

**REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN
PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT**

Date: July 6, 2020

Project Name & Number: Water Reclamation Facility (WRF) Arc Flash Analysis;
Project No. 17-2404

CIP #: 51180

Project Description: Provide engineering services to conduct an arc flash analysis to meet the National Electric Code (NEC) requirement that potential electric arc flash hazards be identified for electrical equipment. That information will be used for labeling potential hazards from electrical equipment and the required Personal Protective Equipment (PPE) necessary for servicing that equipment.

Consultant: HDR Engineering, Inc.

Original
Contract Amount: \$44,960.00

Original
Contract Date: Sept. 18, 2017

Original
Completion Date: Jan. 31, 2018

Addendum No: One

Amendment Description: Since completion of the original Arc Flash Analysis (analysis), the City completed an electrical improvement project to replace major electrical components in two areas of the WRF. Improvements were made to the Digester MCC and the UV/Administration Building power service. These changes affected the results of the original analysis and we request updates to the analysis under this amendment. An increase in the fee is not required. The services can be completed under the original fee. The date of completion will be August 14, 2020.

Current Contract Amount:	\$44,960.00	Current Completion Date:	January 31, 2018
Change Requested:	\$0.00		
New Contract Amount:	\$44,960.00	New Completion Date:	August 14, 2020

Funding Source This Request:

Amount	Dept.	Line Item	Fund	Comments
\$0.00	833	4223	604	Wastewater Replacement / Improvements
\$0.00	Total			

Agreement Review & Approvals

<i>[Signature]</i> Project Manager	6/17/2020 Date	<i>[Signature]</i> Division Manager	6-21-20 Date
<i>[Signature]</i> Compliance Specialist	6-18-20 Date	<i>[Signature]</i> Department Director	6-18-2020 Date
<i>[Signature]</i> City Attorney	6-18-20 Date		

ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.
Finance Office - Retain one original
Project Manager - Retain second original for delivery to Consultant
cc: Public Works
Engineering
Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

	Date	Initials	Approved
Appropriation	6/23/20	<i>[Initials]</i>	Y N
Cash Flow			Y N

AMENDMENT NO. 1 TO AGREEMENT

Project: Water Reclamation Facility (WRF) Arc Flash Analysis, Project No. 17-2404 / CIP #51180

Background Data: The original agreement provided engineering services to conduct an arc flash analysis at the Water Reclamation Facility. This analysis identified potential electric arc flash hazards to meet the National Electric Code (NEC) requirement to identify hazards for electrical equipment. Electrical equipment that posed a potential hazard was labeled, to protect staff.

Nature of Amendment: Since completion of the original analysis, the City completed an electrical improvement project to replace major electrical components in two areas of the WRF. Improvements were made to the Digester MCC and the UV/Administration Building power service. These changes affected the results of the original analysis and we request updates to the analysis under this amendment. The services proposed are detailed in Amendment #1 – Exhibit A attached. The Consultant may use Exhibit C – HDR Engineering 2020 Hourly Billing Rates for the amendment work. The amendment will have an effective date of April 1, 2020. The date of completion will extend to August 14, 2020 and the original contract amount will remain unchanged.

Current Contract Amount: \$44,960.00

Change Requested: Modify the scope of services as described above and extend the completion date to August 14, 2020.

New Contract Amount: Contract amount remains unchanged.

Owner and Engineer hereby agree to modify the above referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The effective date of this Amendment is: April 1, 2020.

CITY OF RAPID CITY:

By: _____
Steve Allender, Mayor

Date Signed: _____

ATTEST:

By: _____
Pauline Sumption, Finance Officer

Date Signed: _____

Engineer:

By: Jan L. Yarnall

Date Signed: 6-18-2020



AMENDMENT #1 - EXHIBIT A
SCOPE OF ENGINEERING SERVICES
PROFESSIONAL SERVICES FOR
THE WASTEWATER TREATMENT FACILITY ARC FLASH ANALYSIS
PROJECT NO. 17-2404 / CIP 51180

DESCRIPTION

The City of Rapid City recently retained HDR Engineering to complete an Arc Flash Analysis at the Water Reclamation Facility (WRF). The study was complete in February 2019 and was comprised of five separate studies, one for each of the primary power services that feed power to the WRF. Since completion of the study, the City has completed an electrical improvement project that replaced major electrical gear in two areas of the WRF. Improvements were made in facilities served by the Secondary Building and UV/Administration Building power services. These changes impact the results of the Arc Flash Analysis and updates are proposed to revise the impacted reports with the latest electrical gear.

SCOPE OF SERVICES

HDR proposes to utilize available unspent fee to complete revisions to the two impacted reports. The current not to exceed fee amount is \$44,960. To date HDR has invoiced for \$37,894. **Report revisions will be completed utilizing the remaining available fee. No additional fee is requested as part of this amendment.** The original agreement was established utilizing engineering rates for 2017, an updated Exhibit C is attached to complete the work using 2020 billing rates.

Deliverables:

- Revised Final Arc Flash Analysis Reports:
 - UV/Administration Building
 - Secondary Building

Fee Estimate (reallocation of unspent fee):

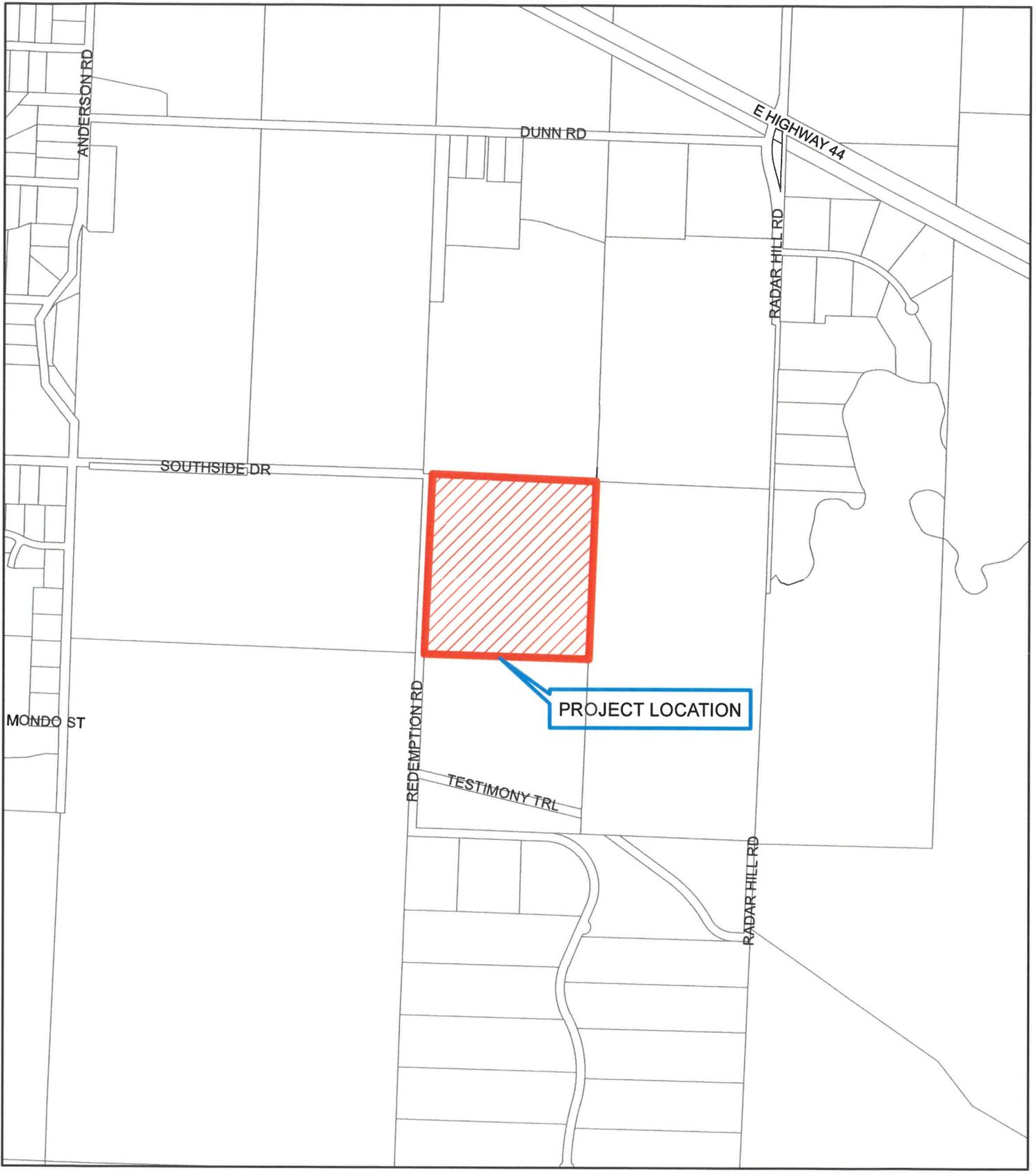
<u>Task</u>	<u>Hours</u>	<u>Cost</u>
1.4 Power System Modeling	4	\$840
1.5 Short Circuit Current Study	4	\$840
1.6 Protective Device Coordination	4	\$840
1.7 Arc Flash Analysis	12	\$2,520
1.9 Final Arc Flash Analysis Report	5	\$1,050
1.10 Project Management and QC	<u>5</u>	<u>\$805</u>
Subtotal	21	\$6,895
Expenses		<u>\$0</u>
TOTAL FEE		\$6,895

Exhibit C
HDR Engineering 2020 Hourly Billing Rates

Water Reclamation Facility
Arc Flash Analysis
Project No. 17-2404 / CIP 51180

Enclosed are the 2020 Hourly Billing Rates for applicable HDR Engineering staff. The rates listed below do not include reimbursable expenses.

Description	Billing Rate/Hour
Project Manager	170
Senior Electrical Engineer	210
Project Accountant	100



RAPID CITY WRF
ARC FLASH ANALYSIS
PROJECT NO. 17-2404 CIP NO. 51180

