. Long Bridge.
- Construct Project W13 – Avondale Garden Overpass.
- Close George Street, Project W12, upon completion of Project W13.
- Conduct further study on the suitability of either an overpass or underpass structure at Willswood Lane, Project W11.
- Construct a single two-way overpass structure at Live Oak Boulevard, Project W10.

Central Section:

- Close Central Avenue and construct the Webb Street Extension, Project C10.
- Construct the Middle Belt.
- Construct Rail Improvement Project:
 - E2 Reconfigure Track and signals at Elysian Fields Avenue.
 - E3 Northwest Quadrant, NE Tower – Provide connection between NS and CSX.
- Project E10, perform an orientation/destination study of the approaches to the Louisa Street crossing of the CSX tracks. This study will determine if this crossing can be closed and traffic re-routed to the Alvin Street overpass of CSX tracks.
- Close France Road, Project E11.
- Relocate the existing Front Belt crossing of Jefferson Highway to adjacent to the KCS crossing of Jefferson Highway.

Eastern Section:

- Construct Rail Improvement Projects;
 - E4 Replacement of Almonaster Bridge.
 - E5 Construct new main track and revise at east end of Gentilly Yard.
Conduct further investigation into the placement of this new track on the north or south of the Gentilly Yard.
 - E12 Almonaster Avenue/Jourdan Road (to remain closed).
- Close the west and east approaches of Gentilly Highway, Projects E13 and E17.
- Construct an underpass structure for Read Boulevard, Project E14.
- Close the I-510 Frontage Road, Project E15.
- Construct an underpass structure for Michoud Boulevard, Project E16.
- Conduct further study into the suitability of an overpass or service road at Industrial Boulevard, Project E18.

West Bank Rail Projects:

- Relocate the NOGCRR to along the west side of the Harvey Canal, alternate route No. 3.
- Construct the HPL Bridge – Balloon track when traffic warrants.

Port of New Orleans:

- Expand intermodal facilities at the Port of New Orleans.

The estimated cost of these recommendations is **\$637.7M**.

THE NEXT STEP

Upon completion of this feasibility analysis a determination shall be made of which projects will be continued for further development.

Construction of the identified projects in the Rail Gateway will require both federal financing and approvals, and will therefore be covered under the National Environmental Policy Act (NEPA). This will require an Environmental Impact Statement (EIS) for a majority of the projects. The EIS process requires direct public involvement and a determination of both direct and indirect impacts to the areas adjacent to the project. Mitigation/enhancement projects will be further defined during the public involvement process.

NEW ORLEANS RAIL GATEWAY
Table ES-1, Estimated Project Costs

Project Number	Project Description	* Estimated Project Costs (millions)
WESTERN SECTION		
W1	Centralized Traffic Control (CTC) Extensions, Livonia and Avondale Subdivisions.	\$ 9.3
W2	New Main Track, Avondale Yard (South)	\$ 2.3
W3	New BNSF Mainline	\$ 3.5
W4	Extend Switching Lead, Avondale Yard (North)	\$ 0.8
W5	Signal and Track Improvements, West Bridge Junction	\$ 7.5
W6	Track and Interlocking Improvements on Huey P. Long Bridge	\$63.6
W10	Live Oak Blvd. – Overpass Structure	\$12.2
W11	Willswood Lane – Underpass Structure	\$ 9.7
W12	George St. – Close Crossing with Project W13	\$ 0.1
W13	Avondale Garden Road – Overpass Structure	\$12.7
Total of Projects for Western Section:		\$121.7
CENTRAL SECTION		
Back Belt Route:		
C1	Signal and Track Improvements @ East Bridge Junction (EBJ)	\$14.0
C2	Shrewsbury CTC – Install CTC from EBJ to Metairie Road	\$ 5.7
C3	Eliminate roadway grade crossings through Metairie	\$58.9
C4	Double Track Back Belt	\$ 9.6
C10	Central Avenue - Close Crossing, Build Replacement Roadway.	\$ 6.0
E1	Install Universal Crossover @ East City Junction (ECJ)	\$ 9.1
E2	Reconfigure Track and Signals @ Elysian Fields Ave.	\$11.9
E3	Northwest Quadrant, NE Tower – Provide connection between NS and CSX.	\$12.3
E6	Construct Third Track from Marconi Dr. to Frenchman St.	\$35.6
E10	Louisa St. – Underpass Structure	\$10.9
E11	France Road (close crossing)	\$ 0.1
Total of Projects for Back Belt Route:		\$174.1

* Project Costs include engineering, construction and construction administration.

Table ES-1, Estimated Project Costs (Continued)

Project Number	Project Description	* Estimated Project Costs (millions)
Middle Belt Route		
C1	Signal and Track Improvements @ (EBJ)	\$16.0
M1	Modifications to Deckbar Ave. Overpass	\$ 4.2
M2	Modifications to Earhart Blvd. main roadway structures	\$ 6.6
M3	Track Installation – EBJ to KCS diamond	\$30.7
M4	Drainage Improvements @ Monticello Canal	\$ 0.5
M5	Reconstruct Palmetto St. Overpass	\$21.5
M6	Reconstruct rail bridges @ Palmetto Canal	\$ 3.6
M7	Reconstruct Airline Dr./Tulane Ave. Interchange	\$56.1
M8	Modify Substructure - I-10/Carrollton Ave. Overpass	\$ 1.1
M9	Reconstruct City Park Avenue Overpass	\$ 2.9
M10	Track Installation – KCS diamond to East City Junction	\$15.3
M11	Right of way acquisition	\$ 7.9
M12	Legal Fees	\$ 0.4
C10	Central Ave. - Close Crossing, Build Replacement Roadway	\$ 6.0
E2	Reconfigure Track and Signals @ Elysian Fields Ave.	\$11.9
E3	Northwest Quadrant, NE Tower – provide connection between NS and CSX.	\$12.3
E10	Louisa St. – Underpass Structure	\$10.9
E11	France Road (close crossing)	\$ 0.1
Total of Projects for Middle Belt Route:		\$208.0
EASTERN SECTION		
E4	Replacement of Almonaster Bridge	\$55.0
E5	Construct new main track and revise @ East end of Gentilly Yard	\$40.0
E12	Almonaster Ave./Jourdan Rd. (to remain closed)	\$ 0.0
E13	Gentilly Hwy., West Approach (close crossing)	\$ 0.1
E14	Read Blvd. – Underpass Structure	\$11.0
E15	I-510 Frontage Road(close roadway)	\$ 0.1
E16	Michoud Blvd. – Underpass Structure	\$ 9.4
E17	Gentilly Hwy., East Approach (close crossing)	\$ 0.1
E18	Industrial Parkway – Overpass Structure	\$ 9.9
Total of Projects for Eastern Section:		\$125.6
Total of Projects with Middle Belt Route:		\$454.9

* Project Costs include engineering, construction and construction administration.

Table ES-1, Estimated Project Costs (Continued)

Project Number	Project Description	* Estimated Project Costs (millions)
West Bank Railroad:		
	Alternate Rail Route No. 2 – East side of the Harvey Canal	\$160.0
	Alternate Rail Route No. 3 – West side of the Harvey Canal	\$155.0 •
	HPL Bridge – Balloon Track	\$ 7.8 •
	Total of West Bank Rail Projects (with Alternate Rail Route No. 3):	\$162.8 •
Port of New Orleans Intermodal Rail Facilities:		
		\$ 20.0
	Total of Projects for New Orleans Rail Gateway:	\$637.7

* Project Costs include engineering, construction and construction administration.

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Introduction

INTRODUCTION

The first step of the New Orleans Rail Gateway Infrastructure Plan was to conduct this Feasibility Analysis to ascertain the viability of the proposed projects to support future freight rail growth, passenger rail service and to enhance public safety. The study team evaluated the feasibility of projects identified in the *Industry Recommendations for the Gateway Plan* (October 29, 2004) and those additional projects that were identified during the preparation of this report.

The findings of the feasibility analysis are presented in the accompanying report consisting of the nine sections and three appendices.

Section 1 – Identified Projects

This section presents a detailed description of projects identified by this feasibility analysis and recommended for further development.

Projects descriptions are provided for:

- Rail Gateway Projects in the Western, Central and Eastern sections,
- Relocation of the New Orleans and Gulf Coast Railroad on the west bank of the Mississippi River,
- Additional rail connections to the Huey P. Long Bridge on both the east bank and west bank of the Mississippi River,
- Intermodal Rail Facility at the Port of New Orleans.

Section 2 - Project Inventory/Evaluation Analysis

This section fully describes the purpose, extent and expected consequences of each previously identified Rail Gateway project and those projects identified by this study:

- Design, engineering and data collection was undertaken to describe the project purpose and need, detail the location, scope of work, estimate costs, and possible public concerns.
- Community mitigation/enhancement projects were identified through meetings with public officials and that would have a positive impact on the community.
- An estimate of additional required right-of-way and its cost is included using recent real estate transactions. Existing right-of-way was determined using existing railroad right-of-way maps, Parish right-of-way unit sheets and in some cases public right-of-way documents were researched.
- Construction cost estimates were prepared for each project.
- A series of meetings were held with local and state officials to obtain input into the planning and design of the various projects and to ascertain that the designs proposed would generally conform to accepted practices.

Section 3 - Simulation Modeling

In 2006, the Association of American Railroads (AAR), representing the six Class I railroads servicing the metro New Orleans area, conducted simulation modeling of the New Orleans Rail Gateway. This modeling considered current and future rail operations with and without the track and signal improvements being proposed in this report.

The modeling also considered improvements being made along the Back Belt and Middle Belt. The simulations found that significant improvements in operating performance would result under either improvement case, but that a greater level of improvement would result from implementation of the new Middle Belt route.

Section 4 - Benefit/Cost Analysis

A benefit/cost analysis was developed to measure the benefits of the accepted projects to the cost of the capital improvements.

Benefits considered were both public and private.

- Public benefits are benefits accruing to the public at large because of the improvements in the Gateway Program. Public benefit categories of the Gateway Program are improved pedestrian and vehicular safety resulting from the elimination of grade crossing conflicts; reduced road congestion due to fewer grade crossing conflicts; air quality benefits due to less locomotive idling; reduced road maintenance costs; construction jobs, and less neighborhood disruption due to less noise from idling locomotives, and fewer instances of blocked crossings or trains stopped in neighborhoods.
- Private benefits are those accruing to railroads due to reductions of train delays and include labor savings from fewer hours of train crew time of trains transiting the gateway, locomotive operating and maintenance savings due to fewer hours of idling and unproductive moves by trains transiting the gateway, and reduced time required for all freight cars transiting the corridor.

Section 5 - Sources of Funding

This section discusses potential sources of funding for implementation of projects in the New Orleans Rail Gateway Program. The funding analysis is divided into three parts. The first identifies Federal grant and credit programs for which Gateway projects are eligible. The second part of this section identifies grant and credit programs for which each project is eligible, and the third part of this section recasts the previous discussions and identifies Gateway projects eligible under each Federal grant and credit program.

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 1 Identified Projects

IDENTIFIED PROJECTS

The Gateway Rail Study (conducted by the American Association of Railroads (AAR) in 2004) and this feasibility study have identified numerous projects that will increase rail capacity and eliminate highway conflicts. Projects located along the Gateway are presented in three sections:

- **Western Section** (*Live Oak Boulevard to east approach of Huey P. Long Bridge*)
- **Central Section** (*East approach of Huey P. Long Bridge to Industrial Canal*)
- **Eastern Section** (*Industrial Canal to Industry Boulevard*)

Additional projects discussed in this section are:

- Relocation of the New Orleans and Gulf Coast Railway on the west bank of the Mississippi River
- Downriver Connection to the Huey P. Long Bridge
- Rail Movement – CN Railroad to the Huey P. Long Bridge
- Proposed Intermodal Rail Facility – Port of New Orleans

RAIL GATEWAY WESTERN SECTION

The Western Section begins at Live Oak Boulevard east of the St. Charles/Jefferson Parish line on the west bank of the Mississippi River. From this point it proceeds eastward along the tracks of the Union Pacific and BNSF railroads through the Avondale Rail Yard and crosses the Mississippi River on the Huey P. Long Bridge; this segment is owned and operated by the New Orleans Public Belt Railroad. The principle rail users of the western section are the Union Pacific, BNSF, New Orleans Public Belt and Amtrak. There are approximately 25 train movements per day in the western section with another 40 to 50 switching operations at the Avondale Rail Yard. The total length of the western section is approximately 8.3 miles.

The trackage on the west bank of the river traverses some of the last remaining large tracks of undeveloped high ground in Jefferson Parish. Residential development is generally located along River Road (Mississippi River) with future expansion being to the south, away from the Mississippi River. With completion of the Huey P. Long Bridge widening project (which will provide three traffic lanes in each direction), development in the Western section will increase.



West Bridge Junction (WBJ)

Identified rail projects in the western section of the Rail Gateway are:

W1	Avondale Yard	Extend Centralized Traffic Control (CTC) eastward from Willis including new BNSF main track to West Bridge Jct. to increase speeds from 10 mph to 40 mph (freight) and 20 mph to 50 mph (Amtrak).
W2	Avondale Yard (south)	Construct 4,200 feet of new south main track to increase access to West Bridge Jct. and increase switching efficiency. Through trains and Amtrak will have better access to HPL Bridge.
W3	Avondale Yards	New BNSF main track – 2,200 feet new, 2,000 feet upgraded to increase access to West Bridge Jct. and reduce conflicts with switching operations.
W4	Avondale Yard (north)	Extend switching lead approximately 1,200 feet to increase switching efficiency.
W5	West Bridge Junction	Upgrade manual interlocking controls, reconfigure trackage to increase speed/reduced delay for through moves, switching moves and Amtrak.
W6	Huey P. Long Bridge	Convert open deck to ballast deck on bridge, install universal crossover at middle of main span to reduce recurring delays from bridge maintenance and to increase the flexibility of bridge operations.

W7, W8, W9 NOT USED

In the western section, east/west roadways are U.S. Highway 90 and River Road (LA 18) which intersect at the base of the Huey P. Long Bridge. Highway 90 proceeds north crossing the Mississippi River on the Huey P. Long Bridge. The four identified roadway crossings act as north/south traffic distributors crossing the railroad tracks.

This report proposes grade separating three and closing one of these crossings:

W10	Live Oak Boulevard	Construct overpass structure: Initial one two-lane, two-way structure. Ultimate, add additional two lane structure.
W11	Willswood Lane	Construct underpass or overpass structure. (<i>requires further study</i>)
W12	George Street	Close crossing.
W13	Avondale Garden Road	Construct two-lane, two way overpass structure.

Project No. W10 – Live Oak Boulevard

(Drawing Sheet No. 200)

This is the western-most north/south roadway in Jefferson Parish and serves as a connection between Highway 90 and River Road. Live Oak Boulevard is an existing improved two-lane asphalt roadway with right-of-way provisions for a future two-lane roadway section (south bound to create a four-lane roadway). Drainage is provided by open ditches. The area between the tracks and River Road is mostly undeveloped at present but is being developed as residential. The low existing traffic volumes do not warrant a grade separation but this will change in the very near future with the accelerated development of the area.

Project No. W11 – Willswood Lane

(Drawing Sheet No. 201)

Willswood Lane is a two-lane unimproved asphalt roadway connecting River Road (LA 18) and Highway 90 by way of Live Oak Boulevard. This crossing is used to avoid possible train conflicts at Avondale Garden Road. The area on the river side of the tracks is being developed as residential.

Immediately north of the tracks is the Norbert Rillieux Elementary School and two single-family homes. The school buildings are built close to the roadway right-of-way and will need to be modified to provide additional clearances. Either an overpass or underpass structure will impact the school and homes, with an underpass structure minimizing the impact.

Project No. W12 - George Street

(Drawing Sheet No. 202)

George Street is an unimproved asphalt roadway 1,200 feet upriver (west) of Avondale Garden Road. It serves to connect Gambino Road and LA 18 (River Road). Traffic uses this crossing when the adjacent Avondale Garden Road is blocked by train operations into and out of the Avondale Rail Yard.

Project No. W13 – Avondale Garden Road

(Drawing Sheet Nos. 202 and 203)

Avondale Garden Road provides the only direct connection between Highway 90 and River Road in the Western Section and is located at the western entrance to the Avondale Rail Yard. There is a large amount of truck traffic using Avondale Garden Road because of the location of two intermodal yards immediately adjacent to and east of this roadway. Because of the large number of switching operations at the Avondale rail yard – 40 to 50 per day – both Avondale Garden Road and George Street experience delays. To alleviate these delays both underpass and overpass structures were considered. Due to the lack of available right-of-way at the George Street/Gambino Road Intersection, George Street was not considered.

Locating structures along existing Avondale Garden Road would have impacted a cemetery north of the tracks and the existing residential area south of the tracks. Plate 203 shows an overpass structure to be constructed immediately east of and behind the east tier of residential lots facing Avondale Garden Road. Construction in this area will require the purchase of right-of-way north and south of the tracks. The proximity of River Road and the Mississippi River levee dictates that the grade of an overpass structure would be excessive to meet the existing

elevation of River Road. To lessen this grade to 6%, River Road is shown raised and shifted towards the river levee. The construction of an overpass structure would eliminate conflicts with rail switching operation. It would also remove all truck traffic from the existing Avondale Garden Road lessening noise and vibrations. With this construction, the crossing at George Street will be closed.

Estimated construction costs for identified projects in the Western Section are:

- Rail improvement projects: \$ 87.0M
 - Eliminate railroad conflict projects: \$ 34.7M
- Total: \$121.7M**

For additional information on Western Section projects see *Section 2, Pages 3 through 48; Appendix 3, Sheet Nos. 200 thru 210.*

CENTRAL SECTION

The Central Section of the New Orleans Rail Gateway begins at the base of the Huey P. Long Bridge (HPLB) on the east bank of the Mississippi River in Jefferson Parish and ends at the Almonaster Bridge crossing the Inner Harbor Navigation Canal (Industrial Canal).

From the base of the HPLB to the Almonaster Bridge there are two existing and one potential route that can be taken. Two are existing, Front Belt and Back Belt, and one the Middle Belt could be created by connecting existing New Orleans Union Passenger Terminal (NOUPT) east bound and west bound mains beneath the I-10/Carrollton Avenue overpass. As discussed in the *Executive Summary*, the integration of the Front Belt (Riverfront Route) into the Rail Gateway is not considered practical.

Although the Front Belt will not be included in the Rail Gateway, modifications to its track layout at Southport Junction are proposed because of its proximity to other proposed projects as follows.

Relocation of Front Belt at Southport Junction
(Sheet No. 403a)

Presently the Front Belt and KCS tracks cross Jefferson Highway with a separation of approximately 700 feet. This separation would require any future grade separation of Jefferson Highway to be extremely long and cost prohibitive. It is recommended that the existing Front Belt tracks be relocated immediately adjacent to the KCS tracks. This would initially decrease the cost of maintaining two separate at-grade roadway crossing and ultimately decrease the length and cost of a future roadway grade separation at this location. With the construction of an overpass structure a 9,800-foot long corridor for queuing trains would be created through a light industrial area.

Future Connection between Front Belt and east bound Middle Belt

(Sheet No. 403)

This would construct a 6-degree to 8-degree curve in the Southeast quadrant of the Middle Belt and the crossing of the KCS riverfront leads. Due to the location of existing CN industry tracks this construction is not presently possible. This area is being redeveloped from industrial to commercial and may eliminate the need for these existing industry tracks.

A connection between the Front Belt and Middle Belt will provide an alternate route for Port rail traffic to access the NS Oliver Yard and CSX Gentilly Yard without traveling through downtown New Orleans and the French Quarter.

BACK BELT

The Back Belt is the existing freight rail route through New Orleans. It begins at the base of the Huey P. Long Bridge and proceeds through the East Bridge Junction (EBJ), along the Back Belt tracks through Jefferson and Orleans Parishes and ending at the Almonaster Bridge, covering a distance of approximately 9.9 miles.

Trackage along this section of the New Orleans Rail Gateway is operated by the New Orleans Public Belt (NOPB), CN, Norfolk Southern, CSX, and KCS Railroads. Amtrak is a major user of tracks in this section except for that portion through the Old Metairie neighborhood in Jefferson Parish.

The majority of the “choke points” to the movement of rail traffic through the New Orleans Rail Gateway occur along the Back Belt tracks.

Identified rail projects for the central section are:

- °C1 - Provide double track route from NS Back Belt to Huey P. Long Bridge through East Bridge Junction. Upgrade and modernize switch and signal hardware and control equipment. Build new control station for remote control operation.
- °C2 - Shrewsbury Centralized Traffic Control (CTC). Install CTC from east bridge junction to Metairie Road and a new control point at Shrewsbury. The new signal system would upgrade the track segment from “Yard Limits” to main line track.
- °C3 - Grade separate existing at grade road crossings. Grade separate or eliminate seven existing at-grade road crossings between Causeway Boulevard and the 17th Canal a distance of approximately 1.7 miles. The grade separations would enable trains waiting to cross the EBJ for access to the Huey P. Long Bridge to be held immediately east of the Shrewsbury Control point.
- °C4 - Double Track Norfolk Southern Back Belt. Construct approximately 3,000 linear feet of double track from immediately west of Metairie Road to immediately east of the 17th Street Canal.

- °E1 - Install universal crossovers at East City Junction. This will enable passenger trains to meet and pass without delays and minimize conflicts with freight trains on the Back Belt.
- E2 - Reconfigure Track and Signals (MP68 NT to 7.2 NT). Improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard.
- E3 - Provide connection between NS and CSX tracks in the northwest quadrant at NE Tower. Provide availability for a second track at this location.
- °E6 - Add third track, Marconi Drive to Frenchman Street. Provide a third track to increase through move capacity and capacity to hold trains in this area for crew changes. The location of the third track on either the north or south side of the existing pair will required further study.

° Denotes projects that would not be required for proposed Middle Belt alignment. (see page 1-9)

At-grade roadway crossings along the Back Belt are:

□C10	Central Avenue	Close crossing. Provide roadway connecting Webb Street to Firestone Drive.
*C11	Shrewsbury Road	Close crossing – traffic rerouted to Labarre Road.
*C12	Labarre Road	Construct underpass structure.
*C13	Atherton Drive	Close crossing – traffic rerouted to Labarre Road underpass by existing Loumar Avenue
*C14	Hollywood Drive	Construct underpass structure.
*C15	Farnham Place	Construct underpass structure.
*C16	West Oakridge Parkway	Close crossing.
*C17	Metairie Road	Construct underpass structure.
*C18	Carrollton Avenue	Construct underpass structure.
□E10	Louisa Street	Construct underpass structure.
□E11	France Road	Close crossing, reroute traffic to Alvar Street overpass of the CSX tracks.

* Construction along Back Belt route only. For the Middle Belt route the track at these crossings would be removed and the roadway reconstructed at a lower elevation.

□ Denotes projects which are common to both Back Belt and Middle Belt routes.

The portion of the Back Belt that transverses the Jefferson Parish neighborhood of Old Metairie has been a continuous irritant to the community for years, primarily because of the obstruction to the flow of auto and truck traffic caused by the number of daily train movements (20 to 24 train movements) and the existing eight-at-grade roadway crossings.

A proposed solution to this would be to raise the rail embankment above its existing elevation beginning at Causeway Boulevard to a maximum of approximately seven feet at Metairie Road and to construct five underpass structures (see above). Except for a vertical clearance of 15 feet at Metairie Road the vertical clearance at all other structures would be 12'-6" to 13'-0" or that needed for passage of emergency vehicles only. Other than Metairie Road all other crossings are residential streets where truck traffic is prohibited. Each crossing would have a drainage pumping station with emergency power back up. The embankment would be landscaped to provide a visual screen from the adjacent neighborhoods.



“Back Belt” Tracks Through Metairie

The grade separation at Metairie Road is proposed to be a six-span structure elevated approximately seven feet above the present rail elevation. Raising the elevation of the tracks will allow an underpass structure with 15 feet of vertical clearance to be constructed and will decrease the length of roadway construction below existing grade. The side spans will have ten feet of clearance and will allow pedestrians and auto traffic to pass beneath the structure.



Looking from the south of the tracks towards the north. Metairie Road underpass in center of picture.

Carrollton Avenue is planned to be a single span structure providing 10.5 feet of vertical clearance.



Back Belt Crossing the 17th Street Canal
Through the Floodwalls

The crossings of the 17th Street Canal and the London Avenue Canal are susceptible to being closed during hurricane events. At both locations the tracks pass through the floodwall/levee protection. Prior to a hurricane making landfall, flood gates are closed and usually remain closed for at least one day. At both the 17th Street Canal and London Avenue Canal it is recommended that the existing bridges be replaced with a waterproof U-channel section. The upturned leg of the channel section would act as a levee along both sides of the tracks eliminating the need for floodgates at the ends.

The construction of a temporary sho-fly track will be required to raise the tracks between Causeway Boulevard and the 17th Street Canal and maintain rail traffic.

The construction from Causeway Boulevard to and including the new structure crossing the 17th Street Canal can be built in one project or a maximum of three projects:

- Bridge crossing the 17th Street Canal
- 17th Street Canal to east of Farnham Place
- Farnham Place to Causeway Boulevard

The limits of construction will depend on the maximum grade allowed to go from the existing track elevation to the new profile.

Metairie Road to the East side of the 17th Street Canal, along Frisco Avenue.

There is a single track through this part of the Central Section. Double track ends 250 feet west of Metairie Road and begins again 430 feet east of the 17th Street Canal, a distance of approximately 2,600 feet. The right-of-width is 100 feet except between Metairie Road and Carrollton Avenue where it is 50 feet.

Proposed construction will provide two track, grade separated structures at both Metairie Road and Carrollton Avenue and a new two track structure crossing the 17th Street Canal as described above.



Single Track Section Through Metairie

Because of the limited 50 feet right-of-way through this section the addition of the second track will require the construction of retaining walls to contain the increased embankment width and height. Frisco Avenue is located along the north side of the tracks and provides access to three streets. Along the south side are five residential structures which may suffer minor damage during construction. It is recommended that an “L-wall” be constructed along the right-of-way on the Frisco Avenue side and the five residential structures on the south be purchased to provide additional right-of-way width so a sloped embankment could be constructed.

There would be no difference in the construction costs between the construction of an “L-wall” or the purchase of the five residential structures and construction of a sloped embankment along the south side in this section.

For more information on Back Belt projects see *Section 2* and *Appendix 3, Sheet Nos. 300-316*.

MIDDLE BELT

The Middle Belt will proceed east from the HPLB south of and parallel to the existing CN mainline, pass beneath the Earhart Boulevard structures at the Orleans Parish line, proceed north to Airline Drive, and along Airline Drive into the City of New Orleans. At the Tulane Avenue/Airline Drive interchange two tracks will turn north passing thru the interchange and proceeding north along Interstate 10 to intersect with the existing Back Belt tracks at East City Junction (ECJ). The existing tracks to the Union Passenger Terminal will remain. Total length of the Middle Belt route from the EBJ to the ECJ is 4 miles, or 1 mile further than the Back Belt between these same locations.

Beginning at the base of the HPLB the Middle Belt will cross the EBJ in much the same manner as the Black Belt crosses it today except that two through tracks will be provided under this new design. Instead of proceeding to cross the CN main, as the Back Belt presently does, the Middle Belt turns to the east and parallels immediately south of the CN mainline to Southport Junction. The KCS tracks turning northeast from the EBJ will remain for access to the rail yard along Airline Drive.



Along Airline Drive Looking East – One Track Would Be Added On The Right Side.

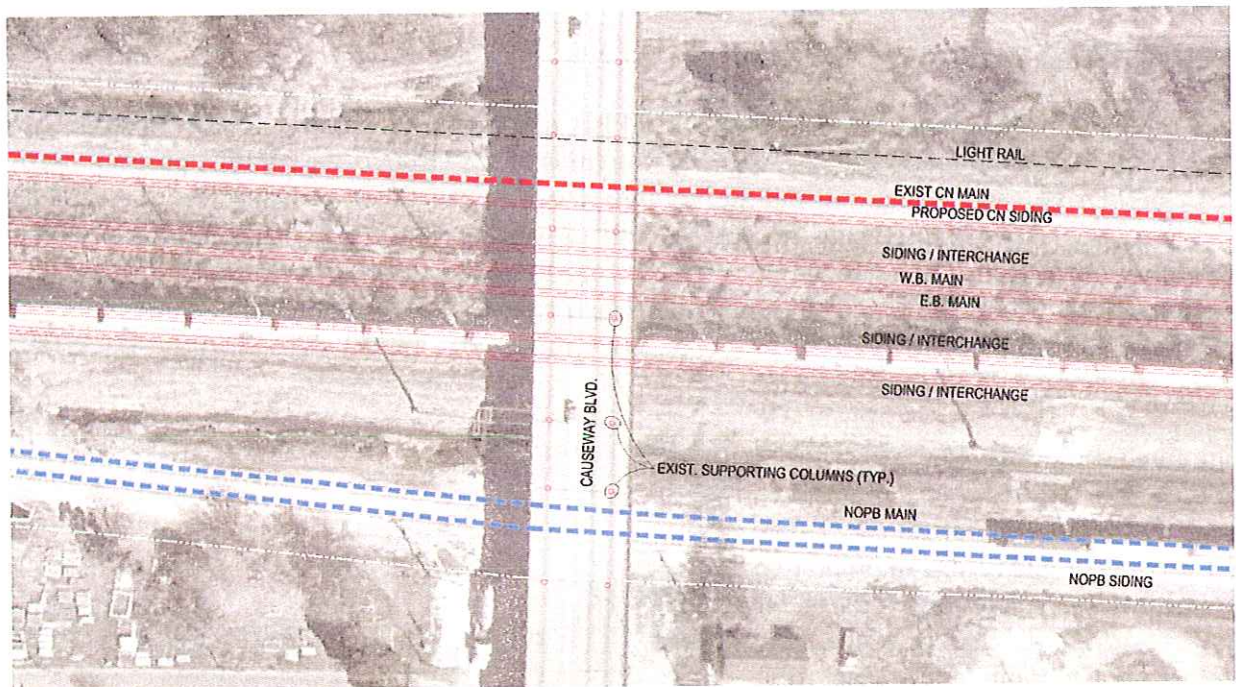
The EBJ will be reconstructed to provide for twin movements from the HPLB to the Middle Belt. Twin through track movements from the NOPB to the HPLB will be maintained along with the existing CN mainline utilized by Amtrak. Access to the existing Back Belt tracks will also be maintained to allow access to the KCS freight yard along Airline Drive.

From the EBJ six additional tracks will be constructed south of and parallel to the existing CN mainline track.

The existing CN main (track 1) will be dedicated to Amtrak operations. The next six tracks in order will be dedicated to (2) CN siding, (3) freight siding/interchange, (4) westbound main, (5) eastbound main, and (6) and (7) freight siding/interchange tracks.

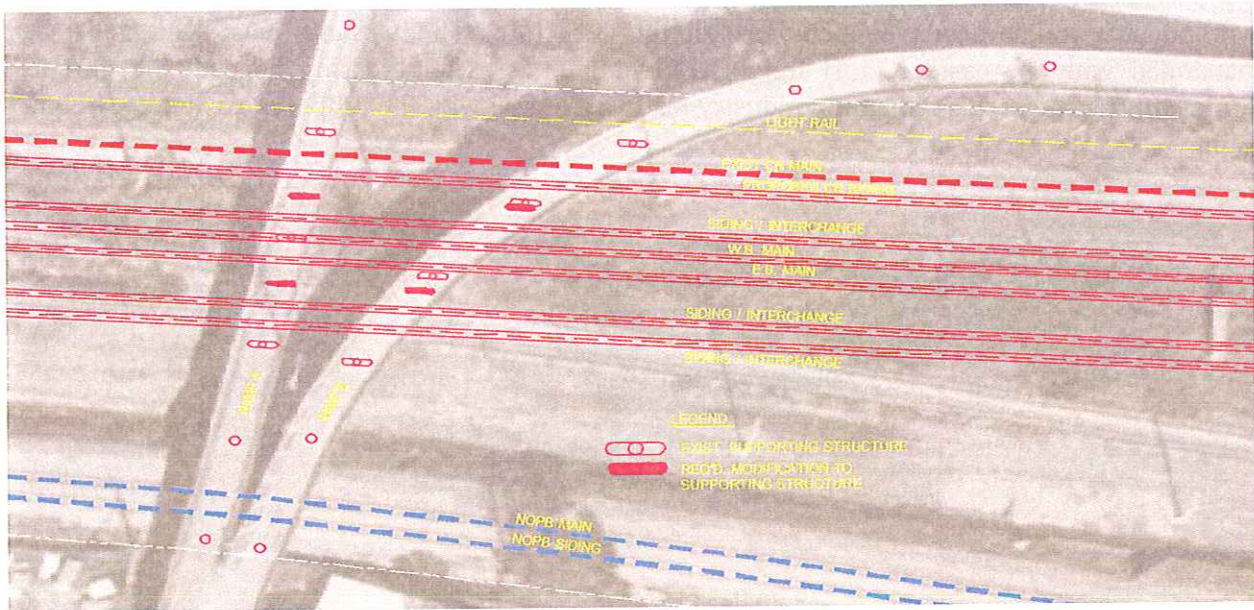
The proposed CN siding (track 2) will allow trains crossing the HPLB heading to Mays Yard to occupy this siding without restricting the use of the Middle Belt tracks for other rail movements as is currently the case.

Proceeding easterly from the EBJ the MB will pass beneath the Causeway Boulevard overpass unimpeded. The six new tracks will be spaced to pass between the supporting structure of the existing Causeway Boulevard overpass structure.



Causeway Boulevard
(See Sheet 400)

Further to the east the crossing beneath the Earhart Boulevard/Deckbar Avenue Interchange will require structural modifications to both overpass structures. These structures consist of one lane concrete AASHTO girder structures supported by single column concrete bents. Sufficient vertical clearance (23 feet) is available but structural modifications to the bridges will be required to provide proper horizontal clearance from the relocated columns to the proposed tracks. One bent/two spans of Ramp “A” and two bents/three spans of Ramp “B” are required to be reconstructed to shift the supporting column locations sufficiently to provide the required 12’-6” minimum horizontal clearance.



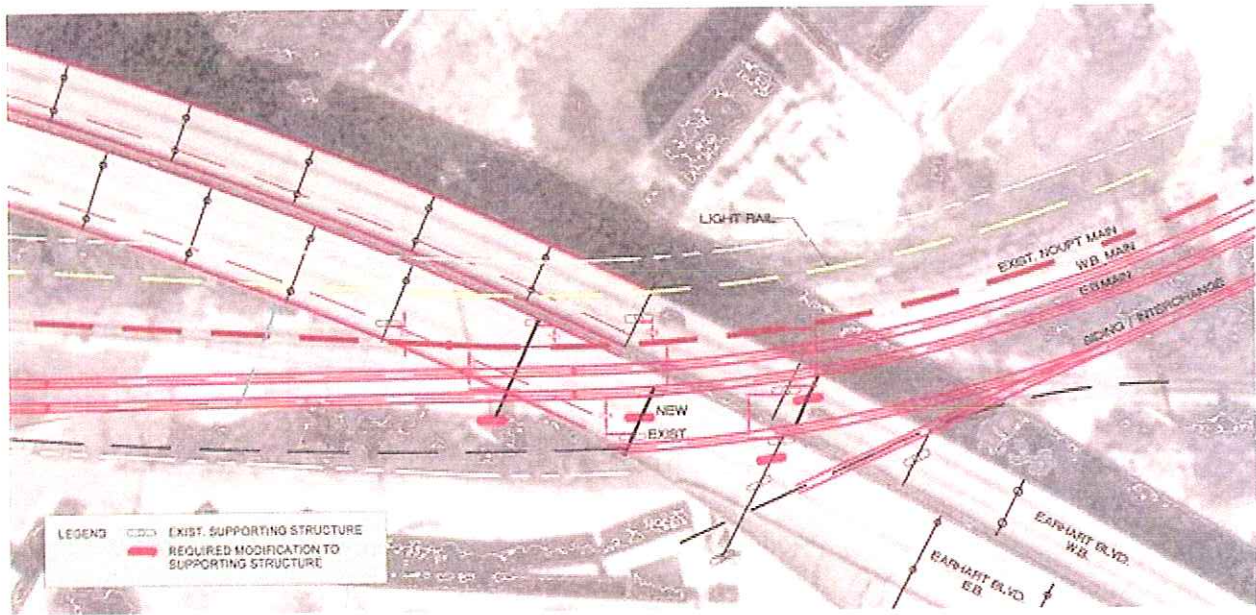
Earhart Boulevard/Deckbar Avenue Interchange
(See Sheet No. 402)

Beginning at the Earhart Boulevard/Deckbar Avenue interchange there is a 20” high pressure gas line approximately 20 feet south of the existing CN main. This line extends approximately 6,600 feet to the east parallel to the CN main and will have to be relocated to the north side of the tracks.

Prior to crossing the KCS riverfront leads the seven tracks will merge into three tracks. The CN siding (2) will merge left into the existing CN main (1) and the three siding/interchange tracks (3, 6, and 7) will merge to the westbound and eastbound mains (4 and 5). See Sheet No. 403.

After crossing the KCS riverfront leads the three tracks will cross the Hoey’s Canal. It is anticipated that a 12’x25’ pile supported concrete box culvert with sufficient length to provide maintenance access along both sides of the tracks will be required at this location.

Immediately east of the KCS riverfront leads the ownership of the existing CN main track changes to the New Orleans Union Passenger Terminal (NOUPT). At the Earhart Boulevard/Orleans Parish Line overpass structures the two new freight mains will pass beneath the structures on a parallel alignment with the existing NOUPT main. There are adequate vertical clearances (23 feet minimum) but the two main roadway structures will have to be modified to provide required minimum horizontal clearances. Both structures consist of concrete girder spans supported by multiple column concrete bents. To provide the 12'-6" minimum horizontal clearance from the C/L of track to the face of the column will require that three bents/four spans of the eastbound and one bent/two spans of the westbound roadways be reconstructed. There are two industry freight leads located beneath this structure. The western most lead is to be abandoned with the eastern most freight lead remaining. After crossing beneath the Earhart Boulevard structures this remaining industry lead will merge with the proposed eastbound freight main.



Earhart Boulevard Main Roadway
(Earhart Boulevard/New Orleans Parish Line Overpass)
 (See Sheet No. 403)

After crossing beneath the Earhart Boulevard structures the three tracks cross the Monticello Canal and proceed into the City of New Orleans. At the Monticello Canal the existing 25'x15' pile supported concrete box culvert will have to be lengthened to provide adequate horizontal clearance for the three tracks.

After crossing into the City of New Orleans the three tracks will merge to two and proceed as two tracks for the remaining distance to the East City Junction where the Middle Belt will rejoin the original Back Belt tracks.

Where the tracks cross under the Palmetto Street overpass the vertical clearance is 19'-11". Both roadway structures will have to be reconstructed to provide the required minimum 23 feet of vertical clearance. At this same location the two tracks cross the Palmetto Drainage Canal.



Looking West, Under Palmetto Overpass
(Two Steel Plate Girder Rail Bridges)

There are presently two separate steel plate girder rail bridges at this location only one of which is currently in use. Before being used for major freight traffic both structures should be investigated to assure their structural integrity. To provide minimum clearance above the maximum water surface in the Palmetto Drainage Canal these structures cannot be lowered therefore the roadway overpass structure above the tracks will have to be raised. This will require the demolition and replacement of both roadway structures of the Palmetto Street Overpass.

Immediately past this point Amtrak will separate and proceed downtown to the Union Passenger Terminal (UPT) and the two freight leads will proceed on a 6 degree to 7 degree curve to the left crossing the Tulane Avenue/Airline Drive Interchange and passing beneath the I-10/Carrollton Avenue Overpass. This new track alignment will require the complete reconstruction of the Tulane Avenue/Airline Drive interchange to provide horizontal and vertical clearances for the two freight tracks. To minimize the impact to the residential neighborhood to the east of I-10 the reconstruction of at least one supporting column beneath the I-10/Carrollton Avenue overpass is recommended. This will allow the alignment of the tracks to be held close to the overpass structure.

After the two freight mains cross beneath the Carrollton Avenue/I-10 overpass the NOUPT Amtrak east bound main joins them. The two tracks continue along the I-10 to ECJ where they meet the existing Back Belt tracks.



Plan – Middle Belt Crossing Tulane Avenue/Airline Drive Interchange

With the construction of the Middle Belt the existing Back Belt tracks between the EBJ and ECJ will be abandoned and removed. This will allow the underpass structures at both I-10 and Airline Drive and the bridge structure crossing the 17th Street Canal to be removed.

For more information on Middle Belt projects see *Section 2* and *Appendix B, Sheet Nos. 400 through 407*.

East City Junction to Almonaster Bridge

From the ECJ to the Almonaster Bridge there are four rail projects (E1, E2, E3, and E6) and two roadway projects (E10 and E11) planned. With the improvements to the existing Back Belt tracks through Metairie, all four rail and two roadway projects will be constructed. The proposed Middle Belt route will eliminate the need for rail projects E1 and E6.

Project E1 will install universal crossovers on the existing Back Belt tracks. The installation of these crossovers will enable passenger trains coming from the NOUPT and freight trains on the Back Belt to meet and pass each other. This project will support the sequencing of the track raising and underpass construction proposed in projects C3 and C4 along the Back Belt. If the Middle Belt track configuration is used, this project would not be required.

Project E6 will add a third (storage) track along the existing two tracks between Marconi Drive and Frenchman Street a distance of 3.5 miles. On Project Plan Sheet Nos. 307 to 313, this third track is shown along the south side of the existing track pair.

This location will require the widening of five existing rail overpass structures. Approximately 1.3 acres of additional right-of-way will be required from the New Orleans City Park and 1.7 acres of additional right-of-way from various owners for the remainder of the distance to Frenchman Street.

The construction of this third track will mitigate the capacity constraint on freight and intercity passenger operations that presently exists in the 3.5 mile section on the NS Back Belt between NOT Junction (7.08) and East City Junction (3.5). This section is used to stage westbound trains for interchange with UP. CSX and NS train crews bring the westbound interchange trains to Marconi Drive, located just east of the East City Junction. These trains are left on the main track to wait for a UP crew to pick them up. The average waiting time is around five hours, effectively blocking one of the double mainline tracks east of Marconi Drive. The eastward interchange traffic is more fluid as trains are delivered directly to CSX's Gentilly Yard and NS's Oliver Yard.

Benefits of Project E6 would include improved freight operating flexibility between Elysian Fields and EBJ, as well as improved operating flexibility for passenger and freight trains between Elysian Fields and East City Junction.

The third track and a new Marconi Drive interlocking would enhance the ability of CSX and NS to stage westbound trains for interchange with UP. Trains left on a mainline track waiting for a UP crew to pick them up should not delay eastbound freight trains and intercity passenger trains to the level that they presently do. The average wait time for a UP crew may not be reduced; however, the increased capacity east of Marconi Drive would increase flexibility and further increase the fluidity of train movements through this present bottleneck located west of CSX's Gentilly Yard and NS's Oliver Yard.

If the Middle Belt track configuration is used project E6, the addition of a third track, would not be required.

With the construction of the Middle Belt project, trains waiting to cross the HPL Bridge or for crew changes will be queued in the area along the existing CN mainline from the EBJ eastward to the KCS riverfront leads, Southport Junction (*see Middle Belt Drawings 400 through 403*).

With the improvement to the Back Belt tracks through Metairie or the construction of the entirely new Middle Belt route the remaining Central Section projects E2, E3, E10, and E11 will be constructed.

- Project E2 will improve operational flexibility at the junction of the CSX dual mainline tracks to Mobile and the NS Back Belt tracks into and out of the Oliver Yard. The CSX tracks east of Elysian Fields will be realigned to decrease the degree of curvature and thus enable train speed to increase 15 to 25 mph. This project would allow dual parallel movements on the NS Back Belt and CSX mainlines and, in conjunction with project E3, would allow Amtrak operations to increase speed from 10 mph to 30 mph.
- Project E3 will provide an improved connection between the NS mainline and the NS Back Belt by providing a connection to the CSX mainline between NE Tower and Elysian Fields (NOT Junction). The connection would eliminate the need for Amtrak trains from Atlanta and UP trains to travel to Oliver Junction to connect to the Back Belt through a slow, circuitous route. The proposed interlocking changes and track connection would facilitate parallel movement of trains to Oliver Junction and Elysian Fields on the NS NO mainline. The project would construct a new connection between the NS and CSX in the northwest quadrant of the NE Tower Junction. Further, this project would require the construction of a box culvert in the People's Avenue canal parallel to the NS mainline. Provisions for a future track would also be provided.
- Roadway grade crossing projects E10, Louisa Street and E11, France Road would improve operational flexibility at the entrance to the CSX Gentilly Yard. Currently, switching operations and train movements into and out of the Gentilly Yard occupies a section track and blocks both crossings for extended periods of time.

Louisa Street, Alvar Street and France Road provide crossings of the CSX tracks in the area bounded by I-10 south to Florida Avenue and from Almonaster Avenue on the west to France Road on the east. All roadways except France Road are four-lane divided urban collectors. France Road is a two-lane roadway. Higgins Boulevard is an east-west four-lane divided roadway connecting Almonaster Avenue and Alvar Street and approximately divides the described area in half. Louisa Street is a four-lane at-grade crossing of the CSX tracks with exit and entrance ramps to I-10 and I-10 main roadways immediately north of the tracks. Alvar Street, 1,800 feet east of Louisa Street, provides a four-lane overpass of the CSX tracks. France Road is located beneath the Alvar Street overpass. Very little traffic uses the crossing of France Road.

There is an existing overpass structure of the CSX tracks for traffic exiting I-10 onto Louisa Street and Almonaster Avenue. An overpass structure for Louisa Street crossing the CSX tracks is impractical because of the existing I-10 exit ramp and main roadway structures. An overpass structure would have to be constructed above both of these existing structures. An underpass

structure on Louisa Street would be difficult to build because of the proximity and grade of the entrance ramp to eastbound I-10 immediately north of the tracks.

There should be additional study done for Louisa Street from the CSX tracks south to Florida Avenue. An orientation/destination study would indicate if the Louisa Street crossing is critical or if this crossing could be closed and traffic diverted to the Alvar Street overpass of the CSX tracks. Improvements would have to be made at the Alvar Street/Old Gentilly Road intersection to facilitate turning movements.

EASTERN SECTION

(Project Plans 500-514)

The Eastern Section begins at the Inner Harbor Navigation Canal (Industrial Canal) and proceeds east along tracks of the CSX Railroad ending at Industrial Parkway, a distance of approximately 7.7 miles.

There are approximately 20 to 24 daily train movements operating along double tracks that extend to immediately east of Industrial Parkway, the eastern limits of the eastern section. This section of track is utilized by CSX as a connection to the east coast at Jacksonville, Florida. Prior to Hurricane *Katrina*, the Amtrak *Sunset Limited* utilized this track, but service has been discontinued since the storm.

The CSX tracks generally delineate the northern boundary of the 7,000-acre New Orleans Regional Business Park (NORBP). The NORBP extends from the Industrial Canal to east of Industrial Parkway and is largely undeveloped. Within the NORBP the east/west movement of auto and truck traffic is by means of Chef Menteur Highway (US 90), Gentilly Highway and Almonaster Avenue. North/south traffic movement is by means of Jourdan Road, Read Boulevard, I-510, Michoud Boulevard, and Industrial Parkway. Jourdan Road and I-510 provide the only grade-separated access crossing the CSX tracks through the eastern section.

The area to the north of the CSX tracks is mainly residential with small business and scattered tracks of undeveloped land along Chef Menteur Highway.

Identified rail projects for the eastern section are:

E4 – Replacement of the Almonaster Bridge Crossing the Industrial Canal.

The existing structure is a single leaf bascule bridge owned and maintained by the Port of New Orleans and is approaching 100 years old. It has been repeatedly struck by barges, causing significant damage to the structure, resulting in major closures for repair and realignment. Because of these repeated barge collisions the bridge structure is in need of substantial permanent repairs and upgrades to insure its reliability as part of the Rail Gateway.

The RPC and Port of New Orleans are proposing the construction of a new vertical lift bridge that will provide a substantially wider navigation channel. The wider navigation channel will reduce the potential of vessel collisions and will improve the reliability of CSX and NOPB rail service crossing the Industrial Canal.

During storm events floodgates on both ends of the existing rail bridge are closed preventing the passage of rail traffic. These closures usually last 24 hours and have an adverse impact on rail traffic through the Gateway.

With the construction of a replacement structure two methods to eliminate the requirement for floodgates have been discussed:

1. Raise the new structure above the elevation of the levees.
2. Waterproof the new structure and leave at its present elevation.

Because of the proximity of the Alvar and Jordan Road overpasses which limit the available vertical clearance and the existing CSX Gentilly Rail Yard, raising the track structure above the levee would be cost prohibitive. Some method of waterproofing the structure would be the only option.



**Project E4 – Existing Railroad
Bascule Bridge at Almonaster**

Due to Hurricane *Katrina*, the U.S. Army Corp of Engineers is considering several scenarios for the construction of flood control structures to prevent storm surges from entering the Industrial Canal. Depending on which scenario is selected the need to raise or waterproof the new structure may not be required. Selection of which flood control structure to use should be made by late 2007 or early 2008.

E5 – Construction of a CSX Main Track No. 3 Along the Southern Limits of the CSX Gentilly Yard (Drawing Sheet Nos. 500 – 503).

This project will provide a new mainline track around the southern limits of the existing CSX Gentilly Rail Yard. The new track will facilitate through train movements and eliminate conflicts with trains that are “made up” or stored on the existing double-track main. It will minimize the need to operate trains through slow speed yard trackage or to hold trains east or west of the yard until the main line is cleared of stopped freight trains. The construction of this new track will reduce the number of yard movements that use the main line.

The east end of the Gentilly Yard will be modified by constructing two new pullout tracks to improve switching flexibility.

Note that Project E5 was identified by the CSX Railroad. In the preparation of this feasibility study it was apparent that sufficient right-of-way exists along the northern limits of the Gentilly Rail Yard for construction of a new mainline track. Other than fiber optic cables there are no apparent utilities and further investigation into placing the new mainline track north of the existing mainline should be conducted.

Other than the right-of-way that will be required for the construction of the CSX No. 3 main on the south side of the Gentilly Rail Yard there is sufficient right-of-way to make all other railroad improvements.

At-grade roadway crossings in the east section are:

E12	Almonaster Avenue/Jourdan Road	Crossing to remain closed.
E13	Gentilly Highway (west approach)	Close crossing.
E14	Read Boulevard	Construct four-lane underpass structure.
E15	I-510 West Frontage Road	Close crossing.
E16	Michoud Boulevard	Construct four-lane underpass structure.
E17	Gentilly Highway (east approach)	Close crossing (needs further study).
E18	Industrial Parkway	Construct two-lane overpass structure or close crossing and construct service road along the south of tracks to Gentilly Highway (needs further study).

No traffic counts are available for any of these crossings.

The Chef Menteur Highway (US 90) and CSX tracks are parallel to each other with a separation that varies from 375 ft. to 560 ft. Because of this limited separation eliminating the roadway grade crossings with overpass structures would be difficult and would require the realignment, horizontally and/or vertically, of Chef Menteur Highway in order to maintain acceptable roadway profiles.

Between the overpass crossings at Jourdan Road and at I-510 there are at-grade crossings at Gentilly Road (west approach) and Read Boulevard. Of these two, Read Boulevard provides a direct connection from I-10 across the CSX tracks to Almonaster Avenue, which is the major east/west distributor road in the New Orleans Regional Business Park. Between Chef Menteur Highway and I-10, Read Boulevard is designated as a truck route.

E10 - Almonaster Avenue/Jourdan Road

Drawing Sheet No. 500

Jordan Road crosses the CSX Tracks on an overpass structure. The at-grade portions of both Almonaster Avenue and Jordan Road are either closed to traffic or have been removed. Recommend they remain closed and not be reopened to traffic.

E11 - Gentilly Highway (West Approach)

Drawing Sheet No. 504, 505

Crossing provides access from Chef Menteur Highway into the New Orleans Regional Business Park along Gentilly Hwy. The condition of Gentilly Highway south of the tracks limits traffic at this crossing, which is mainly used by trucks to access the wrecking yards located south of the tracks. Gentilly Highway crosses the tracks at an approximate 60-degree angle and is geometrically laid out for access to and from the west along Chef Menteur Highway. This crossing falls at the east end of the CSX Rail Yard. Recommend closure, with traffic detoured to Read Boulevard. Closure would improve rail operation into and out of the rail yard. There is a minimal amount of traffic using this crossing and can be rerouted to Read Boulevard.

E12 - Read Boulevard

Drawing Sheet No. 506

Read Boulevard provides a connection between I-10 and Almonaster Avenue in approximately the middle of the western portion of the New Orleans Regional Business Park. It is a four-lane divided asphalt roadway. North of the rail crossing the property is commercial to Chef Menteur Highway and residential from there to I-10. The property south of the rail crossing is undeveloped. Because of the close proximity of Chef Menteur Highway and elevation of the tracks an overpass structure would be difficult to design and construct with out the horizontal and vertical realignment of Chef Menteur Highway. An underpass structure could be constructed without interfering with Chef Menteur Highway. Recommend underpass structure be constructed.

E13 I-510 Frontage Road

Plan Sheet No. 509

This is a four-lane undivided asphalt roadway connecting Chef Menteur Highway and Almonaster Avenue. The crossing of the CSX tracks is in a curve and the site conditions for oncoming traffic are poor. Traffic data is not available but on sight observations on several occasions indicate that traffic along this roadway is virtually non-existent. An investigation of why this roadway was constructed determined that the present location of I-510 is along the old alignment of Paris Road. To allow for construction of I-510 the frontage roads were constructed first, traffic detoured onto them and then the I-510 main roadway constructed. Upon completion of construction the frontage roadways remained open. Traffic on Chef Menteur Highway can enter the I-510 on a high-speed ramp approximately 200 feet after passing this Frontage Road. Recommend closure of this crossing. For the limits of the Frontage Road see *Plan Sheet No. 509*.

E14 Michoud Boulevard

Plan Sheet No. 511

This crossing provides the principle means of access to the Michoud Assembly Facility and eastern portion of the New Orleans Regional Business Park. Very little truck traffic uses this crossing; truck traffic uses Gentilly Highway to connect to I-510. Due to the close proximity of Chef Menteur Highway and the elevation of the CSX tracks an overpass structure would be difficult to design. Recommend an underpass structure be constructed.

E15 Gentilly Highway (East Approach)

Plan Sheet No. 513

Provides access from the east to the Michoud Assembly Facility and eastern portion of the New Orleans Regional Business Park. The majority of traffic uses Michoud Boulevard to the west to access this area. Very little traffic uses this crossing. The alignment of the crossing is skewed at about 25 degrees resulting in severe sight problems. Recommend closure of this crossing.

E16 Industrial Parkway

Plan Sheet No. 514

The crossing provides the only access into the industrial/commercial area along the east side of the Michoud Channel. The flow of traffic is mainly to and from the west (towards I-510) along Chef Menteur Highway. No traffic data is available for this roadway but field observations indicate the majority of the traffic is trucks. Both FedEx and UPS have distribution facilities

located along Industrial Parkway. The master plan for the New Orleans Regional Business Park calls for a grade separation at this location. The close proximity of Chef Menteur Highway with the CSX tracks (approximately 375 feet) makes the construction of a grade separation along the alignment of Industrial Parkway unlikely without the horizontal and vertical realignment of Chef Menteur Highway. To remove this at-grade crossing two solutions are possible:

- Construct an at-grade roadway along the south side of the CSX tracks connecting to Gentilly Highway. Industrial Parkway traffic would connect to I-510 via Gentilly Highway. This would be a benefit of removing heavy truck traffic from the more residential Chef Menteur Highway, or
- Construct an overpass structure, offset along a horizontal curvature to the east, connecting to Chef Menteur Highway.

Total construction cost of identified projects within the Eastern Section are:

- Rail projects: \$ 95.0M
 - Roadway projects: \$ 30.6M
- Total: \$125.6M**

WEST BANK RAILROAD

New Orleans and Gulf Coast Railway Company (NOGC)

At the June 13, 2006 meeting of the Regional Planning Commission Transportation Policy Board (RPC) the study team was tasked with presenting a discussion of the New Orleans and Gulf Coast Railway Company (NOGC) located on the west bank of the Mississippi River. The New Orleans and Gulf Coast Railway is a former Union Pacific Railroad branch line that services industry along the west bank of the Mississippi River from Avondale south along the river to Myrtle Grove. The total length of this line is approximately 32 miles. In addition to this main line the NOGC operates a spur track that runs along the east side of the Harvey Canal on the west edge of Peters Road. This spur track currently has no customers and is in a general state of disrepair.

A report titled *Plaquemines Parish Intermodal Feasibility Study* (PPIFS) was completed in December 2002 by DMJM/Harris for the RPC. It examined rail operations from the West Bridge Junction (WBJ) at the west bank base of the Huey P. Long Bridge (HPLB) to various sites for the construction of a containerized cargo port (Millennium Port) down river of Belle Chase, Louisiana.

Since the PPIFS study was completed interests in a single large containerized port facility has waned, although further development along the river is still a distinct possibility.

The PPIFS study investigated three alternatives:

- Upgrade the existing route,

- Alternate Rail Route 1 - Western Bypass,
- Alternate Rail Route 2 - Harvey Canal Corridor (east side), Recommended by the *Plaquemines Parish Intermodal Feasibility Study* (PPIFS).

This report will discuss each of these three alternative routes and one additional route:

- Alternate Rail Route 3 - Harvey Canal Corridor (west side).

Existing Rail Route

As discussed in the “Executive Summary” on upgrade of the existing route will not address the public safety issues therefore the relocation of this track better serves the public interest.

Alternate Rail Route 1 – Western Bypass (Fig. 1-1)

This alternate routed a new rail line west from the Mississippi River, crossing Bayou Barataria and the Intercoastal Waterway, into Lake Salvador and Lake Cataouache, crossing the back protection levee into Avondale, and crossing the U.S. Highway 90/I-49 corridor to the existing Union Pacific/Burlington Northern Santa Fe Avondale Yard.

The PPIFS Study estimated its construction cost, exclusive of right-of-way and engineer/design at \$846 million. Right-of-way costs could add \$15M to this estimate, assuming the State of Louisiana owns the water bottoms in Lakes Salvador and Cataouache and would not have to be purchased.

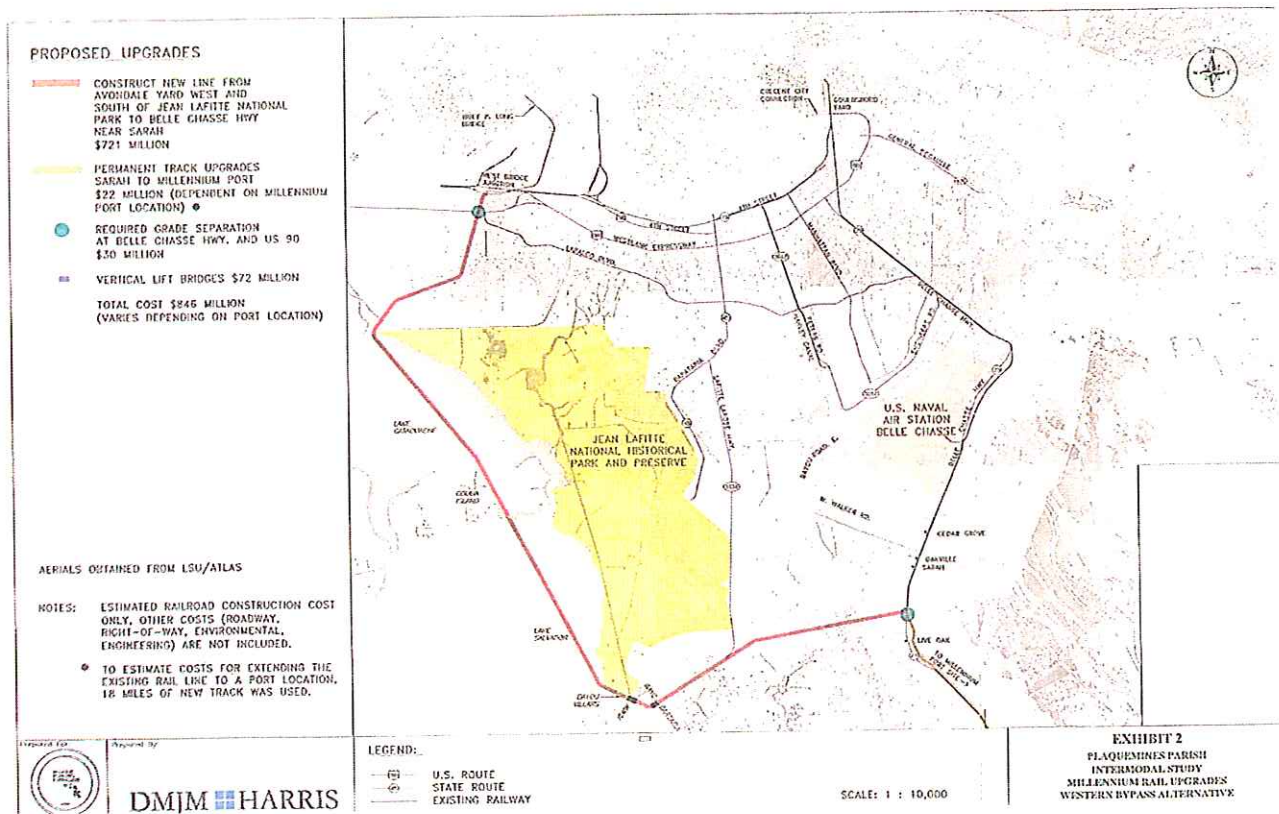


Figure 1-1, Western Bypass from PPIFS Study

This alternate allowed the fastest train speeds of the three alternatives from the West Bridge Junction to the river south of Belle Chasse. Due to existing industrial development between the WBJ and the City of Gretna the rail line through the City of Westwego and along 4th Street would still be required to remain in service.

The total distance of this alternate is 18 miles with an anticipated construction cost of **\$846M + \$15M** for railway.

Alternate Rail Route 2-Harvey Canal Corridor Alternative (East side): (Fig. 1-2)

This alternate would construct a new rail line along the rear of the industrial/commercial corridor along Peters Road to the east of the Harvey Canal. This option would require the construction of approximately nine (9) miles of new track.

The new track would run south from 4th Street crossing the Westbank Expressway, then veer east to the rear of the commercial/industrial property along Peters Road. Continuing south it crosses beneath the Lapalco Bridge crossing of the Harvey Canal then veers to the east to parallel the Murphy Canal, the western boundary of the Woodland Oaks Subdivision. Immediately south of this subdivision the rail line crosses the Murphy Canal from its west to east bank. The track continues along the Murphy Canal crosses the Outfall Canal, Engineers Road and the Intercoastal Waterway (Algiers Canal) on a vertical lift bridge structure. The line would then

cross undeveloped property adjacent to Alvin Calendar Field before intersecting with LA 23 in the vicinity of Cedar Grove approximately 4 miles down river of Belle Chasse.



Looking south along St. Joseph Street

Between 4th Street and the West Bank Expressway the rail line is proposed to run along the west side of St. Joseph Street. This alignment would directly impact 15 businesses and 45 homes.

Along its entire length this route would have a direct impact on 42 businesses and be constructed in close proximity to residential areas.

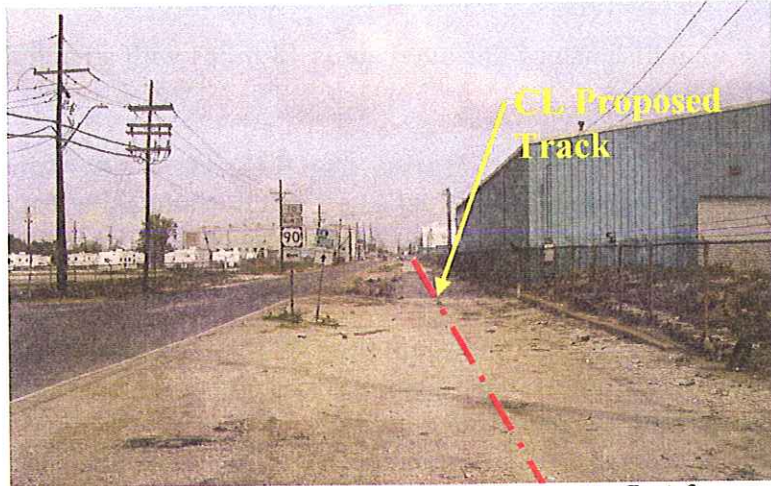
Because of the impacts the construction of this alternate rail route will have on properties along its proposed corridor consideration should be given to investigating alternate solutions.

Anticipated Construction Cost for this alternate is **\$140M + \$20M** for right-of-way.

Alternate Rail Route 3 - Harvey Canal Corridor Alternative (West of Canal) (See Figure 1-2)

This alternative would reconstruct a single-track rail line along the west side of the Harvey Canal.

Beginning at the intersection of 4th Street and Destrehan Ave. a single track would run along an abandoned railroad right-of-way located along the east edge of Destrehan Avenue. This right-of-way exists in varying widths from 4th Street, 2.7 miles south ending at the Cousins Pumping Station discharge canal. From here a single track would cross the Cousins discharge canal and proceed south along the berm of the Harvey Canal Levee crossing the discharge canals for the New Estelle and Old Estelle Pumping Stations. If needed for capacity a second track section could be constructed through this reach.



Looking North from beneath the West Bank Expressway – Route 3

From here it would precede south to a crossing of the Intercoastal Waterway on a vertical lift bridge structure then through mostly undeveloped property to intersect with LA 23 in the vicinity of Cedar Grove. The exact location of the rail line through the undeveloped property and location of vertical lift bridge would need further study.

Because of limited funds property abstracts were not conducted but conversations with railroad personnel suggests the Union Pacific Railroad still has an ownership interest in portions of a 17'-25' wide right-of-way along Destrehan Avenue. The Army Corp of Engineers has a 1,400-foot wide perpetual servitude for maintenance along the west side of the Harvey Canal from the Cousins discharge canal to the New Estelle Pump Station discharge canal. This property would have to be acquired from the property owner but the 1,400-foot depth would provide a buffer to adjacent residential areas.

The rail line would pass under a grade separation for LA 23 and no frontage roads along LA 23 would be required.

Alternate Rail Route 3 along the west side of the Harvey Canal has an advantage in that it does not impact residential development and will minimize the required purchase of developed commercial/industrial properties.

Total length of rail line for this option is approximately 10 miles.

Anticipated Construction Cost for this alternate is **\$150M + \$5M** for Railway.

With the construction of either Alternate Rail Route 2 or 3 the existing track could be removed through the City of Gretna and along Belle Chase Highway (LA. 23) for a distance of 7.4 miles (Points A to B, Figure 1-2).

With the relocation of the Packard Pipe Company at the corner of Belle Chase Highway and Engineers Road an additional length of track (4.3 miles) from Point B to Point C, Figure 1-2 and the vertical lift bridge crossing the Algiers Canal could be removed.

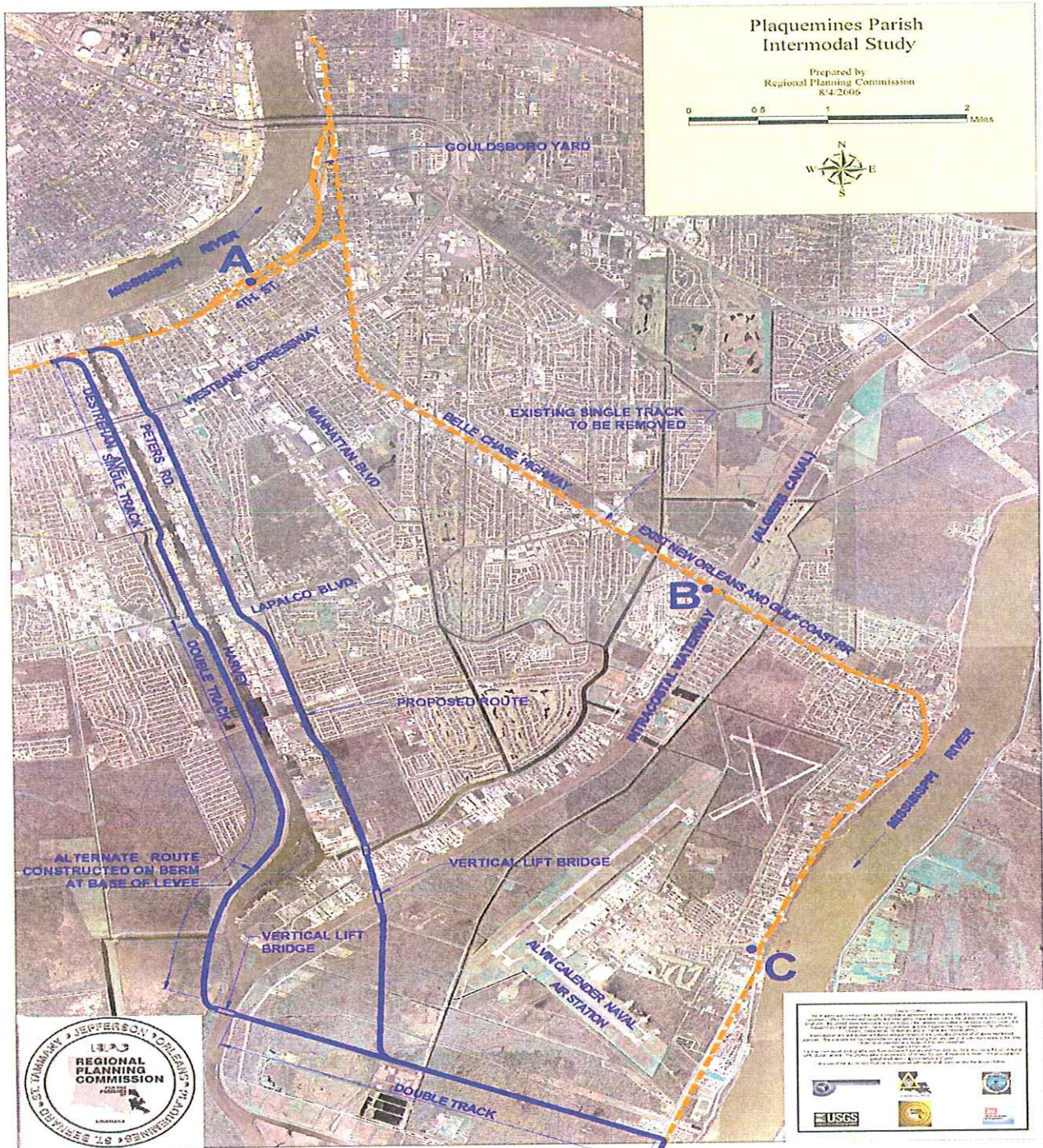


Figure 1-2, Relocation of New Orleans and Gulf Coast Railway Company

DOWNRIVER CONNECTION TO THE HUEY P. LONG BRIDGE (BALLOON TRACK)

Figure 3-3 shows a direct connection to the Huey P. Long Bridge from the Union Pacific/BNSF tracks east of the Avondale Rail Yard. This connection, which would serve rail traffic coming from and going to downriver destinations, was initially proposed in the *Plaquemines Parish Intermodal Feasibility Study* (PPIFS) to facilitate an increase in rail traffic with the construction of the downriver Millennium Port. It will allow rail traffic to cross the HPL Bridge without having to enter the Avondale Rail Yard.

In conjunction with the construction of I-49 the Louisiana DOTD is planning to realign the Highway 90 crossing of the Union Pacific Westwego Leads. The proposed track will allow a 4,500-foot long train to occupy the tracks without blocking either the Avondale Yard or the Westwego Leads.

Total estimated project cost including right-of-way: **\$7.8M**.

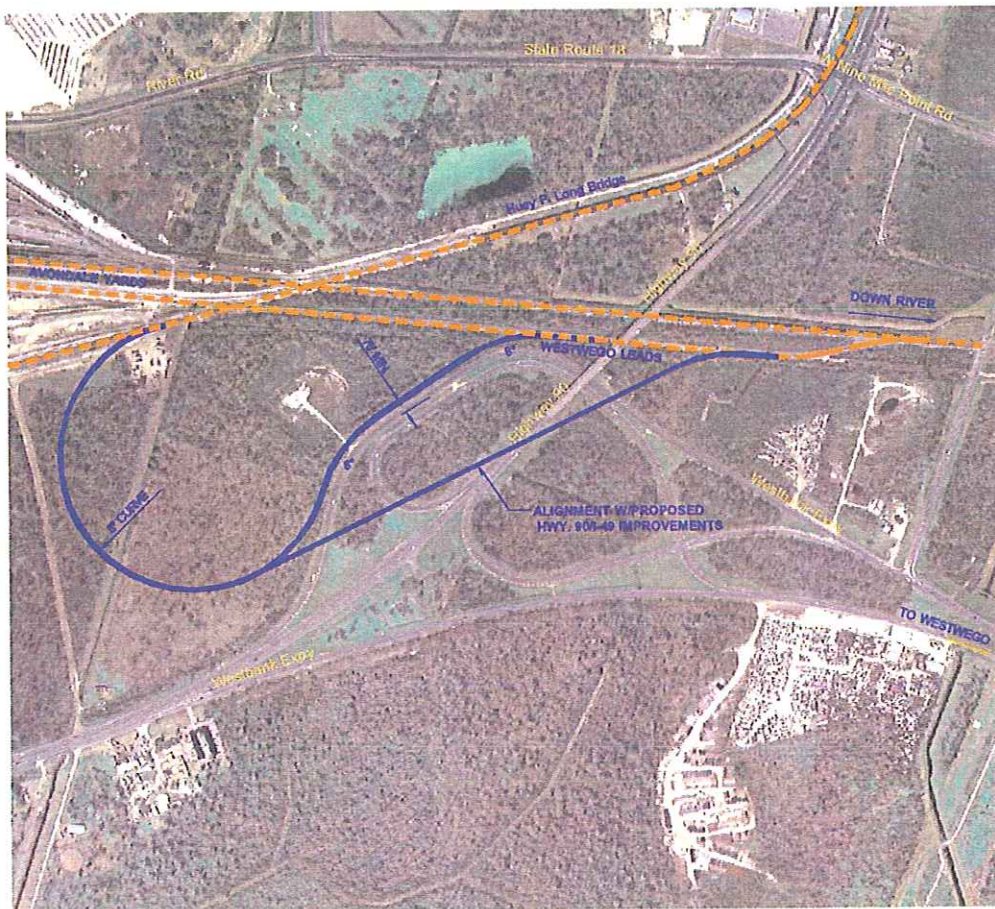


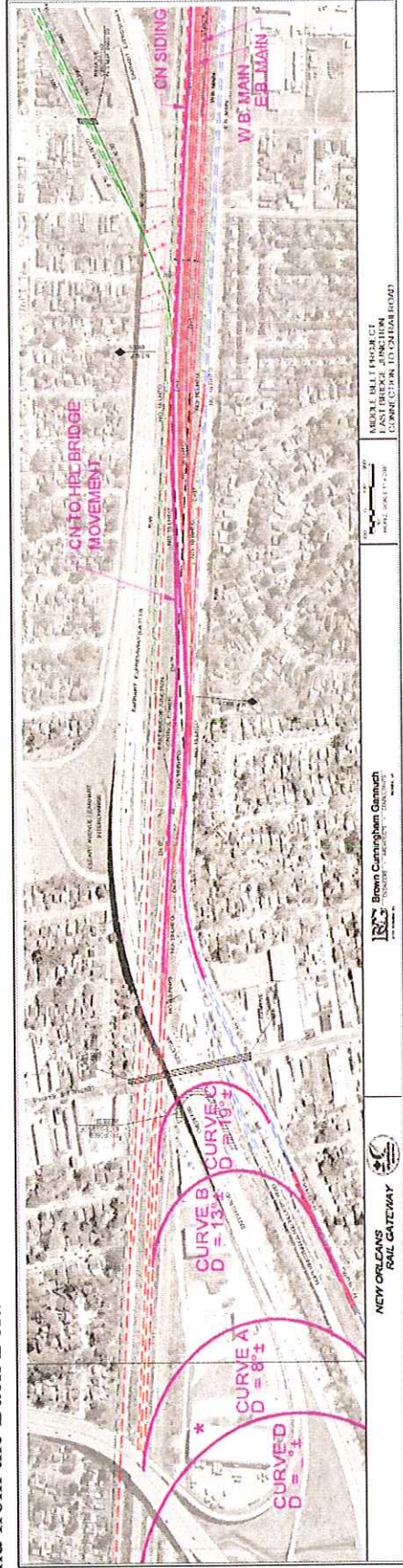
Figure 1-3, Downriver Connection to Huey P. Long Bridge

HUEY P. LONG BRIDGE EAST BANK

Rail Movement

CN Railroad to Huey P. Long Bridge

As part of this feasibility analysis an investigation of a direct connection between the HPLB and the CN was conducted. With the existing configuration of the EBJ and that proposed with the Back Belt improvements, rail movements from the Huey P. Long Bridge to the CN railroad block the EBJ. To make this movement trains must occupy the CN main thus blocking Amtrak and movements to and from the Back Belt.



Other connections that were investigated:

Figure 1-4, East Bridge Junction connection to CN Railroad.

- **Curve A** (8 degrees ± and 1.25 percent grade) - would pass over Earhart Boulevard and beneath the Clearview Parkway overpass of the CN railroad tracks. It would cross the NOPB Yard and Earhart Boulevard on an elevated structure.
- **Curve B** (10 degrees ± and 1 percent grade) – would require raising Earhart Boulevard so the tracks could pass beneath the elevated roadway. It would eliminate the use of the NOPB maintenance yard.
- **Curve C** (16 degrees to 18 degrees and 0 percent grade) – would require minor, if any modifications to the Earhart Boulevard overpass of Central Avenue. It would require same modifications to the operation of the NOPB maintenance yard.
- **Curve D** If the tracks were to crossover Clearview Parkway they would not come to grade until the middle of Mays Yard.

With the proposed Middle Belt/EBJ track configuration a separate CN siding is provided that will allow trains to queue along this siding and not block Amtrak or other rail movements through the EBJ onto the Middle Belt. The construction of curves A, B, C or D is not recommended.

LIGHT RAIL

The study team was charged with providing an alignment for future light rail in conjunction with developing the Middle Belt layout. On the Middle Belt, Drawings 400 through 405, an alignment for light rail north of the exiting CN main is shown.

There is sufficient horizontal and vertical clearance at Causeway Boulevard and at both ramps A and B of the Deckbar Avenue/Earhart Boulevard. To pass beneath the Earhart Boulevard/Orleans Parish Line overpass these structures will require structural modifications to one additional supporting column.

In Orleans Parish, along the Airline Drive corridor, the light rail will cross both the east and west freight mains on an elevated structure. This crossing could be accomplished at either end of the Airline Drive corridor.

The project plans indicate the light rail located along the south side of the freight mains in the Airline Drive corridor. This location will require additional right-of-way.

If the ramp from Airline Drive to the Palmetto Street overpass was eliminated or relocated light rail could be constructed north of the freight mains and cross the freight mains at the eastern end of the Airline Drive corridor. This would be the preferred layout but additional study for eliminating or relocating the Airline Drive to Palmetto Street ramp will be required.

PORT OF NEW ORLEANS PROPOSED INTERMODAL RAIL FACILITY DEVELOPMENT

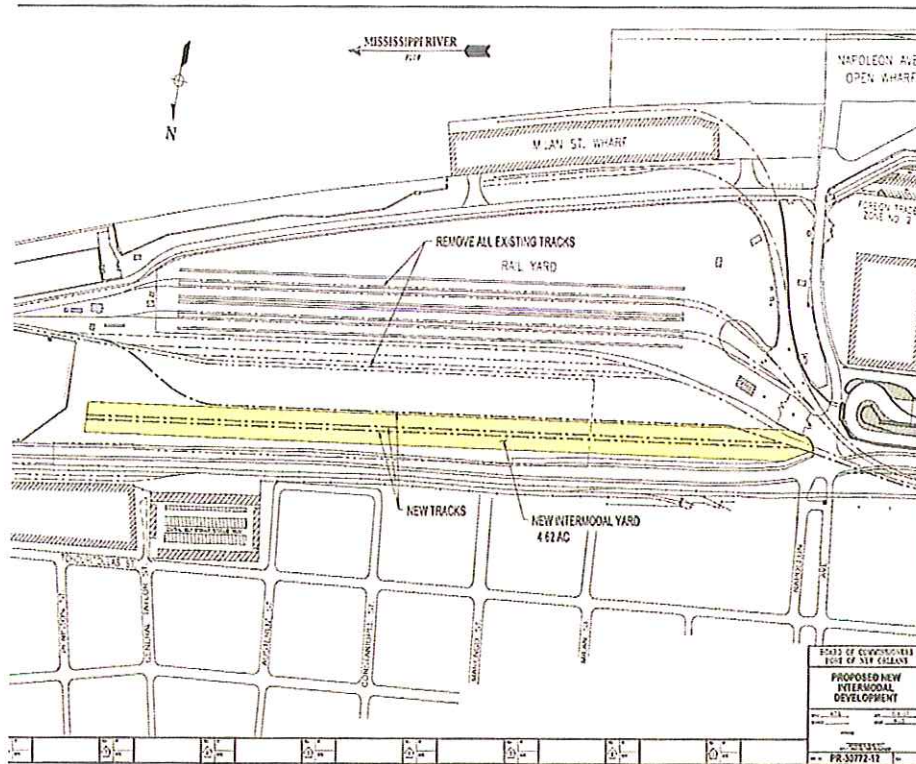


Figure 1-5.
Proposed Intermodal Rail Facility

This project is for the development of an intermodal rail facility to support the container operations at the Port. The Port plans are in keeping with the national trend of providing rail on-dock services for container facilities. By competitive port standards, the Port terminal is small and an efficient intermodal operation is critical to its success. Relying solely on truck traffic creates too much congestion and does not always meet the needs of the customer. Our ability to maintain the European services calling on the Port, and our ability to attract a Far East service, will be enhanced by a new and improved intermodal facility. This will also enable the Port to meet the growing demand for containers to and/or from South and Central American countries moving via rail within the United States.

The proposed site is on property adjacent to the Clarence Henry Truckway and next to a former rail yard. The former rail yard is presently being used for temporary container storage and rail loading, and plans are to use this space to expand our container facilities to meet increased space demand. The proposed site is adjacent to the existing facility and will allow for more efficient operation of an intermodal rail yard. The project will include reconfiguration of the existing rail tracks and paving to provide an efficient intermodal operation close to dock operations. This project includes an anticipated 6,750 linear feet of new tracks, pavement, lighting, utilities, and support services. The estimated cost is between **\$15M and \$20M**, depending on the features and capacity included.

REMOVAL OF EXISTING ROADWAY CROSSINGS THROUGH METAIRIE

(See Project Plan Sheets Nos. 302 through 306.)

With the construction of the Middle Belt route from EBJ to ECJ the existing Back Belt tracks through Metairie between Causeway Boulevard and ECJ will be removed. The removal of these tracks will allow the seven existing crossings to be reconstructed at a lower elevation to match the adjacent roadway and therefore removing the “hump” created by the railroad embankment. The estimated construction cost to reconstruct the seven existing crossings (Labarre Road, Atherton, Hollywood Drive, Farnham Place, W. Oakridge Park, Metairie Road and Carrollton Avenue) is **\$0.7M.**



Hollywood Drive Looking South

REMOVAL OF THE I-10 UNDERPASS OF THE BACK BELT TRACKS AT EAST CITY JUNCTION

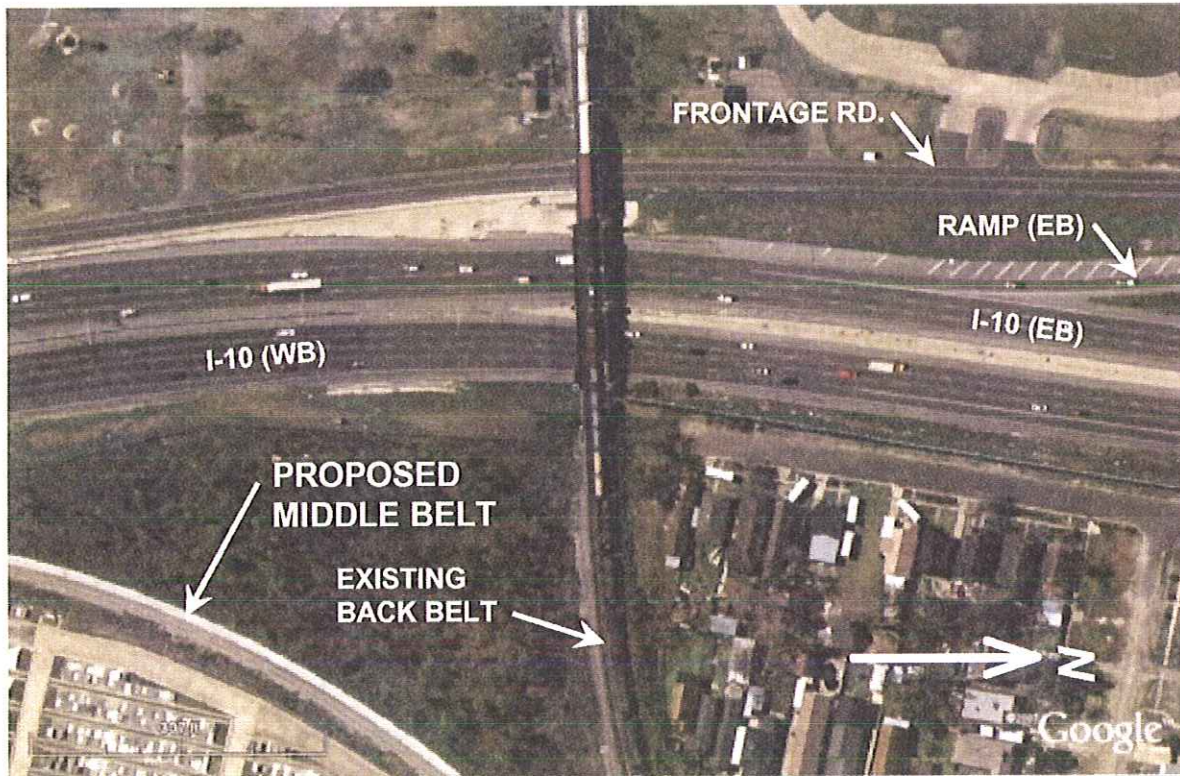
(See Project Plan Sheet No. 306)

The existing I-10 underpass of the Back Belt has been prone to flooding for years.

With the construction of the Middle Belt route from EBJ to ECJ the Back Belt tracks will be removed allowing the underpass structure to be removed and the I-10 roadways raised to the elevation of the adjacent ground (approximately 8 feet).

The estimated construction cost to remove the underpass structure and to raise the I-10 roadways approximate 8 feet is **\$5.8M**.

If the Back Belt tracks were to remain, to eliminate the underpass structure would require the construction of an overpass structure for the I-10 roadways to cross the Back Belt. To provide the minimum 23 feet of vertical clearance above the existing railroad embankment would require an excessively long bridge structure. The estimated construction cost for this structure is **\$57M**.



1-10 Underpass of Back Belt

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 2 Project Evaluation/Inventories

PROJECT EVALUATION INVENTORIES – NEW ORLEANS RAIL GATEWAY

As part of the New Orleans Rail Gateway Infrastructure Feasibility Analysis an evaluation and inventory of each proposed rail improvement project and existing rail/roadway crossing was performed.

Rail projects evaluated were those proposed by the various railroads in their combined report dated, October 29, 2004. All presently existing road at-grade crossings within the limits of the Rail Gateway were evaluated.

For presentation purposes the Gateway has been divided into three parts; Western, Central, and Eastern Sections. (See Project Plans, Sheet Nos. 100, 101 and 102).

Standardized Format

A standardized form was structured so that each railroad and grade crossing project could be adequately documented. The format was structured to assist in the environmental screening process, which would help to determine the projects that would move forward into the scope of work and environmental study.

Conceptual Design

Design, engineering, and rail operating data were collected and summarized to describe the project purpose and need, and detail the location, project scope of work and termini, estimated costs, and public concerns. Each inventory report lists perceived benefits and project impacts and contains recommendations, where necessary. Estimated project costs were reviewed, verified, and updated for each project.

Construction Cost Estimates

- Cost Estimates were prepared using established local unit prices for structural, roadway, drainage and earth work items.
- An amount of five percent for contractor mobilization/demobilization was added to the sum of all items of work.
- Contingency factors of 20 percent to 40 percent were added depending upon how well the parameters for the design and construction of the project were considered defined.
- A factor of 18 percent of the estimated construction cost was applied for engineering design, plan preparation, surveying, contract and construction administration, construction supervision, and material testing.
- The cost of additional right-of-way includes seven percent for legal fees.

Community Benefit Projects

Community mitigation/enhancement projects also were considered during the finalization of the project inventory reports. Community mitigation/enhancement projects including landscaping, improvements to adjacent roadways and traffic patterns in adjacent neighborhoods, improved drainage, or other projects that were suggested by public officials were evaluated and documented.

Railroad Benefit Projects

The benefits and beneficiaries of the proposed railroad improvements were identified and were an important input into the Benefit-Cost Analyses that were performed by the study team. Derived benefits are comparable methodology used in the Chicago CREATE¹ project (which used transportation costs per hour).

Estimates of the Cost of Additional Property

An estimate of additional required property and its cost based upon recent real estate transactions were made. Existing railroad right-of-way maps and Parish right-of-way unit sheets were used to determine the potential additional right-of-way requirements. As identified through meetings with public officials and as deemed necessary to complete the evaluation, public right-of-way documents were researched.

Existing and required right-of-way lines are shown on plans.

Traffic Data

Traffic data used in the evaluation/inventory process was obtained from multiple sources including Jefferson Parish Department of Traffic Engineering, Regional Planning Commission, and past reports/studies. When data was unavailable it is indicated. Mile post and crossing identifiers were obtained from the Federal Railroad Administration web site and number of daily train improvements supplied by each railroad. All other information was obtained by field visits to each road crossing or rail project site.

Flooding During Katrina

Data acquired during and after the hurricane were used to document whether the location of a specific project was flooded. The degree of flooding will be used to evaluate additional improvements that might be needed to maximize the benefit of each project to the railroads and the adjacent community.

¹The "Chicago Region Environmental and Transportation Efficiency Program (CREATE)" is a public/private partnership between the State of Illinois, City of Chicago, Metro and the freight railroads. It is a \$1.5 billion program that will provide critically needed infrastructure improvements to increase the efficiency of the regions rail network and reduce rail and motorist congestion.

PROJECT EVALUATION INVENTORIES – WESTERN SECTION

The Western Section begins on the west bank of the Mississippi River at Live Oak Boulevard east of the St. Charles/Jefferson Parish line. From here it proceeds eastward along tracks of the Union Pacific and Burlington Northern Santa Fe Railroads through their Avondale Rail Yard and crosses the Mississippi River on the Huey P. Long Bridge; which is owned and operated by the New Orleans Public Belt Railroad. The principle users of the western section are the Union Pacific, Burlington Northern Santa Fe, New Orleans Public Belt and Amtrak Railroads. There are approximately 25 train movements per day not counting 40 to 50 switching operations at the Avondale Rail Yard. Total length of the western section is approximately 8.3 miles.

This trackage on the west bank of the river traverses some of the last remaining large tracks of undeveloped high ground in Jefferson Parish. Residential development is generally located along the River Road (Mississippi River) with future expansion being to the south, away from the Mississippi River.

Identified rail projects in the western sections are:

W1	Avondale Yards	Extend Centralized Traffic Control (CTC) eastward from Willis including new BNSF main track to West Bridge Junction to increase speeds from 10 to 40 mph (freight) and 20 to 50 mph (Amtrak).
W2	Avondale Yard (south)	Construct 4,200 feet of new south main track to increase access to West Bridge Junction and increase switching efficiency. Through trains and Amtrak will have better access to HPL Bridge.
W3	Avondale Yards	New BNSF main track – 2,200 feet new, 2,000 feet upgraded to increase access to West Bridge Junction and reduce conflicts.
W4	Avondale Yard (north)	Extend switching lead approximately 1,200 feet to increase switching efficiency.
W5	West Bridge Junction	Upgrade manual interlocking controls, reconfigure trackage to increase speed/reduced delay for through moves, switching moves and Amtrak.
W6	Huey P. Long Bridge	Convert open deck bridge to ballast deck and install universal crossover at middle of main span.

In the western section east/west roadways are Highway 90 and River Road (LA 18) which intersect at the base of the Huey P. Long Bridge with Highway 90 proceeding north crossing the river. The four identified roadway crossings act as north/south traffic distributors crossing the railroad tracks.

W10	Live Oak Boulevard	Construct overpass structure: Initial one two-lane, two-way; ultimate-add additional two-lane structure.
W11	Willswood Lane	Construct Underpass structure.
W12	George Street	Close crossing.
W13	Avondale Garden Road	Construct two-lane, two-way overpass structure.

This report proposes closing all four roadway crossings.

Recommendations for the Western Section:

• Construct rail projects:	
W1 – Centralized Traffic Control	\$ 9.3 M
W2 – Avondale Yard (south) – New Main Track	\$ 2.3 M
W3 – Avondale Yards – New BNSF Mainline	\$ 3.5 M
W4 – Avondale Yard (north) – Extend Switching Lead	\$ 0.8 M
W5 – West Bridge Junction – Signal and Track Improvements	\$ 7.5 M
W6 – Huey P. Long Bridge – Track and Interlocking Improvements	\$ 63.6 M
• Construct Project W-10, Live Oak Boulevard Overpass	\$ 12.2 M
• Construct project W-11, Willswood Lane Underpass	\$ 9.7 M
• Close George Street	\$ 0.1 M
• Construct project W-13, Avondale Garden Road Overpass	<u>\$ 12.7 M</u>
Total:	\$121.7 M

WESTERN SECTION

LIVONIA AND AVONDALE SUBDIVISIONS

PROJECT NO. W1 - CENTRALIZED TRAFFIC CONTROL (CTC) EXTENSIONS

(Project Plans Sheet No. 200-207)

Project Objectives

Extend CTC signalized track about 3.9 miles east from Live Oak and Willis interlockings to West Bridge Junction (WBJ) to enhance operation of UP, BNSF, and Amtrak trains, which currently operate on CTC signalized track west of Live Oak and Willis. CTC would permit greater speeds and enable dispatchers to remotely monitor train movements and control the switches and signals to route train movements.

Replace existing control system by which freight and passenger trains presently operate under yardmaster authorization via radio communication. Movements are made at restricted speed, which is never more than 20 mph.

Control of traffic at WBJ is the responsibility of the tower operator and trains move under signal authorization.

Improve coordination of train movements, yard movements, and transfer traffic over the HPLB and reduce the substantial train delays that occur under existing operating practice. Presently, the number of trains and moves serves to make communication between the dispatcher, the yardmaster, and the WBJ operator difficult, which thereby makes the timely coordination of train movements very difficult.

Project Description

Extend CTC eastward from Willis including new BNSF main track to West Bridge Junction to increase speeds from 10 to 40 mph for freight trains and 20 to 50 mph for Amtrak intercity passenger trains. Close roadway crossings or upgrade grade crossing protection as needed to support higher train speeds.

Project Location

- BNSF Livonia Sub - Willis, La (MP 13.9)- to West Bridge Junction (MP 10.2), No. 2 track,
- UP Livonia Sub – Willis, La. (MP 14.3) – to West Bridge Junction (MP 10.2) add No. 1 track,
- BNSF Lafayette Sub – Avondale Yard, La (MP 12.2) – to West Bridge Junction (MP 10.3),
- UP Avondale Sub – BNSF Conn. (MP 14.9) to West Bridge Junction (MP 10.5).

Potential Environmental Issues Requiring Additional Study

Nothing of consequence; proposed work would be constructed within existing railroad right-of-way.

Potential Community Concerns

Possible construction conflicts along 1,200 feet of Gambino Road – George Street to Avondale Garden Road.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
W2	Avondale Yard (South) - New Main Track	
W3	Avondale Yards - New BNSF Mainline	
W5	West Bridge Junction- Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	Varies	
Siding	Varies	
Yard	Varies	
Max. Timetable Speed		
Type of Train	Maximum Timetable Speed (mph)	
	Existing	Proposed
Passenger	20	50
Freight	10 to 15	40
Switch	10	10
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	1	Varies
Freight	Reported as 24	Varies
Switch	Varies	Varies

RAILROAD DETAIL

Owner/Users

Property Owners: UP, BNSF
 Users: UP, BNSF, Amtrak
 Indirect stakeholders: CN, CSX, KCS, NS

Location

- Milepost –
 - a. UP Livonia Sub - Willis, LA (MP 14.3) - to West Bridge Junction (MP 10.2), No. 1 track.
 - b. BNSF Lafayette Sub – Avondale Yard, La (MP 12.2) to West Bridge Junction (MP 10.3).

Including new BNSF Main Line – MP 12.4 to MP 10.9, projects W2 and W3.

- Parish/City – Jefferson Parish.

Approximate Available Right-of-Way

Sufficient to accommodate presently proposed signal system improvements.

Possible Changes in Alignment

All proposed alignment changes would occur within UP-owned right-of-way.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Install CTC between Willis and West Bridge Junction on:

- the UP Livonia Sub No. 1 and No. 2 tracks,
- the UP Avondale Sub, and
- The new BNSF mainline.
- Five new control points would be added, and three hand-throw crossovers removed. Grade crossing protection would be improved to allow for higher speeds at:
 - Willswood Lane (would be reviewed for potential closure),
 - George Street (would be reviewed for potential closure), and
 - Avondale Garden Road.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Greatly enhanced coordination and cooperation between the dispatcher, yardmasters, and tower operator would facilitate freight and passenger operations into and through Avondale Yard. All through trains would operate on signal indication only. Train conflicts and the resulting delays would be reduced and train speeds increased from 10 and 20 mph to 40 and 50 mph. Increased speeds would also result in decreased public delays at road crossings.

- Beneficiaries: UP, BNSF, and Amtrak.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Possible construction easement required along 1,200 feet of Gambino Road, between George Street and Avondale Garden Road.

Description of Community Impacts of Railroad Work to be Accomplished

Possible construction conflicts along 1,200 feet of Gambino Road, between George Street and Avondale Garden Road.

Estimated Cost

PARSONS (July 2006) \$9.3 million.

WESTERN SECTION

AVONDALE YARD (SOUTH)

PROJECT No. W2 - NEW MAIN TRACK

(Project Plans Sheet Nos. 204-206)

Project Objectives

Modify the current configuration of the UP Avondale South Yard and Construct 4,200 feet of new south main track to eliminate the use of the Avondale Sub mainline to switch cuts of cars (even small cuts), build trains, or swap blocks. Freeing up the Avondale Sub mainline would improve access to the HPLB and would help eliminate conflicts with BNSF switching moves for their yard that is located between the two UP yards.

Project Description

Construct 4,200 feet of new Avondale Subdivision mainline track from about MP 11.5 to MP 12.3. Install one additional No. 15 switch, a new No. 11 switch to the intermodal ramp, and a new No. 11 crossover for access to Avondale south yard.

Install new road crossings at Avondale Garden Road, and George Street to accommodate new track. The work would require the installation of new bridges and minimal grading and drainage work would be required. Signals and switch protection would be provided by CTC project W-1.

Project Location

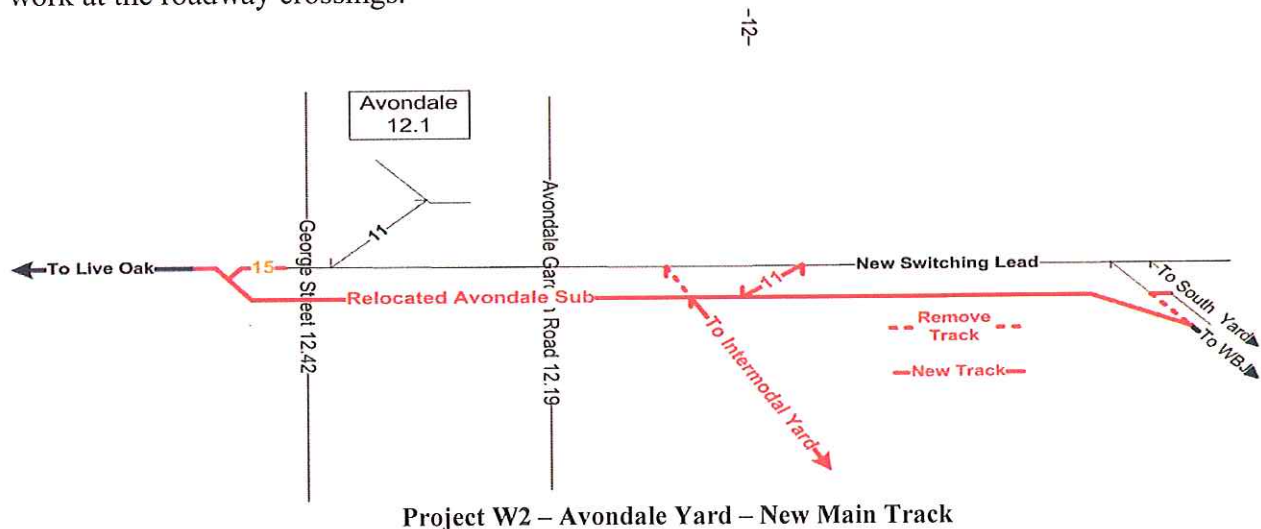
UP Avondale Subdivision MP 11.5 to MP 12.3, South Avondale Yard.

Potential Environmental Issues Requiring Additional Study

Nothing of Consequence. Noted to Date.

Potential Community Concerns

Nothing of consequence noted to date. Location is relatively remote, with the exception of the work at the roadway crossings.



PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
W1	Livonia and Avondale Subdivisions - CTC Extensions	
W3	Avondale Yards - New BNSF Mainline	
W4	Avondale Yard (North) - Extend Switching Lead	
W5	West Bridge Junction - Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	1	
Siding	Varies	
Yard	Varies	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	20	50
Freight	10 to 15	40
Switch	10	10
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	1	Varies
Freight	7	Varies
Switch	12	Varies

RAILROAD DETAIL

Owner/Users

Property Owners: UP

Direct Users: UP, BNSF, AMTRAK

Location

- Milepost - UP Avondale Subdivision MP 12.3 to MP 11.5;
- Parish/City – Jefferson.

Approximate Available Right-of-Way

Adequate - Work would be constructed within existing railroad right-of-way.

Possible Changes in Alignment

All work within railroad-owned right-of-way.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Avondale Sub presently serves as the switching lead for the west end of the UP South Yard between Avondale Interlocking (MP 12.1) and MP 11.5. Construct a new track south of the present Avondale Sub between George Street (located West of Avondale Interlocking) and MP 11.5 (see diagram above).

The work would include:

- Installation of a LH No. 15 turnout west of George Street,
 - The turnout connects the relocated Avondale Sub to the new west switching lead for South Yard;
- Installation of a RH No. 11 turnout leading to the Intermodal Facility;
- Installation of a LH No. 11 crossover connecting the new Avondale Sub and the switching lead immediately east of the Intermodal Facility; and
- Modification of the switching lead tracks at MP 11.5 to complete the separated route for the Avondale Sub,
 - The work consists of removing the existing connection to the switching lead.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Decrease in terminal car-dwell times and reductions to train departure delays. Improved access to the HPLB for mainline freight trains and Amtrak intercity passenger trains would be achieved.

- Beneficiaries: Direct: UP, BNSF, and Amtrak.
- Indirect: CN, CSX, KCS, and NS.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

None identified to date.

Description of Community Impacts of Railroad Work to be Accomplished

Potential delays while rail crossings are upgraded.

Estimated Costs

PARSONS (July 2006) \$2.3 million.

WESTERN SECTION

AVONDALE YARDS

PROJECT NO. W3 - NEW BNSF MAINLINE

(Project Plans Sheet Nos. 202, 204)

Project Objectives

Elimination of the need for the coordination of the UP yardmaster and West Bridge interlocker operator to enable BNSF freight trains to access and use the Livonia Sub Track No. 1 to access the HPLB. Eliminate conflicts with UP freight trains by enabling BNSF freight trains to make pickups and setouts out of their yard. Provide direct access to the WBJ interlocker for BNSF freight trains. Reduce congestion in the Union Pacific yard and provide UP freight trains improved access to the HPLB.

Project Description

Construct about 2,200 feet of new track and rehabilitate about 3,000 feet of existing track in the BNSF Avondale Yard. Install new switches on both ends of the new track, and remove two switches in the existing BNSF yard.

Minimal grading would be required and no bridges would be constructed. Minor culvert and drainage work would be necessary. Signal installation work covered under CTC Project W1.

Project Location

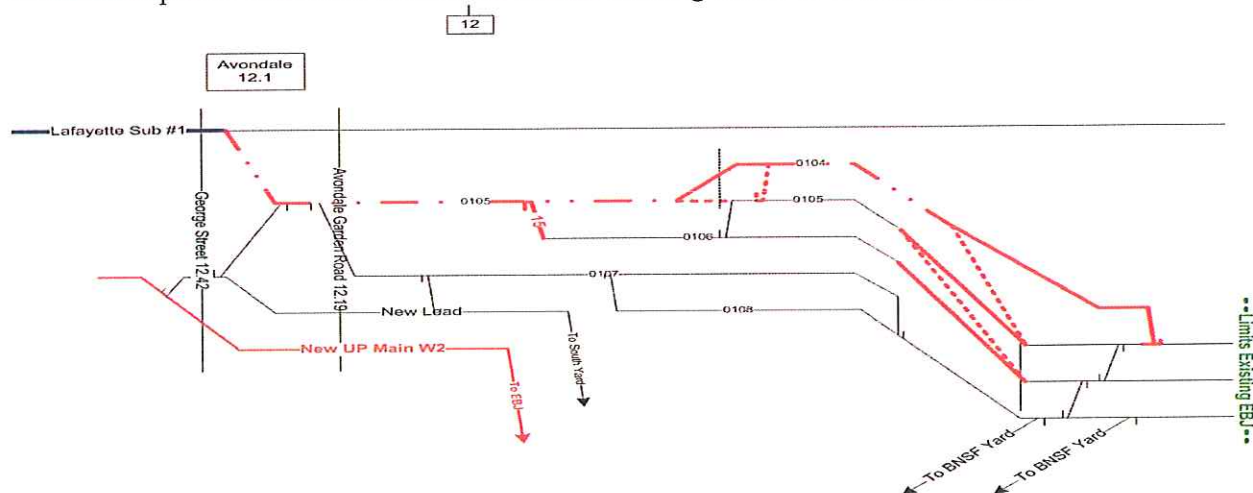
BNSF Avondale Yard.

Potential Environmental Issues Requiring Additional Study

Nothing of consequence noted to date. Mitigation during construction may be necessary. Potential Community Concerns.

Potential Community Concerns

None anticipated. All work conducted within existing limits of Avondale Yard.



Project W3 – Avondale Yard New BNSF Main Line

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
W1	Livonia and Avondale Subdivisions - CTC Extensions	
W2	Avondale Yard (South) - New Main Track	
W4	Avondale Yard (North) - Extend Switching Lead	
W5	West Bridge Junction - Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	1	
Siding	Varies	
Yard	Varies	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	10	30
Freight	10	30
Switch	10	30
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	10 daily movements, depending on new operating agreements	N/A
Freight		N/A
Switch		N/A

RAILROAD DETAIL

Owner/Users

- Property Owners: BNSF.
- Direct Users: BNSF, (UP).

Location

- Milepost - MP 12.2 to MP 10.3.
- Parish/City – Jefferson.

Approximate Available Right-of-Way

None required.

Possible Changes in Alignment

None.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Construct a new BNSF mainline between Avondale (12.1) and East Bridge Junction (10.2) by upgrading the northernmost track(s) in the BNSF Avondale Yard and making a series of realignments.

From west to east, the route:

- Diverts from the Lafayette Sub Track 1 at Avondale through the existing RH turnout to the center track:
- Continues on the center track lead to the turnout to Track 0106, which is upgrade to a RH No. 15;
- Continues on the center track for another 1,200 feet where a new 600 foot connection to Track 0104 is constructed,
 - The existing LH turnout from Track 0105 to 0104 is removed, thereby isolating 0104, which would become part of the new BNSF main track;
- Continues on 0104 for nearly 2,000 feet where a series of cuts and throws changes the alignment of tracks 0104 through 0106 to add a fourth track approximately 1,650 feet long to extend the new main line track nearly 650 feet until it is connected to the existing track that ultimately leads to Track 2 over the HPLB,
 - The four tracks reduce to three at the end of the new construction and connect into the three existing tracks leading to the home signals for EBJ.

The above description assumes that EBJ is modified after the new main track is constructed.

Identification of Benefits And Beneficiaries of Railroad Work to be Accomplished

New direct BNSF access to the West Bridge interlocker through a 7,800-foot [maybe 10,000 feet] mainline/receiving/departure track. Improved UP access to the bridge. Reduced conflicts at the interlocker resulting in reduced train delays for both railroads.

- Beneficiaries: Amtrak, BNSF, CN, CSX, KCS, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

None anticipated.

Description of Community Impacts of Railroad Work to be Accomplished

None.

Estimated Costs-

PARSONS (July 2006) \$3.5 million.

WESTERN SECTION

AVONDALE YARD (NORTH)

PROJECT NO. W4 - EXTEND SWITCHING LEAD

(Project Plans Sheet No. 205)

Project Objectives

Elimination of the short north yard switching lead that restricts the number of cars that can be switched in a day. The lengthened switching lead would increase the number of cars that can be handled by a switch engine at one time. Elimination of the need to build freight trains on the mainline. Ultimately, reduction in the delays:

- to build freight trains,
- to trains departing out of the yard, and,
- to mainline trains.

Project Description

Extend the switching lead approximately 1,800 feet, and install a new switch in the drill track. Substantial grading work would be required. Minimal drainage work would be required, and no bridges would be constructed. The effort would require no new signal work.

Project Location

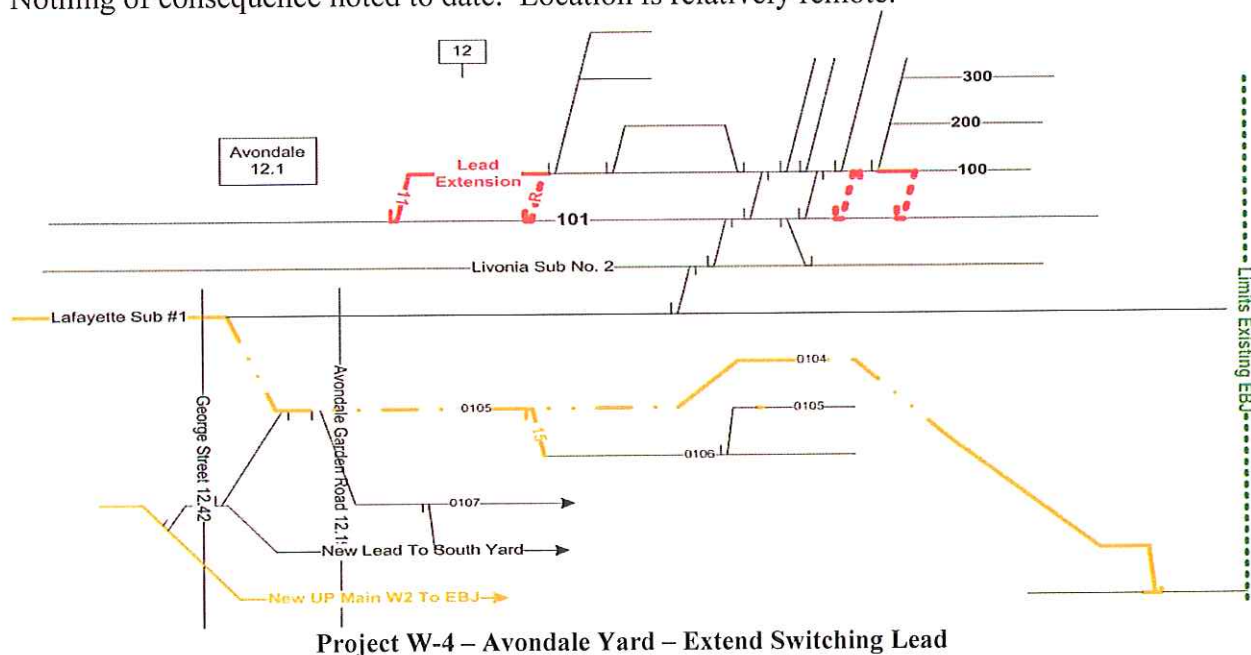
UP North Avondale Yard.

Potential Environmental Issues Requiring Additional Study

Nothing of consequence noted to date.

Potential Community Concerns

Nothing of consequence noted to date. Location is relatively remote.



PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
W2	Avondale Yard (South) - New Main Track	
W3	Avondale Yards - New BNSF Mainline	
W5	West Bridge Junction - Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	0	
Siding	1	
Yard	Varies	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	Not applicable	
Freight		
Switch		
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	Not applicable	Not applicable
Freight		Not applicable
Switch		varies

RAILROAD DETAIL

Owner/Users

- Property Owners: UP
- Direct Users: UP

Location

- Milepost – 12.2 to 11.4
- Parish/City – Jefferson

Approximate Available Right-of-Way

UP has recently acquired sufficient right of way for this project.

Possible Changes in Alignment

The new track would be parallel to the existing railroad alignment.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

The existing switching lead for the UP North Avondale Yard would be extended approximately 1,800 feet westward (see Table above). Track 100 would be extended westward and connected via a new turnout connecting to the drill track presently serving Tracks 200, 300, and 400. Substantial grade work would be required, with minimal drainage, no bridges, and no signal work. A portion of Project W-3 is shown at the bottom of the diagram.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Terminal car-dwell times would be decreased as well as train departure times.

- Beneficiaries: BNSF, CN, CSX, KCS, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Sufficient existing right-of-way.

Description of Community Impacts of Railroad Work to be Accomplished

None identified to date.

Estimated Costs

PARSONS (July 2006) \$0.8 million.

WESTERN SECTION

WEST BRIDGE JUNCTION

PROJECT NO. W5 - SIGNAL AND TRACK IMPROVEMENTS

(Project Plans Sheet Nos. 205, 206, 207)

Project Objectives

Upgrade manual interlocking controls and reconfigure trackage to increase speed and reduce delays for through freight train moves, yard switching moves, and Amtrak intercity passenger trains. Increase coordination and improve communications with and between the stakeholders using the interlocking.

Improve UP and BNSF access to and from the HPLB by increasing and enhance the operational for all trains at the east end of Avondale Yard. Eliminate the delays that presently result from the existing single route for UP trains.

Provide BNSF freight trains access to both the EB and WB mainlines over the HPLB. Increase operational flexibility to eliminate conflicts and substantially reduce the level of train delays.



**Project W5 – West Bridge Junction from UP Mainline
Looking east to HPLB.**

trains to the bridge. The track changes would extend the two mainlines coming off the bridge and include two additional crossovers that would allow parallel moves in and out of the UP North and South Avondale Yards. The provision of a second route to the yards would eliminate the delays that presently result from the existing single route.

The changes would provide BNSF access to both the EB and WB mainlines over the HPLB. Presently, BNSF trains only have access to the WB mainline. The increased operational flexibility would eliminate conflicts and result in substantial reduction in the level of train delays.

The benefits resulting from the reduction in delays resulting from the increased flexibility would be spread proportionally to the stakeholders.

Project Description

Replace West Bridge Junction tower and manual interlocking controls (see photo) with remote electronic controls that would allow for remote operation of the West Bridge Junction tower from any site. The remote electronic controls would result in increased coordination and improved communications with and between the stakeholders using the interlocking, which would greatly benefit all the railroads and the public. The track configuration and interlocker changes would improve UP and BNSF access to and from the HPLB by increasing the flexibility of moving

Project Location

West Bridge Junction is located in Jefferson Parish at the west end of the NOPB Huey P. Long Bridge.

Potential Environmental Issues Requiring Additional Study

Nothing of consequence noted to date.

Potential Community Concerns

Nothing of consequence noted to date. Location is relatively remote.

PROJECT DATA SUMMARY				
Status of Design, Engineering and Data Collection				
Function	Status			
Design	Not started			
Engineering	Sketch-level planning			
Data Collection	Drawings and sketches developed to date; track charts and yard schematics			
Related Projects				
Project Number	Name			
W1	Livonia and Avondale Subdivisions - CTC Extensions			
W2	Avondale Yard (South) - New Main Track			
W3	Avondale Yards - New BNSF Mainline			
W6	HPLB - Signal and Track Improvements			
No. of Tracks				
Tracks	Number			
Main	2			
Siding				
Yard	Not applicable			
Max Timetable Speed				
Type of Train	Maximum Speed (mph)			
	Existing	Proposed		
Passenger	10	20 through WBJ No. 11		
Freight	10	20 through WBJ No. 11		
Switch	10	20 through WBJ No. 11		
Train Volumes: (July, 2004)				
Daily Bridge Volumes				
Movement: From/To	EB	WB	Total	Total
UP to NS	2.1	2.1	4.2	4.2
UP to CSX	4.5	3.8	8.3	8.3
UP to CN	1	0.9	1.9	1.9
BNSF to NOPB	3	3	6	6
Amtrak	0.9	0.9	1.8	1.8
Returning Helper Locomotives	0.1	2.6	2.7	2.7
Total Daily Bridge Movements	11.6	13.3	24.9	24.9
Additional Interlocker Movements			Range	
UP To and From Westwego			4	4
BNSF To and From Ramp			4	4
Switching Moves			24	30
Swing Moves			9	12
Total Other Movements			41	50
Grand Total Work Events Each Day			66	75
Number of Daily Trains/Typical Train Consist				
Type of Train	Average Per Day		Locomotives/Cars	
Passenger	See above		Varies	
Freight			Varies	
Switch			Varies	

RAILROAD DETAIL

Owner/Users

BNSF, NOPB, UP are property owners.

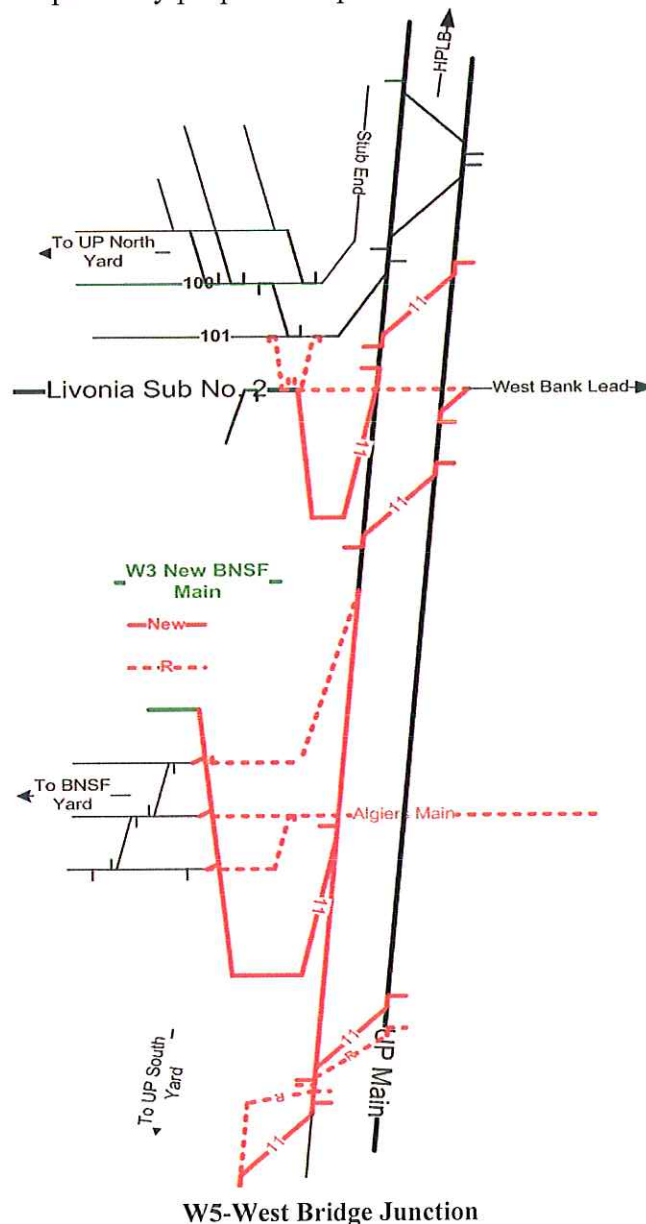
- Direct stakeholders: BNSF, NOPB, UP, Amtrak
- Indirect stakeholders: CN, CSX, KCS, NS, Jefferson Parish

Location

- Milepost –Livonia Division MP 10.2
- Parish/City – Jefferson Parish

Approximate Available Right-of-Way

Sufficient to accommodate presently proposed improvements.



Possible Changes in Alignment

All proposed alignment changes would occur within UP-owned right-of-way.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

The connections from the UP South Yard, the BNSF Avondale Yard, and the Up North Yard to the NOPB double-track mainline would be revised.

The revision includes:

- The abandonment of the UP Algiers main line from approximately MP 10.4 to its connection with the Up West Bank Industrial Lead (MP 8.2).
- The abandonment of the direct connection from the UP North Yard to the UPRR West Bank Lead,
 - The direct connection would be replaced by access from the UP South Yard.

The change in connections to the UP West Bank Lead would result in the elimination of the two sets of existing crossing diamonds. Access to the West Bank Lead from the UP South Yard would be through a series of turnouts and crossovers.

NOPB main track 2 would be extended southward and would connect to the lead to the UP South Yard; a RH turnout and crossover located at the end of the extension would provide access to either NOPB 1 or 2 from the South Yard.

Existing tower and manual interlocker controls would be replaced with remote electronic controls. The overall construction would include 11 new switches and about 2,000 feet of track. Approximately 500 feet of track would be shifted and 9,000 feet of track would be removed.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

- UP and BNSF are primary beneficiaries.
- Amtrak, CN, CSX, KCS, NOPB, and NS benefit from improvements in transfer operations.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

None identified to date.

Description of Community Impacts of Railroad Work to be Accomplished

None identified to date, location is remote.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$7.5 million.

WESTERN SECTION

HUEY P. LONG BRIDGE

PROJECT NO. W6 - TRACK AND INTERLOCKING IMPROVEMENTS HPLB

(Project Plans Sheet Nos. 207-300)

Project Objectives

Reduce maintenance requirements of HPLB track structure. Provide additional operating flexibility by permitting crossover moves on bridge.

Project Description

Convert open deck bridge to ballast deck for entire length of HPLB. Install universal crossover at mid-span of the truss bridge. Install signal system to enable reverse running on the double main tracks.

Project Location

HPLB, NOPB MP 3.7 to MP 8.0.

Potential Environmental Issues Requiring Additional Study

Work over river will require “best practices” during construction.

Potential Community Concerns

Project is isolated from community and should not raise concerns.

PROJECT DATA SUMMARY				
Status of Design, Engineering and Data Collection				
Function	Status			
Design	Not started			
Engineering	Sketch-level planning			
Data Collection	Drawings and sketches developed to date; track charts and yard schematics			
Related Projects				
Project Number	Name			
W1/W2/W3/W5	UPRR, BNSF Rail Corridors from Live Oaks to West Bridge Junction and the approach to the HPLB			
C1	East Bridge Junction (EBJ) - Signal and Track Improvements			
C11	Central Ave Grade Crossing			
No. of Tracks				
Tracks	Number			
Main	2			
Siding	Varies			
Yard	Varies			
Max Timetable Speed				
Type of Train	Maximum Speed (mph)			
	Existing	Proposed		
Passenger	10	30		
Freight	10	30		
Switch	10	30		
Number of Daily Trains/Typical Train Consist				
Daily Bridge Volumes				
Movement: From/To	EB	WB	Total	Total
UP to NS	2.1	2.1	4.2	4.2
UP to CSX	4.5	3.8	8.3	8.3
UP to CN	1	0.9	1.9	1.9
BNSF to NOPB	3	3	6	6
Amtrak	0.9	0.9	1.8	1.8
Returning Helper Locomotives	0.1	2.6	2.7	2.7
Total Daily Bridge Movements	11.6	13.3	24.9	24.9

RAILROAD DETAIL

Owner/Users

- Property Owners: NOPB
- Direct Users: BNSF, NOPB, UP, and Amtrak

Location

- Milepost -
- Parish/City – Jefferson

Approximate Available Right-of-Way

Bridge is owned by NOPB and requires no additional right-of-way to be upgraded.

Possible Changes in Alignment

Alignment modifications not required.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Replace existing open deck track construction with ballasted deck track construction. Work would be accomplished under traffic with one track, at a minimum, open to support train operations. Install a universal interlocking approximately mid-span to provide additional flexibility for train operations. Install signal system to support reverse running on either track. Additional analysis is required to determine whether speed over bridge can be increased.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Reduction in the maintenance requirements of the track structure and bridge would reduce delays to train operations by enabling extended periods of double track operation between East and West Bridge Junction over the bridge. The universal interlocking would enable trains to be held on one track at either interlocking without tying one track the entire length of the bridge. The signal system would provide operating flexibility by enabling trains to run in either direction on either track at normal track speed. The signal system also would provide trains information on the status of the interlocking, East or West Bridge Junction, that it is approaching and thus enable it to operate at the appropriate speed approaching the interlocking, rather than moving at restricted speed as they do now.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Additional real estate would not be required.

Description of Community Impacts of Railroad Work to be Accomplished

None.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$63.6 million.

5. Description of Possible Enhancements:
None, other than providing grade separation.

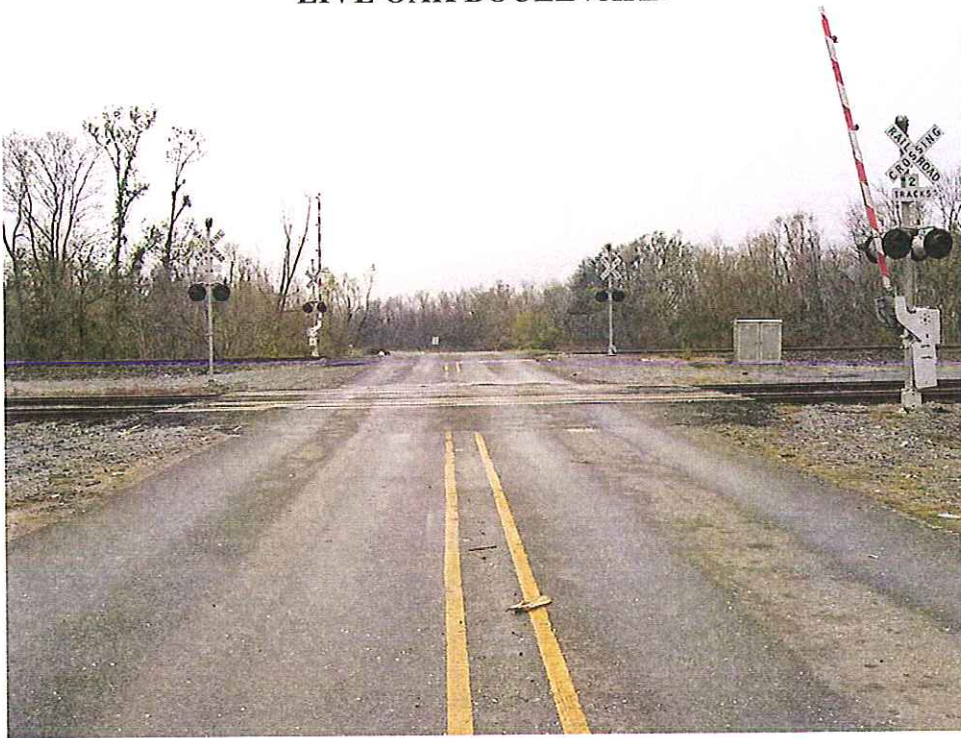
6. Benefit of Project:
Elimination of at-grade crossing.

7. Estimated Costs:	Utility Relocations:	0.00
	Structural/Roadway Construction:	\$10,400,000.00
	Railway Construction:	0.00
	Right-of-Way Acquisition:	0.00
	Plans, Specifications, Construction	
	Administration/Supervision, Testing at 18 Percent:	<u>\$ 1,800,000.00</u>
	Total Project Cost:	\$12,200,000.00

8. Description of Attached Photographs:
South of all tracks looking north.
Middle of crossing looking south.

9. Description of Attached Documents:
Utility Layout.

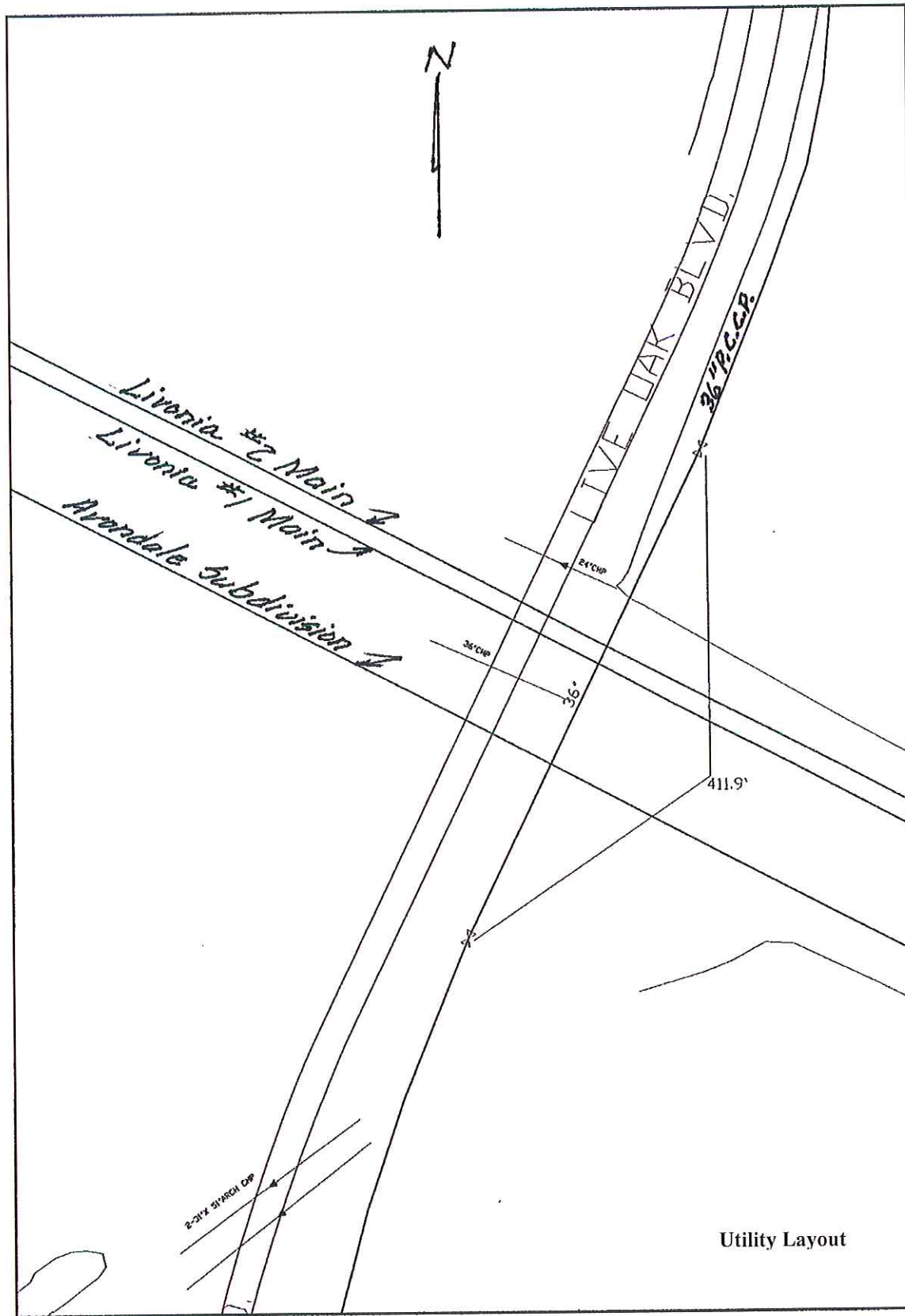
LIVE OAK BOULEVARD



Looking North



Looking South



Utility Layout

WESTERN SECTION

PROJECT NO. W11 - WILLSWOOD LANE

(Project Plans Sheet No. 201)

Project Description

Willswood Lane is a two-lane unimproved asphalt roadway connecting River Road (LA 18) and Highway 90 by way of Live Oak Boulevard. This crossing is used to avoid possible train conflicts at Avondale Garden Road. The area on the riverside of the tracks is being developed residential.

Immediately north of the track is the Norbert Rillieux Elementary School and two single family homes. The school buildings are built close to the roadway right-of-way and will need to be reconstructed. Either an overpass or underpass structure will impact the school and homes with an underpass structure minimizing the impact.

Railroad Data
Users: Union Pacific, BNSF, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): W1
Covered by Whistle Ban: No
Milepost/Crossing ID: UP Milepost 0013.35/757993f
Number of Tracks: 2 Sets. 3 Tracks North, 1 Track South
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Live Oak Boulevard 1.4 Miles West, George Street 0.9 Miles East
Number of Train Movements/Day: 25
Roadway Data
State Route or Local Roadway: Local Collector Roadway: Jefferson Parish Local Roadway
Number of Traffic Lanes: 2 at 11 Feet.
Traffic Volume (Average Daily Traffic): 2006: 1,554 2016: 2 026:*
% Truck: Minimal – 3%
% Auto: 97%
Pedestrian Use: None
Posted Speed Limit: 40 mph South, 20 mph North at School
Level of Service or Classification of Roadway: Collector
Approx. Height of Crossing Above Adjacent or Approach Roadways: 2' to 3'
Approach Roadway:
<ul style="list-style-type: none"> • Shoulders - Non-Paved Grass • Drainage - Subsurface on Each Side of Roadway Draining to South • Utilities – Water and Sewer from North Stopping Before Tracks, Qwest Fiber Optics Between Track Sets • Surfacing of Roadway - Asphalt – Fair Condition • Right-of-Way - 90 Feet South, 60 Ft. North with 18' Drainage Servitude on West • Topography - Country, Flat, Developing Residential
Flooded During Hurricane Katrina or Rita: No, Possible for Category 4 and 5 Storms

*With completion of the Huey P. Long widening project, which will provide three traffic lanes in each direction, development in the Western Section should increase. Jefferson Parish Department of Traffic Engineering has not made projections.

1. Describe Any Problems With Existing Crossing Configuration:

Southbound roadway has sight problems. Possible future conflicts because of developing residential area and location of school. Connection from River Road (LA 18) and Highway 90. This route is used because of possible train conflicts at Avondale Garden Road. Area on the riverside of the tracks is undergoing residential development. Two existing houses and a public school may be affected by the construction of a grade separation structure. Minimal utilities.

2. Description of Possible Improvements:

As development proceeds and traffic grows, consideration should be given to grade separating the crossing. Initial analysis indicates that an overpass would affect adjacent development more than an underpass would.

3. Additional Right-of-Way Requirements:

Frontage roads will be required to provide access to the adjacent undeveloped property, the length depending upon improvements (overpass or underpass).

4. Possible Community Concerns:

Maintenance of access to school located adjacent to crossing. Visual impact of an overpass. Creation of drainage sump by underpass.

5. Description of Possible Enhancements:

Jefferson Parish Department of Public Works has plans to reconstruct this roadway to include two 12' lanes with 8' paved shoulders.

6. Benefit of Project:

Grade crossing separation would permit trains to stop on approach to Avondale Yard without making cuts to avoid blocking the crossing.

7. Estimated Costs:	Utility Relocations:	\$ 150,000.00
	Structural/Roadway Construction:	\$7,800,000.00
	Railway Construction:	\$ 120,000.00
	Right-of-Way Acquisition:	\$ 210,000.00
	Plans, Specifications, Construction	
	Administration/Supervision, Testing at 18 Percent:	<u>\$1,420,000.00</u>
	Total Project Cost:	\$9,700,000.00

8. Description of Attached Photographs:

Photo 1 - Middle of crossing looking north.
Photo 2 - Middle of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

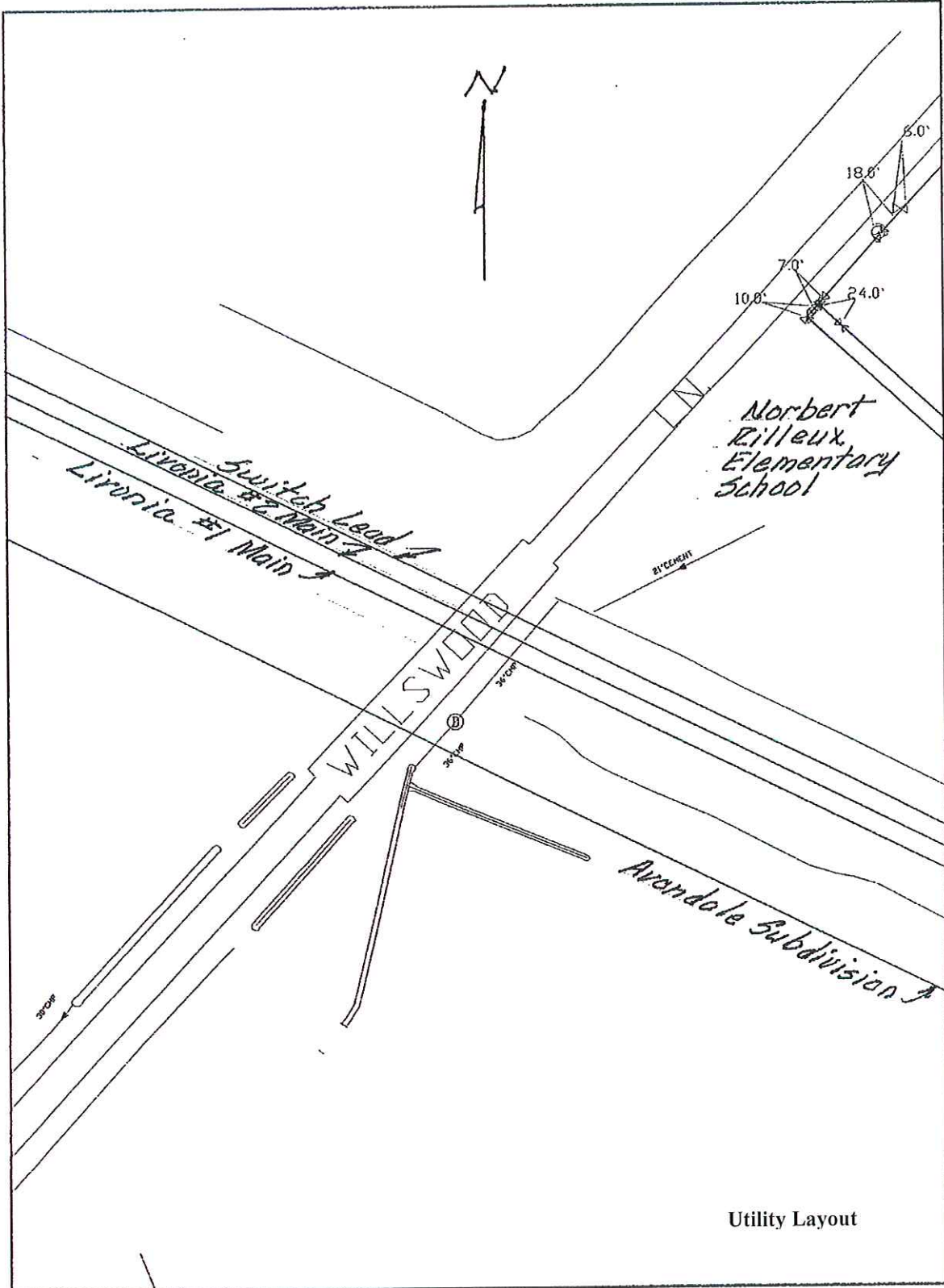
WILLSWOOD LANE



Looking North



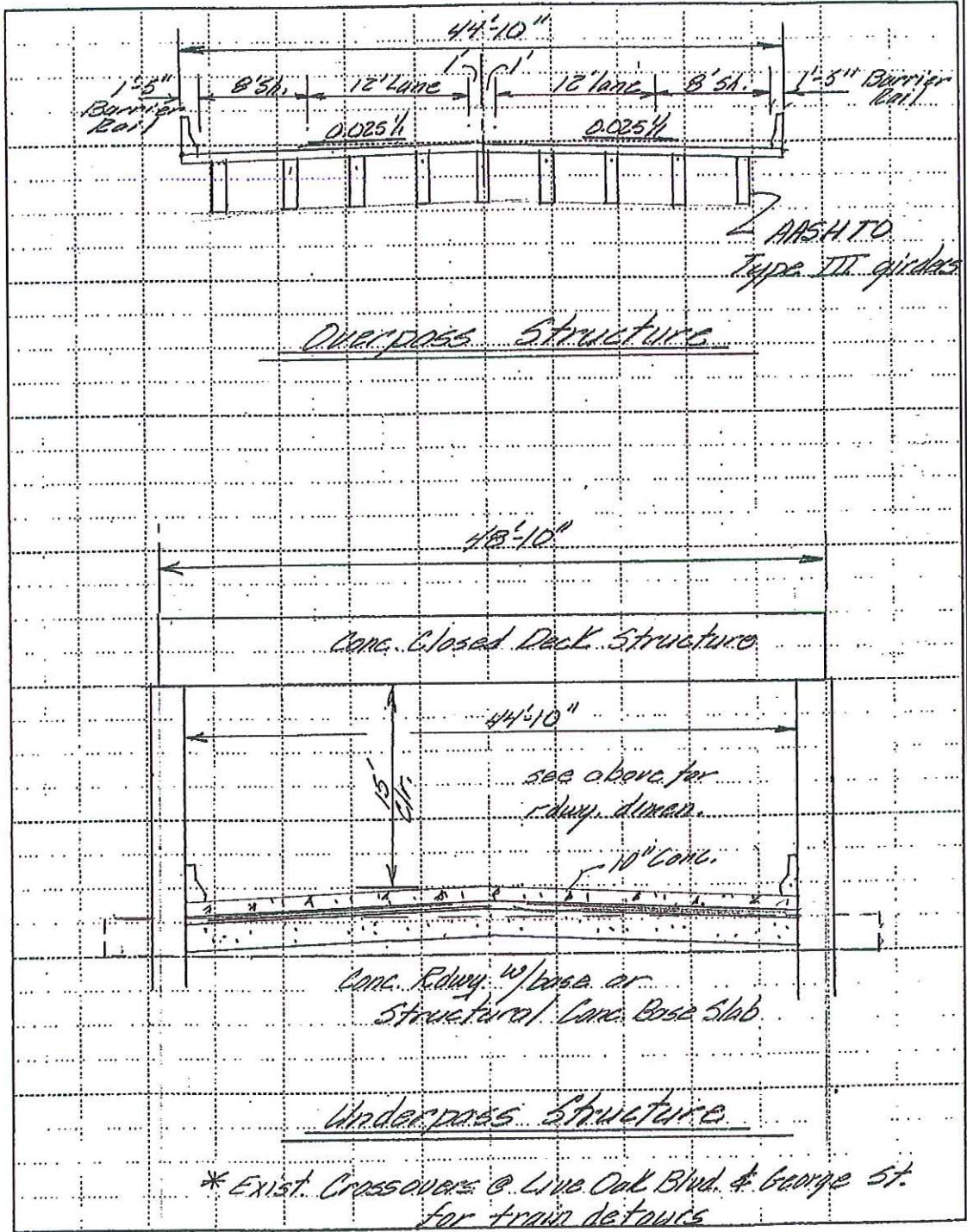
Looking South

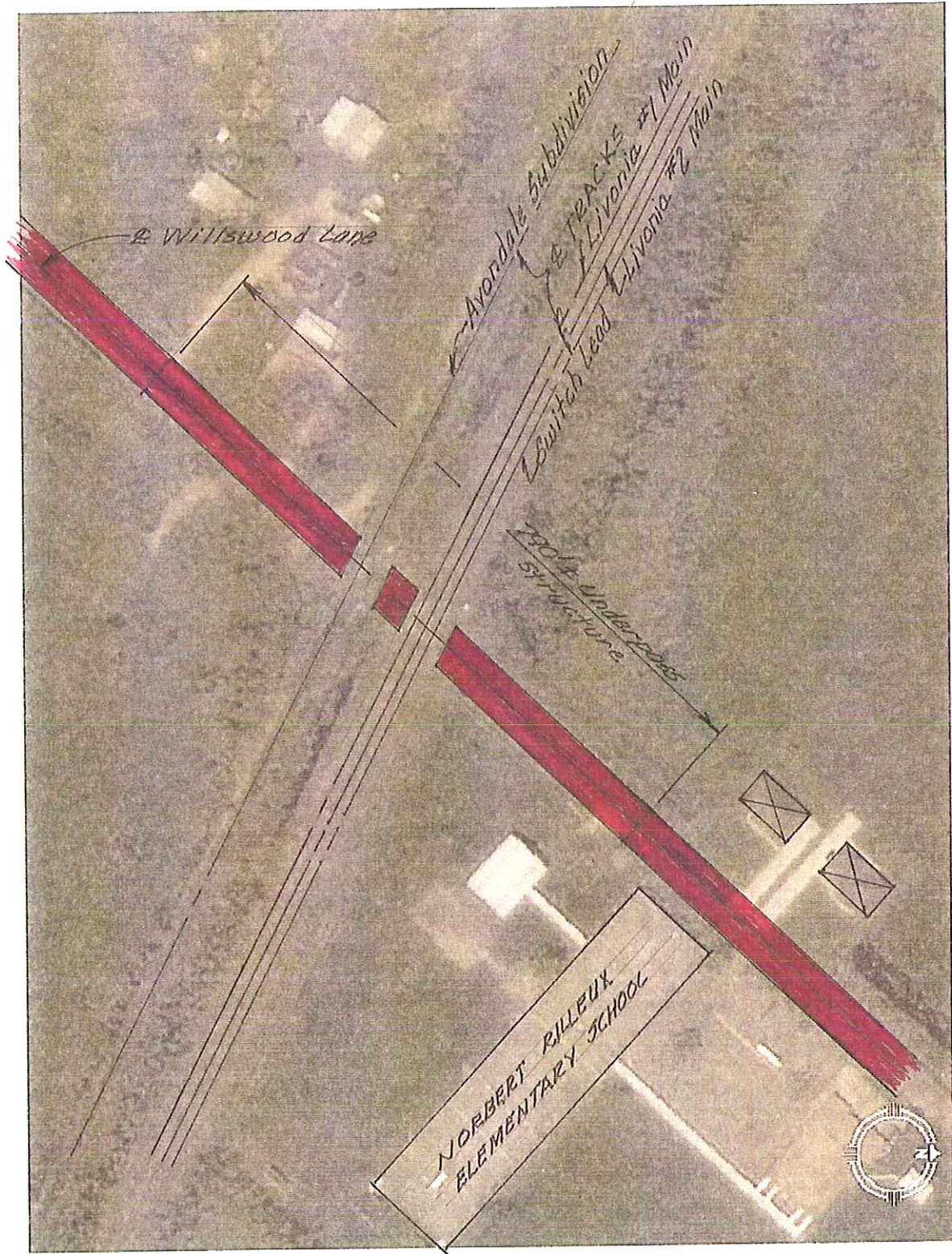


Utility Layout

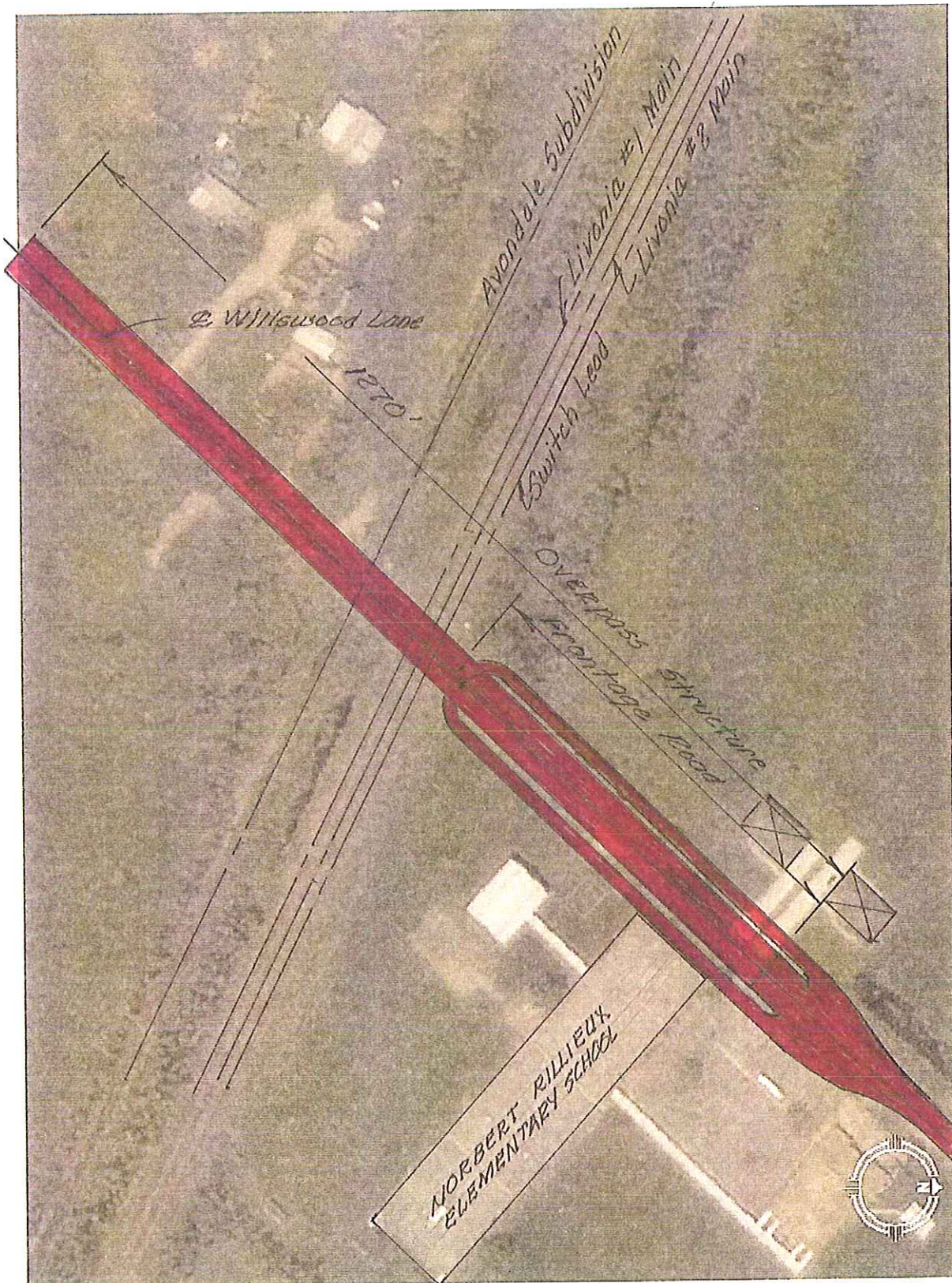
JOB Rail Gateway
 COMPUTATION FOR Wilkswood Lane

SHEET NO. _____ OF _____
 DATE _____
 BY _____ CHKD _____





UNDERPASS STRUCTURE



OVERPASS STRUCTURE

WESTERN SECTION

PROJECT NO. W-12 GEORGE STREET

(Project Plans Sheet No. 202)

Project Description

Serves to connect Gambino Road and LA 18 (River Road). Traffic uses when the adjacent Avondale Garden Road is blocked by train operations in and out of the Avondale Yard. George Street is an unimproved asphalt roadway 1,200 feet upriver (west) of Avondale Garden Road and connects River Road and Gambino Road.

Railroad Data	
Users:	Union Pacific, BNSF, Amtrak
Related Railroad Project (Oct. 29, 2004 Report):	WI and W2
Covered by Whistle Ban:	No
Milepost/Crossing ID:	UP Milepost 12.40/757992Y
Number of Tracks:	2 sets. 3 Tracks North, 1 Track South
Existing Signal Devices:	Gates and Flashers
Distance to Adjacent Crossing:	Avondale Garden Road 0.2 Miles East, Willwood Lane 0.9 miles west.
Number of Train Movements/Day:	25
Roadway Data	
State Route or Local Roadway:	Local Collector Roadway, Jefferson Parish Local Roadway
Number of Traffic Lanes:	2 at 11 Feet
Traffic Volume (Average Daily Traffic):	2006: 1,178 2016: 2026:*
% Truck:	Posted No Truck Route
% Auto:	100%
Posted Speed Limit:	20 mph on Gambino Road
Level of Service or Classification of Roadway:	Collector
Approx. Height of Crossing Above Adjacent or Approach Roadways:	
3' to 4' North	5-½ Ft. on Gambino Road
Approach Roadway:	
<ul style="list-style-type: none"> • Shoulders - None • Drainage - Subsurface Draining to South. • Utilities – Qwest Fiber Optics South of North Set of Tracks. • Surfacing of Roadway - Unimproved Asphalt. • Right-of-Way - 50 Feet • Topography - Unimproved, Country 	
Flooded During Hurricane Katrina or Rita: No, Possible for Category 4 and 5 Storms.	

*With completion of the Huey P. Long widening project, which will provide three traffic lanes in each direction, development in the Western Section should increase. Jefferson Parish Department of Traffic Engineering has not made projections.

1. Describe any Problems With Existing Crossing Configuration:

Frequently blocked by train traffic into and out of Avondale Yard. Serves to connect Gambino Road and LA 18 (River Road). Used as alternative when the adjacent Avondale Garden Road is blocked by train operations in and out of the Avondale Yard.

2. Description of Possible Improvements:

Close crossing, re-route traffic to grade separated Avondale Garden Road crossing.

3. Additional Right-of-Way Requirements:

None anticipated.

4. Possible Community Concerns:

None anticipated.

5. Description of Possible Enhancements:

Grade separation at Avondale Garden Road.

6. Benefit of Project:

Reduced roadway congestion and improved safety. Railroad benefit by elimination of crossing.

7. Estimated Costs: Utility Relocations:

N/A

Structural/Roadway Construction: (remove crossing)

\$ 90,000.00

Railway Construction:

N/A

Right-of-Way Acquisition:

N/A

Plans, Specifications, Construction

Administration/Supervision, Testing:

\$ 10,000.00

Total Project Cost:

\$100,000.00

8. Description of Attached Photographs:

Photo 1 - South of crossing looking north.

Photo 2 - North of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

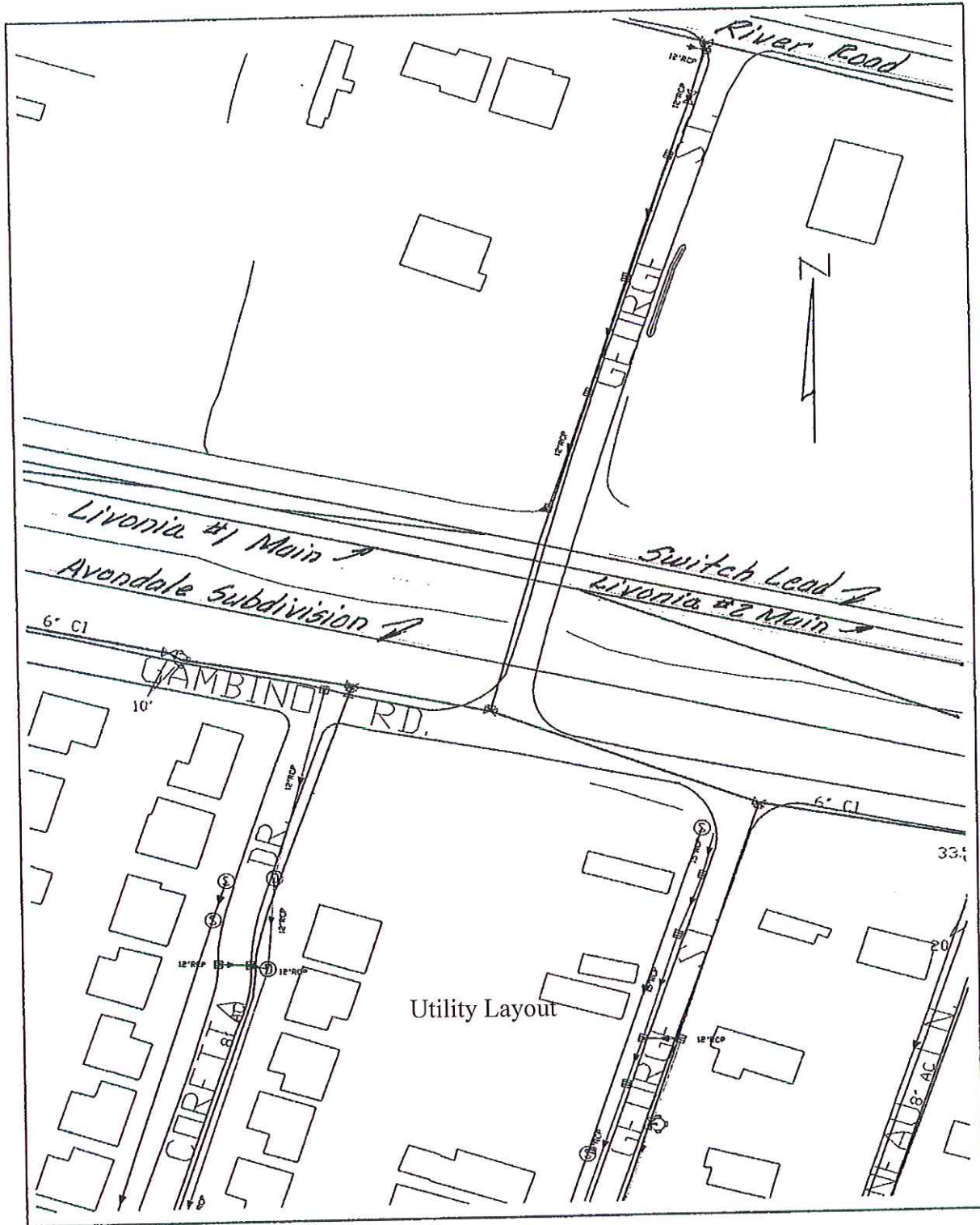
GEORGE STREET



Photo 1 - Looking North



Looking South



BC Brown Cunningham Gannuch
 ENGINEERS • ARCHITECTS • CONSULTANTS
 1701 KINGMAN ST. METairie, LA

WESTERN SECTION

PROJECT NO. W13 - AVONDALE GARDEN ROAD

(Project Plans Sheet Nos. 202, 203)

Project Description

Avondale Garden Road provides a direct connection between Highway 90 and River Road and is located at the western limits of the Avondale Rail Yard. This is the only direct connection between these two roadways within the Western Section. There is a large amount of truck traffic using Avondale Garden Road because of the location of two intermodal yards immediately adjacent and to the east of this roadway. Because of the large number of switching operations at the Avondale Rail Yard, 40 to 50 per day, both Avondale Garden Road and George Street experience delays. To alleviate these delays both underpass and overpass structures were considered. Because of the lack of available right-of-way at the George Street/Gambino Road intersection George Street was not considered. Locating structures along existing Avondale Garden Road would have impacted a cemetery north of the tracks and the existing residential area south of the tracks. Plate 203 shows an overpass structure constructed immediately east and behind the east tier of residential lots facing Avondale Garden Road. Construction in this area will require the purchase of right-of-way on both sides of the tracks. The proximity of River Road and the Mississippi River dictates that the grade of an overpass structure would be excessive to meet the existing elevation of River Road. To lessen this grade to 6 percent, River Road is shown raised and shifted towards the river levee. The construction of an overpass structure would minimize conflicts with rail switching operations during construction. It would also remove all truck traffic from existing Avondale Garden Road lessening noise and vibrations.

Railroad Data	
Users: Union Pacific, BNSF, Amtrak	
Related Railroad Project (Oct. 29, 2004 Report): W1 and W2	
Covered by Whistle Ban: No	
Milepost/Crossing ID: UP Milepost 12.20/757991S	
Number of Tracks: 6 Immediately Adjacent to Avondale Yard. W2 Would Add Seventh Track	
Existing Signal Devices: Gates and Flashers	
Distance to Adjacent Crossing: George Street 0.2 Miles West	
Number of Train Movements/Day: 25	
Roadway Data	
State Route or Local Roadway: Local Collector Roadway, Jefferson Parish Roadway	
Number of Traffic Lanes: 2 at 11 feet	
Traffic Volume (Average Daily Traffic) 2006: 5,317 2016: 2026: *	
% Truck: Large % From Intermodal Yard South of Tracks	
% Auto: 90% ±	
Posted Speed Limit: 20 mph	
Level of Service or Classification of Roadway: Collector	
Approx. Height of Crossing Above Adjacent or Approach Roadways: 2' to 3' North	
Approach Roadway:	
<ul style="list-style-type: none"> • Shoulders - None • Drainage - Open Ditch North, Subsurface South • Utilities – All • Surfacing of Roadway - Asphalt, Poor Condition • Right-of-Way - 50 feet North and South • Topography - Flat, Residential 	
Flooded During Hurricane Katrina or Rita: No, Possible for Category 4 and 5 Storms.	

*With completion of the Huey P. Long widening project, which will provide three traffic lanes in each direction, development in the Western Section should increase. Jefferson Parish Department of Traffic Engineering has not made projections.

1. Describe any Problems with Existing Crossing Configuration:

Crossing frequently blocked by train traffic into and out of Avondale Yard. Avondale Garden Road acts as a connection between U.S. Highway 90 and LA. 18 (River Road) and as a collector roadway for residential area between the tracks and U.S. Highway 90. Provides a connection between intermodal yard south of Avondale Rail Yard and LA. 18 (River Road).

2. Description of Possible Improvements:

Close, construct overpass immediately east of east tier of lots facing Avondale Garden Road.

3. Additional Right-of-Way Requirements:

New alignment will require a right-of-way of 50 feet minimum. A 100 foot wide buffer zone exists behind the tier of lots facing Avondale Garden Road.

4. Possible Community Concerns:

Possible impact to church and access to new roadway.

5. Description of Possible Enhancements:

None other than grade separation.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing. Railroad would benefit by elimination of crossing. Project would serve to eliminate truck traffic in residential area on Avondale Garden Road and improved truck access from intermodal yard to River Road and Highway 90.

7. Estimated Costs: Utility Relocations:	0.00
Structural/Roadway Construction:	\$ 9,900,000.00
Railway Construction:	0.00
Right-of-Way Acquisition:	\$ 1,000,000.00
Plans, Specifications, Construction	
Administration/Supervision, Testing at 18 Percent:	<u>\$ 1,800,000.00</u>
Total Project Cost:	\$12,700,000.00

8. Description of Attached Photographs:

Photo 1 - Middle of crossing looking north.
Photo 2 - Middle of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

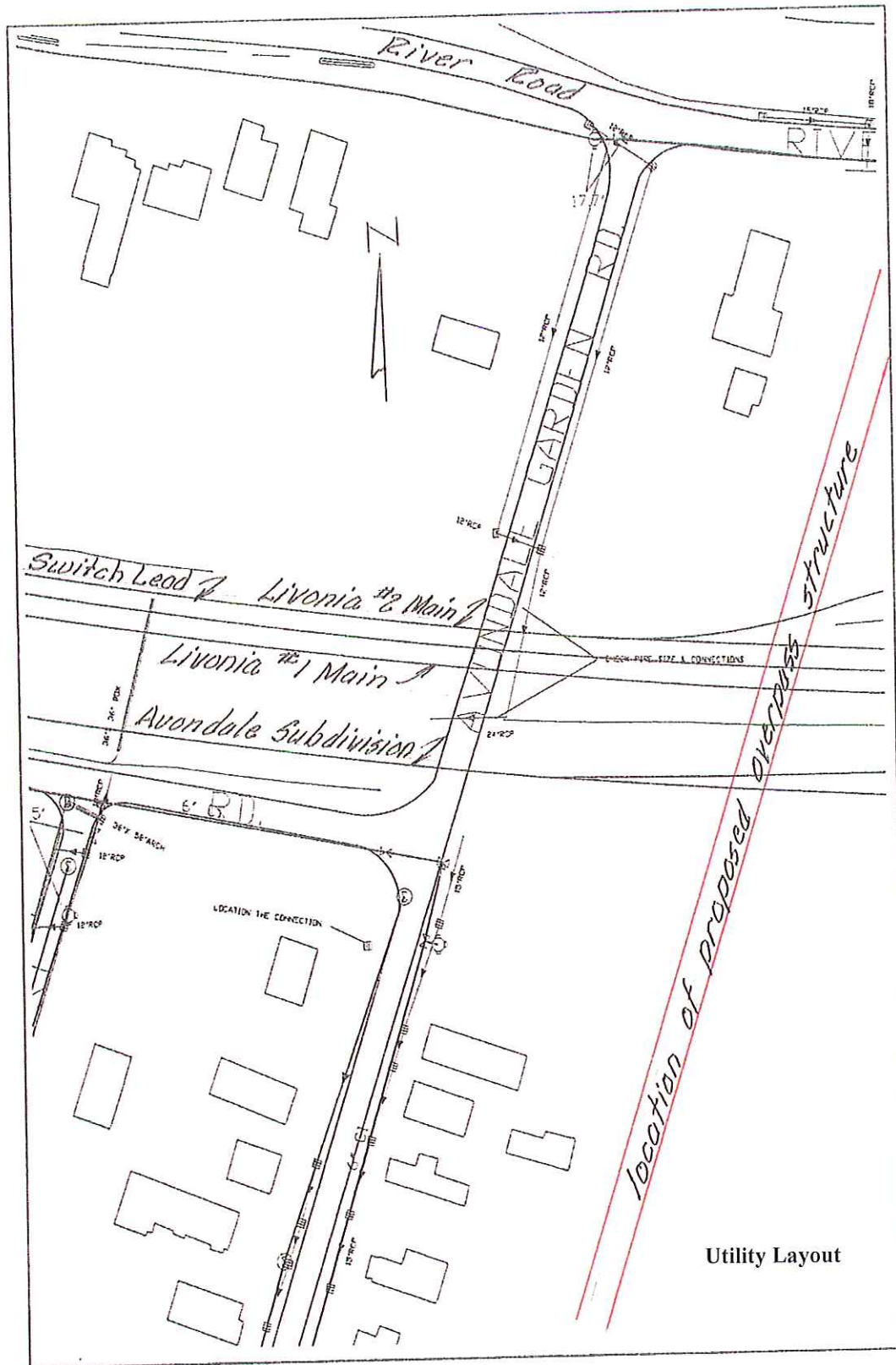
AVONDALE GARDEN ROAD



LOOKING NORTH



LOOKING SOUTH



PROJECT EVALUATION INVENTORIES – CENTRAL SECTION

The Central Section begins at the base of the Huey P. Long Bridge on the east bank of Jefferson Parish. From here it proceeds through the East Bridge Junction, along the “Back Belt” tracks through Jefferson and Orleans Parishes ending at the Almonaster Bridge crossing the Industrial Canal, a distance of approximately 9.9 miles.

BACK BELT ROUTE

Trackage along this section of the New Orleans Rail Gateway is operated by the New Orleans Public Railroad, CN, Norfolk Southern Railroad, CSX, and KCS Railroads. Amtrak is a major user of tracks in this section except for that portion through the Metairie neighborhood of Jefferson Parish.

The majority of the “choke points” to the movement of rail traffic occurs in this Central Section of tracks.

Identified rail projects for the central section are:

- *C1 - Provide double track routes from N.S. Back Belt to Huey P. Long Bridge. Upgrade and modernize switch and signal hardware and control equipment. Build new control station for remote control operation.
- *C2 - Shrewsbury Controlized Traffic Control (CTC). Install CTC from east bridge junction to Metairie Road and a new control point at Shrewsbury. The new signal system would upgrade the track segment from “Yard Limits” to main line track.
- *C3 - Grade Separate existing at grade road crossings. Grade separate or eliminate the seven existing at-grade road crossings between Causeway Boulevard and the 17th Street Canal a distance of approximately 1.7 miles. The grade separations would enable trains waiting to cross the EBI to access the Huey P. Long Bridge to be held immediately east of the Shrewsbury Control point.
- *C4 - Double Track Norfolk Southern Back Belt construct approximately 3,000 linear feet of double track from immediately west of Metairie Road to immediately east of the 17th Street Canal.
- *E1 - Install universal crossovers at East City Junction to enable passenger trains to meet and pass without delays and minimize conflicts with freight trains on the Back Belt.
- E2 - Reconfigure Track and Signals (MP68 NT to 7.2 NT). Improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard.
- E3 - Connection between N.S. and CSX – Provide availability for a second track at this location.
- *E6 - Add third track – Frenchman Street to Marconi Drive. Provide a third track to increase through move capacity and capacity to hold trains in this area.

*Denotes projects that would not be required for Middle Belt alignment. For Middle Belt see page 2-119.

At-grade roadway crossings in the central section are:

C10	Central Avenue	Close crossing. Provide roadway connecting Webb Street to Firestone Drive.
*C11	Shrewsbury Road	Close crossing – traffic rerouted to Labarre Road.
*C12	Labarre Road	Construct underpass structure.
*C13	Atherton Drive	Close crossing – traffic rerouted to Labarre Road underpass by existing Loumar Avenue.
*C14	Hollywood Drive	Construct underpass structure.
*C15	Farnham Place	Construct underpass structure.
*C16	West Oakridge Parkway	Close crossing.
*C17	Metairie Road	Construct underpass structure.
*C18	Carrollton Avenue	Construct underpass structure.
E10	Louisa Street	Close crossing, reroute traffic to Alvar Street overpass of CSX tracks.
E10	France Road	Close crossing, reroute traffic to Alvar Street overpass of CSX tracks.

*Construction along Back Belt route only. For Middle Belt route the track at these crossings would be removed and the roadway would be improved.

From the base of the HPLB to the Almonaster Bridge there are two existing and on additional potential rail routes. The Front Belt and Back Belt routes exist today and a Middle Belt route could be created by connecting existing New Orleans Union Passenger Terminal (NOUPT) eastbound and west bound mains beneath the I-10/Carrollton Avenue overpass. As concluded in the Executive Summary the Front Belt route is not recommended for inclusion of the Rail Gateway. For a description of the Middle Belt see Page 2 - 119.

The portion of the NS Back Belt that transverses Jefferson Parish neighborhood of Metairie has been contentious for years, primarily because of the obstruction to the flow of traffic caused by the number of daily train movements.

It is proposed that the rail embankment be raised beginning at Causeway Boulevard to a maximum of approximately seven feet at Metairie Road. Five underpass structures would be constructed (see above). Except for a vertical clearance of 15 feet at Metairie Road the vertical clearance at all other structures would be 12'-6" that needed for passage of emergency vehicles only. Other than Metairie Road all other crossings are residential streets where truck traffic is prohibited. Each crossing would have a drainage underpass pumping stations with emergency power back up. Upon completion of construction the embankment would be landscaped to provide a visual screen.

The floodgates at each end of the crossings of the 17th Street Canal and the London Avenue Canal are susceptible to being closed during hurricane events. To eliminate the need for this these structures would be reconstructed as waterproof "U" channels with the top of the wall at the elev. of the adjacent levee. The upturned legs of the channel sections would act as a levee along both sides of the tracks eliminating the need for flood gates at the ends of the structures.

The construction from Causeway Boulevard to and including the new structure crossing the 17th Street Canal can be built in one project or a maximum of three projects.

- 1) Bridge crossing the 17th Street Canal.
- 2) 17th Street Canal to east of Farnham Place.
- 3) Farnham Place to Causeway Boulevard.

The limits of construction will depend on the maximum grade to go from the existing track elevation to new profile.

Metairie Road to the Eastside of the 17th Street Canal, along Frisco Avenue

There is a single track through this part of the Central Section. Double track ends 250 feet west of Metairie Road and begins again 430 feet east of the 17th Street Canal, a distance of approximately 2,600 feet. The right-of-way is 100 feet except between Metairie Road and Carrollton Avenue where it is 50 feet, 25 feet each side of the existing track

Presently the single track goes from being the north track west of Metairie Road to being the south track east of the 17th Street Canal. This alignment will be corrected with the installation of dual trackage.

Proposed construction will provide two tracks, grade separated structures at both Metairie Road and Carrollton Avenue and a new two-track structure crossing the 17th Street Canal.

The grade separation at Metairie Road is proposed to be a six-span structure elevated approximately seven feet above the present rail elevation. Raising the elevation of the tracks will allow an underpass structure with 15 feet of vertical clearance to be constructed and will decrease the length of roadway construction below existing grade. The side spans will have ten feet of clearance and will allow pedestrians and auto traffic to pass beneath the structure.

There are a number of scenarios for the structure crossing the 17th Street Canal, depending on the future use of this canal as a drainage conduit.

- 1) If the flood walls and gates are to remain. Raise and provide water proof structure.
- 2) If the flood walls and gates are abandoned (Pump Station No. 6 moved to Lakefront). Construct a new structure at approximately the same elevation as existing.

If Pump Station No. 6 is moved to the Lakefront then this canal becomes a suction canal and the invert of the canal will be deepened drastically compromising the load capacity of the existing bridge piling. In this case the construction of a multi-cell concrete box culvert may be appropriate.

Because of the limited 50 feet right-of-way through this section the addition of the second track will require the construction of retaining walls to contain the increased embankment width and height. Frisco Avenue is located along the north side of the tracks and provides access to three streets. Along the south side are five residential structures which may suffer minor damage during construction. It is recommended that an "L-wall" be constructed along the right-of-way

on the Frisco Avenue side. The five residential structures on the south would be purchased to provide additional right-of-way width so a sloped embankment could be constructed.

Carrollton Avenue is planned to be a single span structure providing 10½ feet of vertical clearance.

The grade separation at Metairie Road is proposed to be a six span structure elevated approximately 7 feet above the present rail elevation. This will enable of 15 feet vertical clearance for Metairie Road and 10 feet of clearance at the side spans.

Recommendations for the Central Section:

• C10 - Close Central Avenue and reroute traffic to Clearview Parkway and Webb Street	\$ 6.0M
• C1A - Construct Middle Belt	\$166.8M
• Construct Rail Projects:	
E2 (Elysian Fields),	\$ 11.9M
E3 (northwest quadrant at Northeast Tower)	\$ 12.3M
• *E10 – Louisa Street Underpass	\$ 10.9M
• E11 – Close France Road	<u>\$ 0.1M</u>
Total	\$208.0M

*Further study should be conducted to determine impact of closing this crossing and rerouting traffic to the Alvar Street overpass.

CENTRAL SECTION

EAST BRIDGE JUNCTION (EBJ) – BACK BELT ROUTE

PROJECT NO. C1 - SIGNAL AND TRACK IMPROVEMENTS

(Project Plans Sheet Nos. 300, 301)

Project Objectives

Upgrade current route from NS Back Belt to NOPB HPLB from a single-track to a double-track movement to increase capacity. Improve track geometry to increase maximum speeds from Back Belt to the HPLB. Replace antiquated control equipment for signals and switches, which a 24-hour manned on-site control tower controls and are subject to frequent service failure.

In conjunction with Projects C3 and C4 eliminate highway/rail conflicts and congestion on Jefferson Parish grade crossings located on the NS Back Belt.

Project Description

Upgrade/modernize switch and signal hardware and control equipment. New control station for remote control operation. Remove existing control tower. Remove NOPB crossover at Central Avenue. Provide double track routes from NS Back Belt to Huey P. Long Bridge, includes rail to rail crossing of CN main. Turnouts replaced and upgraded. Separate control point for beginning of NS Back Belt and KCS main near Earhart Boulevard.

Project Location – NOPB MP 9.8 to NS Back Belt (MP 0.3-A)

East Bridge Junction is located in Jefferson Parish at the east end of the NOPB Huey P. Long Bridge crossing the Mississippi River. EBJ tower is manned and controlled by CN. EBJ is: (1) the junction of NS Back Belt and KCS main to the CN main; (2) crossover from CN main line to CN A1 main; and (3) crossover from CN A1 main line to NOPB double track.

Direct stakeholders: All - BNSF, CN, CSX, KCS, NOPB, NS, UP, City of New Orleans, City of Metairie, Jefferson and Orleans Parish.

Potential Environmental Issues Requiring Additional Study

Nothing of consequence noted to date.

Potential Community Concerns

Nothing of consequence noted to date.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
C2	Shrewsbury CTC - Signal and Track Improvements	
C11	Central Avenue Crossing Closure	
C12	Shrewsbury Road Crossing Closure	
W6	HPLB - Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	5	
Siding	0	
Yard	1	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	30 mph on NOPB	30 mph on NOPB
	40 mph Amtrak on CN	40 mph Amtrak on CN
Freight	20 mph HPLB	20 mph on HPLB
	10 mph through EBJ plant	15 mph through EBJ plant No. 10 turnouts
	20 mph Back Belt	25 mph through EBJ plant No. 15
Switch	same as freight	same as freight
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	4	Varies
Freight	NS Back Belt movements - 25 daily	Varies
	8 KCS movements	Varies
	4 CN yard moves and locals	Varies
	12 NOPB movements	Varies
	2 UP Front Belt movements	Varies
Switch	Included in Above	Varies

RAILROAD DETAIL

Owner/Users

- Property Owners: CN, KCS, NOPB, NS
- Direct Users: Amtrak, BNSF, CN, CSX, KCS, NOPB, NS, UP

Location

- Milepost – N/A
- Parish/City – Jefferson

Approximate Available Right-of-Way

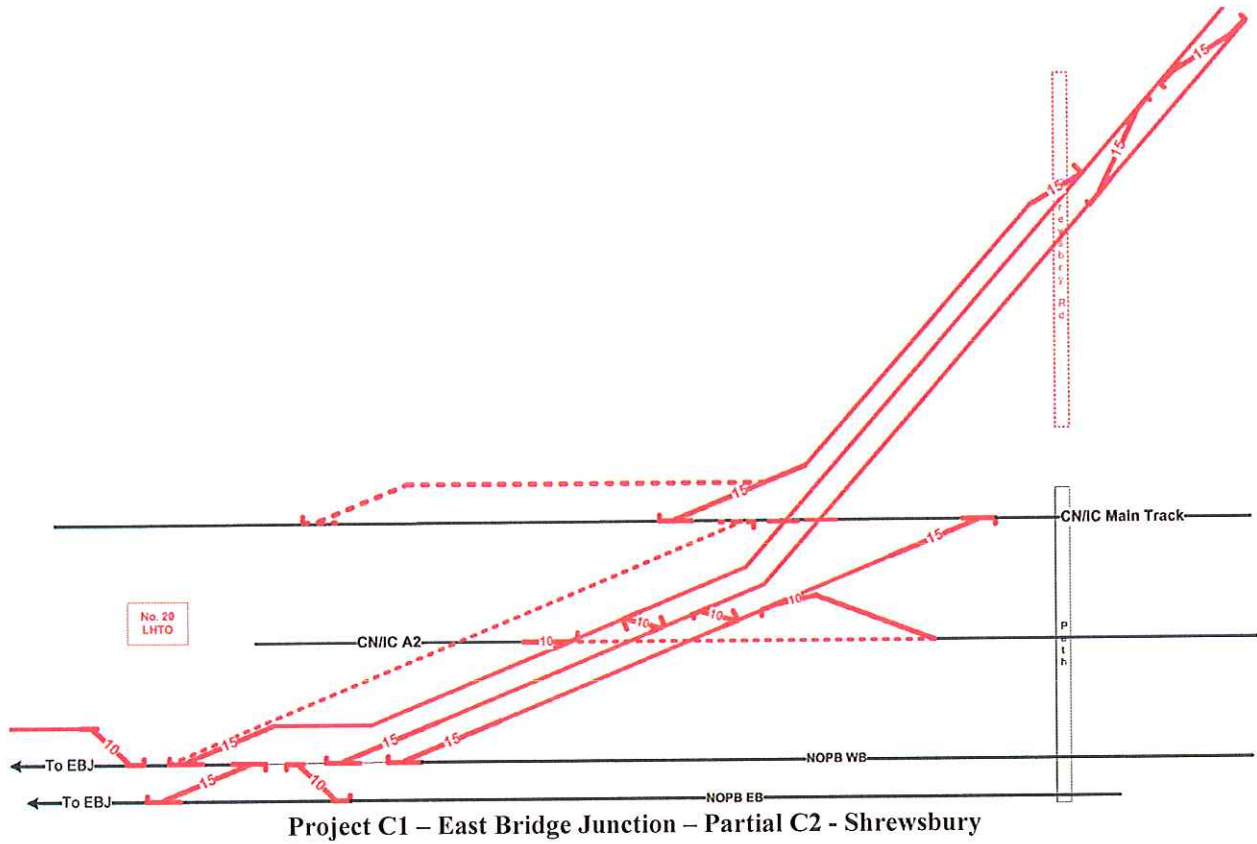
The alignment revisions would take place within railroad owned right-of-way.

Possible Changes in Alignment

The project would significantly modify train routings through EBJ, however, the alignment changes would be constructed within the existing railroad right-of-way.

Flooded During Katrina

No.



Description of Railroad Work to be Accomplished

The project would modify EBJ to increase the capacity and flexibility for movements between the Back Belt and the HPLB. The routing changes are summarized below.

Summary of Changes to Existing Routes Through EBJ

<u>From</u>	<u>To</u>	<u>Change</u>
HPLB	Back Belt	Number of tracks increased from one to two. The configuration would increase speed of trains through EBJ to 25 mph.
HPLB	CN Main	The eastward connection, which is used by the Sunset Limited to access NOUPT, would be improved with the maximum speed increased to 40 mph.
HPLB	NOPB	Not affected by the configuration change.
Mays Yard	CN Track A2	One of the lower density routes would be the route most affected by the reconfiguration; rather than being a simple move over a crossing diamond with the Back Belt lead track, the route would pass through a series of No. 10 turnouts and crossovers, a more indirect and slower routing.
CN/IC main	CN Main	The routing would not be affected by the reconfiguration; with the exception that the main would pass over two rather than one crossing diamond.
CN/IC main	East to KCS	The connection would be shortened and the maximum speed increased to 15 mph. The connection upgrade requires that Project C2, the Shrewsbury Interlocking, also be implemented.

The track changes would include:

- Removal of the existing single track route between the HPLB and the Back Belt,
 - This includes all existing crossing diamonds and turnouts;
- Construction of a complex interlocking on the NOPB main tracks that would provide routing flexibility for all eastward train movements;
- Construction of three tracks, in place of the existing track, between the NOPB main tracks and the CN main track
 - Two of the tracks would cross the CN main and connect to the Back Belt at Shrewsbury,
 - The third track would connect to the CN main and the CN track A2 east of the first two tracks;
- Installation of two RH No. 10 turnouts and two RH No. 10 crossovers to provide the route between Mays Yard and CN A2;
- Installation of a LH No. 15 turnout west of the two tracks to the Back Belt,
 - This turnout replaces the existing slower speed connection located west of the turnout.

The phasing of the construction would require that the existing route to the Back Belt be retained for a period of time while the track and turnouts/crossovers to maintain the other routes are installed.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

The reliability of the signal system and hardware would be improved. In combination with the proposed new Communication System between the railroads, the new interlocking/track configuration would improve dispatcher/operator control with "visibility" of movements and route requests provided from/to all railroads. This would benefit train movements with the possible implementation of passenger rail service between Baton Rouge and New Orleans.

The new track configuration would enable:

- Two freight trains to move in parallel to/from NS Back Belt to HPLB; at present only one train at a time can move between the Back Belt and the HPLB.
- Two NS/KCS freight trains to move from Shrewsbury (Project C2) to either the CN main or Mays Yard at the same time that the Sunset Limited moves to/from the HPLB.

The new configuration would increase the speed of freight movements:

- Through EBJ from/to NS Back Belt and HPLB from 10 mph to 30 mph;
- Through diverging routes to 25 mph;
- KCS movements from CN main to KCS main to 25-mph. Amtrak; and
- The "Sunset Limited" movements through EBJ to 30 mph.

The speed of local freight would be 15 mph; and the speed of "City of New Orleans" movements on CN would remain 40 mph.

- Beneficiaries: Amtrak, BNSF, CN, CSX, KCS, NOPB, NS, UP

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Initially, it does not appear that additional real estate would be required.

Description of Community Impacts of Railroad Work to be Accomplished

The reconfiguration would be in a rather remote location and should not negatively affect the local community. On the contrary the increased train speeds through EBJ and on the approach routes should reduce delays at certain grade crossings, while only minimally increasing freight and passenger train noise impacts.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$14.0 million.

CENTRAL SECTION

SHREWSBURY

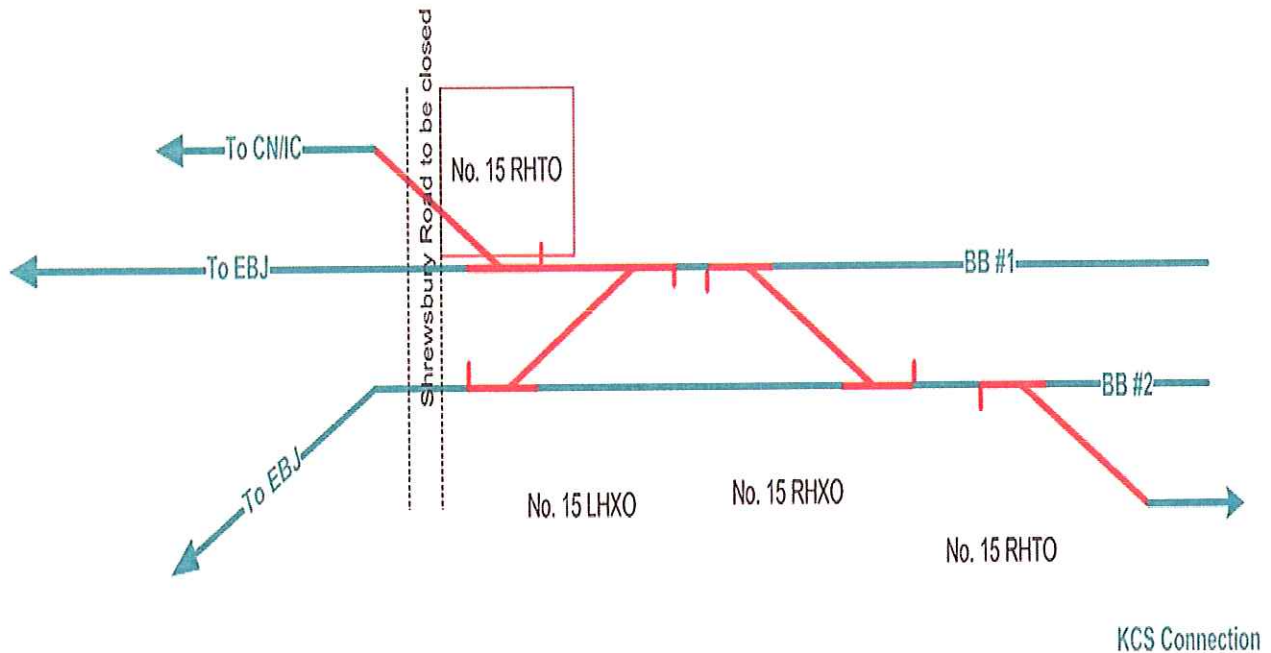
PROJECT NO. C2 - SHREWSBURY CENTRALIZED TRAFFIC CONTROL (CTC) ON NS BACK BELT

(Project Plans Sheet No. 301)

Project Objectives

Install CTC from EBJ to Metairie Rd and a new control point at Shrewsbury to upgrade NS Back Belt that presently has no signals from the "home signals" of EBJ to the controlled switch at MP 2.2-A- located at Metairie Road. Metairie Road is the location where present single-track operation begins on the Back Belt.

The new signal system would upgrade the track segment between from "Yard Limits" to main line track.



Project C2 – Proposed Shrewsbury Interlocking

Project Description

Upgrade Shrewsbury Track Configuration, including:

- Remove existing KCS connection EBJ to KCS main line. Remove two yard tracks.
- Install turnouts and crossovers for new control point at Shrewsbury that would be located between NS MP 0.1-A and 0.4-A.
- Install CTC signals from "Shrewsbury" to "Metairie Road".
- Convert existing "Remote Control" signal territory on the Back Belt to CTC. Modify CN EBJ control for control of "Shrewsbury."

The Shrewsbury control point would be:

- The west end of the NS Back Belt double track,
- The junction of the KCS mainline from the west to the NS Back Belt, and
- The KCS connection from NS double track main to the CN mainline.

Close Shrewsbury Road to eliminate a grade crossing within the new "Shrewsbury" control point.

Project Location

NS Back Belt, (MP 0.0-A) to MP 2.2-A.

Potential Environmental Issues Requiring Additional Study

The closing of Shrewsbury Road would require close coordination with Jefferson Parish and residents affected by the relocation of egress/ingress.

Potential Community Concerns

Coordination with the community regarding alternative methods of removing the existing crossing will be required.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
C1	East Bridge Junction (EBJ) - Signal and Track Improvements	
C12	Shrewsbury Road Crossing Closure	
C3	Metairie Grade Separation - Grade Crossing and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	2	
Siding	1	
Yard	0	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Freight - Back Belt West of MP 2.2A	20	30 (provided C4 is completed)
Freight - Back Belt East of MP 2.2A	30	30
Switch	same as freight	same as freight
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	None	Not applicable
Freight	29	Varies
Switch	Included in above	Not applicable

RAILROAD DETAIL

Owner/Users

- Property Owners: NS
- Direct Users: CN, CSX, NS, UP

Location

- Milepost - NS Back Belt, (MP 0.1-A) to MP 0.4-A.
- Parish/City – Jefferson

Approximate Available Right-of-Way

Project located within existing NS Row limits.

Possible Changes in Alignment

The new control point and track connections also would be located within existing NS Row limits.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Remove existing KCS connection EBJ to KCS main line. Remove two yard tracks.

Install turnouts and crossovers for new NS control point at Shrewsbury that would be located between NS MP 0.1-A and 0.4-A. Install CTC signals from "Shrewsbury" to "Metairie Road". Convert existing "Remote Control" signal territory on the Back Belt to CTC. Modify CN EBJ control for NS control of "Shrewsbury."

The Shrewsbury control point would be:

- The west end of the NS Back Belt double track,
- The junction of the KCS mainline from the west to the NS Back Belt, and
- The KCS connection from NS double track main to the CN mainline.

Close Shrewsbury Road to eliminate a grade crossing within the new "Shrewsbury" control point.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Installation of CTC and signal system would improve dispatcher/operator control of Back Belt traffic to EBJ. The project would reduce the "handoffs" between the various current operators, improve visibility of each carrier's movements to NS dispatcher, and improve communication between the carriers.

The project would increase the capacity of Back Belt to handle trains from NS and CSX to UP, KCS and CN.

Closing Shrewsbury Road would eliminate railroad/highway conflicts.

- Beneficiaries: AMTRAK, BNSF, CN, CSX, KCS, NOPB, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

None identified to date.

Description of Community Impacts of Railroad Work to be Accomplished

The closing of Shrewsbury Road would require close coordination with Jefferson Parish and residents affected the relocation of traffic flow.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$5.7 million.

CENTRAL SECTION

METAIRIE, GRADE SEPARATION

PROJECT NO. C3 - SEVEN GRADE CROSSINGS ON NS BACK BELT

(Project Plans Sheet Nos. 302-305)

Project Objectives

Eliminate the existing seven grade crossings located within the 1.7 miles that the NS Back Belt traverses the City of Metairie. The elimination of the grade crossings, either by closure or grade separation, would eliminate the traffic congestion in the Metairie community caused by the train operations across the numerous road crossings.

The grade separated right-of-way would enable trains waiting to cross EBJ to access the HPLB to be held east of the Shrewsbury Control point. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossings.



Back Belt Tracks through Metairie

Project Description

A grade separated NS Back Belt through Metairie would be created by a combination of:

- Raising the track elevation; and
- Either lowering or closing the seven existing roadways.
- The crossing locations and their initially recommended disposition follow:
 - Labarre Road (0.8-A) (grade separate, underpass),
 - Atherton Drive (1.2-A) (to be closed and combined with adjacent crossing[s]),
 - Hollywood Drive (1.5-A) (grade separate, underpass),
 - Farnham Place (1.9-A) (grade separate, underpass),
 - Oakridge Avenue (2.0-A) (to be closed and combined with adjacent crossing[s]),
 - Metairie Road (2.3-A) (grade separate, underpass), and
 - Carrollton Avenue (2.5-A) (grade separate, underpass).

The railroad tracks currently are elevated between four and eight feet above the approaching roads at the grade crossings. The final design would include a balanced approach that would further elevate the tracks and re-grade the road way approaches and the elevation of the roadways under the railroad bridges in a manner that would minimize the amount that the roadways would be lowered to enable the underpasses to be constructed.

The final profile of the tracks through Metairie would be coordinated with the proposed alignment of the Back Belt tracks as they cross the 17th Street Canal such that the roadbed would match the top elevation of the flood protection or bridge modifications would eliminate the requirement for floodgate closures.

Project Location

NS Back Belt, Labarre Road (0.8-A) to Carrollton Avenue (2.5-A).

Potential Environmental Issues Requiring Additional Study

Impacts during construction and post construction on local neighborhoods and traffic flow in and through Metairie.

Potential Community Concerns

Potential community concerns could include disruption during construction, including construction traffic and noise, as well as disrupted traffic patterns. Post-construction concerns would include the visual and noise impact of the raised railroad right-of-way, the new railroad bridges.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
C2	Shrewsbury CTC - Signal and Track Improvements	
C4	17th Street Canal, Double Track NS Back Belt	
No. of Tracks		
Tracks	Number	
Main	1	
Siding	1	
Yard	none	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger trains do not presently use this portion of the Back Belt and ongoing planning does not anticipate them operating in the future through Metairie on the Back Belt.		
Freight - Back Belt west of MP 2.2A	20	30 (provided C4 is completed)
Freight - Back Belt east of MP 2.2A	30	30
Switch	Same as above	Same as above
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	none	Not applicable
Freight	25	Varies
Switch	included in above	Not applicable

RAILROAD DETAIL

Owner/Users

- Property Owners: NS
- Direct Users: CN, CSX, NS, UP

Location

- Milepost – NS Back Belt, Labarre Road (0.8-A) to Carrollton Avenue (2.5-A)
- Parish/City – Jefferson

Approximate Available Right-of-Way

Adequate for proposed projects.

Possible Changes in Alignment

Vertical alignment would be raised. Horizontal alignment would not be varied; however, an additional track may be required to facilitate staging of the construction.

Flooded During Katrina

From Shrewsbury on both sides of the tracks east to almost Metairie Road.

Description of Railroad Work to be Accomplished

As conceptually envisioned a new, temporary track would be constructed north of the existing Back Belt mainline. The new track would be utilized for train operations while the new double-track right-of-way for the reconfigured Back Belt is being built. The temporary track would be removed when the grade separation project is completed. The exact staging of the construction has yet to be determined. The existing main and passing tracks would be removed to facilitate construction of the new Back Belt profile.

Initial analysis has indicated that the Metairie improvements would have to be constructed prior to double track improvements proposed in Project C4.

Identification of Benefits And Beneficiaries of Railroad Work to be Accomplished

Eliminate highway rail conflicts in Metairie. Addresses long standing issues of conflict (addressed by numerous studies funded by local/state/federal sources) with the community affecting traffic congestion in Jefferson Parish, including emergency vehicle and evacuation routes. Currently these are "silent" crossings and may become subject to horn blowing to comply with the FRA whistle blowing rules.

- Beneficiaries: AMTRAK, BNSF, CN, CSX, KCS, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Back Belt corridor from Labarre to Metairie is a three-track roadbed and can accommodate additional embankment to raise the existing track an additional four to eight feet.

Description of Community Impacts of Railroad Work to be Accomplished

Potential community concerns could include disruption during construction, including construction traffic and noise, as well as disrupted traffic patterns. Post-construction concerns would include the visual impact of the raised railroad right-of-way, the new railroad bridges.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

\$58.9 million (estimated).

ROADWAY DETAIL (CROSSING PROJECT)

Name of Crossing Street	Construction Cost
• Labarre Road (0.8-A),	\$4.20M
• Atherton Drive (1.2-A),	\$0.02M
• Hollywood Drive (1.5-A),	\$4.20M
• Farnham Place (1.9-A),	\$1.13M
• Oakridge Avenue (2.0-A),	\$0.02M
• Metairie Road (2.3-A),	\$6.60M
• Frisco Street	\$8.70M
• Carrollton Avenue (2.5-A).	\$1.29M

Project Data Sheets begin on Page 2-83.

above, included in estimate for Project C3

CENTRAL SECTION

17TH STREET CANAL

PROJECT C4 - DOUBLE TRACK NS BACK BELT (MP 2.2A TO 2.8A) (Project Plans Sheet No. 305)

Project Objectives

Construct 3,000 feet of double-track on the NS Back Belt between Metairie Road (east end of two-mile passing track) and 17th Street Canal (west end of existing double track). Eliminate the passing track that extends between EBJ and Metairie Road, which cannot be used for trains over 2,500 feet in length because they would block road crossings (see discussion Project C-3).



Single Track Section through Metairie, Metairie Road to east of the 17th Street Canal

Increase capacity of the Back Belt by facilitating the sequencing of trains that use the Back Belt. Eliminate the fact that the Back Belt effectively is reduced to a single track for its westernmost 4 miles (between EBJ and East City Junction), which is the result of the standard operating practice that requires crew changes for westbound UP trains at I-10.

Project Description

Project will include construction of a waterproof two track trestle across the 17th St. Canal. The 17th Street floodwall and closure gates would be modified in conjunction with the new trestle across the canal.

Bridge modifications at 17th Street Canal would be coordinated with The Sewerage & Water Board of New Orleans proposed changes for the pump station-capacity enhancements.

Project Location

NS Back Belt (MP 2.2A to 2.8A).

Potential Environmental Issues Requiring Additional Study

Potential environmental issues would include impacts during construction and post construction on local neighborhoods. Necessary permitting and approval to 17th Street Canal pumping station.

Potential Community Concerns

Potential community concerns could include disruption during construction, including construction traffic and noise. Other possible concerns may be the potential increase in number of trains per day and the higher average speeds through “Old Metairie”.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Function	Status	
Design	Conceptual	
Engineering	Sketch-level planning	
Data Collection	Preliminary for this report only	
Related Projects		
Project Number	Name	
C3	Metairie Grade Separation - Grade Crossing and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	1, prior to construction	
Siding	0	
Yard	0	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Freight - Back Belt East of MP 2.2A	30	30
Freight - Back Belt West of MP 2.2A	20	30
Switch	20	30
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	0	Not applicable
Freight	25	Not known
Switch	Included in above	Not known

RAILROAD DETAIL

Owner/Users

- Property Owners: NS
- Direct Users: CSX, NS, and UP.

Location

- Milepost - NS Back Belt (MP 2.2A to 2.8A)
- Parish/City – Jefferson and Orleans Parishes

Approximate Available Right-of-Way

Existing NS ROW is sufficient to accommodate double tracking.

Possible Changes in Alignment

The track alignment would remain the same.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Remove passing track east end switch at Metairie Road. Remove west end of double track switch at 17th Street Canal. Construct approximately 3,000 feet of second track.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Construction of double-track provides the ability for parallel train movements on the NS Back Belt from Oliver Junction. to East Bridge Junction. The double track would reduce the time that trains stand idling while waiting for a "slot" to pass through Metairie, thereby increasing the capacity of Back Belt to handle trains on a timely basis between NS and CSX to UP and CN. The elimination of switch hardware and joints would reduce track noise resulting from the passage of trains through the switches.

- Beneficiaries: AMTRAK, BNSF, CN, CSX, KCS, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

The acquisition of additional real estate to enable of railroad work to be accomplished is not anticipated.

Description of Community Impacts of Railroad Work to be Accomplished

The installation of new track should not result in community impacts.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$9.6 million. This cost does not include property acquisition or roadway structures included in Project C3.

CENTRAL SECTION

EAST CITY JUNCTION

PROJECT NO. E1 - INSTALL UNIVERSAL CROSSOVERS (MP 3.5A)

(Project Plans Sheet No. 306)

Project Objectives

Eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration. Support the construction of Project C3 and C4.

Project Description

Reconfigure East City Junction to enable passenger trains to meet and pass each other without delay. The revised junction also would provide flexibility to minimize conflicts with freight trains on the Back Belt. The reconfigured Junction would provide access to the NS local industrial track. The upgraded interlocking would provide improved freight train operating flexibility between Shrewsbury and Elysian Fields. The reconfigure interlocking would support the sequencing of the track raise and underpass construction planned for Projects C3 and C4.

Project Location

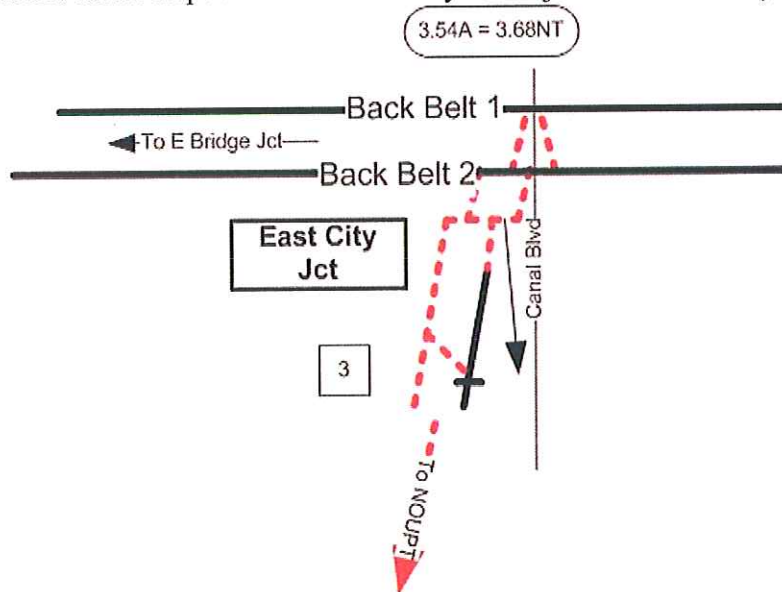
NS Back Belt, MP 3.5A.

Potential Environmental Issues Requiring Additional Study

The improvements would be designed and implemented within the existing railroad ROW. A newly constructed church/parking lot is located immediately adjacent to the railroad [between the freight lead to the industrial track and the lead to the passenger terminal.

Potential Community Concerns

The project should not result in potential concerns by the adjacent community.



Proposed Configuration East City Junction

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Name	Status	
Design	Conceptual	
Engineering	Sketch-level planning	
Data Collection	Limited to data for this report only	
Related Projects		
Project Number	Name	
E7	Double Track to NOUPT	
No. of Tracks		
Tracks	Number	
Main	2	
Siding	1	
Yard	0	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	15	45
Freight	30	30
Switch	30	30
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	4	Not known
Freight	25	Not known
Switch	Included above	Not known

RAILROAD DETAIL

Owner/Users

- Property Owners: NS
- Direct Users: CSX, NS, UP, and Amtrak.

Location

- Milepost - (MP 3.5A)
- Parish/City – Orleans

Approximate Available Right-of-Way

Right-of-way appears to be owned by NS or NOUPT and available.

Possible Changes in Alignment

Track alignment remains approximately the same.

Flooded During Katrina

No.

Description of Railroad Work to be Accomplished

Remove existing turnout to NOUPT lead track. Install No. 20 universal crossovers, one on either side of Canal Boulevard. Install pair of LH No. 20 turnouts leading to NOUPT.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Benefits include improved freight operating flexibility between Elysian Fields and WBJ, improved operating flexibility for passenger and freight trains between Elysian Fields and East City Junction.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

The acquisition of additional non-railroad real estate is not anticipated.

Description of Community Impacts of Railroad Work to be Accomplished

A direct community impact of railroad work is not anticipated.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$9.1 million.

CENTRAL SECTION

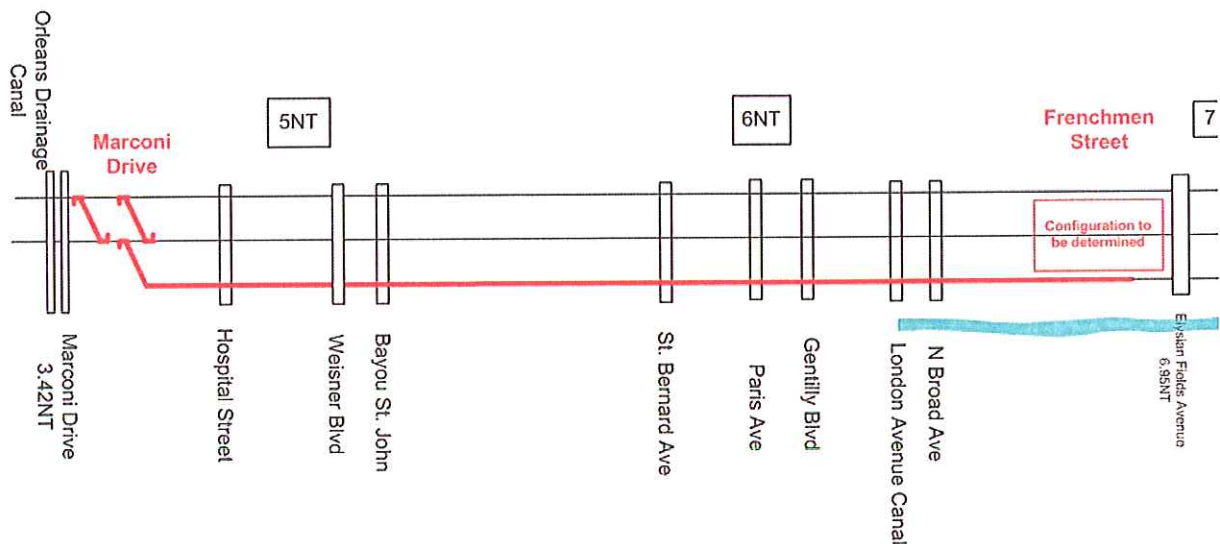
THIRD TRACK

PROJECT NO. E6 - FRENCHMEN STREET TO MARCONI DRIVE

(Project Plans Sheet Nos. 307-313)

Project Objectives

Construct a third NS Back Belt mainline track between Marconi Drive and Frenchmen Street on the rail berm that parallels I-10. The 0.6-mile segment between Marconi Drive and East City Junction would remain double tracked. Construct Marconi Drive interlocking (NT4.3) so that it would facilitate parallel moves at the location where the three tracks merge into two tracks.



Project E-6: Third Track Marconi Drive to Frenchmen Street

The third mainline track would mitigate the capacity constraint on freight and intercity passenger operations that presently exists in the 3.5-mile section on the NS Back Belt between NOT Junction (7.08) and East City Junction (3.5). This section is used to stage westbound trains for interchange with UP. CSXT and NS train crews bring the westbound interchange trains to Marconi Drive, located just east of the East City Junction. These trains are left on the main and wait for the UP crew to pick them up. The average waiting time is around 5 hours, effectively blocking one of the double mainline tracks east of Marconi Drive. The eastward interchange traffic is more fluid as trains are delivered directly to CSX's Gentilly Yard and NS's Oliver Yard.

Project Description

The third mainline track would pass over and under several roads and requires the construction of new bridges over Broad Avenue, the London Avenue Canal, Gentilly Boulevard, Paris Avenue, St. Bernard Avenue, Bayou St. John, a pedestrian access roadway, and Hospital Street. The crossing of the London Avenue Canal would require a new structure that would be water proofed so that two existing flood gates in the levees could be eliminated.

Project Location

NS Back Belt, MP 4.3NT to MP 6.7NT.

Potential Environmental Issues Requiring Additional Study

The line is adjacent to the London Avenue Canal for the first 0.7-mile south of NOT Junction. The line is adjacent to City Park for a significant portion of its alignment.

Potential Community Concerns

The project would pass City Park and several adjacent neighborhoods potentially resulting varying levels of concerns by the adjacent community.

PROJECT DATA SUMMARY		
Status Of Design, Engineering And Data Collection		
Name	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related projects		
Project Number	Name	
E2	Elysian Fields - Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	2	
Siding	0	
Yard	0	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	30	30
Freight	30	30
Switch	30	30
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	4	Varies
Freight	25	Varies
Switch	Included in above	Varies

Railroad Detail

Owner/Users

- Property Owners: NS
- Direct Users: CSX, NS, UP, and Amtrak.

Location

- Milepost - (MP 3.5A)
- Parish/City – Orleans

Approximate Available Right-of-Way

ROW appears to be owned by NS; the project would have to be designed to remain within the confines of railroad-owned right-of-way.

Possible Changes in Alignment

The track alignment would not be modified.

Flooded During Katrina

Yes.

Description of Railroad Work to be Accomplished

Construct third mainline track between Marconi Drive and Frenchmen Street. Install a new interlocking at Marconi Drive to connect the three-track mainline east of Marconi Drive with the two-track mainline west of Marconi Drive. Modify Frenchmen Street to enable the new three-track mainline west of the interlocking to be connected to the existing three-track mainline east of the interlocking. Elysian Fields, as proposed in Project E2 may have to be modified to accommodate the changes at Marconi Drive.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Benefits would include improved freight operating flexibility between Elysian Fields and EBJ, as well as improved operating flexibility for passenger and freight trains between Elysian Fields and East City Junction.

The third-track and new Marconi Drive interlocking would enhance the ability of CSX and NS to stage westbound trains for interchange with UP. Trains left on a mainline track waiting for a UP crew to pick them up should not delay eastbound freight trains and intercity passenger trains to the level that they presently do. The average wait time for a UP crew may not be reduced; however, the increased capacity east of Marconi Drive would increase flexibility and further increase the fluidity of train movements through this present bottleneck located west of CSX's Gentilly yard and NS's Oliver yard.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Construction of a third track will require approximately 1.3 acres of additional right-of-way through the New Orleans City Park from Marconi Drive to the Wizner Boulevard overpass. Between the St. Bernard Avenue overpass and the Elysians Field overpass approximately 1.7 acres of additional right-of-way will be required.

Description of Community Impacts of Railroad Work to be Accomplished

The project would pass City Park and several adjacent neighborhoods potentially resulting in varying levels of concerns by the adjacent community.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$35.6 million.

PROJECT NO. C11 - SHREWSBURY ROAD
(Project Plans Sheet No. 301)

Project Description

Shrewsbury Road serves as one of two entrances to the western end of the Labarre Business Park. The other western entrance is Labarre Road, which crosses the leads to the Kansas City Southern Yard. The eastern entrance to the Labarre Business Park is by way of Dakin Street, which has been reconstructed with an underpass of the eastern leads to the KCS Freight yard.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C2
Covered by Whistle Ban: No
Milepost/Crossing ID: NS Milepost 0.03/725705V
Number of Tracks: 3 - 2 for Norfolk Southern, 1 for KCS
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Labarre Road – 0.53 miles east
Number of Train Movements/Day: 25 to 27
Roadway Data
State Route or Local Roadway: Jefferson Parish local road.
Number of Traffic Lanes: 2 – 11 feet, 2 way
Traffic Volume (Average Daily Traffic) 2006: 1,352 2016: 1,420 2026: 1,490*
% Truck: Large – alternate route into Labarre Business Park
% Auto: 90% to 94%
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Local Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 3'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - Compacted Shell/Limestone • Drainage - Subsurface Crossing Tracks, Open Ditch Parallel To Tracks. • Utilities – Major Water and Gas Crossing Tracks, Drainage. • Surfacing of Roadway - Asphalt, Fair Condition. • Right-of-Way - 100 feet. • Topography - Urban North, Unimproved South.
Flooded during hurricane Katrina or Rita: No.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

The grade crossing is located within the proposed “Shrewsbury” interlocking.

2. Description of Possible Improvements:

Close crossing. Possible access to Earhart Boulevard on the eastern end would improve access to the Labarre Business Park and enhance the closure of the crossing. The alternative would be to grade separate the crossing, which would require a combination of raising the alignment and lowering the roadway.

3. Additional Right-of-Way Requirements:

None required.

4. Possible Community Concerns:

- Only one entrance/exit to the western section of the Labarre Road Business Park would remain.
- Impacts during construction and post construction on local neighborhoods and traffic flow.
- Closure of crossing could affect
 - Vehicular and pedestrian travel in the vicinity.
 - Neighborhood travel patterns, for pedestrians, bicyclists and vehicles, relative to critical access to key destinations, current traffic volumes and travel patterns.
 - Local businesses.
- Elimination of grade crossing should result in slight air quality improvement.

5. Description of Possible Enhancements:

None proposed.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing. Simplify rail construction and operating in the Shrewsbury interlocking area.

7. Estimated Costs: Utility Relocations:	0.00
Roadway Construction (to remove crossing):	\$20,000.00
Railway Construction:	0.00
Right-of-Way Acquisition: None.	
Plans, Specifications, Construction	
Administration/Supervision, Testing:	<u>0.00</u>
Project Total:	\$20,000.00

8. Description of Attached Photographs:

South of crossing looking north.
North of crossing looking south.

(included in project cost for Project C2)

9. Description of Attached Documents:

Plan view of crossing and approach roadways.

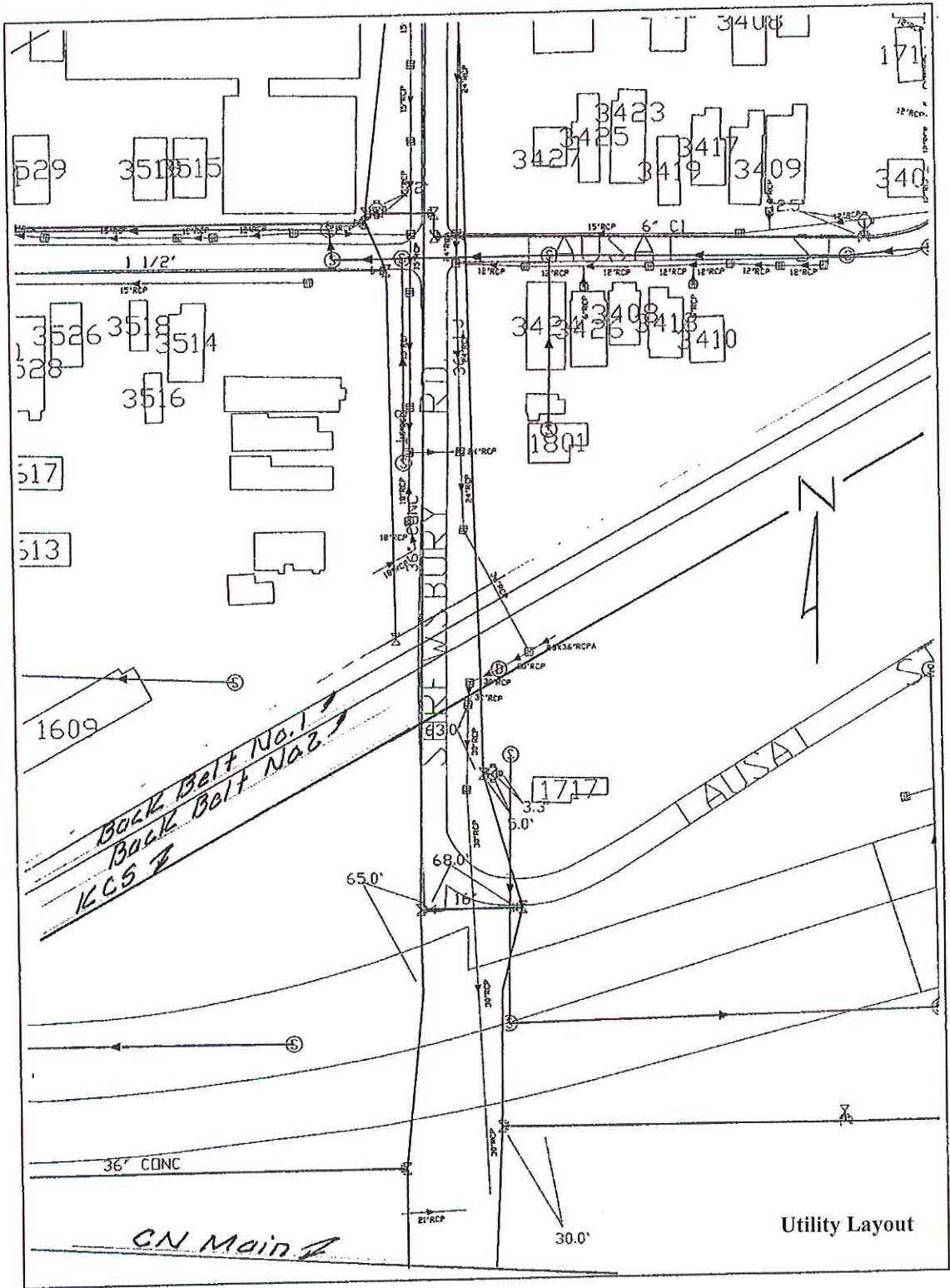
SHREWSBURY ROAD



Looking North



Looking South



Utility Layout

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**PROJECT NO. C12 - LABARRE ROAD
(Project Plans Sheet No. 302)**

Project Description

The roadway traverses a mixed use corridor. South of the tracks is commercial with the larger area north of the tracks being residential. The roadway north of the tracks is an unimproved 24 feet wide asphalt roadway with open ditches. Labarre Road is presently used by delivery trucks, autos and a few school buses.

It is proposed that the rail embankment be raised and an underpass structure with 13 feet of vertical clearance be constructed to the east of the existing crossing. Doing this would eliminate the need to relocate the numerous utilities that presently cross at this location.

Labarre Road at this location is a State Highway (611-4) and any restriction in vertical clearance would require LDOTD approval. Vehicals requiring more than the 13 feet of clearance would have to detour to Severn Avenue at Airline Drive to Metairie Road, an incresed distance of 0.8 miles.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C3
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 0.95/725708R
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: Atherton – 0.4 miles east
Number of Train Movements/Day: 25 to 27
Roadway Data
State Route or Local Roadway: State route 611-4
Number of Traffic Lanes: 2 - 11 feet, 2 way
Traffic Volume (Average Daily Traffic): 2006: 11,018 2016: 11,570 2026: 12,140*
% Truck: 7%
% Auto: 93%
Posted Speed Limit: 30 mph
Level of Service or Classification of Roadway: collector roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 3' to 4'
Approach Roadway:
<ul style="list-style-type: none"> • Shoulders - None • Drainage - Open Ditch along Tracks, Subsurface along Labarre Road. • Utilities – Drainage, Sewage and Water Crossing. • Surfacing of Roadway - Asphalt. • Right-of-Way - 50 Feet • Topography - Fully Developed Urban, Single/Multi-Family North of Tracks, Commercial South of Tracks.
Flooded during hurricane Katrina or Rita: Yes, approach south of crossing.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

At grade crossing raised above approaches. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossing.

2. Description of Possible Improvements:

Raise trackage and shift crossing to the east and provide an underpass structure.

Benefit of moving the underpass structures to the east.

- Eliminates conflicts with utilities at existing crossings.
- Eliminates effect of approach grades on adjacent property along Labarre Road.

3. Additional Right-of-Way Requirements:

None required. Existing 50 feet roadway right-of-way north and south of 100 feet railroad right-of-way.

4. Possible Community Concerns:

Concerns would include potential flooding of underpass structure.

5. Description of Possible Enhancements:

Elimination of at-grade crossing, improved flow of traffic, landscaping of railroad right-of-way, elimination of truck traffic, improved drainage.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing. Elimination of at-grade crossing.

7. Estimated Costs: Utility Relocations:	\$ 500,000.00
Structural/Roadway Construction:	\$ 3,000,000.00
Railway Construction: See Project C3/C4.	
Right-of-Way Acquisition: None.	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing at 20 Percent:	<u>\$ 700,000.00</u>
Project Total:	\$4,200,000.00

8. Description of Attached Photographs:

- South of crossing looking north.
- North of crossing looking south.
- South of crossing looking east.

9. Description of Attached Documents:

Utility Layout.

LABARRE ROAD



Looking North

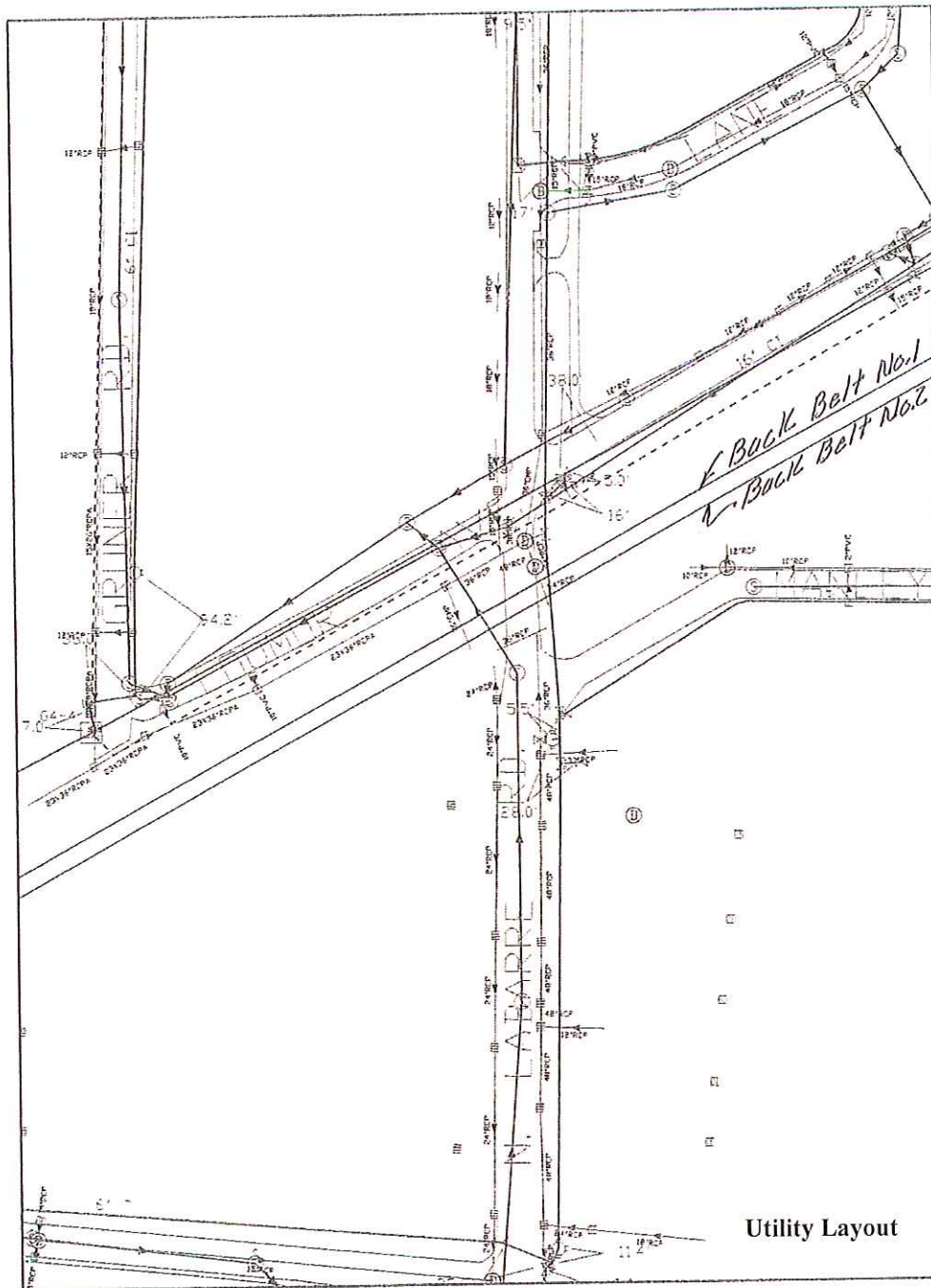


Looking South

LABARRE ROAD

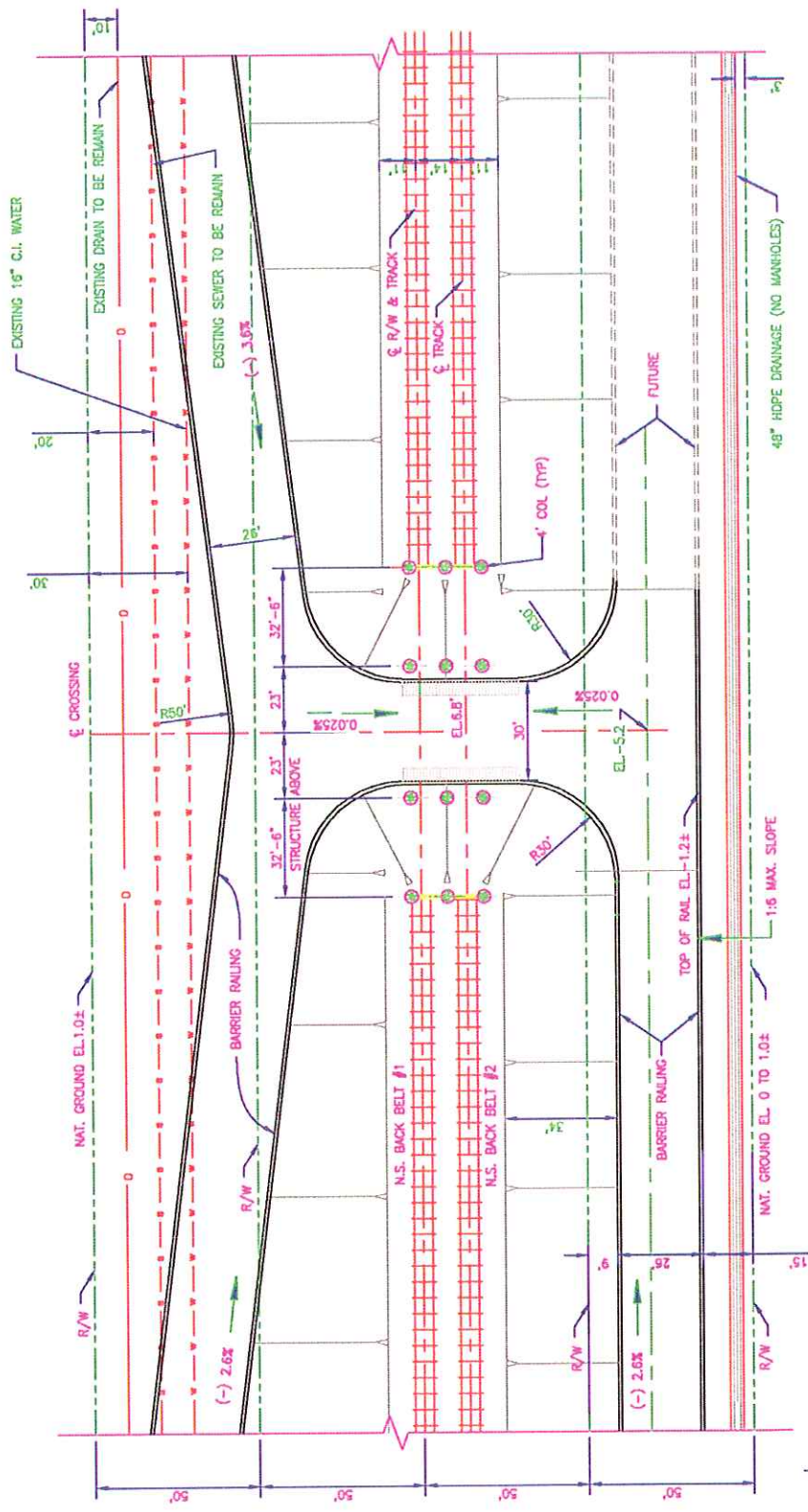


Looking East

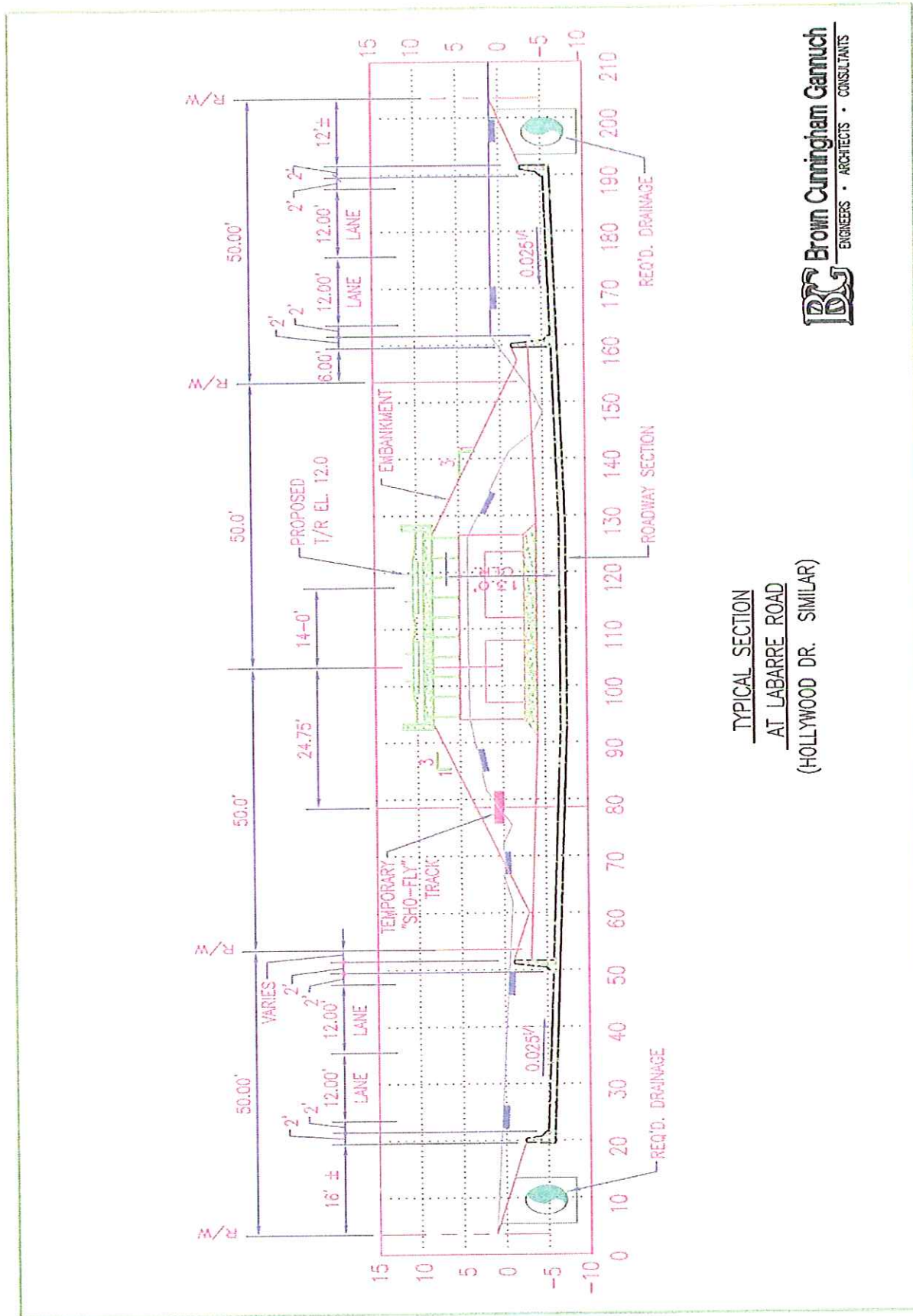


Utility Layout

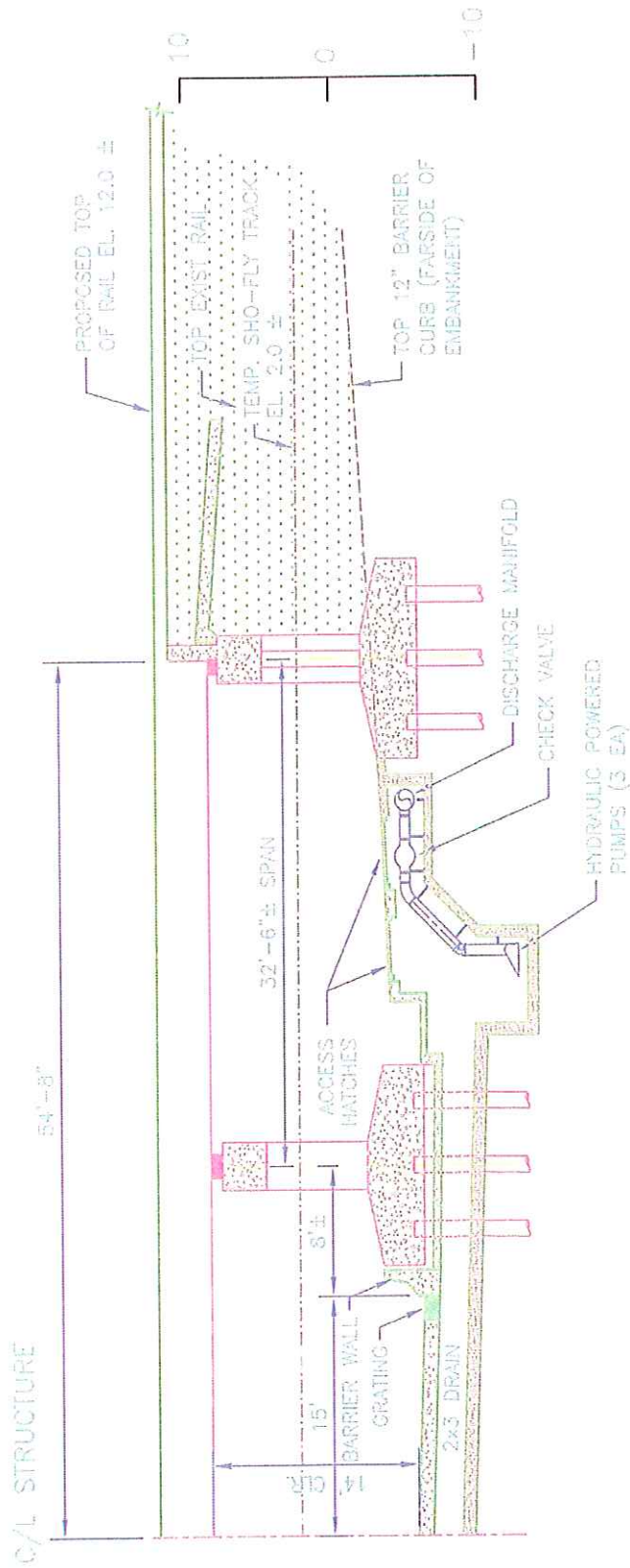
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PLAN OF LABARRE ROAD
SCALE: 1" = 30'-0"



TYPICAL SECTION
AT LABARRE ROAD
(HOLLYWOOD DR. SIMILAR)



NOTE:
 HYDRAULIC AND STAND BY POWER UNIT FOR PUMP STA. MOUNTED ALONG WINGWALLS ABOVE EL. 1.0

HALF SECTION
 THREE SPAN STRUCTURE

SCALE: 1"=10'
 TYPICAL FOR LABARRE RD @ HOLLYWOOD DR.

**PROJECT NO. C13 - ATHERTON DRIVE
(Project Plans Sheet No. 303)**

Project Description

Atherton Drive is an existing residential roadway from Metairie Road on the north crossing the Norfolk Southern tracks to the residential area to the south. The majority of traffic travels to or from Labarre Road by way of Varden and Manley streets, which have curbside parking creating congestion. Recommend closure, traffic would use underpass constructed at Labarre Road.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C3
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 1.50/725709X
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: Labarre Road 0.4 miles west, Hollywood Drive 0.3 miles east
Number of Train Movements/Day: 25 to 27
Roadway Data
State Route or Local Roadway: Jefferson Parish local road
Number of Traffic Lanes: 2 at 12 feet
Traffic Volume (Average Daily Traffic): 2006: 2,705 2016: no change 2026:*
% Truck: few – 5% Large number of school buses.
% Auto: 95%
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: local road
Approx. Height of Crossing Above Adjacent or Approach Roadways: 4' to 5'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - None – Concrete Curb And Gutter • Drainage - Parallel to Tracks. • Utilities – Existing Utilities along Loumar Avenue North and South of Tracks. • Surfacing of Roadway - Crossing Is Asphalt. Approach Roadway Concrete (North), Asphalt (South) • Right-of-Way - 50 Feet • Topography - Urban, Fully Developed Single Family.
Flooded during Hurricane Katrina or Rita: Yes, approach north and south of tracks during Katrina.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

Existing at grade crossing elevated above approach roadways. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossing.

2. Description of Possible Improvements:

Close crossing – re-route existing traffic to use proposed underpass structure at Labarre Road.

3. Additional Right-of-Way Requirements:

None required.

4. Possible Community Concerns:

Concerns would include increase in traffic on Loumar Avenue north of tracks, which would be used to access the Labarre Road underpass.

5. Description of Possible Enhancements:

Removal of traffic through residential neighborhoods north and south of tracks.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing. Removal of traffic from residential neighborhood. Landscaping of railroad embankment would mitigate visual impact of railroad embankment.

7. Estimated Costs:		
Utility Relocations:	None.	0.00
Structural/Roadway Construction	(Removal of crossing):	\$20,000.00
Railway Construction:	None, associated with closure.	0.00
Right-of-Way Acquisition:	None.	0.00
Plans, Specifications, Construction		
Administration/Supervision, Testing:	None.	0.00
Project Total:		<u>\$20,000.00</u>

8. Description of Attached Photographs:

South of crossing looking north.

North of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

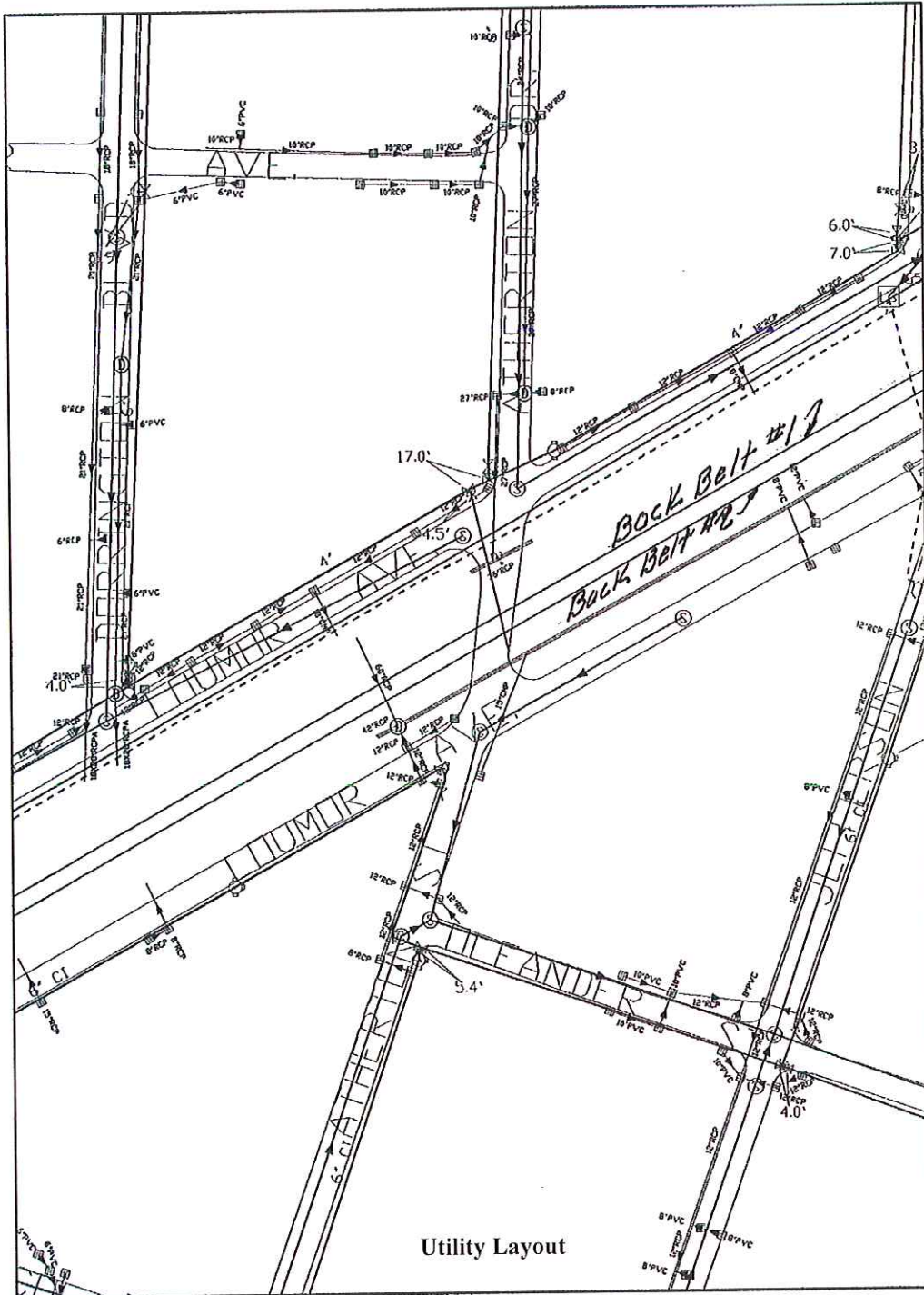
ATHERTON DRIVE



Looking North



Looking South



Utility Layout

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PROJECT NO. C14 - HOLLYWOOD DRIVE
 (Project Plans Sheet No. 303)

Project Description

Hollywood Drive provides the first roadway connection between Airline Drive and Metairie Road inside Jefferson Parish from Orleans Parish. The distance between access points between Metairie Road and Airline Drive without this route would be 2.2 miles along Airline Drive and almost three miles along Metairie Road. Roadway passes through residential neighborhood with narrow streets and curb-side parking. Recommend underpass structure similar to Labarre Road.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C3
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 1.65/725710S
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: Atherton – 0.3 miles west
Number of Train Movements/Day: 25 to 27
Roadway Data
State Route or Local Roadway: Jefferson Parish Collector Roadway
Number of Traffic Lanes: 2
Traffic Volume (Average Daily Traffic): 2006: 3,093 2016: 3,250 2026: 3,410*
% Truck: few – 5%
% Auto: 95%
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 4' to 5'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders – None. • Drainage - Parallel To Tracks. • Utilities – On Loumar Avenue Parallel t Tracks. • Surfacing of Roadway - Concrete North, Asphalt South. • Right-of-Way - 50 Feet. • Topography - Residential.
Flooded during Hurricane Katrina or Rita: Approaches flooded in Katrina.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

Problems include the elevated railroad embankment above adjacent approaches and poor sight conditions. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossing.

2. Description of Possible Improvements:

Provide an underpass structure by raising tracks and depressing roadway.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

Underpass structure subject to flooding.

5. Description of Possible Enhancements:

Improved drainage by construction of pumping station, elimination of truck traffic, elimination of at-grade crossing, landscaping.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing. Elimination of at-grade crossing.

7. Estimated Costs:		
Utility Relocations:		\$ 500,000.00
Structural/Roadway Construction:		\$ 3,000,000.00
Railway Construction:	See Project C3/C4.	
Right-of-Way Acquisition:		0.00
Plans, Specifications, Construction		
Administration/Supervision, Testing at 2 Percent:		\$ 700,000.00
Project Total:		<u>\$ 4,200,000.00</u>

8. Description of Attached Photographs:

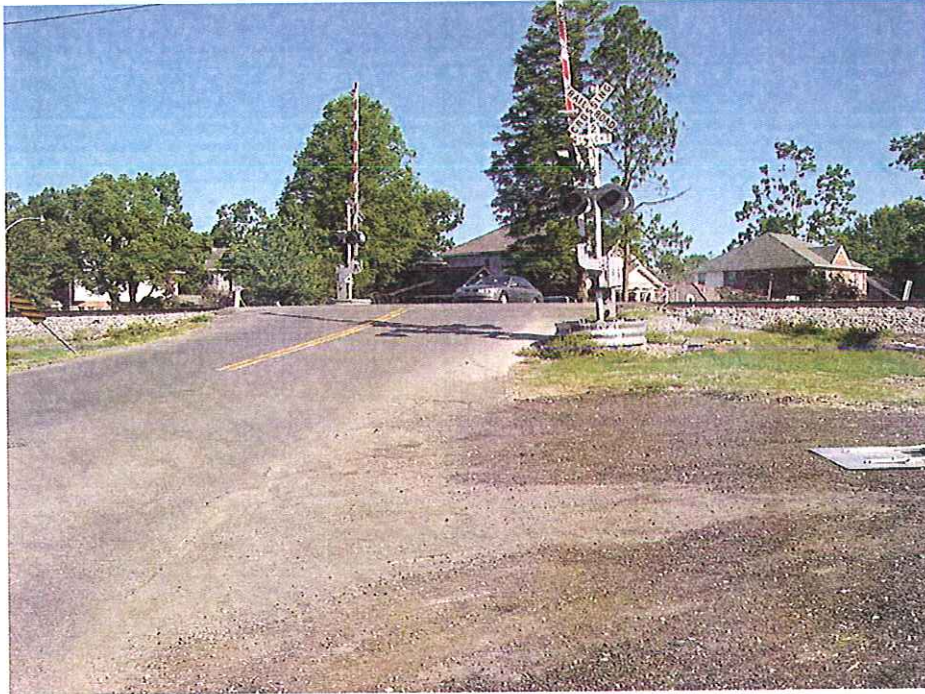
South of crossing looking north.

North of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

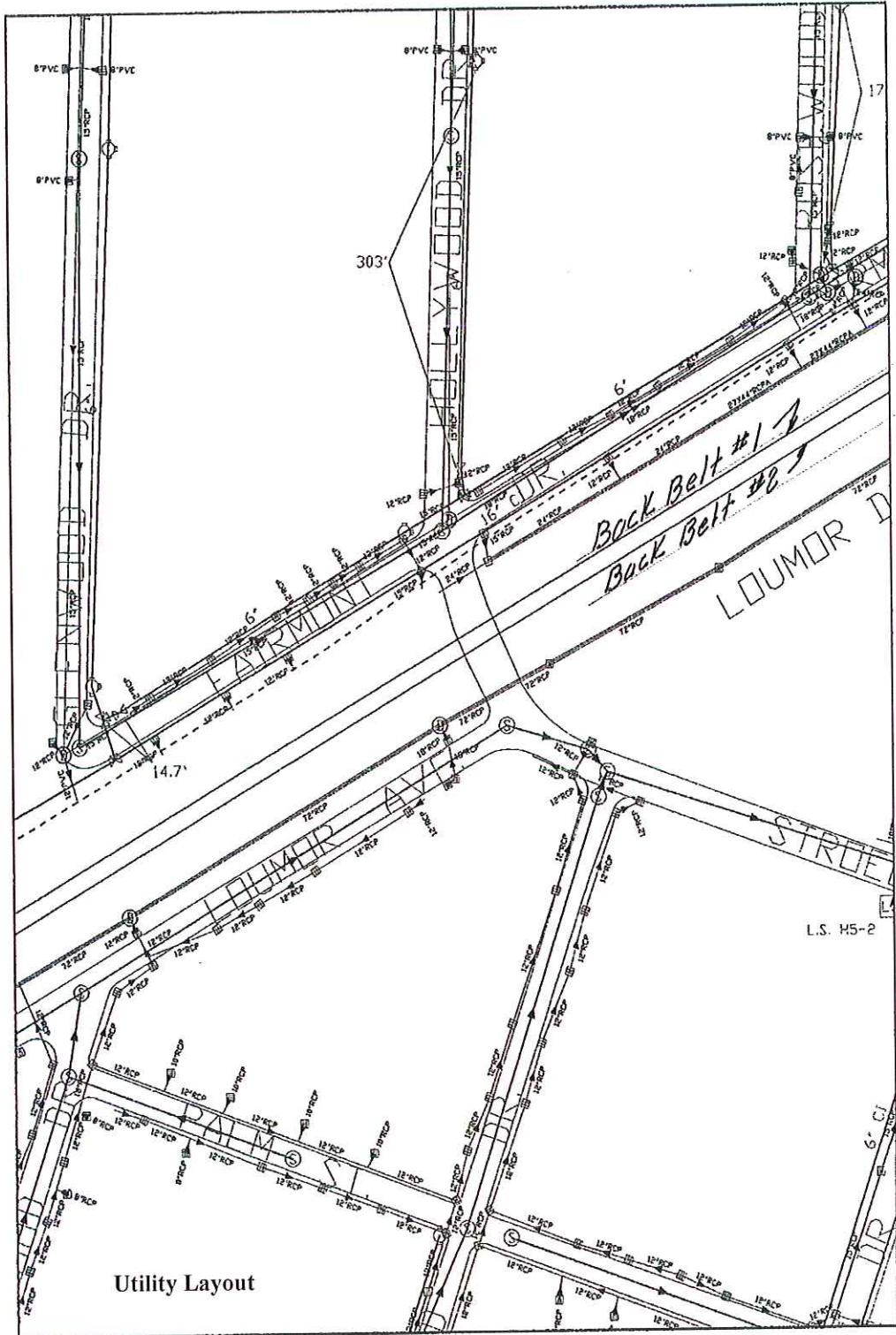
HOLLYWOOD DRIVE



Looking North



Looking South



Utility Layout

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PROJECT NO. C15 - FARNHAM PLACE
(Project Plans Sheet No. 304)

Project Description

Provides access to the Old Metairie area south of the railroad tracks, Metairie Country Day School, and Metairie Country Club. Provide underpass structure.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C3
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 1.95/757711Y
Number of Tracks: 2 existing
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: West Oakridge Parkway – 0.07 miles east
Number of Train Movements/Day: 25
Roadway Data
State Route or Local Roadway: Jefferson Parish Local Roadway
Number of Traffic Lanes: 2 - 12 feet.
Traffic Volume (Average Daily Traffic): 2006: 1,600 2016: no change 2026:*
% Truck: few – 3%
% Auto: 95% to 97%
Pedestrian Use: Yes.
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Jefferson Parish Local Road.
Approx. Height of Crossing Above Adjacent or Approach Roadways: 4' to 5'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders – None. • Drainage - Subsurface North and South of Tracks. • Utilities – Water Crossing Tracks. • Surfacing of Roadway - Asphalt Good Condition. • Right-Of-Way - Varies - 50 Feet Minimum. • Topography - Residential, Fully Developed Single Family.
Flooded during Hurricane Katrina or Rita: Yes – approaches north and south.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

Poor sight conditions because of height of crossing. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossing.

2. Description of Possible Improvements:

Eliminate crossing by raising tracks and providing roadway underpass.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

Anticipated increase in rail traffic.

5. Description of Possible Enhancements:

Provide unobstructed access across tracks, landscaping, and site enhancements.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing.

7. Estimated Costs: Utility Relocations:

0.00

Structural/Roadway Construction:

\$ 960,000.00

Railway Construction: See Project No. C3/C4.

Right-of-Way Acquisition:

0.00

Plans, Specifications, Construction

Administration/Supervision, Testing:

\$ 170,000.00

Project Total:

\$1,130,000.00

8. Description of Attached Photographs:

South of crossing looking north.

North of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

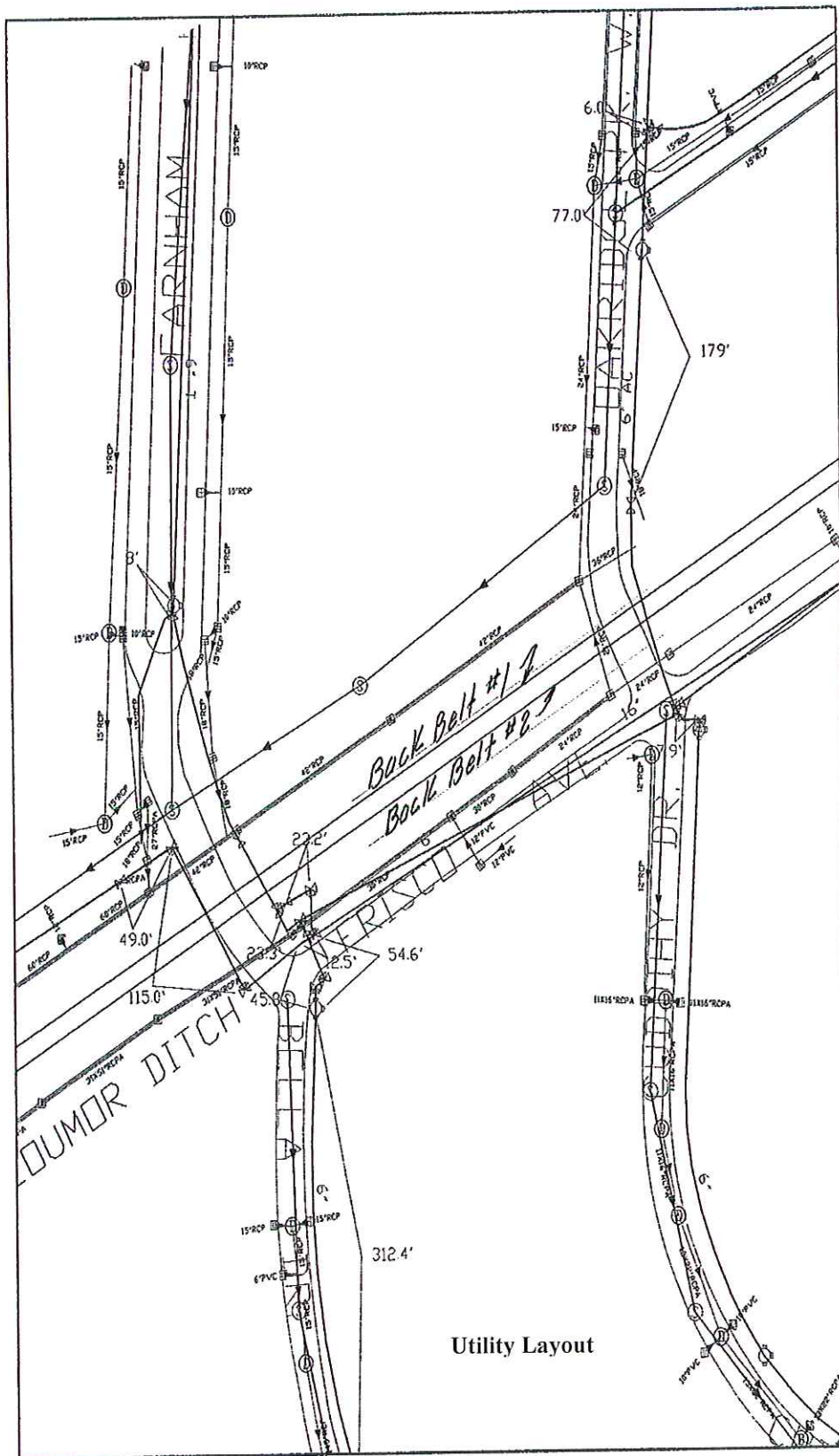
FARNHAM PLACE



Looking North



Looking South



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PROJECT NO. C16 - WEST OAKRIDGE PARKWAY
(Project Plans Sheet No. 304)

Project Description

Provides access to Metairie Country Day School and Metairie Country Club. Recommend closure, traffic would use Farnham Place or Metairie Road.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C3
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 2.02/725712F
Number of Tracks: 2 existing
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: Farnham Place - 0.07 miles west
Number of Train Movements/Day: 25
Roadway Data
State Route or Local Roadway: Jefferson Parish local road.
Number of Traffic Lanes: 2 - 12 ft.
Traffic Volume (Average Daily Traffic): 2006: 1,763 2016: no change 2026:*
% Truck: few – 5%
% Auto: 95% to 97%
Pedestrian Use: Yes.
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Jefferson Parish Local Road.
Approx. Height of Crossing Above Adjacent or Approach Roadways: 4' to 5'
Approach Roadway:
<ul style="list-style-type: none"> • Shoulders – None. • Drainage - Subsurface North and South of Tracks. • Utilities – Water Crossing Tracks. • Surfacing of Roadway - Asphalt Good Condition. • Right-of-Way - Varies - 50 Ft. Minimum. • Topography - Residential, Fully Developed Single Family.
Flooded during Hurricane Katrina or Rita: Yes – south approach.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

Poor sight conditions because of height of crossing. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossing.

2. Description of Possible Improvements:

Close crossing, re-route traffic to use Farnham Place or Metairie Road.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

Anticipated increase in rail traffic, closure of crossing.

5. Description of Possible Enhancements:

Landscaping.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing.

7. Estimated Costs: Utility Relocations:

0.00

Structural/Roadway Construction (to remove crossing): \$20,000.00

Railway Construction: 0.00

Right-of-Way Acquisition: 0.00

Plans, Specifications, Construction

Administration/Supervision, Testing: 0.0 Percent 0.00

Project Total: \$20,000.00

8. Description of Attached Photographs:

South of crossing looking north.

North of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

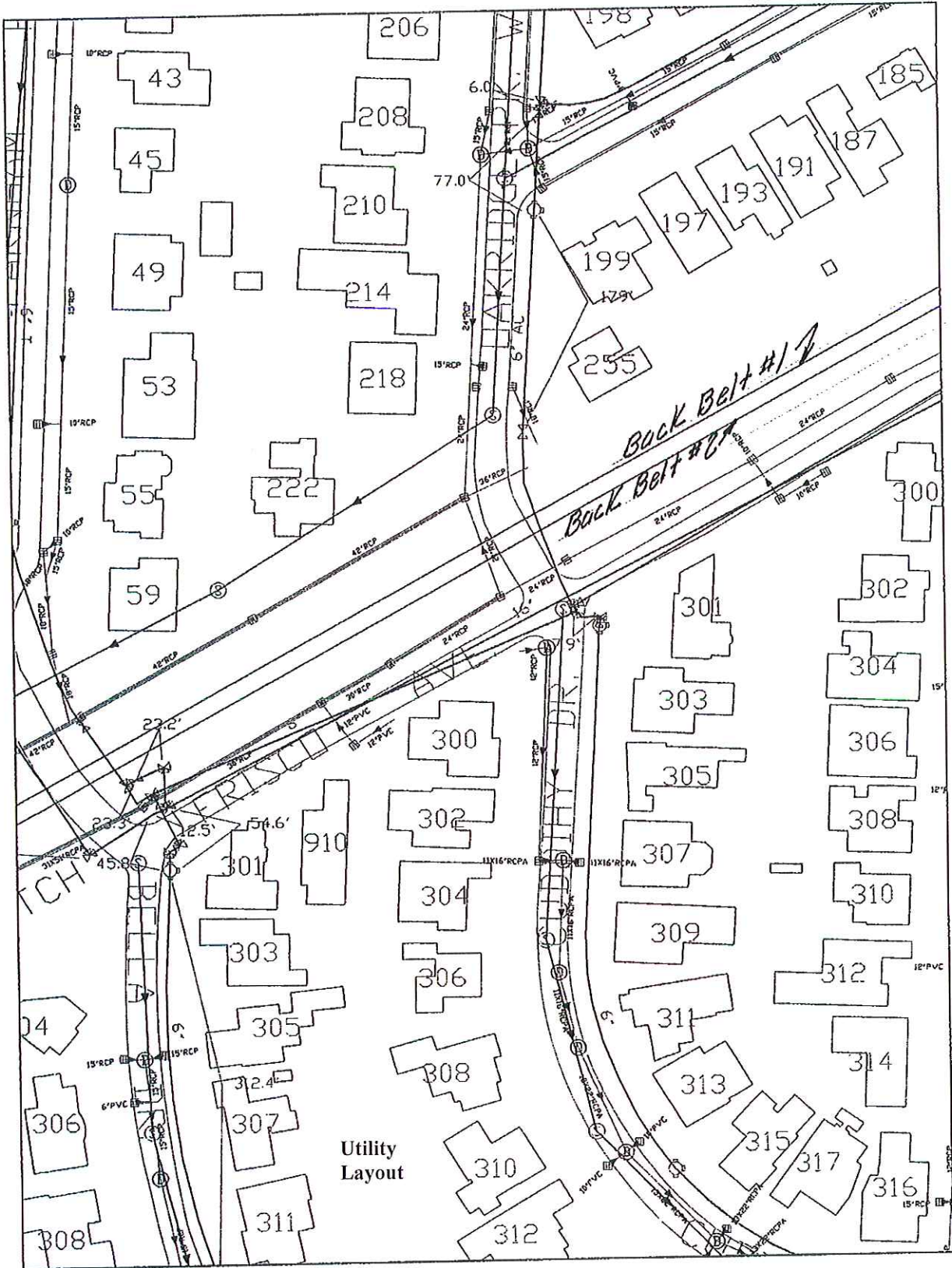
WEST OAKRIDGE PARKWAY



Looking North



Looking South



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PROJECT NO. C17 - METAIRIE ROAD
(Project Plans Sheet No. 305)

Project Description

Metairie Road acts as a collector/distributor roadway through the “Old Metairie” area of Jefferson Parish. At its eastern end it connects with I-10 and on the western end with Airline Drive. Bordering it is the commercial and cultural area of Old Metairie. It is the only east/west roadway in Old Metairie. Because it is a State Highway, No. 611-9, any construction work will require the approval of the LDOTD. Where the tracks cross Metairie Road is an area of small shops and other commercial establishments. The railroad embankment divides this area and because of its height virtually segregates the area into distinct areas. To eliminate the crossing would require either an overpass or underpass structures. Either structure would require that access be provided along its length. Because of the height and therefore length an overpass structure was deemed inappropriate. The length of an underpass structure was also going to conflict with adjacent businesses and needed to be shortened. It was decided to raise the railroad embankment by an amount that would allow the length of the underpass to be decreased to an acceptable amount. In raising the rail embakment, the parking lots on the north and south sides could be connected to provide a common shopping area. See Renderings and Introduction to Central Section.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C4
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 2.50/725713M
Number of Tracks: 1 existing, 1 proposed
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: Carrollton 0.17 miles east
Number of Train Movements/Day: 25
Roadway Data
State Route or Local Roadway: State Route 611-9
Number of Traffic Lanes: 2 - 12 ft.
Traffic Volume (Average Daily Traffic): 2006: 18,400 2016: 19,320 2026: 20,300*
% Truck: 8% to 10%
% Auto: 90% to 92%
Pedestrian use: Yes, large amount between commercial areas.
Posted Speed Limit: 30 mph
Level of Service or Classification of Roadway: Jefferson Parish Collector
Approx. Height of Crossing Above Adjacent or Approach Roadways: 4' to 5'
Approach Roadway:
<ul style="list-style-type: none"> • Shoulders – None. • Drainage - Subsurface Crossing Tracks. • Utilities – Water and Sewer Crossing Tracks. • Surfacing of Roadway - Asphalt Good Condition. • Right-of-Way - Varies - 50 Ft. Minimum. • Topography - Commercial.
Flooded during Hurricane Katrina or Rita: – No.

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. **Describe any Problems with Existing Crossing Configuration:**
Major crossing, stop light one block north backs up traffic across tracks.
2. **Description of Possible Improvements:**
Raise tracks and provide underpass for Metairie Road and adjacent parking areas.
3. **Additional Right-of-Way Requirements:**
None.
4. **Possible Community Concerns:**
Anticipated increase in rail traffic, visual, closure of Frisco Avenue connection to Metairie Road.
5. **Description of Possible Enhancements:**
Provide connection between commercial areas on both side of tracks, landscaping, and site enhancements.
6. **Benefit of Project:**
Reduced roadway congestion and improved safety at the at-grade crossing.
7. **Estimated Costs:**

Utility Relocations: Frisco Street -	
Structural/Roadway Construction:	\$5,500,000.00
Railway Construction: See Project C3/C4.	
Right-of-Way Acquisition:	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing at 20 Percent:	<u>\$1,100,000.00</u>
Project Total:	\$6,600,000.00
Frisco Street -	
Utility Relocations:	\$1,000,000.00
Structural/Roadway Construction:	\$4,250,000.00
Railway Construction: See Project C3/C4.	
Right-of-Way Acquisition:	\$2,400,000.00
Plans, Specifications, Construction	
Administration/Supervision, Testing at 20 Percent:	<u>\$1,050,000.00</u>
Project Total:	\$8,700,000.00
8. **Description of Attached Photographs:**
South of tracks looking north.
North of tracks looking south.
9. **Description of Attached Documents:**
Renderings of proposed improvements.
Utility Layout.

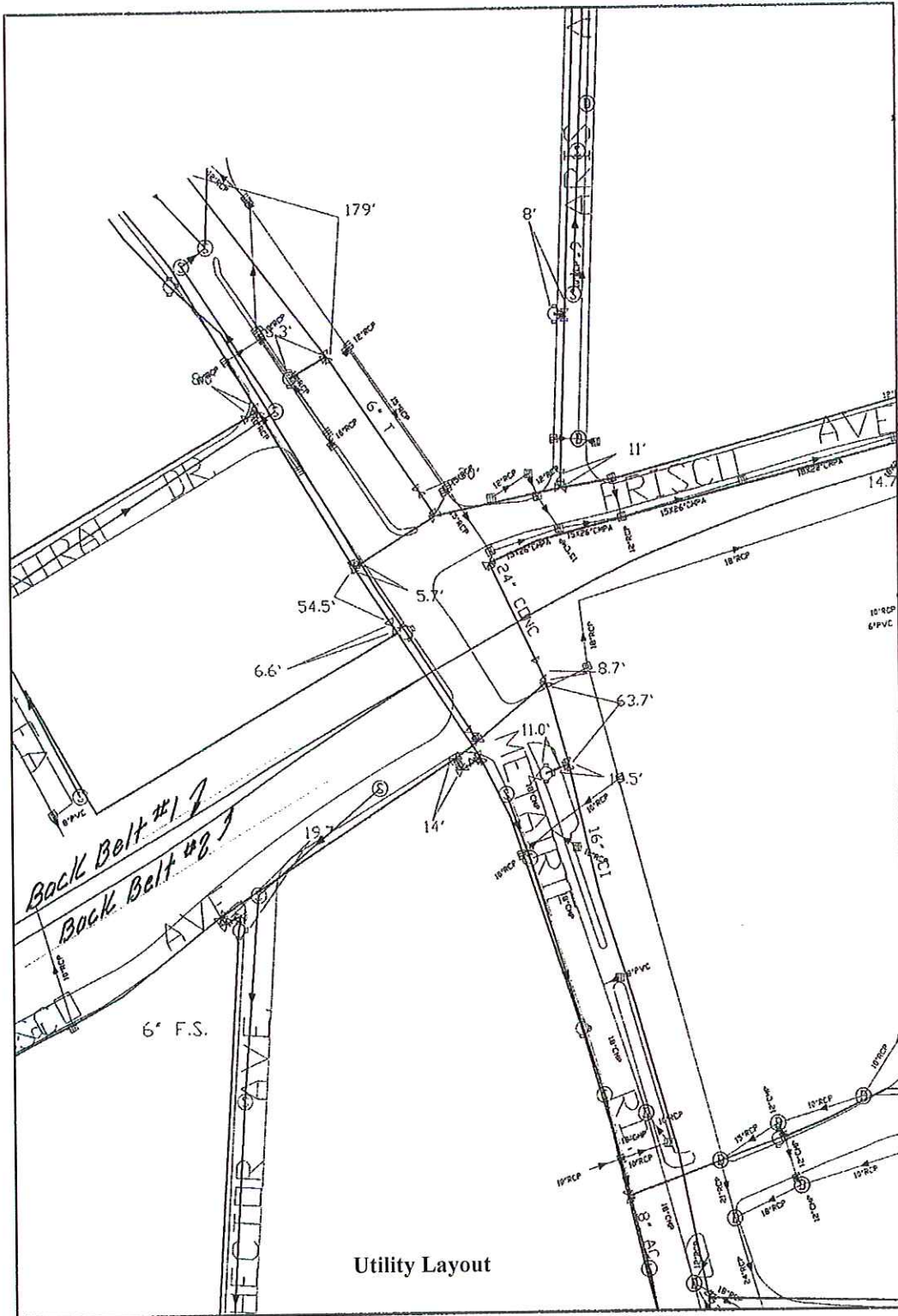
METAIRIE ROAD



Looking North

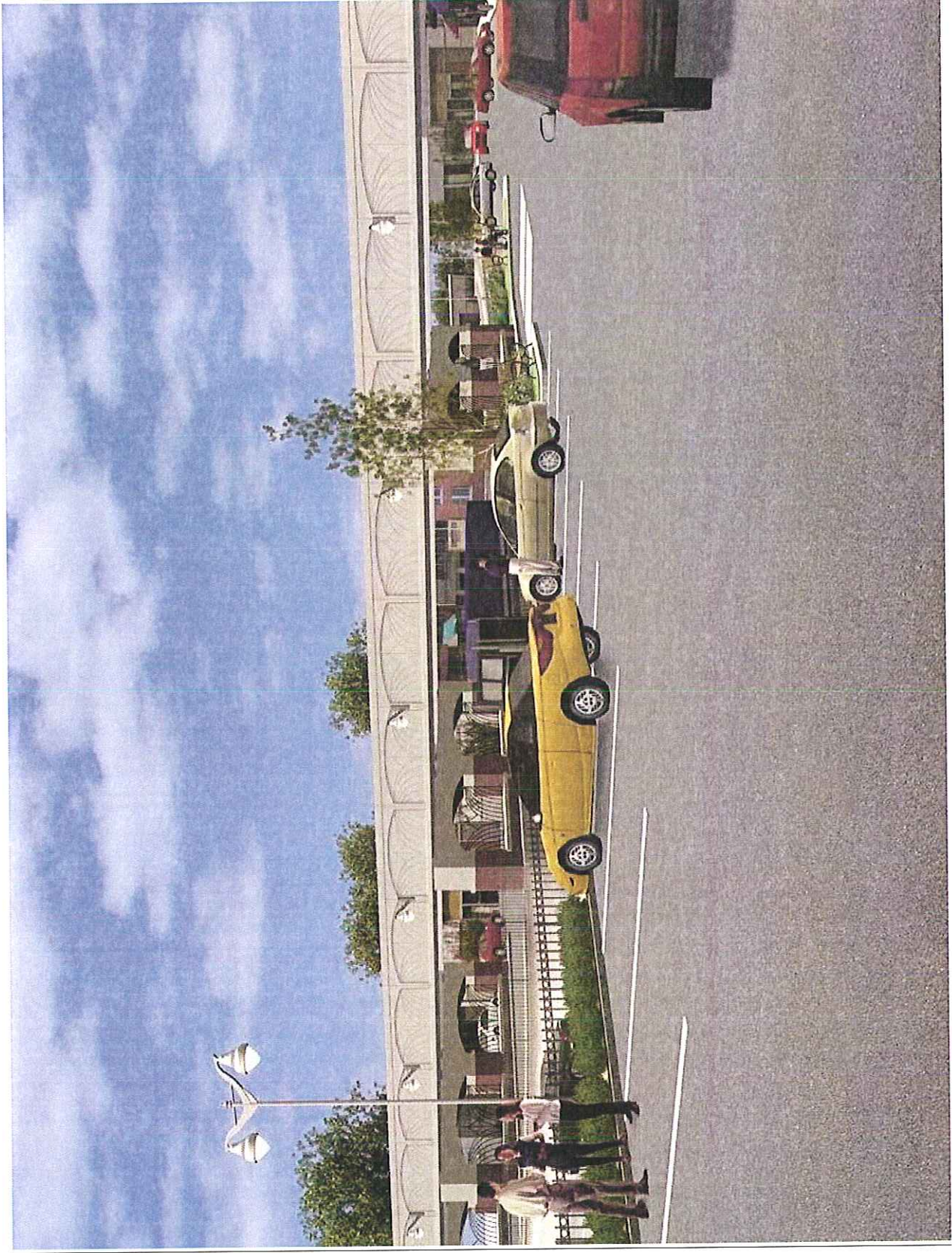


Looking South

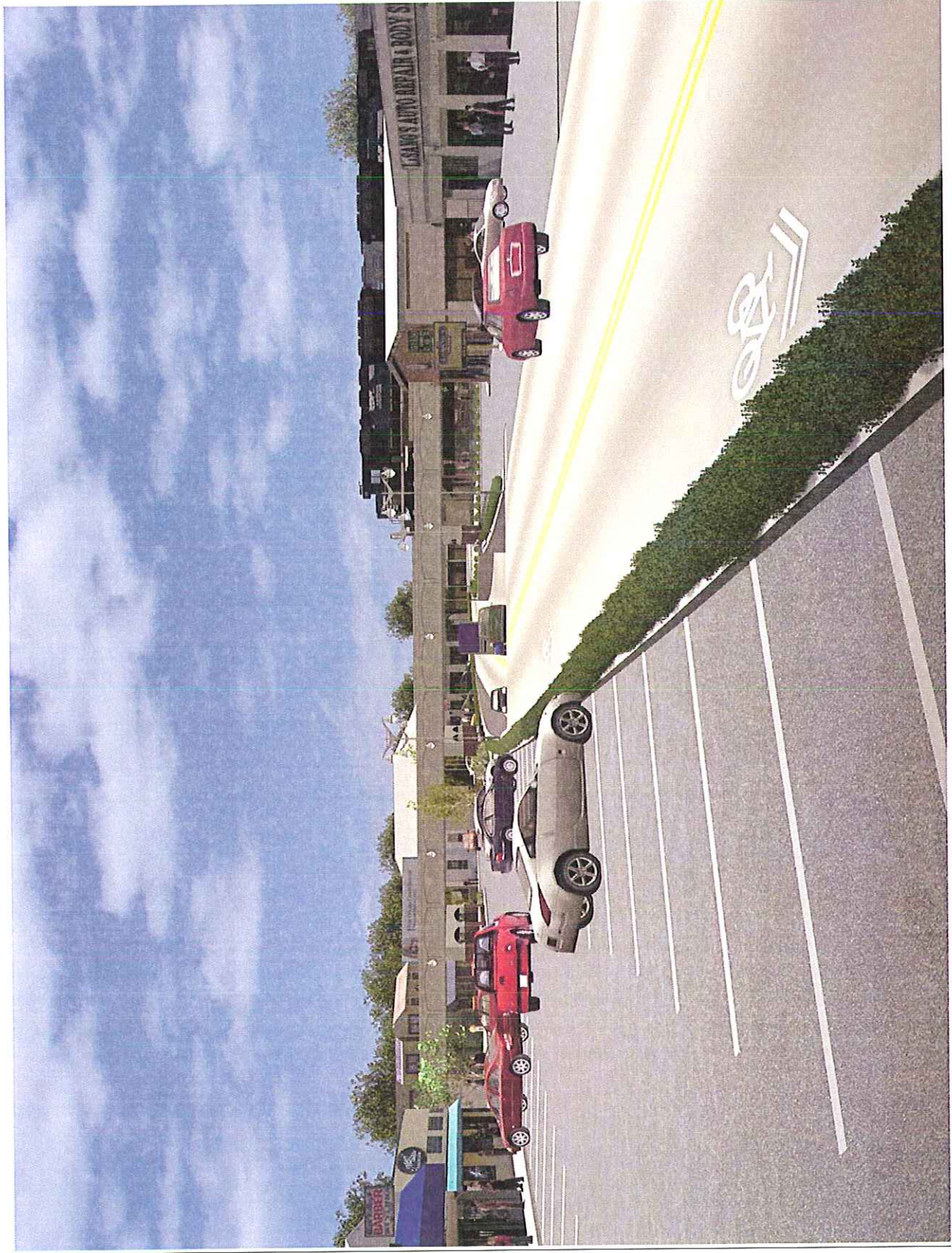


Utility Layout

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 8704 KNOWAN ST. METairie, LA



Looking from the south of the tracks towards the north.
Metairie Road underpass in center of picture.



Looking from north of the tracks towards the south.



Looking north from the eastside of the track.



Looking south towards the City of New Orleans

PROJECT NO. C18 - CARROLLTON AVENUE
(Project Plans Sheet No. 305)

Project Description

Two-lane urban collector roadway providing an alternate route crossing the Back Belt tracks. Connects Metairie Road to I-10 via Canal Street. Closure of this crossing would shift traffic to other residential streets and cause them to act as connectors between Metairie Road and Canal street. Carrollton Avenue will be needed as a detour during construction at Metairie Road.

Railroad Data
Users: Norfolk Southern Railroad
Related Railroad Project (Oct. 29, 2004 Report): C4
Covered by Whistle Ban: Yes
Milepost/Crossing ID: NS Milepost 2.65/725714U
Number of Tracks: 1 existing, 1 additional proposed
Existing Signal Devices: Gates and Flashers (no bells)
Distance to Adjacent Crossing: Metairie Road 0.17 miles west
Number of Train Movements/Day: 25
Roadway Data
State Route or Local Roadway: Jefferson Parish Local Road
Number of Traffic Lanes: 2-11 ft.
Traffic Volume (Average Daily Traffic): 2006: 5,100 2016: no change 2026:*
% Truck: 5%
% Auto: 95%
Pedestrian Use: Limited
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Jefferson Parish collector
Approx. Height of Crossing Above Adjacent or Approach Roadways: 5' to 6'.
Approach Roadway: <ul style="list-style-type: none"> • Shoulders: None – Paved Roadway. • Drainage: Subsurface, Crossing Tracks. • Utilities: Water and Sewer Crossing Tracks. • Surfacing of Roadway: Concrete with Curbs. • Right-of-Way: 50 Ft. • Topography: Residential, Fully Developed.
Flooded during Hurricane Katrina or Rita: No

* Traffic projections by Jefferson Parish Department of Traffic Engineering. The adjacent areas are 100 percent developed.

1. Describe any Problems with Existing Crossing Configuration:

Extreme elevation above approach roadway and poor line-of-sight to on coming traffic.

2. Description of Possible Improvements:

Elevate tracks and provide underpass structure.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

The community expressed concerns over the appearance of the proposed underpass structure and increase in rail traffic.

5. Description of Possible Enhancements:

Landscaping, improved traffic flow, elimination of truck traffic.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing.

7. Estimated Costs: Utility Relocations:

Temporary Sewer By-Pass during Construction.	\$ 80,000.00
Structural/Roadway Construction:	\$ 960,000.00
Railway Construction: See Project C3/C4	
Right-of-Way Acquisition: None.	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing at 20 Percent:	<u>\$ 250,000.00</u>
Project Total:	\$ 1,290,000.00

8. Description of Attached Photographs:

North of Crossing looking south.
South of Crossing looking north.

9. Description of Attached Documents:

Utility Layout.

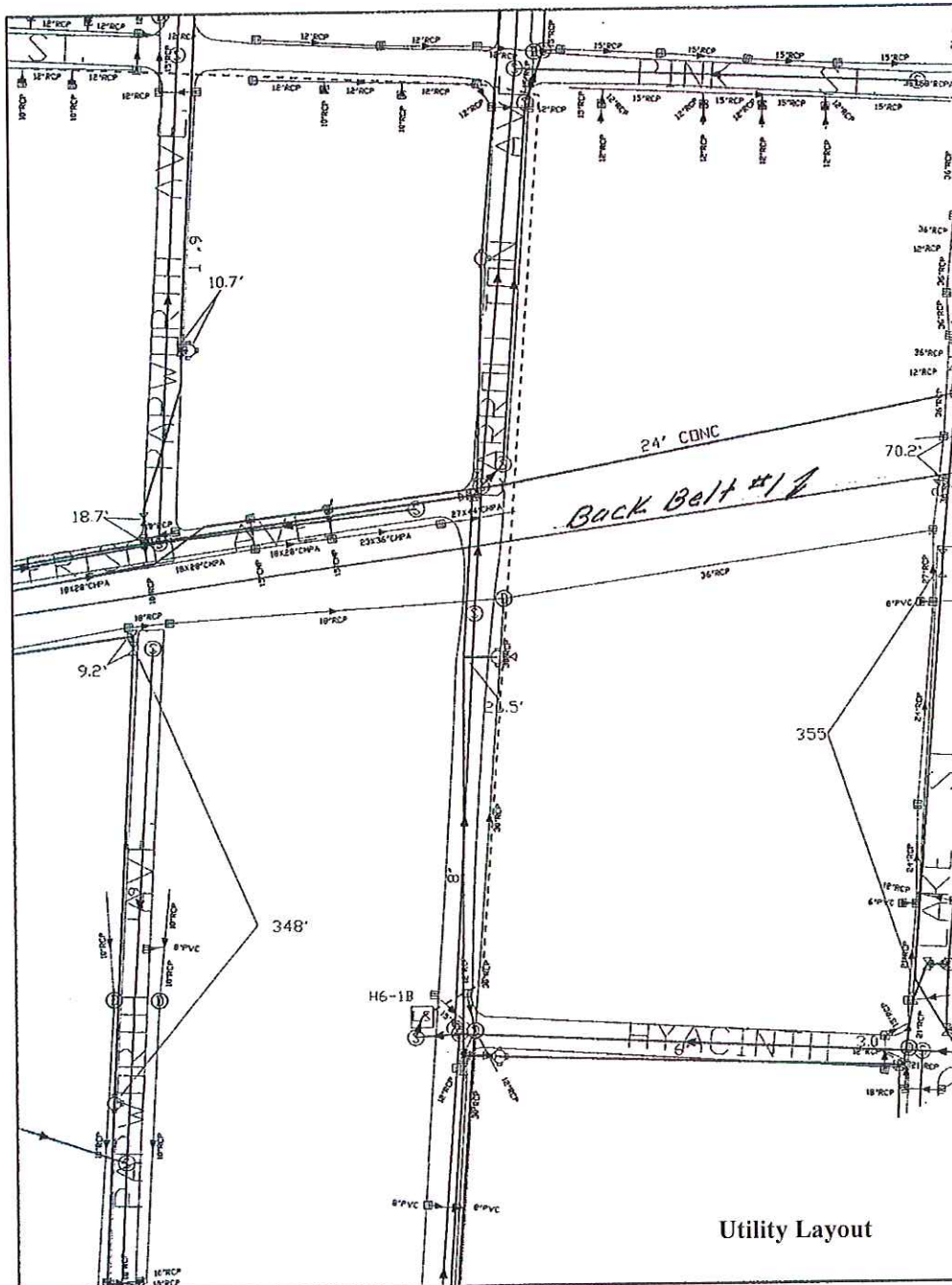
CARROLLTON AVENUE



Looking North



Looking South



Utility Layout

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GATEWAY MIDDLE BELT – EAST BRIDGE JUNCTION TO EAST CITY JUNCTION

PROJECT NO. C1A – SIGNAL AND TRACK IMPROVEMENTS

(Project Plans Sheet Nos. 400-407)

Project Objectives -

Replace current route from HPLB to NS Back Belt to East City Junction with a multi-track, totally grade separated route to increase train speeds and capacity, and eliminate the traffic congestion in the local communities caused by the train operations across numerous at-grade railroad-highway road crossings. Create a combination rail freight and light rail route into and through New Orleans that eliminates the prolonged stopping of freight trains in parish neighborhoods and provides enhanced evacuation routes.

Project Description -

Provide a Middle Belt to replace the Back Belt between EBJ and ECJ.

Developing a Middle Belt will involve:

- Reconfiguration and upgrading of EBJ;
- Construction of new tracks and interlocking within CN right-of-way between EBJ and Southport;
- Construction of new tracks and interlockings within the NOUPT right-of-way between Southport and Monroe Street;
- Construction of new tracks on a new alignment through the Airline Dr./Tulane Ave. Interchange between Monroe Street and Baudin Street on the NOUPT route from Carrollton Junction to ECJ;
- Construction of new tracks within the NOUPT ROW between Baudin Street and ECJ;
- Removal of the NS Back Belt between EBJ and ECJ, including:
 - 1) The removal of all existing grade crossings and their repaving as unobstructed city streets, and
 - 2) The removal of the I-10 underpass and Airline Dr. underpass of the NS Back Belt tracks.
- Provision of a revised connection from the CN northbound main to the KCS main at Shrewsbury;
- Reconstruction of various bridges between EBJ and ECJ; and
- The potential construction of mitigation measures developed during the environmental analysis and approval process or as described in Section 6 of this report.

The project would improve track geometry to increase maximum speeds from Back Belt to the HPLB and the Middle Belt. Antiquated control equipment for signals and switches, including the 24-hour manned EBJ control tower controls that are subject to frequent service failure, would be replaced.

The project would remove the NOPB crossover at Central Avenue and provide a double track route from the Middle Belt to the HPLB.

Project Location – NOPB MP 9.8 to NS Back Belt (MP 3.6-A)

East Bridge Junction (EBJ) is located in Jefferson Parish at the east end of the NOPB Huey P. Long Bridge crossing the Mississippi River. EBJ tower is manned and controlled by CN. EBJ is: (1) the junction of NS Back Belt and KCS main to the CN main; (2) crossover from CN northbound main to CN southbound main; and (3) crossover from CN southbound mainline to NOPB double track.

East City Junction (ECJ) is located in Orleans Parish nearly halfway between EBJ and NE Tower, the junction of the NS and CSX main lines.

Direct stakeholders: All - BNSF, CN, CSX, KCS, NOPB, NS, UP, City of New Orleans, Jefferson and Orleans Parishes.

Potential Environmental Issues Requiring Additional Study

Issues requiring additional study would include impacts during construction of rail improvements and post construction on local neighborhoods and traffic. Elimination of existing grade crossings on the NS Back Belt will enhance vehicular and pedestrian travel in the vicinity.

Impact on local businesses do not appear likely.

Changes in land use and economic development do not appear likely.

Access to public facilities and services, as well as emergency services such as police, ambulance and fire response times will not be effected.

Environmental justice could be an issue requiring detailed evaluation.

Elimination of grade crossing, along the existing Back Belt should result in slight air quality improvement. Noise, Vibration and Energy impacts will be evaluated and may require mitigation.

Parks, cemeteries, and churches (Section 4f) are located adjacent to ROW and potential impacts would require further evaluation. The potential for noise and visual impacts resulting from changes in railroad traffic patterns exists and would require detailed evaluation.

Potential Community Concerns

Potential community concerns could include disruption during construction, including construction traffic and noise, as well as disrupted traffic patterns. Post-construction concerns would include the visual and noise impact of the increased level of railroad traffic on routes that presently encounter lower levels of freight traffic. The relocation of Gateway freight traffic from Metairie to Hollygrove, Dixon, Mid-city, and Navarre neighborhoods is a concern that was identified by earlier studies of similar rail freight routes.

PROJECT DATA SUMMARY		
Status Of Design, Engineering And Data Collection –		
Name	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and various schematics	
Related projects		
Project Number	Name	
C1/C2	EBJ/NS Back Belt, Shrewsbury CTC	
C11	Central Avenue Crossing Closure	
C3/C4	NS Back Belt Metairie, grade separation - seven grade crossings/17th Street Canal, double track (MP 2.2a to 2.8a)	
C12	Shrewsbury Road Crossing Closure	
W6	HPLB - Signal and Track Improvements	
E1	East City Junction	
No. of Tracks –		
Tracks	Number	
Main	5	
Siding	0	
Yard	1	
Max Timetable Speed –		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	30 mph on NOPB	30 mph on NOPB
	40 mph Amtrak on CN	40 mph Amtrak on CN
Freight	20 mph HPLB	20 mph on HPLB
	10 mph through EBJ plant	15 mph through EBJ plant No. 10 turnouts
	20 mph Back Belt	25 mph through EBJ plant No. 15 turnouts
Switch	same as freight	same as freight
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	4	Varies
Freight	NS, Back Belt movements 20-24 daily	Varies
	8 KCS movements	Varies
	4 CN yard moves and locals	Varies
	12 NOPB movements	Varies
	2 UP Front Belt movements	Varies
Switch	Included in Above	N/A

Estimated Costs

PARSONS/BCG (July 2006) \$166.8 million, EBJ to ECJ.

Railroad Detail

Owner/Users

- Property Owners: CN, KCS, NOPB, NS, NOUPT
- Direct Users: Amtrak, BNSF, CN, CSX, KCS, NOPB, NS, UP

Location

- Milepost – new trackage
- Parish/City – Jefferson/Orleans

Approximate Available Right-of-Way

The alignment revisions would take place within railroad owned right-of-way, with the potential exception of property on the new alignment connecting the NOUPT east and west approaches to NOUPT.

Possible Changes in Alignment

The project would significantly modify train routings through the Gateway between EBJ and ECJ; however, the alignment changes would be constructed within the existing railroad right-of-way with the exception of the new alignment connecting the NOUPT east and west approaches to NOUPT. The Middle Belt is approximately 1.3 miles longer than the Back Belt between the EBJ and ECJ.

Flooded During Katrina

Yes.

Description of Railroad Work to be Accomplished

The project would modify EBJ to increase the capacity and flexibility for movements between the Middle Belt and the HPLB. The routing changes are summarized below.

Summary of Changes to Existing Routes through EBJ

<u>From</u>	<u>To</u>	<u>Change</u>
HPLB	Back Belt	The route would be eliminated.
HPLB	CN Main	Number of tracks would remain at one. The configuration would increase speed of trains through EBJ to 25 mph.
HPLB	NOPB	Not affected by the configuration change.
Mays Yard	CN Track A2	One of the lower density routes would be the route most affected by the reconfiguration; rather than being a straight move, including turnouts leading to the Back Belt lead track, the route would pass through a series of No. 15 turnouts and crossovers, a more indirect routing.
CN Main	CN main	The routing would not be affected by the reconfiguration.
CN Main	East to KCS	The connection would be shortened and the maximum speed increased to 15 mph.

The track changes at EBJ would include:

- Removal of the existing single track route between the HPLB and the Back Belt,
 - This includes all existing crossing diamonds and turnouts;
- Construction of a complex interlocking on the NOPB main tracks that would provide routing flexibility for all eastward train movements;
 - Construction of two tracks, in place of the existing track, between the NOPB main tracks and the CN southbound and northbound main tracks;
- Installation of a LH No. 15 turnout, a RH No. 15 crossover, and a RH 15 Turnout to provide the route between Mays Yard and the southbound CN main track;
- Installation of a LH No. 15 turnout west of the two tracks to the CN main tracks,
 - This turnout replaces the existing slower speed connection that leads to the KCS main east of Shrewsbury located west of the turnout.

The phasing of the construction would require that the existing route to the Back Belt be retained for a period of time while the track and turnouts/crossovers to maintain the other routes are installed.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

The reliability of the signal system and hardware at EBJ would be improved. In combination with the proposed new Communication System between the railroads, the new interlocking/track configuration would improve dispatcher/operator control with "visibility" of movements and route requests provided from/to all railroads.

The new track configuration would enable:

- Two freight trains to move in parallel to/from the Gateway Middle Belt to HPLB; at present only one train at a time can move between the Back Belt and the HPLB.
- NS/KCS freight trains to move from EBJ to either the CN main or Mays Yard at the same time that the Sunset Limited moves to/from the HPLB.
 - The new configuration would increase the speed of freight movements:
- Through EBJ from/to the Gateway Middle Belt and HPLB from 10 mph to 30 mph;
- Through diverging routes to 25 mph;
- KCS movements from CN main to KCS main to 25-mph; and
- The "Sunset Limited" movements through EBJ to 30 mph.

The speed of local freight would be 15 mph; and the speed of "City of New Orleans" movements on CN would remain 40 mph.

- Beneficiaries: Amtrak, BNSF, CN, CSX, KCS, NOPB, NS, UP.

The construction of four additional siding/interchange and two mainline tracks adjacent to the CN mainline track between EBJ and Southport would enable the crew change point for Gentilly Yard to Avondale to be relocated westward nearly five miles from the present location at I-10. This would eliminate the parking of trains through City Park and avoid parking trains adjacent to the New Orleans neighborhoods through which the Gateway Middle Belt would pass.

- Beneficiaries: Amtrak, CN, CSX, KCS, NS, UP, and City of New Orleans.

The construction of a combination three- and two-track between Southport, Monroe Street, Baudin Street, and ECJ would provide capacity and operation flexibility to integrate Gateway freight traffic with intercity passenger train access into and out of NOUPT. The upgraded alignment would support 25 mph maximum freight speeds and maintain existing CN and KCS freight routes east of EBJ.

- Beneficiaries: Amtrak, CN, CSX, KCS, NS, UP, BNSF, and rail passengers.

The elimination of the Back Belt infrastructure between EBJ and ECJ would enable the NS Back Belt Bridge over I-10, the Pontchartrain Expressway, to be removed and the gradient of the roadway elevated to eliminate a serious flooding hazard that restricted evacuation routings during and after Katrina.

- Beneficiaries: The City of New Orleans.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished
Additional real estate would be required between Monroe and Baudin Streets on the NOUPT eastern route.

Description of Community Impacts of Railroad Work to be Accomplished
Potential community concerns could include disruption during construction, including construction traffic and noise, as well as disrupted traffic patterns. Post-construction concerns would include the visual and noise impact of the increased level of railroad traffic on routes that presently encounter lower levels of freight and passenger traffic.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate
PARSONS and BCG (July 2006) \$166.8 million, EBJ to ECJ.

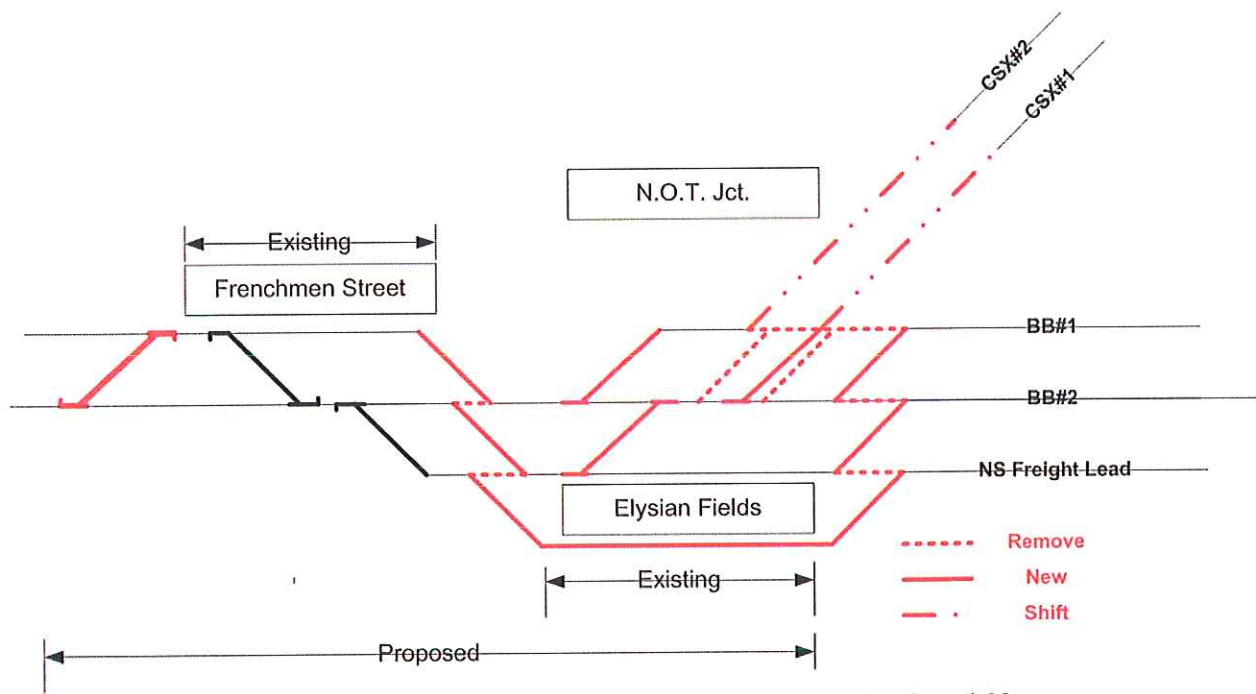
CENTRAL SECTION

ELYSIAN FIELDS

PROJECT NO. E2 - RECONFIGURE TRACK AND SIGNALS (MP 6.8NT TO 7.2NT) (Project Plans Sheet No. 313)

Project Objectives

Improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard. Combine Elysian Fields and Frenchmen Street Interlockings further to enhance flexibility in the routing of trains. Eliminate existing conflicts between CSX and NS freight trains. Realign CSX main tracks east of Elysian Fields to increase track speed for freight trains from 15 to 25 mph.



Project E2 – Proposed Track and Signal Changes at Elysian Fields

Project Description

Revise junction of CSX mainline and NS Back Belt to improve speeds for movements to and from CSX mainline, minimize conflicts with NS freight trains, and enhance operational flexibility. Construct relocated NS Freight Lead Track one-track center to the south of the existing track. Perform a series of cut and throws to realign NS Back Belt and Freight Lead Tracks through Elysian Fields. Remove existing Back Belt Track 1 through Elysian Fields. Remove existing turnouts and crossing diamonds that provide connection between CSX main line and NS Back Belt. Install three No. 15 turnouts to provide new connection between CSX and NS. Install new LH No. 15 Crossover at existing Frenchmen Street to convert interlocking to a universal interlocking. Combine interlocking control of Frenchmen Street and Elysian Fields.

Project Location

Frenchmen Street to Elysian Fields to N.O.T. Junction MP 6.8NT to 7.2NT.

Potential Environmental Issues Requiring Additional Study

None anticipated at this time; however, the final design would have to take the location of the adjacent Florida Avenue Canal into consideration.

Potential Community Concerns

None anticipated at this time. Location is remote and on railroad right-of-way.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Name	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
E3	NE Tower - Signal and Track Improvements	
E6	Triple track to Marconi Drive	
No. of Tracks		
Tracks	Number	
Main	2 CSX, 2 NS	
Siding	1 NS	
Yard	None	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	15	30, when both E2 and E3 are completed to enable Amtrak trains from Atlanta to use route
Freight	15	25
Switch	15	25
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	4	Varies
Freight	25	Varies
Switch	Included in above	Varies

RAILROAD DETAIL

Owner/Users

- Owners: NS and CSX.
- Users: NS and CSX; Amtrak presently uses both routes.

Location

- Milepost - MP 6.8NT to 7.2NT.
- Parish/City – Orleans Parish.

Approximate Available Right-of-Way

Little if any new right-of-way to be acquired to accommodate track shifts. Right-of-way of former CSX/NS interchange yard would accommodate shifting of CSX main line tracks.

Possible Changes in Alignment

A series of track connection changes would result in NS Back Belt Tracks 1 and 2, and the NS Freight lead being shifted one-track spacing to the south through existing Elysian Fields to accommodate configuration changes at the Junction of the CSX mainline and the NS Back Belt. The existing turnouts and moveable point frog crossings providing the Junction would be removed and replaced with a revised interlocking configuration, consisting of one No. 15 crossover and two No. 15 turnouts, shown in Figure E3-1. CSX Tracks 1 and 2 east of the new Junction would be realigned to the west to reduce the degree of curvature and thus increase speeds.

A new No. 15 crossover at the present Frenchmen Street Interlocking would be installed to convert the interlocking into a universal interlocking and thus increase the flexibility of train operations between East City Junction (and Marconi Drive if it is installed) and Elysian Field.

Flooded During Katrina

Yes.

Description of Railroad Work to be Accomplished

Frenchmen Street and Elysian Fields control points would be combined and modified to provide flexibility for movements from either CSX main to both Back Belt mains and would allow improved access to NS Oliver Yard. Movable point frog crossing at Elysian Fields would be replaced with a single left hand switch at Elysian Fields and a new left hand crossover west of Frenchman Street would be installed. Turnouts for all CSX routes would be upgraded to No. 15 turnouts. Rehabilitate CSX tracks and realign Tracks 1 and 2 to connect to new turnouts and to reduce curvature from 8 to 5 degrees.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Provides dual parallel movements on NS Back Belt and CSX. Provides flexibility of operations on Back Belt. Turnout replacements and reduced curvature on CSX would permit 25 mph operations. In conjunction with Project E3, Amtrak operations for connection to NS Back Belt would increase from 10 mph to 30 mph.

- Beneficiaries: Amtrak, CSX, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

It is anticipated that all work would be performed on NS or CSX owned property.

Description of Community Impacts of Railroad Work to be Accomplished

The location is remote and the primary track alignment changes would be made north of existing businesses, which are located more than 300 feet from the proposed relocations.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

\$11.9 million.

17TH STREET CANAL TO GENTILLY NE TOWER

PROJECT NO. E3 - NORTHWEST QUADRANT CONNECTION BETWEEN NS AND CSX (Project Plans Sheet No. 315)

Project Objectives

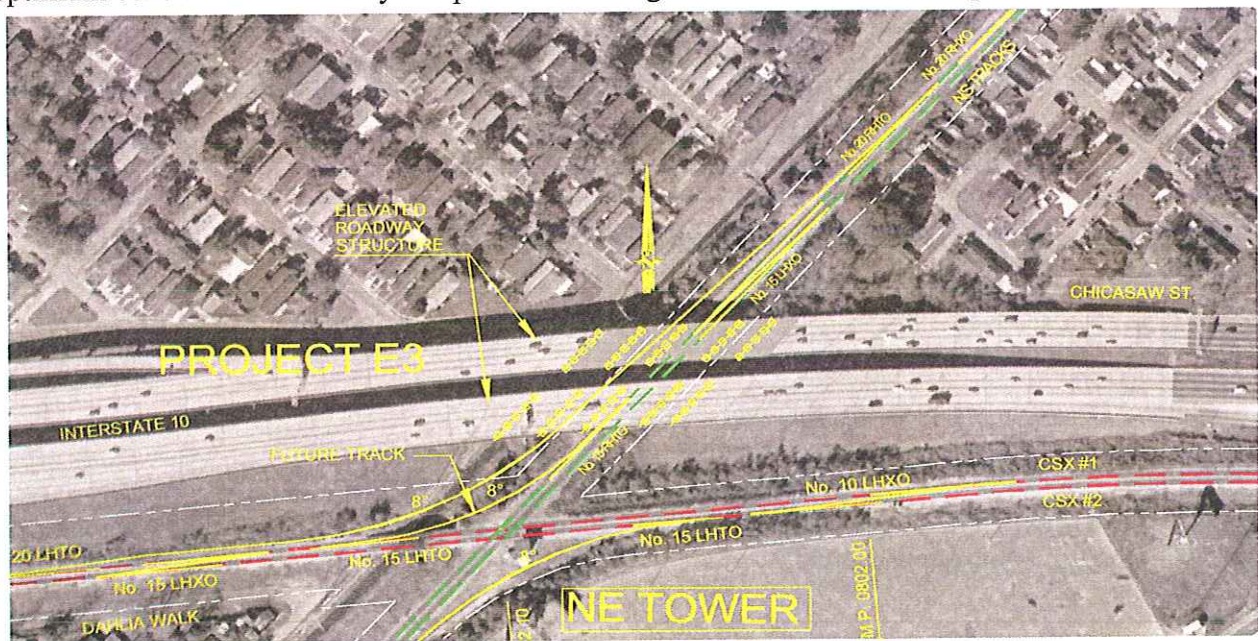
Provide an improved connection between NS mainline and the NS Back Belt by providing a connection to the CSX mainline between NE Tower and Elysian Fields (NOT Junction). The connection would eliminate the need for Amtrak trains from Atlanta and UP trains to travel to Oliver Junction to connect to the Back Belt through a slow, circuitous route. The proposed interlocking changes and track connection would facilitate parallel movement of trains to Oliver Junction and Elysian Fields on the NS NO main line.

Minimize conflicts between NS, Amtrak, and CSX movements at NE Tower and Elysian Fields. The completion of Projects E3 and E2 would increase speed of train movements, enhance operational flexibility, and reduce congestion.

Project Description

Construct a new interlocked connection between NS and CSX in the northwest quadrant of the present NE Tower; construct box culvert in Peoples Avenue Canal parallel to the NS mainline. Install a new controlled set of turnouts and crossovers on the CSX main line west of the NS main line. In addition to the turnout to connect with the CSX mainline, install a crossover to create a universal set of crossovers on the NS mainline north of the existing crossing diamonds at NE Tower.

Upgrade signals on CSX mainline between Gentilly Yard and Elysian Fields. Coordinate NS signal modifications and CSX signal additions from Elysian Fields to NE Tower to provide optimum control and flexibility of operations through NE Tower interlocking.



Plan - NS to CSX Connection at N.E. Tower

Project Location

NS Milepost N0193.25 to NE Tower to CSX MP 802.72, located between NE Tower and Elysian Fields.

Potential Environmental Issues Requiring Additional Study

Potential environmental issues requiring additional study include the impact of the construction of new structure spanning the Peoples Canal as well as the connecting track, which would parallel the canal as well as the existing NS main line.

Potential Community Concerns

The location is remote and should not be a cause of concern to the local community.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Name	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
E2	Reconfigure Track and Signals (MP 6.8NT to 7.2NT)	
No. of Tracks		
Tracks	Number	
Main	2 CSX, 2 NS	
Siding	1 NS	
Yard	none	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	10 mph via connection at Oliver Junction	30 or 45
Freight		25
Switch		25
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	4	Varies
Freight	CSX 20; NS 10	Varies
Switch	Included above	N/A

RAILROAD DETAIL

Owner/Users

- Property Owners: NS, CSX
- Direct Users: CSX, NS, UP, and Amtrak

Location

- Milepost – CSX 802 to CSX 802.72; NS 193.25 to NS 193.75.
- Parish/City – Orleans Parish.

Approximate Available Right-of-Way

Most of the work would be accomplished within railroad-owned right-of-way on right-of-way of I-10.

Possible Changes in Alignment

The existing rail alignment would not change. The only alignment change involves the construction of the connection between the NS main line and CSX mainline in the northwest quadrant of the right-of-way north of NE Tower (see adjacent photograph). See preceding descriptions.

Flooded During Katrina

Yes.

Description of Railroad Work to be Accomplished

Construction of a connection between the NS and the CSX main lines in the northeast quadrant at the NE Tower.



Project E3 – NS Mainline Looking South, Peoples Canal is Right of Track, CSX Mainline Crossing in Center of Photograph

The connection would consist of:

- The addition of crossovers and a turnout on the NS mainline north of NE Tower and the I-10 overhead bridges,
 - It would appear that revised interlocking initially would be controlled from NE Tower.
- The construction of a new roadbed and track connecting the mainline tracks of the two railroads
 - The connection requires a new bridge or box culvert at the People's Avenue Canal;
- The removal of existing crossovers on the CSX mainline and the addition of a new turnout and crossovers to complete the connection and provide operating flexibility,

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

The new connection and interlockings would reduce conflicts between NS and CSX freight train movements by eliminating need for freight trains from NS 'NO' main line that do not have to enter Oliver Yard (or conversely northbound UP trains from the Back Belt to the NO main line) to pass over the existing crossing diamonds to reach or leave Oliver Junction. Similarly, intercity passenger trains using the NO mainline would not have to cross the diamonds or use Oliver Junction, instead they would use the shorter, quicker route via the CSX main line.

The project thereby provides flexibility in the operation of freight and passenger trains to and from the NS Back Belt. The flexibility would include the ability of NS and CSX freight trains to make parallel moves between NE Tower and Elysian Fields. The new connection also would reduce intercity passenger train travel times and improve their reliability by reducing conflicts at the existing NE Tower and Oliver Junction.

Connection speeds would increase from 10 mph to 25 mph for freight and to 30 to 45 mph for intercity passenger trains.

- Beneficiaries: Amtrak, BNSF, CN, CSX, KCS, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

The connecting track between the NS and CSX mainlines would appear to require only a permit from the LDOTD to use I-10 right-of-way. The connection between the CSX mainline east of NE Tower and the siding track adjacent to the NS main line, located between NE Tower and Oliver Junction, would be constructed on railroad-owned right-of-way.

Description of Community Impacts of Railroad Work to be Accomplished

The proposed railroad construction would appear to have minimal impact on the adjacent communities. Noise impacts related to the construction of the new bridge or box culvert at the Peoples Canal would appear to be readily mitigated by the application of best construction practices.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$12.3 million.

**PROJECT NO. C10 - CENTRAL AVENUE
(Project Plans Sheet Nos. 300 and 301)**

Project Description

Central Avenue (La Route 48) provides a connection between Jefferson Highway (US Highway 90) and Airline Drive (US Highway 61). The roadway crosses eight tracks, two of which are the NOPB leads to the Huey P. Long Bridge. Areas north and south of these tracks are fully developed, with light industrial, single, and multiple family usages. Earhart Expressway (La 3139) crosses the CN northern set of five tracks on a grade separated overpass structure. The presence of the elevated portion of Earhart Expressway, multiple tracks, and adjacent fully developed right-of-way makes a grade separation of the crossing difficult. An overpass structure would have to pass over the elevated Earhart Boulevard structure and would extend an unacceptable length both north and south along Central Avenue. Recommend extending Webb Street to Firestone Road and closure of Central Avenue at the tracks (see Page No. 2-137).

Railroad Data
Users: CN, KCS, NOPB
Related Railroad Project (Oct. 29, 2004 Report): C1
Covered by Whistle Ban: No
Milepost/Crossing ID: NOPB Milepost 3.31/464622J
Number of Tracks: 2 Sets – South Set 3 Tracks, 2 NOPB (Huey P. Long Bridge), 1 NOPB Yard Lead; North Set (5 Tracks) CN/IC Main, CN/IC A2, 2 CN/IC Yard Leads, 1 Abandoned.
Existing Signal Devices: 2 sets of gates w/flashers
Distance to Adjacent Crossing: The nearest adjacent crossings are on CN east and west of the crossing; crossings are not included in this project.
Number of Train Movements/Day: 47
Roadway Data
State Route or Local Roadway: State Route 611-2
Number of Traffic Lanes: 2 at 11 ft.
Traffic Volume (Average Daily Traffic) 2006: 10,705 2016: 11,240 2026: 11,800
% Truck: Large Volume from UPS Facility Between Track Sets
% Auto: 95%
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: See Profile Plate No.
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - None • Drainage - Area between Tracks Drains Separately to the West and East • Utilities – Water and Gas Crossing Tracks, Sewer North and South of Tracks • Surfacing of Roadway - Asphalt • Right-of-Way - 50 Ft. North and South • Topography - Residential, Light Commercial North of Crossing; Multiple Family, Light Commercial South of Crossing
Flooded During Hurricane Katrina or Rita: No

1. Describe any Problems with Existing Crossing Configuration:

Extensive train operations include slow freight trains and Amtrak passenger trains. The NOPB tracks lead to Huey P. Long Bridge on western approach to the East Bridge Junction. Eastbound freight trains stop short of crossing to avoid blocking crossing; this practice lengthens the time it takes freight trains to approach and cross East Bridge Junction.

2. Description of Possible Improvements:

- a. Close crossing, route traffic to Clearview Parkway. This would equal to a 0.8 mile increase in travel distance along Clearview Parkway from Jefferson Highway/Central Avenue to Clearview Parkway/Airline Drive than along Central Avenue between these same points.
- b. Construct underpass structure to grade separate crossing. This improvement would be very costly (\$27 M+) and would have problems with access to Firestone Road.

3. Additional Right-of-Way Requirements:

Construction of an underpass structure would require 60 ft. to 70 ft. of additional right-of-way, along the west side of Central Avenue and possibly affecting access to structures along the east side of the crossing.

4. Possible Community Concerns:

- Impacts during construction and post construction on local neighborhoods and traffic flow in and through neighborhoods served by Central Avenue.
- Closure of crossing could affect
 - Vehicular and pedestrian travel in the vicinity.
 - Neighborhood travel patterns, current traffic volumes and travel patterns.
 - Local businesses.
- Elimination of grade crossing should result in slight air quality improvement.

5. Description of Possible Enhancements:

Improved neighborhood roadways and access to commercial area between tracks.

6. Benefit of Project:

Reduced roadway congestion and improved safety at the at-grade crossing. Eliminate – maintenance of eight crossings and delay in train movements.

7. Estimated Costs:	Utility Relocations: None.	0.00
	Roadway Construction Extension of Webb Street:	\$ 4,500,000.00
	Railway Construction: None.	0.00
	Right-of-Way Acquisition: None.	\$ 600,000.00
	Plans, Specifications, Construction Administration/Supervision, Testing at 20 Percent:	<u>\$ 900,000.00</u>
	Project Total:	\$ 6,000,000.00

Note: An underpass structure would cost: \$27,000,000.00(+)

8. Description of Attached Photographs:

- Looking north from beneath Earhart Expressway.
- Looking north from NOPB main tracks.
- Looking south across NOPB main tracks.

9. Description of Attached Documents:

Plan Layout of Webb Street Extension. Plan/profile of Central Avenue underpass.

CENTRAL AVENUE



Looking North CN/IC Main in Background

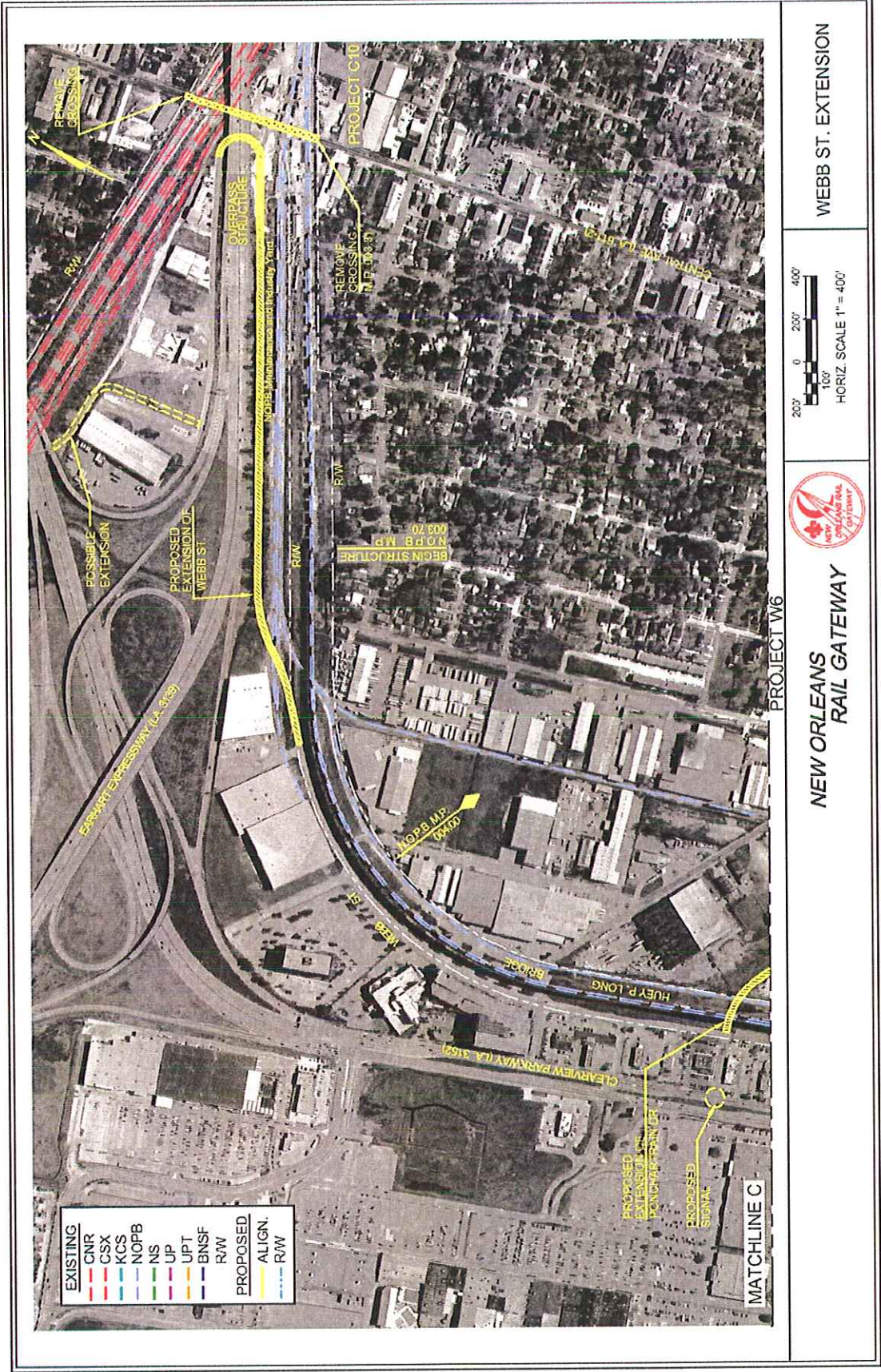


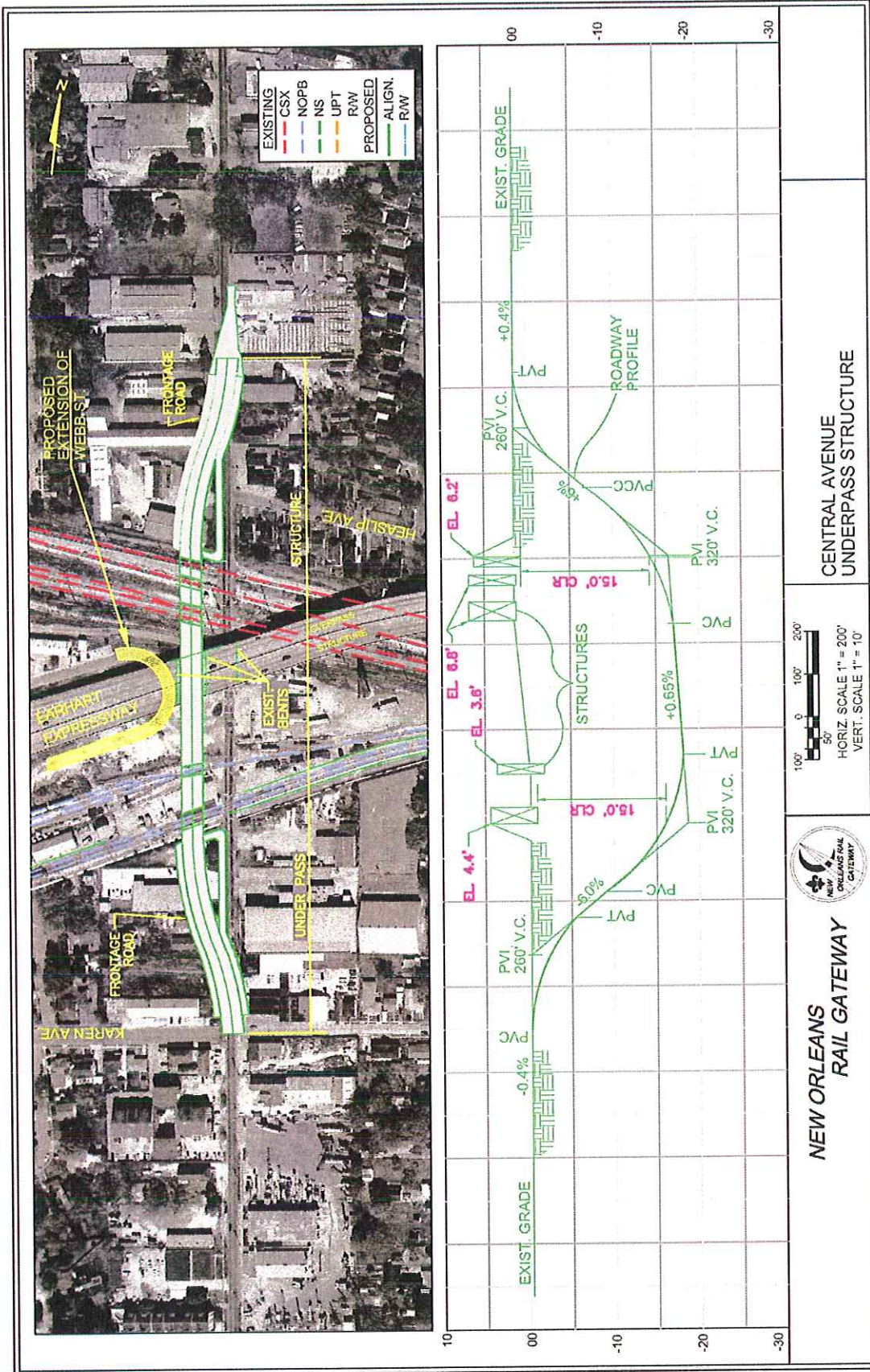
Looking North from Huey P. Long Bridge Leads

CENTRAL AVENUE



Looking South Huey P. Long Bridge Leads





PROJECT NO. E10 - LOUISA STREET (Project Plans Sheet No. 316)

Project Description

Louisa Street, Alvar Street and France Road provide crossings of the CSX tracks in the area bounded by I-10 south to Florida Avenue and from Almonaster Avenue on the west to France Road on the east. All roadways except France Road are four-lane divided urban collectors. Higgins Boulevard is an east-west four-lane divided roadway connecting Almonaster Avenue and Alvar Street and approximately divides the described area in half. Louisa Street is a four-lane at-grade crossing of the CSX tracks with exit and entrance ramps to I-10 and I-10 main roadways immediately north of the tracks. Alvar Street, 1,800 feet east of Louisa Street, provides a four-lane overpass of the CSX tracks. France Road is a two-lane at-grade crossing of these same CSX tracks and is located directly beneath the Alvar Street overpass.

Multiple visits to the site indicated:

- Very little traffic using France Road,
- Eastbound traffic exiting I-10 turned north onto Louisa Street,
- Traffic entering I-10 eastbound came from the north on Louisa Street,
- Northbound traffic on Louisa Street went to the north past I-10,
- Southbound traffic on Louisa Street came from the north of I-10.

There is an existing overpass structure of the CSX tracks for traffic exiting I-10 onto Louisa Street and Almonaster Avenue. An overpass structure for Louisa Street crossing the CSX tracks is impractical because of the existing I-10 exit ramp and main roadway structures. An overpass structure would have to be constructed above both of these existing structures. An underpass structure on Louisa Street would be difficult to build because of the proximity and grade of the entrance ramp to I-10 eastbound, immediately north of the CSX tracks. (Estimated construction costs for an underpass structure are indicated.)

Recommendations: There should be additional study done for Louisa Street, from the CSX tracks south to Florida Avenue. An orientation/destination study would indicate if the Louisa Street crossing is critical or if traffic could be diverted to the Alvar Street overpass. Improvements would have to be made at the Alvar Street/Old Gentilly Road intersection to facilitate turning movements. (Estimated construction costs for an underpass structure are indicated.)

Railroad Data
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): None
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX 0801.99/341072U
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Alvar 0.3 miles east
Number of Train Movements/Day: 22 to 26
Roadway Data
State Route or Local Roadway: New Orleans Collector Roadway
Number of Traffic Lanes: 4 - 12 ft., divided
Traffic Volume (Average Daily Traffic): 2006: 19,800 2016: 20,800 2026: 21,800
% Truck: Large Volume AADT Taken Away from Crossing
% Auto:
Pedestrian Use: Limited
Posted Speed Limit: not posted: Design 20 mph
Level of Service or Classification of Roadway: New Orleans Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: Southside up to 6', north 2'
Approach Roadway:
<ul style="list-style-type: none"> • Shoulders: None – Curb. • Drainage: Subsurface away from Crossing. • Utilities: Water Crossing; Sewer South. • Surfacing of Roadway: Concrete with Curb. • Right-of-Way: South – 80 Ft., North - Unrestricted. • Topography: Commercial South, Interstate Interchange North Approaches.
Flooded during Hurricane Katrina or Rita: Yes, during Katrina.

1. Describe any Problems with Existing Crossing Configuration:

Crossing is located on the approach to the CSX Gentilly yard. Train operations are slow in this area, resulting in extended blockage of crossing.

2. Description of Possible Improvements:

Close crossing – make improvements at Alvar Street/Old Gentilly Road, Alvar Street/Almonaster Avenue intersections. Divert traffic to Alvar Street overpass to provide unobstructed crossing of CSX tracks. (Estimated construction costs for an underpass structure are indicated).

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

Anticipated increased travel time with use of Alvar Street overpass.

5. Description of Possible Enhancements:

Enhancement could include improved intersections along Higgins Boulevard and Alvar Street. If crossing is not closed, grade crossing protection at crossing would be enhanced to increase safety.

6. Benefit of Project:

Elimination of at-grade crossing, improved public safety, improved rail operations.

7. Estimated Costs: Utility Relocations:	\$ 300,000.00
Structural/Roadway Construction:	\$ 8,900,000.00
Railway Construction:	\$ 60,000.00
Right-of-Way Acquisition:	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing at 20 Percent	<u>\$ 1,640,000.00</u>
Project Total:	\$10,900,000.00

8. Description of Attached Photographs:

South of crossing looking north, I-10 in background.
 South of crossing looking east.

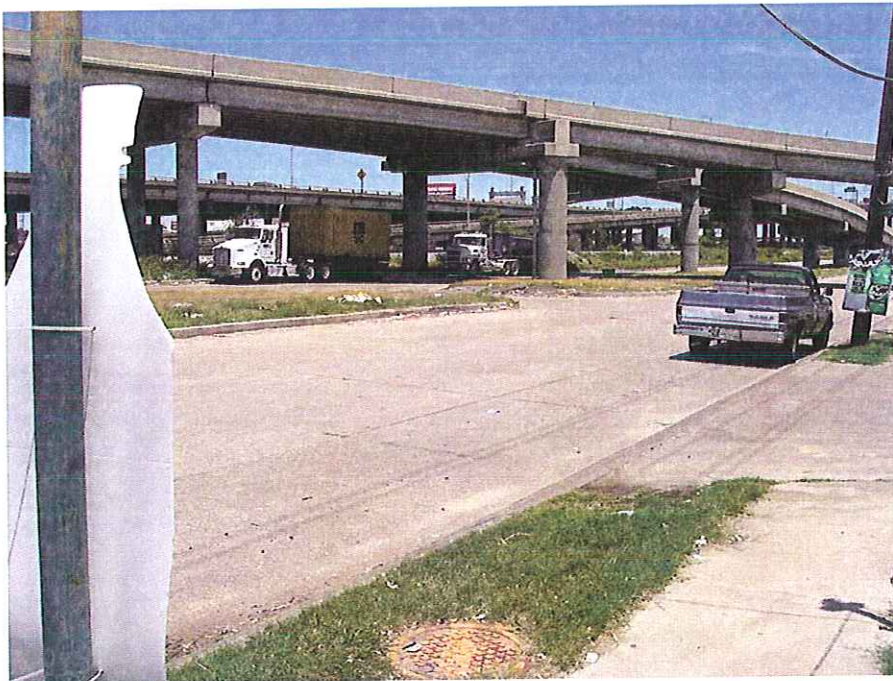
9. Description of Attached Documents:

Drainage Layout.
 Sewer and Water Layout.

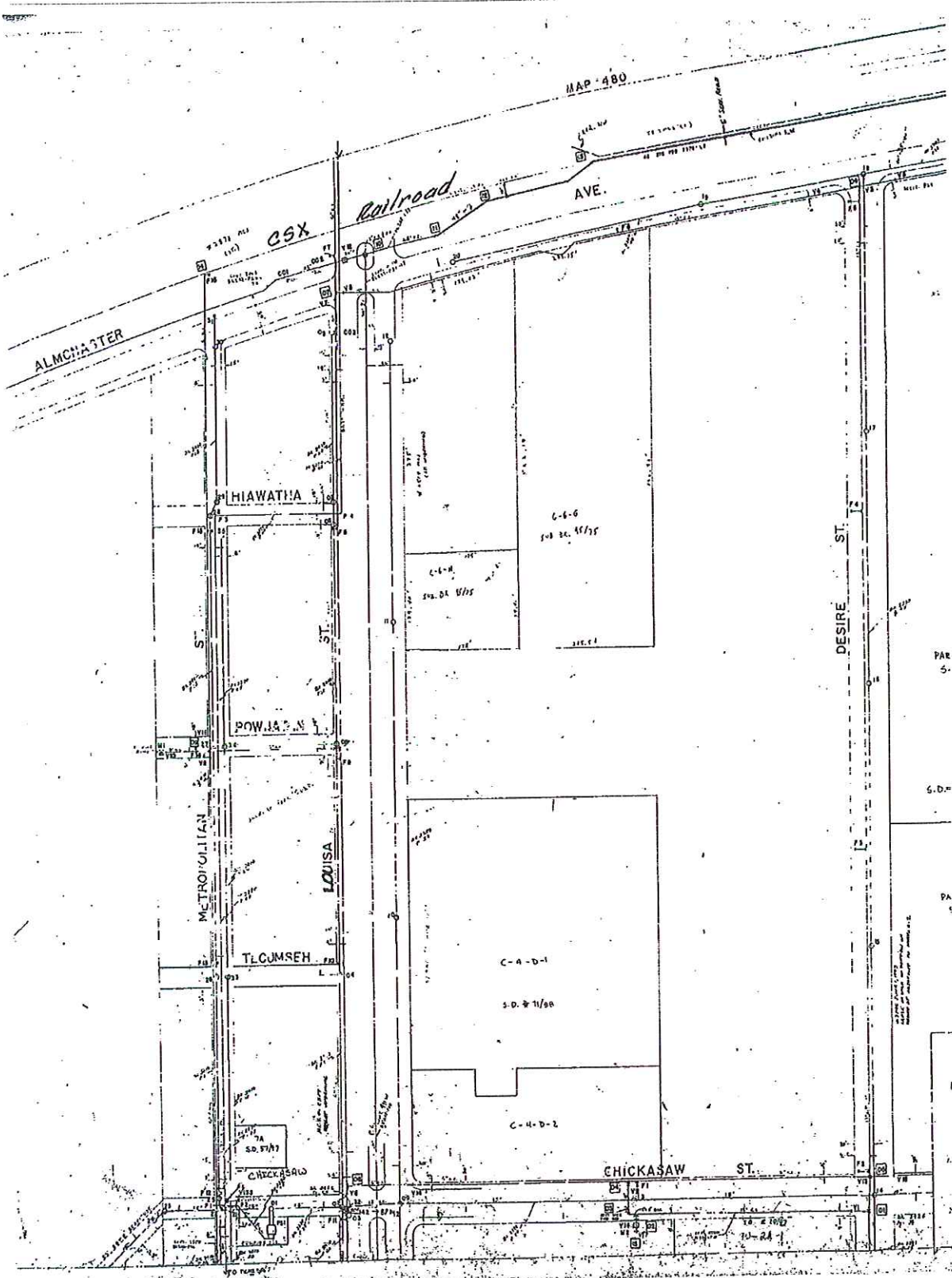
LOUISA STREET



**Looking North, Almonaster Avenue in Foreground,
Louisa Street/Almonaster Avenue Exist from I-10 above
I-10 Main Roadway in Background**



Looking East



Sewer and Water Layout

**PROJECT NO. E11 - FRANCE ROAD
(Project Plans Sheet No. 316)**

Project Description

The France Road crossing of CSX Tracks is located immediately west of the Industrial Canal and directly below the Alvar Street overpass. Traffic on France Road at this location is nominal and composed mostly of auto traffic. The majority of traffic uses the Alvar Street overpass. Recommend closure of this crossing. Also see Louisa Street discussion.

Railroad Data
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): E4
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0801.57/341069L and 341070F
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Alvar
Number of Train Movements/Day: 22 to 26
Roadway Data
State Route or Local Roadway: New Orleans local roadway
Number of Traffic Lanes: 1 each direction
Traffic Volume (Average Daily Traffic) 2006: not available
% Truck: Not available
% Auto: very little traffic, none observed while on site.
Pedestrian use: none
Posted Speed Limit: not posted
Level of Service or Classification of Roadway: New Orleans local road
Approx. Height of Crossing Above Adjacent or Approach Roadways: 1' to 2'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders – None. • Drainage - Subsurface Away from Crossing. • Utilities – Water Crossing, No Sewer. • Surfacing of Roadway - Concrete with Curbs. • Right-of-Way - Sufficient. • Topography - Commercial.
Flooded during Hurricane Katrina or Rita: Yes.

1. Describe any Problems with Existing Crossing Configuration:

Crossing is located on the approach to the CSX Gentilly Yard. Train operations are slow in this area resulting in extended blockage of crossing.

2. Description of Possible Improvements:

Close crossing.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

Anticipated increase in travel times with use of Alvar Street overpass.

5. Description of Possible Enhancements:

If crossing is not closed, grade crossing protection at the crossing would be enhanced to increase safety.

6. Benefit of Project:

Improved public safety, reduced traffic congestion, and improved rail operations.

7. Estimated Costs:	
Utility Relocations:	0.00
Structural/Roadway Construction (to remove crossing):	\$85,000.00
Railway Construction:	0.00
Right-of-Way Acquisition:	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing:	<u>\$15,000.00</u>
Project Total:	\$100,000.00

8. Description of Attached Photographs:

South of crossing looking north to southbound France Road, Alvar overpass over crossing.
South of crossing looking north to northbound France Road Alvar overpass in background.

9. Description of Attached Documents:

Drainage Layout.
Sewer and Water Layout.

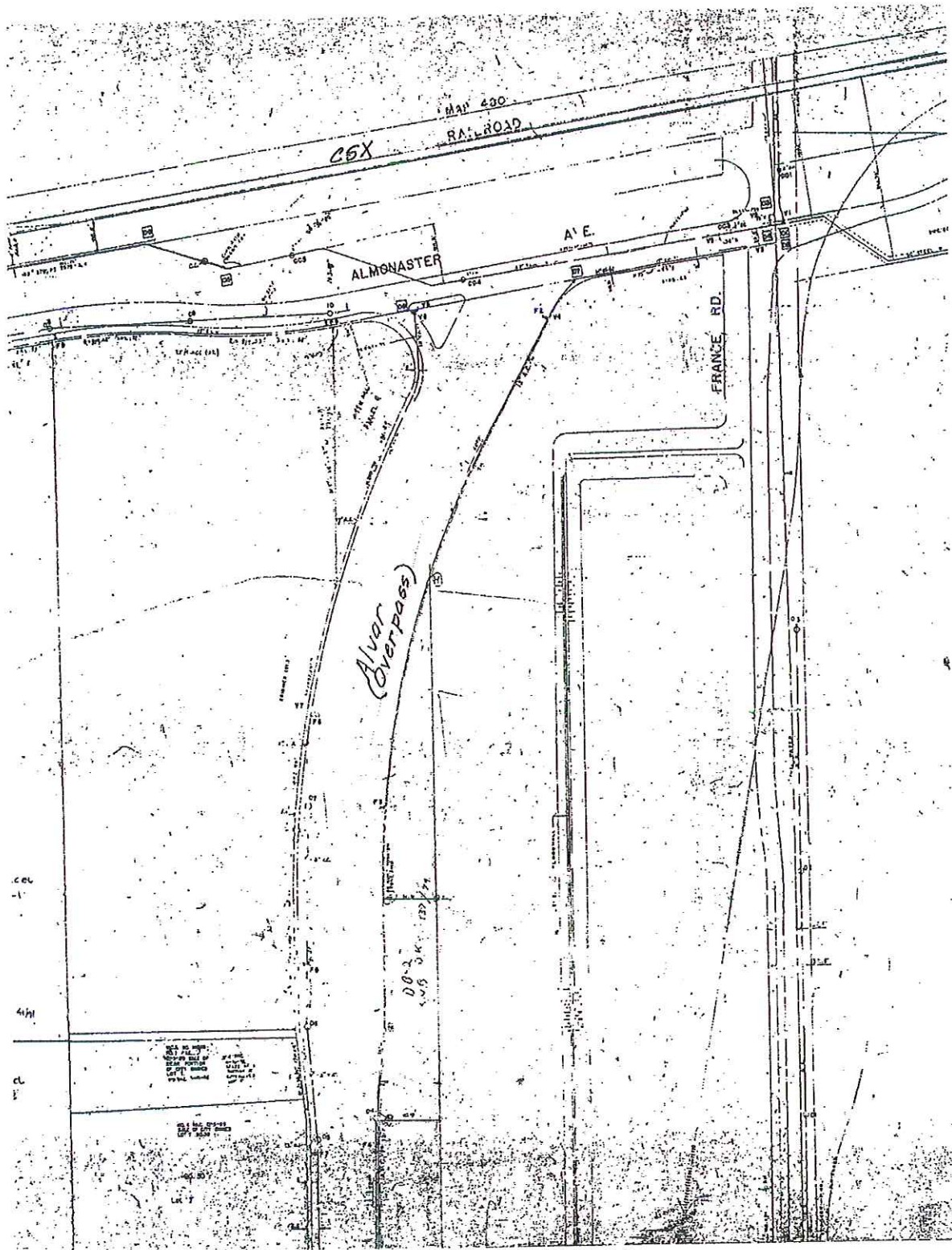
FRANCE ROAD



**Looking North to Southbound France Road
at Almonaster Avenue, Alvar Overpass in Foreground**



**Looking North to Southbound France Road
at Almonaster Avenue, Alvar Overpass in Foreground**



Sewer and Water Layout

PROJECT EVALUATION INVENTORIES – EASTERN SECTION

The Eastern Section begins at the Inner Harbor Navigation Canal (Industrial Canal) and proceeds east along tracks owned by the CSX Railroad to Industrial Parkway, a distance of approximately 7.7 miles.

There are approximately 20 to 24 daily train movements operating along double tracks which end immediately east of Industrial Parkway, the eastern limits of the eastern section. This section of track is utilized by CSX as a connection to the east coast at Jacksonville, Florida.

The CSX tracks generally delineate the northern boundary of the 7,000 acre New Orleans Business and Industrial Park (NOB and ID) which extends from the Industrial Canal to east of Industrial Parkway. This area is largely undeveloped with the area to the north of the CSX tracks being mainly residential with small business and scattered tracks of undeveloped land along Chef Menteur Highway.

The east/west movement of auto and truck traffic is by way of Chef Menteur Highway, Gentilly Highway and Almonaster Avenue. North/south traffic movement is by Jourdan Road, Read Boulevard, I-510, Michoud Boulevard, and Industrial Parkway. Jourdan Road and I-510 provide the only grade separated access crossing the CSX tracks through this area.

Identified rail projects for the eastern section are:

E4 – Replacement of the Almonaster Bridge crossing the Industrial Canal.

E5 – Construction of a CSX main track No. 3 along the southern limits of the CSX Gentilly Yard.

Project E4 - the construction of a replacement for the existing Almonaster Rail Bridge, will improve the reliability of CSX and NOPB rail services crossing the Industrial Canal. The new structure will provide a wider navigation channel reducing the potential of vessel collisions and the necessity for closing the crossing for maintenance and repairs.

Project E5 - will provide a new mainline track around the southern limits of the existing CSX Gentilly Rail Yard. The new track will facilitate through train movements and eliminate conflicts with trains that are “made up” or stored on the existing two main tracks.

At-grade roadway crossings in the eastern section are:

E12	Almonaster Avenue/Jourdan Road	Crossing to remain closed.
E13	Gentilly Highway (west approach)	Close crossing.
E14	Read Boulevard	Construct four-lane underpass structure.
E15	I-510 West Frontage Road	Close crossing.
E16	Michoud Boulevard	Construct four-lane underpass structure.
E17	Gentilly Highway (east approach)	Close crossing (needs further study).
E18	Industrial Parkway	Construct two-lane overpass structure or, construct service road along south side of tracks to Gentilly Highway (needs further study).

These represent all at-grade roadway crossings in the Eastern Section.

Because of the proximity of Chef Menteur Highway and the CSX tracks (375 ft. to 560 ft.) eliminating these at-grade roadway conflicts by constructing overpass structures would be difficult and would involve the realignment, horizontally or vertically, of Chef Menteur Highway. It would be possible to construct underpass structures to eliminate the at-grade roadway crossings through the Eastern Section.

Other than the right-of-way that will be required for the construction of the CSX No. 3 Main there is sufficient right-of-way to make all other railroad improvements. Additional right-of-way will be required for a possible grade crossing project at Industrial Parkway.

Between the Jourdan Road and I-510 crossings, are Gentilly Road (west approach) and Read Boulevard. Of these two, Read Boulevard provides a direct connection from I-10 across the CSX tracks to Almonaster Avenue. Between Chef Menteur Highway and I-10, Read Boulevard is used as a truck route.

The Gentilly Road (west approach) crossing is geometrically laid out to direct traffic to and from the west along Chef Menteur Highway. This crossing falls within the beginning of the proposed CSX No. 3 Main.

Access to the area east of I-510 is by the way of Michoud Boulevard, Gentilly Road (east), and Industrial Parkway. Industrial Parkway is the only access to the industrial area east of the Michoud Canal. Michoud Boulevard is the main entrance to the remaining area and directly connects to Gentilly Road south of the CSX tracks, Chef Menteur Highway and I-10 north of the tracks. Traffic data for Michoud Boulevard, Gentilly Road and Industrial Parkway are unavailable.

Recommendations for the Eastern Section:

• Construct replacement for Almonaster rail bridge.	\$ 55.0M
• Almonaster Avenue/Jourdan Road to remain closed.	\$ 0.0M
• Construct the CSX No. 3 Main and other track improvements on the east end of the Gentilly Rail Yard	\$ 40.0M
• Close Gentilly Highway (west approach).	\$ 0.1M
• Construct an underpass structure at Read Boulevard.	\$ 11.0M
• Close the west I-510 Frontage Road crossing.	\$ 0.1M
• Construct underpass structure at Michoud Boulevard.	\$ 9.4M
• Close Gentilly Highway (east approach).	\$ 0.1M
• Construct overpass structure at Industrial Parkway.	<u>\$ 9.9M</u>
Total	\$125.6M

PROJECT NO. E4 - RENEWAL OF ALMONASTER MOVEABLE BRIDGE (Project Plans Sheet No. 500)

Project Objectives

Construct a replacement structure for the existing bascule bridge (see photo) that would accommodate rail service, maritime transportation needs, truck and vehicular traffic, and transit through the CSX and Almonaster Avenue corridor and bridge crossing over the Inner Harbor Navigation Canal.

Replace existing bridge to improve the reliability of CSX and NOPB operations over the bridge.



Project E4 – Existing Railroad Bascule Bridge

Project Description

Construct a new vertical lift structure at the site of the present combination railroad and highway bridge. As initially conceived the width of the channel would be increased, resulting in a clear opening for the marine channel of 200 feet from fender face to fender face. The clearance in the fully-opened position would be 126 feet.

During storm events floodgates on both ends of the existing rail structures are closed preventing the passage of rail traffic. Those closures usually last 24 hours and have an adverse impact on rail traffic.

With the construction of a replacement structure two methods to eliminate the requirement for floodgates have been discussed.

1. Raise the new structure above the elevation of the levees.
2. Waterproof the structure.

Because of the proximity of the Alvar and Jordan Road overpasses and the existing CSX Gentilly Rail Yard to the existing structure raising the structure above the levee would be cost prohibitive. Waterproofing the structure would be the only option.

Since Hurricane Katrina the Army Corp of Engineers is considering several scenarios for the construction of flood control structures to prevent storm surges from entering the Industrial Canal. Depending on which scenario is selected the need to raise or waterproof the new structures may not be required. Selection of which flood control structure to use will be made late 2007.

Project Location

CSX NO and M Subdivision – MP 801.4.

Potential Environmental Issues Requiring Additional Study

The environmental documentation for the project has been completed by the RPC.

Potential Community Concerns

Community concerns are related more to the affect of the replacement and widening of the eastbound and westbound Almonaster Avenue roadways than the replacement of the railroad portion of the bridge.

PROJECT DATA SUMMARY		
Status Of Design, Engineering And Data Collection –		
Name	Status	
Design	Conceptual and preliminary design has been completed.	
Engineering	Final engineering has not been funded.	
Data Collection	Significant data collection was required for the completed EIS.	
Related projects		
Project Number	Name	
E5	Gentilly Yard - Signal and Track Improvements	
No. of Tracks		
Tracks	Number	
Main	2	
Siding	0	
Yard	0	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	10	40
Freight	10	40
Switch	10	40
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	1	Not known
Freight	21 to 25	Not known
Switch	Included in above	Not known

Railroad Detail

Owner/Users –

- Property Owners: City of New Orleans Port Authority.
- Direct Users: CSX, Amtrak, and NOPB.

Location

- Milepost – CSX MP 801.4
- Parish/City - Orleans

Approximate Available Right-of-Way

The rail-related portion of the project would be constructed within railroad owned right-of-way. It is not clear whether highway portion would require additional right-of-way.

Possible Changes in Alignment

The rail-related work would be accomplished within the existing railroad right-of-way. The vertical alignment initially is shown as being modified, but not the horizontal.

Flooded During Katrina

Yes, area on both approaches to structure.

For Grade Crossing Projects

Not applicable.

Description of Railroad Work to be Accomplished

Remove existing tracks to enable existing bridge to be removed and new bridge to be put in place. Install new tracks on bridge and on the approaches. Resurface the approaches to meet the grade of the new bridge.

Identification of Benefits and Beneficiaries of Railroad Work to be Accomplished

Renewal of the bridge would eliminate costly detour of freight and passenger trains and maintenance curfews to enable bridge repairs to be completed that resulted in delays to train movements that have been associated with the bridge for extended periods of time. These delays routinely cascade into other portions of the New Orleans corridor, causing congestion and service failures. Bridge openings and closings would be more reliable and speeds across bridge would be increased.

- Beneficiaries: CSX, NOPB, and NS.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

The need for additional real estate to complete railroad work is not anticipated.

Description of Community Impacts of Railroad Work to be Accomplished

The railroad work would not have an impact on surrounding community. The highway-work would have impacts that are not related to the rail improvements.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

PARSONS (July 2006) \$55 million.

**PROJECT NO. E5 - GENTILLY YARD - NEW MAIN TRACK AND REVISED EAST
END YARD**
(Project Plans Sheet Nos. 500-504)

Project Objectives

Increase capacity for train movements in either direction through Gentilly Yard. Mitigate conflicts between trains being stored or made up on the existing double-track main and through trains. Minimize the need to operate trains through slow speed yard trackage or to hold trains east or west of the yard until the main line is cleared of stopped freight trains. Reduce number of yard movements that use the main line.

Project Description

Reconfigure Gentilly Yard and the interlockings east and west of the yard to facilitate train movements and yard operations related to the making up of trains.

Create a new main line to the south of the existing yard by installing new track and upgrading portions of existing yard leads. Acquire land east of the yard to enable the east end of the new main track to be constructed. Relocate the existing BIDS Terminal from north of the main line tracks to the east end of Gentilly Yard.

Modify the east end of the yard by constructing two new pullout tracks to improve switching flexibility.

Project Location

MP 801.5 to MP 798.2 – west end of Gentilly Yard to a point near the Read Road Crossing, east of Gentilly Yard.

Potential Environmental Issues Requiring Additional Study

Very preliminary analysis indicates that the acquisition of land east of the yard to construct the eastern portion of the new tracks will require further evaluation, but considering the present use of the land any environmental issues resulting from implementation of the project will be limited in nature.

Potential Community Concerns

The location is remote and significant community concerns are not anticipated.

PROJECT DATA SUMMARY		
Status of Design, Engineering and Data Collection		
Name	Status	
Design	Not started	
Engineering	Sketch-level planning	
Data Collection	Drawings and sketches developed to date; track charts and yard schematics	
Related Projects		
Project Number	Name	
E4	Renewal of Almonaster Moveable Bridge	
No. of Tracks		
Tracks	Number	
Main	2	
Siding	Varies	
Yard	Varies	
Max Timetable Speed		
Type of Train	Maximum Speed (mph)	
	Existing	Proposed
Passenger	20	40
Freight	20	40
Switch	20	40
Number of Daily Trains/Typical Train Consist		
Type of Train	Average Per Day	Locomotives/Cars
Passenger	0.9	Not known
Freight	19 to 23	Not known
Switch	included in above	Not known

RAILROAD DETAIL

Owner/Users

- Property Owners: CSX
- Direct Users: CSX, Amtrak (future possible)

Location

- Milepost – MP 801.5 to MP 798.2
- Parish/City – Orleans

Approximate Available Right-of-Way

Right-of-way is available except for certain segments of the proposed track at south and east end of the yard.

Possible Changes in Alignment

The existing alignment would be modified in several locations; the work would be accomplished under traffic and should not seriously disrupt main line and yard operations. The modification of existing interlockings and yard leads would be staged to minimize disruptions.

*Further study needs to be conducted to determine if this track can be constructed along the north side of the rail yard.

Flooded During Katrina

Yes.

Description of Railroad Work to be Accomplished

A new, bi-directionally signaled 3+-mile main track would be constructed around the southern perimeter of Gentilly Yard. This new track would utilize both existing and new right of way, running roughly parallel to Almonaster Avenue for approximately two-thirds its length. Construction of the line would also entail new connections and sidings to serve existing customers on the south side of Gentilly Yard. Redesign and upgrading of both interlockings at the east and west ends of the new track are anticipated as part of the project.

The extension of one yard track to provide a pullout track to facilitate the switching of yard tracks would be coordinated with this design.

Identification of Benefits And Beneficiaries of Railroad Work to be Accomplished

Completion of this thoroughfare track would allow through operations to continue while trains working or being built at Gentilly Yard are occupying the existing main track. CSX interchange traffic to and from the HPLB would move unimpeded over the new thoroughfare track. The route also would particularly benefit CSX route operations and movements to and from the NOPB. There are no grade crossings involved with the project.

- Beneficiaries: NOPB, NS, UP.

Description of Additional Real Estate Requirements of Railroad Work to be Accomplished

Preliminary analysis indicates that additional real estate requirements would be necessary.

Description of Community Impacts of Railroad Work to be Accomplished

The location is remote and significant community concerns are not anticipated.

Cost Estimates of Railroad Work to be Accomplished and Additional Real Estate

\$40 million.

**PROJECT NO. E12 - ALMONASTER AVENUE AND JOURDAN ROAD
(Project Plans Sheet No. 500)**

Project Description

Both at-grade portions of these roadways are either closed to traffic or removed. Recommend that these stay closed.

Railroad Data
Users: CSX, NOPB, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): E4
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0801.21/341068E
Number of Tracks: 4
Existing Signal Devices: None, Crossings Closed.
Distance to Adjacent Crossing: N/A
Number of Train Movements/Day: 28
Roadway Data
State Route or Local Roadway: Roadway removed
Number of Traffic Lanes:
Traffic Volume (Average Daily Traffic): 2006: 2016: 2026:
% Truck:
% Auto:
Pedestrian Use:
Posted Speed Limit:
Level of Service or Classification of Roadway:
Approx. Height of Crossing Above Adjacent or Approach Roadways: N/A.
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - N/A. • Drainage - N/A. • Utilities - N/A. • Surfacing of Roadway - N/A. • Right-of-Way - N/A. • Topography - N/A.
Flooded During Hurricane Katrina or Rita:

1. Describe any Problems with Existing Crossing Configuration:

N/A.

2. Description of Possible Improvements:

N/A.

3. Additional Right-of-Way Requirements:

N/A.

4. Possible Community Concerns:

N/A.

5. Description of Possible Enhancements:

N/A.

6. Benefit of Project:

N/A.

7. Estimated Costs: Utility Relocations:	0.00
Structural/Roadway Construction:	0.00
Railway Construction:	0.00
Right-of-Way Acquisition:	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing:	0.00

8. Description of Attached Photographs:

South of removed crossing looking north across railroad.
 South of removed crossing looking west towards Industrial Canal.
 Looking west from Jourdan Road overpass towards Industrial Canal.

9. Description of Attached Documents:

Drainage Layout.
 Sewer and Water Layout.

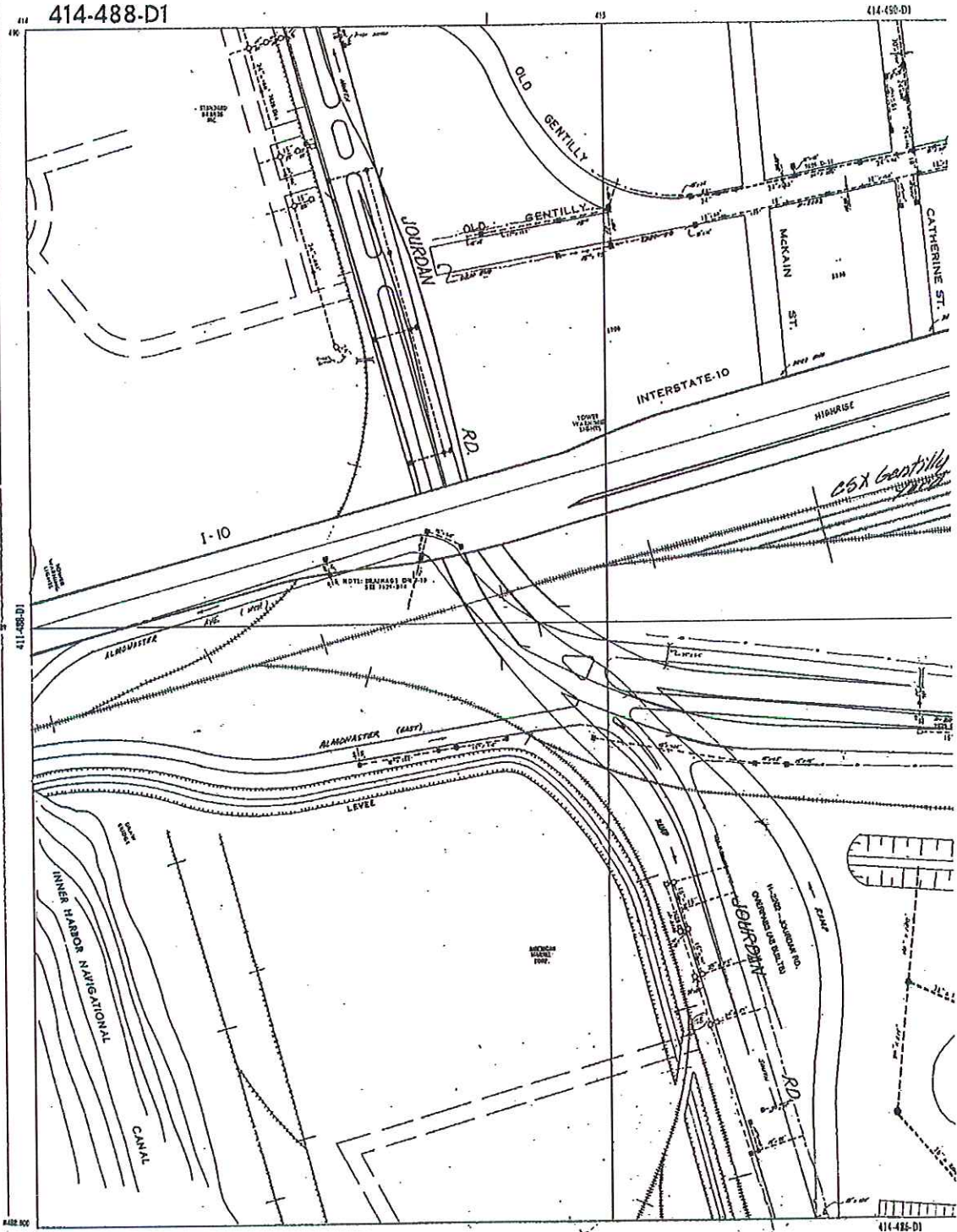
JOURDAN ROAD

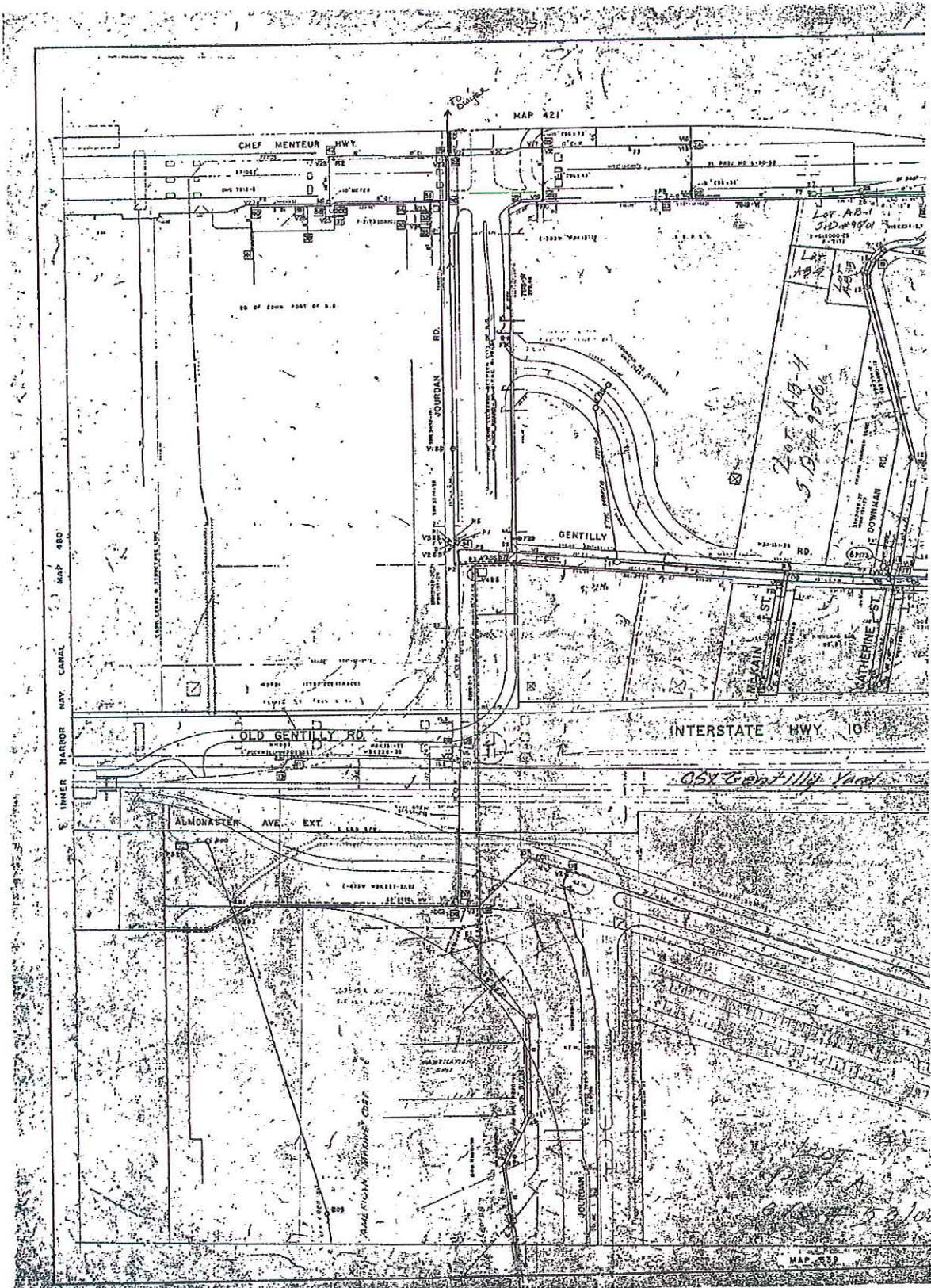


Looking North



Looking West





Sewer and Water Layout

PROJECT NO. E13 - GENTILLY HIGHWAY (WEST APPROACH)
(Project Plans Sheet No. 504)

Project Description

Crossing provides access from Chef Menteur Highway into the New Orleans Business Park along Gentilly Highway. The poor condition of Gentilly Highway limits traffic at this crossing, which is mainly used by trucks to access the wrecking yards located south of the tracks. The road crosses the tracks at an approximate 60 degree angle and is geometrically laid out for access to and from the west along Chef Menteur Highway. Crossing falls at the east end of the CSX Rail Yard. Recommend closure, of the crossing and detour traffic along Chef Menteur Highway to Read Boulevard, a distance of 0.9 miles. Closure would improve rail operations into and out of the CSX Rail Yard. Minimal amount of traffic.

<u>Railroad Data</u>
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): E5
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0798.60/341064C
Number of Tracks: 2 Existing, 4 Proposed
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Read Boulevard 0.9 Miles East, Jourdan Road 2.5 Miles West
Number of Train Movements/Day: 20 to 24/day
<u>Roadway Data</u>
State Route or Local Roadway: Local Road
Number of Traffic Lanes: 2 to 4 Undivided
Traffic Volume (Average Daily Traffic): 2006: 2016: 2026: Not Available
% Truck: Small
% Auto: By Observation Very Little Traffic
Pedestrian Use: Yes
Posted Speed Limit: Not Posted
Level of Service or Classification of Roadway: Local Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 1' to 2'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders – Unpaved. • Drainage - Subsurface Drain Away from Crossing. • Utilities – Water Crossing. • Surfacing of Roadway - Concrete and Asphalt. • Right-of-Way – Sufficient. • Topography - Commercial, Flat Unimproved.
Flooded During Hurricane Katrina or Rita: Yes.

1. Describe any Problems with Existing Crossing Configuration:

Close proximity to CSX Yard and within limits of proposed third main track and drill track.

2. Description of Possible Improvements:

Close crossing to accommodate additional tracks. There is not adequate distance between Chef Mentuer Highway and the CSX tracks to provide an acceptable roadway grade to achieve the minimum 23 feet of vertical clearance over the tracks for an overpass structure.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

- Impacts during construction and post construction on traffic flow in and through the area served by the roadway.
- Closure of crossing could affect:
 - Vehicular travel in the vicinity.
 - Local businesses.
- Elimination of grade crossing should result in slight air quality improvement.

5. Description of Possible Enhancements:

Closure of at-grade crossing would be enhanced by construction of improvements along Gentilly Highway to Read Boulevard. Modification of existing grade crossing protection would be required to accommodate new tracks if grade crossing not eliminated.

6. Benefit of Project:

Project would eliminate at-grade crossing located at the eastern end of CSX Gentilly Yard. Improved public safety and reduced traffic congestion.

7. Estimated Costs: Utility Relocations:	0.00
Structural/Roadway Construction (close roadway):	\$85,000.00
Railway Construction: See Project E-5.	
Right-of-Way Acquisition:	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing:	<u>\$15,000.00</u>
Project Total:	\$100,000.00

8. Description of Attached Photographs:

North of crossing looking south.
South of crossing looking north.

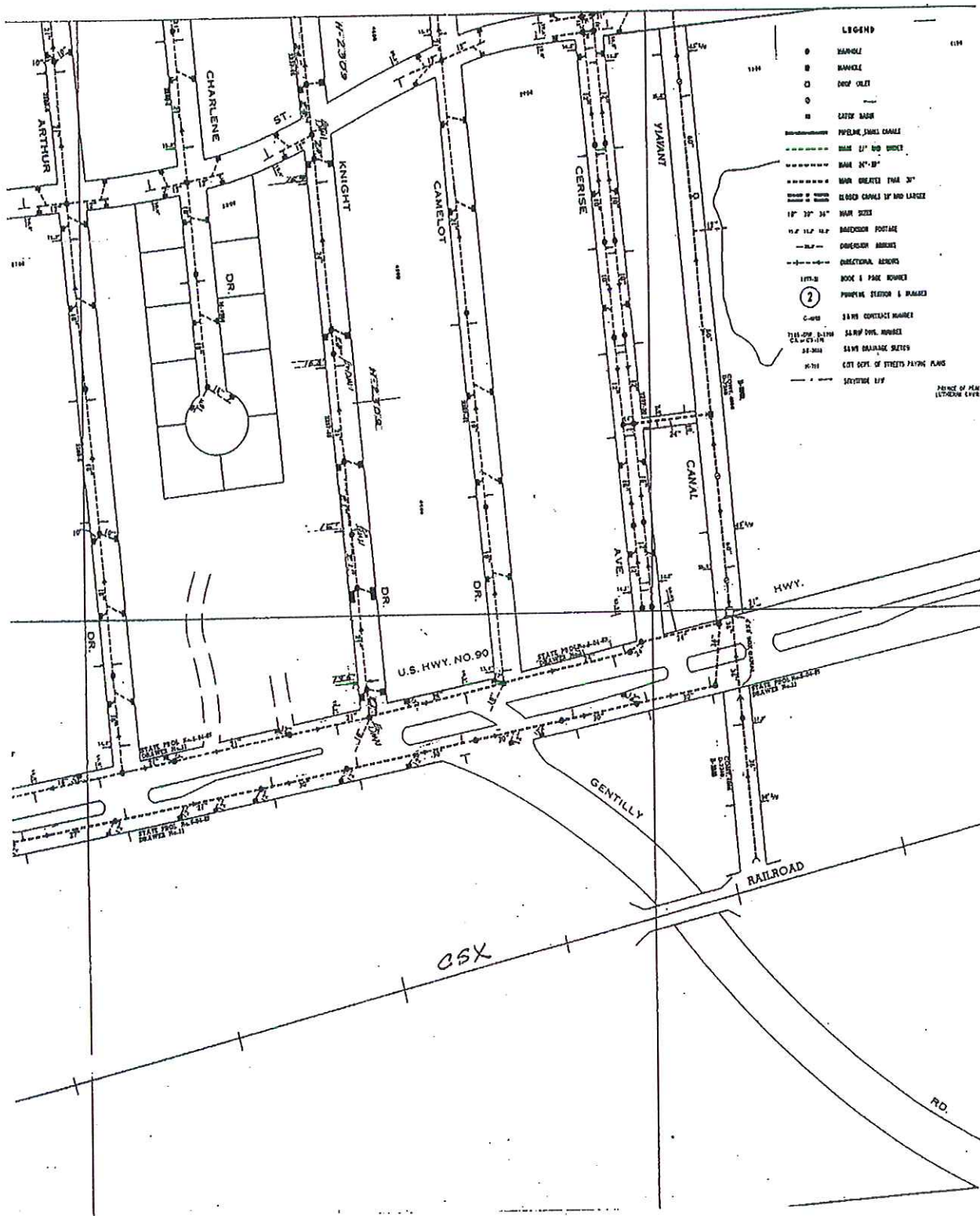
9. Description of Attached Documents:

Drainage and Water Layouts.

GENTILLY HIGHWAY (WEST APPROACH)



Looking South



Drainage Layout



Sewer and Water Layout

**PROJECT NO. E14 - READ BOULEVARD
(Project Plans Sheet No. 506)**

Project Description

Read Boulevard provides a connection between I-10 and Almonaster Avenue in approximately the middle of the western portion of the New Orleans Business and Industrial Park. It is a four-lane divided asphalt roadway. North of the rail crossing the property is commercial to Chef Menteur Highway and residential from there to I-10. The property south of the rail crossing is undeveloped and zoned commercial.

Railroad Data	
Users:	CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report):	None
Covered by Whistle Ban:	No
Milepost/Crossing ID:	CSX Milepost 0797.81/352562S
Number of Tracks:	2
Existing Signal Devices:	Gates and Flashers
Distance to Adjacent Crossing:	Gentilly Highway (west) 0.8 Miles
Number of Train Movements/Day:	Not available
Roadway Data	
State Route or Local Roadway:	New Orleans Local Road
Number of Traffic Lanes:	Four-lane Divided
Traffic Volume (Average Daily Traffic):	2006: 4,200 2016: 2026: Not Available
% Truck:	5% to 7%
% Auto:	93% to 95%
Pedestrian Use:	Small
Posted Speed Limit:	Not Posted – Design 30 mph
Level of Service or Classification of Roadway:	Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways:	1' To 2' Chef Menteur Highway at Approximately Same Elevation
Approach Roadway:	<ul style="list-style-type: none"> • Shoulders - None • Drainage - Open Ditches Draining South • Utilities – Water Crossing Tracks • Surfacing of Roadway - Asphalt – Fair Condition • Right-of-Way - 180 Ft. • Topography - Flat – Undeveloped Commercial
Flooded During Hurricane Katrina or Rita:	Yes.

1. Describe any Problems with Existing Crossing Configuration:

Potential increase in traffic volumes as New Orleans Business Park develops.

2. Description of Possible Improvements:

Provide four-lane underpass structure. There is not adequate distance between Chef Mentuer Highway and the CSX tracks to provide an acceptable roadway grade to achieve the minimum 23 feet of vertical clearance over the tracks for an overpass structure.

3. Additional Right-of-Way Requirements:

None. Depending on future development, frontage roads may be required south of the tracks.

4. Possible Community Concerns:

Access north of tracks to property adjacent to Read Boulevard. Possible flooding of an underpass structure.

5. Description of Possible Enhancements:

Elimination of the at-grade rail crossing.

6. Benefit of Project:

Improved public safety and rail operations.

7. Estimated Costs: Utility Relocations:

0.00

Structural/Roadway Construction:

\$ 9,300,000.00

Railway Construction:

\$ 100,000.00

Right-of-Way Acquisition: None.

0.00

Plans, Specifications, Construction

Administration/Supervision, Testing:

\$ 1,600,000.00

Project Total:

\$11,000,000.00

8. Description of Attached Photographs:

North of crossing looking south.

South of crossing looking north.

9. Description of Attached Documents:

Sewer and Water Layout Sheet.

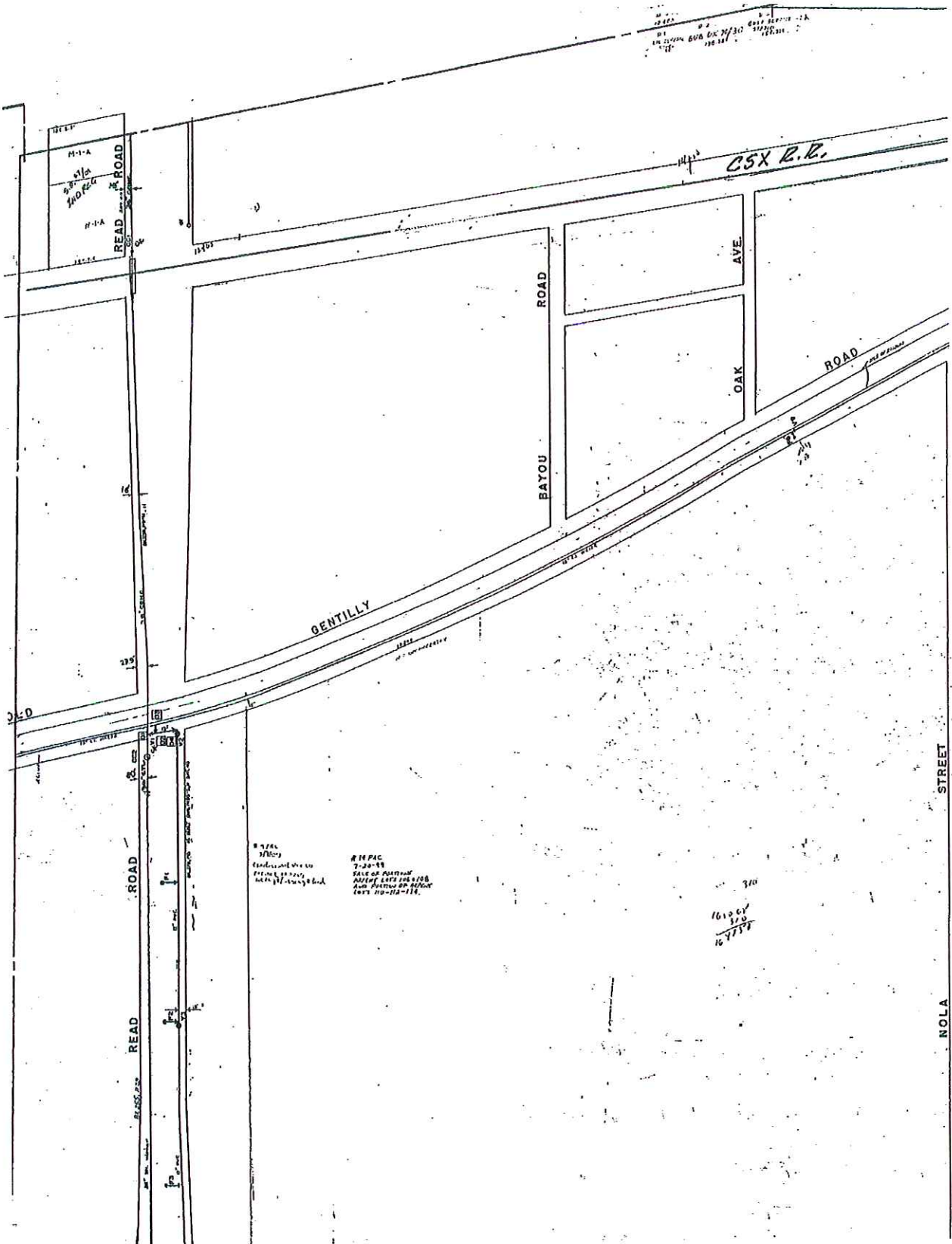
READ BOULEVARD



Looking North



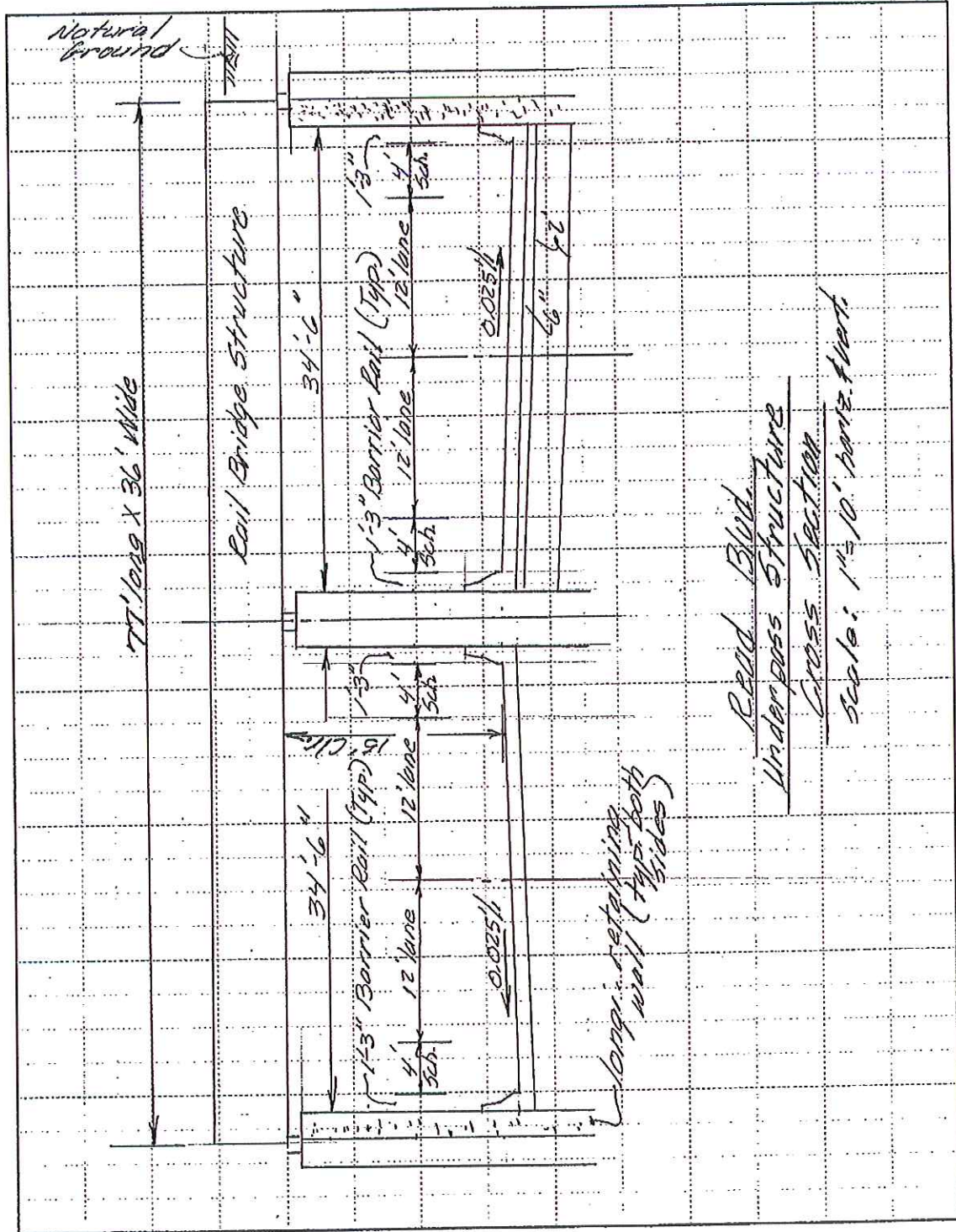
Looking South



Sewer and Water Layout Sheet

JOB Typical Section for
COMPUTATION FOR Read Blvd. underpass

SHEET NO. _____ OF _____
DATE _____
BY _____ CHKD _____



PROJECT NO. E15 - I-510 FRONTAGE ROAD
(Project Plans Sheet No. 509)

Project Description

This is a four-lane undivided asphalt roadway connecting Chef Menteur Highway and Almonaster Avenue. The crossing of the CSX tracks is in a curve and the site conditions for oncoming traffic are poor. Traffic data is not available but on site observations on several occasions indicated that traffic along this section is virtually non-existent. An investigation of why this roadway was even constructed yielded the following. The present location of I-510 is along the alignment of Old Paris Road. To allow for construction of I-510 the frontage roads were constructed first, traffic detoured onto them and the I-510 main roadway constructed. Upon completion of construction the roadways remained open. Traffic on Chef Menteur Highway can enter the I-510 on a high speed ramp approximately 200 feet after passing this Frontage Road. Recommend Closure.

Railroad Data
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): None
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0796.11/877319E
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Michoud Boulevard 0.8 miles east
Number of Train Movements/Day: Not available
Roadway Data
State Route or Local Roadway: State – I-510 Frontage Road
Number of Traffic Lanes: 4 Lanes Undivided
Traffic Volume (Average Daily Traffic): 2006: 2016: 2026: Not Available
% Truck: No Data Available
% Auto: (Very Little Traffic)
Pedestrian Use: None
Posted Speed Limit: 20 mph
Level of Service or Classification of Roadway: Local Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 1 Ft. at Crossing Increasing to 4 Ft. Further Away.
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - Concrete Curb and Gutter. • Drainage – Subsurface. • Utilities – None. • Surfacing of Roadway – Asphalt. • Right-of-Way – Sufficient. • Topography - Swamp/Flat.
Flooded During Hurricane Katrina or Rita: Yes.

1. Describe any Problems with Existing Crossing Configuration:

Very poor line of sight conditions.

2. Description of Possible Improvements:

Close crossing – traffic can be diverted to existing I-510 ramps and main roadway.

3. Additional Right-of-Way Requirements:

None.

4. Possible Community Concerns:

No adjacent development. LaDOTD may object because of investment in roadway.

5. Description of Possible Enhancements:

None.

6. Benefit of Project:

Elimination of at-grade crossing.

7. Estimated Costs:	Utility Relocations:	None.	0.00
	Structural/Roadway Construction	(to close roadway):	\$85,000.00
	Railway Construction:	None.	0.00
	Right-of-Way Acquisition:	None.	0.00
	Plans, Specifications, Construction		
	Administration/Supervision, Testing:		<u>\$15,000.00</u>
	Project Total:		\$100,000.00

8. Description of Attached Photographs:

South of crossing looking north.

North of crossing looking south.

9. Description of Attached Documents:

Utility Layout.

I-510 FRONTAGE ROAD

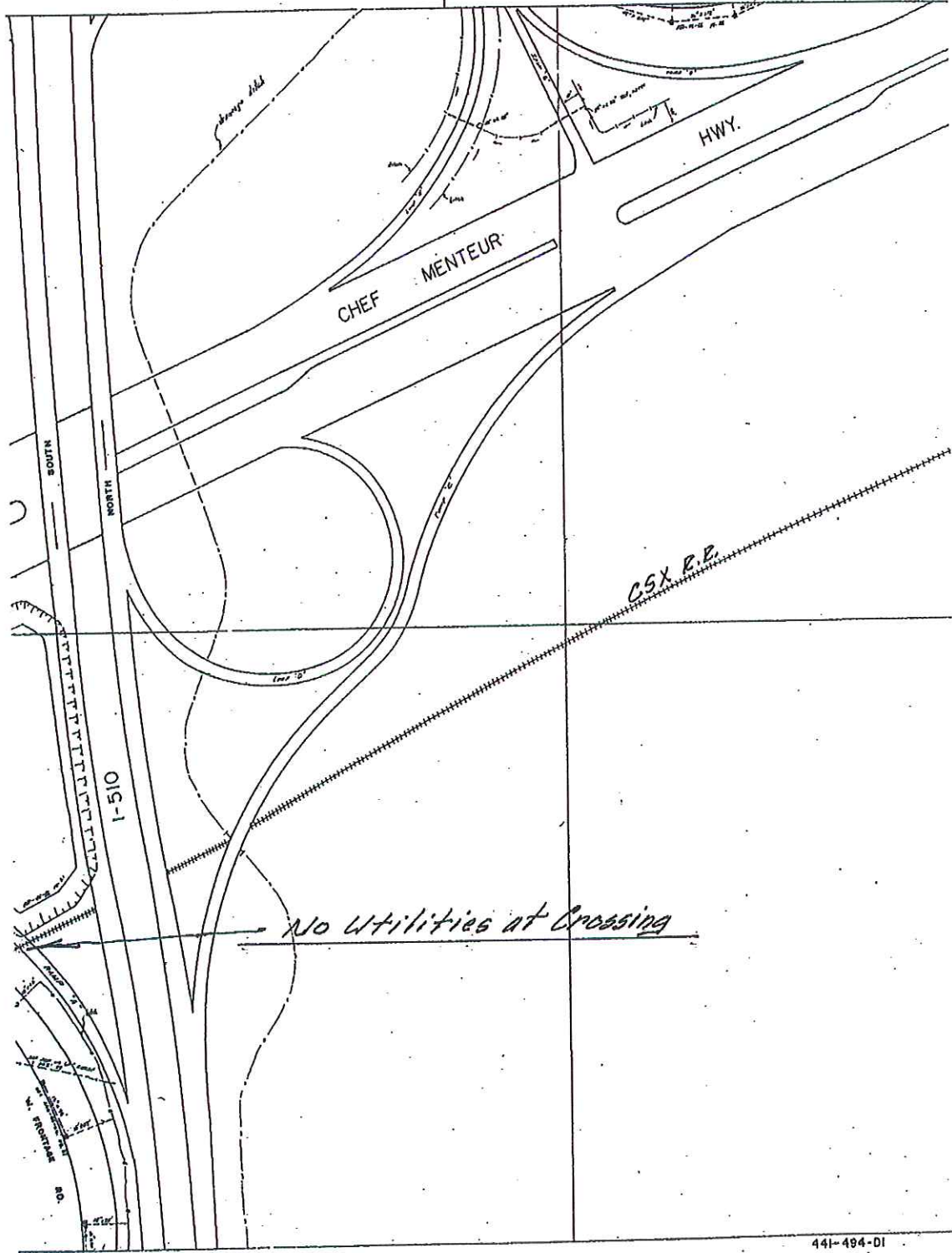


Looking North



Looking South

441-498-D1



441-494-D1



SEWERAGE AND WATER BOARD

PROJECT NO. E16 - MICHLOUD BOULEVARD
(Project Plans Sheet No. 511)

Project Description

Provides principle means of access to the Michoud Assembly facility and eastern portion of the New Orleans Business and Industrial Park. Provides connection for traffic between Gentilly Highway and I-510 via Chef Menteur Highway. Very little truck traffic the majority of which connects to I-510 via. Gentilly Highway. There is not adequate distance between Chef Mentuer Highway and the CSX tracks to provide an acceptable roadway grade to achieve the minimum 23 feet of vertical clearance over the tracks for an overpass structure Recommend constructing an underpass structure.

Railroad Data
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): None
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0795.24/341062N
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Gentilly Highway 1.3 miles east
Number of Train Movements/Day: Not available
Roadway Data
State Route or Local Roadway: Local collector roadway
Number of Traffic Lanes: 4 lanes divided
Traffic Volume (Average Daily Traffic): 2006: 2016: 2026: Not Available
% Truck: No Data Available
% Auto: Principle Entrance to New Orleans Business and Industrial Park.
Pedestrian Use: None
Posted Speed Limit: No Posted Limit. Not Greater Than 30 Mph.
Level of Service or Classification of Roadway: Local Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: Chef Menteur Highway is approximately 4' Lower than Crossing, 7' south of tracks
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - None – Concrete Curbs. • Drainage – Subsurface. • Utilities – Water, Drainage and Sewer Crossings. • Surfacing of Roadway – Four-lane Divided Asphalt with Curbs. • Right-of-Way – Sufficient. • Topography – Commercial.
Flooded During Hurricane Katrina or Rita: Yes.

- 1. Describe any Problems with Existing Crossing Configuration:**
 Heavy usage by observation. Sixty (60%) percent skewed crossing gives line-of-sight problems.
- 2. Description of Possible Improvements:**
 Remove at-grade crossing and construct underpass structure.
- 3. Additional Right-of-Way Requirements:**
 Overpass structure would require frontage roads and additional right-of-way. Underpass structure will require no additional right-of-way.
- 4. Possible Community Concerns:**
 Access to adjacent property, flooding of underpass structure.

5. Description of Possible Enhancements:

Improve level of grade crossing protection at crossing.

6. Benefit of Project:

Elimination of at-grade crossing.

7. Estimated Costs:	
Utility Relocations:	\$ 500,000.00
Structural/Roadway Construction:	\$7,420,000.00
Railway Construction:	\$ 60,000.00
Right-of-Way Acquisition:	0.00
Plans, Specifications, Construction	
Administration/Supervision, Testing:	<u>\$1,420,000.00</u>
Project Total:	\$9,400,000.00

8. Description of Attached Photographs:

North of crossing looking south.

South of crossing looking north.

9. Description of Attached Documents:

Drainage location map.

Sewer and Water location map.

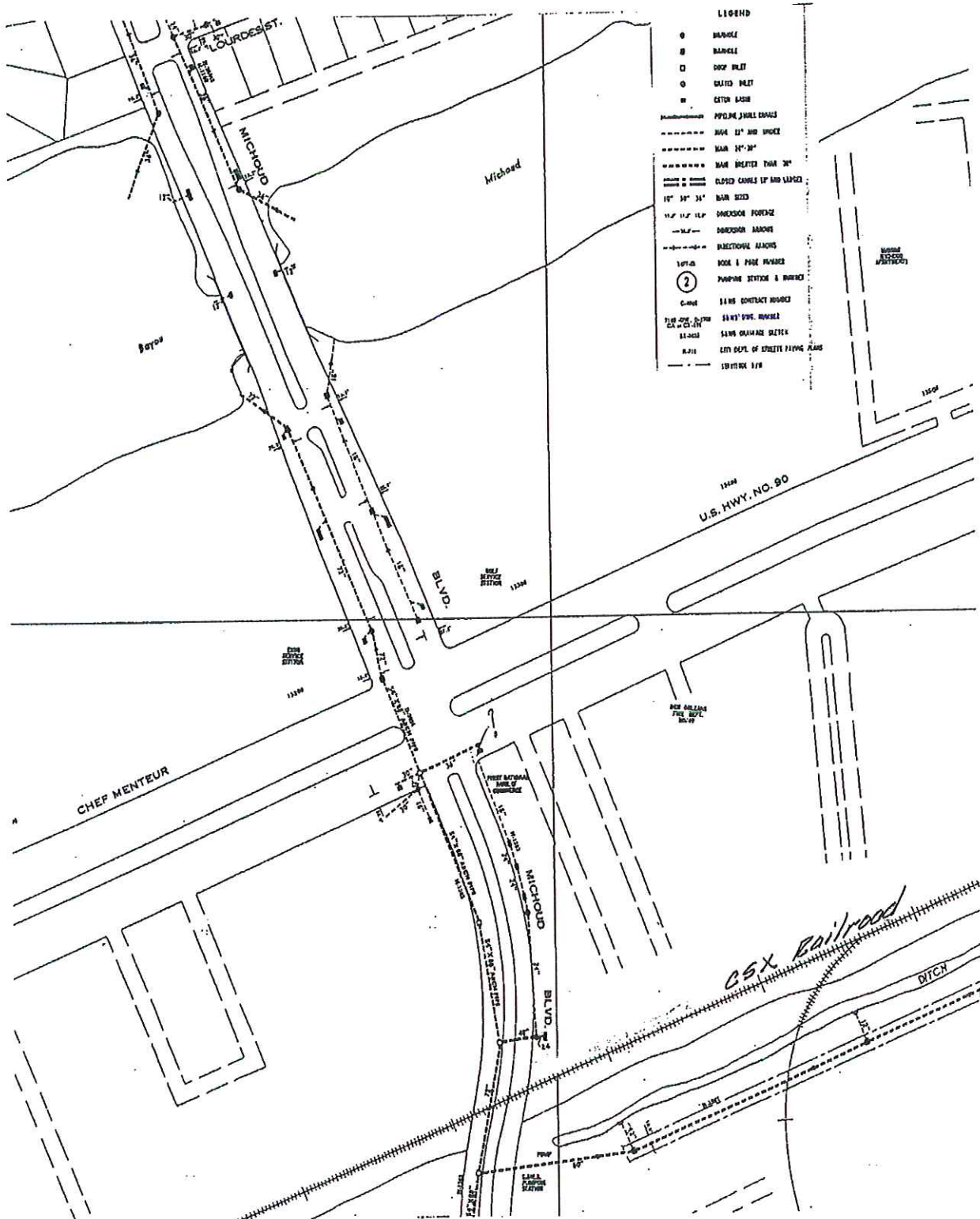
MICHOUD BOULEVARD



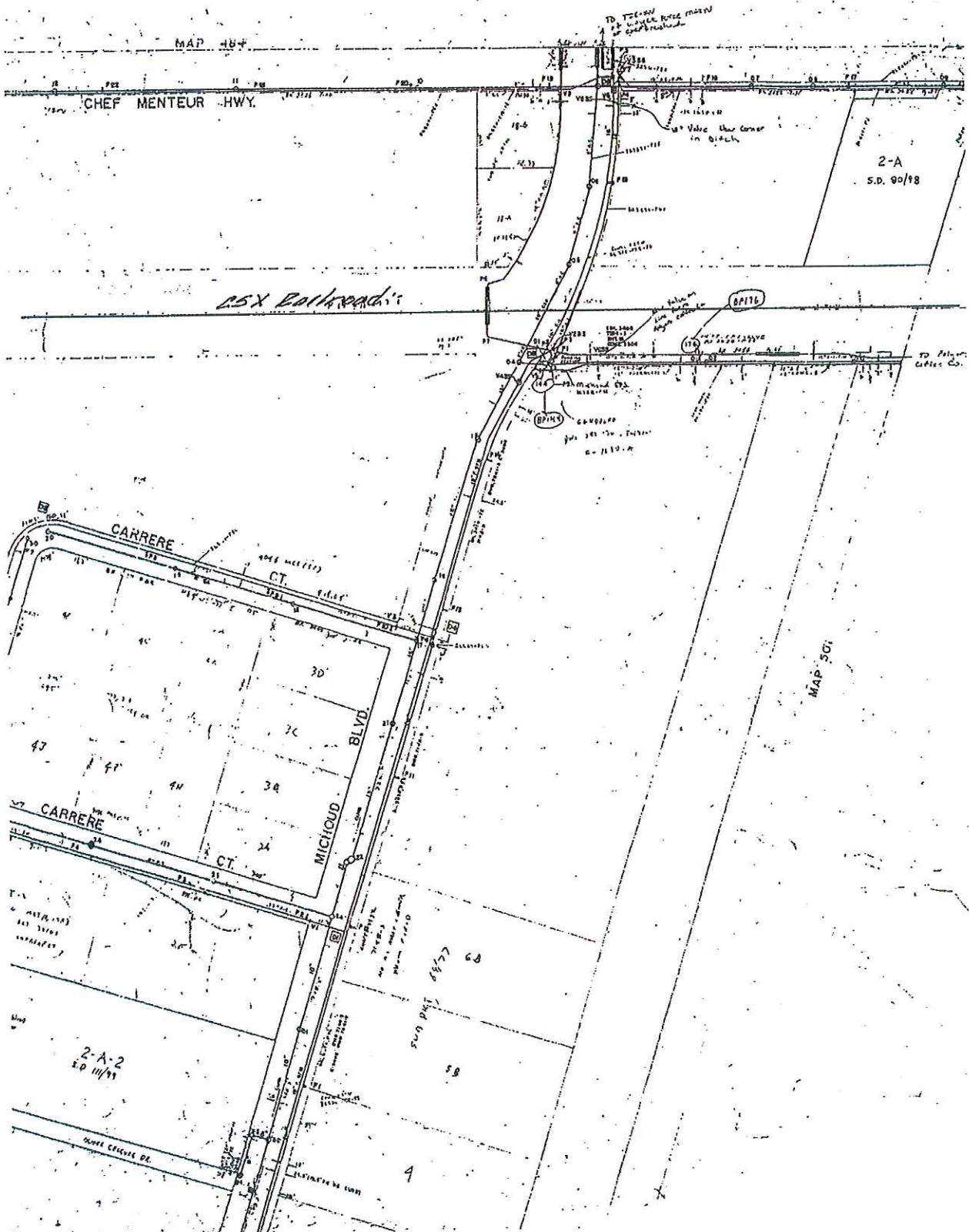
Looking North



Looking South



Drainage Location Map



Sewer and Water Location Map

5. Description of Possible Enhancements:

Increased level of grade crossing protection at crossing.

6. Benefit of Project:

Elimination of at-grade crossing and improved public safety.

7. Estimated Costs: Utility Relocations:

0.00

Structural/Roadway Construction:

\$85,000.00

Railway Construction:

0.00

Right-of-Way Acquisition:

0.00

Plans, Specifications, Construction:

Administration/Supervision, Testing:

\$15,000.00

Project Total:

\$100,000.00

8. Description of Attached Photographs:

North of crossing looking south.

9. Description of Attached Documents:

Sewer and Water location maps.

Drainage location map.

PROJECT NO. E17 - GENTILLY HIGHWAY (EAST APPROACH)
(Project Plans Sheet No. 513)

Project Description

Provides access from the east to the Michoud Assembly Facility and eastern portion of the New Orleans Business and Industrial Park . Majority of traffic uses Michoud Boulevard, to the west, to access this area with very little traffic using this crossing. Recommend closure of this crossing.

Railroad Data
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): None
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0793.86/341059F
Number of Tracks: 2
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Industrial Pkwy. 0.7 miles east, Michoud Boulevard 1.3 miles west
Number of Train Movements/Day: Not available
Roadway Data
State Route or Local Roadway: local collector roadway
Number of Traffic Lanes: Four south of tracks, 2 divided north of tracks.
Traffic Volume (Average Daily Traffic): 2006: 2016: 2026: Not Available
% Truck: No data available
% Auto: Nominal by observation
Pedestrian use: None
Posted Speed Limit: 50 mph further away from crossing
Level of Service or Classification of Roadway: local collector roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 3' to 4'
Approach Roadway: <ul style="list-style-type: none"> • Shoulders - None – Grass. • Drainage - Open Ditches. • Utilities – None Crossing. • Surfacing of Roadway - Four-lane Concrete South, 2 Lane Divided Asphalt North. • Right-of-Way - Required for Overpass Structure and Frontage Roads. • Topography – Industrial.
Flooded During Hurricane Katrina or Rita: Yes.

1. Describe any Problems with Existing Crossing Configuration:

Twenty-five degrees skewed at-grade crossing results in line-of-sight problems.

2. Description of Possible Improvements:

Closure of crossing, divert traffic to Michoud Boulevard. Proximity of Chef Menteur Highway would make construction of an overpass or underpass structure difficult. Construction of an underpass structure would require less right-of-way. Neither option is justified because of small volumn of traffic.

3. Additional Right-of-Way Requirements:

N/A.

4. Possible Community Concerns:

Access to area with the closure of crossing.

5. Description of Possible Enhancements:

Increased level of grade crossing protection at crossing.

6. Benefit of Project:

Elimination of at-grade crossing and improved public safety.

7. Estimated Costs: Utility Relocations:

0.00

Structural/Roadway Construction:

\$85,000.00

Railway Construction:

0.00

Right-of-Way Acquisition:

0.00

Plans, Specifications, Construction:

Administration/Supervision, Testing:

\$15,000.00

Project Total:

\$100,000.00

8. Description of Attached Photographs:

North of crossing looking south.

9. Description of Attached Documents:

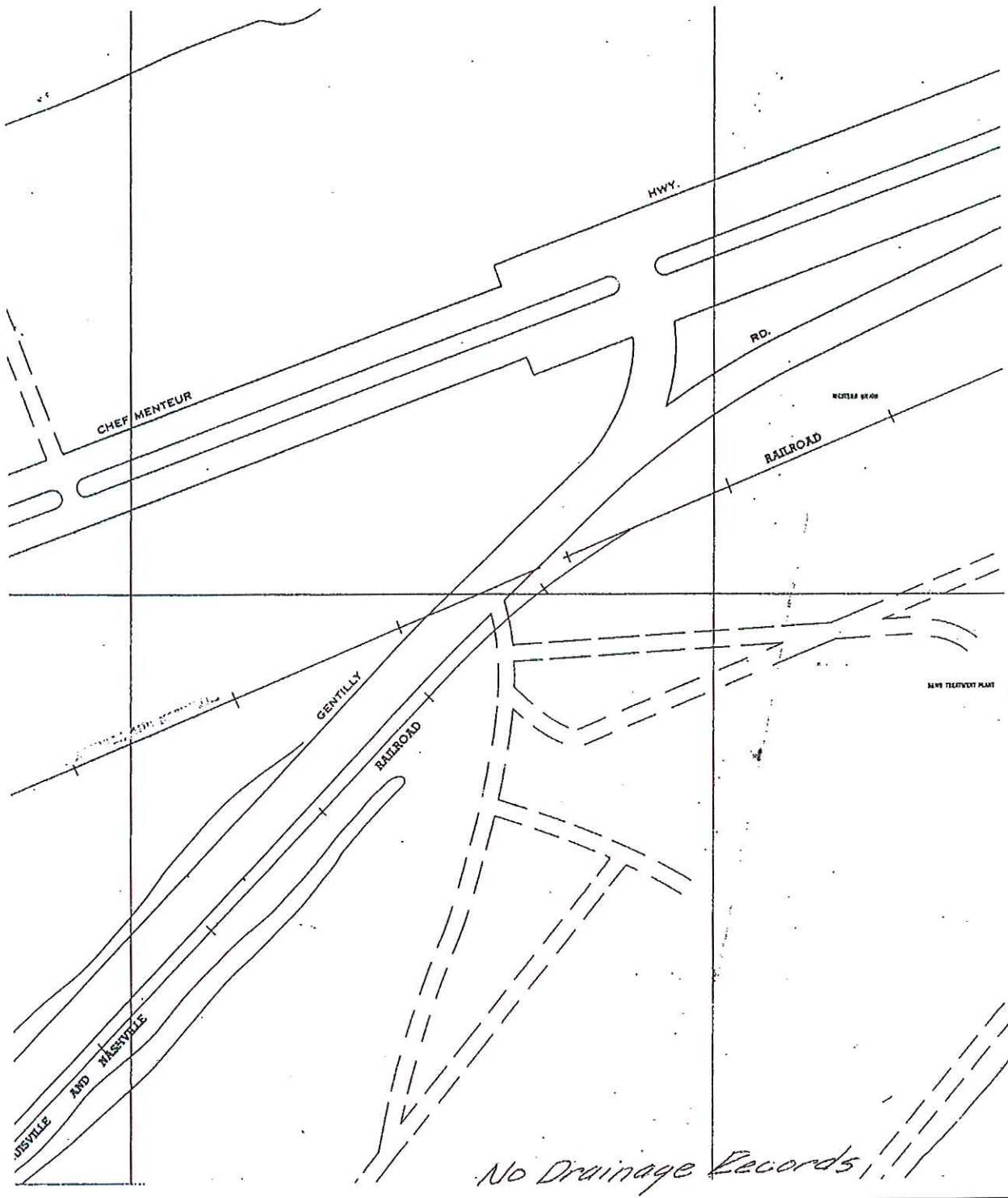
Sewer and Water location maps.

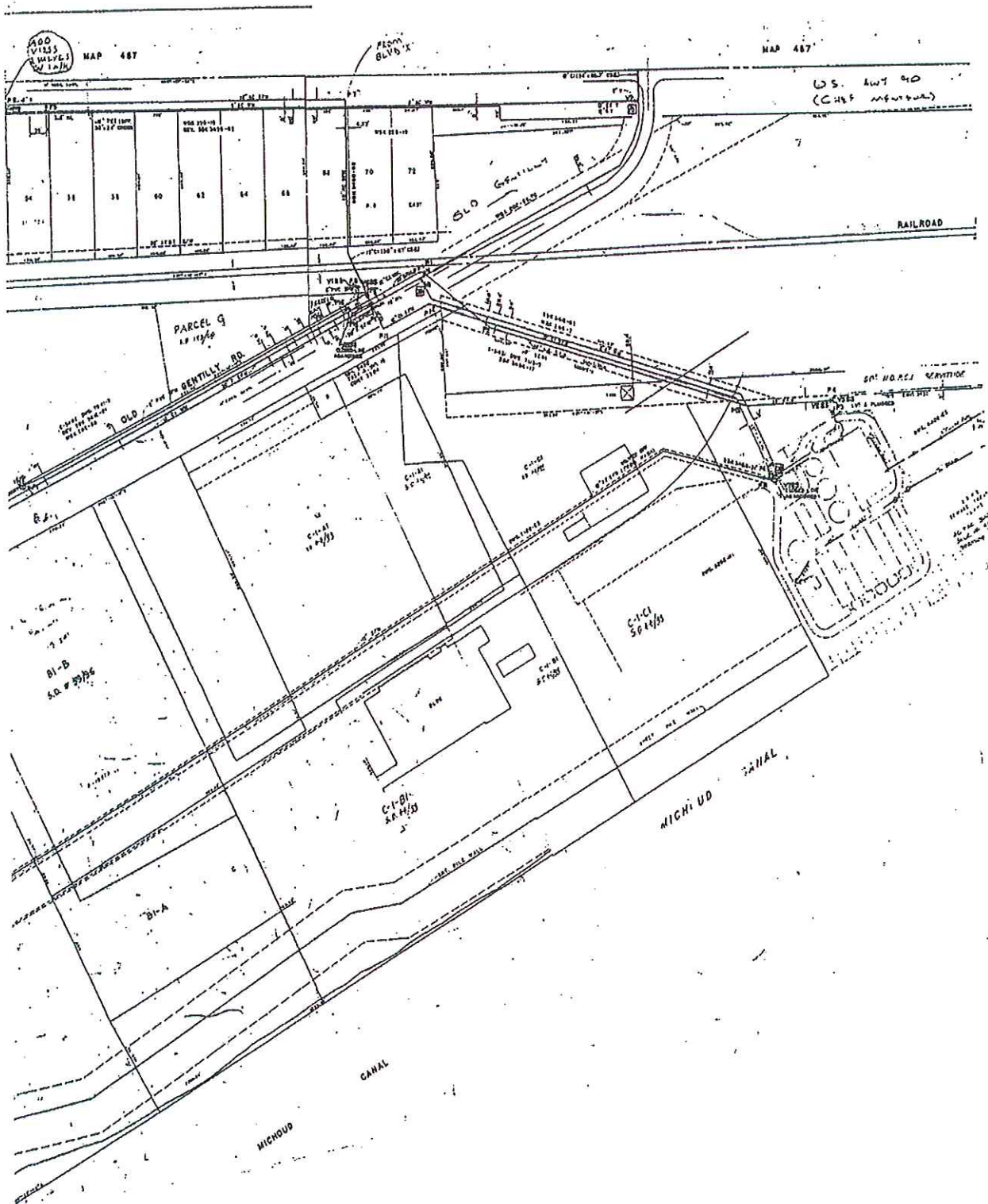
Drainage location map.

GENTILLY HIGHWAY (EAST APPROACH)



Looking South





Sewer and Water Location Map

**PROJECT NO. E18 - INDUSTRIAL PARKWAY
(Project Plans Sheet No. 514)**

Project Description

This crossing provides the only access to the industrial/commercial area along the east side of the Michoud Channel, from Chef Menteur Highway (US 90) thence I-510. The flow of traffic is mainly to and from the west (towards I-510) along Chef Menteur Highway with very little traffic from the east. No traffic data is available but field observations indicate heavy truck traffic. The master plan for the New Orleans Business and Industrial Park calls for an overpass grade separation at this location. The close proximity of Chef Menteur Highway and the CSX tracks (approximately 375 feet) makes the construction of a grade separation (overpass or underpass) along the alignment of Industrial Parkway difficult. To remove this at-grade crossing two solutions were investigated: 1. A roadway at-grade connection to Gentilly Highway along the south side of the CSX tracks. This would allow traffic to connect to an improved Michoud Boulevard and I-510 by way of Gentilly Highway. This would remove the heavy truck traffic from the more residential Chef Menteur Highway. 2. An overpass structure offset to the east and connecting to Chef Menteur Highway.

Railroad Data
Users: CSX, Amtrak
Related Railroad Project (Oct. 29, 2004 Report): None
Covered by Whistle Ban: No
Milepost/Crossing ID: CSX Milepost 0793.24/341041V
Number of Tracks: 2, reduces to 1 immediately east of crossing
Existing Signal Devices: Gates and Flashers
Distance to Adjacent Crossing: Gentilly Highway 0.7 miles west
Number of Train Movements/Day: Not available
Roadway Data
State Route or Local Roadway: Local Roadway
Number of Traffic Lanes: 2 at 12 ft. improved
Traffic Volume (Average Daily Traffic): 2006: 2016: 2026: Not Available
% Truck: No Data Available
% Auto: Heavy Truck Traffic to the Port of Bienvenue
Posted Speed Limit: 15 mph
Level of Service or Classification of Roadway: Collector Roadway
Approx. Height of Crossing Above Adjacent or Approach Roadways: 3' to 4'
Approach Roadway:
<ul style="list-style-type: none"> • Shoulders – None. • Drainage - Open Ditches Draining both Ways. • Utilities – All. • Surfacing of Roadway - Asphalt Improved. • Right-of-Way - Required For Overpass Structure and Frontage Roads. • Topography – Industrial.
Flooded During Hurricane Katrina or Rita: Yes.

1. Describe any Problems with Existing Crossing Configuration:

None other than elevated at-grade crossing. No line of sight problems.

2. Description of Possible Improvements:

There is not adequate distance between Chef Mentuer Highway and the CSX tracks to provide an acceptable roadway grade to achieve the minimum 23 feet of vertical clearance over the tracks for an overpass structure. Underpass structure would require less right-of-way and roadway length.

3. Additional Right-of-Way Requirements:

Would be required for overpass structure and frontage road south of tracks.

4. Possible Community Concerns:

Possible flooding, interruption during construction.

5. Description of Possible Enhancements:

Elimination of at-grade crossing or an increase in level of grade crossing protection.

6. Benefit of Project:

Elimination of at-grade crossing; improved public safety.

7. Estimated Costs: Utility Relocations:

0.00

Structural/Roadway Construction:

\$8,000,000.00

Railway Construction:

0.00

Right-of-Way Acquisition:

\$ 300,000.00

Plans, Specifications, Construction:

Administration/Supervision, Testing at 20 Percent:

\$1,600,000.00

Project Total:

\$9,900,000.00

8. Description of Attached Photographs:

South of highway looking north.

North of highway looking south.

9. Description of Attached Documents:

Sewer and Water location map.

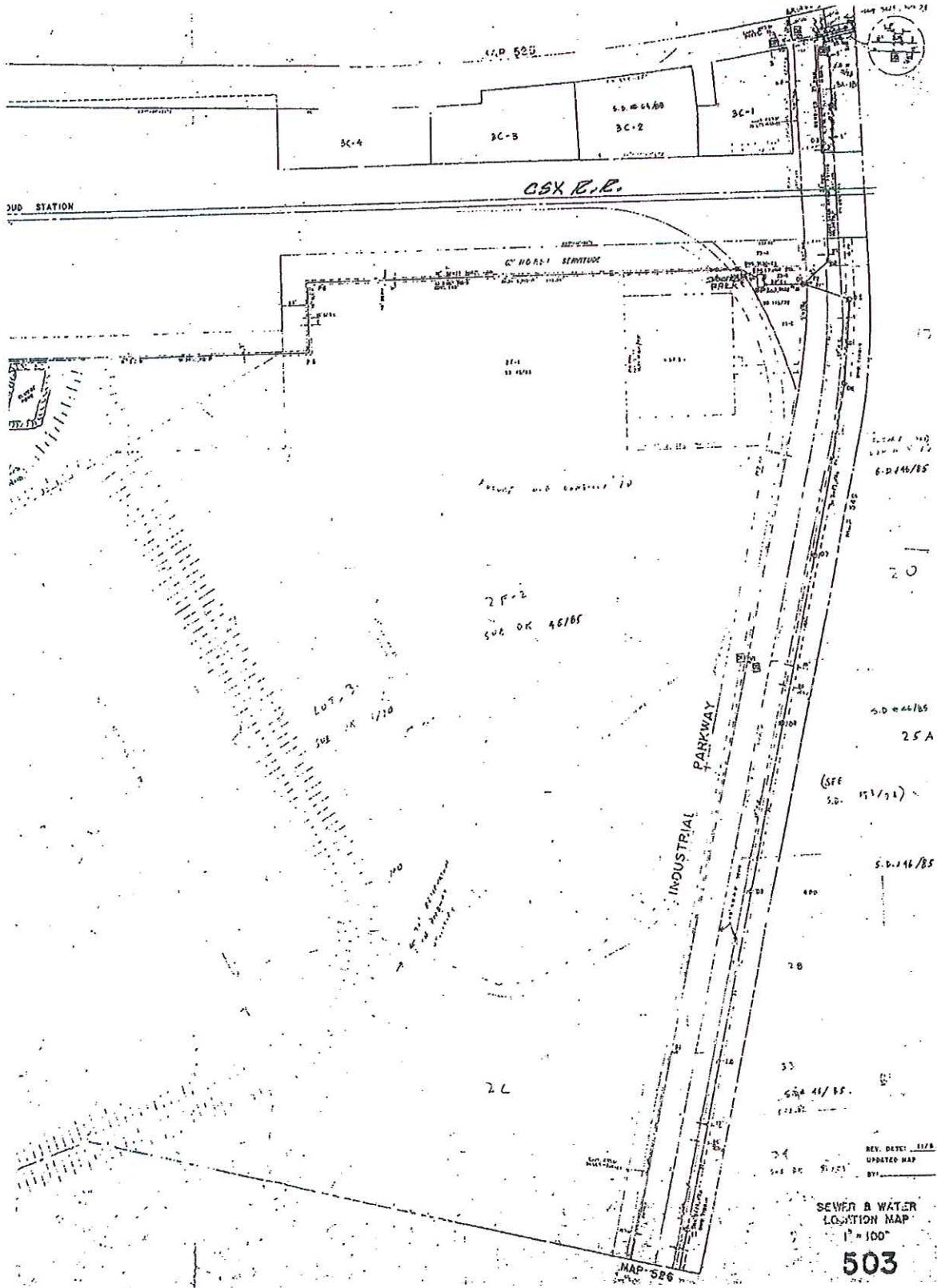
INDUSTRIAL PARKWAY



Looking North



Looking South



Sewer and Water Layout

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 3 Simulation Results

SIMULATIONS

Background

Working through the Association of American Railroads (AAR), the railroads serving New Orleans sponsored a simulation analysis of current rail operations and projected rail operations assuming a series of track and signal improvements designed to improve the movement of freight traffic through the New Orleans Gateway. The simulations were performed by AAR's consultant Willard Keeney, using the Rail Traffic Controller (RTC) software¹ that is widely accepted by all major railroads.

Three separate RTC simulations were performed to determine the likely operating results from implementing various improvement projects across the Gateway area, stretching from Avondale Yard on the west to Gentilly Yard on the east. The proposed improvements were developed by the railroads and represented their best current proposals for reducing delays at "choke point" locations and improving train operations across the network and between railroads.

- The **Base Case** simulation replicated current railroad operations and provided statistical performance results to compare and to assess the benefits of implementing the improvements.
- The **Back Belt** case simulated operations with improvements to the Norfolk Southern (NS) Back Belt trackage that currently carries rail traffic through the city.
- The **Middle Belt** case simulated operations with significant improvements to a new through rail route utilizing an upgraded combination of rail lines running via CN and NOUPT tracks. This case assumed all through traffic would be re-routed, and the Back Belt alignment through Metairie would be abandoned.

Simulation Results

Results of the simulations were reviewed by the rail carriers in March, 2007, and found to be valid representations of rail traffic movements assuming the improvements were to be provided. The simulations were performed to represent rail movements over a five day period, which allows each simulation to include variations in performance that occur from day to day. The simulations were based on actual current train operations of each railroad.

The simulations found that significant improvements in operating performance would result under either improvement case, but that a greater level of improvement would result from implementation of the new Middle Belt route. Statistical results for three significant operating indicators are shown in Table 3-1.

¹ The RTC simulation software required coding the rail network in short segments with permitted speed, distance, grades, switch characteristics, signals, and other operating determinations. Trains are coded with origin, destination, train makeup, work locations, dwell times, priorities, and other operating requirements. The program then dispatches each train through the network using algorithms and decision processes comparable to railroad dispatcher actions. The result is a simulation of operations that can be viewed graphically on the computer screen, or measured statistically by various output tables and files.

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Table 3-1. Network Performance Indicators

	BASE CASE	BACK BELT	MIDDLE BELT
Elapsed Run Time (hours/day)	145.9	111.8	104.5
Improvement (hours)		34.1	41.4
Improvement(percent)		23.4%	28.4%
Delay Time (hours/day)	29.7	18.2	13.3
Improvement (hours)		11.4	16.3
Improvement (percent)		38.5%	55.1%
Delay/100 Train Miles (minutes)	322.1	204.5	145.5
Improvement (minutes)		117.6	176.6
Improvement (percent)		36.5%	54.8%
Average Train Speed (mph)	3.785	4.793	5.251
Improvement (mph)		1.008	1.466
Improvement (percent)		26.6%	38.7%

Elapsed run time represents the total operating time of all trains, including actual running time; planned dwell time for switching or crew changes, and delays encountered in meeting other trains on the network. The Base Case simulation produced 145.9 hours per day of run time. In contrast, the improved Back Belt option reduced this to 111.8 hours per day, or a 23.4 percent improvement. The Middle Belt option resulted in even greater improvement, reducing run time to 104.5 hours representing a 28.4 percent improvement. Elapsed run time is perhaps the best “bottom line” measure of the differences between the track networks that were simulated.

Delay time comprises the time that trains were delayed for meets with other trains, including the time consumed by deceleration and acceleration. It does not include programmed stops for switching or crew changes. The delay time measured by the Base Case was 29.7 hours per day. The Back Belt option reduced the delay to 18.2 hours, representing a 38.5 percent improvement. The Middle Belt provided a further reduction to 13.3 hours per day, or a 55.1 percent reduction in delay time.

Minutes of delay per 100 train miles is another standard measure of operating performance. This was reduced from 322.1 minutes in the Base Case to 204.5 using the Back Belt, and to 145.5 minutes under the Middle Belt option. Percentage improvements were 36.5 percent and 54.8 percent, respectively.

Average train speed is the average of all trains simulated, including any yard and switch moves, and represents the time from initial movement of the train to its final destination. The Back Belt improvements result in a 26.6 percent increase in average speed, while the Middle Belt produces a 38.7 percent gain. Average train speeds are low because New Orleans is a terminal location where switching and yard dwell times are significant.

Allocation of Benefit by Improvement Project

Determining with any precision the amount of run time reduction or delay reduction attributed to an individual project would require running the simulation twice – once without the project, and again with the project built into the track network – and then comparing the results of each case. The same process would be required for each project. Because of the number of projects envisioned for the New Orleans Gateway, that level of analysis was impractical. Some of the projects are designed to work together as a package, and do not lend themselves to individual measurement of results. Additionally, all the improvements together will have a different result than the sum of the individual projects, because each project affects the operation of trains throughout the network in a different manner, and changes the dynamics between all trains as they pass through locations far removed from the specific project. The RTC simulation has the ability to “look forward” to potential delays, and will hold a train at an appropriate location that may be some distance from the root cause of the delay. This also makes allocations to specific projects difficult, because delays to a train do not necessarily occur in the vicinity of the project. For example, maintenance work on the HPL Bridge may cause trains to be held in Avondale Yard or along the eastern portion of the Back Belt, until the route across the bridge is clear.

Similarly, it is difficult in the New Orleans context to allocate benefits to an individual railroad because trains of several railroads may operate over trackage of other railroads in moving across the network. Track ownership and train operations are not synonymous.

The benefit allocations that follow in Table 3-2 are reasoned approximations of the net benefit that each improvement brings to the total network. They are derived from a review of the simulation results for each geographical segment as well as the results for each railroad’s track ownership segments, with the benefits allocated to individual improvements. While the benefits (reduction in elapsed run time) total to the system wide benefits, each separate improvement project would probably have lower real benefit if it were simulated as a single project rather than part of a package of projects.

Table 3-2. Estimate of Running Time Reductions Allocated to Improvement Projects

Track Improvement	Back Belt Option	Middle Belt Option
WESTERN SEGMENTS		
W1 CTC from Willis to West Bridge Junction	1.7	1.7
W2 New South Main Track at Avondale Yard South	1.9	1.9
W3 New BNSF Main Track at Avondale Yard	0.8	0.8
W4 Extend Avondale Yard North Switching Lead	1.0	1.0
W5 Upgrade West Bridge Junction Interlocking	1.3	1.3
W5 Ballast Deck and Crossover on HPL Bridge	3.8	3.8
Subtotal Western Segments	10.5	10.5
CENTRAL SEGMENTS		
C1 Upgrade East Bridge Junction Interlocking	3.4	----
C2 CTC from East Bridge Junction to Metairie Road	2.1	----
C3 Eliminate 7 Grade Crossings from Causeway Boulevard to 17 th Street Canal	0.5	----
C4 Back Belt Double Track from Metairie Road to 17 th Street Canal	3.5	----
E1 Crossovers at East City Junction	0.8	----
E2 Reconfigure Track at CSX/NS Junction	1.7	1.7
E3 Improve Connection between NS and CSX	1.7	1.7
E6 Third Track between Frenchman Street and Marconi Drive	3.3	----
CIA Construct Middle Belt Route with Double Track and Holding Tracks from East Bridge Junction to East City Junction	----	20.9
Subtotal Central Segments	17.0	24.3
EASTERN SEGMENTS		
E4 Replace Almonaster Bridge	2.3	2.3
E5 Construct Bypass Track at Gentilly Yard	4.3	4.3
Subtotal Eastern Segments	6.6	6.6
Total Running Time Reduction	34.1	41.4

Note: Running time reductions expressed as hours per day, derived from a five day simulation period.

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 4 Benefit - Cost Analysis

BENEFIT-COST ANALYSIS

Introduction

The efficiency of the North American rail network has important implications for the nation's economy, and there is a need to "improve its capacity, productivity and security as an integral part of the national freight transportation system." This was a principal finding of "Freight Rail-Bottom Line Report," a report by the American Association of State Highway and Transportation Officials, which concluded that modest investments in the U.S. freight rail network would produce substantial public and private benefits to the nation. Private benefits would accrue to railroads and shippers as reductions in delays and lower transportation costs. Benefits to the public included reduced highway congestion and reduced spending on highway repairs and new construction.

The national freight rail network also has important regional implications in selected corridors and at certain gateways serving multiple railroad companies. Improvements to these corridors and gateways can generate substantial regional and local impacts. The Feasibility Study for the Chicago Regional Environmental and Transportation Efficiency (CREATE) Program, a program of improvements to rail corridors serving the Chicago region, found that substantial regional benefits would be generated by such improvements, including improved safety, reduced highway congestion, lower levels of pollutant emissions, new jobs, fuel savings and enhanced competitiveness.

This analysis of benefits and costs for the proposed New Orleans Gateway Rail Program considers implementation costs of the proposed program of improvements as well as both national and regional benefits, and private and public benefits. Procedures for estimating benefits and costs of the Gateway Program are presented in Tables 4-1 thru 4-6.

Upgrading New Orleans Rail Gateway

The New Orleans Rail Gateway has the same challenges as the national rail network. Growing domestic and international freight traffic is being handled on systems that continue to contend with critical choke points that are legacies of older installations designed for a different time. While the systems are inherently safe, these choke points are associated with capacity constraints caused by antiquated bridges, inadequate signal systems, single track segments at key locations and other deficiencies. The Louisiana Department of Transportation and Development (DOTD), the New Orleans area Regional Planning Commission (RPC), and Class I railroads have proposed a program of rail improvements to address these choke points and infrastructure inadequacies. The program has the potential to generate substantial economic and environmental benefits to the nation as well as to the New Orleans Region.

Improvements to the New Orleans Rail Gateway would improve the flow of domestic and international freight traffic through the New Orleans area, much of which originates or terminates far from New Orleans and the State of Louisiana. The reach of the New Orleans Rail Gateways freight movements is illustrated by Figure 4-1. The national implications of the proposed program will service the second largest port in the United States.



Figure 4-1 Louisiana Freight Flow Maps – Rail

Deficiencies Affecting the New Orleans Rail Gateway

The 29-mile long New Orleans Rail Gateway, shown in Figure 4-2, stretches from west of the Huey P. Long Bridge in Jefferson Parish east to Gentilly in Orleans Parish and currently serves four passenger (Amtrak) routes and 56 daily freight trains. Along the Gateway route there are more than 20 at-grade rail-highway crossings, 13 freight yards, 10 interlockings, a Union Passenger Terminal, and the Huey P. Long and Almonaster Bridges.

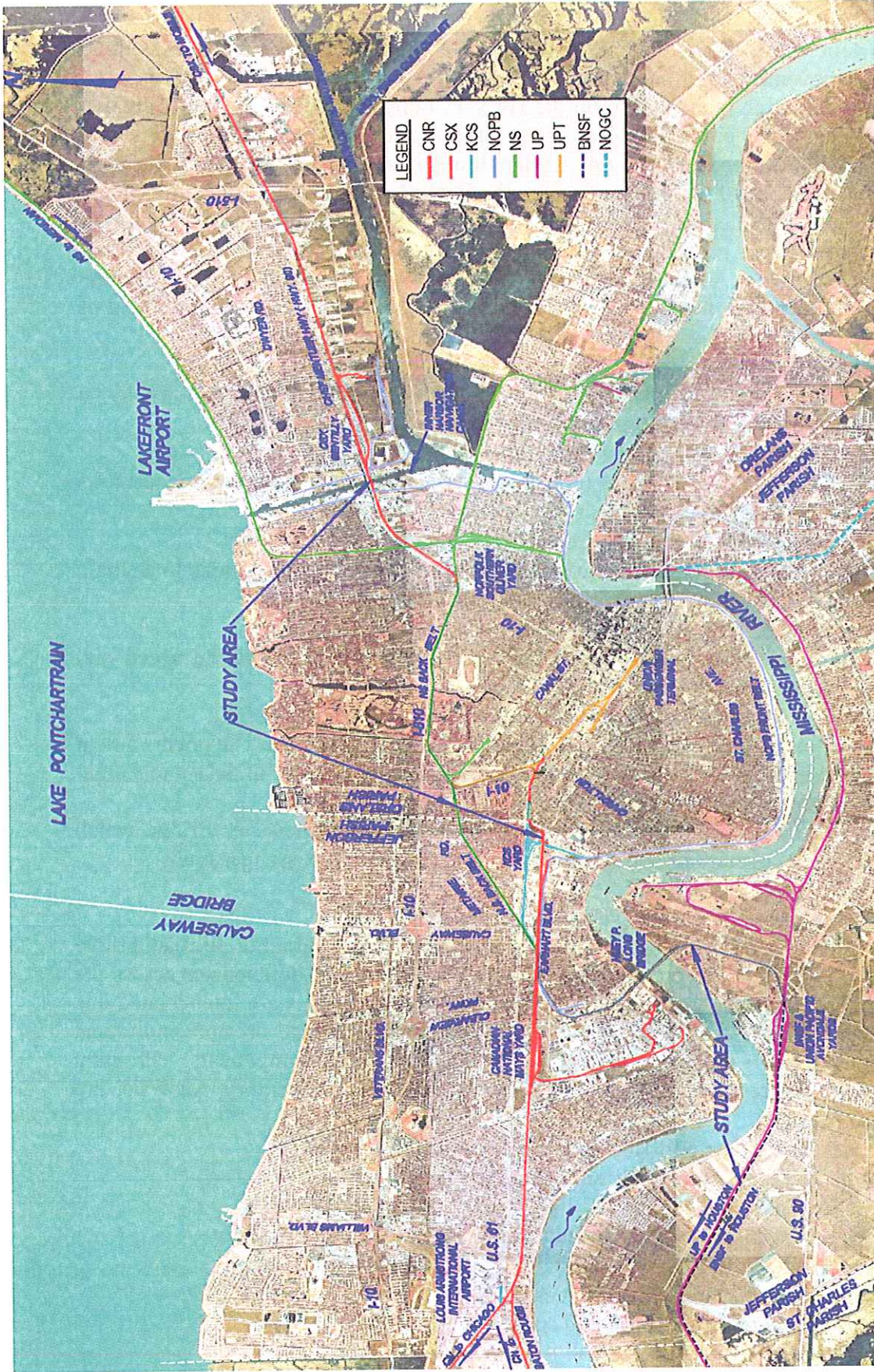


Figure 4-2 New Orleans Rail Gateway

The main deficiency within the rail gateway is a limited ability to handle routine simultaneous movements of trains caused by the existing configuration's lack of capacity. As an example, routine maintenance on the Huey P. Long Bridge causes one of its two tracks to regularly be out of service. East of this location, there is only a single connecting track from the Huey P. Long Bridge through East Bridge Junction to the Back Belt. Finally, only one of the two tracks over the Back Belt through Old Metairie can be used because of the numerous highway-rail crossings. These would be blocked if a train on one of the two tracks paused to allow another to pass on the adjacent track. The result is that a train waiting at Avondale, cannot proceed eastward through the Gateway unless it has a clear route all the way to beyond the 17th Street Canal and the commencement of double track.

A list of existing conditions adversely affecting the 29 mile Gateway that would be addressed by the proposed program is outlined below:

- On the west side of Huey P. Long Bridge (HPLB):
 - Lack of capacity due to dated infrastructure which leads to congestion and limits speeds and throughput of passenger and freight trains; and
 - Multiple at-grade rail-highway crossings which delay vehicle traffic.
- HPLB maintenance requirements, which regularly restrict train operations to a single track and limit throughput of passenger and freight trains.
- On the east side of HPLB:
 - Dated signal systems and single track corridors which restrict the speed and throughput of passenger and freight trains;
 - Multiple at-grade rail-highway crossings which delay vehicle traffic;
 - Lack of capacity due to dated rail to rail connections on selected segments and at selected interchanges which restrict train operations and result in delays to freight and passenger trains; and
 - Substandard conditions and speed restrictions on the Almonaster Bridge which restrict train operations and result in delays to freight and passenger trains.

Proposed Improvements for the New Orleans Rail Gateway

The public-private partnership has proposed a comprehensive program of railroad, bridge and roadway projects. The proposed improvements will address deficiencies across the entire corridor. Analysis has shown that the various improvements are inter-related due to the network nature of railroad operations. The absence of one or more individual features could negate the potential improvements from other components. Program improvements as presented in Section 2, Project Evaluation/Inventory Analysis, are summarized below:

- On the west side of the HPLB-**Western** Segment of Gateway:
 - Install additional main track, siding and yard tracks,
 - Upgrade signal and control facilities,
 - Separate and close at-grade rail-highway (grade) crossings.
- On the HPLB:
 - Convert bridge spans to ballast deck,
 - Install universal crossover at mid span,
 - Install centralized traffic control.

- On the east side of the HPLB-**Central** Segment of Gateway:
 - Upgrade of signal and control facilities,
 - Install additional main line tracks, construct Middle Belt,
 - Separate and close at-grade rail-highway (grade) crossings.
- On the east side of the Almonaster Bridge-**Eastern** Segment of Gateway:
 - Install additional main tracks,
 - Separate and close at-grade rail-highway (grade) crossings,
 - Upgrade of rail-to-rail connections,
 - Replacement of Almonaster Bridge crossing the Industrial Canal.

Benefits of New Orleans Rail Gateway Program

New Orleans is a rail gateway for traffic from the nation's east and west coasts. Improvements to the rail infrastructure will make the national rail network more efficient and will provide public benefits for the entire nation as well as the New Orleans region and the State of Louisiana. A more efficient rail network will also provide private benefits to railroad companies, Port of New Orleans and shippers by reducing delays of rail freight operations and thus the cost of rail freight operations. This section describes public and private benefits that will be provided by the rail gateway improvement program.

Public Benefits

As discussed in the introduction to this section, the New Orleans Gateway plays a significant role in the national freight system and a Gateway Program will generate public benefits far beyond the New Orleans Region. The entire nation will benefit from signal system upgrades, additional track, bridge projects and other improvements in the Gateway Program that will enable railroads to compete effectively for future freight traffic which the U.S. Department of Transportation forecasts to grow 70 percent over the next 20 years. The AASHTO Freight-Rail Report assumed that without public-private support, as with the proposed Gateway Program, railroads would be able to handle the amount of traffic they carry today, but little more. This would mean more trucks would be on the nation's roads in the future to handle freight. Such an increase in trucks on the roads would have adverse impacts on safety, congestion, and air quality. More trucks would also result in increased highway needs and maintenance. The Freight-Rail Report estimated that a \$30 billion investment of public funds in the national rail system would generate large public benefits due to fewer trucks on the nation's roads. These benefits include an estimated \$10 billion in avoided highway requirements and \$238 billion in user benefits--reduced operating costs, lower travel times and reduced accident costs. There would also be significant air quality benefits from such an investment.

Given the importance of the New Orleans Rail Gateway to the nationwide movement of goods by rail, it would be a conservative assumption to expect that about five percent of the investments visualized in the Freight-Rail Report should be made to improve freight movement through New Orleans. At this level, implementing the Gateway program would represent substantial public benefits nationally, including about \$500 million in avoided highway requirements and \$11.9 billion in user benefits such as reduced operating costs, faster travel times, and reduced accident costs.

Upon completion of the Gateway Program of projects the New Orleans Metropolitan Area will realize numerous direct **public benefits**. Grouped by area, these benefits will be:

- **Western Section**
 - Elimination of four roadway grade crossings will improve public safety, access for emergency vehicles and improve flow of traffic between River Road and U.S. Highway 90.
 - Removal of extensive truck traffic from the residential neighborhood along Avondale Garden Road.
- **Central Section**

Of the three routes investigated during this analysis the Front Belt was not considered feasible for inclusion into the Rail Gateway. The other two routes, the Back Belt and Middle Belt both had a number of public benefits. The Middle Belt not only offered the same benefits as the Back Belt but many more that were not only local but regional in nature.

Back Belt Route

- Elimination of twelve (12) roadway grade crossings will improve emergency vehicular response time, safety and travel times.
- Elimination of four flood gate structures.

In addition to these the **Middle Belt Route** will allow additional benefits:

- Elimination of the roadway underpass structures of the “Back Belt” tracks at I-10 and Causeway Boulevard/Airline Drive interchange. Each of these underpass structures is on one of the evacuation routes for the Metropolitan Region.
- The removal of the queue for trains awaiting clearance to precede through the Gateway, from the area of the city of New Orleans City Park.
- Facilitate improvements to the major drainage at the Hoey’s, Monticello and Palmetto Canals.
- Provide improved constructability for future light rail at the Causeway Boulevard/Airline Drive interchange.
- Provide improvements to the roadways at the Airline Drive/Tulane Avenue interchange.
- Provide improvement of the very tight curvature of the Airline Drive west bound on ramp.
- Provide provision for a future connection to the eastbound Gateway between the Front and Middle Belts.

In connection with the construction of the “Middle Belt” some track relocation work will occur along the “Front Belt”. This track relocation will eliminate one of the two existing track crossings on Jefferson Highway. Doing this will allow for the construction of a less expensive overpass structure in the future.

- **Eastern Section**

There are six roadway crossings through the East Section. The Gateway Program of projects is proposing the closure of three of these and grade separation of the remaining three. This will greatly enhance public safety and emergency vehicle access and response time.

- **Relocation of the New Orleans and Gulf Coast Railroad**

The selection of either Alternate Rail Route Nos. 2 or 3 will allow the existing rail line through the City of Gretna and along LA 23 to be abandoned. This will allow for:

- Elimination of over 200 roadway grade crossings.
- The removal of over 2.2 miles of railroad track from along city streets.
- The removal of train traffic from residential neighborhoods.

Local and Regional Benefits

The Gateway Program will also support the region's efforts to provide enhanced hurricane evacuation options for special needs populations. The State of Louisiana and New Orleans Region will gain substantial long term economic and environmental benefits from the Rail Gateway Program. The most direct public benefit of the Gateway Program will be the reduction in grade crossing delay time experienced by highway vehicles. The cost associated with these delays can be reduced from \$1,162,000 to only \$199,000 per year, yielding an annual savings of \$963,000 for auto and truck operators. There also will be reduced accident costs as a result of grade crossing elimination.

The program will have other significant but harder to quantify benefits. These include reduced fuel consumption and reduced emissions from idling vehicles, and reduced neighborhood noise from train operations. The proposed improvements will enhance the ability of rail to participate in emergency evacuation, and will improve the flow of current and future rail passenger service by reducing bottlenecks and allowing faster running times.

Improved Safety

The Gateway Program proposes grade separations at several major rail-highway crossings, and calls for closing a number of crossings that either have low traffic volumes or where traffic can be diverted to a nearby grade separation. If the Middle Belt option is selected, the eight current crossings along the Back Belt from Shrewsbury Road to Carrollton Avenue could remain in place after removal of the rail line. If the current Back Belt route is improved, three of these crossings would be closed and the remaining five would be grade separated. No new grade crossings would need to be created along the Middle Belt route. These improvements will result in lower exposure of vehicles to grade crossing incidents, thus lowering the probability of motorist casualties and property damage.

Reduced Vehicle Congestion

As both vehicular and rail traffic grows in future years, blockages at grade crossings will increase, resulting in increased vehicle delays and road congestion. The proposed crossing closures and grade separations will result in fewer blockages, and less loss of time” by waiting autos or commercial vehicles. In addition, the track improvements contemplated by the Gateway Program will permit higher train speeds and a commensurate reduction in delays at those grade crossings that will remain. The dollar value of current grade crossing delays to highway vehicle users is approximately \$1.162 million per year, as calculated for this study and shown in Table 4-1, page 4-12. This will be reduced to only \$199,000 per year with the full package of crossing closures and separations, for an annual savings of about \$963,000 per year.

Air Quality Benefits

The Gateway Program will reduce delays to highway vehicles and trains yielding lower emissions from both sources.

1. Vehicle Emissions:

Reduced vehicle emissions will be a direct benefit of the Gateway Program. The existing rail and highway network results in daily delays at crossings of 6,746 minutes for automobiles and 728 minutes for trucks. With the program improvements, daily delay will drop to 1,107 and 153 minutes, respectively. The overall reduction in delay time for highway vehicles comes to 37,800 hours per year, representing the reduction in idling time at-grade crossings.

2. Locomotive Emissions:

Locomotive emissions are related to the total hours of operation of the diesel engines that provide the locomotive power. The Gateway Program will result in reduction of daily train operating hours from 145.9 to 111.8 (Back Belt option) or 104.5 hours per day (Middle Belt option). The reductions represent reduced running times (resulting from reduced train delays) and reduced idling time (resulting from less delay at rail yards, junctions, and passing locations). This represents a 23.4 to 28.4 percent reduction in train operating time, and would equate to a similar reduction in emissions from locomotive operation, see Table 3-1. Over time, tighter emission standards for locomotives might minimize the scale of the reduction, but it still would be significant.

Fuel Savings

Fuel savings will result from reductions in vehicle wait times at-grade crossings. As discussed above the Gateway Program of projects will reduce vehicular delays at grade crossings by about 37,800 hours per year. At a typical fuel consumption rate of 0.6 gallons per hour for an idling vehicle, the reduction in fuel usage upon completion of the program will be about 22,680 gallons per year. The annual fuel cost savings to New Orleans area motorists and truckers, assuming \$3 per gallon as the fuel cost, would be about \$68,000. This savings would increase in future years as traffic levels rise, but might be partially offset by more fuel-efficient vehicles.

Construction Benefits

Construction of the Gateway improvements is estimated to cost \$455 million. Each construction dollar generates direct economic gains from salaries and wages paid to local construction workers, and indirect economic gains from payments for supplies and related construction services. Most of the benefits will accrue locally within the New Orleans region.

Enhanced Security

The Gateway Program would reduce maintenance curfews and train-train conflicts, resulting in fewer delays for trains moving through New Orleans. Keeping the trains moving through the Gateway with a minimum of delay contributes to greater security of both goods and rail equipment at the Port of New Orleans, on bridges and in neighborhoods.

Enhanced Intermodal Connectivity

Intermodal connectivity depends on the efficient interchange of freight shipments between modes: Ship to rail, rail to truck, truck to market, and similar combinations of goods movement that utilize the optimum advantages of each mode. While intermodal traffic has grown substantially, it is generally a very competitive. The most successful intermodal operations reflect the growing value of time and minimize delay. To the extent that the Gateway Program can reduce rail transit times across New Orleans, it will contribute to the attractiveness of rail operations for both shipments passing through New Orleans, and those shipments originating or terminating locally.

Enhanced Regional Competitiveness

Proposed improvements to the New Orleans Rail Gateway will reduce the cost of doing business in the region by reducing shipping time and cost for area commerce and thus enhancing the attractiveness of New Orleans as a place to locate and expand business.

Nationwide movement of commodities by rail can follow different routes, and significant improvements to rail gateways in Memphis, St. Louis, Chicago, or elsewhere would reduce the traffic volumes transiting New Orleans. The reduced travel times will help to keep the New Orleans routing competitive as well as attract origin and destination traffic.

Emergency Evacuation

Hurricane Katrina and the subsequent flooding had a devastating effect on the New Orleans Metropolitan Area and there was extreme difficulty in evacuating some residents. The Gateway Program proposals to eliminate flood gates, add track, build new connections and upgrade signal systems will enhance the region's emergency preparedness capability by providing the flexibility for use of railroads for evacuation in directions away from oncoming storms. If the Middle Belt were constructed, two highway underpasses on primary hurricane evacuation routes could be eliminated (I-10 and Airline Drive). Pumping capacity that is currently devoted to these two locations could be redirected elsewhere. These improvements will be supportive of the region's hurricane evacuation planning.

Neighborhood Enhancement

The Gateway Program will enhance local neighborhoods in several ways. Proposed closures and separations of grade crossing will result in fewer blockages of road traffic for passing trains. Fewer blockages of road traffic will result in reduced delays to emergency services and less noise from stopped vehicles. The reduction in grade crossings will also reduce related train horn noise. The Middle Belt alternative, which largely traverses non-residential areas and follows existing rail yards and corridors, provides the greatest potential reduction in noise intrusion into nearby residential areas.

Improved Passenger Rail

Gateway Program improvements will result in improved, faster and more reliable Amtrak service, support future higher speed rail programs and includes consideration of routes for future transit service to the Airport.

Railroad and Private Benefits

Railroads and their customers will benefit from the additional capacity and throughput envisioned in the proposed Gateway improvements. The additional trackage, new crossovers, signal upgrades, and elimination of rail-highway crossings will expedite rail operations and provide greater freight throughput. The nation's railroads, the Port of New Orleans, and rail shippers will benefit from a more efficient railroad system. The improvements will result in fewer delays, lower transit times, and better on-time deliveries. Total train operating time across the Gateway will be reduced almost 25 percent, from an average of 145.9 hours today to 104.6 hours with the upgraded Middle Belt option. Average train speeds will increase by about 39 percent, and hours of delay can be decreased by 55 percent.

This increased throughput and more efficient operations will result in enhanced productivity and resource savings. The most direct measures will be reduced fuel consumption and reduced operating hours that will translate to reduced railroad operating costs. Railroad locomotives consume about four gallons of fuel per hour when idling. The Middle Belt option will reduce total running times by about 14,600 hours per year, with most of this reduction from minimizing the idling time (delay time) of trains crossing the Gateway. Assuming an average of two diesel locomotives per train, the resulting fuel savings would be about 116,800 gallons per year, representing a cost savings of about \$350,400 per year at diesel fuel costs of \$3 per gallon. The increased train velocities will save an estimated \$777,000 per year in crew costs. There also will be savings in locomotive operating and maintenance costs and reductions in freight car fleet requirements. Railroad shippers will benefit from the faster travel times and reduced delays, and could experience a reduction in business inventory requirements. Finally, elimination of grade crossings will reduce the exposure to risk for both railroads and the highway users.

Summary

The Gateway Program will have national and regional consequences and will generate substantial long term economic and environmental benefits. Proposed improvements will improve the flow of goods movement by rail and yield benefits far beyond the confines of New Orleans, because New Orleans represents one of the key gateway interchanges for national rail freight movement. The elimination of choke points allows increased throughput, and will help to keep pace with increasing demand for freight transportation services. Further, by making rail more efficient and competitive, it will reduce the need for highway improvements and contribute to decreased highway congestion for all road users.

The Program's benefits include safety, congestion reduction, air quality improvement from reduced emissions, fuel savings, enhanced regional competitiveness, neighborhood quality improvement, construction benefits, and enhanced emergency evacuation potential. The benefits accrue both to private companies such as the railroads and local shippers, and to the public at large.

Recommendations to Crossings
used for Simulation Modeling

George Street	Crossing to be closed.
Avondale Garden Road	Crossing to be closed, and grade separation constructed.
Central Avenue	Crossing to be closed.
Shrewsbury Road	With Back Belt option, crossing to be closed. With Middle Belt option, all train traffic will be removed.
LaBarre Road	With Back Belt option, grade separation to be provided. With Middle Belt option, all train traffic will be removed.
Atherton Drive	With Back Belt option, crossing to be closed. With Middle Belt option, all train traffic will be removed.
Hollywood Drive	With Back Belt option, grade separation to be provided. With Middle Belt option, all train traffic will be removed.
Farnham Place	With Back Belt option, grade separation to be provided. With Middle Belt option, all train traffic will be removed.
West Oakridge Parkway	With Back Belt option, crossing to be closed. With Middle Belt option, all train traffic will be removed.
Metairie Road	With Back Belt option, grade separation to be provided. With Middle Belt option, all train traffic will be removed.
Carrollton Avenue	With Back Belt option, grade separation to be provided. With Middle Belt option, all train traffic will be removed.
Louisa Street	Assume closure not possible; track projects will permit higher train speeds with lower delay costs.
France Road	Assume closure with both Back Belt and Middle Belt options. (Alvar Street Overpass already serves vehicular traffic).
Gentilly Highway West	Assume closure and diversion of traffic to Read Boulevard.
Read Boulevard	Grade separation to be provided.
I-510 Frontage Road	Closure ideal, but may not be possible. Track projects permitting higher train speeds will lower delay costs.
Michoud Boulevard	Closure ideal, but may not be possible. Track projects permitting higher train speeds will lower delay costs.
Gentilly Highway East	Closure ideal, but may not be possible. Track projects permitting higher train speeds will lower delay costs.
Industrial Parkway	Grade separation proposed long-term. In interim, higher train speeds will reduce delay costs.

Table 4-1

	George Street	Avondale Garden Rd	Central Avenue	Shrewsbury Road	Labarre Road	Atherton Drive	Hollywood Drive	Farnham Place	West Oakridge Pkwy	Metairie Road	Carrollton Avenue	Louisa Street	France Road	Almanaster/Jourdan Rd	Gentilly Highway West	Reed Boulevard	I-510 Frontage Road	Michoud Boulevard	Gentilly Highway East	Industrial Parkway
SECTION 1: Existing Rail Network																				
Avg. Train Length (Feet)	6,000	6,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000	6,000	6,000	6,000
Avg. Train Speed (Miles Per Hour)	10	10	15	15	20	20	25	25	25	25	25	20	20	10	20	20	20	25	25	25
Avg. Blockage Time (Minutes)	8.45	8.45	5.15	5.15	3.93	3.93	3.23	3.23	3.23	3.23	3.23	3.93	3.93	7.32	4.55	4.55	4.55	3.72	3.72	3.72
Avg. Trains/Day	25	25	47	25	25	25	25	25	25	25	25	22	22	22	20	20	20	20	20	20
Total Blockage/Day (Minutes)	211.25	211.25	242.05	128.75	98.25	98.25	80.75	80.75	80.75	80.75	80.75	86.46	86.46	161.04	91.00	91.00	91.00	74.40	74.40	74.40
Total Blockage/Hour (Minutes)	8.80	8.80	10.09	5.36	4.09	4.09	3.36	3.36	3.36	3.36	3.36	3.60	3.60	6.71	3.79	3.79	3.79	3.10	3.10	3.10
Crossing ADT	1,200	5,300	10,700	1,350	11,000	2,700	3,100	1,600	1,750	18,400	5,100	19,800	500	0	500	4,200	500	5,000	500	3,000
Auto Share	90%	90%	90%	90%	93%	95%	95%	97%	97%	90%	95%	90%	90%	90%	75%	90%	50%	90%	90%	70%
Auto ADT	1,080	4,770	9,630	1,215	10,230	2,565	2,945	1,552	1,698	16,560	4,845	17,820	450	0	375	3,780	250	4,500	450	2,100
Truck ADT	120	530	1,070	135	770	135	155	48	53	1,840	255	1,980	50	0	125	420	250	500	50	900
ADT Daytime Share (6AM-Midnight)	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
Daytime Autos per Hour	57.0	251.8	508.3	64.1	539.9	135.4	155.4	81.9	89.6	874.0	255.7	940.5	23.8	0.0	19.8	199.5	13.2	237.5	23.8	110.8
Nighttime Autos per Hour	9.0	39.8	80.3	10.1	85.3	21.4	24.5	12.9	14.1	138.0	40.4	148.5	3.8	0.0	3.1	31.5	2.1	37.5	3.8	17.5
Trucks/Hour Day	6.3	28.0	56.5	7.1	40.6	7.1	8.2	2.5	2.8	97.1	13.5	104.5	2.6	0.0	6.6	22.2	13.2	26.4	2.6	47.5
Trucks/Hour Night	1.0	4.4	8.9	1.1	6.4	1.1	1.3	0.4	0.4	15.3	2.1	16.5	0.4	0.0	1.0	3.5	2.1	4.2	0.4	7.5
Daytime Auto Delay (Minutes)	150.52	664.78	1537.77	103.20	663.09	166.26	156.89	82.68	90.43	882.19	258.11	1016.45	25.67	0.00	22.51	226.93	15.01	220.88	22.09	103.08
Nighttime Auto Delay (Minutes)	7.92	34.99	80.94	5.43	34.90	8.75	8.26	4.35	4.76	46.43	13.58	53.50	1.35	0.00	1.18	11.94	0.79	11.63	1.16	5.43
Total Daily Auto Delay (Minutes)	158.44	699.77	1618.71	108.63	697.98	175.01	165.14	87.03	95.19	928.63	271.69	1069.94	27.02	0.00	23.70	238.88	15.80	232.50	23.25	108.50
Daytime Truck Delay (Minutes)	16.72	73.86	170.86	11.47	49.91	8.75	8.26	2.56	2.80	98.02	13.58	112.94	2.85	0.00	7.50	25.21	15.01	24.54	2.45	44.18
Nighttime Truck Delay (Minutes)	0.88	3.89	8.99	0.60	2.63	0.46	0.43	0.13	0.15	5.16	0.71	5.94	0.15	0.00	0.39	1.33	0.79	1.29	0.13	2.33
Total Daily Truck Delay (Minutes)	17.60	77.75	179.86	12.07	52.54	9.21	8.69	2.69	2.94	103.18	14.30	118.88	3.00	0.00	7.90	26.54	15.80	25.83	2.58	46.50
Auto Cost/Hour	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00
Truck Cost/Hour	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00
Total Daily Auto Cost	\$63.38	\$279.91	\$647.48	\$43.45	\$279.19	\$70.00	\$66.06	\$34.81	\$38.08	\$371.45	\$108.68	\$427.98	\$10.81	\$0.00	\$9.48	\$95.55	\$6.32	\$93.00	\$9.30	\$43.40
Total Daily Truck Cost	\$11.74	\$51.83	\$119.90	\$8.05	\$35.02	\$6.14	\$5.79	\$1.79	\$1.96	\$68.79	\$9.53	\$79.26	\$2.00	\$0.00	\$5.27	\$17.69	\$10.53	\$17.22	\$1.72	\$31.00
Total Daily Cost (All Vehicles)	\$75.11	\$331.74	\$767.39	\$51.50	\$314.22	\$76.14	\$71.85	\$36.61	\$40.04	\$440.24	\$118.21	\$507.23	\$12.81	\$0.00	\$14.75	\$113.24	\$16.85	\$110.22	\$11.02	\$74.40
Total Annual Cost (All Vehicles)	\$27,416	\$121,085	\$280,097	\$18,798	\$114,690	\$27,792	\$26,226	\$13,361	\$14,614	\$160,687	\$43,146	\$185,140	\$4,675	\$0	\$5,382	\$41,334	\$6,151	\$40,231	\$4,023	\$27,156
SECTION 2: Upgrade Back Belt																				
Avg. Train Length (Feet)	6,000	6,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000	6,000	6,000	6,000
Avg. Train Speed (Miles Per Hour)	25	25	30	30	30	30	35	35	35	35	35	30	20	25	35	35	40	40	40	40
Avg. Blockage Time (Minutes)	3.72	3.72	2.77	2.77	2.77	2.77	2.43	2.43	2.43	2.43	2.43	2.77	3.93	3.23	2.77	2.77	2.47	2.47	2.47	2.47
Avg. Trains/Day	25	25	47	25	25	25	25	25	25	25	25	25	22	22	20	20	20	20	20	20
Total Blockage/Day (Minutes)	93.00	93.00	130.19	69.25	69.25	69.25	60.75	60.75	60.75	60.75	60.75	69.25	86.46	71.06	55.40	55.40	49.40	49.40	49.40	49.40
Total Blockage/Hour (Minutes)	3.88	3.88	5.42	2.89	2.89	2.89	2.53	2.53	2.53	2.53	2.53	2.89	3.60	2.96	2.31	2.31	2.06	2.06	2.06	2.06
Crossing ADT	0	0	0	0	0	0	0	0	0	0	0	19,800	0	0	0	0	500	5,000	500	3,000
Auto Share	90%	90%	90%	90%	93%	95%	95%	97%	97%	90%	95%	90%	90%	90%	75%	90%	50%	90%	90%	70%
Auto ADT	0	0	0	0	0	0	0	0	0	0	0	17,820	0	0	0	0	250	4,500	450	2,100
Truck ADT	0	0	0	0	0	0	0	0	0	0	0	1,980	0	0	0	0	250	500	50	900
ADT Daytime Share (6AM-Midnight)	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
Daytime Autos per Hour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	940.5	0.0	0.0	0.0	0.0	13.2	237.5	23.8	110.8
Nighttime Autos per Hour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	148.5	0.0	0.0	0.0	0.0	2.1	37.5	3.8	17.5
Trucks/Hour Day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.5	0.0	0.0	0.0	0.0	13.2	26.4	2.6	47.5
Trucks/Hour Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0	2.1	4.2	0.4	7.5
Daytime Auto Delay (Minutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	814.12	0.00	0.00	0.00	0.00	8.15	146.66	14.67	68.44
Nighttime Auto Delay (Minutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.85	0.00	0.00	0.00	0.00	0.43	7.72	0.77	3.60
Total Daily Auto Delay (Minutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	856.97	0.00	0.00	0.00	0.00	8.58	154.38	15.44	72.04
Daytime Truck Delay (Minutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.46	0.00	0.00	0.00	0.00	8.15	16.30	1.63	29.33
Nighttime Truck Delay (Minutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.76	0.00	0.00	0.00	0.00	0.43	0.86	0.09	1.54
Total Daily Truck Delay (Minutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.22	0.00	0.00	0.00	0.00	8.58	17.15	1.72	30.88
Auto Cost/Hour	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00
Truck Cost/Hour	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00
Total Daily Auto Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$342.79	\$0.00	\$0.00	\$0.00	\$0.00	\$3.43	\$61.75	\$6.18	\$28.82
Total Daily Truck Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$63.48	\$0.00	\$0.00	\$0.00	\$0.00	\$5.72	\$11.44	\$1.14	\$20.58
Total Daily Cost (All Vehicles)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$406.27	\$0.00	\$0.00	\$0.00	\$0.00	\$9.15	\$73.19	\$7.32	\$49.40
Total Annual Cost (All Vehicles)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148,287	\$0	\$0	\$0	\$0	\$3,339	\$26,713	\$2,671	\$18,031
SECTION 3: Develop Middle Belt																				
Avg. Train Length (Feet)	6,000	6,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000	6,000	6,000	6,000
Avg. Train Speed (Miles Per Hour)	25	25	30	30	20	30	35	35	35	35	35	30	20	25	35	35	40	40	40	40
Avg. Blockage Time (

NEW ORLEANS GATEWAY GRADE CROSSING ANALYSIS
SUMMARY OF ANNUAL DELAY COST REDUCTIONS

	George Street	Avondale Garden Road	Central Avenue	Shrewsbury Road	LaBarre Road	Atherton Drive	Hollywood Drive	Farnham Place	West Oakridge Parkway	Metairie Road	Carrollton Avenue	Louisa Street	France Road	Almanaster/Jourdan Road	Gentilly Highway West	Read Boulevard	I-510 Frontage Road	Michoud Boulevard	Genfilly Highway East	Industrial Parkway	Delay Costs
<u>Existing Rail Network</u>																					
Trains per Day	25	25	47	25	25	25	25	25	25	25	25	22	22	22	20	20	20	20	20	20	
Crossing ADT	1,200	5,300	10,700	1,350	11,000	2,700	3,100	1,600	1,750	18,400	5,100	19,800	500	0	500	4,200	500	5,000	500	3,000	
Annual Delay Cost	\$27,416	\$121,085	\$280,097	\$18,798	\$114,690	\$27,792	\$26,226	\$13,361	\$14,614	\$160,687	\$43,146	\$185,140	\$4,675	\$0	\$5,382	\$41,334	\$6,151	\$40,231	\$4,023	\$27,156	\$1,162,004
<u>Upgrade Back Belt</u>																					
Trains per Day	25	25	47	25	25	25	25	25	25	25	25	25	22	22	20	20	20	20	20	20	
Crossing ADT	0	0	0	0	0	0	0	0	0	0	0	19,800	0	0	0	0	500	5,000	500	3,000	
Annual Delay Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148,287	\$0	\$0	\$0	\$0	\$3,339	\$26,713	\$2,671	\$18,031	\$199,041
<u>Develop Middle Belt</u>																					
Trains per Day	25	25	47	25	25	25	25	25	25	25	25	25	22	22	20	20	20	20	20	20	
Crossing ADT	0	0	0	0	0	0	0	0	0	0	0	19,800	0	0	0	0	500	5,000	500	3,000	
Annual Delay Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148,287	\$0	\$0	\$0	\$0	\$3,339	\$26,713	\$2,671	\$18,031	\$199,041
<u>Annual Delay Cost Saved</u>																					
Upgrade Back Belt	\$27,416	\$121,085	\$280,097	\$18,798	\$114,690	\$27,792	\$26,226	\$13,361	\$14,614	\$160,687	\$43,146	\$36,852	\$4,675	\$0	\$5,382	\$41,334	\$2,812	\$13,519	\$1,352	\$9,125	\$962,963
Develop Middle Belt	\$27,416	\$121,085	\$280,097	\$18,798	\$114,690	\$27,792	\$26,226	\$13,361	\$14,614	\$160,687	\$43,146	\$36,852	\$4,675	\$0	\$5,382	\$41,334	\$2,812	\$13,519	\$1,352	\$9,125	\$962,963

Table 4-3

Calculation of the Value of Travel Time

Value of time due to delay at grade crossings was based on the US Department of Transportation document "The Value of Saving Travel Time: Departmental Guidance for Conducting Economic Evaluations". These guidelines were incorporated into Table 5-1, "Value of One Hour of Travel Time(1995 Dollars)" for the Highway Economic Requirements Systems Technical Report. The calculation in that report included small and medium sized autos, and various sizes of trucks, and reflected both business and personal travel.

The values were escalated to year 2007 dollars at 3% annual, and typical values of \$24 per hour for autos and \$40 per hour for trucks were selected for this analysis. The values are comparable to values calculated by other sources.

	small auto	med auto	4 tire truck	6 tire truck	3-4 axle truck	4-axle combo	5-axle combo
business travel							
value per person	18.80	18.80	18.80	16.50	16.50	16.50	16.50
avg. occupancy	1.43	1.43	1.43	1.05	1.00	1.12	1.12
occupant value	26.88	26.88	26.88	17.33	16.50	18.48	18.48
vehicle value	1.09	1.45	1.90	2.65	7.16	6.41	6.16
inventory value	0.00	0.00	0.00	0.00	0.00	0.60	40.60
total value/vehicle	27.97	28.33	28.78	19.98	23.66	25.49	65.24
personal travel							
value per person	8.50	8.50	8.50				
avg occupancy	1.67	1.67	1.67				
occupant value	14.20	14.20	14.20				
vehicle value	0.00	0.00	0.00				
total value/vehicle	14.20	14.20	14.20				
percent business	11%	11%	25%	100%	100%	100%	100%
percent personal	89%	89%	75%				
average value per vehicle	15.71	15.75	17.84	19.98	23.66	25.49	65.24
avg value/vehicle 2007	22.40	22.46	25.44	28.48	33.74	36.35	93.03

	1.03
1995	100.00
1996	103.00
1997	106.09
1998	109.27
1999	112.55
2000	115.93
2001	119.41
2002	122.99
2003	126.68
2004	130.48
2005	134.39
2006	138.42
2007	142.58

Table 4-4

Train Length vs. Speed

Train Length (Ft.)		10MPH	15MPH	20MPH	25MPH	30MPH	35MPH	40MPH	45MPH	50MPH
2,000	HE ar. Node 105	2:22:17	2:14:59	2:10:56	2:08:41	2:07:15	2:06:16	2:05:34	2:05:03	2:04:14
	TE lv. Node 106	2:25:38	2:17:14	2:12:35	2:09:59	2:08:19	2:07:12	2:06:22	2:05:45	2:04:52
	Add'l gate time (h:m:s)	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30
	Total Blockage (h:m:s)	0:03:51	0:02:45	0:02:09	0:01:48	0:01:34	0:01:26	0:01:18	0:01:12	0:01:08
	Total Blockage (minutes)	3.85	2.75	2.15	1.80	1.57	1.43	1.30	1.20	1.13
3,000	HE ar. Node 105	2:51:56	2:45:01	2:40:42	2:39:16	2:37:58	2:37:04	2:36:27	2:36:02	2:34:14
	TE lv. Node 106	2:56:26	2:48:05	2:43:08	2:40:55	2:39:26	2:38:19	2:37:32	2:37:00	2:35:06
	Add'l gate time (h:m:s)	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30
	Total Blockage (h:m:s)	0:05:00	0:03:34	0:02:56	0:02:09	0:01:58	0:01:45	0:01:35	0:01:28	0:01:22
	Total Blockage (minutes)	5.00	3.57	2.93	2.15	1.97	1.75	1.58	1.47	1.37
4,000	HE ar. Node 105	3:21:45	3:14:56	3:10:55	3:09:13	3:07:53	3:07:02	3:06:29	3:06:07	3:04:14
	TE lv. Node 106	3:27:27	3:18:49	3:13:46	3:11:28	3:09:46	3:08:38	3:07:52	3:07:21	3:05:20
	Add'l gate time (h:m:s)	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30
	Total Blockage (h:m:s)	0:06:12	0:04:23	0:03:21	0:02:45	0:02:23	0:02:06	0:01:53	0:01:44	0:01:36
	Total Blockage (minutes)	6.20	4.38	3.35	2.75	2.38	2.10	1.88	1.73	1.60
5,000	HE ar. Node 105	3:51:31	3:45:00	3:40:58	3:39:16	3:37:59	3:37:09	3:36:39	3:36:23	3:34:14
	TE lv. Node 106	3:58:20	3:49:39	3:44:24	3:42:00	3:40:15	3:39:05	3:38:20	3:37:52	3:35:35
	Add'l gate time (h:m:s)	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30
	Total Blockage (h:m:s)	0:07:19	0:05:09	0:03:56	0:03:14	0:02:46	0:02:26	0:02:11	0:01:59	0:01:51
	Total Blockage (minutes)	7.32	5.15	3.93	3.23	2.77	2.43	2.18	1.98	1.85
6,000	HE ar. Node 105	4:21:45	4:15:03	4:11:00	4:09:18	4:07:07	4:07:21	4:05:20	4:06:45	4:04:15
	TE lv. Node 106	4:29:42	4:20:32	4:15:03	4:12:31	4:09:47	4:09:37	4:07:18	4:08:30	4:05:49
	Add'l gate time (h:m:s)	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30
	Total Blockage (h:m:s)	0:08:27	0:05:59	0:04:33	0:03:43	0:03:10	0:02:46	0:02:28	0:02:15	0:02:04
	Total Blockage (minutes)	8.45	5.98	4.55	3.72	3.17	2.77	2.47	2.25	2.07
7,000	HE arr. Node 105	4:51:46	4:45:12	4:40:59	4:39:25	4:37:11	4:37:31	4:35:20	4:37:07	4:34:18
	TE lv. Node 106	5:00:57	4:51:28	4:45:39	4:43:06	4:40:13	4:40:07	4:37:36	4:39:06	4:36:06
	Add'l gate time (h:m:s)	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30	0:00:30
	Total Blockage (h:m:s)	0:09:41	0:06:46	0:05:10	0:04:11	0:03:32	0:03:06	0:02:46	0:02:29	0:02:18
	Total Blockage (minutes)	9.68	6.77	5.17	4.18	3.53	3.10	2.77	2.48	2.30

Times derived from simulation "GradeCrossing" with track speed set at varying rates.
 Times based on crossing link 80 feet long.
 Additional gate time is gate closing and opening seconds before/after train occupancy.
 H.E. is head end of train.
 T.E. is tail end of train.

train length (Ft.)	Total Blockage Time in Minutes (mph)								
	Train Speed								
	10	15	20	25	30	35	40	45	50
2000	3.85	2.75	2.15	1.80	1.57	1.43	1.30	1.20	1.13
2500	4.43	3.16	2.54	1.98	1.77	1.59	1.44	1.34	1.25
3000	5.00	3.57	2.93	2.15	1.97	1.75	1.58	1.47	1.37
3500	5.60	3.98	3.14	2.45	2.18	1.93	1.73	1.60	1.49
4000	6.20	4.38	3.35	2.75	2.38	2.10	1.88	1.73	1.60
4500	6.76	4.77	3.64	2.99	2.58	2.27	2.03	1.86	1.73
5000	7.32	5.15	3.93	3.23	2.77	2.43	2.18	1.98	1.85
5500	7.89	5.57	4.24	3.48	2.97	2.60	2.33	2.12	1.96
6000	8.45	5.98	4.55	3.72	3.17	2.77	2.47	2.25	2.07
6500	9.07	6.38	4.86	3.95	3.35	2.94	2.62	2.37	2.19
7000	9.68	6.77	5.17	4.18	3.53	3.10	2.77	2.48	2.30

Table 4-5

Calculation of Crew Cost Savings

Per data from FRA, average Train and Engine crew wage was \$72,966 in 2005. Benefits for railroad employees equal about 38.2% over wages, to 2005 T&E Salary and Benefit cost was about \$100,839. Escalated to 2007 values at 3%, the 2007 Salary and Benefit cost for T&E employees would be \$106,980. At 2080 typical work hours per year, the 2007 hourly Salary and Benefit cost would be \$51.43 per hour.

RTC simulation found total running time including delays and dwell time:

Base	30:09:48 (d:h:m) = 729.8 hours / 5 days simulated = 145.96 hours/day
Back	23:06:28 = 555.8 hours / 5 days = 111.16 hours/day
Middle	21:18:52 = 522.9 hours / 5 days = 104.58 hours/day

Potential T&E crew cost savings:

Base	145.96 hours @ \$51.43 = \$7,507/day
Back	111.16 hours @ \$51.43 = \$5,717/day or \$1,790/day reduction, or \$653,350/year saved
Middle	104.58 hours @ \$51.43 = \$5,379/day or \$2,128/day reduction, or \$776,720/year saved

Table 4-6

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 5 Sources of Funding

SOURCES OF FUNDING

The New Orleans Rail Gateway public-private partnership has proposed a program of projects (Gateway Infrastructure Program) that has national and regional significance and will provide both public and private benefits. Projects in the New Orleans Rail Gateway Infrastructure Program (details are presented in the Inventory Analysis Section of this report) can be divided into the following groups:

- Additional railroad track and crossovers, rail signal upgrades and other rail infrastructure improvements to facilitate movement of trains.
- Grade separation or closure of highway rail crossings to reduce motorist delay and improve safety.
- Rehabilitation of rail facilities on Huey P. Long and Almonaster bridges to reduce train delay and enhance shipper security.
- Reconstruction of certain roads to facilitate the development of safer, more efficient rail operations.

This section discusses potential sources of funding for implementation of projects in the New Orleans Rail Gateway Program. The funding analysis is divided into three parts. The first identifies Federal grant and credit programs for which Gateway projects are eligible. Individual Gateway projects are eligible for funding under multiple grant and credit programs, and the second part of this section identifies grant and credit programs for which each project is eligible. Similarly, individual grant and credit programs can be used to fund multiple Gateway projects, and the third part of this section recasts the previous discussions and identifies Gateway projects eligible under each Federal grant and credit program.

FINANCIAL ASSISTANCE PROGRAMS FOR RAIL INFRASTRUCTURE IMPROVEMENTS

Beginning with the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and greatly expanded with the enactment of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005, rail infrastructure improvements are eligible for financial assistance under several Federal transportation grant and credit programs. These Federal transportation grant and credit programs have the potential to provide significant amounts of financial assistance for railroad infrastructure projects that provide benefits to the public, as is certainly the case with the New Orleans Rail Gateway Program.

FEDERAL GRANT PROGRAMS

Federal grant programs for which New Orleans Rail Gateway infrastructure projects are eligible can be divided into two primary groups: 1) grant programs administered by LA DOTD and funded with contract authority provided by the Federal Highway Trust Fund (“Trust Fund”), and 2) grant programs administered by the Federal Railroad Administration (FRA) and funded pursuant to an authorization of appropriations from the U.S. General Fund. Contract authority allows LA DOTD to enter into contracts or incur obligations in advance of funds becoming available. Contract authority differs from an authorization from the General Fund which may be exercised only after funds are made available through an appropriation.

Devastation to the Gulf Coast from Hurricane Katrina and the risk from future hurricanes make the New Orleans region eligible for an array of disaster recovery and hazard mitigation grant programs. Principal among these are programs administered by the Federal Emergency Management Administration. Some Gateway projects may be eligible for assistance from these programs.

Matching Funds

Federal grant programs usually require non-Federal matching funds. Such funds may be provided from a combination of State, local and private sources. Louisiana has a Highway Trust Fund that is funded from motor fuel taxes and motor vehicle fees and may be used solely for “construction and maintenance of roads and bridges on the State and Federal highway systems, statewide flood control program, ports, airports, mass transit, state police (for traffic services), and the Parish Transportation Fund.” The Gateway program includes construction or reconstruction on a number of State roads and such projects would be eligible for funding from the State Highway Trust Fund, thus providing a source for the State/local match. The Louisiana Highway Fund does not authorize using its proceeds for local roads, and this creates a challenge for providing non-Federal match for grade crossing separation and reconstruction projects involving these roads.

The Louisiana Highway Fund also does not authorize using its proceeds for rail projects, other than for highway-rail crossings on State roads. Thus, the State does not have a source of funds for most Gateway railroad projects. If the State decides to provide funds for these railroad projects, options to provide a source of State funds for railroad projects can be seen in a 1999 study of State Rail Freight Funding by the National Conference of State Legislatures and a 2005 study the Virginia Department of Rail and Public Transportation. The studies found that States are using multiple sources of revenues to fund rail freight projects:

<u>Funding Source</u>	<u>Number of States</u> (Some states have multiple sources)
• Gasoline Taxes and Motor Vehicle Fees	7
• Existing Railroad Taxes	5
• Bonds	9
• General Fund	5

For example, Tennessee and Maryland are among states which provide funding for railroad projects from their Transportation Trust Fund (i.e., gasoline taxes and motor vehicle fees). Indiana and Oregon are among states which provide funding for railroad projects from their general fund. Maine and Georgia are among states that provide funding for railroad projects from bonds. And Oklahoma provides funding for rail freight projects with revenues from existing rail freight taxes and rail property taxes. The State of Louisiana might consider any of the above approaches as sources of funds for a public share of required matching funds.

Sources of private matching funds include railroads, Port of New Orleans, local development groups, shippers and other beneficiaries of Gateway projects. In the CREATE program, participating railroads agreed to contribute funds equal to the value of economic benefits to the railroad industry. For the CREATE program the railroads agreed to contribute \$212 million to the \$1.5 billion project based on these economic benefits. This could be a model for the Rail Gateway program.

LA DOTD GRANT PROGRAMS

Rail Gateway infrastructure projects can provide substantial public benefits, including congestion relief for highway facilities, and are eligible for funding from such Highway Trust Fund programs as the Projects of Regional and National Significance Program (PRNS), the Interstate Maintenance (IM) Program, the Surface Transportation Program (STP), the National Highway System Program (NHS), the High Priority Projects Program (HPP), the National Corridors Infrastructure Improvement Program (NCIIP), the new Highway Safety Improvement Program (HSIP) and the Highway Bridge Program. Effective June 15, 2005, EPA designated Orleans Parish and Jefferson Parish as “Areas with a Maintenance Plan Requirement” under Section 110(a) (1) of the Clean Air Act, and therefore Gateway projects may be eligible for LA DOTD Congestion Mitigation and Air Quality (CMAQ) funds. These programs require state matching funds and therefore must compete with other planned DOTD projects.

Projects of Regional and National Significance: SAFETEA-LU established this new program to provide Federal assistance to large projects that have national and regional significance, and generate national and regional benefits, such as reduced congestion, and improved transportation safety. On July 24, 2006, the Department of Transportation (DOT) published a Notice of Proposed Rulemaking (NPRM) to establish the required evaluation and rating guidelines for proposed projects. The NPRM defines *applicant* as state departments of transportation. The NPRM indicates that the USDOT will be flexible in its definition of *eligible projects*; *eligible project costs* will include costs associated with non-highway facilities that are otherwise eligible for funding under the Highway Trust Fund. The NPRM establishes a \$500 million minimum threshold for PRNS proposals and requires that the proposals include preliminary engineering results, demonstrate national economic benefits, demonstrate congestion reduction, demonstrate safety benefits, disclose public-private partnership agreements, identify associated new technology and document environmental analysis results. With the completion of this Feasibility Analysis project and preliminary engineering as required by the NPRM, the Gateway Program will be eligible for funding from the PRNS program. Unfortunately, all PRNS funding authorized by SAFETEA-LU has been allocated to other projects. Completion of environmental and preliminary engineering results will position Gateway Program improvements to receive funding from future Highway Trust Fund authorizations beginning in FY 2010.

Interstate Maintenance Program provides funding for resurfacing, restoring, rehabilitating and reconstructing routes on the Interstate System. Gateway interstate reconstruction projects are eligible for IM program funds. The LA DOTD allocation for the IM program for FY 2005-2009 is \$424,598,104.

Surface Transportation Program provides flexible funding that may be used for a wide range of projects, including projects on Federal and state roads, bridge projects on any public road, and transit capital projects. Gateway NHS reconstruction projects, bridge projects, and grade separation and closure projects on State roads are eligible for STP funding. The LA DOTD allocation for STP for FY 2005-2009 is \$485,741,428.

National Highway System Program provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. For example, the Almonaster Bridge (a Gateway project) is a link in the area intermodal network and is on the NHS. SAFETEA-LU allocated \$391,819,557 to Louisiana for NHS projects for FY 2005-2009.

High Priority Projects Program provides designated funding for specific projects identified in Transportation Authorization legislation. Nationally, HPP funds are allocated to a full range of highway projects. SAFETEA-LU allocated \$282,400,000 million to Louisiana for specific HPP projects for FY 2005-2009. Gateway projects were limited to \$400,000 for Almonaster Bridge.

[National Corridor Infrastructure Improvement Program](#) is a discretionary program that provides funding for construction of highway projects in corridors of national significance to promote economic growth and international or interregional trade. SAFETEA-LU allocated \$230 million to Louisiana for specific corridors for FY 2005-2009. No Gateway projects were included in this allocation.

[Highway Safety Improvement Program](#) provides funding to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. Gateway separation and closure projects are eligible for program funding under the HSIP. The LA DOTD allocation for HSIP for FY 2005-2009 is \$68,736,022.

[Highway Bridge Program](#) provides funding for the rehabilitation of highway bridges and bridges of intermodal importance. Rehabilitations of the Huey P long and Almonaster Bridges are eligible for Highway Bridge Program funds administered by LA DOTD. The LA DOTD Bridge Program allocation for FY 2005-2009 is \$607,913,623.

[CMAQ](#) funds may be used for projects that support the attainment of a national ambient air quality standard or for the maintenance of a national ambient air quality standard in a maintenance area. The LA DOTD CMAQ allocation for FY 2005-2009 is \$42,507,531.

FRA ADMINISTERED GRANT PROGRAMS

SAFETEA-LU authorized three grants programs administered by the Federal Railroad Administration for which Gateway projects are eligible. One program, Rail-Highway Crossing Hazard Elimination in High Speed Rail Corridors, is funded with contract authority from the Highway Trust Fund. The other two, a new Rail Line Relocation Grant Program to assist the relocation of rail lines and a Corridor Development Program for existing facilities in federally designated high speed corridors, are funded with annual appropriations.

Annual appropriations provide opportunities for specific funding for specific projects (also known as earmarking). Such appropriations legislation could provide funding from above programs for Gateway projects or for specific other uses such as infrastructure projects to enhance emergency evacuation capabilities.

[Rail-Highway Crossing Hazard Elimination in High Speed Rail Corridors](#) was reauthorized by SAFETEA-LU; \$45 million in contract authority is provided for allocation among federally designated high speed rail corridors from FY 2006 through FY 2009. New Orleans is the core of the Gulf Coast High Speed Corridor, and selected Gateway grade separation and closure projects are eligible for these funds.

[Rail Line Relocation Program](#) will provide grants for the vertical or lateral relocation of rail lines for the purpose of mitigating the adverse effects of rail traffic on safety, motor vehicle traffic flow, community quality of life, or economic development. At this time FRA has not issued implementing regulations for the program. Under Section 9002 of SAFETEA-LU, however, Gateway grade separation projects are clearly eligible for Rail Line Relocation grants; \$350 million is authorized each year for fiscal years 2006-2009. It is important to note that an annual appropriation is required to access the Rail Line Relocation Program. Such appropriations legislation provides opportunities to specify amounts of funding for specific projects (also known as earmarking).

[High Speed Rail Corridor Development Program](#) will provide grants for activities in support of the development of higher speed service in federally designated high speed corridors, including environmental documentation, preliminary engineering and design and acquisition of track and signal equipment. The New Orleans Rail Gateway is part of the Gulf Coast High Speed Corridor, and Gateway projects on identified segments may be eligible for Corridor Development Grants; \$70 million is authorized each year for fiscal years 2006-2013. Annual appropriations are required also required for the Corridor Development Program. Such appropriations legislation provides opportunities for specific funding for specific projects (also known as earmarking).

DISASTER RECOVERY AND MITIGATION GRANT PROGRAMS

The Federal Emergency Management Administration (FEMA) provides grants to assist disaster recovery and mitigation efforts. FEMA provides the following programs which may be available to Gateway projects:

[Hazards Mitigation Grant Program](#) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

[Flood Mitigation Assistance Program](#) provides grants to assist the reduction of risks of flooding damage to structures insurable under the National Flood Insurance Program. Examples of projects include elevation, acquisition, or relocation of structures.

[Pre-Disaster Mitigation Program](#) provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations.

CREDIT PROGRAMS

Innovation in transportation finance was a key feature in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). SAFETEA-LU has built on the innovations in ISTEA and established and expanded eligibility to rail infrastructure improvements. Railroad infrastructure improvements are eligible for credit assistance from three Federal transportation credit programs:

1. Transportation Infrastructure Finance and Innovation Act (TIFIA),
2. Private Activity Bonds, and
3. Railroad Rehabilitation and Improvement Financing.

Transportation Infrastructure Finance and Innovation Act (TIFIA)

TIFIA will provide credit assistance to projects of national or regional significance and to railroad projects that provide public benefits. Assistance can be in the form of loans, loan guarantees or lines of credit. As the fourth largest East-West rail gateway and the second largest East-West intermodal gateway in North America, the New Orleans rail gateway has both National and Regional significance. Gateway projects will also provide substantial public benefits. Consequently, the Gateway and select individual projects (project cost in excess of \$50 million) may be eligible for TIFIA assistance, depending on the results of appropriate financial analysis. Any of the State and local stakeholders or consortia of such stakeholders may apply for TIFIA assistance.

Private Activity Bonds (PAB)

The PAB program will provide \$15 billion in exempt facility bonds not subject to state volume caps for projects eligible for funding from the Highway Trust Fund. Any surface transportation project which eligible to receive Highway Trust Funds is qualified to benefit from private activity bonds. Since TIFIA eligible projects—which include private rail facilities that provide public benefits—are eligible for Highway Trust Funds, Gateway rail projects are eligible for private activity bonds. After completion of appropriate financial analysis, PAB's may be included in funding for the Gateway program. Any of the State and local stakeholders or consortia of such stakeholders may be a sponsor of a project that receives PAB assistance.

Railroad Rehabilitation and Improvement Financing (RRIF)

RRIF can be used to provide loans and loan guarantees for a full range of railroad projects. All Gateway program railroad projects may be eligible for assistance under this program, depending on results of appropriate financial analyses. SAFETEA-LU increased the limitation on outstanding loans and loan guarantees to \$35 billion and made a number of changes designed to make the program more attractive to potential users. Any of the State and local stakeholders or consortia of such stakeholders may apply for RRIF assistance.

GATEWAY INFRASTRUCTURE IMPROVEMENT PROJECTS AND FINANCIAL ASSISTANCE OPTIONS

The public-private partnership has proposed a program of railroad and highway improvements across the New Orleans rail gateway. The improvements will provide substantial private and public benefits and are eligible for funding from a variety of funding sources. An individual project’s eligibility for assistance from a particular Federal financial assistance program will vary depending on its specifics, including whether the proposed improvement would involve a Federal or state road, whether it is on a Federally designated high speed rail corridor and would support future high speed passenger service, and whether there is an identified source of attributable future revenues. The following discussion identifies eligible sources funding for each project in the proposed Gateway Program, beginning with projects on the West bank of the Mississippi and proceeding eastward across the Gateway.

Funding for West Bank Projects

The West Bank segment of the New Orleans Rail Gateway program includes grade separation of Live Oak Boulevard, Willswood Road and Avondale Garden Road, and closure of George Street; and railroad improvements, including new siding and mainline tracks, and signal and train control upgrades. Beneficiaries will include local communities, motorists, freight railroads and Amtrak.

West Bank Segment Grade Crossing Separation and Closure Projects will reduce vehicle delay and associated pollutant emissions enhance traffic safety and reduce the incidence of blocked crossings on local public roads. These projects, which are not on the State roads system, are eligible for funding by a combination of FRA Rail Line Relocation capital grants, and LA DOTD HSIP grants. Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including freight railroads). Currently, there is not a source of State funding for the match.

Projects do not meet TIFIA size threshold, and assistance from the PAB program is unlikely because of a lack of a readily identifiable source of future revenues.

These projects would not directly assist disaster recovery or hazard mitigation efforts and may not be eligible for FEMA recovery and mitigation grants.

Potential Funding

West Bank Segment Grade Separation(g)/Closure(c) Projects:
<ul style="list-style-type: none"> • Avondale Garden Road(g) • Live Oak Boulevard (g) • Willswood Road(g) • George Street (c)
Public Funding Sources:
<ul style="list-style-type: none"> • FRA-Grants-Rail Line Relocation • LA DOTD-HSIP • State/local Match-?
Private Funding Sources:

West Bank Segment Railroad Projects will reduce train delay and locomotive emissions, and enhance throughput for existing and future freight and passenger service. Additionally, West Bank railroad improvements would greatly facilitate the region’s emergency evacuation plans for future hurricanes by providing a flexible and efficient evacuation route to the west. Thus, the railroad improvements could be eligible for CMAQ funds and assistance from any Federal or State funding for hurricane emergency evacuation preparation.

Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including Freight railroads) and credit programs. Currently, there is not a source of State funding for the match.

Credit assistance may be available from RRIF; but such assistance is unlikely because of a lack of a readily identifiable source of future revenues.

These projects would not directly assist disaster recovery or hazard mitigation efforts and may not be eligible for FEMA recovery and mitigation grants.

Potential Funding

West Bank Segment Railroad Projects:
<ul style="list-style-type: none"> • Extend Centralized Traffic Control (CTC) • Add Lead and Mainline Track • Upgrade Track and Interlocker Controls
Public Sources:
<ul style="list-style-type: none"> • LA DOTD Grants-CMAQ • FRA Grants- • State/local Match-?
Private Sources:
RRIF Program

Funding for Huey P Long (HLP) Bridge Project

The HLP is owned by the New Orleans Public Belt railroad and carries two railroad tracks and four highway lanes of US 90 across the Mississippi River. Maintenance of the current railroad bridge requires that it is out of service in excess of 40 hours each week. Converting the railroad bridge to a ballast deck structure will greatly reduce this out of service time and reduce delays to current and future freight and passenger service. Reduction of train delay will reduce pollutant emissions from locomotives, and enhance shipper security—especially as it relates to chemical trains.

As a critical link in the NHS, improvements to the HPL would be eligible for LA DOTD STP, CMAQ, NHS, HPP and Bridge Program funding. Additionally, West Bank railroad improvements would greatly facilitate the region’s emergency evacuation plans for future hurricanes by providing a flexible and efficient route to the west. Thus, the railroad improvements could be eligible for assistance from any Federal or State funding for hurricane emergency evacuation preparation.

Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including Freight railroads). As a NHS link, the HPL is eligible for funding from the State Transportation Trust Fund, thus providing a source for State matching funds.

Credit assistance is available from TIFIA, PAB and/or RRIF, depending on future revenue streams.

Potential Funding

Ballast Deck Huey P Long Bridge:
Public Sources:
<ul style="list-style-type: none"> • LA DOTD Grants <ul style="list-style-type: none"> ○ CMAQ ○ STP ○ HPP ○ NHS ○ Bridge Program • FRA Grant- • State/local Match-State Transportation Trust Fund
Private Sources:
Credit:
<ul style="list-style-type: none"> • TIFIA • PAB • RRIF

Funding for Central Segment Projects

Two program options are considered for the Central segment of the New Orleans Rail Gateway. One, called the Back Belt option would eliminate all rail-highway crossings on the current route through Metairie. The second, called the Middle Belt option, would upgrade the rail line between the Back Belt and Front Belt rail lines. Back Belt traffic would be moved to the new Middle Belt route, and the Back Belt rail line would be removed.

Back Belt Option

The Back Belt option will complete a double track route from HLP Bridge to Carrollton Avenue with modern signal and control systems, and eliminate all grade crossings on the line through a combination of closures and grade separations.

Back Belt Grade Crossing Separation and Closure Projects will reduce vehicle delay, enhance traffic safety, reduce the incidence of blocked crossings in the community, reduce pollutant emissions from stopped trucks and autos, and facilitate higher throughput for future freight service. Back Belt grade crossing elimination projects include local roads (i.e., roads not on the State system) as well as “State roads.” Crossing projects on local roads (Atherton Drive, Hollywood Drive, Farnham Place, Oakwood Parkway and Carrollton Avenue) are eligible for funding using FRA Rail Relocation capital grants, and LA DOTD CMAQ and HSIP grants. Projects on these roads are not eligible for funding from the Louisiana Transportation Trust Fund, thus removing a source for required matching funds.

Back Belt crossing separation projects on State roads (Central Avenue, Shrewsbury Road, LaBarre Road and Metairie Road) are eligible for the above funds and also eligible for LA DOTD STP and HPP funds. As State roads, they also are eligible for funding from the Louisiana Transportation Trust Fund, thus providing a source for State matching funds.

Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including Freight railroads) and credit from TIFIA and PAB, depending on future revenue streams. The above grade crossing elimination projects would comprise a program to eliminate all crossings on the “Back Belt” section of the Gateway. Similar successful efforts on the Alameda Corridor and for the City of Reno, Nevada, have been funded using a mix of State DOT grants (including State and local match), TIFIA credit and private sources.

Potential Funding

Back Belt Grade Separation (g)/Closure (c) Projects on Local Roads: <ul style="list-style-type: none"> • Hollywood Drive(g) • Farnham Place(g) • Carrollton Avenue(g) • Atherton Drive(c) • Oakridge Parkway(c)
Public Funding Sources: <ul style="list-style-type: none"> • FRA Grants-Rail Line Relocation • LA DOTD Grants <ul style="list-style-type: none"> ○ HSIP ○ CMAQ • State/local Match-?
Private Funding Sources:

Potential Funding

Back Belt Grade Separation (g)/Closure(c) Projects on State Roads: <ul style="list-style-type: none"> • Central Avenue (g) • Shrewsbury Road (c) • LaBarre Road (g) • Metairie Road (g)
Public Funding Sources: <ul style="list-style-type: none"> • FRA Grants-Rail Line Relocation • LA DOTD Grants <ul style="list-style-type: none"> ○ HSIP ○ STP ○ HPP ○ CMAQ • State/local Match-State Transportation Trust Fund
Private Funding Sources:
Credit Programs: <ul style="list-style-type: none"> • TIFIA • PAB

[Back Belt Flood Protection Projects.](#) Modernization of the 17th Street Canal will eliminate risks of flooding from future hurricanes. This project involves the Statewide Flood Control System and may be eligible for funding from the State Transportation Trust Fund. The project may also be eligible for FEMA Hazard Mitigation Funds.

Back Belt Railroad Projects will reduce related train delay and enhance throughput for existing and future freight service. These projects will also support planned high speed passenger operations on the Western and Eastern segments of the Gateway and may be eligible for funding from the FRA HSR Corridor Development program.

Private funds can be used in conjunction with above Federal grant funds, and state and local match funds. Currently, there is no identifiable source of funds for a State/local match.

RRIF credit assistance may be available, depending on results of appropriate financial analysis.

Potential Funding

Back Belt Railroad Projects: <ul style="list-style-type: none"> • Upgrade East Bridge Signal and Control Hardware • Extend Double Track to 17th Street Canal • Extend CTC to 17th Street Canal • Double Track Route to Metairie Rd • Install East City Junction Crossover • Add City Park Third Track • Revise Elysian Fields Track and Signals • Install New NE Tower Rail – Rail Connection • Upgrade NE Tower CTC
Public Sources: <ul style="list-style-type: none"> • FRA Grant-HSR Corridor Development • State and Local Match-?
Private Sources:
RRIF

Middle Belt Option

The Middle Belt relocates the Back Belt line to create a double track route from HPL Bridge to East City Junction, with modern switches, signal hardware and control equipment. This project will eliminate eight at-grade road crossings and will reduce vehicle delay, enhance traffic safety, reduce the incidence of blocked crossings in the community, reduce pollutant emissions from stopped trucks and autos, and facilitate higher throughput for future freight service. To create the double track route, extensive modification will be undertaken on Gateway NHS links, including I-10. The project also includes the removal of tracks, roadbed, grade crossings and other structures on the Back Belt.

Middle Belt Railroad Projects will relocate Back Belt traffic to an upgraded and modern, double track route. It will eliminate grade crossings on the Back Belt and will be eligible for FRA Relocation grants. These Middle Belt improvements will reduce passenger and freight train delays, and support planned higher speed passenger operations on the Western and Eastern segments of the Gateway and would be eligible for FRA Corridor Development funds. Middle Belt projects will also provide support for planned rail emergency evacuation service.

Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including freight railroads) and credit programs. Credit assistance may be available from RRIF; but such assistance is unlikely because of a lack of a readily identifiable source of future revenues. Currently, there is not a source of State funding for the match.

Potential Funding

Middle Belt Railroad Projects: <ul style="list-style-type: none"> • Upgrade Signal and Control Systems • Add Track and Sidings • Install East City Junction Crossover • Add City Park Third Track • Revise Elysian Fields Track and Signals • Install New NE Tower Rail – Rail Connection • Upgrade NE Tower CTC
Public Sources: <ul style="list-style-type: none"> • FRA <ul style="list-style-type: none"> ○ Rail Line Relocation ○ HSR Corridor Development • State and Local Match-?
Private Sources:
RRIF

Roadway Reconstruction. Associated reconstruction of roadways and bridges needed to create the Middle Belt rail line may be eligible for funding under the FRA Rail Line Relocation program and certain LA DOTD grant programs. To build the proposed Middle Belt route, reconstruction will be required on the following roads: Deckbar Avenue/Earhart Boulevard Interchange, Earhart Boulevard, Palmetto Street, I-10/Carrollton Avenue overpass, and City Park Avenue. Palmetto Street, Carrollton Avenue and City Park Avenue are local streets, and may be eligible for Rail Line Relocation grants. There is no identified source of State/local match.

Deckbar Avenue, Earhart Boulevard and I-10 are State/Federal roads and reconstruction projects on them are eligible for LA DOTD STP, HPP, HSIP and Bridge programs; reconstruction projects on I-10 may also be eligible for LA DOTD Interstate Maintenance funds. Reconstruction projects on the State/Federal roads also are eligible for funding from the Louisiana Transportation Trust Fund, thus providing a source for State matching funds.

Potential Funding

Middle Belt: Reconstruction on local Roads: <ul style="list-style-type: none"> • Palmetto Street • Carrollton Avenue • City Park Avenue
Public Sources: <ul style="list-style-type: none"> • FRA Grants-Rail Line Relocation • State and Local Match-?
Private Sources:

Potential Funding

<p>Middle Belt: Reconstruction on State/Federal Roads:</p> <ul style="list-style-type: none"> • Deckbar Avenue/Earhart Boulevard. Interchange • Earhart Boulevard (Main Roadway) • I-10/Carrollton Avenue overpass
<p>Public Sources:</p> <ul style="list-style-type: none"> • FRA Grants-Rail Line Relocation • LA DOTD <ul style="list-style-type: none"> ○ IM ○ NHS ○ HPP ○ STP ○ HSIP ○ CMAQ ○ Highway Bridge • State/local Match- Transportation Trust Fund
<p>Private Sources:</p>
<p>Credit Sources:</p> <ul style="list-style-type: none"> • TIFIA • PAB

Funding for Eastern Segment Projects

The eastern segment of the New Orleans Rail Gateway program includes grade crossing separation and closure projects, a bridge replacement and railroad improvements, including new siding and mainline tracks, and signal and train control upgrades. Beneficiaries will include local communities, motorists, freight railroads and Amtrak.

Eastern Segment Highway-Rail Grade Separation and Closures Projects will reduce vehicle delay and associated pollutant emissions, enhance traffic safety, reduce the incidence of blocked crossings in the community, and facilitate higher throughput for future passenger and freight service. There are seven crossing projects in the Eastern segment; six involve local streets and one, I-510 (frontage road), involves a link on the NHS. The six closure projects on local roads are eligible for FRA Rail Line Relocation and Hazard Elimination grants, and LA DOTD HSIP and CMAQ grants. There is no identified source for State/local match funding for projects on these local roads.

The I-510 crossing closure project is eligible for FRA Hazard Elimination grants, and LA DOTD, NHS, HPP, STP, CMAQ and HSIP grants. As a State road, it also is eligible for funding from the Louisiana Transportation Trust Fund, thus providing a source for State matching funds.

Potential Funding

Eastern Segment Grade Crossing (g)/Closure (c) Projects on Local Roads: <ul style="list-style-type: none"> • Louisa Street(c) • Industrial Parkway(g) • Gentilly Highway(c) • Read Boulevard (g) • Michoud Boulevard (g)
Public Sources: <ul style="list-style-type: none"> • FRA <ul style="list-style-type: none"> ○ HSR Hazard Elimination ○ Rail Relocation • LA DOTD Grants- HSIP • State/local Match-?
Private Sources:

Potential Funding

Eastern Segment Grade Crossing Projects on State Roads: <ul style="list-style-type: none"> • I-510 Frontage Road (c)
Public Sources: <ul style="list-style-type: none"> • LA DOTD Grants: <ul style="list-style-type: none"> ○ NHS ○ HPP ○ CMAQ ○ STP ○ HSIP • FRA-HSR Hazard Elimination • State/local Match-Transportation Trust Fund
Private Sources:

[Eastern Segment Railroad Projects](#) will reduce delay and enhance throughput for existing and future freight and passenger rail service. The projects would also provide support for SRRTC plans for high-speed service and would be eligible for FRA HSR Corridor Development grants for environmental review and documentation, and design and preliminary engineering. Eastern segment railroad projects would greatly facilitate the region’s emergency evacuation plans for future hurricanes by providing a flexible and efficient route to the east. Thus, the railroad improvements could be eligible for assistance from any Federal or State funding for emergency evacuation preparation.

Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including Freight railroads) and credit from the RRIF program, depending on future revenue streams.

Potential Funding

Eastern Segment Railroad Projects: <ul style="list-style-type: none"> • Add New Track at Gentilly yard
Public Sources: <ul style="list-style-type: none"> • LA DOTD CMAQ Funds • FRA-HSR Corridor Development Funds • State/local Match-?
Private Sources:
RRIF

Almonaster Bridge Rehabilitation

The Almonaster Bridge is owned by the Port of New Orleans and is a vital element of the region's intermodal network and is on the NHS. Major improvements will reduce train and vehicle delay, and enhance shipper security. A \$400,000 project development earmark is included in SAFETEA-LU, and Almonaster Bridge improvements are also eligible for LA DOTD NHS, HPP, STP and Bridge Program funds.

Funds from the above Federal grant programs plus required State/local matching funds would be used in combination with funds from private sources (including Freight railroads). The Almonaster Bridge is eligible for funding from the Louisiana Transportation Trust Fund, thus providing a source for State matching funds.

Credit assistance is available from TIFIA, PAB and/or RRIF, depending on future revenue streams.

Potential Funding

Almonaster Bridge Rehabilitation:
Public Sources:
<ul style="list-style-type: none">• LA DOTD Grants:<ul style="list-style-type: none">○ STP○ NHS○ HPP○ CMAQ○ Highway Bridge Program• Public Sources-State Transportation Trust Fund
Private Sources:
Credit Programs:
<ul style="list-style-type: none">• TIFIA• PAB• RRIF

FUNDING PROGRAMS AND RAIL GATEWAY PROJECTS

The previous discussions demonstrate the eligibility of individual Gateway projects for funding under multiple grant and credit programs. Similarly, individual grant and credit programs can be used to fund multiple Gateway projects. This section identifies different Gateway projects which may be funded under individual grant and credit programs.

FEDERAL GRANTS

FRA grant programs (Rail Relocation, HSR Corridor Development and HSR Hazard Elimination) have the advantage as a source of funding for Gateway projects in that they are dedicated for rail purposes and therefore there is less competition for the funds for other uses. The big disadvantage for the two largest FRA grant funds is that an annual Congressional appropriation is required before the funds become available and then there can be a wide open competition for the funds among multiple rail projects.

LA DOTD grant programs (STP, CMAQ, HSIP and Bridge Program) have the advantage as a source of funding for Rail Gateway projects in that Transportation Trust Funds do not require an appropriation, and also that the decision to award funds is made by LA DOTD. The big disadvantage with LA DOTD Programs as a source of funding for Gateway projects is that there are an abundance of existing and planned uses for STP, HSIP and Bridge Program funds, and it is sometimes difficult to allocate substantial amounts to new uses such as represented by Rail Gateway Program projects.

The Federal Emergency Management Administration (FEMA) provides grants that may be used for Gateway flood mitigation efforts.

FRA Programs

- Rail Line Relocation. SAFETEA-LU (§ 9002) authorized \$350 million/year for vertical or horizontal relocation (FY 2005-2009). Availability of these funds is only through annual Congressional appropriation. Note that the FY 2006 Transportation Appropriation was enacted 30 November 2005 shortly after creation of the Rail Line Relocation Program in SAFETEA-LU (August 10, 2005). To date Congress has not funded the Rail Line Relocation Program. Eligible Gateway projects for the Rail Line Relocation Program are:
 - Gateway grade separation projects:
 - Avondale Garden Road,
 - Live Oak Road
 - Willswood,
 - Central,
 - Shrewsbury,
 - Labarre Road,
 - Hollywood Drive,
 - Farnham Place,
 - Metairie Road,
 - Carrolton Avenue,
 - Read Boulevard,
 - Michoud Boulevard,
 - Industrial Boulevard,
 - Louisa Street.
 - Middle Belt railroad construction and related road and bridge reconstruction projects.

- HSR Corridor Development. SAFETEA-LU (§ 20154) authorized \$70 million/year for development activities on projects in support of higher speed passenger service on Federally designated HSR corridors (FY 2006-2013). Availability of these funds is only through annual Congressional appropriation. Environmental analyses, design and preliminary engineering and acquisition of certain long lead items on Gateway projects below are eligible for HSR Corridor Development grants:
 - Upgraded Interlocker Controls at East Bridge Junction,
 - Relocated Switch at Carrollton Junction,
 - New Crossover at East City Junction,
 - Third Track between Marconi Drive and Oliver Yard,
 - Reconfiguration of Track and Signal Upgrade at Elysian Fields,
 - New connection and CTC at NE Tower,
 - Gentilly Yard Bypass Track.

- HSR Hazard Elimination. SAFETEA-LU (§ 1103 (f)) apportioned \$44.750 million for the elimination of grade crossing hazards on federally designated HSR corridors for the years FY 2006-FY 2009. These funds are available without appropriation. Eligible Gateway projects include crossings at:
 - Central Avenue,
 - Shrewsbury Road,
 - Read Boulevard,
 - Michoud Boulevard,
 - Industrial Boulevard,
 - Louisa Street,
 - Gentilly Highway,
 - I-510.

LA DOTD PROGRAMS

- Interstate Maintenance Program. SAFETEA-LU will provide \$424,598,104 to LA DOTD for IM projects throughout the State of Louisiana (FY 2005-2009). Along with other Interstate maintenance projects throughout the State, Gateway projects eligible for the LA DOTD IM grants are:
 - Reconstruction of I-10/Carrollton Avenue for the Middle Belt Option,
 - Elimination of the I-510 frontage road rail crossing.

- National Highway System. SAFETEA-LU will provide \$391,819,557 to LA DOTD for NHS projects throughout the State of Louisiana (FY 2005-2009). Along with other NHS projects throughout Louisiana, Gateway projects eligible for the LA DOTD NHS grants are:
 - HPL Bridge reconstruction,
 - I-10/Carrollton Avenue reconstruction,
 - Almonaster Bridge reconstruction.

- High Priority Projects. SAFETEA-LU will provide \$282,400,000 to LA DOTD for specific projects throughout the State of Louisiana (FY 2005-2009); \$400,000 of this amount is authorized for Almonaster Bridge reconstruction. The first opportunity for additional HPP funding for Gateway projects is in next reauthorization of Highway Trust Fund in FY 2010.
- Projects of Regional and National Significance. SAFETEA-LU will provide no funds to LA DOTD for PRNS in Louisiana (FY 2005-2009). No PRNS funds are available for Gateway projects. The first opportunity for PRNS funding for Gateway projects is in next reauthorization of Highway Trust Fund in FY 2010.
- Surface Transportation Program. SAFETEA-LU will provide \$485,741,428 from the STP program to LA DOTD for a wide range of highway, transit and bridge projects throughout the State of Louisiana (FY 2005-2009). Along with such projects throughout the State, Gateway projects eligible for STP grants are:
 - Grade separation on State/Federal Roads
 - Central Avenue
 - Shrewsbury Road
 - Metairie Road
 - I-510 Frontage Road (closure)
 - Reconstruction
 - HLP and Almonaster bridges
 - For Middle Belt
 - Deckbar Avenue/Earhart Boulevard interchange
 - Earhart Boulevard
 - I-10/Carrollton Avenue
- National Corridor Infrastructure Improvement Programs. SAFETEA-LU will provide \$230 million to LA DOTD for such corridor projects throughout the State of Louisiana (FY 2005-2009). All funding has been earmarked. No Gateway projects were included. The first opportunity for NCIIP funding for Gateway projects is in next reauthorization of Highway Trust Fund in FY 2010.
- Highway Safety Improvement Program. SAFETEA-LU will provide \$68,736,022 from the HSIP program to LA DOTD for highway safety improvements on public roads throughout the State of Louisiana; this amount includes \$18,219,832 identified for grade crossing safety improvements under the Section 130 Program (FY 2005-2009). Along with safety improvements throughout the State, all Gateway grade crossing separations and closures are eligible for LA DOTD HSIP funding:
 - Avondale Garden Road.
 - Live Oak Road.
 - Willswood.
 - George Street.
 - Central.
 - Shrewsbury.
 - Labarre Road.

- Hollywood Drive.
 - Farnham Place.
 - Metairie Road.
 - Carrollton Avenue.
 - Read Boulevard.
 - Michoud Boulevard.
 - Industrial Boulevard.
 - Louisa Street.
 - Gentilly Highway.
 - I-510 Frontage Road.
- Highway Bridge Program. SAFETEA-LU will provide \$607,913,623 from the Highway Bridge program to LA DOTD for bridge improvements throughout the State of Louisiana (FY 2005-2009). Along with bridge improvements throughout the State, Gateway bridge improvements eligible for Highway Bridge grants are:
 - Huey P Long and
 - Almonaster.
 - Airline Drive/Tulane Avenue.
 - Palmetto Street Overpass.
 - CMAQ Program. SAFETEA-LU will provide \$42,507,531 to LA DOTD for transportation improvements that support the attainment of a national ambient air quality standard; or the maintenance of a national ambient air quality standard in a maintenance area (FY 2005-2009). Prominent among Gateway projects which may be eligible for CMAQ funds are HLP and Almonaster bridge improvements, improved railroad signal projects, new rail-rail connections and grade separation projects.

FEMA Programs

- Hazards Mitigation Grant Program provides grants to implement long-term hazard mitigation measures. A Gateway project which may be eligible for Hazard Mitigation Grants is the Modernization of 17th Street Canal.
- Flood Mitigation Assistance Program provides grants to assist the reduction of risks flooding damage to structures insurable under the National Flood Insurance Program. No Gateway projects appear eligible for these grants.
- Pre-Disaster Mitigation Program provides funds for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. No Gateway projects appear eligible for these grants.

CREDIT ASSISTANCE

As the fourth largest East-West rail gateway in North America and the second largest intermodal gateway in North America, the New Orleans Rail Gateway has both National and Regional significance. The Gateway Program will also provide substantial public benefits. As a result of its national significance and that it will provide substantial public benefits, Gateway projects are eligible for assistance under three principal Federal transportation credit programs.

1. Transportation Infrastructure Finance and Innovation Act.
2. Private Activity Bonds.
3. Railroad Rehabilitation Infrastructure Finance.

TIFIA and PAB programs are administered by US DOT and RRIF by the Federal Railroad Administration. Each program requires that eligible projects meet certain financial tests before being deemed qualified for financial assistance, including the availability of an adequate future revenue stream. In general, projects proposed for credit assistance from the above programs should—

- Have public or private partners who are eligible applicants,
- Have major elements which are eligible for funding from NHS, STP, HPP and other programs of the Highway Trust Fund,
- Include major elements which are eligible for funding from the Louisiana Transportation Trust Fund, thus providing a source for the State/local match,
- Have estimated costs in excess of \$50 million,
- Provide substantial public benefits, and
- Provide private benefits that enable a stream of future revenues.

TIFIA and PAB can provide credit assistance for Gateway projects which meet a \$50 million size threshold and generate a future revenue stream. Potential projects include:

- Reconstruction of the Huey P Long Bridge to include a ballasted rail deck,
- Elimination of grade crossings through Metairie,
- Reconstruction of highways and bridges for construction of the Middle Belt rail line and
- Reconstruction of the Almonaster Bridge.

RRIF can provide credit assistance for all Gateway rail projects. Gateway rail projects which have a potential for future revenue streams include:

- Construction of a ballasted rail deck on the Huey P Long Bridge,
- Elimination of grade crossings through Metairie,
- Construction of the Middle Belt rail line and
- Replacement of rail deck on the Almonaster Bridge.

SUMMARY

Millions of dollars in Federal, State and private funding are potentially available to support implementation of New Orleans Rail Gateway Program projects. Timely and successful implementation will require preparation of funding packages for individual projects which combine, as appropriate, funds from Federal grant programs, assistance from Federal credit programs, State and local matching funds, and contributions from private sources. Successful funding packages will use a mix of the above sources, depending on project eligibility, e.g., whether the project involves a Federal or state road, public or private ownership, mix of passenger and freight usage, future streams of revenue, etc.

Federal Grants. As described previously, New Orleans Rail Gateway projects are eligible for funding from several Federal grant programs administered by LA DOTD and FRA. Substantial funding is potentially available from these sources. For example, the Middle Belt project is potentially eligible for funding from seven grant program administered by LA DOTD and the FRA Rail Line Relocation grant program. Millions are available for the Middle Belt from these programs; however, there is intense competition for these grant funds, and high demand for funding from the programs has built up over time. The reality of this competition and demand backlog for grant funds for existing and planned uses significantly reduces the actual availability of funding from these sources for Rail Gateway Projects.

A possible exception to this demand backlog is the FRA Rail Line Relocation Program which is a new grant program. The Rail Line Relocation Program is authorized at \$350 million per year for FY 2005-FY 2009. This program appears to be ideal for the Old Metairie grade crossing elimination projects, the Middle Belt construction program and other Gateway grade crossing separation projects. It should be noted, however, that this authorized funding is available only with a Congressional appropriation. Thus, enactment of an appropriation which adequately funds the Rail Line Relocation program is an absolute necessity. Gateway projects would compete well for any appropriations for this program.

Federal Credit Assistance. With the enactment of SAFETEA-LU, Gateway projects are eligible for expanded use of Federal Transportation credit programs, including TIFIA, Private Activity Bonds, and Railroad Rehabilitation and Improvement Financing. The Huey P Long and Almonaster bridge projects, and the Middle Belt and Back Belt projects will provide substantial public and private benefits and could use financing under TIFIA, the Private Activity Bond program or the RRIF program, depending on results of appropriate financial analyses.

State and Local Funds. State/local matching funds are needed to access the above Federal programs for Gateway projects. State Transportation Trust Funds are a potential source of matching funds for the HLP and Almonaster bridge projects, and for other Gateway projects that involve construction on State and Federal roads. Currently, there is no source of identified State/local match for Gateway projects on non-State roads, and obtaining matching funding for grade separation and road reconstruction projects on Carrollton Ave, City Park Avenue and other local roads will be especially challenging. Also, there is no identified source of matching funds for railroad projects.

Private Funds. Private funds, including participation by freight railroads, are another source of project funding. In the CREATE project, participating railroads agreed to contribute \$212 million to the \$1.5 billion project based on the benefits that would be derived by the industry.

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 6 Environmental Determination Strategies

ENVIRONMENTAL DETERMINATION STRATEGIES FOR NEW ORLEANS RAIL GATEWAY

Expediting Environmental Determinations for New Orleans Rail Gateway Program

All Federal Actions, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by a federal agency, are covered under the National Environmental Policy Act of 1969 (NEPA). The primary objectives of NEPA are that an Agency have available and fully consider detailed information regarding environmental effects at the time a decision is made and that this same information be made available to interested and/or affected persons, agencies and organizations before decisions are made and before actions are taken. The New Orleans Gateway program will be partly financed with federal funds and is considered a Federal Action that falls under NEPA.

As described in the Executive Summary, the New Orleans Gateway Program is a public/private partnership that provides an extraordinary transportation improvement opportunity for the busy and complex Gateway rail network. This multi-modal program (freight rail, passenger rail and highway) capitalizes on the spirit of collaboration amongst competitors to provide significant benefits to the region.

However, along with this partnership comes an environmental challenge that must be overcome to succeed both with the New Orleans Gateway Project and the NEPA process. Environmental challenges include the partners' expectations that for New Orleans Gateway to be successful, the component projects will be implemented without excessive delays, the New Orleans Gateway objectives will be achieved and the benefits from New Orleans Gateway will be maximized. At the same time, for the NEPA process to be successful, the public confidence in the integrity of the process must be maintained, impacts must be avoided or minimized, and environmental benefits must be maximized. The traditional methods to handle the environmental analysis for the component projects would be on a project-by-project basis or with a Tiered or Programmatic Environmental Impact Statement (EIS) for the New Orleans Gateway Program as a whole. Each of these methods has their advantages and disadvantages. The project-by-project method, while seeming logical in the eyes of the partners in that it would allow them to pick and choose projects for construction sequencing and would allow a quick start to the low risk projects, could be vulnerable to legal challenges related to segmentation. If challenged legally, major delays could then be experienced. If a Tiered EIS is utilized, vulnerability to legal challenges due to segmentation would be limited. However, the Tiered EIS approach would be considered overkill for the low risk projects and would unnecessarily delay the start of these low risk projects until the completion of the Tiered EIS.

The same challenges were faced by the Chicago Regional Environmental and Transportation Efficiency (CREATE) program, an earlier multimodal program of freight rail, passenger rail and highway improvements in the Chicago region. For CREATE, the answer was to develop a NEPA compliant and expeditious method of moving low risk component projects forward while assessing potential environmental impacts in an appropriate way. In response to such competing goals, the FHWA Illinois Division Office, in cooperation with the Illinois Department of Transportation and the Chicago Department of Transportation, developed the Systematic, Project Expediting, Environmental Decision-making (SPEED) Strategy (flow chart not included). We believe that the SPEED Strategy can address the New Orleans Gateway Program in total: It supports systematic decision-making; it provides an expeditious method of moving low risk component projects forward; and it assesses potential environmental impacts in a proportional, graduated way.

The remainder of this section discusses the application of this iterative NEPA compliant decision-making strategy developed for CREATE to the New Orleans Gateway Program. Appendices 1 and 2 initiate development of documentation which will be required for future environmental studies.

SYSTEMATIC PROJECT EXPEDITING ENVIRONMENTAL DECISION

Making (SPEED) Strategy for the New Orleans Rail Gateway Program

The SPEED process for the New Orleans Rail Gateway Program began with the development of the New Orleans Gateway Infrastructure Improvement Project document by the Railroad Industry Group in October 2004. The document included the Program Level Goals and Strategies, Project Selection Criteria, List of Component Projects, a description of the National Public Benefits as a result of the New Orleans Rail Gateway, and a description of the Local and Regional Benefits as a result of New Orleans Gateway Project. The document has been reviewed, updated, and serves as the basis for development of the Feasibility Plan.

In the adaptation of the SPEED process, all Rail Gateway improvement proposals were first subjected to a systematic analysis to clearly define each project—whether a stand alone project or a linked project. A draft purpose and need statement was developed for each project. Second an initial draft preliminary *Environmental Class of Action Determinations* (ECAD) was undertaken for each project. Future environmental studies will develop appropriate environmental documentation for each stand alone project and each component of linked projects.

Project Definition: Purpose and Need Statement

Gateway program improvements were reviewed individually and in conjunction with adjacent projects to define each project for environmental review purposes. A key aspect of project definition is whether an improvement is a stand-alone project or whether it is a component of a group of linked projects. To distinguish whether a proposal was stand-alone versus linked, each proposed improvement was subjected to three tests: 1) sufficiency of scope, 2) independent utility, and 3) restriction of alternatives. A proposed improvement is a component of a linked project or stand-alone project based on the result of this assessment. This process is illustrated in Figure 1.

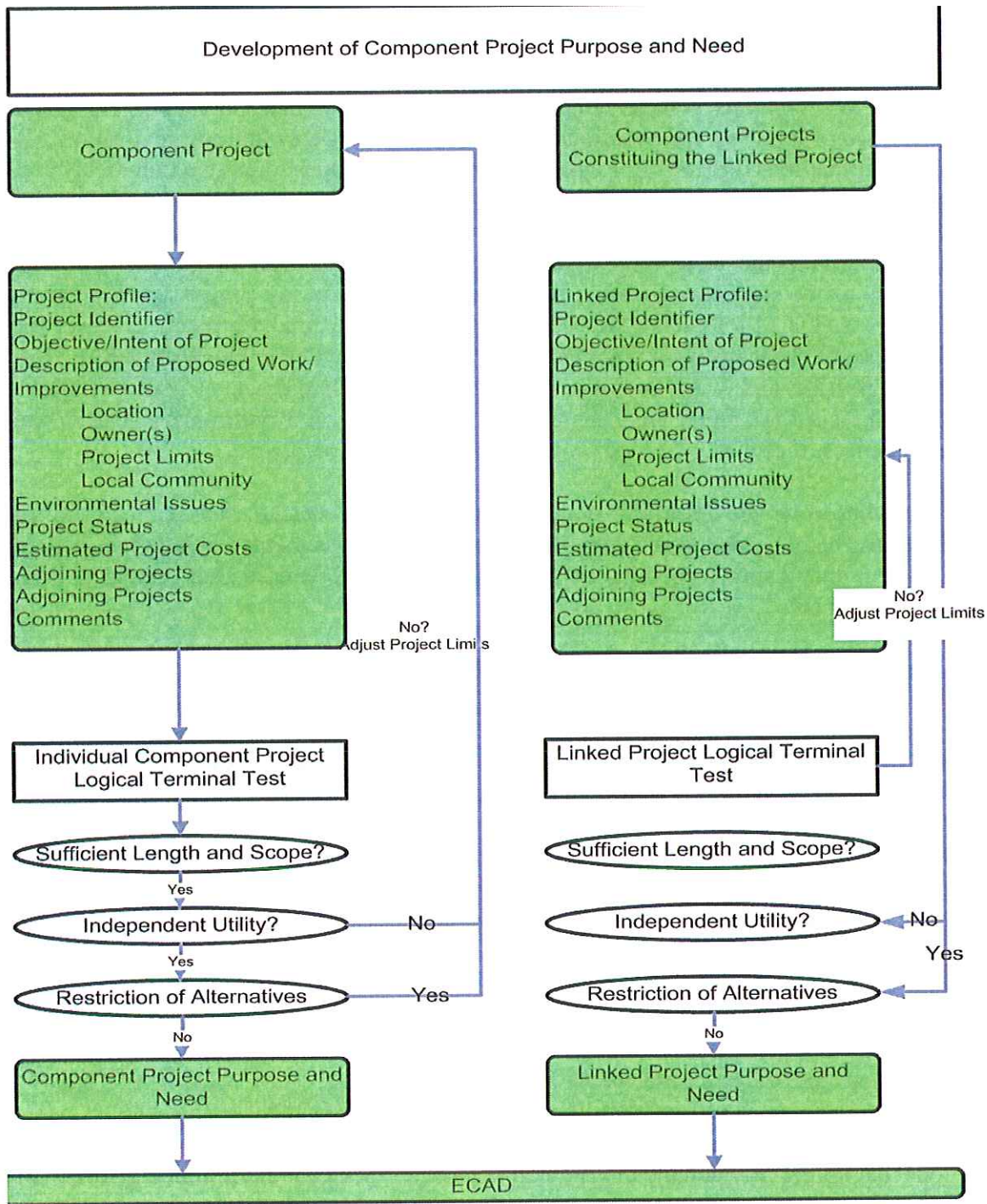


Figure 6-1

The Gateway Program contains a wide range of infrastructure projects, including 1) grade separation or closure of highway rail crossings to reduce motorist delay and improve safety, 2) rehabilitation of rail facilities on Huey P. Long and Almonaster bridges to reduce train delay and enhance shipper security, 3) additional railroad track and crossovers, rail signal upgrades and other rail infrastructure improvements to facilitate movement of trains, and 4) reconstruction of certain roads to facilitate the development of safer, more efficient rail operations. Table 1 summarizes results of the stand-alone versus linked analysis of Gateway projects, and presents purpose and need statements for each stand-alone project and each linked project. (Details for Table 1 are in Appendix 1 Gateway Component Project Preliminary Screening Worksheet). The table identifies objective and work to be accomplished for each project. Finally, Table 1 identifies potential issues for future environmental studies, based on a preliminary scan of the expected consequences of each stand-alone project and each linked project.

In Table 1, the white rows are for stand-alone projects; the gray shaded rows indicate linked projects, while the blue shaded rows identify individual improvements included in linked projects. Also note that Table 1 contains both the Back Belt and Middle Belt options for the Central Gateway Segment.

Environmental Class of Action Determination (ECAD) Process

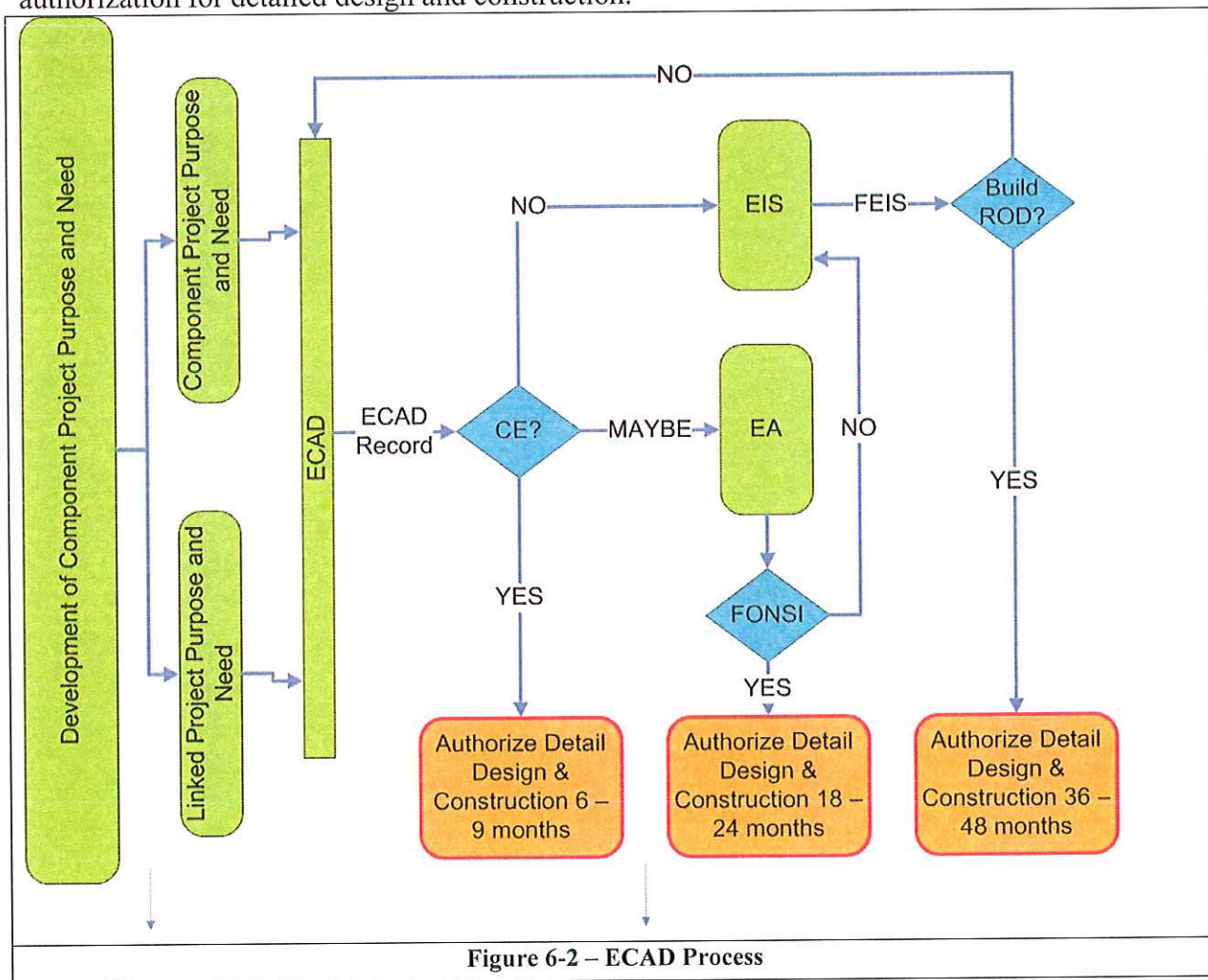
Adapting the SPEED process to the Gateway Program will facilitate identification of the appropriate level of future environmental analysis for each project. This will be accomplished through an Environmental Class of Action Determination (ECAD) process as shown in Figure 2. The ECAD process for each project will begin with consideration of its expected impacts. An initial scan of expected project impacts is presented in Appendix 2 - The Preliminary SPEED Screening Documentation. The ECAD process will evaluate the expected impacts from a proposed action and recommend a determination of the appropriate environmental class of action for the project--categorical exclusion (CE), Environmental Assessment (EA), or Environmental Impact Statement (EIS).

According to Section 771.115 of NEPA there are three classes of actions for an environmental document:

- Class I – Environmental Impact Statement (EIS)
 - This is required when a project significantly affects the environment.
- Class II – Categorical Exclusions (CE)
 - Actions that do not individually or cumulative have a significant environmental effect are excluded from the requirement to prepare an EA or EIS.
- Class III – Environmental Assessment (EA)
 - An EA is used to determine the significance of the environmental impact of a project.

An Environmental Assessment (EA) provides sufficient documentation to determine whether an Environmental Impact Statement (EIS) is required or a Finding of No Significant Impact (FONSI) can be made.

If the FHWA/FRA determine through the ECAD process that a project is classified as a CE, the project then can proceed immediately to authorization for detailed design and construction. If FHWA/FRA determines through the ECAD that a project should be elevated to an EA, an EA would need to be completed to determine if any significant impacts are involved in the implementation of the project. If the EA does not identify any significant impacts, a Finding of No Significant Impacts (FONSI) is issued by the FHWA/FRA and the project can proceed to authorization for detailed design and construction. If the ECAD process or an EA identifies significant impacts as a result of implementing a project, an EIS is required. After completion and approval by FHWA/FRA of the Draft and Final EIS, the FHWA will issue a Record of Decision (ROD). If a build alternative is selected in the ROD, the project can then proceed to authorization for detailed design and construction.



Summary

The analysis of the expected environmental consequences of Gateway projects strongly suggests that application of the SPEED process to the Gateway Program is appropriate and that it will expedite the environmental review of Gateway projects. Application of SPEED process to Gateway projects facilitated project definition, including an accurate identification of stand-alone projects and linked projects, and supported preparation of draft purpose and need statements. With accurate project definition, it is possible to identify and evaluate the expected consequences of each project, and to prepare recommendations for environmental class of action determinations (ECAD) needed to expedite completion of required environmental clearances. In summary, the SPEED strategy will provide methodical project screening and decision making, and proportional assessment impacts while still enabling rapid start-up of low risk projects and limiting risks of delays from legal challenges based on segmentation issues. Following Table 6-1 anticipated impacts of Rail Gateways projects are listed followed by possible mitigation/enhancement projects.

**Table 6-1, Gateway Project Summary
West Bank Railroad Projects**

	Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
1	W1/W2/W3/W5 UPRR, BNSF Rail Corridors from Live Oaks to West Bridge Jct. and the approach to the HPLB	Extend CTC signalized track from Live Oak and Wills interlocking to West Bridge Junction (WBJ) to enhance operation of UP, BNSF, and Amtrak trains. Completion of the CTC project requires that: 1-The UP Avondale Sub be upgraded between MP 12.3 and WBJ to eliminate conflicts with UP and BNSF switching moves. 2-A new BNSF main line track between Avondale and WBJ be constructed to improve access to HPLB. 3-The WBJ manual interlocking controls be replaced and WBJ be reconfigured to increase speed and reduce delays for through freight train moves, yard switching moves, and Amtrak intercity passenger trains.	Install CTC between Wills and West Bridge Jct. on the UP Livonia Sub No. 1 and No. 2 tracks, the UP Avondale Sub, and The new BNSF mainline. Reconstruct Avondale Sub west of the UP South Yard. Construct new BNSF main line east of Avondale through a combination of new track and upgraded track. Replace WBJ tower and manual interlocker controls with remote electronic controls. Revise the connections from the UP South Yard, the BNSF Avondale Yard, and the UP North Yard to the NOPB double-track. Abandon 1) the UP Algiers main line from MP 10.4 to MP 8.2 and 2) the direct connection from the UP North Yard to the UPRR West Bank Lead.	Nothing of consequence—All work within railroad right-of-way. <i>Anticipated Categorical Exclusion</i> ¹ No Mitigation required.
2	W2 Rail Project	W2 was linked to W1. See W1/W2/W3/W5 above		
3	W3 Rail Project	W3 was linked to W1. See W1/W2/W3/W5 above		
4	W4 Switching Lead	Lengthen the short north yard switching lead to increase the number of cars that can be switched in a day.	Extend the north yard switching lead approximately 1,800 feet, and install a new switch in the drill track.	Nothing of consequence—All work within railroad right-of-way. <i>Anticipated Categorical Exclusion</i> ¹ No Mitigation required.
5	W5 Rail Project	W5 was linked to W1. See W1/W2/W3/W5 above in Row 1.		
6	W6 Track and Interlocking Improvements HPLB	Install a ballasted track deck to reduce maintenance requirements of HPLB track structure. A universal crossover would be installed on the bridge to provide additional flexibility.	Remove existing open-deck bridge and install ballasted deck bridge entire length of HPLB. Install universal crossover at mid-span of the truss portion of the bridge. Install signal system to enhance train operations between WBJ and EBJ.	Work over River will require best practices during construction. <i>Anticipated Categorical Exclusion</i> ¹ . No mitigation required.

Legend: White rows represent stand-alone projects. Gray shaded indicate linked projects. Blue shaded identify individual improvements included in linked projects.

¹Section 771.117, (c) (18) of NEPA states that “Track and rail bed maintenance and improvements when carried out within the existing right-of-way meet the criteria for categorical exclusions and normally do not require any further NEPA approvals.”

Central Segment Railroad Projects

	Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
7	<p>Middle Belt Option: C1a/C2a/C3a/C4a/E1a/E7a (EBJ/NS Back Belt, Shrewsbury CTC)</p>	<p>Replace the current route from HPLB to NS Back Belt to East City Junction with a multi-track, totally grade separated route to increase train speeds and capacity, and eliminate the traffic congestion in the local communities caused by the train operations across numerous at-grade railroad-highway road crossings.</p> <p>The action would create a combination rail freight and intercity passenger route into and through New Orleans that eliminates the prolonged stopping of freight trains in parish neighborhoods and provides enhanced evacuation routes.</p> <p>The action would maintain NOPB, CN, and KCS routes through East Bridge Junction (EBJ).</p> <p>The action would eliminate the current freight train route from EBJ to East City Junction via the NS Back Belt. The route at EBJ from the NOPB HPLB to the Middle Belt would be double-tracked. Track geometry at EBJ would be improved to increase maximum speeds from the Middle Belt to the HPLB. The antiquated control equipment for signals and switches would be replaced.</p> <p>Removal of the track from Metairie to ECJ would enable the railroad bridge over Pontchartrain Blvd (I-10) to be removed; an action that would enable the alignment of Pontchartrain Blvd to be raised to eliminate the flooding hazard that presently exists.</p>	<p>Construct a double track route from HPLB to a newly constructed Middle Belt by upgrading the existing route crossing the CN main. The action would replace and upgrade turnouts and provide access to six tracks constructed eastward to the vicinity of existing Southport Jct. The six tracks would parallel the CN northbound main track to Southport Jct. East of Southport Junction would be three tracks [NOUPT main plus two new tracks]. The three tracks west of KCS Junction would narrow to two tracks, which would extend to a point north of Carrollton Junction on the line Carrollton Junction to ECJ where the two tracks would merge with the eastbound passenger main track. Two tracks would exist from that point to ECJ.</p> <p>The project would upgrade/modernize switch and signal hardware and control equipment to enable remote control operation.</p> <p>Remove all tracks, roadbed, grade crossings, and other structures between Shrewsbury and ECJ along existing "Back Belt".</p>	<p>Appears NEPA documentation will apply. <i>Anticipated EIS Document</i> Except for a small portion east of the I-10/Carolton overpass that will require the purchase of additional right-of-way all railroad improvements are within existing right-of way. Required right-of-way would involve Section 4 (f) lands.²</p> <p>Increase in rail traffic adjacent to two residential neighborhoods.</p> <p>Mitigation/Enhancement Projects: The construction of the Middle Belt will make the following mitigation/enhancement projects possible:</p> <ul style="list-style-type: none"> • Remove train queue from City Park • Realign tracks crossing Jefferson Hwy. to eliminate one roadway crossing. • Improve road geometries with the reconstruction of the Airline Dr./Tulane Ave. interchange. • Possible projects to benefit the Hollygrove neighborhood. <ul style="list-style-type: none"> ○ Improvements to the Palmetto St. overpass. ○ Improved recreational facilities. ○ Assistance with reconstruction/relocation of homes. • Possible projects to benefit the Mid City neighborhood, east of I-10: <ul style="list-style-type: none"> ○ Improve St. Patrick playground and other NORD facilities.

²Section 4 (f) lands

Section 4 (f) applies to historic properties and archaeological sites listed or eligible for listing on the National Register, publicly owned public parks, recreation areas, wildlife refuges and waterfowl refuges.

	Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
7a	Back Belt Option: C1/C2/C3/C4	<p>The purpose of this proposed action is to increase capacity from HPLB to NS Back Belt while maintaining NOPB, CN/IC and KCS routes through East Bridge Junction (EBJ).</p> <p>The action would upgrade current route from NS Back Belt to NOPB HPLB from a single-track to a double-track movement. Track geometry would be improved to increase maximum speeds from Back Belt to the HPLB.</p> <p>The purpose of this proposed action is to eliminate roadway congestion in the Metairie community caused by the train operations across the numerous road crossings and improve safety at the at-grade crossings. The project would eliminate the seven existing grade crossings located within the 1.7 miles that the NS Back Belt traverses the City of Metairie, either by closure or grade separation.</p> <p>The project would increase capacity by double tracking the Back Belt between Metairie Road and 17th Street.</p>	<p>Construct a double track route from HPLB to NS Back Belt by upgrading the existing route crossing the CN main. Replace and upgrade Turnouts.</p> <p>Upgrade/modernize switch and signal hardware and control equipment to enable remote control operation.</p> <p>Construct a revised KCS connection from EBJ to the KCS main line. Install turnouts and crossovers for new NS control point at Shrewsbury. Install CTC signals from "Shrewsbury" to "Metairie Road". Convert existing "Remote Control" signal territory on the Back Belt to CTC. Modify CN EBJ control for NS control of "Shrewsbury."</p> <p>Close Shrewsbury Road to eliminate a grade crossing within the new "Shrewsbury" control point.</p> <p>Create a grade separated NS Back Belt through Metairie would by a combination of Raising the track elevation; and either lowering or closing the seven existing roadways.</p> <p>Construct 3,000 feet of double-track on the NS Back Belt between Metairie Road (east end of 2-mile passing track) and 17th Street Canal (west end of existing double track). Eliminate the passing track that extends between EBJ and Metairie Road, which cannot be used for trains over 2,500 feet in length because they would block road crossings.</p>	<p>Impacts during construction and post construction on local neighborhoods and traffic flow in and through Metairie would have to be evaluated.</p> <p>Closure of crossings will affect vehicular and pedestrian travel in the vicinity.</p> <p>Effect on neighborhood travel patterns, for pedestrians, bicyclists and vehicles, relative to critical access to key destinations, current traffic volumes and travel patterns would require detailed evaluation.</p> <p>Impact on local businesses might occur and will require evaluation. Changes in land use and economic development do not appear likely.</p> <p>Access to public facilities and services, as well as emergency services such as police, ambulance and fire response times should be minimized.</p> <p>Environmental Justice should not be an issue.</p> <p>NEPA evaluation relative to archaeological sites, historic districts and buildings will be required.</p> <p>Elimination of grade crossing should result in slight air quality improvement. Noise and Vibration and Energy impacts will be evaluated and may require mitigation. One park (Section 4f) appears to be adjacent to ROW, but should not be impacted directly by the grade crossing project; however noise and visual impacts are potential. <i>Anticipated E.I.S. required</i></p>
8	C4	C4 was linked to C3. See C3/C4 above in Row 9		

	Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
9	E2 NS Back Belt, Elysian Fields	The purpose of this proposed action is to improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard. Combine Elysian Fields and Frenchmen Street Inter-lockings further to enhance flexibility in the routing of trains. Eliminate existing conflicts between CSX and NS freight trains. Increase track speed for freight trains from 15 to 25 mph.	Revise junction of CSX mainline and NS Back Belt. Construct relocated NS Freight Lead Track one-track center to the south of the existing track. Install three No. 15 Turnouts to provide new connection between CSX and NS. Install new LH No. 15 Crossover at existing Frenchmen Street to convert inter-locking to a universal inter-locking. Combine Inter-locking control of Frenchmen Street and Elysian Fields.	None anticipated. All work within existing railroad right-of-way. <i>Anticipated Categorical Exclusions.</i>
*10	E6 NS Belt Line, Third Track - Frenchmen Street to Marconi Drive	Construct a third NS Back Belt mainline track between Marconi Drive and Frenchmen Street on the rail berm that parallels I-10. The 0.6-mile segment between Marconi Drive and East City Junction would remain double tracked. Construct Marconi Drive interlocking (NT4.3) so that it would facilitate parallel moves at the location where the three tracks merge into two tracks.	Construct third mainline track between Marconi Drive and Frenchmen Street. Install a new interlocking at Marconi Drive to connect the three-track mainline east of Marconi Drive with the two-track mainline west of Marconi Drive. Modify Frenchmen Street The third mainline track requires the construction of new bridges over Broad Avenue, The London Canal, Gentilly Boulevard, Paris Avenue, St. Bernard Avenue, Bayou St John, a pedestrian access roadway, and Hospital Street.	Impacts on vehicular and pedestrian traffic will be required as well as studies for noise, vibration and visual impacts. Construction in vicinity of the London Canal will require best planning practices. Project passes through City Park (section 4(f) lands) direct impact on the project will be investigated. <i>Anticipated E.I.S. required.</i>
11	E3 Northwest Quadrant Connection between NS and CSX	The purpose of this proposed action is to establish an improved connection between NS mainline and the NS Back Belt by providing a connection to the CSX mainline between NE Tower and Elysian Fields (N.O.T. Jct.). The proposed interlocking changes and track connection would facilitate parallel movement of trains to Oliver Junction and Elysian Fields on the NS NO mainline. Minimize conflicts between NS, Amtrak, and CSX movements at NE Tower. The completion of the project would increase speed of train movements, enhance operational flexibility.	Construct a new interlocked connection between NS and CSX in the northwest quadrant of the present NE Tower; construct bridge to span Peoples Canal, which parallels the NS mainline. Install a new controlled set of turnouts and crossovers on the CSX main line west of the NS main line. In addition to the turnout to connect with the CSX mainline, install a crossover to create a universal set of crossovers on the NS mainline north of the existing crossing diamonds at NE Tower. Upgrade signals on CSX mainline between Gentilly Yard and Elysian Fields.	Construction of new bridge/ box culvert over Peoples Canal would require further evaluation and implementation of best planning practices during construction. <i>Anticipated EIS required</i>

*Note: This project would be eliminated with the construction of project CIA, Middle Belt.

East Segment Railroad Projects

	Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
12	E4 CSX Main Line, Renewal of Almonaster Moveable Bridge	<p>Construct a replacement structure for the existing bascule bridge that would accommodate rail service, maritime transportation needs, and vehicular traffic, and transit through the CSX and Almonaster Avenue corridor and bridge crossing over the Inner Harbor Navigation Canal.</p> <p>Replace existing bridge to improve the reliability of CSX and NOPB operations over the bridge.</p>	<p>Construct a new vertical lift structure at the site of the present combination railroad and highway bridge. As initially conceived the width of the channel would be increased, resulting in a clear opening for the marine channel of 200 feet from fender face to fender face. The clearance in the fully-opened position would be 126 feet.</p>	<p>RPC has completed initial environmental documentation.</p>
13	E5 Gentilly Yard New Main Track and Revised East End Yard	<p>Increase capacity for train movements in either direction through Gentilly Yard.</p> <p>The project would: 1) mitigate conflicts between trains being stored or made up on the existing double-track main and through trains; 2) minimize the need to operate trains through slow speed yard trackage or to hold trains east or west of the yard until the main line is cleared of stopped freight trains; and 3) reduce number of yard movements that use the main line.</p>	<p>Reconfigure Gentilly Yard and the interlocking east and west of the yard.</p> <p>Create a new main line to the south of the existing yard by installing new track and upgrading portions of existing yard leads. Relocate the existing BIDS Terminal from north of the main line tracks to the east end of Gentilly Yard. Modify the east end of the yard by constructing two new pullout tracks to improve switching flexibility.</p>	<p>Very preliminary analysis indicates that the acquisition of land east of the yard to construct the eastern portion of the new tracks will require further evaluation, but considering the present use of the land any environmental issues resulting from implementation of the project will be limited in nature. Potential for hazardous material effects will be verified. <i>Anticipated E.I.S. required.</i></p>

West Bank Grade Crossing Separation Projects

	Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	None Anticipated Potential Issues
	W10	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Live Oak Boulevard by the UP, BNSF, and Amtrak.	Grade separate grade crossing when improvement justified by level of traffic resulting from future development. Initially upgrade level of grade crossing protection and grade crossing signal approach circuit design considerations in W1/W2/W3/W4/W5.	None Anticipated. Sufficient R/W <i>Anticipated E.A.</i>
	W11	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Willswood Lane by the UP, BNSF, and Amtrak.	Grade separate Grade Crossing when improvement justified by level of traffic resulting from future development. Initially upgrade level of grade crossing protection and grade crossing signal approach circuit design considerations in W1/W2/W3/W4/W5.	Section 4 (f) lands, Public School. Required 1.3 acres Of private property along west side. <i>E.I.S. required.</i> Mitigation/ Enhancement: Reconstruction/ Remodeling of school facilities.
	W12	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of George Street by the UP, BNSF, and Amtrak.	Close crossing upon completion of overpass structure at Avondale Garden Road, W13.	
	W13	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Avondale Garden Road by the UP, BNSF, and Amtrak.	Grade separate grade crossing with overpass structure. Upon completion of grade separation close George St. crossing.	Required 4.5 acs. Of commercial property. <i>E.I.S. required.</i> Mitigation/ Enhancement: Overpass structure will remove thru auto and truck traffic from residential neighborhood.

Central Segment (Back Belt Option) Grade Crossing Separation Projects

Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
C10	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Central Avenue.	Close crossing, reroute traffic to Clearview Parkway	E.I.S. required
C11	C11 was linked to C1/C2. See C1/C2, Row 7.	Close Shrewsbury Road.	E.I.S. required
C12	C12 was linked to C3. See C3/C4, Row 9.	Grade Separate Labarre Road	E.I.S. required
C13	C13 was linked to C3. See C3/C4, Row 9.	Close Atherton Drive	E.I.S. required
C14	C14 was linked to C3. See C3/C4, Row 9.	Grade Separate Hollywood Drive	E.I.S. required
C15	C15 was linked to C3. See C3/C4, Row 9.	Grade Separate Farnham Place	E.I.S. required
C16	C16 was linked to C3. See C3/C4, Row 9.	Close West Oakridge Parkway	E.I.S. required
C17	C17 was linked to C4. See C3/C4, Row 9.	Grade separate Metairie Road	E.I.S. required
C18	C18 was linked to C4. See C3/C4, Row 9.	Grade separate Carrollton Avenue	E.I.S. required
E10	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Louisa Street by the UP, NS, and Amtrak.	Close crossing, diverting access to Alvar Street overpass. If not achievable upgrade level of grade crossing protection.	Possible increase in travel time. E.I.S. required.
E11	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of France Road.	Close crossing, diverting access to Alvar Street overpass.	E.I.S. required

East Segment Grade Crossing Separation Projects

Project Identifier	Preliminary Purpose and Need	Description of Proposed Work/Improvements	Potential Issues
E12	Jourdan Road.	At-grade crossing replaced with overpass structure. At-grade crossing to remain closed.	None
E13	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Gentilly Highway.	Close crossing and divert traffic to Read Boulevard or Jordan Rd. overpass.	E.I.S. document will need to be prepared.
E14	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Read Boulevard.	Grade separate crossing by constructing underpass structure.	E.I.S. document will need to be prepared.
E15	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of I-510 Frontage Road.	Close crossing, diverting access to adjacent I-510 main roadway.	None, Petition LA DOTD for closure.
E16	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Michoud Boulevard.	Grade separate crossing by constructing underpass.	E.I.S. document will need to be prepared.
E17	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Gentilly Highway.	Close crossing. Traffic diverted to Michoud Blvd.	Increase in travel time to western part of Gentilly Hwy. E.I.S. document will need to be prepared.
E18	Eliminate Rail/Roadway conflict and improve safety at the at-grade crossing of Industrial Parkway.	Upgrade level of grade crossing protection.	E.I.S. document will need to be prepared.

ANTICIPATED IMPACTS OF RAIL GATEWAY PROJECTS

Impacts to Section 4 (f) Lands:

Section 4 (f) lands apply to historic properties and archaeological sites listed or eligible for listing on the National Register, publicly owned public parks, recreation areas, wildlife refuges and waterfowl refuges.

Western Section:

- Project W11 – Willswood Lane
Property from Norbert Rillieux Elementary School
Approximately 0.3 acres taking

Central Section:

- Back Belt
 - * Project C3 – Metairie Playground.
Raising the railroad embankment may encroach upon park property.
 - * Project E6 – Third Track.
Additional right-of-way required from New Orleans City Park
Approximately 2.8 acres

- Middle Belt
East of I-10/Carrollton Avenue overpass.
Property from St. Patrick Playground, taking 0.2 acres of 1.6 acres total.
New Orleans Recreation Department

Eastern Section:

- None Anticipated. It is not apparent that any Section 4 (f) lands exist along the Rail Gateway in the Eastern Section.

Impacts to Private Property:

The construction of Rail Gateway projects, as described in this feasibility study will require the taking of the following private properties:

Western Section:

- Project W11, Willswood Lane, 1.3 acres along the west side zoned residential.
- Project W13, Avondale Garden Road, 4.5 acres zoned commercial.

Central Section:

- Back Belt
 - * Project No. C3, purchase property along the south side of the proposed double track between Metairie Road and Carrollton Avenue, zoned residential, 5 houses.
- Middle Belt, purchase of property on eastside of I-10/Carrollton Avenue overpass;
 - Commercial – 18,000 square feet
 - Residential – 2 houses

Eastern Section:

- Project E5 – CSX Gentilly Yard
 - Commercial – 27 acres
 - Alternate track location along the north side of CSX Gentilly Yard may not require purchase of additional right-of-way.

* This project is not required for the Middle Belt route.

Title 23 CFR Section 771.117, (c) (18) of NEPA states that “Track and rail bed maintenance and improvement when carried out within the existing right-of-way meet the criteria for categorical exclusions and normally do not require any further approvals.” Except for a small track of land east of the I-10/Carrollton Avenue overpass required for the Middle Belt route, less than 0.5 acre, all railroad improvements occur within existing railroad rights-of-way. Regardless, the construction of certain Rail Gateway projects may impact immediately adjacent properties.

POSSIBLE MITIGATION/ENHANCEMENT (M/E) PROJECTS

Mitigation measures are those steps taken to reduce the impact of a project in the surrounding neighborhoods. They are done to minimize or offset the impacts to some degree. Enhancements are projects that the community has requested in addition to mitigation projects that may be outside the immediate impact area but have a relationship to the project. Examples of possible projects designated as (M) Mitigation or (E) Enhancement are listed below.

Western Section:

- W11, Willswood Lane
Reconstruction or remodeling of the Norbert Rillieux Elementary Public school buildings and play facilities (M).

Central Section:

Back Belt Route:

- Construct soundwalls, provide landscaping and improve drainage (E) – Requested by the Regional Planning Commission.

Middle Belt Route:

- Improved recreational facilities in the Hollygrove neighborhood (E) – Requested by Orleans Parish Council.
- Improvements to the St. Patrick playground and possibly other New Orleans Recreation Department (NORD) facilities (E) – Requested by Orleans Parish Council.
- Provisions for a future rail overpass structure along Airline Drive, for light rail track access to the New Orleans Union Passenger Terminal (M) – Required by the Regional Planning Commission.
- Right of access to Norfolk Southern right-of-way along spur track between Canal Boulevard and Carrollton Avenue for extension of Lafitte Corridor multi-use path (E) – Requested by Orleans Parish Council.
- Right of access to Norfolk Southern right-of-way on west side of People's Avenue between Leon C. Simon and Chef Menteur Highway/rails with trails project (E) – Requested by Orleans Parish Council.
- Streetcar right of access to cross the Norfolk Southern track on St. Claude Avenue at Press Street for future Desire Streetcar Extension (E) – Requested by Orleans Parish Council.

Front Belt Route:

- Reconfiguration of existing rail tracks at the Port of New Orleans Intermodal Rail Facility (E) – Requested by the Port of New Orleans.

West Bank Rail Projects:

- Extension of the railroad track along the Harvey Canal to the Mississippi River in Plaquemines Parish. See the program of projects outlined in the Plaquemines Parish Intermodal Feasibility Study by DMJM Harris, December 2002 and this report (E) – Requested by Plaquemines Parish President.

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 7 Project History

THE NEW ORLEANS UNION PASSENGER TERMINAL (NOUPT)

Legislation to establish the New Orleans Union Passenger Terminal was provided for in The Constitution of the State of Louisiana for 1921. The legislation allowed the City of New Orleans to “construct and maintain one or more railroad passenger stations and all approaches thereto and appurtenances thereof.”

The 1947 “Union Passenger Terminal Agreement” prohibits usage of the NOUPT tracks by freight railroads except the Illinois Central (CN Railroad) and Louisiana and Arkansas (KCS) Railroads. The New Orleans Union Passenger Terminal Board is an agency of the City of New Orleans.

Coming from the west the NOUPT track and right-of-way ownership begins immediately east of where the KCS Railroad crosses the CN mainline track (Southport Junction). From here NOUPT property extends north to Airline Drive, and along Airline Drive to the Union Passenger Terminal in downtown New Orleans. Coming from the east NOUPT track and right-of-way ownership begins at East City Junction where the NOUPT tracks intersect with the existing Back Belt trackage.

The NOUPT right-of-way originally included two tracks. Beginning at Southport Junction, the original two tracks were designated northward and southward mains. The northern property line was 33 ft. north of the north track. Along Airline Drive the tracks were placed in the center of a 65 ft. wide R/W. Field investigations indicate that the southern most track designated the southward main, has been removed and that the entrance ramp to the Palmetto Street Overpass encroaches into the northern portion of the right-of-way. Going north along I-10, from the Carrollton/I-10 overpass, there were originally two mainline tracks designated eastward and westward, located in the center of a 100 foot right-of-way. Field investigations indicate that the westward main, western most track has been removed. The original construction of Interstate 10 and subsequent widenings to it has decreased the amount of useable right-of-way along the west side of this right-of-way.

From the EBJ the existing trackage that is to be utilized for the Middle Belt, CN Mainline and NOUPT, is primarily used only by Amtrak. The CN uses their main on a limited bases to service the two industry leads located under the Earhart Boulevard/Orleans Parish Line overpass.

Coming from the west Amtrak presently has three daily trains; two each, “The City of New Orleans” and one, “The Sunset Limited.” In addition to these three trains the Louisiana DOTD has plans to add an additional six daily trains to provide passenger rail service between Baton Rouge and New Orleans.

Coming from the east the Amtrak, “Crescent” has two daily trains.

HISTORY OF THE NEW ORLEANS TERMINAL RAILROAD (Back Belt Tracks through Metairie)

In this section an abbreviated history of the events affecting the rail line through Jefferson Parish is presented. This information is reprinted from the report "A Comprehensive Study of Problems in the Old Metairie Railroad Corridor in Jefferson and Orleans Parishes in Louisiana" prepared by Rail Lease Inc., dated November 1996.

The original tracks were installed in or about 1895. In 1942 Jefferson Parish granted permission to the New Orleans Terminal (NOT) Railroad to add one additional track crossing Labarre Road.

In 1947 the City of New Orleans executed the Union Passenger Terminal Agreement. This agreement consolidated rail operations in the city and was responsible for the construction of several grade separations; City Park Avenue/Metairie Road, Canal Blvd., North Broad, etc. Jefferson Parish declined to participate because they lacked the necessary bonding capacity.

In 1955 the Jefferson Parish Police Jury attempted to halt the construction of the Airline Drive/Tulane Avenue Interchange because it would obstruct the passage of a future railroad. The Police Jury was proposing to reroute the NOT Railroad through the area.

In 1966 Jefferson Parish filed a law suit against the railroad in an attempt to force them to remove the tracks through Metairie. The US District Court of Appeals for the 5th Circuit ruled against the Parish.

In May 1975 the CONSAD report, "Analysis of Alternatives in Alleviating Railroad-Community Conflicts in Jefferson Parish" is issued. The CONSAD Study was divided into two phases. Phase 1 is for the removal of the KCS tracks from Airline Hwy. and Phase 2 is for the complete removal of the mainline tracks through Old Metairie and for the possible relocation of these tracks under the Carrollton Interchange in Orleans Parish. Phase 1 is completed, Phase 2 has never begun.

The Federal-Aid Highway Act of 1976 amends the previous Act of 1973 to include a railroad-highway demonstration project in Metairie, Louisiana to be funded 70/30.

Final plans for the I-10/Carrollton Ave. overpass are completed in May, 1975.

In September, 1982 an FHA study of an overpass at Central Ave. is released. The DOTD rejects this on the grounds of a negative cost-benefit analysis.

From 1986 into 1988 Urban Systems conducts a study of railroad-community conflicts for the Louisiana DOTD and FHA.

In 1988 the FHA authorizes the law firm of Shockey and Ziober to examine past legal actions taken to remove or restrict rail operations and if any future actions could be taken. During their review they found no written record or legal evidence supporting the contention that the railroads agreed, promised, or intended to remove the second track through Metairie after WWII.

In 1990 the Louisiana Legislature passes a bill which prohibits audible railroad warnings in Metairie and eliminates railroads liability.

In 2004 the New Orleans Regional Planning Commission awards a contract to BCG, Inc. to conduct a "Rail Gateway Feasibility Analysis".

Reprinted from the Report "A Comprehensive Study of Problems in the Old Metairie Railroad Corridor in Jefferson and Orleans Parishes in Louisiana" prepared by Rail Lease Inc., dated November 1996.

100-Year History of the New Orleans Terminal Railroad-Metairie/Jefferson Parish Community Conflicts

The following is an abbreviated history of the most important events affecting the Old Metairie Railroad Project. We have included additional background information on legal considerations (see page eight), tables listing the alternatives developed in prior studies, and some of the events which affect other railroad corridors/routings which have been considered as relocation alternatives.

- 1895 Jan New Orleans and Western Railroad Company incorporates to operate in the parishes of Orleans, Jefferson, and St. Bernard.
- 1901 Apr New Orleans and Western Railroad Company name changes to New Orleans Belt and Terminal Railroad.
- 1902 Dec New Orleans Belt and Terminal Company name changes to New Orleans and San Francisco Railroad Company, and railroad properties are leased to the St. Louis and San Francisco Railroad and the Southern Railway until July 1, 2002.
- 1903 Jun New Orleans and San Francisco Railroad Company name changes to its current nomenclature, the New Orleans Terminal (NOT) Company.
- 1909 May Trackage rights over the NOT for the LN, ICG, and SP are entered into on May 17, 1909. Note: The names and entities of the ICG and SP were different at that time.
- 1913 St. Louis and San Francisco Railroad defaults on its rental payment, and its interest in the NOT is transferred under forfeiture to the Southern Railway Company.
- 1942 NOT approaches the Jefferson Parish Police Jury for permission to construct additional trackage to facilitate handling of war material. Such trackage is to extend from LaBarre Road to Ridgewood Drive. This segment of track is very close to the description of Long Siding. Indications are that the "railroad people did not stick to their promise and built the track to Metairie Road."
- 1942 Dec Ordinance Number 812 (dated December 6, 1942): Jefferson Parish grants permission to NOT to cross LaBarre Road with one additional track, Shrewsbury Road with four additional tracks, and Airline Highway with one additional track. Such permission is granted

in order that the railroad might "move National Defense materials and its other freight and business expeditiously.

1942-45 (WWII) Major portion of 3.0 miles of the NOT in Metairie is double tracked.

1947 Union Passenger Terminal Agreement is executed by the City of New Orleans and the Public Belt Railroad Commission (a unit of New Orleans City Government) and eleven railroads which consolidated railroad right-of-way and provided for several grade separations. Jefferson Parish elects not to participate in the agreement which provides for grade separations at all highway crossings.

1953 Jul. Trackage rights over the NOT for the LN, ICG, and SP terminated.

1953 Sep. New Agreement for trackage rights over the NOT for the LN, ICG, and SP is signed which, in essence, continues the original agreement of 1909 for a period of ten years, and after such period is to remain in effect on a year-to-year basis. This operating agreement of 1953 assigns control of all trains of the participating carriers to the NOT when those trains are on NOT tracks. The ICG withdraws from the agreement insofar as operations over the NOT are concerned. The ICG elects to interchange traffic with SOU at Shrewsbury and transfer cars to the LN over the NOT on a tariff charge basis.

1955 Apr. The Jefferson Parish Police Jury passes ordinance Number 2744, ordering the NOT to take and relocate and reroute the NOT tracks from the Old Metairie area to the mainline of the Illinois Central Railroad near Shrewsbury and thence on to tracks of the NOUPT. On May 4, 1955, the Police Jury also filed suit to halt construction of the Carrollton-Airline Highway Interchange because implementation of the construction plans by the State Department of Highways would obstruct the passage of the railroad trains under the existing New Basin Canal Bridge which is where the Police Jury proposed NOT reroute its operations. The Police Jury lost the suit because it was determined that the Police Jury was aware of the construction plans for over two years and had waited too long to file the suit, and also because Orleans Parish, the interchange construction contractor, the Pontchartrain neighborhood association weighed in heavily against delaying the construction of the interchange and because it was demonstrated that the Police Jury had

- not discussed or obtained the prior agreement and approval of the railroads for rerouting the trains.
- 1958 Dec Ordinance Number 3911 of Jefferson Parish Police Jury repeals Ordinance Number 812.
- 1959 Mar Ordinance Number 3967 of Jefferson Parish Police Jury imposes fines on the NOT.
- 1961 Jefferson Parish residents approve a bond issue to provide funds to alleviate traffic problems at the Metairie Road and the Southern Railway tracks. The Louisiana Department of Highways prepares two plans. One plan calls for raising the tracks 5.3 feet and building an underpass beneath them 28 feet wide and 15 feet high. The other plan does not involve raising the tracks but calls for beginning the downgrade of Metairie Road further down the tracks.
- 1962 Feb Jefferson Parish chooses to build the underpass because it will cost \$200,000 less in land purchases and construction. According to the plan, the underpass will be three lanes wide and include a pedestrian walkway. It requires blocking off of Central Avenue at Metairie Road. The railroad plans to add a second track to the crossing and pay for the cost of foundations necessitated by the additional track.
- 1963 Jan Metairie residents reject the underpass. It is the plan to build a second track that ultimately makes the project objectionable to residents. They fear the laying of a second track will transform the railroad into a permanent neighborhood fixture. These residents are represented by a group called the Citizens Committee to Relocate The Track from Metairie. Their primary concern is the hazard presented by the railroads; they demand the removal of all tracks. Another neighborhood group, the Metairie Subdivision Improvement Association is concerned that the underpass will leave residents with only one evacuation route. According to the Association's General Chairman, Anthony Musmeci, the underpass will put the neighborhood's 37,000 residents in constant jeopardy as it will limit their ability to evacuate in case of flooding or hurricane. According to Musmeci, "This will leave us with one exit to Metairie Road and that is Foci Street, which is already a traffic problem...this area will hold water indefinitely." The neighborhood was declared a disaster area in 1947, when a hurricane sent the waters of the 17th Street Canal overflowing into the streets of Old Metairie. The Jefferson Parish Council decides to abandon the

underpass plan in the face of so much neighborhood opposition.

1966 Jefferson Parish brings suit to compel the railroad to remove the tracks which had been originally constructed as a war time measure. The U.S. District Court of Appeals for the Fifth Circuit rules that because the NOT was engaged in the movement of interstate and intrastate freight and because such tracks under contest were not spur, interchanges, team, switching, or side tracks, abandonment of such tracks could not be obtained without certificate of abandonment from the Interstate Commerce Commission. Therefore the Parish could not compel abandonment, but had to make application to the Interstate Commerce Commission for an abandonment order. Subsequently the NOT takes the necessary action to obtain a permanent injunction from the District Court to preclude the Parish from making application to ICC for such an order on the grounds that the Parish did not petition the ICG within the time allotted by the court decision. The U.S. Supreme Court refuses to review the case, upholding the Appellate Court decision.

1970-71 Numerous citations are issued to the railroads and railroad employees for violating the crossing blockage ordinance section 28-1 of the Jefferson Parish Code and were prosecuted in criminal proceedings before the First Parish Court in Jefferson Parish.

1972 In U.S. District Court for Eastern Louisiana, the NOT challenges several ordinances passed by Jefferson Parish designed to minimize delays to vehicular traffic caused by railroad crossing blockage. These ordinances limit train blockage of a grade crossing to five minutes and restrict train length to fifty cars or less.

1972 U.S. District Court upholds the five minute law, but the provision limiting train length is found to be unconstitutional and is dismissed. The railroad petitions the U.S. Supreme Court to reverse the District Court decision concerning the five minute grade crossing blockage law, but the Supreme Court declines to hear the case, thus the five minute blockage law is declared constitutional by virtue of the Districts Court's decision remaining unreversed.

1972 Jun A task force, composed of Jefferson Parish residents and public officials, travels to Washington, DC in an effort to bring the rail problem to the attention of the State's Congressional Delegation.

- 1972 Jul Members of the Congressional Delegation, including U.S. Representative Hale Boggs and U.S. Senators Allen Ellender and Russell Long, State and Parish Officials, representatives of the Federal Railroad Administration, the Federal Highway Administration and Interstate Commerce Commission, and the Presidents of three Railroads involved make an on-site inspection.
- 1972 Sep FRA questions the financial and engineering feasibility and the impact on Orleans Parish of relocation suggestions put forward by Metairie residents. FRA suggests some near-term "in-place" improvements that could be made in a relatively short period of time at a substantially less cost. The railroad companies are agreeable to implementing some or all of the possible short-term improvements and are particularly interested in adding another track over the 17th Street Canal to improve the efficiency of their operations and to relieve highway congestion caused by trains. However, Metairie citizen groups hold to their objective of complete relocation and rejected FRA's recommendation of interim improvements, particularly the double-tracking over the Canal.
- 1973 The U.S. Court of Appeals for the Fifth Circuit also rules on Jefferson Parish's attempt to regulate safety standards on the NOT. Such action results in the decision that safety standards come within the scope of the Federal Railroad Safety Act of 1970 and such safety standards are to be set and enforced through the Department of Transportation and not Jefferson Parish.
- 1974 Jun CONSAD and Kaiser Engineering are awarded a contract to conduct an analysis of alternatives for alleviating the railroad-community conflicts in Jefferson Parish, Louisiana.
- 1975 May The CONSAD report, "Analysis of Alternatives In Alleviating Railroad-Community Conflicts In Jefferson Parish, Louisiana, Volumes I & II", analyzes a variety of alternative solutions based on costs and benefits, railroad operating and engineering impacts and environmental and quality of life impacts affecting the community. The report identified and analyzed short and long term solutions (see the table on the following page) as "relocation" or "in-place" alternatives.

Relocation Alternatives		Feasible	Rejected
1	Carrollton Curve Relocation From Metairie to Orleans Parish Line	\$37 M	
2	Carrollton Reverse Movement	\$39 M	
3	River Front Route of NOPB.	\$22 M	
4	West Bank Route-New Rail Bridge-East Side of New Orleans		\$400 m
5	North-Lake Pontchartrain-ICG Line from Hammond-Slidell		\$283 M
6	Interstate 10-Causeway Boulevard Corridor		N.A.
7	Midtown Corridor-Connect NOUPT trackage with NOPB River Tracks		N.A.
8	Railroad Traffic Rerouting		
In-Place Packages			
1	Relocate KCS-ICG Interchanges	Level I	
2	Grade Separations Metairie, LaBarre, and Carrollton Ave.	Level I	
3	Close Five Grade Crossings (Oakridge, Farham, Hollywood, Atherton, and Shrewsbury)	Level I	
4	Construct Two Pedestrian Underpasses/Overpasses	Level I	
5	Fence Railroad Right of Way	Level I	
6	Double Track the NOT	Level I	
7	Establish Centralized Train Control	Level I	
8	Grade separate Metairie Road with an overpass	Level II	
10	Relocate KCS-ICG Interchanges	Level II	
11	Establish Centralized Train Control	Level II	
12	Construct noise barriers using trees and scrubs	Level II	
13	Double Track the NOT	Level II	
14	Install Crossing gates at all eight grade crossings	Level III	
15	Relocate the KCS-ICG Interchange	Level III	
16	Establish Centralized train control	Level III	
17	Elevate Tracks at 17th Street Canal - Atherton, Grade Separate NOT	xxx	xxx
18	Depress Tracks - Through Metairie Railroad Corridor	xxx	xxx

19	Construct Solid Noise Barrier To Acoustically Isolate the NOT	xxx	xxx
20	Reschedule Trains	xxx	xxx

1975 Apr FRA Inventory and Problem Identification Study of Railroad Operations in the New Orleans Region, completed by Parson Brinkerhoff Quade and Douglas, cites the long term need for the unification of railroad operations, consolidation, and relocations to improve efficiency and safety..

1976 May Section 140 of the Federal-Aid Highway Act of 1976 amends Section 163 of the Federal-Aid Highway Act of 1973 by authorizing four additional railroad-highway crossing demonstration projects in addition to the 14 demonstration projects previously stabilized under Section 163 of the 1973 Act. One of the projects is for Metairie, Louisiana. The act states that "The Secretary of Transportation shall carry out a demonstration project in Metairie Louisiana, Jefferson Parish, Louisiana, for the relocation or grade separation of rail lines, whichever he deems most feasible, in order to eliminate certain grade level railroad highway crossings. The Metairie Project is to be funded 70/30.

1976 Jun Officials from the Federal Highway Administration, Louisiana State Highway Department, Orleans and Jefferson Parish Governments and a representative from Congressman David Treen's office meet in Baton Rouge to define which aspects of the CONSAD Study would be eligible for the Metairie Railroad Demonstration project. The project is divided into two phases:

The first phase involves the elimination of the Kansas City Southern (L&A) Railroad tracks between Williams and Central Avenue parallel to Airline Highway (US Rt. 61). The removal of the tracks will eliminate 17 grade crossings, including the grade crossings at the major arteries of Williams Boulevard, Little Farms Avenue, Hickory Avenue, Clearview Parkway, and Central Avenue. KCS traffic would be rerouted onto new trackage to be installed on the Illinois-Central Gulf right-of-way between Shrewsbury and Central Avenue. Included in Phase I of the demonstration project is the relocation of the New Orleans terminal "Long Siding"

Phase II is defined to be the complete removal of the resulting main line tracks through Old Metairie, and

possible relocation of tracks under the Carrollton Interchange in Orleans Parish.

Officials express concern that including both phases in the Environmental Impact Statement may delay the entire project. They agree Phase I could be accomplished as a separate Project. They reason that, since the first portion is independent in utility and function and must be completed before any relocation or grade separation of the main line tracks in Metairie, the two portions should be handled separately.

- 1976 Jun 30 Jefferson Parish authorities meet with Federal Railroad Administration officials. They agree that Phase I could proceed with a negative impact statement without having to wait on an environmental impact statement for the overall project which would "delay implementation of Phase II some three years. According to a Jefferson department interoffice memorandum from Principal Planner Donald R. Terranova to Planning Director, Hugh Ford.
- 1976 Jul 17 The first meeting of the Jefferson Parish Railroad Project Steering Committee is held. The Committee approves the conceptual plan for the Metairie Railroad Demonstration project, which divides the Project into two phases.
- 1976 Aug 12 The Louisiana Department of Transportation and Development's (LADOTD) Office of Highways solicits views from public agencies, organizations, and individuals. Based on the response of these solicitations, and the environmental assessment prepared by LADOTD, it is determined that the project should be declared a major action requiring a negative declaration.
- 1977 Aug 31 The negative declaration is approved by the Federal Highway Administration.
- 1977 Oct 3 An Agreement of Understanding is executed between the railroads, the Parish, and State which outline the project and the responsibilities of the involved parties. The scope of the agreement includes both phases of the demonstration project, but only Phase I is subsequently implemented.
- 1977 Nov 7 A public hearing is held at which 200 residents from Seventh Ward subdivisions (Gilmore, Belleview, Azalea Gardens, Jefferson Park, Camellia Gardens, and Orleans Parkway) object to relocating the ICG interchange tracks to their neighborhood, (area of Turnbull Avenue

and Central Avenue) expressing objections to being blocked in their neighborhood by trains and worry about the proximity of hazardous materials tank cars.

1977 Nov 16 Jefferson Parish Council creates a Railroad Relocation Review Committee composed of six members from the affected area and instructs them to present alternatives to the proposed action.

1978 Feb The Railroad Relocation Committee suggests changing the limits of the project to involve extending the removal of the KCS track along Airline Highway to the eastern side of Turnbull Avenue. The extension, which has the approval of the railroads, involves the removal of an additional 2,350 feet of track. The committee also recommends moving the interchange planned for the ICG right-of-way farther east.

The recommendation to remove the tracks to Turnbull Drive is accepted, the suggestion to relocate the new interchange is not. The moving of the tracks up to Turnbull eliminates the objections of the Gilmore and Belleview Subdivision residents. One resident of the Jefferson Park subdivision, Sidney Rosenthal Jr., wants the railroads to relocate the interchange and storage tracks to the industrial area east of LaBarre Road rather than the residential area west of LaBarre.

1978 Oct-Nov The draft environmental impact statement is released for comment. Public agencies and officials endorse the project, many neighborhood groups and individuals remain opposed.

1979 Mar Representatives of LADOTD, FHA, and Jefferson Parish meet to discuss comments received on the Draft EIS. FHA is asked to investigate the possibility of constructing an overpass or underpass at Central Avenue as part of the demonstration Project. FHA authorizes LADOTD to conduct a feasibility analysis of possible ways to mitigate railroad conflicts at Central Avenue.

1979 Jun A public meeting is held where opposition to the new interchange yard on ICG property is expressed. Following the meeting, Jefferson Parish suggests to the involved railroads a westward shift in the location of the interchange, but the railroads reject the idea on economic grounds.

1980 The Federal funding formula for the demonstration project is changed from 70/30 to 95% being paid by the federal government, and the state paying Jefferson Parish's 5% local match. The EIS is approved.

- 1980 Aug Jefferson Parish Council votes against locating Long Siding to the ICG right-of-way Between Central Avenue and Shrewsbury Road. In September, the Council reverses itself and accepts relocating the interchange on the ICG right-of-way. The Railroad Project Steering Committee Chairman, C.J. Egan Jr. says the Council's demand for another site could cost the parish \$7 million in federal matching funds.
- 1982 Mar Jefferson Parish receives \$950,000 from the U.S. Department of Transportation to have engineering plans drawn up for the Demonstration Project.
- 1982 Sep FHA sponsored study on Central Avenue grade crossing is released making a recommendation that an overpass be constructed for \$12.7 million. State officials choose not to recommend any of the suggested options. Explaining that all of the options result in a negative cost-benefit analysis.
- 1982-83 IC and KCS implement portions of the CONSAD recommendations and construct new trackage and switches, allowing them to relocate their interchange operations. As a consequence 122,000 total daily vehicular grade crossing blockage of four major north-south crossings at Clearview, Parkway, Hickory, Avenue, Williams Boulevards and at LaBarre Road was eliminated. The noise from refrigerator cars which had been parked on NOT tracks during switching operations and locomotive engine noise associated with these operations was eliminated.
- 1983 The President of the New Orleans Hilton Hotel requests a meeting with local railroads to request that they refrain from running trains over the NOPB tracks during the World's Fair for safety reasons. The railroads agree to cooperate. NS grants UP trackage rights over the NOT.
- 1984 New Orleans World's Fair is convened. UP diverts four trains per day from NOUPT River front belt route to the NOT corridor. Grade crossing blockage in Metairie is increased immediately.
- 1985 Oct At conclusion of the World Fair, UP and other railroads continue using the NOT citing operating cost savings.
- 1985 Urban Systems reported in their July 1986 project newsletter that a study of hazardous rail movements in Jefferson Parish found that in 1983, a total of 39,281 rail cars carrying hazardous materials of the 235,449 total rail cars that traveled through the area during

1983. (Note: The percentage looks fairly accurate - the total number of cars does not.)

1986 Metairie residents object to increased noise and crossing blockage, believe railroads went back on their word by not restoring traffic to the NOPB route. Citizens begin to petition Parish leaders and their legislators to do something about the problem.

1986 July Jefferson Parish Council establishes the Old Metairie Project Steering Committee for one year.

1986 Citizens attempt to enforce the five minute crossing blockage law. District Attorney hands out cards allowing citizens to identify the train number, the operating railroad, etc. An effort is made to prosecute the railroads for grade crossing blockage, although it is still difficult for residents to identify the owning railroad.

1986-88 The State of Louisiana and the FHA sponsor an Old Metairie Railroad Project study of railroad-community conflicts. The contractor, Urban Systems, inventoried existing vehicular and rail traffic operations, identified existing land use and conducted a noise analysis. They identified alternative actions and solicited public comment using a 600 person random telephone survey of residents attitudes towards various alternatives with heavier weighting given to the responses from those neighborhoods closest to the tracks, a 3,700 mailed public opinion poll that received 261 completed survey responses, two public meetings/workshops and meetings with steering committee members. Following the pattern established by CONSAD in the initial FRA study, they listed fourteen rail operating alternatives, ten vehicular traffic operations alternatives, six safety measures, and two suggestions for reducing noise. The consultants express a preference for implementing six of the alternatives, (shaded lines) which were ranked by 285 residents as follows:

	Favorable	Unfavorable	Type
Restriction of Hazardous Materials Rail Shipments	254	18	Safety
Relocation/removal of railroad tracks	253	45	RR Ops
Park Waiting Trains In Areas Outside of Study Area	242	23	RR Ops
Enforcement of Existing Rail Ordinances (crossing blockage etc.)	242	27	RR Ops
Reduce number of trains using tracks	238	31	RR Ops

	Favorable	Unfavorable	Type
Removal of Long Siding	214	31	RR Ops
Restriction of Train Movements During Peak Traffic Periods	214	58	RR Ops
Removal of second track from Metairie Road to LaBarre Road	185	57	RR O.s.
Placement of additional warning devices at crossings	164	95	Safety
Implementation of Transportation System Management Techniques	140	86	Vehicular
Elimination of all train horns	128	131	Noise
Redesign Roadway Layout for Metairie & LaBarre Roads	92	145	Vehicular
Construction of Service Streets Parallel To RR Tracks, Metairie to LaBarre	100	151	Vehicular
Reopen pedestrian/bicycle underpass located at Metairie Playground	84	140	Safety
Construction of one or more pedestrian/bicycle overpasses	71	159	Safety
Construction of an underpass at Metairie Road	71	193	Vehicular
Construction of additional pedestrian/bicycle underpasses	64	138	Safety
Construction of an overpass at Metairie Road	61	203	Vehicular
Construction of an underpass at LaBarre Road	60	173	Vehicular
Increase the speed of trains	57	202	RR O.s.
Construction of noise barriers	56	185	Noise
Do Nothing	51	205	
Construction of an overpass at LaBarre Road	46	185	Vehicular
Close one or more crossings at Atherton, Hollywood, Cuddihy or Farnham	46	211	Vehicular
Depression of railroad tracks in Metairie NOT Railroad Corridor	40	189	RR O.s.
Fencing off of the tracks	39	198	Safety
Construction of an underpass at Carrollton Avenue	38	180	Vehicular
Construction of double tracks between Metairie Rd. and Orleans Parish Line	37	211	RR O.s.

	Favorable	Unfavorable	Type
Elevation of railroad tracks in Metairie Corridor	35	209	RR O.s.
Construction of an overpass at Carrollton Avenue	28	190	Vehicular
Railroads operate only run-through trains (Unrated by Residents)			RR O.s.
Relocate LaBarre Road switching activities (Unrated by Residents)			RR O.s.
Maintain the good condition of the tracks (Unrated by Residents)			RR O.s.

1988 The FHA authorizes additional legal research completed by Shockey and Ziober, Attorneys at Law to examine past legal actions taken to remove or restrict rail operations, and determine what future legal actions can be taken to initiate private or public action to remove or restrict rail operations and the likelihood of their success. The research also addressed the extent to which NS could be held liable for violations on NOT tracks, whether there was ever a railroad promise made to remove the second track (established during WWII), and the legal and liability issues concerning the restricting of horn noise in the NOT corridor. This study established the following: Synopsis of Principal Legal Questions & Issues

1. Private citizens cannot legally force the removal of the railroad as the Louisiana State Supreme Court has ruled that the ordinary operations of railroads do not constitute a nuisance.
2. With the State of Louisiana authorized legislation and approval, Jefferson Parish could legally remove the railroads through the process of expropriation, but the railroads would be entitled to just compensation for the loss. Jefferson Parish would have to pay a substantial price for the expropriation.

Note: It is the opinion of the CONSAD/Raillease study team that in addition to receiving a fair market value for their Metairie property, NS would be entitled to receive capital funds sufficient to construct an alternative railroad corridor, the exact amount being the difference between the total cost for its construction and the fair market value for the Metairie property less the net salvage value received for the rail, ties, ballast, rail hardware, and grade crossing protection, and signal equipment. Should the alternative corridor increase railroad operating costs and reduce gross profits, railroads would also be entitled to receive compensation for these lost profits as well.

3. The five minute crossing blocking ordinance, Section 28-1 of the Jefferson Parish Code is legal and enforceable and the railroad can be fined for crossing blockages exceeding five minutes, where such blockage results from a train that is stopped. The railroads must also allow three minutes between blockages. Section 28-2 limiting trains to 50 cars or less is not legal and

is not enforceable. Section 28-5 and 28-6, which sought to prevent the parking of hazardous materials cars within 300 feet of a residence and prevent railroad motors (other than locomotives) i.e. refrigerator cars, from running their motors between 8:00 PM and 7:00 AM, were ambiguously worded and thus constructed would, in the opinion of Shockey and Ziobor, not survive a legal challenge by the railroads. The attorneys suggested that Jefferson Parish rewrite these ordinances in clear unambiguous language if they intend to make these prohibitions legally binding.

4. This legal research also established that the prohibition of horn sounding could only be established by state ordinance and that the Union Passenger Terminal Agreement which prevents freight trains from using NOUPT tracks, thereby preventing the alternate routing of trains through the Carrollton curve, could only be revised prior to 1998 with the consent of the current NOUPT bond holders, the City of New Orleans, and the railroads that are party to the agreement. After 1998 all NOUPT bonds will have been retired thus removing this legal impediment to revising the NOUPT agreement. Note: The City of New Orleans and the railroads that are party to the original agreement are currently negotiating a new NOUPT agreement.
5. There is no written record or legal evidence supporting the contention that the railroads agreed, promised, or intended to remove the second track after WWII.
6. Norfolk Southern cannot be held liable for crossing blockages caused by other railroad trains i.e., SP, UP, CSX, ICG, and KCS.
7. The Parish and the State of Louisiana could petition the U.S. Secretary of the Department of Transportation and indicate that they intend to pass legislation that restricts the movement of hazardous materials through Metairie. Such legislation would have to show that it affords an equal or greater level of protection to the public than is now offered by current Federal laws, rules, and regulations and that the implementation of such legislation would not unreasonably burden interstate commerce.
8. Jefferson Parish and/or the State of Louisiana can force the railroads to reduce the number of trains running over NOT tracks and/or restrict the number of movements during peak vehicular traffic periods provided it can show that such restrictions protect the health welfare and safety of its citizens and do not constitute an unreasonable burden on interstate commerce.

1988 Long Siding is removed.

1989 Jefferson Parish Council passes resolution requesting parish legislative delegation to support legislation banning the sounding of train horns in the Old Metairie railroad corridor and eliminating railroad liability for damages once signalized grade crossings are established.

1989 IC abandons the line from Hammond to Slidell. St. Tammany Parish converts the roadbed to a bike trail using Federal Railroad ISTEA funds.

- 1990 Jan 12 The Secretary of LADOTD requests federal grant of \$251,000 to fund at-grade barrier arm protection from Lt. Gov Paul Hardy, Chairman of the Interim Emergency Board. Total cost for the signalization project is \$600,000.
- 1990 Feb 13 Interim Emergency Board approves appropriation No. 8 to supplement the cost of installing signalized grade crossings in the amount of \$96,332
- 1990 Feb 19 LADOTD requests FHA funds to install grade crossing protection at seven Metairie grade crossings; Carrollton Avenue, Metairie Road, West Oakridge Avenue/Cuddihy Drive, Farnham Place, Hollywood Drive, Atherton Drive, and LaBarre Road. Request asks for \$251,000, the remaining balance of funds in the FHA Demonstration Grant Project.
- 1990 Apr 11 The Louisiana Legislature passes Senator Hainkel's Bill Act 983 Senate Bill 87 which prohibits audible railroad warnings in Metairie and eliminates railroad liability for damages for failure to sound a warning, except in the case of an emergency.
- 1990 May 18 FHA allows Louisiana to use the \$251,000 balance of funds for grade crossing protection.
- 1990 Jun 1 FHA advises LADOTD that they cannot utilize "non-obtrusive" lights at the Metairie grade crossings, but that the flashing signals must meet national standards for traffic control devices, and that audible warning devices (bells) may not be necessary provided the Parish can reach agreement in writing with the railroads regarding legal liability.
- 1990 Jul 3 LADOTD initiates authority for construction of signalization of Metairie grade crossings -Federal Aid Project RFP -5001(065)
- 1990 Aug 1 Jefferson Parish Council authorizes \$285,000 for grade crossing protection bringing total construction funds available to \$632,332. Funds were provided as follows:
- | | |
|-----------------------------|-----------|
| Jefferson Parish: | \$285,000 |
| FHA: | \$251,000 |
| LA Interim Emergency Board: | \$96,332 |
- 1990 Oct Railroad advises Jefferson Parish that construction of new grade crossing protection will take fourteen weeks to complete. Due to delays encountered in obtaining parts construction is delayed.

1992 Mar Railroad (NOT) completes installation of new grade crossing protection (gates) equipment at seven Metairie grade crossings. Railroads begin to refrain from sounding horns at Metairie grade crossings.

1993 Residents of Shrewsbury complain about Shrewsbury grade crossing not being equipped with crossings gates as were other Metairie grade crossings. They allege racial discrimination, and threaten to sue Jefferson Parish.

1993 Regional Planning Commission - DMJM report indicates ICG-KCS corridor suitable for Light Rail Transit from the CBD to the airport. Corridor width allows the widening of Airline Highway. LRT airport shuttle would cross over NOT tracks on a flyover. However LRT's corridor alignment under Carrollton Curve, DOG UP-4, may conflict and prevent the use of the Carrollton Curve Interchange as a relocation alternative. Barring other solutions it would require an at-grade crossing with the LRT.

1993 Congressman Livingston writes National Transportation Safety Board requesting an analysis of the safety of rail operations in the Metairie Railroad Corridor. NTSB passes request on to the Federal Railroad Administration. FRA administrator Jolene Molitoris responds to request and authorizes the regional field office of FRA to conduct a complete safety evaluation of the Metairie railroad corridor and all railroad operations incident thereto. The FRA safety study is completed by regional safety office personnel in early 1994 and finds the NOT in good condition and the railroads operating in a manner consistent with all safety regulations and safe operating practices. In a meeting with Congressman Livingston and his staff the results are reported to Congressman Livingston. Congressman Livingston asks for a formal written response to the safety question so that he might respond to his constituents.

1994 Swift Railroad Development Act passed by Congress. The Act requires railroads to sound their horns at all grade crossings. It overturns the 1990 Louisiana law which prohibited the railroads from sounding their horns at Metairie crossings. FRA is empowered to grant exceptions to the new law where it can be demonstrated to them that there is equivalent grade crossing protection. This has been defined to mean four quadrant gate protection and a median barrier to prevent gate run-around.

- 1994 In the fiscal year 1995 Federal Budget, Congressman Livingston includes funds for FRA analysis of potential solutions to the railroad-community conflicts and the potential for rail induced hazardous materials accidents.
- 1995 Feb LADOTD releases a Statewide Intermodal Freight Plan focusing on intermodal linkages and identifying the need for increased funding of railroad/highway grade crossing programs, the need to resolve institutional and operational impediments to railroad cooperation, and the need to revamp the East Bridge Junction east west gateway access which the Plan described as the "principal bottleneck in Louisiana's railroad network". All of the trains transiting the Metairie railroad corridor must obtain clearance from the Illinois Central's East Bridge Junction Control Tower to move onto, through, and cross over the IC tracks. Since bottlenecks at East Bridge Junction create crossings blockages in Metairie, operating solutions must address and solve East Bridge Junction crossing delays.
- 1995 Mar FRA conducts a competitive procurement and after negotiation and review by FRA's technical review board in June, awards a contract to the RailLease Inc./CONSAD Research Corporation contractor team to complete the study.
- 1995 Jul State releases preliminary Intermodal Plan. UP announces plans to acquire the SP, which has the potential for consolidating UP-SP operations in Avondale.
- 1995 Sep On Friday September 29th, a NS train traveling from Livonia to Birmingham, derailed a covered hopper car carrying plastic pellets at Metairie Road on the Carrollton curve of the NS's Back Belt around 9:45 AM. Metairie Road was blocked by the accident, which produced no fatalities or injuries, until 11:00 AM. Police rerouted traffic via Carrollton Avenue. The car remained upright and damages to track and equipment were less than FRA's reporting threshold. NS officials explain that a combination of and track factors (cross level) and equipment (car rocking) caused a wheel to lift off the track derailing the car.
- 1995 Oct UP announces it's intention to sell its New Orleans to Houston trackage to BN/ATSF and convey over 4,100 miles of trackage rights to ATSF to provide a second railroad to captive customers thereby blunting opposition of some Gulf Coast BN/ATSF traffic volumes

Could eventually add four more trains per day to the Back Belt's traffic volumes.

- 1996 Jan Representatives from Congressman Livingston's office, Federal Railroad officials, Parish representatives, and interested citizens inspect Metairie grade crossings and meet to discuss the implications of the Swift Railroad Act's overturning the State's horn sounding ban. Various options that Jefferson Parish can take to preserve the Ban, including grand fathering, are discussed.
- 2002 Sept "New Orleans Rail gateway and regional Rail Operation Analysis" report issued. Prepared by URS in association with CANAC, Inc.; N-Y & Associates, Inc. and Saizan & Associates, Inc.
- 2004 Jan Jefferson Parish Council contracts with Brown, Cunningham and Gannuch, Inc. to investigate the possibility of eliminating the at-grade roadway crossings along the "Back Belt" railway corridor through Metairie.
- 2004 April Brown, Cunningham, & Gannuch, Inc. issue's a conceptual plan for eliminating the seven at-grade roadway crossings through Old Metairie.
- 2006 Jan Regional Planning Commission issues work order for the preparation of a "New Orleans Rail Gateway Infrastructure Feasibility Analysis" report to the study team comprised of Brown, Cunningham & Gannuch, Inc, PARSONS Transportation, Inc. and Wilbur Smith & Associates.
- 2006 Jun Regional Planning Commission directs study team for "New Orleans Rail Gateway Infrastructure Feasibility Analysis" to study relocating gateway rail traffic to "Middle Belt" and to review and comment on relocating rail line from Belle Chase Hwy.

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 8 Previous Studies

PREVIOUS STUDIES CONDUCTED OF ALL OR PORTIONS OF THE GATEWAY INCLUDE:

- 1975- “Analysis of Alternatives in Alleviating Railroad – Community Conflicts in Jefferson Parish, Louisiana”, prepared for the U.S. Department of Transportation by the CONSAD Research Corporation.

Report No. RP-3007, DOT-FR-4-3007

Investigated alternatives, both in-place and relocations, to the tracks through the Jefferson Parish neighborhood of “Old Metairie”. Alternatives were studied, analyzed and presented in terms of construction costs, railroad costs, and community impacts.

Presented the “Carrollton Curve” or Middle Belt on Drawing Nos. 21 and 21a showing layouts for a single track with 9°-30’, 11°-30’ and 12° curves. It also looked at a UPT Partial Reverse Move, the Carrollton Curve, and Carrollton Reverse Move. This report did not recommend either of these scenarios.

- 1989- “Old Metairie Railroad Project Environmental Statement”, prepared for U.S. Department of Transportation, Federal Highway Administration and Louisiana Department of Transportation and Development.

S.D. No. 736-10-48

F.A.P. No. RR-022R (007)

This report examined thirty alternatives to ease or eliminate railroad/traffic conflicts and noise in the Old Metairie area of Jefferson Parish. In Section 3 the report described Alternate No. 2, Relocation/Removal of Railroad Tracks. The description consisted of the “Carrollton Curve”, the “Carrollton Reverse Movement”, and the “Front Belt”. The report deferred to the 1975 CONSAD report and no recommendations for the relocation of this rail line were made.

Some of the recommendations of this report were eventually implemented, Alternate No. 4 – Removal of Long Siding and Alternate No. 24 – elimination of train hours.

- 1996–“A Comprehensive Study of Problems in the Old Metairie Railroad Corridor in Jefferson and Orleans Parishes in Louisiana”, prepared for U.S. Department of Transportation, Federal Railroad Administration Office of Railroad Development by Rail Lease Inc.

Report No. DOT-FRA-RDV-96-01B

The study examined alternatives for mitigating the impact of the railroad to the Old Metairie area. Alternatives included the relocation of rail traffic, rescheduling train movements, grade crossing improvements, and grade separations.

In the executive summary the report states “a broad consensus on specific alternatives strategies was not found by the study team”. No recommendations were implemented.

2002- “New Orleans Rail Gateway and Regional Rail Operational Analysis”, prepared for Louisiana Department of Transportation and Development by URS Corporation.

S.P. No. 737-26-0002

F.A.P. No. HP-T021 (021)

This report presented and analyzed several physical and operational improvements to improve rail through-put in the New Orleans Rail Gateway. To alleviate rail/roadway conflicts through Old Metairie it recommended four-quadrant gates along with further study

No improvements recommended by this study have been made.

2004- “New Orleans Rail Gateway Infrastructure Plan” prepared by the Association of American Railroads.

This report recommended a number of rail infrastructure projects which are being further evaluated in the ongoing, “New Orleans Rail Gateway Infrastructure Feasibility Analysis.”

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Section 9 Flooding Caused by Hurricane Katrina

FLOODING CAUSED BY HURRICANE KATRINA

On August 26, 2005 Hurricane Katrina entered the Gulf of Mexico after crossing the southern tip of Florida as a Category 1 storm. During the next two days it increased in strength to a Category 5 storm with winds of 175 mph and on the morning of August 29, 2005 the eye of the storm made landfall in the vicinity of the Louisiana/Mississippi boarder as a Category 3 storm with 125 mph winds. The storm surge accompanying this storm was of such magnitude that it devastated the entire Mississippi Gulf Coast and large portions of the Metropolitan New Orleans area. The storm surge was driven up the Mississippi River Gulf Outlet and Intracoastal Waterway with such height and force that it overtopped and failed large portions of the hurricane protection levee and floodwall system along these waterways and along the Inner Harbor Navigation Canal (Industrial Canal).

The surge entered Lake Ponchartrain and subsequently failed the I-wall flood protection along the 17th Street and London Avenue Canals and flowed around the end of the flood protection on the Orleans Avenue Canal. These failures combined with the subsequent failure of the City of New Orleans drainage pumping stations resulted in the majority of the east bank of the City of New Orleans and a large portion of adjacent Jefferson Parish being inundated by as much as 12 feet of water.

The majority of the railroad embankment through Jefferson and Orleans Parishes was above the level of flooding (see Plates F-1 through F-15, Appendix 3). However, beginning at approximately Norfolk Southern M.P. 0.23, along the Back Belt, the areas on both sides of the rail embankment were flooded. The flooding continued along the Norfolk Southern tracks to its crossing of Lake Ponchartrain and along the CSX tracks into the state of Mississippi. From Norfolk Southern M.P. 6.09, at approximately Elysian Fields, the majority of their Oliver Yard and along the CSX track to approximately M.P. 802.77 (at approximate N.E. Tower) the rail embankment was flooded to varying depths (approximately 1.5 feet at Elysian Fields, see attached).

To prevent future flooding along the Norfolk Southern and CSX Railroads to the west of the Industrial Canal would require the existing embankment be raised by approximately 2' to 2 ½.' This would also require that the Elysian Fields and both I-10 overpasses along with the Franklin Avenue underpass structure all be raised.

The CN and NOUPT railroad embankments from East Bridge junction along Earhart Boulevard, into the City of New Orleans to the I-10/Carrolton Avenue overpass then north along I-10 to the intersection with the Back Belt were flooded to varying depths. The maximum water surface elevation varied from MSL el. 3.0 to 2.8. (See Plates F-16 through F-19, Appendix 3).

Figure 21 of the Interagency Performance Evaluation Taskforce (IPET) report compared the flooding which occurred during Hurricane Katrina to that which would have occurred even if the levees hadn't failed, overtopping only. (See attached). A review of existing contours in the area of Elysian Fields indicates that the difference in these amounts of flooding is 2.5 feet to 3 feet. In other words the railroad embankments would not have been overtopped, although the Norfolk Southern's Oliver Yard may have been flooded to a small degree.

The Army Corp of Engineers is in the process of completing numerous projects for the repair of the floodwall/levee system which will prevent the massive failures of the levee system experienced during Hurricane Katrina from happening again. Any future event should only generate levee overtopping. Upon completion of those projects the closing of the flood gates at the 17th Street and London Avenue Canals may not be required.

The Army Corp of Engineers has also begun the planning process for projects that will prevent the levees from being overtopped, but these projects are years in the future.

With the remedial projects being undertaken at this time the extent of flooding experienced during Hurricane Katrina should not happen again.

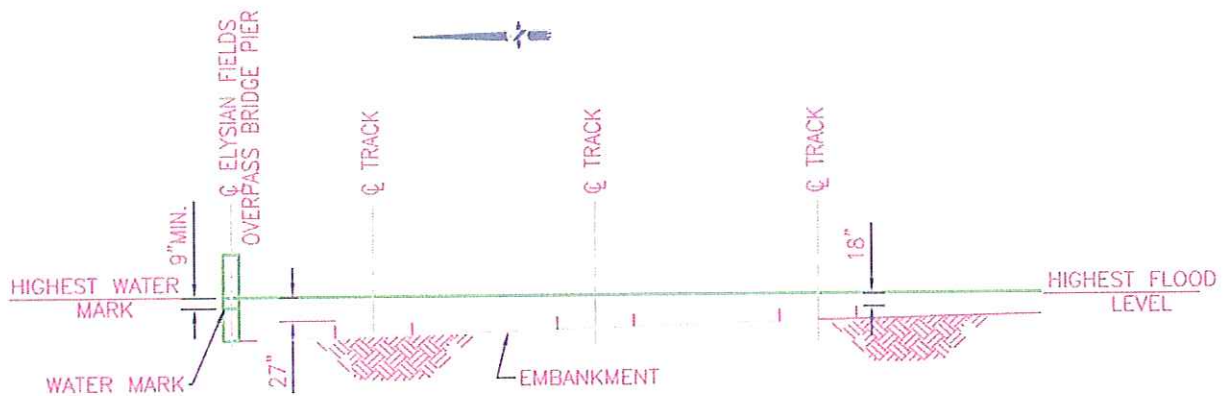


Figure 9.1
Cross-section of Norfolk Southern Tracks at Elysian Fields Avenue Overpass (looking east).

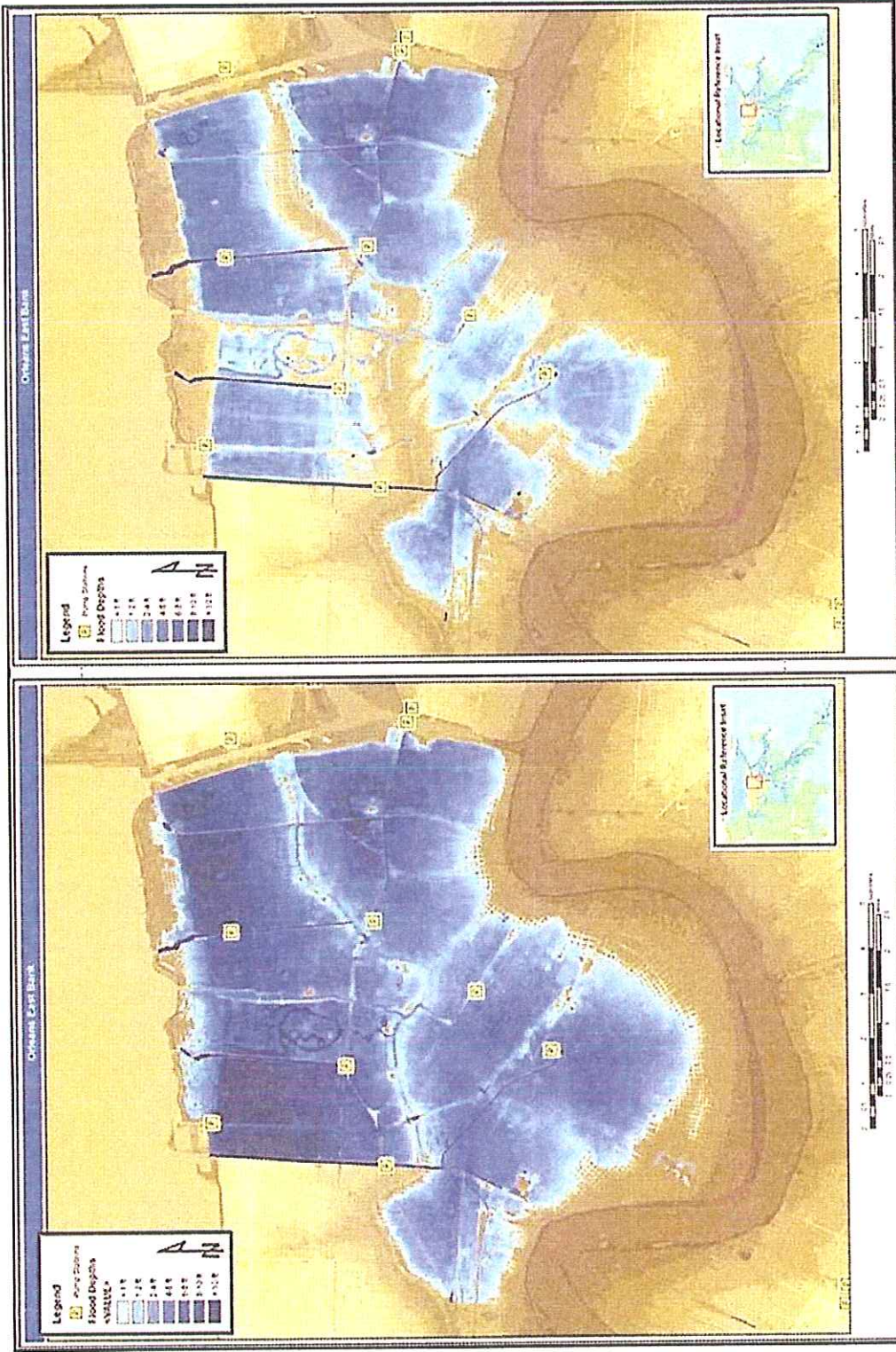


Figure 9.2. Comparison of Flooding from Katrina (Left) to Hypothetical Condition of No Breaching and Full Pumping Capacity (Right) for Orleans East Basin

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Appendix 1 Component Project Preliminary Screening Worksheet For Gateway Projects

NOLA GATEWAY PROJECT PROFILE

Project Identifier	W1 - Livonia and Avondale Subdivisions, Centralized Traffic Control (CTC) Extensions	
Objective, Intent of Project	<p>Extend CTC signalized track about 3.9 miles east from Live Oak and Willis interlockings to West Bridge Junction (WBJ) to enhance operation of UP, BNSF, and Amtrak trains, which currently operate on CTC signalized track west of Live Oak and Willis. CTC would enable dispatchers to remotely monitor train movements and control the switches and signals to route train movements.</p> <p>Replace existing control system by which freight and passenger trains presently operate under yardmaster authorization via radio communication. Movements are made at restricted speed, which is never more than 20 mph.</p> <p>Control of traffic at WBJ is the responsibility of the tower operator and trains move under signal authorization.</p> <p>Improve coordination of train movements, yard movements, and transfer traffic over the HPLB and reduce the substantial train delays that occur under existing operating practice. Presently, the number of trains and moves serves to make communication between the dispatcher, the yardmaster, and the WBJ operator difficult, which thereby makes the timely coordination of train movements very difficult.</p>	
Description of Proposed Work/Improvements	<p>Install CTC between Willis and West Bridge Junction on:</p> <ul style="list-style-type: none"> • the UP Livonia Sub No. 1 and No. 2 tracks, • the UP Avondale Sub, and • the new BNSF main line. <p>Five new control points would be added, and three hand-throw crossovers removed. Grade crossing protection would be improved to allow for higher speeds at:</p> <ul style="list-style-type: none"> • Willswood Lane (would be reviewed for potential closure), • George Street (would be closed), and • Avondale Garden Road (recommended grade separation). 	
Location: Owner(s)	UP, BNSF.	
Route/Line	UP Livonia Sub, UP Avondale Sub, and BNSF main line.	
Project Limits	UP Livonia Sub 13.9 to 10.2, UP Avondale Sub 14.9 to 10.5, and BNSF 12.1 to 10.5.	
Local Community	Avondale.	
Potential Environmental Issues Needing Further Study	No issues appear to need greater detail than normally accomplished through ECAD process.	
Project Status	Engineering: Conceptual layout and estimate.	
Estimated Project Costs (Level of Confidence)	Construction	\$9.3 M
	R/W	\$0.0
	Contingencies	20% included
		Planning Estimate
		Preliminary Engineering Estimate
Adjoining Projects (Project No., Line, Distance)	A. W2.	
	B. W3.	
	C. W4.	
	D. W5.	
	E.	
Other Related Projects (Nature of Relationship)	Not applicable.	
Comments/Notes		

Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.

1) Sufficient Length and Scope Determination

Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.	Y/N Y
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2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project W2	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	The purpose of W1 is to install a CTC system along the corridor, and W2 upgrades the switches and track connections along one of the routes to be signaled in the corridor.	N	Project W1 is to improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Jct on the UP Livonia Sub No. 1 and No. 2 tracks, the UP Avondale Sub, and a new BNSF main line track. W1 is not fully usable without W2. Therefore, the projects are linked.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	Project W2 would only cause signal software programming considerations in W1.	N	Project W1 does not restrict alternatives in W2.
Linkage to Project W3	Independent Utility?	The purpose of W1 is to install a CTC system on three routes along the corridor; W3 creates the new BNSF route between Avondale and West Bridge Junction W3 upgrades switches and track connections along one of the routes to be signaled in the corridor.	N	Project W1 is to improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Jct on the UP Livonia Sub No. 1 and No. 2 tracks, the UP Avondale Sub, and a new BNSF main line track. W1 is not fully usable without W3. Therefore, the projects are linked.
	Restriction of Alternatives?	Project W3 would only cause signal software programming considerations in W1.	N	Project W1 does not restrict alternatives in W3.

Linkage to Project W4	Independent Utility?	None.	Y	Project W1 is to improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Jct on the UP Livonia Sub No. 1 and No. 2 tracks, the UP Avondale Sub, and a new BNSF main line track. W1 is fully usable without W4.
	Restriction of Alternatives?	Project W4 would only cause signal software programming considerations in W1.	N	Project W1 does not restrict alternatives in W4.
Linkage to Project W5	Independent Utility?	The purpose of W1 is to install a CTC system on three routes along the corridor; the W1 proposal assumes that extensive work at West Bridge Junction (W5) is complete before the CTC system is installed.	N	Project W1 is to improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Jct on the UP Livonia Sub No. 1 and No. 2 tracks, the UP Avondale Sub, and a new BNSF main line track. W1 is not fully usable without the installation of W5. Therefore, the projects are linked.
	Restriction of Alternatives?	Project W5 connects to an already completed W3, which is linked to W1. An alternative would be to include the costs for a BN CP immediately west of West Bridge Jct in W5. The actual construction of the final changes at the east end of the new BNSF main line may be included as part of the West Bridge rearrangement (W5).	Y	Project W1, because of its linkage to W3, does influence the improvements to be included in W5; thus the projects are linked.
Linkage to Project W10	Independent Utility?	The purpose W10 is to reduce roadway congestion and improve safety at the Live Oak Blvd at-grade crossing, which is not affected by the New Orleans Gateway Project Improvements.	Y	W1 is fully usable without the completion of W10. Therefore, the projects are not linked.
	Restriction of Alternatives?	W10 would not restrict the design of the CTC system to be implemented by W1. Project W11 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W10 does not restrict alternatives in W1.

Linkage to Project W11	Independent Utility?	The purpose W11 is to reduce roadway congestion and improve safety at the Willswood Lane at-grade crossing, which is not affected by the New Orleans Gateway Project Improvements.	Y	W1 is fully usable without the completion of W10. Therefore, the projects are not linked.
	Restriction of Alternatives?	Project W11 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W11 does not restrict alternatives in W1.
Linkage to Project W12	Independent Utility?	The purpose W12 is to reduce roadway congestion and improve safety at the George Street at-grade crossing.	Y	W1 is fully usable without the completion of W12. Therefore, the projects are not linked.
	Restriction of Alternatives?	Project W12 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W12 does not restrict alternatives in W1.
Linkage to Project W13	Independent Utility?	The purpose W13 is to reduce roadway congestion and improve safety at the Avondale Garden Road at-grade crossing.	Y	W1 is fully usable without the completion of W13. Therefore, the projects are not linked.
	Restriction of Alternatives?	Project W13 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W13 does not restrict alternatives in W1.
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.				
Project is now ready to be processed through an ECAD.		Form Completed: 04/17/06 Form Revised: 05/30/06 Form Revised:		
If linkages, go to next page.		Yes.		

NOLA GATEWAY LINKED PROJECT PROFILE

Project Identifier	W1, W2, W3, and W5 - UPRR BNSF Rail Corridors from Live Oaks to West Bridge Junction and the approach to the HPLB	
Objective, Intent of Project	<p>To improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Junction</p> <p>Extend CTC signalized track about 3.9 miles east from Live Oak and Wills interlockings to West Bridge Jct (WBJ) to enhance operation of UP, BNSF, and Amtrak trains, which currently operate on CTC signalized track west of Live Oak and Wills.</p> <p>Upgrade UP Avondale Sub between MP 12.3 and WBJ to eliminate conflicts with UP and BNSF switching moves. Construct new BNSF main line track between Avondale and WBJ to improve access to HPLB.</p> <p>Upgrade WBJ manual interlocking controls and reconfigure trackage to increase speed and reduce delays for through freight train moves, yard switching moves, and Amtrak intercity passenger trains. Increase coordination and improve communications with and between the stakeholders using the interlocker.</p> <p>Enhance the operational for all trains at the east end of Avondale Yard. Eliminate the delays that presently result from the existing single route for UP trains. Increase operational flexibility to eliminate conflicts and substantially reduce the level of train delays.</p>	
Description of Proposed Work/Improvements	<p>Install CTC between Wills and West Bridge Junction on:</p> <ul style="list-style-type: none"> • the UP Livonia Sub No. 1 and No. 2 tracks, • the UP Avondale Sub, and • the new BNSF main line. <p>Reconstruct Avondale Sub west of the UP South Yard to eliminate conflicts with switching moves. Construct new BNSF main line east of Avondale through a combination of new track and upgraded track.</p> <p>Replace WBJ tower and manual interlocker controls with remote electronic controls that would allow for remote operation of the WBJ tower from any site. Revise the connections from the UP South Yard, the BNSF Avondale Yard, and the Up North Yard to the NOPB double-track. Abandon the UP Algiers main line from approximately MP 10.4 to its connection with the Up West Bank Industrial lead (MP 8.2) and the direct connection from the UP North Yard to the UPRR West Bank Lead.</p> <p>Extend NOPB main track 2 southward and connect it to the lead to the UP South Yard; provide access to either NOPB 1 or 2 from the South Yard.</p>	
Location: Owner(s)	UP, BNSF, NOPB.	
Route/Line	UP Livonia Sub, UP Avondale Sub, BNSF main line, and NOPB main line.	
Project Limits	Live Oaks to WBJ.	
Local Community	Avondale.	
Potential Environmental Issues Needing Further Study	Nothing of consequence; proposed work would be constructed within existing railroad R-O-W.	
Project Status	Engineering: Conceptual layout and estimate. Ground survey and detailed signal design needs to be completed.	
Estimated Project Costs (Level of Confidence)	Construction	\$22.6 M
	R/W	\$0.0
	Contingencies	20% included
	Planning Estimate	
	Preliminary Engineering Estimate	
Adjoining Projects (Project No., Line, Distance)	A. W4.	
	B. W6 HPLB Bridge.	
	C. W10.	
	D. W11.	
	E. W12.	
	F. W13.	
Other Related Projects (Nature of Relationship)	HPLB highway modifications.	
Comments/Notes		

Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.				
1) Sufficient Length and Scope Determination				
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.				Y/N
				Y
2) Independent Utility and 3) Restriction of Alternatives Determination				
		Discussion	Y/N	Rationale
Linkage to Project W4	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	Yard lead extension can be implemented immediately without the recommended main line signal and track changes.	Y	Project is to improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Junction Extend CTC signalized track about 3.9 miles east from Live Oak and Wills interlockings to West Bridge Jct (WBJ) to enhance operation of UP, BNSF, and Amtrak trains. Upgrade UP Avondale Sub between MP 12.3 and WBJ. Construct new BNSF main line track between Avondale and WBJ. Upgrade WBJ manual interlocking controls and reconfigure trackage to increase speed and reduce delays for through freight train moves, yard switching moves, and Amtrak intercity passenger trains. Enhance the operational flexibility for all trains at the east end of Avondale Yard. W1/W2/W3/W5 is fully usable without W4.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?		N	W1/W2/W3/W5 does not restrict alternatives in W4.

Linkage to Project W6 HPLB	Independent Utility?	None.	Y	Project is to improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Junction Extend CTC signalized track about 3.9 miles east from Live Oak and Wills interlockings to West Bridge Jct (WBJ) to enhance operation of UP, BNSF, and Amtrak trains. Upgrade UP Avondale Sub between MP 12.3 and WBJ. Construct new BNSF main line track between Avondale and WBJ. W1/W2/W3/W5 is fully usable without W6.
	Restriction of Alternatives?		N	W1/W2/W3/W5 does not restrict alternatives in W6.
HPLB Highway Improvements	Independent Utility?		Y	W1/W2/W3/W5 is fully usable without the HPLB highway improvements
	Restriction of Alternatives?		N	W1/W2/W3/W5 does not restrict alternatives in HPLB highway improvements
Linkage to Project W10	Independent Utility?	The purpose W10 is to reduce roadway congestion and improve safety at the Live Oak Blvd at-grade crossing, which is not affected by the New Orleans Gateway Project Improvements.	Y	W1/W2/W3/W5 is fully usable without the completion of W10. Therefore, the projects are not linked.
	Restriction of Alternatives?	W10 would not restrict the design of the CTC system to be implemented by W1.	N	Project W10 does not restrict alternatives in W1/W2/W3/W5.

Linkage to Project W11	Independent Utility?	The purpose W11 is to reduce roadway congestion and improve safety at the Willswood Lane at-grade crossing, which is not affected by the New Orleans Gateway Project Improvements.	Y	W1/W2/W3/W5 is fully usable without the completion of W10. therefore, the projects are not linked.
	Restriction of Alternatives?	Project W11 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W11 does not restrict alternatives in W1/W2/W3/W5.
Linkage to Project W12	Independent Utility?	The purpose W12 is to reduce roadway congestion and improve safety at the George Street at-grade crossing.	Y	W1/W2/W3/W5 is fully usable without the completion of W12. Therefore, the projects are not linked.
	Restriction of Alternatives?	Project W12 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W12 does not restrict alternatives in W1/W2/W3/W5.
Linkage to Project W13	Independent Utility?	The purpose W13 is to reduce roadway congestion and improve safety at the Avondale Garden Road at-grade crossing.	Y	W1/W2/W3/W5 is fully usable without the completion of W13. Therefore, the projects are not linked.
	Restriction of Alternatives?	Project W13 would only cause grade crossing signal approach circuit design considerations in W1.	N	Project W13 does not restrict alternatives in W1/W2/W3/W5.
Summary of Project Linkages				
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	<p>Improve the flow of traffic, increase train speeds, and increase capacity between Live Oak and West Bridge Junction</p> <p>Extend CTC signalized track about 3.9 miles east from Live Oak and Wills interlockings to West Bridge Junction (WBJ) to enhance operation of UP, BNSF, and Amtrak trains, which currently operate on CTC signalized track west of Live Oak and Wills.</p> <p>Upgrade UP Avondale Sub between MP 12.3 and WBJ to eliminate conflicts with UP and BNSF switching moves. Construct new BNSF main line track between Avondale and WBJ to improve access to HPLB.</p> <p>Upgrade WBJ manual interlocking controls and reconfigure trackage to increase speed and reduce delays for through freight train moves, yard switching moves, and Amtrak intercity passenger trains. Increase coordination and improve communications with and between the stakeholders using the interlocker.</p> <p>Enhance the operational for all trains at the east end of Avondale Yard. Eliminate the delays that presently result from the existing single route for UP trains. Increase operational flexibility to eliminate conflicts and substantially reduce the level of train delays.</p>			
Project is now ready to be processed through an ECAD.	<p>Form Completed: 04/17/06</p> <p>Form Revised: 05/30/06</p> <p>Form Revised:</p>			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE

Project Identifier	W4 - Avondale Yard (North), Extend Switching Lead	
Objective, Intent of Project	Elimination of the short north yard switching lead that restricts the number of cars that can be switched in a day. The lengthened switching lead would increase the number of cars that can be handled by a switch engine at one time. Elimination of the need to build freight trains on the main line. Ultimately, reduction in the delays to: build freight trains, to trains departing out of the yard, and to main line trains.	
Description of Proposed Work/Improvements	Extend the switching lead approximately 1,800 feet, and install a new switch in the drill track. Substantial grading work would be required. Minimal drainage work would be required, and no bridges would be constructed. The effort would require no new signal work.	
Location: Owner(s)	UP.	
Route/Line	UP North Avondale Yard.	
Project Limits	West End of North Avondale Yard.	
Local Community	Avondale.	
Potential Environmental Issues Needing Further Study	Nothing of consequence noted to date.	
Project Status	Engineering: Preliminary layout and estimate.	
Estimated Project Costs (Level of Confidence)	Construction \$0.8 M R/W \$0.0 Contingencies 20% included	Planning Estimate Preliminary Engineering Estimate
Adjoining Projects (Project No., Line, Distance)	A. W1/W2/W3/W5. B. C. D. E.	
Other Related Projects (Nature of Relationship)	None.	
Comments/Notes		

Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.

1) Sufficient Length and Scope Determination

Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.	Y/N
	Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project W1/W2/W3/W5	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	None.	Y	The project would eliminate the short north yard switching lead that restricts the number of cars that can be switched in a day. The lengthened switching lead would increase the number of cars that can be handled by a switch engine at one time. Elimination of the need to build freight trains on the main line. Ultimately, reduction in the delays to: build freight trains, to trains departing out of the yard, and to main line trains. W4 is fully usable without W1/W2/W3/W5.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	None.	N	W4 does not restrict alternatives in W1/W2/W3/W5.

<p>If no linkages, prepare Component Project Preliminary Purpose and Need Statement.</p>	<p>Elimination of the short north yard switching lead that restricts the number of cars that can be switched in a day. The lengthened switching lead would increase the number of cars that can be handled by a switch engine at one time. Elimination of the need to build freight trains on the main line. Ultimately, reduction in the delays:</p> <ul style="list-style-type: none"> • to build freight trains, • to trains departing out of the yard, and • to main line trains.
<p>Project is now ready to be processed through an ECAD.</p>	<p>Form Completed: 04/17/06 Form Revised: 05/30/06 Form Revised:</p>
<p>If linkages, go to next page.</p>	<p>None.</p>

NOLA GATEWAY PROJECT PROFILE

Project Identifier	W6 - Track and Interlocking Improvements HPLB		
Objective, Intent of Project	Install ballasted track deck to reduce maintenance requirements of HPLB track structure. Install universal crossover on bridge to provide additional operating flexibility by permitting crossover moves on bridge		
Description of Proposed Work/Improvements	Remove existing open-deck bridge and install ballasted deck bridge entire length of HPLB. Install universal crossover at mid-span of the truss portion of the bridge. Upgrade bridge to support increased load and maintain existing vertical clearances.		
Location: Owner(s)	State?		
Route/Line	NOPB Main Line.		
Project Limits	MP 15.00 to MP 10.66.		
Local Community			
Potential Environmental Issues Needing Further Study	Work over river will require "best practices" during construction.		
Project Status			
Estimated Project Costs (Level of Confidence)	Construction \$63.6 M R/W \$0.0 Contingencies 20% included	Planning Estimate Preliminary Engineering Estimate	
Adjoining Projects (Project No., Line, Distance)	A. W1/W2/W3/W5. B. C1. C. D. E.		
Other Related Projects (Nature of Relationship)	F. Proposed HPLB highway Improvements.		
Comments/Notes			
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.			
1) Sufficient Length and Scope Determination			
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.			Y/N
			Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project W1/W2/W3/W5	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	Significant distance between the two projects and neither would have an impact on the other.	Y	Project would install ballasted track deck to reduce maintenance requirements of HPLB track structure. Install universal crossover on bridge to provide additional operating flexibility by permitting crossover moves on bridge. W6 would be fully usable without W1/W2/W3/W5.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	None.	N	Project would not restrict alternatives in W1/W2/W3/W5.
Linkage to Project C1	Independent Utility?	Significant distance between the two projects and neither would have an impact on the other.	Y	Project would install ballasted track deck to reduce maintenance requirements of HPLB track structure. Install universal crossover on bridge to provide additional operating flexibility by permitting crossover moves on bridge. W6 would be fully usable without C1.
	Restriction of Alternatives?	None.	N	Project would not restrict alternatives in C1.

Linkage to Proposed HPLB highway Improvements	Independent Utility?	Proposed lane widening would make significant structural changes to bridge. The addition of the new truss structures for the highway lanes has been determined to be essential to the installation of a ballasted railroad deck the length of the truss. Timing of improvements might affect design of each.	Y	Project would install ballasted track deck to reduce maintenance requirements of HPLB track structure. Install universal crossover on bridge to provide additional operating flexibility by permitting crossover moves on bridge. W6 would not be fully usable without the HPLB Highway Improvements.
	Restriction of Alternatives?	See discussion above relative to truss strengthening.	Y	Determination need to be made as whether the project would not restrict alternatives in the highway widening project.
	Independent Utility?			
	Restriction of Alternatives?			
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	Install ballasted track deck to reduce maintenance requirements of HPLB track structure. Install universal crossover on bridge to provide additional operating flexibility by permitting crossover moves on bridge. Install signal system to eliminate the "yard limit" designation for the tracks over the bridge.			
Project is now ready to be processed through an ECAD.	Form Completed: 04/17/06 Form Revised: 05/31/06 Form Revised:			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE		
Project Identifier	C1 - East Bridge Junction (EBJ), Signal and Track Improvements	
Objective, Intent of Project	Increase capacity from HPLB to NS Back Belt. Maintain CN/IC and KCS routes through EBJ. Upgrade current route from NS Back Belt to NOPB HPLB from a single-track to a double-track movement to increase capacity. Improve track geometry to increase maximum speeds from Back Belt to the HPLB. Replace antiquated control equipment for signals and switches, which a 24-hour manned on-site control tower controls and are subject to frequent service failure.	
Description of Proposed Work/Improvements	Upgrade/modernize switch and signal hardware and control equipment. New control station for remote control operation. Remove existing control tower. Remove NOPB crossover at Central Avenue. Provide double track routes from NS Back Belt to Huey P. Long Bridge, includes rail to rail crossing of CN main. Turnouts replaced and upgraded. Separate control point for beginning of NS Back Belt and KCS main near Earhart Boulevard.	
Location: Owner(s)	CN, KCS, NOPB, NS.	
Route/Line	NOPB Main Line, CN/IC Main Line, NS Back Belt, KCS route to Yard.	
Project Limits	Connection NOPB Main Line to CN/IC Main Line to NS Belt Line.	
Local Community	Metairie.	
Potential Environmental Issues Needing Further Study	No issues appear to need greater detail than normally accomplished through ECAD process.	
Project Status	Engineering: Conceptual layout and estimate. Ground survey, track layout, and detailed signal design need to be completed.	
Estimated Project Costs (Level of Confidence)	Construction \$14.0 M R/W \$0.0 Contingencies 20% included	Planning Estimate Preliminary Engineering Estimate
Adjoining Projects (Project No., Line, Distance)	A. C2 Back Belt, directly east of C1. B. C3 Back Belt, one project east of C1. C. HPLB – NOPB main line, directly west of C1. D. E.	
Other Related Projects (Nature of Relationship)		
Comments/Notes		
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) Independent utility; and 3) restriction of alternatives.		
1) Sufficient Length and Scope Determination		
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.		Y/N Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project: C2	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	The Shrewsbury Interlocking improvements directly connect to the EBJ improvements. C2 provides flexibility in the routing of trains between EBJ and the Back Belt east of Shrewsbury. EBJ and Shrewsbury establish routing of KCS trains to and from their yard.	N	Project C1 is to increase capacity from HPLB to NS Back Belt and maintain CN/IC and KCS routes through EBJ. C1 is not fully usable without C2. Therefore, the projects are linked.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	The install CTC from EBJ to Metairie Rd portion of C2 could be built if C1 were not. The new control point at Shrewsbury could be built if C1 were not, however, it would have a different configuration	N	Project C1 does not restrict alternatives between Shrewsbury and Metairie Road. Project C1 restricts alternative configurations within Shrewsbury Interlocking.
Linkage to Project: C3	Independent Utility?	C1 adds capacity to the existing HPLB to NS Back Belt and is independent of C3.	Y	Project C1 is to increase capacity from HPLB to NS Back Belt and maintain CN/IC and KCS routes through EBJ. C1 is fully usable without C3. Therefore, the projects are not linked.
	Restriction of Alternatives?	None.	N	Project C1 does not restrict alternatives in C3.
Linkage to Project HPLB	Independent Utility?	The deck of the bridge can be replaced independent of the improvements to EBJ. The signal improvements over the bridge that would be implemented as part of the bridge project would speed up movements through EBJ, but are not essential to implementation of the EBJ Project.	Y	Project C1 is to increase capacity from HPLB to NS Back Belt and maintain CN/IC and KCS routes through EBJ. C1 is fully usable without HPLB. Therefore, the projects are not linked.
	Restriction of Alternatives?	None.	N	Project C1 does not restrict alternatives in HPLB.

If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	
Project is now ready to be processed through an ECAD.	Form Completed: 04/17/06 Form Revised: Form Revised:
If linkages, go to next page.	Yes.
List Component Projects that Constitute the Linked Project.	C1 and C2

NOLA GATEWAY LINKED PROJECT PROFILE

Project Identifier	C1/C2 - (EBJ/NS Back Belt, Shrewsbury CTC)	
Objective, Intent of Project	<p>Increase capacity from HPLB to NS Back Belt. Maintain CN/IC and KCS routes through EBJ.</p> <p>Install CTC from EBJ to Metairie Road to upgrade NS Back Belt that presently has no signals from the "home signals" of EBJ to the controlled switch at MP 2.2-A- located at Metairie Road. Metairie Road is the location where present single-track operation begins on the Back Belt. Install a new control point at Shrewsbury that connects with the new routes from HPLB through EBJ and provides KCS access from CN/IC main track to their Main Track.</p>	
Description of Proposed Work/Improvements	<p>Upgrade/modernize switch and signal hardware and control equipment. New control station for remote control operation. Remove existing control tower. Remove NOPB crossover at Central Avenue. Provide double track routes from NS Back Belt to Huey P. Long Bridge, includes rail to rail crossing of CN main. Turnouts replaced and upgraded. Separate control point for beginning of NS Back Belt and KCS main near Earhart Boulevard.</p> <p>Remove existing KCS connection EBJ to KCS main line. Remove two yard tracks.</p> <p>Install turnouts and crossovers for new NS control point at Shrewsbury that would be located between NS MP 0.1-A and 0.4-A. Install CTC signals from "Shrewsbury" to "Metairie Road". Convert existing "Remote Control" signal territory on the Back Belt to CTC. Modify CN EBJ control for NS control of "Shrewsbury."</p> <p>Close Shrewsbury Road to eliminate a grade crossing within the new "Shrewsbury" control point.</p>	
Location:	Owner(s)	CN, KCS, NOPB, NS.
Route/Line		NOPB Main Line, CN/IC Main Line, NS Back Belt, KCS route to Yard.
Project Limits		Connection NOPB Main Line to CN/IC Main Line to NS Belt Line.
Local Community		Metairie.
Potential Environmental Issues Needing Further Study	<p>No issues appear to need greater detail than normally accomplished through ECAD process.</p> <p>The Shrewsbury Grade Crossing Closure will require further analysis of impact on traffic flow.</p>	
Project Status	Engineering: Conceptual layout and estimate. Ground survey, track layout, and detailed signal design need to be completed.	
Estimated Project Costs (Level of Confidence)	<p>Construction \$19.7 M</p> <p>R/W \$0.00</p> <p>Contingencies 20% included</p>	<p>Planning Estimate</p> <p><u>Preliminary Engineering Estimate</u></p>
Adjoining Projects (Project No., Line, Distance)	<p>A. W6 HPLB.</p> <p>B. C3.</p> <p>C. C11 Shrewsbury Road grade crossing.</p> <p>D.</p> <p>E.</p>	
Other Related Projects (Nature of Relationship)		
Comments/Notes		
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.		
1) Sufficient Length and Scope Determination		
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.		Y/N
		Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project HPLB	<p>Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?</p>	<p>The deck of the bridge can be replaced independent of the improvements to EBJ. The signal improvements over the bridge that would be implemented as part of the bridge project would speed up movements through EBJ, but are not essential to implementation of the EBJ Project.</p>	Y	<p>Project C1/C2 is to increase capacity from HPLB to NS Back Belt. Maintain CN/IC and KCS routes through EBJ.</p> <p>Install CTC from EBJ to Metairie Rd to upgrade NS Back Belt that presently has no signals from the "home signals" of EBJ to the controlled switch at MP 2.2-A- located at Metairie Road. Install a new control point at Shrewsbury that connects with the new routes from HPLB through EBJ and provides KCS access from CN/IC main track to their main track.</p>
	<p>Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?</p>	None.	N	<p>Project C1/C2 does not restrict alternatives in HPLB.</p>

Linkage to Project: C3	Independent Utility?	C1/C2 adds capacity to the existing HPLB to NS Back Belt and is independent of C3.	Y	Project C1/C2 is to increase capacity from HPLB to NS Back Belt. Maintain CN/IC and KCS routes through EBJ. Install CTC from EBJ to Metairie Road to upgrade NS Back Belt. Install a new control point at Shrewsbury.
	Restriction of Alternatives?	None.	N	Project C1/C2 does not restrict alternatives in C3.
Linkage to Project C11	Independent Utility?	The purpose C11 is to reduce roadway congestion and improve safety at the Shrewsbury Road at-grade crossing.	Y	C1/C2 is fully usable without the completion of C11. Therefore, the projects are not linked.
	Restriction of Alternatives?	C11 would restrict the design of the vertical alignment of the tracks and interlocking installed by C1/C2. C11 would require a modification in the design of C1/C2.	Y	Project C11 restricts alternatives in C1/C2.
Linked Project Preliminary Purpose and Need.	The purpose of the proposed action is to Increase capacity from HPLB to NS Back Belt and maintain CN/IC and KCS routes through EBJ. Also install CTC from EBJ to Metairie Road to upgrade NS Back Belt and install a new control point at Shrewsbury. The project also would result in either the closure or grade separation of Shrewsbury Road grade crossing.			
Project is now ready to be processed through an ECAD.	Form Completed: 04/17/06 Form Revised: 05/30/06 Form Revised:			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE

Project Identifier	C3 - NS BACK BELT METAIRIE, GRADE SEPARATION – SEVEN GRADE CROSSINGS
Objective, Intent of Project	<p>To reduce roadway congestion and improve safety at the at-grade crossings in Metairie, eliminate the existing seven grade crossings located within the 1.7 miles that the NS Back Belt traverses the Metairie neighborhood of Jefferson Parish. The elimination of the grade crossings, either by closure or grade separation, would eliminate the traffic congestion in the Metairie community caused by the train operations across the numerous road crossings.</p> <p>The grade separated right-of-way would enable trains waiting to cross EBJ to access the HPLB to be held east of the Shrewsbury Control point. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossings. The closures and separations also would put an end to the time extensive process of breaking the train at each road crossing to allow highway traffic to use the crossings.</p>
Description of Proposed Work/Improvements	<p>Construct seven grade-separation structures to route highway traffic under the railroad. A grade separated NS Back Belt through Metairie would be created by a combination of:</p> <ul style="list-style-type: none"> • Raising the track elevation; and • Either lowering or closing the seven existing roadways. <p>Ultimately, the disposition of each crossing would be determined by a subsequent evaluation of existing traffic patterns, estimate the effect of closing a specific crossing, and involve a vigorous public outreach and coordination program.</p> <p>The railroad tracks currently are elevated between four and six feet above the approaching roads at the grade crossings. The final design would include a balanced approach that would further elevate the tracks and re-grade the road way approaches and the elevation of the roadways under the railroad bridges in a manner that would minimize the amount the roadways would be lowered to enable the underpasses to be constructed.</p> <p>The final profile of the tracks through Metairie would be coordinated with the proposed alignment of the Back Belt tracks as they cross the 17th Street Canal such that the road bed would match the top elevation of the flood protection or bridge modifications would eliminate the requirement for gate closures.</p>
Location: Owner(s)	NS.
Route/Line	NS Belt Line.
Project Limits	MP 0.6A to 3.1A.
Local Community	Metairie.
Potential Environmental Issues Needing Further Study	<p>Impacts during construction and post construction on local neighborhoods and traffic flow in and through Metairie would have to be evaluated.</p> <p>Closure of crossings will affect vehicular and pedestrian travel in the vicinity. Effect on neighborhood travel patterns, for pedestrians, bicyclists and vehicles, relative to critical access to key destinations, current traffic volumes and travel patterns would require detailed evaluation.</p> <p>Impact on local businesses might occur and will require evaluation. Changes in land use and economic development do not appear likely.</p> <p>Access to public facilities and services, as well as emergency services such as police, ambulance and fire response times will not be affected.</p> <p>Environmental justice should not be an issue. NEPA evaluation relative to archaeological sites, historic districts and buildings will be required.</p> <p>Elimination of grade crossing should result in slight air quality improvement. Noise and vibration and energy impacts will be evaluated and may require mitigation.</p> <p>One park (Section 4f) appears to be adjacent to R-O-W, but should not be impacted directly by the grade crossing project; however noise and visual impacts are potential.</p>

Project Status	Engineering: Preliminary layout and estimate.			
Estimated Project Costs (Level of Confidence)	Construction \$58.9 M R/W \$0.0 Contingencies 20% included	Planning-Estimate Preliminary-Engineering-Estimate		
Adjoining Projects (Project No., Line, Distance)	A. C2.			
	B. C4.			
	C.			
	D.			
	E.			
Other Related Projects (Nature of Relationship)	17 th Street Canal hurricane-related improvements.			
Comments/Notes				
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.				
1) Sufficient Length and Scope Determination				
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.				Y/N
				Y
2) Independent Utility and 3) Restriction of Alternatives Determination				
		Discussion	Y/N	Rationale
Linkage to Project C2	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	The implementation of C2 only would affect train operations and would be fully useful without C3.	Y	Project C3 is to reduce roadway congestion and improve safety at the at-grade crossings in Metairie, eliminate the existing seven grade crossings located within the 1.7 miles that the NS Back Belt traverses the City of Metairie. C3 is fully usable without C2.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	C2 would enhance operational flexibility of trains during construction, but would not restrict consideration of reasonable alternatives. The implementation of C3 without C4 would cause signal software programming considerations in C2.	N	Project C3 does not restrict alternatives in C2.

Linkage to Project C4	Independent Utility?	<p>The implementation of C4 without C3 would result in the reconstruction of the existing grade crossings at Metairie Road and Carrollton Avenue; neither grade crossing would be separated as the project is presently scoped.</p> <p>The implementation of C3 without C4 would result in the end of double track remaining west of Metairie Road; it would not be extended eastward to west end of the 17th Street Canal. The grade separation of Metairie Road and Carrollton Avenue as single-track, rather than double track grade separations would not achieve the overall goals of the operating improvements between EBJ and 17th Street Canal.</p>	N	<p>Project C3 is to reduce roadway congestion and improve safety at the at-grade crossings in Metairie; eliminate the existing seven grade crossings located within the 1.7 miles that the NS Back Belt traverses the City of Metairie; and enable trains to be held east of Shrewsbury/EBJ without blocking highway traffic or having to be separated at grade crossings. This latter goal could not be achieved without the double track between Metairie and 17th Street Canal. C3 is not fully usable without C4.</p>
	Restriction of Alternatives?	<p>C3 requires that any improvement east of Metairie be constructed as a grade separated improvement. This would limit horizontal and vertical design considerations in the implementation of C4 east of Metairie.</p>	Y	<p>Project C3 restricts alternatives in C4.</p>
Linkage to Project: 17 th Street Canal Hurricane-Related Improvements	Independent Utility?	Not identified as of this draft.		
	Restriction of Alternatives?	Not identified as of this draft.		
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.				
Project is now ready to be processed through an ECAD.	Form Completed: 04/17/06 Form Revised: 05/30/06 Form Revised:			
If linkages, go to next page.	Yes.			

NOLA GATEWAY LINKED PROJECT PROFILE

Project Identifier	C3/C4 - NS Back Belt Metairie, Grade Separation - Seven Grade Crossings/17th Street Canal, Double Track (Mp 2.2a To 2.8a)
Objective, Intent of Project	<p>Eliminate roadway congestion in the Metairie community caused by the train operations across the numerous road crossings and improve safety at the at-grade crossings, by eliminating the existing seven grade crossings, either by closure or grade separation, located within the 1.7 miles that the NS Back Belt traverses the City of Metairie.</p> <p>Increase capacity of the Back Belt by double tracking the line between Metairie Road and 17th Street Canal. The double tracking would facilitate the sequencing of trains by eliminating the fact that the Back Belt effectively is reduced to a single track for its westernmost 4 miles (between EBJ and East City Junction).</p> <p>The grade separated right-of-way would enable trains waiting to cross EBJ to access the HPLB to be held east of the Shrewsbury Control point. Presently, the existing passing track from EBJ to Metairie Road (2.1 miles) rarely is used to hold trains as the result of the unacceptable highway traffic conditions caused by the freight train blocking the crossings. The closures and separations also would put an end to the time extensive process of breaking the train at each road crossing to allow highway traffic to use the crossings.</p>
Description of Proposed Work/Improvements	<p>Construct grade-separation structures and close grade crossings to route highway traffic under the railroad. A grade separated NS Back Belt through Metairie would be created by a combination of:</p> <ul style="list-style-type: none"> • Raising the track elevation; and • Either lowering or closing the seven existing roadways. <p>Ultimately, the disposition of each crossing would be determined by a subsequent evaluation existing traffic patterns, estimate the effect of closing a specific crossing, and involve a vigorous public outreach and coordination program.</p> <p>The railroad tracks currently are elevated between four and eight feet above the approaching roads at the grade crossings. The final design would include a balanced approach that would further elevate the tracks and re-grade the road way approaches and the elevation of the roadways under the railroad bridges in a manner that would minimize the amount the roadways would be lowered to enable the underpasses to be constructed.</p> <p>The final profile of the tracks through Metairie would be coordinated with the proposed alignment of the Back Belt Tracks as they cross the 17th Street Canal such that a combination of raising the roadbed and/or bridge modifications would eliminate the requirement for flood gate closures.</p> <p>Construct 3,000 feet of double-track on the NS Back Belt between Metairie Road (east end of two mile passing track) and 17th Street Canal (west end of existing double track). Eliminate the passing track that extends between EBJ and Metairie Road, which cannot be used for trains over 2,500 feet in length because they would block road crossings.</p>
Location: Owner(s)	NS.
Route/Line	NS Belt Line.
Project Limits	MP 0.6A to 3.1A.
Local Community	Jefferson Parish and Orleans Parish.

<p>Potential Environmental Issues Needing Further Study</p>	<p>Impacts during construction and post construction on local neighborhoods and traffic flow in and through Metairie would have to be evaluated.</p> <p>Closure of crossings will affect vehicular and pedestrian travel in the vicinity.</p> <p>Effect on neighborhood travel patterns, for pedestrians, bicyclists and vehicles, relative to critical access to key destinations, current traffic volumes and travel patterns would require detailed evaluation.</p> <p>Impact on local businesses might occur and will require evaluation.</p> <p>Changes in land use and economic development do not appear likely.</p> <p>Access to public facilities and services, as well as emergency services such as police, ambulance and fire response times will not be affected.</p> <p>Environmental Justice should not be an issue, but will require verification.</p> <p>NEPA evaluation relative to archaeological sites, historic districts and buildings will be required.</p> <p>Elimination of grade crossing should result in slight air quality improvement. Noise and Vibration and Energy impacts will be evaluated and may require mitigation.</p> <p>One park (Section 4(f) appears to be adjacent to R-O-W, but should not be directly impacted by the grade crossing project.</p>	
<p>Project Status</p>	<p>Engineering: Preliminary layout and estimate. Ground survey and detailed signal design needs to be completed.</p>	
<p>Estimated Project Costs (Level of Confidence)</p>	<p>Construction \$68.3 M R/W \$0.0 Contingencies 20% included</p>	<p>Planning Estimate Preliminary Engineering Estimate</p>
<p>Adjoining Projects (Project No., Line, Distance)</p>	<p>A. C2. B. E1. C. C12. D. C13. E. C14. F. C15. G. C16. H. C17. I. C18.</p>	
<p>Other Related Projects (Nature of Relationship)</p>	<p>17th Street Canal Hurricane-Related Improvements.</p>	
<p>Comments/Notes</p>		

Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.

1) Sufficient Length and Scope Determination

Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.	Y/N
	Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project C2	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	The implementation of C2 only would affect train operations and would be fully useful without C3.	Y	Project C3/C4 is to reduce roadway congestion and improve safety at the at-grade crossings in Metairie, eliminate the existing seven grade crossings located within the 1.7 miles that the NS Back Belt traverses the City of Metairie. C3/C4 is fully usable without C2.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	C2 would enhance operational flexibility of trains during construction, but would not restrict consideration of reasonable alternatives. The implementation of C2 without C3/C4 would cause signal software programming considerations in C2.	N	Project C3/C4 does not restrict alternatives in C2.
Linkage to Project E1	Independent Utility?	Project C3/C4 would increase capacity of the Back Belt by facilitating the sequencing of trains between Metairie Road and 17 th Street Canal and eliminate highway congestion resulting from train operations.	Y	Project C3/C4 is C4 is fully usable without E1. Implementation of E1 will assist in construction phase of C3/C4.
	Restriction of Alternatives?	None.	N	Project C4 does not restrict alternatives in E1.

C12 Labarre Road	Independent Utility?	Project C12 is to reduce roadway congestion and improve safety at Labarre Road by eliminating the existing grade crossing and constructing an underpass structure.	N	The elimination of Labarre Road makes C12 an integral component of C3/C4. C3/C4 is not fully usable without C12.
	Restriction of Alternatives?	Project C12 eliminates the Labarre Road at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C12; thus the projects are linked.
C13 Atherton Drive	Independent Utility?	Project C13 is to reduce roadway congestion and improve safety at Atherton Drive by eliminating the existing grade crossing.	N	The elimination of Atherton Drive makes C13 an integral component of C3/C4. C3/C4 is not fully usable without C13.
	Restriction of Alternatives?	Project C13 eliminates the Atherton Drive at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C13; thus the projects are linked.
C14 Hollywood Drive	Independent Utility?	Project C14 is to reduce roadway congestion and improve safety at Hollywood Drive by eliminating the existing grade crossing and constructing an underpass structure.	N	The elimination of Hollywood Drive makes C14 an integral component of C3/C4. C3/C4 is not fully usable without C14.
	Restriction of Alternatives?	Project C14 eliminates the Hollywood Drive at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C14; thus the projects are linked.

C15 Farnham Place	Independent Utility?	Project C15 is to reduce roadway congestion and improve safety at Farnham Place by eliminating the existing grade crossing and constructing an underpass structure.	N	The elimination of Farnham Place makes C15 an integral component of C3/C4. C3/C4 is not fully usable without C15.
	Restriction of Alternatives?	Project C15 eliminates the Farnham Place at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C15; thus the projects are linked.
C16 West Oakridge Parkway	Independent Utility?	Project C16 is to reduce roadway congestion and improve safety at West Oakridge Parkway by eliminating the existing grade crossing.	N	The elimination of West Oakridge Parkway makes C16 an integral component of C3/C4. C3/C4 is not fully usable without C16.
	Restriction of Alternatives?	Project C16 eliminates the West Oakridge parkway at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C16; thus the projects are linked.
C17 Metairie Road	Independent Utility?	Project C17 is to reduce roadway congestion and improve safety at Metairie Road by eliminating the existing grade crossing and constructing an underpass structure.	N	The elimination of Metairie Road makes C17 an integral component of C3/C4. C3/C4 is not fully usable without C17.
	Restriction of Alternatives?	Project C17 eliminates the Metairie Road at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C17; thus the projects are linked.

C18 Carrollton Avenue	Independent Utility?	Project C18 is to reduce roadway congestion and improve safety at Carrollton Avenue by eliminating the existing grade crossing and constructing an underpass structure.	N	The elimination of Carrollton Avenue makes C18 an integral component of C3/C4. C3/C4 is not fully usable without C18.
	Restriction of Alternatives?	Project C18 eliminates the Carrollton Avenue at-grade crossing and as such is an integral component of C3/C4.	Y	Project C3/C4 does influence the improvements to be included in C18; thus the projects are linked.
Linkage to Project: 17 th Street Canal Hurricane-Related Improvements	Independent Utility?	Not identified as of this draft.		
	Restriction of Alternatives?	Not identified as of this draft.		
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	Increase capacity of the Back Belt by facilitating the sequencing of trains between Metairie Road and 17 th Street Canal. Eliminate the fact that the Back Belt effectively is reduced to a single track for its westernmost four miles (between EBJ and East City Junction).			
Project is now ready to be processed through an ECAD.	Form Completed: 04//06 Form Revised: 05/31/06 Form Revised:			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE							
Project Identifier	E1 - NS Back Belt, East City Junction, Install Universal Crossovers						
Objective, Intent of Project	Eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration. Support the construction of Project C3/C4.						
Description of Proposed Work/Improvements	Reconfigure East City Junction to enable passenger trains to meet and pass each other without delay. The revised junction also would provide flexibility to minimize conflicts with freight trains on the Back Belt. The reconfigured Junction would continue to provide access to the NS local industrial track. The upgraded interlocking would provide improved freight train operating flexibility between Shrewsbury and Elysian Fields.						
Location: Owner(s)	NS.						
Route/Line	NS Belt Line.						
Project Limits	MP 3.5A.						
Local Community	Orleans Parish.						
Potential Environmental Issues Needing Further Study	None anticipated, work within existing R-O-W.						
Project Status	Preliminary layout and estimate						
Estimated Project Costs (Level of Confidence)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Construction \$9.7 M</td> <td style="width: 40%;">Planning Estimate</td> </tr> <tr> <td>R/W \$0.0</td> <td></td> </tr> <tr> <td>Contingencies 20% included</td> <td>Preliminary Engineering Estimate</td> </tr> </table>	Construction \$9.7 M	Planning Estimate	R/W \$0.0		Contingencies 20% included	Preliminary Engineering Estimate
Construction \$9.7 M	Planning Estimate						
R/W \$0.0							
Contingencies 20% included	Preliminary Engineering Estimate						
Adjoining Projects (Project No., Line, Distance)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>A. C3/C4.</td> </tr> <tr> <td>B. E2.</td> </tr> <tr> <td>C. E6 Marconi Drive to Elysian Fields.</td> </tr> <tr> <td>D. E7 Double Track East City Junction to Carrollton.</td> </tr> <tr> <td>E.</td> </tr> </table>	A. C3/C4.	B. E2.	C. E6 Marconi Drive to Elysian Fields.	D. E7 Double Track East City Junction to Carrollton.	E.	
A. C3/C4.							
B. E2.							
C. E6 Marconi Drive to Elysian Fields.							
D. E7 Double Track East City Junction to Carrollton.							
E.							
Other Related Projects (Nature of Relationship)							
Comments/Notes							

Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.				
1) Sufficient Length and Scope Determination				
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.				Y/N
				Y
2) Independent Utility and 3) Restriction of Alternatives Determination				
		Discussion	Y/N	Rationale
Linkage to Project C3/C4	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	None.	Y	Project E1 is to eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration. E1 is fully usable without C3/C4, and will aid in the construction of C3/C4.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	None.	N	Project E1 does not restrict alternatives in C3/C4.
Linkage to Project E6	Independent Utility?	E6 would improve capacity between Marconi Drive and Frenchmen Street, but does not affect the configuration of East City Junction.	Y	Project E1 is to eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration. E1 is fully usable without E6.
	Restriction of Alternatives?	A decision as to the location of the third track east of Marconi Drive and other considerations relative to E6 would be independent as to the configuration of E1.	N	Project E1 does not restrict alternatives in E6.

Linkage to Project E2	Independent Utility?	None.	Y	Project E1 is to eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration. E1 is fully usable without E2.
	Restriction of Alternatives?	None.	N	Project E1 does not restrict alternatives in E2.
Linkage to Project E7	Independent Utility?	See the discussion in the <i>Rationale Cell</i> .	Y	Project E1 is to eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration. The main track configuration of E1 is fully usable without E7. The configuration of E1 leading to the freight lead track and to NOUPT is dependent upon the decision as to the number of tracks leading to the passenger station.
	Restriction of Alternatives?	The effect of whether the station lead is single or double tracked is described in the <i>Rationale Cell</i> .	Y	Project E1 in its base alignment is intended to support a single track operation into NOUPT, the presently recommended enhanced configuration does not restrict alternatives in E7.

<p>If no linkages, prepare Component Project Preliminary Purpose and Need Statement.</p>	<p>Eliminate the present lack of operational flexibility of freight and Amtrak movements on the Back Belt resulting from the current track and crossover configuration.</p>
<p>Project is now ready to be processed through an ECAD.</p>	<p>Form Completed: 05/31/06 Form Revised: Form Revised:</p>
<p>If linkages, go to next page.</p>	<p>None.</p>

NOLA GATEWAY PROJECT PROFILE

Project Identifier	E2 - NS Back Belt, Elysian Fields, Reconfigure Track and Signals	
Objective, Intent of Project	Improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard. Combine Elysian Fields and Frenchmen Street Interlockings further to enhance flexibility in the routing of trains. Eliminate existing conflicts between CSX and NS freight trains. Realign CSX main tracks east of Elysian Fields to increase track speed for freight trains from 15 to 25 mph.	
Description of Proposed Work/Improvements	Revise junction of CSX mainline and NS Back Belt to improve speeds for movements to and from CSX mainline, minimize conflicts with NS freight trains, and enhance operational flexibility. Construct relocated NS Freight Lead Track one-track center to the south of the existing track. Perform a series of cut and throws to realign NS Back Belt and freight lead tracks through Elysian Fields. Remove existing Back Belt Track 1 through Elysian Fields. Remove existing turnouts and crossing diamonds that provide connection between CSX main line and NS Back Belt. Install three No. 15 turnouts to provide new connection between CSX and NS. Install new LH No. 15 crossover at existing Frenchmen Street to convert interlocking to a universal interlocking. Combine Interlocking control of Frenchmen Street and Elysian Fields.	
Location: Owner(s)	NS.	
Route/Line	NS Belt Line.	
Project Limits	MP 6.8NT to 4.2NT.	
Local Community	Orleans Parish.	
Potential Environmental Issues Needing Further Study	None anticipated.	
Project Status	Preliminary layout and estimate.	
Estimated Project Costs (Level of Confidence)	Construction \$11.9 M R/W \$0.0 Contingencies 20% included	Planning-Estimate Preliminary-Engineering-Estimate
Adjoining Projects (Project No., Line, Distance)	A. E1 East City Junction. B. E6 Marconi Drive to Elysian Fields. C. E3 NE Tower. D. E.	
Other Related Projects (Nature of Relationship)		
Comments/Notes		
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.		
1) Sufficient Length and Scope Determination		
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, then proceed to project linkage test.		Y/N Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project E1	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	None.	Y	Project E2 is to improve operational flexibility at the junction of the CSX main line to Mobile and the NS Back Belt into and out of Oliver Yard. The project will combine Elysian Fields and Frenchmen Street Interlockings to further enhance flexibility in the routing of trains. Eliminate existing conflicts between CSX and NS freight trains. E2 is fully usable without E1.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	None.	N	Project E2 does not restrict alternatives in E1.
Linkage to Project E6	Independent Utility?	E2 would be configured to support the location and configuration of the three track alignment required to implement E6.	Y	Project E2 is to improve operational flexibility at the junction of the CSX main line to Mobile and the NS Back Belt into and out of Oliver Yard. E2 is fully usable without E6.
	Restriction of Alternatives?	The configuration of the Frenchmen Street portion of the interlocking would easily be modified to accommodate the ultimate configuration of the upgraded main line configuration to Marconi Drive.	N	Project E2 does not restrict alternatives in E6.

Linkage to Project E3	Independent Utility?	Trains using E2 would still be able to access the CSX and NS main tracks as well as Oliver Yard east of Elysian Fields. The CSX connection between Elysian Fields and NE Tower would remain double tracked.	Y	Project E2 is to improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard. E2 is fully usable without E3
	Restriction of Alternatives?	Project E3 would only cause signal software programming considerations in the Elysian Fields Interlocking project.	N	Project E2 does not restrict alternatives in E3.
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	Improve operational flexibility at the junction of the CSX mainline to Mobile and the NS Back Belt into and out of Oliver Yard. Combine Elysian Fields and Frenchmen Street Interlockings further to enhance flexibility in the routing of trains and eliminate existing conflicts between CSX and NS freight trains. Realign CSX main tracks east of Elysian Fields to increase track speed for freight trains from 15 to 25 mph.			
Project is now ready to be processed through an ECAD.	Form Completed: 04/17/06 Form Revised: 05/31/06 Form Revised:			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE

Project Identifier	E3 - Northwest Quadrant Connection between NS and CSX, NE Tower	
Objective, Intent of Project	<p>Establish an improved connection between NS mainline and the NS Back Belt by providing a connection to the CSX mainline between NE Tower and Elysian Fields (N.O.T. Junction). The connection would eliminate the need for Amtrak trains from Atlanta and UP trains to travel to Oliver Jct to connect to the Back Belt through a slow, circuitous route. The proposed interlocking changes and track connection would facilitate parallel movement of trains to Oliver Jct and Elysian Fields on the NS New Orleans main line.</p> <p>Minimize conflicts between NS, Amtrak, and CSX movements at NE Tower. The completion of the project would increase speed of train movements, enhance operational flexibility, and reduce congestion.</p>	
Description of Proposed Work/Improvements	<p>Construct a new interlocked connection between NS and CSX in the northwest quadrant of the present NE Tower; construct bridge to span Peoples Canal, which parallels the NS mainline. Install a new controlled set of turnouts and crossovers on the CSX main line west of the NS main line. In addition to the turnout to connect with the CSX main line, install a crossover to create a universal set of crossovers on the NS mainline north of the existing crossing diamonds at NE Tower.</p> <p>Upgrade signals on CSX mainline between Gentilly Yard and Elysian Fields. Coordinate NS signal modifications and CSX signal additions from Elysian Fields to NE Tower to provide optimum control and flexibility of operations through NE Tower interlocking.</p>	
Location: Owner(s)	NS and CSX.	
Route/Line	NS NO Line and CSX NO&M Line.	
Project Limits	NS Milepost N0193.25 to NE Tower to CSX MP 802.72.	
Local Community	Orleans Parish.	
Potential Environmental Issues Needing Further Study	Construction of new bridge over Peoples Canal would require further evaluation and implementation of best planning practices during construction.	
Project Status	Conceptual design and schematics. Further survey required.	
Estimated Project Costs (Level of Confidence)	Construction \$12.3 M R/W \$0.0 Contingencies 20% included	Planning Estimate Preliminary Engineering Estimate
Adjoining Projects (Project No., Line, Distance)	A. E2. B. C. D. E.	
Other Related Projects (Nature of Relationship)		
Comments/Notes		
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.		
1) Sufficient Length and Scope Determination		
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.	Y/N	Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project E2	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	While the projects are mutually supportive, each can be implemented without the other.	Y	Project is to establish an improved connection between NS mainline and the NS Back Belt by providing a connection to the CSX mainline between NE Tower and Elysian Fields (N.O.T. Junction). E3 is fully usable without E2.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	No.	N	Project E3 does not restrict alternatives in E2.
Linkage to Project	Independent Utility?			
	Restriction of Alternatives?			
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	<p>Project is to establish an improved connection between NS mainline and the NS Back Belt by providing a connection to the CSX mainline between NE Tower and Elysian Fields (N.O.T. Junction).</p> <p>The project would minimize conflicts between NS, Amtrak, and CSX movements at NE Tower and Elysian Fields. The completion of Project would increase speed of train movements, enhance operational flexibility, and reduce congestion.</p>			
Project is now ready to be processed through an ECAD.	<p>Form Completed: 04/17/06 Form Revised: 05/31/06 Form Revised:</p>			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE										
Project Identifier	E4 - CSX Main Line, Renewal of Almonaster Moveable Bridge									
Objective, Intent of Project	Construct a replacement structure for the existing bascule bridge that would accommodate rail service, maritime transportation needs, truck and vehicular traffic, and transit through the CSX and Almonaster Avenue corridor and bridge crossing over the Inner Harbor Navigation Canal. Replace existing bridge to improve the reliability of CSX and NOPB operations over the bridge.									
Description of Proposed Work/Improvements	Construct a new vertical lift structure at the site of the present combination railroad and highway bridge. As initially conceived the width of the channel would be increased, resulting in a clear opening for the marine channel of 200 feet from fender face to fender face. The clearance in the fully-opened position would be 126 feet.									
Location: Owner(s)	City of New Orleans Port Authority.									
Route/Line	CSX NO&M Line.									
Project Limits	CSX NO&M Subdivision – MP 801.4.									
Local Community										
Potential Environmental Issues Needing Further Study	The environmental documentation for the project has been completed by the RPC.									
Project Status	Preliminary design completed; project under review to reduce estimated construction cost.									
Estimated Project Costs (Level of Confidence)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Construction</td> <td style="width: 25%;">\$55.0 M</td> <td style="width: 25%;">Planning-Estimate</td> </tr> <tr> <td>R/W</td> <td>\$0.0</td> <td></td> </tr> <tr> <td>Contingencies</td> <td>20% included</td> <td>Preliminary-Engineering-Estimate</td> </tr> </table>	Construction	\$55.0 M	Planning-Estimate	R/W	\$0.0		Contingencies	20% included	Preliminary-Engineering-Estimate
Construction	\$55.0 M	Planning-Estimate								
R/W	\$0.0									
Contingencies	20% included	Preliminary-Engineering-Estimate								
Adjoining Projects (Project No., Line, Distance)	A. E5. B. C. D. E.									
Other Related Projects (Nature of Relationship)	New Orleans upgrade of Almonaster Avenue west and east of the bridge.									
Comments/Notes										
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.										
1) Sufficient Length and Scope Determination										
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.	Y/N Y									

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project E5	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	The combination highway-rail bridge is in need of replacement and has been extensively studied over the last decade.	Y	The project would construct a replacement structure for the existing bascule bridge that would accommodate rail service, maritime transportation needs, truck and vehicular traffic, and transit through the CSX and Almonaster Avenue corridor and bridge crossing over the Inner Harbor Navigation Canal. E4 is fully usable without E5.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	The bridge location is fixed and improvements associated with Gentilly Yard acknowledge the fixed constraint. A delay in the construction of E4 would not affect E5.	Y	Project E4 only permits a double track alignment over the bridge, which restricts E5 alternatives that may include more tracks. Such alternatives are not a priority at this time.
Linkage to Project: New Orleans Upgrade of Almonaster Avenue west and east of the bridge.	Independent Utility?	The highway-rail moveable bridge has been interconnected since the present bridge was constructed. The site is such that the bridge must continue to serve both Almonaster Avenue and the CSX main line.	N	E4 is not fully usable without the Almonaster Improvements. The ultimate design would include tradeoffs between the highway and rail portions of the structure. The linkage has no impact on E5 or other rail projects.
	Restriction of Alternatives?	As a minimum, the rail portion of the bridge must remain at least two tracks.	Y	Project E4 and the Almonaster Avenue improvements are inter-related.
	Independent Utility?			
	Restriction of Alternatives?			

<p>If no linkages, prepare Component Project Preliminary Purpose and Need Statement.</p>	<p>Construct a replacement structure for the existing bascule bridge (see photo) that would accommodate rail service, maritime transportation needs, truck and vehicular traffic, and transit through the CSX and Almonaster Avenue corridor and bridge crossing over the Inner Harbor Navigation Canal.</p> <p>Replace existing bridge to improve the reliability of CSX and NOPB operations over the bridge.</p>
<p>Project is now ready to be processed through an ECAD.</p>	<p>Form Completed: 04/17/06 Form Revised: 05/31/06 Form Revised:</p>
<p>If linkages, go to next page.</p>	<p>None.</p>

NOLA GATEWAY PROJECT PROFILE		
Project Identifier	E5 - Gentilly Yard - New Main Track and Revised East End Yard	
Objective, Intent of Project	Increase capacity for train movements in either direction through Gentilly Yard. Mitigate conflicts between trains being stored or made up on the existing double-track main and through trains. Minimize the need to operate trains through slow speed yard trackage or to hold trains east or west of the yard until the main line is cleared of stopped freight trains. Reduce number of yard movements that use the main line.	
Description of Proposed Work/Improvements	Reconfigure Gentilly Yard and the interlockings east and west of the yard to facilitate train movements and yard operations related to the making up of trains. Create a new main line to the south of the existing yard by installing new track and upgrading portions of existing yard leads. Acquire land east of the yard to enable the east end of the new main track to be constructed. Relocate the existing BIDS Terminal from north of the main line tracks to the east end of Gentilly Yard. Modify the east end of the yard by constructing two new pullout tracks to improve switching flexibility.	
Location: Owner(s)	CSX.	
Route/Line	NO&M main line.	
Project Limits	MP 801.5 to MP 798.2 – west end of Gentilly Yard to a point near the Read Road Crossing, east of Gentilly Yard.	
Local Community		
Potential Environmental Issues Needing Further Study	Very preliminary analysis indicates that the acquisition of land east of the yard to construct the eastern portion of the new tracks will require further evaluation, but considering the present use of the land any environmental issues resulting from implementation of the project will be limited in nature. Potential for hazardous material effects will be verified.	
Project Status	Conceptual schematics developed. Requirements definition is preliminary	
Estimated Project Costs (Level of Confidence)	Construction \$40.0 M R/W \$0.0 Contingencies 20% included	Planning-Estimate Preliminary-Engineering-Estimate
Adjoining Projects (Project No., Line, Distance)	A. E4. B. C. D. E.	
Other Related Projects (Nature of Relationship)		
Comments/Notes		
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.		
1) Sufficient Length and Scope Determination		
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.		Y/N Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project E4	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	The improved reliability of the movable bridge would benefit train operations, but is not essential to success of E5.	Y	The project would increase capacity for train movements in either direction through Gentilly Yard. Mitigate conflicts between trains being stored or made up on the existing double-track main and through trains. Minimize the need to operate trains through slow speed yard trackage or to hold trains east or west of the yard until the main line is cleared of stopped freight trains. E5 is fully usable without E4.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	E5 has been configured to conform to present minimal bridge design that retains existing double track configuration.	N	Project E5 does not restrict alternatives in E4.
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.	Increase capacity for train movements in either direction through Gentilly Yard. Mitigate conflicts between trains being stored or made up on the existing double-track main and through trains. Minimize the need to operate trains through slow speed yard trackage or to hold trains east or west of the yard until the main line is cleared of stopped freight trains. Reduce number of yard movements that use the main line.			
Project is now ready to be processed through an ECAD.	Form Completed: 05/31/06 Form Revised: Form Revised:			
If linkages, go to next page.	None.			

NOLA GATEWAY PROJECT PROFILE

Project Identifier	E6 - NS Back Belt Line, Third Track - Frenchmen Street to Marconi Drive	
Objective, Intent of Project	<p>Construct a third NS Back Belt mainline track between Marconi Drive and Frenchmen Street on the rail berm that parallels I-10. The 0.6-mile segment between Marconi Drive and East City Junction would remain double tracked. Construct Marconi Drive interlocking (NT4.3) so that it would facilitate parallel moves at the location where the three tracks merge into two tracks.</p> <p>The third main line track would mitigate the capacity constraint on freight and intercity passenger operations that presently exists in the 3.5-mile section on the NS Back Belt between N.O.T Junction (7.08) and East City Junction (3.5). This section is used to stage westbound trains for interchange with UP. CSXT and NS train crews bring the westbound interchange trains to Marconi Drive, located just east of the East City Junction. These trains are left on the main and wait for the UP crew to pick them up. The average waiting time is around five hours, effectively blocking one of the double mainline tracks east of Marconi Drive. The eastward interchange traffic is more fluid as trains are delivered directly to CSX's Gentilly Yard and NS's Oliver Yard.</p>	
Description of Proposed Work/Improvements	<p>Construct third mainline track between Marconi Drive and Frenchmen Street. Install a new interlocking at Marconi Drive to connect the three-track main line east of Marconi Drive with the two-track mainline west of Marconi Drive. Modify Frenchmen Street to enable the new three-track main line west of the interlocking to be connected to the existing three-track main line east of the interlocking. Elysian Fields, as proposed in Project E2 may have to be modified to accommodate the changes at Marconi Drive.</p> <p>The third main line track would pass over and under several roads and requires the construction of new bridges over Broad Avenue, the London Canal, Gentilly Boulevard, Paris Avenue, St. Bernard Avenue, Bayou St. John, a pedestrian access roadway, and Hospital Street.</p>	
Location: Owner(s)	NS.	
Route/Line	Back Belt.	
Project Limits	MP 4.3NT to MP 6.7NT.	
Local Community	Orleans Parish.	
Potential Environmental Issues Needing Further Study	None.	
Project Status	Preliminary layout and estimate.	
Estimated Project Costs (Level of Confidence)	Construction \$35.6 M R/W \$0.0 Contingencies 20% included	Planning Estimate Preliminary Engineering Estimate
Adjoining Projects (Project No., Line, Distance)	A. E1. B. E2. C. D. E.	
Other Related Projects (Nature of Relationship)		
Comments/Notes		
Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.		
1) Sufficient Length and Scope Determination		
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.		Y/N Y

2) Independent Utility and 3) Restriction of Alternatives Determination

		Discussion	Y/N	Rationale
Linkage to Project E1	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	None.	Y	The project would increase capacity on the NS Back Belt mainline between Marconi Drive and Frenchmen Street. Marconi Drive interlocking (NT4.3) would facilitate parallel moves at the location where the newly configured three tracks merge into two tracks. Project E6 would be fully usable without E1.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?	None.	N	Project E6 would not restrict Alternatives in E1.
Linkage to Project E2	Independent Utility?	The number of tracks and interlockings east and west of the 2.4-mile stretch of rail line would not be altered or affected.	Y	The project would increase capacity on the NS Back Belt mainline between Marconi Drive and Frenchmen Street. Marconi Drive interlocking (NT4.3) would facilitate parallel moves at the location where the newly configured three tracks merge into two tracks. Project E6 would be fully usable without E1.
	Restriction of Alternatives?	E6 would only cause signal software programming considerations in E2.	N	Project E6 would affect but not restrict alternatives in E2.

<p>If no linkages, prepare Component Project Preliminary Purpose and Need Statement.</p>	<p>Construct a third NS Back Belt mainline track between Marconi Drive and Frenchmen Street on the rail berm that parallels I-10. The 0.6-mile segment between Marconi Drive and East City Junction would remain double tracked. Construct Marconi Drive interlocking (NT4.3) so that it would facilitate parallel moves at the location where the three tracks merge into two tracks.</p> <p>The third mainline track would mitigate the capacity constraint on freight and intercity passenger operations that presently exists in the 3.5-mile section on the NS Back Belt between N.O.T Junction (7.08) and East City Junction (3.5).</p>
<p>Project is now ready to be processed through an ECAD.</p>	<p>Form Completed: 04/17/06 Form Revised: 05/31/06 Form Revised:</p>
<p>If linkages, go to next page.</p>	<p>None.</p>

Individual Component Project Logical Termini Test – Determine 1) sufficient length and scope; 2) independent utility; and 3) restriction of alternatives.				
1) Sufficient Length and Scope Determination				
Does the proposed project have sufficient length and scope to broadly address environmental issues? If no, modify project limits. After project limits are modified, ensure project profile is accurate, and then proceed to project linkage test.				Y/N
				Y
2) Independent Utility and 3) Restriction of Alternatives Determination				
		Discussion	Y/N	Rationale
Linkage to Project W6	Independent Utility? Does the project have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made?	Project CIA would install crossovers on the structure at its Eastbank terminals and alter the track layout at the base of the bridge.	Y	Project CIA will improve the flow of rail traffic through the East Bridge Junction and provide tracks for trains to queue while waiting to traverse the Gateway.
	Restriction of Alternatives? Does the project restrict the consideration of alternatives for other reasonably foreseeable transportation improvements?		N	Project CIA does not restrict alternative in Project W6.
Linkage to Project E1	Independent Utility?	Project E1, will provide universal crossovers immediately outside the limits of project CIA.	Y	Project CIA will improve the flow of rail traffic through the East Bridge Junction and provide tracks for trains to queue while waiting to traverse the Gateway.
	Restriction of Alternatives?		N	Project W1 does not restrict alternatives in W3.
If no linkages, prepare Component Project Preliminary Purpose and Need Statement.				
Project is now ready to be processed through an ECAD.		Form Completed: 05/30/06 Form Revised: Form Revised:		
If linkages, go to next page.		No.		

NEW ORLEANS RAIL GATEWAY INFRASTRUCTURE FEASIBILITY ANALYSIS



Appendix 2 Preliminary Speed Screening Documentation For Gateway Projects

**W1, W2, W3, and W5 - UPRR, BNSF Rail Corridors from Live Oak to West Bridge Jct.
and the Approach to the HPLB**

Resources and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will Project impact properties/parcels formerly owned by the respective railroads?	No
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	N/A
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N/A
	Will Potential viaduct closures also affect community cohesion?	N/A
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Mixed
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	\$25,000 to \$35,000
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	Y
	Does the neighborhood qualify as a minority population?	Y
	Are a significant percentage of the households in the project area classified as below the poverty level?	Y
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resources and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential Noise and Vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	N
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resources and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year Flood Plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA Maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

W4 - Avondale Yard (North), Extend Switching Lead		
Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will project impact properties/parcels formerly owned by the respective railroads?	N
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Non Caucasian
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	\$22,500to \$30,000
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	Y
	Does the neighborhood qualify as a minority population?	Y
	Are a significant percentage of the households in the project area classified as below the poverty level?	N
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	N
	Are there any potential noise and vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/ Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA Maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

W6 - Track and Interlocking Improvements HPLB		
Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will project impact properties/parcels formerly owned by the respective railroads?	
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
4. Change in Land Use and Economic Development	Will parking loss occur at the front or rear of business properties?	N
	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
5. Community Cohesion	Are changes to the adjacent areas and neighborhoods anticipated?	N
	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
6. Public Facilities and Services	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	N/A
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	N/A
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N/A
	Does the neighborhood qualify as a minority population?	N/A
	Are a significant percentage of the households in the project area classified as below the poverty level?	N/A
9. Pedestrian and Bicycle Facilities	Will environmental justice will be a key factor for consideration?	N
	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	Y
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	N
	Are there any potential noise and vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	N
	Will most construction be on railroad ROW?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	N
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	Mississippi River
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	N
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

C1/C2 - (EBJ/NS Back Belt, Shrewsbury CTC)

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will Project impact properties/parcels formerly owned by the respective railroads?	No
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	Yes
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	No
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	Y, depends on Shrewsbury Road Disposition
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N/A
	Will potential viaduct closures also affect community cohesion?	N/A
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	No
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Commercial
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	Commercial
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N/A
	Does the neighborhood qualify as a Minority population?	N/A
	Are a significant percentage of the households in the project area classified as below the poverty level?	N/A
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	Verify
2. Historic Bridges	Are rail bridges more than 50 years old?	N/A
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	None
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	Typical
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential Noise and Vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	N
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

**C3/C4 - NS Back Belt Metairie, Grade Separation/Seven Grade Crossings/
17th Street Canal, Double Track (MP 2.2a To 2.8a)**

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	N
	Will project impact properties/parcels formerly owned by the respective railroads?	N
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Y
	Will project result in changes in rail travel patterns?	N
	Will closure of roadways affect vehicular and pedestrian travel in the vicinity?	During construction both will be affected
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	N
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N.
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will Potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Caucasian
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	\$60,000 to \$100,000
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	No
	Does the neighborhood qualify as a Minority population?	No
	Are a significant percentage of the households in the project area classified as below the poverty level?	No
	Will Environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N/A

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	N
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	Normal Construction
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential noise and vibration receptor locations?	None
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Yes
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Yes
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	Y
	Will there be any direct impacts to these 4(f) resources?	N
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The federal Land & Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

E1 -NS Back Belt, East City Junction

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will Project impact properties/parcels formerly owned by the respective railroads	No
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use & Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will Potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Cemeteries
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	N/A
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N
	Does the neighborhood qualify as a Minority population?	N
	Are a significant percentage of the households in the project area classified as below the poverty level?	N
	Will Environmental justice will be a key factor for consideration?	N
9. Pedestrian & Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	N
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential Noise and Vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Rspnse
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

E2 - NS Back Belt, Elysian Fields

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will project impact properties/parcels formerly owned by the respective railroads?	N
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will Potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Non Caucasian
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	\$15,000 to \$22,500
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	Y
	Does the neighborhood qualify as a minority population?	Y
	Are a significant percentage of the households in the project area classified as below the poverty level?	Y
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential noise and vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

**E3 - Northwest Quadrant Connection between NS
and CSX, NE Tower**

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will project impact properties/parcels formerly owned by the respective railroads?	No
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Non Caucasian
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	\$30,000 to \$40,000
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N
	Does the neighborhood qualify as a minority population?	Y
	Are a significant percentage of the households in the project area classified as below the poverty level?	N
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential noise and vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources / Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

E4 - CSX Main Line, Renewal of Almonaster Moveable Bridge

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	N
	Will project impact properties/parcels formerly owned by the respective railroads?	N
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Y
	Will project result in changes in rail travel patterns?	N
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	N
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	N
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Commercial
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	N/A
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N/A
	Does the neighborhood qualify as a minority population?	N/A
	Are a significant percentage of the households in the project area classified as below the poverty level?	N/A
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	Typical
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential Noise and Vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	N
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	Y
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

E5 - Gentilly Yard New Main Track and Revised East End of Yard

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will project impact properties/parcels formerly owned by the respective railroads?	N
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Commercial
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	N/A
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N/A
	Does the neighborhood qualify as a minority population?	N/A
	Are a significant percentage of the households in the project area classified as below the poverty level?	N/A
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	None
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential noise and vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	N
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

E6 – NS Back Belt Line, Third Track - Frenchmen Street to Marconi Drive

Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	No
	Will project impact properties/parcels formerly owned by the respective railroads?	No
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	No
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Y
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	N
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	N
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Mixed
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	\$15,000 to \$22,500
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	Y
	Does the neighborhood qualify as a minority population?	Y
	Are a significant percentage of the households in the project area classified as below the poverty level?	Y
	Will environmental justice will be a key factor for consideration?	N
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	Typical
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential noise and vibration receptor locations?	N/A
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	Y
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/ Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	N
	Will there be any direct impacts to these 4(F) resources?	N/A
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N/A
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

C1A – Signal and Track Improvements, Middle Belt, East Bridge Junction to East City Junction		
Resource and Issues	Outstanding Issues	Initial Response
I. Social/Economic		
1. Relocations - Business and Residential	Does project require removal of homes, churches, commercial parcels, etc.?	Yes
	Will Project impact properties/parcels formerly owned by the respective railroads	No
2. Changes in Travel Patterns	Will project result in more efficient railroad travel?	Yes
	Will project result in changes in rail travel patterns?	Yes
	Will closure of viaducts affect vehicular and pedestrian travel in the vicinity?	No
	Will neighborhood travel patterns, for pedestrians, bicyclists and vehicles, be affected relative to critical access to key destinations, current traffic volumes and travel patterns?	No
3. Economic Impacts	Will project result in positive economic impacts to the railroads from reduced freight delays?	Yes
	Will project affect businesses in the vicinity of the project?	N
	Will businesses need to be reconstructed?	Yes
	Will access changes to businesses be required?	N
	Will parking loss occur at the front or rear of business properties?	N
4. Change in Land Use and Economic Development	Will project require changes to the adjacent neighborhoods?	Yes
	Will project result in conflicts with existing or proposed local or regional land use plans?	N
	Are changes to the adjacent areas and neighborhoods anticipated?	N
5. Community Cohesion	Will neighborhood be impacted and potentially divided by the construction of an overpass?	N
	Will potential viaduct closures also affect community cohesion?	N
	Because the project is largely within the existing rail corridor that has been in place since the neighborhoods evolved, would there therefore be changes in community cohesion?	N
6. Public Facilities and Services	Would potential viaduct closures affect access to public facilities and services, as well as emergency services such as police, ambulance and fire response times?	N
7. Title VI and Other Protected Groups	What is racial makeup of neighborhood affected by project?	Cemeteries
8. Environmental Justice	What is the median household income of the neighborhood affected by the project?	N/A*
	What is the average household income? What is the per capital income?	N/A
	Does the neighborhood qualify as a low income area?	N/A*
	Does the neighborhood qualify as a minority population?	*
	Are a significant percentage of the households in the project area classified as below the poverty level?	N
	Will environmental justice will be a key factor for consideration?	Yes
9. Pedestrian and Bicycle Facilities	Could viaduct closures affect bicyclist and pedestrian access to neighborhood destinations?	N

*Various neighborhoods. One neighborhood qualifies as minority, low income with a \$30,000 to \$40,000 average yearly income.

Resource and Issues	Outstanding Issues	Initial Response
II. Agricultural		
1. Agricultural Sites	Is agriculture land production involved with or within the limits of this project?	N
	Does agri-business exist within the project area?	N
III. Cultural		
1. Archaeological Sites	Are archaeological sites present in the vicinity of the project?	N
2. Historic Bridges	Are rail bridges more than 50 years old?	Y
	Are any of them unique?	N
	Are historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended affected by the proposed construction activities in the project?	N
3. Historic Districts and Buildings	Are historic districts affected? Will houses over 50 years old be affected by the project?	N
	Churches?	N
IV. Air Quality		
1. Attainment/Non-attainment Status	Has the project been included in the current TIP?	N
	Is the project located within a US-EPA Non-attainment area for the ozone 8-hour standard and PM2.5?	N
2. Micro-scale Analysis	Will the project increase locomotive emissions relative to the no-build?	N
3. Construction Related Particulate Matter	What will short-term construction impacts be?	Typical
V. Noise and Vibration		
	What are potential noise and vibration impacts?	None
	Are there any potential Noise and Vibration receptor locations?	N
VI. Energy		
	Will energy consumption by vehicles in the area increase during construction due to possible traffic delays?	N
	Will most construction be on railroad R-O-W?	Y
	Will project minimize the energy consumption increase?	Y
	Will construction of the proposed improvement reduce rail traffic congestion and conflicts along the route and thereby reduce rail stopping and slowing conditions?	Y
	Will increased rail traffic decrease truck freight movements and decrease energy usage?	Y
VII. Natural Resources		
	Will project affect any natural resource areas?	N
VIII. Water Quality/Resources		
1. Surface Water Resources/Quality	Are there any streams, ponds, or lakes in the project area?	N
	Are there any overland flows to streams, rivers or other bodies of water in the project area?	N
	Does the project area drain via combined sewers?	N
2. Permits	Will project result in the disturbance of one or more acres of total land area?	Y
3. Groundwater Resources/Quality	Will the project create any new potential "routes" for groundwater pollution or any new potential "sources" of groundwater pollution?	N

Resource and Issues	Outstanding Issues	Initial Response
IX. Flood Plains		
1. 100-Year Flood Plain	Is the project located within a 100-Year flood plain?	N
2. Regulatory Floodway	Is the project located within a regulatory floodway, as determined by FEMA maps?	N
X. Wetlands		
	Are wetlands located adjacent to the project or affected by construction of the project?	N
XI. Special Waste		
	Is the project located almost entirely on railroad R-O-W?	Y
XII. Special Lands		
1. 4(F)	Are parks located adjacent to project?	Y
	Will there be any direct impacts to these 4(F) resources?	Y
2. 6(F) (LAWCON)	If there are parks, were LAWCON (The Federal Land and Water Conservation Fund) funds used for them?	N
	Was railroad R-O-W acquired with LAWCON funds?	N
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	Was railroad R-O-W acquired with OSLAD funds?	N
	If there are parks, were OSLAD funds used for them?	N/A
XIII. Other Issues		
	None	

