

To: The Honorable Mayor and Council Members

From: Alberto Destrade, Purchasing Director 

Date: May 24, 2016

RE: **A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA, AUTHORIZING THE CITY MANAGER TO APPROVE WORK ORDER NUMBER 5, AMENDING A PROFESSIONAL DESIGN AND CONSTRUCTION MANAGEMENT AGREEMENT BETWEEN THE CITY OF NORTH MIAMI AND HAZEN AND SAWYER, P.C., TO UPDATE DESIGN DOCUMENTS PRIOR TO ISSUANCE OF A REQUEST FOR BID, PROVIDE PERMITTING AND BIDDING ASSISTANCE, CONSTRUCTION MANAGEMENT SERVICES, AND FLORIDA STATE REVOLVING FUND (SRF) REPORTING ASSISTANCE IN SUPPORT OF THE BP 1 FILTER REHABILITATION PROJECT; WITH AN ESTIMATED TIME FOR PERFORMANCE OF SEVENTEEN (17) MONTHS AT A COST NOT TO EXCEED FOUR HUNDRED SEVENTY THOUSAND DOLLARS (\$470,000.00), IN ACCORDANCE WITH THE TERMS, CONDITIONS AND SPECIFICATIONS CONTAINED IN THE REQUEST FOR QUALIFICATIONS NO. 03-07-08, UPGRADES TO CURRENT WATER TREATMENT PLANT AND THE DESIGN AND CONSTRUCTION MANAGEMENT OF A NEW MEMBRANE WATER TREATMENT FACILITY; PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER PURPOSES.**

RECOMMENDATION

Staff is requesting that Mayor and City Council approve an amendment of the existing agreement between the City of North Miami (City) and the engineering firm of Hazen and Sawyer for Work Order No. 5 to provide engineering design, permitting, bidding and construction administration services for the rehabilitation project of the filter system at the City's Winson Water Treatment Plant, at a total not-to-exceed amount of \$470,000 and for an estimated period of 17 months.

BACKGROUND

On May 7, 2008, the City advertised Request for Qualifications (RFQ) No. 03-07-08 "Upgrades to Current Water Treatment Plant & Design and Construction Management of a New Membrane Water Treatment Facility" for the purpose of selecting an experienced and qualified engineering firm to provide the City with professional engineering services for the planned upgrades to the Winson Water Treatment Plant.

As a result of this RFQ, the City Council approved the selection of Hazen and Sawyer as the engineering consultant assigned to this project on September 23, 2008, through Resolution No. R-2008-100, and subsequently entered into an agreement to perform the requested engineering and construction administration services on September 16, 2009.

Under previous work orders, Hazen and Sawyer has already provided design, permitting and bidding services for this Winson Water Treatment Plant project; however, the actual construction contract has yet to be awarded by the City. Therefore, in order to proceed with this much needed filter rehabilitation project at the City’s treatment plant, staff has negotiated the following services with Hazen and Sawyer to move forward with the selection and award of a construction contract to execute the project.

SCOPE OF SERVICES

The scope of services to be performed under this work order include, but are not limited to, the review of any potential updates required to the design documents, review and modifications due to current permitting requirements, preparation of bid documents and bidding assistance during the solicitation and award of a construction contract, construction administration services during the actual construction of the project estimated to last approximately 12 months, and submittal of State Revolving Fund (SRF) reporting on behalf of the City in support of this project.

The estimated duration for each of the major tasks to be performed under this work order is as follows:

Description of Services	Duration (Calendar Days)
Design Documents Update	30
Permitting	60
Bidding Services	60
Construction Administration Services	365
Total Estimated Duration	515

The total fee negotiated and agreed to by Hazen and Sawyer for Work Order No. 5 is a not-to-exceed amount \$470,000.

Staff recommends approval of this amendment to the Hazen and Sawyer contract for Work Order No. 5 for engineering consulting services related to the rehabilitation project of the filter system at the City’s Winson Water Treatment Plant.

FUNDING SOURCE

Funding for this work order has been allocated from the City’s Utility Fund.

ATTACHMENTS

- Resolution
- Resolution R-2008-100 – Initial Award
- Hazen and Sayer’s Proposal (Work Order 5)
- Winson Water Treatment Plant – Site Plan & Related Improvements

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA, AUTHORIZING THE CITY MANAGER TO APPROVE WORK ORDER NUMBER 5, AMENDING A PROFESSIONAL DESIGN AND CONSTRUCTION MANAGEMENT AGREEMENT BETWEEN THE CITY OF NORTH MIAMI AND HAZEN AND SAWYER, P.C., TO UPDATE DESIGN DOCUMENTS PRIOR TO ISSUANCE OF A REQUEST FOR BID, PROVIDE PERMITTING AND BIDDING ASSISTANCE, CONSTRUCTION MANAGEMENT SERVICES, AND FLORIDA STATE REVOLVING FUND (SRF) REPORTING ASSISTANCE IN SUPPORT OF THE BP 1 FILTER REHABILITATION PROJECT; WITH AN ESTIMATED TIME FOR PERFORMANCE OF SEVENTEEN (17) MONTHS AT A COST NOT TO EXCEED FOUR HUNDRED SEVENTY THOUSAND DOLLARS (\$470,000.00), IN ACCORDANCE WITH THE TERMS, CONDITIONS AND SPECIFICATIONS CONTAINED IN THE REQUEST FOR QUALIFICATIONS NO. 03-07-08, UPGRADES TO CURRENT WATER TREATMENT PLANT AND THE DESIGN AND CONSTRUCTION MANAGEMENT OF A NEW MEMBRANE WATER TREATMENT FACILITY; PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER PURPOSES.

WHEREAS, on May 7, 2008, the City of North Miami (“City”) advertised *Request for Qualifications No. 03-07-08, Upgrades to Current Water Treatment Plant and the Design and Construction Management of a New Membrane Water Treatment Facility* (“RFQ”), requesting sealed qualifications from professional engineering firms to perform engineering consulting services for upgrades to the Winson Water Treatment Plant (“Water Plant”), and for design and construction management services for a new membrane water treatment facility (collectively referred hereto as “Services”); and

WHEREAS, in response to the RFQ, Hazen and Sawyer, P.C. (“Consultant”), submitted its sealed qualifications for the provision of Services, and was subsequently selected by City administration as having those qualifications and references most advantageous to the City; and

WHEREAS, on September 23, 2008, the Mayor and City Council passed and adopted Resolution No. R-2008-100, approving the selection of Consultant for the rendition of Services and authorized City administration to negotiate and execute an agreement for such Services; and

WHEREAS, on September 16, 2009, the City and Consultant entered into an agreement for Services in accordance with the terms, conditions and specifications contained in the Contract Documents (“Agreement”); and

WHEREAS, in the ongoing design and construction efforts for the proposed Water Plant improvements, the City requires additional services to be included in the Agreement which are described in Consultant’s Work Order Number 5, including among other things, the following services: 1) design documents update, 2) permitting requirements and review, 3) preparation and review of bid documents, 4) construction management services, 5) inspections and field observations, 6) on-site startup 7) multiple engineering discipline observations, 8) project closeout assistance, 9) record drawings incorporating changes made during the construction process, and 10) State Revolving Fund (SRF) reporting assistance (collectively referred to herein as “Additional Services”); and

WHEREAS, the City needs the Additional Services to diligently proceed with improving the existing potable water system currently serving the City, Village of Biscayne Park, portions of Golden Glades, Westview, Pinewood and certain areas of unincorporated Miami-Dade County (“Service Area Consumers”); and

WHEREAS, the Mayor and City Council find the approval of Work Order Number 5 to be an important step towards the completion of the Water Plant improvements, which are designed to best serve City residents and all Service Area Consumers of potable water.

NOW THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA:

Section 1. Authority of City Manager. The Mayor and City Council of the City of North Miami, Florida, hereby authorize the City Manager to approve Work Order Number 5, amending a Professional Design and Construction Management Agreement between the City of North Miami and Hazen and Sawyer, P.C., to update design documents prior to issuance of a request for bid, provide permitting and bidding assistance, construction management services, Florida State Revolving Fund (SRF) reporting assistance in support of the BP 1 Filter Rehabilitation Project; with an estimated time for performance of seventeen (17) months at a cost not to exceed Four Hundred Seventy Thousand Dollars (\$470,000.00), in accordance with the terms, conditions and specifications contained in the *Request for Qualifications No. 03-07-08*,

Upgrades to Current Water Treatment Plant and the Design and Construction Management of a New Membrane Water Treatment Facility.

Section 2. Effective Date. This Resolution shall become effective immediately upon adoption.

PASSED AND ADOPTED by a _____ vote of the Mayor and City Council of the City of North Miami, Florida, this ____ day of _____, 2016.

DR. SMITH JOSEPH
MAYOR

ATTEST:

MICHAEL A. ETIENNE, ESQ.
CITY CLERK

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

JEFF P. H. CAZEAU, ESQ.
CITY ATTORNEY

SPONSORED BY: CITY ADMINISTRATION

Moved by: _____

Seconded by: _____

Vote:

Mayor Smith Joseph, D.O., Pharm. D.
Vice Mayor Alix Desulme
Councilman Scott Galvin
Councilwoman Carol Keys, Esq.
Councilman Philippe Bien-Aime

_____ (Yes) _____ (No)
_____ (Yes) _____ (No)
_____ (Yes) _____ (No)
_____ (Yes) _____ (No)
_____ (Yes) _____ (No)

RESOLUTION NO. R-2008-100

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA, APPROVING THE SELECTION OF HAZEN & SAWYER AS THE CONSULTANT FOR THE PROVISION OF ENGINEERING CONSULTING SERVICES FOR UPGRADES TO THE WINSON WATER PLANT AT SUNKIST GROVE AND DESIGN AND CONSTRUCTION MANAGEMENT SERVICES FOR A NEW MEMBRANE WATER TREATMENT FACILITY; FURTHER AUTHORIZING THE CITY MANAGER AND CITY ATTORNEY TO NEGOTIATE AN AGREEMENT FOR THE PROVISION OF STATED SERVICES; PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER PURPOSES.

WHEREAS, on May 7, 2008, the City of North Miami ("City") advertised Request for Qualifications #03-07-08 ("RFQ"), requesting sealed qualifications from professional engineering firms interested in performing engineering consulting services for upgrades to the Winson Water Plant at Sunkist Grove, and design and construction management services for a new membrane water treatment facility ("Services"); and

WHEREAS, of sixty-nine interested firms, only six sealed qualifications were timely submitted by consultants in response to the RFQ; and

WHEREAS, on July 15, 2008, the City's Selection Team held a public meeting, reviewed and ranked the six proposals and selected Hazen & Sawyer as the most responsive and responsible provider of Services; and

WHEREAS, in accordance with the Selection Team's findings, the City Manager respectfully requests that the City Council approve the selection of Hazen & Sawyer as the consultant and authorize the City Manager and City Attorney to negotiate an agreement for Services; and should the negotiations with Hazen & Sawyer fail, to then be authorized to negotiate an agreement with CDM as the second highest ranked consultant, and if necessary, to continue the process to the next highest ranked firm until an agreement is ultimately reached.

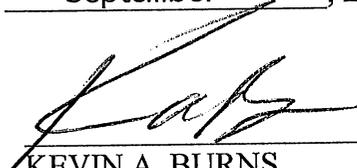
NOW THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA:

Section 1. Selection Approval. The Mayor and City Council of the City of North Miami hereby approve the selection of Hazen & Sawyer as the consultant for the provision of engineering consulting services for upgrades to the Winson Water Plant at Sunkist Grove and design and construction management services for a new membrane water treatment facility.

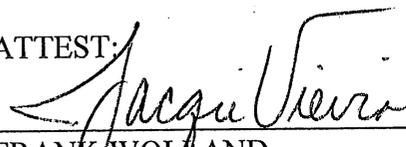
Section 2. Authority of City Manager and City Attorney. The City Manager and City Attorney are hereby authorized to negotiate an agreement for the provision of Services between the City of North Miami and Hazen & Sawyer; and should the negotiations with Hazen & Sawyer fail, to then be authorized to negotiate an agreement with CDM as the second highest ranked consultant, and if necessary, to continue the process to the next highest ranked firm until an agreement is ultimately reached.

Section 3. Effective Date. This Resolution shall be effective upon adoption.

PASSED AND ADOPTED by a 4-1 vote of the Mayor and City Council of the City of North Miami, Florida, this 23 day of September, 2008.

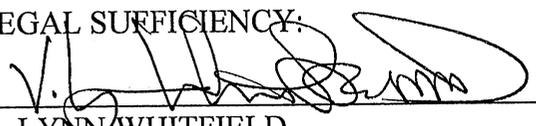


KEVIN A. BURNS
MAYOR

ATTEST:


FRANK WOLLAND
CITY CLERK

Deputy for

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:


V. LYNN WHITFIELD
CITY ATTORNEY

SPONSORED BY: CITY ADMINISTRATION

Moved by: Councilman Blynn

Seconded by: Mayor Burns

Vote:

Mayor Kevin A. Burns	<u>X</u>	(Yes)	<u> </u>	(No)
Vice Mayor Scott Galvin	<u>X</u>	(Yes)	<u> </u>	(No)
Councilperson Michael R. Blynn	<u>X</u>	(Yes)	<u> </u>	(No)
Councilperson Jacques A. Despinosse	<u>X</u>	(Yes)	<u> </u>	(No)
Councilperson Marie Erlande Steril	<u> </u>	(Yes)	<u>X</u>	(No)



Hazen and Sawyer
4000 Hollywood Boulevard, Suite 750N • Hollywood, FL 33021 • 954.987.0066

SCOPE OF SERVICES

North Miami Winson WTP BP 1: Filter Rehabilitation Project Design, Permitting, Bidding and Construction Management Support Services

WORK ORDER May 2016

BACKGROUND

On August 31, 2009, the City of North Miami (CITY) Council authorized an agreement with Hazen and Sawyer, P.C. (CONSULTANT), for the provision of consultant services associated with the Winson Water Treatment Plant (WTP).

The existing potable water system serves the area within the City limits as well as the Village of Biscayne Park, portions of Golden Glades, Westview, Pinewood, and surrounding areas of unincorporated Miami-Dade County. Potable water is supplied from the Winson WTP and via interconnects with the Miami-Dade County Water and Sewer Department (MDWASD), providing approximately 8.5 mgd AADF and 4.5 mgd AADF, respectively. The WTP is a conventional lime softening treatment plant with a permitted capacity of 9.3 mgd, and treats raw water from Biscayne Aquifer wells located on site and nearby the WTP.

In 2007 the CITY authorized preparation of a report entitled Winson Water Treatment Plant Expansion Feasibility Study indicating that the existing lime softening treatment system and Biscayne Aquifer wellfield infrastructure were at or near the end of their useful life. To this end, the CITY determined that the WTP facilities should be rehabilitated to ensure continued reliability through the year 2030. Due to budget constraints, expansion of the treatment capacity is not contemplated, and the WTP will maintain a 9.3 mgd capacity after completion of the rehabilitation effort.

Under a previous Work Order CONSULTANT provided design, permitting and bid services for the rehabilitation of the existing filter system at the Winson WTP. The CITY has decided to re-bid the project in the near future. The scope of services to be performed under this Work Order include review of any potential updates required to the design documents prior to bid, review of current permitting requirements and modifications to design documents that may be required as a result of permitting changes, permitting assistance, bidding assistance and construction management services including Florida State Revolving Fund (SRF) reporting in support of the BP 1 Filter Rehabilitation Project.

SCOPE OF SERVICES

TASK 1 – DESIGN DOCUMENTS UPDATE

Design Update

CONSULTANT will review and update the current design documents including the CITY's standard front-end bidding requirements. It is assumed that CONSULTANT will utilize front-end documents provided electronically by the CITY in Microsoft Word.

CONSULTANT will use the updated design documents as the Permit set documents for construction permits. CONSULTANT will incorporate comments received from permitting agencies to produce the Bid documents.

CONSULTANT shall submit an updated Class 3 construction cost estimate as defined by AACE International with the Bid documents. The cost estimate should have an expected accuracy range of +15% to -10%.

Task 1 Deliverables:

1. Bid Documents Submittal: CONSULTANT shall provide CITY with three hard copies (additional copies will be provided if needed) and one electronic copy (PDF format) of the Bid documents (plans and technical specifications). Hard copy drawings shall be 22-inch by 34-inch. Drawings will be signed and sealed, if required for the Building Department use.
2. Construction Cost Estimate: CONSULTANT will submit an updated Class 3 construction cost estimate as defined by AACE International with the Bid documents submittal.

TASK 2 – PERMITTING

CONSULTANT shall review the current permitting requirements and potential modifications to design documents that may be required as a result of permitting changes. CONSULTANT shall coordinate and attend one meeting with each of the following regulatory agencies to discuss the requirements for acquiring pre-bid construction permits for this project:

- Miami-Dade Department of Health (for the Florida Department of Environmental Protection–Application for a Public Drinking Water Facility Construction Permit)
- City of North Miami Building Department (including associated Fire review)

CONSULTANT will coordinate with Miami-Dade Department of Health for any additional permitting requirements. The current Florida Department of Health Permit will expire on May 9, 2017.

CONSULTANT will coordinate with the City of North Miami Building Department regarding a courtesy review of the contract documents.

The CITY recognizes that the time period for obtaining permits is beyond the control of CONSULTANT. The CITY will pay all permit fees to regulatory agencies.

Task 2 Deliverables:

- Prepare signed and sealed permit applications for the noted agencies, if needed.
- Prepare up to three signed and sealed sets of contract documents for the City of North Miami Building Department.
- Participate in one (1) coordination meeting with each agency having jurisdiction over Project. A maximum of two (2) meetings has been assumed.
- Respond to up to two (2) agency requests for information (RFI) related to permitting. A maximum of four (4) RFIs has been assumed.
- Participate in up to one (1) meeting with the City of North Miami Building Department to resolve permitting issues.

TASK 3 – BID SERVICES

In general, the CITY will handle the advertising, distribution, sale and maintenance of records of sale for the Bid Documents.

Pre-Bid Conference: CONSULTANT will attend one Pre-Bid Conference with the CITY and potential Bidders. CONSULTANT will electronically issue minutes of the issues discussed at the pre-Bid Conference to the CITY for subsequent distribution to prospective bidders.

Addenda Issuance: CONSULTANT will provide timely responses to reasonable inquiries from prospective bidders, as may be received and forwarded to CONSULTANT by the CITY, via written addenda interpreting and/or clarifying the bid documents. CONSULTANT will forward, via e-mail digital files of the addenda documents to the CITY. The CITY will issue the addenda to prospective bidders. Up to two (2) addenda are assumed.

Bid Evaluation: CONSULTANT will attend one bid opening. The CITY will determine responsiveness of each bid and furnish CONSULTANT with a bid tabulation and the completed bid form(s) for the bidder that the CITY determines to be the apparent low and responsive bidder. CONSULTANT will review this submittal and offer a written opinion to the CITY with respect to the award of contract.

This scope of services includes no allowance for CONSULTANT time to assist the CITY in the event of a bid protest.

Contract Award: CONSULTANT will provide five (5) sets of Contract Documents for execution by CITY and the successful bidder within five calendar days of request by CITY.

Task 3 Deliverables:

- Attend and participate in one Pre-bid Conference and Bid Opening. CONSULTANT will electronically issue meeting minutes to CITY, for distribution to potential bidders.
- Respond to reasonable questions from prospective bidders and prepare up to two Addenda accordingly. Forward Addenda in electronic format to the CITY for distribution to potential bidders
- Prepare five (5) sets of Contract Documents for execution.
- Prepare and forward a written opinion to the CITY with respect to the award of contract.

TASK 4 – CONSTRUCTION MANAGEMENT SERVICES

CONSULTANT shall perform the following tasks associated with office administration and field observation activities related to the construction of the project during the 12-month construction phase.

Subtask 4.1 – Pre-Construction Conference

CONSULTANT shall conduct a preconstruction conference attended by representatives of CITY and by the Construction Contractor. CONSULTANT shall provide the attendees with a written summary of the meeting which will be distributed electronically. This Scope of Services represents an expected level of effort of about 12 hours of services.

Subtask 4.2 – Construction Administration Services

CONSULTANT shall provide construction administration services in support of the construction phase, including:

Management: Provide necessary services for the management of the project during the construction phase. Such management activities shall include limited coordination and general correspondence with the CITY, Construction Contractor and subcontractors, as well as handling and processing of submittals received from the construction Contractor. This task also includes requests for contract interpretations and clarifications required by the Construction Contractor which do not result in the submittal of formal Requests for Information. This Scope of Services represents an expected level of effort of about 90 hours of services.

Contract Interpretations and Clarifications: CONSULTANT shall log requests for information and issue necessary technical interpretations and clarifications of the Construction Contract Documents in a timely manner. For purposes of estimating level of effort associated with this sub task, it is assumed that thirty-six (36) requests for information will be addressed by CONSULTANT. Non-technical administrative interpretations will be issued by CITY. This Scope of Services represents an expected level of effort of about 144 hours of services.

Change Orders: CONSULTANT shall provide technical input for requests for routine project cost and/or schedule changes from the construction Contractor. Changes may be the result of unforeseen conditions or interferences arising during routine progress of work or additional improvements requested by CITY after the project bid date. CONSULTANT shall evaluate the impact of the change request in terms of project cost and schedule. CONSULTANT shall prepare a recommendation of the change order request.

CONSULTANT analysis of the change request shall be forwarded to the CITY for processing. This Scope of Services has been based upon the preparation of ten (10) change orders. This Scope of Services represents an expected level of effort of about 160 hours of services. It is noted that CONSULTANT Scope of Services does not include claims analysis or litigation support.

Pay Requests: CONSULTANT shall review applications for payment and accompanying data, determine the amounts owed, and recommend approval of payments due the Construction Contractor. It is understood that CONSULTANT's recommendation of any payment requested in an application for payment constitutes a representation by CONSULTANT to the CITY, based on CONSULTANT's on-site observations of construction in progress as an experienced and qualified professional and on the CONSULTANT's review of the application for payment and the accompanying data and schedules, that construction has progressed to the point indicated. In addition, it is understood that to the best of the CONSULTANT's knowledge, information and belief, the quality of construction is in substantial accordance with the Contract Documents; subject to an evaluation of construction upon substantial completion, to the results of any subsequent tests called for in the Contract Documents, and any qualifications stated in the recommendation; and that the Construction Contractor is due the amount recommended. For the purposes of estimating the level of effort associated with this subtask, it is assumed that the CONSULTANT shall review up to 12 pay requests. This Scope of Services represents an expected level of effort of about 48 hours of services.

Shop Drawings: CONSULTANT shall log, track, review and process shop drawings and any other submittals which the Construction Contractor is required to submit within twenty-one (21) working days of receipt of the submittal except for special items requiring longer review time if so noted in the Construction Contract Documents. The review shall be for conformance with the design intent and compliance with the information presented in the Construction Contract Documents. CONSULTANT shall determine the acceptability of materials and equipment proposed by the Construction Contractor. This Scope of Services has been based upon the review and processing of a maximum of thirty-four (34) submittals, including resubmittals. This Scope of Services represents an expected level of effort of about 232 hours of services.

Construction Progress Meetings: Approximately twice per month (up to a maximum of 24 meetings), CONSULTANT shall conduct a progress meeting with the Construction Contractor and the CITY to review project status and identify issues that may affect the project schedule. CONSULTANT shall provide CITY with a written summary of each progress meeting which will be distributed electronically to the attendees. This Scope of Services represents an expected level of effort of about 132 hours of services.

Subtask 4.3 – Field Observation Services

CONSULTANT shall provide an inspector to assist the CITY in the field observation services of the proposed Work. This Scope of Services has been based upon observation as required for a nine month period. The CONSULTANT inspector will perform the following duties and responsibilities, up to the limitations of the inspection hours defined in this contract (1,560 hours):

- Serve as the construction liaison, working primarily with the Construction Contractor's superintendent(s) and plant staff.
- Conduct on-site observations of construction in progress to assist in determining if construction is proceeding in substantial accordance with the Contract Documents.
- Inform the Construction Contractor whenever the he/she believes that construction is unsatisfactory, faulty or defective, does not conform to the Contract Documents, does not meet the requirements of any inspections, tests or approval required to be made, or has been damaged before final payment.
- Visually review suitability and method of storage of materials, equipment and supplies delivered to the construction site.
- Verify that operating and maintenance procedures are available to the CITY before equipment start-up and operator training is conducted by the Construction Contractor.
- Observe, record, and report appropriate details relative to testing and start-up procedures.

- Review applications for payment with the Construction Contractor for accuracy, back-up detail and completeness.
- During the course of construction, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by the Construction Contractor are applicable to the items actually installed.
- Attend pre-construction conference, progress meetings and other job conferences.
- Before issuance of a determination of substantial completion, prepare a list of items requiring completion or correction, in concert with the CITY. Participate in the final inspection.
- Coordinate with the CITY and Construction Contractor for necessary shutdowns and interruptions of CITY facilities.

It is important to note that in performance of the duties noted herein, the inspector shall not:

- Undertake any of the responsibilities of Construction Contractor or its subcontractors, nor direct any of their work.
- Advise on or issue directions pertaining to any aspect of the means, method, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.
- Advise on, or issue directions about, safety precautions and programs related to the Construction Contractor's Work.
- Approve any interruptions or modification of CITY's facilities without the approval of CITY.

Subtask 4.4 – On-site Start-up Services

CONSULTANT shall participate in startup activities the startup phase of the project. Participation shall include but not be limited to assistance with signal loop testing including electrical and instrumentation terminations, review of as-built documentation prior to startup; instrument calibrations; coordination of new signals and process tuning during startup. This Scope of Services represents an expected level of effort of about 80 hours of services.

Subtask 4.5 – Discipline Observations

CONSULTANT shall furnish the periodic services of discipline engineers (mechanical, electrical, structural, and instrumentation engineers) during construction perform specialized inspections associated with work and compliance reporting in accordance with regulating requirements. This Scope of Services represents an expected level of effort of about 115 hours of services.

Discipline observation labor is based upon performing the observations associated with compliance with the Miami-Dade Department of Health and Building Department construction permit requirements.

Subtask 4.6 – Project Close-Out Assistance

Upon receiving notice from the Construction Contractor that the project is substantially complete, CONSULTANT, in conjunction with appropriate CITY staff, shall develop a "punch list" of the project. The "punch list" shall include items needing completion or correction prior to consideration of final acceptance. CONSULTANT shall develop the list with assistance from CITY. The list shall be forwarded to the Construction Contractor by the CITY. Upon notification from the Construction Contractor that all remaining "punch list" items have been resolved, CONSULTANT, in conjunction with appropriate CITY staff, shall perform a final review of the finished project. Based on successful completion of all outstanding work items by the Construction Contractor, CONSULTANT shall assist in closing out the construction contract by certifying final construction to jurisdictional agencies. This Scope of Services represents an expected level of effort of about 48 hours of services.

Subtask 4.7 – Record Drawings

CONSULTANT shall prepare and distribute to the CITY within thirty (30) days of the date of receipt of marked-up, red-lined field drawings from the Construction Contractor, five sets of 22-inch by 34-inch signed and sealed record drawing prints. CONSULTANT shall also deliver the AutoCAD electronic version of the record drawings on compact disk. The record drawings shall incorporate those changes made during the construction process, based on the marked-up prints, drawings and other data furnished by the Construction Contractor to CONSULTANT. This Scope of Services represents an expected level of effort of about 92 hours of services.

Subtask 4.8 – SRF Reporting Assistance

CONSULTANT shall provide State Revolving Fund (SRF) coordination assistance to the CITY during the construction of the project. This Scope of Services represents an expected level of effort of about 96 hours of services.

ASSUMPTIONS

The following assumptions were made in preparation of the above scope:

1. The Front End documents (Contract Requirements) will be prepared by CITY.
2. The CITY will pay for all water quality sampling and analyses required by the contract documents and/or permits. The CITY will be responsible for procurement of water quality testing laboratory services.
3. The CITY will pay for all materials testing (i.e., concrete cylinders analyses, etc.) required by the contract documents and/or permits. The CITY will be responsible for procurement of material testing laboratory services.
4. Fifteen calendar days of review time for CITY have been provided for in CONSULTANT's time of performance.
5. A survey or a geotechnical report is assumed to not be required for permitting.
6. The design documents will be prepared as a single construction project.
7. Litigation and claims services are not included in this work authorization.
8. Numbering of technical specification sections shall follow CONSULTANT's normal practice.
9. The construction period is assumed to be 365 calendar days.
10. CONSULTANT shall not be responsible for the acts or omissions of any Contractor, any subcontractor or any other person (except CONSULTANT's own employees, subconsultants or other agents) at the project site.
11. CONSULTANT shall not be responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. CONSULTANT shall issue technical instructions to the Contractor and shall interpret all technical requirements of the contract documents.
12. No materials testing/specialty materials observations by laboratories/specialty forms are included.
13. No training by CONSULTANT is anticipated.
14. The selected Contractor will maintain full responsibility for meeting safety and environmental regulations and conditions.

SCHEDULE OF COMPLETION

The Schedule for the major work tasks is summarized below.

Task	Description	Duration for task/subtask (days)	Calendar Days From Notice To Proceed
1	Design Documents Update	30	30
2	Permitting	60	90
3	Bid Services	60	150
4	Construction Management Services	365	515

COMPENSATION

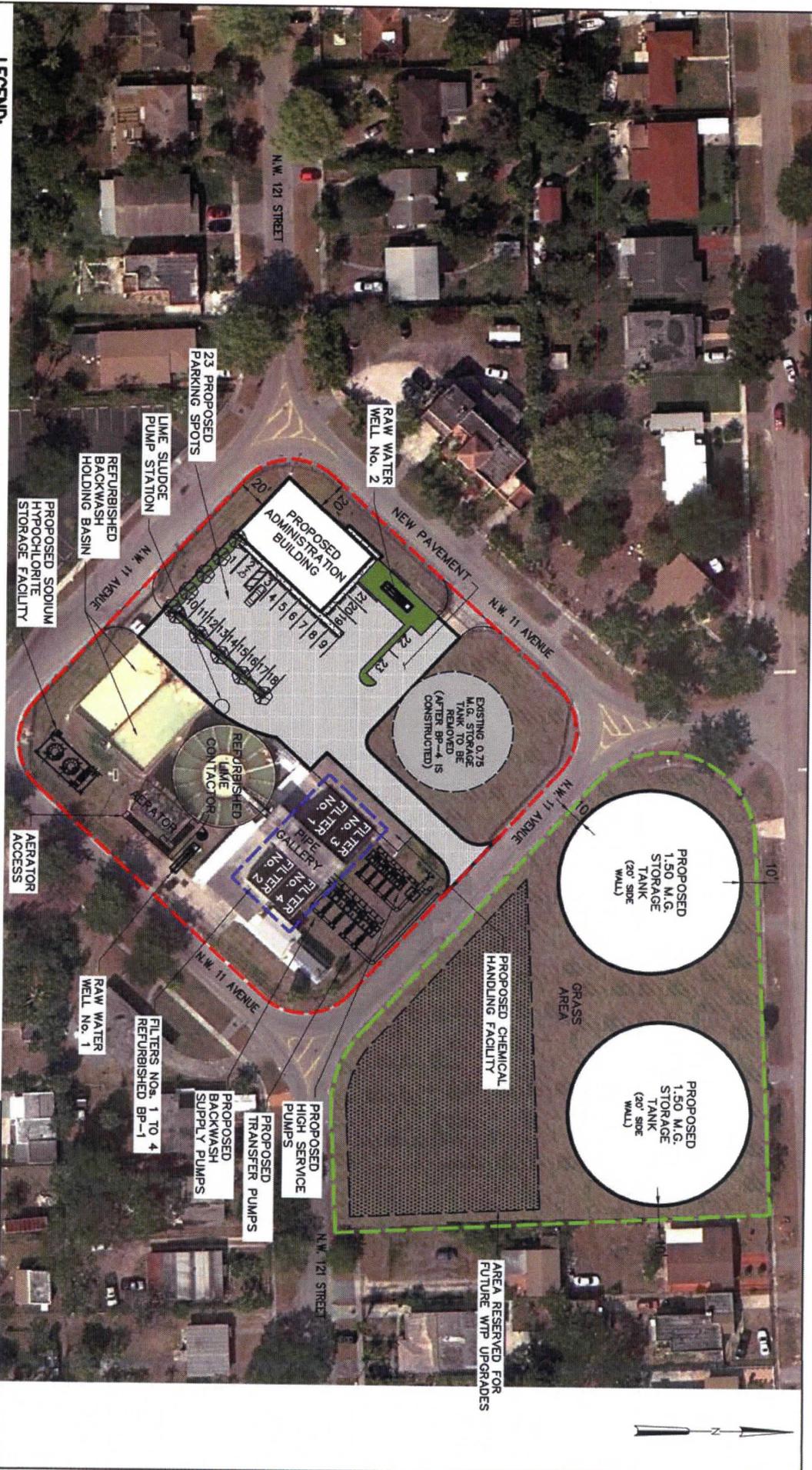
Compensation shall be made to CONSULTANT as indicated in the table below.

Task	Description	Compensation Type	Estimated Fee
1	Design Documents Update	Lump Sum	\$14,900
2	Permitting	Lump Sum	\$6,700
3	Bid Services	Lump Sum	\$17,500
4	Construction Management Services	Lump Sum	\$428,000
099	Expenses	Not to Exceed	\$2,900
TOTAL			\$470,000

AUTHORIZATION - HAZEN AND SAWYER, P.C.


 Accepted: Patricia A. Carney, P.E.
 Vice President

5/11/16
 Date:



HAZEN AND SAWYER
Environmental Engineers & Scientists

LEGEND:

- BP-1: FILTER REHABILITATION PROJECT.
- BP-2: WTP REHABILITATION PROJECT (INCLUDES BP-2 ON-SITE RAW WATER SYSTEM IMPROVEMENTS).
- BP-3: WATER STORAGE TANKS PROJECT.
- BP-4: WATER STORAGE TANKS PROJECT.

1"=60'-0"

60 30 0 60'

REVISED PLANT LAYOUT