



Public Works Utility Operations

DATE: May 14, 2024

FROM: Michelle Klose, Director Public Works Utilities

ITEM: Amendment No. 2 to HDR WTP Expansion Project Contract

REQUEST:

Approval of Amendment No. 2 to HDR Engineering WTP Expansion Contract.

BACKGROUND INFORMATION:

As the Water Treatment Plant Expansion Project moves forward, construction phase services for the administration, engineering, observation, and commissioning of the work described in the specifications and drawings for work authorization titled Bismarck WTP Design CMAR GMP3A UPS Replacement is ready to proceed. Amendment No. 2 in the amount of \$17,120 will provide these construction phase services.

RECOMMENDED CITY COMMISSION ACTION:

Approve Amendment No. 2 to HDR Engineering WTP Expansion Project and allow the Director of Utility Operations to execute accordingly.

STAFF CONTACT INFORMATION:

Amber Araujo, Executive Assistant, 701-355-1739, aaraujo@bismarcknd.gov

ATTACHMENTS:

1. HDR - amendment # 2 - GMP 3A - 240403

AMENDMENT TO OWNER-ENGINEER AGREEMENT

Amendment No. 2

Owner: City of Bismarck, North Dakota

Engineer: **HDR Engineering, Inc.**

Project: Water Treatment Plant Expansion Project

Effective Date of Owner-Engineer Agreement: **July 20th, 2023**

Nature of Amendment:

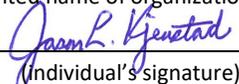
- Additional Services to be performed by Engineer
- Modifications to services of Engineer
- Modifications to responsibilities of Owner
- Modifications of payment to Engineer
- Modifications to time(s) for rendering services
- Modifications to other terms and conditions of the Agreement

Description of Modifications:

See Amendment No. 2, Attachment A

Agreement Summary:	Engineering Services related to Design, Bidding, and CMAR tasks for the WTP Expansion Project as described in Owner-Engineer Agreement
Original agreement Amount:	\$ 4,441,226
Net Change for prior amendments:	\$337,753
This amendment amount:	\$17,120
Adjusted Agreement Amount:	\$4,796,099
Change in time for services:	None

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. The Effective Date of the Amendment is **April 9, 2024**.

Owner City of Bismarck, North Dakota <hr/> (typed or printed name of organization)	Engineer HDR Engineering, Inc. <hr/> (typed or printed name of organization)
By: _____ (individual's signature)	By:  (individual's signature)
(Attach evidence of authority to sign.)	(Attach evidence of authority to sign.)
Date: _____ (date signed)	Date: <u>4-3-2024</u> (date signed)
Name: <u>Michelle Klose</u> (typed or printed)	Name: <u>Jason Kjenstad</u> (typed or printed)
Title: <u>Director of Utility Operations</u> (typed or printed)	Title: <u>Sr. Vice President</u> (typed or printed)

SCOPE OF SERVICES

WATER TREATMENT PLANT EXPANSION – AMENDMENT NO. 2

Bismarck Water Treatment Plant

Bismarck, North Dakota

March 31, 2024

SCOPE OF SERVICES

In addition to the scope of the original executed agreement, this Amendment shall add the described Scope of Services for HDR Engineering, Inc. (“ENGINEER”) to provide construction administration, construction observation and Project Startup, O&M and Training services to the City of Bismarck (“OWNER”) related to the Uninterrupted Power Supply Replacement associated with Water Treatment Plant Expansion project. The Scope of Services to be performed by ENGINEER shall be completed in accordance with generally accepted standards of practice and shall include the services and supplies to complete the following tasks:

Task Series 100 – Project Management/Initiation

Task Series 300– Construction Administration & Engineering

Task Series 400 – Construction Observation

Task Series 600 – Project Startup, O&M and Training

PROJECT DESCRIPTION

The City of Bismarck desires construction phase services for the administration, engineering, observation, and commissioning of the work described in the specifications and drawings for work authorization titled Bismarck WTP Design CMAR GMP3A UPS Replacement HDR Project No. 10371902. HDR Engineering, Inc. is the engineer of record for plans and specifications.

The scope of anticipated construction work includes but is not limited to:

1. Demolish and remove the existing Toshiba UPS system including UPS cabinet and battery cabinet.
2. Provide and install a new UPS system with all associated components at the same location and all other work required in accordance with the contract document.
3. Provide and install a 100A/3P circuit breaker in existing FCHP5 panel.
4. Provide power connection from the 100A/3P breaker to the UPS.
5. Provide connection from the UPS to existing FCHP-UPS panel.
6. Mega test existing wiring to control panel CP-04.
7. Replace wiring if meg test fail.
8. Install new CAT6 cable from the UPS to CP-04
9. Terminate wiring in CP-04
10. Existing equipment protection throughout the duration of the work.

The project site is located at the City of Bismarck Water Treatment Plant, 615 River Road, Bismarck, ND.

Task Series 300 – Construction Administration

Objective: Provide administrative and engineering support during implementation of HDR-designed plans and specifications. Construction administration will be administered by HDR as part of this amendment.

Engineer Activities:

Task 301 Pre-construction Conference & Progress Meetings

Task 302 Construction Engineering: Submittals, Pay Req., CO's, FO's, RFI's

Task 304 As Recorded Drawings

Task 305 Construction Contract Close-out

Services Provided by HDR:

- Preconstruction conference meetings and progress meetings as part of the Project.
- Construction engineering for the project including administration of submittals, payment requests, construction, requests for information and field observations.
- Development of record drawings for the Project.
- Construction contract close-out including punchlist, substantial completion review, certificate of final completion.

Owner Activities:

- Provide review and processing of monthly progress report and invoices within 10 working days.
- Identify and provide relevant prior studies, reports, drawings, specifications, manuals, and other data prepared by others.
- Provide review and comment on project deliverables within 14 working days.
- Coordinate OWNER staff participation and actively participate in meetings.
- Provide and make arrangements for facilities to conduct meetings.
- Provide access to project site as required for ENGINEER's performance of the scope of services.

Deliverables:

- Monthly project status reports and invoices.
- Pre-construction meeting agenda and minutes.
- Submittal reviews for divisions listed in the Project Manual including shop drawings, products, testing reports, schedule of values, materials in storage, progress schedule, list of submittals, progress and final pay applications.
- Certificate of Final Completion
- Record Drawings

Task Series 400 –Construction Observation

Objective: On-site observation will be provided on an hourly basis with 20 estimated hours to complete this task.

Engineer Activities:

Task 401 RPR Construction Observation (On Site)

Services Provided by HDR:

- Communicate with City staff as needed and provide project updates.
- Report to Contractor whenever HDR or Owner believes that any work is unsatisfactory, faulty, or defective, or does not conform to the contract documents
- Inspect materials/equipment for damage and notify Contractor if items do not meet the requirements of any inspection, test, or approval.
- Advise Contractor of work that should be corrected or rejected, uncovered for observation, or requires special testing, inspection, or approval
- Coordinate testing services with Contractor and review results for compliance with contract requirements
- Conduct substantial completion review and punchlist inspection/coordination.
- Perform one (1) year warranty walkthrough and complete associated documentation.

Owner Activities:

- Provide review and processing of monthly progress report and invoices within 10 working days.
- Identify and provide relevant prior studies, reports, drawings, specifications, manuals, and other data prepared by others.
- Provide review and comment on project deliverables within 14 working days.
- Coordinate OWNER staff participation and actively participate in meetings.
- Provide and make arrangements for facilities to conduct meetings.
- Provide access to project site as required for ENGINEER's performance of the scope of services.

Deliverables:

- Field logs, including daily reports.
- Certificate of Final Completion
- Deficiency punch lists
- Scheduled date of one (1) year warranty walkthrough

Task Series 600 – Project Startup, O&M and Training

Objective: Provide engineering consultant services for project startup and commissioning.

Engineer Activities:

Task 601 Project Start-Up

Task 602 Equipment and Systems Start-Up

Task 603 Operation and Maintenance Manual

Services Provided by HDR:

- Coordinate and monitor equipment checkout and start-up training sessions to be performed by the

- Contractor as required by the contract documents.
- Develop a O&M Manual in consultation with City staff.

Owner Activities:

- Coordinate OWNER staff participation and actively participate in meetings.
- Provide and arrange for facilities to conduct meetings.
- Provide access to project site as required for ENGINEER’s performance of the scope of services.

Key Understandings and Assumptions:

- Erosion and sedimentation control plan review not required.
- Permits required by the contract documents shall be obtained by the construction Contractor in accordance with the contract documents.
- Testing of soils, aggregates, concrete or steel fabrication not required.
- Archeological, historical, or cultural resources monitoring is not required. If any sites are determined to be archeological or historical sites, additional services for monitoring will be incorporated by Contract Amendment.
- Observation of the remediation and disposal of contaminated or hazardous materials not required.
- All preliminary deliverables will be submitted to OWNER in electronic PDF format via email or on flash drive.

SCHEDULE

The scope of services for this Amendment shall be completed in accordance with the following schedule unless modified by mutual agreement or by factors beyond the control of ENGINEER:

Task Series 100 – Project Management/Initiation	November 30, 2024
Task Series 300 – Construction Administration Services	November 30, 2024
Task Series 400 – RPR Construction Observation Services	November 30, 2024
Task Series 600 – Project Startup, O&M and Training	November 30, 2024

COMPENSATION

Owner shall pay Engineer for Services for Amendment No. 2 as follows. Terms and Conditions of Original Agreement Exhibit J remain unchanged except for compensation. Updated Engineer’s 2024 Rates and Expense Schedules in affect are attached for reference.

The total compensation for such services including Amendment No. 2 is estimated to be **\$4,796,099** based on the following estimated distribution of compensation.

Task No.	Task	Fee
Original Agreement		
100 – 110	Project Management	\$387,423
111 – 116	30% Preliminary Design Phase	\$878,330
117 – 122	60% Design Phase	\$797,595
123 – 133	Final Design Phase	\$1,797,340
210 – 215	CMAR Phase	\$490,538
Amendment No. 1		
500 – 524	HCW Design Phase	\$265,814
210 – 215	HCW CMAR Phase	\$21,939
Amendment No. 2		
101	Project Management	\$853
301-305	Construction Administration & Engineering	\$9,620
401	Construction Observation	\$5,040
601-603	Project Startup, O&M and Training	\$1,608
Subconsultants		
SUB	Geotechnical	\$40,000
SUB	SCADA/Controls	\$50,000
SUB	SCADA/Controls Amendment #1	\$50,000
SUB	Construction Administration	NA
SUB	RPR Construction Observation	NA

HOURLY RATE AND EXPENSE SCHEDULE

REIMBURSABLE EXPENSES

Reimbursable Expense shall mean actual expenses incurred for travel, meals, subconsultants, shipping, and other incurred expense. If negotiated with Owner in the contract, HDR will add an agreed to percentage mark-up to subconsultant invoices to cover administrative expenses and vicarious liability. Specialty equipment charges apply to specific equipment used on the project.

Direct Expenses

Drone	\$275.00 per day
Traffic Counting Equipment	\$120.00 per hour
Survey/GPS Equipment	\$50.00 per hour
Robotic Total Station	\$50.00 per hour
Side-by-Side Utility Vehicle	\$25.00 per hour
Handheld GPS	\$20.00 per hour
HDR Vehicle Mileage	\$0.75 per mile
Personal Vehicle Mileage	IRS rate per mile

Printing (in-house)

B&W 8.5x11	\$0.0857 each
Color 8.5x11	\$0.1801 each
B&W 11x17	\$0.1228each
Color 11x17	\$0.2397 each
Plots Bond	\$0.55 per sq. ft.



HDR Engineering 2024 Hourly Billing Rates

Enclosed are the 2024 Hourly Billing Rates for HDR Engineering. These rates shall be adjusted annually.

Description	Billing Rate/Hour
Managing Principal	235
Senior Project Manager	225
Project Manager III	205
Project Manager II	190
Project Manager I	170
Engineer VI	205
Engineer V	190
Engineer IV	170
Engineer III	145
Engineer II	130
Engineer I	120
Senior ASME Engineer	195
ASME Engineer	180
System Integrator Engineer IV	195
System Integrator Engineer III	175
System Integrator Engineer II	155
System Integrator Engineer I	115
Engineering/Field Services Technician V	180
Engineering/Field Services Technician IV	160
Engineering/Field Services Technician III	135
Engineering/Field Services Technician II	115
Engineering/Field Services Technician I	105
Cadd/GIS Technician V	160
Cadd/GIS Technician IV	140
Cadd/GIS Technician III	120
Cadd/GIS Technician II	110
Cadd/GIS Technician I	100
Right of Way IV	190
Right of Way III	175
Right of Way II	155
Right of Way I	120
Right of Way Coordinator	95
Environmental/Hydrologist/Geologist VI	200
Environmental/Hydrologist/Geologist V	180
Environmental/Hydrologist/Geologist IV	160
Environmental/Hydrologist/Geologist III	140
Environmental/Hydrologist/Geologist II	125
Environmental/Hydrologist/Geologist I	110
Senior Land Surveyor	155
Land Surveyor	135
Survey Technician III	125
Survey Technician II	110
Survey Technician I	95



Senior Construction Manager	205
Construction Manager	195
Construction Engineer III	180
Construction Engineer II	160
Construction Engineer I	135
<u>Construction Inspector</u>	<u>105</u>
Strategic Communications/Graphic Designer IV	165
Strategic Communications/Graphic Designer III	145
Strategic Communications/Graphic Designer II	130
<u>Strategic Communications/Graphic Designer I</u>	<u>100</u>
Project Controller	95
Project Assistant	95
Admin Assistant	70

HDR has technical experts in various geographic locations that may be utilized based on specific project need. This specialized expertise will be billed at the below rates.

<u>Description</u>	<u>Billing Rate/Hour</u>
Technical Expert VI	315
Technical Expert V	305
Technical Expert IV	285
Technical Expert III	265
Technical Expert II	245
Technical Expert I	225

