

## Attachment A

### Scope of Services

Article 3 of the AGREEMENT is amended and supplemented to include the following agreement of the parties. CONSULTANT shall, except as otherwise provided for herein, furnish all Engineering services, labor, equipment, and incidentals (SERVICES) as required for this AGREEMENT.

#### **Scope of Services for Pond Retrofit**

The scope set forth herein defines the work to be performed by the CONSULTANT, Freese and Nichols, Inc. (FNI), in completing the project. Both the Owner (CITY) and FNI have attempted to clearly define the work to be performed and address the needs of the Project. Under this scope, CONSULTANT is expanded to include any sub-consultant, including surveyor, employed, or contracted by Freese and Nichols, Inc.

#### **GENERAL OVERVIEW**

CONSULTANT will provide planning, analysis, design, and support services for retrofitting an existing detention pond to current standards. A primary goal of the Project is to plan and implement nature-based solutions (NBS) as a pilot for the City of Norman to demonstrate performance and develop guidance for future applications. The Project will evaluate and, as needed, increase storage capacity and update inlet and outlet configurations. Presampling, post-sampling, and geotechnical exploration will be performed by University of Oklahoma (OU) graduate students and provided to CONSULTANT for incorporation into the design.

CONSULTANT will provide two submittals: a 75% Design Submittal and a Final Submittal.

Objectives for the Project are to:

- Design the pond retrofit to current standards with any additional capacity needed and updated inlet/outlet configurations.
- Integrate presampling, post-sampling, and geotechnical information furnished by OU graduate students.
- Prepare bid-ready documents.
- Develop a guidelines document for long-term maintenance guidelines for the retrofitted pond.
- Identify, evaluate, and incorporate feasible nature-based solutions identified in previous study (e.g., native riparian plantings, wetland shelves/benches, bioretention features, soil amendments, microtopography, and habitat enhancements) to improve water quality, resilience, and ecological function.
- Document the pilot's intended outcomes and performance approach in coordination with OU (leveraging available pre/post-sampling) and summarize lessons learned to inform future NBS retrofits in Norman.

## WORK TO BE PERFORMED

### **Basic Services**

The following design services shall align with the tasks set forth in **Attachment C – Compensation**.

### **PROJECT MANAGEMENT**

CONSULTANT will manage the work outlined in this scope for efficient and effective use of CONSULTANT and the City's time and resources. CONSULTANT will manage change, communication, coordinate internally and externally as needed, and address issues with the City's Project Manager and others as necessary to make progress on the work.

1. CONSULTANT will coordinate internally, track the progress of the project, and submit monthly status updates via e-mail. Items in the monthly updates may include project updates, upcoming activities, project schedule, upcoming deliverables, and outstanding issues or information requirements.
2. Meetings: CONSULTANT will conduct a virtual kickoff meeting; a 75% review meeting; and a Final review meeting. CONSULTANT will also support up to one (1) community meeting.

### **ASSUMPTIONS**

- Up to three (3) meetings total are included as noted above.
- Project schedule will be coordinated at kickoff.

### **DELIVERABLES**

- Agendas and minutes for meetings.
- Monthly status updates via e-mail.

### **TASK 1. DATA COLLECTION COORDINATION (SAMPLING & GEOTECHNICAL BY OTHERS)**

CONSULTANT will coordinate with OU graduate students performing presampling, post-sampling, and geotechnical exploration including infiltration testing. Survey will be included in this scope item as well. CONSULTANT will:

- Provide requested sampling locations/targets and a high-level sampling outline for alignment with design needs.
- Provide recommended boring locations, estimated depths, and general parameters for geotechnical exploration.
- Review delivered field logs, lab results, and sampling summaries and incorporate the information into design assumptions and criteria.
- Develop a brief Data Integration Memorandum summarizing how the provided data informs design.

- Survey of existing pond, including inflow and outflow infrastructure
  - a. Topographic Survey
  - b. Utility Locates
  - c. Property / Right of Way
  - d. Landowner Notifications
  - e. Survey Data Sheets

## **ASSUMPTIONS**

Sampling and geotechnical work (field, lab, and reporting) will be performed and stamped/approved by others; CONSULTANT will rely on these data. CONSULTANT is not responsible for health and safety, QA/QC, scheduling, or access related to sampling or borings performed by others.

## **DELIVERABLES**

Data Integration Memorandum (PDF).

## **TASK 2. EXISTING CONDITIONS & DESIGN CRITERIA**

CONSULTANT will compile available record information, visit the site, and establish design criteria. Work includes:

- Review of existing drawings, drainage reports, and available GIS and aerials.
- Field reconnaissance to confirm key features, constraints, and access.
- Establish design criteria to meet current City and applicable regional/state standards for detention, conveyance, and water quality (as relevant).

## **DELIVERABLES**

Technical memorandum (PDF) summarizing existing conditions and design criteria.

## **TASK 3. HYDROLOGIC & HYDRAULIC (H&H) ANALYSIS**

CONSULTANT will perform conceptual-level hydrologic and hydraulic analysis to inform sizing and configuration of the retrofitted pond and inlet/outlet structures. Work includes:

- Development/confirmation of drainage basin, design storms, and inflow hydrographs.
- Stage–storage–discharge relationships and routing to evaluate detention performance.
- Evaluation of additional storage capacity needs and alternatives.
- Assessment of inlet and outlet configuration options to meet criteria and minimize maintenance.

## **ASSUMPTIONS**

- No CLOMR/LOMR submittals are included.
- Modeling will be at planning/design level suitable for facility sizing and plan production.

## **DELIVERABLES**

H&H summary and figures incorporated into the 75% and Final submittals.

#### **TASK 4. 75% DESIGN SUBMITTAL**

The 75% Preliminary Design Submittal should include, but is not limited to, the following:

- Title Sheet (with sheet index and standard drawings listed)
- Typical Section/Detail Sheet
- Drainage Map
- Drainage Design Details & Calculation Tables
- Storm Water Management Plan
- Plan and Profile Sheets
- Layout, grading, and cross sections for the pond retrofit and upgrades to bring the bioretention pond to current standards
- Estimate of Earthwork
- Survey Data Sheets including Utility Data Sheets
- Preliminary Sequence of Construction (to determine Right-of-Way requirement)
- Planting Plan and Plant Selection: develop a native species palette and planting plan tailored to bioretention hydrologic zones (ponding/bottom, benches/shelves, side slopes), including sizes, quantities, spacing, seasonal diversity, establishment period requirements, and invasive-species management.
- Bioretention performance elements (as applicable): media/soil amendments, mulch, underdrain configuration, overflow, and protection measures to support the nature-based pilot objectives and OU pre/post-sampling.
- Opinion of Probable Cost
- Updated Design Schedule

#### **DELIVERABLES**

- 75% plan set (PDF), Outline Specifications and OPCC.
- 75% review meeting and comment log.

#### **TASK 5. FINAL DESIGN SUBMITTAL**

The 100% Final Design Submittal should include, but is not limited to, the following:

- 100% ODOT Plans Checklist
- Title Sheet
- Typical Section/Detail Sheet
- ODOT Pay Item Lists and Notes
- Summary Sheets
- Stormwater Management Plan
- Erosion Control Sheets
- Plan and Profile Sheets
- Layout, grading, and cross sections for the pond retrofit and upgrades to bring the bioretention pond to current standards (e.g., forebay/sediment control, ponding depth, side slopes, access).
- Demolition Sheets

- Final Estimate of Earthwork
- Survey Data Sheets including Utility Data Sheets
- Sequence of Construction and Traffic Control Plans
- Planting Plan and Plant Selection
- Bioretention performance elements (as applicable)
- Final Opinion of Probable Cost – in required format
- One-page NBS Pilot Summary (PDF; provided as an appendix to the Final submittal).

## **DELIVERABLES**

- Final plan set (PDF)
- Final specifications (PDF)
- Editable files (CAD and Word as applicable)
- Final comment resolution log
- One-page NBS Pilot Summary (PDF; provided as an appendix to the Final submittal).
- Graphics will use City brand guidelines if provided.

## **TASK 6. MAINTENANCE GUIDELINES DOCUMENT**

CONSULTANT will develop a guide for long-term maintenance of the retrofitted pond, tailored to City practices. Content will include:

- Routine inspection checklists and frequencies.
- Vegetation management, sediment/debris removal, inlet/outlet upkeep, and safety considerations.
- Triggers for maintenance and example forms.

## **DELIVERABLES**

Maintenance Guidelines document (editable Word and PDF).

## **PROJECT-WIDE ASSUMPTIONS**

- OU graduate students will perform presampling, post-sampling, and geotechnical exploration. CONSULTANT will rely on data provided by others and will not direct field work, laboratory testing, or health and safety for these activities.
- Easements, and right-of-entry/access coordination are by the City unless otherwise noted.
- Environmental permitting, if required, is not included unless specifically authorized.
- Utility relocations, land acquisition, and cultural/natural resource studies are not included.

- Two design submittals are included: 75% and Final.

## **DELIVERABLES SUMMARY**

- 75% Design Submittal: plan set (PDF), outline specifications, OPCC, and review meeting.
- Final Design Submittal: plan set (PDF), specifications (PDF), final OPCC, editable files (CAD/Word). • Data Integration Memorandum; Existing Conditions & Criteria memo.
- Maintenance Guidelines document (editable Word and PDF).

**ADDITIONAL SERVICES:** The following services are additional and shall not be included in the Scope of Services unless specifically approved by the CITY. CONSULTANT shall inform the CITY when a particular service falls into the “Additional Services” category. Compensation for Additional Services shall be on an hourly basis.

1. Preparation of FIS documents such as profiles, summary of discharges table, or floodway data tables.
2. Additional field surveys beyond what is included in the scope above.
3. Additional alternative analyses or project development.
4. Recreation of existing H&H models if digital files of the effective models are not available.
5. Revisions to existing H&H models or creation of new models for areas not identified.
6. Preparation of LOMR or CLOMR
7. Additional alternatives to be detailed modeled or evaluated, including analysis of study areas beyond those outlined in scope of work.
8. Public Outreach beyond what is included in scope above
9. Appearances before regulatory agencies other than the CITY.
10. Assistance to the CITY as an expert witness in any litigation with third parties arising from the development of the Project.
11. Making property, boundary and right-of-way surveys, preparation of easement and deed descriptions, including title search and examination of deed records.
12. Preparing data and reports for assistance to CITY in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
13. Assisting CITY in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claims disputes with Contractor(s).

14. Visits to the project areas or City facilities in excess of the number of trips, coordination meetings or contract completion activities as defined in Basic and Special Services.
15. Providing environmental investigations coordination with environmental resource agencies, jurisdictional determinations, and state or federal permitting.
16. Providing basic or additional services on an accelerated time schedule. The scope of this service does not include cost for overtime wages of employees and consultants, inefficiencies in work sequence and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the CITY.
17. Soil and foundation investigations, including field and laboratory tests, borings, related engineering analyses, and recommendations.
18. Providing Geotechnical investigations, studies, or reports.
19. Additional copies of reports.
20. Preparation of applications and supporting documents for government grants, loans, or planning advances for public works projects.
21. Acquisition of individual federal or state permits that may be required.
22. Preparation of environmental statements.