EXHIBIT A DESIGN PHASE SERVICES SCADA SYSTEM – RADIO COMMUNICATIONS SYSTEM CITY OF LEE'S SUMMIT (Water Utilities)

SCOPE OF SERVICES

This scope of services describes the work to be performed by HDR on behalf of the City of Lee's Summit (Water Utilities) for the replacement of the City's existing T1 telecommunications system with a radio communications system.

TASK 1 – Project Management

Services Provided by HDR:

- Project management and administration (Project setup)
- Budget and invoice management

Deliverables:

• Project Invoices

Meetings:

• None

TASK 2 – On-site Radio Path Studies

Services Provided by HDR:

- Management of the Radio Path Studies subcontract
 - On-site Wireless Data Communications Systems Analysis and Viability Survey to include the following services:
 - Analysis of proposed wireless network based upon 450 MHz radios
 - Temporary installation of system radio to confirm performance
 - Site suitability evaluation
 - Site evaluation of actual radio signal strength
 - Site specification recommendation for antenna systems
 - Summary report

Deliverables:

• Summary report

Communications System

Meetings:

• Meeting with City to review site access

TASK 3 – Radio Replacement Design Drawings

Services Provided by HDR:

- Create drawing bid set for radio communications system
 - o Site map of locations
 - o Modifications to Operational Building
 - o Modifications to Water Utilities Building
 - o Modifications to Water Towers
 - Site upgrades
- Internal QA/QC review of drawing bid set
- Issue to Owner for review
- Respond to any comments from the Owner
- Issue for Bid

Deliverables:

• Drawing Bid Set

Meetings:

• Review meeting with Owner to review Bid Set

TASK 4 – Radio Replacement Specifications

Services Provided by HDR:

- Create bidding documents for radio communications system
 - o Utilize City of Lee's Summit Front End and Division 1 specifications
 - o Technical specifications
- Internal QA/QC review of bidding documents
- Issue to Owner for review
- Respond to any comments from the Owner
- Issue for Bid

Deliverables:

Bidding documents

Meetings:

• Review meeting with Owner to review Bidding Documents

TASK 5 – Bidding Phase Services

Services Provided by HDR:

- Assist Owner with Bidding Phase Services
 - o Coordinate with Owner to distribute the bidding documents
 - o Answer Bidder's questions
 - o Prepare and distribute addenda
 - o Attend and assist at the Pre-bid Conference

- o Assist in the bid opening and evaluate the bids
- o Make a recommendation of award

Deliverables:

- Addenda
- Recommendation of Award

Meetings:

• Pre-bid Conference

TASK 6 – Construction Phase Services

Services Provided by HDR:

- Assist Owner with Construction Phase Services
 - o Assist with the administration of the Contract Documents
 - o Provide shop drawing reviews
 - o Respond to Contractor's Request for Information
 - o Assist the Owner with Change Orders
 - o Review Payment Applications
 - o Attend Construction Progress Review Meetings
 - o Conduct Construction Inspection
 - o Assist in the development of punch list at substantial completion
 - o Assist with closeout documentation

Deliverables:

- Contract Documents
- Construction administration documents

Meetings:

• Construction Progress Review Meetings

City of Lee's Summit, Missouri SCADA System - Radio Communications System Scope and Fee

		Pat Young	J. Riley Senior	K. Boyd	B. Reuss		Sr. Support			
		Senior PM	Electrical	Electrical	Technician	Admin	Staff	HDR Expenses	Subconsultants	Total
	Allowable Billing Rates per Client Contract	225.00	200.00	115.00	90.00	75.00	85.00			
	TASKS Task 1 - Project Management									
1	Project Management and Administration	8					4	\$50		\$2,190
2	Budget and invoice management	8					4	\$50		\$2,190
_	Subtotal Hours	16	0	0	0	0	8			
	Subtotal Dollars Total Task 1	3600	0	0	0	0	680	\$100	\$0	\$4,380 \$4,380
	Total Task I									94,500
	Task 2 - On-site Radio Path Studies									
1	On-Site Radio Path Study Subcontractor (Larson Data) HDR Subcontractor Management		8	8					\$24,500	\$24,500 \$2,520
	Subtotal Hours	0	8	8	0	0	0			\$2,320
	Subtotal Dollars	0	1600	920	0	0	0	\$0	\$24,500	\$27,020
	Total Task 2									\$27,020
	Task 3 -Radio Replacement Design Drawings									
1	Cover Sheet/Index			4	2					\$640
2	General Legands			4	2					\$640
3	Standard Details Existing System Architecture- Demo Plan		2	12	2 4					\$610 \$2,140
5	Revised System Architecture Revised System Architecture		2	12	4					\$2,140
	Site Map/Locations		2	20	10					\$3,600
	Operational Building- Demo and Sequencing Notes		2	16	4					\$2,600
	Water Utilities Building- Additions and Sequencing Notes Water Toward Additions and Sequencing Notes		3	16	4					\$2,600 \$2,570
	Water Towers-Additions and Sequencing Notes Site Upgrade Types 1 through 5- Details and Notes		4	14 50	8					\$2,570 \$7,270
	QA/QC Review		8	3	3			\$100		\$2,315
	Issue for Owner Review		1	4	4	8				\$1,620
	Respond to Owner Comments Issue for Bids		2	10 4	4	8		\$200		\$1,910 \$1,260
14	ISSUE FOR DICES Subtotal Hours	0	29	171	55	16	0	\$200		\$1,200
	Subtotal Dollars	0	5800	19665	4950	1200	0	\$300	\$0	\$31,915
	Total Task 3									\$31,915
	Task 4 - Radio Replacement Specifications									
1	26 05 00 Electrical Basic Requirements			2		1				\$305
2	26 05 13 Wire & Cable			4		2				\$610
3	26 05 27 Grounding			3		1				\$420
5	26 05 33 Racways & Boxes 26 43 13 Low Voltage Surge Protection Devices			3 4		2 2				\$495 \$610
	26 41 14 Lightning Protection System			4		2				\$610
7	27 21 00 Radios			16		4				\$2,140
	40 99 00 Instrumentation Surge Protection Devices		12	6		3		6100		\$915
9	QA/QC Subtotal Hours	0	12 12	42	0	17	0	\$100		\$2,500
	Subtotal Dollars	0	2400	4830	0	1275	0	\$100	\$0	\$8,605
	Total Task 4									\$8,605
	Task 5 - Bidding Phase Services									
1	Coordinate with the Owner for the distribution of the bidding documents		2			4		\$80		\$780
2	Answer bidder's questions		2	8				+20		\$1,320
3	Prepare and distribute addenda		2	8	4					\$1,680
4	Attend and assist at the Pre-bid Conference Assist in the public openings of bids and evaluate the bids per the City	2	4							\$1,250
	approval	2								\$450
6	Make recommendation of Award	<u>2</u> 6	10	17		4	0			\$750
	Subtotal Hours Subtotal Dollars	1350	10 2000	16 1840	360	8 600	0	80	0	\$6,230
	Total Task 5									\$6,230
	Task 6 - Construction Phase Services	4				2				d1 050
2	Assist the Owner in the administration of the Contract Documents Provide Shop Drawing reviews	4	8	40		24				\$1,050 \$8,000
	Respond to Contractor's Requests for Information		12	24		= •				\$5,160
4	Assist the Owner with Change Orders		4	8						\$1,720
5	Review Payment Applications	2	2	6				050		\$690 \$1.500
7	Attend Construction Progress Review Meetings Conduct Construction Inspection	2	2 4	6 20				\$50 \$50		\$1,590 \$3,150
8	Assist Owner in the development of punch list at substantial completion		4	20		2		\$50		\$3,300
9	Assist the Owner with closeout documentation	2	24	10.1	•	2				\$600
	Subtotal Hours Subtotal Dollars	8 1800	34 6800	124 14260	0	30 2250	0	150	0	\$25,260
	Total Task 6	1000		1.200						\$25,260
	Total Hours	30	93	361	59	71	8			622
Щ	Total Billing Amount	\$6,750	\$18,600	\$41,515	\$5,310	\$5,325	\$680	\$500	\$24,500	\$103,180

Estimated Project Fee

\$103,180