

RESOLUTION JIA/CRA-2020-01

A RESOLUTION OF THE JACKSONVILLE INTERNATIONAL AIRPORT COMMUNITY REDEVELOPMENT AGENCY (“JIA/CRA”) ADOPTING A FY 2019-2020 AMENDED BUDGET; ALLOCATING ADDITIONAL FUNDING TO THE DUVAL ROAD PD&E STUDY; PROVIDING FOR OVERSIGHT BY PUBLIC WORKS AND AUTHORIZATION TO PROCURE SERVICES; AUTHORIZING THE MAYOR AND CORPORATION SECRETARY TO EXECUTE AND DELIVER ALL CONTRACTS; PROVIDING AN EFFECTIVE DATE.

WHEREAS, Ordinance 2018-573-E and Resolution JIA/CRA-2018-01 appropriated \$350,000 to the Duval Road PD&E Study activity; and

WHEREAS, there is \$6,781,636.60 remaining in the FY 2019-2020 JIA/CRA Unallocated Plan Authorized Expenditures budget line item and the Board desires to transfer \$300,000 from that line item to the Duval Road PD&E Study as additional funding to complete the PD&E Study; and

WHEREAS, the Board is empowered to authorize projects within the JIA/CRA and finds that the Duval Road PD&E Study is in compliance with, and furthers the purposes and objectives of the JIA/CRA Redevelopment Plan; and

WHEREAS, on October 29, 2019, the JIA/CRA Advisory Board, with a unanimous vote of 4-0, recommended to the Agency Board that a transfer of \$300,000 be made within the Plan Authorized Expenditures Category from the Unallocated Plan Authorized Expenditures line item to the existing activity created for the Duval Road PD&E Study; and

WHEREAS, in accordance with Sec. 106.341, Ordinance Code, the Board has been given authority to allocate and transfer funds from “Unallocated Plan Authorized Expenditures” to a specific Plan Capital Project, such as the Duval Road PD&E Study, without further Council approval; and

WHEREAS, Chapter 126.211, Ordinance Code (Procurement Code) provides for the City to utilize a competitively procured government contract “for the procurement of supplies, professional design services, professional services, contractual services and capital improvements by the City and its independent and/or using agencies;” now therefore

BE IT RESOLVED, by the JIA/CRA Board:

Section 1. The Board is empowered to authorize projects within the JIA/CRA and finds that the development of the Duval Road PD&E Study is in compliance with, and furthers the purposes and objectives of the JIA/CRA Redevelopment Plan as follows:

1. Page 4:
 - h) Provide pedestrian linkages within the project area;
 - k) Provide public improvements to complement and service new development, including needed utilities also including: electric, water, sewer and gas line extensions, street closings and changes, streetscape improvements, open space landscaping, pedestrian linkages and parking;
 - l) Provide the additional public services including roadways necessary to serve new development.
2. Page 6:

Goal 2: Increase Existing Transportation Network Capacity – The traffic carrying ability of the existing roadway network shall be optimized and the traffic carrying capability of any capacity-deficient roadway segment shall be increased to the highest practical level of efficiency before considering the addition of through-lane miles.

Goal 3: Increase Total Roadway Network – New lane miles shall be added to the existing roadway network when necessary to ensure the safe, efficient movement of persons and goods. The addition of lane miles will be accomplished where possible within the existing roadways right-of-way.
3. Page 7:

Goal 4: Establish Non-Motorized Transportation Network – The establishment and use of an interconnected system of right-of-way, which provides for the safe movement of pedestrians and bicyclists throughout the City, shall be supported.

Goal 7: Transportation System Safety – The traffic circulation system shall be operated in a manner which values the safety of its citizens as being of equal importance to efficiency and expedience of design and materials.

Section 2. The Duval Road PD&E Study Project description is **attached hereto as Exhibit A.**

Section 3. The Board hereby allocates and transfers \$300,000 from the Unallocated Plan Authorized Expenditures line item within the Plan Authorized Expenditures Category of the JIA/CRA FY 2019-2020 Budget, **attached hereto as Exhibit B**, to the existing activity created for the Duval Road PD&E Study.

Section 4. Pursuant to Sec. 106.344, Ordinance Code, a CRA Budget Transfer Form and CRA Capital Project Sheet regarding the Duval Road PD&E Study are **attached hereto as Exhibit C.**

Section 5. Pursuant to Sec. 106.345, Ordinance Code, funds shall carryover from fiscal year to fiscal year. Any funds remaining after all obligations have been made regarding the Project shall be returned to the JIA/CRA Unallocated Plan Authorized Expenditures line item within the Plan Authorized Expenditures Category for the fiscal year in which the funds become excess.

Section 6. The Board requests that the Mayor direct the Public Works Department to provide oversight on the Duval Road PD&E Study. The Public Works Department is hereby authorized to procure services pursuant to Ch. 126, Ordinance Code.

Section 7. Pursuant to Sec. 500.116, Ordinance Code, the Mayor, or his or her designee, and the Corporation Secretary, are authorized to execute and deliver all contracts and documents approved and authorized by the Board related to the Duval Road PD&E Study.

Section 8. This Resolution shall become effective upon a majority vote of the Board and upon execution by the Chair.

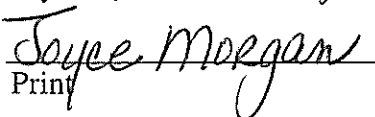
WITNESS:

**JACKSONVILLE INTERNATIONAL AIRPORT
COMMUNITY REDEVELOPMENT AGENCY**


Signature



Scott A. Wilson, Chairman


Print

Date signed: 1-28-2020

VOTE: In Favor: 13 Opposed: 0 Abstained: 0

FORM APPROVAL:



Office of General Counsel

SCOPE OF SERVICES
City of Jacksonville, Florida
Duval Road Widening
Preliminary Engineering and Drainage Reports
June 14, 2019

Study Objective

The purpose of this project is to perform preliminary engineering and prepare a study for the potential widening of Duval Road from Dunn Avenue to I-295. The study report will identify improvements necessary to widen Duval Road from its current 2 lane rural cross section to a 3-lane, 4-lane or 5-lane urban cross section with pedestrian facilities, improved drainage, bridge widening and repair or replacement and traffic signals. This study will include the preliminary engineering evaluation of the corridor to identify a preferred alternative for this project including identification of utility and right of way impacts. This study will be completed for the City of Jacksonville (City) for the purpose of constructing the project with local funds. The report will not be prepared in anticipation of federal funding, but rather in accordance with City of Jacksonville standards.

Governing Regulations

The services performed by Alfred Benesch & Company (Benesch) team shall comply with the following guidelines.

- The City’s Master Storm Water Management Plan
- The City’s Land Development Procedures Manual
- Manual on Uniform Traffic Control Devices
- FDOT Minimum Standards for Design, Construction and Maintenance of Streets and Highways
- Florida’s Design Criteria for Resurfacing, Restoration and Rehabilitation (RRR) of Streets and Highways
- FDOT Design Standard Index

Project Team

Benesch will serve as the prime consultant for the project and will be responsible for completing the required services. Benesch will be assisted by the following subconsultants. Benesch will be responsible for the management of subconsultants.

Subconsultant Firm	Responsibility
RE Holland (JSEB)	Survey Right of way mapping
ERS Environmental/Aerostar SES/ SEARCH	Natural Resource Evaluation Report
CSI Geo (JSEB)	Geotechnical
Peggy Malone & Associates	Traffic Counts

General Scope of Services

The scope of this preliminary engineering study is divided into the following tasks:

1. Project Management and Coordination
2. Public Involvement
3. Engineering Analysis and Report
4. Environmental Analysis and Reports

Each task is described in detail in the following section of the Work Plan.

Task 1: Project Management and Coordination

The following is included in this task:

Meetings as needed

Benesch will attend a Notice to Proceed Meeting with city representatives, where relevant project information will be provided by the city, along with procedures for administering the contract. Additional regular meetings are not anticipated. A modest number of hours have been included for potential coordination meetings of specific items requiring discussion.

Schedule Management

This task will include preparation of an initial schedule for completion of the project, as well as monthly updates of the schedule to record progress. A duration of 12 months from notice to proceed is assumed for this project.

Quality Control

Benesch shall be responsible for insuring that work products conform to the City's standards and criteria. This shall be accomplished through an internal Quality Control (QC) process performed by Benesch and subconsultants. This QC process shall ensure that quality is achieved through checking, reviewing and surveillance of work activities by objective and qualified individuals who were not directly responsible for performing the initial work.

Before submitting the first invoice, Benesch shall submit a Project Quality Management Plan (PQMP) to the City's Project Manager for approval. The PQMP will include the proposed method or process of providing Quality Control for all work products, and shall identify the products to be reviewed, the personnel who perform the reviews, and the method of documentation.

Contract Management

This includes project management efforts for Benesch to complete setup and maintenance of files and prepare technical monthly progress and financial status reports.

Submittals

Benesch shall provide electronic and hard copies of the required documents as listed below. It is assumed that three hard copies will be provided for each report for the purposes of estimating this contract.

- Public Involvement Plan
- Project Traffic Analysis Report
- First Draft Preliminary Engineering Report
- Preliminary Engineering Report (Signed and Sealed)
- First Draft Preliminary Drainage Report
- Preliminary Drainage Report (Signed and Sealed)
- Drainage/Pond Siting Report
- Geotechnical Report
- Right of Way Drawings
- Natural Resource Evaluation Report

It is assumed that one set of compiled comments will be received from the City on each submittal. Benesch will submit a disposition of comments with each submittal to confirm receipt and incorporation of the City's comments.

Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. Benesch will develop CADD drawings in accordance with the FDOT CADD Manual and the FDOT Plans Preparation Manual. Plans will be completed in Bentley Microstation.

Task 2: Public Involvement

This task will include the following:

Public Involvement Plan

This task involves the research and coordination necessary to prepare a public involvement plan. The FDOT PD&E Manual and Public Involvement Handbook will be used as a guideline to prepare this plan. Issues such as how information will be disseminated and gathered from the public will be considered. No websites or newsletters are anticipated for this project or included in this scope of work.

Public Meetings

It is assumed that two open house format public meetings will be conducted for this project:

- Public Meeting No. 1: Introduce the project. This will be held in an open house format to meet the local stakeholders, gain knowledge of the project area, obtain initial public thoughts and ideas for the project, gauge support for the project and collect contact information for attendees. A map and comment materials will be created for this meeting.
- Public Meeting No. 2: Present preferred alternative. This final public meeting will include exhibits demonstrating final proposed improvements for the project. This meeting will also be conducted as an open house, providing a forum to collect final comments from the public. This will be a public meeting and not a public hearing, seeking written comments from stakeholders. A court reporter is not included in this scope or cost.

The meetings will be held at a City-owned public location near the project. No rental, facility or refreshment costs are assumed for these meetings. For the second public meeting, Benesch will prepare a series of draft exhibits and handouts for review with the City staff prior to the public meeting. Benesch will arrange to have the handouts printed and exhibits printed and mounted on foam boards for display at each meeting. Benesch will manage the logistics of each meeting, creating sign in sheets and arranging the room for each meeting. Benesch will provide three staff members for each meeting to greet attendees and answer questions. It is assumed that City staff will attend and assist with meeting the public and responding to questions. In lieu of creating a mailing list for the project, stakeholders will be notified of the upcoming public meeting by electronic changeable message signs located at either end of the project. Benesch will arrange for these boards, the cost of which is included in this contract. These will be installed at locations agreeable to the City for up to one week prior to the meeting. Prior attendees from meeting 1 will be notified via email for meeting 2. No cost of ads or public notices are included in this contract.

Comments and Coordination Report

This task includes the compiling and responding to comments received on the project and summarizing the coordination effort in the Preliminary Engineering Report.

Task 3: Engineering Analysis and Report

The following items are included in this task:

Review of Previous Studies

This task includes coordinating with the City and other agencies, with the City's approval, in obtaining and reviewing previous studies such as corridor studies, subarea studies, Master Plans, ACER and adjacent studies to the project.

Existing Conditions Analysis

This will consist of two tasks:

Data Collection

This task consists of collecting data describing existing roadway conditions and characteristics. It includes the review of relevant data with regard to the existing roadway, including but not limited to plans, pavement reports, and existing ROW, tax and maintenance maps, as well as data related to modes and sub-modes of transportation. This data will be analyzed to determine transportation deficiencies as they relate to the needs and objectives of the project. This also includes the development of exhibits such as a Project Location Map and Corridor Maps as necessary

Field Review

This task consists of conducting field observations to review existing conditions and obtaining data required to understand the study area.

Survey

This scope of work includes a full topographic survey of the corridor and SUE evaluations

to establish utility locations and depths suitable for use during design. Although this work could be delayed until the full design phase, it is prudent to include this work in the preliminary engineering phase to provide for more accurate evaluations of the corridor.

Topographic and Route Survey

This task will include preparation of a Topographic and Route Survey of Duval Road along the public rights-of-way for a project centerline length of approximately 10,000 feet, plus 50 feet along the 5 side intersection streets, for a total project survey length of approximately 10,600 linear feet. Width of the survey effort will be 50 feet east and west of the edge of pavement, for a corridor width of 125 feet total. The survey effort will include topographic and tree survey of all trees 6 inches and larger. All hardscape including driveways, sidewalks, hedges, landscape planters and ornamental shrubs will be located. All topographic features including storm, sanitary, ditches, and other physical features will be included. All above ground visible evidence of utilities will be located. A full DTM model and Bridge survey will be done. The route survey shall be utilized for the purposes of a civil engineering design survey for the widening of Duval Rd. (to be completed by RE Holland)

ROW Mapping

This task includes right of way mapping for Duval Road. The mapping will begin at I-295 and Duval Road, continuing along Duval to the intersection with Dunn Avenue. This task will include recovery and establishment of right of way along the entire corridor. No title work will be included in this task. (to be completed by RE Holland)

Geotechnical Investigation

This preliminary engineering phase will include performing limited exploratory field work along Duval Road and at the Duval Road crossing over Cedar Creek to obtain general subsurface data to be used for this study phase. The full geotechnical effort will be conducted during the Design Phase of the project. This preliminary geotechnical exploration will consist of field exploratory borings, laboratory testing and a preliminary geotechnical analysis of the collected data.

The proposed exploration will consist of preliminary geotechnical studies and the collection of preliminary subsurface data as follows:

Duval Road Widening

During this preliminary engineering phase, the preliminary roadway exploration will consist of auger borings along each side of Duval Road to depths of 5 and 20 feet at 1,000 foot intervals. The work effort will also include pavement cores at 1,000 foot intervals.

Bridge at Cedar Creek

During this phase, one Standard Penetration Test (SPT) boring will be performed to 100' deep as close as possible to the creek. Undisturbed samples of cohesive soils will be obtained in accordance with FDOT Standards. Soil and water samples from the bridge area will also be tested for environmental classification testing. Additionally, D50 grain sizing will be collected and tested for the bridge hydraulic report. The bridge boring will be

grouted upon completion.

Soil samples will be classified, containerized, and marked in the field and returned to the laboratory for visual inspection and classification by the geotechnical engineer using the AASHTO and the Unified Soil Classification System.

Southern Approach to Cedar Creek Bridge

In 2017, CSI Geo was tasked by FDOT to investigate the cause of the excessive settlement issues at the southern approach and approach slab of the Duval Road bridge over Cedar Creek (bridge no. 724317). Several borings and cores were performed at this location indicating the presence of highly compressible unsuitable organic material and voids underneath the approach and the approach slab. Results of the geotechnical exploration along with repair recommendations/alternatives that were provided to FDOT in 2017 will be included for information purposes as part of the preliminary engineering submittals/deliverables. However, no further field exploration will be conducted along this section during this phase.

Laboratory Testing

Routine laboratory testing will be conducted on representative soil samples to determine classification, and aggressiveness. Laboratory classification and index soil tests will be performed as necessary on selected soil samples obtained from the exploration. Specific tests to be performed are Organic Content, Moisture Content, Percent Fines, Grain Size Analysis, Atterberg Limits, Environmental/Corrosion Testing, and Consolidation Testing.

Engineering/Support Services

A geotechnical engineer, registered in the State of Florida, will direct the preliminary geotechnical exploration and provide preliminary engineering analysis and evaluation of the site and subsurface conditions with respect to the planned construction. The results of the exploration will be presented in a preliminary report containing the following:

- A brief discussion of the planned construction.
- A graphical representation of the subsurface conditions encountered as well as encountered and seasonal high-water tables, etc., as they relate to the planned construction.
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, and other pertinent calculations.
- Written discussion of the subsurface conditions encountered.
- Preliminary evaluation of the subsurface soils and preliminary recommendations concerning the suitability of the subsurface soils for support of the planned roadway widening.
- D50 test results on creek soils.
- Pile capacity curves for precast driven concrete piles for the bridge foundations.
- Geotechnical Reports prepared by CSI Geo in 2017 pertaining to the southern approach slab settlement issues and associated repair recommendations.

Traffic Analysis

Methodology

This task consists of developing methodology that will be used to performed traffic analysis in accordance with the Highway Capacity Manual and FDOT's PD&E Manual, Manual on Uniform Traffic Studies (MUTS), Q/LOS Handbook, Traffic Analysis Handbook and Project Traffic Forecasting Handbook. The Methodology should include an approach to evaluate safety performance of the alternatives. The Methodology will be approved by the City.

Existing Traffic Operational Analysis

Benesch will obtain or collect the necessary data to complete the traffic operations and safety analysis. Immediately following the Notice to Proceed, Benesch shall begin data collection activities. Benesch shall obtain pertinent data that defines the existing physical features of the Duval Road corridor and related supporting transportation facilities and services. Sources may include previous Master Plans, concept reports, PD&E Studies, special studies, project files, old plans, right-of-way maps, straight line diagrams, the FDOT's Work Program, and computer programs as available. Other sources may include field observations or plans, projects, or databases maintained by local, regional, or other state agencies, transit authorities and/or operators, or the general public.

The data collection efforts include but limited to the following:

- Roadway Characteristics
Benesch will review and summarize the existing roadway characteristics present along the Duval Road corridor within the project limits. Specific roadway characteristics to be reviewed include:
 - Locations of signalized study intersections within the study area
 - Approach geometries of study intersections
 - Existing signal timing plans, where available, for signalized intersections (SR 104/Dunn Avenue).

- Traffic Count Data (Peggy Malone & Associates)
Turning Movement Counts: Weekday eight-hour turning movement counts (7:00 AM-9:00 AM and 3:00 PM-6:00 PM) will be conducted at the intersections listed below. Vehicles, pedestrians and bicycles will be counted.
 - SR 104 (Dunn Avenue)
 - Armsdale Road
 - I-295 EB ramps
 - I-295 WB ramps (optional)
24-Hour Traffic Counts (Intersection): Hourly traffic data on each approach (up to 4 approaches) of the intersection will be counted for a period of 24 hours during typical weekday traffic conditions.
 - Armsdale Rd

72-Hour Traffic Counts: Hourly traffic count data for a period of 72 hours during typical weekday traffic conditions. The count data will be presented in an acceptable tabular form showing 15-minute interval volumes and hourly summaries.

- N/O Dunn Avenue
- N/O Armsdale Road

Spot speed study: This will be conducted as set forth in MUTS at the following location.

- N/O Victoria Point Drive

- Prior Reports, Studies and Concepts

Benesch will obtain and review readily available documentation of studies and concepts conducted in the general study area. Items such as lane configurations, storage lengths, merge lengths, etc. will be necessary for use in the Future Conditions Analysis.

- Land Use Data

Benesch shall collect the most recent available data regarding present and future land use, proposed developments, current zoning and observed trends. Data should be sufficient to show existing and projected residential, commercial, industrial, public, agricultural, and undeveloped areas within the corridor, and to demonstrate any relationships between land use, parking, and development policies. Future land uses and allowable development thresholds will be obtained from the comprehensive plans supplemented with local information from the NFLTPO and the City of Jacksonville.

- Planned and/or Programmed Transportation Projects

Benesch shall identify and document significant transportation network projects programmed in the FDOT's first five-year and second five-year Work Program, SIS Cost Feasible Plan, and the NFLTPO's Cost Feasible 2040 LRTP. Benesch will identify and accommodate these transportation network projects.

Benesch shall obtain and document current transportation plans for all modes, as available. Plans to be collected shall include the following: State and NFLTPO's Transportation Improvement Programs, Florida Transportation Plan, NFLTPO 2040 Long-Range Transportation Plan, current Transit Development Plans (JTA), City of Jacksonville comprehensive plans (particularly land use, traffic and transit elements), Freight Mobility Studies, Airport Plans, Strategic Intermodal System plans, and other studies completed or underway that address the study area.

- Existing Conditions Documentation

This task will focus on the collection and analysis of existing conditions information. For purposes of this analysis, the Existing Year is 2019.

- Existing Roadway Characteristics

Roadway information including the road name, area type, roadway type, number of lanes, and posted speed limit will be collected. The existing intersection geometry, including exclusive left turn lanes, exclusive right turn lanes, and the number of through

lanes will be obtained from aerial images (either Google Earth or other source of aerial imagery) and verified by a field review.

- Existing Conditions Analysis

An operational analysis utilizing Highway Capacity Manual (HCM) 2010 methodologies will be completed for the study intersections for the AM and PM peak hours. Benesch will utilize HCS and/or Synchro in the analysis.

For study intersections, the overall intersection LOS, volume to capacity ratio, queuing and delay time characteristics will be reviewed and summarized.

Future Demand Forecasting

The following methods will be used to study potential traffic growth in the study area:

- Northeast Florida Regional Planning Model (NERPM-AB, v. 3) – Benesch will review the validated model network within an agreed to subarea. As practicable, Benesch will review and update the transportation network data (number of lanes, speeds, facility types, and area types) within the subarea. Benesch will also review the socioeconomic (land use) data within the subarea to reflect current and future development. All modifications from the validation effort will be summarized and included within the report.
- Historical growth rate using TRENDS software and historical traffic count data for Duval Road from the City of Jacksonville’s concurrency database (where available).
- Bureau of Economic and Business Research (BEBR) data to understand area-wide growth trends.

The three resulting growth rates will be compared and an applied annual growth rate will be developed. The applied growth rate and existing traffic volumes will be used to forecast future traffic volumes (AADT) and AM and PM peak hour turning movement volumes for Duval Road and study intersections (SR 104 (Dunn Avenue, Armsdale Road and I-295 ramps (EB and WB (optional))).

The future year AADTs will be developed for the Opening and Design-year schedule provided within this Scope of Services.

No-Build Analysis

The following future conditions analyses will be completed for the Opening and Design Years in the No-Build scenario peak hours (AM and PM):

- Peak-hour intersection level of service and capacity analyses using Synchro and/or HCS.

Development and Screening of Build Alternatives

Based on the Design Hour Volumes developed in the future year analysis, a roadway cross section will be recommended for analysis. The future conditions screening will include a segment and intersection level of service analysis for the opening and design years.

Project Traffic Analysis Report

All tasks will be documented in a Project Traffic Analysis Report (PTAR). This task includes a draft and final submittal.

Signalization Analysis

Benesch shall analyze the collected data in light of the warranting conditions for all nine (9) signal warrants described in the Manual on Uniform Traffic Control Devices (MUTCD), the FDOT's Manual on Uniform Traffic Studies (MUTS), HSIPG and accepted traffic engineering practice at Armsdale Road. From this analysis, a recommendation shall be formulated as to whether or not a traffic signal should be considered for installation. The recommendation and justification for it shall be documented in the report.

Safety Analysis

A safety evaluation will be completed to determine if effective countermeasures to reduce crash potential can be incorporated into the project. Safety tasks are as follows:

Crash Data

Collision records will be obtained from the Signal 4 Analytics database. The date range will be from January 1, 2012 to May 1, 2019. Collision diagrams and summaries will not be prepared. Approximately 100 crashes are anticipated. It appears that one fatality occurred along the corridor during the study period.

Historical Crash Analysis

The historical crash data will be reviewed and summarized to identify crash trends along the corridor. The crash analysis will include the following information:

- Crash rates
- Common types of crashes and their causes
- Crash trends, etc. Crash trends may include:
 - Frequency of crashes by severity (fatal, injury, or property damage only)
 - Crash type
 - Vehicle movements
 - Number of vehicles involved
 - Related environmental factors

Documentation of Safety Analysis

The safety analysis will be documented and included in the Preliminary Engineering Report.

Utilities

This task includes the analysis of impacts of the project on utility providers and customers. This task is based on coordination with the utility companies along the project and preparation of a Utility Assessment Package to be included in the Preliminary Engineering Report.

Roadway Analysis

This includes the following:

Design Controls and Criteria

This task consists of defining the design controls and criteria according to the FDOT Design Manual.

Pavement Design

Based on traffic and geotechnical information, a pavement design will be performed. The pavement section will follow typical city pavement sections on similar roadways.

Geometric Design

This task consists of the development of horizontal and vertical alignments for the project. Alignments include mainline, cross roads and interchange ramps.

Intersection and Signal Evaluation

This task consists of evaluation of intersections type in accordance with the applicable FDOT manuals and procedures. A signal warrant will be completed for the Armsdale Road intersection within the Traffic Task above. This data will be used to evaluate the intersection design.

Access Management

This task will include impacts to access points along the corridor, as well as consideration of access locations that could be consolidated or improved.

Multimodal Accommodations

This task consists of identifying and evaluating accommodations of freight, pedestrian, bicycle and transit in the development and evaluation of project alternatives. It also includes analyzing existing and planned multi-modal needs (including accessibility and connectivity) and developing alternatives to accommodate all users depending on the context.

Maintenance of Traffic and Construction Phasing

This task consists of evaluating alternatives for constructability and the ability to maintain traffic during construction in accordance with Part 2, Chapter 3 of the PD&E Manual. It may include the segmenting and identification of the project into implementable construction segments.

Lighting/Signing/Pavement Markings

Evaluation of the need for lighting and additional signage will be conducted under this task.

Structures

Existing Structures

Our team will review the existing bridge information to properly understand the features of the existing structure, to understand potential rehabilitation needs, and to facilitate a comparison of how the current design criteria differs from the existing bridge. Benesch will review and

document the bridge number, bridge type, span arrangement, typical section, age of structure, condition, load rating, and channel data. In order to properly complete this task, Benesch will review the following information and document findings in the PER.

- Existing bridge plans and rehabilitation history
- Bridge Inspection Reports (BIR)
- Geotechnical reports, scour reports, environmental permits, and any previous studies
- Because hydraulic analysis will be required for the design of a new structure, bridge information for upstream and downstream structures will also be collected.
- Basic assessment of any environmental or wildlife conditions

Structure Typical Sections

The proposed bridge improvements for the structure crossing Cedar Creek require conveyance of two additional travel lanes and the inclusion of sidewalks and bike lanes. Our review of possible alternatives will include options that widen the existing structure or construct a new bridge parallel to the existing structure. Benesch will review alternatives and will develop structure typical sections for the following:

- Rehabilitate and widen the existing structure to accommodate the roadway section desired
- Rehabilitate the existing structure and construct a parallel structure to accommodate the additional roadway section desired

Structure Design Alternatives

Because alternatives for the Duval Road project may require widening the existing structure or simply to construct a new bridge parallel, the development of alternatives for structure design will describe the general attributes of each alternative and provide the designer with specific structural features. This includes the proposed structure type, rehabilitation requirements, substructure requirements, and span arrangements. Benesch will also specify the level and scope of structural analysis required for design of the alternates.

Drainage

A drainage study and report will be developed based on the proposed roadway cross section including the surrounding topography and existing drainage patterns.

- 2010 Drainage Manual, Florida Department of Transportation
- Hydrology Manual, Florida Department of Transportation
- Stormwater Treatment Design Guidelines, Memo, Florida Department of Transportation
- Stormwater Treatment Design Guidelines, CWI Memo to the City of Jacksonville
- Stormwater Quality Handbook (March 2010 Draft), Florida Department of Environmental Protection

Preliminary Pond Siting Report

Practical stormwater ponds locations and sizing will be in accordance with current St Johns River Water Management District criteria and to the Florida Department of Environmental Protection stormwater rule. For this study it is estimated three stormwater management facility (SWMF) ponds will be needed for the Duval Road improvement project.

Two meetings are estimated for the environmental look around (ELA) and pond siting. This includes preparing exhibits and meeting minutes.

A Pond Siting Report will be prepared to document the design process and the evaluation process used to recommend the location for the SWMF ponds. The report will contain project treatment volume and project attenuation volume calculation summaries, wetland impacts, contamination assessments, property information and estimating construction cost.

Preliminary Drainage Report

The drainage report will document the analysis of the drainage issues and the drainage design concepts for the Duval Road improvements. The report will include the following design elements: existing drainage conditions, exiting drainage outfalls, SWMF ponds, preliminary storm sewer design, preliminary stormwater layout, linear retention, any floodplain compensation in the area or associated with Cedar Creek, drainage maps, and right-of-way needs. For developing level of effort two flood plain encroachment locations are estimated. During the drainage analysis coordination will be performed with the city on anticipated future developments within the drainage areas of the proposed storm sewer system and ponds to address all future demands based on the information known today with the project. The storm sewer design and layout will be conceptual for estimating purposes. Final design will address storm sewer hydraulics, pipe diameter, pipe inverts and specific utility conflicts.

Bridge Hydraulic Evaluation

Because all alternatives involve a larger structure crossing Cedar Creek, Benesch will review hydraulic design requirements for each alternative. This will require the development of a (Location Hydraulic Report (LHR) for the crossing. This will be completed using HEC RAS modeling. Benesch will also perform a scour analysis of the alternatives.

Landscaping Analysis

This includes research required to collect data necessary to complete initial evaluation of landscaping requirements for the project. It also includes identifying local ordinances and collection of data such as lighting, utilities, ITS, signage/pavement markings, drainage maintenance.

Construction and Right of Way Cost Estimates

This includes the following:

Construction Cost Estimates (2 alternates)

This task includes the development of construction cost estimates using LRE.

Right of Way Cost Estimates

This task includes coordination and preparation of project materials needed to support ROW cost estimates

Alternatives Evaluation

Comparative Alternatives Evaluation

This task includes the development of an evaluation matrix and the qualitative and quantitative analysis of the project alternatives. The criteria for determining the number of hours needed for this task are the number of alternatives and segments and the level of detail for the concepts.

Selection of Recommended Alternative

This task includes coordinating with the City to select the preferred alternative.

Concept Plans

This consists of the following:

Base Map

This task includes creating a base map that consists of existing data and information for the project on aerial photographs. This task includes creating an Overall Project Location Map, Overall Drainage Map and Corridor Maps (Roll Plots).

Typical Section Package (assume 6)

This task includes all work required to develop and approve the typical section package. Typical sections will be developed for the preferred alternative.

Engineering Analysis Documentation

Draft Engineering Analysis Documentation

This task includes the completion of the draft First Draft Preliminary Engineering Report. This will be completed prior to Public Meeting No. 2.

Final Engineering Analysis Documentation

This task includes the completion of the Preliminary Engineering Report (Signed and Sealed) after the selection of the preferred alternative. This includes documentation of preferred alternative, and any updates required based on public meeting input.

Quality Assurance / Quality Control

This task consists of implementing the Quality Control (QC) plan for the engineering analyses and considerations.

Task 4: Environmental Analysis and Reports

Environmental Resource Solutions (ERS), in conjunction with Aerostar and SEARCH, will assist with the completion of field surveys and relevant documentation for inclusion in a Natural Resource Evaluation (NRE) that provides an assessment of potential impacts to jurisdictional wetlands and/or surface waters, and both state and federally-listed plants, fish, and wildlife species for the portion of Duval Road (CR 110) located between Dunn Avenue (SR 104) and Interstate 295 in Duval County, Florida. All vegetative communities will be mapped within each alternative footprint and impacts to protected resources will be estimated. A draft functional assessment using Uniform Mitigation Assessment Method (UMAM) will be completed for estimated wetland impacts per alternative and per wetland community type.

ERS will perform the following sub-tasks towards the developments of each primary alternative and the final recommended alternative:

1. Conduct full wildlife database search and desktop evaluation of each proposed alternative to determine the approximate extent of wetland and surface water resources.
2. Conduct a delineation of wetlands and surface waters to determine the extent of jurisdictional wetlands and surface waters.
3. Conduct preliminary flora and fauna surveys within each alternative to determine whether the habitats support or have the potential to support federally-listed species.
4. Prepare a Natural Resource Evaluation report that will include a wetland evaluation [per FDOT PD&E Manual Part 2, Chapter 9 (2017)], listed species evaluation [per FDOT PD&E Manual Part 2, Chapter 16: Protected Species and Habitat (2017)], and evaluation of EFH [per FDOT PD&E Manual Part 2, Chapter 17 (2017)].
5. Aerostar SES will perform a Contamination Screening Evaluation (CRE) to determine the potential for contamination within the proposed alternatives.
6. SEARCH will prepare a cultural resources desktop analysis to identify known cultural resources that have been recorded with the Florida Master Site File (FMSF), research regarding unrecorded historic resources, and development of archaeological probability models. No archaeological or architectural history field survey will be conducted under the present scope of services and no historic resources will be evaluated with regard to eligibility for listing on the National Register of Historic Places (NRHP).

Quality Assurance / Quality Control

This task consists of implementing the Quality Control (QC) plan for the engineering analyses and considerations.

**JIA AREA REDEVELOPMENT TID
SUBFUND 18C
FY 19/20 AMENDED BUDGET**

	<u>FY 19/20 APPROVED BUDGET</u>	<u>FY 19/20 AMENDED BUDGET</u>
REVENUES		
Property Taxes	\$ 13,065,456	\$ 13,105,330 (A)
Investment Pool Earnings	\$ -	\$ 40,717
Total Revenues	<u>\$ 13,065,456</u>	<u>\$ 13,146,047</u>
EXPENDITURES		
Administrative Expenses		
Professional and Contractual Services (not "Plan Professional Services")	\$ 1,000	\$ 1,000
Travel	500	500
OGC Internal Service	6,940	6,940
Advertising and Promotion	1,000	1,000
Office Supplies	500	500
Employee Training	300	300
Dues, subscriptions	342	342
Supervision Allocation	90,590	90,590 (B)
Annual Independent Audit	2,500	2,500
Total Administrative Expenses	<u>\$ 103,672</u>	<u>\$ 103,672</u>
Financial Obligations		
REV Grants		
Amazon	\$ 1,500,000	\$ 1,500,000
RAMCO	745,000	745,000
Ecolab	50,000	50,000
River City Crossing (RCC)	240,000	240,000
QTI Grants		
Mercedes Benz	16,200	16,200
Amazon	75,000	75,000
Safariland	3,600	3,600
Debt Service - 2014 Special Revenue, RAMCO (Interest)	472,905	472,905
Debt Service - 2014 Special Revenue, RAMCO (Principal)	780,000	780,000
Total Financial Obligations	<u>\$ 3,882,705</u>	<u>\$ 3,882,705</u>
Future Years Debt Reduction	\$ -	\$ -
Total Future Years Debt Reduction	<u>\$ -</u>	<u>\$ -</u>
Plan Authorized Expenditures		
¹ Duval Road-Airport to Biscayne-Roadway Resurfacing-Mobility cc	658,284	658,284
¹ Duval Road-Airport to Biscayne-Sidewalks-Mobility cc	1,524,750	1,524,750 (C)(D)
¹ Ranch Road-Duval to Tradeport-Sidewalks-Mobility dd	195,000	195,000 (D)
¹ Duval Rd PD&E Study	-	300,000 (E)
Unallocated Plan Authorized Expenditures	6,701,046	6,481,637
Total Plan Authorized Expenditures	<u>\$ 9,079,079</u>	<u>\$ 9,159,670</u>
Total Expenditures	<u>\$ 13,065,456</u>	<u>\$ 13,146,047</u>

¹ Denotes Plan Capital Project.

(A) FY19/20 Amended Budget reflects actual property taxes, or a difference of \$39,874.

(B) Amount provided by Budget Office.

(C) Project partially funded via FY18/19 Amended Budget. Allocation represents balance of funding needed for project. Total cost = \$2.1M.

(D) Mobility Projects cc) and dd) are listed separately for reference purposes. Per discussions with Public Works, the two sidewalk projects will be combined into a single project at a total cost of \$2,295,000 in order to be more cost effective.

(E) Ord. 2018-573-E and Resolution JIA/CRA-2018-01 authorized existing project and appropriated \$350,000 to the Duval Rd PD&E Study. Amending for additional funding requested by Public Works.

CRA Budget Transfer Form
 City of Jacksonville, Florida
COMMUNITY REDEVELOPMENT AGENCY

Jacksonville International Airport
 Name of Community Redevelopment Agency

Yes
 Plan Capital Project (Yes or No)
 (if applicable fill out CRA Capital Project Form)

7
 Council District (s)

Description of Expenditure Request:

The Duval Road PD&E Project was originally approved per JIA-CRA-2018-01 & Ord. 2018-573-E. The purpose of this request is to allocate an additional \$300,000 to the Project, as requested by Public Works. **Accounting will need to move revenue actuals from 31101 CRAPAE-AL to 31101 JEE163-01.**

\$300,000.00
 Total Amount of Expenditure Request

TBD
 Anticipated Expenditure Commencement Date

TBD
 Anticipated Expenditure Completion Date

04904
 Applicable Approved CRA Budget Line Item For Expenditure

\$6,781,636.60
 Available Funds in Approved CRA Budget Line Item

Date Rec'd.	Date Fwd.	CRA Board Administrator Approval
	1/15/20	

BUDGET OFFICE

Date Rec'd.	Date Fwd.	Budget Officer Approval
1-16-20		

ACCOUNTING DIVISION

Date Rec'd.	Date Fwd.	Comptroller Approval
1/16/20		

Budget Office and Accounting approval required to verify available funds and for any necessary finance activity / line item changes.

CRA BOARD APPROVAL

Date Rec'd.	Date Fwd.	CRA Board Chair Approval

\$300,000.00
 Expenditure Amount Approved by CRA Board

JIA-CRA-2020-01
 CRA Board Resolution Number

1/28/2020

CRA Budget Transfer Line Item Detail

TRANSFER FROM: (Revenue line items in this area are being appropriated and expense line items are being de-appropriated.)

Rev Exp	SF ID	Subfund Title	Activity / Grant Title	Line Item / Subobject Title	Amount	Accounting Codes					
						Indexcode	Subobject	Project	Prj-Dtl	Grant	Grt-Dtl
Total: \$600,000.00											
REV	18C	Jax Int'l Airport CRA Trust Fund	JIA Area Redevelopment Trust	Property Taxes	\$300,000.00	JXSF18C	31101	JEE163	01		
EXP	18C	Jax Int'l Airport CRA Trust Fund	Unallocated Plan Authorized Expenditures	Trust Fund Authorized Expenditures	\$300,000.00	JXSF18CPLAN	04904	CRAPAE	AL		

TRANSFER TO: (Revenue line items in this area are being de-appropriated and expense line items are being appropriated.)

Rev Exp	SF ID	Subfund Title	Activity / Grant Title	Line Item / Subobject Title	Amount	Accounting Codes					
						Indexcode	Subobject	Project	Prj-Dtl	Grant	Grt-Dtl
Total: \$600,000.00											
REV	18C	Jax Int'l Airport CRA Trust Fund	JIA Area Redevelopment Trust	Property Taxes	\$300,000.00	JXSF18C	31101	CRAPAE	AL		
EXP	18C	JIA Area Redev CRA Capital Projects	Duval Road PD&E Study	Other Construction	\$300,000.00	JECP18C0007	06505	JEE163	01		

CRA CAPITAL PROJECT SHEET

(This Project is a CRA Capital Project and is NOT included in the City's Five Year Capital Improvement Plan)

Project Title: Duval Road PD&E Council District(s): 7
 Project Location: Duval Road, from Dunn Avenue to I-295
 CRA Name: JIA CRA Project Number (to be Provided by Budget Division): JEE163-01
 CRA Board Res No.: JIA-CRA-2018-01 CRA Trust Fund: 18C Useful Life: TBD Project Completion Date: TBD
JIA-CRA-2020-01

Project Description:

This project consists of engineering design and all other professional services necessary for pavement widening and pedestrian improvements on Duval Road from Dunn Avenue to I-295. The purpose of this project is to widen Duval Road from its current 2 lane rural cross section to a 4 lane or 5 lane urban cross section with improved drainage and traffic signals.

Justification/ Explanation of Authorization in CRA Plan:

The JIA/CRA is empowered to authorize projects within the JIA/CRA Community Redevelopment Area and finds that the Project is in compliance with, and furthers the purposes and objectives of the JIA/CRA Community Redevelopment Plan as follows:

- Page 6, Goal 1: Level of Service Standard which meet FDOT guidelines and reflect the driving habits and tolerance levels of the City's driving population shall be recognized.
- Page 6, Goal 2: Increase Existing Transportation Network Capacity - The traffic-carrying ability of the existing roadway network shall be optimized and the traffic-carrying capability of any capacity-deficient roadway segment shall be increased to the highest practical level of efficiency before considering the addition of through-lane miles.
- Page 7, Goal 7: Transportation System Safety – The traffic circulation system shall be operated in a manner which values the safety of its citizens as being of equal importance to efficiency and expedience of design and materials.

Funding Sources	Total	Prior Years	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Beyond 5th
Transfer Between Projects	\$ -							
Debt Proceeds / Borrowed Funds	\$ -							
Pay-Go (CRA Trust Fund)	\$ -							
Interest Earnings	\$ -							
Contribution from Private Source	\$ -							
Grant / Trust Fund / Other	\$ 650,000	350,000	-	300,000				
Totals	\$ 650,000	\$ 350,000	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -

Expenditures/Project Phase	Total	Prior Years	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Beyond 5th
Design & Engineering	\$ -							
Land Acquisition & Site Preparation	\$ -							
Construction	\$ 650,000	350,000	-	300,000				
Capital Equipment	\$ -							
Misc. Equipment & Furnishings	\$ -							
Totals	\$ 650,000	\$ 350,000	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -

(if applicable)

Operating Budget Impact	Total	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Beyond 5th
Full Time Equivalents	-						
Personnel Expenses	\$ -						
Contractual Services	\$ -						
Utilities	\$ -						
Materials/Supplies	\$ -						
Equipment	\$ -						
Annual Debt Service	\$ -						