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January 7, 2016

Jeff R. Derouen, Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40601

Case No. 2016-00037

RECEIVED

JAN 08 2016

PUBLIC SERVICE  
COMMISSION

RE: Certificate of Public Convenience and Necessity  
Gearheart Communications d/b/a Coalfields Telephone Company

Dear Director Derouen:

Attached for your review is an application submitted on behalf of Gearheart Communications d/b/a Coalfields Telephone Company for a Certificate of Public Convenience and Necessity for the construction of fiber-to-the-premises and additional network upgrades in in Floyd and Pike Counties.

As noted in paragraph 7 of the application, the company is still working with its vendor to complete the loan application documents that would otherwise provide information requested in 807 KAR 5:001 Section 15(e). To the extent that the Commission deems this information necessary, the company requests that this filing be deemed a request for waiver of those requirements at this time.

One (1) original application and ten (10) copies are included here. Also enclosed are two (2) complete sets of maps bearing the seal of its consulting engineer.

Please call or email me with any questions.

Sincerely,

Eileen M Bodamer  
Gearheart Communications d/b/a Coalfields Telephone Company

Enc.

Cc (email): Jim Steven, KY PSC  
James Campbell, CTC

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

RECEIVED

JAN 08 2016

PUBLIC SERVICE  
COMMISSION

**In the Matter of:**

**THE APPLICATION OF GEARHEART  
COMMUNICATIONS, INC. DBA COALFIELDS  
TELEPHONE COMPANY  
FOR A CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY FOR THE  
CONSTRUCTION OF FIBER-TO-THE-PREMISE  
AND ADDITIONAL NETWORK UPGRADES IN  
FLOYD AND PIKE COUNTIES, KENTUCKY**

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**Case No. 2016-00037**

**APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY  
FOR CONSTRUCTION OF FIBER-TO-THE-PREMISE AND ADDITIONAL  
NETWORK UPGRADES IN FLOYD AND PIKE COUNTIES, KENTUCKY**

Pursuant to KRS 278.020 and 807 KAR 5:001, Gearheart Communications, Inc. dba Coalfields Telephone Company ("CTC") hereby submits this application for a certificate of public convenience and necessity ("CPCN") for the construction of Fiber-to-the-Premise ("FTTP") and additional network upgrades in Floyd and Pike counties, Kentucky.

1. Pursuant to **807 KAR 5:001 Section 14(1)**, contact information for CTC is as follows:

Gearheart Communications, Inc. dba Coalfields Telephone Company  
20 Lanesville Road / P.O. Box 160  
Harold, KY 41635-0160  
Attn: James Campbell, CFO  
Tel: 606-479-6254  
Email: [jcamp@gearheart.com](mailto:jcamp@gearheart.com)

2. Pursuant to **807 KAR 5:001 Section 14(2)** CTC is a Kentucky Corporation chartered as a corporation and in good standing. Registration and incorporation documents were provided in Case. 2013-00192 and are unchanged.

3. Pursuant to requirements of **807 KAR 5:001 Section 15(2)(a)** the following information is provided to show that the proposed construction is required by public convenience and necessity:

**Background**

CTC is an independent local exchange carrier (“ILEC”) serving approximately 5,500 access lines in the three exchanges of Harold, Wheelwright, and Grethel located in Floyd and Pike counties of eastern Kentucky. Like most ILECs in Kentucky, CTC relies on universal service to support advanced network services.

The FCC has tied ongoing receipt of those critical funds to increasingly higher broadband speeds.<sup>1</sup> Additionally, in January, 2014, the FCC opened a docket seeking to identify and address those items it deemed necessary in anticipation to transition to an all IP network.<sup>2</sup> In doing so, the FCC recognized that “Modernizing communications networks can dramatically reduce network costs, allowing providers to serve customers with increased efficiencies that can lead to improved and innovative product offerings and lower prices.”<sup>3</sup> Thus, CTC is under pressure from both its customers and FCC initiatives to prepare its network for the next generation of IP and very high speed Broadband services.

**Justification for Project**

CTC’s Harold exchange is its geographically largest exchange and serves the majority of its business subscribers. Unlike its Wheelwright and Grethel exchanges, the Harold exchange suffers from long loop lengths limiting its ability to provide high speed broadband throughout its network. All three offices – even when not loop length restricted – are served by equipment that does not readily support VDSL, further limiting the company’s ability to provide the broadband speeds demanded by its subscribers. The company’s primary switch in Harold is ill-suited for the eventual conversion to an IP network and is already limiting the company in its ability to improve inter-exchange efficiencies. Lastly, the company lacks a full fiber backbone that would connect all of its exchanges to improve network performance, including reliability and recoverability.

To address the items the company applied for and received \$12,306,019 from the Rural Utility Service (“RUS”) to complete three critical projects:

1. deploy FTTP in the Harold exchange;
2. upgrade central office and remote equipment in all three exchanges, including the deployment of a Soft Switch in its Harold exchange; and
3. complete the transport fiber backbone network connecting all three of its exchanges.

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<sup>1</sup> Under its January 29, 2015, Report and Notice of Inquiry (FCC 15-10), minimum speeds are poised to increase to 25/3.

<sup>2</sup> Federal Communications Commission, “Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative,” Adopted: January 30, 2014; Released: January 31, 2014.

<sup>3</sup> Order at paragraph 2.

In its application for the loan(s) necessary to fund the three goals of the project, CTC identified its anticipated expenditures in each of its exchanges to support the projects as follows:

Project	Exchange	Funding
FTTP	Harold	\$5,705,604
Equipment additions including Soft switch	Harold	\$3,082,492
	Grethel	\$208,209
	Wheelwright	\$92,822
Back bone	Harold	\$851,695
	Grethel	\$508,654
Total Projects		\$10,449,476
Engineering		\$1,856,543
<b>Grand Total</b>		<b>\$12,306,019</b>

As described herein, the fiber-to-the-premise (“FTTP”) deployment will allow CTC to overcome the long loop lengths that limit broadband speeds available to its customers in its largest exchange. Its equipment additions will permit the company to add electronic equipment in all three exchanges readily supporting VDSL speeds and the efficiencies of a next-generation IP enabled network.

4. In response to **807 KAR 5:001 Section 15(2)(b)** CTC states that does not require franchise approval from any public authority to deploy the facilities described herein. Any highway or railway permits will be obtained prior to start of construction. The majority of this construction will be on private right-of-way way however CTC will also apply for KDOT permits should some private ROW be unavailable.
5. Pursuant to **807 KAR 5:001 Section 15(2)(c)** CTC provides the following information regarding the proposed construction:

**Equipment additions, including a Softswitch**

The loan funds requested for electronic equipment will consist of a new Metaswitch Softswitch and new Broadband Loop Carrier units along with subscriber ONTs and battery backups. CTC anticipates spending \$3,383,523 for the new switch and Broadband Loop Carrier (BLC) units. The company intends to deploy Adtran Total Access 5000 (TA5K) equipment in all three exchanges and a Metaswitch Softswitch at the Harold CO, subject to cost, anticipated performance, and ongoing inclusion on the RUS “List of Acceptable Materials” all of which will influence the final purchase decision.

Approximately seven (7) Broadband Loop Carrier units are expected to be deployed in two of the three exchanges that are part of this project. The pad mounted remotes will be placed where existing generator-equipped cabinets are located. The concrete pads will be

extended for the fiber cabinets. Doing so eliminates any potential adverse environmental impact that would potentially violate RUS standards.

A detailed financial summary of proposed equipment expenditures is included in **Exhibit 1** of this filing.

### **Outside Plant, including FTTP**

CTC primarily utilizes a Gigabit Passive Optical Network (GPON) point to multipoint, fiber to the premise network architecture in which unpowered optical splitters enable a single optical fiber to serve multiple establishments, terminating in the Broadband Loop Carrier (BLC) unit and then to the Harold host switch. CTC will implement FTTP in the Harold exchange where broadband speeds are insufficient. The company intends to eventually complete a full fiber overlay to reach all subscribers within the service area not already served via fiber.

The Harold FTTP project will allow CTC to offer broadband service speeds of up to 1Gig based on its customer's requirements, while supporting Ethernet capability to the businesses, medical offices and governmental offices and educational institutions that provide employment throughout its operating counties. While CTC recognizes that the demand for 1Gig may not yet be universal, its FTTP deployment will allow the company to readily meet evolving speed requirements with upgrades in electronics using the existing fiber infrastructure.

The current local loop outside plant facilities in Harold consist of aerial, filled, paired, 22 and 24 gauge copper cables. Broadband speeds are restricted to the loop limits imposed by the existing copper facilities. Even in those few ideal situations – loop lengths less than 10,000 feet and assuming the highest quality copper – broadband speeds are *capped* at 10/1 Mbps. Despite the company's efforts to use its current copper network, it finds that it is no longer operationally or financially realistic to continue to do so as its copper plant has exceeded its useful life.

The existing transport routes in CTC are primarily aerial, due to the extensive rock in the CTC serving area. All existing wire centers in the Grethel, Harold and Wheelwright exchanges will be linked with full redundant routes of aerial fiber optic cable, with 24 fibers being the minimum size.

CTC proposes to upgrade the existing network of switches to enable features that will improve operating efficiency and expand service offerings. A fiber optic cable build is proposed to create a hybrid outside plant, utilizing the existing copper cable and the proposed fiber optic cable. The benefits of fiber optic cable over the traditional copper cable to the subscriber user is to provide a higher bandwidth capacity for the advanced data services along with a longer reach, longer life, resistance to outside interferences, lower maintenance costs, and better reliability.

CTC's entire service area has extensive copper cable being used for local plant; in the Harold exchange the copper plant is nearing its maximum utilization point. All of the



exchanges have been supplemented by the use of Broadband Loop Carrier (BLC) and as of year-end December 2014, an estimated 112.17 miles of fiber transport plant exists throughout the entire system.

The plan is to deploy a network capable of providing bandwidth of up to 1 Gbps in the Harold exchange, and 10 Mbps in the Grethel and Wheelwright exchanges (downstream). To do so, CTC will build FTTP in the Harold exchange so that all subscribers can receive bandwidth up to the 1 Gbps. All copper cable in the Harold exchange will be retired as part of this project.

In addition to gains in available broadband speeds, CTC anticipates that fiber optic cable will provide a longer reach, longer life, resistance to outside interferences, lower maintenance costs and better reliability over that obtained over copper.

As of the date of this design, there were 3,862 establishments passed in the Harold Exchange, necessitating 114.64 miles of distribution fiber for the FTTP build. The budget for deploying its FTTP network in Harold include fiber service drops to the optic network termination (ONT) that will be placed at the customer location to transfer the signal. The number of service drops is based on a 75% take rate of the total number of potential subscribers. It is estimated that 90% of the drops will be aerial, at a length of 300 feet, and 10% will be buried at a length of 200 feet.

In preparing the design for the CTC service area, consideration was given to designing buried plant where economical. The entire area is underlain with rock at shallow depths. Therefore, it was determined that building the proposed plant as aerial would be more for the following reasons:

- (1) Plowing cable in lieu of utilizing existing pole line routes would be impractical due to the steep, rugged terrain that is predominate in the area.
- (2) Relocating aerial service to buried routes along existing roadways would significantly increase the amount of cable that would be required.
- (3) An sufficient pole line system already exists that eliminate the need to disturb existing rights-of-way, thereby lessening the effect the proposed construction would have on the environment, a criteria used by RUS in evaluating loan applications.
- (4) Plowing cable in many locations would require an additional cost for the blasting of rock in order to place cable.

As plant is staked, buried construction will be considered wherever economics, routing, and demographics determine that buried plant is feasible. All existing fiber within the CTC service area is currently aerial. Construction of new pole lines for the placement of aerial cable will only be considered if there is a compelling engineering reason not to bury the cable.

CTC has maintained full productive use of its joint use agreements with the electric companies within its service area. Its relationship with its joint use providers has been

long term and stable with economically viable joint use rates and the companies have cooperated to avoid duplication of infrastructure.

A detailed financial summary of outside plant expenditures is included in **Exhibit 2** of this filing.

CTC hopes to begin construction as early as the first quarter of 2016 and to be completed in approximately five years. Customers will be migrated to the new FTTP facilities initially on an on-demand basis and then as warranted due to cost, maintenance, and other business considerations.

CTC has no competition for fixed broadband services in the proposed construction area.

6. Pursuant to **807 KAR 5:001 Section 15(2)(d)** two copies of the required maps, plan, specs and drawings are being included with this application as well as one copy in pdf format on compact disk.
7. Pursuant to **807 KAR 5:001 Section 15(e)** CTC plans to finance all proposed construction, engineering and electronics through a RUS "M" loan, including interim financing.

The company has requested a 20-year loan and while it has received approval for its request, including interim financing authority to spend \$1,052,000, the company is still working with RUS to complete the loan documents. Accordingly, while the company anticipates that its interest rate will be indexed to the Federal Financing Bank Act (12 U.S.C. 2285(b)) and the FFB Lending Policy, until it completes the execution of the loan document the company cannot state with certainty the information typically provided. The RUS letter regarding the loan and interim financing is included in **Exhibit 3** of this application.

**To the extent that the Commission deems this information necessary, please consider this a request for waiver of the requirements of 807 KAR 5:001 Section 15(e) at this time. The company can provide additional information regarding the terms of the loan when it becomes available.**

CTC does not anticipate any local telephone rate adjustments associated with the project *per se*. Because its ability to fund such projects, however, is contingent on its continued access to Universal Service Funding, CTC recognizes that changes implemented by the Federal Communications Commission could impose rate level requirements that the company, not currently a recipient of high cost loop support, may be required to meet in the future.

8. In response to **807 KAR 5:001 Section 15(f)** CTC has not estimated an ongoing cost of maintenance of the fiber upon completion. Upon information and belief, the company anticipates that its ongoing maintenance and provisioning costs will be no more than and likely less, than its costs for its current network.

Coalfields Telephone Company  
Application for a CPCN

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Based on the foregoing, and in accordance with KRS 278.020, Gearheart Communications, Inc. dba Coalfields Telephone Company respectfully requests that the Commission issue a CPCN for construction of network upgrades in Floyd and Pike Counties, Kentucky.

Respectfully submitted,



Heather M. Gearheart, General Counsel  
Gearheart Communications  
20 Laynesville Rd.  
Harold, KY 41635  
606-479-6260  
[heather@gearheart.com](mailto:heather@gearheart.com)



**PROJECT SUMMARY**

<b>PROJECT TOTAL FOR TA5000 PON FTTH, SPLITTERS &amp; ONTS (also, VDSL), SIP, &amp; 8,000 LINE SOFTSWITCH</b>	<b>\$ 3,383,523</b>
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LOCATION	CUSTOMERS	TA 5000 with SPLITTERS, SHIPPING, TAXES, & INSTALLATION	ONTS & ASSOCIATED MATERIAL with FREIGHT & TAXES	TOTAL TA5000 SPLITTERS & ONTS PER LOCATION
HAROLD CO	957	\$298,568	\$411,415	\$709,983
HURRICANE CREEK	248	\$98,942	\$106,526	\$205,468
LITTLE MUD	284	\$104,202	\$122,124	\$226,326
PRATER CREEK	261	\$99,833	\$112,472	\$212,305
STANVILLE/MARE CREEK	382	\$127,180	\$164,230	\$291,410
IVEL	244	\$100,218	\$104,847	\$205,065
TOLER CREEK ADDITION	340	\$81,207	\$146,115	\$227,322
GRETHEL CO	323 (VDSL)	\$95,343	\$0	\$95,343
BIG MUD	377 (VDSL)	\$94,866	\$0	\$94,866
WHEELWRIGHT CO	336 (VDSL)	\$83,822	\$0	\$83,822
<b>PROJECT TOTAL FOR TA5000, SPLITTERS &amp; ONTS (also, VDSL)</b>				<b>\$ 2,351,910</b>

CENTRAL OFFICE LOCATION	CUSTOMERS	SIP RTU PER 200	TOTAL SIP RTU PER SITE COSTS
HAROLD CO	2,800	4,500.00	\$ 63,000
GRETHEL CO	800	4,500.00	\$ 18,000
WHEELWRIGHT CO	400	4,500.00	\$ 9,000
<b>PROJECT TOTAL FOR SIP RTU</b>			<b>\$ 90,000</b>

CENTRAL OFFICE LOCATION	CUSTOMERS	SOFTSWITCH
HAROLD CO	8,000	\$ 941,613
<b>PROJECT TOTAL FOR 8,000 LINE SOFTSWITCH</b>		<b>\$ 941,613</b>

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M OUTSIDE PLANT COST ESTIMATE SUMMARY	
EXCHANGE/REMOTE	TOTAL COST
HAROLD HOST OSP	\$1,127,192
DEADENING SPLITTER	\$143,509
HUNTS FORK SPLITTER	\$124,196
HURRICANE CREEK REMOTE	\$332,117
IVEL REMOTE	\$328,192
LITTLE MUD REMOTE	\$348,384
MARE CREEK REMOTE	\$434,797
PARSONS BRANCH SPLITTER	\$124,102
PRATER CREEK REMOTE	\$242,583
SPURLOCK CHURCH SPLITTER	\$90,718
TOLER CREEK REMOTE	\$286,514
TRANSPORT FIBER	\$1,360,349
FIBER DROPS	\$2,123,300
TOTAL:	\$7,065,953

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE HAROLD CO OUTSIDE PLANT			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	25,617	\$2.59	\$66,348
CO12RLOOP	9,930	\$1.40	\$13,902
CO24R(10M)	39,050	\$2.94	\$114,807
CO24R(E)	2,930	\$1.50	\$4,395
CO24RLOOP	9,450	\$1.50	\$14,175
CO36R(10M)	15,745	\$3.02	\$47,550
CO36R(E)	600	\$1.58	\$948
CO36RLOOP	4,200	\$1.58	\$6,636
CO48R(10M)	20,640	\$3.09	\$63,778
CO48RLOOP	5,270	\$1.65	\$8,696
CO72R(10M)	20,530	\$3.29	\$67,544
CO72RLOOP	5,030	\$1.85	\$9,306
CO96R(10M)	4,500	\$3.72	\$16,740
CO96R(E)	1,100	\$2.27	\$2,497
CO96RLOOP	2,200	\$2.27	\$4,994
CO144R(10M)	2,080	\$4.05	\$8,424
CO144R(E)	6,170	\$2.60	\$16,042
CO144RLOOP	1,860	\$2.60	\$4,836
CO180R(10M)	3,250	\$4.38	\$14,235
CO180RLOOP	580	\$2.68	\$1,554
CO240R(E)	3,650	\$4.15	\$15,148
CO240RLOOP	650	\$4.15	\$2,698
CO288R(10M)	12,720	\$5.62	\$71,486
CO288R(E)	2,100	\$4.15	\$8,715
CO288RLOOP	3,050	\$4.15	\$12,658
CO432R(10M)	3,900	\$8.84	\$34,476
CO432RLOOP	400	\$6.51	\$2,604
HACO(12)	95	\$330.00	\$31,350
HACO(24)	145	\$330.00	\$47,850
HACO(36)	64	\$350.00	\$22,400
HACO(48)	64	\$350.00	\$22,400
HACO(72)	77	\$380.00	\$29,260
HACO(96)	28	\$405.00	\$11,340
HACO(144)	20	\$475.00	\$9,500
HACO(180)	9	\$600.00	\$5,400
HACO(240)	8	\$750.00	\$6,000
HACO(288)	37	\$785.00	\$29,045
HACO(432)	3	\$820.00	\$2,460
HO1	1174	\$28.95	\$33,987
HO12R	652	\$255.00	\$166,260
Pole Replacement (35%)	130	\$575.00	\$74,750
TOTAL OSP COST:			\$1,127,192

Gearheart Communications  
Application for CPCN  
Exhibit 2

<p style="text-align: center;">GEARHEART COMMUNICATIONS COMPANY, INC.  d/b/a  COALFIELDS TELEPHONE COMPANY  KY. 534-M  HAROLD EXCHANGE  DEADENING SPLITTER</p>			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	1,900	\$2.59	\$4,921
CO12RLOOP	320	\$1.40	\$448
CO24R(10M)	11,720	\$2.94	\$34,457
CO24RLOOP	1,490	\$1.50	\$2,235
CO36R(10M)	3,000	\$3.02	\$9,060
CO36RLOOP	440	\$1.58	\$695
CO48R(10M)	3,200	\$3.09	\$9,888
CO48RLOOP	380	\$1.65	\$627
CO72R(10M)	6,720	\$3.29	\$22,109
CO72RLOOP	960	\$1.85	\$1,776
HACO(12)	5	\$330.00	\$1,650
HACO(24)	27	\$330.00	\$8,910
HACO(36)	9	\$350.00	\$3,150
HACO(48)	7	\$350.00	\$2,450
HACO(72)	15	\$380.00	\$5,700
HO1	83	\$28.95	\$2,403
HO12R	46	\$255.00	\$11,730
144 SPLITTER	1	\$7,500.00	\$7,500
Pole Replacement (35%)	24	\$575.00	\$13,800
TOTAL OSP COST:			\$143,509

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE HUNTS FORK SPLITTER			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	8,600	\$2.59	\$22,274
CO12RLOOP	1,420	\$1.40	\$1,988
CO24R(10M)	2,200	\$2.94	\$6,468
CO24RLOOP	350	\$1.50	\$525
CO36R(10M)	4,800	\$3.02	\$14,496
CO36RLOOP	540	\$1.58	\$853
CO48R(10M)	2,700	\$3.09	\$8,343
CO48RLOOP	380	\$1.65	\$627
CO72R(10M)	6,000	\$3.29	\$19,740
CO72RLOOP	620	\$1.85	\$1,147
HACO(12)	19	\$330.00	\$6,270
HACO(24)	6	\$330.00	\$1,980
HACO(36)	10	\$350.00	\$3,500
HACO(48)	7	\$350.00	\$2,450
HACO(72)	15	\$380.00	\$5,700
HO1	72	\$28.95	\$2,084
HO12R	40	\$255.00	\$10,200
144 SPLITTER	1	\$7,500.00	\$7,500
Pole Replacement (35%)	14	\$575.00	\$8,050
TOTAL OSP COST:			\$124,196



GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE HURRICANE CREEK REMOTE OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	14,820	\$2.59	\$38,384
CO12RLOOP	3,060	\$1.40	\$4,284
CO24R(10M)	3,550	\$2.94	\$10,437
CO24R(E)	950	\$1.50	\$1,425
CO24RLOOP	1,230	\$1.50	\$1,845
CO36R(10M)	9,770	\$3.02	\$29,505
CO36RLOOP	1,480	\$1.58	\$2,338
CO48R(10M)	2,000	\$3.09	\$6,180
CO48R(E)	5,900	\$1.65	\$9,735
CO48RLOOP	1,190	\$1.65	\$1,964
CO72R(10M)	11,850	\$3.29	\$38,987
CO72R(E)	1,250	\$1.85	\$2,313
CO72RLOOP	1,610	\$1.85	\$2,979
CO144R(10M)	3,720	\$4.05	\$15,066
CO144RLOOP	540	\$2.60	\$1,404
CO240R(10M)	5,700	\$4.80	\$27,360
CO240RLOOP	1,590	\$4.15	\$6,599
HACO(12)	44	\$330.00	\$14,520
HACO(24)	15	\$330.00	\$4,950
HACO(36)	21	\$350.00	\$7,350
HACO(48)	25	\$350.00	\$8,750
HACO(72)	29	\$380.00	\$11,020
HACO(144)	9	\$475.00	\$4,275
HACO(240)	18	\$750.00	\$13,500
HO1	234	\$28.95	\$6,774
HO12R	130	\$255.00	\$33,150
Pole Replacement (35%)	47	\$575.00	\$27,025
TOTAL OSP COST:			\$332,117

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE IVEL REMOTE			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	18,020	\$2.59	\$46,672
CO12RLOOP	3,270	\$1.40	\$4,578
CO24R(10M)	8,200	\$2.94	\$24,108
CO24RLOOP	1,540	\$1.50	\$2,310
CO48R(10M)	14,800	\$3.09	\$45,732
CO48RLOOP	1,850	\$1.65	\$3,053
CO96R(10M)	6,000	\$3.72	\$22,320
CO96RLOOP	1,410	\$2.27	\$3,201
CO144R(10M)	5,750	\$4.05	\$23,288
CO144RLOOP	710	\$2.60	\$1,846
CO240R(10M)	3,370	\$4.80	\$16,176
CO240R LOOP	590	\$4.15	\$2,449
CO288R(10M)	1,900	\$5.62	\$10,678
CO288RLOOP	410	\$4.15	\$1,702
HACO(12)	33	\$330.00	\$10,890
HACO(24)	22	\$330.00	\$7,260
HACO(48)	31	\$350.00	\$10,850
HACO(96)	12	\$405.00	\$4,860
HACO(144)	10	\$475.00	\$4,750
HACO(240)	6	\$750.00	\$4,500
HACO(288)	6	\$785.00	\$4,710
HO1	299	\$28.95	\$8,656
HO12R	166	\$255.00	\$42,330
Pole Replacement	37	\$575.00	\$21,275
TOTAL OSP COST:			\$328,192

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE LITTLE MUD REMOTE			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	8,300	\$2.59	\$21,497
CO12RLOOP	1,660	\$1.40	\$2,324
CO24R(10M)	20,450	\$2.94	\$60,123
CO24R(E)	1,300	\$1.50	\$1,950
CO24RLOOP	2,270	\$1.50	\$3,405
CO48R(10M)	21,800	\$3.09	\$67,362
CO48RLOOP	2,030	\$1.65	\$3,350
CO72R(10M)	4,700	\$3.29	\$15,463
CO72RLOOP	400	\$1.85	\$740
CO96R(10M)	4,000	\$3.72	\$14,880
CO96RLOOP	440	\$2.27	\$999
CO180R(10M)	7,250	\$4.38	\$31,755
CO180RLOOP	1,090	\$2.68	\$2,921
HACO(12)	19	\$330.00	\$6,270
HACO(24)	37	\$330.00	\$12,210
HACO(48)	45	\$350.00	\$15,750
HACO(96)	9	\$405.00	\$3,645
HACO(180)	25	\$600.00	\$15,000
HO1	214	\$28.95	\$6,195
HO12R	119	\$255.00	\$30,345
Pole Replacement (35%)	56	\$575.00	\$32,200
TOTAL OSP COST:			\$348,384

GEARHEART COMMUNICATIONS COMPANY, INC.			
d/b/a			
COALFIELDS TELEPHONE COMPANY			
KY. 534-M			
HAROLD EXCHANGE			
MARE CREEK REMOTE			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	15,090	\$2.59	\$39,083
CO12RLOOP	3,330	\$1.40	\$4,662
CO24R(10M)	23,360	\$2.94	\$68,678
CO24RLOOP	4,290	\$1.50	\$6,435
CO36R(10M)	600	\$3.02	\$1,812
CO36RLOOP	350	\$1.58	\$553
CO48R(10M)	2,650	\$3.09	\$8,189
CO48RLOOP	290	\$1.65	\$479
CO72R(10M)	5,230	\$3.29	\$17,207
CO72RLOOP	960	\$1.85	\$1,776
CO96R(10M)	7,590	\$3.72	\$28,235
CO96RLOOP	1,580	\$2.27	\$3,587
CO144R(10M)	8,300	\$4.05	\$33,615
CO144RLOOP	2,130	\$2.60	\$5,538
CO180R(10M)	3,350	\$4.38	\$14,673
CO180RLOOP	440	\$2.68	\$1,179
CO288R(10M)	2,900	\$5.62	\$16,298
CO288RLOOP	1,250	\$4.15	\$5,188
HACO(12)	34	\$330.00	\$11,220
HACO(24)	67	\$330.00	\$22,110
HACO(36)	6	\$350.00	\$2,100
HACO(48)	4	\$350.00	\$1,400
HACO(72)	15	\$380.00	\$5,700
HACO(96)	22	\$405.00	\$8,910
HACO(144)	30	\$475.00	\$14,250
HACO(180)	9	\$600.00	\$5,400
HACO(288)	11	\$785.00	\$8,635
HO1	384	\$28.95	\$11,117
HO12R	214	\$255.00	\$54,570
Pole Replacement (35%)	56	\$575.00	\$32,200
TOTAL OSP COST:			\$434,797

Gearheart Communications  
Application for CPCN  
Exhibit 2

<p style="text-align: center;">GEARHEART COMMUNICATIONS COMPANY, INC.  d/b/a  COALFIELDS TELEPHONE COMPANY  KY. 534-M  HAROLD EXCHANGE  PARSONS BRANCH SPLITTER</p>			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	9,370	\$2.59	\$24,268
CO12R(E)	700	\$1.40	\$980
CO12RLOOP	1,980	\$1.40	\$2,772
CO24R(10M)	1,600	\$2.94	\$4,704
CO24RLOOP	890	\$1.50	\$1,335
CO36R(10M)	2,900	\$3.02	\$8,758
CO36RLOOP	280	\$1.58	\$442
CO48R(10M)	2,550	\$3.09	\$7,880
CO48RLOOP	320	\$1.65	\$528
CO96R(10M)	7,350	\$3.72	\$27,342
CO96RLOOP	580	\$2.27	\$1,317
HACO(12)	16	\$330.00	\$5,280
HACO(24)	6	\$330.00	\$1,980
HACO(36)	7	\$350.00	\$2,450
HACO(48)	5	\$350.00	\$1,750
HACO(96)	9	\$405.00	\$3,645
HO1	70	\$28.95	\$2,027
HO12R	39	\$255.00	\$9,945
144 SPLITTER	1	\$7,500.00	\$7,500
Pole Replacement (35%)	16	\$575.00	\$9,200
TOTAL OSP COST:			\$124,102



Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE PRATER CREEK REMOTE			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	10,700	\$2.59	\$27,713
CO12RLOOP	1,860	\$1.40	\$2,604
CO24R(10M)	1,800	\$2.94	\$5,292
CO24RLOOP	350	\$1.50	\$525
CO36R(10M)	2,200	\$3.02	\$6,644
CO36RLOOP	550	\$1.58	\$869
CO48R(10M)	14,250	\$3.09	\$44,033
CO48RLOOP	1,430	\$1.65	\$2,360
CO72R(10M)	5,900	\$3.29	\$19,411
CO72RLOOP	760	\$1.85	\$1,406
CO96R(10M)	3,450	\$3.72	\$12,834
CO96RLOOP	540	\$2.27	\$1,226
CO180R(10M)	5,800	\$4.38	\$25,404
CO180RLOOP	970	\$2.68	\$2,600
HACO(12)	19	\$330.00	\$6,270
HACO(24)	6	\$330.00	\$1,980
HACO(36)	7	\$350.00	\$2,450
HACO(48)	34	\$350.00	\$11,900
HACO(72)	9	\$380.00	\$3,420
HACO(96)	9	\$405.00	\$3,645
HACO(180)	11	\$600.00	\$6,600
HO1	178	\$28.95	\$5,153
HO12R	99	\$255.00	\$25,245
Pole Replacement (35%)	40	\$575.00	\$23,000
TOTAL OSP COST:			\$242,583

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC.			
d/b/a			
COALFIELDS TELEPHONE COMPANY			
KY. 534-M			
HAROLD EXCHANGE			
SPURLOCK CHURCH SPLITTER			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	1,800	\$2.59	\$4,662
CO12RLOOP	460	\$1.40	\$644
CO24R(10M)	4,250	\$2.94	\$12,495
CO24RLOOP	570	\$1.50	\$855
CO36R(10M)	3,200	\$3.02	\$9,664
CO36RLOOP	380	\$1.58	\$600
CO72R(10M)	5,000	\$3.29	\$16,450
CO72RLOOP	440	\$1.85	\$814
HACO(12)	4	\$330.00	\$1,320
HACO(24)	13	\$330.00	\$4,290
HACO(36)	7	\$350.00	\$2,450
HACO(72)	9	\$380.00	\$3,420
HO1	49	\$28.95	\$1,419
HO12R	27	\$255.00	\$6,885
144 SPLITTER	1	\$7,500.00	\$7,500
Pole Replacement (35%)	30	\$575.00	\$17,250
TOTAL OSP COST:			\$90,718

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M HAROLD EXCHANGE TOLER CREEK REMOTE			
OUTSIDE PLANT COST ESTIMATE			
Description	Quantity	Price	Cost
CO12R(10M)	3,300	\$2.59	\$8,547
CO12RLOOP	1,170	\$1.40	\$1,638
CO24R(10M)	13,160	\$2.94	\$38,690
CO24RLOOP	1,590	\$1.50	\$2,385
CO36R(E)	3,200	\$1.58	\$5,056
CO36RLOOP	370	\$1.58	\$585
CO48R(10M)	5,320	\$3.09	\$16,439
CO48RLOOP	850	\$1.65	\$1,403
CO96R(10M)	17,770	\$3.72	\$66,104
CO96R(E)	600	\$2.27	\$1,362
CO96RLOOP	1,740	\$2.27	\$3,950
CO144R(10M)	3,100	\$4.05	\$12,555
CO144RLOOP	460	\$2.60	\$1,196
CO180R(10M)	6,180	\$4.38	\$27,068
CO180RLOOP	1,320	\$2.68	\$3,538
HACO(12)	14	\$330.00	\$4,620
HACO(24)	28	\$330.00	\$9,240
HACO(36)	11	\$350.00	\$3,850
HACO(48)	17	\$350.00	\$5,950
HACO(96)	34	\$405.00	\$13,770
HACO(144)	4	\$475.00	\$1,900
HACO(180)	17	\$600.00	\$10,200
HO1	148	\$28.95	\$4,285
HO12R	82	\$255.00	\$20,910
Pole Replacement (35%)	37	\$575.00	\$21,275
TOTAL OSP COST:			\$286,514

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M TRANSPORT FIBER COST ESTIMATE			
Description	Quantity	Price	Cost
HAROLD CO - HURRICANE CREEK REMOTE			
CO288R(10M)	16,400	\$ 5.62	\$ 92,168
CO288RLOOP	400	\$ 4.15	\$ 1,660
HAROLD CO - IVEL REMOTE			
CO288R(10M)	26,500	\$ 5.62	\$ 148,930
CO288RLOOP	1,200	\$ 4.15	\$ 4,980
HURRICANE CREEK REMOTE - TOLER CREEK REMOTE			
CO48R(10M)	40,800	\$ 3.09	\$ 126,072
CO48RLOOP	2,000	\$ 1.65	\$ 3,300
CO288R(10M)	18,400	\$ 5.62	\$ 103,408
CO288RLOOP	1,000	\$ 4.15	\$ 4,150
HAROLD CO - GRETHEL BOUNDARY			
CO288R(10M)	15,800	\$ 5.62	\$ 88,796
CO288RLOOP	800	\$ 4.15	\$ 3,320
GRETHEL BOUNDARY-GRETHEL CO			
CO288R(10M)	14,100	\$ 5.62	\$ 79,242
CO288RLOOP	700	\$ 4.15	\$ 2,905
GRETHEL CO - WHEELWRIGHT BOUNDARY			
CO288R(10M)	60,000	\$ 5.62	\$ 337,200
CO288RLOOP	3,500	\$ 4.15	\$ 14,525
HAROLD CO - PRATER CREEK REMOTE			
CO72R(10M)	6,900	\$ 3.29	\$ 22,701
CO72RLOOP	400	\$ 1.85	\$ 740
CO48R(10M)	7,980	\$ 3.09	\$ 24,658
CO48RLOOP	500	\$ 1.65	\$ 825
HAROLD CO - LITTLE MUD REMOTE			
CO24R(10M)	9,365	\$ 2.94	\$ 27,533
CO24RLOOP	600	\$ 1.50	\$ 900
IVEL REMOTE - PRATER CREEK REMOTE			
CO288R(10M)	19,500	\$ 5.62	\$ 109,590
CO288RLOOP	700	\$ 4.15	\$ 2,905
CO48R(10M)	27,100	\$ 3.09	\$ 83,739
CO48RLOOP	800	\$ 1.65	\$ 1,320
TINK REMOTE - BRAN 2 REMOTE			
CO48R(10M)	23,774	\$ 3.09	\$ 73,462
CO48RLOOP	800	\$ 1.65	\$ 1,320
TOTAL TRANSPORT FIBER COST:			\$ 1,360,349

Gearheart Communications  
Application for CPCN  
Exhibit 2

GEARHEART COMMUNICATIONS COMPANY, INC. d/b/a COALFIELDS TELEPHONE COMPANY KY. 534-M FIBER DROPS COST ESTIMATE			
Description	Quantity	Price	Cost
Harold CO	884	\$850	\$751,400
Hurricane Creek	248	\$850	\$210,800
Toler Creek	241	\$850	\$204,850
Mare Creek	162	\$850	\$137,700
Ivel	244	\$850	\$207,400
Prater Creek	162	\$850	\$137,700
Little Mud	227	\$850	\$192,950
Parsons Branch	72	\$850	\$61,200
Deadening	96	\$850	\$81,600
Spurlock Church	58	\$850	\$49,300
Hunts Fork	104	\$850	\$88,400
Total:			\$2,123,300





**United States Department of Agriculture  
Rural Development**

DEC 09 2015

Mr. Paul D. Gearheart  
President  
Gearheart Communications Company, Inc.,  
d/b/a Coalfields Telephone Company  
P.O. Box 160  
Harold, Kentucky 41635

Dear Mr. Gearheart:

We have received and are hereby approving your request to proceed with construction proposed under your "M" loan application in the amount of \$12,306,019. We understand that you plan to use general funds as an interim financing arrangement.

We grant interim financing approval for only those projects that you must perform immediately. We understand that the proposed construction will consist of engineering services, electronic equipment and outside plant costs related to toll and trunk improvements and the completion of the fiber ring in the Grethel Exchange.

We approve your request to proceed under interim financing in an amount not to exceed \$1,052,000. This approval is not a commitment from the Rural Utilities Service Telecommunications Program that loan funds will be available for these purposes.

If loan funds become available for these purposes, we will be under no obligation to advance funds to reimburse interim financing unless you comply with all conditions of the Rural Utilities Service Telecommunications Program loans:

1. All construction is consistent with the approved engineering study submitted as a basis for the loan.
2. Our standard procedures for engineering services and construction are followed. This includes obtaining Rural Utilities Service Telecommunications Program approval of plans and specifications, proposals, contracts, and close-out documents.
3. The completed construction conforms fully with our standards and specifications.
4. Construction costs are reasonable and well documented.

1400 Independence Ave, S.W. · Washington DC 20250-0700  
Web: <http://www.rurdev.usda.gov>

Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."  
To file a complaint of discrimination, write USDA, Director, Office of Civil Rights,  
1400 Independence Avenue, S.W., Washington, DC 20250-9410 or call (800) 795-3272 (Voice) or (202) 720-6382 (TDD).

Mr. Paul D. Gearheart

2

5. Construction is performed following REA Bulletin 320-15, "Equal Employment Opportunity in Construction Financed with REA Loans."

6. All requisites to advances established in the loan contract are satisfied.

7. The "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions" is included in all construction and equipment purchase agreements of \$25,000 or more, and in solicitations for such agreements and purchases. We have enclosed a suggested form of this certification.

8. The "Certification for Contracts, Grants, Loans and Cooperative Agreements" regarding lobbying is included in all construction and equipment purchase agreements of \$100,000 or more, and in solicitations for such agreements and purchases. We have enclosed a suggested form of this certification.

You must include a copy of the enclosed addenda with all "*Requests for Proposals*" to potential suppliers and contractors to inform them that an RUS loan has **not** been made and that Coalfields Telephone Company will fund the work with its own funds and that arrangements have been made by Coalfields Telephone to ensure the timely payment for work performed under contracts that are approved on an interim basis by RUS.

If you should have any questions on interim financing procedures, please contact our General Field Representative, Mr. James E. Wilson at 859-335-5483 or our Post Loan Servicing Branch at 202-720-0725

Sincerely,

A handwritten signature in dark ink, appearing to read 'S.B. Arner', with a stylized flourish at the end.

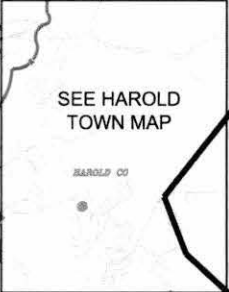
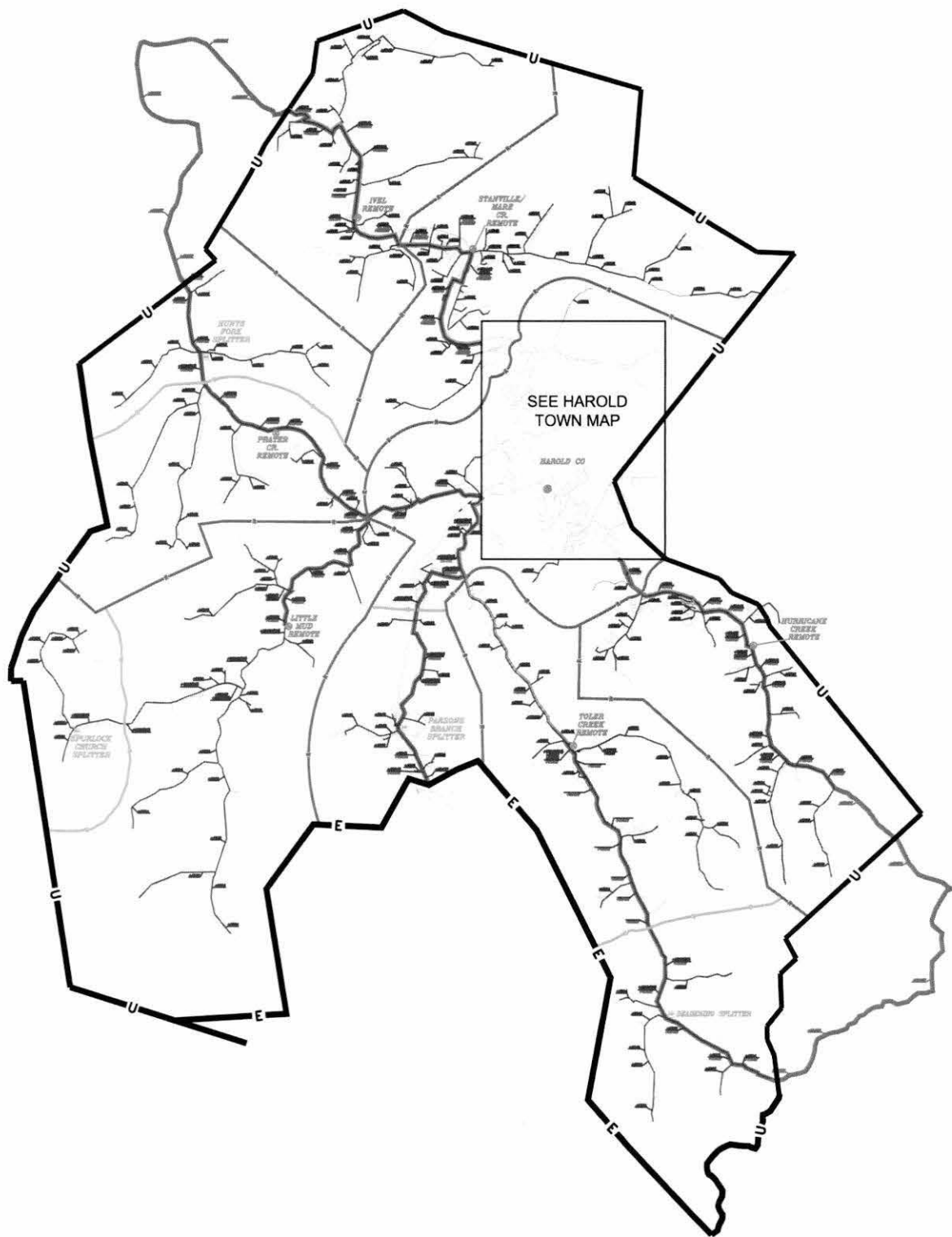
SHAWN B. ARNER, Deputy Assistant Administrator  
Loan Origination & Approval Division  
Telecommunications Program  
Rural Utilities Service

Enclosures

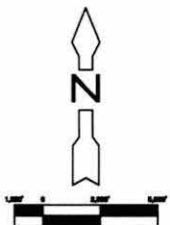
cc:  
Ladd Engineering Associates, Inc.

Gearheart Communications dba Coalfields Telephone Company  
Application for a CPCN

Maps



LEGEND	
	EXISTING CENTRAL OFFICE
	PROPOSED SPLITTER CABINET
	EXISTING NET (DASHED)
	EXISTING SPLIT
	PROPOSED FIBER (DASHED)
	EXISTING FIBER (DASHED)
	PROPOSED FIBER (SOLID)
	PROPOSED SPLITTER BOUNDARY
	ROUTE BOUNDARY
	EXCHANGE BOUNDARY
	UTILITY BOUNDARY



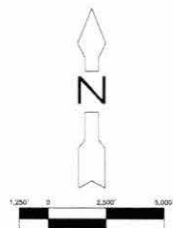
/Engineering seal on original/

DATE	REVISION
9/17/18	LOAN DESIGN

**COALFIELDS TELEPHONE COMPANY**  
 LOAN DESIGN  
 HAROLD EXCHANGE AND FIBER RING  
 FTTH DESIGN  
 LADD ENGINEERING ASSOCIATES, INC.  
2001 W. 8th St. | P.O. Box 1010 | Harlow, MO 64601 | 417-438-1100 | FAX 417-438-1101



LEGEND	
	EXISTING CENTRAL OFFICE
	PROPOSED SPLITTER CABINET
	EXISTING SPLICING CABINET
	EXISTING FIBER (TRANSPORT)
	PROPOSED FIBER (TRANSPORT)
	EXISTING FIBER (FTTH)
	PROPOSED FIBER (FTTH)
	REMOTE BOUNDARY
	EXCHANGE BOUNDARY
	UTILITY BOUNDARY



/Engineering Seal on Originals/

DATE	REVISIONS
9/17/15	LOAN DESIGN

COALFIELDS TELEPHONE COMPANY	
LOAN DESIGN	
HAROLD TOWN	
FTTH DESIGN	
LADD ENGINEERING ASSOCIATES, INC.	
DESIGN BY: BHG	DATE: 08/16/15
DESIGN BY: BHG	JOB # 704
SHEET 2 OF 3	



LADD ENGINEERING ASSOCIATES, INC.				
DWN. BY: RHG	DATE: 06/10/15	DESIGN BY: RHG	JOB # 704	SHEET 1 OF 2

Application  
CONTAINS  
LARGE OR OVERSIZED  
MAP(S)

RECEIVED ON:  
01/08/2016