



Exhibit L - High Cost project Worksheet (NOFA #008)

Purpose:

This form, labeled “Exhibit L – High-Cost Project Worksheet,” requires an Applicant to justify its average cost per passing when the cost per passing resides within the top 25% of all applications submitted to NOFA 8 (“High-Cost Threshold”).

It has been determined by the Office that the Application submitted falls within the High-Cost Threshold and seeks justification for the cost per passing indicated within the Core Application. The Office may use this information to determine the sufficiency of the cost and whether to disqualify an application exceeding the High-Cost Threshold.

Separate High-Cost Thresholds have been generated for wireless and wireline delivery platforms.

Applicants must provide additional information to the Office to justify the high deployment costs of their proposed project. This information may include a narrative (one page or less) describing contributing or exacerbating factors leading to the estimated total project costs as identified within the Core Application.

Organization Name: Harmony Telephone Company

Is rurality a contributing factor to high cost? If yes, please explain how the rurality of your deployment is contributing to high cost.

Rurality is a key component to this comprehensive cost analysis conducted by Finley Engineering. High level engineering designs approximate a total of 91.3 miles with only 158 eligible service locations; a ratio of 1.73 subscribers to every route mile indicates the area is extremely rural, furthering the need for long stretches of mainline distribution, longer drops to the household and more electronics such as pedestals spread across the proposed network. Additionally, many of the locations are requiring drops that are longer than normal, further contributing to the high cost per passing. Harmony Telephone Company interpreted the ITQ and V5 mapping process as an opportunity to identify rural areas in Iowa similar to the low-density process in Minnesota. The funds requested in the broadband intervention zones of 68, 88, and 91 in the Howard projects are necessary to complete this project as without this process, it would be challenging to make a business case for this construction project given its rurality. Harmony Telephone Company is committed to serving the residents of Iowa regardless of rurality and has made lasting and frequent commitments to the betterment of rural broadband in the State of Iowa.

Is topography a contributing factor to high cost? If yes, please explain how the topography of your project area is contributing to high cost.

The area is notorious for its difficult geologic and topographic terrain which has long been a deterrent for contractors and ISPs in the immediate area. Fiber being buried at traditionally 18-36" will have to be dug through a Bedrock of Limestone, Dolomite, and a mixture of both. The topsoil's in this area range from soft loamy soils and clays from 0-60 sometimes 80" deep, however the shallow areas range around 18-24" of topsoil's before hitting the Limestone beds. Attached are geologic maps in this region of Iowa to further the need for high-cost boring processes for both material and labor. The area used to be glacial ice that melted, producing large deposits of sedimentary limestone and shale both of which allow for increased rock percentages in both labor and material as drill bits are worn quickly and labor is long.

We estimated 9% of cable footage will be bored for creeks & waterways. Our NOFA007 Winneshiek project as staked came in at 12% cable footage for this itemized expense. This project includes 2% of cable footage included for heavy rock such as limestone at \$72 per ft. Winneshiek as staked came in at 3% cable footage. Regarding cobble and other softer rock, 3% of cable footage was included at a price point of \$26.00. Winneshiek as staked came in at 5% cable footage. Harmony is also working in partnership with MiEnergy to utilize aerial builds to help minimize costs in this rugged terrain. This unique partnership will deploy lower cost quality networks to MiEnergy's electric cooperative members. Attached are project maps and preliminary budgets to justify these high network costs.

Is the cost of the technology being used a contributing factor to high cost? If yes, please explain the technology being used and why this lends to high cost.

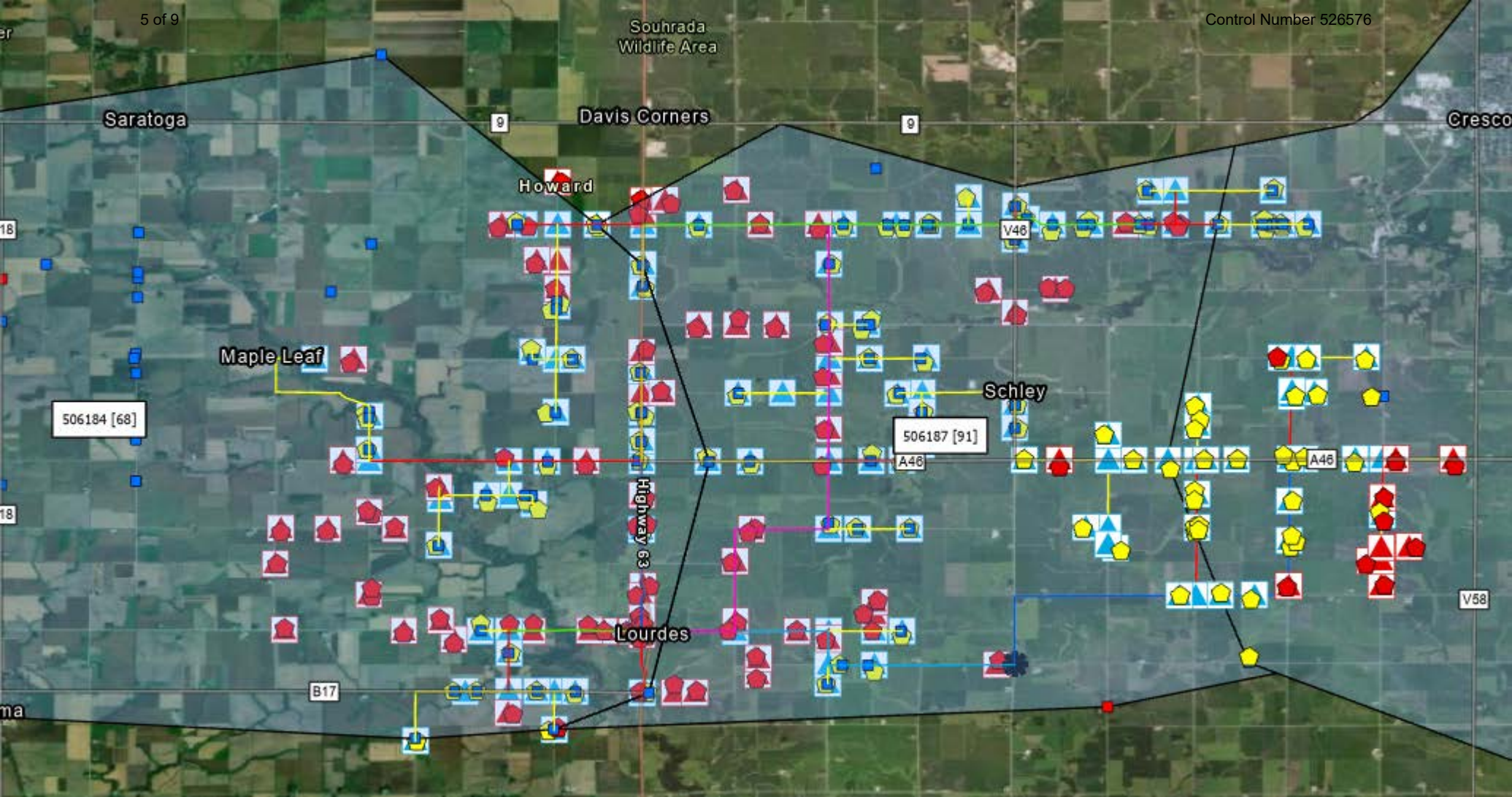
The proposed network is an FTTP XGS-PON network scalable to 10G/10G shared over a 1X32 split ratio. The rugged terrain makes a FTTP network the only viable way to deliver 100Mbps and above service to all locations in the area simultaneously. The downside is that fiber is the most expensive type of network to deploy, the rates for material, and labor associated with the installation of this network come from recent bids from the Winneshiek project that occurred in NOFA007 in a similar region of Iowa combined with other recent area projects. Decade high inflation, inventory availability concerns, and workforce shortages have all attributed to higher costs for similar goods and services juxtaposed to just last year. We have attached a unit cost summary, as well as the previous NOFA007 bid that was referenced indicative of corresponding percentages and pricing sheets for further analysis from the office. This project budget includes a small contingency rate built into its formula to account for these cost considerations, as well as accounting for future increase in both labor and material. Harmony works with Finley Engineering Inc. to develop designs and budgets for all of their projects. Attached are the high-level designs for this project.

Does your project contain a significant amount of Middle Mile that is contributing to high cost? If yes, please explain the distance and approximate location where your middle mile is coming from, the estimated cost of the middle mile portion of your project, and any other relevant information.

There is not a significant need for middle mile construction under this proposed project due to the proximity of Harmony Telephone's completed, ongoing and awarded projects in the immediate area. The close proximity to prior USDA ReConnect 2, NOFA003, and NOFA007 awards uniquely positions Harmony Telephone Company to build on existing mainline, employ dig once techniques, deploy resources and labor across projects, and identify potential network meet points in the immediate area. Middle mile and mainline costs are expected to decrease due to established partnerships with MiEnergy Electric Cooperative to maximize the use of ADSS aerial assets in the power space, when necessary, as a cost saving mechanism that can also lengthen the construction period window.

Applicants may also provide any additional information, documents or data sets that might further justify the High Cost of the proposed project.

All narrative and additional information should be submitted in a single PDF format named as:
“Application Number -Applicant Name – Exhibit L.” Email the completed PDF to
ociogrants@iowa.gov.



BIZ 68, 88, 91 TOTAL

| | Labor | Material | Rt Miles | Subs | Total |
|-----------------------|--------------------|--------------------|----------|------|---------------------|
| MAINLINE DISTRIBUTION | \$5,143,398 | \$1,024,020 | 91.3 | 158 | \$ 6,167,418 |
| SEBO4 | \$ 544,328 | \$ 31,082 | | | \$ 575,410 |
| NID,GROUND, & SPLICE | \$ 56,536 | \$ 22,470 | | | \$ 79,006 |
| Cutover | \$ 63,345 | \$ 21,115 | | | \$ 84,460 |
| Electronics | \$ 9,745 | \$ 220,521 | | | \$ 230,266 |
| Permitting | \$ 1,900 | \$ - | | | \$ 1,900 |
| WEST SCHLEY | \$5,819,252 | \$1,319,208 | | | \$ 7,138,460 |
| | | | | | |
| | | | | | |
| | | | CORE APP | | \$ 7,138,459.95 |
| | | | | | \$ - |

INCREASE
5% 5%
2024

2023 CONTRACTS

| | LABOR | MATERIAL | LABOR | MATERIAL |
|---------------------------------|--------------------|--------------------|-----------|-------------|
| BA23 | \$ 49.35 | \$ 47.25 | \$ 47.00 | \$ 45.00 |
| BDO5A | \$ 357.00 | \$ 598.50 | \$ 340.00 | \$ 570.00 |
| BM2(5/8)(8) | \$ 28.35 | \$ 39.90 | \$ 27.00 | \$ 38.00 |
| MISC | \$ 5.00 | \$ 5.00 | \$ 5.00 | \$ 5.00 |
| PED,POLE & GROUNDING | \$ 439.70 | \$ 690.65 | | |
| BFO12W | \$ 3.15 | \$ 0.58 | \$ 3.00 | \$ 0.55 |
| BFO12(D) | \$ 1.45 | \$ 0.58 | \$ 1.38 | \$ 0.55 |
| BFO12I | \$ 1.45 | \$ 0.58 | \$ 1.38 | \$ 0.55 |
| BFO12IE | \$ 1.97 | \$ 0.58 | \$ 1.88 | \$ 0.55 |
| BFO24W | \$ 3.15 | \$ 0.58 | \$ 3.00 | \$ 0.55 |
| BFO24(D) | \$ 1.45 | \$ 0.63 | \$ 1.38 | \$ 0.60 |
| BFO24I | \$ 1.45 | \$ 0.63 | \$ 1.38 | \$ 0.60 |
| BFO24IE | \$ 1.97 | \$ 0.63 | \$ 1.88 | \$ 0.60 |
| BFO48W | \$ 3.15 | \$ 0.74 | \$ 3.00 | \$ 0.70 |
| BFO48(D) | \$ 1.45 | \$ 0.74 | \$ 1.38 | \$ 0.70 |
| BFO48I | \$ 1.45 | \$ 0.74 | \$ 1.38 | \$ 0.70 |
| BFO48IE | \$ 1.97 | \$ 0.74 | \$ 1.88 | \$ 0.70 |
| BFO96W | \$ 3.15 | \$ 1.16 | \$ 3.00 | \$ 1.10 |
| BFO96(D) | \$ 1.58 | \$ 1.16 | \$ 1.50 | \$ 1.10 |
| BFO96I | \$ 1.58 | \$ 1.16 | \$ 1.50 | \$ 1.10 |
| BFO96IE | \$ 2.50 | \$ 1.16 | \$ 2.38 | \$ 1.10 |
| BFO144W | \$ 3.15 | \$ 1.63 | \$ 3.00 | \$ 1.55 |
| BFO144(D) | \$ 1.58 | \$ 1.63 | \$ 1.50 | \$ 1.55 |
| BFO144I | \$ 1.58 | \$ 1.63 | \$ 1.50 | \$ 1.55 |
| BFO144IE | \$ 2.50 | \$ 1.63 | \$ 2.38 | \$ 1.55 |
| BFO288W | \$ 3.15 | \$ 2.63 | \$ 3.00 | \$ 2.50 |
| BFO288(D) | \$ 1.58 | \$ 2.63 | \$ 1.50 | \$ 2.50 |
| BFO288I | \$ 1.58 | \$ 2.63 | \$ 1.50 | \$ 2.50 |
| BFO288IE | \$ 2.50 | \$ 2.63 | \$ 2.38 | \$ 2.50 |
| BFOV(1-1.25)PLOW | \$ 6.30 | \$ 1.16 | \$ 6.00 | \$ 1.10 |
| BFOV(1-1.25) | \$ 13.23 | \$ 1.16 | \$ 12.60 | \$ 1.10 |
| BFOV(2-1.25) | \$ 14.18 | \$ 2.31 | \$ 13.50 | \$ 2.20 |
| BFOV(3-1.25) | \$ 15.12 | \$ 3.47 | \$ 14.40 | \$ 3.30 |
| BM53 | \$ 31.50 | \$ 49.35 | \$ 30.00 | \$ 47.00 |
| BM60(1.25) | \$ 14.49 | \$ 1.16 | \$ 13.80 | \$ 1.10 |
| BM60(1.25)R | \$ 71.93 | \$ 1.16 | \$ 68.50 | \$ 1.10 |
| BM60(1.25)COBBLE | \$ 25.73 | \$ 1.16 | \$ 24.50 | \$ 1.10 |
| BM71 | \$ 25.73 | \$ - | \$ 24.50 | \$ - |
| BM72 | \$ 31.50 | \$ 39.90 | \$ 30.00 | \$ 38.00 |
| BM73 | \$ 31.50 | \$ 42.00 | \$ 30.00 | \$ 40.00 |
| HO1 | \$ 44.10 | \$ 0.53 | \$ 42.00 | \$ 0.50 |
| BHF (##x##x##) | \$ 672.00 | \$ 1,869.00 | \$ 640.00 | \$ 1,780.00 |
| HBFO(*) | \$ 299.25 | \$ 703.50 | \$ 285.00 | \$ 670.00 |
| BM2(5/8)(8) | \$ 28.35 | \$ 39.90 | \$ 27.00 | \$ 38.00 |
| BM55 | \$ 52.50 | \$ 115.50 | \$ 50.00 | \$ 110.00 |
| HAND HOLE W/ SPLICE CASE | \$ 1,052.10 | \$ 2,727.90 | | |
| BHF (##x##x##) | \$ 504.00 | \$ 2,020.31 | \$ 480.00 | \$ 1,924.10 |
| HBFO(*) | | | \$ 285.00 | \$ 670.00 |
| BM2(5/8)(8) | | | \$ 50.00 | \$ 35.62 |
| BM55 | \$ 52.50 | \$ 115.50 | \$ 50.00 | \$ 110.00 |
| HAND HOLE ONLY | \$ 556.50 | \$ 2,135.81 | | |
| UNKNOWN5 | \$ 100.00 | \$ 100.00 | | |
| SEB04 | \$ 6.83 | \$ 0.39 | \$ 6.50 | \$ 0.37 |
| NID | \$ 91.35 | \$ 57.75 | \$ 87.00 | \$ 55.00 |
| BM83 | \$ 21.00 | \$ 7.88 | \$ 20.00 | \$ 7.50 |
| BM2 | \$ 24.15 | \$ 31.50 | \$ 23.00 | \$ 30.00 |
| HO1P | \$ 131.25 | \$ 9.29 | \$ 125.00 | \$ 8.85 |

COST ASSUMPTIONS

| | | |
|---|-----|------------------------|
| BM60R - Hard Rock | 2% | of total cable footage |
| BM71 - Cobble | 3% | of total cable footage |
| BM60 - directional bores, driveways, creeks,... | 9% | of total cable footage |
| BFOV(1-1.25)PLOW -Direct Buried Pipe | 10% | of total cable footage |

