

## **WORK ORDER 2 NMB WATER CAPITAL IMPROVEMENT PROGRAM MANAGEMENT SUPPORT SERVICES**

### **SCOPE OF SERVICES**

#### **SECTION 1: PURPOSE AND INTENT**

This work order covers the provision of staff augmentation services in support of the delivery of the City of North Miami Beach NMB Water Capital Improvement Program (CIP). The intent of this scope is to provide the specialized and experienced labor, expertise, resources and availability needed to continue supporting NMB Water as it implements its CIP and builds up NMB Water's institutional capability and associated internal management and labor capacity.

In accordance with the RFQ#19-099-DR "NMB Water Capital Improvement Program Management Support" between the City of North Miami Beach, Florida and Black & Veatch (CONSULTANT), the following Scope of Services for Work Order 2 Program Management Support Services is to be performed.

#### **SECTION 2: BACKGROUND**

NMB Water has contracted with CONSULTANT to provide professionals to augment NMB Water's CIP program management staff and provide support services to implement their capital improvement program.

This work order authorizes CONSULTANT to provide ongoing Staff Augmentation and Program Management support to NMB Water for the CIP as described in the subsequent paragraphs. The activities which the CONSULTANT's professional will be assigned to support as part of this work order are listed below. The work associated with this work order is described in further detail in the following sections of this document.

In essence, this scope of services constitutes a Staff Augmentation service in support of NMB Water's CIP planning and implementation needs. Technical Direction will be provided by NMB Water to assigned CONSULTANT professionals to guide the performance of this scope of services. Technical direction includes direction that helps the CONSULTANT accomplish the activities under this Scope of Services, or comments on and approval of reports or other deliverables. Technical direction must be within the general scope of services of this work order, unless amended by mutual agreement.

Labor resources identified and made available to NMB Water represent good faith estimates of NMB Water labor requirements. As such, numbers of professionals and specific number of hours assigned to each professional are fungible within the ceiling of this contract so as to provide NMB Water with the flexibility needed to implement its CIP in an agile manner. Should changes in NMB Water CIP planning or new or otherwise unanticipated NMB Water needs emerge that require additional labor and expertise, the CONSULTANT shall exert reasonable efforts to provision NMB Water with the requested labor and expertise subject to mutually agreed amendment of this scope of services and availability of funding.

#### **SECTION 3: PROGRAM MANAGEMENT SUPPORT**

The overall objective is to continue assisting the City in managing the implementation of assigned projects/professional services. The CONSULTANT'S responsibilities and deliverables for this effort may include, but are not limited to the following:

- A. Maintain and update NMB Water's revised Program Management Plan (PMP) developed under Work Order 1 to enhance its usefulness as a practical and living management tool.

Objectives are to pursue continuous improvement, consistency and responsiveness to NMB's planning, and to managing implementation across NMB Water.

Continue to assist in standardizing core project management processes, tools, and systems across the CIP. This also involves helping and supporting NMB Water leadership to manage consistent adoption across the NMB Water organization. In practice, the CONSULTANT PM/CM Procedures team will observe and identify existing best practice that is working well for NMB Water; revise and improve practices where warranted; identify and suggest new practices to include in NMB Water's PMP; and assist and support NMB Water leadership to propagate and adopt best practice across the organization to enhance NMB Water's institutional capacity. Under the leadership of the CONSULTANT's Contract Manager, Project Controls Manager, Sr. Project Manager - Preconstruction and Construction Manager, the CONSULTANT shall assist the City to develop processes and procedures for the NMB Water departments they are respectively assigned to.

- B. An essential element of the program is maintaining public understanding of the benefits of the Capital Improvement Program and to advise them of activities or construction projects which may impact their normal activities and communities. The goal is to have NMB residents, NMB Water regional customers, and local businesses understand the program purpose, receive regular program information, and be a part of the program's success. Therefore, the CONSULTANT shall prepare upon request CIP project updates for public media and/or NMB's own CityLine, among others. Additionally, CONSULTANT shall also prepare upon request, presentations or any other communication materials, to inform NMB Water clients of the CIP activities, through community meetings, townhall meeting or any other way available to interact with the clients, for which the CONSULTANT is expected to participate. The CONSULTANT shall develop a CIP Public Outreach Plan, to be primarily developed by the CONSULTANT's Public Information Officer and related Communications specialists in conjunction with NMB Water leadership and the PM/CM Procedures Team. NMB Water and/or other NMB Officials designated by NMB will serve as the public face of the CIP. The purpose of the CIP Public Outreach Plan is to develop strategies, craft key messages, schedule events and other outreach, and implement outreach activities through public forums, web-sites, and other media to assure the community is informed of CIP benefits, impacts and other developments through proactive communication with the community.
- C. Implement, maintain and update new components of the PMP, including
  - i. The Quality Assurance/Quality Control (QA/QC) plan to ensure the projects are being implemented with the highest level of quality, consistency and according to industry best practices.
  - ii. The Health, Safety & Environmental (HSE) Plan to define the procedures and requirements for the health and safety of the CONSULTANT staff and visitors when they are physically on the project site. The project site includes the project offices, trailers, and facilities thereon as applicable. This Plan does not apply to the third-party contractors, their workers, their subcontractors, their visitors, or any other persons not under the direct control or custody of the CONSULTANT. As part of the CONSULTANT's PM/CM Support Plans and Procedures team, this plan will be primarily developed by the CONSULTANT's Safety Lead and CONSULTANT's Site Safety Officer in consultation with NMB Water leadership.
  - iii. The CONSULTANT shall prepare a Project Closeout Plan. This plan identifies the different stages of closeout activities during the program completion phase and defines the corresponding responsibilities for the closeout of the tasks. This plan will include an assembly of contractor deliverables, retention and disposal of documents, lessons learned and feedback, defects and liabilities, and gateway closeout processes. This plan will be primarily developed by the CONSULTANT's Construction Manager with the support of PM/CM Support Plans and Procedures staff in consultation with NMB Water

leadership. This shall be performed upon completion of items A and B to assure that Project Closeout procedures and tasks are developed and able to be implemented as part of the normal construction process under the philosophy that project closeout best practice begins at the planning stage. Early development and adoption will minimize delays downstream. Consistent application captures ongoing data needed to inform As-Built drawings to be prepared by others. Photographs, GPS data, Non-Conformance Reports will be required as part of Construction Inspectors' Daily Inspection Reports (DIRs). As-Built drawings should be updated routinely as construction progresses based upon survey data and the DIRs. NCRs form the basis of the punch list: timely NCRs transmitted to the Contractor will lead to the Contractor completing the punch list even before acceptance.

- D. Identify and correct gaps in program or project management in support of PMP adoption and implementation across NMB Water. This may include providing experienced and qualified project, construction managers or subject matter experts for a limited time. This is an ongoing process. CONSULTANT will adjust support and expertise provided to NMB to address new situations as they arise. Any adjustments will require prior approval from NMB Water leadership.
- E. Oversee work by third-party project delivery Architecture and Engineering (A/E) firms and construction contractors under contract with the City throughout the project delivery life cycle, from project definition through startup and commissioning. This task may include Quality Assurance and Quality Control (QA/QC), bid and constructability reviews, and/or other Owner-representative responsibilities as deemed necessary or appropriate by the City. CONSULTANT will arrange adequate resources to support the various ongoing Planning and Design projects being implemented under the CIP during the timeframe of this Work Order. Construction Management best practice involves scoping participation as well as constructability reviews to be conducted at the 30/60/90 stages of design. This assures NMB infrastructure is built in a manner that minimizes change-orders while addressing additional NMB Water project parameters (life-cycle costs, automation and maintenance requirements, availability of funding, schedule drivers, etc.).
- F. Measure, track and recommend (as needed) key performance indicators (KPIs) that may be most appropriate for City consideration to measure progress and document program accomplishments. Some of the KPIs of the program will include quantity and quality of work completed, budget and schedule adherence, and quality of delivery. Under the leadership of the CONSULTANT's Reg. Tech Expert/ CM Expert and with the support of CONSULTANT's Sr. Design Manager - Preconstruction and other experts, the CONSULTANT PM/CM Procedures team will draw from KPIs that have proven effective in managing CIP programs in South Florida, the region and other parts of the country; will develop additional KPIs that are responsive to NMB Water's specific real-world conditions; and will suggest them for consideration and concurrence by NMB Water leadership.
- G. A common element of successful programs is an ability to be flexible and adaptive to emerging needs and unforeseen conditions. Operational expediency warrants a reasonable level of CONSULTANT management and administrative oversight and support to address existing NMB requirements and anticipate emerging needs. It also warrants adequate CONSULTANT management and administrative engagement to assure that requisite expertise and resources are identified and assigned when needed to support NMB's existing requirements and emerging needs with one single objective: facilitate NMB's reliable execution of its CIP and demonstrate the effectiveness of NMB Water's new management approach in front of its constituents, customers and other stakeholders.

Roles and their functions are described on the following pages. Total estimated level of effort for each participant is provided in Exhibit B.

## ROLES:

- **Principal:** Working a few hours a month from the A/E's local Home Office, CONSULTANT's Principal provides corporate oversight to make sure the team is properly resourced and help to establish critical success factors and define/select KPIs to measure performance.
- **Contract Manager / Project Manager:** As holistic planner for the program, the Contract Manager will apply a portion of his hours to organize and collaborate with the PM/CM Team for this activity. Role will include participation in activity planning meetings at NMB Water, sharing of lessons learned from other programs, helping develop KPIs, and reviewing the state of PM/CM deliverables and planning documents. He also drives CONSULTANT contract compliance as well as ensuring NMB Water's satisfaction with CONSULTANT's services and expertise.
- **QA/QC Manager:** The QA/QC Manager reviews updates to NMB Water's PMP, conducts remote spot audits of project documentation to assure conformance with NMB Water PMP-approved processes and procedures, and shares findings and suggestions with NMB Water leadership. He also has a role on the PM/CM Plans & Procedures team, leading the development of the QA/QC plan in conjunction and close collaboration with the PM/CM Support Team.
- **PM/CM Support Plans and Procedures Experts:** Various senior level professionals will evaluate NMB Water's existing project management plans and processes, discuss initial findings with NMB WATER Leadership and recommend an appropriate course of action to complete NMB WATER's PMP to enhance its usefulness. They will also draw on their experience to observe and evaluate existing NMB WATER practices, identify practices which work well for NMB WATER, adapt practices which merit improvement, and build on Team findings in collaboration with the NMB Water Leadership to develop standardized core processes, tools, and systems across the CIP.
- **Project Manager - Preconstruction:** Working from NMB Water's offices full-time, this position collaborates with the PM/CM Procedures Team to observe and evaluate existing NMB WATER practices, identify practices which work well for NMB WATER, adapt practices which merit improvement, and build on their findings on collaboration with the Program Management Support Team to develop standardized core project management processes, tools, and systems across the CIP.
- **Project Control Manager:** Working part-time, the Project Control Manager works in tandem with the PM/CM Procedures Team to develop and implement the Program Control Plan and provide reports, dashboards and other information to help NMB Water visualize the tracked and forecasted performance of NMB Water's CIP.
- **Scheduling Specialist:** This position works part-time from the CONSULTANT's Home Offices to support the Project Control Manager during the planning and implementation phases of the CIP to document and forecast the schedule performance of projects under NMB Water's CIP.
- **Safety Officer:** This position works part-time from the CONSULTANT's Office and NMB Water sites as needed, supporting the execution of the HSE plan developed by the PM/CM Support Team. During the construction phase of CIP projects, assures construction projects are in compliance with requisite regulations, contractually mandated safety requirements and the contractors' respective construction site safety plans.

- Public Information Officer will lead the development of the Public Outreach Plan in conjunction and close collaboration with the PM/CM Support Team.
- Sr. Administrator: Provides requisite routine accounting and financial reporting support.
- Field Office Admin Assistant will work full time from the NMB Water Office to support NMB Water leadership and the CONSULTANT's Design and Construction phase experts as needed to support CIP implementation and respond to ad hoc administrative requests.
- Editor / Technical Writer, working full time from the NMB Water Office will support NMB Water technical writing, document editing, and graphic design needs for the NMB Water documents and public communications.

#### **SECTION 4: PRE-CONSTRUCTION MANAGEMENT**

The CONSULTANT, through their staff under the direction of NMB Water, shall perform pre-construction management services that include:

##### **A. PLANNING**

- 1) Review recently prepared planning and other documents, including the latest CIP, master plan, engineering studies and designs, and related information and provide any comments or suggestions for implementation. Exhibit A includes the latest CIP projects for fiscal year 2021.
- 2) Assist in reviewing the current capital program master schedule to assure that all projects are identified, appropriately scoped, budgeted and sequenced, and that achievable schedules have been developed.
- 3) Validate that the preliminary project scopes are definitive, comprehensive, and meet intended objectives. Identify permitting requirements for all projects. This requires a clear understanding of the realities and circumstances under which the City implements its extensive CIP. Numerous factors presently influence the implementation of the water and sewer CIP, including but not limited to:
  - a) Financial constraints
  - b) Regulatory requirements;
  - c) Schedule targets and/or constraints
  - d) Construction market conditions
  - e) Project permit and approval requirements
  - f) CIP implementation optimization
  - g) Construction in populated areas
- 4) Make recommendations to better plan and execute the CIP and to facilitate more effective delivery of individual projects, more efficient use of resources, and more effective coordination between projects and the current and anticipated operation of the water distribution and wastewater collection systems.
- 5) Advise the City in providing day-to-day management and oversight of the CIP and develop options and recommendations for the City's consideration in the effective and efficient delivery of the CIP.

- 6) Assist the City developing a logical sequence of construction bid packages and/or program delivery strategies that ensure facilities remain operational and in regulatory compliance during construction.
- 7) Assist the City preparing an annual work plan prior to the beginning of each contract year that defines projects, tasks, budgets, staffing resources, and assignments for the year, with a report on status of same for the previous year.

#### **B. DESIGN MANAGEMENT**

- 1) Prepare scope of services to contract project delivery A/E firms that will complete designs, studies, and other project delivery tasks as determined in collaboration with the City. The CONSULTANT will provide oversight of the chosen project delivery A/E firms under the City's strategic direction.
- 2) Preparation of reports, budgets, advertisements, cost estimates, schedules, etc. to assist the City with selection of and contracting with project delivery engineering firms to provide engineering and construction services that are developed, included or adopted as part of this program. Also, assist in preparation of technical scopes for the selected project delivery consultants for use in the preparation of cost proposals;
- 3) Prepare a Quality Assurance/Quality Control (QA/QC) plan to ensure the program is being implemented with the highest level of quality, consistency and according to industry best practices, and per the City's standards. Conduct QA/QC audits on a periodic basis.
- 4) Collaborate and direct CONSULTANT Cost Estimators to prepare cost estimates, as needed, for bid packages to be reconciled with the estimates of the A/E firm or project design consultant.
- 5) Manage and coordinate the implementation of the A/E firms' work, schedule, and budget and other subcontractors. (e.g., surveyors, geotechnical, etc.)
- 6) Provide technical consultation as requested by A/E firms or for the overall benefit of the project.
- 7) Prepare construction bid documents utilizing plans, specifications, and other required documents prepared by NMB Water-contracted A/E firms.
- 8) Conduct periodic reviews of prepared studies and designs, including progress reviews at typical design percent completion stages.
- 9) Monitor performance, review invoices, and recommend periodic progress payments.
- 10) Provide expertise in value engineering and help assess when such an evaluation is a benefit to the City.
- 11) Provide periodic progress reports to NMB Water regarding the management of design services, including the services provided by subcontractors.
- 12) Provide technical assistance as requested by the City, including design services for tasks of an urgent or critical nature.

#### **C. PERMITTING MANAGEMENT**

- 1) Assist the City in obtaining appropriate permits to comply with requirements of the Clean Air Act, Clean Water Act and Safe Drinking Water Act and from any other applicable federal,

state and local regulatory agencies. Update and maintain reporting systems used to document compliance with various permits.

- 2) Although permitting efforts will be led primarily by City staff; the CONSULTANT will assist the City with documentation for acquiring permits, coordination, and provide technical support during permit negotiations. Coordination of permitting efforts may include (but not limited to) the following departments or agencies:
  - a) South Florida Water Management District
  - b) Miami Gardens Building Department and other Municipal Building Departments
  - c) Florida Department of Health in Miami-Dade County
  - d) Miami-Dade County Department of Environmental Regulatory Management
  - e) Florida Department of Environmental Protection
  - f) U.S. Environmental Protection Agency
  - g) Miami-Dade Fire Department
  - h) City Manager's Office
  - i) Parks Department
  - j) Public Works Department
  - k) Schools (Dade-County or other)
  - l) Community Redevelopment Agency
  - m) Urban Forester
  - n) Miami Dade County Department of Transportation
  - o) Florida Department of Transportation
  - p) Utility Companies
  - q) Building and Zoning
  - r) Waste Management
- 3) Ensure CIP projects are planned and executed in compliance with all applicable EPA/WIFIA and any other federal, state and county laws and regulations and permit provisions;
- 4) Advise the City on various regulatory permit processes and requirements and include application and processing times in the master program and projects schedules to define a viable implementation plan for the program and all funded projects. Identify studies or other work products needed to secure permits and provide appropriate technical expertise to assist the City in permit acquisition;

#### **D. PROCUREMENT SUPPORT**

- 1) Assist in the procurement of grants or loans through the preparation of environmental information documents, cost effectiveness analyses, value engineering studies, and other grant/loan application data. Update and maintain grant/loan review processes, schedules, and grants/loans database;
- 2) Procurement support services include activities after the design has concluded and prior to construction; typically, those during the bidding phase. Selected construction service providers will be contracted directly by NMB Water. The CONSULTANT shall provide assistance in the procurement of construction firms, which may include preparation of advertisements; assist with evaluating qualification statements; performing experience and background investigations; and assist NMB Water and the City in negotiating with construction firms.
- 3) Procurement services may include, but are not limited to:
  - a) Assisting with the preparation of bid documents
  - b) Assuring that all permits have been received and all land has been acquired before proceeding with the bidding process

- c) Coordinate and assure the availability of funding before proceeding with the bidding process
- d) Coordinating the bidding process activities with both the City's Procurement Divisions and the A/E design consultants
- e) Assisting with the solicitation of bids, which may include preparing advertisements and attending or directing pre-bid meetings
- f) Conducting technical reviews of bids
- g) Assisting in the preparation of construction contracts
- h) Assisting in negotiating and executing construction contracts

Roles and their functions are described below. Total estimated level of effort for each participant is provided in Exhibit B.

#### ROLES:

- Project Manager - Preconstruction: Working from NMB Water's offices full-time from the start of this agreement, this position supports NMB Water's Pre-Construction Director by managing the CONSULTANT's Pre-Construction support at NMB Water. Leads planning, design, permitting and tender support for assigned projects.
- Design Discipline Technical Reviewers will provide project-specific reviews from the CONSULTANT's Offices of NMB Water-contracted A/E plans, specifications and cost estimates at the 30/60/90 design review stages.
- Cost Estimators will provide planning level cost estimates of design and construction projects from the CONSULTANT's Home Offices; will also conduct reviews of NMB Water-contracted A/E cost estimates at the 30/60/90 design review stages.
- Assistant Office Engineer: This position supports the team in Pre-Construction activities to include planning, design management, permitting, and procurement.
- Permitting Lead: Provides reviews of projects from the CONSULTANT's Home Offices at the planning and 60% design stages to define and support achievement of required permitting requirements on a project-specific basis.
- Construction Manager: Participates in project scope planning and performs constructability and operability reviews at the 30/60/90 design review stages.
- Sr. Technical Specialist: Subject Matter Experts will provide assistance from the CONSULTANT's Offices with anticipated needs associated with the wells for Norwood WTP. Tasks may include but are not limited to background research and data collection/review, update of an existing groundwater model, project planning, assistance with well evaluations, permitting support, and other technical assistance.
- Technical Specialist: Technical Reviewers will provide as needed project-specific reviews from the CONSULTANT's Offices of NMB Water-contracted A/E drawings, specifications and cost estimates at designated design review stages. Updates to the water system hydraulic model are anticipated. A Technical Reviewer will be utilized to review and provide QA/QC and technical insight to its refinement.

#### **SECTION 5: CONSTRUCTION MANAGEMENT**

The construction phase commences upon the issuance of a written notice to the contractor to proceed with construction of a project. In general, these services include what are typically referred to as construction management and inspection. Additionally, the CONSULTANT shall also support



the project through completion, startup and the contractual closure with the construction contractor. The CONSULTANT, through their staff under the direction of NMB Water, shall perform construction management services that include but are not limited to:

- 1) Manage and coordinate services during construction being provided by the A/E firm. Services during construction include, but are not limited to, shop drawings review; rendering consultation during construction; advising NMB Water on laboratory, shop, and test of material and equipment for compliance with specifications; assisting in tune-up test, and start-up of equipment; preparing records drawings; and providing final inspection and report;
- 2) Evaluate contractor's construction work plan for effectiveness and efficiency in terms of approach and resource allocations; The Construction Work Plan describes the construction means and methods, sequence of construction, the maintenance of traffic (MOT) equipment, the sequence of construction activities; among other project requirements. The CONSULTANT shall carefully review and consider the proposed work plan to determine the assistance that will be required, coordination with other City's Department, and Miami-Dade Water and Sewer, and other third parties.
- 3) Responsible for monitoring, managing NMB's Water policies, procedures, rules, regulations, standards, and requirements per the Contract Document.
- 4) Ensure that all activities performed during the construction phase comply with current or revised NMB Water policies, rules, procedures, standards and project specifications;
- 5) Review the quality assurance programs developed by contractors and monitoring adherence thereof;
- 6) Administer construction contracts, including the review and certification of contractors' invoices.
- 7) Manage and perform construction contractor negotiations regarding progress accomplished (percent completions), change orders (including design changes), claims and counterclaims. The CONSULTANT shall obtain approval from NMB Water for the resolution of all claims and final processing of change orders prior to their implementation.
- 8) Perform construction inspection and testing services required during the construction phase for Quality Assurance and compliance with contract documents;
- 9) Provide a safety specialist certified by OSHA to assure construction projects are in compliance with all applicable safety rules and regulations;
- 10) Manage all services to be supplied by other external service providers contracted by NMB Water during this phase using Good Industry Practice;
- 11) Provide technical support services in the areas of proposed design changes, review of proposed complex construction methods, cost estimating, project control, and review of submittals;
- 12) Maintain orderly and complete Project specific files relative to contractor documentation;
- 13) Witness and document mechanical start-up, testing, and commissioning of individual equipment along with the electromechanical testing of entire system;
- 14) Obtain all operational permits needed for the testing, start-up, and commissioning of projects;
- 15) Assist with the transfer of assets from the construction contractors to NMB Water and

coordinate the beginning of start-up activities by contractor or by NMB Water Construction Manager, as appropriate;

- 16) Coordinate and manage all construction contract closeout activities, including final invoice and claim reviews;
- 17) Ensure that all guarantees and warranties are obtained for all equipment and materials and that they are properly transferred to NMB Water.
- 18) Manage the completion and acceptance of the work for project closeout. Certify projects Substantial Completion and Final Completion.
- 19) Provide support for project administration closeout and turnover.
- 20) Review the Quality Assurance/Quality Control (QA/QC) to comply with the technical requirements of the project as well as the City's and County's standard practice. Part of the QA/QC plan is documenting the results of the field tests and notifying the Contractor in the case that a specific test fails. Few of the QA/QC tests that are performed in the field are: inspection of the material brought to the job site, testing of the concrete and other materials, and verification of the construction work plan.
- 21) Construction contractor negotiations regarding progress accomplished (percent completions), change orders (including design changes), claims and counterclaims. The CONSULTANT shall obtain approval from NMB Water for the resolution of all claims and final processing of change orders prior to their implementation.
- 22) Construction inspection services required during the construction phase for Quality Assurance and compliance with contract documents.
- 23) Although the construction safety is the responsibilities of all personnel involved or visiting the construction site, only the Contractor is the sole responsible party. Under this task, The CONSULTANT will provide OSHA certified safety officer to monitor the site and ongoing construction activities as well as communications with NMB Water and the Contractor. On the other hand, if the violation does not represent an imminent danger, the site inspector will discuss the violation with the Contractor's assigned safety representative or Superintendent to correct the violation. In addition, the site inspector shall provide the Contractor with a safety violation noticed that is filed within the project documents and noted in the daily reports.
- 24) Monitor and enforce the Standard Construction Management practice as per the Construction Management Association of America (CCMA).
- 25) Provide technical support services during construction such as but not limited to; review and evaluate any potential value engineering that the Contractor may request; develop solutions to difference site conditions; clarify discrepancies between the design documents and the technical specifications; cost estimating, progress and impact schedule evaluations; claims and corresponding cost and schedule; etc.
- 26) Software implementation and training that can be used for the life of the project. The following is a list of the suggested software to implement for the CIP:
  - a) E-Builder – Construction Management software to track all the documentation generated from the Planning to the project close-out
  - b) Primavera (P6) – Schedule review and analysis,
  - c) Estimating Software (to be determined)
  - d) Adobe Pro – Documents review, and
  - e) Microsoft's software (Word, Excel, Power Point)

- 27) Preparing and completing the commissioning technical specifications and start-up. In addition, the A/E firm shall aid on system integration, SCADA, and O&M; etc.
- 28) Obtain the Certificate of Beneficial Use and coordinating substantial and final completion and provide to the O&M group.
- 29) Coordinating and managing the project close-out, reviewing and approving as-builts, collecting and distributing the operational manuals, obtain the warranties, gather the Certificate of Beneficial Use; verify that claims and change orders are closed, final payment, and other tasks associated with the project close-out but not mentioned here.

Roles and their functions are described below. Total estimated level of effort for each role is provided in Exhibit B.

#### ROLES:

- Construction Manager: Supports the NMB Water's Construction Manager by managing the CONSULTANT's Construction Phase support at NMB Water. Leads tender support and construction management for assigned projects.
- Inspectors: help the Construction Manager plan and arrange contractor provided site offices, support the development of construction project-specific Testing & Inspection Plans, and perform daily site inspections in conjunction with the CM Expert. They also develop Daily Inspection Reports (DIRs) supported by photographs, GPS data. They also develop Non-Conformance Reports as needed to remedy any construction issues.
- Civil Engineers: These three positions are budgeted to afford NMB Water flexibility in the type of expertise needed to support planning, construction procurement efforts or site inspection services for the Norwood WTP, ongoing water and sewer main work, or other ad hoc Engineering-during-Construction support. When non-credentialed inspectors are used, they will be billed at the commensurate position/rate for their discipline. They will be responsible for ensuring that all permits are being complied with and reporting the progress and quality of the Contractor's work. Additionally, they will document and report on all potential problems that result onsite especially those issues which could result in Change Orders.
- Safety Officer: This position works part-time from the CONSULTANT's Office and NMB Water sites as needed to help implement NMB Water's HSE plan. During the construction phase of CIP projects, assures construction projects are in compliance with requisite regulations, contractually mandated safety requirements and the contractors' respective construction site safety plans.
- Project Manager - Preconstruction: Supports the Construction Manager by managing the Engineering During Construction process, including reviews of submittals, responses to RFIs and review of shop drawings and as-built drawings.
- Project Controls, Scheduling and Cost Estimators maintain records of construction contractor schedule performance and cost records and support the change order review process from the CONSULTANT's Home Offices.
- Assistant Office Engineer: This position supports the team during Construction activities with routine document control and administrative support.
- Water Treatment Plant - Lime Softening Engineer: Supports planning, process

optimization and troubleshooting efforts from the CONSULTANT's Offices for planned rehab and improvements of the lime softening processes at the Norwood Water Treatment Plant.

- Sr. Technical Specialist: This position is budgeted to afford NMB Water flexibility in the type of expertise needed to provide subject matter expertise and technical assistance from the CONSULTANT's Offices for various anticipated needs associated with the Norwood WTP, wells or Design-Build procurement planning inputs. Tasks may include but are not limited to background research and data collection/review, update of existing groundwater or hydraulic models, project planning, assistance with infrastructure evaluations, permitting support, and other technical assistance that may be required to advance planned work under this work order.
- Technical Specialist - Technical Reviewers will provide as needed project-specific reviews from the CONSULTANT's Offices of NMB Water-contracted A/E drawings, specifications and cost estimates at designated design review stages. Updates to the water system hydraulic model are anticipated. A Technical Reviewer will be utilized to review and provide QA/QC and technical insight to its refinement.
- Mechanical Engineer: Provides mechanical engineering, process and management support to benefit the planned rehab and improvements at the Norwood Water Treatment Plant.
- Electrical I&C Engineer: Provides electrical engineering, instrumentation and controls support to benefit the planned rehab and improvements at the Norwood Water Treatment Plant.

## SECTION 6: BASIS OF COMPENSATION

The fee for the scope of WO 2 is calculated based on the estimated staff augmentation labor and expertise needed by NMB Water to support implementation of the CIP project schedule depicted in Exhibit A and the Program Management support described in Section 3. Exhibit B depicts the estimated hours for these services. Exhibit C (of agreement RFQ-19-099-DR) documents the hourly rates applicable to each labor category. An analysis of the CIP's planned demand for labor in terms of positions and person hours under this scope is presented in the table below

Roles/Positions Included in Work Order 2: Estimated Level of Effort & Budget (Person Hours)													
Description	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total \$\$\$
<b>Program Support Services</b>	<b>615</b>	<b>615</b>	<b>615</b>	<b>639</b>	<b>639</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>\$ 1,251,765.34</b>
Principal	4	4	4	4	4	4	4	4	4	4	4	4	\$ 13,440.00
Contract Manager/Project Mgr.	60	60	60	60	60	60	60	60	60	60	60	60	\$ 179,092.80
QA/QC Manager	16	16	16	16	16	16	16	16	16	16	16	16	\$ 38,400.00
Permitting Lead				16	16	24	24	24	24	24	24	24	\$ 36,290.00
Project Control	20	20	20	28	28	28	28	28	28	28	28	28	\$ 70,512.00
Scheduling	16	16	16	16	16	16	16	16	16	16	16	16	\$ 34,838.40
Cost Estimator	16	16	16	16	16	16	16	16	16	16	16	16	\$ 36,672.00
Sr. Administrator	14	14	14	14	14	14	14	14	14	14	14	14	\$ 18,498.48
Public Information Officer	8	8	8	8	8	10	10	10	10	10	10	10	\$ 25,294.50
Editor / Technical Writer	173	173	173	173	173	173	173	173	173	173	173	173	\$ 339,986.52
Field Office Admin Assistant	173	173	173	173	173	173	173	173	173	173	173	173	\$ 230,747.40
Project Manager - Preconstruction	58	58	58	58	58	58	58	58	58	58	58	58	\$ 162,377.80
Assistant Office Engineer	58	58	58	58	58	58	58	58	58	58	58	58	\$ 65,615.44
<b>PMP Plans &amp; Procedures Dev.</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>\$ 44,800.00</b>
PM/CM Support Plans and Procedures	40	40	40	40	8	8	8	8	8	8	8	8	\$ 44,800.00
<b>Pre-Construction Support</b>	<b>328</b>	<b>328</b>	<b>328</b>	<b>328</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>\$ 634,785.40</b>
Project Manager - Preconstruction	58	58	58	58	58	58	58	58	58	58	58	58	\$ 162,377.80
Mid-level Project Manager	173	173	173	173	173	173	173	173	173	173	173	173	\$ 343,702.56

Roles/Positions Included in Work Order 2: Estimated Level of Effort & Budget (Person Hours)													
Description	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total \$\$\$
Assistant Office Engineer	58	58	58	58	58	58	58	58	58	58	58	58	\$ 65,615.44
Technical Specialist	40	40	40	40	15	15	15	15	15	15	15	15	\$ 63,089.60
<b>Construction Mgmnt Support</b>	<b>838</b>	<b>838</b>	<b>838</b>	<b>838</b>	<b>665</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>\$ 2,099,319.03</b>
Project Manager - Preconstruction	58	58	58	58	58	58	58	58	58	58	58	58	\$ 162,377.80
Assistant Office Engineer	40	40	40	40	40	40	40	40	40	40	40	40	\$ 45,513.60
Construction Manager	173	173	173	173	173	173	173	173	173	173	173	173	\$ 470,130.96
Safety Officer	0	0	0	0	0	16	16	16	16	16	16	16	\$ 13,994.40
Water Treatment Plan - Lime Softening Engineer	12	12	12	12	12	12	12	12	12	12	12	12	\$ 28,909.44
Sr. Technical Specialist	173	173	173	173	0	0	0	0	0	0	0	0	\$ 173,173.00
Inspector	173	173	173	173	173	173	173	173	173	173	173	173	\$ 255,514.08
Inspector	0	0	0	0	0	346	346	346	346	346	346	346	\$ 298,099.76
Civil Engineer (GS/FM/WT&D)	12	12	12	12	12	12	12	12	12	12	12	12	\$ 25,230.24
Mechanical Engineer	12	12	12	12	12	12	12	12	12	12	12	12	\$ 25,230.24
Electrical I&C Engineer	12	12	12	12	12	12	12	12	12	12	12	12	\$ 25,230.24
Civil Engineer (GS/FM/WT&D))	173	173	173	173	173	173	173	173	173	173	173	173	\$ 363,735.96
Civil Engineer (GS/FM/WT&D)	0	0	0	0	0	173	173	173	173	173	173	173	\$ 212,179.31
<b>Direct Labor Sub-Total:</b>	<b>1821</b>	<b>1821</b>	<b>1821</b>	<b>1845</b>	<b>1615</b>	<b>2160</b>	<b>2160</b>	<b>2160</b>	<b>2160</b>	<b>2160</b>	<b>2160</b>	<b>2160</b>	<b>\$ 4,030,669.77</b>
<b>5% Projects' Other Direct Expenditures</b>													<b>\$ 201,533.49</b>
<b>5% Project Management of Customer Service Programing Project &amp; PSA Building, City Hall Lobby &amp; Customer Service Remodeling Project &amp; Other Projects</b>													<b>\$ 201,533.49</b>
<b>Total:</b>													<b>\$ 4,433,736.75</b>

Should the labor requirements for CONSULTANT professionals assigned to NMB WATER to work full-time exceed a normal 40-hour work week, CONSULTANT and CITY will re-evaluate the need for additional personnel and negotiate an amendment to support fulfillment of the CITY's labor needs as it transitions to build up NMB Water's institutional capability and associated internal management and labor capacity. Rates shall also include the following:

- a) All local travel to and from work at NMB Water.
- b) Computer usage and telephone expenses
- c) Sale and use taxes

No claim for reimbursement for the above expenses shall be made to the CITY. Moreover, costs associated with lodging, commuting, and other related expenses for non-local professionals assigned to NMB-W full-time for periods in excess of three months will not be billable to the City. Non-local professionals are based out of CONSULTANT offices that do not include Coral Gables office, Coral Springs office, Lake Worth office and Fort Myers office or any new office within 2.5 hours travel time to NMB Water.

As part of providing the full extent of the services, the CONSULTANT may incur certain administrative and other direct expenses related to the implementation of the CIP, such as for NMB Water or Field office supplies, NMB Water or Field office adaption, special equipment or materials, charges related to the preparation and/or outside reproduction of deliverables, communications materials or other collaterals required to support meetings, presentations, Community Outreach and such. Such expenses are reimbursable from the Other Direct Expenditures budget line item. The CONSULTANT shall not incur such costs without the written direction and approval of NMB Water. The CONSULTANT agrees to keep, furnish, and support reimbursement of authorized direct costs with copies of receipts or statements of time expended (if applicable for other direct services type expenses). Reimbursable expenses will be invoiced by the CONSULTANT to the CITY (and compensated by the CITY to the CONSULTANT) from the Other Direct Expenditures budget line item, following adherence to the aforementioned conditions. Such documentation and records will be available at all reasonable times for examination and audit by the City.

The 5% Project Management of Customer Service Programing Project & PSA Building, City Hall Lobby & Customer Service Remodeling Project & Other Projects budget line item funds are related to unanticipated labor requirements and are being provided for the discretionary use of NMB Water. Any use of these funds must be pre-approved by NMB Water and a Purchase Order Change Order must be obtained and provided by NMB Water prior to incurring labor expenses under said budget line item. The CONSULTANT shall file a request that includes a detailed description of the needs and services being requested. Such request will be recommended by the NMB Water Design or Construction Manager, reviewed by the NMB Water Deputy and approved by NMB Water Director. Any approvals to utilize funds available in the 5% Project Management of Customer Service Programing Project & PSA Building, City Hall Lobby & Customer Service Remodeling Project & Other Projects budget line item shall be included as part of the CONSULTANT invoice's backup so as to substantiate that such approvals are in place.

## **SECTION 7: PAYMENT**

The CONSULTANT will invoice the City on a monthly basis for the services rendered during the prior month.

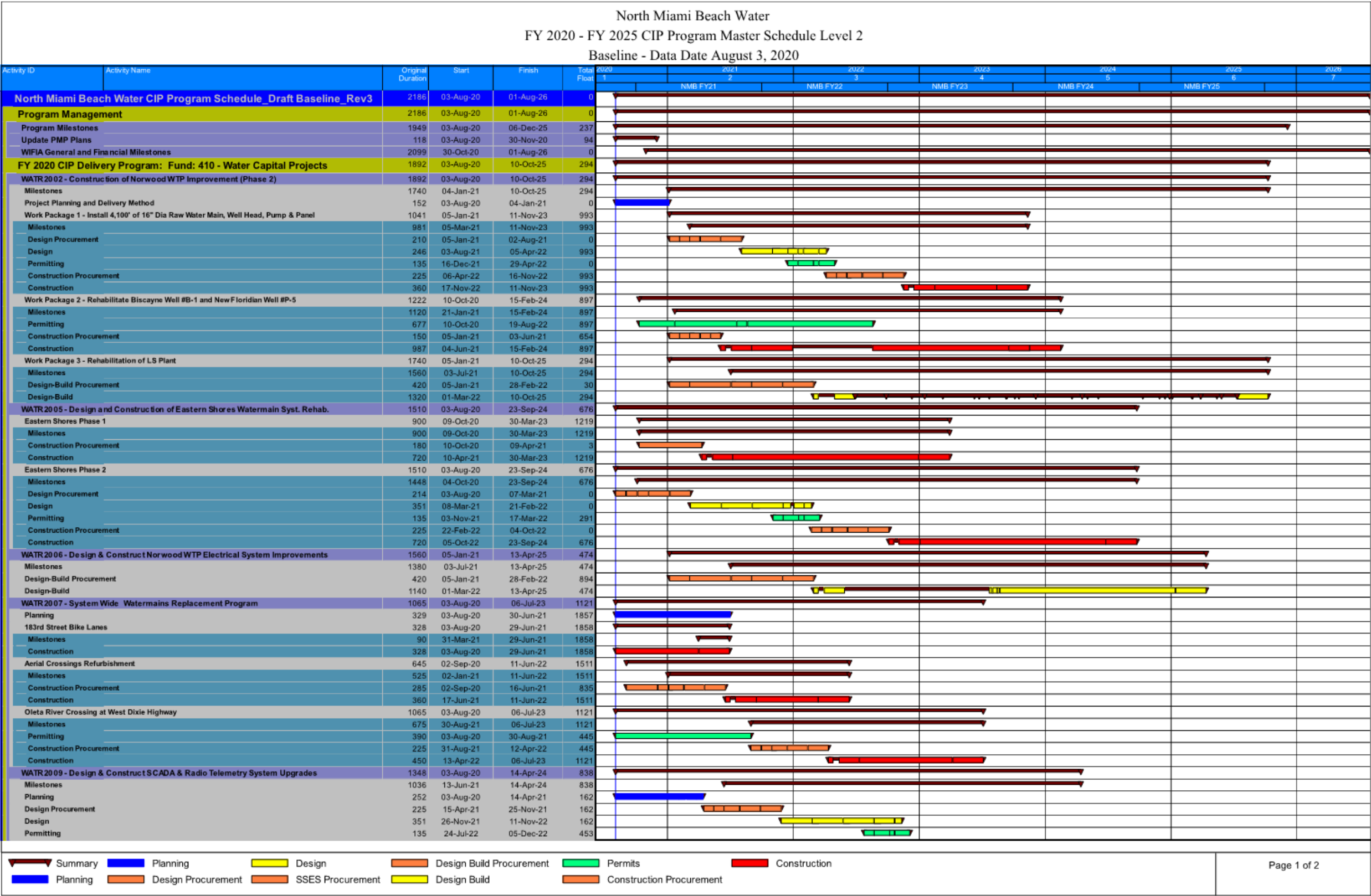
All invoices must reference the Consultant's legal name as authorized to do business with the State of Florida; CITY's Contract Number and Work Order Number; a unique invoice number not previously used under this contract; date; a description of the services performed, and the amount to be invoiced. CONSULTANT shall: 1) submit invoices using a pdf file at a resolution of no less than 300 dpi; 2) name the pdf file with the Consultant's name and the PO number; 3) provide all required attachments with the invoice file. Each invoice shall summarize the contract price,

payments made to date, percentage of budget completed to date; amounts due under the invoice, remaining balance of the Work Order. Invoices shall be submitted via email to NMB Water Deputy Director Zamacona, Samuel (at email address: [Samuel.Zamacona@citynmb.com](mailto:Samuel.Zamacona@citynmb.com)) and NMB Water Finance Manager Kaygon Atkinson (at email address: [Kaygon.Atkinson@citynmb.com](mailto:Kaygon.Atkinson@citynmb.com)) for their review and forward processing to the CITY for payment to CONSULTANT.

Labor costs will be billed on a time and material basis (hourly rate basis per the rate schedule in Exhibit C (of agreement 19-099-DR)). Labor line items in the invoice shall include the name, position and job category of the professional whose hours are being charged to the CITY, along with hours worked and hourly rates, as well as an arithmetically correct subtotal. Weekly timesheets will be emailed to NMB Water Managers. Other Direct Expenditures will be invoiced and compensated as aforementioned.



Exhibit A: Projects Schedule



North Miami Beach Water  
FY 2020 - FY 2025 CIP Program Master Schedule Level 2  
Baseline - Data Date August 3, 2020

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2020	2021	2022	2023	2024	2025	2026
						1	2	3	4	5	6	7
							NMB FY21	NMB FY22	NMB FY23	NMB FY24	NMB FY25	
	Construction Procurement	225	12-Nov-22	24-Jun-23	162							
	Construction	295	25-Jun-23	14-Apr-24	838							
	<b>WATR2010 - Design &amp; Construct Honey Hill Watermain System Rehabilitation</b>	<b>737</b>	<b>03-Aug-20</b>	<b>12-Aug-22</b>	<b>1449</b>							
	Milestones	585	04-Jan-21	12-Aug-22	1449							
	Permitting	150	03-Aug-20	02-Jan-21	775							
	Construction Procurement	225	05-Jan-21	17-Aug-21	773							
	Construction	360	18-Aug-21	12-Aug-22	1449							
	<b>WATR2012 - Design &amp; Construct Operations Center Pump Station Improvements</b>	<b>1261</b>	<b>05-Jan-21</b>	<b>18-Jun-24</b>	<b>773</b>							
	Milestones	1161	14-Apr-21	18-Jun-24	773							
	Planning	100	05-Jan-21	14-Apr-21	97							
	Design Procurement	225	15-Apr-21	25-Nov-21	97							
	Design	351	26-Nov-21	11-Nov-22	97							
	Permitting	135	24-Jul-22	05-Dec-22	388							
	Construction Procurement	225	12-Nov-22	24-Jun-23	97							
	Construction	360	25-Jun-23	18-Jun-24	773							
	<b>FY 2020 CIP Delivery Program: Fund: 450 - Wastewater Capital Projects</b>	<b>1949</b>	<b>03-Aug-20</b>	<b>06-Dec-25</b>	<b>237</b>							
	<b>SEWR2001 - Wastewater Collection Repairs and Replacements Program</b>	<b>1078</b>	<b>25-Dec-22</b>	<b>06-Dec-25</b>	<b>237</b>							
	Milestones	1018	22-Feb-23	06-Dec-25	237							
	Design Procurement	255	25-Dec-22	05-Sep-23	237							
	Design	254	06-Sep-23	16-May-24	237							
	Permitting	135	03-Feb-24	16-Jun-24	505							
	Construction Procurement	225	17-May-24	27-Dec-24	237							
	Construction	344	28-Dec-24	06-Dec-25	237							
	<b>SEWR2002 - Construct Master PS #4 Force Main Re-Routing</b>	<b>749</b>	<b>03-Aug-20</b>	<b>24-Aug-22</b>	<b>1437</b>							
	Milestones	569	01-Feb-21	24-Aug-22	1437							
	Permitting	180	03-Aug-20	01-Feb-21	1437							
	Construction Procurement	225	02-Feb-21	14-Sep-21	1437							
	Construction	344	15-Sep-21	24-Aug-22	1437							
	<b>SEWR2003 - Implement Wastewater Collection System Plan of Compliance FY19</b>	<b>721</b>	<b>03-Jan-21</b>	<b>24-Dec-22</b>	<b>237</b>							
	Milestones	626	07-Apr-21	24-Dec-22	237							
	Planning	721	03-Jan-21	24-Dec-22	237							
	Planning Phase 3	95	03-Jan-21	07-Apr-21	237							
	Sanitary Sewer Evaluation Study	371	19-Dec-21	24-Dec-22	237							
	SSS Procurement	255	08-Apr-21	18-Dec-21	237							
	<b>SEWR2004 - Construct Cravero Force Main Replacement</b>	<b>809</b>	<b>03-Aug-20</b>	<b>23-Oct-22</b>	<b>1377</b>							
	Milestones	569	02-Apr-21	23-Oct-22	1377							
	Permitting	240	03-Aug-20	02-Apr-21	1377							
	Construction Procurement	225	03-Apr-21	13-Nov-21	1377							
	Construction	344	14-Nov-21	23-Oct-22	1377							
	<b>SEWR2005 - Construct Velda Farm Force Main Replacement</b>	<b>1229</b>	<b>03-Aug-20</b>	<b>17-Dec-23</b>	<b>957</b>							
	Milestones	1019	03-Mar-21	17-Dec-23	957							
	Permitting	210	03-Aug-20	03-Mar-21	957							
	Construction Procurement	225	04-Mar-21	14-Oct-21	957							
	Construction	794	15-Oct-21	17-Dec-23	957							
	<b>SEWR2006 - Construct Corona del Mar Low Pressure Collection System</b>	<b>1139</b>	<b>03-Aug-20</b>	<b>18-Sep-23</b>	<b>1047</b>							
	Milestones	1019	02-Dec-20	18-Sep-23	1047							
	Permitting	120	03-Aug-20	02-Dec-20	1047							
	Construction Procurement	225	03-Dec-20	16-Jul-21	1047							
	Construction	794	17-Jul-21	18-Sep-23	1047							
	<b>SEWR2007 - Construct Bell Gardens Force Main Replacement</b>	<b>1289</b>	<b>03-Aug-20</b>	<b>15-Feb-24</b>	<b>897</b>							
	Milestones	1019	02-May-21	15-Feb-24	897							
	Permitting	270	03-Aug-20	02-May-21	897							
	Construction Procurement	225	03-May-21	13-Dec-21	897							
	Construction	794	14-Dec-21	15-Feb-24	897							

 Summary
  Planning
  Design
  Design Build Procurement
  Permits
  Construction

 Planning
  Design Procurement
  SSS Procurement
  Design Build
  Construction Procurement

## Exhibit B: Estimated Level of Effort<sup>1</sup>

Roles/Positions Included in Work Order 2: Estimated Level of Effort (Person Hours)													
Description	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total Hrs
<b>Program Support Services</b>	<b>615</b>	<b>615</b>	<b>615</b>	<b>639</b>	<b>639</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>649</b>	<b>7670</b>
Principal	4	4	4	4	4	4	4	4	4	4	4	4	<b>48</b>
Contract Manager/Project Mgr.	60	60	60	60	60	60	60	60	60	60	60	60	<b>720</b>
QA/QC Manager	16	16	16	16	16	16	16	16	16	16	16	16	<b>192</b>
Permitting Lead				16	16	24	24	24	24	24	24	24	<b>200</b>
Project Control	20	20	20	28	28	28	28	28	28	28	28	28	<b>312</b>
Scheduling	16	16	16	16	16	16	16	16	16	16	16	16	<b>192</b>
Cost Estimator	16	16	16	16	16	16	16	16	16	16	16	16	<b>192</b>
Sr. Administrator	14	14	14	14	14	14	14	14	14	14	14	14	<b>168</b>
Public Information Officer	8	8	8	8	8	10	10	10	10	10	10	10	<b>110</b>
Editor / Technical Writer	173	173	173	173	173	173	173	173	173	173	173	173	<b>2076</b>
Field Office Admin Assistant	173	173	173	173	173	173	173	173	173	173	173	173	<b>2076</b>
Project Manager - Preconstruction	58	58	58	58	58	58	58	58	58	58	58	58	<b>692</b>
Assistant Office Engineer	58	58	58	58	58	58	58	58	58	58	58	58	<b>692</b>
<b>PMP Plans &amp; Procedures Dev.</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>224</b>
PM/CM Support Plans and Procedures	40	40	40	40	8	8	8	8	8	8	8	8	<b>224</b>

<sup>1</sup> The type and quantity of labor resources, monthly labor estimates, and total estimated person hours represent good faith estimates of NMB Water labor requirements. Numbers of professionals and specific number of hours assigned to each professional are fungible within the ceiling of this contract so as to provide NMB Water with the flexibility needed to implement its CIP in an agile manner.

Roles/Positions Included in Work Order 2: Estimated Level of Effort (Person Hours)													
Description	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total Hrs
<b>Pre-Construction Support</b>	<b>328</b>	<b>328</b>	<b>328</b>	<b>328</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>303</b>	<b>3740</b>
Project Manager - Preconstruction	58	58	58	58	58	58	58	58	58	58	58	58	<b>692</b>
Mid-level Project Manager	173	173	173	173	173	173	173	173	173	173	173	173	<b>2076</b>
Assistant Office Engineer	58	58	58	58	58	58	58	58	58	58	58	58	<b>692</b>
Technical Specialist	40	40	40	40	15	15	15	15	15	15	15	15	<b>280</b>
<b>Construction Mgmnt Support</b>	<b>838</b>	<b>838</b>	<b>838</b>	<b>838</b>	<b>665</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>12413</b>
Project Manager - Preconstruction	58	58	58	58	58	58	58	58	58	58	58	58	<b>692</b>
Assistant Office Engineer	40	40	40	40	40	40	40	40	40	40	40	40	<b>480</b>
Construction Manager	173	173	173	173	173	173	173	173	173	173	173	173	<b>2076</b>
Safety Officer						16	16	16	16	16	16	16	<b>112</b>
Water Treatment Plan - Lime Softening Engineer	12	12	12	12	12	12	12	12	12	12	12	12	<b>144</b>
Sr. Technical Specialist	173	173	173	173									<b>692</b>
Inspector	173	173	173	173	173	173	173	173	173	173	173	173	<b>2076</b>
Inspector						346	346	346	346	346	346	346	<b>2422</b>
Civil Engineer (GS/FM/WT&D)	12	12	12	12	12	12	12	12	12	12	12	12	<b>144</b>
Mechanical Engineer	12	12	12	12	12	12	12	12	12	12	12	12	<b>144</b>
Electrical I&C Engineer	12	12	12	12	12	12	12	12	12	12	12	12	<b>144</b>
Civil Engineer (GS/FM/WT&D))	173	173	173	173	173	173	173	173	173	173	173	173	<b>2076</b>
Civil Engineer (GS/FM/WT&D)						173	173	173	173	173	173	173	<b>1211</b>

## Exhibit C: Hourly Rates per Labor Category<sup>2</sup>

TITLE / POSTION	HOURLY BILLING RATES
Principal	\$ 280.00
Contract Manager / Project Manager	\$ 248.74
Project Manager - Preconstruction	\$ 234.65
QA/QC Manager	\$ 200.00
Permitting Lead	\$ 181.45
Construction Manager	\$ 226.46
Scheduling	\$ 181.45
Project Control	\$ 226.00
Safety Officer	\$ 124.95
Cost Estimator	\$ 191.00
Inspector	\$ 123.08
Assistant Office Engineer	\$ 94.82
Field Office Administrative Assistant	\$ 111.15
Public Information Officer	\$ 229.95
Editor / Technical Writer	\$ 163.77
PM/CM Support Plans and Procedures	\$ 200.00
Structural Engineer	\$ 175.21
Water Treatment Plan - Membranes Engineer	\$ 215.42
Water Treatment Plan - Lime Softening Engineer	\$ 200.76
Mechanical Engineer	\$ 175.21
Electrical I&C Engineer	\$ 175.21
Civil Engineer (Gravity Sewer / Force Mains / Water Transmission and Distribution)	\$ 175.21

<sup>2</sup> Proposed billing rates are effective through September 30, 2022 (end of FY 2022). Commencing with FY 2023, rates will be adjusted to reflect adjustments in the cost of labor. In order to keep pace with the inflation of regular business costs, it is agreed that upward adjustments will be based on the annual change in the Consumer Price Index ("CPI") as established by the Bureau of Labor and Statistics and applicable to the Miami-Fort Lauderdale Area, to be requested thirty days (30) prior to the expiration of the then-current term; at no point shall this adjustment exceed 3%.

Trenchless Technologist Specialist	\$ 225.36
Geotechnical Engineer	\$ 215.08
Biosolids Specialist	\$ 225.36
Architect	\$ 175.21
FDEP Permitting Specialist	\$ 191.00
Construction Inspectors - Structural	\$ 144.00
Construction Inspectors - Mechanical	\$ 144.00
Construction Inspectors - Electrical and I&C	\$ 144.00
SCADA Specialist	\$ 163.00
CAD Designer	\$ 140.04
Graphic Designer	\$ 201.16
Administrative Support Staff, Technician	\$ 70.00
Clerical, Document Control Clerk, Project Accountant	\$ 68.00
National Practice Leader	\$ 275.74
Sr. Technical Specialist	\$ 250.25
Technical Specialist	\$ 225.32
Senior Engineering Manager	\$ 220.12
Engineering Manager	\$ 200.41
Mid-level Project Manager	\$ 165.56
Sr. Administrator	\$ 110.11
Design Engineer	\$ 135.27
Project Engineer	\$ 125.52
Staff Engineer	\$ 110.41