SUPPLEMENTAL SPECIFICATIONS

ROCKY CREEK WASTEWATER EXPANSION
CIP 10171-19001

1.01 - HC TECHNICAL SPECIFICATIONS

Unless otherwise indicated in the Supplemental Specifications, all work shall comply with the HC Public Utilities Department (HCPUD) Technical Specifications for all vacuum sewer system components of the project and HC Public Works Department (HCPWD) Technical Specifications for the stormwater components of the project. Specifications are located on the Hillsborough County Website:

HCPUD Technical Specifications and Exhibits (Standard Detail Drawings) - http://www.hillsboroughcounty.org/en/businesses/land-development/technical-publications/public-utilities-technical-specifications

HCPUD Technical Manual - http://www.hillsboroughcounty.org/en/businesses/land-development/technical-publications/public-utilities-technical-manuals

HCPUD Appendix B - http://www.hillsboroughcounty.org/library/hillsborough/media-center/documents/public-utilities/technical-specifications/16--specs-appendix-b.pdf

HCPWD http://www.hillsboroughcounty.org/en/businesses/land-development/technical-publications/public-works-publications

The Utilities Department's Technical Manual and the Technical Specifications were written for both developer and CIP contractors. This project is a CIP project, not a developer project.

1.02 – UTILIZATION OF PRIVATE PROPERTY

The Contractor shall not enter upon private property for any purpose without first securing the permission of the property owner, in writing, and furnishing the County with a copy of said permission. This requirement will be strictly enforced, particularly with regard to such properties which may be utilized for material storage. Contractor shall restore all utilized private property back to equal or better condition as determined by the County. Any area to be utilized by Contractor is to be video-taped prior to use to determine existing conditions. This video shall follow the requirements of Section 01385 and a copy shall be provided to the County before occupation of the property.

1.03 – PIPE DELIVERY and HANDLING

At no time shall pipe be moved by machinery without the use of non-metallic/canvas type slings and/or manufacturers' recommendations. At no time shall a piece of machinery insert a fork or tong into an end of the pipe to lift or move the pipe.

1.04 – CONSTRUCTION OBSERVATION

All buried work is requested to be observed, surveyed, and photographed before being covered/backfilled. No work shall be performed nor materials used, without suitable supervision or inspection by the Project Manager or his representative, and the Contractor shall furnish the Project Manager with every reasonable opportunity for ascertaining whether the work performed and materials used are in accordance with the requirements and intent of the plans and specifications. If the Project Manager so requests, the Contractor shall, at any time before final completion and/or acceptance of the work, remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore the uncovered portions of the work to the standard required by the specifications. The uncovering or removal, and the replacing of the covering or making good of the parts removed, shall be at the Contractor's expense.

1.05 – PIPE INSTALLATION AND HOMING INSPECTION

The County shall place emphasis on proper pipe bedding, installation procedures, compaction requirements, and homing of the pipe.

1. The Contractor must not use a "come along" or heavy piece of equipment to deflect the pipe to line up joints. It may put too much stress on the pipe and cause premature failure.

2. Contractor shall not deflect pipe beyond manufacturer's or the County's specifications, whichever is more stringent.

3. All pipes that get over-homed shall be considered over-assembled and damaged. The bell section of pipe shall be replaced and the spigot end shall be replaced in this circumstance and all costs shall be paid for by Contractor. The Contractor is not allowed to pull the pipe out and re-install.

4. Contractor shall coordinate with the County representative to inspect each joint before backfill begins. Pre-marked circumferential insertion line must be visible and flush with the lip of the adjoining pipe bell after joint assembly is complete.

5. Contractor shall provide a spreadsheet showing joint number, date, and Florida State Plane Coordinate System X, Y coordinates or station number and offset and shall be submitted to the Project Manager in a DVD Data Disc for review for acceptance and inclusion into the As-builts.

1.06 – DEWATERING PLAN

The Contractor's Dewatering Plan is to address the dewatering operations to provide a suitably dry trench and structure excavations for construction operations, as follows:

Provide and maintain means and devices to remove and dispose of groundwater and surface water entering a pipe trench excavation during the time the trench is being prepared for pipe installation, and excavations for the construction of structures, until the backfill compaction and passing density tests at the pipe zone or structure perimeter has been completed. These provisions shall apply during both working and nonworking hours, including lunch time, evenings, weekends, and holidays. Dispose of the water in a manner to prevent damage to adjacent property and transport of sediment in accordance with regulatory agency requirements. Do not drain trench water through the pipeline under construction.

All work shall be carried out "in the dry." The Contractor shall review site conditions and determine methods and extent of dewatering necessary. No additional compensation shall be provided for control of ground or surface water or for additional materials or rework required as a result of inadequate or insufficient dewatering.

Dewatering plan for construction of the pump station lower section may include a caisson approach as noted on the Drawings.

1.07 - COMPETENT PERSON

CONTRACTOR shall have on-site at all times during Work a Competent Person meeting the requirements of OSHA Standards 29 CFR Part 1926.

1.08 - CONTRACTOR'S ON-SITE SUPERVISOR

The CONTRACTOR shall at all times have on the Work as his agent, a competent supervisor capable of thoroughly interpreting the plans and specifications and thoroughly experienced in the type of Work being performed. The supervisor shall have full authority and appropriate experience to execute the Work as specified and to acquire promptly any materials, tools, equipment, labor and incidentals which may be required. Such supervision shall be furnished regardless of the amount of Work sublet. The Contractor's on-site supervisor shall speak and understand English and be identified at the start of the project. One responsible person who speaks and understands English shall be on the project during all working hours.

1.09 – POST-BID REQUIRED INFORMATION

After the bid closes, the apparent low bidder must provide the below listed information along with the Responsibility Survey. This information will be used to properly evaluate the apparent low bidder and provide an adequate recommendation.

1. A list of all projects Contractor has worked on or is currently working on in the past 5 years. Include description of project, location, cost, name and phone number of owner's representative, subcontractors used and name and phone number of surety.
2. A list all major equipment owned and operated by Contractor and a list of all equipment to be utilized on this project.
3. A list of contractor's employees to be utilized on this project with their job title, years of experience and number of years in current job function.
4. Resume of the project manager and full time job supervisor the Contractor will utilize to construct this project.
5. A management plan detailing Contractor's approach to this project. Explain how Contractor will ensure the project is adequately manned, equipped, and managed so it will be completed on time and within budget.
6. A copy of all required licenses. All licenses must be active and current at time of bid opening.

1.10 - DAILY CLEAN-UP AND SAFETY PLAN (DCSP)

The County does not want residents of the area calling and complaining about the condition of worksites on this project, therefore the County will closely monitor and enforce all requirements of Section 01560 and specifically as it relates to dust and rubbish control. Additionally, Contractor will be monitored closely to have daily clean up and capping of all open cut operations and removal of construction debris.

Contractor will need to submit and get approved a DCSP to the PM before construction begins. The plan will need to include all Erosion and Pollution Control Plan requirements of Section 1300, paragraph 1.16.

1.11 – PERMITS

A. The following permits are listed as pertinent to the project and have been acquired by Public Utilities Department; all other permits are the responsibility of the Contractor as required:
   1. HC Public Utilities Department Right of Way Use Permit.
   2. EPC / FDEP Wastewater System Construction Permit
   3. SWFWMD ERP stormwater management Permit
   4. HC Development Review

B. Pursuant to Section 218.80, Florida Statutes, Hillsborough County discloses that the following permits are the responsibility of the Contractor.

PERMIT	FEE (EST.)
1. HC Public Works Department Temporary Traffic Control, Road Closure, Lane Closure Application and Permit	$300
2. Right of Way Permits	$250
3. National Pollutant Discharge Elimination System Permit	$400
4. Building Department	$1,085.40

C. Contractor to apply to the Public Works Department's Roadway Maintenance Section a minimum of 3 weeks ahead of planned work.

1.12 NOTICE OF INTENT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY TO BE COVERED UNDER A NPDES PERMIT

A. Under the provisions of the Clean Water Act, as amended, Federal Law prohibits discharges of pollutants in stormwater from construction activities without a National Pollutant Discharge Elimination System Permit (NPDES). The Contractor shall complete and submit Notice of Intent (NOI) form along with the appropriate fee to the following at least 48 hours prior to any construction activities to obtain coverage under a Construction General Permit. The permit form can be found on the web at:

http://www.dep.state.fl.us/water/stormwater/npdes/permits_forms.htm

B. The completed form shall be mailed to NPDES Stormwater Notices Center, MS#2510, Florida Department of Environmental Protection, 2600 Blairstone Road, Tallahassee FL 32399-2400. The permit may also be submitted to FDEP on-line in accordance with the instructions on the application form. The appropriate fee shall be one of the following:

- Large Projects – 5 acres or more disturbed $400;
- Small Projects – 1 acre up to 5 acres disturbed $250; or,
- In accordance with the current requirements in Chapter 62-4.050(4)(d)1. - Florida Administrative Code.

C. Copies of all Contractor permits shall be available on the job site for review by the Project Manager, Professional, or Inspector. This shall also include a copy of the NPDES permit package as submitted to the FDEP.

D. **CONTRACTOR** shall be responsible for meeting the requirements of the National Pollutant Discharge Elimination System (NPDES) permitting program in the State of Florida, found in Department of Environmental Protection (DEP) Document No. 62-621.300(4)(a). This includes: submittal of a Notice of Intent to the Florida Department of Environmental Protection Stormwater Notices Center and posting of Notice of Intent (NOI) or acknowledgement letter from DEP at the site: construction and documenting inspections for erosion control measures and Stormwater Management: the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP): and, filing Notice of Termination (NOT) within fourteen days of final stabilization of the site and retention of reports for three (3) years after final stabilization. The SWPPP must be prepared under the direction of a Florida Licensed professional engineer. Prior to implementation, the SWPPP is to be submitted to the County for review and approval.

E. The **CONTRACTOR** shall review and understand the project construction limits, areas specified for clearing and grubbing, wetland delineations, and areas

specified per the project permits for temporary and permanent impacts against their means and methods of construction prior to bidding on the Contract. If the **CONTRACTOR**'s means and methods of construction will require permit modifications, the **CONTRACTOR** shall be responsible for all impacts, including project costs and delays associated with pursuing the modifications to the permits.

F. Since erosion control on the project site is performance based, simply installing erosion control devices shown on the SWPPP may not be sufficient in certain cases. If inspections by the **CONTRACTOR** or the County reveal that controls are insufficient, the **CONTRACTOR** is to install additional erosion control devices as necessary to prevent off- site discharge of sediment and other possible sources of pollution, such as stormwater runoff.

G. All Construction General Permit (CGP) compliance violations and/or SWPPP deficiencies identified through site inspections shall be resolved in a timely manner, dependent upon the severity of the violation. Failure to resolve all compliance violations in a timeframe agreeable to the **COUNTY** shall result in requisite enforcement actions. All costs associated with enforcement actions shall be the responsibility of the **CONTRACTOR**.

H. The **CONTRACTOR** shall adhere to all Florida Department of Environmental Protection guidelines regarding CGP compliance and SWPPP implementation. Additional resources can be found on FDEP's website [current as of March 2012]: http://www.dep.state.fl.us/water/stormwater/npdes/construction3.htm.

1.13 – GEOTECHNICAL REPORT

A. See Appendix C for the following Geotechnical Report:

MC^2 Engineers, Inc.
Geotechnical Engineering Services Report
Rocky Creek Wastewater Expansion Services Report – CIP 10250-15003
MC^2 Engineers Project No. T051807.096

B. This report is being provided for the bidder's / Contractor's general information only. The potential Bidder or Contractor is not relieved of any duty as otherwise required in these contract documents to examine the site or make any investigations or inquiries, including but not limited to, additional subsurface testing because the County provided this report. Any such examinations, investigations, inquiries or testing performed by the bidder or Contractor shall be done at bidders or Contractors expense. The County disclaims all responsibility for the findings and interpretations expressed in this report by MC^2 Engineers. The bidder or Contractor shall make whatever subsurface and geotechnical investigations it deems necessary to comply with the requirements of the contract documents.

1.14 – CONSTRUCTION SEQUENCING AND CONSTRAINTS

A. Work under the Contract shall be scheduled, sequenced, and performed in such a manner as to result in the least possible disruption to the residents and commercial businesses in the work area.

B. Critical events in the sequence of construction are specified herein. The outlined sequence of construction does not include all items necessary to complete the work but is intended to identify the sequence of critical events necessary to minimize disruption. It shall be understood by the Contractor that the critical events identified are not all inclusive and that additional items of work not shown may be required. The sequence of construction does not attempt to schedule the Contractor's work but does provide guidance on the intended sequence of construction.

1. Mobilization: Set up staging area, develop and submit construction and shop drawing schedules, and begin shop drawing submittals.

2. Connections to existing pipelines may require the temporary outage of existing pipelines. In such cases, the CONTRACTOR shall coordinate Work with the COUNTY and PROFESSIONAL as described below. The CONTRACTOR shall submit a detailed time schedule for construction activities which will make it necessary to remove a pipeline, electrical circuit, equipment, structure, road, or other facilities from service.

3. The CONTRACTOR shall be responsible for development of the construction sequencing. In implementing the construction sequencing, the CONTRACTOR shall maintain the existing pipeline in full service until the new pipelines are constructed and are operational. The following general guidelines shall be used by the CONTRACTOR in planning the sequence of construction. Specific dates will be confirmed during construction.

    a. Begin installation of the new 4-inch and 6-inch pipeline, service laterals, valve pits and isolation valves along Rocky Creek Drive via open cut. Perform sump tests of the valve pits, pipeline flushing, and daily vacuum line tests for each pit and pipe section installed as the work proceeds. Trench work shall be back filled and compacted on a daily basis to not have any overnight excavations, bringing excavated area up to pavement elevation. Fully compact and tack coat the disturbed lane surface to allow for a temporary unpaved, hard, and dust reduced surface until ready for final re-paving. Protect pits and pipeline from infiltration and protect temporary lane surfaces from erosion until system is ready for the final vacuum test prior to being placed in service.

    b. Install storm water pipeline replacement work within the road way limits simultaneous with and immediately following installation of the vacuum lines in the area of a storm water line to minimize the duration of disturbance of the public road way. Storm water pipeline work

outside the limits of the road way can be installed at a later time during a dry season prior to the end of the project.

c. Following installation of the pipeline on Rocky Creek Drive, install new 6-inch pipeline, valve pit, EAAC pit, and isolation valves along S. Lagoon Street and to the pump station via open cut (to avoid simultaneous roadway interruptions on both S. Lagoon and Rocky Creek Drive and to maintain necessary pipeline grade all the way to the pump station). Perform sump tests of the valve pits, pipeline flushing, and daily vacuum line tests for each pit and pipe section installed as the work proceeds. Trench work shall be back filled and compacted on a daily basis to not have any overnight excavations, bringing excavated area up to pavement elevation. Fully compact and tack coat the disturbed lane surface to allow for a temporary unpaved, hard, and dust reduced surface until ready for final re-paving. Protect pits and pipeline from infiltration and protect temporary lane surfaces from erosion until system is ready for the final vacuum test prior to being placed in service.

d. Begin excavation work for the vacuum sewer system pump station and initial stormwater retention pond at any time as best fits the construction schedule needs (prior to, simultaneous with, or concurrent with pipeline work). It is suggested to start this as soon as possible ahead of the wet season to minimize dewatering needs for the deeper excavation. Backfill to above the ground water line around the completed pump station buried walls and after the buried vacuum sewer and force main pipeline tap are installed (cap vacuum sewer line into the station if remainder of vacuum line from S. Lagoon St. is not yet completed). Coordinate with the COUNTY for shutdown of existing 16-inch line for making the connection then keep force main isolation valve closed until startup. Protect slopes and grades of the stormwater pond throughout the end of construction.

e. Complete vacuum sewer station work, including odor control and generator installation, to allow the station to be tested and made ready for startup.

f. Perform field tests for startup of the equipment and controls for certification that the system is ready to be placed in service. Perform final four-hour vacuum tightness test for the complete vacuum piping network. Notify FDEP/EPC of readiness to place the system in service.

g. Open the force main isolation valve and startup the system using simulated loads prior to connection of individual homes. Submit O&M manuals and provide training of Owner's personnel prior to and during startup. Complete pervious and impervious access road work to allow safe access to the pump station as a part of system startup. Obtain permit clearances and certificates to allow use of the structure by operations staff.

h. In the two month's prior to startup completion, coordinate with home owners, and their selected plumber, who are willing to be connected to the system. Arrange to schedule placement of these homes on to the system once the system has passed all startup tests. Coordinate with Owner's personnel to allow observation of connection of homes to the system.

i. Mill and remove all remaining existing pavement along public roadways impacted by pipeline installation or otherwise damages by construction activities and perform final re-paving efforts. Complete final restoration of right-of-way areas immediately following final re-paving efforts.

j. Complete all remaining civil site work, grassing, and punch list items to close out the project.

4. Final Completion Work and Closeout

a. Perform final cleanup

b. Submit final as-built record drawing markups and warrantee documents

c. Complete project closeout in accordance with Section 01700 entitled "Completion, Start up and Closeout"

d. Obtain final acceptance of the project and start warrantees

1.15 – BID PRICES

A. The bidder's bid prices must contain all cost items in amounts deemed sufficient by the **CONTRACTOR** for all overhead, profit, minimal design, engineering and drafting support, incidental costs, administrative support, progress meeting expenses, contract start up and closeout costs, required computer equipment/supplies, warranties/guarantees and all pertinent contingencies and risks associated with this **CONTRACT**. The Bidder's prices must include all taxes, including sales tax.

1.16 – FDOT STANDARDS

A. The following hyper-links are being provided to assist in locating the following FDOT Specifications for which all road work and storm water improvements are to adhere to whether specifically referred to in the Contract Documents:

For the July 2015 FDOT Standard Specifications for Road and Bridge Construction:

http://www.fdot.gov/programmanagement/Implemented/SpecBooks/July2015/Files/715eBook_Revised.pdf

For the 2015 FDOT Design Standards:

http://www.fdot.gov/roadway/DS/15/STDs.shtm

1.17 – INCIDENTAL ITEMS

A. Miscellaneous or incidental items such as dewatering, cutting, patching, saw-cutting, concrete pipe collars, electrical hardware, bolts, nuts, fittings, etc., or other items may be required to complete the construction as indicated on the plans. If no specific bid item is shown, such miscellaneous or incidental items are to be included in the unit price for the item with which they are associated. SEPARATE PAYMENT FOR MISCELLANEOUS INCIDENTAL ITEMS SHALL NOT BE MADE BY THE COUNTY. All components shown and described on the bid documents are to be included in the bid items shown on the bid form.

1.18 – STORMWATER TEMPORARY EASEMENT PROVISION

A. For the stormwater outfall construction, the County currently has a 10' drainage easements over the existing and proposed outfalls. The County is attempting to obtain an additional 10' of temporary construction easement to facilitate the outfall installation. However, if the temporary construction easements are not available at the time of construction, the Contractor must utilize means and methods of construction to install the outfall storm pipes and endwalls within the existing 10' drainage easements. This may include the use of trench boxes or other methods. There will be no additional payment for these construction methods.

END OF SECTION