

**HAMPSHIRE COUNTY COMMISSION
HAMPSHIRE COUNTY, WEST VIRGINIA
CAPON BRIDGE HYBRID FIBER OPTIC AND WIRELESS BROADBAND PROJECT
BID TABULATION
MONDAY, OCTOBER 7, 2019 AT 1:00 PM
Thrasher Project #010-00010**

Item	Qty.	Unit	Description	Henkels & McCoy, Inc. Blue Bell, PA WV #000379	
				UNIT PRICE	TOTAL COST
BASE BID					
1	1	EA	ZHONE MXK-Chassis-819 - MXK 8U 19" Chassis (Complete Assembly)	\$ 2,023.31	\$ 2,023.31
2	2	EA	MXK Uplink with 2 x 10G+8x1G T1/E1 CLK SFP/SFP+	\$ 5,678.11	\$ 11,356.22
3	3	EA	MXK-GPONX8-IO3 2 - MXK Line Card w/ 8 ports of GPON SFP Optics	\$ 4,542.49	\$ 13,627.47
4	24	EA	Zhone Transceiver - MXK-GPON-SFP-B+-RSSI Single fiber bi-directional data links application with 2.488Gbps downstream and 1.244Gbps upstream	\$ 449.62	\$ 10,790.88
5	12	EA	MXK-UPLINK-BLANK: Blank End Panel to cover unused Uplink Slot	\$ 80.93	\$ 971.16
6	10,380	LF	144 Strand Fiber Optic Cable - Single-Armor, Single-Jacket W/ Reduced Water Peak Glass (Corning® SMF28e® Enhanced Single Mode Fiber OR Equivalent)	\$ 1.85	\$ 19,203.00
7	4,200	LF	48 Strand Fiber Optic Cable – Single-Armor, Single-Jacket W/ Reduced Water Peak Glass (Corning® SMF28e® Enhanced Single Mode Fiber Compliant) OR Equivalent	\$ 0.75	\$ 3,150.00
8	5,040	LF	24 Strand Fiber Optic Cable – Non-armored, Single Jacket with Corning® SMF28e® Enhanced Single Mode Fiber Glass OR Equivalent	\$ 0.46	\$ 2,318.40
9	1,440	LF	12 Strand Fiber Optic Cable – Single Armor, Single Jacket with ALLWAVE ESMF Glass (Corning® SMF28e® Complaint) OR Equivalent	\$ 0.39	\$ 561.60
10	34	EA	3M™ SLiC™ Aerial Terminal Closure SLFT-530-B-1A-08-EPXX-E-P	\$ 445.26	\$ 15,138.84
11	3	EA	Clearfield FieldSmart® Fiber Delivery Point (FDP) Wall Box	\$ 256.93	\$ 770.79
12	13	EA	3M™ Fiber Optic Splice Closure: Model 2178 OR Equivalent	\$ 488.16	\$ 6,346.08
13	16	EA	3M™ Cable Addition Kit 2181-LS: 12 Fibrlok Splices 24 Discrete Fusion Splices (3.0 mm x 60 mm Heat Shrink Sleeves) and 12 Mass Fusion Splices (12 fibers each)	\$ 110.48	\$ 1,767.68
14	5	EA	Tessco or Oldcastle 30"x36"x48" Open Base Underground Inspection Vault OR Equivalent	\$ 852.35	\$ 4,261.75

15	12	EA	Harger 360PP 10"x24" PVC Well w/HDPE Cover OR Equivalent Flowerpot	\$ 134.85	\$ 1,618.20
16	5	EA	ProFORM Vault Pedestal or Charles Fiber Distribution Point™ Interconnect Pedestal OR Equivalent	\$ 763.30	\$ 3,816.50
17	12	EA	CraftSmart Fiber Protection Vault (FPV) OR Equivalent	\$ 432.54	\$ 5,190.48
18	12	EA	RLH Fiber Marker Post OR Equivalent	\$ 38.17	\$ 458.04
19	60	EA	Fiber Optic Cable Markers for Wooden Poles (designating Hampshire County Fiber Optic Cable)	\$ 2.54	\$ 152.40
20	1,939	LF	Fiber Optic Conduit: 1.25-inch SDR 11 Orange HDPE Smoothwall Conduit with Pull Tape	\$ 0.70	\$ 1,357.30
21	1,939	LF	Tracer Wire Insulated 12 AWG, 30-mil Polyethylene Solid Copper	\$ 0.17	\$ 329.63
22	10	CY	Handhole Installation Bedding and Backfill (6-inch granular base of compacted crushed rock or granular materials; at which 100% passes a 3/8 inch sieve; and a max of 5% passes a number 10 sieve)	\$ 19.08	\$ 190.80
23	1	EA	Clearfield Fieldsmart 432 Port PON Cabinet with 12-inch Riser, Fiber Patch Only, loaded with 384 SC/APC Distribution Ports, 2 x 48 and 2 x144 Fiber, 100-ft Fiber OSP Ribbon non-rated non- armored with 48 OSP Feeder Fiber Pigtail in a Clearview® Blue Cassette OR Equivalent	\$ 10,304.57	\$ 10,304.57
24	1	EA	Clearfield Fieldsmart 432 Port PON Cabinet with 12-inch Riser, Fiber Patch Only, loaded with 384 SC/APC Distribution Ports, 1 x 24 and 1 x96 Fiber, 100-ft Fiber OSP Ribbon non-rated non-armored with 48 OSP Feeder Fiber Pigtail in a Clearview® Blue Cassette OR Equivalent	\$ 10,431.79	\$ 10,431.79
25	12	EA	Clearfield® WaveSmart Ruggedized Splitter 1 x 16 Connection Type SC/APC OR Equivalent	\$ 617.00	\$ 7,404.00
26	2	EA	PenCell below Grade Vault - 30" x 48" x 36" Split HDPE Lid with Hex Bolts and cut out for Clearfield Fieldsmart Cabinets (specification above), Straight Wall, Green Color	\$ 1,035.55	\$ 2,071.10
27	14,198	LF	Removal of Existing Cable Plant per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c effective September 17, 2001, as Revised.	\$ 1.62	\$ 23,000.76
28	14,229	LF	Aerial Fiber Optic Cable Installation per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c effective September 17, 2001, as Revised.	\$ 5.58	\$ 79,397.82
29	100	LF	Trenching per Bulletin 1753F-150, Specifications and Drawings for Construction of Direct Buried Plant, Rural Utilities Service Form 515a, as Revised	\$ 39.04	\$ 3,904.00
30	100	LF	Boring per Bulletin 1753F-150, Specifications and Drawings for Construction of Direct Buried Plant, Rural Utilities Service Form 515a, as Revised	\$ 62.00	\$ 6,200.00

31	1,939	LF	Direct Bury / Vibratory Plow per Bulletin 1753F-150, Specifications and Drawings for Construction of Direct Buried Plant, Rural Utilities Service Form 515a, as Revised.	\$ 14.51	\$ 28,134.89
32			Bid Item Removed		\$ -
33	2	EA	Make Ready – Light: installation specifications per FirstEnergy One Touch Make Ready (OTMR) Minimum Requirements Guide effective May 20, 2019	\$ 143.73	\$ 287.46
34	3	EA	Pole Replacement (or new pole installation) at Contractor’s Expense to be coordinated with First Energy and Hampshire County GIS	\$ 3,553.16	\$ 10,659.48
35	34	EA	Handhole Installation per RUS Bulletin 1753F-150 - Specifications and Drawings for Construction of		\$ 24,765.36
36	700	EA	Direct Buried Plant, RUS Form 515a, as Revised	\$ 30.12	\$ 21,084.00
37	40	EA	Splicing Installation per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 227.94	\$ 9,117.60
38	5	EA	Ribbon Resplicing to Smoky Hollow - Splicing current ribbon fibers back to Smoky Hollow Demark per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 397.53	\$ 1,987.65
39	1	EA	Resplicing to Smoky Hollow Reentry: Reentry - Splicing current ribbon fibers back to Smoky Hollow Demark per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 303.23	\$ 303.23
40	4	EA	Ribbon Splicing (additional as needed) per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 530.04	\$ 2,120.16
41	13	EA	Placement and Installation of 530-4 Terminals per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 795.06	\$ 10,335.78
42	16	EA	Placement and Installation of 2178 Splice Enclosures per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 106.01	\$ 1,696.16

43	5	EA	Placement and Installation of 2181 Cable Addition Kits per Bulletin 1753F-152 - Specifications and Drawings for Construction of Aerial Plant, RUS Form 515c, and Bulletin 1753F-401 (PC-2) RUS Splicing Standard, and Section 1755.200 RUS standard for Splicing Copper and Fiber Optic Cables, as Revised.	\$ 1,237.79	\$ 6,188.95
44	50	EA	Preparation and Installation of ProFORM Vault Pedestal or Charles Fiber Distribution Point™ Interconnect Pedestal OR Equivalent (specified above)	\$ 31.80	\$ 1,590.00
45	50	EA	OTDR Testing per Rural Utilities Service Bulletin 1753F-601a (PE-90a) Minimum Performance Specification for Fiber Optic Cables (for Backbone, Feeder and Distribution Plant), as Revised.	\$ 31.80	\$ 1,590.00
46	50	EA	Power Testing per Rural Utilities Service Bulletin 1753F-601a (PE-90a) Minimum Performance Specification for Fiber Optic Cables (for Backbone, Feeder and Distribution Plant), as Revised.	\$ 7.95	\$ 397.50
47	8	HR	Provide Test Reports documenting results of OTDR and Power Testing as required to demonstrate proper handling and installation of materials. Report format and content to be approved in advance by the Hampshire County GIS Coordinator.	\$ 202.38	\$ 1,619.04
48	8	HR	Provide Certified Cable Splicer with Installation Equipment to supplement installation. These services must be approved in advance by the Hampshire County GIS Coordinator.	\$ 163.61	\$ 1,308.88
49			Bid Item Removed		\$ -
50			Bid Item Removed		\$ -
51	3	EA	FuseConnect Fusion Spliced Field Installable Connectors: AFL's FuseConnect OR Equivalent to yield true APC performance for SC/APC and LC/APC configurations, and compliant to Generic Requirements for Single-mode Optical Connectors and Jumper Assemblies (GR-326-CORE) standard.	\$ 60.69	\$ 182.07
52			Bid Item Removed		\$ -
53	3	EA	Samlex 100W Inverter	\$ 26.98	\$ 80.94
54	3	EA	Samlex SEC 1230-UL Battery Charger	\$ 276.20	\$ 828.60
55	12	EA	12v 100Ah Rechargeable Sealed Lead Acid Battery	\$ 474.03	\$ 5,688.36
56	3	EA	DC Voltage Monitoring Device	\$ 309.60	\$ 928.80
57	3	EA	Unmanaged Rack Mount PDU (60)	\$ 93.78	\$ 281.34
58	4	EA	Ubiquiti Networks Airmax 5ghz AC Sector Antenna, 60 Degrees AM - 5AC21-60	\$ 245.37	\$ 981.48
59	4	EA	Ubiquiti Rocket 5AC Prism Gen2 AirMAX AC 5GHz BaseStation 500+ Mbps with airPrism Technology: RP-5AC-Gen2-US:	\$ 289.04	\$ 1,156.16
60	2	EA	Ubiquiti AF-5U High-Band 5 GHz Point-to-Point wireless platform: AF5U	\$ 1,413.11	\$ 2,826.22
61	2	EA	Ubiquiti AF-5XHD-US High-Band 5 GHz airFiber® XHD modular airFiber radio system:	\$ 490.73	\$ 981.46

62	1	EA	RF Armor 3 Gang Cluster Mount with Armor Shield Kit and associated Mounting Hardware (Contractor to verify and obtain that all mounting equipment necessary for Antenna Installation).	\$	449.62	\$	449.62
63	1	EA	Nano Switch™ Ubiquity Outdoor 4-Port PoE Passthrough Switch - Model N-SW OR Equivalent	\$	51.39	\$	51.39
			TOTAL BID			\$	385,737.15

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