Capital Project Discussion
Supporting Documents

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Capital Construction Program (Bond Funding)

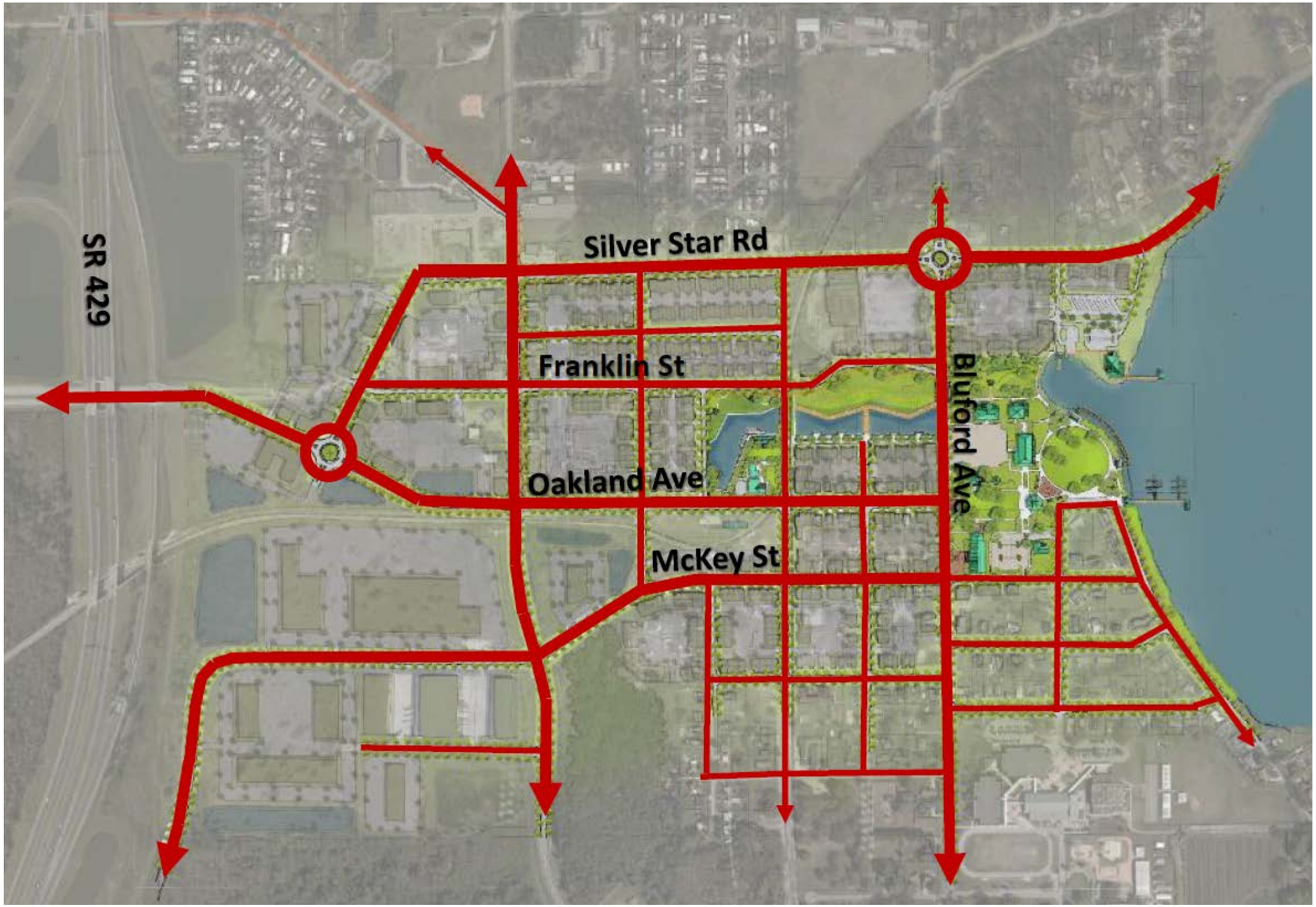
Adopted October 4, 2016

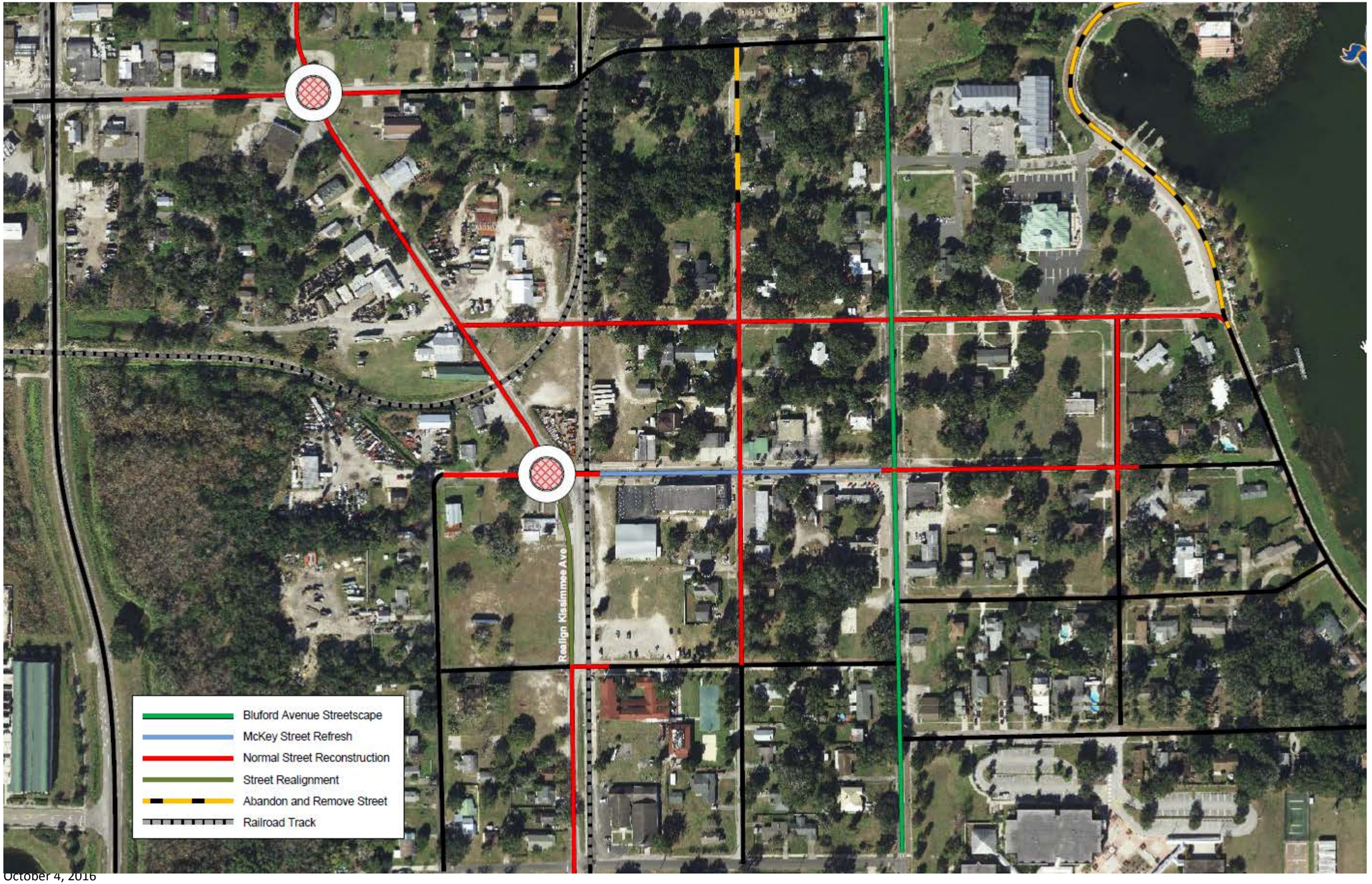
Funded Projects

Project Name	Project Description	Total Cost	Gen Fund Bond	Other Funds
Master Downtown Stormwater System	Retention Pond & Collection System Trunk Lines; includes Creek Improvements	$8,180,000	$180,000	$8,000,000
Downtown Gravity Sewer System	Build as Needed; Locations TBD by development & other projects	TBD	$0	$750,000
Bluford Avenue Reconstruction	Delaware St to Silver Star Rd; includes Force Main & Underground Power	$9,680,000	$4,280,000	$5,400,000
Lakefront Park Improvements Phase 1	Lakefront improvements and park development (southern section)	$2,200,000	$2,200,000	$0
City Hall Relocation	Construct New Building; includes Parking Facility (current bldg = 31,062 Habitable SF)	$9,000,000	$9,000,000	$0
Lakeshore Center Expansion	Add 350-seat Ballroom (Conceptual Design completed)	$4,000,000	$4,000,000	$0
Oakland Avenue Reconstruction	Taylor St to Lakeshore Dr; includes Trail Connector Segment 1	$895,000	$895,000	$0
McKey Street Reconstruction	Bluford Ave to Lakewood Ave	$300,000	$300,000	$0
Wastewater Force Main Connector	North Segment, Silver Star Rd to Wurst Rd (Bid Awarded)	$2,875,000	$0	$2,875,000
Maine Street Extension	Maguire Rd to Bluford Ave (in design)	$750,000	$747,000	$3,000
Ocoee Woman's Club Rehabilitation	Rebuild kitchen, adjust grading, and make other improvements (Long-term Lease)	$200,000	$200,000	$0
Bluford Second Left-turn Lane	North Approach to SR 50 (in discussion with SR 50 Contractor)	$350,000	$239,000	$111,000
Silver Star Road Realignment - PD&E	Project Development & Environmental Study (by FDOT)	$890,000	$445,000	$445,000
Kissimmee Avenue Realignment	Floral St to McKey St; Floral St RR crossing upgrade	$261,000	$261,000	$0
Taylor Street Reconstruction	McKey St to Franklin St with Roundabouts; includes Trail Connector Segment 2	$956,000	$956,000	$0
Gateways & Wayfinding Phase 1	Franklin@Taylor, McKey@Taylor, Geneva@Bluford	$80,000	$80,000	$0
Trail Connector Segment 3	East Crown Point Rd to Taylor St (south side of Franklin, cross Plant St at E Crown Pt Rd)	$375,000	$375,000	$0
Lakefront Park Improvements Phase 2	Lakefront improvements and park development (northern section)	$2,520,000	$842,000	$0
	Subtotals	**$43,512,000**	**$25,000,000**	**$17,584,000**

Color Code

- Purple – Related projects with dependencies; these projects will be undertaken in parallel as the design and construction of some are inputs or prerequisites to the completion of others; these 8 projects will require 7 design procurements
- Green – Projects that can be pursued somewhat independently and possibly earlier than those with dependencies; these projects are in various stages of work
- Yellow – Related projects that have significant dependencies with each other but no other projects (except for some likely need for stormwater treatment); these projects can be undertaken with a single design professional procurement
- Blue – Phase 2 of the Lakefront Improvement project, the construction of which cannot be undertaken until City Hall is relocated; the conceptual design, at least, should be included in the planning for Phase 1 of this project


SR 429
Silver Star Rd
Franklin St
Oakland Ave
McKey St
Bluford Ave


Realign Kissimmee Ave
Bluford Avenue Streetscape
McKey Street Refresh
Normal Street Reconstruction
Street Realignment
Abandon and Remove Street
Railroad Track

Bond-funded Project Descriptions

Overview

The City of Ocoee has embarked on a major program of capital investment in streets, utilities, and public facilities as the genesis of a downtown revival initiative. The overall goal is to stimulate redevelopment and expansion of the city core, which has been substantially overlooked as the city's periphery has grown through multiple commercial and residential developments. The main asset in the downtown area is Starke Lake, which has active use as a recreational facility and, increasingly, as a venue for public gatherings. The city's strategy is to leverage investments in the lakeshore's public spaces to grow commercial and residential properties to the west. At the junction of the lakeshore and downtown will sit a new City Hall with related retain spaces so as to serve as a transition point as people move from private to public spaces. Keys to the development of the downtown area are street extensions to link the city core with major roadways and sanitary sewer services, which are necessary to increase development density. Water distribution capacity will also need to be increased to handle a higher density of commercial and residential development. Funds from a new bond issue will be supplemented by those already available from the city's stormwater utility and water and sewer services.

1. ***Lake Front Enhancements*** - $4,720,000, all general bond funds. The public space on the western shore of Starke Lake has become a major event venue space with multiple indoor and outdoor elements. This project will improve those spaces and provide additional capacity to accommodate larger public and private events, in addition to providing space for private investments, such as restaurants, to take advantage of the shoreline ambience. The project should be built in two phases to allow an early start for that portion that can move forward prior to relocation of City Hall. There are two major project components:
   a. **Lakefront Park Improvements** - $4,180,000. The major element of this project component will involve the removal of existing trafficways and buildings and construction of a formal amphitheater, parking upgrades, commercial building spaces, a small water park, playground, and pedestrian pathways.
   b. **Lake Edge Improvements** - $540,000. The shoreline of Starke Lake will get native littoral plantings to improve lake water quality and preserve the banks, plus landscaping, improved sidewalks and lighting, more pavilions, a boardwalk, and enhanced water-access facilities (boat launches, piers, and docks). The existing boat ramp will be removed and a portion of Lakeshore Drive may be closed.

2. ***Silver Star Road Realignment –PD&E Study*** - $890,000, $445,000 general bond funds, $445,000 FDOT funds. The initial action required to realign Silver Star Road is to conduct a project development and environment (PD&E) study. This study will lead next to engineering design and ROW acquisition, followed by construction. The city proposes to provide 50% of the funds needed to conduct the PD&E study as an inducement to advancing the project in the MetroPlan Orlando project priority list and FDOT Work Program.

3. ***Bluford Avenue*** - $9,680,000 total cost; $4,280,000 from general bond funds; also includes $2,400,000 from utility bond funds and $3,000,000 from stormwater utility revenues. Reconstruct Bluford Avenue from Delaware Street to Silver Star Road concurrent with installation of water and sanitary sewer utilities, stormwater management, and roadside landscaping. Includes $800,000 for putting powerlines underground. Bluford Avenue is the central transportation facility for north-south travel through the city, extending from Old Winter Garden Road to the south to Silver Star Road and, though its functional extension as Lakewood

Avenue, to the SR 429 interchange at Clarcona-Ocoee Road. The intent of the streetscape project is to develop a boulevard appearance after construction of the utilities and stormwater facilities that will support adjacent higher density development. Using the complete streets design framework, this project reaches its objective at a lower cost than typical capacity improvement projects on urban arterials.

4. ***Oakland Avenue Reconstruction/Extension*** - $3,895,000, all general bond funds. This project is proposed for construction in three phases. Phase 1 will reconstruct the existing extent of Oakland Avenue from Taylor Road to Bluford Avenue to provide a boulevard appearance, along with construction of the initial West Orange Trail Connector segment. Phase 2 will extend Oakland Avenue to Maguire Road. Phase 3 will connect a further extension of Oakland Avenue to the relocated Silver Star Road, which is a project being discussed with the Florida Department of Transportation. The planned multimodal facility will convey the West Orange Trail connector to the shores of Starke Lake via the northern segment of the proposed new downtown area. The West Orange Connector will join the main trail to Ocoee's downtown area, thereby making downtown and Starke Lake major destinations for users of the facility. There are multiple paths to reach the main Trail from Taylor Road; the project list includes two, one near-term and one for later construction after realignment of Silver Star Road.

5. ***City Hall Relocation*** - $10,000,000, all general bond funds. The existing Ocoee City Hall is undergoing structural stress as a result of its location near Starke Lake. In addition, City Hall staff is spread across two buildings, which reduces operational efficiency. City Hall will be moved to city-owned property at the northeast corner of Bluford Avenue and McKey Street to serve as a bridge from the private commercial and residential spaces of the downtown area and the enhanced public spaces of the Lakeshore Center. This single structure will house all City Hall staff and provide ground floor spaces for retail and food services.

6. ***McKee Street Reconstruction*** - $300,000, all general bond funds. This project will bring McKee Street from Bluford Avenue to Lakeshore Drive up to the construction design standards used on the reconstructed Bluford Avenue.

7. ***Master Downtown Stormwater System*** - $8,150,000, $150,000 in general bond funds and $8,000,000 in stormwater bond funds. Construction of a large stormwater storage and treatment facility—essentially, a small lake—to serve the downtown area offers two major benefits. First, it relieves new development in the service area from having to separately deal with stormwater on each parcel, thereby allowing greater densities and flexibility of development. Developers will instead pay their fair-share portion of the facility's cost. Second, it serves as a major gateway water feature that offers additional recreational and park areas that extend the benefits of Starke Lake into the city core. This project will also improve a small creek runs that along the northern boundary of the City Hall property. The proposed project area is from Bluford Avenue to Starke Lake and will turn what is little more than a drainage ditch into a major water facility for passive recreational use. More natural creek banks, enhanced landscaping, walking paths, and park furniture will be provided. Some acquisition of adjacent property will be required to treat both banks of the creek.

8. ***Taylor Street and West Orange Trail Connector*** - $956,000, all general bond funds. Until such time as development requires the extension of Oakland Avenue and McKey Street further west, Taylor Street will continue to form the western boundary of the main downtown area and, with

Franklin Street, serve as the path from the SR 429 interchange to downtown. This project will continue the West Orange Trail Connector from Oakland Avenue to Franklin Street and add a traffic circle with gateway structure at the project terminal intersections located at McKey Street and Franklin Street.

9. ***West Orange Trail Connector*** - $375,000, all general bond funds. This project constructs the final segment of the West Orange Trail Connector along Franklin Street between the SR 429 interchange and Taylor Street. Plant Street sidewalks in Winter Garden would allow pedestrians to reach the West Orange Trail. A second, direct connection to the Trail at Chapin Station is proposed for construction after realignment of Silver Star Road.

10. ***Kissimmee Avenue Realignment*** - $261,000, all general bond funds. Construction of the Taylor Street and McKee Street traffic circle will require that Kissimmee be relocated away from the railroad tracks, where it presently shares a right of way between Floral Street and McKee Street.

11. ***Gateways and Wayfinding*** - $80,000, all general bond funds. The Downtown Master Plan proposes three major gateways at major intersections, two of which depend on realignment of Silver Star Road. The gateway at the intersection of Bluford Avenue and Geneva Street can be constructed as a standalone project. Two minor gateways are proposed at the Taylor Street roundabouts.

12. ***Woman's Club Rehabilitation*** - $200,000, all general bond funds. The city is presently in discussions with the Ocoee Woman's Club about leasing their historical building as an additional facility for the Lakeshore Center and its venue rental operations. This project would rehabilitate the property, add outside landscaping, construct new restrooms, and upgrade the kitchen to one suitable for catering operations while preserving the building's historic character. The property would also gain the advantage of integrated parking with other city facilities.

13. ***Maine Street Extension*** - $750,000, all bond funds. Cross access to Bluford from other north-south roads is extremely limited. The extension of Maine Street from Maguire Road to Bluford Avenue will provide a needed connection that both aids access to the downtown area and relieves local traffic congestion of SR 50 by serving as a parallel land access roadway. In order to best integrate this extension into the traffic system, a traffic signal will be installed.

14. ***Bluford Avenue Dual-left Turn Lanes*** - $350,000, mostly general bond funds with some developer contribution. The Maine Street Extension will allow Maguire Road to serve as the primary path from Bluford to westbound SR 50. Bluford Avenue will serve the eastbound traffic, but traffic on this movement already exceeds the available capacity provided by a single left-turn lane. This project will add a second left-turn lane for southbound traffic turning onto eastbound SR 50 toward Orlando.

Capital Project Cost Estimation Methodology

Cost estimates for the capital investment projects included in the Downtown Ocoee Master Plan are based on multiple considerations and sources. The potential cost of most road projects is derived from average construction costs for similar roads provided by the Florida Department of Transportation. This guidance is based on a sample of actual projects and is used by FDOT during project initiation. A potential issue presented by this source is the relatively small sample size for short, two-lane, urban streets of the type contemplated by the Master Plan. Economies of scale experienced by FDOT projects will not be present in the city's. To compensate for this potential error and to provide a more conservative cost estimate, a 20% project-level contingency amount was added to the raw cost estimates. This addition will provide more reasonable accommodation of right of way acquisition, stormwater and sanitary sewer construction, and other cost elements of the proposed projects that are not significant considerations in the FDOT data.

The estimated cost for other projects is based on general cost information available to the planning team for the type of construction involved. Many projects have multiple construction types. For example, the Bluford Street Reconstruction project involves underground utilities, such as stormwater collection and conveyance pipelines, water mains, gravity lines and force mains for sanitary sewer service, and electric power lines. Each type of construction has its own cost estimating sources and methods. The proposed time of construction is an additional factor, with near-term project costs being more reliable, as some are based on actual price proposals and detailed cost estimates. There are also project dependencies that will need to be accommodated, such as by building a portion of one project as part of another to avoid future reconstruction costs. As a reflection of the degree of uncertainty present at this conceptual planning stage, the cost estimate provided for any specific project should be viewed as illustrative and not definitive of the actual cost.

Construction Project Timelines

The Downtown Ocoee Master Plan presents the fully built vision over a 40-year period. Individual projects will often have impacts on others. To set the stage for realizing this vision, the city next needs to identify specific project-related actions and fully accommodate the impacts individual projects have on each other; i.e., project dependencies. The task of discovering and accommodating project dependencies is the reason the Downtown Ocoee Master Plan presents projects in near-, mid-, and long-term timeline groups. Final project construction timing will be based on the presence (or absence) of project dependencies and opportunities presented by private land redevelopment investments.

Larger projects can be split into multiple phases in order to allow work in some areas to occur sooner than might be otherwise possible. There are also key infrastructure projects that are not included in the Downtown Ocoee Master Plan but are necessary to realize the vision presented by the Plan, such as construction of a downtown sanitary sewer collection system that will allow future development to occur at higher densities.

The city's task is to construct those portions of the Downtown Ocoee Master Plan that represent public infrastructure, like streets, parks, and utilities. Most of the Downtown Ocoee Master Plan's vision is actually a reflection of the city's desired private investments. Careful planning now will ensure the best use of the public's money for construction and set the stage for private investment.

As shown in Figure 1, a typical capital project starts with conceptual planning and ends with construction. The various preliminary phases are usually much longer than the construction time.

Figure 1. *Design-Bid-Build project timeline.*

This timeline is for a Design-Bid-Build project and is the typical approach used by the city for all types of construction projects. A key element is the Design & Permitting phase, which ends with a complete set of construction plans that are used to conduct a bidding process where the low bidder is awarded the construction work. The major shortcoming of this approach is that the city does not have much construction cost information available while the project is being designed. To avoid this problem, the city may also use the Design-Build approach, as shown in Figure 2.

Figure 2. *Design-Build project timeline.*

The Design-Build timeline puts the Bid & Award phase earlier in the process. This is done by splitting the Design & Permitting phase into two parts: a preliminary design phase, where the city hires a design firm to assemble a design criteria package for the purpose of finding a design and construction firm, and a final design and permitting phase, which is accomplished by the same company that will do the construction work. The preliminary design phase tells potential contractors what the city wants them to build. Final design is accomplished with a great deal of cost information. The amount of design work

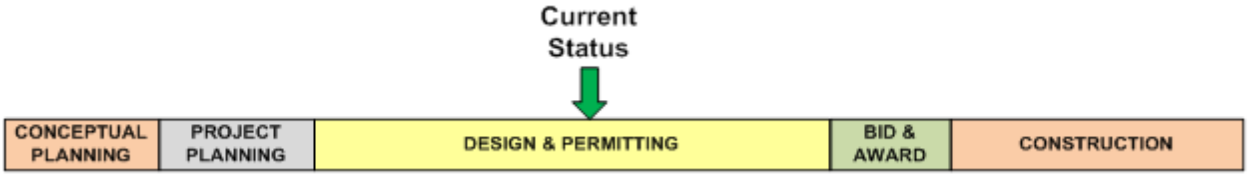
done before and after the bid and award phase is determined by the extent to which the city wants to specify the final product.

Regardless of the construction method used by the city for the projects included in the Downtown Ocoee Master Plan, most of those projects are really conceptual proposals for projects. A few of the projects listed in the Downtown Ocoee Master Plan are in a near-construction-ready state waiting on funding. Most will need significant detailed planning, design, and other work before construction can begin. It will be for the city and its consultants to carry the projects through the rest of the timeline.

Figure 3. *Maine Street Extension project status.*

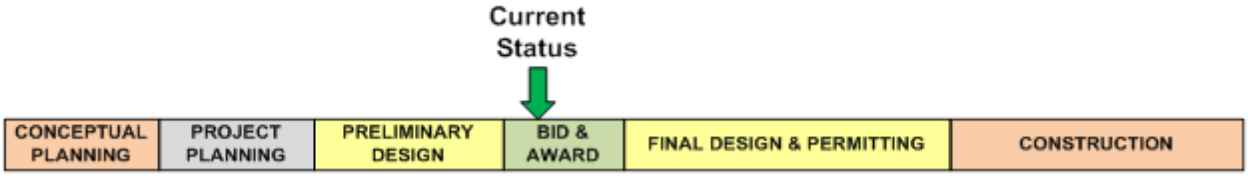
Figure 3 shows the current timeline status of the Maine Street Extension project, which will construct a link between Bluford Avenue and Maguire Road. Most of the design work is complete, with stormwater management and traffic signal design underway. Right of Way title is being transferred to the city under an existing development agreement.

Figure 4. *Bluford Avenue Reconstruction project status.*



The timeline status for the more complex Bluford Avenue Reconstruction project (Figure 4), which will install major portions of the new downtown utility infrastructure in addition to providing a new streetscape, has completed the streetscape conceptual design and wastewater force-main engineering design. Streetscape engineering design and other elements of the utility and stormwater infrastructure that will be in the Bluford Avenue right of way and, thus, need to be included in the project scope are still being developed. Accommodating future projects on the cross-streets is also a project dependency.

Figure 5. *Bluford Avenue Left-turn Lane Addition project status.*



The timeline status for the project adding a second left-turn lane on the north approach of Bluford Avenue at SR 50 (West Colonial Drive) is shown in Figure 5. This project will likely use a design-build

approach with the scope of work being conceptually added to the FDOT-funded SR 50 road widening project, where Lane Construction is the prime contractor.

Project Dependencies

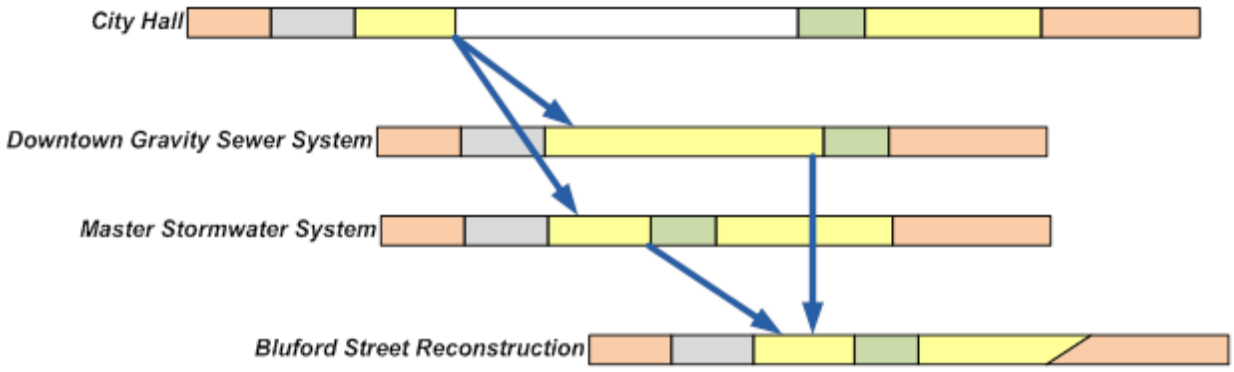
Project dependencies are the impacts projects have on each other, such as for one to be completed before another can begin. Two of the major downtown redevelopment projects have a number of such dependencies. The Bluford Avenue Reconstruction project and related underground utility construction depend on:

- Master Downtown Stormwater System, both for receiving street stormwater runoff and any need to modify the creek crossing near Franklin Street to accommodate the retention facility
- Sizing of new City Hall stormwater demand and conveyance pipe to future Master Downtown Stormwater System retention facility (this dependency may be removed by constructing onsite retention capacity)
- Downtown Gravity Sewer System design (assumes construction of downtown sanitary sewer collection elements within Bluford ROW does not require construction of the entire system)

The City Hall Relocation project similarly depends on:

- Master Force-main Connector
- Master Downtown Stormwater System (this dependency may be removed by constructing onsite retention capacity)
- Bluford Avenue Streetscape (for construction of stormwater conveyance; this dependency may be removed by constructing onsite retention capacity)
- Purchase of Parcel 17-22-28-5504-04-080, 16 E McKee St, 2016 OCPA Appraised Value=$55,130

These project dependencies are illustrated in the figure below. It shows that the design of the new City Hall will impose requirements on the Downtown Gravity Sewer System, which will need to accommodate the building's production of wastewater, and the Master Downtown Stormwater System, which will need to be sized to accommodate the runoff from the building and related impervious surface areas. It will then be necessary to construct the gravity sanitary sewer system and stormwater system to the extent they can handle the discharges from City Hall. Since the underground pipes that connect the City Hall site to the Master Stormwater System and provide sanitary sewer collection service go under the reconstructed Bluford Avenue roadway, their construction will also impact the timing for that project. Thus, the design of the new City Hall is an input to the design of the Downtown Gravity Sewer and Master Stormwater systems, which are, in turn, inputs to the design of Bluford Avenue.



There are other, less complex project dependencies. For example, the creek Improvements project should be concurrent with Master Downtown Stormwater System construction due to expected changes in water elevation. The northern portions of the Lakefront Park Improvements project are dependent

on City Hall Relocation, as it includes the area presently occupied by City Hall, and should be concurrent with Lake Edge Improvement project. This dependency led staff to split the Lakefront Park Improvements project into two parts, one that can move forward prior to relocating City Hall and another that will happen after City Hall is moved.

There are also project relationships that may affect timing and funding options. For instance, the construction of the gravity sewer and stormwater systems can facilitate reconstruction of Cumberland Avenue and other downtown streets since the pipes will be located under the pavement.