Stage "0" Feasibility Report for:

Broad Street Corridor Streetscape Improvements

US 61 (Tulane Avenue) to Bayou Road

6/30/2015

RPC UPWP Task: A-1.15; FY-15 UPWP

Prepared For:

Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes

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Chapter One

1.0 Executive Summary

Project Overview

The Regional Planning Commission (RPC) has contracted Perez, APC to perform a Stage 0 Feasibility Study for Broad Street between State Highway US 61 (Tulane Avenue) and Bayou Road. For the purpose of this report, the study area will be referred to as the Broad Street Corridor (which is in the state system, but is a US Highway) that is designated a principle arterial road (Louisiana Department of Transportation and Development - Office of Planning and Programming). Broad Street within the project area crosses two principal arterial roads, which are Tulane Avenue and Canal Street; two minor arterials which are Orleans and Esplanade Avenues, and two urban collectors which are Banks Street and Bayou Road (Louisiana Department of Transportation and Development - Office of Planning and Programming). See Figure 1 for project location. A project management committee (PMC) team was assembled for this project to help "guide the stage "0" planning analysis, review study findings, and develop recommendations for the advancement by the City of New Orleans and the Louisiana Department of Transportation Development (LADOTD)" (The Regional Planning Commission, 2014). Members include the RPC, New Orleans City Planning Commission (NOCPC), New Orleans Department of Public Works (NODPW), New Orleans Parks and Parkways, Council Districts A, B, and D; LADOTD District 02, the Regional Transit Authority (RTA), and the Broad Community Connections.

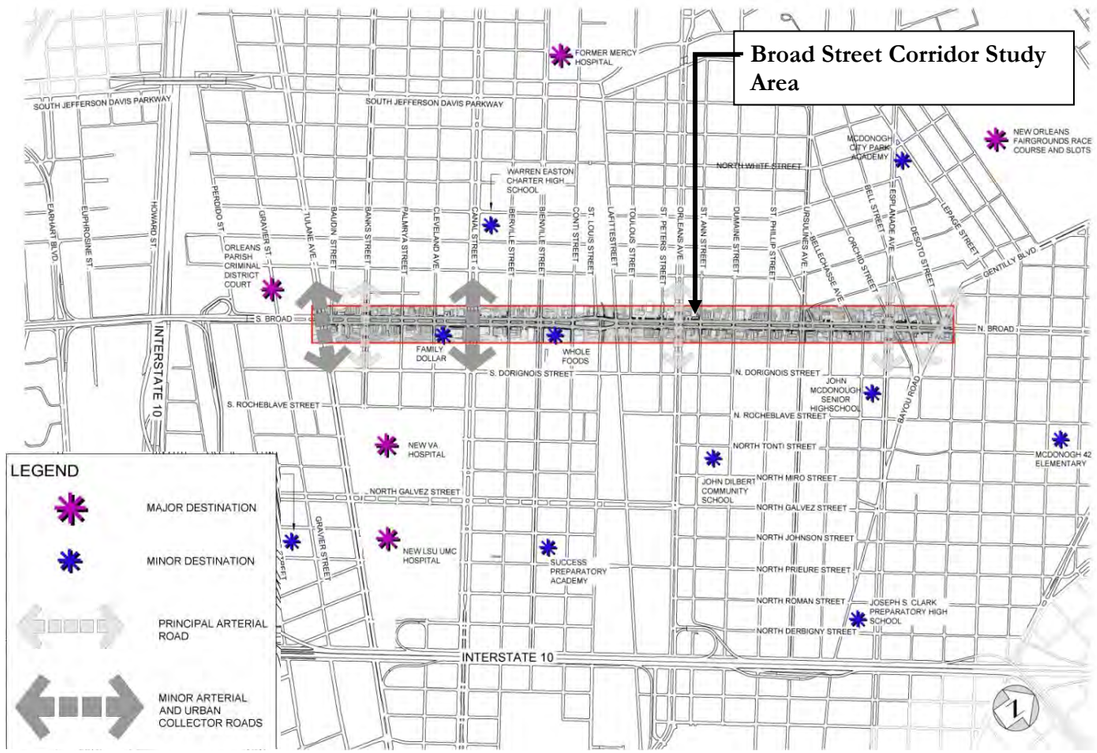


Figure 1: Location Map of Project Site

Purpose and Need

As stated in the Regional Planning Commission scope of work for this project, the primary purpose for this study was "to support the continued revitalization of Broad Street as a vibrant commercial and mixed-use corridor of regional significance" (The Regional Planning Commission, 2014). The Broad Street Corridor can be described as a conflicting environment between high volumes of transit, vehicular, pedestrian, and bicycle uses (modes), resulting in many crashes throughout the corridor. The need for this study was important because the construction of two nearby medical facilities will increase traffic for all modes, thus adding to existing modal conflicts. This study will also serve to aid in the uniformity and coordination between existing projects occurring within or adjacent to the corridor.

Project Description

This study involved several components. The first step undertaken before enhancements could be developed was the collection of data and the evaluation of existing conditions. The following is a list of tasks that were performed for this report, which is described more fully throughout the report in their respective sections:

- Data Acquisition and field investigation for the development of site inventory and assessment plans. Plans include a comprehensive layout of existing utilities that occur throughout the corridor
- Collection, assessment and coordination with existing projects that occur adjacent or within the corridor study area
- Collection and assessment of existing zoning, draft zoning, future land use, and draft overlay maps for a quarter mile buffer surrounding the corridor
- Collection and assessment of traffic, pedestrian, bicycle, and transit user daily counts
- Collection and assessment of pedestrian, vehicular and bicycle crash data

- Collection and assessment of bicycle connectivity and important nodes for a quarter mile surrounding the corridor
- Coordination meetings with the Regional Transit Authority, Louisiana Department of Transportation Development, New Orleans City Planning Commission, the Zulu Social Aid and Pleasure Club, and the Broad Street Community Connection Business Community
- Three meetings with the Project Management Committee (PMC) team

After these tasks were performed, two concept alternatives were presented to the PMC team for their feedback and input for the development of a preferred alternative option. Concept One consists of three different alternatives, since they build upon each other. Concept One A consist of minimal improvements, Concept One B consist of more improvements that Concept One A and Concept One C consisting of the most improvements. The second concept alternative includes a protected bike lane. A map was also created showing a bike connectivity plan routing option if a road diet and bike lane was not feasible to incorporate along Broad Street. The third concept alternative was then created in response to PMC feedback from concept one and two alternative options.

Project Objectives

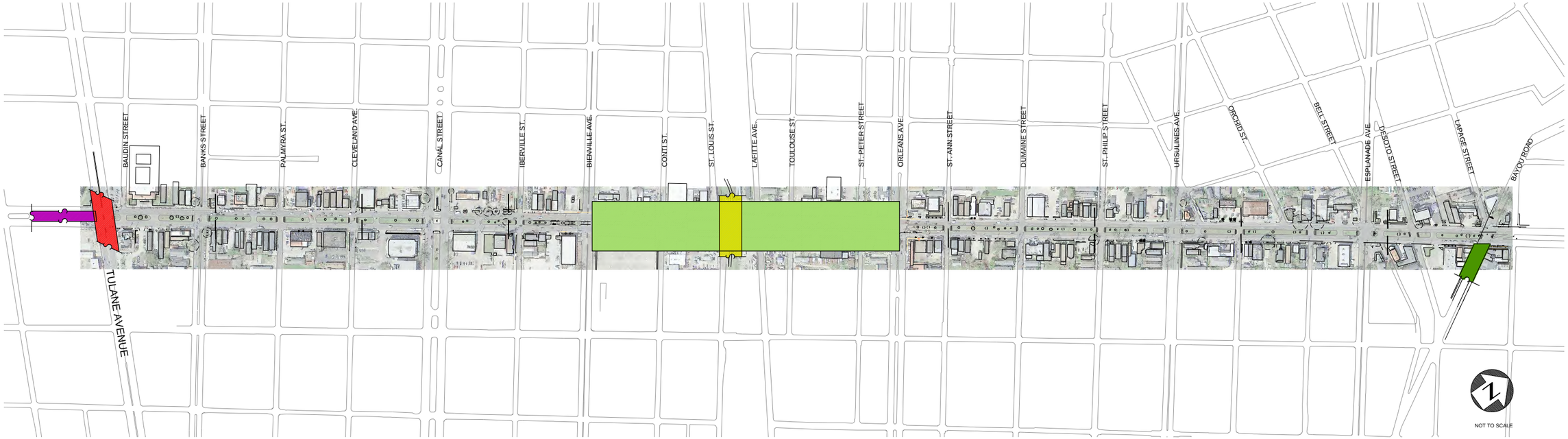
The objectives of this project were to explore the feasibility of streetscape beautification enhancements in an effort to improve bicycle, transit, and pedestrian needs and conflicts. The streetscape design recommendations (mentioned in Chapter 4.0 of this report) respond to the two new medical facilities that are currently under construction near the focus study area due to the expectation of increased traffic for all modes. Design recommendations also enhance the small neighborhood commercial character of the corridor.

Chapter Two

2.0 Current Projects Affecting the Corridor Design

Overview

This chapter consists of five existing projects either adjacent or within the study project area that influenced design decisions when developing concept alternatives (see Figure 2 for locations located on the following page). A description of coordination meetings that were held, data collected, and design influence on streetscape design alternatives for each project are included in this chapter.



1 CURRENT PROJECTS OCCURRING WITHIN OR ADACENT TO THIS CORRIDOR STUDY

PROJECTS OCCURRING WITHIN OR ADJACENT TO CORRIDOR

- BROAD STREET MEDIAN AS PART OF THE ORLEANS PARISH CRIMINAL DISTRICT COURT COMPLEX
- TULANE AVENUE STREETSCAPE
- BROAD AND LAFITTE PROJECT
- LAFITTE GREENWAY
- BAYOU ROAD STREETSCAPE PROJECT

2 LEGEND

EXISTING PROJECTS

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 2: Plan of existing projects adjacent or occurring within the project area. Aerial Image Source: (Google Earth, 2013).

Orleans Parish Criminal District Court Complex

Meeting

In order to learn more about the Orleans Parish Criminal District Court Complex Improvement project, a meeting was conducted on October 17, 2014 with Sizeler, Thompson, Brown Architects; Parks and Parkways, and the TMG consulting group at the offices of TMG consulting. As discussed in the meeting, improvements consisted of building renovations and new construction. As part of a City of New Orleans requirement, this project also entailed tree plantings within the South Broad Street median. Therefore, it was important to coordinate their median planting design with median plantings that would surround the Tulane intersection and other major intersections throughout the corridor as part of the study presented here. The planting design as of March, 2015, consisted of Alta Magnolias and Jerusalem Thorn trees in a staggered layout pattern. However, the design is under review, as of the writing of this report and is subject to change. See Appendix C for meeting minutes.

Data Collection

Preliminary construction documentation landscape plans were acquired, courtesy of Sizeler Architects in a pdf format (see Figure 3 on the following page). Since construction documentation is still pending completion, plantings are subject to change.

Design Influence

During the meeting with TMG consulting group, Sizeler, Thompson, Brown Architects and Parks and Parkways, everyone in attendance agreed that Medjool Palms (two on either side of the Tulane Avenue and Broad Street intersection) would be a good way to accent the intersection. Therefore Medjool Palms were implemented in several of the design alternatives, which are discussed further in Chapter 4.0.

Tulane Avenue Streetscape Improvements

Meeting

A review meeting was conducted at the Regional Planning Commission (RPC) with the Perez team on January 23, 2015. During this meeting, concept development alternatives were discussed. A blow up plan consisting of improvements at the Tulane Avenue and Broad Street were shown. Enhancements pertaining to Tulane Avenue streetscape improvements were discussed. Minutes from this meeting can be found in Appendix E.

Data Collection

After the review meeting, the RPC sent the Perez team a plan in an Autocad (computer aided design) electronic format of the Tulane Avenue improvements. The drawing file was not a contract document, but rather what appeared to be a base file (a drawing not on a sheet, but rather a working drawing showing truck radii, curb-lines and pavement markings).

Design Influence

After receiving the Tulane Avenue Improvements, drawings were imported into all concept plans. The improvements consist of a widened median, a road diet, and the inclusion of a bike lane in either direction. The improvements also include a dedicated turning lane located on the southwest corner of the Tulane Avenue and South Broad Street intersection. Concept alternative plans one a and one b include the dedicated vehicular turning lane per the Tulane Avenue Improvement plans. Concept alternative plan one c and two do not include the dedicated turning lane as an option to improve pedestrian safety at that corner. Concept alternatives are described more fully in Chapter 4.0 of this report.

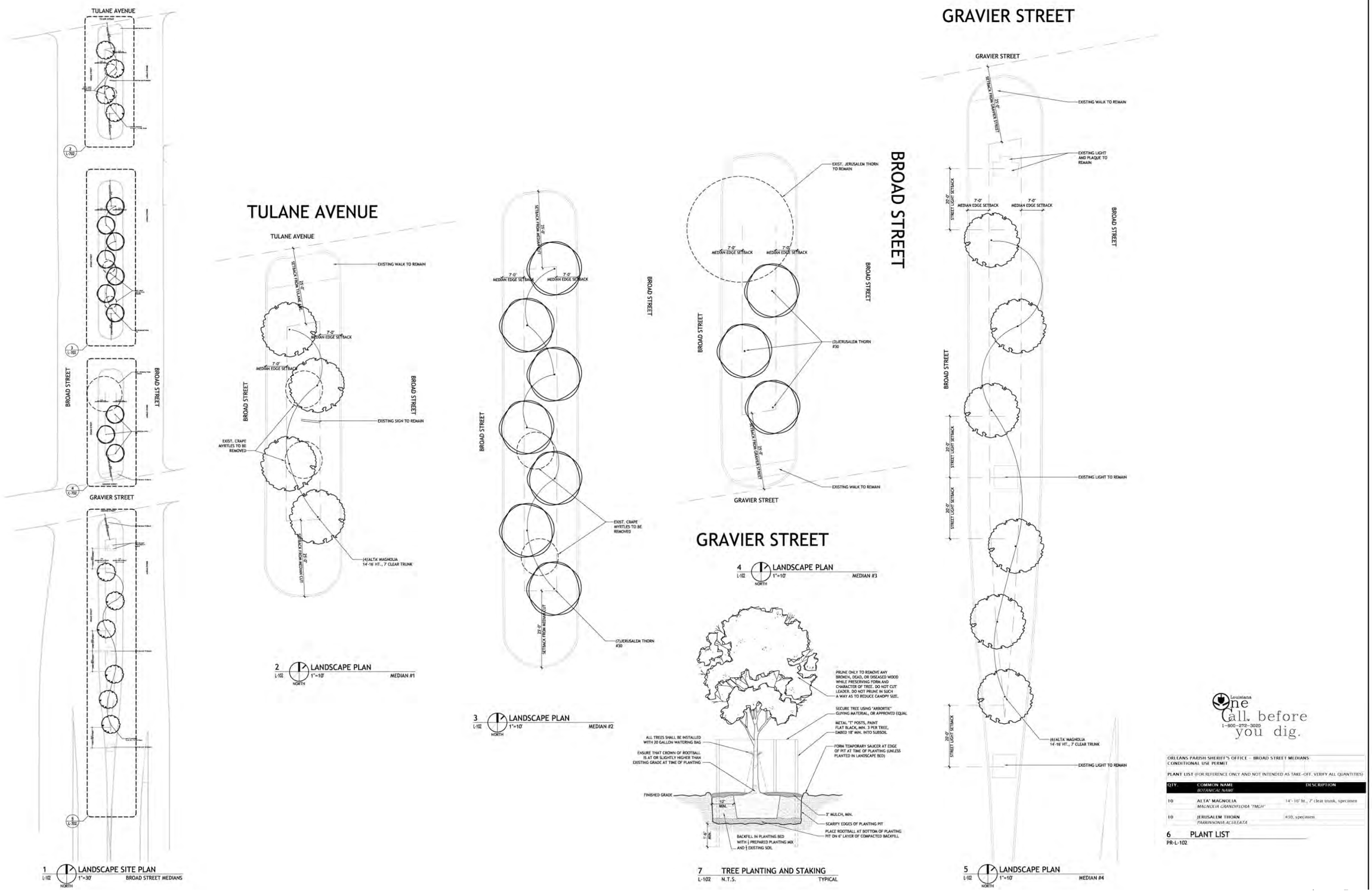


Figure 3: Preliminary planting plans for the Broad Street median (south of Tulane Avenue) Plans courtesy of Project Design Group.

Broad and Lafitte Project

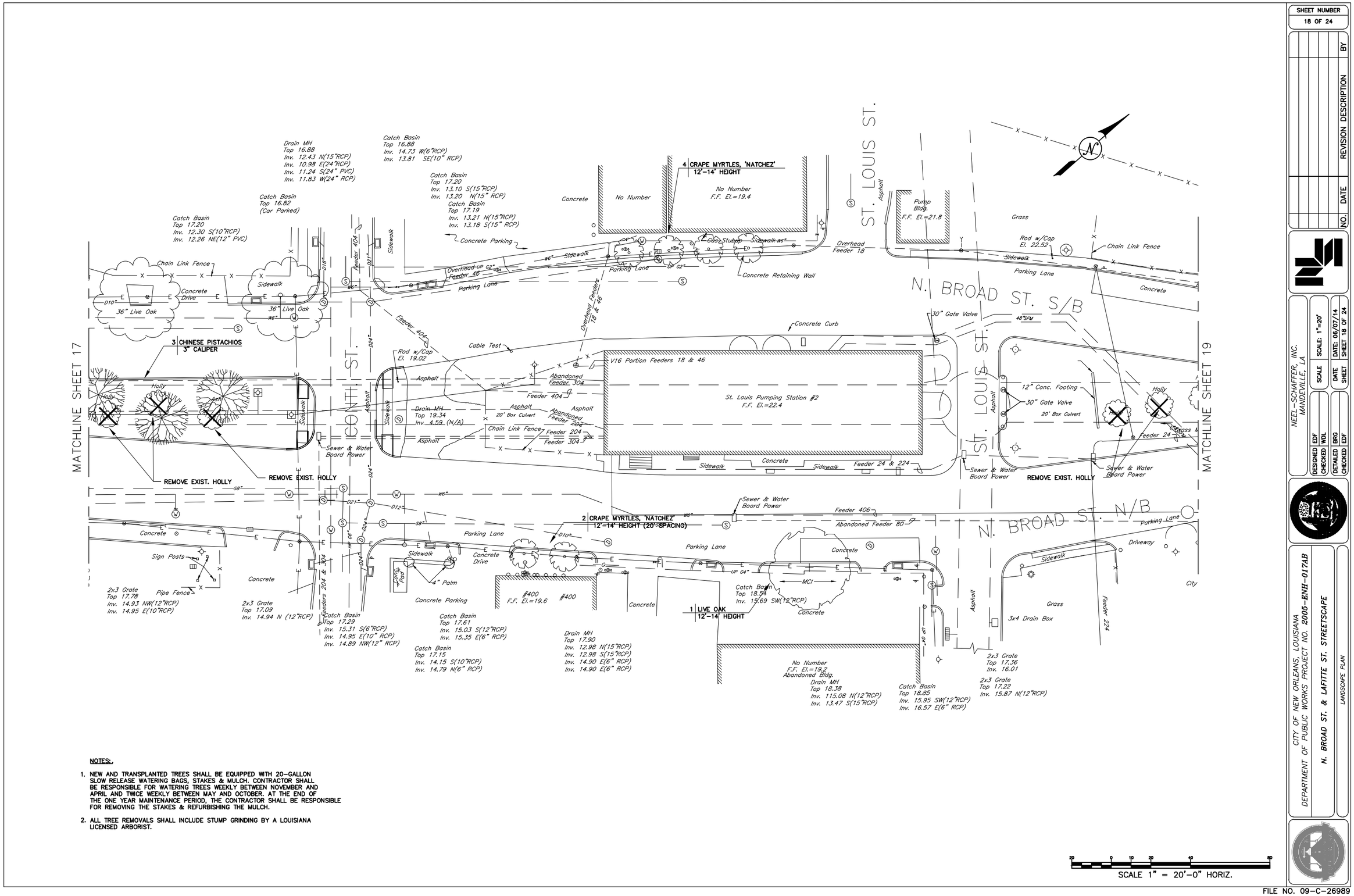
Data Collection

In September of 2014, construction documentation for a streetscape renovation project was near completion which included the area of North Broad between Bienville and Orleans Avenue. The Perez team acquired construction documentation in an Autocad electronic format of proposed improvements from the New Orleans Department of Public Works.

Improvements included sidewalk repair and replacement, the incorporation of a 6'-0" bike lane in both directions (inclusive of roadway re-striping to accommodate the bike lane(s)), four LED lighting assemblies and re-wiring, concrete removal and sod replacement in certain areas in the right-of-way (ROW), and the installment of both median and Right-of Way (ROW) trees. Median trees included Chinese Pistashe and D.D. Blanchard Magnolias. ROW trees (trees in-between the back of curb and sidewalk and under utility lines) included Natchez Crape Myrtles and one Southern Live Oak. Figure 4 on the following page is a planting plan for a portion of that project area (adjacent to the Broad Street pump station #2).

Design Influence

The approval of the road diet and bike lane delayed the project bidding process. Due to feedback from the PMC regarding a dedicated bike lane in this corridor study and the proposed dedicated bike lane in the Broad and Lafitte project, concept options one (a, b, and c)and two include the continuation of the dedicated bike lane from Bienville Avenue to Tulane Avenue in addition to a road diet. However, based upon vehicular count evaluation and feedback from the Department of Transportation Development (DOTD), a bike connectivity map (which is shown later in this report) was created that diverts the bike route off of Broad Street at Bienville Avenue (where the dedicated bike lane ends in the Broad and Lafitte Project) and can be included as an element in addition to any of the proposed concept plans. The bike connectivity location was determined, in part, from the location of the approved dedicated bike lane as part of the Broad and Lafitte Project, but also, where funded and existing bike lanes occur. After the assessment of proposed tree plantings in the Broad and Lafitte Project and collaboration with Parks and Parkways, a median tree and a right of way tree was selected in place of the trees shown in the Broad and Lafitte Project in order to establish a uniform, cohesive appearance throughout the corridor.



NOTES:,

1. NEW AND TRANSPLANTED TREES SHALL BE EQUIPPED WITH 20-GALLON SLOW RELEASE WATERING BAGS, STAKES & MULCH. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING TREES WEEKLY BETWEEN NOVEMBER AND APRIL AND TWICE WEEKLY BETWEEN MAY AND OCTOBER. AT THE END OF THE ONE YEAR MAINTENANCE PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE STAKES & REFURBISHING THE MULCH.
2. ALL TREE REMOVALS SHALL INCLUDE STUMP GRINDING BY A LOUISIANA LICENSED ARBORIST.

SHEET NUMBER 18 OF 24

NO.	DATE	REVISION DESCRIPTION	BY

NEEL-SCHAFFER, INC. MANDEVILLE, LA

DESIGNED EDF	SCALE	SCALE: 1"=20'	
CHECKED WDL			
DETAILED BRG	DATE	DATE: 06/07/14	
CHECKED EDF	SHEET	SHEET 18 OF 24	

CITY OF NEW ORLEANS, LOUISIANA
DEPARTMENT OF PUBLIC WORKS PROJECT NO. 2005-ENH-017AB
N. BROAD ST. & LAFITTE ST. STREETSCAPE
LANDSCAPE PLAN

FILE NO. 09-C-26989

FIGURE 4: Broad and Lafitte Project planting plan. Plan courtesy of the New Orleans Department of Public Works.

Lafitte Greenway Bicycle and Pedestrian Path

Data Collection

The Laffite Greenway bicycle and pedestrian path project encompasses a 2.6 mile area, located between St. Louis and Lafitte Streets bisecting the Broad Street Corridor area at St. Louis Street. Funded by Disaster Community Development Block Grants and the Louisiana Recreational Trails Program, this 2.6 mile linear park began construction in March of 2014. The Perez team acquired construction documentation an Autocad electronic format of proposed improvements from the New Orleans Department of Public Works.

Improvements include the implementation of a 2.6 mile shared-use trail (bicycle and pedestrian), grading and implementation of plantings and new baseball fields, sub-surface drainage improvements, new sidewalks, and lighting/signalization improvements (The City of New Orleans, 2014).

Improvements that bisect the Broad Street Corridor include landscaping and the incorporation of the 12'-0" wide shared-use trail north of the existing Broad Street Pump Station. Bike racks also are located on either side of Broad Street. See Figure 5. Trees were also included in the median between Lafitte and St. Louis Streets, however, another tree was selected (through coordination efforts with Parks and Parkways and the Perez Team pertaining to this project) to ensure uniformity throughout the corridor. See Chapter Four (Concept Three - The Preferred Alternative – preferred alternative concept), for more information regarding median tree selection.

Design Influence

The location of pavement markings and bike racks where the path bisects North Broad Street is critical for this area, since it is anticipated that many pedestrians and bicyclists will be using the path. Since pavement markings and bike racks are included in the Lafitte Greenway Bicycle and Pedestrian Path project at this intersection, these improvements were not needed as part of the Broad Street Corridor project (the project presented here). As mentioned previously, one tree species was selected to be implemented throughout the Broad Street Corridor, thus replacing the tree species selected as part of the Lafitte Greenway Bicycle and Pedestrian Path.

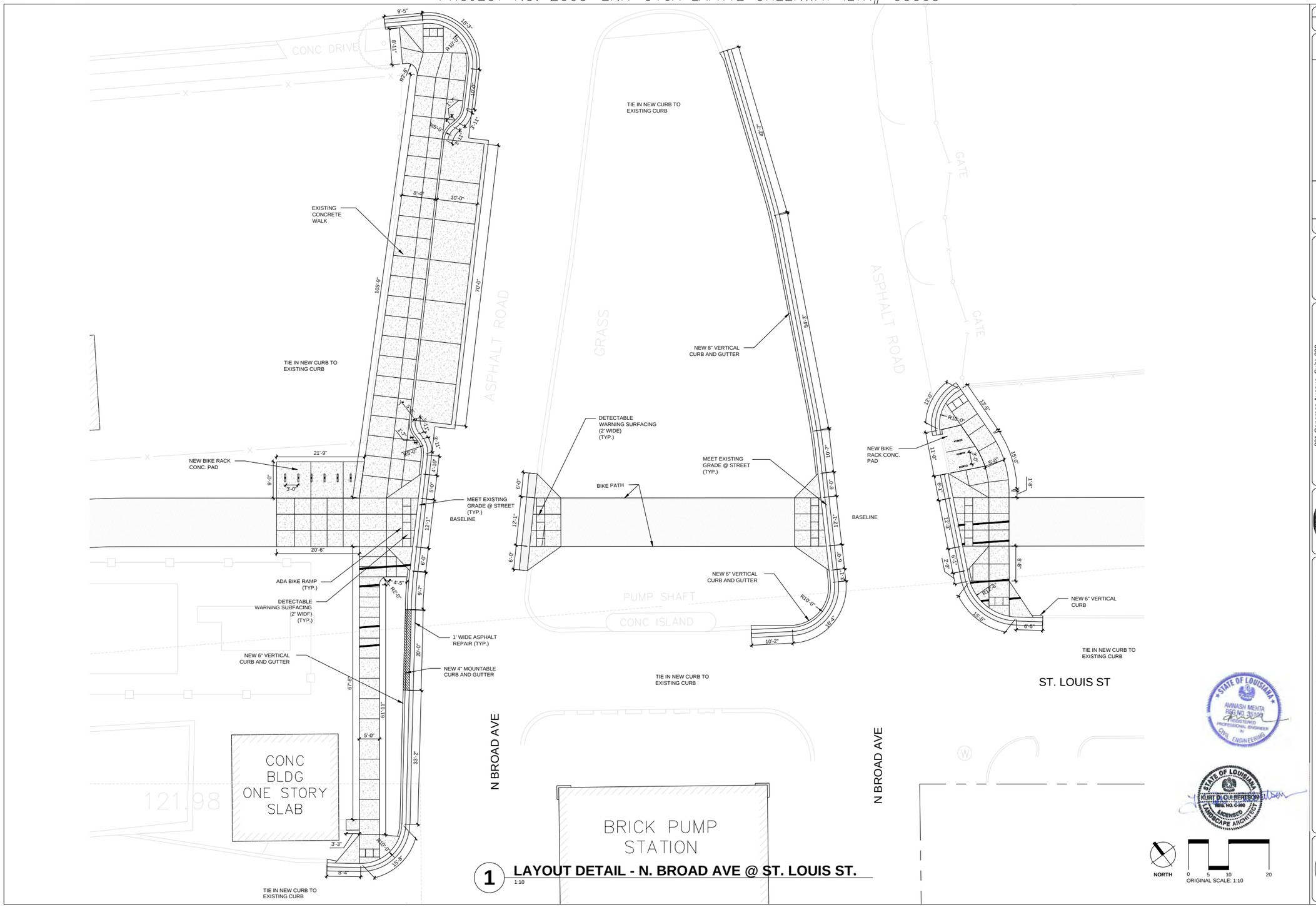


FIGURE 5: Layout plan showing the North Broad Street and Lafitte Bicycle and Pedestrian Path intersection. Plan courtesy of the New Orleans Department of Public Works.

Bayou Road Streetscape

Data Collection

Construction documentation plans in an Autocad electronic format were acquired from the New Orleans Department of Public Works. Improvements include, in part, granite curb and brick replacements in selected locations, the implementation of street trees, and sidewalk replacement. See Figure 6 on the following page for the construction document showing pavement and planting improvements at the N. Broad and Bayou Road intersection.

Design Influence

After assessing the improvement plans, new median trees at the Bayou Road and N. Broad Street intersection were not included as part of the Bayou Road Project. Therefore, the re-location of existing median Pistashe trees were considered in all concept alternative plans for the median area at this intersection. Survey information was also helpful when developing approximate utility locations throughout the corridor, which affected the placement of certain design elements (discussed more fully in Chapter 4.0 of this report).

Summary

Considering existing projects as mentioned in this chapter was crucial during the design process due to the effort taken to unify the corridor while incorporating existing project improvements. As a result, after evaluating each project mentioned in this chapter, all projects influenced design decisions for concept alternative options.

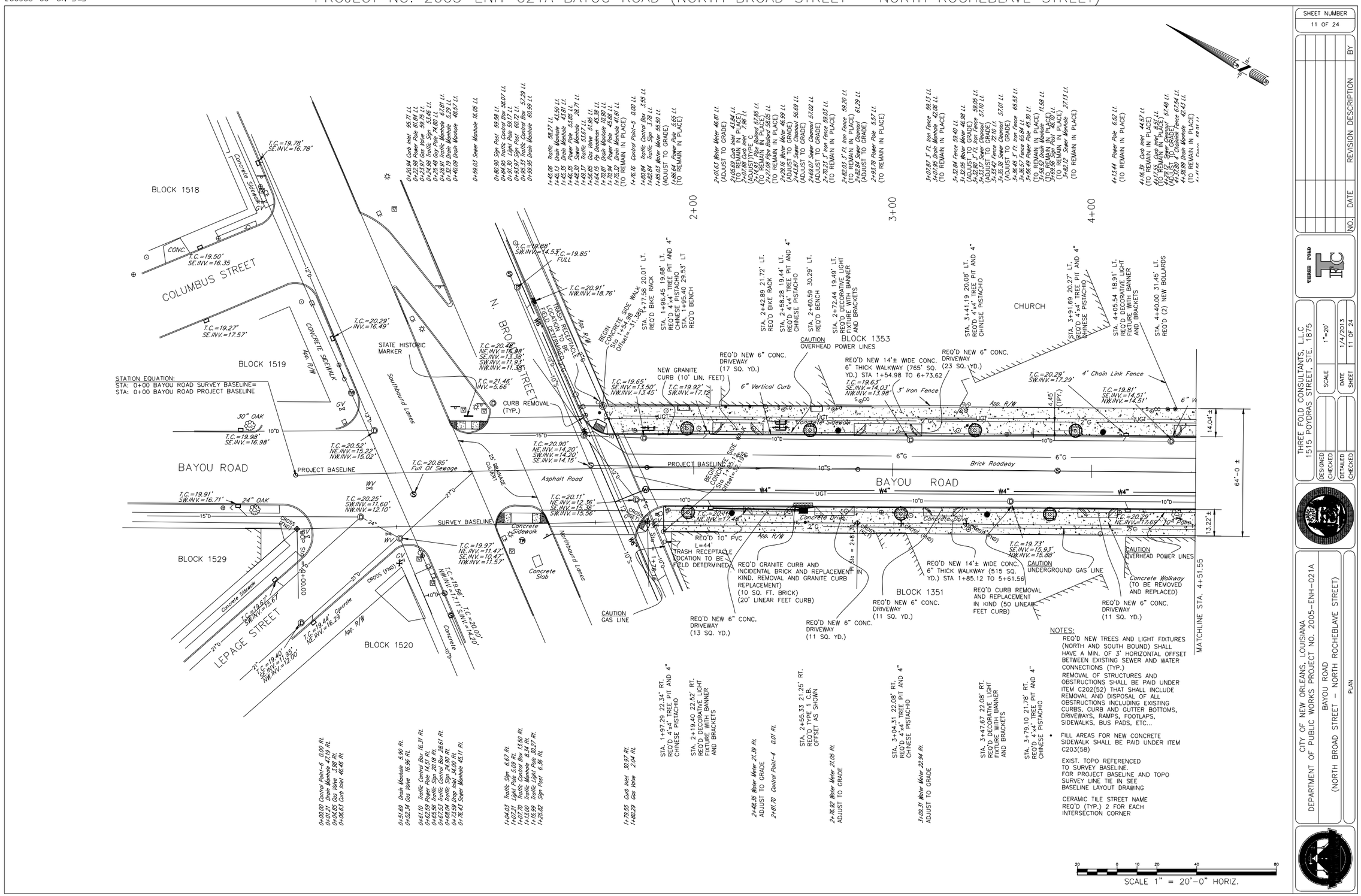


FIGURE 6: Improvement plan at the intersection of Bayou Road and North Broad Street. Plan courtesy of the New Orleans Department of Public Works.

Chapter Three

3.0 Existing Conditions

Overview

The first step during the design process for the Broad Street Corridor entailed the collection of existing condition data. Land use information was collected and assessed in order to understand the current and future context of the corridor site in relation with surrounding development. The Broad Street Corridor area is also part of an initiative called the Main Street Resiliency Program, which was created in part, to help "support economic recovery after disasters" (Louisiana Resiliancy Assistance Program, 2013). The Main Street Resiliency Program was important to understand, as the plan could potentially impact the resiliency of businesses in the corridor. Determining general site constraints and concerns, such as worn pedestrian crosswalks and cluttered transit stops were also important to evaluate and consider remediating through thoughtful design. In an effort to develop design alternatives that aligned with a "complete streets" approach, as outlined by the LADOTD Complete Street Policy and the City of New Orleans Complete Streets Ordinance, other data such as average daily traffic counts, pedestrian, bicycle and transit user counts were collected and analyzed. Pedestrian, vehicular, and bicycle crash data analysis were collected and evaluated to understand corridor safety concerns. Finally, site inventory and assessment plans, which include, in part, approximate locations of utilities, curb cuts, curbs, building structures, existing vegetation, and sidewalks were important to develop to fully understand more specific site concerns and constraints. These plans, in addition to all of the data presented in this chapter were then used as a basis for the development of concept option alternative plans.

Land Use

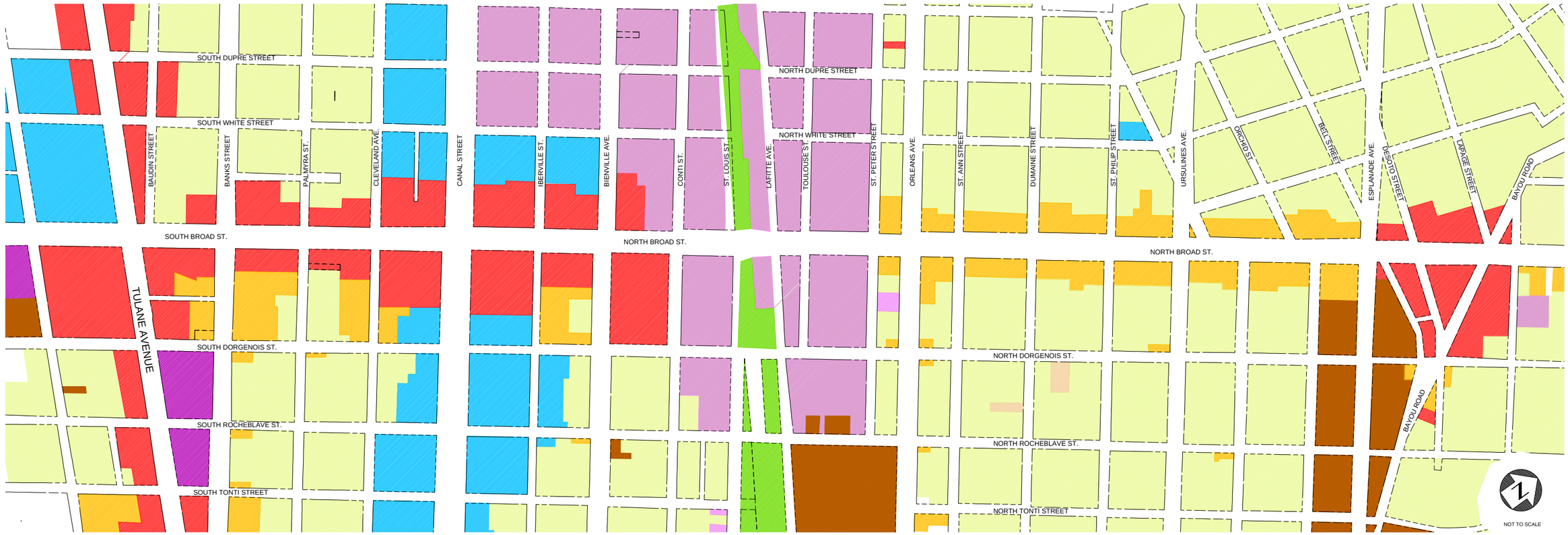
Existing Zoning

Data Collection

Data was acquired from the City of New Orleans property viewer website (City of New Orleans, 2013), which was last updated on December 19, 2013. In addition, parcel information, was acquired from the Regional Planning Commission in an Autocad software format. Thus utilizing the aforementioned sources, an existing zoning plan showing a quarter mile buffer surrounding the corridor (see Figure 7) was then created utilizing Autocad software.

Interpretation

Existing zoning has shaped the physical character of the corridor project area. As seen in Figure 7, commercial (C-1) land uses occupy the South end (Tulane Avenue) and the North end (Bayou Road) of the Broad Street Corridor project area. Light industrial uses occupy the "middle" of the project area, which are uses adjacent to the Jean Lafitte Bicycle and Pedestrian Trail (currently under construction). Neighborhood business uses occupy the south end of the project area. In sum, the project area currently occupies a mix of uses, which physically reflect the existing zoning ordinances. A more detailed description of zoning information can be found in the New Orleans municipal code.



1 EXISTING ZONING

SOURCE FOR EXISTING ZONING INFORMATION:
CITY OF NEW ORLEANS. *PROPERTY VIEWER*. RETRIEVED 3-17-2015,
FROM CITY OF NEW ORLEANS CITY PLANNING:
HTTP://PROPERTY.NOLA.GOV/

EXISTING ZONING (EXTENDING .25 MILES FROM CORRIDOR)

- NEIGHBORHOOD BUSINESS - B-1A
- GENERAL COMMERCIAL - C-1A
- HEAVY INDUSTRIAL - HI
- SINGLE FAMILY RESIDENTIAL - RD-2
- LIGHT INDUSTRIAL - LI
- PARK
- SINGLE FAMILY RESIDENTIAL - RD-3
- MULTI-FAMILY RESIDENTIAL - RM-2
- MULTI-FAMILY RESIDENTIAL - RM-3
- GENERAL OFFICE - RO-1

2 LEGEND

EXISTING ZONING

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

Z1.0

FIGURE 7: Existing Zoning Plan. Source: (City of New Orleans, 2013).

Future Land Use

Data Collection

Similar to the existing zoning data, information for the future land use plan was acquired from the City of New Orleans property viewer website (City of New Orleans, 2013), which was last updated on December 19, 2013 along with parcel information acquired from the Regional Planning Commission in an Autocad software format. Utilizing the aforementioned sources, a future land use plan showing a quarter mile buffer surrounding the corridor project area (see Figure 8) was then created in utilizing Autocad.

Interpretation

The Future Land Use plan was derived from of the Plan for the 21st Century: New Orleans 2030 Adopted August 2010 as amended through 2012. As seen in Figure 8, land uses within the Broad Street Corridor project area are mostly defined as mixed use low density. The goal for the mixed use low density future land use is to maintain a small urban character by increasing "neighborhood convenience and walk-ability within and along edges of neighborhoods with low density residential and neighborhood-serving retail/commercial establishments" (New Orleans Master Plan and Comprehensive Zoning Ordinance, 2012). Mixed use medium density future land uses can be seen adjacent to Tulane Avenue and the Lafitte Greenway Bicycle and Pedestrian Path. Institutional land future land uses are seen where the Orleans Parish Criminal District Court Complex is located. Most notably, mixed use health/life sciences neighborhood future land uses are seen where the new VA and new LSUAMC hospital complexes reside (currently under construction). It is anticipated that the new hospital complexes will influence property uses along the corridor. In other words, venues such as hospital equipment, private practitioner medical offices, and restaurants to service the hospital complexes could populate properties along the corridor.

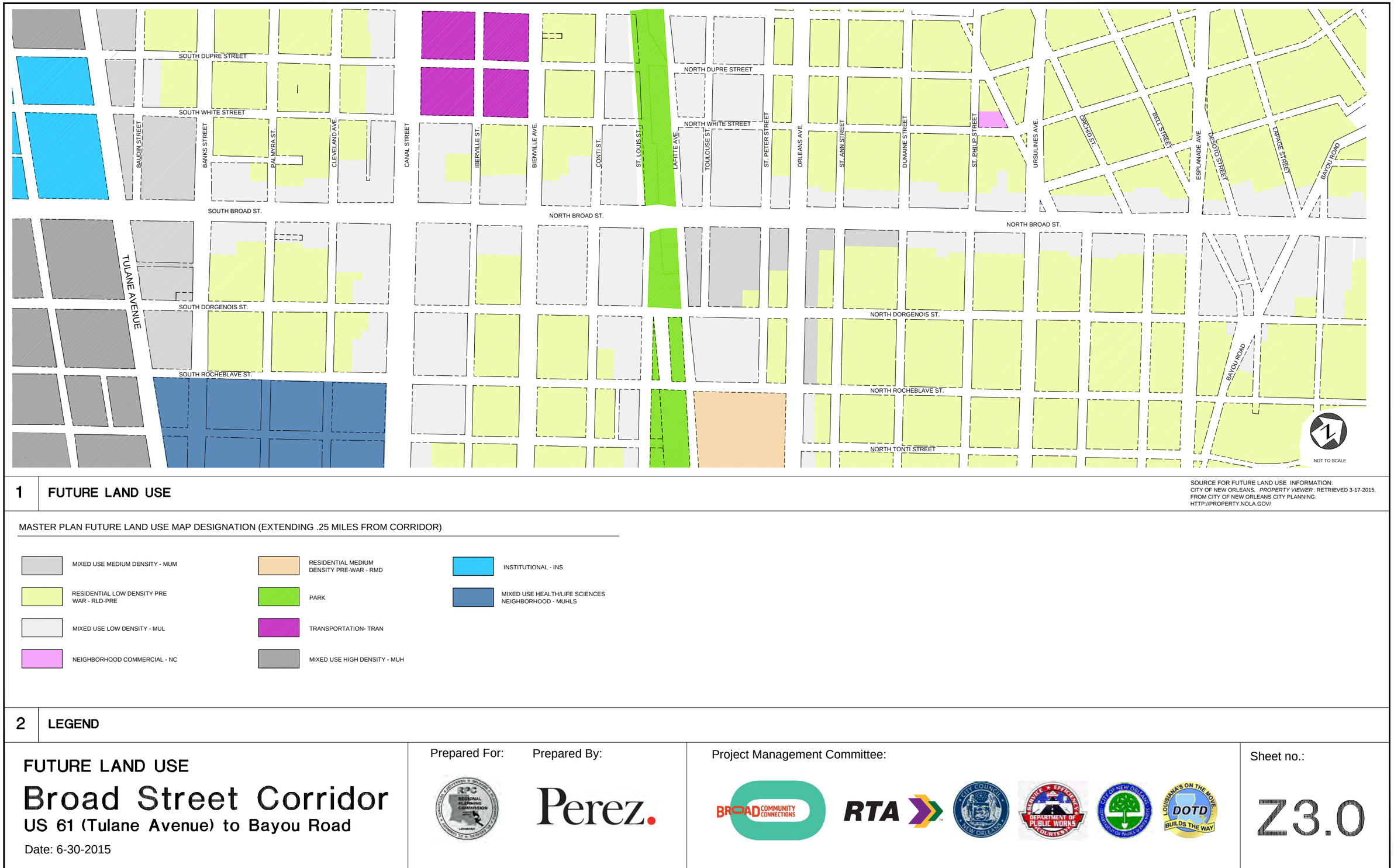


FIGURE 9: Draft Zoning Plan. Source: (City of New Orleans, 2013).

Draft Zoning

Data Collection

Similar to the existing zoning and future land use data, information for the draft zoning plan was acquired from the City of New Orleans property viewer website (City of New Orleans, 2013), which was last updated on December 19, 2013 as part of the City Council Review Draft 9-2014. In addition, parcel information, was acquired from the Regional Planning Commission in Autocad software format. The plan from the City of New Orleans property viewer web-site is shown with the parcel drawing above. See Figure 9 on the following page.

Interpretation

Much of the draft zoning within the Broad Street corridor project area is designated "Historic Urban Neighborhood". Aligning with future land use goals, the historic urban neighborhood character includes "commercial uses closely integrated into the residential neighborhoods, including the traditional corner store, small commercial clusters and small mixed-use corridors" (City of New Orleans, 2014, p. 0). MU-1 (medium intensity mixed use district) as seen in Figure 9 is designated for parcels adjacent to Tulane Avenue. The purpose for that use is "intended to encourage walk-able neighborhood centers and corridors, with a mix of residential and commercial uses. Buildings may contain vertical mixed-use as well as single purpose uses designed to provide transitions to adjacent lower density residential areas" (The City of New Orleans, 2014, p. 1). The life science mixed use district, which is shown where the LSUAMC and the VA hospital complexes are located (east of the Broad Street Corridor project area) are "intended to provide a district that is focused on life sciences research, including research, development, medical and limited manufacturing activity. In addition to life science research and development uses, the area is also intended to be more mixed-use in nature, by also allowing higher density residential and supportive commercial uses to serve those that live and work within the district" (The City of New Orleans, 2014, p. 2). Light industrial districts have been designated where the Orleans Criminal District Court Complex is located. In sum, the draft zoning ordinance emulates for the most part, the future land use designations within and surrounding the corridor, which is mostly characterized by walk-able communities inclusive of older residential areas mixed with small commercial/neighborhood type businesses. These factors were important to consider when developing design concepts that would enhance future land use and draft zoning designations.

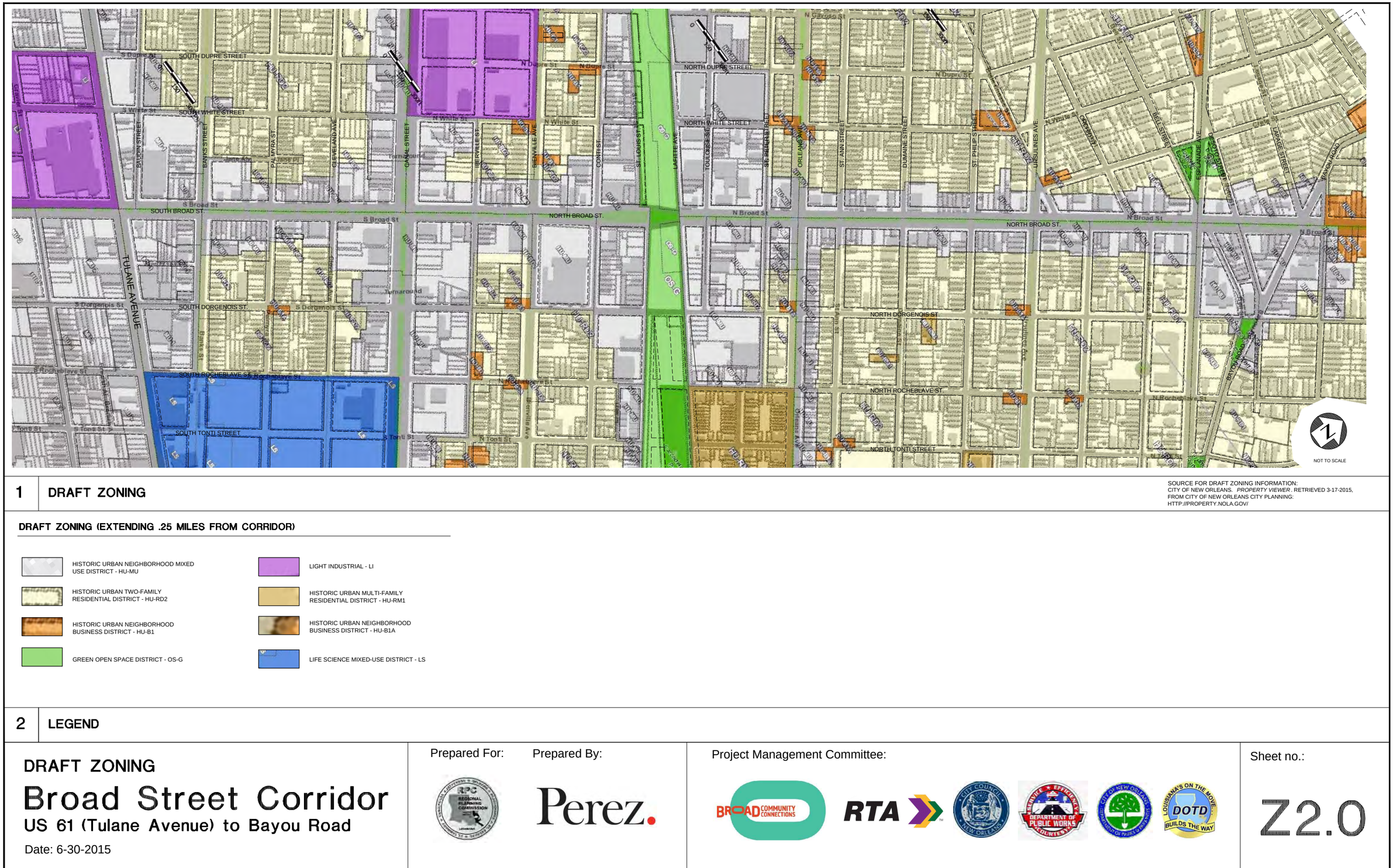


FIGURE 8: Future Land Use. Source: (City of New Orleans, 2013).

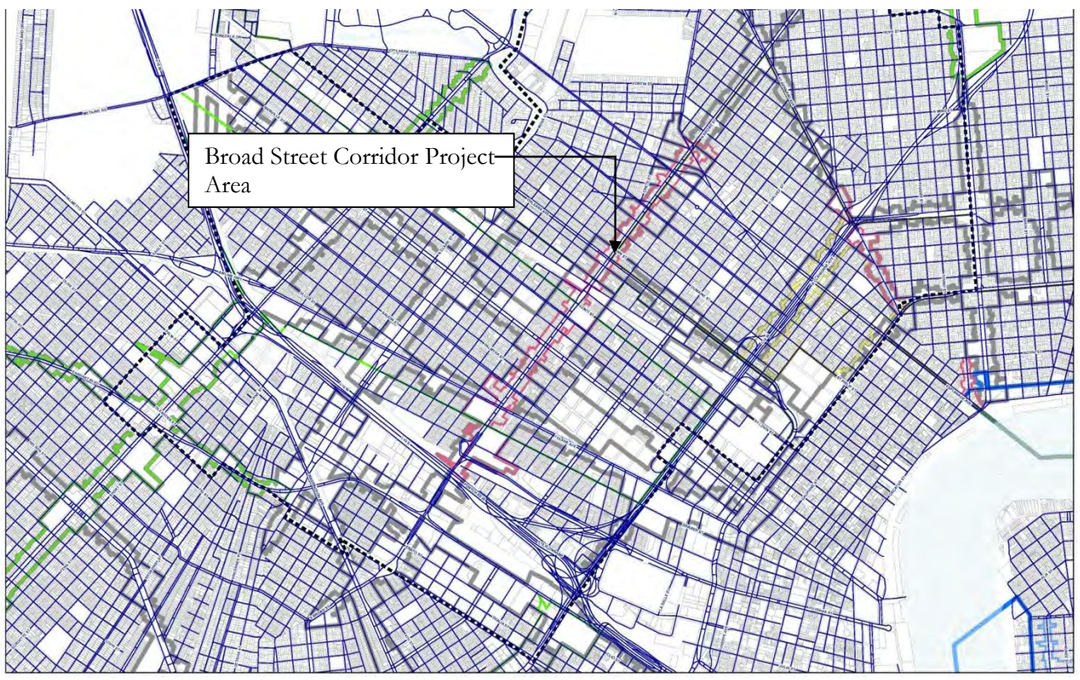
Draft Overlay

Data Collection

The draft overlay map (see Figure 10) was obtained from the New Orleans Planning Commission and last updated in July of 2014.

Interpretation

The corridor falls within two overlay districts. The Arts and Cultural Diversity Overlay and the Enhancement Corridor Overlay. The purpose of the Arts and Cultural Diversity Overlay District is to "maintain and reinforce small-scale uses and a balance of daytime and night-time uses that are compatible with the character of surrounding residential neighborhoods" (The City of New Orleans, 2014, p. 3). The Enhancement Corridor Overlay's purpose is to require a site plan design review to "ensure coordinated infill development and re-development" in an effort to maintain the traditional character of surrounding development (The City of New Orleans, 2014, p. 4).



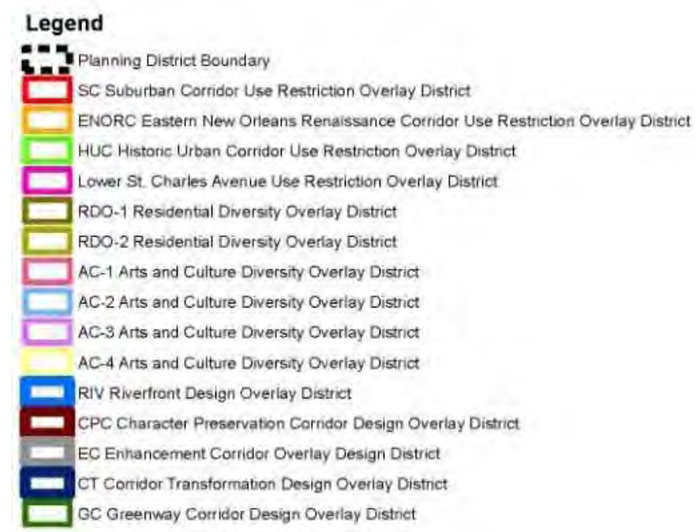


Figure 10: Draft Overlay Plan. Source: (City Planning Commission, 2014).

Main Street Resiliency Plan

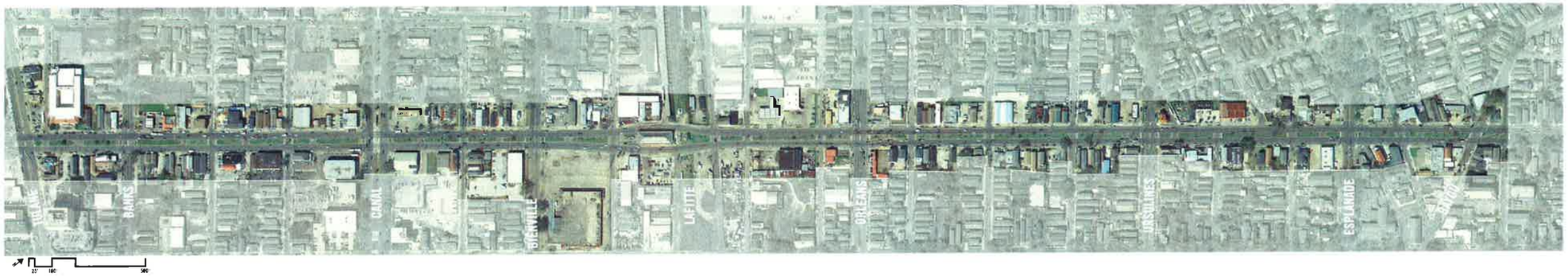
As stated previously, the Main Street Resiliency plan was created in part, to help "support economic recovery after disasters" (Louisiana Resiliancy Assistance Program, 2013, para. 2). More specifically, program also helps the city of New Orleans prioritize funding for infrastructure improvements. The program, which is funded by the U.S. Housing and Urban Development and Louisiana Office of Community Development – Disaster and Recovery unit, contains funding for six commercial districts in the city of New Orleans (the Broad Street Corridor between Tulane Avenue and Bayou Road being one of them). See Figure 11 for detailed locations of the six commercial districts. See Figure 12 for an overall map showing locations of the six commercial districts. As part of the program a Project Advisory Committee is formed whereby "the Project Advisory Committee will provide advice and recommendations to the City Planning Commission concerning policy, program development, and other matters of significance related to interdisciplinary, community-based resiliency projects" (New Orleans Main Street Resiliency Plan, 2015, p. 2). In order to improve resilience for the Broad Street Corridor, the program's methodology is applied. Tasks include the following (as outlined in (New Orleans Main Street Resiliency Plan, 2015)):

- Community Outreach and Participation
- Background Research
- Corridor Assessment
- Market Analysis
- Analysis and Plan Recommendations
- Best Practice (How-to) guides

A copy of the Advisory Committee Meeting Agenda can be found in Appendix O.

City of New Orleans- Main Street Resiliency Plan

Broad Street
1.35 Miles
44 Block Faces



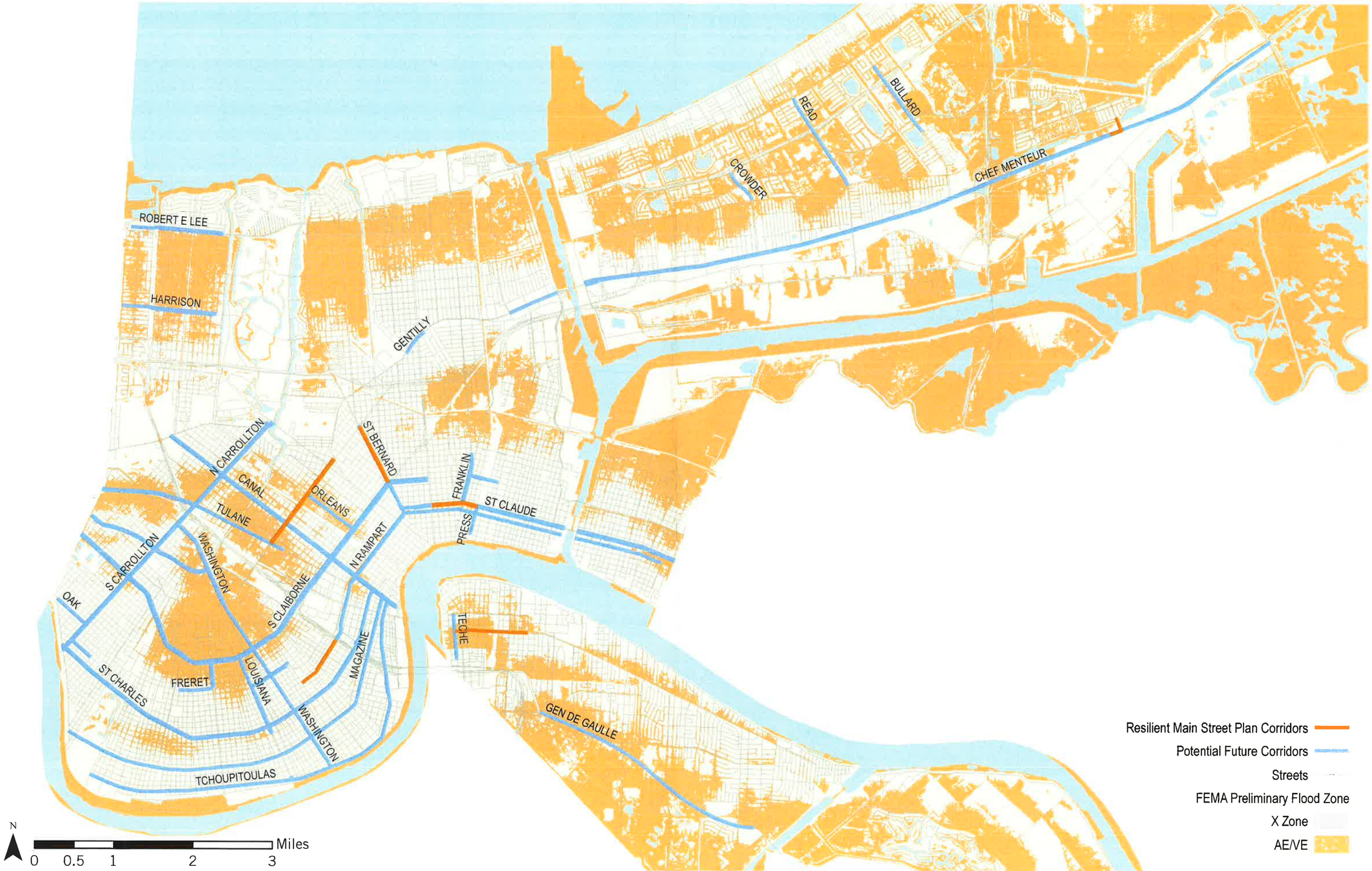
Newton Street
.76 Mile
30 Block Faces

St Bernard Avenue
.82 Mile
23 Block Faces

Alcee Fortier Boulevard
.31 Mile
3 Block Faces

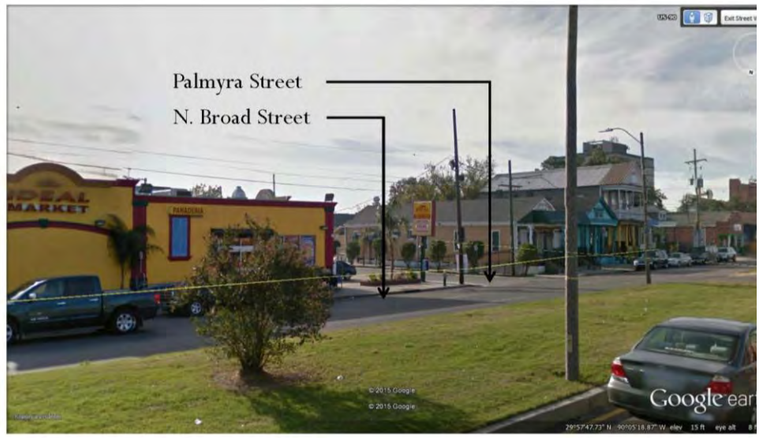
St Claude Avenue
.58 Mile
18 Block Faces

O C Haley Boulevard
.71 Mile
22 Block Faces


ROBERT E LEE
HARRISON
GENTILLY
CROWDER
READ
BULLARD
CHEF MENTEUR
N CARROLLTON
CANAL
TULANE
ORLEANS
ST BERNARD
FRANKLIN
ST CLAUDE
PRESS
N RAMPART
S CARROLLTON
WASHINGTON
S CLAIBORNE
OAK
TECHE
MAGAZINE
ST CHARLES
FRERET
LOUISIANA
WASHINGTON
GEN DE GAULLE
TCHOUPITOULAS
N
Miles
0
0.5
1
2
3
Resilient Main Street Plan Corridors
Potential Future Corridors
Streets
FEMA Preliminary Flood Zone
X Zone
AE/VE

Notable Issues throughout the Corridor

There are many issues throughout the project area that were taken into account when developing concept design options. Competing architectural styles and utility poles that lean and obstruct views can be seen throughout the corridor (see Figures 13 and 14). Modal conflicts also can be seen throughout the corridor (see Figures 15 and 16). Worn crosswalks create safety concerns and sidewalks surrounded by concrete and buildings increase the heat island effect and create harsh pedestrian environments (see Figures 17 and 18). Many transit stop areas can also be considered harsh pedestrian environments due to the lack of trees (thus increasing the heat island effect) and tight space constraints. Site furniture at many transit stop locations are disorganized which increases visual clutter and site triangle impediments at many transit stop corners (see Figures 19, 20, 21 and 22). Storm water runoff is also a concern within the corridor. Many drain storm inlets are blocked by debris, but most importantly, the corridor mainly consists (with the exception of the median) of concrete and asphalt pavements in addition to building infrastructure which contribute to storm runoff quantities (see Figures 23, 24, and 25). Excessive and unnecessary curb cuts also can be seen throughout the corridor, thus creating modal conflicts (see Figure 26 on page 32). Figure 26 and 27 shows parked vehicles on the pedestrian sidewalk, which eliminates pedestrian space and creates a potentially dangerous situation for pedestrians. In addition, the lack of curbs at critical intersections, as seen in Figure 28, creates the tendency for turning vehicles to roll onto the handicap ramp, which also poses pedestrian safety concerns. Figure 29, shows a transit stop is situated in a parking lot area, which poses a particular dangerous situation for transit users and pedestrians. Also, notable throughout the corridor are the lack of pedestrian signals at existing signalized intersections, and missing curb ramps at sidewalks that are located in the median.



(Image located on the corner of North Broad and Palmyra)

Figure 13: Competing architectural styles. Source: Google Earth, 2014.

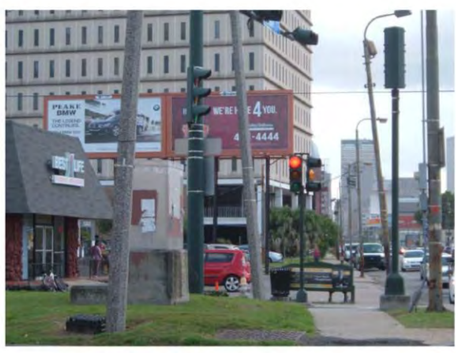


Figure 14: Utility poles obstruct view. Source: M. Johanna Leibe, 2014

Figure 15: Modal conflicts. Source: M. Johanna Leibe, 2015

Figure16: Modal conflicts. Source: M. Johanna Leibe, 2014

Figure 17: Worn crosswalks. Source: Google Earth, 2014.

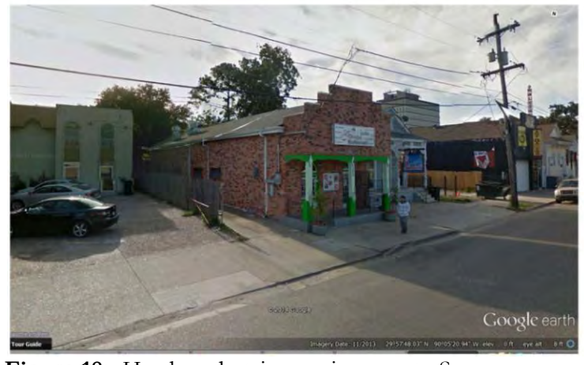


Figure 18: Harsh pedestrian environment. Source: Google Earth, 2013.

Figure19: Transit stop space constraints. Source: Google Earth, 2013.

Figure 20: Transit stop space constraints and harsh environment. Source: Google Earth, 2014.

Figure21: Transit stop – space constraints. Source: M. Johanna Leibe, 2014

Figure 22: Transit stop – cluttered site elements. Source: Google Earth, 2014.

Figure 23: Drain inlets blocked with debris. Source: M. Johanna Leibe, 2014.

Figure 24: Pavement on public and private properties contributes to the heat island effect creating harsh environments for pedestrians. Source: Google Earth, 2014.

Figure 25: Pavement at major intersections contributes to the heat island effect creating harsh environments for pedestrians. Source: Google Earth, 2014.

Figure 26: Modal conflicts as indicated in the image stress the need for enforcement. Source: Google Earth, 2014

Figure27: Modal conflicts as indicated in the image stress the need for enforcement. Source: Google Earth, 2014

Figure 28: Lack of curbs at intersection corners creates modal conflicts. Source: Google Earth, 2014.

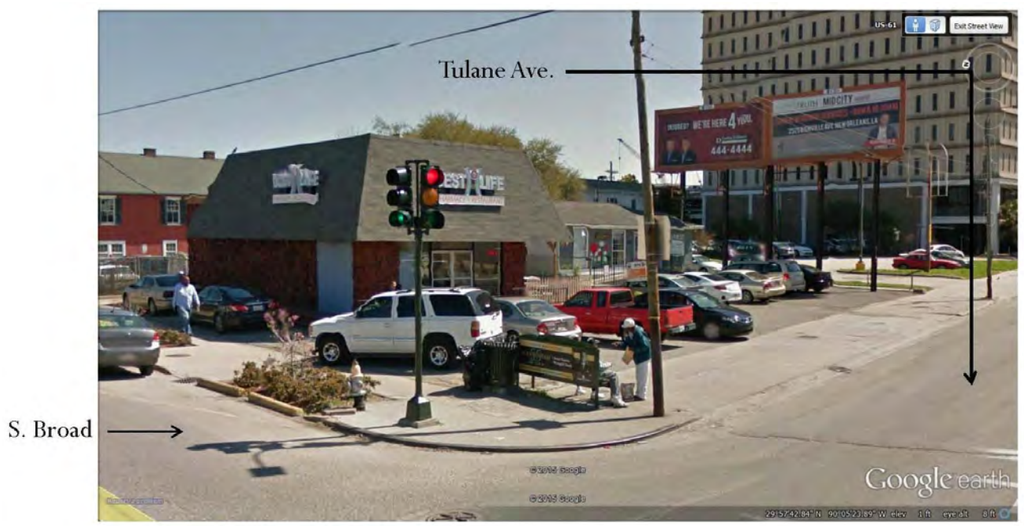


Figure 29: Modal conflicts at transit stop location. Source: (Google Earth, 2014).

Average Daily Traffic Counts

The average daily traffic count data ,as seen in Tables 1 and 2, reveals approximately 33, 791 vehicles that travel through the corridor between Orleans to Tulane Avenue a day. "The FHWA advises that roadways with ADT of 20,000 vehicle per day (VPD) or less may be good candidates for a Road Diet and should be evaluated for feasibility" (U.S. Department of Transportation - Federal Highway Administration, 2014, p. 17). In addition, "if the ADT is near the upper limits of the study volumes, practitioners should conduct further analysis to determine its operational feasibility" (U.S. Department of Transportation - Federal Highway Administration, 2014, p. 17).

However, according to the Road Diet and Pedestrian Safety Webinar, 2012; the benchmark of ADT's of 20,000 vehicles per day or less for road diet consideration, seem to apply for roads with four travel lanes or less (from a four lane to a two or three lane road). In addition, the webinar indicates that there appears to be a reduction of 29% on average in crashes with roads that have incorporated a road diet. A project that was mentioned in the project management committee (PMC) - meeting two was the Cesar Chavez Streetscape in San Francisco. The ADT count was 53,000 vehicles per day and "functionally similar to Broad: six-lane divided state highway running through the urban center, and designed to act as a throughway connecting two interstates" (Schwartz, 2015, p. 1). In addition, the "SF MTA did a six-lane to four-lane (with a left turn lane at key intersections) road diet, and added a parking lane, dedicated a 14' median--which Broad already has, which allows for pedestrian islands and landscaping" (Schwartz, 2015, p. 1).

Plans of the Cesar Chavez Street project can be found in Appendix P. This data was important to obtain and evaluate due to design elements, such as a road diet and dedicated bike lane implementation that were considered, which is discussed further in Chapter 4.0.

Table 1: Average Daily Traffic Counts – Fall of 2014

Broad St Extent		Tuesday								Wednesday								Thursday							Avg Count (T,W,TH):	
		WB Count	WB Peak Hr	WB Peak Count	EB Count	EB Peak Hr	EB Peak Count	Total Am/PM	% Daily Volume AM/PM	WB Count	WB Peak Hr	WB Peak Count	EB Count	EB Peak Hr	EB Peak Count	Total Am/ PM	% Daily Volume AM/PM	WB Count	WB Peak Hr	WB Peak Cou nt	EB Count	EB Peak Hr	EB Peak Count	Total Am/PM	% Daily Volume AM/PM	
Orleans to Bienville 10/20/2014-10/22/2014	AM	7999	7:15	2042	4567	7:30	864	*12566*	39%	7873	7:15	2026	4663	7:30	854	*12536*	38%	8063	7:15	2108	4912	7:45	910	*12975*	37%	
	PM	9505	4:45	1293	10486	4:45	1599	*19991*	61%	9926	4:30	1320	10929	5:00	1644	*20855*	62%	10377	4:30	1398	11511	4:45	1763	*21888*	63%	
	Total WB/EB	*17504*			*15053*					*17799*			*15592*					*18440*			*16423*					
	% Daily Volume WB/EB	54%			46%					53%			47%					53%			47%					
	Total Daily	***32557***								***33391***								***34863***								33604
Bienville to Canal 10/20/2014-10/22/2014 (Not in Report)	AM	7269	7:15	1713	4750	11:00	896	*12019*	43%	7166	7:15	1704	3034	7:30	672	*10200*	37%	7267	7:15	1730	3794	11:00	695	*11061*	40%	
	PM	9305	4:45	1266	6492	12:00	864	*15797*	57%	9768	4:30	1313	7715	5:00	1118	*17483*	63%	10021	4:45	1326	6671	3:45	1313	*16692*	60%	
	Total WB/EB	*16574*			*11242*					*16934*			*10749*					*17288*			*10465*					
	% Daily Volume WB/EB	60%			40%					61%			39%					62%			38%					
	Total Daily	*27816*								*27683*								*27753*								27751
Canal to Tulane 10/20/2014-10/22/2014	AM	7020	7:15	1704	9127	7:30	998	*16147*	45%	7122	7:15	1723	5247	7:30	1042	*12369*	38%	7138	7:15	1747	5461	7:45	1664	*12599*	37%	
	PM	9564	4:45	1338	9992	4:30	1521	*19556*	55%	9890	4:45	1384	10323	4:30	1595	*20213*	62%	10197	4:30	1450	10851	4:45	1043	*21048*	63%	
	Total WB/EB	*16584*			*19119*					*17012*			*15570*					*17335*			*16312*					
	% Daily Volume WB/EB	46%			54%					52%			48%					52%			48%					
	Total Daily	***35703***								***32582***								***33647***								33977

Source: The Regional Planning Commission

Table 2: Average Daily Traffic Count Summary

Average Daily Traffic Count 10/20/2014 -10/22/2014	
Orleans to Bienville	33,604
Bienville to Canal (Average)	*33,791
Canal to Tulane	33,977

Source: The Regional Planning Commission

*Note: The average daily traffic count between Bienville to Canal was derived by averaging the Orleans to Bienville and the Canal to Tulane average daily traffic counts.

Pedestrian and Bicycle Counts

In 2013, there was an estimated daily traffic (EDT) of 1, 652 pedestrians between Tulane Avenue and Banks Street. In 2014, pedestrian counts increased in this area by over 100 bringing the EDT count to 1,790. In 2013, the EDT count was 376 bikers between Tulane Avenue and Banks Street. A total of 433 bikers were counted within this same area in 2014. Both the pedestrian and bicycle EDT counts were obtained from the Regional Planning Commission. These counts reveal that bikers and pedestrians utilize the corridor between Tulane Avenue and Banks Street to a large degree. Unfortunately, there is no data regarding pedestrian and bicycle counts between Banks Street and Bayou Road (the remainder of the project area). Based upon observation, EDT bicycle and pedestrian counts for the remainder of the project area do not appear to be as high as counts south of Banks Street. However, due to the new hospital complexes being built near-by, a strong potential exists that bicycle and pedestrian counts will increase, not only in the area between Tulane Avenue and Banks, but throughout the rest of the corridor project area.

Transit Origin and Destination Counts

It was important to understand how much usage transit stops throughout the Broad Street Corridor project area receive, as this information was useful when evaluating the need for transit shelters where none exist. Therefore, RPC provided transit origin and destination count summaries (see Table 2 and Table 3 on the following page). As Table 2 and 3 reveal, transit stops at Canal Street and Esplanade Avenue have high amounts of transit users (both for users getting on to the bus and users getting off of the bus (origin and destinations accordingly). The remainder of the transit stops throughout the corridor has either low or no usage, as seen in Table 2.

Table 3: Transit Origin and Destination Count Summaries

Cross Street	Origin Count	Percentage	Destination Count	Percentage	Total Count	Total Percentage	Classification
Tulane	0	0%	1	1%	1	1%	Low Count
Baudin	0	0%	0	0%	0	0%	No Count
Banks	2	3%	2	2%	4	2%	Low Count
Palmyra	0	0%	0	0%	0	0%	No Count
Cleveland	1	1%	4	4%	5	3%	Low Count
Canal	44	55%	51	48%	95	51%	High Count
Ibervile	0	0%	0	0%	0	0%	No Count
Bienville	0	0%	4	4%	4	2%	Low Count
Conti	0	0%	0	0%	0	0%	No Count
St Louis	0	0%	0	0%	0	0%	No Count
Lafitte	0	0%	0	0%	0	0%	No Count
Toulouse	0	0%	1	0%	1	1%	Low Count
St Peter	1	1%	0	0%	1	1%	Low Count
Orleans	5	6%	6	6%	11	6%	Low Count
St Ann	2	3%	1	1%	3	2%	Low Count
Dumaine	4	5%	1	1%	5	3%	Low Count
St Phillip	0	0%	2	2%	2	1%	Low Count
Ursulines	3	4%	3	3%	6	3%	Low Count
Gov Nicholls	0	0%	1	1%	1	1%	Low Count
Barracks	0	0%	0	0%	0	0%	No Count
Esplanade	18	23%	29	27%	47	25%	
Total Origin Count:	**80**	**Total Destination Count:**	**106**	**Total Count Origin and Destination:**	**186**		

Source: Regional Planning Commission

Table 4: Transit Origin and Destination Count Methodology

Count Classification	Origin Count Range	Destination Count Range	Total Count Range
High	18-44	51-29	47-95
Low	1-5	1-6	1-11
None	0	0	0

Source: Regional Planning Commission

Crash Analysis Data

Site improvements, that were considered when developing concept design options, included the incorporation of a road diet and a dedicated bike lane. Another popular streetscape amenity used as a traffic calming measure that was considered as a site improvement was the incorporation of curb extensions, more commonly referred to bulb-outs at corners. It was important to understand the viability of these site elements as options by first understanding the locations and types of crashes that occur throughout the corridor project area as indicated in the following maps.

Figure 30 (located on the following page) is a map showing all crashes throughout the corridor reveals there have been numerous automobile crashes (indicated by the red dots). There have also been many pedestrian and bicycle crashes as well. Figure 31 shows all bike and pedestrian crashes throughout the corridor. Figure 32 shows all fatal and serious along with moderate injury crashes. Fatal crashes can be defined as incapacitating injuries, while moderate crashes can be defined as non-incapacitating injuries. However, classifications are subjective since this information is derived from police reports (i.e. police officers may misinterpret (not accurately judge) the severity of injuries).

Figure 33 shows fatal and serious along with moderate injury bicycle and pedestrian crashes. Figure 34 shows all fatal and serious injury crashes throughout the corridor. An evaluation of all fatal and serious crashes reveals that there were serious and fatal vehicular crashes at nine intersections, with two occurring at St. Ann Street. Figure 34 also indicates that there were two serious and fatal bicycle crashes at Ursulines and Bayou Road. There were also several moderate pedestrian, bicycle and vehicular crashes that have occurred throughout the corridor, most notably three pedestrian crashes at the Tulane Avenue and South Broad Street intersection (see Figure 33).

Due to the magnitude of crashes as indicated in crash maps (Figures 30 through 34), providing design solutions to increase pedestrian, vehicular and bicycle safety throughout the corridor (thus aligning with a complete streets approach per DOTD and the City of New Orleans policies became paramount when developing streetscape design concept options.

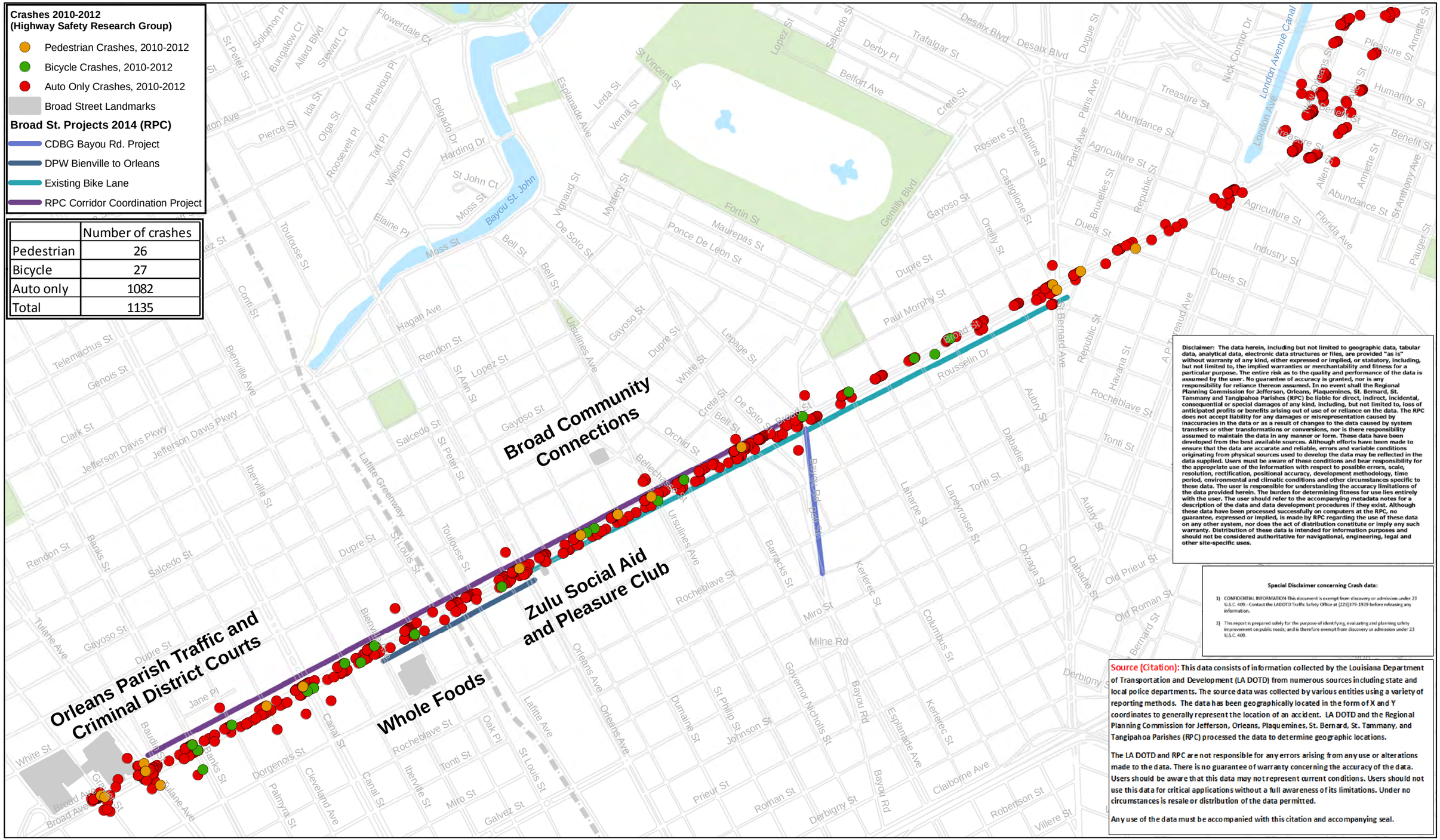
Crashes 2010-2012
(Highway Safety Research Group)

- Pedestrian Crashes, 2010-2012
- Bicycle Crashes, 2010-2012
- Auto Only Crashes, 2010-2012
- Broad Street Landmarks

Broad St. Projects 2014 (RPC)

- CDBG Bayou Rd. Project
- DPW Bienville to Orleans
- Existing Bike Lane
- RPC Corridor Coordination Project

	Number of crashes
Pedestrian	26
Bicycle	27
Auto only	1082
Total	1135



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Special Disclaimer concerning Crash data:

1) CONFIDENTIAL INFORMATION-This document is exempt from discovery or admission under 23 U.S.C. 409.- Contact the LADOTD Traffic Safety Office at (225)379-1929 before releasing any information.

2) This report is prepared solely for the purpose of identifying, evaluating and planning safety improvement on public roads; and is therefore exempt from discovery or admission under 23 U.S.C. 409.

Source (Citation): This data consists of information collected by the Louisiana Department of Transportation and Development (LA DOTD) from numerous sources including state and local police departments. The source data was collected by various entities using a variety of reporting methods. The data has been geographically located in the form of X and Y coordinates to generally represent the location of an accident. LA DOTD and the Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany, and Tangipahoa Parishes (RPC) processed the data to determine geographic locations.

The LA DOTD and RPC are not responsible for any errors arising from any use or alterations made to the data. There is no guarantee of warranty concerning the accuracy of the data. Users should be aware that this data may not represent current conditions. Users should not use this data for critical applications without a full awareness of its limitations. Under no circumstances is resale or distribution of the data permitted.

Any use of the data must be accompanied with this citation and accompanying seal.

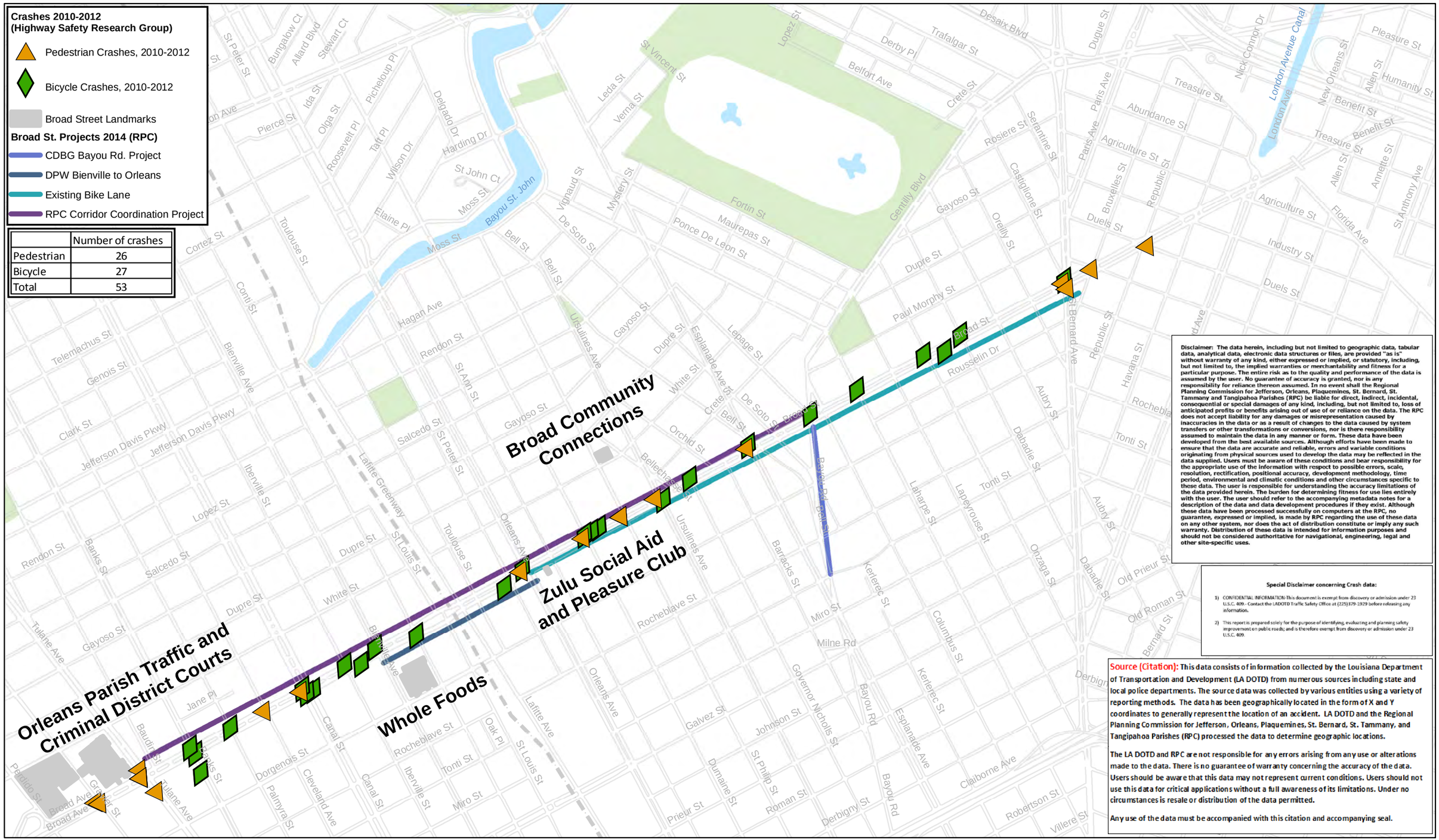
N

0 500 1,000 2,000 Feet

Broad St. Corridor Crashes
All Crashes, All Modes
New Orleans, Louisiana

Prepared by
Regional Planning Commission for
Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes
December 2014

RPC Task: UPWP HSPLA



	Number of crashes
Pedestrian	26
Bicycle	27
Total	53

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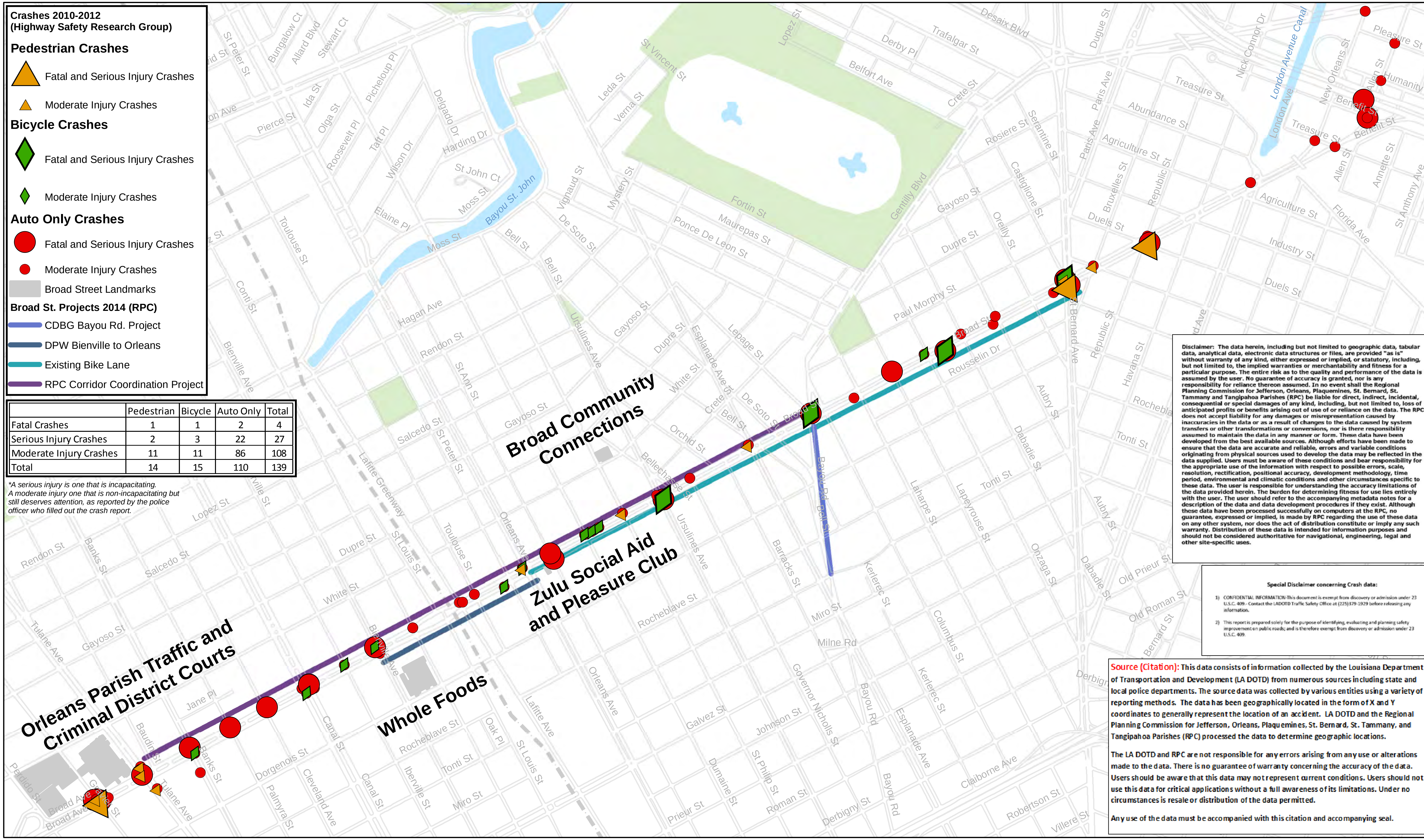
N

0 500 1,000 2,000 Feet

Broad St. Corridor
All Crashes, Pedestrian and Bicycle
New Orleans, Louisiana

Prepared by
Regional Planning Commission for
Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes
December 2014

RPC Task: UPWP HSPLA



	Pedestrian	Bicycle	Auto Only	Total
Fatal Crashes	1	1	2	4
Serious Injury Crashes	2	3	22	27
Moderate Injury Crashes	11	11	86	108
Total	14	15	110	139

**A serious injury is one that is incapacitating.*
A moderate injury one that is non-incapacitating but still deserves attention, as reported by the police officer who filled out the crash report.

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Broad St. Corridor Crashes
Fatal, Serious and Moderate Injury Crashes, All Modes
New Orleans, Louisiana

Prepared by
Regional Planning Commission for
Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes
December 2014

RPC Task: UPWP HSPLA

Crashes 2010-2012
(Highway Safety Research Group)

Pedestrian Crashes

- Fatal and Serious Injury Crashes
- Moderate Injury Crashes

Bicycle Crashes

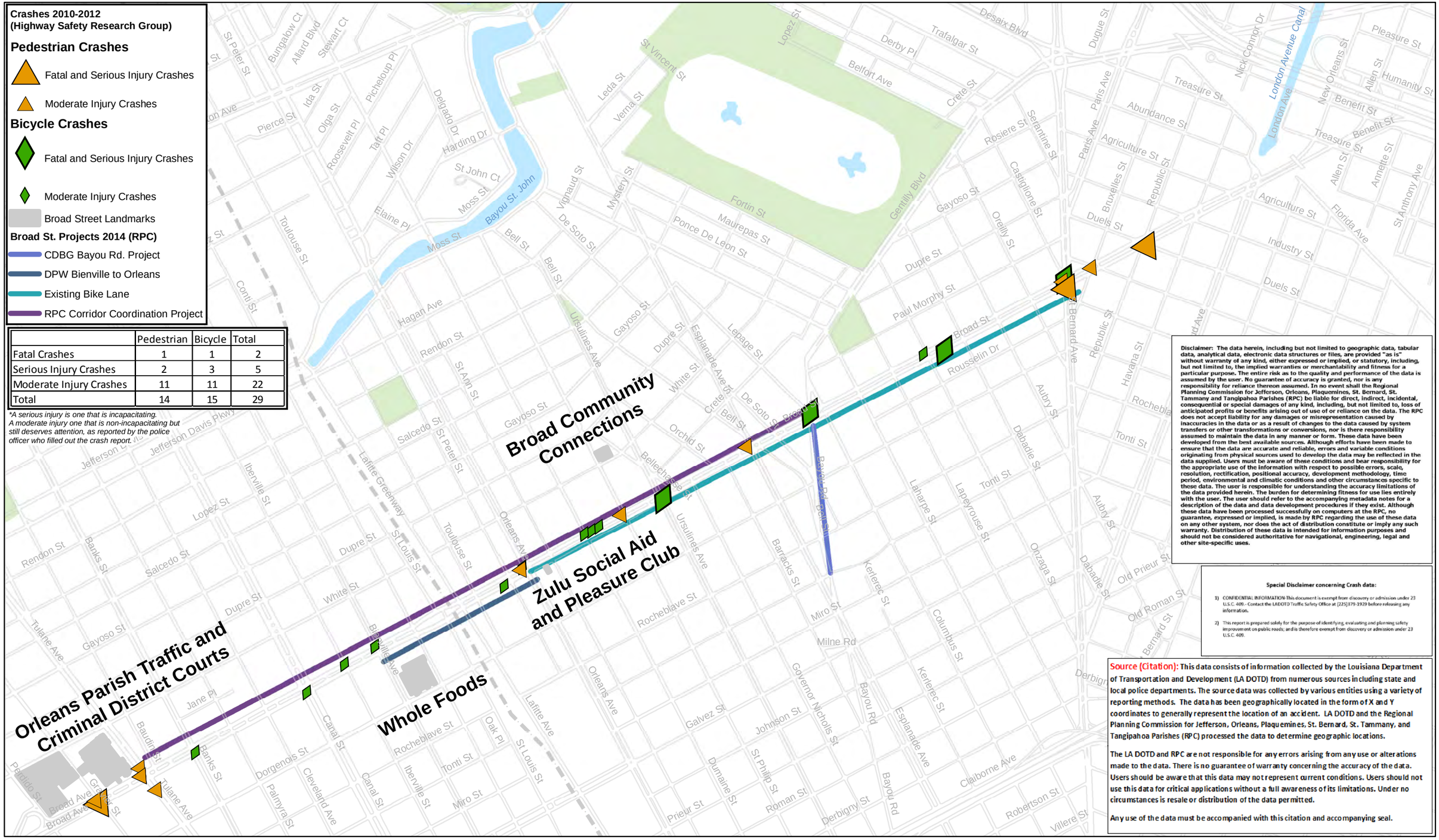
- Fatal and Serious Injury Crashes
- Moderate Injury Crashes
- Broad Street Landmarks

Broad St. Projects 2014 (RPC)

- CDBG Bayou Rd. Project
- DPW Bienville to Orleans
- Existing Bike Lane
- RPC Corridor Coordination Project

	Pedestrian	Bicycle	Total
Fatal Crashes	1	1	2
Serious Injury Crashes	2	3	5
Moderate Injury Crashes	11	11	22
Total	14	15	29

**A serious injury is one that is incapacitating. A moderate injury one that is non-incapacitating but still deserves attention, as reported by the police officer who filled out the crash report.*



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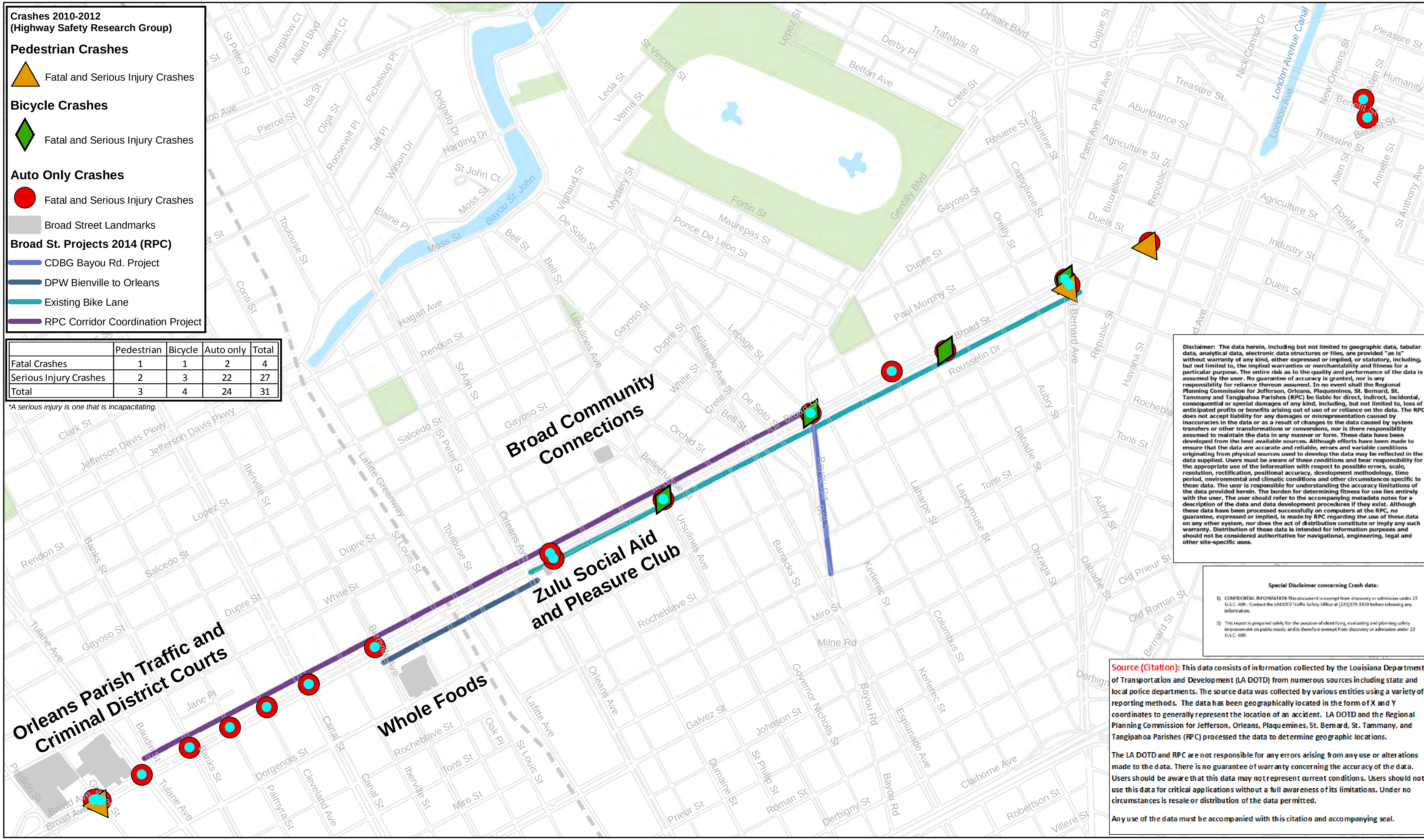
N

0 500 1,000 2,000 Feet

Broad St. Corridor
Fatal, Serious and Moderate Injury Crashes, Pedestrian and Bicycle
New Orleans, Louisiana

Prepared by
Regional Planning Commission for
Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes
December 2014

RPC Task: UPWP HSPLA



	Pedestrian	Bicycle	Auto only	Total
Fatal Crashes	1	1	2	4
Serious Injury Crashes	2	3	22	27
Total	3	4	24	31

**A serious injury is one that is incapacitating.*

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Broad St. Corridor Crashes
Fatal and Serious Injury Crashes, All Modes
New Orleans, Louisiana

Prepared by
Regional Planning Commission for
Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes
December 2014

RPC Task: UPWP HSPLA

Site Inventory and Assessment Plans

Data Collection

After the project kick off meeting (see Appendix A), M. Johanna Leibe with Perez APC met with Lynn Dupont of the Regional Planning Commission and acquired a geo-referenced aerial of the project area along with parcel, typography and roadway data. All data was geo-referenced (placed at the proper "x and y" coordinates) into Autocad (computer aided design) software using a GEOREF lisp routine. Because of Autocad software and ARC View software compatibility issues, the aerial photograph that RPC provided imported into the Autocad software in black and white and poor resolution. Therefore, in order to acquire a higher resolution, color image, aerial images were acquired from Google Earth and merged together in Photoshop software. The image was then imported into Autocad software at the proper coordinates (coordinates that match the ARC View coordinates) whereby RPC can then import the proposed enhancements back into ARC View software in the correct location. Thus, utilizing the road, parcel and Google Earth color image files, a plan of the area was the first step when developing site inventory/assessment plans.

Josh W. Hartley with the New Orleans Department of Public Works provided Perez APC with files in Autocad format of the Bayou Road, Lafitte Greenway Bicycle and Pedestrian Path, and Broad and Lafitte Street projects, as mentioned earlier in Chapter 2.0. Surveys from the Bayou Road and Broad and Lafitte Street projects were then combined into one file. Additional utility information (image file of approximate water, sanitary sewer, and storm water drainage line locations) was received from Sewerage and Water Board of New Orleans (SWBNO). Google Earth Street view was utilized to locate various utility covers, such as water, telephone, and sanitary sewer man-holes, in addition to storm water drainage inlets, water meter and valve locations. After approximate utility locations were created in plan (utilizing existing surveys, Google Earth street view and information provided by SWBNO), site visits were conducted for utility location verification. Therefore, approximate utility locations, as seen in the Site Inventory and Assessment Plans were derived utilizing data from the sources as mentioned above (survey, data provided by SWBNO, Google Earth street view, and site visits). In addition, Google Earth street view and subsequent site visits were also utilized to locate and verify other site element locations, such as traffic light and median light poles, fire hydrants, building locations, sidewalks, trees, traffic boxes, and other important site features.

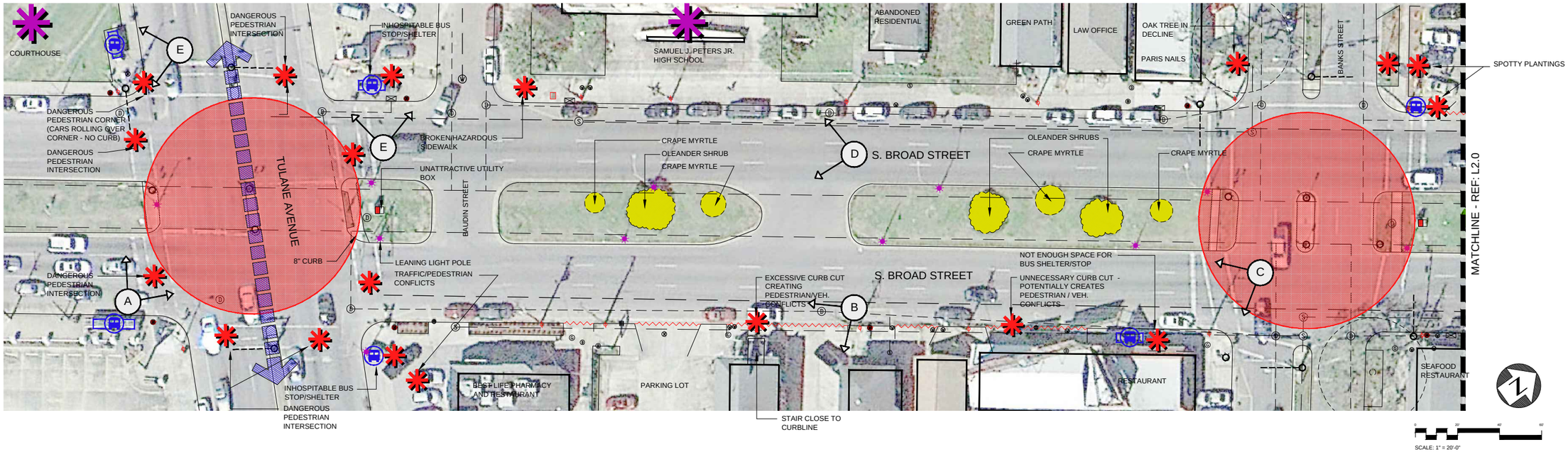
Interpretation

The inventory and assessment plans, which were created from the data as mentioned previously; contain a list of notable issues, points of interest, crash data, and vehicular, pedestrian and bicycle counts that pertain to each area shown on each sheet. Utility location was critical, as this information will aid the construction documentation process, which is needed for implementation. For example, the construction of bulb-outs (curb-extensions at corners) should not obstruct storm drainage; therefore, the location of street drains alone was extremely important. The development of notable issues that occur throughout the corridor was also extremely important in order to develop concept design options. Most notable issues include excessive and unnecessary curb cuts (which create modal conflicts), spotty and un-cohesive median plantings, and the lack of vegetation between the curb and the property lines, which adds to the urban heat island effect. The visual character of the corridor can be described as chaotic, as there are many competing architectural styles along with varying setback distances. Parking lot styles and placements also add to the visual chaos of the corridor. Site assessment information in addition to other data (land use, traffic, bicycle, and pedestrian counts, transit user counts, crash data and PMC feedback) was then used to help develop design concept strategies.

Site inventory and assessment plans can be found on the following pages (Figure 35 through Figure 44).

Conclusion

Land use data, site assessments, vehicular, bicycle, and pedestrian count data, transit origin and destination count data, and crash analysis data contributed to the decision making process when developing concept alternative options, and the preferred concept alternative option for this corridor. Each concept option along with decisions that were based upon existing condition information is further discussed in Chapter 4.0 of this report.



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

4 OVERALL ASSESSMENT NOTES

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG WITH THE EXCEPTION OF THE PISTASHE
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- CURB CUTS WHERE INDICATED "EXCESSIVE" POTENTIALLY CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- INAPPROPRIATE TREES PLANTED UNDER POWER LINES
- SIDEWALK IN NEED OF REPAIR
- PARKING LOT IN CONFLICT WITH SIDEWALK WHERE INDICATED
- CROSSWALK PAVEMENT MARKINGS AT TULANE NOT PROMINENT AT DANGEROUS INTERSECTION
- BUS SHELTERS SITUATED IN HEAT ISLAND AND NOT ENOUGH QUEUING ROOM - UNORGANIZED SITE FURNITURE - ABANDONED PHONE BOOTHS

POINT OF INTEREST/EXISTING ATTRIBUTES

- SAMUAL J. PETERS JR. HIGHSCHOOL
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES
- COURTHOUSE

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENT AT BANKS AND BROAD
  - AUTO ACCIDENT AT TULANE AND BROAD
- MODERATE
  - AUTO AND PEDESTRIAN CRASHES AT TULANE AND BROAD
  - BICYCLE CRASH AT BANKS AND BROAD

VEHICULAR, PEDESTRIAN AND BICYCLE COUNTS (DAILY)

- BETWEEN TULANE AND CANAL
  - 2014 VEHICULAR: 33,977
- BETWEEN TULANE AVE. AND BROAD STREET
  - 2013 PEDESTRIAN: 1,652
  - 2014 PEDESTRIAN: 1,790
  - 2013 BICYCLE: 376
  - 2014 BICYCLE: 433

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

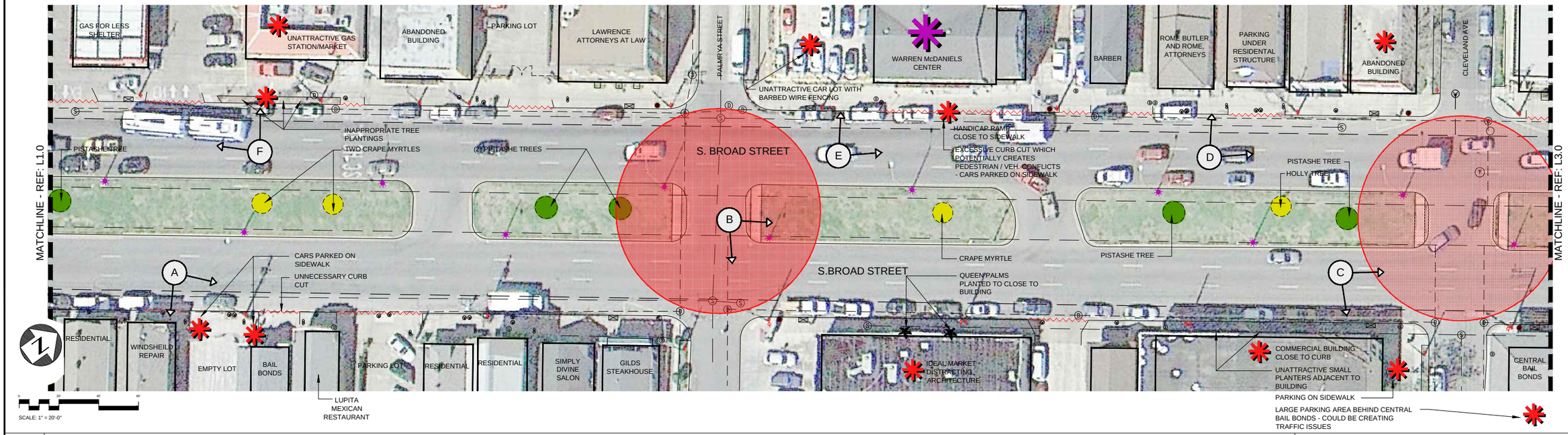
Prepared For: RPC Regional Planning Commission

Prepared By: Perez.

Project Management Committee: Broad Community Connections, RTA, City Council New Orleans, Department of Public Works, City of New Orleans, DOTD Louisiana's On the Move Builds the Way

Sheet no.: L1.0

FIGURE 35: Site Inventory and Assessment Plan - Sheet One. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

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- EXISTING SANITARY SEWER LINE
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- EXISTING TRAFFIC BOX
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- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

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- CURB CUTS WHERE INDICATED "EXCESSIVE" POTENTIALLY CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- CARS PARKED ON SIDEWALKS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- INAPPROPRIATE TREES PLANTED UNDER POWER LINES
- UNSIGHTLY CAR LOTS AND ABANDONED BUILDINGS

POINT OF INTEREST/EXISTING ATTRIBUTES

- WARREN MCDANIELS CENTER / ATTRACTIVE ARCHITECTURE
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENT AT PALMRYA AND BROAD
  - AUTO ACCIDENT AT CLEVELAND AVE. AND BROAD

VEHICULAR, PEDESTRIAN AND BICYCLE COUNTS (DAILY)

- BETWEEN TULANE AND CANAL
  - 2014 VEHICULAR: 33,977
- BETWEEN TULANE AVE. AND BROAD STREET
  - 2013 PEDESTRIAN: 1,652
  - 2014 PEDESTRIAN: 1,790
  - 2013 BICYCLE: 376
  - 2014 BICYCLE: 433

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

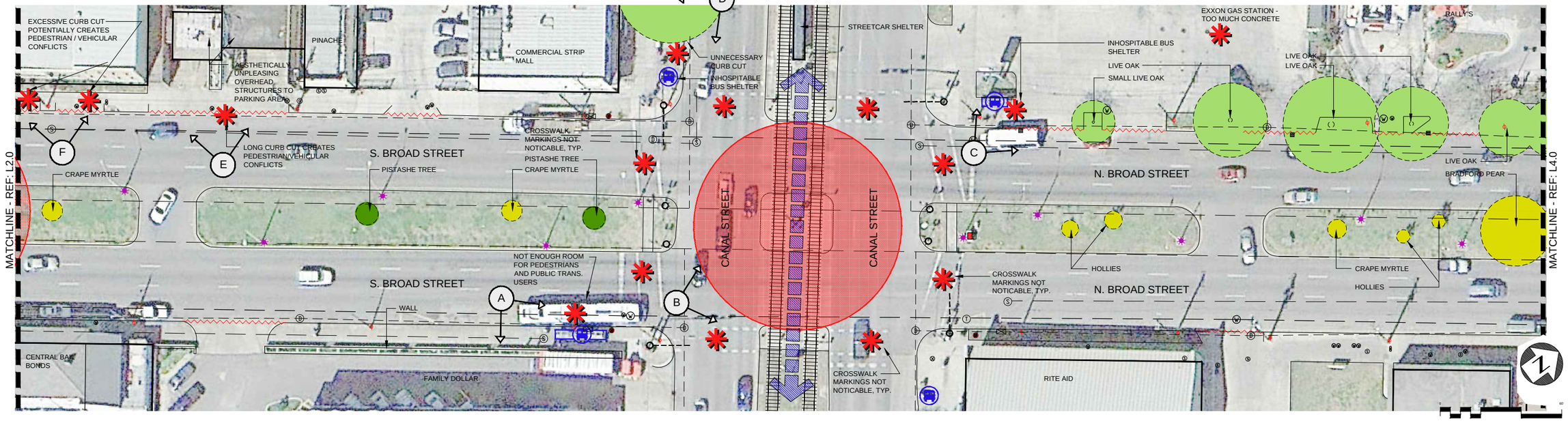
Prepared For: RPC Regional Planning Commission

Prepared By: Perez.

Project Management Committee: Broad Community Connections, RTA, City Council New Orleans, Department of Public Works, City of New Orleans, DOTD Louisiana's On the Move

Sheet no.: L2.0

FIGURE 36: Site Inventory and Assessment Plan - Sheet Two. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

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ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
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2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

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- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- CURB CUTS WHERE INDICATED "EXCESSIVE" POTENTIALLY CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- INAPPROPRIATE TREES PLANTED UNDER POWER LINES
- UNSIGHTLY CAR LOTS, JUNK YARDS, AND BROWN FIELDS
- INHOSPITABLE BUS STOPS
- BUS STOP SHELTER AT CANAL AND BROAD (EAST BOUND) TOO CLOSE TO STREET - TIGHT SPACE BETWEEN BACK OF SHELTER AND WALL
- CROSSWALK MARKINGS NOT NOTICEABLE TO VEHICULAR TRAFFIC

POINT OF INTEREST/EXISTING ATTRIBUTES

- CANAL STREET CAR LINE AMENITY
- ATTRACTIVE LIVE OAKS WHERE INDICATED
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENT AT CANAL STREET AND BROAD
- MODERATE
  - BICYCLE AND AUTO CRASH AT CANAL AND BROAD

VEHICULAR COUNTS (DAILY)

- BETWEEN TULANE AND CANAL
  - 2014 VEHICULAR: 33,977
- BETWEEN CANAL AND BIENVILLE
  - 2014 VEHICULAR: 33,791 AVG.

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

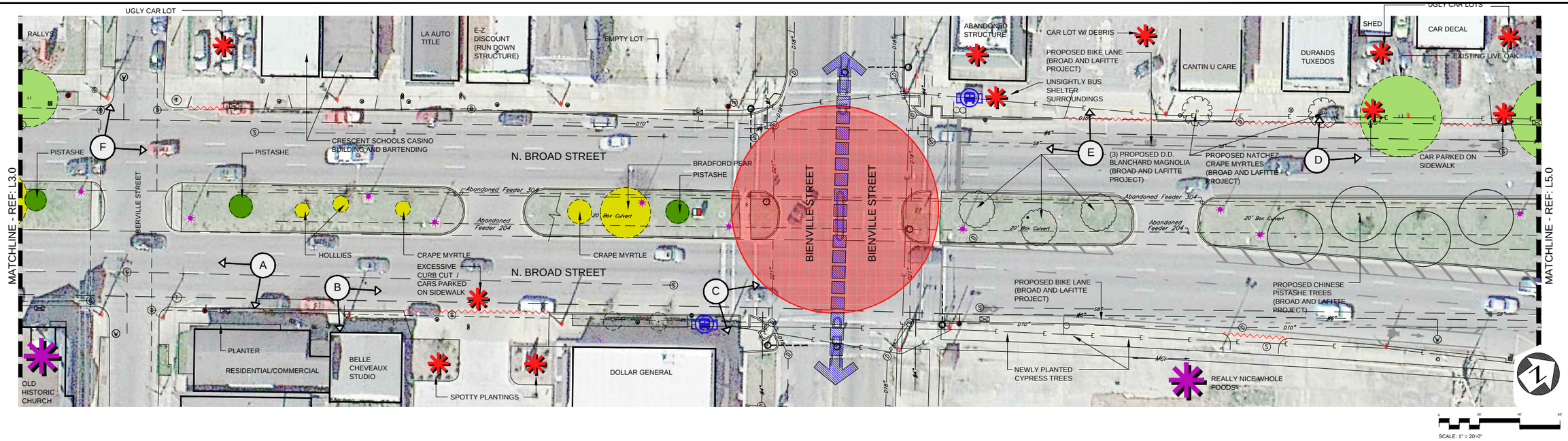
Prepared For: RPC Regional Planning Commission

Prepared By: Perez.

Project Management Committee: Broad Community Connections, RTA, City Council New Orleans, Department of Public Works, City of New Orleans, DOTD Louisiana's On the Move Builds the Way

Sheet no.: L3.0

FIGURE 37: Site Inventory and Assessment Plan - Sheet Three. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG WITH THE EXCEPTION OF THE PISTASHE
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- CURB CUTS WHERE INDICATED "EXCESSIVE" POTENTIALLY CREATES PEDESTRIAN / VEHICULAR CONFLICTS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- INAPPROPRIATE TREES PLANTED UNDER POWER LINES
- UNSIGHTLY CAR LOTS
- PROPOSED CRAPE MYRTLES AS STREET TREES MAY BE INAPPROPRIATE (TOO LOW AND WIDE, CAUSING MUCH TRIMMING AND MAINTENANCE) AND FLOWERS CAN CAUSE STAINS ON CARS
- CARS PARKED ON SIDEWALK IN FRONT OF CAR DECAL

POINT OF INTEREST/EXISTING ATTRIBUTES

- PLANNED STREET AND MEDIAN TREES PER BROAD AND LAFITTE PROJECT
- ATTRACTIVE WHOLE FOODS
- PLANNED BIKE LANE PER BROAD AND LAFITTE PROJECT
- ATTRACTIVE ARCHITECTURE (OLD HISTORIC CHURCH)
- ATTRACTIVE LIVE OAKS WHERE INDICATED

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENT AT BIENVILLE STREET AND BROAD
- MODERATE
  - BICYCLE AND AUTO CRASH AT IBERVILLE AND BROAD
  - BICYCLE AND AUTO CRASH AT BIENVILLE

VEHICULAR COUNTS (DAILY)

- BETWEEN BIENVILLE TO CANAL
  - 2014 VEHICULAR: 33,791 AVG.

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

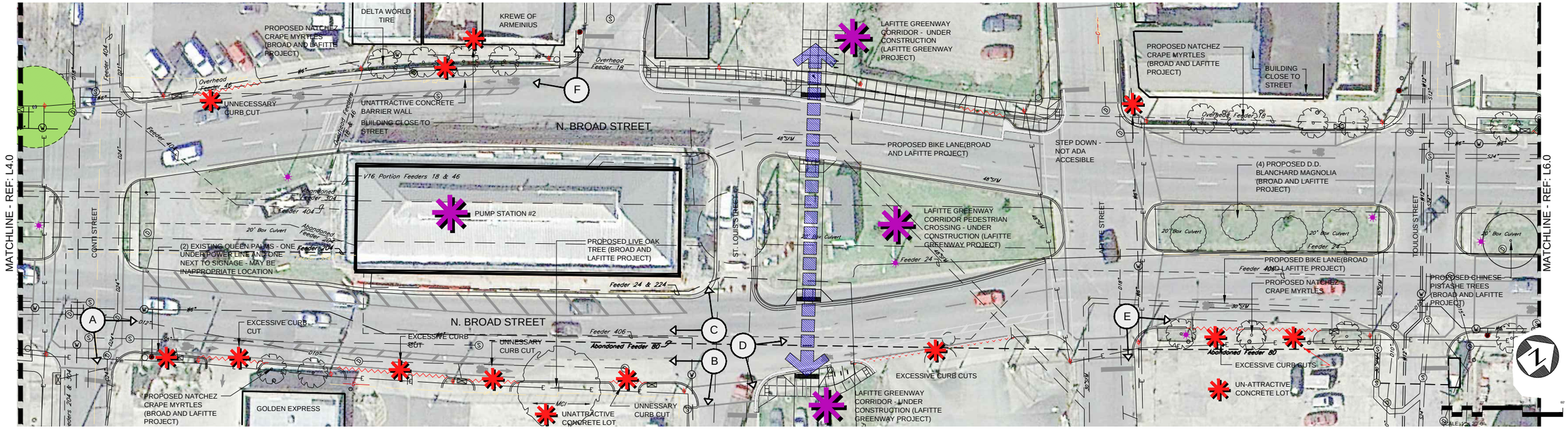
Prepared For:

Prepared By: Perez.

Project Management Committee:

Sheet no.: L4.0

FIGURE 38: Site Inventory and Assessment Plan - Sheet Four. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- PROPOSED MEDIAN TREES (PISTASHE) MAY TAKE YEARS BEFORE BECOMING ATTRACTIVE
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- CURB CUTS WHERE INDICATED "EXCESSIVE" POTENTIALLY CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- UNSIGHTLY CONCRETE LOTS / BROWN FIELDS
- PROPOSED CRAPE MYRTLES AS STREET TREES MAY BE INAPPROPRIATE (TOO LOW AND WIDE, CAUSING MUCH TRIMMING AND MAINTENANCE) AND FLOWERS CAN CAUSE STAINS ON CARS

POINT OF INTEREST/EXISTING ATTRIBUTES

- LAFITTE GREENWAY CORRIDOR UNDER CONSTRUCTION
- PUMP STATION #2 COULD BE AN ATTRACTION
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES
- PLANNED BIKE LANE PER BROAD AND LAFITTE PROJECT

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENT AT ST. ANN STREET AND BROAD
- MODERATE
  - AUTO ACCIDENT AT CONTI AND BROAD, LAFITTE AND BROAD AND TOULOUSE STREET AND BROAD

VEHICULAR COUNTS (DAILY)

- BETWEEN ORLEANS TO BIENVILLE
  - 2014 VEHICULAR: 33,604

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

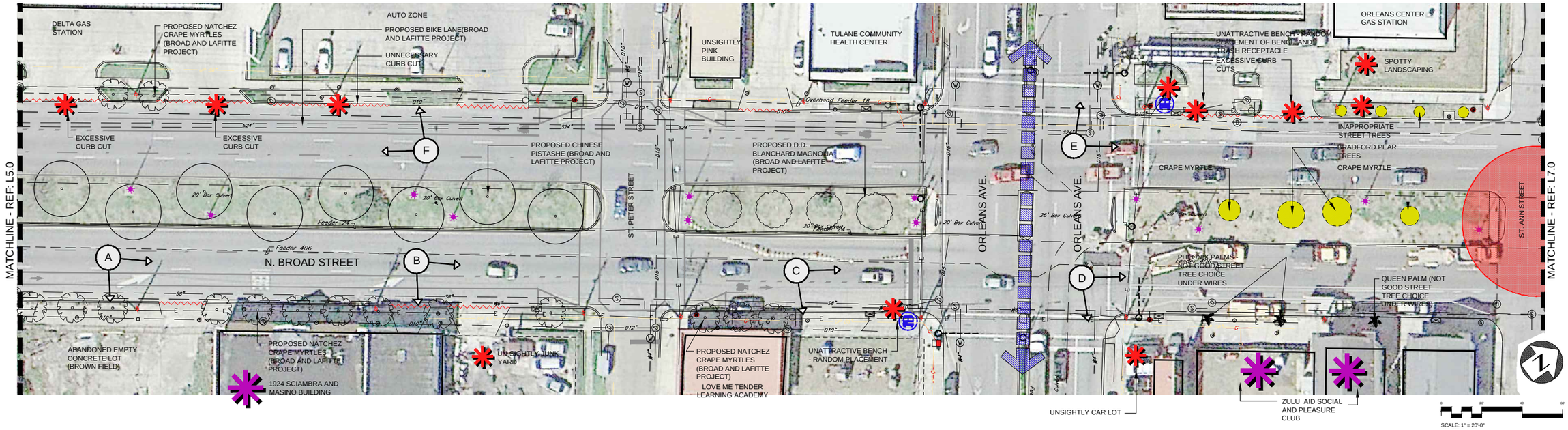
Prepared For: RPC Regional Planning Commission

Prepared By: Perez.

Project Management Committee: Broad Community Connections, RTA, City Council New Orleans, Department of Public Works, City of New Orleans, DOTD Louisiana's On the Move

Sheet no.: L5.0

FIGURE 39: Site Inventory and Assessment Plan - Sheet Five. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG WITH THE EXCEPTION OF THE PISTASHE
- PROPOSED MEDIAN TREES (PISTASHE) MAY TAKE YEARS BEFORE BECOMING ATTRACTIVE
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- CURB CUTS WHERE INDICATED "EXCESSIVE" POTENTIALLY CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- INAPPROPRIATE TREES PLANTED UNDER POWER LINES
- UNSIGHTLY CAR LOTS, JUNK YARDS, AND BROWN FIELDS
- PROPOSED CRAPE MYRTLES AS STREET TREES MAY BE INAPPROPRIATE (TOO LOW AND WIDE, CAUSING MUCH TRIMMING AND MAINTENANCE) AND FLOWERS CAN CAUSE STAINS ON CARS

POINT OF INTEREST/EXISTING ATTRIBUTES

- ZULU SOCIAL AID AND PLEASURE CLUB
- ATTRACTIVE SCIAMBRA AND MASINO BUILDING
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES
- PLANNED BIKE LANE

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENTS AT ST. ANN STREET AND BROAD
- MODERATE
  - BICYCLE AND AUTO CRASH NEAR ST. PETER ST. AND BROAD
  - PEDESTRIAN, BICYCLE AND AUTO CRASH AT ORLEANS AND BROAD

VEHICULAR COUNTS (DAILY)

- BETWEEN ORLEANS TO BIENVILLE
  - 2014 VEHICULAR: 33,604

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

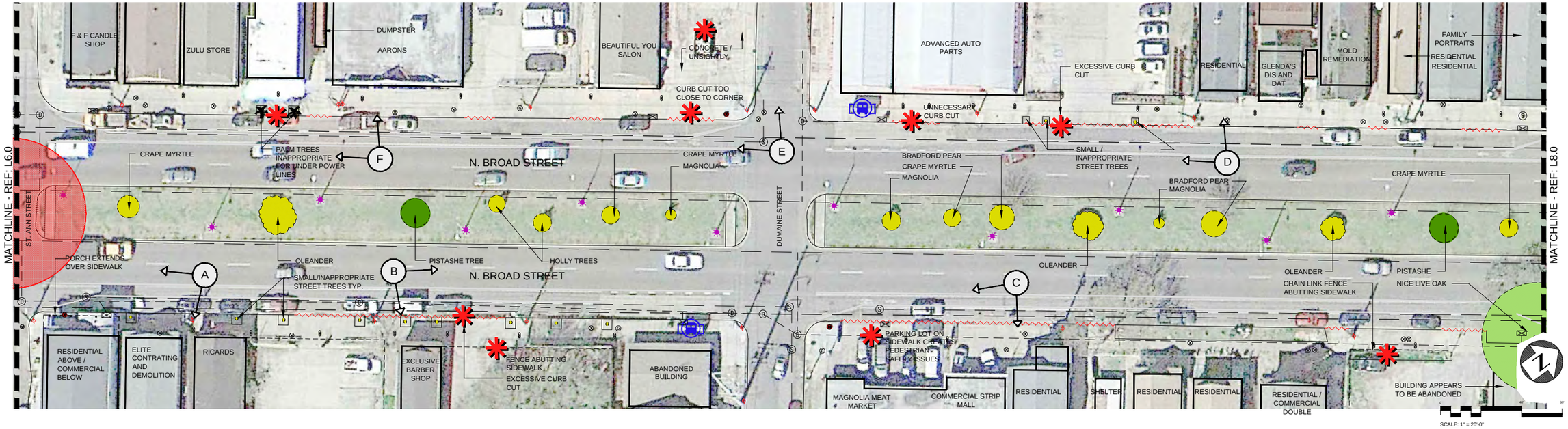
Prepared For: RPC Regional Planning Commission

Prepared By: Perez.

Project Management Committee: Broad Community Connections, RTA, City Council New Orleans, Department of Public Works, City of New Orleans, DOTD Louisiana's On the Move

Sheet no.: L6.0

FIGURE 40: Site Inventory and Assessment Plan - Sheet Six. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG WITH THE EXCEPTION OF THE PISTASHE
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- CURB CUTS WHERE INDICATED EXCESSIVE CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- PARKING LOT IN FRONT OF STRIP MALL CREATES PEDESTRIAN/VEHICULAR CONFLICTS (CARS PARKED ON SIDEWALK)
- POWER LINES ARE NOTICABLE AND UNATTRACTIVE
- INAPPROPRIATE TREES PLANTED UNDER POWER LINES

POINT OF INTEREST/EXISTING ATTRIBUTES

- NICE LIVE OAK LOCATED ON THE CORNER BY ST. PHILLIP STREET
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES
- BIKE LANE

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - AUTO ACCIDENT AT ST. ANN STREET AND BROAD
- MODERATE
  - PEDETRIAN, BICYCLE, AND AUTO CRASHES NEAR DUMAINE AND BROAD

VEHICULAR COUNTS (DAILY)

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

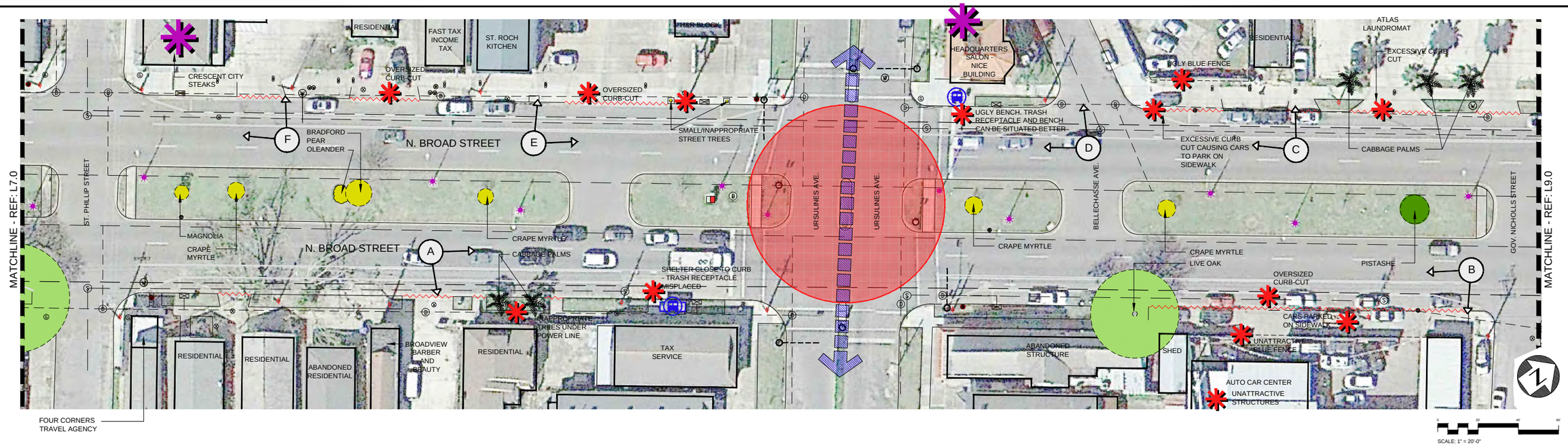
Prepared For: RPC Regional Planning Commission

Prepared By: Perez.

Project Management Committee: Broad Community Connections, RTA, City Council New Orleans, Bicycle Friendly Department of Public Works, City of New Orleans, Louisiana's On the Move DOTD Builds the Way

Sheet no.: L7.0

FIGURE 41: Site Inventory and Assessment Plan - Sheet Seven. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG WITH THE EXCEPTION OF THE PISTASHE
- UN-COHESIVE ARCHITECTURE IN GENERAL
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH PEDESTRIAN THOROUGHFARE
- UNATTRACTIVE STRUCTURES AT AUTOCARE CENTER
- UNATTRACTIVE BLUE FENCE LOCATED ADJACENT TO THE SIDEWALK BY AUTOCARE CENTER AND ON THE CORNER OF BELLECHASE AVE.
- CURB CUT LOCATED BY THE AUTOCARE CENTER AND ON THE CORNER OF BELLECHASE AVE IS EXCESSIVE CAUSING CARS TO PARK ON THE SIDEWALK
- OTHER EXCESSIVE CURB CUTS AS INDICATED
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE
- UNATTRACTIVE SITE FURNITURE AT BUS STOP BY HEADQUARTERS SALON
- INAPPROPRIATE TREES UNDER POWER LINES

POINT OF INTEREST/EXISTING ATTRIBUTES

- ATTRACTIVE RESIDENTIAL ARCHITECTURE
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES
- CRESCENT CITY STEAKS
- BIKE LANE

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - BIKE AND PEDESTRIAN ACCIDENT AT URSULINE AVE. AND BROAD
- MODERATE
  - PEDESTRIAN AND AUTO CRASH AT ST. PHILIP AND BROAD
  - AUTO CRASHES AT URSULINES AND BROAD
  - AUTO CRASH AT GOV. NICHOLLS ST. AND BROAD

VEHICULAR COUNTS (DAILY)

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

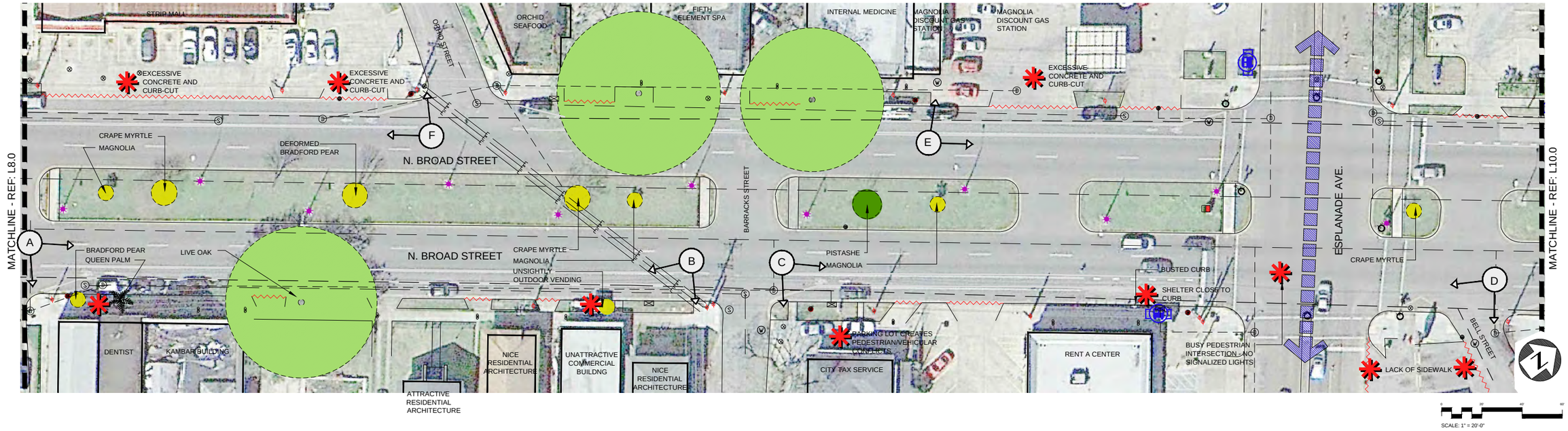
Date: 6-30-2015

Prepared For: Prepared By:

Project Management Committee:

Sheet no.: L8.0

FIGURE 42: Site Inventory and Assessment Plan - Sheet Eight. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG WITH THE EXCEPTION OF THE PISTASHE
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH SIDEWALK AREA FOR PEDESTRIANS
- PARKING LOT LOCATED ALONG ESPLANADE BY THE TASTEE DONUTS ELIMINATES PEDESTRIAN THOROUGHFARE.
- CURB CUT LOCATED BY MAGNOLIA DISCOUNT GAS STATION IS EXCESSIVE, ADDING TO PEDESTRIAN/VEHICULAR CONFLICTS
- PARKING LOT BY THE STRIP MALL, AND TAX CENTER CREATES PEDESTRIAN/VEHICULAR CONFLICTS
- POWER LINES ARE NOTICABLE AND UNATTRACTIVE
- UNSIGHTLY OUTDOOR VENDING STRUCTURE LOCATED IN ROW
- NO SIGNILIZED LIGHTS AT BUSY PEDESTRIAN INTERSECTION
- INAPPROPRIATE TREES UNDER POWER LINES BY DENTIST OFFICE

POINT OF INTEREST/EXISTING ATTRIBUTES

- NICE LIVE OAK LOCATED BY CHASE BANK
- WIDE MEDIAN WHICH PROVIDES SPACE FOR NICE TREES
- NICE LIVE OAKS BY INTERNAL MEDICINE CENTER AND FIFTH ELEMENT SPA
- NICE LIVE OAK LOCATED BY KAMBUR BUILDING
- BIKE LANE

CRASH DATA (2010-2012)

- MODERATE
  - PEDESTRIAN AND BIKE CRASH AT ESPLANADE

VEHICULAR COUNTS (DAILY)

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

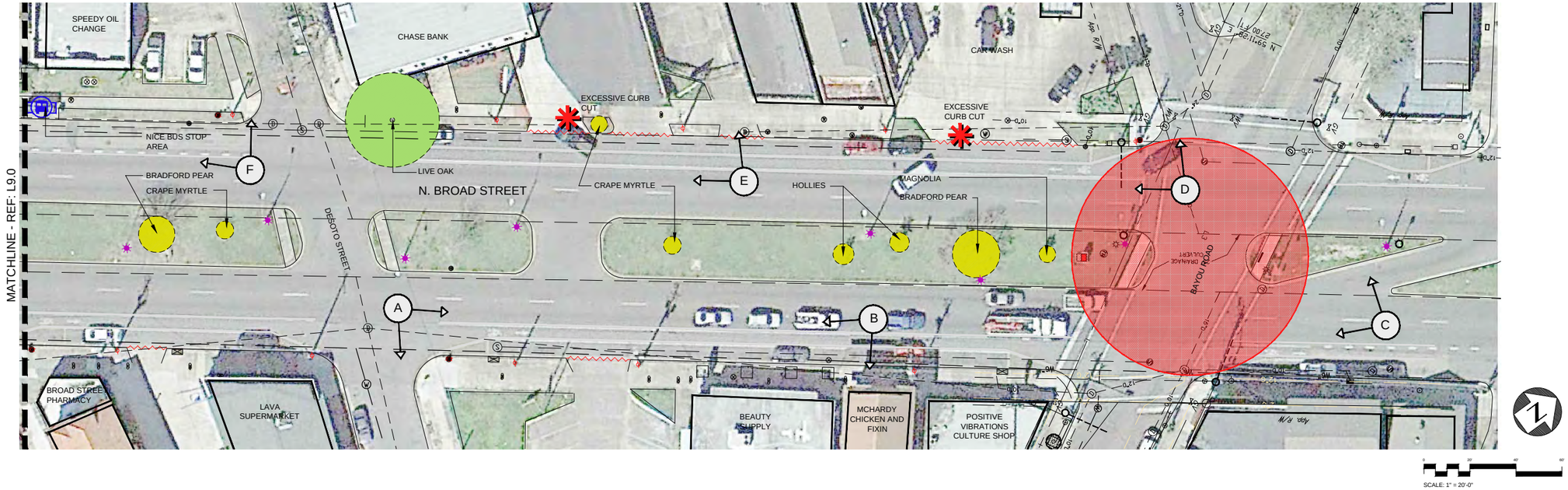
Prepared For: Prepared By:

Perez.

Project Management Committee:

Sheet no.: L9.0

FIGURE 43: Site Inventory and Assessment Plan - Sheet Nine. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).



1 SITE INVENTORY/ASSESSMENT

UTILITIES

- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BOX CULVERT
- EXISTING OVERHEAD ELECTRICAL
- EXISTING DRAIN INLET
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING TRAFFIC BOX
- EXISTING TRAFFIC SIGNAL
- EXISTING STORM SEWER LINE
- EXISTING UTILITY POLE

SITE FEATURES

- EXISTING BUS STOP W/ SHELTER
- EXISTING BUS STOP W/OUT SHELTER
- EXISTING LIVE OAKS
- EXISTING PISTASHE
- EXISTING TREES (CRAPE MYRTLE, BRADFORD PEAR, HOLLY OR MAGNOLIA)
- CURB CUT

ASSESSMENT

- NOTABLE ISSUES
- SITE ATTRIBUTE/FEATURE
- MAJOR TRANSPORTATION CORRIDOR
- FATAL AND SERIOUS INJURY CRASH AREA

2 SITE LEGEND

3 SITE PHOTOGRAPHS

NOTABLE ISSUES

- MEDIAN TREES ARE SPOTTY. TREE SPECIES ARE NOT LONG LIVED/STRONG
- UN-COHESIVE ARCHITECTURE
- LACK OF TREES AND PLANT MATERIALS BETWEEN ROW AND PROPERTY LINE ADDS TO HEAT ISLAND EFFECT AND CREATES HARSH THOROUGHFARE FOR PEDESTRIANS
- CURB CUT LOCATED BY THE CAR WASH AND CHASE BANK IS EXCESSIVE, ADDING TO PEDESTRIAN/VEHICULAR CONFLICTS
- POWER LINES ARE NOTICEABLE AND UNATTRACTIVE

POINT OF INTEREST/EXISTING ATTRIBUTES

- NICE LIVE OAK LOCATED BY CHASE BANK
- WIDE MEDIAN WHICH PROVIDES SPACE FOR STRONG TREES
- NICE BUS STOP LOCATED BY SPEEDY OIL CHANGE
- BIKE LANE

CRASH DATA (2010-2012)

- FATAL AND SERIOUS
  - BIKE AND AUTO CRASH AT BAYOU ROAD AND BROAD

VEHICULAR COUNTS (DAILY)

4 OVERALL ASSESSMENT NOTES

Site Inventory/Assessment

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For: Prepared By:

Perez.

Project Management Committee:

Sheet no.: L10.0

FIGURE 44: Site Inventory and Assessment Plan - Sheet Nine. Aerial image source: (Google Earth, 2013). Photo source: (Google Earth, 2014).

Chapter Four

4.0 Proposed Corridor Enhancements

Overview

This chapter first consists of a list of site enhancements that was used to address some of the existing condition issues as mentioned in Chapter 3.0. Enhancement items were presented to PMC members in meeting two (see Appendix B) after the PMC members provided general feedback in a kick off meeting (see Appendix A). Concept alternatives were then developed based upon PMC feedback and existing conditions data as mentioned in Chapter 3.0. Concept Option One A entails basic enhancements. Concept One B and C build upon the previous concept option respectively (e.g. Concept B builds upon Concept A and Concept C builds upon Concept B). During a coordination meeting with the Regional Planning Commission (see Appendix E), a second concept alternative option was discussed which included a protected bike lane. After a presentation and evaluation of Concept One and Two options (see Appendix G), comments from the PMC were used to develop a preferred alternative option, which is Concept Three - The Preferred Alternative.

Enhancement Items

Visual Enhancements

Visual enhancements suggested in order to unify the corridor include the implementation of trees. The implementation of trees can also help decrease storm water run-off (by providing water retention as mentioned in the water management enhancement section), reduce the urban heat island effect[1], can provide carbon sequestration[2] along with providing habitats to birds. Figure 45 and 46, shows how street trees between the sidewalk and the back of the curb can visually enhance and unify the corridor. Suggested species that would be appropriate for locations under utility lines include the Chinese Pistashe tree (see Figure 47) or the standard Natchez Crape Myrtle (if 14'-0" Chinese Pistashe trees are not available. Trees would have a 7'-0" clear trunk.

Figure 45: Existing establishments along Broad Street. Source: (Google Earth, 2014).

Figure 46: Broad Street establishments with street trees. Source of Image: (Google Earth, 2014).

Figure 47: Chinese Pistashe Tree. Source: (Ned Patchett Consulting, Inc., 2014)

Figure 48: Natchez Crape Myrtle Tree. Source: (James, 2011)

Figure 49: Ginkgo Tree. Source: (Gazette Staff Writer, 2008).

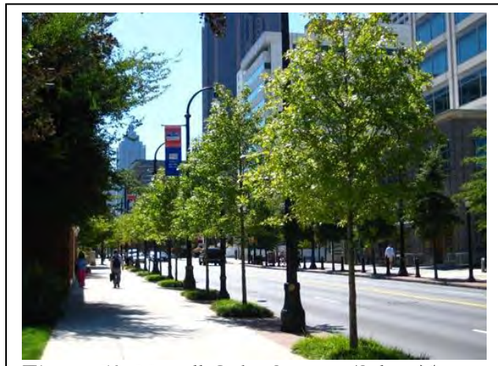


Figure 50: Nuttall Oak. Source: (Select Trees, 2015).

Trees that were considered in inner block bulb-out areas (as included as part of Concept One C), include the Autumn Gold or Halka Gingko tree (see Figure 48 and 49 respectively). Due to strict New Orleans S&WB guidelines, oak trees were found to not be permitted within ten feet of any sewerage and water board utility line and there was found to be an existing underground box culvert located in the median area. However, in coordination with Parks and Parkways, the New Orleans S&WB approved Nuttall Oaks (due to the less invasive root system than live oaks) as the median tree (see Figure 50).

Pedestrian Friendly Enhancements

Due to the high vehicular traffic counts, crash data within the corridor, and space constraints at existing transit stops; curb extensions, more commonly referred to bulb-outs were considered as a design element, since bulb-outs have shown to slow traffic and improve pedestrian safety while providing more space for transit users.

[1] Heat island effect is a term that describes "built up areas that are hotter than nearby rural areas" (EPA, 2014). In addition, "heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality" (EPA, 2014).

[2] Carbon sequestration refers to the storage of carbon dioxide, which can reduce greenhouse gas emissions, thus decreasing global warming (New York State Department of Environmental Conservation, 2015).

Bulb-outs also decrease the pedestrian travel distance to cross the street (see Figure 51). Specialized paving in the center of major intersections (See Figure 53) and specialized plantings at intersection corners (see Figure 52) can also serve as a traffic calming measure and can visually enhance major intersections. In addition, plantings at major intersections can help decrease storm water run-off, while adding a small visual barrier that can serve as a prevention method from large vehicles "popping" corner curbs. The implementation of high visibility crosswalks can also increase pedestrian safety at major intersections (see Figure 54).

Figure 51: Bulb-out. Source: (Google earth, 2014).

Figure 52: Decorative intersection plantings. Photo taken by M. Johanna Leibe

Figure 53: Decorative intersection paving. Source: (Google earth, 2014).

Figure 54: High visibility asphalt crosswalk. Source: (Bump & Shultz, 2012).

Water Management Enhancements

Due to the City of New Orleans being situated, for the most part, below sea level, the city depends upon pumps for drainage. Therefore, storm water mitigation is extremely important to address as part of the Broad Street Corridor project. In addition, funding may be available if certain water mitigation practices are incorporated within the Broad Street Corridor project. Potential funding sources regarding water mitigation include the National Disaster Resilience Competition, Hazard Mitigation Grant Program, and funding as part of the Restore Act. Community Development Block Grants may also be utilized for water mitigation funding. Potential funding sources are discussed further in Chapter 5.

As mentioned in Chapter 3.0, the lack of tree cover and the abundance of pavement throughout the corridor increase storm water runoff. In an effort to decrease storm water run-off quantities, permeable pavers were considered as a design element. Permeable pavers allow the water to perk through into the sub-surface soil, thus decreasing the amount of water entering the city's drainage system. One option that was considered included permeable pavers located along Broad Street in the parking lane (see Figure 55).

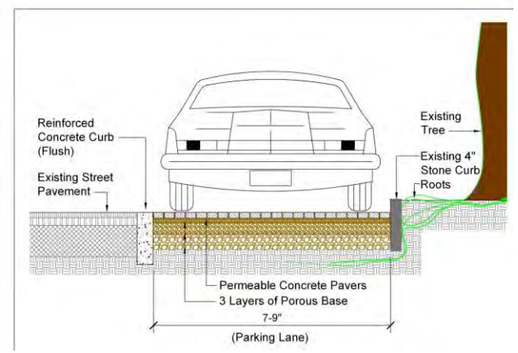


Figure 55: Permeable pavers in parking lane

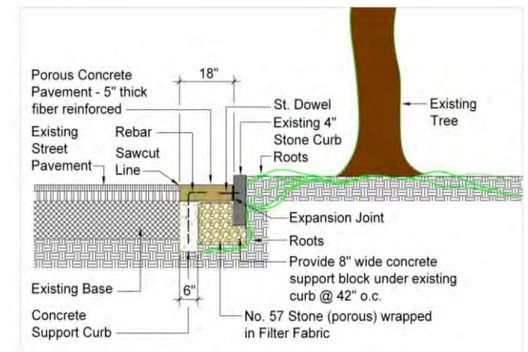


Figure 56: Permeable paver gutter

Permeable pavers can also be implemented in suggested bulb-out locations. Another option to mitigate water (which is to a lesser degree than the parking land porous paver option) included a porous paver street gutter (see Figure 56). And finally, the construction of inner block bulb-outs, which is described more fully as part of the Concept One C option, can decrease storm water runoff quantities with pervious square footage in addition to a perforated underground drainage system used to divert storm water run-off to irrigate trees until saturation (see Figures 57 and 58).

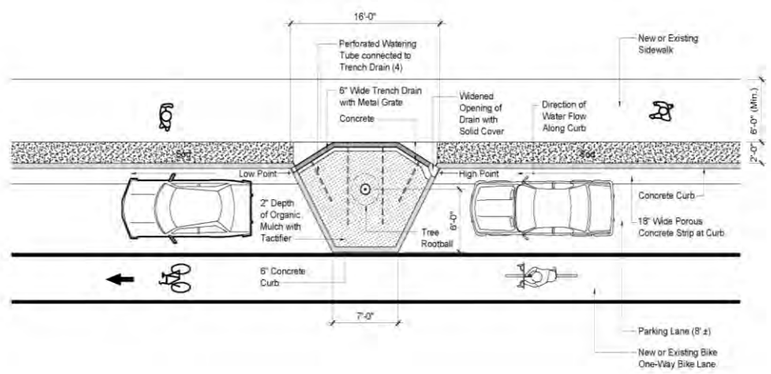


Figure 57: Inner block bulb-out plan view

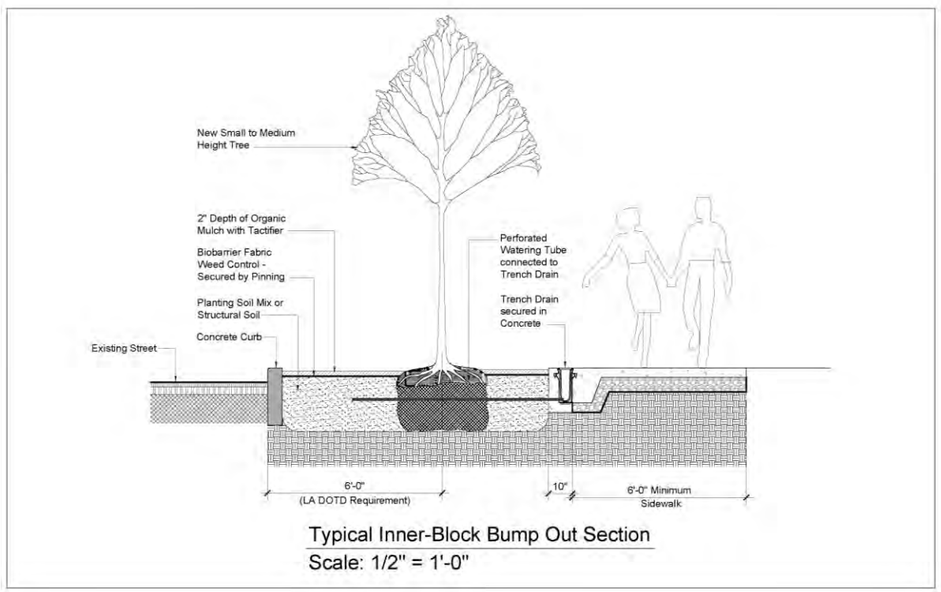


Figure 58: Inner block bulb-out section

Bike Lane

A dedicated bike lane with two lanes of traffic exists within the corridor study area between Orleans Avenue and Bayou Road. As mentioned in Chapter 2.0, a road diet and a dedicated bike lane has been planned (and recently approved) as part of the Broad and Lafitte Project between Orleans Avenue and Bienville Street. Therefore, in keeping with a "complete streets" approach, a road diet and the implementation of a dedicated bike lane from Orleans Avenue to Tulane Avenue was a consideration (see Figure 59). Due to the large quantities of vehicular traffic between Bienville and Tulane Avenue, the implementation of a protected bike lane was also considered (see Figure 60). Another option that was considered was the implementation of a shared bike lane that would connect to the dedicated bike lane along North Broad, but then would divert to a less traveled road, whereby vehicular traffic would not be constricted (due to a road diet), and bicycle safety would be improved. A bike connectivity plan showing the location of the proposed bike lane diversion (off of Broad Street) can be found in the following section. The shared bike lane, as seen on the bike connectivity plan, is not part of any concept option, but rather, an element that should be considered with every concept option.

Figure 59: Designated bike lane. Source: (Schmitt, 2013).

Figure 60: Protected bike lane. Source: (Bike Winnipeg).

Proposed Corridor Enhancement Options

Concept One A

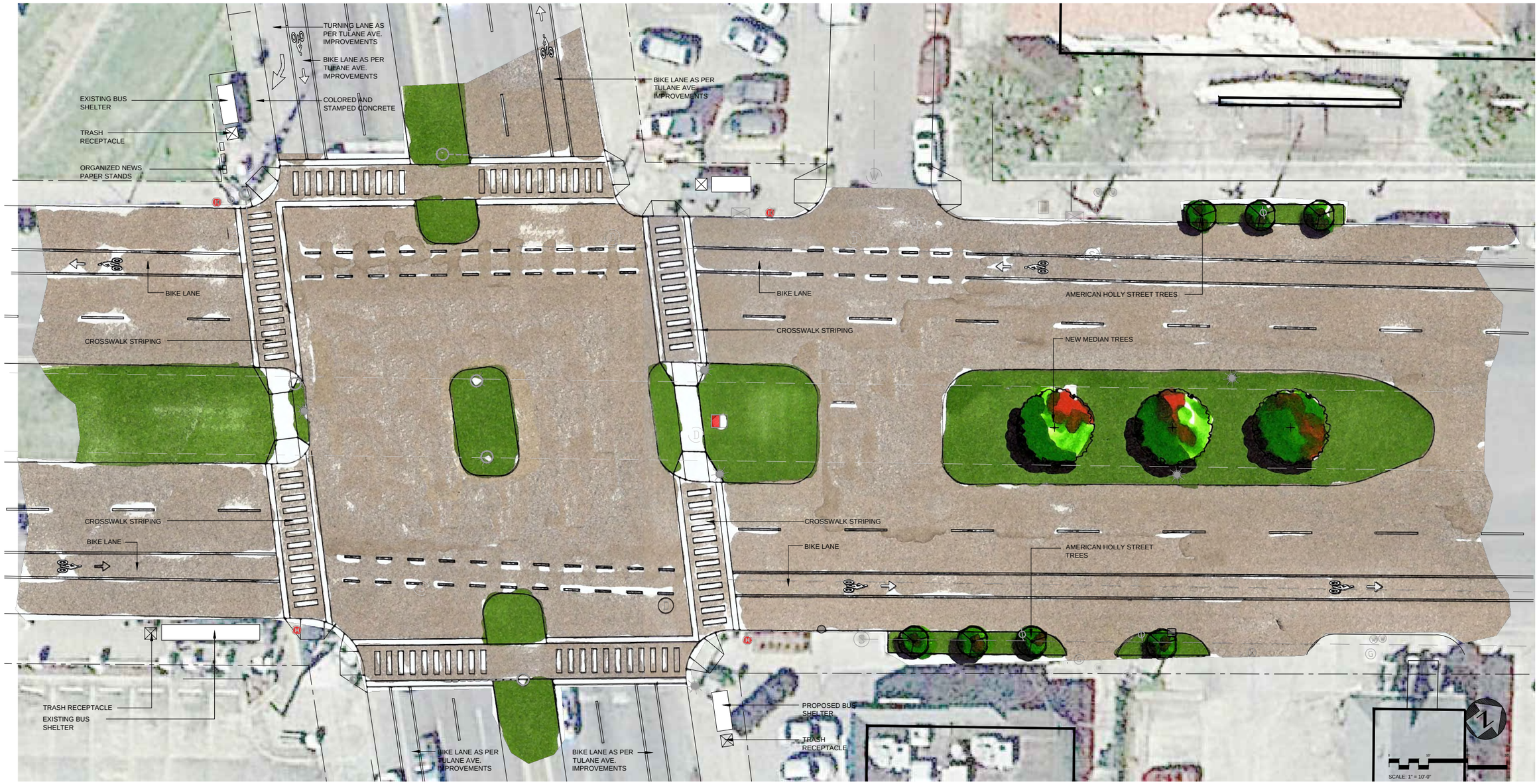
Review

As mentioned previously, Concept One A was developed based upon PMC feedback and the assessment of existing conditions. This concept includes basic enhancements such as sidewalk repair, crosswalk striping at major intersections, the removal of abandoned utility poles and phone booths, the establishment of new curb lines, sidewalk repair and handicap ADA compliant ramps where none exist, and a dedicated bike lane that would begin at Bienville and end at Tulane Ave. The removal of existing trees and shrubs in the medians and the implementation of median trees in a simple, single row pattern are also included in this option to help

simplify the visual chaos of much of the corridor. Existing Chinese Pistashe trees are re-located to another location, such as the Bayou Road intersection area, but would be coordinated with Parks and Parkways. Small trees, such as Chinese Pisatashe are implemented between the back of curb and the sidewalk under the power lines where appropriate, which would also lessen the visual of competing architectural styles as seen throughout the corridor study area. An enlargement plan showing Concept One A improvements followed by a general cost for concept One A construction is included in this section. But first a list of Concept One A improvements is presented. PMC comments regarding this option can be found in Appendix G.

Concept One A - List of Improvements

I. Utility Poles
   a. Straighten existing utility poles
   b. Remove abandoned utility poles
   c. Propose steel poles as an alternate
II. Remove abandoned phone poles and booths
III. Establish new curb lines where indicated excessive or unnecessary
IV. Repair existing sidewalks and implement handicap ramps where appropriate.
V. Dedicated Bike Lane Incorporation
VI. Re-stripe crosswalks at major intersections (the following are intersections with signals)
   a. Tulane Ave.
   b. Banks Street
   c. Canal Street
   d. Bienville Ave.
   e. Orleans Ave.
   f. Ursulines Ave.
   g. Esplanade Ave.
   h. Bayou Road
VII. Trees
   a. Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
   b. Implementation of new median trees (Nutall Oaks)
   c. Implementation of Chinese Pistashe street tree under utility wires where appropriate
VIII. Bike Connectivity Option
   a. The implementation of shared use bike lanes (see bike connectivity plan)



1 TULANE AVE. AND BROAD STREET INTERSECTION ENLARGEMENT PLAN - CONCEPT ONE A

Concept One A Enlargement Plan

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 61: Concept One A Enlargement Plan. Aerial image source: (Google Earth, 2013).

Concept One A - Cost Estimate

Table 5: Cost Estimate – Concept One A

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Concept One					
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles and Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Restripe crosswalks at major intersections	8	EA		$ 2,500.00	$ 20,000.00
Remove existing trees and shrubs in median (62)		LS		$20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Pistashe Street trees	200	EA		$ 500.00	$ 100,000.00
Subtotal					$ 676,000.00
25% Contingency					$ 169,000.00
Total					***$ 845,000.00***

Concept One B

Review

Concept One B proposed enhancements include all of concept one enhancement items. In addition, bike racks are implemented at select locations. Bulb-outs with decorative permeable paving, Medjool palms, and colored asphalt crosswalks at eight intersections are also included as part of this concept option (see Figures 62 and 63). Bulb-out lengths accommodate articulated buses where feasible (Figure 64 show how an elongated bulb-out can accommodate an articulated bus). Bulb-out constraints includes, in part, storm drainage inlet and curb cut conflicts. This concept option also includes the re-organization of transit areas to visual enhance the stop area and to create better pedestrian flow. East Palatka hollies are incorporated at corner bulb-out locations as a visual enhancement that can lessen the heat island effect. An enlargement plan showing Concept One B improvements followed by a general cost for Concept One B construction is included in this section. But first a list of Concept One B improvements is presented. PMC comments regarding this option can be found in Appendix G.

Figure 62: Curb extension or "bulb-out". Source: (Landscape Communications Inc., 2015).

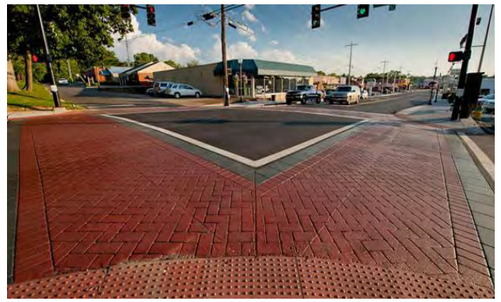


Figure 63: Colored asphalt crosswalks. Source: (Session Sealing and Maintanence Company).

Figure 64: Elongated bulb-out. Source: (Boone, 2013).

Concept One B - List of Improvements

I. Implementation Concept One A improvements (items I, II, III, and IV)

II. Bike rack incorporation at select locations

III. Major Intersection Improvements

a. Bulb outs at major intersections (as listed in item II) with new handicap ramps as appropriate. Bulb-outs to receive permeable brick or concrete paving. Bulb-out locations at the Tulane Ave and Broad Street intersection would occur at every corner except for the corner adjacent to the courthouse, as there is a turning lane planned at that location.

b. Countdown signals at four intersections (Tulane Avenue, Canal Street, Bienville Street, and Esplanade Avenue)

c. Bus stop site furniture re-organization

d. Colored asphalt and striped crosswalks at major intersections

i. Tulane Ave.

ii. Banks Street

iii. Canal Street

iv. Bienville Ave.

v. Orleans Ave.

vi. Ursulines Ave.

vii. Esplanade Ave.

viii. Bayou Road

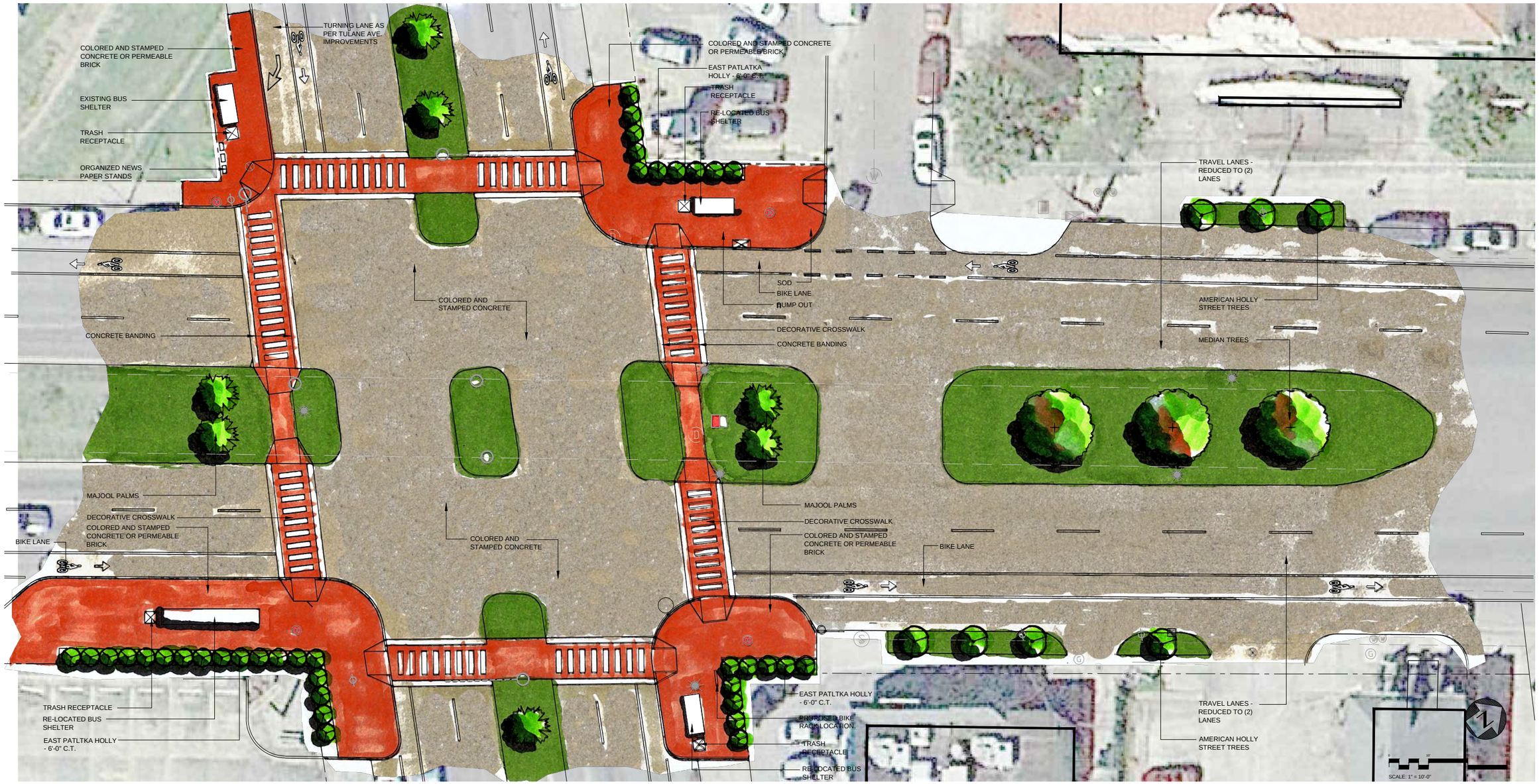
IV. Trees

a. Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.

b. Implementation of new median trees, such as the Nuttall Oak Tree

c. Implementation of Chinese Pistashe street trees

d. Implementation of Medjool Palms at major intersections



1 TULANE AVE. AND BROAD STREET INTERSECTION ENLARGEMENT PLAN - CONCEPT ONE B

Concept One B Enlargement Plan

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 65: Concept One B Enlargement Plan. Aerial image source: (Google Earth, 2013).

Concept One B - Cost Estimate

Table 6: Cost Estimate – Concept One B

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles And Booths	5	EA		$ 750.00	$ 3,750.00
Establish New Curb Lines Where Needed	275	LF		$ 20.00	$ 5,500.00
Repair Existing Curbs	1500	LF		$ 15.00	$ 22,500.00
Repair Existing Sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps Where Needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Bulb-outs at Major Intersections	8	EA		$ 175,000.00	$ 1,400,000.00
Countdown Signals (4 Intersections)	4	EA		$ 80,000.00	$ 320,000.00
Bus Stop Furniture	10	EA		$ 5,000.00	$ 50,000.00
Bike Racks	8	EA		$ 750.00	$ 6,000.00
Colored Asphalt Crosswalks (8 Intersections)	8	EA		$ 8,000.00	$ 64,000.00
Remove Existing Trees And Shrubs In Median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Pistashe Street trees	200	EA		$ 500.00	$ 100,000.00
Medjool Palm Trees	32	EA		$ 8,000.00	$ 256,000.00
Miscellaneous Landscaping		LS		$ 12,000.00	$ 12,000.00
Subtotal					$ 2,764,000.00
25% Contingency					$ 691,000.00
Total					***$ 3,455,000.00***

Concept One C

Review

Concept One C (the most expensive concept one option) include concept one and two options enhancements. However, instead of asphalt crosswalks, Concept One C proposed enhancements include colored and stamped concrete crosswalks. In addition, colored and stamped patterned paving is provided in the center of all major intersections (there are eight proposed – see the list of improvements). Permeable brick paving or stamped and colored concrete brick patterned paving is also suggested as part of this option in the major intersection bulb out areas. Inner block bulb-outs (for every block throughout this corridor study) are also included in this option instead of holly or smaller trees located under power lines (see Figure 42 and 42). The inner block bulb-outs are located appropriately in the parking lane (will not block curb cuts) and are approximately 9'-0" wide x 10'-0 long (average)[3]. The inner block bulb-out areas also create opportunities to plant bigger trees with non-invasive root systems, such as the Gingko tree (with "y" branching) or Bosque Elms (tough urban tree). Because the trees are bigger, they visually enhance the corridor to a greater extent than the holly trees (as included in concepts One A and B) by masking utility lines and reducing the un-cohesive architecture that occurs throughout the corridor to a greater degree. Bigger trees also provide canopies which reduce the heat island effect for vehicles, cyclists, and pedestrians. In addition, the inner block bulb-out areas also decrease storm water runoff as described in the water management section of this report. An enlargement plan showing Concept One C improvements followed by before and after photos are included in this section followed by a general cost for Concept One C construction. But first a list of Concept One C improvements is presented. PMC comments regarding this option can be found in Appendix G.

[3] The size of the inner bulb-out areas is large enough to implement larger trees and increase storm water runoff mitigation.

Concept One C - List of Improvements

I. Implementation of Concept One A improvements (items I, II, III and IV)

II. Implementation of Concept One B improvements (items II and III)

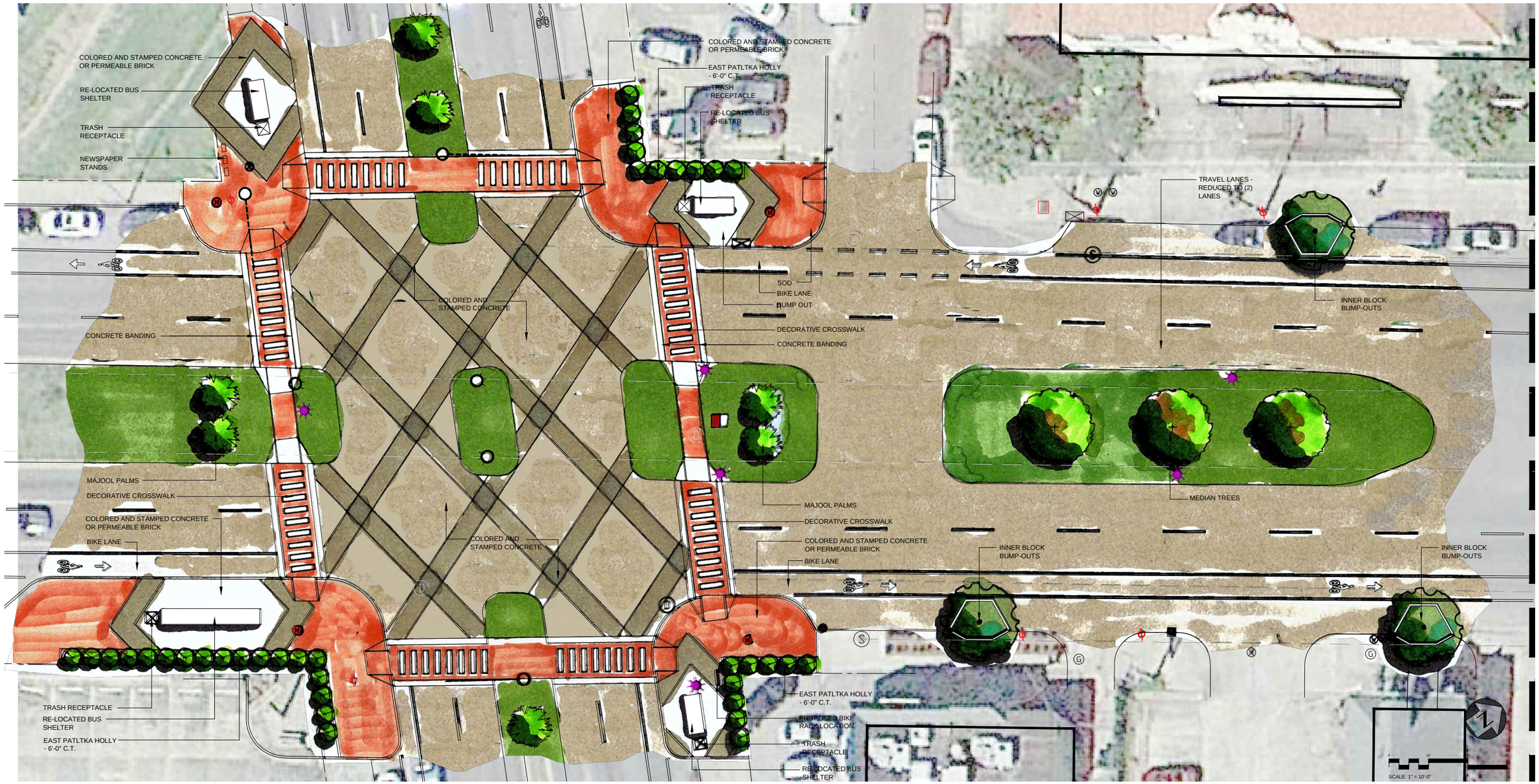
III. Decorative paving (concrete) at major intersections (entire intersection) with incorporated decorative crosswalk pattern

   a. Tulane Ave.
   b. Banks Street
   c. Canal Street
   d. Bienville Ave.
   e. Orleans Ave.
   f. Ursulines Ave.
   g. Esplanade Ave.
   h. Bayou Road

IV. Trees

   a. Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
   b. Implementation of Medjool Palms at major intersections
   c. Implementation of new median trees such as the Nutall Oak tree.

V. Inner block bulb-outs where appropriate for every block. Inner block bulb-outs shall be planted with trees, such as the Gingko or Bosque Elm, understory turf and water mitigation techniques.



1 TULANE AVE. AND BROAD STREET INTERSECTION ENLARGEMENT PLAN - CONCEPT ONE C

Concept One C Enlargement Plan

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 66: Concept One C Enlargement Plan. Aerial image source: (Google Earth, 2013).

Concept One C Before and After Photos

Figure 67: Existing transit stop located on S. Broad Street between Tulane Avenue and Baudin Street. Source: M. Johanna Leibe

Figure 68: Figure 47 with enhancements as per Concept Option One C. Source: M. Johanna Leibe

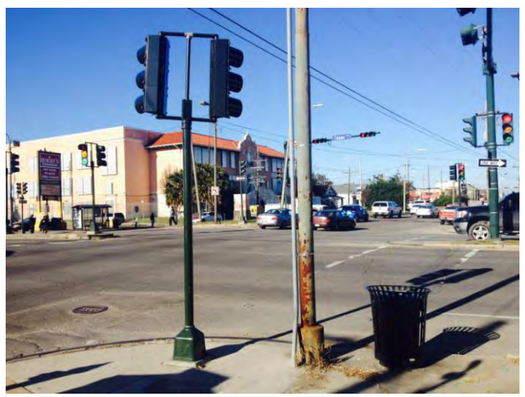


Figure 69: Tulane Avenue and S. Broad Street intersection looking North. Source: M. Johanna Leibe

Figure 70: Figure 49 with enhancements as per Concept Option One C. Source: M. Johanna Leibe

Concept One C - Cost Estimate

Table 7: Cost Estimate – Concept One C

	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles and Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Bulb-outs at Major Intersections	8	EA		$ 175,000.00	$ 1,400,000.00
Countdown Signals (4 Intersections)	4	EA		$ 80,000.00	$ 320,000.00
Bus Stop Furniture	10	EA		$ 5,000.00	$ 50,000.00
Bike Racks	8	EA		$ 750.00	$ 6,000.00
Inner Block Bulb-outs	65	EA		$ 1,500.00	$ 97,500.00
Decorative Paving at Major Intersections (8)	63000	SF		$ 20.00	$ 1,260,000.00
Remove existing trees and shrubs in median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Major Street Trees	65	EA		$ 800.00	$ 52,000.00
Medjool Palm Trees	32	EA		$ 8,000.00	$ 256,000.00
Miscellaneous Landscaping		LS		$ 12,000.00	$ 12,000.00
Subtotal					$ 4,009,500.00
25% Contingency					$ 1,002,375.00
Total					*$ 5,011,875.00*

Concept Two

Review

This concept option was developed in coordination with RPC and consists of a protected bike lane. Bulb-outs are located at every corner at eight major intersections and consist of decorative paving (such as colored and stamped concrete) and colored asphalt crosswalks. This option would not receive decorative paving infill within the center of the intersection. This option also includes low maintenance planting treatments (such as iris) at the bulb-out corners, which would also contribute to the decrease in storm water run-off and would provide an additional barrier for vehicles from rolling over the curb (as mentioned earlier in this chapter). Bigger trees, such as Gingko or Bosque Elms are proposed in islands that are located in the parking lane. Bigger trees with a clear trunk of at least 7'-0" would be implemented in these areas as to not obstruct views. Transit stop areas, however, are minimized due to the protected bike lane configuration and the tight right of way space constraints. PMC comments regarding this option can be found in Appendix G. The following is a detailed list of Concept One C improvements. After which, an enlargement plan showing concept two improvement elements for the Tulane Avenue and South Broad Street intersection is presented.

Concept Two - List of Improvements

I. Implementation concept one A improvements (items I, II III and IV)
II. Implementation of concept one B improvements (items II)
III. Implementation of a protected bike lane.
IV. Implementation of bulb-outs at the following locations:
    a. Tulane Ave.
    b. Banks Street
    c. Canal Street
    d. Bienville Ave.
    e. Orleans Ave.
    f. Ursulines Ave.
    g. Esplanade Ave.
    h. Bayou Road
V. Decorative paving (concrete) crosswalks major intersections at bulb-out locations
VI. Trees
    a. Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
    b. Implementation of Medjool Palms at major intersections
    c. Bigger trees, such as Gingko or Bosque Elm for street trees
    d. Implementation of new median trees, such as the Nuttall Oak tree.
VII. Inner block bulb-outs where appropriate for every block. Inner block bulb-outs shall be placed in areas to not impede site visibility (e.g. at driveway intersections) and shall be planted with trees with a 7'-0" clear trunk.
VIII. Low maintenance plantings at the corners of bulb-out locations contingent upon cooperative endeavor agreements.

1 TULANE AVE. AND BROAD STREET INTERSECTION ENLARGEMENT PLAN - CONCEPT TWO

Concept Two Enlargement Plan

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 71: Concept Two Enlargement Plan. Aerial image source: (Google Earth, 2013).

Concept Two - Cost Estimate

Table 8: Cost Estimate – Concept Two

Concept Four					
Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles and Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Bulb-outs at Major Intersections	8	EA		$ 175,000.00	$ 1,400,000.00
Bike Lane Green Coating through intersection	16	EA		$ 2.00	$ 6,212.00
Countdown Signals (4 Intersections)	4	EA		$ 80,000.00	$ 320,000.00
Bus Stop Furniture	10	EA		$ 5,000.00	$ 50,000.00
Bike Racks	8	EA		$ 750.00	$ 6,000.00
Inner Block Bulb-outs	65	EA		$ 3,000.00	$ 195,000.00
Curbs for Protected Bike Lane	1200	LF		$ 15.00	$ 18,000.00
Remove existing trees and shrubs in median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Major Street Trees	100	EA		$ 800.00	$ 80,000.00
Medjool Palm Trees	32	EA		$ 8,000.00	$ 256,000.00
Miscellaneous Landscaping		LS		$ 12,000.00	$ 12,000.00
Subtotal					$ 2,899,212.00
25% Contingency					$ 724,803.00
Total					*$ 3,624,015.00*

Concept Three - The Preferred Alternative

Review

After the PMC meeting two, additional coordination meetings were conducted with the Regional Transit Authority (see Appendix H for meeting minutes), the City Planning Commission (see Appendix I for meeting minutes), the Broad Street Community Connections Business Community (see Appendix J for meeting minutes, and RPC and DOTD (see Appendix K for meeting minutes). Comments from the PMC members and the subsequent coordination meetings were then collected and evaluated. After which, findings were then presented to the Project Management Committee in a meeting for their review and comment (see Appendix L).

The following is a list of improvements that were incorporated into Concept Three - The Preferred Alternative per comments from respective PMC members. After which, a comprehensive list of Concept Three - The Preferred Alternative improvements is presented followed by an overall plan showing locations of Concept Three - The Preferred Alternative improvements. A bike connectivity plan then follows, which can be implemented as part of any concept option.

Improvements in Response to RTA Comments

- A 13'-0" long bus shelter was incorporated along N. Broad Street at the Orleans Ave. and St. Louis southbound stops and Orleans northbound stop due to the "getting on" capacities.
- A 23'-0" long bus shelter to replace the bus shelter along S. Broad Street at Tulane (southbound). The bus shelter is to be re-located from between Tulane Ave. and Baudin Street to the south side of Tulane Ave. due to pedestrian and vehicular space constraints.
- Bulb-outs at bus stop intersections. Bulb-out lengths to accommodate 60'-0" long buses will be evaluated for further study.
- The protected bike lane option was not preferred due to the existing space constraints of the right-of way, whereby implementation of a protected bike lane would further decrease transit stop areas and create conflicts between pedestrians and transit users with cyclists.

Improvements in Response to the New Orleans City Planning Commission Comments

- The implementation of bulb-outs at bus stop intersections and decorative crosswalks at these locations further enhance the vision of the corridor as per the CPC, which is to create a more walk-able and pedestrian friendly street.

Improvements in Response to the Broad Community Connections (BCC) Business Community Comments

- The implementation of pedestrian crossing improvements at Tulane, Canal, Orleans, and Esplanade.

- Colored and stamped concrete center treatments at Tulane Ave, Canal Street, and Esplanade Ave.
- Bulb-outs with colored and stamped concrete crosswalks at Bienville, Bayou Road and Orleans Ave.
- The implementation of inner-block bulb-outs, which is considered as an option for further evaluation.
- Permeable paving implementation at bulb-out locations.

Improvements in Response to Park and Parkways Comments

- The implementation of inner-block bulb-outs, which is considered as an option for further evaluation.
- The implementation of a uniform planting scheme. The Nutall Oak tree was selected in coordination with Parks and Parkways as the median tree.
- Collaboration with Parks and Parkways took place in regards to the median plantings contained in the Broad and Lafitte Project, and the Lafitte Greenway Bicycle and Pedestrian Path project (median between St. Louis and Lafitte Streets). As a result, the Nuttall Oak tree was selected (and approved by the New Orleans Sewerage and Water Board) as the sole median tree throughout the entire corridor (from Bayou Road to Tulane Ave.), thus replacing the median tree selections within the Broad and Lafitte Project and the Lafitte Greenway Bicycle and Pedestrian Path project, since those projects have not implemented tree plantings as of this writing.
- Tree selections were coordinated with Parks and Parkways. The Halka or Autumn Gold Gingko was selected as the tree for the inner-block bulb-out locations. In the event that inner-block bulb-out's are not feasible, the Chinese Pistashe was selected as the tree to include under the utility wires, provided that a 14'-0" tree with a 7'-0" clear trunk can be obtained. If unavailable, then a tree-form Natchez Crape Mrytle with a 7'-0" was selected as the tree to be implemented under the utility lines. In addition, a mulch mat and sub-surface staking system was also selected to use in conjunction with the trees located under the utility lines. The Pistashe (or Natchez Crape Myrtle) will replace the tree selections as part of the Broad and Lafitte Project.

Improvements in Response to DOTD Comments

- Basic improvements inclusive of the following:
  - The straightening of utility poles and street lights
  - The removal of abandoned utility poles and phone booths
  - The installation of new six inch barrier curbs where excessive roll over or unnecessary curb cuts occur.
  - The replacement of existing damaged street curbs where required.
- The implementation of improved pedestrian signage at select intersections
- The exclusion of a road diet and bike lane until further evaluation due to high traffic counts, but the inclusion of a bike connectivity planroute, which can be found on the bike connectivity plan.

Concept Three - The Preferred Alternative - List of Improvements

I. Straighten existing utility poles and street lights.

II. Remove abandoned utility poles and phone booths

III. Install new 6" barrier curbs where excessive roll over or unnecessary curb cuts occur. Replace existing damaged street curbs where required.

IV. Install new ADA curb ramps at street corners where needed.

V. Install new concrete sidewalks for ADA accessibility and connectivity to ADA curb ramps where appropriate.

VI. Install bulb-outs at bus stop intersections (as listed below) with new ADA curb ramps. Bulb-outs are to receive decorative permeable paving.

   a. Tulane Ave.
   b. Banks Street
   c. Canal Street
   d. Bienville Ave.
   e. St. Louis St.
   f. Orleans Ave.
   g. Dumaine Street
   h. Ursulines Ave.
   i. Esplanade Ave

VII. Install colored concrete paving at the following three major signalized intersections (entire street areas of the intersections) with the inclusion of colored concrete crosswalks:

   a. Tulane Avenue
   b. Canal Street
   c. Esplanade Ave.

VIII. Install color concrete paving crosswalks per DOTD specifications only at the following locations:

   a. Banks Street (Signalized)
   b. Bienville Ave. (Signalized)
   c. St. Louis St. (Non-signalized)
   d. Orleans Ave. (Signalized)
   e. Dumaine Street (Non-signalized)
   f. Ursulines Ave. (Signalized)

IX. Install improved pedestrian signage at Tulane, Canal, Orleans and Esplanade.

X. Provide new 13-foot long bus shelters at the following bus stop locations:

a. Orleans Avenue (Southbound)
b. St. Louis Street (Northbound)
c. Orleans Avenue (Northbound)

XI. Relocate the bus stop to the far-side corner of Tulane Avenue and Broad Street for the southbound Broad Street route and install a new 23-foot long bus shelter.

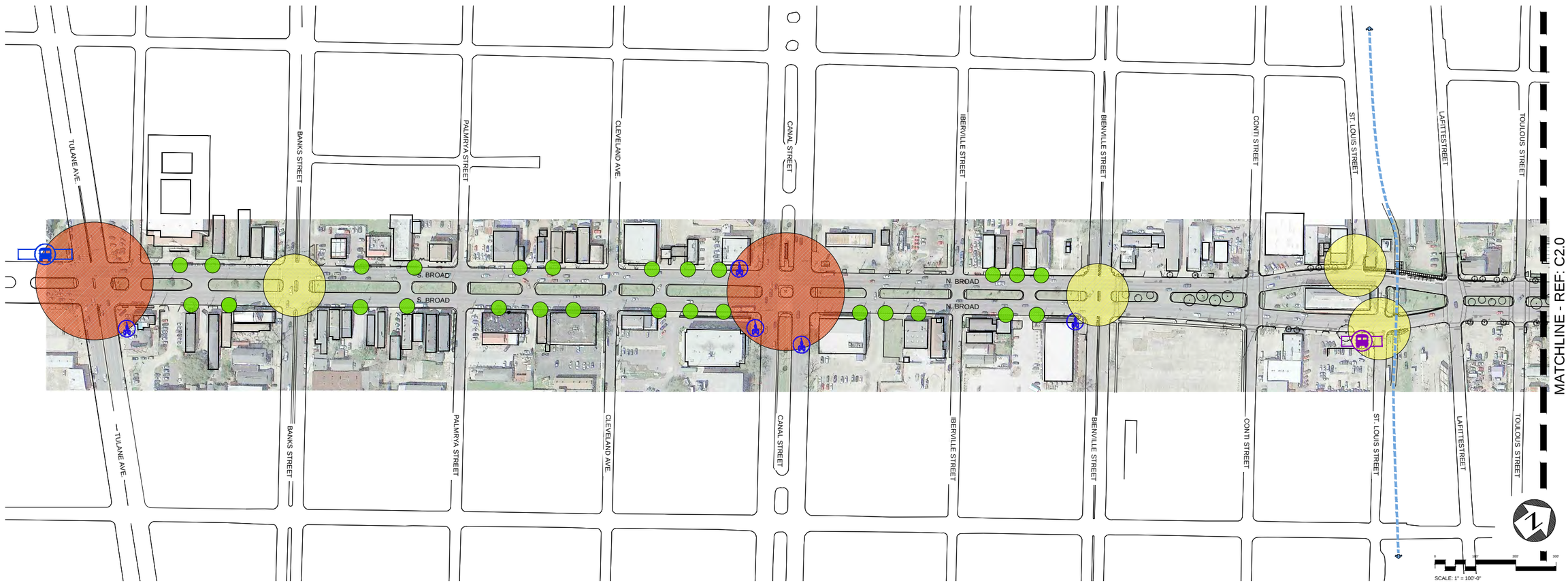
XII. Trees

a. Remove all median trees and shrubs (except between Bienville Ave. and Orleans Ave.). Existing Chinese Pistache trees to be re-located within the corridor per DOTD specifications.
b. Plant new single row of large street trees (Nuttall Oak trees) centered in medians per DOTD specifications.
c. Plant Medjool Date Palms at the ends of the medians at major intersections.
d. Plant Chinese Pistashe Trees under utility wires if inner block bulb outs are not implemented.

XIII. Inner block bulb-outs (Pending Further Investigation)

a. Install inner block bulb-outs where appropriate for every block.
b. Inner block bulb-outs will be planted with medium to large size street trees such as Ginkgo or Bosque Elm and will include water mitigation techniques.

XIV. Provide thorough traffic and safety analysis to further study the feasibility of a road diet and bike lane.



1 CONCEPT THREE - OVERALL PLAN

BULB OUT LOCATIONS - INCLUSIVE OF DECORATIVE CONCRETE CROSSWALKS

BULB-OUTS INCLUSIVE OF DECORATIVE CONCRETE CROSSWALKS AND INTERSECTION CENTER TREATMENT

PROPOSED BUS 13'-0" SHELTER

PROPOSED BUS 23'-0" SHELTER

EXISTING BIKE ROUTE (OFF-STREET) (SEE BIKE ALTERNATIVE MAP)

INNER BLOCK BULB-OUT LOCATIONS.

NOTE: THIS IMPROVEMENT IS CONTINGENT UPON FURTHER STUDY AND DISCUSSION

PROPOSED BIKE RACK LOCATIONS.

2 CONCEPT THREE LEGEND

3 CONCEPT THREE IMPROVEMENT NOTES

I. STRAIGHTEN EXISTING UTILITY POLES AND STREET LIGHTS.

II. REMOVE ABANDONED UTILITY POLES AND PHONE BOOTHS

III. INSTALL NEW 60BARRIER CURBS WHERE EXCESSIVE ROLL OVER OR UNNECESSARY CURB CUTS OCCUR. REPLACE EXISTING DAMAGED STREET CURBS WHERE REQUIRED.

IV. INSTALL NEW ADA CURB RAMPS AT STREET CORNERS WHERE NEEDED.

V. INSTALL NEW CONCRETE SIDEWALKS FOR ADA ACCESSIBILITY AND CONNECTIVITY TO ADA CURB RAMPS WHERE APPROPRIATE.

VI. INSTALL BULB-OUTS AT BUS STOP INTERSECTIONS (AS LISTED BELOW) WITH NEW ADA CURB RAMPS. BULB-OUTS ARE TO RECEIVE DECORATIVE PERMEABLE PAVING.

a. TULANE AVE.
b. BANKS STREET
c. CANAL STREET
d. BIENVILLE AVE.
e. ST. LOUIS ST.
f. ORLEANS AVE.
g. DUMAINE STREET
h. URSULINESAVE.
i. ESPLANADE AVE

VIII. INSTALL COLORED CONCRETE PAVING AT THE FOLLOWING THREE MAJOR SIGNALIZED INTERSECTIONS (ENTIRE STREET AREAS OF THE INTERSECTIONS) WITH THE INCLUSION OF COLORED CONCRETE CROSSWALKS:

a. TULANE AVENUE
b. CANAL STREET
c. ESPLANADE AVE.

IX. INSTALL COLOR CONCRETE PAVING CROSSWALKS PER DOTD SPECIFICATIONS ONLY AT THE FOLLOWING LOCATIONS:

a. BANKS STREET (SIGNALIZED)
b. BIENVILLE AVE. (SIGNALIZED)
c. ST. LOUIS ST. (NON-SIGNALIZED)
d. ORLEANS AVE. (SIGNALIZED)
e. DUMAINE STREET (NON-SIGNALIZED)
f. URSULINES AVE. (SIGNALIZED)

X. INSTALL PEDESTRIAN CROSSING IMPROVEMENTS AT TULANE, CANAL, ORLEANS AND ESPLANADE.

XI. PROVIDE NEW 13-FOOT LONG BUS SHELTERS AT THE FOLLOWING BUS STOP LOCATIONS:

a. ORLEANS AVENUE (SOUTHBOUND)
b. ST. LOUIS STREET (NORTHBOUND)
c. ORLEANS AVENUE (NORTHBOUND)

XII. RELOCATE THE BUS STOP TO THE FAR-SIDE CORNER OF TULANE AVENUE AND BROAD STREET FOR THE SOUTHBOUND BROAD STREET ROUTE AND INSTALL A NEW 23-FOOT LONG BUS SHELTER.

XIII. TREES

a. REMOVE ALL MEDIAN TREES AND SHRUBS (EXCEPT BETWEEN BIENVILLE AVE. AND ORLEANS AVE.). EXISTING CHINESE PISTACHE TREES TO BE RE-LOCATED WITHIN THE CORRIDOR PER DOTD SPECIFICATIONS.
b. PLANT NEW SINGLE ROW OF LARGE STREET TREES CENTERED IN MEDIANS PER DOTD SPECIFICATIONS.
c. PLANT MEDJOOL DATE PALMS AT THE ENDS OF THE MEDIANS AT MAJOR INTERSECTIONS.

XIV. INNER BLOCK BULB-OUTS (PENDING FURTHER INVESTIGATION)

a. INSTALL INNER BLOCK BULB-OUTS WHERE APPROPRIATE FOR EVERY BLOCK.
b. INNER BLOCK BULB-OUTS WILL BE PLANTED WITH MEDIUM TO LARGE SIZE STREET TREES SUCH AS GINKGO OR ELM CULTIVARS AND WILL INCLUDE WATER MITIGATION TECHNIQUES.

XV. PROVIDE CRASH ANALYSIS TO FURTHER STUDY THE FEASIBILITY OF A ROAD DIET AND BIKE LANE ALONG BROAD STEET BETWEEN TULANE AVE.NUE AND BIENVILLE STREET.

Concept Three - Preferred Alternative

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

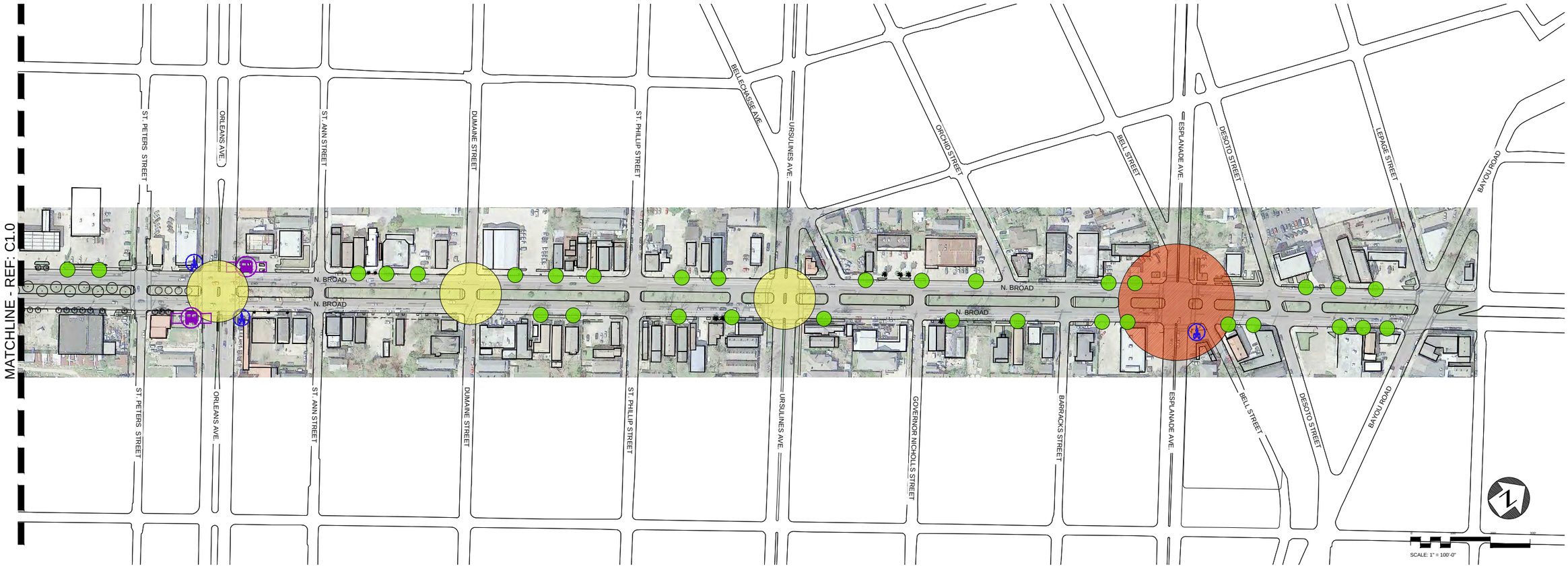
Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 72: Concept Three - Preferred Alternative Plan - Sheet One. Aerial image source: (Google Earth, 2013).



1 CONCEPT THREE - OVERALL PLAN

BULB OUT LOCATIONS - INCLUSIVE OF DECORATIVE CONCRETE CROSSWALKS

BULB-OUTS INCLUSIVE OF DECORATIVE CONCRETE CROSSWALKS AND INTERSECTION CENTER TREATMENT

PROPOSED BUS 13'-0" SHELTER

PROPOSED BUS 23'-0" SHELTER

EXISTING BIKE ROUTE (OFF-STREET) (SEE BIKE ALTERNATIVE MAP)

INNER BLOCK BULB-OUT LOCATIONS.

NOTE: THIS IMPROVEMENT IS CONTINGENT UPON FURTHER STUDY AND DISCUSSION

PROPOSED BIKE RACK LOCATIONS.

2 CONCEPT THREE LEGEND

3 CONCEPT THREE IMPROVEMENT NOTES

I. STRAIGHTEN EXISTING UTILITY POLES AND STREET LIGHTS.

II. REMOVE ABANDONED UTILITY POLES AND PHONE BOOTHS

III. INSTALL NEW 60BARRIER CURBS WHERE EXCESSIVE ROLL OVER OR UNNECESSARY CURB CUTS OCCUR. REPLACE EXISTING DAMAGED STREET CURBS WHERE REQUIRED.

IV. INSTALL NEW ADA CURB RAMPS AT STREET CORNERS WHERE NEEDED.

V. INSTALL NEW CONCRETE SIDEWALKS FOR ADA ACCESSIBILITY AND CONNECTIVITY TO ADA CURB RAMPS WHERE APPROPRIATE.

VI. INSTALL BULB-OUTS AT BUS STOP INTERSECTIONS (AS LISTED BELOW) WITH NEW ADA CURB RAMPS. BULB-OUTS ARE TO RECEIVE DECORATIVE PERMEABLE PAVING.

a. TULANE AVE.
b. BANKS STREET
c. CANAL STREET
d. BIENVILLE AVE.
e. ST. LOUIS ST.
f. ORLEANS AVE.
g. DUMAINE STREET
h. URSULINESAVE.
i. ESPLANADE AVE

VIII. INSTALL COLORED CONCRETE PAVING AT THE FOLLOWING THREE MAJOR SIGNALIZED INTERSECTIONS (ENTIRE STREET AREAS OF THE INTERSECTIONS) WITH THE INCLUSION OF COLORED CONCRETE CROSSWALKS:

a. TULANE AVENUE
b. CANAL STREET
c. ESPLANADE AVE.

IX. INSTALL COLOR CONCRETE PAVING CROSSWALKS PER DOTD SPECIFICATIONS ONLY AT THE FOLLOWING LOCATIONS:

a. BANKS STREET (SIGNALIZED)
b. BIENVILLE AVE. (SIGNALIZED)
c. ST. LOUIS ST. (NON-SIGNALIZED)
d. ORLEANS AVE. (SIGNALIZED)
e. DUMAINE STREET (NON-SIGNALIZED)
f. URSULINES AVE. (SIGNALIZED)

X. INSTALL PEDESTRIAN CROSSING IMPROVEMENTS AT TULANE, CANAL, ORLEANS AND ESPLANADE.

XI. PROVIDE NEW 13-FOOT LONG BUS SHELTERS AT THE FOLLOWING BUS STOP LOCATIONS:

a. ORLEANS AVENUE (SOUTHBOUND)
b. ST. LOUIS STREET (NORTHBOUND)
c. ORLEANS AVENUE (NORTHBOUND)

XII. RELOCATE THE BUS STOP TO THE FAR-SIDE CORNER OF TULANE AVENUE AND BROAD STREET FOR THE SOUTHBOUND BROAD STREET ROUTE AND INSTALL A NEW 23-FOOT LONG BUS SHELTER.

XIII. TREES

a. REMOVE ALL MEDIAN TREES AND SHRUBS (EXCEPT BETWEEN BIENVILLE AVE. AND ORLEANS AVE.). EXISTING CHINESE PISTACHE TREES TO BE RE-LOCATED WITHIN THE CORRIDOR PER DOTD SPECIFICATIONS.
b. PLANT NEW SINGLE ROW OF LARGE STREET TREES CENTERED IN MEDIANS PER DOTD SPECIFICATIONS.
c. PLANT MEDJOOL DATE PALMS AT THE ENDS OF THE MEDIANS AT MAJOR INTERSECTIONS.

XIV. INNER BLOCK BULB-OUTS (PENDING FURTHER INVESTIGATION)

a. INSTALL INNER BLOCK BULB-OUTS WHERE APPROPRIATE FOR EVERY BLOCK.
b. INNER BLOCK BULB-OUTS WILL BE PLANTED WITH MEDIUM TO LARGE SIZE STREET TREES SUCH AS GINKGO OR ELM CULTIVARS AND WILL INCLUDE WATER MITIGATION TECHNIQUES.

XV. PROVIDE CRASH ANALYSIS TO FURTHER STUDY THE FEASIBILITY OF A ROAD DIET AND BIKE LANE ALONG BROAD STEET BETWEEN TULANE AVE.NUE AND BIENVILLE STREET.

Concept Three - Preferred Alternative

Broad Street Corridor

US 61 (Tulane Avenue) to Bayou Road

Date: 6-30-2015

Prepared For:

Prepared By:

Perez.

Project Management Committee:

Sheet no.:

FIGURE 73: Concept Three - Preferred Alternative Plan - Sheet Two. Aerial image source: (Google Earth, 2013).

Concept Three - The Preferred Alternative Cost Estimate

Table 9: Cost Estimate – Concept Three - The Preferred Alternative

Basic Items

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$2,500.00	$187,500.00
Remove Abandoned Utility Poles	5	EA		$1,200.00	$6,000.00
Remove Abandoned Phone Poles and Booths	5	EA		$750.00	$3,750.00
Establish new curb lines where needed	275	LF		$30.00	$8,250.00
Repair existing curbs	1500	LF		$15.00	$22,500.00
Install new sidewalks	12000	SF		$10.00	$120,000.00
New HC Ramps where needed	25	EA		$900.00	$22,500.00
Total					$370,500.00

Hardscape and Furniture Items

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Install bulb-outs at Bus Stop Intersections	9	EA		$175,000.00	$1,575,000.00
Pedestrian crossing improvements (T, C, O & E)	4	EA		$80,000.00	$320,000.00
New Bus Stop Furniture	10	EA		$2,500.00	$25,000.00
Bike Racks	8	EA		$900.00	$7,200.00
Inner Block Bulb-outs	58	EA		$2,200.00	$127,600.00
Color Concrete Paving at Major Intersections (3)	31650	SF		$30.00	$949,500.00
Colored Concrete Crosswalks (6 Intersections)	14980	SF		$30.00	$449,400.00
Total					$3,453,700.00

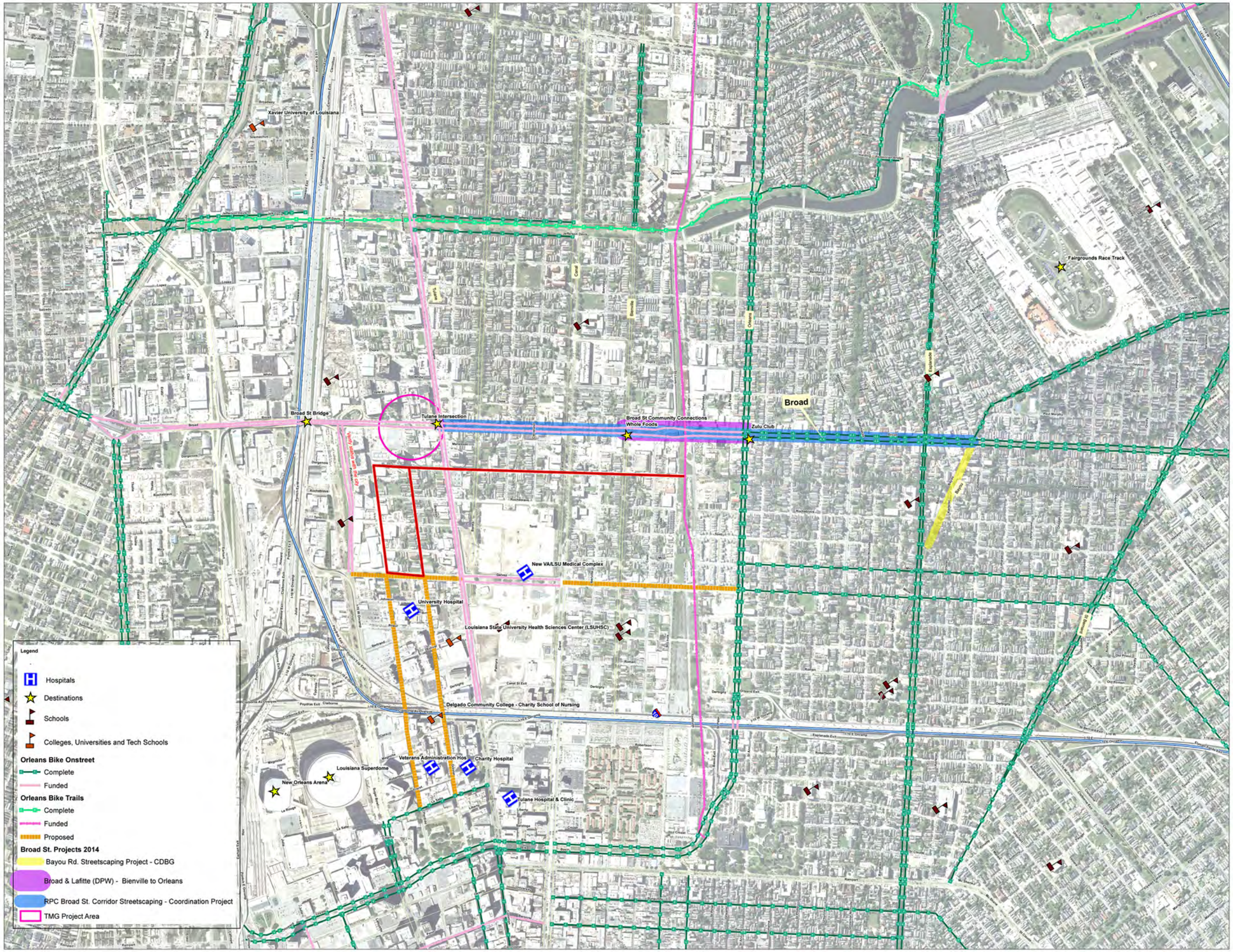
Bus Shelters

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Install new 13-long bus shelters (3 locations)	3	EA		$20,000.00	$60,000.00
Relocate Bus Stop at Tulane and install 23' Shelter		LS		$40,000.00	$40,000.00
Total					$100,000.00

Landscaping

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Remove existing trees and shrubs in median (62)		LS		$25,000.00	$25,000.00
Relocate Existing Pistachio trees	12	EA		$1,000.00	$12,000.00
New Median trees	130	EA		$650.00	$84,500.00
Major Street Trees	65	EA		$650.00	$42,250.00
Medjool Palm Trees (Tulane, Canal and Esplanade)	12	EA		$8,000.00	$96,000.00
Miscellaneous Landscaping		LS		$12,000.00	$12,000.00
Total					$271,750.00

Subtotal	$4,195,950.00
10% Contingency	$419,595.00
Total	***$4,615,545.00***



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Broad St. Corridor Bike Connectivity Planning Map 2015
New Orleans, Louisiana

Prepared by
Regional Planning Commission for
Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes
March, 2014

RPC Task: UPWP A1.15

Chapter Five

5.0 Conclusion

Report Summary

Through research of existing projects adjacent or within the corridor study area, evaluation of existing conditions, and thorough discussion evaluation and feedback from PMC members in reference to concept alternative one and two options shaped the preferred concept alternative option (Concept Three - The Preferred Alternative), as presented in Chapter 4.0. The preferred alternative option addresses vehicular, bicycle and pedestrian safety concerns through thoughtful design while visually enhancing the corridor; thus creating a pedestrian friendly environment which is feasible and reflects a complete streets approach.

Next Steps

The preparation of construction documents and coordination with the City of New Orleans resiliency plan is needed in order to implement improvements. Therefore, funds are needed to cover professional fees (RPC does not provide funding for professional fees, (e.g., construction documentation)) along with construction costs. The following is a list of potential funding sources along with descriptions of each:

Community Development Block Grants

Eligible projects that qualify for Community Development Block Grants (CDBG) are diverse. However, more specific to the Broad Street Corridor, "site improvements of any kind made to publicly owned property are considered a 'public improvement' eligible for assistance under this category" (U.S. Department of Housing and Urban Development, 2015, p. 8). CDBG funding "could be used for site improvements such as water and sewer connections and development of streets and sidewalks" (U.S. Department of Housing and Urban Development, 2015, p. 8). The Broad and Lafitte Project (as mentioned earlier in Chapter 2.0) was funded with Community Development Block Grants.

Transportation Alternatives Program

Projects that qualify for funding through the Transportation Alternatives Program (TAP) include "on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways" (U.S. Department of Transportation: Federal Highway Administration, 2014, para. 3). Most projects that are funded with TAP funds receive 80 percent Federal Funding and 20 percent "state or local match subject to the sliding scale adjustment" (U.S. Department of Transportation: Federal Highway Administration, 2014, para. 14). More information about the TAP program can be found on the U.S. Department of Transportation :Federal Highway Adminstration's web-site.

The Regional Planning Commission suggested that a local entity, such as the city of New Orleans or Broad Community Connections could raise money to provide the 20 percent match, and thus acquire funding through TAP to complete the construction documentation and construction. More information about the TAP program can be found on the U.S. Department of Transportation :Federal Highway Adminstration's web-site.

Urban Systems Program

As the Louisiana Department of Transportation Development (LADOTD) indicates, projects that qualify for funds through the Urban Systems Program include "include reconstruction of existing routes, overlaying existing routes, adding capacity to existing routes, computerized signal systems, construction or reconstruction of bridges and construction of sidewalks and bike trails. The Metropolitan Planning Organization (MPO) has great flexibility in the use of its funds" (Lousiana Department of Transportation Development, p. para. 5). More information about the program can be found on the LADOTD web-site.

Water Mitigation

As mentioned previously, potential funding sources regarding water mitigation include the National Disaster Resilience Competition, the Hazard Mitigation Grant Program, and funding as part of the Restore Act. Community Development Block Grants may also be utilized for water mitigation funding. The National Disaster Resilience Competition, which was created in 2014, "invites communities that have experienced natural disasters to compete for funds to help them rebuild and increase their resilience to future disasters" (ER Assist, 2014, para. 1). The Hazard Mitigation Grant Program goal is to "help communities implement hazard mitigation measures following a Presidential major disaster declaration" (Federal Emergency Management Agency, 2015). As part of the Restore Act, a trust fund was created and "amounts in the trust fund will be available for programs, projects, and activities that restore and protect the environment and economy of the Gulf Coast region" (U.S. Department of Treasury, 2015, para. 2).

More information, including eligibility and application processes can be found at the following web-sites:

National Disaster Resilience Competition:

https://www.hudexchange.info/programs/cdbg-dr/resilient-recovery/

Hazard Mitigation Grant Program:

https://www.fema.gov/hazard-mitigation-grant-program

Restore Act:

http://www.treasury.gov/services/restore-act/Pages/default.aspx

References

Louisiana Resiliancy Assistance Program. (2013). *City of New Orleans Main Street Resiliency Program*. Retrieved from LRAP: Louisiana Resiliency Assistance Program: http://resiliency.lsu.edu/planning/city-of-new-orleans-main-street-resiliency-plan/

Bike Winnipeg. (n.d.). *Webinar: Intersections and Protected Bike Lanes*. Retrieved 3 20, 2015, from Bike Winnipeg: http://bikewinnipeg.ca/2014/08/21/webinar-intersections-protected-bike-lanes/#sthash.fLn6EfcL.dpbs

Boone, A. (2013, 10 17). *Proving to Caltrans That El Camino Real Can Be a Safer Street* . Retrieved 3 20, 2015, from Streetsblog SF: http://sf.streetsblog.org/2013/10/17/proving-to-caltrans-that-el-camino-real-can-be-a-safer-street/

Bump, & Shultz, M. (2012, 9 28). *Schenectady Evaluating Performance and Value of Traffic Patterns XD for Downtown*. Retrieved 3 20, 2015, from Ennis Flint: http://www.ennisflint.com/News-Events/Industry-News/Schenectady-Evaluating-performance-and-Value-of-Tr

City of New Orleans. (2011, April 5). *Zoning Base Maps*. Retrieved from City of New Orleans: http://www.nola.gov/RESIDENTS/City%20Planning/Zoning%20Base%20Maps/

City of New Orleans. (2013, 12 19). *Property Viewer*. Retrieved 2 4, 2015, from City of New Orleans City Planning: http://property.nola.gov/

City of New Orleans. (2014, 9). *Article 12. Historic Urban Neighborhoods*. Retrieved from City of New Orleans: http://nola.gov/getattachment/0eac3e4d-024d-4106-9792-2c4fc363f309/CC1-Art-12-Hist-Urban-Non-Res-2014/

DOTD: Louisiana Department of Transportation and Development. (2013, 12). *Access Connections Policy:To Accompany the Access Connections Rule (LAC Title 70, Part I, Chapter 15)*. Retrieved 4 7, 2015, from DOTD: Louisiana Department of Transportation and Development: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Access%20Connections%20To%20Other%20State%20Highways/Access%20Connections%20Policy%20%28December%202013%29.pdf

EPA. (2014, 7 31). *Heat Island Effect*. Retrieved from EPA: United States Environmental Protection Agency: http://www.epa.gov/heatisland/

ER Assist. (2014). *National Disaster Resilience Competition (NDRC)*. Retrieved from ER Assist: Disaster Grant Services: http://www.erassist.com/funding-opportunity-national-disaster-resilience-competition/

Federal Emergency Management Agency. (2015, 6 17). *Hazard Mitigation Grant Program*. Retrieved from FEMA: https://www.fema.gov/hazard-mitigation-grant-program

Gazette Staff Writer. (2008, 11 8). *Ancient Ginkgo Trees Have Survived the Test of Time*. Retrieved 3 20, 2015, from Filmore Gazette: http://www.fillmoregazette.com/community/ancient-ginkgo-trees-have-survived-test-time

Google Earth. (2013, 3 5). *Google Earth*. Retrieved from Google Earth: https://www.google.com/earth/

Google Earth. (2014). *Google Earth*. Retrieved from Google Earth: https://www.google.com/earth/

James, S. (2011, 8 1). *Flower Power*. Retrieved from Columbia County Magazine: http://columbiacountymag.com/2011/08

Landscape Communications Inc. (2015). *Eddy Street Commons*. Retrieved 3 20, 2015, from LandscapeOnline.com: http://landscapeonline.com/research/article/16782

Louisiana Department of Transportation and Development - Office of Planning and Programming. (n.d.). *New Orleans Functional Highway Classification Urbanized Area Map*. Retrieved from DOTD: Louisiana Department of Transportation and Development: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Data_Collection/Mapping/Urbanized%20Highway%20Functional%20Classification/New_Orleans.pdf

Lousiana Department of Transportation Development. (n.d.). *Road Design: Urban Systems Program*. Retrieved from DOTD: Lousiana Department of Transportation Development: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Urban_Systems.aspx

Lowes. (n.d.). *Home:Outdoors:Home and Planters:Plants, Bulbs and Seeds:Trees*. Retrieved 3 20, 2015, from Lowes: http://www.lowes.com/pd_150673-1535-NURSERY_0__?productId=3625564

Metropolitan Transportation Commission. (2009, 2 27). *Safety Toolbox: Engineering*. Retrieved 3 20, 2015, from Metropolitan Transportation Commission: http://www.mtc.ca.gov/planning/bicyclespedestrians/tools/countdownSignal/

National Complete Streets Coalition. (2015). *Fundamentals*. Retrieved 4 7, 2015, from Smart Growth America: Making Neighborhoods Great Together: http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals

Ned Patchett Consulting, Inc. (2014). *Chinese Pistashe - Amazing Fall Color*. Retrieved from Ned Patchett Consulting, Inc.: http://www.google.com/search?q=chinese+pistache+street+trees&biw=1051&bih=654&noj=1&tbm=isch&imgil=_Zifo65OGNTVoM%253A%253Bq_YTn8a6OT1G7M%253Bhttp%25253A%25252F%25252Fwww.nedpatchttp://www.nedpatchett.com/chinese-pistache/

New Orleans Main Street Resiliency Plan. (2015). Advisory Committee Meeting. *Advisory Committee Meeting* (pp. 1-4). New Orleans: New Orleans Main Street Resiliency Plan.

New Orleans Master Plan and Comprehensive Zoning Ordinance. (2012). *Plan for the 21st century: New Orleans 2030* . New Orleans: City of New Orleans.

New York State Department of Environmental Conservation. (2015). *Trees: The Carbon Storage Experts*. Retrieved from New York State Department of Environmental Conservation: http://www.dec.ny.gov/lands/47481.html

Plainfeild Trees. (2010, 2 10). *Plainfeild Trees*. Retrieved 3 20, 2015, from American Holly: http://plainfieldtrees.blogspot.com/2008/02/american-holly.html

Schmitt, A. (2013, 5 23). *Memphis to add 15 Miles of Protected Bike Lanes*. Retrieved 3 20, 2015, from Streets Blog Network: http://streetsblog.net/2013/05/23/memphis-to-add-15-miles-of-protected-bike-lanes/

Schwartz, J. (2015, 5 1). FHWA Presentation. New Orleans, Louisiana.

Select Trees. (2015). *Highpoint Nuttall Oak*. Retrieved from Select Trees Limited Portfolio: http://www.selecttrees.com/pgs/Portfolio.php?TREE=2

Select Trees. (2015). *Select Trees Limited Portfolio: Bosque Elm*. Retrieved from Select Trees: Positive Impact for Sustainable Trees: http://www.selecttrees.com/pgs/ProjectTreePix.swf?ID=19%7C6%7CBosque*+Lacebark+Elm%7CLofts+at+Las+Colinas

Session Sealing and Maintanence Company. (n.d.). *Stamped Asphalt*. Retrieved 3 20, 2015, from Session Sealing: http://sessionssealing.com/Services/Decorative_Stamped_Asphalt.html

The City of New Orleans. (2013, 11 15). *Article 5- Business and Commercial Districts*. Retrieved from City of New Orleans: https://www.municode.com/library/la/new_orleans/codes/zoning/?nodeId=ART5BUCODI

The City of New Orleans. (2014, 9). *Article 15 - Commercial Center & Insitutional Campus Districts*. Retrieved from The City of New Orleans: http://www.nola.gov/RESIDENTS/City-Planning/DRAFT-Zoning-Ordinance/Draft-Zoning-Ordinance-Text/

The City of New Orleans. (2014, 7). *Article 18 -Overlay Zoning Districts*. Retrieved 3 19, 2015, from City of New Orleans: http://www.nola.gov/getattachment/9143c277-fcd7-4f13-86e0-8a9069d8c4c2/Art18-Overlay-Zoning-Districts/

The City of New Orleans. (2014, 3 21). *Laffite Greenway Bicycle and Pedestrian Path*. Retrieved from The City of New Orleans: http://www.nola.gov/dpw/projects/lafitte-greenway/

The Regional Planning Commission. (2014, 7). *Broad Street Corridor Streetscaping UG 61 (Tulane Avnue) to Bayou Road*. New Orleans, Louisiana, United States of America: The Regional Planning Commission.

U.S. Department of Housing and Urban Development. (2015, 2 24). *Eligible Activities*. Retrieved from U.S. Department of Housing and Urban Development: https://www.hudexchange.info/onecpd/assets/File/CDBG-State-National-Objectives-Eligible-Activities-Chapter-2.pdf

U.S. Department of Transportation - Federal Highway Administration. (2014, November 24). *Road Diet Informational Guide - FHWA Safety Program*. Retrieved 3 23, 2015, from U.S. Department of Transportation - Federal Highway Administration: http://safety.fhwa.dot.gov/road_diets/info_guide/

U.S. Department of Transportation Federal Highway Administration. (2015, 2 10). *Context Sensitive Solutions in Transportation Planning*. Retrieved 4 7, 2015, from U.S. Department of Transportation Federal Highway Administration: http://www.fhwa.dot.gov/planning/csstp/

U.S. Department of Transportation: Federal Highway Administration. (2014, 3 16). *Transportation Alternatives Program (TAP) Guidance*. Retrieved from U.S. Department of Transportation: Federal Highway Administration: http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm

U.S. Department of Treasury. (2015, 4 29). *Services: Restore Act*. Retrieved from U.S. Department of Treasury: http://www.treasury.gov/services/restore-act/Pages/default.aspx

U.S. Environmental Protection Agency. (2012, 6 25). *Basic Information*. Retrieved 4 7, 2015, from National Environmental Policy Act (NEPA): http://www.epa.gov/compliance/basics/nepa.html#implementation

University of Missouri Extension. (2015). *Selecting Landscape Plants: Shade Trees*. Retrieved from University of Missouri Extension: http://extension.missouri.edu/p/G6800-10

Urban Forest Nursery, Inc. (n.d.). *Autumn Blaze Maple*. Retrieved 3 20, 2015, from Urban Forest Nursery, Inc.: http://www.urbanforestnursery.com/treeprofiles/profileautumnblazemaple.html

Appendix A

Appendix A

Kick Off Meeting (August 13, 2014)

Meeting Sign-In Sheets

Regional Planning Commission
Jefferson, Orleans Plaquemines, St. Bernard & St. Tammany Parishes

Broad Street Corridor Streetscaping
US 61 (Tulane Avenue) to Bayou Road
Stage 0 Feasibility Study
RPC Task A-1.15
Kick Off Meeting, August 13, 2014

PLEASE PRINT

Name	Representing	Phone	E-mail
Maggie Woodruff	RPC	483-8502	mwoodruff@norpc.org
Nicole Kirkland	Perez	584-5100	[illegible]
Cherlyn Bates	DPW	658-8046	crbates@nola.gov
Josh Hartley	DPW	658-8042	jwhartley@nola.gov
Ennis Johnson	LADOTD	437-3103	Ennis.Johnson@la.gov
Keith Tintchell	BCC	267-4666	Keithgct@aol.com
JEFF SCHWARTZ	BCC	722-3628	JEFF@ BROADCOMMUNITYCONNECTIONS.ORG
Lynn Dupont	RPC	463-8514	
Brandon Adams	Perez APC	584-5100	badams@e-perez.com
Dan Jatres	RPC	483.8505	djatres@norpc.org
JOHANNA LEIBE	Perez	231-6062	Johanna@Le.be.org

Regional Planning Commission
Jefferson, Orleans Plaquemines, St. Bernard & St. Tammany Parishes

Broad Street Corridor Streetscaping
US 61 (Tulane Avenue) to Bayou Road
Stage 0 Feasibility Study
RPC Task A-1.15
Kick Off Meeting, August 13, 2014

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Name	Representing	Phone	E-mail
Chris Morvant	DOTD	437-3101	chris.morvant@la.gov
Amber Seely-Mars	RPC Economic Development	483-8527	aseely@norpc.org
Lisa Amoss	BCC	669-0435	LMAmoss2@gmail.com

Meeting Minutes

Meeting Minutes #1

MEETING DATE	**August 13, 2014**	**SUBJECT**	**Kick Off Meeting**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**August 22, 2014**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**Tighe Kirkland**
MEETING TIME	2 PM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
x	Maggie Woodruff (MW)	RPC	504-483-8502	Mwoodruff@norpc.org
x	Tighe Kirkland (TK)	Perez	504-584-5100	tkirkland@e-perez.com
x	Cheryn Robles (CR)	DPW	501-658-8046	crobles@nola.gov
x	Josh Hartley (JH)	DPW	504-658-8042	Jwhartley@nola.gov
x	Ennis Johnson (EJ)	LADOTD	504-437-3103	Ennis.johnson@la.gov
x	Keith Twitchell (KT)	Broad Community Connections (BCC)	504-267-4866	keithgct@aol.com
x	Jeff Schwartz (JS)	BCC	504-722-3628	jeff@broadcommunityconnections.org
x	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.com
x	Brandon Adams (BA)	Perez	504-584-5100	badams@e-perez.com
x	Dan Jatres (DJ)	RPC	504-483-8505	djatres@norpc.org
x	Johanna Leibe (JL)	Perez	504-231-6062	johanna@leibe.org
x	Chris Morvant (CM)	DOTD	504-437-3101	Chris.morvant@la.gov
x	Amber Seely-Marks (AM)	RPC Economic Development	504-483-8527	aseely@norpc.org
x	Lisa Amoss (LA)	BCC	504-669-0435	Lmamoss2@gmail.com

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the Regional Planning Commission on this date from 2:00pm – 3:00pm. This meeting served as an Owner-Architect design meeting and the following is offered for whatever information may be contained herein. Should you take exception to any of the items noted, please respond in writing within five (5) days of receipt of these minutes. After this time, the minutes will be assumed as complete and accurate.

1. **Invoice Process**
   - **a.** MW conveyed the invoice process to TK that invoices are to be submitted the 1st Tuesday of every month for timely payment.
   - **b.** MW provided the invoice worksheet to TK that is to be used as a cover sheet to the Perez Invoice
2. **Team Introductions**
3. **Project Goals**
   - a. Described the goals for the project to return the Broad Street Corridor from Tulane to Bayou Road to a designated main street.
   - b. Some things that should be considered are Bikes, Pedestrian, and Transit stop upgrades, water management, street speeds
   - c. A general discussion on strategies to unify the streets in a cohesive way.
4. Project Overlaps
   - a. Discussed concurrent projects adjacent to this project. DPW reps described the Broad & Lafitte streetscape project which includes a bike lane that would extend to the bike lane in this project. LED street light upgrades were discussed and ADA upgrades. DPW then described the Lafitte Greenway project features as well as the Bayou Road streetscape project. The Lafitte Greenway is a linear pedestrian and bicycle path that starts in the French Quarter and goes to Bayou St. John area. The Bayou Rd. streetscape project includes removal and replacement of the sidewalks, improved drainage, landscaping and two bulb-outs. JS asked DPW if beacon lights are included in the Lafitte Greenway scope and it was confirmed. KT asked about the types of trees at Bayou Road, the project includes Crepe Myrtles and Chinese Pistache trees. DPW was also asked what trees are being used on the Broad & Lafitte streetscape project. DPW relayed that the magnolia trees proposed for the median were the D. D. Blanchard magnolia. It was mentioned that the D. D. Blanchard magnolia was not the typical southern magnolia, which grows bigger than the D. D. Blanchard.
   - b. MW relayed that this project should be consistent with other efforts due to the overlap and adjacencies.
5. Perez Approach Introduction
   - a. BA relayed the opportunity for bike lanes
   - b. It was asked how to deal with the existing utility lines and how they would affect any potential new trees.
   - c. JL conveyed there was a potential for canopy trees to baffle the differing existing architectural typologies and unite the street.
   - d. Perez requested DPW information on adjacent project Action Item: DPW to provide Lafitte Greenway, Bayou Rd. and Broad and Lafitte project drawings.
   - e. BCC agreed shading for the sidewalks was indeed desirable due to the existing heat conditions on the street.
   - f. It was noted that funding for the implementation of this project has not been secured and that the work done for this effort would create somewhat of a marketing package to pursue implementation funds.
   - g. It was asked if bulb-outs could be utilized potentially, they could
   - h. DOTD conveyed that angled parking could not be used.
   - i. It was noted by BCC that existing businesses should not be affected with regard to visibility of existing signage.
   - j. Permeable pavement was presented as a way to improve water management practices.
   - k. Turn lanes should be addressed for safety and visibility.
   - l. Public transit pick up points should be evaluated for appropriate size to volume of people. Some locations could be larger to accommodate this and also be an opportunity to create the neighborhood identity.
   - m. Pedestrian visibility should be adderessed
   - n. BA suggested exploring a midblock bulb-out, neutral ground branding opportunities.
   - o. One approach could be to simplify and organize the streetscape.
   - p. BCC requested water management strategies be explored like the bioswales at the Lafitte Greenway Project.
   - q. The Zulu Social Aid and Pleasure Club that is in this area was discussed with regards to large gatherings that are being held in and around their facilities and how to mitigate that for safety purposes. Action Item: Client to engage the organization for collaboration.
   - r. Further opportunities for branding were discussed with a banner program. DPW confirmed they have attempted to do similar things on other projects
   - s. AM conveyed that Heritage Tourism is a growing trend in the city and how could this project take that into account with signage or some sort of intervention to draw tourism to the area.
   - t. JS relayed that they are currently working with the Sewerage and Water Board to access the existing pump station as an educational component and that they were able to receive a grant to fund.
   - u. Utilization of sculpture or painted utility boxes in the neutral ground could be explored.
   - v. Mosaic paving was suggested
   - w. DOTD relayed that all design standards have to be met and that traffic counts would be needed to determine lane requirements. It was suggested the count be done through the project area and to continue past Tulane Avenue
   - x. JL asked what are some of the major issues DOTD has had in the past regarding streetscape projects similar to this one. They identified the following:
     - i. Bollards could only be used 6' off the back of the curb
     - ii. Bulb-outs would need to be reviewed
     - iii. Decorative poles
     - iv. Drainage issues
     - v. Signage requirements
     - vi. Max height on shrubbery to be 24"
     - vii. No brick pavers to be used, but stamped concrete has been used in other locations in lieu Action Item: DOTD to provide vegetation standards to JL

y. DPW relayed that there is a program to upgrade all existing streetlights to LED

6. Project Management Committee (PMC)

a. MW and the team identified the following individuals to be added to the team and to coordinate a kickoff meeting with them to review the scope and initial ideas

i. Parks and Parkway Representative: Ann MacDonald Action Item: DPW to provide contact information

ii. Capital Projects: Dani Galloway

iii. Mayor's Office of Neighborhood Engagement Ray Bolling. Action Item: DPW to provide contact information

iv. Planning: Leslie Alley

v. RTA: Stefan Marks

vi. RPC: Jeff…Action Items: RPC to Provide Correct Names

vii. Council Members: LaToya Cantrell; Jared C. Brosset

b. MW recommended a meeting with the PMC be scheduled sooner than later to preview ideas.

Task	Responsible Party	Deadline
Provide design drawings of Lafitte Greenway, Broad & Lafitte and Bayou Rd. projects to Perez	DPW	Aug. 25
RPC to engage Zulu Social Aide and Pleasure Club	RPC	TBD
DOTD to provide vegetation standards to Perez	DOTD	TBD
Share contact information with possible Project Management Committee members (Parks and Parkways, Mayor's Office of Neighborhood Engagement, Capital Projects)	DPW	Completed
RPC to provide correct names	RPC	Aug. 25

END OF REPORT

Appendix B

Appendix B

Project Management Committee – Meeting One (September 16, 2014)

Meeting Agenda

Project: RPC Broad Street Corridor Streetscaping

RPC Task: A-1.15; FY-15 UPWP

Date: 9-16-14

Agenda Items

Maggie Woodruff:

1. Introductions

Brandon Adams:

2. Project Status

Johanna Leibe:

3. Existing Project Overlaps
   - Broad and Lafitte Project Enhancements
     - Incorporation of bike lanes (2) 11'-0" travel lanes w/ 6'-0" bike lane/pavement markings
     - Incorporation of Crape Myrtles under power lines
     - Incorporation of Chinese Pistashe trees and D.D. Blanchard
     - Magnolias in median
     - Sidewalk Repair/Replacement
     - Concrete removal and turf implementation in ROW
     - LED lights (4) and re-wiring
   - Bayou Road Streetscape Project Enhancements
     - Terminates at Broad Street
   - Lafitte Greenway Bicycle and Pedestrian Path
4. Review of Existing Site Constraints
   - Unattractive
     - Un-cohesive Architecture
     - No Corridor Unity
     - Unnattractive Utility Poles
       - Low Wires (20'-0" +/-?)
   - Not Pedestrian Friendly
     - Worn crosswalks
     - No buffer between pedestrian & vehicular traffic
     - Lack of pedestrian friendly elements, such as art, banners, or planters
   - Not Bicycle Friendly
     - No bike lane
   - Poor Water Management
     - Concrete in most cases from structure to the back of curb

Brandon Adams:

5. Review of **potential** enhancements as discussed in the last meeting
   - Attractiveness
     - Street Trees in ROW and Median to mask utility lines and un-cohesive architecture:
     - Types of canopy trees to consider in ROW planted not directly under utility lines:
       - Green Ash – Oval form – 50'-0" ht. avg.
       - Gingko Tree – Y branching – 50'-0" ht. avg.
       - Nuttall Oak – Oval Form – 40'-0" ht. avg.
       - Red Maple – upright form – 30'-0" ht. avg.
     - Types of canopy trees to consider directly under power line by sidewalk:
       - Sweet Bay Magnolia – upright form – 20'-0" – 30'-0" ht. avg.
       - Drake Lacebark Elm – upright form – 30'-0" ht. avg.
   - Pedestrian Friendly Enhancements
     - Bulb-outs @ corners and mid block (traffic calming)
     - Traffic Box Art and Sculpture
     - Light Pole Banners
     - Bulb-out at Zulu Social Aid and Pleasure Club
     - Decorative Paving at Major Corridor Intersections
     - Specialized plantings at major corridor intersections
     - High Visibility Pedestrian Crosswalks
     - Bollards should be 6'-0" off back of curb due to DOTD requirements
   - Water management (bio-swales)
     - Incorporation of grass strip between back of curb and sidewalk
   - Bike Lane Incorporation (continuation of the Broad and Lafitte Street Project)
6. Other Potential Enhancements

7. Economics
   - Broad and Lafitte Project (CDBG Funds)
     - $600,000.00 (1,500 l.f. of improvements)
   - Broad Street Corridor Streetscaping Enhancements
     - $2,150,000.00 (5,375 l.f. of improvements (not including Broad Street

Enhancement area))

- Additional Items
  - Transit Stops
  - Traffic Box Art ($500.00 ea.)
  - Light Pole Banners
  - Bulb-outs
  - Decorative Paving/Crosswalks – (Tulane, Canal, Bienville, Esplanade)
    - $71,000.00 +/- (concrete pavers on top of concrete sub-base surrounded by a 6" concrete band)
    - $30,000.00 +/- Stamped Concrete (6" stamped concrete on top of 8" crushed gravel)
    - $21,500.00 +/- Decorative Asphalt

Johanna Leibe:

8. Potential Funding Sources
   - Community Development Block Grants
   - Local Road Safety Program
   - Transportation Alternatives Program
   - Urban Systems Program

9. Other funding Sources

10. Additional Items

11. Action Items
    - Perez:
      - Will prepare a project schedule for RPC and submit October 1, 2014.
      - Will contact the following agencies to acquire the following items:
        - S&WB for a copy of the existing utilities
        - Entergy Natural Gas and Entergy Electric for existing utility information
      - Claire Brown (RPC) for Crash Data Analysis information
      - Logos from the following:
        - Parks and Parkways
        - RTA
        - City Planning Commission
        - Capital Projects
        - Department of Public Works
        - Department of Transportation and Development
        - New Orleans Sewerage and Water Board
        - Broad Street Community Connections

Meeting Sign-In Sheets

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Broad Street Corridor Streetscaping
US 61 (Tulane Avenue) to Bayou Road
Stage 0 Feasibility Study
RPC Task A-1.15
Program Management Committee Meeting, September 16, 2014

PLEASE PRINT

Name	Representing	Phone	E-mail
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Brandon Adams	Perez	504-584-5100	gbrandonadams@aol.com
Johanna LEIBE	Perez	504-231-6062	Johanna@Leibe.org
Lynn Dupont	RPC	504 483-8514	ldupont@norpc.org
Josh Hartley	CNO-DPW	504.658.8042	jwhartley@nola.gov
Alison Maulhardt	RPC		amaulhardt@nola.gov
Dan Jatres	RPC	504.483.8505	djatres@norpc.org
JEFF SCHWARTZ	BCC	504-722-3628	JEFF@BROADCOMMUNITYCONNECTIONS.ORG
Hailey Bowen	PKY	504-658-3204	hdbowen@nola.gov
Ennis Johnson	DOTD	504-437-3103	Ennis.Johnson@la.gov

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Broad Street Corridor Streetscaping
US 61 (Tulane Avenue) to Bayou Road
Stage 0 Feasibility Study
RPC Task A-1.15
Program Management Committee Meeting, September 16, 2014

PLEASE PRINT

Name	Representing	Phone	E-mail
Domonique Dickerson	City Council District D	504 658 1040	ddickerson@nola.gov
CM. Jared Brossett	City Council " "	" "	" "
Keith Twitchell	Broad Community Connections	504-430-2258	keithgct@aol.com
Stefan Marks	RTA	504-606-6886	stefan.marks@transdev.com

PowerPoint

Broad Street Corridor Streetscaping

US 61 (Tulane Avenue) to Bayou Road

Task A-1.15; FY-15 UPWP

Table of Contents

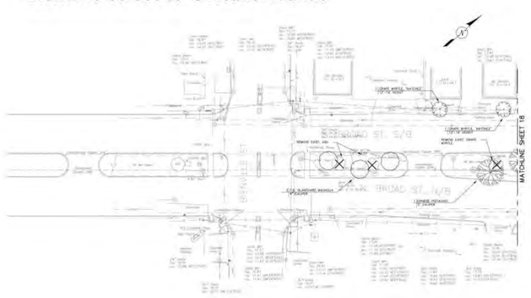
- Project Overview
- Existing Project Overlaps
- Review of Existing Site Constraints
- Review of Possible Enhancements (discussed at last meeting)
- Other Potential Enhancements
- Economics
- Potential Funding Sources
- Other Funding Sources
- Additional Items
- Action Items

Project Overview

- Project Status
  - In the Process of :
    - Collecting Data Needed for Report
    - Developing Existing Conditions Drawings
    - Developing Inventory/Analysis Drawings
    - Developing Format/Outline of Report
- Why we are here?
  - Describe Project
  - Present Ideas
  - Receive Input from Stakeholders

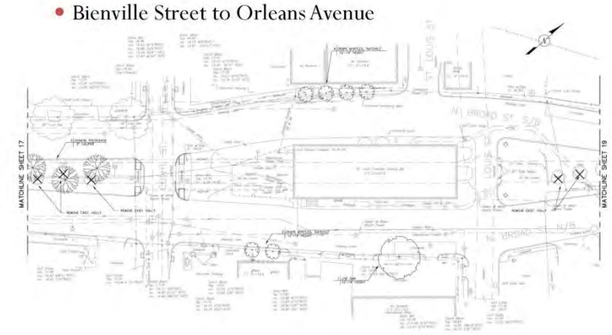
Existing Project Overlaps

- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



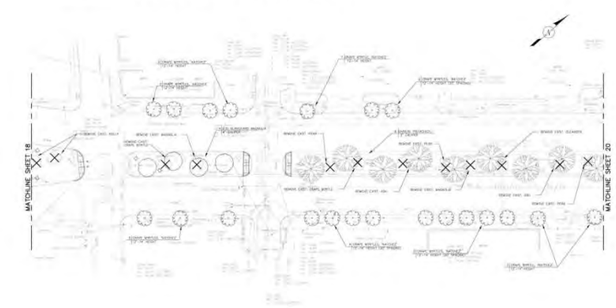
Existing Project Overlaps

- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



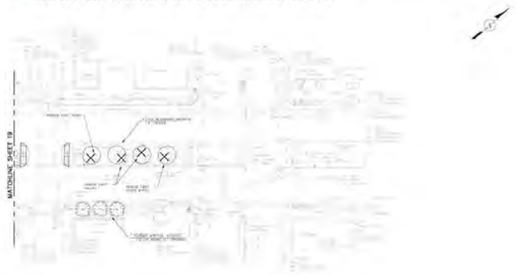
Existing Project Overlaps

- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



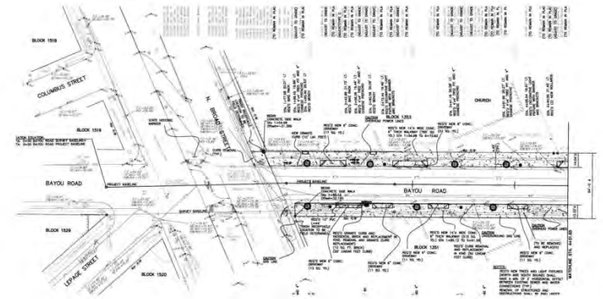
Existing Project Overlaps

- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



Existing Project Overlaps

- Bayou Road Streetscape Project Enhancements



Existing Project Overlaps

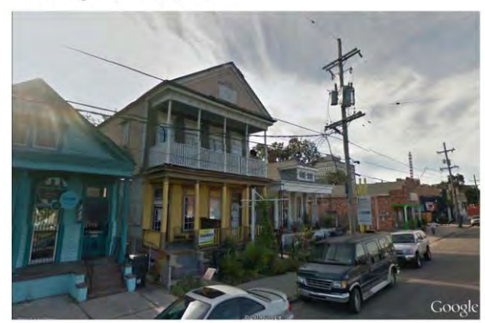
- Lafitte Greenway Bicycle and Pedestrian Path

Review of Existing Site Constraints

- Unattractive
  - Un-cohesive Architecture

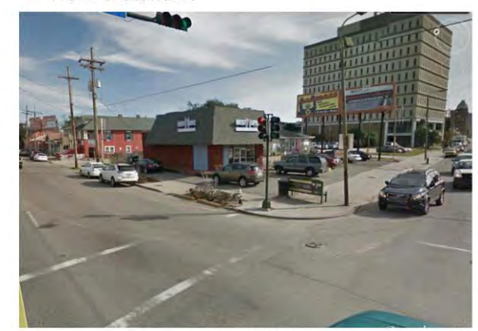
Review of Existing Site Constraints

- Unattractive
  - Unsightly Utility Poles



Review of Existing Site Constraints

- Not Pedestrian Friendly
  - Worn crosswalks



Review of Existing Site Constraints

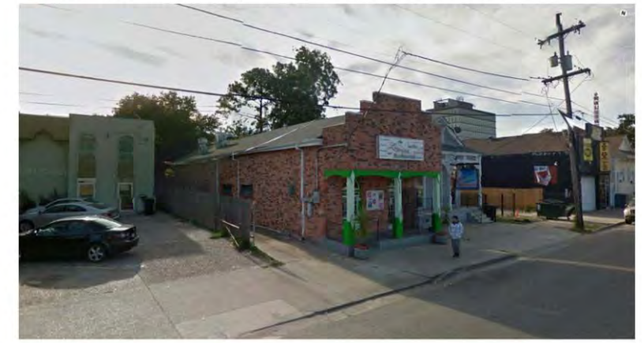
- Not Pedestrian Friendly
  - No buffer between pedestrian & vehicular traffic

Review of Existing Site Constraints

- Not Pedestrian Friendly
  - No buffer between pedestrian & vehicular traffic

Review of Existing Site Constraints

- Unattractive
  - No buffer between pedestrian & vehicular traffic



Potential Enhancements

- Attractiveness
  - Street Trees in the ROW and Median to mask utility lines and un-cohesive architecture

Potential Enhancements

- Attractiveness
  - Types of canopy trees to consider in ROW: Gingko Tree

Potential Enhancements

- Attractiveness
  - Types of canopy trees to consider in ROW: Green Ash

Potential Enhancements

- Attractiveness
  - Types of canopy trees to consider in ROW: Nuttall Oak

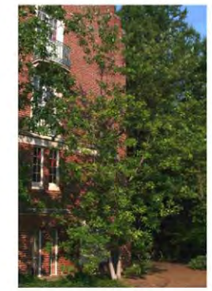
Potential Enhancements

- Attractiveness
  - Types of canopy trees to consider in ROW: Red Maple

Potential Enhancements

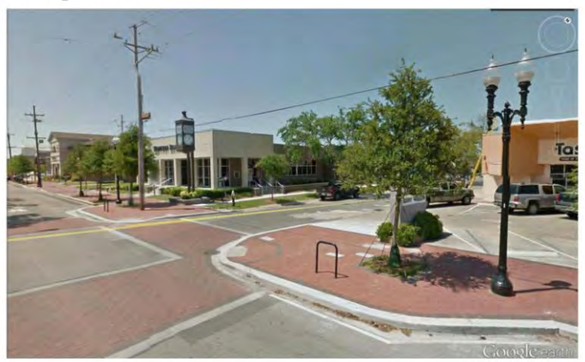
- Attractiveness
  - Trees to consider in ROW directly under power line:

Sweet Bay Magnolia Drake Lacebark Elm



Pedestrian Friendly Enhancements

- Bump Outs



Pedestrian Friendly Enhancements

- Traffic Box Art, Sculpture, Light Pole Banners

Pedestrian Friendly Enhancements

- Specialized Paving @ Major Intersections

Pedestrian Friendly Enhancements

- Specialized Plantings @ Major Intersections

Pedestrian Friendly Enhancements

- High Visibility Crosswalks

Bike Lane Incorporation

Other Potential Enhancements

Economics

- Broad and Lafitte Project
  - $600,000.00
- Broad Street Corridor Streetscaping
  - $2,150,000.00
    - Luminaire Replacement
    - Median and ROW Trees
    - Bike Lane Incorporation
    - Pavement Markings
    - Sidewalk Repair and Replacement
    - Concrete Removal and Grass Implementation in ROW

Economics

- Broad Street Corridor Streetscaping Cont. (Four Intersections)
  - $75,000.00 +/-
    - Concrete pavers atop concrete sub-slab

Economics

- Broad Street Corridor Streetscaping Cont.
  - $30,000.00 +/-
    - Stamped and Stained Concrete

Economics

- Broad Street Corridor Streetscaping Cont.
  - $21,500.00 +/-
    - Decorative Asphalt

Potential Funding Sources

- Community Development Block Grants
- Local Road Safety Program
  - Intent: "*To increase local community participation in roadway safety and to develop and implement road safety improvements on public roads under parish or municipal jurisdiction.*
  - Eligibility: *"Parish or and municipal jurisdictions governments."*

Potential Funding Sources

- Transportation Alternatives Program
  - *"The DOTD Transportation Alternative Program (DOTDTAP), previously known as Transportation Enhancement Program (TEP), is a Federally funded program administered through DOTD. The goal is to work toward building a more balanced transportation system that includes pedestrians and bicyclists as well as the motoring public. Eligible projects can include bicycle and pedestrian facilities, safe routes for non-drivers, conversion of abandoned railway corridors to trails, scenic turnouts, overlooks and viewing areas, archaeological activities, stormwater mitigation, wildlife management, and community improvement activities. Community improvement activities can include outdoor advertising management, historic preservation and rehabilitation of historic transportation facilities and vegetation management."*

Potential Funding Sources

- Urban Systems Program
  - *"This category of funding encompasses many different types of projects. Some of the projects that have been completed by this program include reconstruction of existing routes, overlaying existing routes, adding capacity to existing routes, computerized signal systems, construction or reconstruction of bridges and construction of sidewalks and bike paths. The MPO has great flexibility in the use of its funds."*

Other Funding Sources

Additional Items

Action Items

- Perez APZ:
  - Will prepare a project schedule for RPC and submit October 1, 2014.
  - Will contact the following agencies to acquire the following items:
    - S&WB for a copy of the existing utilities
    - Entergy Natural Gas and Entergy Electric
  - Claire Brown for Crash Data Analysis Information
  - Logos

Discussion

Meeting Minutes

Meeting Minutes #2

MEETING DATE	**September 16, 2014**	**SUBJECT**	**Project Management Committee**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**September 25, 2014**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**Tighe Kirkland**
MEETING TIME	2 PM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
x	Maggie Woodruff (MW)	RPC	504-483-8502	Mwoodruff@norpc.org
x	Tighe Kirkland (TK)	Perez	504-584-5100	tkirkland@e-perez.com
	Cheryn Robles (CR)	DPW	501-658-8046	crobles@nola.gov
x	Josh Hartley (JH)	DPW	504-658-8042	Jwhartley@nola.gov
x	Ennis Johnson (EJ)	LADOTD	504-437-3103	Ennis.johnson@la.gov
x	Keith Twitchell (KT)	Broad Community Connections (BCC)	504-267-4866	keithgct@aol.com
x	Jeff Schwartz (JS)	BCC	504-722-3628	jeff@broadcommunityconnections.org
x	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.com
x	Brandon Adams (BA)	Perez	504-584-5100	badams@e-perez.com
x	Dan Jatres (DJ)	RPC	504-483-8505	djatres@norpc.org
x	Johanna Leibe (JL)	Perez	504-231-6062	johanna@leibe.org
x	Chris Morvant (CM)	DOTD	504-437-3101	Chris.morvant@la.gov
x	Lisa Amoss (LA)	BCC	504-669-0435	Lmamoss2@gmail.com
x	Alison Maulhardt (AM)	RPC	504-483-8502	amaulhardt@nola.gov
x	Dominique Dickerson	City Council District D	504-658-1040	dcdickerson@nola.gov
x	Council Member Jared Brossett	City Council District D	504-658-1040	dcdickerson@nola.gov
x	Stefan Marks	RTA	504-606-6886	Stefan.marks@transdev.com
x	Hailey Bowen (H)	CNO – Parks and Parkways	504-658-3204	hdbowen@nola.gov

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the Regional Planning Commission on this date from 2:00pm – 3:30pm. This meeting served as a Project Management Committee (PMC) design meeting and the following is offered for whatever information may be contained herein.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

12. **Introductions**
    Attendees went around the room and introduced themselves.

13. **Existing Project Overlaps**
    - Review of existing project Overlaps
      - Broad and Lafitte Project Enhancements
        - Incorporation of bike lanes (2) 11'-0" travel lanes w/ 6'-0" bike lane/pavement markings
        - Incorporation of Crape Myrtles under power lines
        - Incorporation of Chinese Pistashe trees and D.D. Blanchard Magnolias in median
        - Sidewalk Repair/Replacement
        - Concrete removal and turf implementation in ROW
        - LED lights (4) and re-wiring
          - It was confirmed that Broad and Lafitte are out to bid.

          Action Item: Perez requested more detailed plans for the Broad and Lafitte projects.
      - Bayou Road Streetscape Project Enhancements
        - Terminates at Broad Street

14. **Review of Existing Site Constraints**
    - Team reviewed the existing site constraints.
    - Potential to use smaller trees that would lessen constraints on location as it relates to the curb and site lines.
    - DOTD relayed concerns with bulb-out and drainage BA confirmed that is being considered by for the design team, but will provide a solution to create positive drainage if bump-outs are proposed. .
    - Unattractive
      - Un-cohesive Architecture
      - No Corridor Unity
      - Unnattractive Utility Poles
        - Low Wires (20'-0" +/-?)
    - Not Pedestrian Friendly
      - Non-visible crosswalks
      - No buffer between pedestrian & vehicular traffic
      - Lack of pedestrian friendly elements, such as art, banners, or planters
    - Not Bicycle Friendly
      - No bike lane
      - Poor Water Management
      - Concrete in most cases from structure to the back of curb
    - It was discussed that Perez had not received the correct set of plans from DPW for the Broad St. Corridor Streetscaping.
    - **Action Item: Hailey Bowen with Parks and Parkways to forward updated plans to Perez.**

15. **Review of possible enhancements as discussed in the last meeting**
    - Attractiveness
      - PMC discussed a need for this to be cohesive with other streetscaping projects.
    - Street Trees in ROW and Median to mask utility lines and un-cohesive architecture:
      - HB relayed that the street trees will need to have a 25' Setback from the corners
      - Tree variety would need to be approved by DOTD first.
    - Types of canopy trees to consider in ROW planted not directly under utility lines:
      - Green Ash – Oval form – 50'-0" ht. avg.
      - Gingko Tree – Y branching – 50'-0" ht. avg.
      - Nuttall Oak – Oval Form – 40'-0" ht. avg.
      - Types of canopy trees to consider directly under power line by sidewalk:
        - Sweet Bay Magnolia – upright form – 20'-0" – 30'-0" ht. avg.
        - Red Maple – upright form – 30'-0" ht. avg.
        - Drake Lacebark Elm – upright form – 30'-0" ht. avg.
    - Pedestrian Friendly Enhancements
      - Improved Transit Stops and Locations
        - SM relayed that ridership in this corridor is the peak in the city and that that should be considered with regards to enhanced bus stops shelters and safe and ease of access to these locations with crosswalks
        - Study should examine new bus shelters at stops that don't currently have them.
        - SM confirmed there are approximately 16 stops in this corridor.
        - Pedestrian Accessibility should be considered, blind persons were used as an example.
        - The overlap of the bike lanes should be considered with regards to the bus stops.
        - Bus shelters should accommodate the extended (60') buses and improve the pedestrian space around them. .
      - Bulb-outs @ corners and mid block (traffic calming)
        - BA recommended that these could be used to accommodate the bus stops, thus, the bus would block one lane of traffic when stopped.

- SM stated that stops will be at the near corner.
- Traffic Box Art and Sculpture
- Light Pole Banners
- Bulb-out at Zulu Social Aid and Pleasure Club
- Decorative Paving at Major Corridor Intersections
- Specialized plantings at major corridor intersections
- Bollards should be 6'-0" off back of curb due to DOTD requirements

- Water management (bio-swales)
  - Incorporation of grass strip between back of curb and sidewalk
  - Use of pervious pavers were discussed to be able to channel water to the street trees on the sidewalk side.
- Bike Lane Incorporation (continuation of Broad Street Project)
  - Council Member Brossett asked if this would reduce the number of lanes and JS relayed that the lane configuration is partially 3 lanes that reduces to 2

16. Other Potential Enhancements

- High visibility cross walks used in Pensacola, Florida were examined.
- HB relayed that the neutral ground should be addressed, BA and JL confirmed
- 3 nodes were identified at the Lafitte Greenway Project, Tulane Avenue that would need to be addressed with turn lanes and upgraded signalization. BA confirmed that signalization, street lighting, and bus shelters would be provided for.
  - It was discussed for incorporation of a traffic light at the Lafitte Greenway multi use trail crossing, and a turning lane incorporation, one at Tulane Ave., and then one at Canal Street.
  - BA recommended better traffic poles (steel mast), fixtures, and countdown pedestrian signals at select locations.
- It was discussed that the enhancements would need to be prioritized
- Minimal maintenance should be required.

17. Economics

- Broad Street Enhancements between Bienville and Orleans (CDBG Funds)
  - $600,000.00 (1,500 l.f. of improvements)
- Broad Street Corridor Enhancements
  - $2,150,000.00 (5,375 l.f. of improvements (not including Broad Street Enhancement area))
- Additional Items
  - Transit Stops
  - Traffic Box Art ($500.00 ea.)
  - Light Pole Banners
  - Bulb-outs
  - Decorative Paving/Crosswalks – (Tulane, Canal, Bienville, Esplanade)
    - $71,000.00 +/- (concrete pavers on top of concrete sub-base surrounded by a 6" concrete band)
      $30,000.00 +/- Stamped Concrete (6" stamped concrete on top of 8" crushed gravel)
    - $21,500.00 +/- Decorative Asphalt

18. Funding Sources

- Community Development Block Grants
- Federal Lands Access Program
- Local Road Safety Program
  - Intent: "*To increase local community participation in roadway safety and to develop and implement road safety improvements on public roads under parish or municipal jurisdiction.*
  - Eligibility: *"Parish or and municipal jurisdictions governments."*
- Recreational Trails
- Safe Routes to School
- Transportation Alternatives Program
  - *"The DOTD Transportation Alternative Program (DOTDTAP), previously known as Transportation Enhancement Program (TEP), is a Federally funded program administered through DOTD. The goal is to work toward building a more balanced transportation system that includes pedestrians and bicyclists as well as the motoring public. Eligible projects can include bicycle and pedestrian facilities, safe routes for non-drivers, conversion of abandoned railway corridors to trails, scenic turnouts, overlooks and viewing areas, archaeological activities, stormwater mitigation, wildlife management, and community improvement activities. Community improvement activities can include outdoor advertising management, historic preservation and rehabilitation of historic transportation facilities and vegetation management."*
- Urban Systems Program

  * *This category of funding encompasses many different types of projects. Some of the projects that have been completed by this program include reconstruction of existing routes, overlaying existing routes, adding capacity to existing routes, computerized signal systems, construction or reconstruction of bridges and construction of sidewalks and bike trails. The MPO has great flexibility in the use of its funds*

19. Other funding Sources

- Team discussed the possibility of blending funds, local matches and capital outlay opportunities

20. Additional Items

- It was discussed the recent redistricting actually has this project now located in 3 districts rather than 2.
- It was noted that all presentations are to be sent to the RPC prior to the meeting.

21. Action Items (see following page)

22. Action Items

- Perez:
  - Will prepare a project schedule for RPC and submit October 1, 2014.
  - Will contact the following agencies to acquire the following items:
    - S&WB for a copy of the existing utilities
    - Entergy Natural Gas and Entergy Electric for existing utility information
    - Clare Brown (RPC) for Crash Data Analysis information
    - Logos from the following:
      - Parks and Parkways
      - RTA
      - City Planning Commission
      - Capital Projects
      - Department of Public Works
      - Department of Transportation and Development
      - New Orleans Sewerage and Water Board
      - Broad Community Connections
      -

END OF REPORT

Appendix C

Appendix C

TMG Coordination Meeting (September 23, 2014)

Meeting Minutes

Meeting Minutes #3

MEETING DATE	**October 17, 2014**	**SUBJECT**	**OPSO Broad Street Median Coord.**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**September 23, 2014**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**M. Johanna Leibe**
MEETING TIME	10:00 AM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
x	Toomas Soosaar, (TS)	Sizeler Architects	504-437-3103	tsoosaar@sizeler.com
x	Jan Heinrich Garbers (JG)	TMG Consulting	504-452-7996	jangarbers@tmg-consulting.net
x	Rachael Bauer (RB)	TMG Consulting	504-256-4059	rachaelbauer@tmg-consulting.net
x	Alison Maulhardt (AL)	RPC	504-463-8514	amaulhardt@norpc.org
x	Brandon Adams (BA)	Perez	504-584-5100	badams@e-perez.com
x	Johanna Leibe (JL)	Perez	504-231-6062	johanna@leibe.org
x	Hailey Bowen (HB)	CNO – Parks and Parkways	504-658-3204	hdbowen@nola.gov

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the TMG Consulting on this date from 10:00pm – 11:15pm. This meeting served as a coordination meeting and the following is offered for whatever information may be contained herein.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

Background

Due to the planned improvements for the Orleans Parish Criminal District Court Complex (new buildings and parking lot funded by FEMA), the city of New Orleans has required the design team (Sizeler Architects and TMG Consultants) to provide landscape plan for the Broad Street Median between Tulane Ave. and Gravier Streets. It was mentioned that Sheriff Marlin Gusman requested low plantings in the median as to not reduce vehicular visibility to the existing un-safe pedestrian crossing at Gravier Street. RB mentioned that the city of New Orleans planning commission would approve proposed median plantings if approved by Parks and Parkways. Therefore, this meeting was coordinated in order to receive approval from Parks and Parkways regarding median plantings, but also to coordinate planting design efforts with the Broad Street Corridor streetscaping project design team.

Proposed Planting Plans

The meeting commenced with TS presenting a planting plan to HB for approval. The planting plan consisted of shrubs that would not exceed 30 inches in height in the medians, thus conforming to safety concerns as mentioned by Marlin Gusman. HB mentioned that while she liked the proposed planting plan, there were a couple of concerns:

1. She would like to save/incorporate an existing Jerusalem Thorn Tree that is located in the median into their proposed planting plans
2. Park and Parkways would only approve shrubs only if there was a cooperative endeavor agreement in place; assuring the maintenance of the proposed shrubbery because Park and Parkways does not have the resources to maintain any planting materials other than trees and sod.

It was then mentioned that Sheriff Marlin Gusman did not have the financial resources to maintain the plantings in the median. HB stated that usually a proviso would require landscaping between the sidewalk and the back of curb, not the medians. RB mentioned that there were existing mature live oaks between the sidewalk and the back of curb. HB stated that she would coordinate with Arlen Brunson to determine exactly the location of the planting requirement. Due to the box culvert located in the median, an approval from Sewerage and Water Board will be required on all proposed trees, if the city requires plantings in the median.

Median Plantings and Tulane Intersection

If trees are required in the median, HB suggested using Palm trees, especially to designate traffic node intersections, such as near the Tulane Street intersection. HB mentioned that palm trees do not have a fibrous root system which could potentially damage underground infrastructure and do not impede vision therefore would be an appropriate choice for this application. JL and BA agreed and thought that Palm Trees designed around choice intersections throughout the corridor, including the Tulane Intersection, could be a good option to consider.

It was also mentioned that Tulane Avenue would soon be under construction. Improvements include hardscape items such as median widening, incorporation of turning lanes and bike lanes, and sidewalks. Landscaping is not included in the Tulane Avenue Streetscape project. HB mentioned that she would send Tulane Avenue Streetscape plans to Sizeler and TMG construction in order for them to determine the extent of construction which would direct the best location for median trees.

Gravier Street Pedestrian Crossing

JL mentioned that a pedestrian light at Gravier and Broad Streets would be the best option to improve pedestrian safety at that location. BA agreed and stated that another option could to consider included a pedestrian sign that would illuminate along with lights in the crosswalk pavement which would blink. This option would enhance the visibility of the crosswalk, thus increasing pedestrian safety at that location. AL mentioned that federal funding does exist through a safety coalition group for these types of projects. AL mentioned that Emily Barr with Regional Planning Commission would be a good person to contact for more information about funding opportunities for a signalized pedestrian light and crosswalk. JG mentioned that the city of New Orleans should coordinate with the safety coalition group regarding pedestrian enhancements at this location to improve safety since this area is the responsibility of the city. BA mentioned that perhaps as part of a change order for the Tulane Avenue Streetscape

Project, a high visibility pedestrian signal and crosswalk could be incorporated at this location. BA and JL will coordinate with Lynn Dupont regarding this issue.

Action Items

The following is a summary of action items that were discussed as part of this meeting:

- Hailey Bowen
  - Will send TMG and Sizeler Architects plans of the Tulane Avenue Streetscape project
  - Will contact Arlen Brunson to determine the exact location of proposed plantings
  - Will follow up with TMG regarding a planting directive
- Brandon Adams and Johanna Leibe
  - Will contact Josh Hartely (with DPW) or Lynn Dupont to obtain plans for the Tulane Avenue Streetscape Project
- TMG/Sizeler
  - Will coordinate with Hailey Bowen regarding a planting design directive and obtain approval from Parks and Parkways first before contacting Sewerage and Water Board for approval if median plantings are required.

END OF REPORT

Appendix D

Appendix D

Zulu Aid Social and Pleasure Club Meeting (November 14, 2014)

Meeting Minutes

Meeting Minutes #4

MEETING DATE	**November 14, 2014**	**SUBJECT**	**OPSO Broad Street Median Coord.**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**November 18, 2014**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**M. Johanna Leibe**
MEETING TIME	2:00 PM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
x	Krieg Perkins (building controller) (KP)	Zulu Aid Pleasure and Social Club	504-827-1559	
x	Carl A. Sylvas (board member) (CS)	Zulu Aid Pleasure and Social Club	504-827-1559	
x	Brandon Adams (BA)	Perez	504-584-5100	badams@e-perez.com
x	Johanna Leibe (JL)	Perez	504-231-6062	johanna@leibe.org

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the Zulu Aid Pleasure and Social Club on this date from 2:00pm – 2:30pm. This purpose of the meeting was to obtain information regarding the Zulu Aid Pleasure and Social Club activities in an effort to contribute to final concept design.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

Activities

The Zulu Aid Pleasure and Social Club has two elections, one in July which is a charter election, and one every other year, which is a board election. According to KP, these two events in addition to activities relating to Mardi Gras (which begin in January) impact the area in front of the building along Broad Street. During some of these events, tents are erected in the Broad Street neutral ground directly across the street from the Zulu Aid Pleasure and Social Club building. One lane of traffic is occupied where barricades are erected, thereby reducing the traffic to one lane to accommodate for the mass number of people at these events. A police officer is also hired to control the traffic due to people walking back and forth across the street to the neutral ground area in front of the building. KP mentioned that approximately 1,500 to 2,000 people may be present at these events. He also mentioned that parking is an issue.

Suggested Streetscape Improvements

KP mentioned that neutral ground parking would be great, similar to the median parking area along Harrison Avenue. CS mentioned that because Broad Street is a state highway, that neutral ground parking would probably not be accepted. KP also mentioned that people started parking on the neutral ground during some of these events, however, the Esplanade Ridge Association objected, causing neutral ground parking to not be allowed. BA mentioned that we could bulb-out the curb to take up the parking lane, which would allow for a wider sidewalk area for people. KP was not in favor of this idea because it would eliminate the parking spaces in front of the building. KP's main concern was the lack of parking in the area for members. CS and KP mentioned that a movie theater was being built in the next block (towards Tulane Ave.) and that parking would be more of an issue once the movie theater opened. KP also mentioned that he was not in favor of any trees, as there are three trees that exist in front of their property (an existing Queen Palm planted in front of the old building, and two cabbage palms planted in front of the new addition). CS and KP mentioned that we should have a meeting with the Zulu Aid Pleasure and Social Club president (Naaman Craig Stewart) because he would be more informative regarding what types of infrastructure would be feasible and beneficial to the club.

END OF REPORT

Appendix E

Appendix E

RPC Coordination Meeting (January 23, 2015)

Meeting Minutes

Meeting Minutes #5

MEETING DATE	**January 23, 2015**	**SUBJECT**	**Broad Streetscape Concepts**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**January 28, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**M. Johanna Leibe / Brandon Adams**
MEETING TIME	11:00 AM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
x	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.com
x	Alison Maulhardt (AM)	RPC	504-463-8514	amaulhardt@norpc.org
x	Brandon Adams (BA)	Perez	504-584-5100	badams@e-perez.com
x	Johanna Leibe (JL)	Perez	504-231-6062	jleibe@e-perez.com

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the Regional Planning Commission on this date from 11:00am – 1:30pm. This purpose of the meeting was to inform Regional Planning Commission (RPC) of our progress and to review proposed improvements for three concept plans.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

Inventory and Analysis

JL reviewed the completed inventory and analysis plans with the RPC team. Drawings included existing utilities (lighting, water, sewer, gas, electric, storm drainage), along with existing vegetation, buildings, streets, existing curb cuts, and buildings. The drawings also included attributes and potential issues for each sheet. Issues included, in part, vehicular and pedestrian crashs along with major infrastructure issues created pedestrian/vehicular conflicts. LD questioned whether all conflicts were shown on the plans; but it was determined only the severe conflicts were shown due the magnitude of crashs along Broad Street. There was a discussion regarding why there was a serious auto crash at Cleveland Avenue and Broad Street. JL determined that a parking lot was located behind the Central Bail Bond Building (south side of Broad street), and that perhaps vehicular movement towards the parking area could have contributed to the crash that occurred there.

Intersection Improvements

JL and BA presented proposed improvements for the Tulane Avenue intersection with the RPC team. Proposed improvements would be indicative to certain major intersections along the corridor. JL suggested implementing an 8" curb at the corners. LD stated that it would be a liability for transit users; however, 8" curbs could be implemented around the medians where appropriate. JL stated that most of the transit shelters appeared to be in good shape and that the issues with the transit stops appeared to be the size and design of the space. Proposed enhancements included bump-outs at every corner which would give transit users more space to gather. Moving the transit shelters to the middle of the bulb-outs would also give pedestrians more room to move through the area. LD will acquire traffic counts to give to Perez (see action items) in an effort to determine which stops warrant shelters where there currently are none.

Bike racks were also located at every corner at the intersection. LD mentioned that a design was created for Tulane Ave. that included a road diet which would widen the median and incorporate a bike lane. She will acquire those plans for Perez (see action items) so that suggested improvements developed by Perez integrate with the Tulane Ave. improvement plans. LD suggested that there may be a way to implement ground cover at the corners in place of grass – as grass may not be as sustainable in the suggested locations. Suggested shrubbery to hide the parking lots at three corners were hollies with a 6'-0" clear trunk – as to not create an area for criminals to hide. The intersection pavement designs are still being developed. It was mentioned that durable materials, such as concrete should be used for the proposed paving at the intersections of Tulane Avenue and Canal Street. LD stated that crosswalk alternatives should also be created.

Block Improvements

BA presented a concept for a mid block bulb-out in an effort to create areas for sizable street trees. He suggested that either the Athena Classic or the Ginkgo tree would be good street trees to use within the ROW due to the branching structure, height, and width of those trees. Water management ideas were also discussed. These included drip-line water mitigation for mid block trees, porous concrete in the parking lane along the curb-line, porous pavers at the corner bump-outs, and water detention techniques in the neutral grounds, depending upon if the soil above the box culvert is deep enough.

BA and JL had a discussion with Hailey Bowen in a prior meeting regarding median trees. Hailey gave her consent regarding the removal of all median trees and vegetation with the exception of the pistashe trees. BA and JL proposed to LD and AM a more formal arrangement of median trees (one row) and transplanting the pistashe trees and grouping them together at a major node, such as by the pumping station / Laffitte greenway. Coordination
A discussion took place regarding the neutral ground west of Tulane Avenue on Broad Street. BA, JL, AM and Hailey Bowen with Parks and Parkways had a meeting last October with TMG consulting. TMG, along with Sizeler Architects are in the process of preparing planting plans for that area. JL mentioned that at the meeting, palm trees, such as medjool, were suggested to be implemented by the Tulane Ave, Broad Street intersection. At that meeting, Hailey mentioned that Parks and Parkways would not approve any shrub plantings, unless a cooperative endeavor agreement was in place.

BA contacted the Zulu Aid Social and Pleasure club in an effort to meet with the President. Unfortunately, the president is not available for a meeting until after Mardi Gras. JL mentioned that the crowds that gather in front of the

Zulu Aid Pleasure and Social Club and block the street only happen during Mardi Gras. However, there may be other events that occur throughout the year where the club utilizes the right of way space in front of the building along Broad Avenue. According to the last meeting BA and JL had with the Zulu Aid Pleasure and Social Club, the two representatives were concerned about parking and their wish was to create more parking for their club. They did not want to create bulb-outs or widen the pedestrian sidewalk because that would reduce the number of parking spaces in front of the their building.

Concept Items

BA and JL presented a list of improvement items for three concepts. Concept one improvements included minimal streetscape enhancements similar to the Broad and Lafitte Project enhancements. These included, in part, straightening utility poles, bike lane incorporation, the re-striping of pedestrian crosswalks at major intersections, the implementation of new median trees, the implementation of new curbs, and the implementation of small street trees under the utility lines in the public ROW between the sidewalk and back of curb. Perez decided not to include new lighting options due to expense and lack of significant impact, as poles and fixtures are standardized.

Concept two items included the implementation of concept one items with the exception of restriping the crosswalks at major intersections. A more decorative paving crosswalk pattern will be implemented instead, along with major intersection improvements (bump-outs, new traffic mast arms, countdown signals, transit stop site furniture re-organization etc.), and the implementation of Madjool palms at major intersections in addition to the implementation of new median trees.

Concept Three - The Preferred Alternative items included the inclusion of concept two improvements along with new decorative paving patterns at major intersections, crosswalk lights in the paving at the Tulane Avenue and Canal Street intersections, within block bump-outs, and bump-outs at every corner. Water mitigation techniques, such as permeable paving, and drip-line irrigation were also included in this concept option.

Action Items

Below is a list of tasks and corresponding responsible parties as mentioned at the meeting:

- Regional Planning Commission
    - RPC to provide Perez transit stop traffic counts along the Broad Street Corridor
    - An Auto-cad plan needed of the Jean Lafitte Corridor Improvements. LD suggested that AM contact Josh Hartley in order to acquire the plans for Perez.
    - RPC (via John King) to send the proposed improvements for Tulane Avenue to Perez in order to coordinate the improvements with the intersection design at Broad Ave.
    - LD will arrange a coordination meeting with pertinent parties, including in part, Parks and Parkways, Broad Community Connections and associated council members.
- Perez
    - JL is to upload the inventory and analysis drawings to RPC via dropbox.
    - BA is to contact Sewage and Water Board to determine the depth of the soil in the neutral ground.
    - JL and BA to acquire contract documents from TMG consulting in order to coordinate the Tulane Ave. intersection design with their proposed improvements.
    - JL and BA to develop crosswalk alternatives at intersections
    - JL and BA to develop Concept Three - The Preferred Alternative plan view improvements along the entirety of the corridor.
    - JL and BA will produce before and after improvements for a typical major intersection and a streetscape, midblock view.

END OF REPORT

Appendix F

Appendix F

RPC Bike Lane Connectivity Coordination Meeting (February 23, 2015)

Meeting Minutes

Meeting Minutes #6

MEETING DATE	**February 23, 2015**	**SUBJECT**	**Broad Streetscape Bike Lane Alt.**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**March 6, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**M. Johanna Leibe**
MEETING TIME	1:00 PM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
X	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.com
X	Alison Maulhardt (AM)	RPC	504-463-8514	amaulhardt@norpc.org
X	Dan Jatres (DJ)	RPC	504-463-8514	djatres@norpc.org
X	Jeff Roesel (JR)	RPC	504-463-8514	jroesel@norpc.org
X	Karen Parsons (KP)	RPC	504-463-8514	kparsons@norpc.org
X	Johanna Leibe (JL)	Perez	504-231-6062	jleibe@e-perez.com

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the Regional Planning Commission on this date from 1:00pm – 3:30pm. This purpose of the meeting was to collect data and input from the Regional Planning Commission (RPC) regarding bike lane alternative routes.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

Bike Lanes

The meeting commenced with a discussion regarding bike connectivity along the Broad St corridor. A map of the area depicted existing vs. funded bike lane routes to aid in the discussion. The main concern for the discussion was the pending DOTD approval regarding a road diet and bike lane between Orleans Ave. and Bienville Street. A bike lane has been proposed along Broad St from Bienville Street to Tulane Ave., but is dependent on the approval of the Orleans to Bienville segment. In the event that a bike lane that is planned and funded along N. Broad starting at Orleans Ave. and ending at Bienville does not receive approval, alternative routes should be planned. The map showed an existing bike lane which is located within the corridor between Orleans Ave. and Bayou Road. A bike lane located along Tulane Ave. has also been planned, funded and approved. Existing bike lane routes intersect the Broad Street corridor at the following intersections:

- Lafitte Greenway
- Esplanade Ave.
- Bayou Road north of N. Broad

An alternate route that would connect the Broad Street bike lane ending at Orleans was developed during the meeting. The alternative route would begin at Broad Street and Orleans Ave. and continue to Galvez. A bike lane would then be proposed along Galvez to Perdido street (a segment that runs past the new hospital complexes (currently under construction) from Canal to Tulane is already funded) and then connect to bike lanes along Perdido and Gravier streets. The bike lanes proposed along Perdido and Gravier streets would then provide access to the area south of Claiborne Ave. Perez will implement a bike lane along Broad from Bienville to Tulane Ave. for concepts two and three. Concept one will also include a bike lane from Bienville to Tulane Ave. However, if the bike lane does not receive approval between Bienville and Orleans Ave. along North Broad, then the alternative route as mentioned previously will be proposed (a bike lane alternative route map (showing a broader area spanning from Jeff. Davis Pkwy to Loyola) will be included in the stage "0" feasibility report). DJ suggested implementing a protected bike lane from Bienville to Tulane Ave. The following widths would be incorporated in order to provide enough space for a protected bike lane:

- Traffic lane width - 10'-0"
- Parking lane width - 8'-0"
- Bike buffer lane width – 2'-0"
- Bike lane width – 5'-0"

Mid block bump-outs could then occur between the bike lane and the travel lane, totaling a width of 10'-0". DJ mentioned that this may only be feasible if there were not too many curb cuts. DJ gave JL a copy of the Urban Bikeway Design Guide which outlines best practices for various streetscape conditions when designing a bike lane.

Intersection Improvements

JL presented two photographs that were taken of the Tulane and N. Broad intersection. The first photograph depicted a bus stop that is located on the north east corner of that intersection. The other photograph included a wider shot of the intersection facing north. Images of the same view showing proposed enhancements were then presented. DJ mentioned that only two types of bike racks would be acceptable. They include the "U" rack and the classic bollard rack. The classic bollard rack can be seen near Lafayette Square. DJ also suggested implementing bike racks at major destinations and to omit them from major intersections at bus stop locations. DJ then mentioned that only a 4'-0" pedestrian clearance would be necessary if space was tight in any of the areas that Perez would propose to locate them. KP suggested designing a space for newspaper stands where appropriate to remove them from site triangles and make the space less cluttered and more aesthetically pleasing. DJ stated that continental striping should be incorporated into the decorative colored and stamped crosswalks via thermoplastic striping, or colored and stamped concrete. DJ mentioned that he was not sure how the thermoplastic striping would adhere to the stamped and colored concrete. JL mentioned that a turning lane has been planned and located along Tulane traveling south and turning (right) onto N. Broad. Because the Tulane Ave. project has already been advertised for bid, JL will omit the bump-out at that location and impliment the turning lane as per those plans for concept two. Concept Three - The Preferred Alternative might include the bump-out at that location – but only as a future option if the turning lane

presents pedestrian/vehicular conflicts after implementation. DJ also mentioned that blinking lights in the crosswalk pavement at busy intersections present a maintenance issue and should not be incorporated into any of the concepts. However, he did suggest the use of traffic cameras. KP suggested that monumental signage along the corridor may be a consideration to aesthetically enhance the corridor. LD mentioned that corner ramps should be avoided and directional ramps should be used at each intersection.

Meeting

In order to complete the report by the end of the contract period, a meeting with the project management committee should be held in the beginning of March. Therefore, March 13, 2015 at 10:00 am has tentatively been scheduled. JL will create a detailed agenda to be passed out at the meeting. A general agenda will also be created and distributed via e-mail. The following is a partial list of items that will be included in the March 13, 2015 presentation:

- Site Analysis/Inventory Drawings
- Crash and crash data (pedestrian/bike/vehicular)
- Pedestrian, bicycle and traffic counts
- Concept one – proposed enhancement item list
    - Simple graphic
    - Proposed materials
- Concept two – proposed enhancement item list
    - Simple graphic
    - Proposed materials
- Concept Three - The Preferred Alternative
    - Proposed materials
    - Colored blow up Plans
        - Intersection @ Tulane and N. Broad
        - Typical block layout
    - Before and after perspectives:
        - Bus shelter
        - Intersection
        - Typical block view looking down the street

Action Items

Below is a list of tasks and corresponding responsible parties as mentioned at the meeting:

- Regional Planning Commission
    - AL to provide Perez with updated traffic counts from Bienville to Canal Street (this has been received)
    - DJ is to provide bike count data to Perez (this has been received)
    - AL is to provide Perez with traffic counts between Bienville to Bayou Road
    - AL is to reserve a room for a meeting with the PAC on March 13, 2015 at 10:00 am.
- Perez
    - JL is to contact Stefan Marks to acquire updated bus stop locations.
    - JL is to contact Josh Hartley regarding the status of the bike lane approval from Orleans Ave. to Bienville Ave.
    - JL is to include bike counts and traffic counts on Site Analysis/Inventory Drawings.
    - JL is to upload revised Site Analysis/Inventory drawings to RPC
    - JL and BA to acquire contract documents from TMG consulting in order to coordinate the Tulane Ave. intersection design with their proposed improvements.
    - JL is to update perspective views showing continental striping at crosswalks and omitting bike racks.
    - JL is to include City of New Orleans approved bike racks in front of important destinations.

END OF REPORT

Appendix G

Appendix G

Project Management Committee – Meeting Two (March 23, 2015)

Meeting Agenda

Project: RPC Broad Street Corridor Streetscaping

RPC Task: A-1.15; FY-15 UPWP

Date: 3-23-15

Agenda Items

23. Summary of Project
24. Introductions
25. Project Status
26. Existing Project Overlaps as Discussed at Last Meeting– Quick overview
    - Review of existing project Overlaps
        - Lafitte Greenway Project Enhancements
        - Bayou Road Streetscape Project Enhancements
        - Tulane Avenue Enhancements
        - Orleans Parish Criminal District Court Complex Improvements
27. Review of Existing Site Constraints as Discussed at Last Meeting – Quick Review
    - Aesthetics
    - Not Pedestrian Friendly
    - Bus Stop Areas
    - Not Bicycle Friendly
    - Poor Water Management
    - Curb Cuts
    - Vegetation
    - Vehicular, Pedestrian and Bicycle Count Review
    - Crash Analysis Data Review
    - General Discussion of Site Analysis/Inventory Maps
    - Presentation of RPC bike lane map showing existing, proposed, and funded bike lanes.
28. Quick review of enhancements as discussed in the last meeting
    - Aesthetic Enhancements
    - Pedestrian Friendly Enhancements
    - Water management Techniques
    - Bike Lane Incorporation (continuation of Broad Street Project)
29. Enhancement Options
    - Concept One
    - Concept Two
    - Concept Three - The Preferred Alternative
    - Concept Four
30. Economics
    - General Cost Estimates per Concept Option:
        - Concept one enhancement costs
        - Concept two enhancement costs
        - Concept Three - The Preferred Alternative enhancement costs
        - Concept four enhancement costs
31. Potential Funding Sources as Discussed at Last Meeting
    - Community Development Block Grants
    - Federal Lands Access Program
    - Local Road Safety Program
    - Recreational Trails
    - Safe Routes to School
    - Transportation Alternatives Program
    - Urban Systems Program
32. Other funding Sources
    - Blending funds, local matches, and capital outlay opportunities
33. Additional Items / Questions

Meeting Sign-in Sheets

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Meeting – Date – Time

PLEASE PRINT

Name	Representing	Phone	E-mail
Dominique Dickerson	Jared Brossett, New Orleans City Council	504-658-1044	dddickerson@nola.gov
Mark Jernigan	DPW City of New Orleans	504 658 8002	mdjernigan@nola.gov
ANGELA O'BYRNE	PEREZ	504 584 5100	aobyrne@e-perez.com
BRANDON ADAMS	"	"	
JOHANNA LEIBE	"	"	
Victoria Menendez	Sandwiching Angela O'Byrne + Tulane University	"	vmenendez@tulane.edu
KAARI MAGGIO	PEREZ	504 584 5100	KMAGGIO@E-PEREZ.com
STEFAN MARKS	RTA / TRANSDEV	504 606 6086	stefan.marks@transdev.com
Brendan Matthews	RTA / Transdev	504-827-8383	brendan.matthews@transdev.com
Tina Hartman	Pwys	658-3226	thartman@nola.gov
JEFF SCHWARTZ	BCC	504-722-3628	JEFF@BROADCOMMUNITYCONNECTIONS.ORG

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Meeting – Date – Time

PLEASE PRINT

Name	Representing	Phone	E-mail
JEFF ROESEL	RPC	504-483-8528	jroesel@norpc.org

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Meeting – Date – Time

PLEASE PRINT

Name	Representing	Phone	E-mail
Nicolette Jones	City Planning Commission	658 7025	nipjones@nola.gov
Larry Massey	City Planning Commission	658-7027	lwmassey@NOLA.gov.
Alison Maulhardt	RPC		amaulhardt@norpc.org
Lynn Dupont	RPC	483-8514	ldupont@norpc.org
Michael Martin	City Council - CM Guidry	658-1010	mlmartin@nola.gov
Ennis Johnson	LA DOTD	437-3103	Ennis.Johnson@la.gov
WALTER BROOKS	RPC	483-8525	WBROOKS@NORPC.ORG
Dominique Dickerson	New Orleans City Council, District D	504-658-1044	dddickerson@nolagov
Dan Jatres	RPC	504.483.8505	djatres@norpc.org

Powerpoint

Broad Street Corridor Streetscaping

US 61 (Tulane Avenue) to Bayou Road

Task A-1.15; FY-15 UPWP

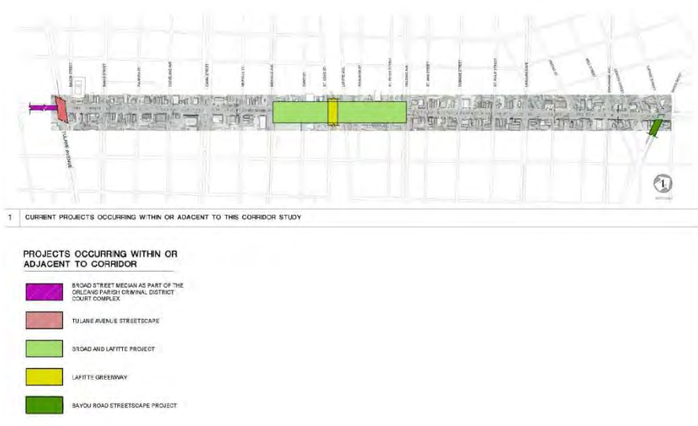
Table of Contents

- Project Overview
- Project s Occurring Within or Adjacent to the Corridor
- Review of Existing Conditions
  - Notable Issues
  - Vehicular, Pedestrian and Bicycle Counts
  - Crash Analysis Data
  - Site Inventory and Analysis
  - Zoning and Future Land Use Plans
  - Area Connectivity and Existing Project Adjacent or Within this Corridor Study
  - Connectivity
  - Transit Origin and Destination Counts
- Corridor Enhancements – Quick Review
- Corridor Enhancement Options
  - Concept One Proposed Enhancements
  - Concept Two Proposed Enhancements
  - Concept Three Proposed Enhancements
  - Concept Four Proposed Enhancements
- General Cost Estimates
  - Preferred Proposal Consensus
- Next Steps - Funding
- Discussion and Questions – Next Steps

Project Overview

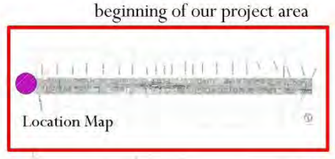
- Project Status
  - Site Analysis Review:
    - Existing Conditions Drawings
    - Inventory/Analysis Drawings
  - In process of:
    - Collecting Information From Stakeholders
    - Findings
- Design Concepts:
  - Present Concept Options
  - Receive Input from Stakeholders

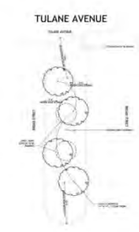
Projects Occurring Within or Adjacent to Corridor

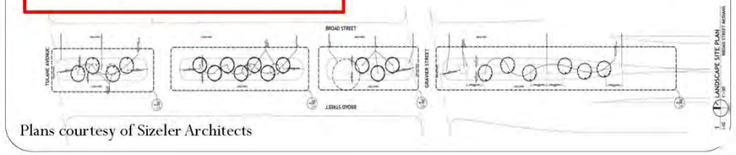


Projects Occurring Within or Adjacent to Corridor

- Orleans Parish Criminal District Court Complex - Median Enhancements
  - Still in design development
    - Overall project entails the improvements to the Orleans Parish criminal District Facilities
    - Project also entails landscaping (trees) in the Broad Street median south of Tulane Ave. which slightly impact the beginning of our project area



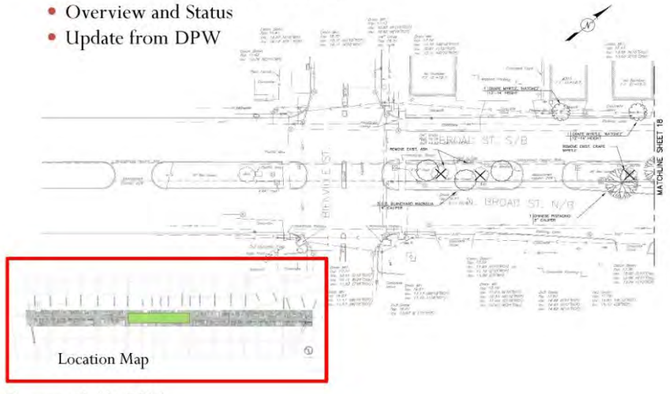




Plans courtesy of Sizeler Architects

Projects Occurring Within or Adjacent to Corridor

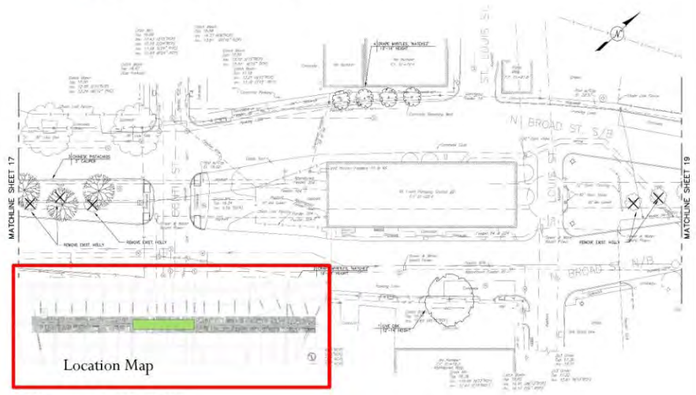
- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue
  - Overview and Status
  - Update from DPW



Plans provided by DPW

Projects Occurring Within or Adjacent to Corridor

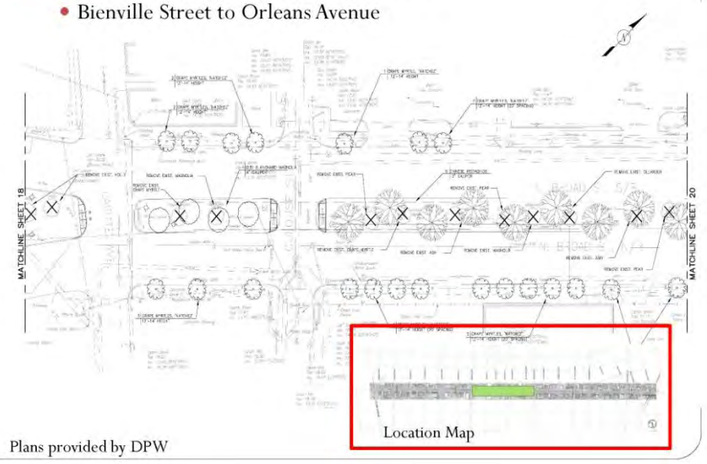
- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



Plans provided by DPW

Projects Occurring Within or Adjacent to Corridor

- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



Plans provided by DPW

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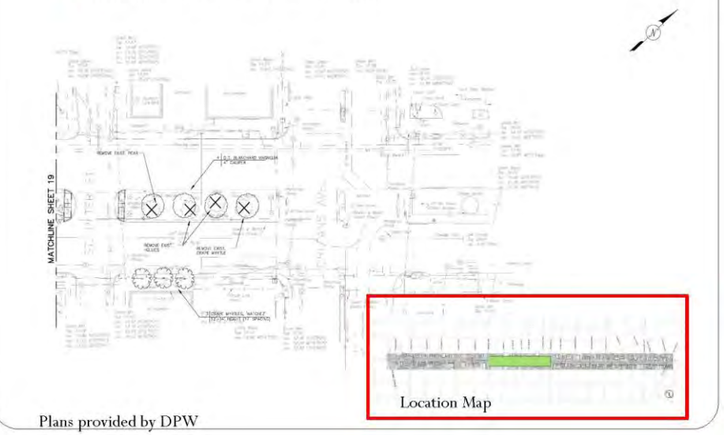
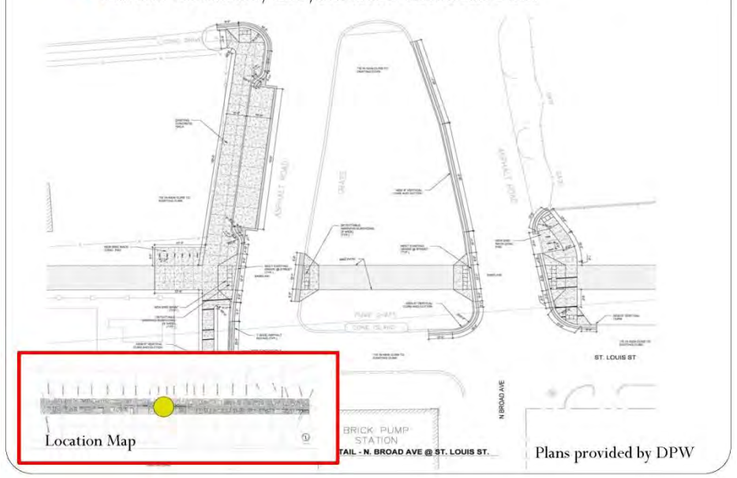
- Broad and Lafitte Project Enhancements
  - Bienville Street to Orleans Avenue



Plans provided by DPW

Projects Occurring Within or Adjacent to Corridor

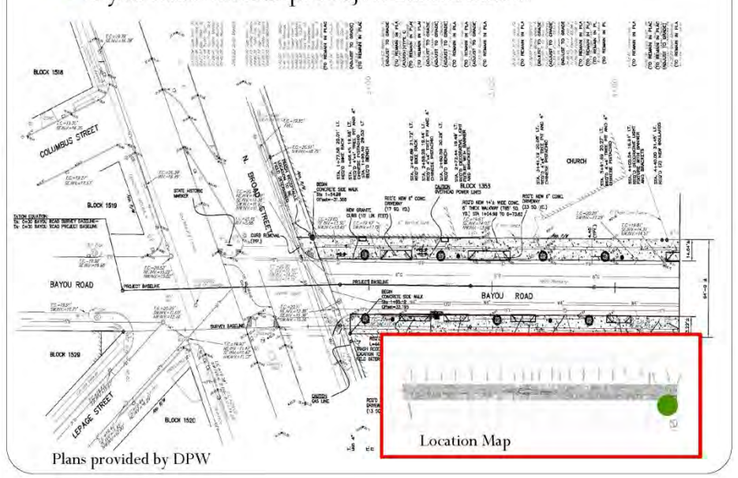
- Lafitte Greenway Bicycle and Pedestrian Path



Plans provided by DPW

Projects Occurring Within or Adjacent to Corridor

- Bayou Road Streetscape Project Enhancements



Plans provided by DPW

Overview of Existing Conditions

- Unsightly Site Elements
- Bicycle and Pedestrian Site Issues/Conflicts
- Bus Stop Area Site Issues
- Water Management Issues
- Lack of Curbs, Excessive Curb Cuts and Lack of ADA Ramps
- Vehicular, Bicycle and Pedestrian Traffic Count Analysis
- Vehicular, Bicycle and Pedestrian Crash Analysis
- Detailed Site Inventory and Analysis Plans
- Existing Zoning, Draft Zoning, Future Land Use and Draft Overlay PD 4 Maps
- Bike Connectivity Area Map
- Circulation (1/4 mile buffer surrounding corridor)
  - Existing Vehicular and bicycle
  - Proposed Pedestrian and Bicycle Connections

Review of Existing Conditions

- Unsightly Elements Overview
  - Competing Architectural Styles
  - Utility Poles lean and obstruct Views

Location Map of Images shown on the following slides

Review of Existing Conditions

- Unsightly Site Elements - Competing Architectural Styles

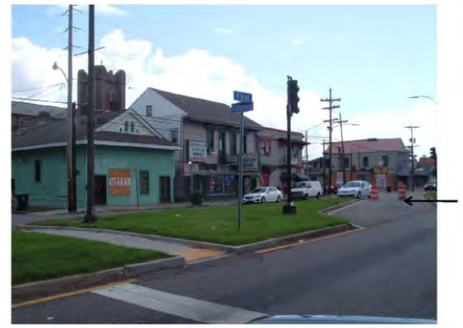


Photo taken by M. Johanna Leibe (corner of North Broad and Columbus)

Review of Existing Conditions

- Unsightly Site Elements - Competing Architectural Styles

(Image located on the corner of North Broad and Palmyra)

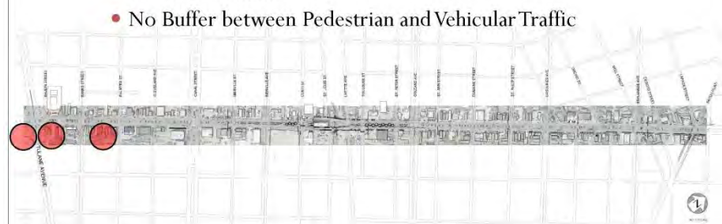
Review of Existing Conditions

- Unsightly Elements - Utility Poles Lean and Obstruct View

Photo taken by M. Johanna Leibe (corner of Tulane and South Broad)

Review of Existing Conditions

- Bike and Pedestrian Site Issues/Conflicts Overview
  - Vehicular Conflicts
  - Worn Crosswalks
  - No Buffer between Pedestrian and Vehicular Traffic



Location Map of Images shown on the following slides

Review of Existing Conditions

- Bicycle/Vehicular conflicts

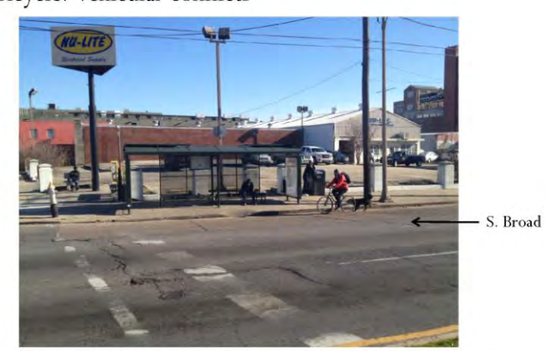


Photo taken by M. Johanna Leibe (Photo located at the corner of South Broad and Tulane)

Review of Existing Conditions

- Bicycle Vehicular Conflicts

Photo taken by M. Johanna Leibe (Photo taken at the corner of S. Broad and Tulane)

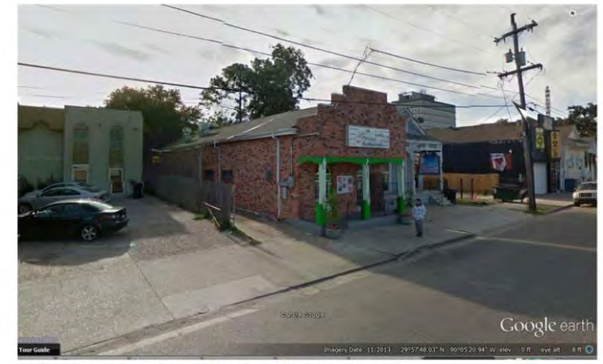
Review of Existing Conditions

- Pedestrian Site Issues
  - Worn crosswalks

(Photo location: corner of S. Broad and Tulane)

Review of Existing Conditions

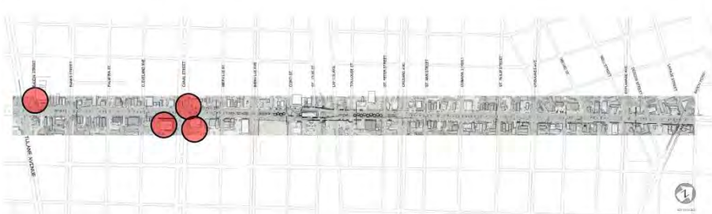
- No buffer between pedestrian & vehicular traffic



(Photo Location: between Palmyra and Banks streets looking east)

Review of Existing Conditions

- Bus Stop Site Issues Overview
  - Not Pedestrian Friendly



Location Map of Images shown on the following slides

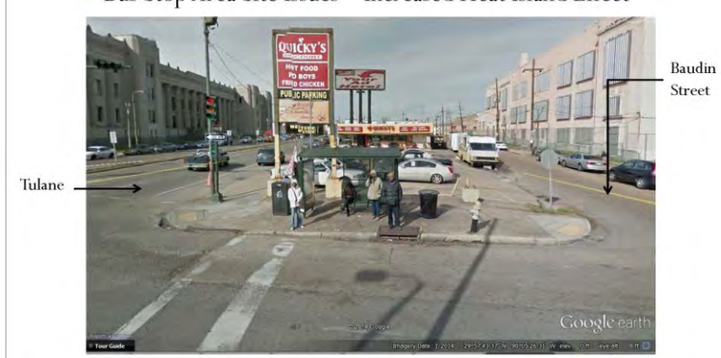
Review of Existing Conditions

- Bus Stop Area Site Issues – space constraints

(Photo location: corner of Canal and Broad (north bound))

Review of Existing Conditions

- Bus Stop Area Site Issues – Increased Heat Island Effect



(Photo Location: corner of N. Broad and Tulane)

Review of Existing Conditions

- Bus Stop Area Site Issues – Site Element Disorganization

Photo taken by M. Johanna Leibe (bus stop located on the corner of N. Broad and Canal – southbound)

Review of Existing Conditions

- Bus Stop Area Issues – Site Element Disorganization

(Photo location: corner of N. Broad and Canal)

Review of Existing Conditions

- Water Management Issues Overview
  - Debris blocking drainage inlets
  - Excessive pavement throughout corridor increases storm water

Location Map of Images shown on the following slides

Review of Existing Conditions

- Water Management Issues Overview
  - Debris blocking drainage inlets

Photo taken by M. Johanna Leibe (Photo taken at the corner of Tulane and S. Broad adjacent to the transit stop area)

Review of Existing Conditions

- Water Management Issues
  - Excessive pavement throughout corridor increases storm water run-off

(Photo location: corner of Toulouse and N. Broad)

Review of Existing Conditions

- Water Management Issues
  - Excessive pavement throughout corridor increases storm water run-off

(Photo location: corner of Tulane and S. Broad)

Review of Existing Conditions

- Lack of Curbs, Excessive Curb Cuts and Lack of ADA Ramps
  - Curb Cuts
  - Access Management
  - Code Enforcement
  - Vehicular Conflicts
  - Inappropriate use of Property
  - Rollover Curb Parking
  - ADA

Location Map of Images shown on the following slides

Review of Existing Conditions

- Excessive Curb Cuts Create Pedestrian Vehicular Conflicts

(Photo location: corner Governor Nicholls and N. Broad)

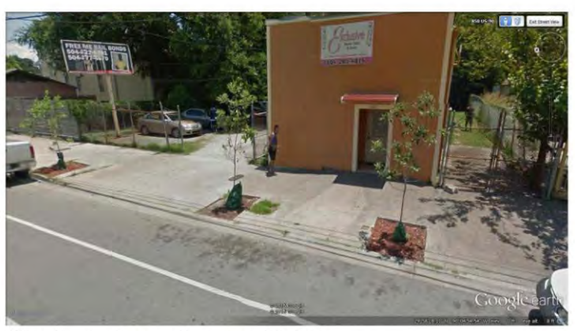
Review of Existing Conditions

- Excessive Curb Cuts Create Pedestrian Vehicular Conflicts
  - Inappropriate Use of Property

(Photo location: corner of Dumaine and N. Broad)

Review of Existing Conditions

- Excessive Curb Cuts Create Pedestrian/Vehicular Conflicts



(Photo location: between Dumaine and St. Ann)

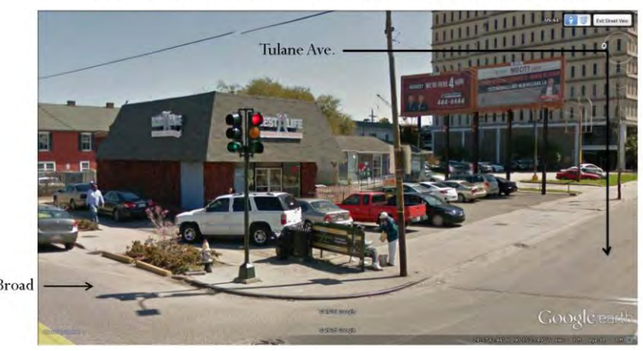
Review of Existing Conditions

- Excessive Curb Cuts Create Pedestrian/Vehicular Conflicts
  - Access Management

(Photo location: corner of St. Peter and N. Broad)

Review of Existing Conditions

- Excessive Curb Cuts Create Pedestrian/Vehicular Conflicts



(Photo location: corner S. Broad and Tulane)

Review of Existing Conditions

- Lack of ADA accessible ramps
- Rollover Curb Parking

(Photo location: corner of Tulane and S. Broad)

Review of Existing Conditions

- Vehicular, Pedestrian and Bicycle Counts:
  - Vehicular

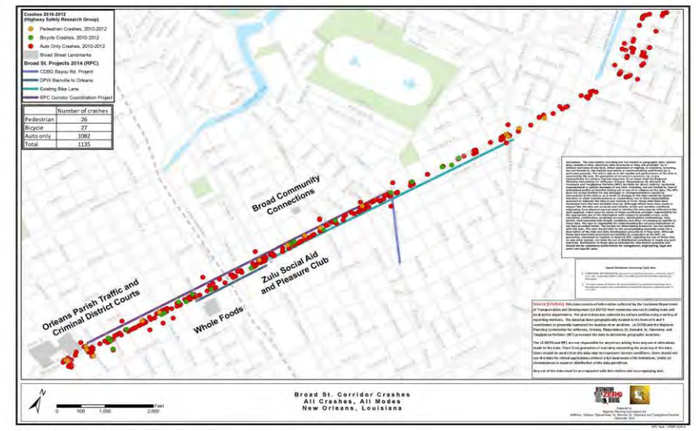
Average Daily Traffic Count 10/20/2014 -10/22/2014	
Orleans to Bienville	33604
Bienville to Canal (Avg)	33791
Canal to Tulane	33977

  - Bicycle – Between Tulane Ave. and Banks Street - Daily
    - 2013 Bicycle: 376
    - 2014 Bicycle: 433
  - Pedestrian – Between Tulane Ave. and Banks Street - Daily
    - 2013 Pedestrian: 1,652
    - 2014 Pedestrian: 1,790

Information provided by RPC

Review of Existing Conditions

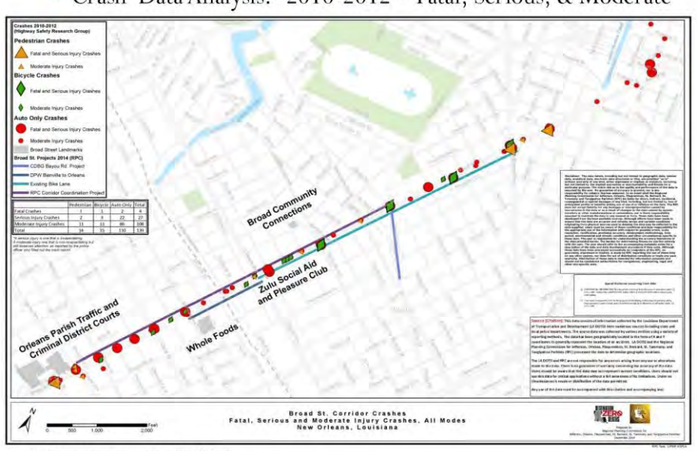
- Crash Data Analysis: -2010-2012 – All Crashes



Information provided by RPC

Review of Existing Conditions

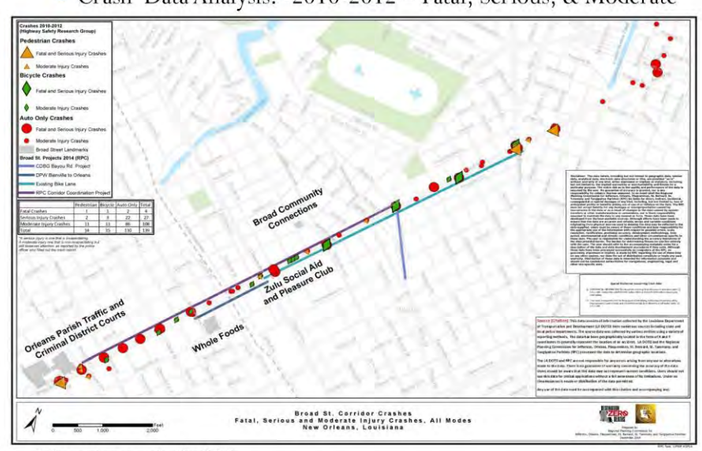
- Crash Data Analysis: -2010-2012 – Fatal, Serious, & Moderate



Information provided by RPC

Review of Existing Conditions

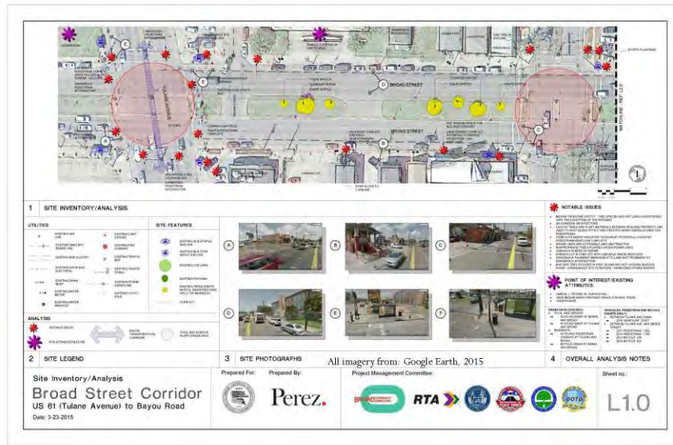
- Crash Data Analysis: -2010-2012 – Fatal, Serious, & Moderate



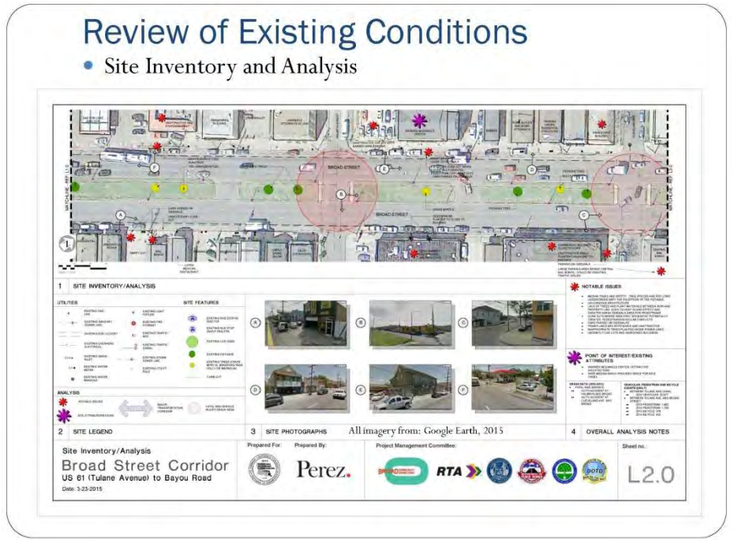
Information provided by RPC

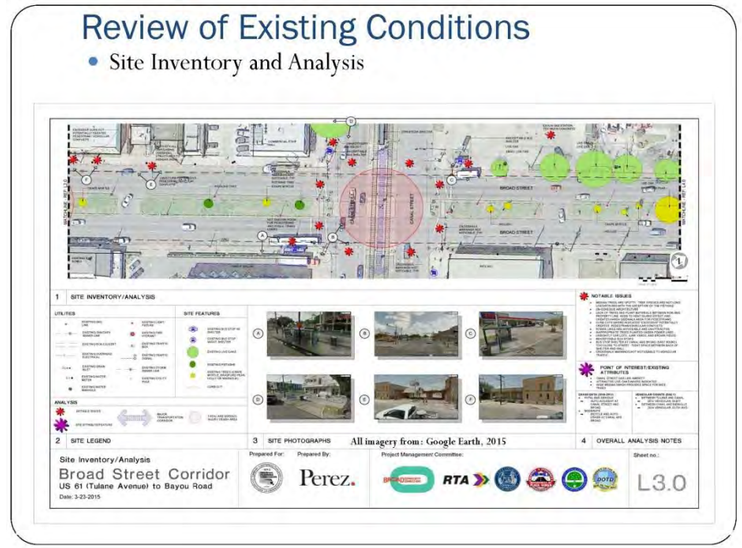
Review of Existing Conditions

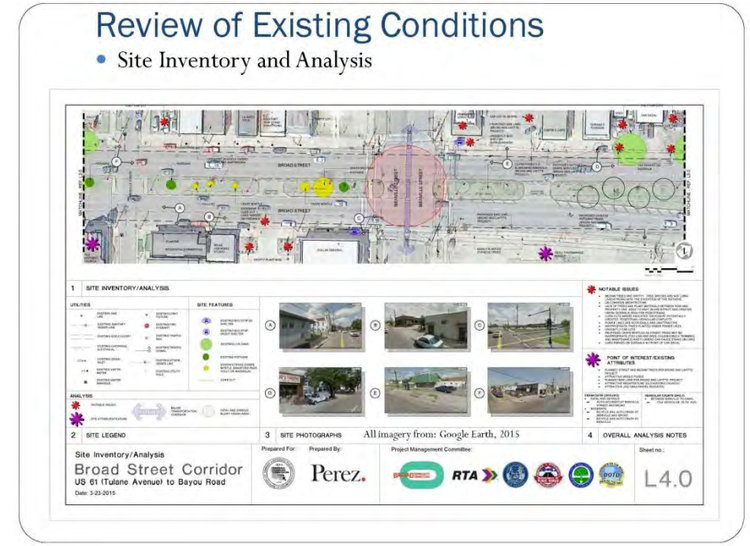
- Site Inventory and Analysis

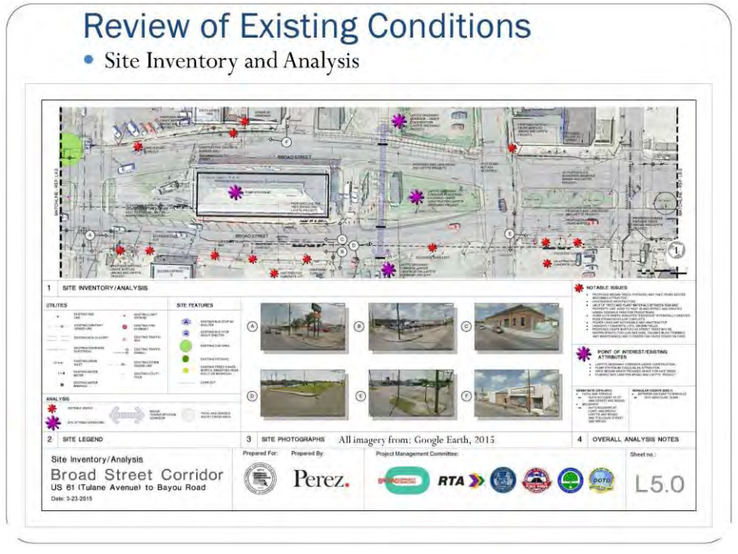


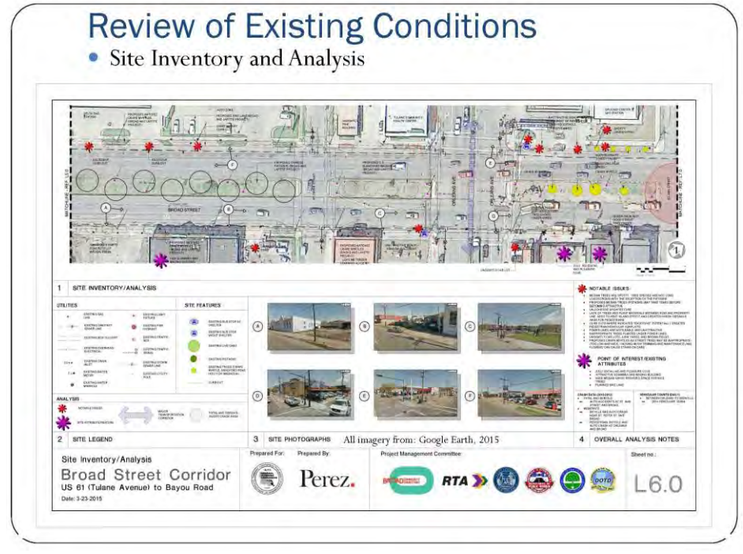
RPC UPWP Task: A-1.15; FY-15

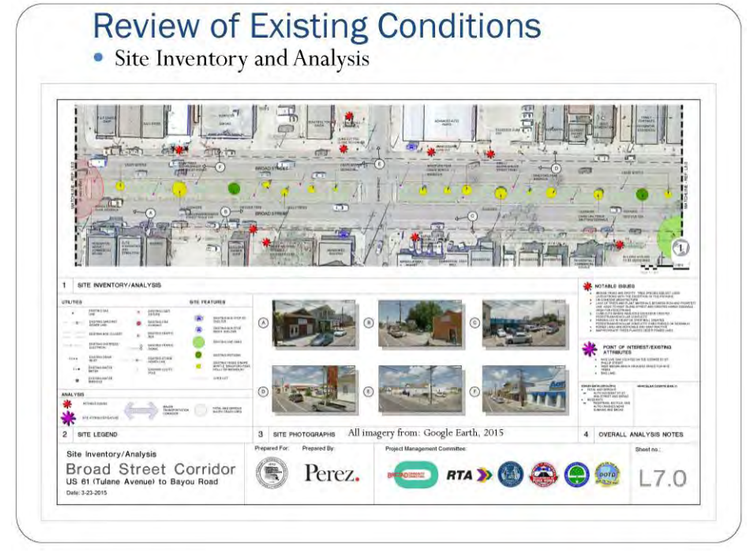








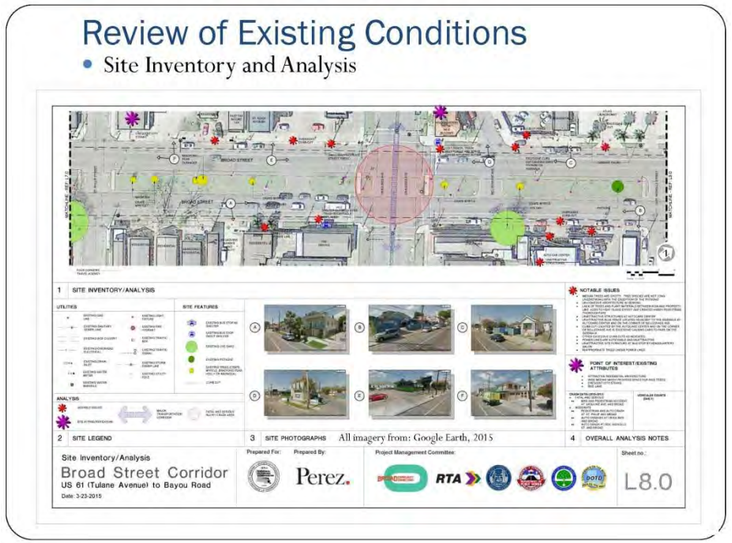




RPC UPWP Task: A-1.15; FY-15

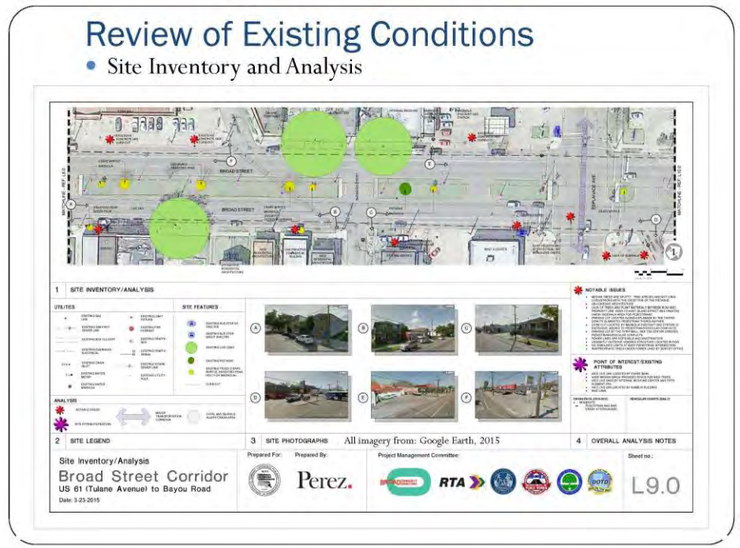
Review of Existing Conditions

- Site Inventory and Analysis



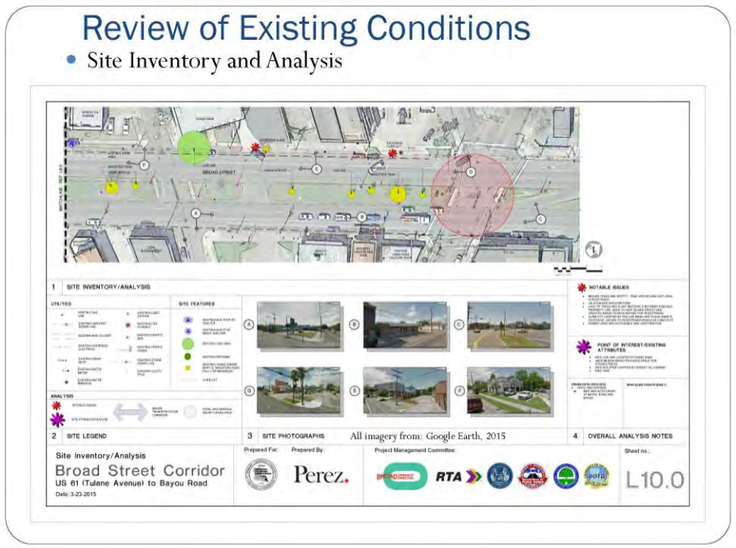
Review of Existing Conditions

- Site Inventory and Analysis



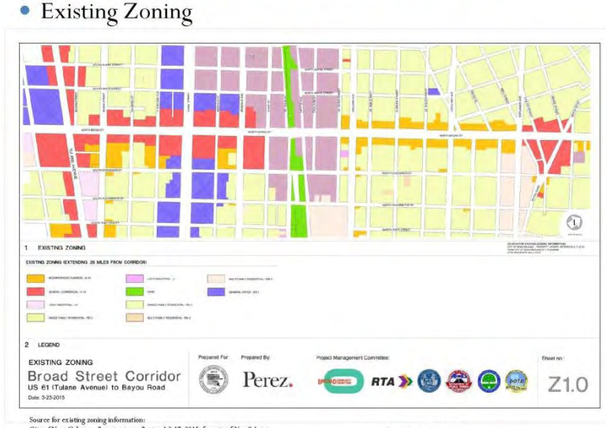
Review of Existing Conditions

- Site Inventory and Analysis



Review of Existing Conditions

- Existing Zoning



Source for existing zoning information: City of New Orleans. *Property viewer. Retrieved 3-17-2015, from city of New Orleans city planning: http://property.Nola.GOV*

Zoning map last updated: 12-19-2013

Review of Existing Conditions

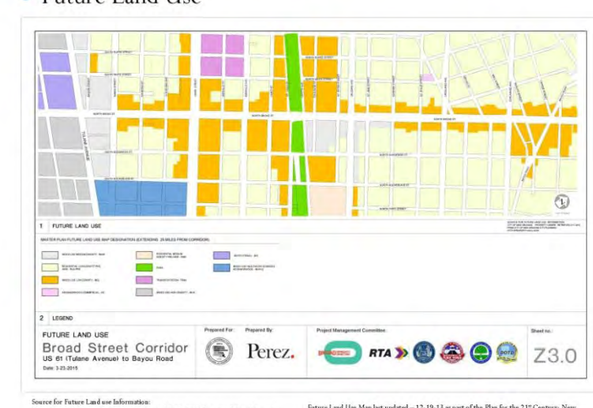
- Draft Zoning

Source for draft zoning information: City of New Orleans. *Property viewer. Retrieved 3-17-2015, from city of new orleans city planning: http://property.Nola.Gov*

Draft Zoning Map last updated – 12-19-13. City Council Review Draft 9-2014 as part of the New Orleans Comprehensive Zoning Ordinance

Review of Existing Conditions

- Future Land Use

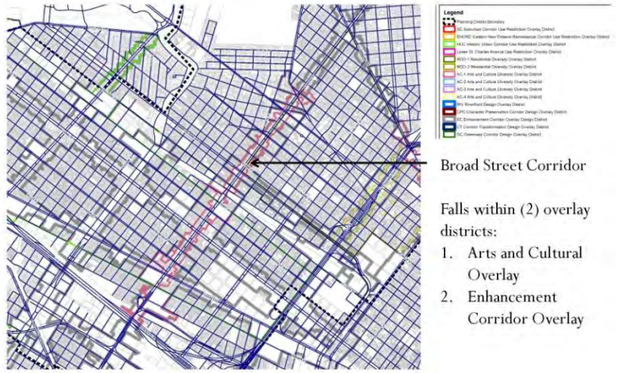


Source for Future Land use Information: City of new Orleans. *Property viewer. Retrieved 3-17-2015, from city of New Orleans city planning: http://property.Nola.Gov*

Future Land Use Map last updated – 12-19-13 as part of the Plan for the 21st Century: New Orleans 2030 Adopted August 2010 as amended through 2012

Review of Existing Conditions

- Draft Overlay Map – 2014 (Planned Development District 4)



Broad Street Corridor

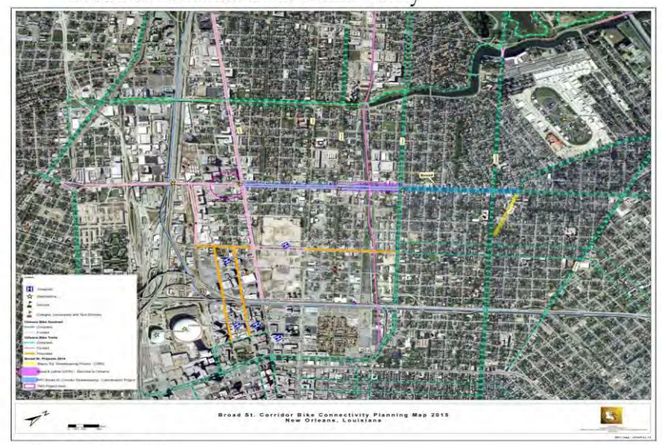
Falls within (2) overlay districts:

1. Arts and Cultural Overlay
2. Enhancement Corridor Overlay

Map provided by New Orleans City Planning Commission – July 2014

Review of Existing Conditions

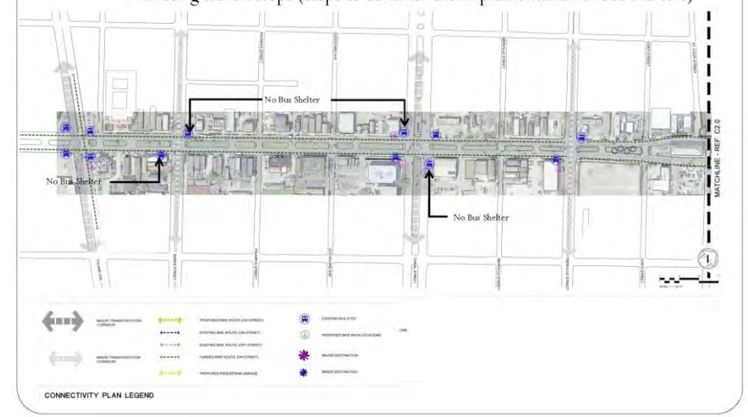
- Broad St Corridor Bike Connectivity



Map provided by RPC

Review of Existing Conditions

- Major and Minor vehicular circulation through corridor
- Blow up of funded and existing bike lanes
- Existing transit stops (stops to consider the implementation of bus shelters)

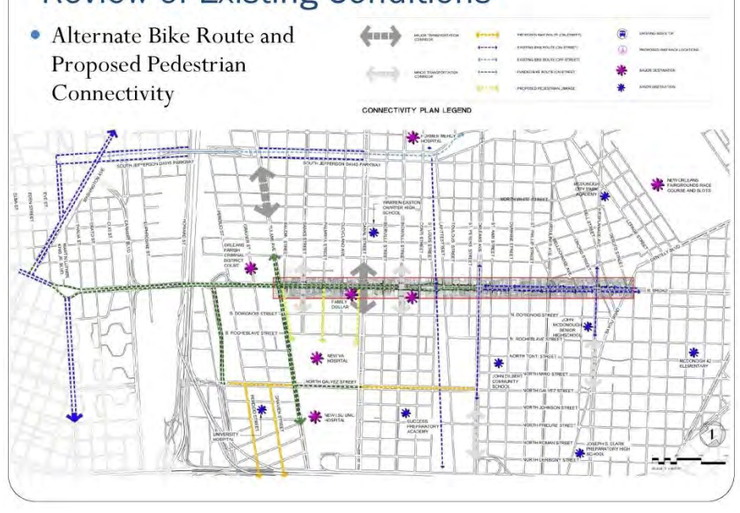


Review of Existing Conditions

- Major and Minor vehicular circulation through corridor
- Blow up of funded and existing bike lanes
- Existing transit stops (stops to consider the implementation of bus shelters)

Review of Existing Conditions

- Alternate Bike Route and Proposed Pedestrian Connectivity



Review of Existing Conditions

- Transit Origin and Destination Count Summaries

Cross Street	Origin Count	Percentage	Destination Count	Percentage	Total Count	Total Percentage	Classification
Tulane	0	0%	1	1%	1	1%	Low Count
Baudin	0	0%	0	0%	0	0%	No Count
Banks	2	3%	2	2%	4	2%	Low Count
Palmyra	0	0%	0	0%	0	0%	No Count
Cleveland	1	1%	4	4%	5	3%	Low Count
Canal	44	55%	51	48%	95	51%	High Count
Iberville	0	0%	0	0%	0	0%	No Count
Bienville	0	0%	4	4%	4	2%	Low Count
Conti	0	0%	0	0%	0	0%	No Count
St Louis	0	0%	0	0%	0	0%	No Count
Lafitte	0	0%	0	0%	0	0%	No Count
Toulouse	0	0%	1	0%	1	1%	Low Count
St Peter	1	1%	0	0%	1	1%	Low Count
Orleans	5	6%	6	6%	11	6%	Low Count
St Ann	2	3%	1	1%	3	2%	Low Count
Dumaine	4	5%	1	1%	5	3%	Low Count
St Phillip	0	0%	2	2%	2	1%	Low Count
Ursulines	3	4%	3	3%	6	3%	Low Count
Gov Nicholls	0	0%	1	1%	1	1%	Low Count
Barracks	0	0%	0	0%	0	0%	No Count
Esplanade	18	23%	29	27%	47	25%	

Total Origin Count: 80

Total Destination Count: 106

Total Count Origin and Destination: 186

Count Classification	Origin Count Range	Destination Count Range	Total Count Range
High	18-44	51-29	47-95
Low	1-5	1-6	1-11
None	0	0	0

Data provided by RPC

RPC UPWP Task: A-1.15; FY-15

Corridor Enhancements Overview

- Visual Enhancements - Trees
- Pedestrian Friendly Enhancements
  - Bump Outs
  - Specialized Paving at Intersections
  - Specialized Plantings at Intersections
  - High Visibility Crosswalks
- Water Management
- Bike Lane

Corridor Enhancements

- Visual Enhancements
  - Street Trees in the ROW and Median to mask utility lines and un-cohesive architecture

Image Source: Google, 2015

Potential Enhancements

- Visual Enhancements
  - Types of canopy trees to consider in ROW:
    - Under Wires: American Holly
    - In inner block bump out areas Gingko Tree or Drake Elm

Plainfeild Trees. (2010, 2 10). *Plainfeild Trees*. Retrieved 5 20, 2015, from American Holly: http://plainfeildtrees.blogspot.com/2008/02/americas-holly.html

Gazette Staff Writer. (2008, 11 8). *Ancient Ginkgo Trees Have Survived the Test of Time*. Retrieved 5 20, 2015, from Fillmore Gazette: http://www.fillmoregazette.com/community/ancient-ginkgo-trees-have-survived-test-time

Lowes. (n. d.). *Home Outdoor: Home and Planters: Plants, Bulbs and Seeds: Trees*. Retrieved 5 20, 2015, from Lowes: http://www.lowes.com/pd_150671-1515-NURSERY_0__?productId=1623564

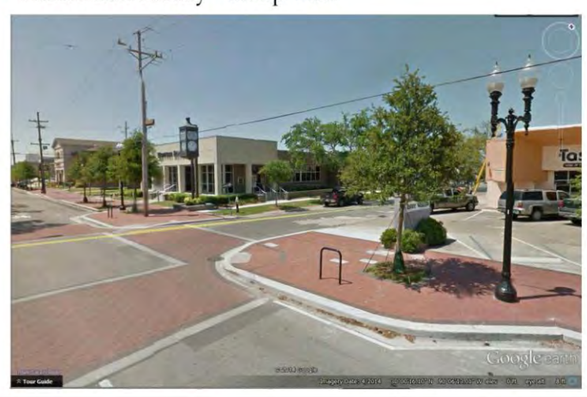
Potential Enhancements

- Visual Enhancements
  - Types of canopy trees to consider in median: Red Maple

Urban Forest Nursery, Inc. (n.d.). *Autumn Blaze Maple*. Retrieved 5 20, 2015, from Urban Forest Nursery, Inc.: http://www.urbanforestnursery.com/treeprofiles/profileautumnblazemaple.html

Corridor Enhancements

- Pedestrian Friendly - Bump Outs



Corridor Enhancements

- Pedestrian Friendly - Specialized Paving at Major Intersections

Corridor Enhancements

- Pedestrian Friendly - Specialized Plantings @ Major Intersections

Photo Taken by M. Johanna Leibe (Fairhope, AL)

Corridor Enhancements

- Pedestrian Friendly
  - High Visibility Crosswalks
    - Traffic lights and countdown pedestrian signal programming

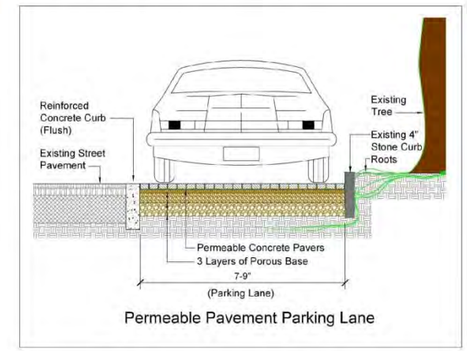
Metropolitan Transportation Commission. (2009, 2 27). *Safety Toolbox: Engineering*. Retrieved 5 20, 2015, from Metropolitan Transportation Commission: http://www.mtc.ca.gov/planning/bicycles-pedestrians/tools/countdownSignal/

Improved thermoplastic pavement markings "are more reflective, slip resistant and durable than standard crosswalk markings" (Bump, 2012)

Bump and Schultz, M. (2012, 9 28). *Schmeeckly Evaluating performance and Value of TrafficPatternXD for Downtown Connellsville*. Retrieved 5 20, 2015, from Ennis Flint: http://www.ennisflint.com/News-Events/Industry-News/Schmeeckly-Evaluating-performance-and-Value-of-Tr

Corridor Enhancements

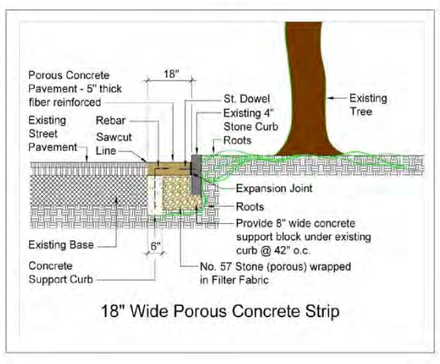
- Water Management Techniques



Permeable Pavement Parking Lane

Corridor Enhancements

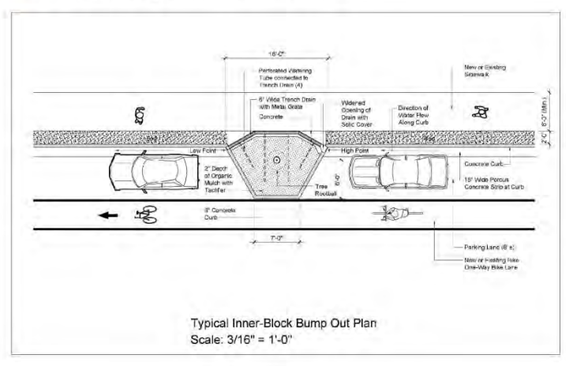
- Water Management Techniques



18" Wide Porous Concrete Strip

Corridor Enhancements

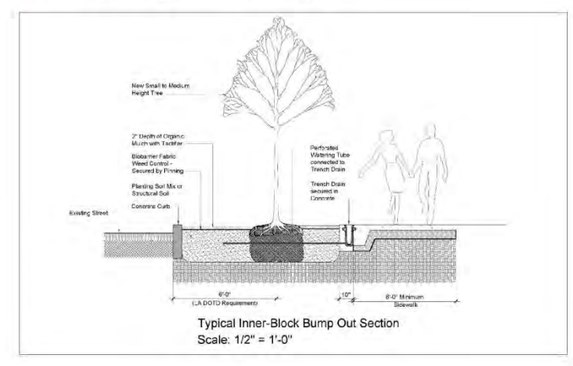
- Water Management Techniques



Typical Inner-Block Bump Out Plan
Scale: 3/16" = 1'-0"

Corridor Enhancements

- Water Management Techniques



Typical Inner-Block Bump Out Section
Scale: 1/2" = 1'-0"

Corridor Enhancements

- Bike Lane Incorporation

Concepts 1, 2 and 3
Concept 4

Schwitt, A. (2013, 3 23). *Memphis to add 15 Miles of Protected Bike Lanes*. Retrieved 3 20, 2015, from Streets Blog Network: http://streetsblog.net/2013/03/23/memphis-to-add-15-miles-of-protected-bike-lanes/

Bike Winnipeg. (n.d.). *Webinar: Intersections and Protected Bike Lanes*. Retrieved 3 20, 2015, from Bike Winnipeg: http://bikewinnipeg.ca/2014/08/21/webinar-intersections-protected-bike-lanes/#sthash.fLzo5fcL.dpbs

Corridor Enhancement Options

- Concept One Proposed Enhancements (least expensive option)
  - Utility Poles
    - Straighten existing utility poles and street lights
    - Remove abandoned utility poles
  - Remove abandoned phone poles and booths
  - Establish new curb lines where indicated excessive or unnecessary
    - Repair existing curb-lines especially at intersection corners
  - Repair existing sidewalks and implement handicap ramps where appropriate.
  - Bike Lane Incorporation (between Tulane Ave. and Bienville with alternate route if bike lane is not approved between Orleans and Bienville)

Corridor Enhancement Options

- Concept One Proposed Enhancements Cont.
  - Re-stripe crosswalks at major intersections (the following are intersections with signals)
    - Tulane Ave.
    - Banks Street
    - Canal Street
    - Bienville Ave.
    - Orleans Ave.
    - Ursulines Ave.
    - Esplanade Ave.
    - Bayou Road
  - Trees
    - Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
  - Implementation of new median trees (red maples)
    - Implement holly street tree under utility wires where appropriate

Corridor Enhancement Options

- Concept One Proposed Enhancements

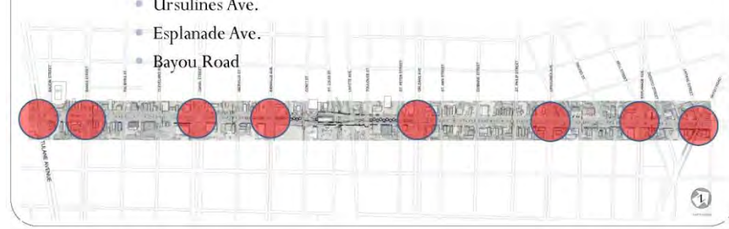
1 TULANE AVE. AND BROAD STREET INTERSECTION ENLARGEMENT PLAN - CONCEPT ONE

Corridor Enhancement Options

- Concept Two Proposed Enhancements
  - Implementation concept one improvements (items I, II, III, IV and V)
  - Bike lane rack incorporation at select locations
  - Major Intersection Improvements
    - Bump outs at major intersections (as listed in concept one) with new handicap ramps as appropriate. Bump outs to receive permeable brick or concrete paving. The Tulane Ave. and Broad Street intersection would receive three corner bump-outs, as there is a turning lane planned at the southwest corner.
    - Countdown signals (Tulane, Canal, Orleans, and Esplanade)
    - Bus stop shelters and site furniture re-organization

Corridor Enhancement Options

- Concept Two Proposed Enhancements Cont.
  - Colored asphalt crosswalks at major intersections
    - Tulane Ave.
    - Banks Street
    - Canal Street
    - Bienville Ave.
    - Orleans Ave.
    - Ursulines Ave.
    - Esplanade Ave.
    - Bayou Road



Corridor Enhancement Options

- Concept Two Proposed Enhancements Cont.
  - Trees
    - Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
    - Implementation of new median trees
    - Implementation of East Palatka Hollies at corner bump-outs as appropriate
    - Implementation of Holly street trees
    - Implementation of Madjool Palms at (8) major intersections

Corridor Enhancement Options

- Concept Two Proposed Enhancements
  - Stamped and Colored Concrete Bump-outs

Landscape Communications Inc. (2015). *Eddy Street Commons*. Retrieved 1 20, 2015, from LandscapeOnline.com: http://landscapeonline.com/research/article/16782

Landscape Communications Inc. (2015). *Eddy Street Commons*. Retrieved 1 20, 2015, from LandscapeOnline.com: http://landscapeonline.com/research/article/16782

Corridor Enhancement Options

- Concept Two Proposed Enhancements
  - Bump-outs to accommodate articulated buses where feasible

Boone, A. (2015, 10 17). *Proving to Caltrans That El Camino Real Can Be a Safer Street* . Retrieved 1 20, 2015, from Streetsblog SF: http://sf.streetsblog.org/2011/10/17/proving-to-caltrans-that-el-camino-real-can-be-a-safer-street/

Corridor Enhancement Options

- Concept Two Proposed Enhancements
  - Colored Asphalt Crosswalks

Session Sealing and Maintanence Company. (n.d.). *Stamped Asphalt*. Retrieved 1 20, 2015, from Session Sealing: http://sessionsealing.com/Services/Decorative_Stamped_Asphalt.html

Corridor Enhancement Options

- Concept Two Proposed Enhancements

1 TULANE AVE. AND BROAD STREET INTERSECTION ENLARGEMENT PLAN - CONCEPT TWO

Corridor Enhancement Options

- Concept Three Proposed Enhancements (Most Expensive Option)
  - Implementation concept one improvements (items I, II III, IV and V)
  - Implementation of concept two improvements (items II and III)
  - Decorative paving (concrete) at major intersections (entire intersection) with incorporated decorative crosswalk pattern
    - Tulane Ave.
    - Banks Street
    - Canal Street
    - Bienville Ave.
    - Orleans Ave.
    - Ursulines Ave.
    - Esplanade Ave.
    - Bayou Road

Corridor Enhancement Options

- Concept Three Proposed Enhancements Cont.
  - Trees
    - Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
    - Implementation of Majool Palms at major intersections
    - Bigger trees, such as Ginko or Drake Elm for street trees
    - Implementation of East Palatka Hollies at corner bump-outs as appropriate
  - Inner block bump outs where appropriate for every block. Inner block bump outs shall be planted with trees, understory plantings and water mitigation techniques.

Corridor Enhancement Options

- Concept Three Proposed Enhancements

Corridor Enhancement Options

- Concept Three Proposed Enhancements – Before Photo

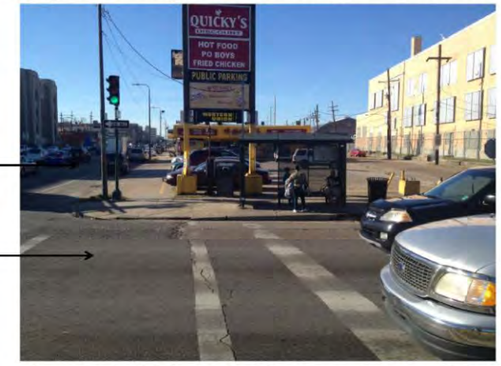


Photo taken by M. Johanna Leibe (Photo taken at the corner of S. Broad and Tulane)

Corridor Enhancement Options

- Concept Three Proposed Enhancements – After Photo

Corridor Enhancement Options

- Concept Three Proposed Enhancements – Before Photo

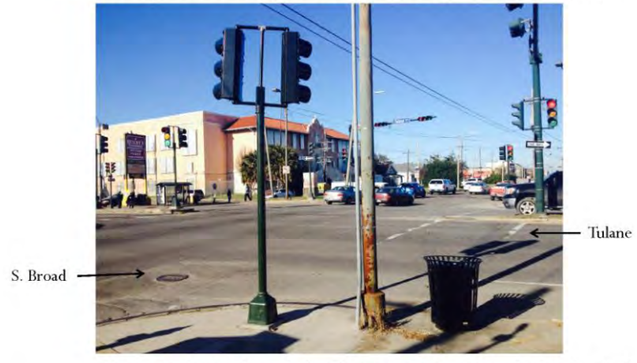


Photo taken by M. Johanna Leibe (Photo taken at the corner of S. Broad and Tulane)

Corridor Enhancement Options

- Concept Three Proposed Enhancements – After Photo

Corridor Enhancement Options

- Concept Four Proposed Enhancements
  - Implementation concept one improvements (items I, II III, IV and V)
  - Implementation of concept two improvements (items II and III (less turning lane incorporation)
  - Implementation of a protected bike lane
  - Implementation of major intersection corner plantings
  - Implementation of trees in inner block bump outs. Bump outs to assist in site triangle visibility at driveway entrances.
  - Trees
    - Removal of all median trees and shrubs (except between Bienville and Orleans Ave.) Existing Chinese Pistashe trees to be re-located.
    - Implementation of Majool Palms at major intersections
    - Bigger trees, such as Ginko or Drake Elm for street trees in intermediate bump out areas
    - Implementation of East Palatka Hollies at corner bump-outs as appropriate

Corridor Enhancement Options

- Concept Four Proposed Enhancements

General Cost Estimates

- Concept One Enhancements

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Concept One					
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles amd Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Restripe crosswalks at major intersections	7	EA		$ 2,500.00	$ 17,500.00
Remove existing trees and shrubs in median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Holly Street trees	200	EA		$ 500.00	$ 100,000.00
Subtotal					$ 673,500.00
25% Contingency					$ 168,375.00
Total					***$ 841,875.00***

General Cost Estimates

- Concept Two Enhancements

Concept Two Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles amd Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Bumpouts at Major Intersections	8	EA		$ 175,000.00	$ 1,400,000.00
Countdown Signals (4 Intersections)	4	EA		$ 80,000.00	$ 320,000.00
Bus Stop Furniture	10	EA		$ 5,000.00	$ 50,000.00
Bike Racks	8	EA		$ 750.00	$ 6,000.00
Colored Asphalt Crosswalks (8 Intersections)	8	EA		$ 8,000.00	$ 64,000.00
Remove existing trees and shrubs in median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Holly Street trees	200	EA		$ 500.00	$ 100,000.00
Madjool Palm Trees	32	EA		$ 8,000.00	$ 256,000.00
Miscellaneous Landscaping		LS		$ 12,000.00	$ 12,000.00
Subtotal					$ 2,784,000.00
25% Contingency					$ 691,000.00
Total					***$ 3,455,000.00***

General Cost Estimates

- Concept Three Enhancements

Concept Three Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles amd Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Bumpouts at Major Intersections	8	EA		$ 175,000.00	$ 1,400,000.00
Countdown Signals (4 Intersections)	4	EA		$ 80,000.00	$ 320,000.00
Bus Stop Furniture	10	EA		$ 5,000.00	$ 50,000.00
Bike Racks	8	EA		$ 750.00	$ 6,000.00
Inner Block Bumpouts	65	EA		$ 1,500.00	$ 97,500.00
Decorative Paving at Major Intersections (8)	63000	SF		$ 20.00	$ 1,260,000.00
Remove existing trees and shrubs in median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Major Street Trees	65	EA		$ 800.00	$ 52,000.00
Madjool Palm Trees	32	EA		$ 8,000.00	$ 256,000.00
Miscellaneous Landscaping		LS		$ 12,000.00	$ 12,000.00
Subtotal					$ 4,009,500.00
25% Contingency					$ 1,002,375.00
Total					***$ 5,011,875.00***

General Cost Estimates

- Concept Four Enhancements

Concept Four Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$ 2,500.00	$ 187,500.00
Remove Abandoned Utility Poles	5	EA		$ 1,200.00	$ 6,000.00
Remove Abandoned Phone Poles amd Booths	5	EA		$ 750.00	$ 3,750.00
Establish new curb lines where needed	275	LF		$ 20.00	$ 5,500.00
Repair existing curbs	1500	LF		$ 15.00	$ 22,500.00
Repair existing sidewalks	12000	SF		$ 10.00	$ 120,000.00
New HC Ramps where needed	25	EA		$ 750.00	$ 18,750.00
Bike Lanes from Tulane to Bienville	2500	LF		$ 20.00	$ 50,000.00
Bumpouts at Major Intersections	8	EA		$ 175,000.00	$ 1,400,000.00
Countdown Signals (4 Intersections)	4	EA		$ 80,000.00	$ 320,000.00
Bus Stop Furniture	10	EA		$ 5,000.00	$ 50,000.00
Bike Racks	8	EA		$ 750.00	$ 6,000.00
Inner Block Bumpouts	65	EA		$ 3,000.00	$ 195,000.00
Curbs for Protected Bike Lane	1200	LF		$ 15.00	$ 18,000.00
Remove existing trees and shrubs in median (62)		LS		$ 20,000.00	$ 20,000.00
Relocate Existing Pistachio trees	12	EA		$ 1,500.00	$ 18,000.00
New Median trees	130	EA		$ 800.00	$ 104,000.00
Major Street Trees	100	EA		$ 800.00	$ 80,000.00
Madjool Palm Trees	32	EA		$ 8,000.00	$ 256,000.00
Miscellaneous Landscaping		LS		$ 12,000.00	$ 12,000.00
Subtotal					$ 2,893,000.00
25% Contingency					$ 723,250.00
Total					***$ 3,616,250.00***

Broad Street Corridor Streetscaping

US 61 (Tulane Avenue) to Bayou Road

Task A-1.15; FY-15 UPWP

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Meeting Minutes

Meeting Minutes #7

MEETING DATE	**March 23, 2015**	**SUBJECT**	**Broad Street Corridor Streetscaping**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**March 27, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**M. Johanna Leibe**
MEETING TIME	10:00 AM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
X	Walter Brooks (WB)	RPC	504-483-8525	wbrooks@norpc.org
X	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.org
X	Alison Maulhardt (AM)	RPC	504-463-8514	amaulhardt@norpc.org
X	Dan Jatres (DJ)	RPC	504-463-8505	djatres@norpc.org
X	Jeff Roesel (JR)	RPC	504-463-8514	jroesel@norpc.org
X	Tica Hartman (TH)	Parks and Parkways	504-658-3226	thartman@nola.gov
X	Angela O'Byrne (AO)	Perez, APC	504-584-5100	aobyrne@e-perez.org
X	Brandon Adams (BA)	Perez, APC	504-584-5100	badams@e-perez.org
X	Stefan Marks (SM)	RTA	504-606-6086	Stefan.marks@transdev.com
X	Dominique Dickerson (DD)	New Orleans Council(District D)	504-658-1044	dcdickerson@nola.gov
X	Mark Jernigan (MJ)	DPW	504-658-8002	mdjernigan@nola.gov
X	Victoria Menchaca (VM)	Perez, APC	504-584-5100	vmenchaca@tulane.edu
X	Karri Maggio (KM)	Perez, APC	504-584-5100	kmaggio@e-perez.com
X	Brendon Matthews (BM)	RTA (Transportation Development)	504-827-8383	brendonmatthews@transdev.com
X	Jeff Schwartz (JS)	Broad Community Connections (BCC)	504-722-3628	jeff@broadcommunityconnections.org
X	Nicolette Jones (NJ)	City Planning Commission (CPC)	504-658-7025	nipjones@nola.gov
X	Larry Massey (LM)	CPC	504-658-7027	lwmassey@nola.gov
X	Michael Martin (MM)	New Orleans City Council (representing C.M. Susan Guidry)	504-658-1010	mlmartin@nola.gov
X	Ennis Johnson (EJ)	LADOTD	504-437-3103	Ennis.johnson@la.gov
X	Johanna Leibe (JL)	Perez, APC	504-231-6062	jleibe@e-perez.com
X	Keith Twitchell (KT)	Broad Community Connections (BCC)	504-267-4866	keithqct@aol.com
X	Maggie Woodruff (MW)	RPC	504-483-8502	mwoodruff@norpc.com

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTE7

A meeting was held at the Regional Planning Commission on this date from 10:00am – 12:30pm. This purpose of the meeting was to present collected data, findings and feasible concept plan options to the Project Management Committee (PMC) for their review and feedback.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

1. **Introductions**

   The meeting commenced with a brief project summary and introductions given by Lynn Dupont (LD). LD expressed the complexity of the Broad Street Corridor, with many existing projects occurring within or adjacent to the study area. The complexity of the corridor also includes many factors that were taken into consideration with developing design alternatives. BA then introduced the team and discussed the extensive amount of data that was collected and reviewed before developing conceptual design options, which was the first half of the presentation. He mentioned that due to the length of the presentation, he would quickly review those items, but if anyone needs more information regarding existing projects or the review of existing conditions, to please feel free to interrupt and ask questions.

2. **Project Overview**

   a. **Project Status**

   Brandon Adams (BA) explained that the Perez team had already completed their site inventory and analysis review. Perez had also developed concept design alternatives based upon extensive data that was collected and reviewed. Currently, Perez is in the process of collecting more information from the Zulu Social Aid and Pleasure Club, the Regional Transit Authority, and the City Planning Commission regarding the funded bike lane between Orleans and Bienville. BA then explained that based upon the data collected thus far, Perez has developed four concept options to present to the Project Management Committee (PMC) for their input and feedback after their review period.

3. **Projects Occurring Within or Adjacent to the Corridor**

   a. BA then explained the following projects that are occurring either adjacent or within the Broad Street Corridor project area:

      i. Orleans Parish Criminal District Court Complex – Located adjacent to the Broad Corridor project area, this project includes improvements to the Criminal District Court Complex. As part of a City of New Orleans requirement, this project also entails South Broad Street median tree plantings inclusive of Alta Magnolias and Jerusalem Thorn trees in a staggered layout pattern. The design is still under review and is subject to change. A meeting with Sizeler, Thompson, Brown Architects; Parks and Parkways, and the TMG consulting group occurred October 17, 2014 in order to coordinate their median planting design with median plantings that would surround the Tulane intersection and other major intersections throughout the corridor. It was agreed that Medjool Palms (two on either side of the intersection) would be a good way to accent the intersection.

   b. Tulane Avenue Streetscape

      i. Drawings were received from the Regional Planning Commission that showed a road diet (reducing three travel lanes to two) and the incorporation of a bike lane. The median was also widened and a dedicated turning lane was also implemented for traffic traveling east

along Tulane and turning south onto South Broad Street (adjacent to the Orleans Parish Criminal District Court Complex). Tulane Avenue street improvements were incorporated into all design concepts, less the turning lane for concepts three and four.

c. Broad and Lafitte Project Enhancements
   i. This project occurs between Orleans and Bienville streets along North Broad and includes enhancements such as a bike lane, median tree plantings, crape myrtle planting under utility lines, basic sidewalk repair, areas of concrete removal and grass implementation between the sidewalk and the back of the curb and fixture replacement. The bike lane would be a continuation of the already existing bike lane along N. Broad that currently ends at Orleans Ave. However, the bike lane is still in need of official approval by the Department of Transportation Development (DOTD). Broad and Lafitte enhancement plans will also be incorporated into the preferred alternative concept plan, as decided upon by the PMC.

d. Lafitte Greenway Bicycle and Pedestrian Path
   i. The Lafitte Greenway Bicycle and Pedestrian Path bi-sects the project area close to the Broad Street Pump station No. 2. Improvements include crosswalk striping and bike racks located on both sides of N. Broad Street.

e. Bayou Road Streetscape Project Enhancements
   i. Bayou Road Streetscape enhancements include, in part, bulb-outs, street trees, and new paving. This project is adjacent to the Broad Street Corridor Streetscaping project, as it terminates at North Broad Street.

4. Review of Existing Conditions

a. There are many issues that Perez, APC noticed and took into consideration when developing concept plans. BA discussed the following:
   i. Unnattractive site elements
      1. Competing architectural styles
      2. Utility Poles, traffic poles, and light poles lean
   ii. Bicycle and pedestrian site issues and conflicts
      1. Lack of a bike lane for a corridor populated with bikers
      2. Worn pedestrian crosswalks that are not highly visible
      3. No buffer between the street and the sidewalk for pedestrian traffic
   iii. Bus stop area site issues
      1. Tight space constraints for transit users
      2. Unfriendly/uncomfortable area for transit users with increased heat island effect (no vegetation and surrounded by pavement). Stefan Marks (SM) mentioned that historically, bus stops in New Orleans are placed on the near side of intersections, which also increases pedestrian safety. However, he stated that he would not be opposed to a far side bus stop for the bus stop located between Baudin and Tulane Ave. along South Broad due to the tight space constraints at that particular transit stop.
      3. Bus stop elements, such as abandoned telephone poles, scattered newspaper stands, and trash receptacles add to the visual chaos of many transit stop areas
   iv. Water management issues
      1. Debris blocking drain inlets and excessive pavement throughout the corridor (both on public and private properties) add to storm water run-off quantities.
   v. Curb Issues
      1. Lack of curbs in critical areas, excessive curb cuts, and lack of ADA ramps in various locations occur throughout the corridor. BA mentioned that curb cuts that have been abandoned create the potential for cars to park partially on the sidewalk which create modal conflicts (safety concerns). In addition, he mentioned that many businesses have utilized the sidewalk as parking areas for customers, which shows a need for enforcement.
   vi. Vehicular, bicycle and pedestrian traffic count analysis
      1. Average daily counts of vehicular traffic reveal that there approximately 33,791 vehicles (on average) that travel through the corridor daily (from Orleans to Tulane Ave.) Average bicycle daily counts reveal an increase of 57 cyclers from the year 2013 (376) to 2014 (433). Pedestrian daily counts have also increased by 138 from the year 2013 (1,652) to 2014 (1,790).
   vii. Vehicular, bicycle and pedestrian crash analysis
      1. There have been many pedestrian, bicycle and vehicular[4] crashs, that have occurred throughout the corridor. Fatal and serious crashes have occurred at nine intersections within the corridor project area (all vehicular and two bicycle). Due to the crash data and the vehicular, bicycle and pedestrian counts, it is clear that design concepts need to incorporate streetscape elements that will enhance bicycle, pedestrian and vehicular safety concerns.
   viii. Site inventory and analysis drawings
      1. BA quickly presented the site inventory and analysis drawings, as RPC provided large drawings which were set up on easels in the meeting room for the PMC to review more closely, due to the inordinate amount of information contained within this plans.
   ix. Existing Zoning
      1. An existing zoning map was shown, revealing commercially zoned development along Broad Street occurring between Tulane Ave. and Conti Street, and again

[4] Crashs that have occurred throughout the Broad Street Corridor Streetscaping project area have mostly been vehicular.

around the Bayou Road Intersection. Light industrial uses occur adjacent to the Lafitte Greenway area, and mixed business uses occur between St. Peter and Esplanade Streets.

x. Draft Zoning
   1. Much of the corridor is zoned historic urban neighborhood, which is intended to preserve the small scale and pedestrian-oriented character of the area.

xi. Future Land Use
   1. Most of the corridor was designated as a mixed use, low density future land use, with a few parcels adjacent to the Lafitte Greenway designated as mixed use medium density land use. Land use descriptions were based upon the Plan for the 21st Century: New Orleans 2030 plan.

xii. Draft Overlay Map
   1. The Broad Street Corridor Streetscaping project area encompasses two overlay districts. The Arts and Cultural Overlay would allow for additional live entertainment opportunities, while the Enhancement Corridor Overlay would require a design review for most development within the corridor project area.

xiii. Bike Connectivity
   1. BA presented a map prepared by RTA that showed funded bike lanes, existing bike lanes (on the street and off street) and proposed alternate routes if the Orleans to Bienville bike route is not approved.

xiv. Transit Shelter and Bike Rack Locations
   1. Another map was presented showing major and minor vehicular circulation and potential transit shelter locations where currently none exist. Potential bike rack locations were also shown on the plan, which were placed based upon popular commercial destinations.

xv. Alternate Bike Route and Proposed Pedestrian Connectivity
   1. A plan was shown depicting major attractions and destinations, existing bike lanes, funded bike lanes, and proposed/alternate route bike lanes. Pedestrian connections linking the hospital complexes to the corridor were also shown, as it is anticipated that many businesses will develop along the corridor to support these two (LSUAMC and VA Hospital) major hospital facilities.

xvi. Transit Origin and Destination Counts
   1. Low counts were revealed for transit users at all intersections throughout the Broad Street Corridor project area, with the exception of Canal and Esplanade, which revealed high counts. It is anticipated that once the new hospital complexes are complete and operational, transit counts will increase accordingly.

5. Corridor Enhancement Site Elements

a. BA presented basic site elements that the Perez team have considered and have incorporated into their concept plans to enhance the corridor. Median and trees located between the back of curb and the sidewalk will enhance the visual character of the corridor. Bulb-outs (bulb outs) can enhance pedestrian safety by calming traffic and minimizing the distance pedestrians have to walk in order to travel across the street. Decorative paving at intersections also visually enhances the corridor and serves as a traffic calming measure. Pedestrian countdown signals, contrasting, high visibility crosswalks, and programmed pedestrian signalization could also enhance pedestrian safety. Water management techniques were also shown, such as permeable pavement in the parking lane, a porous concrete strip which would run along the curb gutter, and inner block bump perforated pipes that would divert a portion of storm water runoff to be used to irrigate street trees. Permeable brick pavers at bulb out intersection locations could also decrease storm water runoff. However, Tica Hartman (TH) mentioned (later in the presentation) that unless the permeable pavements are vacuumed, soil fines can essentially block drainage, which would negate any water management improvement. A dedicated bike lane (both typical and protected) was also implemented in concept design options.

6. Corridor Enhancement Options

a. Concept One Proposed Enhancements

BA mentioned that each concept option builds upon the prior concept, with the exception of Concept Four. Concept One, which is the least expensive option, would include basic enhancements, such as sidewalk repair, crosswalk striping at major intersections, the removal of abandoned utility poles and phone booths, the establishment of new curb lines, sidewalk repair and handicap ADA compliant ramps where none exist, and a dedicated bike lane that would begin at Bienville and end at Tulane Ave. if the Broad Laffite Project bike lane receives approval. Otherwise, the bike alternate map should be referenced. The removal of existing trees and shrubs in the medians and the implementation of median trees in a simple, single row pattern would also help to simplify the visual chaos of much of the corridor. Existing Chinese Pistashe trees would be re-located to another location, such as the Bayou Road intersection area, but would be coordinated with Parks and Parkways. Small trees, such as American Hollies would be implemented between the back of curb and the sidewalk under the power lines where appropriate, which would also lessen the visual competing architectural styles as seen throughout the corridor study.

b. Concept Two Proposed Enhancements

Concept two proposed enhancements included all of concept one enhancement items. In addition, bike racks would be implemented at select locations, bulb outs with decorative permeable paving, Medjool palms, and colored asphalt crosswalks at eight intersections would also be implemented within the study area. Bulb out lengths would accommodate articulated buses where feasible. Bulb

out constraints includes, in part, storm drainage inlet and curb cut conflicts. Bus stop areas would be re-organized for visual enhancements and to create better pedestrian flow through the area. East Palatka hollies would also be incorporated at corner bulb-out locations. This option would also include countdown signals at Tulane, Canal, Orleans and Esplanade. There was discussion regarding how vehicular movement would be affected due to the intersection bulb-outs. Keith Twitchell (KT) asked if a right turn on red would be allowed. BA stated that vehicles would still be able to turn right as they do now, but instead, it would be a vehicle turning from a two lane street onto a two lane street, instead of a three lane street turning onto a three lane street. And, the turning lane would not occur from parking lane, but rather, from a traffic lane. LD stated that there would not be a dedicated turning lane. Due to the modal conflicts at Canal Street and Tulane Ave., perhaps a no right turn on red option could increase pedestrian safety. Jeff Schwartz (JS) asked if a left turning lane could be implemented at the Tulane Ave. intersection. Ennis Johnson (EJ) stated that due to the increased size of the median (per the Tulane Ave. streetscape improvement plans), a left turn lane at that intersection was not feasible.

c. Concept Three - The Preferred Alternative Proposed Enhancements

The most expensive option, Concept Three - The Preferred Alternative proposed enhancements include concept one and two options. However, instead of asphalt crosswalks, Concept Three - The Preferred Alternative proposed enhancements include colored and stamped concrete crosswalks. In addition, colored and stamped patterned paving is included in this option in the center of all major intersections (there are eight proposed). LD suggested that instead of every major intersection receiving the decorative paving (in the middle of the intersection), that perhaps only the Canal Street and Tulane intersections could receive the center paving treatment, which would increase the visual impacts on the largest intersections and reduce costs. Permeable brick paving or stamped and colored concrete brick patterned paving could be implemented in the major intersection bulb out areas. Inner block bulb-outs (for every block throughout this corridor study) are also included in this option instead of holly or smaller trees located under power lines. The inner block bump-outs will be located appropriately in the parking lane, will not block curb cuts and are approximately 9'-0" wide x 10'-0 long (average)[5]. The inner block bulb-out areas also create opportunities to plant bigger trees with non-invasive root systems, such as the Ginko tree (with "y" branching) or Drake Elms (tough urban tree). Because the trees are bigger, they would visually enhance the corridor to a greater extent than the holly trees as included in concepts one and two by masking unnattractive utility lines and reducing the un-cohesive architecture that occurs throughout the corridor to a greater degree. Bigger trees would also provide canopies for pedestrians, and reduce the heat island effect for vehicles, cyclists, and pedestrians. In addition, the inner block bulb-out areas will also decrease storm water runoff as described in the water management section of this slide presentation. BA mentioned that mulch would be incorporated in the bump-out areas, however, TH mentioned that mulch would not be sustainable and that Parks and Parkways were not responsible for maintaining landscaping in-between the back of curb and the sidewalk area. Johanna Leibe (JL) mentioned that perhaps sod could be incorporated instead, since property owners are more apt to cut grass, than to re-mulch. Walter Brooks (WB) asked if the inner block bump-out areas would eliminate much parking. BA responded by stating that while the inner block bulb-out areas would eliminate some parking, that it was not a considerable amount due to how the inner block bulb-out areas were arranged in plan. Nicolette Jones (NJ) suggested creating a colored bike lane through the intersection. However due to the decorative pattern that is suggested for the center of the intersection, a colored bike lane was not included in this option, but rather, for option four which does not contain the decorative pattern in the center of the intersection. SM stated that Esplanade and Orleans were busy transit intersections and that specialized pavement treatment should be considered for those intersections as well.

d. Concept Four Proposed Enhancements

The most prominent differentiation from the other concepts that is included in this concept option is the incorporation of a protected bike lane. Bulb outs at every corner that would consist of decorative paving (such as colored and stamped concrete) and colored asphalt crosswalks at every major intersection (there are eight) are also included in this option. This option would not receive decorative paving infill within the center of the intersection. This option also differed from the other options due to the proposed low maintenance planting treatments (such as iris) at the bulb-out corners, which would also contribute to the decrease in storm water run-off and would provide an additional barrier for vehicles from rolling over the curb. BA mentioned that perhaps a cooperative endeavor agreement could be obtained with business owners for the maintenance of these plantings at the proposed eight major intersection areas. Bigger trees, such as Ginko or Drake Elms were also proposed for this option in islands that are located in the parking lane. Bigger trees with a clear trunk of at least 6'-0" would be implemented in these areas as to not obstruct views. Transit stop areas, however, are minimized due to the protected bike lane configuration and the tight right of way space constraints. SM mentioned this and also mentioned that while the protected bike lane would create a better option for cyclists, transit users would have less space to queue and conflicts between pedestrians and cyclists would increase, especially at busy intersections. KT mentioned that he really like the protected bike lane option. NJ mentioned a few suggestions to improve the protected bike lane option. One would be to not have a space between the crosswalk and the bike lane, but rather, have them abut one another. Angela O'Byrne (AO) mentioned that this was not feasible due to the space constraints of the bulb out areas in regards to the handicap ramps. NJ also mentioned that parallel parking could be created on the median side by reducing the width of the median. However, LD stated that since this is a state highway, it was highly unlikely that parking on the median side would be approved. NJ also suggested elevating the protected bike lane, which would provide further

[5] The size of the inner bulb-out areas is large enough to implement larger trees and increase storm water runoff mitigation.

protection from vehicular traffic. However, since the original curb line is maintained in this option, elevating the bike lane would incur additional costs due to relocating storm drainage inlets and additional paving.

7. **General Cost Estimates**

BA then briefly discussed how much each concept option would cost to implement.

8. **Next Steps – Funding**

LD suggested some ideas in order to fund the project, meaning constructed documentation and then implementation. She suggested that a local entity, such as the city of New Orleans or Broad Community Connections could raise money to complete the construction documentation. She mentioned that Transportation Alternatives Program (TAP), as administered through the Department of Transportation Development (DOTD) could be a source for funding. Community Development Block Grants could also be another funding source.

9. **Final Comments**

Turning movements at major intersections should be studied and assessed. The Regional Planning Commission and the Department of Transportation Development should have a discussion with the state in regards to the major intersection bulb-outs. Another discussion should occur with the Regional Transit Authority (RTA) regarding far side transit relocations. WB mentioned that in regards to the implementation of pedestrian signals, DOTD would want to conduct their own pedestrian analysis which could take an inordinate amount of time. There was mention that Broad Street could be on the list for a road transfer (from state to local). WB stated that most of the elements in concept option one seemed attainable.

10. **Action Items**

Below is a list of tasks and corresponding responsible parties as mentioned at the meeting:

a. Perez
   i. Perez, APC to send out meeting minutes and a copy of the PowerPoint to all PMC members for review. The PMC members will have 21 days from the date of the presentation to review and provide feedback that will shape a preferred concept option.
   ii. After receiving comments and feedback from the PMC and RPC, Perez to prepare a draft of the Stage “0” Feasibility study to RPC for approval and distribution to PMC members.
   iii. Perez, APC to prepare and finalize the Stage “0” Feasibility Study which will be distributed to PMC members.

b. Meetings
   i. Perez, APC to arrange and conduct a meeting with RTA regarding additional feedback for transit stops.
   ii. Perez, APC to meet with DOTD and RPC regarding bulb-out feasibility
   iii. Perez, APC to coordinate with the City Planning Commission regarding the future outlook for the Broad Street Corridor project area.
   iv. Perez, APC to conduct a meeting with the Broad Street Business Community and coordinate with Jeff Schwartz and Lynn Dupont regarding the date for that meeting.
   v. Perez, APC to meet with RPC when the review comments have been received from the PMC members
   vi. Perez, APC to conduct one final meeting with the PMC to acquire feedback and review the draft Stage “0” Feasibility Study

END OF REPORT

Appendix H

Appendix H

RTA Coordination Meeting (April 2, 2015)

Meeting Minutes

Meeting Minutes #8

MEETING DATE	**April 2, 2015**	**SUBJECT**	**Broad Street Corridor Streetscaping**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**April 10, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**Brandon Adams**
MEETING TIME	2:00 pm		

MEETING ROSTER

X	Stefan Marks (SM)	RTA	504-606-6086	Stefan.marks@transdev.com
X	Brendon Matthews (BM)	RTA (Transportation Development)	504-827-8383	brendonmatthews@transdev.com
X	Brandon Adams (BA)	Perez, APC	504-584-5100	badams@e-perez.org

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the New Orleans Regional Transit Authority on this date from 2:00 pm to 3:00 pm. This purpose of the meeting was to receive recommendations from the RTA regarding design concepts presented by Perez APC at the Project Management Committee meeting held on March 23, 2015.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

1. Stefan Marks (SM) gave Brandon Adams (BA) the on and off daily counts of all the bus stops along the corridor. A shelter is usually needed when the getting on daily count exceeds 20. In any one day, the counts usually only vary around 20%. SM said that shelters need to be added at the St. Louis and Orleans southbound stops, and the Orleans northbound stop.

2. The buses currently run every 20 minutes.

3. SM stated that a far side stop at the southbound stop at Tulane Avenue makes sense due to the current limited space of the current one, if the City and the Court are interested in seeing this happen.

4. Brendan Matthews (BM) suggested discussing the protected bike trail with DPW. BM and SM expressed some concern regarding vehicles turning right and having poor vision of the bike riders crossing the street from the protected bike trail.

5. SM stated that if possible, 60’ long bulb-outs at bus stops is needed for the articulated buses.

6. SM said that good examples of sidewalk extension are at Elks Place and Canal Street, and at Canal Street and Corondelet Street.

7. Standard shelter sizes are 23’ and 13’ long. There are ten 13’ long shelters and two 23’ long shelters in the project area. The 23’ long shelters are at Tulane Avenue and Canal Street.

END OF REPORT

Appendix I

Appendix I

City Planning Commission Coordination Meeting (April 2, 2015)

Meeting Minutes

Meeting Minutes #9

MEETING DATE	**April 2, 2015**	**SUBJECT**	**Broad Street Corridor Streetscaping**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**April 10, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**Brandon Adams**
MEETING TIME	4:00 pm		

MEETING ROSTER

X	Paul Cramer (PC)	CPC	504-658-7012	pcramer@nola.gov
X	Larry Massey (LM)	CPC	504-658-7033	lwmassey@nola.gov
X	Brandon Adams (BA)	Perez, APC	504-584-5100	badams@e-perez.org

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the New Orleans City Planning Commission on this date from 4:00 pm to 5:00 pm. This purpose of the meeting was to glean any information from city planning concerning their future outlook for the Broad Street corridor within the project boundaries.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

1. Larry Massey (LM) showed Brandon Adams (BA) an illustration that shows all sites of the Resiliency Plan project. Waggonner and Ball and other firms are working on this project. The entire area of the Broad Street Corridor Streetscaping project is included in one of the areas. LM will send BA a pdf of the illustration along with a description of the Resiliency project goals. There are currently no funds available to implement the plan. The project is basically a way that businesses can protect themselves structurally and economically. LM said that it will be a tool to evaluate commercial corridors.

2. Paul Cramer (PC) said that his outlook for the corridor is a more walkable and pedestrian friendly street with thriving businesses. The Arts and Cultural Overlay should help to establish more music venues and small theaters.

3. The standard colors were discussed regarding the Zoning, Future Land Use and Draft Overlay Maps. BA marked up the drawings indicating the colors to match their maps. The colors can be verified by Boa Nguyen at CPC.

END OF REPORT

Appendix J

Appendix J

Broad Community Connections Design Review Meeting (April 8, 2015)

Meeting Sign-In Sheets

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Broad Street Corridor Streetscaping
US 61 (Tulane Avenue) to Bayou Road
Stage 0 Feasibility Study
RPC Task A-1.15
Broad Community Connections Design Review Meeting, April 8, 2015

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Lisa Amoss	BCC	669-0435	LMAmoss2@gmail.com
JEFF SCHWARTZ	BCC	504-722-3628	JEFF@ BROADCOMMUNITY CONNECTIONS.org
THOM SMITH	WAGGONER & BALL	504.524.5308	thomewbarchitects.com
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Name	Representing	Phone	E-mail
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Keith Twitchell	BCC	430.2258	keithgct@aol.com

Meeting Minutes

Meeting Minutes #10 – Broad Community Connections

MEETING DATE	**April 8, 2015**	**SUBJECT**	**Broad Street Corridor Streetscaping**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**April 10, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**Lynn Dupont**
MEETING TIME	12:00 noon		

Present	Representative	Company	Phone	Email
X	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.org
X	Jeff Schwartz (JS)	Broad Community Connections (BCC)	504-722-3628	jeff@broadcommunityconnections.org
x	Eliot Perkins	BCC/HDLC	504 658-7040	ceperkins@nola.gov
x	Lisa Amoss	BCC	504 669-0435	LMAmoss2@gmail.com
x	Thom Smith	Waggonner & Ball	504 524-5308	thom@wbarchitects.com
X	Ramiro Diaz	Waggonner & Ball	504 524-5308	ramiro@wbarchitects.com
x	Michael Grote	AIMBIC community Dev	334 354-0546	mgrote@alembicconnunity.com
x	Mark Rufo	GCR	504 304-0714	mrufo@gcrincorporated.com
X	Dwight Norton	GCR	504 304-0690	dnorton@gcrincorporated.com
X	Linda Landesberg	BCC	504 609-9670	linda@amosstrading.com
X	Keith Twitchell	BCC	504 430-2258	keithgct@aol.com

MEETING MINUTES

A meeting was held at the Broad Community Connections meeting Room at the Refresh Project within the Whole Foods complex at 300 N. Broad ST. on April 8 from 12:00pm – 1:30pm. The purpose of this meeting was to present collected data, findings and feasible concept plan options to the Broad St. Community Connections Board members for their review and feedback.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

1. **Introductions**

   The meeting commenced with a brief project summary and introductions given by Jeff Schwartz (JS) of Broad Community Connections (BCC), the Main Street Director, and Lynn Dupont (LD) from the RPC. JS expressed his appreciation for the effort to date and briefly described the intent of this meeting concerning business associates in the corridor and their needed input to the design alternatives. LD described the existing projects occurring within or adjacent to the study area and the need for a stage 0 report and possible funding for future implementation. Brandon Adams (BA), then described the differences between the first three designs which are of one concept with the separate bike lane continuing down Broad to Tulane from Bienville with various design elements added. He mentioned that due to the length of the presentation, he would quickly review those items, but if anyone needs more information regarding existing projects or the review of existing conditions, to please feel free to interrupt and ask questions. BA quickly moved from the cost estimates for the first concept to the next concept which involved a protected bike lane on the exterior of the parking area.

2. **Overall Concept Comments**

   a. Site inventory and analysis drawings

      i. RPC provided the site inventory and analysis drawings to BCC, but they were not reviewed at this meeting.

      ii. Concept One, which is the least expensive option, would include basic enhancements, such as sidewalk repair, crosswalk striping at major intersections, the removal of abandoned utility poles and phone booths, the establishment of new curb lines, sidewalk repair and handicap ADA compliant ramps where none exist, and a dedicated bike lane that would begin at Bienville and end at Tulane Ave. if the Broad Laffite Project bike lane receives approval. Otherwise, the bike alternate map should be referenced. The removal of existing trees and shrubs in the medians and the implementation of median trees in a simple, single row pattern would also help to simplify the visual chaos of much of the corridor. Existing Chinese Pistashe trees would be re-located to another location, such as the Bayou Road intersection area, but would be coordinated with Parks and Parkways. Small trees, such as American Hollies would be implemented between the back of curb and the sidewalk under the power lines where appropriate, which would also lessen the visual competing architectural styles as seen throughout the corridor study.

   b. JS discussed the RTA bus stop issues in terms of buses pulling out and back into traffic which blocks a lane of traffic.

      i. RTA buses stopping traffic

         1. Complaints that buses along Broad stop at an angle with their rear in a traffic lane (not completely out of traffic) was a driver education issue
         2. LD noted this is probably so that they can quickly get back into traffic after unloading and loading
         3. Discussion did ensue concerning how traffic throughput would be affected by this practice by the buses should a road diet occur resulting in one less lane, leaving Broad with one through lane.

      ii. Bus stop locations

         1. BA noted from the previous meeting that Stefan Marks (SM) mentioned that historically, bus stops in New Orleans are placed on the near side of intersections, which also increases pedestrian safety (due to pedestrians not needing to cross street to board the bus) and that RTA would follow the recommendation of DPW, which didn't wish to deviate from historical practice. However, LD stated that RTA (SM) would not be opposed to attempting to locate a far-side bus stop on the far side of Tulane by the courthouse, which would take interaction with the Court, RTA and

DPW, but would be on the non-state owned section of Broad, so it wouldn't involve DOTD.

c. Vehicular, bicycle and pedestrian traffic count, crash analysis

i. LD mentioned that the Average daily counts of vehicular traffic reveal that there approximately 33,791 vehicles (on average) that travel through the corridor daily (from Orleans to Tulane Ave.)[6], and that the counts somewhat increase south of Orleans Ave. LD noted that the Federal Highway Road Diet Guidelines suggest that roads with over 20,000 ADT and at the most 25,000 ADT should not be considered as good candidates for a road diet. The report also notes that peak hour counts should be below 750 Vehicles per hour. The ITS traffic survey requested by RPC shows peak hour counts from 854 to 1763. LD noted that this data is a substantial barrier to gaining approval for a road diet from DOTD. Discussion ensued with Dwight Norton (DN) of GCR questioning the number of lanes FHWA was using for the recommendations.

1. LD explained that a follow-up meeting with DOTD would take place the following day at RPC which will cover ADT, crash analysis and turning movement concerns in regard to the existing concepts. Keith Twitchell (KT) of BCC stated (paraphrase) that he was uncomfortable supporting any design that did not include a completely protected and separated bike lane due to the traffic and speed on the corridor. He did not want to feel responsible should someone be killed biking on Broad St. LD showed and briefly discussed the crash analysis maps. Pedestrian/bike and auto crashes for fatal and severe injuries in the corridor were noted as significant and the summary tables of crashes were reviewed. Intersections are of most concern (Bayou Rd., Ursuline, Orleans and Tulane were noted as the worst for fatal crashes).

d. Turning issues:

i. The lack of a designated left pocket turning lane at Tulane Ave. was noted as a traffic and safety issue by the BCC members when vehicles are traveling south along Broad St. (from Bayou Rd. towards Tulane).

ii. It was noted that the small U-turn pocket just before Tulane might be eliminated if survey should show it not well used. Closing this median split would allow more turning lane pocket area.

iii. Perhaps eliminating the small central median island on Tulane for those left turns should also be examined.

iv. Turning issues on Broad at Canal were also noted with similar traffic concerns. DN noted that handling some of the turning traffic at Canal might also relieve turning traffic onto Tulane. (noting the Galvez St. Connection between the two roads which acts as a major destination for the new hospitals.

e. Speed issues:

i. DN noted that speeds along Broad increase above the 35MPH limit moving north beyond Orleans. KT said he had experienced the opposite and that vehicles fly off the bridge crossing the interstate and speed until the existing lane conversion down to 2 lanes in each direction. Either way, speed control issues were noted and it was suggested that signage, signalization and perhaps other traffic calming techniques (bump-outs, bike lanes, narrower lanes, visible crossing striping, etc.) needed to be pursued.

ii. At this point, KT noted that he thought bulb-outs do slow traffic, but they do interfere with traffic flow, and perhaps do more harm than good (paraphrase).
The entire BCC group seemed in favor of the mid-block bump-outs.

iii. Bollard installation along high speed corners was also discussed. LD noted that DOTD is generally not in favor of bollards where trucks are prevalent in the corridor.

f. The entire group agreed that using patterned concrete in some design (not necessarily the crisscross pattern of concept 3 would help designate major intersections and make drivers aware of potential increased pedestrian crossings.

i. BA noted that RTA requested major intersection treatment at Esplanade (a major transit connection) as well as at Canal and Tulane as the group discussed.

ii. Minor treatment of the crossings at the Bayou Rd., Bienville and Orleans intersections was also noted as a need.

iii. Pedestrian countdown signals – particularly a leading pedestrian signal for the red light at Tulane Ave., contrasting, high visibility crosswalks, and programmed pedestrian signalization could also enhance pedestrian safety.

g. Water Management was noted by KT as a major consideration for any area such as bump-outs (particularly mid-block since larger trees can be incorporated.

i. The BCC group was interested in the use of permeable concrete, and BA noted that in his discussions with DPW, the lack of maintenance in terms of vacuuming permeable pavement has not been as relevant as previously thought – lack of prospective maintenance is not a significant detriment.

ii. LD noted that there has been a follow-up test in City Park at the TE funded bioswale parking lot that demonstrated that completely non-maintained permeable paving still performed admirably (at least 50% greater than solid pavement).

h. DN discussed the Resilience Plan that GCR is currently contracted to work on through the City Planning Commission. The same Broad corridor from Bayou Rd. to Tulane has been designated as a Resilience Corridor. Their contract has to do with determining a template to assess community corridors for inclusion in a resilience effort. Using the current Broad Street Corridor Streetscaping

[6] According to the Federal Highway Administration Safety Program, road diets (reducing the lanes of traffic to incorporate site elements, such as bike lanes) for average daily traffic counts of 20,000 or less are advised. Cities, such as Seattle, WA have implemented road diets on streets with average daily traffic counts as high as 25,000.

data may be of use to help promote this corridor as a primary project for funding through HMPG or the Rockefeller Foundation.

i. Land Use/Zoning Points:

Matt Rufo (MR) questioned the land use changes in the corridor. BA noted that he had visited with City Planning (Paul Cramer and Larry Massey, Jr.) where the overlay Arts and Entertainment District was noted in an attempt to create a more welcoming corridor for small entertainment based businesses. JS noted that he had been part of the CZO team for the corridor. KT noted that he hoped that the zoning changes would help the corridor become more of a destination than a 'drive through' area. MR wished to promote the idea that the Lafitte Greenway will most likely bring in a large influx or small business interest as would increased transit movements from Tulane (the hospital complex) and Esplanade (a rapidly developing area). JS noted that there is too much underutilized property in the corridor, which ensued in a parking discussion noting that most current businesses desire increased parking (DN, JS, MR), but if these lots are used for parking, it may not fit the desired character of the corridor and may not be needed with increased transit and bike access.

3. Bike Connectivity

a. BA showed the slide of the bike connectivity map prepared by Regional Planning Commission (RPC). This map was developed with input, in part, from RPC bike planners Dan Jatres and Karen Parsons along with Jeff Roesel, who is the Deputy Director and Transportation Planner at the RPC. The map was prepared for the purpose of developing an alternate on-street (shared lane for most portions) bike route for bikers looking for a less trafficked route from the Lafitte Greenway to the Hospital Complex. Several participants (KT, Ramiro Diaz and several others) noted that Dorgenois St. (which is tree lined and shady, cut currently in poor road condition) would be the preferred route to connect from the Lafitte Greenway to Tulane Ave. should a biker wish to avoid Broad St.

4. General Cost Estimates

BA then briefly discussed how much each concept option would cost to implement. It was noted that the bike connectivity overall plan had a cost of $50,000.

5. Next Steps – Funding

LD suggested some ideas in order to fund the project, meaning constructed documentation and then implementation. She suggested that a local entity, such as the city of New Orleans or Broad Community Connections could raise money to complete the construction documentation. She mentioned that Transportation Alternatives Program (TAP), as administered through the Department of Transportation Development (DOTD) could be a source for funding. Community Development Block Grants could also be another funding source. The group discussed the Resiliency Project and possible funding sources.

6. Final Comments

The next PAC meeting was noted as April 22nd at 1:00pm at the RPC and all were invited.

7. Action Items

Below is a list of tasks and corresponding responsible parties as mentioned at the meeting:

i. RPC to send out meeting minutes to Perez and JS for review
ii. BCC comments will be incorporated into the stage 0 report by Perez.
iii. RPC to provide the printed and edited draft stage 0 report for the April 22nd meeting.

Appendix K

Appendix K

DOTD Design Review Meeting (April 9, 2015)

Meeting Sign-In Sheets

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Broad Street Corridor Streetscaping
US 61 (Tulane Avenue) to Bayou Road
Stage 0 Feasibility Study
RPC Task A-1.15
~~**Broad Community Connections Design Review Meeting, April 8, 2013**~~

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Ennis Johnson	LADOTD	504 437-3103	Ennis.Johnson@la.gov
WALTER BROOKS	RPC	483-8525	WBROOKS@NORPC.ORG
Lynn Dupont	RPC	483-8514	ldupont@norpc.org
Alison Maulhardt	RPC	483-8533	amaulhardt@norpc.org

Meeting Minutes

Meeting Minutes #11 – LA DOTD

MEETING DATE	**April 9, 2015**	**SUBJECT**	**Broad Street Corridor Streetscaping**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**April 10, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**Alison Maulhardt**
MEETING TIME	2:00 pm		

Present	Representative	Company	Phone	Email
X	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.org
	Walter Brooks (WB)	RPC	504-483-8525	wbrooks@norpc.org
	Jeff Roesel (JR)	RPC	504-483-8528	jroesel@norpc.org
	Alison Maulhardt (AM)	RPC		amaulhardt@norpc.org
	Scott Boyle (SB)	LA DOTD		scott.boyle@la.gov
	Innis Johnson (IJ)	LA DOTD	504-437-3103	ennis.johnson@la.gov
	Carmelo Gutierrez (CG)	ITS	504-888-9399	cgutierrez@itsregional.com
	Brandon Adams (BA)	Perez APC	504-584-5100	badams@perez.com

MEETING MINUTES

A meeting was held at the Regional Planning Commission on April 9 from 2:00 pm to 4:30 pm. The purpose of this meeting was to present concept plan options for the Broad Street Corridor developed by Perez APC to DOTD representatives for their review and feedback.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

1. The meeting began with a discussion on bike connectivity for the region and concerns about safety if a bike lane was recommended on Broad St from Canal to Tulane where the corridor carries its heaviest traffic.

2. WB expressed safety concerns for the right turn at Broad St and Tulane Ave, particularly heavy vehicle turning and the safety for a bike lane. He referred to CG who concurred that this aspect of the study needed further study.

3. WB asked how the streetscape elements and pedestrian safety improvements proposed for the corridor and the design elements would be affected without a bike lane or if the corridor implemented a road diet in a later phase of development, particularly the bulb-out improvement.

4. BA responded that the bulb-out design in the parking lane would not be affected by the removal of the bike lane design, and that a road diet could be implemented in a later phase of the development.

5. IJ expressed drainage concerns with the bulb-out design element. He cited the picture that was circulated via email to the PAC prior to the March 23 PAC meeting. He used the example of Claiborne Ave as a project where the bulb-out design cause drainage issues and explained how this could make that particular design element more expensive than anticipated. IJ suggested that these design elements be tried on a city street first and then if they are successful implement on a state highway.

6. IJ also expressed concerns about maintenance of streetscape design elements such as landscaping, and water management elements such as porous paving. SB agreed and added that there has been precedence with beautification projects not being maintained.

7. IJ proposed the road transfer program as a possible solution.

8. WB asked BA to discuss Option one design elements, the most affordable and achievable option.

9. BA responded by asking whether DOTD would be willing to remove a traffic lane without implementing a bike lane to make the corridor look less imposing to pedestrians. SB explained that DOTD would not be willing to remove a traffic lane for this reason.

10. CG explained how removing a traffic lane would negatively affect the level of service of the corridor, which is already borderline without imposing a road diet.

11. SB mentioned that he had driven the corridor at peak hours. He observed that the PM peak is heavier than the AM peak, but that the level of service based on his observations were decent. He also noticed that the left lane was used more heavily than the right lane because the left lane is a through lane.

12. BA mentioned how the articulated Buses affect the flow of traffic

13. WB inquired about trucks counts and CG responded that he did not look at mode split for the corridor.

14. JR mentioned that the articulated buses are an important factor to consider when evaluating the level of service of the corridor with a road diet.

15. WB reiterated that he wanted Brandon to explain option one.

16. SB noted that the bike lane from Orleans to Bienville was approved and that we should refer to the DOTD comments for that project and this one referring to the type and size of trees. LD emailed Josh Hartley during the meeting to get a copy of the comments in question so that they could be incorporated into our recommended design.

17. SB also noted that DOTD does not permit high visibility crosswalks at signalized intersections. He continued that high visibility crosswalks at non-signalized intersections are allowed. He explained further that intersections with existing crosswalks could be refurbished as is.

18. BA inquired about colored paving such as stamped concrete in crosswalks. IJ gave the example of CCC where colored stamped concrete was used successfully. He noted that stamped concrete was preferable to concrete pavers for maintenance reasons. SB said that he was open to colored concrete and gave the example of Airline Highway and I12 at LA 3185.

19. SB noted that DOTD was liable to justify any deviations from standard improvements when there is an crash. He gave the example of the roundabout and high visibility crosswalk on Mardi Gras Blvd. SB suggested that we recommend design elements that we can consistently deliver.

20. LD brought up a protected turn lane at Broad St and Tulane Ave. WB expressed interest in looking exploring the left turn at Tulane further. SB responded that if traffic analysis showed that this was the lesser of two evils then it could be justified. He continued that a crash analysis and capacity would need to be studied further to see the impact on the opposing through movement of traffic. LD referred us to the crash maps that Tricia Keffer made for the study.

21. BA asked about the feasibility of pedestrian count downs at the cross walks. SB responded that restricting right turn on red would be the first step and added that LA State law dictates that cars yield to pedestrian traffic. CG recommended that improved signage be used at intersections to remind cars of pedestrian right of way.

22. At this point in the meeting, we moved to a discussion of the protected bike lane concept that is being championed by bike advocates for the corridor.

23. There was confusion on how this might change the curb line. BA explained that this did not change the curb line.

24. Concern was also expressed about how this design might negatively impact drainage. It was agreed that further information is needed about the slope and grade of the road to evaluate how this design would affect drainage. WB gave the example of Claiborne Ave where they made slits in the concrete for drainage.

25. Concern was expressed about how this design would reduce visibility

26. WB expressed concern about bike fatalities. LD gave the example of Baronne St. and expressed concern about liability for bike crashes with the recommendation of a bike lane where it is not safe. Discussion ensued about possible truck and bike conflict on the route.

27. JR explained that bike lanes are more prone to debris blockage for drainage.

28. WB expressed concern about flooding along the corridor and gave the example of the complaints in the French quarter when improvements were made before the super bowl.

29. IJ expressed concern about slope issues with the protected bike.

30. WB explained that funding for the next round of TAP funding is not until July 2016 and the there is plenty of time to do further study about the feasibility of the bike lane design and a crash analysis done by the DOTD.

31. At this point in the meeting, the discussion turned to bike connectivity in the region.

32. WB expressed that we need to look at emergency access plan for the region when considering a route.

33. It was also noted that a local road might have less conflicts for a bike lane; however, TAP funding can only be used on a state route.

34. The route needs to be justified by counts and due diligence to protect against lawsuits.

35. Galvez was discussed as a possible alternative route.

36. JR warned that recommending a route would suggest we have the funds to implement.

37. Discussion ensued about FHWA recommended counts for a road diet and it was agreed that more information and studies are needed for a recommendation, or if a bike lane on Broad St. will be allowed.

38. WB Suggested that the recommended designs for the report include the site elements that have consensus and that further study can be made on the bike lane to be implemented in a later phase.

END OF REPORT

Appendix L

Appendix L

Project Management Committee – Meeting Three (April 22, 2015)

Meeting Agenda

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP
Date: 4-22-15

Agenda Items

1. Summary of Project & Introductions
2. Project Overview
3. Preferred Alternative Option
    - Concept Three - The Preferred Alternative
        - Feedback from Stakeholders
        - List of Improvements
        - Overall Improvement Plan
        - Bike Connectivity Plan
        - Cost Estimate
4. Additional Items / Questions

Meeting Sign-In Sheets

Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Meeting – Date – Time 4/22/2015
PMC 3 Broad St
Presentation of Draft Report

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Regional Planning Commission
Jefferson, Orleans, Plaquemines,
St. Bernard, St. Tammany & Tangipahoa Parishes

Meeting – Date – Time

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PowerPoint

Broad Street Corridor Streetscaping

US 61 (Tulane Avenue) to Bayou Road

Task A-1.15; FY-15 UPWP

Table of Contents

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- Preferred Alternative Option
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Project Overview

- Project Status:
  - Received Input from Stakeholders
  - Developed Preferred Alternative Option
  - Developed Stage "0" Feasibility Report Draft
- We are here today:
  - Present Draft Stage "0" Feasibility Report
  - Present Preferred Alternative Option
  - Receive Input from Stakeholders
    - Report
    - Preferred Alternative Option

Preferred Alternative Option Feedback

- Improvements in Response to **Regional Transit Authority** Comments:
  - The incorporation of a 13'-0" long bus shelter along N. Broad Street at the Orleans Ave. and St. Louis southbound stops and Orleans northbound stop due to the "getting on" capacities.
  - The incorporation of a 23'-0" long bus shelter to replace the bus shelter along S. Broad Street at Tulane (southbound). The bus shelter is to be re-located from between Tulane Ave. and Baudin Street to the south side of Tulane Ave. due to pedestrian and vehicular space constraints.
  - The incorporation of bulb-outs at bus stop intersections. Bulb-out lengths to accommodate 60'-0" long buses will be evaluated for further study.
  - The protected bike lane option was not preferred due to the existing space constraints of the right-of way, whereby implementation of a protected bike lane would further decrease transit stop areas and create conflicts between pedestrians and transit users with cyclists.

Preferred Alternative Option Feedback

- Improvements in Response to **City Planning Commission** Comments:
  - The implementation of bulb-outs at bus stop intersections and decorative crosswalks at these locations further enhance the vision of the corridor as per the CPC, which is to create a more walk-able and pedestrian friendly street.

Preferred Alternative Option - Feedback

- Improvements in Response to **Broad Street Community Connections Business Community** Comments:
  - The implementation of pedestrian crossing improvements at Tulane, Canal, Orleans, and Esplanade.
  - Patterned concrete center treatments at Tulane Ave, Canal Street, and Esplanade Ave.
  - Bulb-outs with patterned concrete crosswalks at Bienville, Bayou Road and Orleans Ave.
  - The implementation of inner-block bulb-outs, which is considered as an option for further evaluation.
  - Permeable paving implementation at bulb-out locations.

Preferred Alternative Option - Feedback

- Improvements in Response to **Parks and Parkways** Comments:
  - The implementation of inner-block bulb-outs, which is considered as an option for further evaluation.
  - The implementation of a uniform planting scheme. A tree will be selected upon further coordination with Parks and Parkways for the median area.
  - The coordination with Parks and Parkways in regards to the Broad and Lafitte Street project tree plantings.
  - The coordination with Parks and Parkways regarding a tree for the inner block bulb-out areas. An alternate tree will also be coordinated with Parks and Parkways if further investigation reveals that the inner-block bulb-outs are not feasible.

Preferred Alternative Option - Feedback

- Improvements in Response to **DOTD** Comments:
  - Basic improvements inclusive of the following:
    - The straightening of utility poles and street lights
    - The removal of abandoned utility poles and phone booths
    - The installation of new six inch barrier curbs where excessive roll over or unnecessary curb cuts occur.
    - The replacement of existing damaged street curbs where required.
  - The implementation of improved pedestrian signage at select intersections
  - The exclusion of a road diet and bike lane until further evaluation due to high traffic counts, but the inclusion of a bike alternative route.

Preferred Alternative Option

- List of Improvements:
  - Straighten existing utility poles and street lights.
  - Remove abandoned utility poles and phone booths
  - Install new 6" barrier curbs where excessive roll over or unnecessary curb cuts occur. Replace existing damaged street curbs where required.
  - Install new ADA curb ramps at street corners where needed.
  - Install new concrete sidewalks for ADA accessibility and connectivity to ADA curb ramps where appropriate.

Preferred Alternative Option

- List of Improvements Cont.:
  - Install bulb-outs at bus stop intersections (as listed below) with new ADA curb ramps. Bulb-outs are to receive decorative permeable paving.
    - Tulane Ave.
    - Banks Street
    - Canal Street
    - Bienville Ave.
    - St. Louis St.
    - Orleans Ave.
    - Dumaine Street
    - Ursulines Ave.
    - Esplanade Ave
  - Install colored concrete paving at the following three major signalized intersections (entire street areas of the intersections) with the inclusion of colored concrete crosswalks:
    - Tulane Avenue
    - Canal Street
    - Esplanade Ave.

Preferred Alternative Option

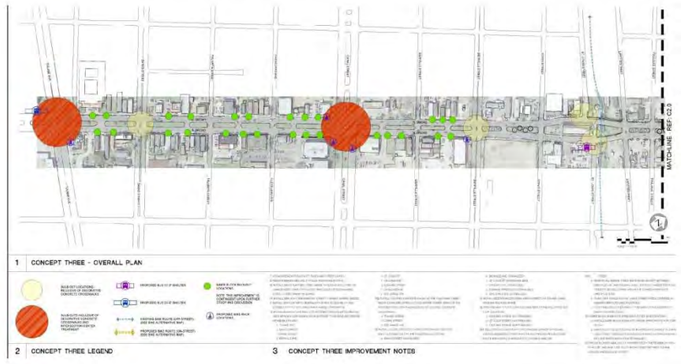
- List of Improvements Cont.
  - Install color concrete paving crosswalks per DOTD specifications only at the following locations:
    - Banks Street (Signalized)
    - Bienville Ave. (Signalized)
    - St. Louis St. (Non-signalized)
    - Orleans Ave. (Signalized)
    - Dumaine Street (Non-signalized)
    - Ursulines Ave. (Signalized)
  - Install improved pedestrian signage at Tulane, Canal, Orleans and Esplanade.
  - Provide new 13-foot long bus shelters at the following bus stop locations:
    - Orleans Avenue (Southbound)
    - St. Louis Street (Northbound)
    - Orleans Avenue (Northbound)

Preferred Alternative Option

- List of Improvements Cont.
  - Relocate the bus stop to the far-side corner of Tulane Avenue and Broad Street for the southbound Broad Street route and install a new 23-foot long bus shelter.
  - Trees
    - Remove all median trees and shrubs (except between Bienville Ave. and Orleans Ave.). Existing Chinese Pistache trees to be re-located within the corridor per DOTD specifications.
    - Plant new single row of large street trees centered in medians per DOTD specifications.
    - Plant Medjool Date Palms at the ends of the medians at major intersections.
  - Inner block bulb-outs (Pending Further Investigation)
    - Install inner block bulb-outs where appropriate for every block.
    - Inner block bulb-outs will be planted with medium to large size street trees such as Ginkgo or Bosque Elm and will include water mitigation techniques.
  - Provide crash analysis to further study the feasibility of a road diet and bike lane.

Preferred Alternative Option

- Overall Improvement Plan

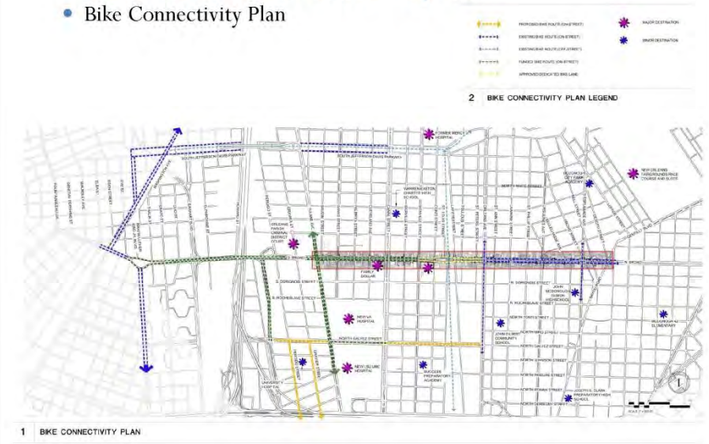


Preferred Alternative Option

- Overall Improvement Plan

Preferred Alternative Option

- Bike Connectivity Plan



Preferred Alternative Option

- Cost Estimate

Basic Items

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Straighten Utility Poles	75	EA		$2,500.00	$187,500.00
Remove Abandoned Utility Poles	5	EA		$1,200.00	$6,000.00
Remove Abandoned Phone Poles and Booths	5	EA		$750.00	$3,750.00
Establish new curb lines where needed	275	LF		$30.00	$8,250.00
Repair existing curbs	1500	LF		$15.00	$22,500.00
Install new sidewalks	12000	SF		$10.00	$120,000.00
New HC Ramps where needed	25	EA		$900.00	$22,500.00
Total					$370,500.00

Hardscape and Furniture Items

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Install bulb-outs at Bus Stop Intersections	9	EA		$175,000.00	$1,575,000.00
Pedestrian crossing improvements (T, C, O & E)	4	EA		$80,000.00	$320,000.00
New Bus Stop Furniture	10	EA		$2,500.00	$25,000.00
Bike Racks	8	EA		$900.00	$7,200.00
Inner Block Bulb-outs	58	EA		$2,200.00	$127,600.00
Color Concrete Paving at Major Intersections (3)	31650	SF		$30.00	$949,500.00
Colored Concrete Crosswalks (6 Intersections)	14980	SF		$30.00	$449,400.00
Total					$3,453,700.00

Preferred Alternative Option

- Cost Estimate Cont.

Bus Shelters

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Install new 13-long bus shelters (3 locations)	3	EA		$20,000.00	$60,000.00
Relocate Bus Stop at Tulane and install 23' Shelter		LS		$40,000.00	$40,000.00
Total					$100,000.00

Landscaping

Description	Qty. of Ea.	Unit	No.	Unit Cost	Cost
Remove existing trees and shrubs in median (62)		LS		$25,000.00	$25,000.00
Relocate Existing Pistachio trees	12	EA		$1,000.00	$12,000.00
New Median trees	130	EA		$650.00	$84,500.00
Major Street Trees	65	EA		$650.00	$42,250.00
Medjool Palm Trees (Tulane, Canal and Esplanade)	12	EA		$8,000.00	$96,000.00
Miscellaneous Landscaping		LS		$12,000.00	$12,000.00
Total					$271,750.00

Subtotal	$4,195,950.00
10% Contingency	$419,595.00
Total	***$4,615,545.00***

Discussion and Questions

Meeting Minutes

Meeting Minutes #12

MEETING DATE	**April 22, 2015**	**SUBJECT**	**Broad Street Corridor Streetscaping**
PROJECT NAME	**Broad Street Corridor Streetscaping**	**MINUTES DATE ISSUED**	**April 24, 2015**
PROJECT NUMBER	**01-14-1054**	**MINUTES BY**	**M. Johanna Leibe**
MEETING TIME	1:00 PM		

MEETING ROSTER

Present	Representative	Company	Phone	Email
X	Walter Brooks (WB)	RPC	504-483-8525	wbrooks@norpc.org
X	Lynn Dupont (LD)	RPC	504-463-8514	ldupont@norpc.org
X	Alison Maulhardt (AM)	RPC	504-463-8514	amaulhardt@norpc.org
X	Dan Jatres (DJ)	RPC	504-463-8505	djatres@norpc.org
X	Hailey Bowen (HB)	Parks and Parkways	504-658-3226	hdbowen@nola.gov
X	Brandon Adams (BA)	Perez, APC	504-584-5100	badams@e-perez.org
X	Jeff Schwartz (JS)	Broad Community Connections (BCC)	504-722-3628	jeff@broadcommunityconnections.org
X	Nicolette Jones (NJ)	City Planning Commission (CPC)	504-658-7025	nipjones@nola.gov
X	Josh Hartley (JH)	DPW	504-658-8042	jwhartley@nola.gov
X	Ennis Johnson (EJ)	LADOTD	504-437-3103	Ennis.johnson@la.gov
X	Johanna Leibe (JL)	Perez, APC	504-231-6062	jleibe@e-perez.com
X	Keith Twitchell (KT)	Broad Community Connections (BCC)	504-267-4866	keithqct@aol.com
X	Maggie Woodruff (MW)	RPC	504-483-8502	mwoodruff@norpc.com
X	Prisca T. Weems (MW)	Storm water Manager	504-483-8502	ptweems@nola.gov

***Include additional names and contact information above in the minutes of the meeting when not included in the agenda.**

MEETING MINUTES

A meeting was held at the Regional Planning Commission on this date from 1:00pm – 2:30pm. This purpose of the meeting was to present a draft of the stage "0" feasibility report in conjunction with the preferred concept option alternative to the Project Management Committee (PMC) for their review and feedback.

Project: RPC Broad Street Corridor Streetscaping
RPC Task: A-1.15; FY-15 UPWP

11. Introductions

The meeting commenced with a brief project summary given by Lynn Dupont (LD). After which all meeting attendees introduced themselves.

12. Project Overview

Mr. Brandon Adams (BA) explained that the Perez team has completed a draft stage "0" feasibility study in conjunction with a preferred alternative option (which was derived from project management committee (PMC) input). Therefore, the purpose of the meeting was to present the preferred alternative option and the draft stage "0" feasibility report for PMC input and feedback. BA also explained that concepts one, two, and three were re-named to concept one a, concept one b, and concept one c respectively. Concept four was renamed to concept two and the preferred alternative concept option was named Concept Three - The Preferred Alternative. BA then stated that after the last PMC meeting, individual meetings were conducted with the New Orleans City Planning Commission (CPC), the Regional Transit Authority (RTA), the Broad Street Community Connections Business Community (BCC), and the Department of Transportation Development (DOTD). In addition, feedback was acquired from Parks and Parkways. Based upon the feedback received, the preferred alternative option was developed.

13. Preferred Alternative Option

BA then explained feedback that influenced preferred alternative improvements. He began with comments that were received from RTA.

A. RTA Comments

He stated that according to the RTA, if "getting on" capacities exceed eight people, then there was justification for a bus shelter at stops where shelters did not exist. The re-location of the bus stop between Baudin Street and Tulane Avenue (southbound) to the south side of Tulane (adjacent to the courthouse) was suggested by RTA due to space constraints, but also due to the stop being on the same side of the street as the major destination (the courthouse). BA also stated that RTA favored bulb-outs because a bus would block the entire lane when stopped instead of half of the lane as exists currently. BA explained that buses that block half of the lane create traffic hazards due to the tendency of some drivers to "straddle" the lane line in an effort to go around the buses. Below is the list of improvements that BA discussed regarding RTA comments:

- The incorporation of a 13'-0" long bus shelter along N. Broad Street at the Orleans Ave. and St. Louis southbound stops and Orleans northbound stop due to the "getting on" capacities.
- The incorporation of a 23'-0" long bus shelter to replace the bus shelter along S. Broad Street at Tulane Avenue (southbound). The bus shelter is to be re-located from between Tulane Avenue and Baudin Street to the south side of Tulane Ave. due to pedestrian and vehicular space constraints. (However, Walter Brooks (WB) stated that the far side bus stop is a safety concern that DOTD will evaluate when assessing the feasibility of a road diet).
- The incorporation of bulb-outs at bus stop intersections. Bulb-out lengths to accommodate 60'-0" long buses will be evaluated for further study.
- The protected bike lane option was not preferred due to the existing space constraints of the right-of way, whereby implementation of a protected bike lane would further decrease transit stop areas and create conflicts between pedestrians and transit users with cyclists.

a. Protected Bike Lane

The last item BA discussed in response to RTA comments was the non-preference of the protected bike lane element. BA stated that not only did the protected bike lane element decrease space for transit users, but also, created longer site distance lines for turning vehicles, which could present a safety hazard. Mr. Walter Brooks (WB) explained that while there are general road diet guidelines (which Josh Hartely and Jeff Schwartz referenced); Broad Street was specific case that required further safety and traffic analysis study by DOTD and investigation due to the high traffic counts, high incidence of crashes, and other variables such as speed that could affect safety. In addition, the City of New Orleans and the State of Louisiana would assume liability if there was an crash. WB stated that he put in a request to the Department of Transportation Development (DOTD) for a safety evaluation and stated that he wanted to organize a conference for engineers in Louisiana to collaborate with engineers from other states that have more developed complete street infrastructure. Jeff Schwartz (JS) mentioned that the Federal Highway Administration (FHWA) guidelines are for a road diet that changes from four travel lanes to two travel lanes. He further stated that since Broad Street has six travel lanes that would be reduced to four - the FHWA guidelines should not apply. He then mentioned that the Cesar Chavez road (in San Francisco, California) had traffic counts of 53,000 (much higher than the Broad Street Corridor, which is approx. 33,000) and that a road diet was implemented whereby there was a 30% reduction in traffic conflicts. WB re-iterated that Broad Street was a special case (different from Cesar Chavez), with many variables, such as lane widths, median widths and traffic signals that all had to be taken into consideration for a safety evaluation. JS stated that while a complete streets approach (balancing pedestrian, bicycle, and vehicular traffic) was important to the BCC, further study to ensure that a bike lane and a road diet would be safe was important as well. WB further mentioned that a state highway located in a city was also another variable that had to be assessed in regards to the implementation of a road diet and a bike lane. Nicolette Jones (NJ) stated that Charlotte, NC conducted a study regarding road diet criteria that could be a resource for this project. WB agreed and stated that he would like to learn more about the Charlotte study. Keith Twitchell (KT) stated that there were many cyclists who break the law, which could contribute to safety concerns. NJ stated that cyclists were the most vulnerable and that putting the blame on cyclists for crashs was unfair. In sum, WB stated that more data (such as researching other state policies regarding road diets and designated bike lanes) is needed, in addition to a safety evaluation / traffic interaction analysis before a decision could be made regarding the construction of road diet and a designated bike lane.

B. CPC Comments

BA first mentioned that the Broad Street Corridor falls within two overlay districts contained in the draft comprehensive zoning ordinance. These districts include the Arts and Cultural and Enhancement Corridor Overlays. The Arts and Cultural Overlay allows for additional live entertainment opportunities, while the Enhancement Corridor overlay requires a design review for most new development that occur within the corridor. BA then mentioned the resiliency plan, whereby the Broad Street Corridor project area is included as part of. . He stated that the CPC's vision was that the Broad Street Corridor be safe and more pedestrian friendly. Below is a list of improvements that BA discussed regarding CPC comments:

- The implementation of bulb-outs at bus stop intersections and decorative crosswalks at these locations further enhance the vision of the corridor as per the CPC, which is to create a more walk-able and pedestrian friendly street.

C. BCC Comments

BA continued with describing preferred alternative option improvements based upon BCC comments:

- The implementation of pedestrian crossing improvements at Tulane, Canal, Orleans, and Esplanade.
- Patterned concrete center treatments at Tulane Ave, Canal Street, and Esplanade Ave.
- Bulb-outs with patterned concrete crosswalks at Bienville, Bayou Road and Orleans Ave.
- The implementation of inner-block bulb-outs, which is considered as an option for further evaluation.
- Permeable paving implementation at bulb-out locations.

D. Parks and Parkways Comments

BA continued with describing preferred alternative option improvements based upon Parks and Parkways comments:

- The implementation of inner-block bulb-outs, which is considered as an option for further evaluation.
- The implementation of a uniform planting scheme. A tree will be selected upon further coordination with Parks and Parkways for the median area.
- The coordination with Parks and Parkways in regards to the Broad and Lafitte Street project tree plantings.
- The coordination with Parks and Parkways regarding a tree for the inner block bulb-out areas. An alternate tree will also be coordinated with Parks and Parkways if further investigation reveals that the inner-block bulb-outs are not feasible.

E. Department of Transportation Development (DOTD) Comments

BA continued with describing preferred alternative option improvements based upon DOTD comments:

- Basic improvements inclusive of the following:
  - The straightening of utility poles and street lights
  - The removal of abandoned utility poles and phone booths
  - The installation of new six inch barrier curbs where excessive roll over or unnecessary curb cuts occur.
  - The replacement of existing damaged street curbs where required.
- The implementation of improved pedestrian signage at select intersections

- The exclusion of a road diet and bike lane until further evaluation due to high traffic counts and crash data, but the inclusion of a bike connectivity route.
    - Mr. Walter Brooks stated that the Department of Transportation Development headquarters in Baton Rouge needs to develop further guidance for an agreed upon process regarding road diet evaluation on state routes. In addition, Ms. Lynn Dupont stated that the exclusion of the road diet as a preferred option does not mean that with further study a road diet cannot be implemented in the future.

F. List of Improvements

BA presented the list of preferred alternative option improvements, followed with a preferred alternative option plan of the Broad Street Corridor and a bike connectivity routing map. The preferred alternative plan included major intersection enhancements, inclusive of colored and stamped concrete crosswalks, bulb-outs at each corner, permeable paving at the bulb-out locations, and a decorative colored concrete center treatment at three major intersections. Seven other locations would receive major intersection enhancements, but would not include the decorative colored concrete center treatment. Three new 13'-0" long bus shelters and a 23'-0" long bus shelter (which would be a re-location of the existing transit stop located on S. Broad Street southbound at Tulane), was also included and locations shown on the plan. Inner block bulb-out locations were also shown in plan throughout the corridor, except for the area between Orleans Ave. and Bienville Street. The bike connectivity planrouting map showed a proposed route that would begin at Galvez at Orleans Avenue and continue to Canal Street, where it would tie into a funded bike lane at Canal and Galvez. Proposed bike rack locations were shown on the plan at major destinations along the corridor.

G. Costs

BA presented general cost estimates for the preferred alternative option. He stated that there would be Medjool Palm trees at the three major intersections. A discussion regarding the preferred alternative option ensued.

H. Overall Comments – Preferred Alterative Enhancements

JS stated that he really liked the inner-block bulb-outs. In addition, the inner-block bulb-outs would also reduce the heat island affect, which was of importance to Prisca Weems (PW). HB mentioned that Parks and Parkways was only responsible for the maintenance of trees between the sidewalk and the back of curb, and was responsible for grass cutting and trees in the median. BA stated that the contractor would be responsible for the trees and grass (warranty) for the first year and maintenance (3 months). The property owner would be responsible for cutting any grass between the back of curb and the sidewalk once the maintenance period ended. BA further stated that the tree selected would be an urban tolerant tree. It was also mentioned that Entergy had not been part of the discussion regarding ROW trees (under the power lines) and that discussion and collaboration with them should take place. HB stated that a contract had not been awarded for the Broad and Lafitte project yet and that perhaps bulb-outs could be incorporated within that project area. She further stated that trees were included in the median between St. Louis Street and Lafitte Street as part of the Jean Lafitte Greenway project. She stated that the planting plans were two separate plans (one for ground cover and one for trees), which is why the trees were missed. BA and JL stated that they will search for the tree plan for that project and incorporate those trees on the plan accordingly. JL mentioned that the draft report stated that the bike connectivity route would occur along Dorignois Street, but that was a mistake and that the proposed route was as mentioned earlier (along Galvez). BA mentioned that the existing Pistashe trees would be removed and re-located (grouped) at another location, such as around the Bayou Road intersection to mark the end of the project area. As another water mitigation method, besides the permeable pavers, perhaps the Perez team could show a separate cost for the permeable paver in the parking lane. It was stated that City Park conducted a study assessing water quantities regarding their permeable paving parking lot (which had not been vacuumed) and had been constructed years ago. The study revealed that water quantities were still 50 percent less than if regular concrete pavement had been used, thus indicating that the paving was still permeable without vacuuming out silts. PW stated that there was money to be acquired from various sources in regards to storm water management and she sees this project as a good fit with state guidelines. Ennis Johnson (EJ) stated that the standard for state highways was either asphalt or concrete. He stated that he was not sure if a permeable paver would be allowed, but perhaps it could, since it would be located in the parking lane. NJ stated that she felt that the decorative center treatment at the three major intersections was a waste of money. She further stated that the road diet and designated bike lane would slow traffic down and be safer than the decorative center intersection treatments. JS re-iterated that he was in favor of the road diet and designated bike lane, but that we would have to go through the process, as mentioned earlier, regarding data assessment and safety studies. JS further stated that the decorative center intersection treatments were a lower priority. EJ and WB also stated a traffic study and further study regarding the slope of the road and drainage was needed in order make a final decision regarding the bulb-outs and the inner block bulb-outs.

I. Overall Comments – Preferred Alterative Costs

Walter Brooks (WB) stated that if DOTD could do the street design, design costs could be reduced. He stated that it was good to have the district on board to help in regards to capital monies. WB and LD stated that they could prepare a submittal to acquire 1 to 1.5 million from Transportation Alternative Program (TAP) funding. EJ thought that this was feasible. However, in order to receive TAP funding, a 20 percent local match is needed. WB stated that Community Development Block Grants (CDBG) could be used for the 20 percent match. He stated that RTA could talk with the city regarding the utility poles. DOTD could possibly cover curbing, sidewalk repairs and ADA ramp costs and RTA could cover costs regarding the new transit shelters. Again, WB stated that a traffic study/safety analysis is needed before

a decision could be made regarding the road diet and designated bike lane. PW stated that National Disaster Resilience (NDR) funding designees will be determined by this July. JS asked when decisions could be made regarding water management (pavers in the parking lane, bulb-outs, inner block bulb-outs and permeable pavers) from DOTD. EJ stated that the DOTD hydraulic department would be responsible for making those decisions. PW stated that there were hazard mitigation funds (from Hurricanes Rita and Katrina). In sum, WB stated that the City of New Orleans should make a priority list regarding projects that were most important to get built and focus financial efforts (match funding) on those projects.

END OF REPORT

Appendix M

Appendix M

Stage 0 Revised Preliminary Scope and Budget Checklist

STAGE 0
Preliminary Scope and Budget Checklist

MPO Area: New Orleans, Louisiana

A. Project Background

District: Planning District Four Parish: Orleans

Route: Broad Street (between Tulane Avenue and Bayou Road)

Project Category (Safety, Capacity, etc.): Dedicated Program

Date Study Completed: June 30, 2015

Describe the existing facility:

The corridor consists of two bike lanes (one in either direction) and four vehicular travel lanes (two in either direction) between Bayou Road and Orleans Ave. The corridor also consists of six vehicular travel lanes (three in either direction) between Orleans Ave. and Tulane Ave. Median plantings are sporadic in design and placement. Plantings between the back of the curb and property lines are minimal. The average set-back distance between the back of curb and building is approx. 15'-0" +/- throughout the corridor.

Functional classification: Principal Arterial (per the New Orleans Highway functional Classification Map)

Number and width of lanes: (6) and (4) as described above. The average width of lanes is approx. 11'-0" wide

Shoulder width and type: Approximately 8'-0" wide paved lane Mode:

Access control: Controlled ADT: 33,791 Average Posted Speed: 35 MPH

Describe any existing pedestrian facilities (ADA compliance should be considered for all improvements that include pedestrian facilities):

The sidewalks, both ADA compliant and non ADA compliant exist throughout the study area. Sidewalks in need of repair also exist throughout the study area.

Describe the adjacent land use:

Properties along the corridor project area are zoned either commercial, residential, light industrial, or neighborhood business. See the existing zoning map in chapter two of this report.

Who is the sponsor of the study? The Regional Planning Commission

List study team members: Broad Community Connections, Regional Transit Authority, New Orleans Parks and Parkways, New Orleans Department of Public Works, LA DOTD District 02, City Council District members of A, B, and D

Will this project be adding miles to the state highway system (new alignment, new facility)? If yes, has a transfer of ownership been initiated with the appropriate entity? No

Are there recent, current or near future planning studies or projects in the vicinity? Yes

If yes, please describe the relationship of this project to those studies/projects.

- Orleans District Municipal Court Complex Improvements (adjacent to the project site)
- Tulane Ave. Improvements (within the project site)
- N. Broad and Lafitte Streetscape (within the project site)
- Lafitte Greenway (within the project site)
- Bayou Road (adjacent to the project site)

More information regarding how these projects affected the proposed corridor design alternative options are described more fully in chapter two of this report.

Provide a brief chronology of these planning study activities:

Construction Documentation Completion dates is as follows:

- N. Broad and Lafitte Streetscape - 6-7-2011
- Bayou Road - 1-4-2013
- Lafitte Greenway - 10-14-2013
- Tulane Avenue Streetscape – pending construction
- Orleans District Municipal Court Complex - pending completion

B. Purpose and Need

State the Purpose (reason for proposing the project) and Need (problem or issue)/Corridor Vision and a brief scope of the project. Also, identify any additional goals and objectives for the project.

Purpose and Need:

As stated in the Regional Planning Commission scope of work for this project, the primary purpose for this study was "to support the continued revitalization of Broad Street as a vibrant commercial and mixed-use corridor of regional significance" (The Regional Planning Commission, 2014). The Broad Street Corridor can currently be described as a conflicting environment between heavy vehicular, pedestrian, transit, and bicycle use, resulting in many crashes throughout the corridor which is discussed further in chapter three. The need for this study was important because vehicular, pedestrian, transit, and bicycle conflicts have the potential of increasing due to the construction of two nearby major medical facilities. The need for this study was also important because of the uniformity and coordination needed between the various projects occurring within or adjacent to the corridor, which is discussed in more detail in chapter two of this report.

Corridor Vision and Objectives:

The objectives of the project were to address current and future concerns of the corridor. Along with addressing current concerns of the corridor, such as much needed corridor streetscape beautification enhancements in addition to addressing bicycle, transit, and pedestrian needs and conflicts; future needs and concerns were also evaluated. It was anticipated that two new medical facilities that are currently under construction near the focus study area could incur significant impacts regarding the increase in vehicular, pedestrian, transit, and bicycle traffic. Therefore, it was an important objective to consider these potential impacts when developing feasible design alternatives. It was also an important objective to develop design alternatives that would maintain the small neighborhood commercial character of the corridor, thus aligning with the future lane use and zoning intent.

Scope:

This study involved several components, as described in part, in the RPC scope of work for this project. Understanding the constraints of the corridor was the first step undertaken before enhancements could be developed. The following is a list of tasks that were performed for this report, which is described more fully throughout the report in their respective sections:

- Data Acquisition and field investigation for the development of site inventory and assessment plans. Plans include a comprehensive layout of existing utilities that occur throughout the corridor
- Collection, assessment and coordination with existing projects that occur adjacent or within the corridor study area
- Collection and assessment of existing zoning, draft zoning, future land use, and draft overlay maps for a quarter mile buffer surrounding the corridor
- Collection and assessment of traffic, pedestrian, bicycle, and transit user daily counts
- Collection and assessment of pedestrian, vehicular and bicycle crash data

- Collection and assessment of bicycle connectivity and important nodes for a quarter mile surrounding the corridor
- Coordination meetings with the Regional Transit Authority, Department of Transportation Development, New Orleans City Planning, the Zulu Social Aid and Pleasure Club, and the Broad Street Community Connection Business Community
- Three meetings with the Project Management Committee (PMC) team

After these tasks were performed, five concept alternatives were presented to the PMC team for their feedback and input for the development of a preferred alternative option. The first three concept alternatives build upon each other, with concept one being minimal improvements. The fourth include a protected bike lane concept alternative. The fifth includes a bike connectivity planrouting option. The sixth concept alternative was then created in response to feedback from the first five concept alternative options.

C. Agency Coordination

Provide a brief synopsis of coordination with federal, tribal, state and local environmental, regulatory and resource agencies.
Coordination with the following agencies regarding proposed improvements has occurred with the New Orleans City Planning Commission, Louisiana Department of Transportation Development (LADOTD), Regional Planning Commission (RPC), New Orleans Department of Public Works (DPW), Regional Transit Authority (RTA), New Orleans Sewerage and Water Board, Entergy, New Orleans Parks and Parkways, Broad Street Community Connections and the Zulu Social Aid and Pleasure Club

What transportation agencies were included in the agency coordination effort?
As mentioned above, the Regional Transit Authority and the Louisiana Department of Transportation and Development were involved with the planning efforts involved with this report.

Describe the level of participation of other agencies and how the coordination effort was implemented.
A project management committee (PMC) was formed in coordination with the RPC, the City Planning Commission, and Broad Community Connections. The project consisted of (3) workshop meetings with PMC members to acquire and implement feedback needed to produce a viable enhancement option that would respond to their needs while addressing safety concerns. The enhancement option also includes a future connectivity guide in response to the large adjacent medical facilities currently being constructed near the project site. Coordination efforts are described in more detail in chapters two, and four of this report.

C. Agency Coordination (Continued)

What steps will need to be taken with each agency during NEPA scoping?
The Broad Street Community Connections would be a good source to determine businesses along the corridor that may have an environmental impact in the area, such as gas stations and brown fields, in order to begin the first level of analysis called categorical exclusion (U.S. Environmental Protection Agency, 2012).

D. Public Coordination

Provide a synopsis of the coordination effort with the public and stakeholders; include specific timelines, meeting details, agendas, sign-in sheets, etc. (if applicable).
See chapters two and four of this report for the coordination efforts that occurred throughout the project timeline. See appendices for meeting agendas, Sign-in sheets, minutes, and PowerPoint presentations.

E. Range of Alternatives – Evaluation and Screening

Give a description of the project concept for each alternative studied.

What are the major design features of the proposed facility (attach aerial photo with concept layout, if applicable).
There are six proposed concept alternatives with the sixth being the preferred alternative as developed from project management committee feedback. Detailed descriptions along with associated plans can be found in chapter four of this report.

Will design exceptions be required? N/A

What impact would this project have on freight movements?
While freight movements have not been studied by technical representatives, it is anticipated that freight movements will slow throughout the corridor due to proposed enhancements in an effort to respond to pedestrian and bicycle safety.

Does this project cross or is it near a railroad crossing? This project crosses the Canal Streetcar line.

Was the DOTD's "Complete Streets" policy taken into consideration? Yes

If so, describe how. Include a brief explanation of why the policy was determined to be feasible or not feasible.

This project takes into account DOTD's "complete streets" policy by assessing existing vehicular, bicycle, pedestrian, and transit user patterns and accommodating these users through thoughtful design in an effort to increase safety and enhance the area (create better spaces for communities" to live, play, work and shop") throughout the corridor for everyone (National Complete Streets Coalition, 2015).

How are Context Sensitive Solutions being incorporated into the project?:
The core principle of Context Sensitive Solutions (CSS) is "transportation planning that reflects community input and takes into consideration the impacts on both natural and human environments, which promotes partnerships that lead to 'balanced' decision making" (U.S. Department of Transportation Federal Highway Administration, 2015). Meetings with the PMC along with local business leaders and the Zulu Social Aid and Pleasure club gave us the opportunity to acquire feedback that was utilized in the design process. Environmental factors were also considered during the design process, such as solutions for storm water runoff and the implementation of trees where appropriate to reduce the heat island effect and enhance the natural environment.

Was the DOTD's "Access Management" policy taken into consideration? If so, describe how.
According to DOTD's "Access Management" policy, the "obligation to ensure protection of the transportation infrastructure, economy of maintenance, preservation of effective drainage, safe and efficient movement of vehicles and pedestrians, and full accountability of the transportation investments by the citizens of Louisiana upon the DOTD" were taken into consideration (DOTD: Louisiana Department of Transportation and Development, 2013). There are many code violations that occur throughout the corridor, (such as excessive curb-cuts and parking lots on sidewalks) that create modal conflicts. Working with DOTD, design solutions were developed that enhances safe vehicular and pedestrian traffic while accommodating drainage infrastructure.

Were any safety analyses performed? If so describe results.
No safety analyses were performed at this stage, as this is a design development / conceptual phase deliverable.

Are there any abnormal crash locations or overrepresented crashes within the project limits?
There have been many vehicular crashes that have occurred throughout the corridor. Fatal and Serious injury crashes have also occurred in several areas. Crash data with corresponding maps can be seen in Chapter 3 of this report.

What future traffic analyses are anticipated?
It is anticipated that traffic bisecting the corridor may increase due to the new medical facilities (VA Hospital and the LSUAMC) that are currently under construction near-by.

E. Range of Alternatives – Evaluation and Screening (Continued)

Will fiber optics be required? If so, are there existing lines to tie into? No

Are there any future ITS/traffic considerations? No

Is a Transportation Management Plan (TMP) required? No

- Is this project considered significant as defined in EDSM No. VI.1.1.4? No. Broad Street is not an interstate, but rather a principal arterial road.
- If yes, describe the mobility and safety analysis and assessment that was conducted as required in the development of a TMP. N/A
- What further data will need to be collected to address the content and scope of the TMP in the design stage/phase of this project? N/A

Was Construction Transportation Management/Property Access taken into consideration? No

Were alternative construction methods considered to mitigate work zone impacts? No

Describe screening criteria used to compare alternatives and from what agency the criteria were defined.
Alternatives were evaluated from the PMC members and a preferred alternative developed based upon feedback from PMC members. Critical criteria considered when developing alternatives were pedestrian, bicycle, and vehicular safety along with visual enhancements of the corridor.

Give an explanation for any alternative that was eliminated based on the screening criteria.
The alternative for the protected bike lane was eliminated based upon feedback from the RPC and LADOTD due to pedestrian safety concerns. A road diet was also eliminated until a thorough traffic and safety analysis can be performed.

Which alternatives should be brought forward into NEPA and why?
None of the alternative should be brought forward to NEPA.

Did the public, stakeholders and agencies have an opportunity to comment during the alternative screening process?
The stakeholders and agencies had the opportunity to comment based upon PMC meeting two and three. Business leaders were also given the opportunity to comment where design alternatives were presented (see Appendix K of this report).

Describe any unresolved issues with the public, stakeholders and/or agencies.

F. Planning Assumptions and Analytical Methods

What is the forecast year used in the study? No

What method was used for forecasting traffic volumes? None

Are the planning assumptions and the corridor vision/purpose and need statement consistent with the long range transportation plan? Yes

What future year policy and/or data assumptions were used in the transportation planning process as they are related to land use, economic development, transportation costs and network expansion?

Refer to Chapter Three of this report for more information on future land use, and draft zoning information that was assessed during the development of design alternatives for this project.

H. Cost Estimate

Provide a cost estimate for each feasible alternative:

Please refer to Chapter Four for a detailed descriptive of each design alternative along with a general construction cost estimate respectively.

Phase	Total Estimated Cost	Funding Source (STP>200K, STP<200K, CMAQ, DEMO, DOTD Priority Program)	Match Provided By (City, Parish, State, Other…)	TIP Fiscal Year
Environmental (document, mitigation, etc.)				
Engineering Design				
R/W Acquisition (C of A if applicable)				
Utility Relocations				
Construction				
Construction Engineering & Inspection Services				
TOTAL COST				

ATTACH ANY ADDITIONAL DOCUMENTATION

Disposition (circle one): (1) Advance to Stage 1 (2) Hold for Reconsideration (3) Shelve

Appendix N

Appendix N

Stage 0 Environmental Checklist

Route: Broad Street (Between Tulane Avenue and Bayou Road Parish: Orleans

C.S.: N/A Begin Log mile: N/A End Log mile: N/A

ADJACENT LAND USE: Commercial, Light Industrial, Residential and Neighborhood Business

Any property owned by a Native American Tribe?
(Y or N or Unknown) If so, which Tribe? Unknown

Any property enrolled into the Wetland Reserve Program?
(Y or N or Unknown) If so, give the location: No

Are there any other known wetlands in the area?
(Y or N) If so, give the location: No

Community Elements: Is the project impacting or adjacent to any (if the answer is yes, list names and locations):
(Y or N) Cemeteries: No
(Y or N) Churches: Yes – Full Gospel Christian Church (138 N. Broad Street)
(Y or N) Schools: Yes - Samuel J. Peters Jr. High school (459-499 S. Broad Street) and Crescent City School of Gaming and Bartending (209 N. Broad) and New Orleans Providing Literacy to All Youth (139 S. Broad St.)

(Y or N) Public Facilities (i.e., fire station, library, etc.): No
(Y or N) Community water well/supply: No

Section 4(f) issue: Is the project impacting or adjacent to any (if the answer is yes, list names and locations):
(Y or N) Public recreation areas: No
(Y or N) Public parks: Yes – Lafitte Greenway (located between Lafitte and St. Louis Streets) (Y or N) Wildlife Refuges: No
(Y or N) Historic Sites: No

Is the project impacting, or adjacent to, a property listed on the National Register of Historic Places? (Y or N) **Is the project within a historic district or a national landmark district?** (Y or N) If the answer is yes to either question, list names and locations below:
Yes - Criminal Courts Building - located at 2700 Tulane Ave. This building is on the national register of historic places. Part of the project area falls within a historic district (N. Broad between Orleans and Bayou Road). The historic district is the Esplanade Ridge District.

Do <u>you know</u> of any threatened or endangered species in the area? (Y or N)
If so, list species and location. : No

Does the project impact or adjacent to a stream protected by the Louisiana Scenic Rivers Act? (Y or N) If yes, name the stream. No

Are there any Significant Trees as defined by EDSM I.1.1.21 within proposed ROW? (Y or N) If so, where? There are existing live oak trees within the public right of way within the project area. The live oak trees are located as follows: (5)along N. Broad (west side) between Canal and Iberville Streets; (2) along N. Broad (west side) between Bienville and Conti Streets; (1) on the corner of N. Broad and St. Philip Streets (east side); (1) along N. Broad (east side) between Ursulines and Gov. Nicholls Streets; (1) along N. Broad (east side) between Gov. Nicholls and Barracks Streets; and (2) along N. Broad between Orchid and Esplanade Streets. All of the live oak trees have been trimmed considerably due to overhead power lines (especially the live oak located between Ursulines and Gov. Nicholls Streets), which have compromised the integrity (form and health) of the trees.

What year was the existing bridge built? N/A

Are any waterways impacted by the project considered navigable? (Y or N) If unknown, state so, list the waterways: No

Hazardous Material: Have you checked the following DEQ and EPA databases for potential problems? (If the answer is yes, list names and locations.) No
(Y or N) Leaking Underground Storage Tanks
(Y or N) CERCLIS
(Y or N) ERNS
(Y or N) Enforcement and Compliance History

Underground Storage Tanks (UST): Are there any Gasoline Stations or other facilities that may have UST on or adjacent to the project? (Y or N)
If so, give the name and location: There are two gas stations located within the corridor project area – they are the Discount Value (617 N. Broad) and Exxon (2701 Canal St.) .

Any chemical plants, refineries or landfills adjacent to the project? (Y or N) **Any large manufacturing facilities adjacent to the project?** (Y or N) **Dry Cleaners?** (Y or N) If yes to any, give names and locations: No. No. Yes. Atlas Cleaning and Laundry Services - 1125 N. Broad Street

Oil/Gas wells: Have you checked DNR database for registered oil and gas wells? (Y or N) List the type and location of wells being impacted by the project. There are no wells located within the project area.

Are there any possible residential or commercial relocations/displacements? (Y or N)
How many?

Do you know of any sensitive community or cultural issues related to the project? (Y or N)
If so, explain:
There are no sensitive community or cultural issues, however, we have been working with the Broad Street Community Connections and the Zulu Social Aid and Pleasure Club regarding proposed enhancements.

Is the project area population minority or low income? (Y or N)

What type of detour/closures could be used on the job?
When necessary, partial street closure down to one lane with flaggers.

Did you notice anything of environmental concern during your site/windshield survey of the area? If so, explain below.
No.

<u>Perez, APC – Brandon Adams, ASLA, PLA</u>
Point of Contact

<u>504-584-5100</u>
Phone Number

<u>June 30, 2015</u>
Date

General Explanation:

To adequately consider projects in Stage 0, some consideration must be given to the human and natural environment which will be impacted by the project. The Environmental Checklist was designed knowing that some environmental issues may surface later in the process. This checklist was designed to obtain basic information, which is readily accessible by reviewing public databases and by visiting the site. It is recognized that some information may be more accessible than other information. Some items on the checklist may be more important than others depending on the type of project. It is recommended that the individual completing the checklist do their best to answer the questions accurately. Feel free to comment or write any explanatory comments at the end of the checklist.

The Databases:

To assist in gathering public information, the previous sheet includes web addresses for some of the databases that need to be consulted to complete the checklist. As of February 2011, these addresses were accurate.

Note that you will not have access to the location of any threatened or endangered (T&E) species. The web address lists only the threatened or endangered species in Louisiana by Parish. It will generally describe their habitat and other information. If you know of any species in the project area, please state so, but you will not be able to confirm it yourself. If you feel this may be an issue, please contact the Environmental Section. We have biologist on staff who can confirm the presence of a species.

Why is this information important?

Land Use? Indicator of biological issues such as T&E species or wetlands.

Tribal Land Ownership? Tells us whether coordination with tribal nations will be required.

WRP properties? Farmland that is converted back into wetlands. The Federal government has a permanent easement which cannot be expropriated by the State. Program is operated through the Natural Resources Conservation Service (formerly the Soil Conservation Service).

Community Elements? DOTD would like to limit adverse impacts to communities. Also, public facilities may be costly to relocate.

Section 4(f) issues? USDOT agencies are required by law to avoid certain properties, unless a prudent or feasible alternative is not available.

Historic Properties? Tells us if we have a Section 106 issue on the project. (Section 106 of the National Historic Preservation Act) See http://www.achp.gov/work106.html for more details.

Scenic Streams? Scenic streams require a permit and may require restricted construction activities.

Significant Trees? Need coordination and can be important to community.

Age of Bridge? Section 106 may apply. Bridges over 50 years old are evaluated to determine if they are eligible for the National Register of Historic Places.

Navigability? If navigable, will require an assessment of present and future navigation needs and US Coast Guard permit.

Hazardous Material? Don't want to purchase property if contaminated. Also, a safety issue for construction workers if right-of-way is contaminated.

Oil and Gas Wells? Expensive if project hits a well.

Relocations? Important to community. Real Estate costs can be substantial depending on location of project. Can result in organized opposition to a project.

Sensitive Issues? Identification of sensitive issues early greatly assists project team in designing public involvement plan.

Minority/Low Income Populations? Executive Order requires Federal Agencies to identify and address disproportionately high and adverse human health and environmental effects on minority or low income populations. (Often referred to as Environmental Justice)

Detours? The detour route may have as many or more impacts. Should be looked at with project. May be unacceptable to the public.

Louisiana Governor's Office of Indian Affairs:
http://www.indianaffairs.com/tribes.htm

Louisiana Wetlands Reserve Program:
http://www.nrcs.usda.gov/programs/wrp/states/la.html

Community Water Well/Supply
http://sonris.com/default.htm

Louisiana Department of Wildlife and Fisheries – Wildlife Refuges
http://www.wlf.louisiana.gov/refuges
http://www.fws.gov/refuges/profiles/ByState.cfm?state=LA
http://www.fws.gov/refuges/refugelocatormaps/Louisiana.html

U.S. Fish & Wildlife Service – National Wetlands Inventory:
http://www.fws.gov/wetlands/

Louisiana State Historic Sites:
http://www.crt.state.la.us/parks/ihistoricsiteslisting.aspx

National Register of Historic Places (Louisiana):
http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome
http://www.nationalregisterofhistoricplaces.com/la/state.html

National Historic Landmarks Program:
http://www.nps.gov/history/nhl/

Threatened and Endangered Species Databases:
http://www.wlf.louisiana.gov/wildlife/louisiana-natural-heritage-program

Louisiana Scenic Rivers:
http://www.wlf.louisiana.gov/wildlife/scenic-rivers
http://media.wlf.state.la.us/experience/scenicrivers/louisiananaturalandscenicriversdescriptions/
http://www.legis.state.la.us/lss/lss.asp?doc=104995

Significant Tree Policy (EDSM I.1.1.21)
http://notes1/ppmemos.nsf
(Live Oak, Red Oak, White Oak, Magnolia or Cypress, aesthetically important, 18" or greater in diameter at breast height and has form that separates it from surrounding or that which may be considered historic.)

CERCLIS (Superfund Sites):
http://www.epa.gov/superfund/sites/cursites/
http://www.epa.gov/enviro/html/cerclis/cerclis_query.html

ERNS - Emergency Response Notification System - Database of oil and hazardous substances spill reports:
http://www.epa.gov/region4/r4data/erns/index.htm

Enforcement & Compliance History (ECHO)
http://www.epa-echo.gov/echo/

DEQ – Underground Storage Tank Program Information:
http://www.deq.louisiana.gov/portal/tabid/2674/Default.aspx
Leaking Underground Storage Tanks:
http://www.deq.state.la.us/portal/tabid/79/Default.aspx

SONRIS – Oil and Gas Well Information & Water Well Information
http://sonris.com/default.htm

Environmental Justice (minority & low income)
http://www.fhwa.dot.gov/environment/ej2000.htm

Demographics
http://www.census.gov/

FHWA's Environmental Website
http://www.fhwa.dot.gov/environment/index.htm

Additional Databases Checked

Other Comments:

Appendix O

Appendix O
Advisory Committee Meeting Agenda

Main Street Resiliency Plan

Advisory Committee Meeting

3/31/15

AGENDA

1. Introductions Bob Rivers, Dir. City Planning rdrivers@nola.gov 658-7018
   Dwight Norris, GCR
2. Project Overview
   a. Goals
   b. Schedule now - Sept.
   c. Community Engagement 2 mtgs in each corridor + 3 cross-corridor mtgs
3. Defining Resilience
4. Current Resilience Efforts
5. Existing Main Street Plans, Projects and Resources – NORA, NOBA Commercial Corridor Market Value Analysis
6. Initial Assessment Corridor
7. Next Steps

Main Street Resiliency Plan

Purpose

The Main Street Resiliency Project Advisory Committee (PAC) will provide advice and recommendations to the City Planning Commission concerning policy, program development, and other matters of significance related to interdisciplinary, community-based resiliency project.

The Project Advisory Committee is created for the purpose of working with the City Planning Commission and shall limit its activities to advising on matters that directly concern the stated program. The specific purposes of the Committee may include the following responsibilities:

- Assist with relevant departmental procedures
- Advise on existing projects with potential overlaps
- Provide technical assistance
- Facilitate inter-agency communication

Goals

1. Develop a shared definition of resiliency of commercial corridors in New Orleans.
2. Create a measurable and actionable methodology for assessing resiliency of commercial corridors or Main Streets.
3. Apply methodology to 6 corridors (5 designated Main Streets), in the city and develop individualized recommendations for:
   a. Broad Street (from Tulane Avenue to Bayou Road)
   b. O. C. Haley Boulevard (From Phillip Street to Caliope Street)
   c. St. Claude Avenue (From Elysian Fields Avenue to Press Street)
   d. Newton Street (from Teche Street to Behrman Highway)
   e. St. Bernard Avenue (from N. Claiborne Avenue to Broad Street)
   f. Alcee Fortier Boulevard (from Chef Menteur Highway to Michoud Lagoon)
4. Develop how-to guides for businesses for improving resiliency as applied to business operations and for businesses/property-owners for improving building resiliency

Technical Advisors

Organization	Representative
New Orleans Regional Transit Authority	Justin Augustine, III
FEMA	Thomas "Mike" Womak
GOHSEP	
Historic Districts Landmarks Commission	Elliot Perkins
Entergy	
Cox Communications	
Louisiana Economic Development	

Main Street Resiliency Plan

CITY OF NEW ORLEANS

Schedule

#	TASK	March				April					May				June				July					August				September				
	week	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	5
1	**Project Management**																															
2	**Community Participation**																															
2.1	Steering/Advisory Committee																															
2.2	Corridor planning workshops																															
2.3	Business resiliency workshops																															
3	**Background Research**																															
3.1	Existing plans/literature Review																															
3.2	Define resilient cooridor																															
4	**Corridor Assessments**																															
4.1	Develop standardized assessment																															
4.2	Data collection																															
4.2.	Business conditions																															
4.3	Building prototypes																															
5	**Market analysis**																															
5.1	Identify reinvestment opportunities																															
5.2	Identify specific market niche opportunities																															
5.3	Market network analysis																															
5.4	Identify any potential branding opportunities																															
6	**Analysis and Plan Recommendations**																															
6.1	Infrastructure improvements by corridor																															
6.2	Adaptive reuse/infill strategies																															
6.3	Asmnt of financial/livability implementation																															
6.4	Technical guide to harden structure																															
6.5	Business resiliency model																															
7	**Final Plan and Presentation**																															
7.1	Draft Resiliency Plan																															
7.2	Final Resiliency Plan																															
7.3	Final Presentations																															
8	**Develop How-To/Best Practices Guides**																															
8.1	Develop How-to building hardening																															
8.2	Develop How-to buisiness resiliency																															
8.3	Develop companion website																															

Main Street Resiliency Plan

CITY OF NEW ORLEANS

recover
bounce back
positive adaptability

Defining Resiliency

Master Plan:
RESILIENCE (Chapter 12)

- Capacity to anticipate significant multi-hazard threats, to reduce overall the community's vulnerability to hazard events, and to respond to and recover from specific hazard events when they occur
- Capacity to cope with and recover from present-day risks
- Capacity to adapt to changing conditions, including uncertain, unknown, or unpredictable risks
drawn from the Community and Regional Resilience Institute (CARRI)

HUD

"A resilient community is able to resist and rapidly recover from disasters or other shocks with minimal outside assistance. Reducing current and future risk is essential to the long-term vitality, economic well-being, and security of all communities"

"The ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions."

- Demonstrate Unmet Recovery Needs
- Demonstrate Capacity
- Follow CDBR-DR funding objectives.

Rockefeller Foundation: City Resilience Framework

"Capacity of cities to function so that the people living and working in the cities – particularly the poor and vulnerable – survive and thrive no matter what stresses or shocks they encounter"

- 12 indicators in 4 categories as fundamental attributes
- Indicators are intentionally qualitative, but potential to connect to measurable data sources

100 Resilient Cities

RAND

"It's the ability to mitigate and withstand the stress of disaster, recover in a way that restores normal functioning, and apply lessons learned from past responses to better withstand future incidents."

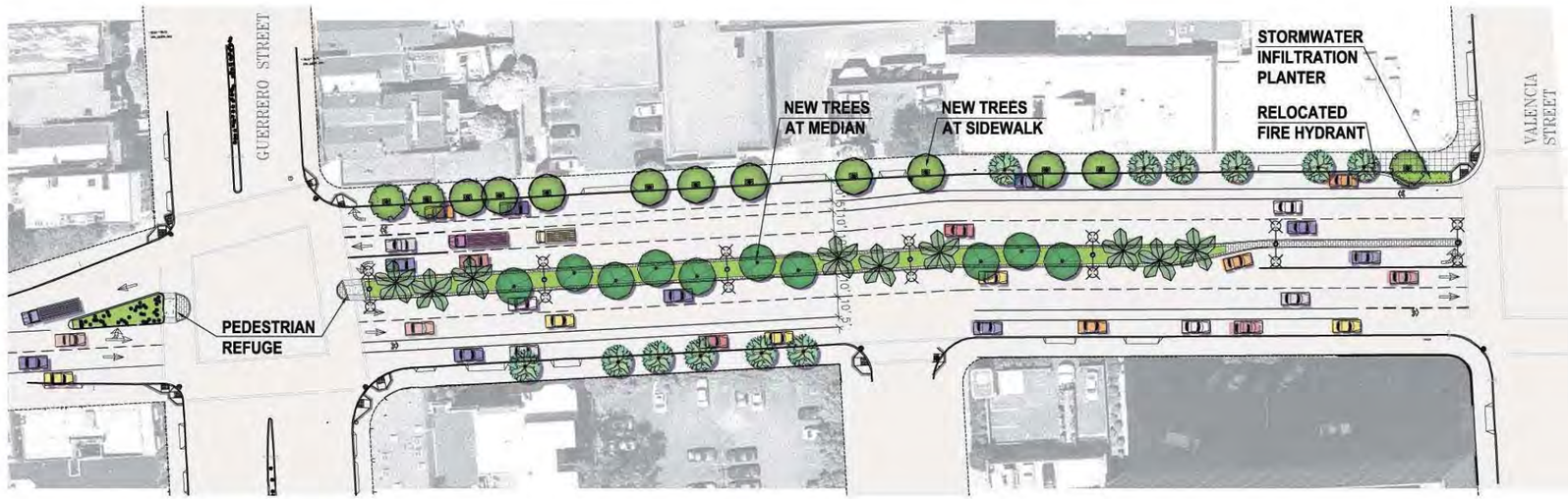
resiliency framework

shocks
stresses (slow boil)

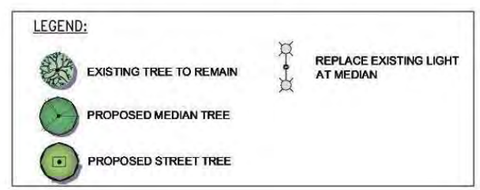
Appendix P

Appendix P

Cesar Chavez Streetscape Improvement Concept Plans



GUERRERO STREET TO VALENCIA STREET



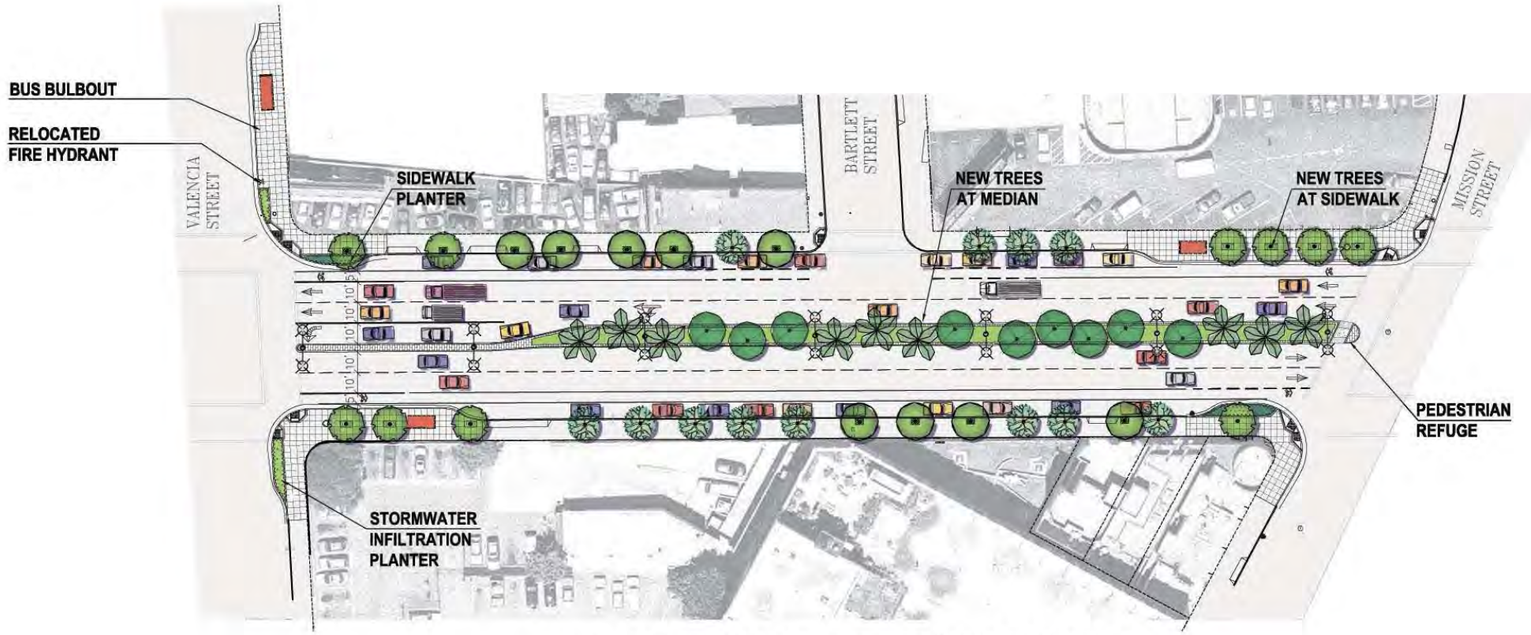
SAN FRANCISCO PLANNING DEPARTMENT

SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS

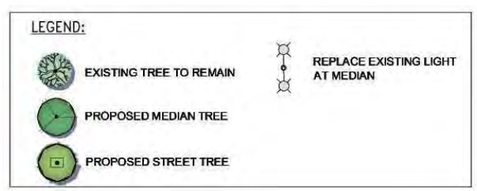
CESAR CHAVEZ STREETSCAPE IMPROVEMENTS - CONCEPTUAL PLAN

SAN FRANCISCO GREAT STREETS PROGRAM

SFDPW Landscape Architecture
MAY 2011



VALENCIA STREET TO MISSION STREET



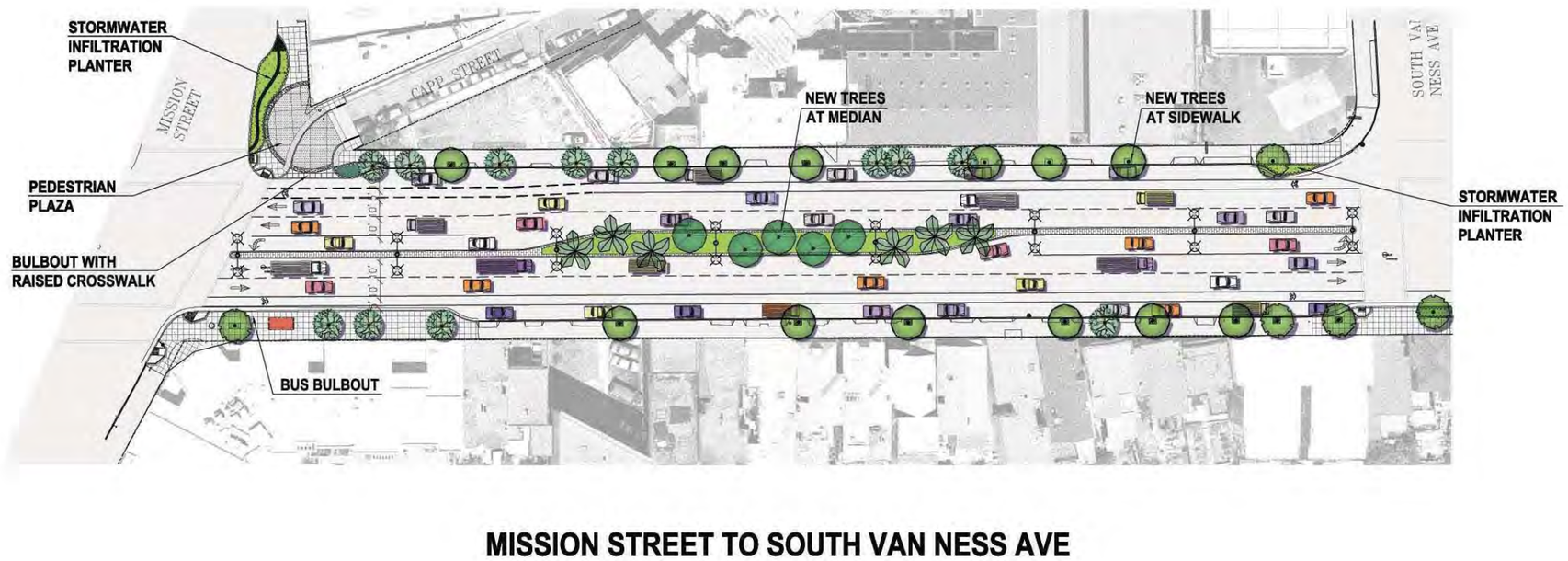
SAN FRANCISCO PLANNING DEPARTMENT

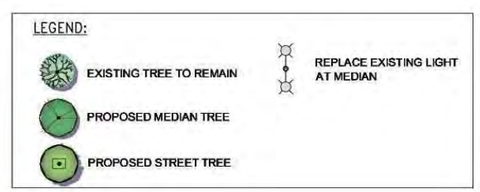
SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS

CESAR CHAVEZ STREETSCAPE IMPROVEMENTS - CONCEPTUAL PLAN

SAN FRANCISCO GREAT STREETS PROGRAM

SFDPW Landscape Architecture
MAY 2011





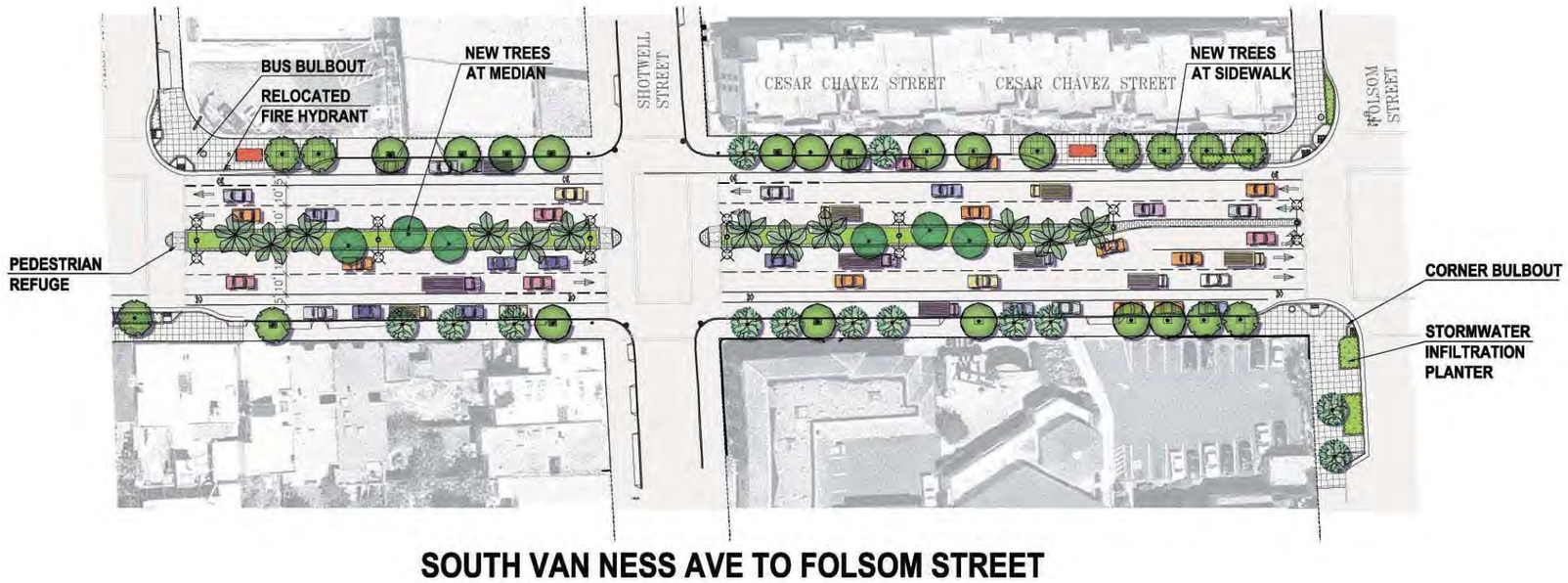
SAN FRANCISCO PLANNING DEPARTMENT

SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS

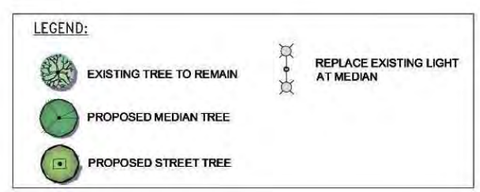
CESAR CHAVEZ STREETSCAPE IMPROVEMENTS - CONCEPTUAL PLAN

SAN FRANCISCO GREAT STREETS PROGRAM

SFDPW Landscape Architecture
MAY 2011



SOUTH VAN NESS AVE TO FOLSOM STREET



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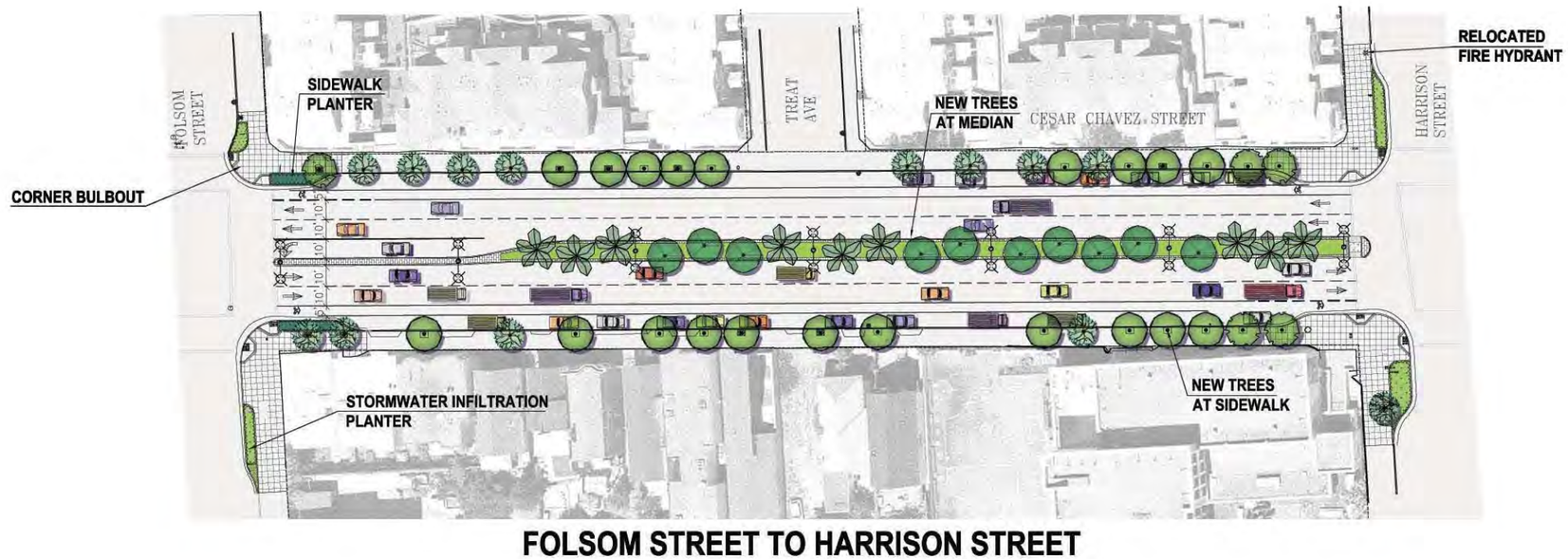

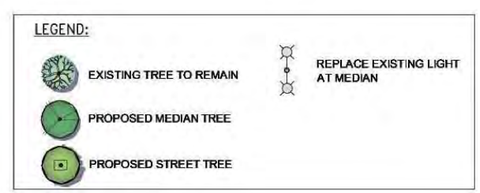

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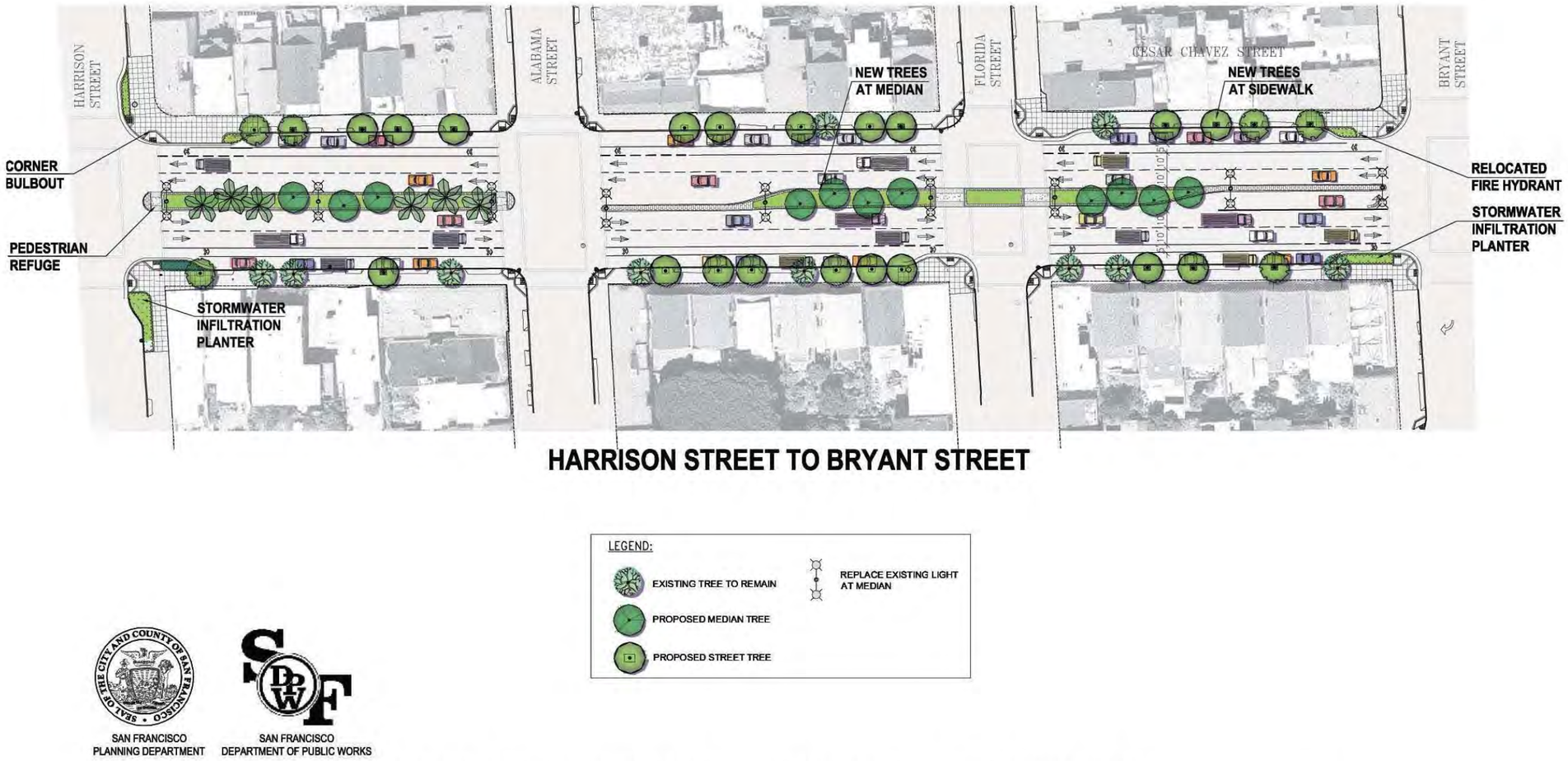
HARRISON STREET
ALABAMA STREET
FLORIDA STREET
CESAR CHAVEZ STREET
BRYANT STREET
NEW TREES AT MEDIAN
NEW TREES AT SIDEWALK
CORNER BULBOUT
PEDESTRIAN REFUGE
STORMWATER INFILTRATION PLANTER
RELOCATED FIRE HYDRANT
STORMWATER INFILTRATION PLANTER
HARRISON STREET TO BRYANT STREET
LEGEND:
EXISTING TREE TO REMAIN
PROPOSED MEDIAN TREE
PROPOSED STREET TREE
REPLACE EXISTING LIGHT AT MEDIAN
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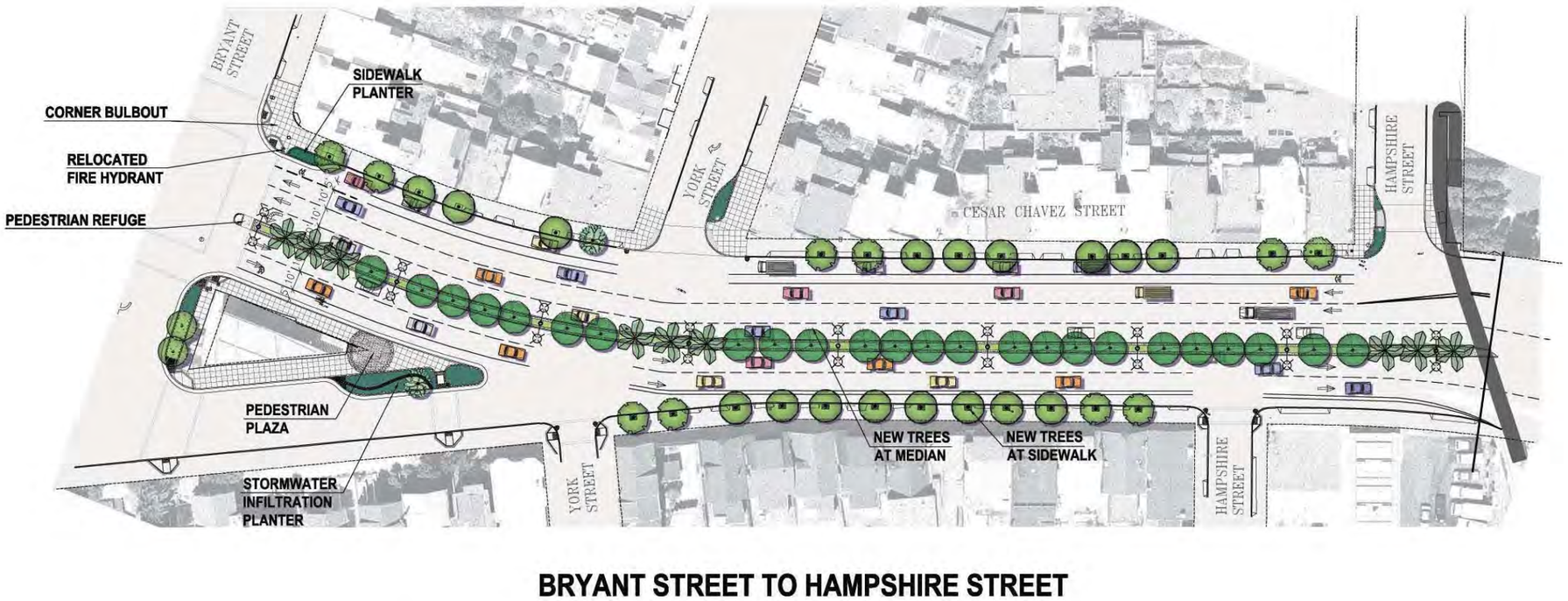

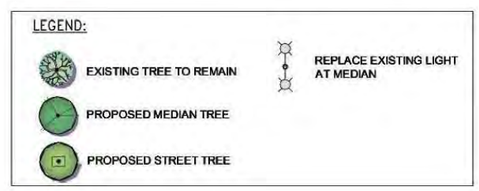

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