#### **EXHIBIT A**

## TASK ORDER- WWTRC Electronic Operations Manual

This Task Order pertains to an Agreement by and between The Ci	ty of Boerne, ("OWNER"),			
and HDR Engineering, Inc. ("ENGINEER"), dated	, 2017, ("the Agreement").			
Engineer shall perform services on the project described below as	provided herein and in the			
Agreement. This Task Order shall not be binding until it has been properly signed by both				
parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the				
project described below.				

TASK ORDER NUMBER: 1

PROJECT NAME: Electronic Operations Manual

## PART 1.0 PROJECT DESCRIPTION:

HDR will develop an electronic Operations Manual (eOM) for the Owner wastewater treatment and recycling center. The eOM will provide City staff with convenient and quick access to the information necessary to operate and maintain the plant in an efficient and reliable manner. The eOM will contain a variety of information, including facility and equipment descriptions, design criteria, design drawings, and vendor supplied equipment O&M manuals. Using the eOM, City staff will be able to access this information in an electronic format with an easy-to-use graphical user interface. The eOM will provide a permanent archive of plant information. The eOM will include wastewater treatment plant equipment using nameplate data supplied in existing operation manuals.

The eOM will be developed as a web application in the Microsoft ASP.net web environment and will function on the City's Windows-based server. The eOM will be internally accessible via Internet Explorer but will not be accessible by the general public. An on-line HTML text editor (Cute Editor) will be embedded in the eOM web pages to enable easy text editing by City staff without having to know HTML. HDR owns a Cute Editor Enterprise License that allows for free distribution as long as the software is used on HDR's eOM application.

## eOM Hardware Requirements

- Microsoft Windows machine (running Microsoft Windows Server 2008 R2 Standard Edition or greater)
- 2.0 GHz dual/quad processor or better
- 4 GB of RAM
- 80 GB of hard drive space
- 19" diagonal LCD Monitor (1280 by 800 pixel resolution)

## eOM Software Requirements

- IIS (Internet Information Services 6.0 or higher)
- Microsoft .NET Framework 3.5
- Database SQL Server Express with Tools 2005 or higher (must enable TCP/IP protocol)

## O&M Staff - Content Development Software Minimum Requirements

- MS Office Suite 2007 (Word, Excel)
- Adobe Acrobat Reader (latest version)
- Internet Explorer 7 or above

## Optional Software Recommendations

- Microsoft SQL Server 2008 R2
- Adobe Acrobat Standard in order to modify equipment O&M manuals and construction drawings in PDF file format

# PART 2.0 SCOPE OF SERVICES TO BE PERFORMED BY ENGINEER ON THE PROJECT:

## Task 1 - eOM Site Map Workshop

A two hour project kickoff workshop will be held to discuss general manual content and the process for developing and implementing the eOM. In addition, the purpose of the workshop is to prepare a final web site map to illustrate the eOM layout and structure. HDR will prepare a draft web site map for review and comment prior to the workshop. The final web site map developed at the workshop will be emailed to City staff after the workshop for final approval.

The draft web site map will illustrate how and where the following information will be organized:

- eOM structure, and organization for each unit process
- Navigation (hyperlinks) between each section
- Plant general reference information
- Unit process content details.
- Equipment O&M manuals hyperlinks
- An eOM content management guide

The web site map will be developed in coordination with City staff, and will be specifically tailored to meet requirements and needs of the facility staff. A site map example is shown on the following page. The site map will be customized as necessary to provide the specific subsections desired by the plant staff. HDR will initially concentrate on developing the high level architecture of the eOM structure to define the structure and organization.

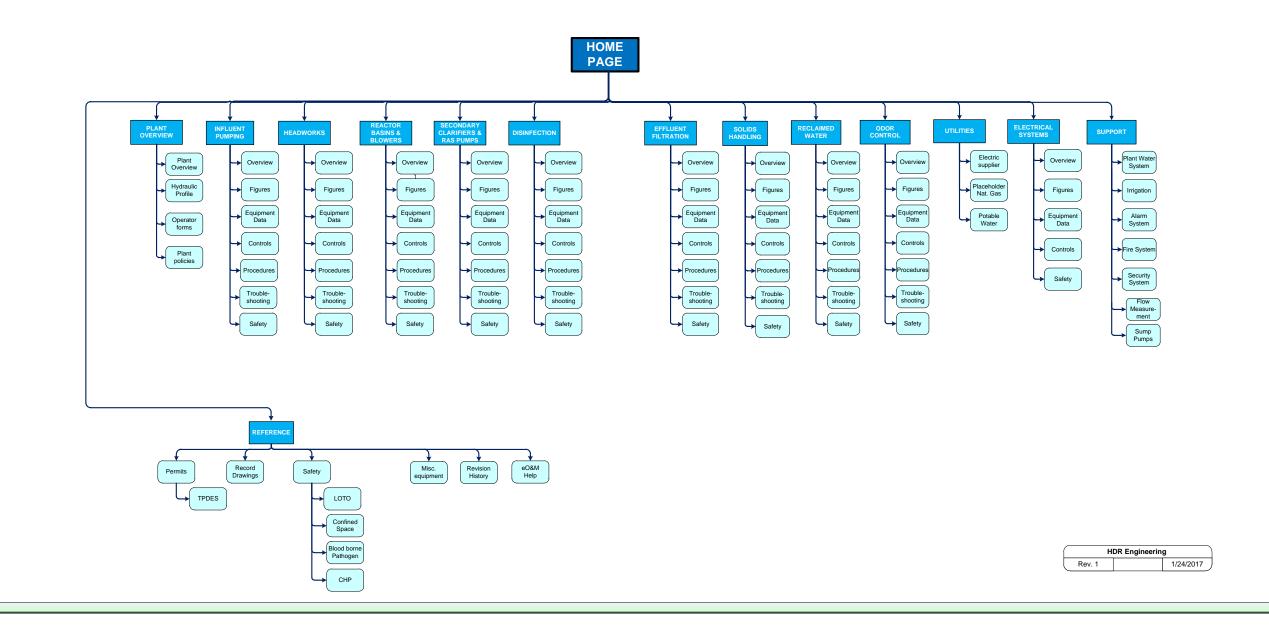
## **HDR** Deliverables

Meeting agenda and minutes for one two hour workshop.

- Draft eOM web site map prior to workshop.
- Final eOM web site map after the workshop for approval.

## EXAMPLE WASTEWATER TREATMENT & RECYCLING CENTER eOM SITE MAP

## Boerne Wastewater Treatment & Recycling Center – Electronic Operations Manual – Web Site Map



## Task 2 - eOM Content Preparation

The purpose of this task is to prepare the eOM content as defined by the web site map and to integrate the content into the eOM.

## Unit Process Content Definition

HDR will prepare the O&M manual content for each unit process shown in the web site map. Example content definitions are shown in the following table. Note that content definitions for this project will be specific and customized to those sub-sections agreed upon and defined by the web site map developed with plant staff in Task 1.

Example eOM Content Pages			
Section	Text		
Overview	A description of each unit process illustrating the design intent with photos of individual equipment components. A brief description of the theory behind each unit process. Strategies for evaluating data and making process adjustments.		
Figures	HDR will develop figures for communicating the design intent of unit processes. The figures will be developed from contract drawings but will be modified by deleting extraneous construction related information that is not pertinent to O&M personnel. The figures will be prepared in AutoCAD and converted to PDF file format for inclusion in the eOM. A total of 12 figures are anticipated.		
Equipment	Hyperlinks to vendor supplied equipment manuals in PDF file format. Existing equipment O&M manuals will be hyperlinked within the eOM application.		
Controls	A description of manual and automatic equipment controls.		
System Procedures	A list of general procedures for starting up and shutting down the process.		
Troubleshooting	A list of process alarms showing possible causes and suggested responses.		
Safety	General safety considerations for the unit process.		

## Items Not Included:

The following items are not provided by HDR:

- Network server and personal computers, including standard network software.
- Path to and necessary server storage space on the City's network server to house the eOM application.
- Ancillary software on the City's computers necessary to run the eOM, including Microsoft Internet Explorer, MS Windows, or Vista and the SQL database.
- Detailed standard operating procedures.

#### HDR Deliverables

- Draft eOM in electronic format accessible by plant staff during development via the Internet.
- Attend meeting at the City to demonstrate draft eOM to plant staff.
- Final draft eOM in electronic format for City review and comment.

## Task 3 – eOM Application Installation and Training

HDR will develop the draft and final eOM on an HDR server. The draft and final versions will be available to City staff via the Internet for review. HDR will coordinate installation of the final eOM on the City's server with the City's information technology (IT) staff at the end of the project. The final eOM will be downloaded to the City's network server.

HDR will schedule a meeting with the plant staff, and facilitate two two-hour training sessions for the plant staff on how to use and maintain the eOM. The first two-hour training session will provide general instruction and use of the eOM. The second two-hour training session will provide instruction on how the plant staff can edit and revise the eOM.

### HDR Deliverables

- Coordination with City's IT staff to download and install final eOM.
- Two, two-hour training sessions at plant to City O&M staff.

#### Task 4 - Project Management and Coordination

HDR will plan and execute the preparation of the eOM in accordance with the contract scope, schedule, and budget. HDR will monitor project progress, including work completed, work remaining, budget expended, schedule, estimated cost of work remaining, and estimated cost at completion. HDR will manage activities within task budgets, and advise the City's project manager of project status. Monthly invoices will be prepared and submitted to the City.

### HDR Deliverables

- Memoranda and meeting notes, as required.
- Monthly invoice.

### PART 3.0 OWNER'S RESPONSIBILITIES:

The Owner shall be responsible for the following:

- Provide meeting space and participation in one two hour workshop.
- Provide a copy of the current discharge permit
- Provide a copy of the Discharge Monitoring Report
- Provide a copy of the operator round sheets
- Provide a contact list of entities and individuals to be contacted during emergencies
- Provide the emergency operation plans for power outages, flooding and other site specific emergency situations that may develop
- Provide annual safety training curriculum and schedule for all facility staff
- Made available City IT staff for eOM application installation.
- Provide meeting space for eOM training sessions.
- Participation in training sessions.
- Review and provide comments on draft eOM.
- Participate in teleconferences and meetings.
- Review and approve invoice.
- Review and approve modifications to approach, schedule and deliverables as appropriate.

#### PART 4.0 PERIODS OF SERVICE:

The following schedule is the proposed schedule for the eOM development:

- Provide City access to the draft eOM over the Internet for review approximately 30 calendar days after web site creation.
- Procurement of and hyperlinking to equipment photographs will occur after web site map meeting.
- The draft eOM will be provided to the City for review within 120 calendar days following notice to proceed.

## PART 5.0 ENGINEER'S FEE:

Compensation will be on a Lump Sum basis in the amount \$58,342.00. HDR will submit monthly invoices based on the percentage of the work complete.

This Task Orde	r is executed this	day of	, 20	
CITY OF BOERNE			HDR ENGINEERING, INC.	
"OWNER"		"ENGINEER"	"ENGINEER"	
BY:		BY:		
NAME:		NAME:		
TITLE:		TITLE:		
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	Boerne, TX 78006		San Antonio, TX 78216	