

Items in red box already completed via Massachusetts Community Compact Grant

Town				Hampden
Overhead distribution			miles	64.20
Underground distribution			miles	7.10
Estimated Pole Count				1979
Physical Dwelling Units (PDU's)				1980
PDU's			per mile	27.8
Anticipated Take rate				50%
Anticipated Subscribers				990
Pole Surveyor				WGE
Electric Company				N Grid
Make Ready	UOM	Rate	Estimate	Estimated Costs
National Grid Fees				
Pole application Processing	per pole	\$69.06	1979	\$136,669.74
Pole application Charge (200 poles per)	per application	\$265.00	10	\$2,650.00
Verizon Fees				
Pre-Construction Survey Charge 11-200 Poles	per pole	\$12.60	1979	\$24,935.40
Pre-Construction Survey Travel Time (Based on 75 Poles per Day)	per day	\$255.15	27	\$6,889.05
Pole Application Licensing Fee	one time	\$425.00	1	\$425.00
WGE Fees				
Pole applications required (WGE)	per pole	\$ 25.00	1979	\$ 49,475.00
Pole Survey Fees (rideout by WGE)	per foot	\$ 0.10	338976	\$ 33,897.60
Total, Pole Application Fee				\$254,941.79
Make ready per pole (estimated), assumption 100% requiring work	average per pole	\$ 1,000.00	1979	\$ 1,979,000.00
Total, Make Ready				\$2,233,941.79
Engineering, Design, and Field Services	UOM	Rate	Estimate	Estimated Costs
Planning and project setup	per foot	\$ 0.01	376464	\$ 3,764.64
Walkout Base Maps Route and Addressing (Mapping) Aerial and Underground	per foot	\$ 0.10	376464	\$ 37,646.40
Detailed Buried path mapping (visible utilities and obstructions)	per foot	\$ 0.18	37488	\$ 6,747.84
MDU Walkout	per unit	\$ 4.02	66	\$ 265.32
Draft Route (CAD) Aerial and Underground	per foot	\$ 0.04	376464	\$ 15,058.56
Draft Route MDU Adder (CAD)	per unit	\$ 0.90	2000	\$ 1,800.00
Detailed Buried path mapping (visible utilities, structures and offsets)	per foot	\$ 0.12	37488	\$ 4,498.56
FTTX Design	per sheath foot	\$ 0.10	376464	\$ 37,646.40
Microduct Design	per foot	\$ 0.06	37488	\$ 2,249.28
Field walkout engineer, misc, lump sum, 20 hours	per hour	\$ 78.00	120	\$ 9,360.00
Out of scope Design changes or revisions, lump sum, 40 hours	per hour	\$ 102.00	120	\$ 12,240.00
WCF Fiber Engineer: QA/QC Design Validation				\$ 18,894.50
WCF Project Engineer: Network Proofing, Project Management and Oversight				\$ 23,172.50
WCF GIS Engineering: GIS analysis, system management				\$ 5,393.85
Total, Engineering, Design and Field Services				\$ 178,737.85
Cost per Passing				\$ 90.27
Construction	UOM	Rate	Estimate	Estimated Costs
Optical Network Terminals (ONT's)		\$ 155.39	990	\$ 153,836.10
Service Drops to the Premise				\$ 911,928.60
Materials		\$ 231.00	990	\$ 228,690.00
Overhead Labor		\$ 539.00	743	\$ 400,207.50
Underground Labor		\$ 1,143.56	248	\$ 283,031.10
Construction Labor				\$ 3,491,801.50
Overhead Contract Labor	per mile	\$ 20,670.00	64.20	\$ 1,327,014.00
Underground Contract Labor	per mile	\$ 79,200.00	7.10	\$ 562,320.00
Distribution Network Materials	per mile	\$ 22,475.00	71.3	\$ 1,602,467.50
Police Detail (2x/day, expected network cabling construction/per FSA)	per detail	\$ 520.00	142.6	\$ 148,304.00
Fiber Optic Hub with Generator				\$ 95,645.00
Network Active and Passive Components				\$ 185,600.00
Construction Project Management and Contractor Oversight		10.00%		\$ 498,711.52
Total Construction				\$ 5,485,827
Cost per Passing				\$ 2,770.62
Program Management		Rate	Estimate	Estimated Costs
Construction Contractor Procurement		1.25%	2572573	\$ 32,157.16
Material Management and Procurement		4.32%	2266239	\$ 97,901.51
Westfield General Contractor Fee		10.00%		\$ 548,582.67
Total Program Management				\$ 678,641
Full Build; Engineering, Design, Field Services FTTH Construction, Service Fullfillment - Grand Total				\$ 8,577,148
Cost per Passing				\$ 4,331.89