DENVER WATER

1600 West 12th Ave
Denver, CO 80204-3412
303.628.6000
denverwater.org

PROFESSIONAL SERVICES
REQUEST FOR STATEMENTS OF QUALIFICATIONS

North System Renewal Water Treatment Plant (NSRWTP)
Design Package #5 (DP#5) – Architectural & Building Systems

Section 1: Background and History

Denver Water (DW) is in the process of replacing the aging Moffat Water Treatment Plant (WTP) with a new modern plant located near Ralston Reservoir. The site is owned by DW and has approximately 80 acres available for the North System Renewal Water Treatment Plant (NSRWTP). The new facility will have the capacity to initially treat from 10 to 150 million gallons per day (MGD) and be expandable to treat up to 250 MGD, with accommodations for future unit processes such as ozonation and granular activated carbon adsorption. Facility accommodations will also maintain available land for a parallel treatment system should a more impaired water source be treated at this site in the future.

Section 2: Project Description

DW is soliciting Statements of Qualifications (SOQ) for a **DP#5 – Architectural & Building Systems** design consultant (Consultant) to execute and deliver design phase services for architectural and building support systems for the proposed buildings and structures associated with the NSRWTP. The NSRWTP is a new 150-MGD facility located on DW property near Ralston Reservoir north of Golden on Colorado State Highway 93.

The NSRWTP Project execution will be a joint effort between DW, DW's Owner's Representative (OR), a Construction Manager-at-Risk (CMAR), and the design team. The design team will be comprised of a multi-disciplinary team based on the design packages (DPs) for the NSRWTP.

- DP#1 – Site and Civil Improvements
- DP#2 – Treatment Process Systems and Structures
- DP#3 – Electrical, Instrumentation, & Control Systems
- DP#4 – Ancillary Treatment Process Systems and Structures
- **DP#5 – Architectural and Building Systems**
- DP#6 – Post-Tensioned Water Storage Tanks
- DP#7 – Moffat Facility Improvements

The Consultant shall provide architectural, building structural, and building mechanical design services for the NSRWTP and associated facilities.

DW/OR responsibilities will include Project management, internal and external communications, scheduling of internal resources, design management, review, and budget allocation. The Consultant's responsibilities and pertinent Project information are presented herein with instructions for preparing a complete SOQ to serve as the Architectural and Building Systems Consultant for the delivery of the NSRWTP.

Section 3: Project Objectives

The following specific Project objectives have been identified:

- Sustainability: The NSRWTP site and facility will be designed to achieve the highest level of sustainability ratings possible in a cost-effective and feasible manner.
- Modularity: The NSRWTP processes will be designed for parallel operation to allow for units to be removed from service (operational and electrical) while the plant remains functional.
- Ease of Access and Maintenance: The NSRWTP site will be designed to allow for safe, efficient flow of traffic; future upgrade, expansion, and improvement to processes and structures; and ease of maintenance of all equipment.
- Safety: The NSRWTP will be designed to facilitate personnel safety during construction, startup and commissioning, and long-term plant operations and maintenance (O&M).
- Personnel: The NSRWTP will be designed to accommodate existing and future Collection System facilities, allowing for streamlined operation and control.
- Schedule: The NSRWTP will be operational no later than 2023.
- Budget: The team will accomplish the Project objectives within the projected budget.

Section 4: Consultant Scope of Services

The DP#5 Consultant shall be responsible to take the previously developed conceptual site layout building programming and code studies and architectural and building systems standards (by others) and advance the design of the following to a 30% level of completion:

- Provide architectural design services for the NSRWTP. Demonstrate the programmed square footage of each usage type has been accommodated and document the need for any additional elements necessary to achieve the Project objectives. Develop drawings, documents, and/or other media that illustrate the concepts of the design with a focus on spatial relationships, scale, and form. Evaluate building requirements to accommodate operations, management, and O&M personnel, as defined in the programming documents (by others) and as necessary to support the proposed NSRWTP. Evaluate and recommend interior and exterior building finishes that meet the Project objectives and standards previously set (by others).
    - Currently, site structures and buildings are expected to include the following, with foundation and superstructure design, building layout, and interior and exterior building design provided by DP#5:
        - Administration Building (approximately 10,000 SF)
        - Control Room and Laboratory (approximately 8,000 SF, may be combined with other process facilities or constructed as one or more standalone buildings)
        - Collection System Maintenance Building (approximately 22,000 SF)
        - Yard Building/Warehouse (approximately 22,000 SF)
        - Guard Shack (approximately 200 SF)
    - Process structures and buildings are expected to include the following, with sub-structure design provided by others and superstructure design and interior and exterior building finishes provided by DP#5. Process layout and equipment access will be provided by others. For these facilities, DP#3 will be responsible for confirming code requirements and providing architectural superstructure, façade, and finishes based on the site layout (by others):

        - Headworks, Rapid Mix, and Flocculation/Sedimentation Building (may be combined into a single building or separated into two or three; total area approximately 90,000 SF)
        - Filter Building (approximately 50,000 SF)
        - Pre-treatment Chemical Building (approximately 12,000 SF)
        - Post-treatment Chemical Building (approximately 12,000 SF)
        - Residuals pump station (approximately 3,000 SF)
        - Modular Data Center (approximately 4,000 SF, may be combined with other process or administrative facilities, or standalone)
        - Backwash Equalization Pump Station (approximately 3,000 SF)
        - Additional Facilities as may be determined by DW and combined with other process facilities or constructed as a standalone building (approximately 12,000 SF)
- Assist the CMAR to obtain all permits required for work associated with DP#5. All local, state, and federal required permits obtained shall be coordinated with the OR for permit tracking.
    - Identify and address all jurisdictional requirements and restrictions. Deliverables shall include floor plans, sections, elevations, and other illustrative materials, computer images, or renderings as required to satisfy authorities having jurisdiction requirements. Drawings shall include overall dimensions and square footages of each usage type reconciled with the established program or identifying any discrepancies.
    - Evaluate jurisdictional requirements and prepare renderings that depict conceptual site features and building elevations, as required to facilitate permitting activities.
- Provide superstructure loadings for each process building to the DP#2 and DP#4 consultants for incorporation into consultants' respective substructure design.
- Review standards developed by others for use in designing heating, ventilation and air conditioning (HVAC), plumbing, and fire suppression systems associated with all elements of the Project including all enclosed buildings such as the process structures, electrical and control rooms, administration building, Collection System facilities, chemical buildings, clearwells, and other support structures and advance the design of these building mechanical systems to 30% design completion. Plumbing systems to provide 30% design for all domestic water systems, sanitary systems, and possible fueling design and coordination for the onsite generator.
- Review Autodesk Revit standards developed by others and provide recommendations for expansion of Revit standards to include architectural, structural, and building mechanical design. Produce 30% design documents using Autodesk Revit in accordance with the NSRWTP Project Management Plan and the DW Capital Projects Procedures Manual (CPPM).
- Identify a Startup and Commissioning Coordinator experienced in startup and commissioning of new building mechanical (HVAC) systems to be a part of the NSRWTP Startup Planning Team (led by DP#3 consultant) to continue early planning activities for startup, testing, and commissioning of the new WTP.
- Identify a Specifications Coordinator to be a part of the NSRWTP specifications team (led by DW and the OR) to oversee the development of Project specific specifications for DP#5 in conjunction with the development of a NSRWTP Project specific Capital Project Construction Standards manual and supplementary technical specifications. The Specifications Coordinator role is intended to be an administrative function, providing coordination of technical specifications development and ensuring formatting and cross-reference compliance.
- Identify a Revit Lead Coordinator to be responsible for versioning and control of Autodesk Revit files and security/permission access to common drawing reference files used by all DPs.

Section 5: Consultant Qualifications

The Consultant shall demonstrate that the firm and proposed team have the necessary experience to design the NSRWTP architectural and building systems to meet DW's Project objectives and all regulatory requirements. The Consultant shall provide a minimum of three references that demonstrate performance on past projects. Proposed project personnel shall be tied to the project references.

The Consultant's SOQ shall demonstrate applicable experience for key staff as identified herein, and as necessary to accomplish the scope of services. DW's preference is that the Consultant's project manager is located in the Denver metropolitan area for the duration of the project. However, other key and support staff may be located outside of Denver. The following key personnel have been identified for DP#5:

- Project Manager
- Lead Architect
- Lead Structural Engineer
- Lead Mechanical Engineer
- Specifications Coordinator (administrative role, oversight of document formatting)
- Revit Lead Coordinator (responsible for monitoring externally referenced files used by multiple DP consultants)
- Startup and Commissioning Coordinator (familiar with startup of buildings and HVAC systems of similar scope or size)

Section 6: Owner Responsibility

DW will provide to the Consultant all available relevant information to aid in the design process. This includes but is not limited to:

- Previous studies.
- Project objectives.
- Provide review comments within agreed upon schedules.
- Provide all surveys including design surveys and as-built elevations.
- Provide historical as-built records.
- Provide relevant and appropriate design, specifications, and drafting for DW-designed Project components.

Section 7: Project Assumptions

The following assumptions were made in the development of this Scope of Services:

- The Preliminary Design Phase will proceed from programming and standards to 30%. The 30% level will be a major design gate for the Project and will meet the requirements detailed in the Scope of Services. Initially, the Consultant's Scope of Services will only be defined through the 30% Preliminary Design Phase. The Scope of Services from 30% to Final Design and Bidding may be developed near the conclusion of the 30% design.
- The design phase, through 30%, will not exceed a period of nine months from Notice to Proceed unless so authorized in advance of the delivery deadline by DW.
- DW will provide payment for all agreed upon permit application and review fees.
- Public relations efforts will be completed by DW.

- The Project execution shall follow the NSRWTP Project Management Plan, a copy of which will be provided to the selected Consultant, and applicable portions of DW's CPPM: http://www.denverwater.org/DoingBusinesswithUs/EngineeringOverview/CapitalProjectsProceduresManual/.
- Drawings shall be provided in electronic media on the shared NSRWTP ProjectWise site and in quality hard copy media. AutoCAD Drawings shall be in accordance with DW's CAD Standards developed for the NSRWTP, a copy of which will be provided to the selected Consultant. It should be noted that CAD standards have been developed specific to each discipline and may be modified for architectural and mechanical systems based on input from the Consultant.
- The Consultant's Revit Lead Coordinator shall attend a meeting with DW's Drafting and Administration groups to discuss DW's Standards.
- Project specifications shall be submitted in CSI MasterFormat 2016 Edition and adhere to DW's Engineering Specifications, with formatting consistent with the CPCS: http://www.denverwater.org/DoingBusinesswithUs/EngineeringOverview/CPCS/ and any revisions made by the NSRWTP Specifications Team.
- Construction Contract General Conditions, Contract Agreement, Bid Forms, etc., shall be provided by DW via the CPCS.
- The Consultant's team will be co-located with key members of the design team throughout the Final Design scope of services.
- A "gate" is a term used to reference a formal document and the process used to acknowledge Project decisions. A gate is designed to acknowledge approval of its related topic by Project stakeholders. A gate is also a means to document decisions that have been made which are critical to the progress of the design beyond the current milestone/phase. Once a gate is "closed," no changes can be made to the design deliverable or data transferred without approval from DW. If changes are identified, those changes are to be logged on the Project change log and addressed in accordance with the change management process identified in the NSRWTP Project Management Plan and the CPPM.
- The Consultant shall assume the site is free of any sensitive cultural resources that require environmental clearance or other required permitting at the local, state, or federal level.
- The DP#2 consultant shall submit the Project to Colorado Department of Public Health and Environment (CDPHE) for design approval. The DP#5 Consultant shall coordinate and provide drawings and calculations, as necessary to support CDPHE design submittal and approval.

Section 8: Project Schedule

Schedule for SOQs:

- November 10, 2016 Request for Qualifications advertised through www.denverwater.org
- November 17, 2016 Pre-SOQ Meeting, 8:30 am DW Board Room
- December 14, 2016 SOQ Due, 11:00 am

A Request for Proposal (RFP) with detailed instructions and Project information will be sent to the best-qualified firms, based on DW's assessment of the SOQs. After receipt and review of the qualified firms' proposals, a qualifications-based selection of the DP#5 Consultant will be made based on weighted factors detailed in the RFP. DW may elect to follow the proposals with a formal questionnaire and/or interview to assist with the proposal evaluation.

The anticipated schedule for proposals, Design Phase services, and construction is summarized below:

- January 10, 2017 Request for Proposals sent to short-listed Consultants
- January 18, 2017 Mandatory Pre-Proposal Meeting, 11:00 am DW Board Room
- January 31, 2017 Final Written Questions Due
- February 3, 2017 Addendum Issued (if required)
- February 7, 2017 Proposals Due
- February 27-28, 2017 Consultant Interviews (if required)
- March 1, 2017 Announce Consultant Selection
- March 22, 2017 Selected Consultant Recommendation to the Board
- March 30, 2017 Notice to Proceed Issued to Selected Consultant
- December 31, 2017 Preliminary Design (30%) Completion
- 2019 Final Design Completion (estimated)
- 2023 Construction Complete (estimated)

Any requests for clarification or additional information regarding submission of this SOQ shall be submitted in writing via e-mail (peter.mccormick@denverwater.org), or during the Pre-SOQ meeting that will be held in the Denver Water Board Room at 1600 West 12th Avenue, Denver, Colorado 80204, 8:30 am, local time, November 17, 2016. Limit attendance at the Pre-SOQ meeting to three employees per firm. DW is in the process of determining selection committee members for all NSRWTP RFPs and has instituted a blackout period for the solicitation of design services. **Any contact with DW or OR team members regarding the NSRWTP during the SOQ period, except Peter McCormick, may result in Consultant disqualification.**

Section 9: SOQ Requirements

Interested firms are to submit eight hard copies and one electronic copy (pdf on flash drive) of the SOQ package. The SOQ package page limit is six pages in length, excluding Cover Letter, References, and Resumes.

SOQ packages must be submitted to Peter McCormick, Design Project Manager, Denver Water, 1600 West 12th Avenue, Denver, Colorado 80204 by 11:00 am, local time, Wednesday, December 14, 2016.

The SOQ package shall include the following items in the order shown:

- Cover Letter (one page maximum, not included in the page limit).
- Firm background information, including local and national capabilities for Prime consultant and Subconsultants.
- Proposed Project Organizational Chart (an 11-inch by 17-inch format is acceptable for the Organizational Chart). Identify the home office location and applicable experience of each individual proposed.

- Anticipated Minority and Women-Owned Business Enterprise (MWBE) and Small Business Enterprise (SBE) firm involvement. DW recognizes the federal government's small business size regulations and certifications by the Mountain Plains Minority Supplier Development Council, Women's Business Enterprise Council – West, Colorado Department of Transportation, and City and County of Denver Division of Small Business. The MWBE goal for DP#5 is anticipated to be 8 to 12%.
- Provide a minimum of three project references of similar scope and size for the prime Consultant and major Subconsultants. Include project statistics (capacity, construction cost, etc.), similarity or relevance to NSRWTP DP#5, dates, photos or renderings, and client contact information. Limit project references to a maximum of 10 pages, which are not included in the page limit. Tie proposed staff and responsibilities to reference projects (an 11-inch by 17-inch format is acceptable for the project references).
- Proposed staff resumes (limited to two pages each) shall be provided in an appendix and are not included in the page limit.

Section 10: Addenda to the Request for Statements of Qualifications

If it becomes necessary to revise any part of the RFQ, an addendum will be placed online at: http://www.denverwater.org/DoingBusinesswithUs/RequestsforProposals/BidProposalsEngineering/ prior to the date indicated herein. Respondents are responsible to check online prior to submission of their SOQ and acknowledge receipt of addendum(s) within their SOQ.