

November 20, 2018**Quote #: Q-WCHI-12586****Mike Baker
City of Aurora
44 E Downer Place
Aurora IL 60507****RE: COA- HH to Light Pole & Eola Duct , HH's & Fiber**

Mr. Baker,

Thank you for the opportunity to submit the following proposal for the project referenced above.

Engineering:**IR Labor:**

- Generate applications to each utility in order to start the processes of outlining and identifying existing utilities in the public way, which may conflict with proposed conduit construction (Municipality, State or County information)

Walkout/GPS Survey (0' to 75' ROW):

- ASCE level C-Utilize conventional surveying data collection methods and multiple person survey crew; survey, confirm and locate the existing topography, surface appurtenances of existing subsurface utilities, utility surface

CAD Design:

- Outline & apply all related property lines, physically identifiable infrastructure, additional utilities outlined on "IR", proposed running lines, due diligence of property vs. public way (not including title search)

Permitting:

- Prepare applications, submit, track coordinate changes and pick up permits from the municipality/City and process for permit under the proposed contractors name. Send copy to owner and contractor for records Special Permitting: Generate/CAD horizontal profile view, apply for authorization to encroach existing easement, co-locate of premises, work directly with agencies (State, R&R H20, Pipelines, US routes etc.) to outline parameters of permit base.

Asbuilts:

- Reflect changes made during the construction process, recording differences between the original design and the completed structure

Construction:

1. Furnish & install 306 ft of (6) 2" ducts, or pvc from the existing COA HH 0+00 following proposed path to the new HH at station 3+06
2. Furnish & install 120 ft of (6) 2" ducts, or pvc from station 3+06 to newly placed pole/cabinet at 4+23
3. Furnish & install (1) 36" x 60" HH with locate ped at station 3+06
4. Furnish & install (1) 36" x 60" HH with locate ped at station 4+23
5. Furnish & install (6) 2" ducts, or (1) 4" conduit from the new HH at 3+06 south to the existing CME MH
6. Core CME MH to accept 6 conduits, or (1) 4" conduit Furnish & install seal tight conduit from the HH to existing cabinet at station 4+23 Furnish & install 120 ft of (1) 2" 3 cell maxcell from HH 3+06 to 4+30
7. Furnish & install 200 ft. of (1) 48 count SM fiber cable from the cabinet at station 4+23 to the HH at 3+06
8. Furnish & install (1) FDP (1U or Wic-02P wall mount) with (1) 12 count bulkhead and (1) 12 count pigtail in the existing cabinet at station 4+30
9. Terminate up to (12) fibers in new FDP at 4+30
10. Furnish & install 400 ft of 864 count OFNR SM fiber from station 3+06 to the East MMR
11. Furnish & install (1) 4U FDP with splice bracket, (1) 24 count bulkhead, (1) 12 count pigtail and tray
12. Furnish & install (1) 600 D splice case in the new HH at 3+06
13. Prep the new 864 into the new FDP and terminate (12) fibers at the new panel
14. Prep the new 864 count cable and the new customer 48 count into new splice case in HH 3+06
15. Splice up to (12) fibers from the customer 48 count to the new 864 count
16. Furnish & install approximately 1400 ft of (6) 2" ducts, or pvc from the existing COA HH 4+23 following proposed path and ending at SE corner of Eola/ Diehl 18+08
17. Hydro-Excavate gas main at (2) locations
18. Furnish & install (1) 24" x 48" HH with locate ped at station 4+89 next to COA pole on Deihl Rd
19. Furnish and install (1) CBOX on the new COA pole at 4+89
20. Core hole in back of box through the pole
21. Furnish & install (1) 1.25" duct from the 4+89 HH to the new COA pole
22. Furnish & install (1) 36" x 60" HH with locate ped on the west side of Eola before crossing to east
23. Furnish & install (1) 36" x 60" HH with locate ped at the SE corner of Eola & Diehl
24. Furnish & install (1) 36" x 24 x 30" HH with locate ped at a proposed pole outside of Scientel on Eola
25. Furnish and install (1) CBOX on the proposed pole on Eola Rd.
26. Core hole in back of box through the pole
27. Furnish & install seal tight conduit from the HH to the pole
28. Core hole in base of pole and connect seal tight conduit to pole
29. Furnish & install 2100 ft. of 288 count SM fiber cable from the COA HH 0+00 east to the SE corner of Diehl & Eola 18+08
30. Midsheath the cable in the HH next to light pole at 4+30
31. Furnish & build (1) splice case
32. Install a lateral cable from the HH up the pole
33. Splice 6 fibers for pole lateral
34. Furnish & install (1) SPH-01P, with (1) 6 count bulkhead, (1) 6 count pigtail and terminate (6) fibers in the new CBOX
35. Midsheath the cable in the HH next to light pole on Eola for Scientel
36. Furnish & build (1) splice case
37. Install a lateral cable from the HH up the pole
38. Splice 6 fibers for pole lateral
39. Furnish & install (1) SPH-01P, with (1) 6 count bulkhead, (1) 6 count pigtail and terminate (6) fibers in the new CBOX
40. Prep the new 288 count cable into an existing splice case and splice (6) fibers in the COA HH at 0+00
41. Midsheath the 288 count cable in the HH at 3+06 and prep into the existing 864 case
42. Splice (12-24) fibers from the the 288 to the new 864 count cable
43. Furnish (2) 12 count pigtails with (1) 24 count bulkhead, (1) tray and terminate (24) fibers in the COA patch panel

44. OTDR & power meter test from the COA patch panel to the Scientel pole and to the COA pole
45. Provide test results
46. Provide construction equipment, Hydro Vac, truck, bucket truck, splice trailer, fusion splicer, OTDR's & power meters

Description	Hours/Qty	Unit	Rate	Cost
Project Manager	50	Hours	\$105.00	\$5,250.00
Foreman - ST	40	Hours	\$105.00	\$4,200.00
Foreman - OT	32	Hours	\$157.50	\$5,040.00
Splicer - ST	48	Hours	\$92.00	\$4,416.00
Splicer - OT	24	Hours	\$138.00	\$3,312.00
Truck-Standard	56	Hours	\$12.00	\$672.00
Truck Bucket per hour	8	Hours	\$25.00	\$200.00
Splicer - Single	32	Each	\$15.50	\$496.00
Trailer - Splicing	24	Hours	\$28.00	\$672.00
OTDR	32	Each	\$8.00	\$256.00
Power Meter	16	Each	\$8.00	\$128.00
Labor & Equipment				\$24,642.00
864 Count fiber	400	Each	\$10.00	\$4,000.00
288 count fiber	2,100	Each	\$3.65	\$7,665.00
FDP 1U, bulkhead, pigtail, splice tray	1	Each	\$313.90	\$313.90
FDP 4U, bulkhead, pigtail, splice bracket & Tray	1	Each	\$625.00	\$625.00
Splice cases with trays	3	Each	\$460.00	\$1,380.00
CBOX for Aurora pole	1	Each	\$480.00	\$480.00
Small FDP with pigtail & bulkhead at CBOXes	2	Each	\$260.00	\$520.00
NTI Fiber Materials				\$14,983.90
IR Labor	1	Each	\$359.00	\$359.00
Walkout/GPS Survey (0' to 75' ROW) Unit Is LF	1,800	Each	\$1.20	\$2,160.00
CAD Design Unit is LF	1,800	Each	\$1.42	\$2,556.00
Permitting	1	Each	\$1,190.00	\$1,190.00
Asbuilts-Unit is LF	1,800	Each	\$0.50	\$900.00
Engineering Total				\$7,165.00
Construction Labor	640	Each	\$139.99	\$89,593.60
Construction Labor				\$89,593.60
Service Truck	120	Each	\$10.00	\$1,200.00

Description	Hours/Qty	Unit	Rate	Cost
Dump Truck	120	Each	\$15.00	\$1,800.00
Flatbed boom truck	120	Each	\$20.00	\$2,400.00
Hydro Vac	120	Each	\$25.00	\$3,000.00
Mini Excavator	120	Each	\$20.00	\$2,400.00
Skid Steer	120	Each	\$20.00	\$2,400.00
Bore Machine	70	Each	\$75.00	\$5,250.00
Poly Duct Trailers	70	Each	\$5.69	\$398.30
Construction Equipment				\$18,848.30
2" Conduit	10,800	Each	\$0.78	\$8,424.00
60" x 36" Hand hole	6	Each	\$1,530.00	\$9,180.00
36 x 24" Hand hole	1	Each	\$816.00	\$816.00
Locate peds	7	Each	\$75.00	\$525.00
Gravel by the ton	10	Each	\$30.00	\$300.00
Construction Materials				\$19,245.00
Traffic Control, arrow board sinage and cones per hour	160	Each	\$22.87	\$3,659.20
Traffic Control				\$3,659.20
Sub Total:				\$178,137.00
Equipment & Labor Total:				\$178,137.00

Notes:

- **Work to be completed in quarter 1 of 2019 weather permitting**
- **There will be a 4% increase on all material, and construction labor for work in quarter 1 of 2019**
- **NTI labor and equipment rates will remain the same per Kane County/COA contract agreement**
- **All work outside of the CME fence will take place during normal business hours**
- **All work inside the CME fence will take place during off peak hours**
- **Conduit installation will consist of boring and open excavation due to the amount of utilities in the proposed route**
- **Restore all landscape upon completion**
- **Excludes concrete and asphalt excavations**
- **All spoils will be delivered to the City of Aurora, for disposal by Aurora**
- **Any obstructions in the route will be removed and discarded on a T&M basis**
- **Fiber will be left coiled in the SE Diehl/Eola HH**
- **Proposed pole on Eola will be by others**
- **Does not include permission from CME to enter their MH with conduits**

We appreciate the opportunity to provide your company with a proposal and hope to work with you on this project. Should you have any questions or if we can be of further assistance, please call me at the number below.

Sincerely,

Rick Danca

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