



Public Works Service Operations

DATE: February 13, 2024

FROM: Steven Salwei, Director Public Works Services

ITEM: Groundwater Monitoring Task Order 24-01

REQUEST:

Approval of Task Order 24-01 from Houston Engineering for the Solid Waste operations to provide 2024 BMWF Groundwater Sampling, Analysis, and Reporting.

BACKGROUND INFORMATION:

The ND Department of Environmental Quality issued the City of Bismarck Permit No. 0017 to construct and operate a solid waste facility at its designated location. As part of the approved permit, the NDDEQ requires annual groundwater monitoring and annual reporting of results in accordance with the permit-approved Groundwater Monitoring Plan (GWMP). The total estimated cost of Task Order No. 24-01 is \$36,900.

RECOMMENDED CITY COMMISSION ACTION:

Approve Task Order No. 24-01 Ground Water Monitoring to the Agreement with Houston Engineering for professional engineering services for Solid Waste operations.

STAFF CONTACT INFORMATION:

Steven Salwei, Director Public Works Services, 701-355-1705, ssalwei@bismarcknd.gov

ATTACHMENTS:

1. MWF Task Order 24-01 Groundwater Sampling, Analysis, and Reporting
2. BMWF Task Order 24-02 (2024 T2 NMOC)

**TASK ORDER AGREEMENT TO
BISMARCK SOLID WASTE OPERATIONS ENGINEERING SERVICES
AGREEMENT**

This is Task Order No **24-01**,
consisting of **5** pages.

Task Order

In accordance with Paragraph 1.01 of the Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated February 11, 2021 ("Agreement"), Owner and Engineer agree as follows:

1. Background Data

- a. Effective Date of Task Order: **February 13, 2024**
- b. Owner: **City of Bismarck**
- c. Engineer: **Houston Engineering Inc.**
- d. Specific Project (title): **2024 BMWF Groundwater Sampling, Analysis, and Reporting**
- e. Specific Project (description): **The North Dakota Department of Environmental Quality (NDDEQ) issued the City of Bismarck's Permit Number 0017 to construct and operate a solid waste facility at its designated location. As part of the approved permit the NDDEQ requires annual groundwater monitoring and annual reporting of results in accordance with the permit approved Groundwater Monitoring Plan (GWMP).**

2. Services of Engineer

- A. The specific services to be provided or furnished by Engineer under this Task Order are as follows:
 - 1. **Prepare an annual report presenting the groundwater data collected in 2023 including the statistical analysis of the 2023 groundwater quality data relative to the past groundwater quality data. NOTE: Remaining consistent with past practices, the groundwater data collected in 2024 will be submitted in an annual report to be provided in 2024 under a 2025 task order contract;**
 - 2. **In Spring/Summer 2024, obtain groundwater elevation data from 54 monitoring wells in accordance with the site groundwater monitoring plan.**
 - 3. **In late Fall 2024, obtain groundwater elevation measurements from 28 monitoring wells in accordance with the site groundwater monitoring plan.**
 - 4. **Measure the percent methane (% CH₄), percent oxygen (% O₂), and percent carbon dioxide (% CO₂) in four on-site buildings, three off-site buildings, two leachate sumps,**

and ten landfill gas monitoring wells on a quarterly basis (March, June, August, and November 2024);

- 5. In Spring/Summer 2024, collect groundwater samples from the 40 existing monitoring wells in accordance with the site groundwater monitoring plan;**
- 6. In late Fall 2024, collect groundwater samples from the 22 existing monitoring wells in accordance with the site groundwater monitoring plan;**
- 7. Analyze the groundwater samples collected from the groundwater monitoring wells for the presence and concentration of the Group A, Group B, Group D, Group F, and Group H parameters; and**
- 8. Take the appropriate Quality Assurance/Quality Control measures relative to the groundwater quality data, to include obtaining trip blanks and collecting field blanks for analysis of Volatile Organic compounds (VOCs), and collecting equipment blanks for analysis of the parameters listed in Group A, Group B, Group D, Group F, and Group H.**

B. Other Services

As directed during the required permit action coordination meetings with the City of Bismarck and NDDEQ.

- C. All of the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order.**

3. Additional Services

- A. Additional Services that may be authorized or necessary under this Task Order are:**

Set forth as Additional Services in Part 2—Additional Services, of Exhibit A, "Engineer's Services for Task Order," modified for this specific Task Order, and attached to and incorporated as part of this Task Order.

4. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 of the Agreement and in Exhibit B.

5. Task Order Schedule

In addition to any schedule provisions provided in Exhibit A or elsewhere, the parties shall meet the following schedule:

The timeframe and/or due date as set forth in the permit documentation for annual reporting. Monitoring and sampling are through the end of 2024.

6. Payments to Engineer

- A. Owner shall pay Engineer for services rendered under this Task Order as follows:**

By Standard Hourly rates set forth in Article 2 and described in Exhibit C Article 2 Paragraph C2.02.B of the Agreement.

The total estimated fee for services is \$85,100. This cost estimate includes subcontractor costs for Minnesota Valley Testing Laboratories (MVTL) to perform the sampling and analysis and it is expected that MVTL will invoice the City directly for these services. The portion of the estimated fee for MVTL to perform the sampling and analysis services is \$50,800. The portion of the estimated fee for Engineer services is \$34,300. The Engineer services will be based on the cumulative hours charged during the billing period plus Reimbursable Expenses and Engineer's Consultant's charges. The total estimated fee will not be exceeded without prior written authorization of the Owner.

- B. The terms of payment are set forth in Article 4 of the Agreement and in the applicable governing provisions of Exhibit C.

7. Sub-Consultants retained as of the Effective Date of the Task Order:

Minnesota Valley Testing Laboratories, Inc., 2616 E. Broadway Ave, Bismarck, ND 58501

8. Other Modifications to Agreement and Exhibits:

None

9. Attachments:

None

10. Other Documents Incorporated by Reference:

Bismarck Solid Waste Operations Engineering Services Agreement- **February 11, 2021**

11. Terms and Conditions

Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is **February 13, 2024**.

OWNER: City of Bismarck

ENGINEER: Houston Engineering Inc.

By: _____

Name: Mike Schmitz

Title: Mayor

By: _____

Name: Sherwin Wanner, PE

Title: Project Manager / Bismarck Office
Manager

Engineer License or Firm's
Certificate No. 015C

State of: North Dakota

Date Signed: _____

Date Signed: _____

Attest: _____

Name: Jason Tomanek

Title: Acting City Administrator

Attest: _____

Name: Kevin Martin, PE

Title: Principal/Senior Project Manager

Address for giving notices:

Bismarck Department of Public Works
PO Box 5503
601 S. 26th Street

Bismarck, ND 58506-5503

Address for giving notices:

Houston Engineering Inc.
3712 Lockport St.

Bismarck, ND 58503

Task Order Form

EJCDC® E-505, Agreement Between Owner and Engineer for Professional Services – Task Order Edition.
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and American Society of Civil Engineers. All rights reserved.

DESIGNATED REPRESENTATIVE
(Paragraph 8.03.A):

Steve Salwei

Title: Director of Service Operations

Phone Number: 701-355-1705

Facsimile Number: 701-221-6840

E-Mail

Address: ssalwei@bismarcknd.gov

DESIGNATED REPRESENTATIVE
(Paragraph 8.03.A):

Sherwin Wanner, PE

Title: Project Manager

Phone Number: 701-323-0200

Facsimile Number: 701-323-0300

E-Mail

Address: swanner@houstoneng.com

**TASK ORDER AGREEMENT TO
BISMARCK SOLID WASTE OPERATIONS ENGINEERING SERVICES
AGREEMENT**

This is Task Order No **24-02**,
consisting of **5** pages.

Task Order

In accordance with Paragraph 1.01 of the Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated February 11, 2021 ("Agreement"), Owner and Engineer agree as follows:

1. Background Data

- a. Effective Date of Task Order: **February 13, 2024**
- b. Owner: **City of Bismarck**
- c. Engineer: **Houston Engineering Inc.**
- d. Specific Project (title): **2024 BMWF Tier 2 NMOC Emission Testing, Analysis, and Reporting**
- e. Specific Project (description): **The North Dakota Department of Environmental Quality (NDDEQ) issued the City of Bismarck's Permit Number 0017 to construct and operate a solid waste facility at its designated location. As part of the approved permit, the performance of Tier 2 NMOC emission testing is required every 5 years. The previous Tier 2 testing was performed in 2019. The Air Quality Title V permit is required by the NDDEQ and EPA as part of the permitting process and includes the NMOC monitoring.**

2. Services of Engineer

- A. The specific services to be provided or furnished by Engineer under this Task Order are as follows:
 - 1. **Install up to 55 drive point methane monitoring locations within the pertinent waste areas of the Subtitle D landfill.**
 - a. **The monitoring points will be installed to a depth of up to 8 feet below the surface.**
 - b. **Assumes 5 points will encounter refusal and re-drilling will be required (net 50 sample probe locations is assumed).**
 - 2. **Collect survey point data of all the drive points and geo-reference the survey points to the landfill benchmarks.**

3. Landfill gas encountered at each monitoring location will be purged and the flow stabilized with respect to percent oxygen (O₂), carbon dioxide (CO₂), lower explosive limit (LEL) and Methane (CH₄).
4. Landfill gas will be collected from each monitoring point in a 6-liter (L) summa canister for chemical analysis.
5. Composite samples will be collected to minimize sample analysis costs.
 - a. Up to four samples may be composited in a 6L canister;
 - b. the minimum individual sample size will be no less than 1L; and
 - c. up to 15 composite samples are assumed.
6. Composite samples will be analyzed for total NMOC as carbon, CH₄, CO₂, O₂, and Nitrogen by EPA Method 25C and EPA Method 3C.
7. Calculate NMOC concentrations and prepare a report presenting the data generated during our activities with our conclusions and recommendations based on that data.

B. Other Services

As directed during the required permit action coordination meetings with the City of Bismarck and NDDEQ.

- C. All of the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order.

3. Additional Services

- A. Additional Services that may be authorized or necessary under this Task Order are:

Set forth as Additional Services in Part 2—Additional Services, of Exhibit A, "Engineer's Services for Task Order," modified for this specific Task Order, and attached to and incorporated as part of this Task Order.

4. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 of the Agreement and in Exhibit B.

5. Task Order Schedule

In addition to any schedule provisions provided in Exhibit A or elsewhere, the parties shall meet the following schedule:

The timeframe and/or due date as set forth in the permit documentation. Monitoring and sampling are through the end of 2024.

6. Payments to Engineer

- A. Owner shall pay Engineer for services rendered under this Task Order as follows:

By Standard Hourly rates set forth in Article 2 and described in Exhibit C Article 2 Paragraph C2.02.B of the Agreement.

The total estimated fee for services is \$36,900. This cost estimate includes subcontractor costs for Eurofins Laboratories Inc. to perform the chemical analysis and R&B Environmental Drilling, LLC (RBE) or Traut Companies (depending on availability) to perform field services. HEI will process the subcontractor invoices for inclusion in HEI billing. The portion of the estimated fee for Eurofins to perform the sampling and analysis services is \$6,300. The portion of the estimated fee for drilling services is \$11,900. The portion of the estimated fee for Engineer services to complete the Tier 2 NMOC monitoring, analysis and reporting is \$18,700. The Engineer services will be based on the cumulative hours charged during the billing period plus Reimbursable Expenses and Engineer's Consultant's charges. The total estimated fee will not be exceeded without prior written authorization of the Owner.

- B. The terms of payment are set forth in Article 4 of the Agreement and in the applicable governing provisions of Exhibit C.

7. Sub-Consultants retained as of the Effective Date of the Task Order:

Eurofins Laboratories Inc. will perform landfill gas chemical analysis.

R&B Environmental Drilling, LLC or Traut Companies will install the methane drive point sample probes for subsequent sampling by HEI.

8. Other Modifications to Agreement and Exhibits:

None

9. Attachments:

None

10. Other Documents Incorporated by Reference:

Bismarck Solid Waste Operations Engineering Services Agreement- February 11, 2021.

11. Terms and Conditions

Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is **February 13, 2024**.

OWNER: City of Bismarck

ENGINEER: Houston Engineering Inc.

By: _____

By: _____

Name: Mike Schmitz

Name: Sherwin Wanner, PE

Title: Mayor

Title: Project Manager / Bismarck Office
Manager

Engineer License or Firm's
Certificate No. 015C

State of: North Dakota

Date Signed: _____

Date Signed: _____

Attest: _____

Attest: _____

Name: Jason Tomanek

Name: Kevin Martin, PE

Title: Acting City Administrator

Title: Principal/Senior Project Manager

Address for giving notices:

Address for giving notices:

Bismarck Department of Public Works
PO Box 5503
601 S. 26th Street

Houston Engineering Inc.
3712 Lockport St.

Bismarck, ND 58506-5503

Bismarck, ND 58503

DESIGNATED REPRESENTATIVE

DESIGNATED REPRESENTATIVE

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Task Order Form

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and American Society of Civil Engineers. All rights reserved.

(Paragraph 8.03.A):

Steve Salwei

Title: Director of Service Operations

Phone Number: 701-355-1705

Facsimile Number: 701-221-6840

E-Mail

Address: ssalwei@bismarcknd.gov

(Paragraph 8.03.A):

Sherwin Wanner, PE

Title: Project Manager

Phone Number: 701-323-0200

Facsimile Number: 701-323-0300

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Address: swanner@houstoneng.com