

TASK AUTHORIZATION NO. ____

FOR

SOUTHWEST WATER TREATMENT PLANT DESIGN REVIEW

This Authorization, when executed, shall be incorporated in and become part of the Agreement for Professional Services between the City of North Port (OWNER), and CDM Smith Inc. (CONSULTANT), dated September 14, 2016 hereafter referred to as the Agreement.

PROJECT BACKGROUND

The OWNER has an agreement with the West Villages Improvement District (WVID), pursuant to which the WVID will construct a water system, which will include a wellfield and a operational water treatment plant (WTP) for the OWNER. This WTP will have an initial capacity to produce at least 1.0 mgd of potable water and will be upgradable to meet all future needs of the WVID. The system will include concentrate disposal piping, raw water wells and connections to water mains (WM) as required by the WVID system that will tie into the City's system through the existing 16-inch WM in the right-of-way along US-41/ Tamiami Trail. The OWNER has requested the CONSULTANT to provide professional engineering services for a third party technical review of the design of the Southwest Water Treatment Plant (SWWTP) prepared by WVID. The scope of work is limited to review of design documents provided by WVID to the OWNER.

SCOPE OF WORK

The following is a description of the services to be provided under this Task Authorization.

TASK 1 - WTP DESIGN REVIEW

During each phase of the design (30%, 60%, 90%), CONSULTANT will provide support to evaluate the design of the RO treatment process, pretreatment, chemical addition, pumping, energy efficiency, membrane systems, water quality, post treatment, corrosion control, blending, and ancillary systems. The CONSULTANT review team will include a wellfield expert, WTP process engineer, water distribution system modeler, electrical engineer, automation engineer, structural engineer, architect, and an O&M specialist. At the end of each design phase review, the CONSULTANT will provide the OWNER with the following documents in electronic format:

- A marked-up set of plans with review comments
- A marked-up set of specifications with review comments
- A tracking spreadsheet of the CONSULTANT's comments. A spreadsheet will be maintained throughout the design and updated at each design milestone to reflect how the comments were addressed by WVID and its design engineer in each subsequent submittal.

Subtask 1.1 - 30 Percent Design Review

Activities performed under this subtask consist of those general functions required to get a buy-in from OWNER for the proposed layout and the design criteria for the WTP as proposed by WVID. The intent is to lock down the design concept and not require major changes in subsequent detail design.

Subtask 1.2 - 60 Percent Design Review

Activities performed under this subtask consist of overview that the design development has progressed sufficiently to pin-down the proposed layout based on field conditions and the design criteria for the WTP processes including sizing of civil and mechanical components is complete. The intent is to reduce uncertainty in the final design and identify the components of final design.

Subtask 1.3 - 90 and 100 Percent Design Review

Activities performed under this subtask consist of overview that the design development has been completed and includes details per design criteria for the WTP processes including sizing of the components and software and programming logic. The intent is to include detailed design information for licensed contractors to be able to bid on the project for construction of this infrastructure.

Following the submittal of the 100% design package, the CONSULTANT will review the package to check if the comments made at the 90% design stage were addressed by WVID and its design engineer. No additional review comments will be provided for the 100% design package.

Subtask 1.4 - Issued for Bid (IFB) Document Review

Activities performed under this subtask consist of overview of the IFB documents for consistency with general contracting conditions and the 100% design documents previously developed. No additional review comments will be provided for the IFB document review package.

TASK 2 - PROJECT MEETINGS

CONSULTANT will plan for and attend the following meetings:

- Kick-off meeting with OWNER. Prior to the meeting CONSULTANT will review the Unit Process and Site Planning Memorandum.
- One meeting to review the 30% design submittal.
- One meeting to review the 60% design submittal.
- One meeting to review the 90% design submittal.
- One meeting to discuss the 100% design submittal.
- One meeting to discuss the IFB submittal.

The CONSULTANT will prepare and distribute meeting minutes of each meeting as appropriate.

TASK 3 - PROJECT AND QUALITY MANAGEMENT

Activities performed under this task consist of those general functions required to maintain the project on schedule, within budget, and that the quality of the work products defined within this scope is consistent with CONSULTANT's standards and OWNER's requirements. This task includes internal monthly project status review management meetings and periodic internal team progress meetings.

ASSUMPTIONS

The above described engineering services have been based upon the following assumptions:

1. If desired by the City, CDM Smith can provide construction phase Owner's representative services. These services during construction could include review of shop drawings against approved plans

and specifications, review of change orders against the original contract, and full or part-time resident project representative services. The goal of these services would be to check that the Contractor is constructing the work in accordance with the project documents, NPU Standards, requirements, and applicable regulations.

2. Review of design is not intended to be a QA/QC review of other's work.
3. Review does not include review of design calculations.

DELIVERABLES

CONSULTANT will provide the following deliverables to the OWNER:

1. Meeting minutes for meetings identified under Task 2.
2. Data request list.
3. Review comments on the Unit Process and Site Planning Memorandum.
4. Review comments on 30% design plans and technical specifications.
5. Review comments on 60% design plans and technical specifications.
6. Review comments on 90% design plans and technical specifications.
7. Tracking spreadsheet of review comments on the plans and technical specifications.

TIME OF COMPLETION/SCHEDULE

CONSULTANT shall commence work within 7 calendar days after issuance of a written Notice-to-Proceed from the OWNER. A project kickoff meeting will be held with OWNER and a data request letter provided to the OWNER within 14 days of Notice-to-Proceed. Design reviews will be completed within one week of the OWNER providing the design documents.

COMPENSATION AND PAYMENT

In the Basic Services performed under the Scope of Work, the OWNER agrees to pay the CONSULTANT as follows:

For work done by the CONSULTANT at the hourly billing rate for the category of the individual performing the work, for all time directly chargeable to the project. The CONSULTANT's Fee Estimate based on the schedule of Hourly Billing Rates is attached as Exhibit A.

CONSULTANT will perform the SCOPE OF SERVICES described above, on a time and materials basis in accordance with the terms of the master services agreement for a not-to-exceed fee of \$199,945.68.

Exhibit A

City of North Port - Southwest Water Treatment Plant Design Review - Fee Estimate

Task Description	Principal-in-Charge	Principal/Principal Architect	Senior PM	Senior Engineer	Senior Designer	Clerical	Total		Total Costs
	Contract Billing Rate:								
	hours	hours	hours	hours	hours	hours	hours	Labor costs	
Task 1 - WTP Design Review	40	32	140	340	32	96	680	\$128,709.44	\$128,709.44
Subtask 1.1 - 30 % Design Review	12	8	36	70	8	20	154	\$29,633.36	\$29,633.36
Subtask 1.2 - 60 % Design Review	12	8	36	98	8	24	186	\$35,590.56	\$35,590.56
Subtask 1.3 - 90 % & 100 % Design Review	10	8	42	92	8	44	204	\$36,661.16	\$36,661.16
Subtask 1.4 - IFB Design Review	6	8	26	80	8	8	136	\$26,824.36	\$26,824.36
Task 2 - Project Meetings	10	2	72	168	-	24	276	\$54,367.40	\$54,367.40
Task 3 - Project and Quality Management	14	20	32	-	12	-	78	\$16,868.84	\$16,868.84
Total	64	54	244	508	44	120	1034	\$199,945.68	\$199,945.68