



**WORK ORDER INITIATION FORM
for the CITY OF CLEARWATER**

Date: April 7, 2016

Project Number: _____

City Project Number: _____

Plan Set Number: _____

1. PROJECT TITLE:

The Clearwater North Marina Improvements

2. SCOPE OF SERVICES:

The City of Clearwater (City) has requested that AECOM provide a Scope of Services for professional consulting services for the permitting, design, engineering and production of construction documents and all related design services as described herein for tasks identified in the Clearwater North Marina Area Master Plan. The purpose of this document is to establish a scope of services for AECOM, define the parameters of the project, the project understanding, project schedule, limits of work and tasks to be performed.

The design, engineering, permitting and coordination tasks to be performed by AECOM will take into consideration the following key program elements:

- ***Existing Parking Area and Seminole Street Modifications and Waterfront Boardwalk*** – Repave/stripe existing parking lot, add landscaping islands, improve surface drainage, provide low-impact design for stormwater treatment, waterfront boardwalk with educational displays along existing seawall; connections to boat ramps and multi-use trail

- ***Pinellas Trail Connection*** –New multi-use trail connection from the Seminole Boat Ramp east to Osceola Street with associated amenities and pedestrian level lighting;
- ***New Trailer Parking Lot*** – Provide pavement design, low-impact design for stormwater treatment, landscape design, and security lighting and pedestrian connections to boat ramps.
- ***New Car Parking Lot*** – Provide pavement design, low-impact design for stormwater treatment, landscape design, and security lighting and pedestrian connections to boat ramps and Francis Wilson Playhouse
- ***New Floating Docks*** – Provide construction plans for two new floating docks adjacent to existing boat ramp;
- ***New Lawn/Green Space*** – New lawn area/green space with associated LID Stormwater treatment
- ***Park Enhancement*** – New mini-park design with associated amenities to enhance existing park land owned by West Coast Inland Navigation District (WCIND).

I – CONCEPTUAL DESIGN PHASE

Task 1 – Kick-Off Meeting

AECOM will convene a Kick-Off Meeting with the CITY within one (1) week after the Notice to Proceed. AECOM will develop the agenda for the Kick-Off Meeting with input from the CITY. The Kick-Off Meeting will discuss and document the points of contacts within the CITY and AECOM, communication protocol, data requirements, the scope of work, confirm desired program elements, project schedule, milestones and submittals, and other miscellaneous issues.

AECOM will prepare minutes of the Kick-Off Meeting and will distribute them to the meeting attendees.

Task 2: Site Inspection

AECOM will perform a site inspection to check and verify the site specific information against the data collected above. The site will be visually examined and photographed by the Project Team prior to the start of the design phase. The proposed route of the multi-use trail to the Pinellas Trail will be visually inspected to gain an understanding of the available right-of-way, ADA requirements, safety concerns, grading and drainage issues, and other design constraints.

Task 3 – Data Collection

AECOM will review and collect all relevant base data information that is available in the Public Record files of the following public agencies:

- City of Clearwater
- Pinellas County Watershed Management Division (PCWMD)
- Southwest Florida Water Management District (SWFWMD)
- Federal Emergency Management Agency (FEMA)
- Florida Department of Environmental Protection (FDEP)
- Army Corps of Engineers (ACOE)

Task 4 – Survey

Boundary, topographic and tree surveys will be conducted within the limits of the project. Topographic mapping will be provided on a 50-foot (minimum) grid extending 25 feet beyond the boundary of all proposed site improvements. The surveying effort may include:

- Updating the boundary survey of City land and rights-of-way;
- Topographic survey of the existing and proposed parking lots and connections to roadways;
- Bathymetric surveys of the areas proposed for floating docks;
- Curblines and edges of pavement for surrounding roadways and parking areas;
- Locations, sizes, top elevations and inverts of sewer and storm drains;
- Location of potable water valves, meter boxes, backflow preventers, fire hydrants;
- Above ground utilities, building corners, structures, seawalls, and site features;
- Establishment of site horizontal and vertical control points;
- Legal descriptions and sketches for new utility easements; and
- Submerged land lease research.

Task 4 – Geotechnical Investigation

An evaluation of subsurface conditions at the project site will be performed to develop recommendations for site preparation, pavement and shallow foundation design and construction. The geotechnical scope of work will include a review of existing data, a field exploration program, laboratory testing, preliminary engineering evaluation and recommendations and a final geotechnical engineering report.

Task 5 – Utility Coordination

AECOM will coordinate with City of Clearwater, Verizon, Duke Energy, Clearwater Gas and other utility providers to establish the location of the existing utilities within the project limits. A Sunshine One Call utility locate request will be made and the utility owners within the project area will be identified. The surveyor will record the approximate horizontal locations on the site specific survey based on flagging or marks provided by the utility companies.

Task 6 – Subsurface Utility Engineering (SUE)

Vacuum excavations may be required at critical underground utility crossings. If SUE work is necessary, the horizontal and vertical disposition of the utilities will be identified along with the utility's size and material type. Utility information acquired will be presented on the provided construction drawings with dimensions shown for horizontal location and vertical data presented as depth of cover from existing grade.

Task 7 - Conceptual Plan Preparation

Upon completion of the field review and land surveying tasks, AECOM will produce a Conceptual Plan incorporating the program elements approved by the City during the kick-off meeting. The plan will depict the proposed program elements and relationship to existing conditions on an illustrated map at an appropriate scale. The plan will address the issues of pedestrian and vehicular circulation, infrastructure improvements, sidewalks, landscaping, lighting, and site furnishings. It is anticipated that conceptual plan will be used to solicit feedback from the public on the proposed design and amenities. AECOM will incorporate one set of City review comments to produce revised concept plans for a stakeholder meeting with the stakeholders identified by the City. The City's Project Manager shall be responsible for coordinating with all other City personnel and stakeholders required to schedule and attend the meeting. The City shall be responsible for the logistics of the meeting, including venue. AECOM will present the concept plans and elicit public input.

Task 8 – Permit Pre-application Meetings

AECOM will coordinate and meet with representatives of the City of Clearwater, FDEP, Pinellas County, ACOE and other appropriate permitting agencies prior to the submittal of permit applications.

II – PRELIMINARY DESIGN PHASE

Task 1 – Project Coordination Meeting

AECOM will participate in meetings with the project team during the Design Phase of the project to review the plans, permit applications and site specific requirements of the project. Meetings will be held at City of Clearwater offices on a monthly basis for the duration of the project.

Task 2 – Preliminary Engineering Plan Preparation

After City approval of the conceptual plan, preliminary site drawings will be produced and will include the following:

- Overall Base Plan - A base sheet will be prepared in AutoCAD showing the proposed improvements overlaid on the existing property lines, roadways, parking lots, utilities, topography, wetland jurisdictional lines, trees, existing roadways. The parking lot will be laid out with consideration given for turning movements and required parking geometry for boat trailers.
- Paving and Grading Plans - Preliminary paving and grading plans will be prepared for the parking areas, trail connection, streetscaping, and sidewalks. Vehicular circulation patterns and turning radii of existing and new parking areas and roadways will be verified with vehicle turning movement software such as AutoTurn.
- Drainage Analysis – The pre-application meetings with SWFWMD and FDEP will confirm the reviewing agency and the stormwater design criteria required for the improvements. A preliminary stormwater analysis will be prepared (to be completed with AdICPR software during Final Design Services.) The stormwater drainage system for the existing parking lot will be reviewed and assessed to determine if any remedial repairs or upgrades are required for the final configuration. Low-impact design alternatives for stormwater treatment for run-off from the parking area will be researched and incorporated into the drawings. Treatment options may include bioswales or manufactured treatment systems.

- Preliminary Landscape & Hardscape Plans – Preliminary landscape, hardscape, lighting and gateway signage plans will be developed for the site and include the WCIND park area, the parking areas, the waterfront boardwalk, the lawn/green space and the trail connection route. Recreation, bicycle and pedestrian amenities such as comfort stations, water drinking fountains, shade structures, water accessibility, observation areas, picnic shelters, seating, bike racks, dog walk/sanitation stations can be discussed in the project programming.
- Floating Dock Plans – A City approved manufacturer or vendor will be responsible for the design of the floating docks. The vendor will provide signed and sealed plans and specifications to incorporate into the construction documents. AECOM will design the piers and the connections to land. This task includes design and permitting for dredging for the south staging dock. No inspection, upgrades or redesign of the existing seawalls or retaining walls is included. This task also includes delineation of existing seagrass beds within and immediately adjacent to the proposed project footprint, including any proposed temporary construction footprint locations. AECOM will document the boundaries of existing seagrass beds using hand-held GPS units for incorporation into the project construction plans. It is anticipated that impacts to existing seagrass beds resulting from the proposed transient docks will require mitigation. This task does not include any formal wildlife surveys. Should seagrass mitigation be required, AECOM will develop a mitigation plan to offset adverse impacts to seagrass beds resulting from the project. As part of this task, proposed impacts will be evaluated using the Uniform Mitigation Assessment Method (UMAM), and the results will be used to determine the appropriate level of mitigation needed for the project. This task includes coordination with the FDEP and the USACE for negotiation and approval of the proposed UMAM scores and seagrass mitigation plan. This task does not include any post-construction mitigation monitoring.
- Lighting Design and Electrical Engineering – AECOM will document existing field conditions, equipment and furnishings to remain and coordinate new electrical installations with existing conditions in the field. Duke Energy will be contacted to confirm proper coordination of the electrical services and fixtures. AECOM will provide the City with options to choose from for the preferred type of light fixtures and light pole type(s). The City will provide direction for existing equipment to remain and/or be relocated.

Deliverables:

- Boundary and Topographic Surveys
- Geotechnical Engineer Report

- Preliminary Drainage Analysis
- Preliminary Drawings
- Cost Estimate

CITY standard specifications will be used to the fullest extent possible. Any required sections not covered by standard CITY specifications will be prepared by AECOM. AECOM technical specifications will be prepared in CSI Master Format -2004.

Task 11 – Final Design

The tasks included in Final Design Services will be the preparation of the final construction documents including plans for the project. The objective of this task will be to provide construction documents to support the permitting, bidding, and construction phases of the project. The construction document plan set will include the following plans:

Demolition Plan – AECOM will prepare demolition and tree protection plans that will illustrate which buildings, structures, pavement areas, trees, etc. are to be demolished, removed, or protected.

Paving and Grading Plan - Paving and grading plans will be developed for the developed portions of the site. This will include establishing lines, grades, and slopes necessary to provide adequate surface drainage for the parking areas, sidewalks and landscaped areas. AECOM will prepare a striping, signage and pavement marking plan for project limits of the parking lots and trail connection. The striping, signage and pavement marking plan will include the pavement marking (striping, turn arrows, reflective pavement markings, etc.) and signage required by the City. The Contractor will be responsible for the preparation of Maintenance of Traffic plans.

Landscape Plans – Landscape Design Plan sheets will be prepared in AutoCAD DWG format and PDF format. Landscape Design Construction Documents will be prepared in accordance with City of Clearwater Community Development Code and be signed and sealed by a Registered Landscape Architect in Florida. The landscape design plan sheets will depict the proposed planting and will be graphically and dimensionally referenced. Plant Schedule: Plan sheet will include a plant schedule providing a tabular plant materials list identifying the proposed plantings by their plan symbol, quantity of each species, botanical and common name, and the planting specifications (planting height, width/spread, container or root ball size, caliper, clear trunk dimension, plant spacing on-center dimension), specialty features. Plans will also include General Notes and Landscape Details.

Hardscape Plans – Hardscape Design Plan sheets will be prepared in AutoCAD DWG format and PDF format. Hardscape Design Construction Documents will be signed and sealed by a Registered Landscape Architect and/or a Registered Professional Engineer in Florida. Plan sheets will depict proposed design elements including pedestrian and bicycle amenities, special paving and all other proposed hardscape amenities.

Irrigation Plans – Irrigation Design Plan sheets and details will be prepared using AutoCAD for an irrigation system that provides 100% coverage for proposed plantings within the project limits. Irrigation design and technical specification shall be in accordance with City preferences. It is assumed that the source will be reclaimed water.

Gateway Feature Signage Plans – Gateway Feature Sign Plan sheets will be prepared and include:

- Graphic standards (typestyle, arrows, symbols)
- Dimensioned layouts
- Fabrication details with material and color specifications
- Mounting details
- Technical specifications

Potable Water Plan - Construction drawings will be prepared for a potable water system to service drinking fountains, fish cleaning stations and hose bibs. The water distribution system will be designed and prepared in accordance with the City of Clearwater Technical Standards and the requirements of the Florida Department of Environmental Protection (FDEP). The FDEP application is “Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs”. The location and number of proposed water drinking fountains, fish cleaning stations and hose bibs will be established as approved by the City during the preliminary design phase.

Stormwater Management and Collection – A stormwater management report and construction plans will be developed for the applicable portions of the project. The expectation is that the existing paved parking lots and the pedestrian sidewalks will be exempt from environmental resource permitting. The stormwater permitting for the new parking area will be included in the ERP application package for the floating docks.

Floating Dock Plans - The final design of the floating docks will be completed with the vendor who was selected in the Preliminary Design phase. The vendor will provide signed and sealed plans and specifications to incorporate into the construction documents. AECOM will design the piers and connections to land.

Lighting Design and Electrical Engineering – Photometric analysis will be conducted for the parking lot and pedestrian sidewalk. The lighting and electrical design drawings will be in accordance with the National Electrical Code NEC, the Illuminating Engineering Society of North America IES Handbook and other applicable codes and standards. AECOM will

perform all necessary calculations to support design documents including photometric calculations for lighting, voltage drop, and electrical load. AECOM will specify types of materials, method of attachment, conduit and conductor sizes and other pertinent information as required for a complete and operating system.

Design drawings will be developed illustrating locations and requirements for electrical services, light poles and fixtures, receptacles, branch circuiting, power riser diagrams, and panel schedules. All wiring and conduit design to new designed lighting fixtures for a complete and operational system. All conduit and conductors are assumed to be new. Lighting luminaires shall be selected based on local environmental conditions (to be coordinated with the Florida Fish and Wildlife Commission). Luminaires shall be provided with glare and spill control.

Other electrical and lighting services may include:

- Design of automatic lighting control. (Photocell only or photocell and timeclock);
- Electrical design of landscape lighting;
- Design of Closed Circuit Television (CCTV) design or provisions for future CCTV;
- Power provisions for parking lot pay station;
- Lighting for any signage;
- Lighting for floating dock(s) and boat ramps;
- Power provisions to any electric drinking fountains;
- Power provisions for lighting and receptacles at pavilions;
- Receptacles located in various parking lot site lighting poles; and
- Power for electric car chargers.

Stormwater Pollution Prevention Plan (SWPPP) - AECOM will develop a Stormwater Pollution Prevention Plan (SWPPP) to support the NPDES Stormwater Construction Generic Permit (CGP) in accordance with 40 CFR parts 122 and 123 and Section 403.0885, Florida Statutes, and applicable rules of the Florida Administrative Code.

AECOM will design appropriate Best Management Practices (BMPs) to protect Waters of the State and existing stormwater management systems from adverse impacts during proposed construction activities. Such controls can include erosion controls, sediment controls, stormwater management controls, temporary grading for drainage, and controls for tracking of sediments.

The SWPPP plan will include the following elements:

- Identify the stormwater team responsible for implementing the SWPPP, including a qualified inspector;

- List all contractors or subcontractors who will be conducting construction activities at the site;
- Describe the nature of construction activities covered under the CGP;
- Describe the intended sequence and timetable of major soil-disturbing activities (clearing, grubbing, grading, cut/fill, dewatering, installation of BMP and stormwater controls, paving, stabilization, removal of construction equipment/vehicles, etc.);
- Estimate the total site area and area(s) anticipated to be disturbed by construction activity;
- Locate proposed discharge points and list all anticipated non-stormwater discharges covered under the CGP;
- Describe temporary and permanent BMPs and stormwater controls that will be implemented or installed during the construction process to control pollutants/sediments in stormwater discharges;
- Describe dewatering controls (as applicable) to ensure that discharges of non-contaminated groundwater do not cause violations of State water quality standards;
- Detail stormwater inspection procedures and BMP maintenance activities and schedules;
- Provide a site map showing property boundaries, entrance/exit points, drainage patterns and existing surface waters/wetlands, construction activity and dewatering locations, major structural and non-structural controls, discharge locations, protected areas; and
- Include all the signed contractors and subcontractors certifications

Draft copies of this plan will be submitted to the City for their review and comment. Comments from the City will be incorporated into the plan prior to its submittal to the regulatory agencies (i.e., Florida Department of Environmental Protection and U.S. Environmental Protection Agency).

AECOM will coordinate with the City and other contractors regarding stormwater management controls during the course of the project. Monthly reviews and updates (as needed) of the SWPPP may be required during the project due to changes in the plans, proposed construction methods or other permits.

Deliverables:

- Final Drainage Analysis;
- Final Drawings – Landscape, Hardscape, Lighting, Paving & Grading, Drainage;
- Stormwater Pollution Prevention Plan

II - BIDDING PHASE

Task 3 - Bidding Services

AECOM will attend the pre-bid conference. The purpose of AECOM attendance is to answer technical questions with respect to the design. AECOM will not be responsible for questions or providing information involving the contract between the CITY and the contractor.

AECOM will assist the CITY in preparing up to two (2) addenda during the bid phase to formally answer bidder's technical questions, clarify issues or adjust the bid documents prior to the bid opening.

Following bid advertisement by the CITY, AECOM will review the bids submitted by the contractors and provide recommendation of award to the CITY.

3. PERMITTING:

AECOM will prepare and submit the permit applications, plans and supporting documents to the appropriate agencies or departments for review and approval. Submittals will be made to the following permitting agencies or governmental departments:

- City of Clearwater
- Project Planning Review
- Site Construction Plan Approval
- Pinellas County Public Works
- Right-of-Way Use Permit (Trail Connection)
- Pinellas County Watershed Management Division (PCWMD)
- Commercial and Multi-use Dock Permit
- Southwest Florida Water Management District (SWFWMD)
- Environmental Resource Permit (ERP)
- Florida Department of Environmental Protection (FDEP)
- Water Distribution System Permit
- Environmental Resource Permit (ERP)
- Sovereign Submerged Lands Authorization
- U.S. Army Corps of Engineers (USACE)
- Section 404 Dredge and Fill Permit
- Environmental Protection Agency (EPA)
- NPDES Notice of Intent (through FDEP)

Agency Coordination - AECOM will coordinate with representatives of the above listed agencies as part of the permit application review process to address potential design and construction concerns. This task includes a pre-application meeting and,

if necessary, a post-submittal site inspection with each of the above permitting agencies. As part of this task, AECOM will respond to one (1) Request for Additional Information from each agency following the initial permit application submittal.

Requests for Additional Information (RAI) and Resubmittals: AECOM will prepare written responses to each RAI comment from the agencies, complete additional design revisions, and resubmit the plans and supporting documents for final approval.

Deliverables:

- City of Clearwater Site Plan Approval
- FDEP Environmental Resource Permit
- Pinellas County Right-of-Way Use Permit
- Pinellas County Commercial and Multi-use Dock Permit
- FDEP Water Distribution System Permit
- FDEP Sovereign Submerged Lands Authorization
- USACE Dredge and Fill Permit
- EPA NPDES Notice of Intent Application

4. PROJECT GOALS:

The project goal is to improve the infrastructure of the North Marina Area. These proposed improvements will provide the users of the North Marina and others with enhanced parking, user features, landscaping and park amenities.

5. BUDGET:

Attachment “B” provides the fee estimate detail. This price includes all labor and expenses anticipated to be incurred by AECOM for the completion of these tasks in accordance with Professional Services Method “A” – Cost Times Multiplier Basis, **for a fee not to exceed Three Hundred Seventy Five Thousand (\$375,000.00).**

6. SCHEDULE:

The design portion of the project is to be completed XXXXX days from issuance of notice-to-proceed or from the date all information that is to be provided by the CITY is received by AECOM. The schedule is based upon the assumption that CITY reviews of the project work products will be completed in two (2) weeks from the date of submission. The project deliverables are to be phased as follows:

Conceptual Design	132 calendar days
Preliminary Design	105 calendar days
Final Design	75 calendar days
Permitting	196 calendar days
Bidding Assistance	58 calendar days

7. STAFF ASSIGNMENT (Consultant):

- Officer-in-Charge:** Dana K. Tallman, PE, BCEE
- Project Manager:** Dennis Syrja, PE
- Landscape Architect:** Paul Kurtz, RLA, LEED AP, BD+C™
- Senior Designer:** Terry Sonnenberg
- Admin Assistant:** Deborah Mols

8. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to XXXXXX. All City project correspondence shall be directed to Dennis Syrja with copies to others as may be appropriate.

9. INVOICING/FUNDING PROCEDURES:

Invoices for work performed shall be submitted monthly to the City of Clearwater, Engineering Department, Attn.: Veronica Josef, Senior Staff Assistant, PO Box 4748, Clearwater, Florida 33758-4748.

City Invoicing Code: XXXXXXX

10. INVOICING PROCEDURES

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- A. Purchase Order Number and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A short narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Cost Times Multiplier
- E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
- F. If Cost Times Multiplier, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
- G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

11. SPECIAL CONSIDERATIONS:

The consultant named above is required to comply with Section 119.0701, Florida Statutes (2013) where applicable.

PREPARED BY:

Dana K. Tallman, PE, BCEE
Vice President
AECOM

Date

APPROVED BY:

Michael D. Quillen, PE
City Engineer
City of Clearwater

Date

WORK ORDER INITIATION FORM

CITY OF CLEARWATER DELIVERABLES STANDARDS

FORMAT:

The design plans shall be compiled utilizing one of the following standards:

City of Clearwater CAD standards or Consultant's CAD standards (please provide all supporting documents when utilizing Consultant's Standards).

DATUM:

Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

DELIVERABLES:

A minimum of two (2) signed and sealed Plans and Contract Documents (specifications book) labeled "ISSUED FOR BID" shall be provided at the onset of the bid phase, as well as electronic copies. Electronic plan copies in PDF and CAD and electronic contract documents in PDF and MS Word.

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. The consultant shall also deliver all digital files in CAD drawing format and PDF format together with all project data in AutoCAD Civil 3D file format. All references, such as other drawings attached, images and graphic files, custom fonts and shapes shall be included in hard copy and electronic copy.

Prior to the City Council award date, a minimum of two (2) copies of signed and sealed plans and contract documents (specifications book) labeled "CONFORMED" shall be provided. All revisions made during the bid phase shall be included in the plan sets and noted in the revision block or as a footnote. Copies of each Addendum shall be included at the front of the contract and all revisions made during the bid phase shall be incorporated into the Contract Documents.

Electronic copies of "CONFORMED" plans (PDF and CAD) and contract documents (PDF and MS Word) shall be provided prior to the City Council award date.

NOTES:

- If approved deviation from using Clearwater CAD standards, the consultant shall include all necessary information to aid in manipulating and printing/plotting the drawings. Please address any questions regarding file format to Mr. Tom Mahony, Geographic Technology Manager, at (727) 562-4762 or email address: tom.mahony@myclearwater.com.

THE CLEARWATER NORTH MARINA IMPROVEMENTS

(XX-XXXX-XX)



WORK ORDER INITIATION FORM
PROJECT BUDGET

Task	Description	Subconsultant Services	Labor	Total
1	Conceptual Deign	\$29,670	\$78,962	\$108,632
2	Preliminary Design		\$82,518	\$82,518
3	Final Design		\$121,685	\$121,685
4	Permitting		\$35,891	\$35,891
5	Bidding Services		\$11,376	\$11,374
				\$360,100
Subtotal, Labor & Subcontractors				\$360,100
Permit Review Fees				\$5,000
Other Direct Costs (prints, photocopies, postage, etc.)				\$9,900
Grand Total				\$375,000

REVIEW PERIOD SUBMITTAL REQUIREMENTS

This list is intended as a guideline of the items to be completed at various levels of project completion. The specific list for each project shall be finalized in the work order.

30% Construction Plans

Requirements for the 30% submittal shall include the following:

- Cover Sheet,
- Legend and Abbreviations per City standards,
- Key Sheet,
- Demolition Plans indicating existing improvements, utilities, and topography, and identification of trees to be removed,
- Preliminary layout of the proposed improvements, existing right-of-way and easements, subdivision, block, and lot number, and plat book and page for adjacent parcels,
- Engineer's/Architect's preliminary opinion of probable construction cost, based on the 30 % submittal.

60% Construction Plans

In addition to the items in the 30% submittal, requirements for the 60% submittal shall include the following:

- General Construction Notes related to best management practices, utilities, and other conditions relevant to the project,
- Typical pavement sections shall indicate typical cross sectional slopes, median improvements, pavement requirements, right-of-way lines, sidewalks, curbs, gutters, and landscaped areas,
- Grading, Paving, and Drainage detail sheets, including standard and nonstandard stormwater management structures, retaining walls, and related notes,
- Erosion control and tree protection details, including best management practices applied to the project,
- Existing private utilities, as available, such as gas, electrical, telephone, fiber optic, and cable TV,
- Detailed Cross Sections,
- Wetland Planting Plans and Details,
- Utility Plan including utility relocation/adjustment details indicating utility conflicts, relocation design, proposed utility structures, and conflict manholes, design details, and specific profiles, if required,
- Permit Applications,
- Estimated construction quantities,
- Engineer's/Architect's updated opinion of probable construction cost and duration based on the 60% design submittal, and
- Engineer/Architect will review City's standard technical specifications and modify or supplement as necessary for the project.

90% Construction Plans

The 90% construction plans shall include the design items required for the construction of the project, including the special provisions and technical specifications. In addition to the items in the 60% submittal, requirements for the 90% submittal shall include the following:

- a. Maintenance of Traffic Plan,
- b. Structural plans, details, and calculations, including design and details of shallow foundations, pedestrian bridge abutments, retaining walls, structural reinforcing, tiebacks, and stability analyses for slopes and retaining walls,
- c. Detailed construction quantities based upon 90% design,
- d. Engineer's/Architect's updated opinion of probable construction cost and duration based on the 90% design submittal, and
- e. Technical specifications and Special Provisions.

Final (100%) Construction Documents

The 100% submittal shall address the City's final review comments.

Engineering Projects prepared and/or submitted shall be reviewed and checked by a civil engineer registered in the state of Florida as the Engineer of Record. The Engineer of Record shall sign, seal and date the design calculations, technical specifications and contract drawings as required by Florida law.

See Attachment "A" – Deliverables – for specific labeling requirements.