

# DOWNTOWN VISION: A REDEVELOPMENT PLAN FOR JACKSONVILLE BEACH

## WHY A VISION PLAN?

The City of Jacksonville Beach is embarking on an exciting new phase in city building. The City has completed a number of strategic public investments – Latham Park, Amphitheatre, improved Board Walk and Pavilion, streetscape and the allocation of free public parking for the beach in the last decade. Because of these efforts, the Downtown Central Business District (CBD) is now positioning itself for new investment opportunities. The citizens, elected officials and staff have developed a vision plan that will prepare for and guide redevelopment in the Central Business District. The purpose of the Vision Plan is to provide the citizenry a thoughtful approach to how new development would not only maintain, but also improve the quality of life for Downtown Jacksonville Beach.



This document illustrates and summarizes the Vision for Downtown Jacksonville Beach. *The Vision Plan is guided by the five guiding principles that were created from the values identified by the citizens of Jacksonville Beach.* Detailed land use, transportation and urban design strategies are the key elements included in this vision and are described herein.

## THE PROCESS

The process in creating the Vision Plan relied on a strong community involvement process which provided a variety of opportunities for public input through stakeholder interviews, a walking audit of the Downtown and a three-day charrette with two formal presentations and two and half days of open house working sessions to the public.

The Vision Plan was formalized during the charrette from June 5 to June 7, 2007. During these three days, the values and priorities of the community were established, issues were identified and voted on, and the community provided solutions, desires and expectations. Almost 100 citizens, public official and staff members participated in the charrette effort. Each person provided valuable input in creating the Vision Plan.



## NEXT STEPS

The Downtown Vision Plan is intended as a road map for future public policy decisions and private development and redevelopment. Its implementation will undeniably entail a long-term and incremental process. Important to its realization is to ensure that the plan is understood and supported by the private development community. The next step of the process is the development of a set of land development guidelines that directly supports and implements the vision developed for Downtown Jacksonville Beach.

## COMMUNITY CORE VALUES

The eight values listed below were identified by the community during the visioning exercise. These will serve as the foundation for redevelopment activities in the Downtown District through the planning period (January 2014)

*Safety*

*Family Friendly*

*Walkability*

*Small Community Feel*

*Open Space/Views to  
Ocean/Beach Access*

*Entertainment*

*Gathering Place*

*Mix of Uses*

## GUIDING PRINCIPLES

The following five principles provide the necessary framework that was used to develop the Vision Plan.

### ***Celebrate Our Assets***

Enhance the *four major corridors* to the beach. Encourage mixed-use development along each corridor through investments in public realm (parks, gateway elements, streetscape) and infrastructure (on-street parking, new streets, parking garages).





### **Complete the Streets**

In addition to improving the four major corridors to the beach, enhance the streetscape for 3rd Street, 2<sup>nd</sup> Street and 1st Street based on their vehicular and pedestrian mobility functions

### **Mix-it Up**

Link together individual pieces of public amenities and investments within the Downtown. Allow a mix of various uses especially in the four core corridors.



### **Be Family-Friendly**

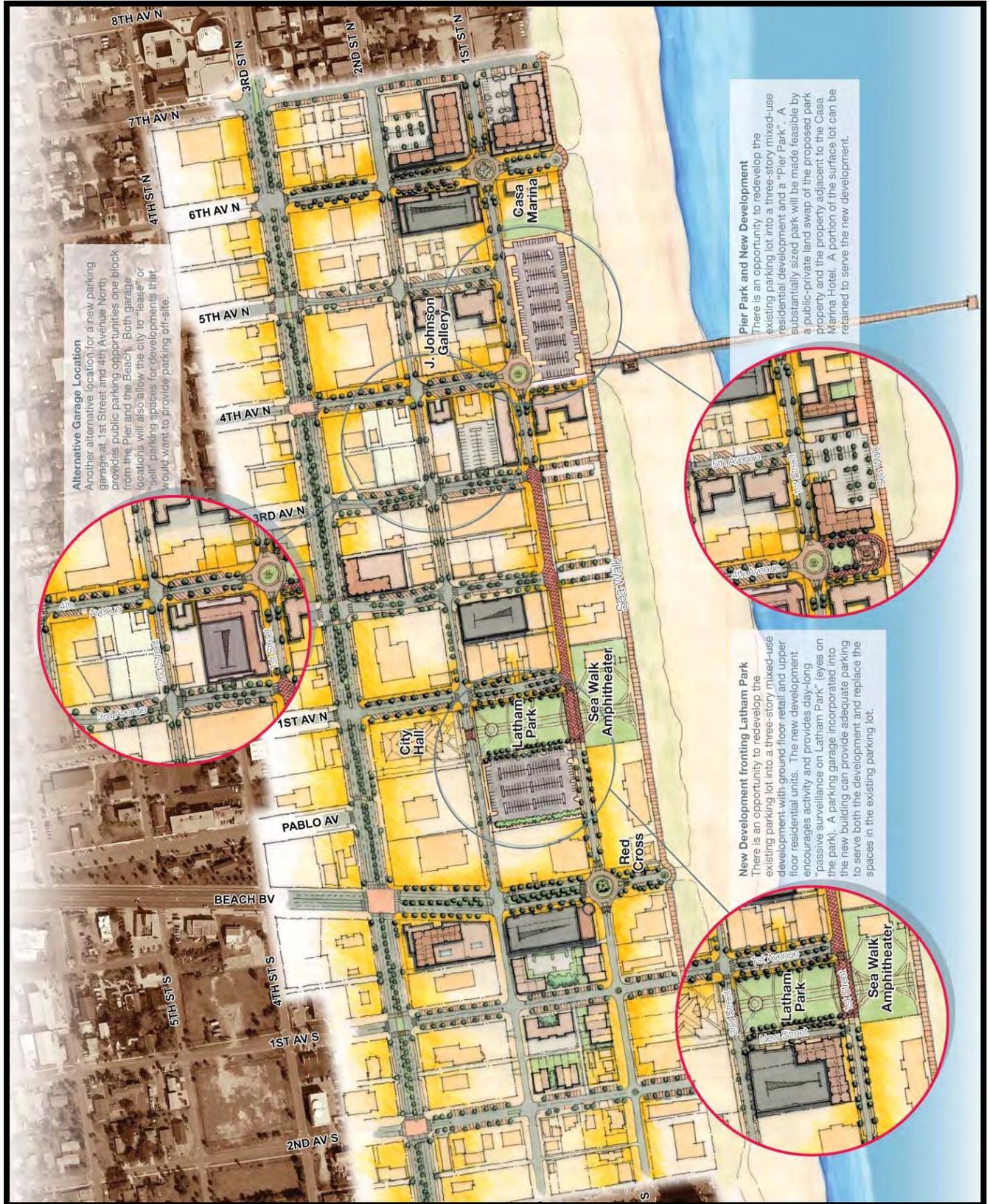
Program public spaces to accommodate family events and activities especially around the fishing pier and Latham Park. Encourage growth of neighborhoods toward the Downtown.

### **Design Matters**

Develop design guidelines to ensure that private development pattern and character support the vision plan.



# ILLUSTRATIVE REDEVELOPMENT INITIATIVES



**Alternative Garage Location**  
 Another alternative location for a new parking garage at 1st Street and 4th Avenue North provides public parking opportunities one block from the Pier and the Beach. Both garage locations will also allow the city to "lease" or "sell" parking spaces for developments that would want to provide parking off-site.

**Pier Park and New Development**  
 There is an opportunity to redevelop the existing parking lot into a three-story mixed-use residential development and a "Pier Park". A substantially sized park will be made feasible by a public-private land swap of the proposed park property and the property adjacent to the Casa Marina Hotel. A portion of the surface lot can be retained to serve the new development.

**New Development fronting Latham Park**  
 There is an opportunity to redevelop the existing parking lot into a three-story mixed-use development with ground floor retail and upper floor residential units. The new development encourages activity and provides day-long "passive surveillance" on Latham Park (eyes on the park). A parking garage incorporated into the new building can provide adequate parking to serve both the development and replace the spaces in the existing parking lot.



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## DESCRIPTION OF ILLUSTRATIVE PROPOSALS

Following the core values and guiding principles identified during the visioning process, a “menu of ideas” for both public and private redevelopment initiatives is proposed. The following sections describe some of these ideas.

### ***NEW DEVELOPMENT FRONTING LATHAM PLAZA***

There is an opportunity to redevelop the existing parking lot into a three-story mixed-use development with ground floor retail and upper floor residential units. The new development encourages activity and provides daylong “passive surveillance on Latham Plaza” (eyes on the park). A parking garage incorporated into the new building can provide adequate parking to serve both the development and replace the spaces in the existing parking lot.

### ***SOUTH EDGE OF LATHAM PLAZA***



***Existing (left):*** Fence and planting around park edge restrict park access and creates security problems.

***Proposed (below):*** New street and development frames the park and provides the opportunity for “passive surveillance” of the area.



## **PIER PARK AND NEW DEVELOPMENT**

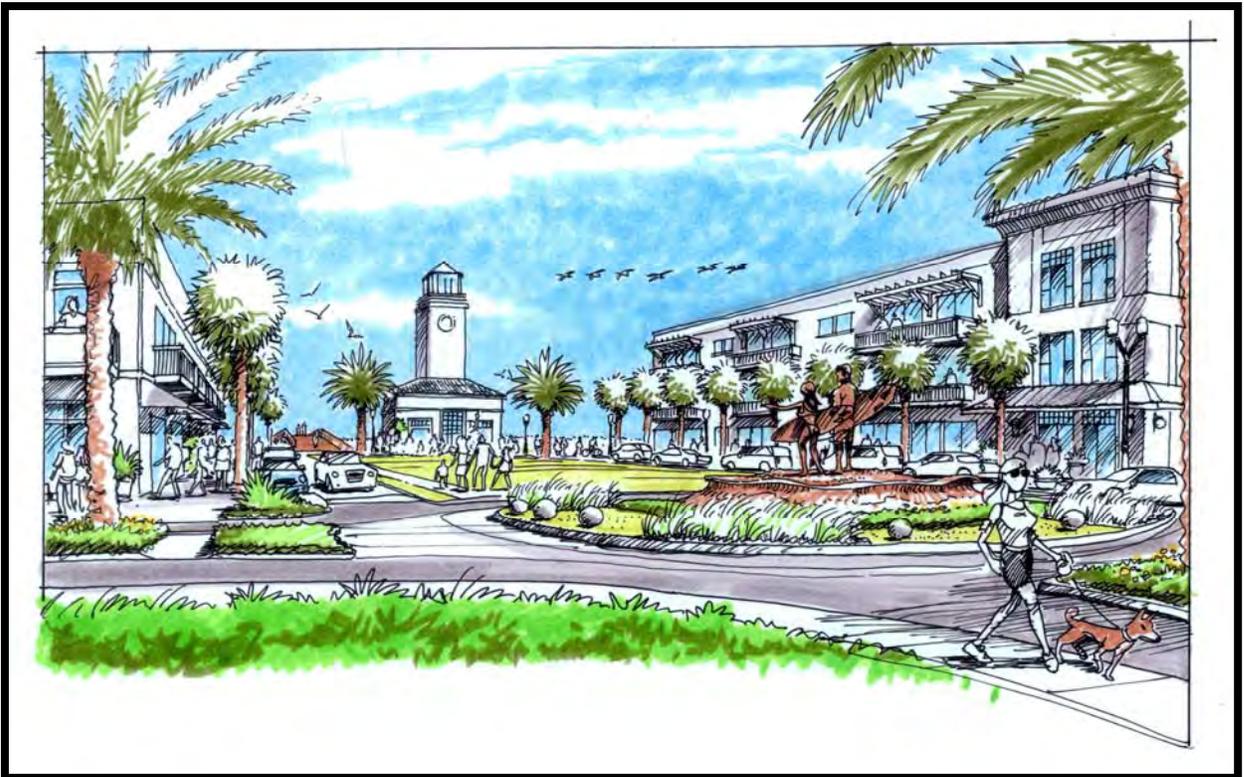
There is an opportunity to redevelop the existing parking lot into a three-story mixed-use residential development and a “Pier Park”. A substantially sized park will be made feasible by a public-private land swap of the proposed park property and the property adjacent to the Casa Marina Hotel. A portion of the surface lot can be retained to serve the new development.

### **PIER LANDING**



**Existing (left):** Pier terminated by a parking lot.

**Proposed (below):** New “Pier Park provides a gathering place and terminates the view to the Beach along 4<sup>th</sup> Avenue North.



## ALTERNATIVE PARKING GARAGE LOCATIONS

Possible parking garage locations are on Beach Boulevard, southeast corner of 2<sup>nd</sup> Street North, 2<sup>nd</sup> Street North @ 3<sup>rd</sup> Avenue North, or 6<sup>th</sup> Avenue North. Another alternative location for a new parking garage at the northwest corner of 1st Street and 3rd Avenue North ("The Ritz Lot"), which provides public parking opportunities located just one block from the Pier and the Beach. Construction of a public garage at any of these locations will also allow the city to "lease" or "sell" parking spaces for developments that would want to provide parking off-site.



# URBAN DESIGN STRATEGIES FOR DOWNTOWN JACKSONVILLE BEACH

The Vision Plan identified four corridors that are considered the premier entryways into the Downtown. Each corridor provides a terminus to the beach, identifies specific strategies that will implement the Vision Plan and classifies the timing of each strategy as follows: short term – immediately or within three years, mid-term, three to five years, and long term - more than five years.

## THE FOUR CORRIDORS TO THE BEACH

### *Gateway Corridor*

Beach Boulevard is the southern gateway to the CBD's core. Because of its regional transportation significance, the Boulevard is also an important commercial corridor, offering great visual and physical access to beach. The historic Red Cross life-guard center terminates the corridor vista to the beach.



### *Civic Corridor*



The City has put in tremendous public investment along 1st Avenue North, including the City Hall, the Latham Park, and the Sea Walk Amphitheater. Together with the Beach Boulevard corridor, the 1st Avenue North corridor anchors the southerly end of the Downtown. Some parking lots and underutilized properties around the new public investments are well positioned for redevelopment as mixed-use products to add vitality to Downtown's civic core.



## ***Pier Corridor***

4th Avenue North is another important east-west corridor to the beach. It is terminated by a public fishing pier and is where the J. Johnson Gallery is located. Both of these treasured public amenities call for additional care and attention to this corridor's streetscape treatments and future development character. Strategic public investments and development guidance will ensure that the current infill development trend along the corridor continues to catalyze the CBD's revitalization.



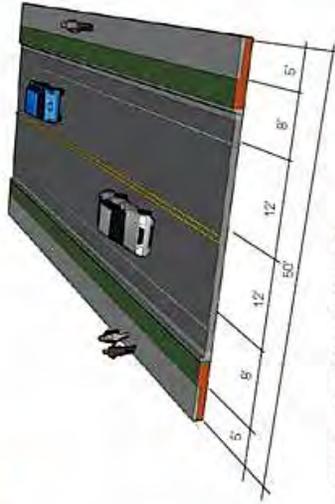
## ***Retail Corridor***



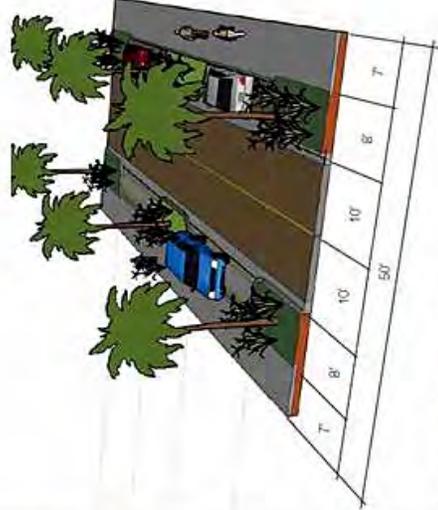
6th Avenue North marks the northern edge of the CBD. The historic Casa Marina Hotel anchors both the eastern end of the 6th Avenue North Corridor and the boardwalk. Properties along the Corridor are mostly underutilized and vacant. The opportunity exists to create a new retail shopping experience along this corridor that would complement the beach activities. New residential-based development will also encourage more year-round and daytime activity in the CBD.



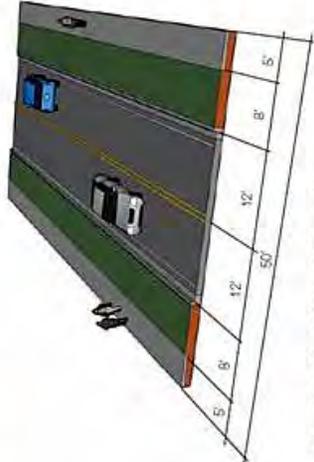
# Existing and Proposed Cross Sections



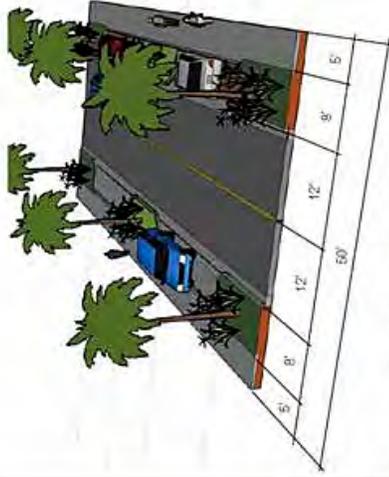
Existing 1st Street Corridor



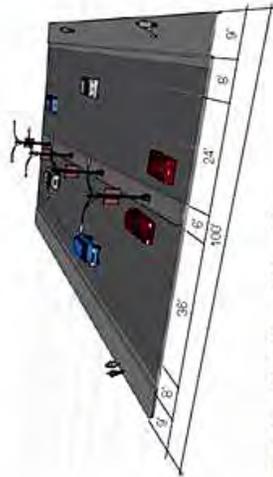
Proposed 1st Street Corridor



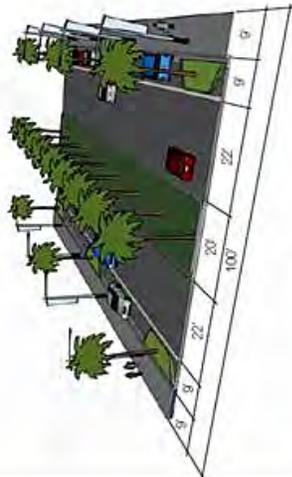
Existing 2nd Street Corridor



Proposed 2nd Street Corridor



Existing 3rd Street Corridor



Proposed 3rd Street Corridor



# URBAN DESIGN STRATEGIES



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# DOWNTOWN JACKSONVILLE BEACH VISION PLAN – “A MENU OF IDEAS”

		Short-Term 0-3 Years	Mid-Term 3-5 Years	Long-Term 5+ Years
<b>GATEWAY CORRIDOR</b>				
<b>1</b>	Improve streetscape (provide continuous sidewalks, bulb-outs, street trees, pedestrian lighting, wayfinding and other street furniture) along Beach Boulevard.	●		
<b>2</b>	Reduce Beach Boulevard from four lanes to two lanes, widen median, and add on-street parking between 2nd Street and 1st Street	●		
<b>3</b>	Introduce roundabout as a southern gateway to Downtown and as a traffic-calming feature on 1st Street.	●		
<b>4</b>	Organize parking between 1st Street and the Sea Walk and incorporate a traffic circle as a turn-around/drop-off point for beach users.	●		
<b>5</b>	Encourage new development to have a mix of uses and to front and address Beach Boulevard.	●		
<b>6</b>	Encourage the development of a joint-use parking garage serving existing and new commercial uses. The parking garage will have ground floor commercial uses along Beach Boulevard.		●	●
<b>7</b>	Incorporate public bathrooms and shower facilities at turn-around next to the Red Cross building.		●	
<b>CIVIC CORRIDOR</b>				
<b>8</b>	Enhance pedestrian level lighting in Latham Park.	●		
<b>9</b>	Develop new two-way street with parallel on-street parking along south side of Latham Plaza.		●	●
<b>10</b>	Redevelop existing parking lot as a mixed-use project. The two to three-level building will include a garage that will provide parking spaces to replace existing surface parking space and the needs of the new development. The new structure will have ground floor commercial uses fronting Latham Park and two to three levels of residential and/or office uses.		●	●
<b>11</b>	Redevelop existing surface lot as a new public parking garage that will support the parking needs of existing retail/restaurant uses as well as beach visitors.			●



		Short-Term 0-3 Years	Mid-Term 3-5 Years	Long-Term 5+ Years
<b>PIER CORRIDOR</b>				
12	Organize on-street parking on 4th Avenue North and improve streetscape (provide continuous sidewalks, bulb-outs, street trees, pedestrian lighting, wayfinding and other street furniture).	●		
13	Develop a new pier park programmed with activities of children and families. The park can include a spray fountain/splash fountain that can serve as a place to cool-off and as a public park amenity.	●	●	
13	Incorporate a driveway to for beach users to drop-off/pick-up as part of the park design. (A potential land swap between the City and private property owners would allow for a substantial sized Pier Park.)	●	●	
14	New residential and commercial development can frame either side of the new pier park and the view toward the beach and the fishing pier.		●	●
15	Relocate restroom facilities that are near Casa Marina.		●	●
16	Retain a portion of the existing surface parking lot to serve the new residential development.		●	●
17	Encourage infill residential-based mixed-use development along 4th Avenue North.	●	●	●
18	Develop a public parking garage to serve beach users and area retail uses. Explore the feasibility of alternative location for this parking garage.) The potential new parking garage can also lease or "sell" parking spaces to relieve on-site parking needs of new developments.		●	●
19	Introduce a roundabout at 1st Street as a landmark element and to calm traffic along 1st Street.	●		
<b>RETAIL CORRIDOR</b>				
20	Encourage the expansion of Casa Marina in a form, scale, and character that is respectful of the historic hotel.	●	●	
21	Develop a joint-use parking garage to serve the Casa Marina expansion. The parking garage will be lined with ground floor retail uses along 6th Avenue North and 1st Street.		●	
22	Introduce a roundabout at 1st Street as a northern gateway to downtown and to calm traffic along 1st Street.	●		
23	Encourage a concentration of retail shops along 6th Avenue North as part of new development.		●	●



		<b>Short-Term 0-3 Years</b>	<b>Mid-Term 3-5 Years</b>	<b>Long-Term 5+ Years</b>
<b>24</b>	Encourage residential-based mixed-use development on the north side of 6th Avenue North.		●	●
<b>25</b>	Organize on-street parking on 6th Avenue North and improve streetscape (provide continuous sidewalks, new bulb-outs, street trees, pedestrian lighting, wayfinding and other street furniture).	●		
<b>26</b>	Organize on-street parking between 1st Street and the Sea Walk and incorporate a traffic circle as a turn-around/drop-off point for beach users.	●		
<b>NORTH-SOUTH STREETS</b>				
<b>27</b>	Introduce on-street parking spaces along either side of 3rd Street. Add bulb-outs at intersections and mid-blocks to create more opportunities for street trees and shorten pedestrian crossing distances. Explore the feasibility of 3rd Street streetscape changes as part of the upcoming Florida Department of Transportation (FDOT) pavement resurfacing work.	●		
<b>28</b>	Reduce median cuts along 3rd Street and introduce street trees along the median.	●		
<b>29</b>	Relocate traffic signal from 2nd Avenue North to 4th Avenue North.	●		
<b>30</b>	Introduce new crosswalks along 3rd Street.	●		
<b>31</b>	Introduce parallel on-street parking along 2nd Street between Beach Boulevard and 7th Avenue North.	●		
<b>32</b>	Provide narrower travel lanes and introduce parallel on-street parking along 1st Street between Beach Boulevard and Latham Park and between 3rd Avenue North and 7th Avenue North.	●		
<b>33</b>	Develop 1st Street as a “festival street” between 2nd Avenue North and 3rd Avenue North by varying the texture and color of roadway finish.	●		
<b>34</b>	Enhance existing speed table between Latham Park and Sea Walk Pavilion.	●		
<b>35</b>	Introduce traffic circles south of Beach Boulevard as traffic calming devices and neighborhood features.	●		
<b>36</b>	Improve streetscapes (provide continuous sidewalks, street trees, pedestrian lighting, wayfinding and other street furniture) and crosswalks along all north-south streets.	●		



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# DOWNTOWN CAPITAL IMPROVEMENT PROGRAM

## FISCAL YEARS 2008-2014

### INTRODUCTION

In December 2006, the City of Jacksonville Beach (City) retained the services of GAI Consultants, Inc. (GAI), to conduct an engineering analysis to determine the need for roadway and infrastructure improvements in the Jacksonville Beach Downtown Community Redevelopment Area (CRA). The Downtown CRA limits extend from 13<sup>th</sup> Avenue South to 9<sup>th</sup> Avenue North and from 3<sup>rd</sup> Street (State Road A1A) to the Atlantic Ocean. This area encompasses a total of 161 acres. The scope of engineering services includes providing an Engineering Report for Infrastructure Improvements consisting of a Stormwater Master Plan, and evaluation reports for water and sewer facility improvements. Underground and surface improvements will address roadway and right-of-way impacts. A typical parking detail and plan is also provided. Locations for these improvements will be determined on a case-by-case basis as directed by City staff.

The Community Redevelopment Agency (CRA) has the ability to fund infrastructure improvements with the downtown CRA through its Downtown Tax Increment Trust Fund (TIF), and may appropriate such monies for future capital improvements projects. The proposed improvements identified by GAI will complement the 1996 Infrastructure Improvement Pilot Project. This pilot project was designed to extend redevelopment into the Downtown Central District. This pilot project upgraded and replaced water, sewer, and stormwater facilities and the resulting roadway improvements that included landscaped medians, parking, curb, sidewalk, pavement imprints and other miscellaneous reconstruction elements.

This section of the Downtown Vision Plan summarizes the assumptions, evaluations, results and recommendations developed from modeling and analysis of the existing infrastructure components in the study area. A probable engineering cost estimates for the facility upgrades is provided with a recommended project phasing. The reader is directed to the full *Downtown Redevelopment Area Infrastructure Improvements* report by GAI Consultants, Inc., which available for review in the Offices of the Community Redevelopment Agency (Planning & Development Department), 11 North 3<sup>rd</sup> Street or the Public Works department at 1600 Shetter Avenue.

### STORMWATER COLLECTION SYSTEM

The Stormwater Master Plan separates the downtown drainage area into three major basins. The three basins are delineated to separate the Beach Boulevard Stormwater Basin located within the urban core, from the North Basin and South Basin limits. The North Basin spans from 5<sup>th</sup> Avenue North to 9<sup>th</sup> Avenue North. The Beach Boulevard Basin Spans from Beach Boulevard to 4<sup>th</sup> Avenue North, and the South Basin Spans from 1<sup>st</sup> Avenue South to 13<sup>th</sup> Avenue South. Refer to the map on the following page showing the existing stormwater basins.

The existing drainage system was modeled using ASAD, a rational method analysis program that computes the hydraulic grade line from sub-basin areas. The model routes stormwater through conveyance structures and identifies flooding conditions at each inlet. The model utilized a 10-year storm design frequency in order to meet the minimum level of service required by the City of Jacksonville Beach. Model results confirm that portions of the system are undersized and in need of upgrades. Previously upgraded storm sewer facilities, including the Beach Blvd Basin, 5<sup>th</sup> Avenue North and 11<sup>th</sup> Avenue South are deemed adequate.



# STORMWATER DRAINAGE BASINS



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Presently, beach outfalls exist throughout the study area and in most cases, serve as the primary outfalls for stormwater. The City has recently reconstructed the beach outfalls, and reconstructed several of the beach parking areas through developer-assisted improvements. The City anticipates that these beach outfalls are to be maintained for the present.

A St. Johns River Water Management District (SJRWMD) Permit will be required for modifications to the existing systems. The North Basin will be submitted as a Standard Permit, and the South Basin will be submitted as a General Permit. SJRWMD Permits are active for 5-years and can be extended another 5 years.

The stormwater management system will meet current and future drainage needs and allow for development within each basin. The new system will provide adequate facilities to meet water quality and provide conveyance systems for a future build-out of the area based on an 80 percent impervious condition. If a developer desires to increase the impervious area above the 80 percent impervious condition, drainage facilities must be constructed on-site to provide for the additional treatment volume required, and control discharges to the 80 percent development discharge rate. This study does not consider a redirection of beach outfalls within the existing beach outfall drainage boundary if beach parking area reconstruction is required, or other roadway reconstruction in areas has been recently completed as part of City or privately initiated redevelopment projects. The City desires to avoid reconstruction of recently improved areas.

Conceptual designs have been evaluated that consider taking all of the stormwater from the entire drainage basin including the beach outfalls and providing alternate means of disposal. Redirection of flows will require treatment of the diverted volumes of stormwater runoff and conveyance of the added flow. In areas where proposed stormwater infrastructure is planned, redirection of flow away from the beach outfalls will be subject to detailed engineering and further cost analysis. A Drainage Connection Permit will be required for any modifications to the FDOT drainage systems, and thus requires compliance with FDOT Rule 14-86.

Two alternate stormwater management concepts were developed to resolve the flooding issues and meet the permitting requirements. Alternate 1 provides treatment in the form of exfiltration systems located within the existing right of way, with overflow from these systems connected to the existing FDOT and/or beach outfalls. This option will also require attenuation to limit the discharge rate to be equal to or less than the existing discharge rate.

Alternate 2 proposes the construction of stormwater vaults, pumps, and force mains that will discharge stormwater to areas where new ponds can be constructed, or existing ponds can be upgraded.

Both Alternates will require the City to reconstruct streets within the downtown limits due to the level of expected reconstruction resulting from stormwater management facility installations and establishment of new roadway profiles. Roadway longitudinal profiles will ensure positive grades for conveyance to new drainage inlets.

Alternate 1 (Exfiltration System) will consist of perforated pipe surrounded by a layer of coarse aggregate wrapped in filter fabric to separate it from the surrounding soil. Each exfiltration system must be designed to site-specific requirements. Exfiltration system limits typically will be located in the Avenues between 3<sup>rd</sup> Street (State Road A1A) and 2<sup>nd</sup> Street, 2<sup>nd</sup> Street and 1<sup>st</sup> Street, and under the parking areas when feasible. The proposed exfiltration system will modify drainage areas for 5<sup>th</sup> Avenue North through 9<sup>th</sup> Avenue North, and 1<sup>st</sup> Avenue South through 13<sup>th</sup> Avenue South.

The City has indicated that Beach parking areas can be utilized for the installation of the exfiltration systems, but recommends restricting them to those locations that have not been previously recon-



structed. This would include 9<sup>th</sup> Avenue North, 8<sup>th</sup> Avenue North, 6<sup>th</sup> Avenue North, 7<sup>th</sup> Avenue South, 10<sup>th</sup> Avenue South, 12<sup>th</sup> Avenue South and 13<sup>th</sup> Avenue South. Exfiltration systems within the North Basin will be connected to existing 3<sup>rd</sup> Street (State Road A1A) drainage system or the 2<sup>nd</sup> Street Stormwater Project currently under design. The estimate of probable project cost for Alternate 1 is \$25,246,485.00

Alternate 2 (Pump/ Vault System) will include the construction of a vault and pump system similar to the Beach Boulevard pump system. The City has indicated that the pump option will only be considered in the South Basin. The City requested that GAI provide consideration of two pump systems that would result in force main outfalls. One would be connected to the 12<sup>th</sup> Avenue South stilling Basin and the other to the existing City Golf Course pond location, which is the same outfall utilized by the Beach Boulevard Pump Station. The estimate of probable project cost for Alternate 2 is \$36,589,774.00, excluding the cost of stormwater ponds. The City is proposing to enlarge the existing golf course stormwater ponds as part of the North 2<sup>nd</sup> Street Stormwater Collection and Treatment project.

Additional key considerations of the study are as follows:

- Alternate 1 is proposed for both the North and South Basins, while Alternate 2 is only proposed for the South Basin, as requested by the City.
- For the North Basin area, the exfiltration system is recommended to be incorporated into the 2<sup>nd</sup> Street Stormwater Project currently under design or directed to the beach outfalls.
- Reconstruction of the Beach Boulevard beach ramp estimated at \$211,940 has been included in the cost programming.
- For the South Basin area, GAI would recommend that the exfiltration option be considered initially in order to maintain the most economical approach to the stormwater improvements. Alternate 1 (Exfiltration System) offers an estimated \$11.8 million savings over Alternate 2 (Pump/ Vault).
- Although limited geotechnical evaluation supports the use of an exfiltration system for the study area, a detailed geotechnical survey will need to be performed in order to verify the suitability of the proposed system for specific basins throughout the study area.
- Even though Alternate 1 (Exfiltration system) is being recommended throughout the South Basin, the City could also consider draining 9.25 acres of the South Basin to the 12<sup>th</sup> Avenue South Stilling Basin, utilizing a vault/pump system. This option would require further review to complement this study and to clearly identify the available capacity of the outfall. A cost comparison between the exfiltration system and the pump/vault system for the 9.25 acres is \$4.2 million, and \$7.6 million, respectively.
- Areas such as 5<sup>th</sup> Avenue North, 11<sup>th</sup> Avenue South from 1<sup>st</sup> to 2<sup>nd</sup> Street, and several other beach parking areas have been recently reconstructed as part of redevelopment efforts. New construction in these areas will be avoided. The probable cost estimates developed as part of this study account for maintaining these areas.

## POTABLE WATER DISTRIBUTION SYSTEM

The water distribution system model was analyzed under two main loading scenarios: Existing Conditions (Year 2006) and future Full-Build out Conditions (Year 2020). Multiple simulations were created and analyzed to account for combinations of the Maximum Daily Flows (MDF) and Needed



Fire Flows (NFF). The model was constructed from record data received from the City and field substantiation of the data, as observed by GAI staff.

The modeling and analysis of the water distribution system and the review and analysis of existing utility data has yielded recommendations for prioritization of the proposed improvements. This prioritization was based first on the need for hydraulic improvements with secondary consideration given to the material condition and remaining service life of the pipes. These prioritized improvements have been divided into two major groups of projects, with projects included in the first group based on hydraulics, and projects included in the secondary group based on material conditions. The estimate of probable project costs of the proposed water main improvements is estimated at \$746,041. This estimated cost only includes the roadway reconstruction necessary for the installation of the proposed pipes. *Because the water distribution system improvements will be completed in conjunction with the proposed stormwater improvements, the major roadway infrastructure costs have been included in the stormwater cost estimate.*

Records indicate that certain segments of the water distribution system have asbestos-concrete (transite) pipe material. GAI was unable to identify this material within the study area. Should this pipe material be encountered, replacement is recommended. In lieu of removal, these transite pipes should be vacated, cleaned, grouted, and abandoned in place.

Provision for additional fire hydrants must be considered as the City develops toward its allowable density. One recommended method is to ensure that the private developers bear the cost of installing fire hydrants for building fire suppression when required. These projects would have to comply with the Florida Prevention Code requiring additional hydrants per NFPA-1, Chapter 18.

## **SANITARY SEWER CONVEYANCE SYSTEM**

The sanitary sewer conveyance system model was analyzed under two main loading scenarios: Existing Conditions (Year 2006) and Future Full Build-out Conditions (Year 2020). Multiple simulations were created and analyzed to account for the Peak Hour Flows (PHF); one for existing and one for future. Each model was constructed from record data received from the City, supplemental field surveyed data, and field substantiation of the data, as observed by GAI staff.

The results of the hydraulic modeling analysis for the Existing Conditions reveal minimal hydraulic limitations due to pipe size. Most deficiencies were identified as inadequate pipe slopes, which is a condition that exposes hydraulic limitations for future expansion.

The amount of manholes surcharging the pipe inverts was minimal and the level of surcharge was barely above the pipe crowns. Most of these manholes have very deep sumps, thus visual confirmation of the surcharge is uncommon.

The City's Public Works Department has not identified any areas within the study area that have flow restriction issues causing regular maintenance or flushing due to accumulation of debris or lateral back-up flows. The model reveals that the current sewer pipe system is adequate to supply conveyance for the sanitary flows under PHF load conditions.

These proposed improvements have been prioritized based on hydraulic requirements into five projects. The estimate of probable project cost of the proposed sanitary sewer conveyance system improvements is estimated at \$500,075. As with the water system cost estimates, the cost for full roadway reconstruction is not included in the sanitary sewer estimate, but addressed in the stormwater cost estimate.



## PARKING AND ROADWAY CONSIDERATIONS

GAI also evaluated the condition of the existing surface components including on-street parking facilities, roadway pavement, sidewalks, and curbs.

GAI reviewed several options with the City and it was decided to explore the idea of providing 90-degree parking to the outsides of the existing avenues and streets within the existing right-of-ways at locations where such parking may be needed. Based on the condition of the existing parking areas, a typical roadway cross-section solution was developed to enhance the parking facilities. Areas where this on-street parking enhancement could be provided were prioritized with input from the City. A construction cost estimate has been developed for the proposed parking spaces; however, the final location and cost will be based on an assessment of property restoration impacts, additional drainage and utility impacts. Locations for these improvements will be determined on a case-by-case basis as directed by City staff. Below are some illustrations of how additional on-street parking opportunities could be created in conjunction with the utility upgrades.



**Potential Parking Layout:** 3<sup>rd</sup> Avenue South (Between State Road A1A and 2<sup>nd</sup> Street South)

**Potential Parking Layout:** 9<sup>th</sup> Avenue South (Between A1A and 1<sup>st</sup> Street South)



We have evaluated the condition of the existing pavement, curbs, and sidewalks; and made recommendations for improving these components. The final determination for repair/rehabilitation of these surface components will be determined by the final design solutions for the storm sewer, sanitary sewer and potable water systems. Due to the fact that while the current conditions of these surface components may allow some sections to remain in place, should the proposed underground facilities require demolition of these above ground features, full reconstruction of these features will be required.



## COST PROGRAMMING AND PHASING

The CRA will appropriate funds for capital improvements in the Downtown Redevelopment Area on an annual basis according to priorities established by the CRA and the City. The number and type of projects and the amounts appropriated will be based on the amount of money available in the Downtown Tax Increment Trust Fund (TIF). Typically, the appropriations are approved based on a final engineer or architect's estimate of the project cost or the actual bid price for the work from a private contractor.

### ***Pending Projects***

In addition to the annual operating expenses, including the commitment to continue the Downtown Community Policing Initiative; and debt service on outstanding tax increment revenue bonds, there are currently several downtown redevelopment projects in various stages of development to which TIF monies are committed.

<b>REDEVELOPMENT PROJECTS PENDING BEFORE FY 2008</b>				
	<b>PROJECT NAME</b>	<b>APPROVED PROJECTS</b>	<b>PROJECT STATUS</b>	<b>DATE APPROVED BY CRA</b>
1.	2 <sup>nd</sup> Street North Drainage between 6 <sup>th</sup> and 9 <sup>th</sup> Avenue North	\$2,926,273 (TIF Revenue Bond Funds)	Design Phase	09/12/05
2.	Stormwater Outfall Extension	\$978,000	80% Complete	10/18/04
4.	Downtown Infrastructure Study	\$230,670	Project Study Phase	12/18/06
5.	4 <sup>th</sup> Avenue Streetscape Improvements	\$315,785	Bid Received	07/30/07
6.	Downtown Vision Plan	\$139,018	Study in Progress	02/26/07
7.	SeaWalk Restoration, Beach Boulevard to 3 <sup>rd</sup> Avenue North	\$1,500,000 (est.)	Need Approval for Design/Build	Request for Proposals Only
8.	Property Acquisition for Future Redevelopment Purposes, Including Parking Facilities	\$8,000,000 (est.)	Property Appraisals	Property Appraisals Only
	<b>Total</b>	<b>\$13,786,624</b>		

### ***Vision Plan Recommendations***

The City has requested that the initial project phase plan include elements recommended in the Downtown Vision Plan. The costs associated with the development and implementation of these elements is not addressed under this Capital Improvement Program. However, this CIP does identify and address certain infrastructure improvement costs, within the limits identified by the Vision Plan.

The recommendations of the Downtown Vision Plan that would require tax increment funding, if they move forward to implementation, are listed below.



<b>DOWNTOWN VISION PLAN CAPITAL PROJECTS</b>	
<b>GATEWAY CORRIDOR:</b>	
Improve streetscape (provide continuous sidewalks, bulb-outs, street trees, pedestrian lighting, wayfinding and other street furniture) along Beach Boulevard.	Estimated cost to be determined from engineering/architectural design
Reduce Beach Boulevard from four lanes to two lanes, widen median, and add on-street parking between 2 <sup>nd</sup> Street and 1 <sup>st</sup> Street	Estimated cost to be determined from engineering/architectural design
Introduce roundabout as a southern gateway to Downtown and as a traffic-calming feature on 1 <sup>st</sup> Street.	Estimated cost to be determined from engineering/architectural design
Organize parking between 1 <sup>st</sup> Street and the Sea Walk and incorporate a traffic circle as a turn-around/drop-off point for beach users.	Estimated cost to be determined from engineering/architectural design
Incorporate public bathrooms and shower facilities at turn-around next to the Red Cross building.	Estimated cost to be determined from engineering/architectural design
<b>CIVIC CORRIDOR:</b>	
Enhance pedestrian level lighting in Latham Park.	Estimated cost to be determined from engineering/architectural design
Develop new two-way street with parallel on-street parking along south side of Latham Plaza.	Estimated cost to be determined from engineering/architectural design
Redevelop existing parking lot as a mixed-use project. The two to three-level building will include a garage that will provide parking spaces to replace existing surface parking space and the needs of the new development. The new structure will have ground floor commercial uses fronting Latham Park and two to three levels of residential and/or office uses.	Estimated cost to be determined from engineering/architectural design
Redevelop existing surface lot as a new public parking garage that will support the parking needs of existing retail/restaurant uses as well as beach visitors.	Estimated cost to be determined from engineering/architectural design
<b>PIER CORRIDOR:</b>	
Organize on-street parking on 4 <sup>th</sup> Avenue North and improve streetscape (provide continuous sidewalks, bulb-outs, street trees, pedestrian lighting, wayfinding and other street furniture).	Estimated cost to be determined from engineering/architectural design
Develop a new pier park programmed with activities of children and families. The park can include a spray fountain/splash fountain that can serve as a place to cool-off and as a public park amenity.	Estimated cost to be determined from engineering/architectural design
Incorporate a driveway to for beach users to drop-off/pick-up as park of the park design. (A potential land swap between the City and private property owners would allow for a substantial sized Pier Park.)	Estimated cost to be determined from engineering/architectural design



<b>DOWNTOWN VISION PLAN CAPITAL PROJECTS</b>	
Relocate restroom facilities that are near Casa Marina.	Estimated cost to be determined from engineering/architectural design
Develop a public parking garage to serve beach users and area retail uses. Explore the feasibility of alternative location for this parking garage.) The potential new parking garage can also lease or “sell” parking spaces to relieve on-site parking needs of new developments.	Estimated cost to be determined from engineering/architectural design
Introduce a roundabout at 1 <sup>st</sup> Street as a landmark element and to calm traffic along 1 <sup>st</sup> Street.	Estimated cost to be determined from engineering/architectural design
<b>RETAIL CORRIDOR:</b>	
Develop a joint-use parking garage to serve the Casa Marina expansion. The parking garage will be lined with ground floor retail uses along 6 <sup>th</sup> Avenue North and 1 <sup>st</sup> Street.	Estimated cost to be determined from engineering/architectural design
Introduce a roundabout at 1 <sup>st</sup> Street as a northern gateway to downtown and to calm traffic along 1 <sup>st</sup> Street.	Estimated cost to be determined from engineering/architectural design
Organize on-street parking on 6 <sup>th</sup> Avenue North and improve streetscape (provide continuous sidewalks, new bulb-outs, street trees, pedestrian lighting, wayfinding and other street furniture).	Estimated cost to be determined from engineering/architectural design
Organize on-street parking between 1 <sup>st</sup> Street and the Sea Walk and incorporate a traffic circle as a turn-around/drop-off point for beach users.	Estimated cost to be determined from engineering/architectural design
<b>NORTH-SOUTH STREETS:</b>	
Introduce on-street parking spaces along either side of 3 <sup>rd</sup> Street. Add bulb-outs at intersections and mid-blocks to create more opportunities for street trees and shorten pedestrian crossing distances. Explore the feasibility of 3 <sup>rd</sup> Street streetscape changes as part of the upcoming Florida Department of Transportation (FDOT) pavement resurfacing work.	Estimated cost to be determined from engineering/architectural design
Reduce median cuts along 3 <sup>rd</sup> Street and introduce street trees along the median.	Estimated cost to be determined from engineering/architectural design
Relocate traffic signal from 2 <sup>nd</sup> Avenue North to 4 <sup>th</sup> Avenue North.	Estimated cost to be determined from engineering/architectural design
Introduce new crosswalks along 3 <sup>rd</sup> Street.	Estimated cost to be determined from engineering/architectural design
Introduce parallel on-street parking along 2 <sup>nd</sup> Street between Beach Boulevard and 7 <sup>th</sup> Avenue North.	Estimated cost to be determined from engineering/architectural design
Provide narrower travel lanes and introduce parallel on-street parking along 1 <sup>st</sup> Street between Beach Boulevard and Latham Park and between 3 <sup>rd</sup> Avenue North and 7 <sup>th</sup> Avenue North.	Estimated cost to be determined from engineering/architectural design



<b>DOWNTOWN VISION PLAN CAPITAL PROJECTS</b>	
Develop 1 <sup>st</sup> Street as a “festival street” between 2 <sup>nd</sup> Avenue North and 3 <sup>rd</sup> Avenue North by varying the texture and color of roadway finish.	Estimated cost to be determined from engineering/architectural design
Enhance existing speed table between Latham Park and Sea Walk Pavilion.	Estimated cost to be determined from engineering/architectural design
Introduce traffic circles south of Beach Boulevard as traffic calming devices and neighborhood features.	Estimated cost to be determined from engineering/architectural design
Improve streetscapes (provide continuous sidewalks, street trees, pedestrian lighting, wayfinding and other street furniture) and crosswalks along all north-south streets.	Estimated cost to be determined from engineering/architectural design

### ***Downtown Redevelopment Area Infrastructure Improvements Study***

The initial infrastructure improvements phase includes the modifications to beach access on Beach Boulevard, 3<sup>rd</sup> Avenue South, 1<sup>st</sup> Avenue South, 5<sup>th</sup> Avenue North and 7<sup>th</sup> Avenue North between 3<sup>rd</sup> Street and 1<sup>st</sup> Street. The overall Project Phasing Plan divides the total study area into several projects in the Downtown Redevelopment District. These project phases may then be funded on an annual basis to coincide with available CRA funding sources.

The organization of this phased reconstruction is aimed at allowing reconstruction of facilities in segments while maintaining essential city services, business access, residential access, and manageable construction housekeeping. Limiting the area of the project phases provides an opportunity to manage reconstruction efforts within the highly urbanized area of Downtown Jacksonville Beach and improves the public perception of the construction efforts.

Infrastructure redevelopment will include upgrades to water, sewer, and stormwater facilities, with affected roadway improvements. Roadway improvements may span from right-of-way to right-of-way, thus affecting reconstruction of curb, sidewalk, driveways, landscaping and relocation of utilities. Detailed engineering will be required to accurately identify this level of work.

The utility and roadway renovations will approximate the level of work accomplished under the Beach Boulevard pilot project. The work will not overlap the North 2<sup>nd</sup> Street Stormwater Project limits or any private development projects.

The table on the following page provides a summary of cost for each phase.



<b>PROJECT PHASING</b>				
<b>PROJECT PHASE</b>	<b>WATER</b>	<b>SEWER</b>	<b>STORMWATER EXFILTRATION SYSTEM</b>	<b>TOTAL</b>
<b>1</b>	\$28,181	\$0	\$5,407,464	\$5,435,645
<b>2</b>	\$100,992	\$0	\$5,444,030	\$5,545,021
<b>3</b>	\$62,317	\$134,795	\$6,170,861	\$6,367,974
<b>4</b>	\$242,915	\$0	\$4,213,555	\$4,456,470
<b>5A</b>	\$173,201	\$304,799	\$1,979,022	\$2,457,023
<b>5B</b>	\$138,436	\$60,481	\$848,161	\$1,047,069
<b>Totals:</b>	<b>\$746,042</b>	<b>\$500,075</b>	<b>\$24,063,093</b>	<b>\$25,309,210</b>

Note: Columns and rows may not total due to rounding.

The Project Phasing is shown on the map on the following page.

For detail of the probable cost data for the proposed reconstruction of the stormwater facilities divided into sub-basins, with water system and sewer system priorities included, refer to the *Appendix*.



