# LUMEN®

In response to:

## City of Ann Arbor Information Technology Department

Request For Proposal

RFP No.: 20-30

### **Water Treatment Plant Point-to-Point Wireless**



November 19, 2020

LUMEN<sup>®</sup>
Lumen Technolologies Group
100 CenturyLink Drive
Monroe, LA 71203



### D. Fee Proposal - 20 points

Fee schedules shall be submitted in a separate, sealed, envelope as part of the proposal. Fee quotations are to include the names, title, hourly rates, overhead factors, and any other relevant details. The proposal should highlight key staff and positions that would likely be involved with projects. Offerors shall be capable of justifying the details of the fee proposal relative to personnel costs, overhead, how the overhead rate is derived, material and time.

Lumen has provided the following pricing schedule with detailed information including the bill of materials. At the end of this pricing document there is a pricing summary of the different options proposed.

Part Number	Item Description	Qty	Unit Price	Extended Price
	Product			
119330110F1	POE POWER LINK. A two-unit radio link TX rate limited to 850Mbps, with one (1) Ethernet/PoE port, and one (1) combined RJ45/SFP port per radio. Total radio throughput is 1700Mbps (2 x 850Mbps). Includes one-year hardware warranty. Two (2) Wall/pole mounting brackets (IBR-ACBR3), and two (2) weatherized RJ45 connectors (IBR-AC-CO3) are included.	1	\$12,222.23	\$12,222.23
419326203F2US	CCS 60Ghz MetNet 1Gbps CPE, 90deg ANTENNA, -POE POWER, GREY/WHITE	8	\$ 885.17	\$ 7,081.36
119330171F1	Outdoor IP66/NEMA4-rated 90-264VAC Power over Ethernet midspan injector with pigtail and lightning suppression.	2	\$ 1,005.56	\$ 2,011.12
119330172F1	Pole mounting bracket for IBR-AC-PO4.	2	\$ 124.45	\$ 248.90
1702595F15	POE PROTECTOR INJECTOR for CCS CPE V2 Nodes	8	\$ 94.45	\$ 755.60
1901FWACATCOMTL1	Cat5 Shielded Cable (2000 ft) (Implementation Material)	1	\$ 1,127.78	\$ 1,127.78
1901FWACATCOMTL1	30 x Ground Kit for shield cables. Three (3) per cable run. (Implementation Material)	1	\$ 416.67	\$ 416.67
	Spares			
119330130F1	POE POWER RADIO. A radio TX rate limited to 850Mbps, with one (1) Ethernet/PoE port, and one (1) combined RJ45/SFP port per radio. Includes one-year hardware warranty. One (1) weatherized RJ45 connector (IBR-AC-CO3) is included.	4	\$ 8,886.67	\$ 8,886.67
419326203F2US	CCS 60Ghz MetNet 1Gbps CPE, 90deg ANTENNA, -POE POWER, GREY/WHITE	1	\$ 885.17	\$ 885.17
Shipping & Handling	Product Shipping & Handling including the Spares listed above	1	\$ 908.16	\$ 908.16
	Support (1 Year Option)			
1100AMFW30M1T1	ProCare Basic 1 Year Care Plan for CCS MetNet 60G Mesh Radios	8	\$ 77.78	\$ 622.24

DSR No: 663954 OMR No: R218696

# City of Ann Arbor Information Technology Department Water Treatment Plant Point-to-Point Wireless



Part Number	Item Description	Qty	Unit Price	Extended Price
1100-PROCTECHONL	5x8xNBD OST DISPATCH ONLY  * Annual Fee per radio - 1 year  * 5x8 Dispatch Support  * Coordination of next business day onsite support	10	\$ 466.67	\$ 4,666.70
1905MSFSVCOBHR01	Repair Call-out Rooftop (Business Hours)  * One Field Engineer  * Up to two (2) standard business hours onsite	Per Callout	\$ 444.45	Per Callout
1905MSFSVCOBHR02	Repair Call-out Tower (Business Hours)  * Four Tower Field Engineers  * Up to four (4) standard business hours onsite	Per Callout	\$ 5,000.00	Per Callout
1905MSFSVCOBHR03	Repair Extra-Hour Rooftop (Business Hours)  * One Field Engineer  * One (1) extra standard business hour onsite	Per Hour	\$ 188.89	Per Hour
1905MSFSVCOBHR04	Repair Extra-Hour Tower (Business Hours) * Four Tower Field Engineers * One (1) extra standard business hours onsite	Per Hour	\$ 1,000.00	Per Hour
	Support (3 Year Option)			
1100AMFW50M1T1	Per Unit Warranty Extension (1 year). Warranty extension for IBR-130X adds an additional 12 months to the standard warranty	2	\$ 1,240.00	\$ 2,480.00
1100AMFW30M1T3	ProCare Basic 3 Year Care Plan for CCS MetNet 60G Mesh Radios	8	\$ 300.00	\$ 2,400.00
1100-PROCTECHONL	5x8xNBD OST DISPATCH ONLY  * Annual Fee per radio - 1 year  * 5x8 Dispatch Support  * Coordination of next business day onsite support	30	\$ 466.67	\$14,000.10
1905MSFSVCOBHR01	Repair Call-out Rooftop (Business Hours)  * One Field Engineer  * Up to two (2) standard business hours onsite	Per Callout	\$ 444.45	Per Callout
1905MSFSVCOBHR02	Repair Call-out Tower (Business Hours)  * Four Tower Field Engineers  * Up to four (4) standard business hours onsite	Per Callout	\$ 5,000.00	Per Callout
1905MSFSVCOBHR03	Repair Extra-Hour Rooftop (Business Hours)  * One Field Engineer  * One (1) extra standard business hour onsite	Per Hour	\$ 188.89	Per Hour
1905MSFSVCOBHR04	Repair Extra-Hour Tower (Business Hours) * Four Tower Field Engineers * One (1) extra standard business hours onsite	Per Hour	\$ 1,000.00	Per Hour

### City of Ann Arbor Information Technology Department Water Treatment Plant Point-to-Point Wireless



Part Number	Item Description	Qty	Unit Price	Extended Price
-------------	------------------	-----	------------	-------------------

#### **Support Assumptions:**

- Assume next day response for onsite rooftop radios repairs.
- Assume best effort response for onsite tower radio repairs.
- 5x8 Dispatch Support.
- Customer will ensure field technicians have access to sites.
- Field Technicians will contact Customer's NOC when onsite.
- SLA is for next day onsite availability only. Issue repair or restoration SLA are not in scope.
- Assume spare parts will be available on site.

Services / Implementation				
1901FWACATSURV03	Pre-Construction Site Walk  * Joint site visit with end customers recommended  * Validate site type: rooftop, new pole, co-located or replacement  * Take photos of site location, existing equipment and surrounding areas  * Inventory existing equipment if applicable  * Determine the closest power source: streetlight vault, power company Point of Connection (POC), existing overhead drop, etc  * Determine probable trench route to Point of Connection (POC)  * Determine telco / fiber Point of Connection (POC) distance  * Determine if a structural analysis is required	6	\$ 1,444.45	\$ 8,666.70
1901FWACATDWG001	Construction Drawings Revision * Revi+G:Lse Construction Drawing (CD) and red- mark per site walk findings and solution requirements. (per revision)	6	\$ 994.45	\$ 5,966.70
1901FWACATBHDES1	Backhaul Radio Link Design  * Design and Engineer PtP backhaul links with 99.99% availability (min)  * Coordinate On-site Path and Site Survey (if needed - path and site survey cost not included)  * Verify utilization of existing radio and antenna  * Verify existing site configuration and spacing  * Build Bill of Material  * Design new radio and antenna placement  * Does not include support with radio/frequency license filing (if applicable)	5	\$ 1,450.00	\$ 7,250.00

DSR No: 663954 OMR No: R218696



Part Number	Item Description	Qty	Unit Price	Extended Price
1901FWACATCOLAB1	Radio Decommissioning (Tower/Monopole)  * Two (2) backhaul radio decom (tower)  * Power off equipment  * Decommission backhaul radio equipment per agreed procedure  * Remove cables  * Store removed equipment onsite or drop off at agreed location  * Dispose remaining materials	1	\$ 1,195.56	\$ 1,195.56
1901FWACATRDINT4	Backhaul Radio Installation (Tower/Monopole)  * One (1) backhaul radio per site  * Pick up and deliver equipment to site  * Install backhaul radio equipment per final approved Construction Drawing (CD)  * Run cables with labeling  * Powering radio and provisioning basic configuration  * Estimated pricing includes minor parts and consumable materials	2	\$ 5,444.45	\$10,888.90
1901FWACATCOLAB1	Radio Decommissioning (Rooftop)  * Eight (8) backhaul radio decom (rooftop)  * Power off equipment  * Decommission backhaul radio equipment per agreed procedure  * Remove cables  * Store removed equipment onsite or drop off at agreed location  * Dispose remaining materials	1	\$ 3,111.12	\$ 3,111.12
1901FWACATCPEGS1	CPE Radio Installation (Rooftop)  * One (1) backhaul radio per site  * Pick up and deliver equipment to site  * Install backhaul radio equipment per final approved Construction Drawing (CD)  * Run cables with labeling  * Powering radio and provisioning basic configuration  * Estimated pricing includes minor parts and consumable materials	8	\$ 955.56	\$ 7,644.48
1901FWACATLKALN1	Backhaul Link Alignment  * Align antennas on both ends of the link to ensure optimum signal strength as per path design  * Run speed test to validate throughput and error rate	1	\$ 2,888.89	\$ 2,888.89
1901FWACATINTSP1	Remote Integration * Support from ADTRAN experts who will assist the installation crews during configuration and integration	10	\$ 388.89	\$ 3,888.90

DSR No: 663954 November 19, 2020 | Page 4

OMR No: R218696

### **City of Ann Arbor Information Technology Department**

Water Treatment Plant Point-to-Point Wireless



Part Number	Item Description	Qty	Unit Price	Extended Price
1901FWACATPRMG01	Project Management  * Project Planning  * SOW Creation and Management  * Communication Plans and Reporting  * Issue Management  * Change Order Management  * Provide schedules for completion of deliverables.  NOTE: Schedules shall be agreed upon by both  ADTRAN and the City of Ann Arbor. Project  Management costs will be determined once scope is finalized.	40	\$ 138.89	\$ 5,555.60
1901FWACATCOLOG1	Mobilization Fee for tower crew	1	\$ 2,111.12	\$ 2,111.12

#### **Services / Implementation Assumptions:**

- Assume new radios will be installed on existing poles or attached directly to the tower. No additional sector frames, platforms or supports are needed.
- Cables will run on the same routes and, where available, us the same conduits already installed.
- Assumes ADTRAN can use existing rooftop penetrations / cable entry points no new penetrations will be required.
- Customer will provide existing construction drawing for redlining and review.
- Customer will be responsible for construction permitting for all sites.
- Assume there is clear line of sight for all links (No path survey is required)
- Assume existing radios will be decommissioned to make space for new radios. This will be coordinated as part of the implementation plan.

Pricing Summary	
Product	\$ 23,863.66
Spares	\$ 9,771.84
1 Year Support Option less per call/additional hour price	\$ 5,288.94
3 Year Support Option less per call/additional hour price	\$ 18,880.10
Services / Implementation	\$ 59,167.97
Shipping and Handling	\$ 908.16
1 Year Total less per call/additional hour	\$ 99,000.57
3 Year Total less per call/additional hour	\$ 112,591.73

DSR No: 663954 November 19, 2020 | Page 5 OMR No: R218696