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September 14, 2016

**VIA ELECTRONIC FILING**

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 Seventh Place East, Suite 350  
St. Paul, Minnesota 55101

Re: In the Matter of the Annual Update of the 911 Plan of Charter Fiberlink CCO, LLC, P6716/

Dear Mr. Wolf:

Enclosed is the annual update to the 911 Plan of Charter Fiberlink CCO, LLC ("Charter Fiberlink CCO"). Charter Fiberlink CCO submits this filing following consultations with the Minnesota Department of Public Safety (the "Department of Public Safety") and the Metropolitan Emergency Services Board (the "Metro Board").

Also enclosed is an Affidavit of Service. Copies of the filing have been mailed concurrently to the Minnesota Attorney General's office, the Minnesota Department of Commerce, the Department of Public Safety, the Metro Board, and others that are interested in this proceeding.

If you have any questions regarding the foregoing, please contact the undersigned.

Sincerely,

/s/ Kennard B. Woods  
Attorney for Charter Fiberlink CCO, LLC

KBW/jh

Enc.

cc: Charter Fiberlink CCO, LLC  
(with enclosure)  
Charles A. Hudak, Esq.  
(without enclosure)

COMPANY NAME

Charter Fiberlink CCO, LLC

NENA ID

CHTR

(Enter the company name and NENA ID in the header above)

COMPLETED BY (Name):

Charter Fiberlink CCO, LLC

DATE:

5-27-2016

# MINNESOTA CLEC 911 PLAN

## Minnesota 911 Program Contact Information

Minnesota Administrative Rules 7811 and 7812 require all Competitive Local Exchange Carriers (CLEC) to have Public Utilities Commission (PUC) approval of a 911 CLEC Plan before the CLEC is authorized to start offering local telephone service. In developing this plan, *the Company* should be aware of the following contacts and should consult with the appropriate representative(s) to answer any questions prior to submitting the plan to the Department of Public Safety-Emergency Communication Networks (DPS-ECN). *The Company* may also refer to the **911 CLEC Plan Instructions** packet included with this template.

### State 911 Office

Minnesota Department of Public Safety  
Emergency Communication Networks  
445 Minnesota Street, Suite 137  
Saint Paul, MN 55101-5137  
For information or forms send email to:  
[ecn.clec.911-plans@state.mn.us](mailto:ecn.clec.911-plans@state.mn.us)

### 911 Plans

David Denton  
911 Program Analyst  
Telephone: 651-201-7555  
Facsimile: 651-296-2665  
[David.Denton@state.mn.us](mailto:David.Denton@state.mn.us)

### MESB (if service is provided to the 9 county Metro Area)

Metropolitan Emergency Services Board  
2099 West University Avenue  
St. Paul, MN 55104-3431  
<http://www.mn-mesb.org/>  
(for specific contacts refer to Addendum A)

### Contracts

Dana Wahlberg  
911 Program Manager  
Telephone: 651-201-7546  
Facsimile: 651-296-2665  
[Dana.Wahlberg@state.mn.us](mailto:Dana.Wahlberg@state.mn.us)

### Billing and Fee Submission

Carol Schmidt  
911 Accountant  
Telephone: 651-201-7549  
Facsimile: 651-296-2665  
[Carol.schmidt@state.mn.us](mailto:Carol.schmidt@state.mn.us)

COMPANY NAME Charter Fiberlink CCO, LLC | NENA ID **CHTR** |

Enter the **COMPANY NAME & NENA ID** in the header above.  
**Competitive Local Exchange Carrier 911 Plan**

**Section 1 - Summary/General Information**

The Company is Formerly Known As	
The Company is Doing Business As	Charter Fiberlink CCO, LLC
The Company Web Site Address	

	Date Filed	Docket number
Original 911 Plan	<p>(1) Approved, December 3, 2009;</p> <p>(2) approved, July 20, 2010;</p> <p>(3) approved, March 18, 2011;</p> <p>(4) subsumed by 2012 Annual Plan approval;</p> <p>(5) subsumed by 2012 Annual Plan approval;</p> <p>(6) approved, July 31, 2012;</p> <p>(7) approved, August 31, 2013;</p> <p>(8) approved, July 24, 2014;</p> <p>(9) filed June 19, 2015, pending approval;</p> <p>(10) approved, January 27, 2016.</p>	<p>(1) Docket No. P5535/EP-09-1288 (for all counties listed below, except for Meeker County, Dodge County, Houston County and Cass County); (2) Docket No. P6716/EP-10-441 (filed to add Meeker County); (3) Docket No. P6716/EP-10-777 (for all counties listed below, except for Dodge County, Houston County and Cass County); (4) Docket No. P6716/EP-11-527 (for all counties listed below, except for Dodge County, Houston County and Cass County); (5) Docket No. P6716/EP-12-138 (filed to add Monticello exchange in Wright County); (6) Docket No. P6716/EP-12-481 (2012 Annual Plan, for all counties listed below, except Dodge County, Houston County and Cass County); and (7) Docket No. P-6716/EP-13-458 (2013 Annual Plan, for all counties listed below, except Cass County); (8) Docket No. P-6716/EP-14-517 (2014 Annual Plan, for all counties listed below, except Cass County); (9) Docket No. P6716/EP-15-608 (2015 Annual Plan, for all counties listed below, except Cass County); and (10) Docket No. P6716/EP-15-267 (filed to add Breezy Point, Ideal</p>

COMPANY NAME Charter Fiberlink CCO, LLC | NENA ID CHTR |

		Corners, Pequot Lakes, and Pine River exchanges and rate centers, and to add Cass County.
Most recent Update to 911 Plan	Approved, January 27, 2016.	Docket No. P6716/EP-15-267.

Company Corporate Address:

12405 Powerscourt Drive
St. Louis, MO 63131

**Network / Database Escalation Contacts**

List the escalation contacts established by *the Company* that should be used in the event of a situation requiring resolution at higher levels.

<u>Escalation Level</u>	<u>Name</u>	<u>Telephone #</u>	<u>E-mail address</u>
Supervisory Management	NOC Supervisors	866-248-7662	dlnoc@Charter.com
	7:00am-4pm CT Tue-Sat)		
	Jay Atkinson	314-288-3935	<a href="mailto:jay.atkinson@Charter.com">jay.atkinson@Charter.com</a>
	Scott Linck	314-288-3369	<a href="mailto:scott.linck@charter.com">scott.linck@charter.com</a>
	3:00pm-12:00am CT (Sun-Thu)	314-288-3933	
	Micah Barnes	314-288-3965	<a href="mailto:micah.barnes@Charter.com">micah.barnes@Charter.com</a>
	John Morris		<a href="mailto:john.morris@Charter.com">john.morris@Charter.com</a>
	11:00pm-8:am CT (Sun-Thu)		
	Jonathon Day	314-288-3830	<a href="mailto:jonathon.day@Charter.com">jonathon.day@Charter.com</a>
	11:00pm-8:00am CT (Tue-Sat)		
Officer	Karl Napieracz	314-288-3939	<a href="mailto:karl.napieracz@Charter.com">karl.napieracz@Charter.com</a>

**Certificate of Authority**

*The Company* has a certificate of authority to provide competitive local exchange service dated (8/17/2009), approved by the Minnesota Public Utilities Commission under docket number (P5615/M09-240, as amended by an order dated May 26, 2010 and approved by the Minnesota Public Utilities Commission under docket number P6716/M-10-426, an order dated March 21, 2012 under docket number P6716/M-12-131, an order dated May 22, 2012 under docket number P-

**COMPANY NAME**

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**CHTR**

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6716/M-12-391, an order dated January 11, 2016 under docket number P6716/SA-15-84, an order dated June 8, 2016 under docket number P-6716/16-376, and an order dated September 7, 2016 under docket number P6716/SA-16-598.

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**Section 2 - Type of CLEC** (Choose all that apply)

- Reseller
- Facilities Based
- VoIP (If you check VoIP, you must also choose Nomadic and/or Fixed Interconnected)
  - Nomadic
  - Fixed Interconnected

The Company will connect facilities and/or VoIP based services to the selective routers marked with an “X” as detailed in addenda A through L as applicable:

Facilities Based			
			<b>List The Counties</b> Refer to: <a href="https://dps.mn.gov/divisions/ec/n/programs/911/Pages/answerirng-centers-psaps-directory.aspx">https://dps.mn.gov/divisions/ec/n/programs/911/Pages/answerirng-centers-psaps-directory.aspx</a>
	X	<b>Selective Router Location</b>	
A	X	CenturyLink Metro paired	(9 Metro counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Washington)
B	X	CenturyLink Duluth	<b>Duluth (St. Louis South)</b>
C		CenturyLink Fargo	
D	X	CenturyLink Minneapolis	<b>Benton, Stearns, Sherburne, Wright, Meeker</b>
E	X	CenturyLink Rochester	<b>Freeborn, Mower, Olmsted, Rice and Steele (Pearl Street), Winona, Goodhue and Dodge</b>
F	X	IES Brainerd	<b>Aitkin, Crow Wing and Morrison</b>
G		IES Erskine	
H	X	IES Hutchinson	<b>Chippewa, Kandiyohi, Swift and Meeker</b>
I	X	IES Kasson	<b>Blue Earth, Nicollet and Houston</b>
J	X	IES Perham	<b>Becker, Douglas, Todd, Otter Tail, Pope, Wadena and Wilkin</b>
K	X	IES Ruthton	<b>Blue Earth and Lyon</b>
L	X	IES Turtle River	<b>Hubbard and Cass</b>

VoIP Interconnected			
			<b>List The Counties</b> Refer to: <a href="https://dps.mn.gov/divisions/ec/n/programs/911/Pages/answerirng-centers-psaps-directory.aspx">https://dps.mn.gov/divisions/ec/n/programs/911/Pages/answerirng-centers-psaps-directory.aspx</a>
	X	<b>Selective Router Location</b>	
A		CenturyLink Metro paired	(9 Metro counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Washington)
B		CenturyLink Duluth	
C		CenturyLink Fargo	
D		CenturyLink Minneapolis	
E		CenturyLink Rochester	
F		IES Brainerd	
G		IES Erskine	
H		IES Hutchinson	
I		IES Kasson	
J		IES Perham	
K		IES Ruthton	
L		IES Turtle River	

**Section 3 - 911-Related Service to Other Entities**

911-related services include acting as an underlying carrier for a reseller, providing a gateway from VoIP or non-traditional telecom service to traditional trunks, acting as a connection point to 911 selective routers, conducting data base services for the other entity or collection and remittance of 911 fees.

Check one of the following:

	<i>The Company has not</i> contracted to provide access to the 911 network or 911 related services on behalf of another entity
X	<i>The Company has</i> contracted to provide access to the 911 network or 911 related services on behalf of another entity. Details of the services provided and contact information for each entity are contained on the next page.
3	Number of entities <i>the Company</i> has contracted with.

COMPANY NAME Charter Fiberlink CCO, LLC | NENA ID CHTR |

If the Company has contracted to provide access to the 911 network or 911 related services to another entity, complete this page to include the entity name, the type of 911 network or related services provided, and the contact information requested. (If more than one entity, complete a separate page for each. One additional entity information page is attached and can be copied as many times as necessary.

Entity Name Charter Fiberlink CC VIII, LLC (see 911 plan filed by Charter Fiberlink CC VIII, LLC contemporaneous with Charter Fiberlink CCO, LLC's 911 Plan

Check all that are applicable	<input checked="" type="checkbox"/>	Conventional Service Provider
	<input type="checkbox"/>	Fixed location VoIP
	<input type="checkbox"/>	Nomadic VoIP
	<input type="checkbox"/>	Other non-traditional telecom services. Specify: <input type="checkbox"/>

**What NENA ID will be displayed at the PSAP?**

CHTR  
 Contact Name Mary Carol Hasty  
 Contact Phone # 314-543-5899  
 Contact E-mail Marycarol.hasty@Charter.com

Check the appropriate box(s) and provide a detailed narrative description of all of the 911 services provided by the Company to this entity:

- Acting as an underlying carrier for a reseller entity  
Charter Fiberlink CCO, LLC will establish and coordinate all network arrangements (including all 911 arrangements) utilized by Charter Fiberlink CC VIII, LLC. Charter Fiberlink CCO, LLC will share and permit the use of such network arrangements by Charter Fiberlink CC VIII, LLC.
- Providing telephone numbers  
Charter Fiberlink CCO, LLC will provide telephone numbers on behalf of Charter Fiberlink CC VIII, LLC.
- Providing a gateway from VoIP to traditional circuits
- Acting as a connection point to 911 selective routers  
Charter Fiberlink CCO, LLC will act as a connection point to the 911 selective routers as the underlying carrier for Charter Fiberlink CC VIII, LLC.
- Conducting data base services for the other entity



COMPANY NAME

Charter Fiberlink CCO, LLC

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Charter Fiberlink CCO, LLC will conduct all data base services on behalf of Charter Fiberlink CC VIII, LLC.



Collection and remittance of 911 fees

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COMPANY NAME Charter Fiberlink CCO, LLC | NENA ID CHTR |

**Additional Entity Data Form (if needed, copy and paste)**

Entity Name Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC

Check all that are applicable	<input type="checkbox"/>	Conventional Service Provider
	<input checked="" type="checkbox"/>	Fixed location VoIP
	<input type="checkbox"/>	Nomadic VoIP
	<input type="checkbox"/>	Other non-traditional telecom services. Specify: <input type="checkbox"/>

**What NENA ID will be displayed at the PSAP?**

CHTR |  
 Contact Name Mary Carol Hasty  
 Contact Phone # 314-543-5899  
 Contact E-mail Marycarol.hasty@Charter.com

Check the appropriate box(s) and provide a detailed narrative description of all of the 911 services provided by the *Company* to this entity:

- Acting as an underlying carrier for a reseller entity  
**Charter Fiberlink CCO, LLC will establish and coordinate all network arrangements (including all 911 arrangements) utilized by Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC. Charter Fiberlink CCO, LLC will share and permit the use of such network arrangements by Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC.**

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- Providing telephone numbers  
**Charter Fiberlink CCO, LLC will provide telephone numbers on behalf of Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC.**

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- Providing a gateway from VoIP to traditional circuits

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- Acting as a connection point to 911 selective routers  
**Charter Fiberlink CCO, LLC will act as a connection point to the 911 selective routers as the underlying carrier for Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC**

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- Conducting data base services for the other entity

COMPANY NAME

Charter Fiberlink CCO, LLC

NENA ID

CHTR

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Charter Fiberlink CCO, LLC will conduct all data base services on behalf of Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC.

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Collection and remittance of 911 fees

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(If additional pages are needed for additional entities, copy the above page and paste in the blank area below).

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## **Section 4 - Company Certification of Ability and Intent**

The Company certifies that this plan is consistent with the following:

### **A. 911 Plan Submission and Updates**

**Initial Full Plan:** Minnesota Rules 7811.0550 Subpart 1 states, in part, that before providing local service in a service area, a competitive local exchange carrier (CLEC) shall submit to the Public Utilities Commission a comprehensive plan, detailing how it will provide 911 service to its customers in a manner consistent with applicable law, including chapter 7580, and comparable to the provision of 911 service by the local exchange carrier (LEC) operating in the competitive local exchange carrier's service area.

**Updated Full Plan:** All CLECs must submit to DPS-ECN a 2016 911 plan no later than June 1, 2016. After the 2016 911 plan has been reviewed and approved by DPS-ECN, submitted to and approved by the PUC, subsequent years' plans will be required annually only if the Company has made any changes or modifications to its facilities, network or database during the months following the approval. The annual update shall be submitted to DPS-ECN no later than June 1 of each year and shall reflect any changes identified in a Letter of Authorization(s) (LOAs) issued by DPS-ECN in the months which followed the PUC approval of the last filed plan. DPS-ECN will continue to place on its website pertinent information for each subsequent years plan templates.

**No Change Letters:** If no changes have been made to the Company's CLEC plan since the last PUC approved plan, and no LOAs have been issued for the Company in the months following the last filed, ECN and PUC approved plan, the Company may request a "No Changes" letter from DPS-ECN. DPS-ECN will review the request and determine if a full plan filing is required and will send same to the Company; or may provide a "No Changes" letter to the Company for certification and filing to the PUC instead of a full CLEC plan. DPS-ECN will provide the template required and will distribute to the Company along with instructions for completing and filing with the PUC.

**5 Year Requirement:** The Company shall be required to submit an updated full plan at least every 5 years. When four years of "No Change" letters have been approved by DPS-ECN the company shall submit an updated full plan no later than June 1 of year 5. DPS-ECN will continue to place on its website pertinent information for plan templates.

### **B. Integrate into 911 Network**

The Company shall integrate into the 911 selective router network as relevant to connectivity of the county to which the Company is providing service in order to achieve selective router-based choking and as described in Selective Router Addenda A through L as applicable. No changes will be made in the network without the concurrence of the state, or the Metropolitan Emergency Services Board, as applicable. If service area covered by this plan includes the Twin Cities metropolitan area (the nine counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, and Washington) the Company will comply with the current network and database standards that are included on Addendum A and incorporated into this 911 Plan. If the service area is outside of the counties outside of the metropolitan area, the Company will comply with the current State of Minnesota network and database standards that are incorporated herein as an attachment to this 911 Plan.

**C. Diversity Where Available**

*The Company* shall design and provide adequate diversity, where available, for their portion of the 911 network and default routing capability consistent with the County 911 Plan. *The Company* shall include diagrams as requested and required in each of the Selective Routers Addenda A through L, as applicable depicting such diversity.

Default routing is based on customer concentration in a service area. *The Company* is required to include the default routing plan in Selective Routers Addenda A through L as applicable.

*The Company* conducts and documents an annual audit of diversity and shall describe how the annual audit (review and verification) will be conducted in Selective Routers Addenda A through L as applicable.

**D. Paired Selective Routers**

*The Company* has in place separate 911 trunk groups for each Selective Router in those counties requiring connectivity to dual paired routers. Counties requiring dual connectivity are identified on each of the addenda where appropriate as well as within the instructions accompanying this plan.

**E. Test Plan**

*The Company* has a test plan to test the *Company's* integration to the 911 system before providing live customer service and ongoing thereafter for instances where network changes could affect 911 (e.g. service area adjustments, major switch or network reconfigurations.) The test plan includes testing of trunk defaults, selective routing, ability to call back subscribers, correct ALI displays, etc. Prior to providing live customer service in Greater Minnesota, the Company will coordinate all 911 testing with and will have test results approved by the state of Minnesota DPS-ECN. In the 9 county Metro Area, prior to providing live customer service, the Company will coordinate all 911 testing with and will have test results approved by the MESB Director of 911 Services.

**F. Traffic Study**

The Company will conduct a traffic study for its 911 trunks in Greater Minnesota at any time as requested by the State of Minnesota and in conjunction with the 911 System Integrator(s) for the areas the Company serves and will share the results of its traffic study with the DPS-ECN Program Manager. In the 9 county Metro Area, the Company will provide the results of annual traffic studies with the metro area system integrator and the MESB.

**G. Contingency Plans**

The Company shall maintain service restoration and disaster recovery plans which shall be shared with the state of Minnesota, DPS-ECN Program Manager as requested. The Company shall maintain circuit routing profiles and shall expedite service restoration.

The Company maintains power failure backup and/or an alternate power source for the Company's switch and associated carrier, fiber, and transmission equipment. The Company shall regularly test their power failure backup and/or alternate power source system(s).

**H. Database Standards**

The Company shall share customer information and location data consistent with current national, Minnesota, and MESB standards for providing emergency telephone service.

The Company must obtain a Company service provider ID from the National Emergency Number Association (NENA). The Company will ensure, or has made arrangements with another entity to ensure, that the Company's service provider ID appears on the ALI records for company subscribers and is displayed at the PSAP as required by the County 911 Plan.

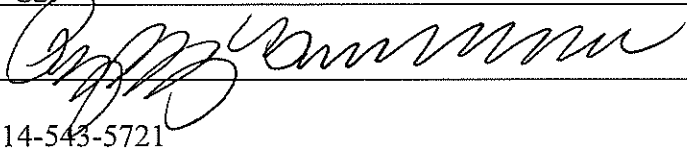
The Company performs an annual database comparison and reconciliation of Company source records for its customers with the ALI database records held by the Company's 911 service provider. The Company shall correct any data errors in the Company's source records and/or the 911 database that were identified through each annual data reconciliation.


The Company shall comply and adhere to the state of Minnesota 911 Database Service Standards incorporated herein and attached to this section of the 911 CLEC Plan.

COMPANY NAME Charter Fiberlink CCO, LLC NENA ID CHTR

**Certification**

I certify that I am an officer or someone with designated authority to accurately answer the information queries of this CLEC 911 plan document and any subsequent addenda, reseller plan, or VoIP plan documents initialed by me and attached hereto; and that I am also able to commit to the adherence of the statements contained herein and within the attachments on behalf of *the Company*; and that the information contained herein and within the attachments is accurate.

Certified by:  
Typed name Peggy L. Giaminetti  
Signature:   
Telephone # 314-543-5721

Date signed 9/2/2016  


Total number of pages submitted in this document: 103

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COMPANY NAME

**Charter Fiberlink CCO, LLC**

NENA ID

**CHTR**

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Enter the **COMPANY NAME & NENA ID** in the header above.

### **Addendum A – CenturyLink Metro**

#### **Metropolitan Emergency Services Board Contact Information**

2099 West University Avenue  
St. Paul, MN 55104-3431  
<http://www.mn-mesb.org/>

**All electronic correspondence should be directed to: 911PlanAdmin@mn-mesb.org**

**Executive Director**

Exec\_Dir@mn-mesb.org  
Telephone: 651-643-8398  
Facsimile: 651-603-0101  
(contract and plan issues)

**Director of 911 Services**

911\_Dir@mn-mesb.org  
Telephone: 651-643-8377  
Facsimile: 651-603-0101  
(network issues)

**Administrative Assistant**

911PlanAdmin@mn-mesb.org  
Telephone: 651-643-8381  
Facsimile: 651-603-0101

**911 Database Coordinator**

911\_Coord@mn-mesb.org  
Telephone: 651-643-8376  
Facsimile: 651-603-0101  
(database issues)

In developing this plan, *the Company* has consulted with the following Metropolitan Emergency Services Board contacts: [Include the MESB contacts used previously if they did not contact Board staff in preparation of their annual 911 plan update. For annual updates, if consultation was not done in this calendar year, list previous contacts and year consulted with, e.g. Pete Eggimann (2013).]

Pete Eggimann (2009 – 2016)

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The enhanced 911 network in the Metropolitan area is provided by CenturyLink Communications Corporation under contract with the Minnesota Department of Public Safety and the Metropolitan Emergency Services Board, a joint powers board contracting on behalf of Anoka County, Carver County, Chisago County, Dakota County, Hennepin County, Isanti County, Ramsey County, Scott County, and Washington County.



**COMPANY NAME**

**Charter Fiberlink CCO, LLC**

**NENA ID**

**CHTR**

**Service Area**

Yes	No	County	PSAPs in the Service Area (Check all that apply)			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Anoka	<input type="checkbox"/>	County Central Communications		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Carver	<input checked="" type="checkbox"/>	County Sheriff		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chisago	<input type="checkbox"/>	County Sheriff		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Dakota	<input checked="" type="checkbox"/>	Dakota Communications Center		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hennepin	<input checked="" type="checkbox"/>	County Sheriff	<input type="checkbox"/>	Bloomington PD
			<input type="checkbox"/>	Eden Prairie PD	<input type="checkbox"/>	Edina PD
			<input type="checkbox"/>		<input type="checkbox"/>	Minneapolis ECC
			<input type="checkbox"/>	Minnetonka PD	<input type="checkbox"/>	University of MN
			<input type="checkbox"/>	Saint Louis Park PD	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Isanti	<input type="checkbox"/>	County Sheriff		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ramsey	<input checked="" type="checkbox"/>	Ramsey County Emergency Communications Center	<input type="checkbox"/>	White Bear Lake PD
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Scott	<input checked="" type="checkbox"/>	County Sheriff		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Washington	<input type="checkbox"/>	County Sheriff		

COMPANY NAME

**Charter Fiberlink CCO, LLC**

NENA ID

**CHTR**

List the exchange(s) of the Company applicable to this 911 system	NPA/NXX or NPA/NXX-X			Company Exchange Names(s)
	651	200	2	Apple Valley, Burnsville-Frontier, Burnsville-CenturyLink, Elk River, Farmington, Lakeville, Rockford, Rogers, Rosemount, Minneapolis/St. Paul, Mound, Watertown, Dayton, Osseo, Rogers portions of the Twin Cities Rate Center, and Hastings
	651	332	2	
	651	333	9	
	651	344	7	
	651	344	8	
	763	267	7	
	763	276	1	
	763	276	7	
	763	355	9	
	763	515	3	
	763	515	6	
	763	595	1	
	763	777	9	
	952	236	0	
	952	236	8	
	952	236	9	
	952	255	8	
	952	378	4	
	952	388	1	
	952	683	1	
	952	683	9	

Yes No



Connectivity between *the Company's* Central Office and the subscriber location is provided through an Incumbent local exchange carrier.

List the Incumbent Local Exchange Carrier exchanges that are in *the Company's* proposed service area. Indicate whether *the Company's* service area is a portion of an exchange area, such as “the portion of the ABC exchange within the City of XYZ”

Incumbent’s Exchange Name(s)  
Apple Valley, Burnsville-Frontier, Burnsville-  
CenturyLink, Elk River, Farmington, Lakeville,  
Rockford, Rogers, Rosemount, Minneapolis/  
St. Paul, Mound, Watertown, Dayton, Osseo and  
Rogers portions of the Twin Cities rate center,  
and adding Hastings

Yes No

COMPANY NAME

**Charter Fiberlink CCO, LLC**

NENA ID

**CHTR**

Connectivity between *the Company's* Central Office and the subscriber location is provided through *the Company* or another provider cable network or other broadband network.

List the cable network and its franchised area or the broadband network and its service area that will be used to provide *the Company's* proposed service. Indicate whether *the Company's* service area is a portion of an exchange area, such as “the portion of the ABC exchange within the City of XYZ”

Charter Fiberlink CCO, LLC provides connectivity on its own network

Apple Valley, Burnsville-Frontier, Burnsville-CenturyLink, Elk River, Farmington, Lakeville, Rockford, Rogers, Rosemount, Minneapolis/St Paul, Mound, Watertown, Dayton, Osseo and Rogers portions of the Twin Cities rate center, and adding Hastings

COMPANY NAME

**Charter Fiberlink CCO, LLC**

NENA ID

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**Simplified Circuit Connection Diagram**

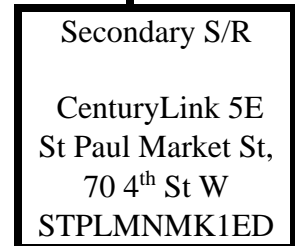
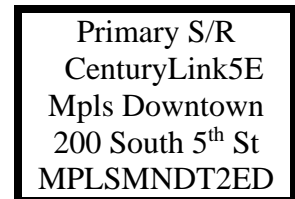
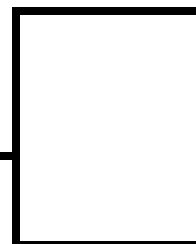
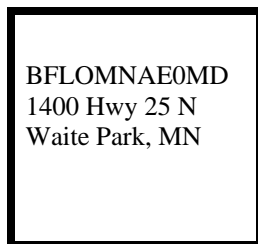
(one required per Company Switch location)

Company 911 Network Connection and Diversity Information

Company Switch or Minnesota Point of Presence

Intervening switch or Access Tandem (if applicable)

CenturyLink Lucent 5E Selective Router



Location CLLI  
Location Address

WTPKMNACOMD  
400 Sundial Dr  
Waite Park, MN

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Is the Company switch capable of delivering calls to a standards-based Next Generation 911 ESInet that utilizes the SIP Protocol (Session Initiation Protocol)?

Yes

No

	Primary Selective Router	Secondary Selective Router	Total all DSO Circuits
Number of DSO Circuits to Selective Router	<u>3</u>	<u>3</u>	<u>6</u>
Type of circuits: CAMA, FGD, SS7 or PRI	<u>SS7</u>		

Circuit Meet Point percentage of Ownership

List all carriers who provide all or a portion of the Company's 911 circuits to the selective routers.

CenturyLink 1 Miles 100 %

COMPANY NAME

**Charter Fiberlink CCO, LLC**

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**CHTR****Company Certification of Ability and Intent for the Metro Area**

For each statement, signify the Company's compliance with an "X" in the "YES" or "NO" column, as applicable. For any "NO" responses, provide an explanation in the last column.

Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
			<b>GENERAL</b>	
1.1	X		The Company complies with the <b>Minnesota Code of Administrative Rules</b> , chapter 7580 (formerly 1215).	
1.2	X		The Company has an existing <b>contract agreement</b> with the Metropolitan Emergency Services Board (MESB) and the State of Minnesota in accordance with chapter 7580 (formerly 1215). The contract is consistent with the Company's 911 Plan and Addendum A and the contract's expiration date is: <u>N/A – Contracts have evergreen provisions (provide date)</u> . If a contract is not in effect, the Company has entered into <b>contract negotiations</b> with the MESB and the State of Minnesota to establish or renew a contract agreement.	
1.3	X		The Company's <b>911 Plan will be updated and amended at least annually and no later than June 1 of each year</b> . Any changes or modifications to the Company's 911 Plan will be filed by amendment with the State of Minnesota, the MESB and the Minnesota Public Utilities Commission.	
1.4	X		The Company complies with the <b>MESB network and database standards</b> incorporated in this Addendum.	
			<b>NETWORK</b>	
2.1	X		The Company will <b>integrate into the existing paired 911 selective router network</b> for the 9-county metro area in order to provide 911 service to its customers and will <b>coordinate with the metro area's designed 911 system integrator</b> , currently CenturyLink. The Company's interconnection is described in the Simplified Circuit Connection Diagram(s) in this Addendum.	
2.2	X		The Company has in place <b>primary and secondary 911 trunk groups for each NPA within the Company's 9-county metro service area</b> . The primary trunk group routes to the metro area's primary 911 selective router located in Minneapolis (MPLSMNNDT2ED). The secondary trunk group routes to the metro area's secondary	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
			911 selective router located in St. Paul (STPLMNMK1ED).	
2.3	X		The Company engineers 911 trunk quantities sufficient to achieve a minimum of <b>p.01 grade of service</b> . The Company will obtain approval of initial trunk quantities, as well as subsequent augmentations or reductions of trunks, from the MESB Director of 911 Services.	
2.4	X		The Company has a <b>test plan</b> to test the Company's integration to the metro area 911 system before providing live customer service, and ongoing thereafter for instances where network changes could affect 911 (e.g. service area adjustments, major switch or network reconfigurations.) The test plan includes testing of trunk defaults, selective routing, ability to call back subscribers, correct ALI displays, etc. Prior to providing live customer service, the Company will <b>coordinate all 911 testing</b> with and will have test results approved by the MESB Director of 911 Services.	
2.5	X		The Company will conduct a <b>traffic study</b> for its 911 trunks annually in conjunction with the metro area system integrator. The Company will share the results of its traffic study with the metro area system integrator and the MESB.	
			<b>DIVERSITY</b>	
3.1	X		The Company will <b>provide diversity of its 911 network</b> in the metro area in compliance with the MESB's network standards. The Company has included a description and diagram of its 911 diversity configuration in this Addendum.	
3.2	X		The Company utilizes <b>SS7 trunking</b> to the primary and secondary 9-1-1 selective routers in the metro area. The Company affirms that for the portion of the SS7 network used to process 9-1-1 calls using SS7 technology protocol: 1) Signaling transfer point (STP) processors are mated; 2) SS7 connections between end central offices and STPs, as well as those between STPs at the various levels, are redundant; 3) SS7 data links have both physical route and carrier system diversity; and 4) An engineering threshold of forty percent capacity triggers the installation of additional data links.	
3.3	X		The Company has a <b>plan for the ongoing maintenance of diversity</b> .	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
3.4	X		The Company conducts and documents an <b>annual audit of diversity</b> in conjunction with the metro area 911 system integrator to review and verify optimum 911 circuit diversity for the metro area. The Company will share the results of the audit, and any changes made as a result of it, with the system integrator and the MESB.	
			<b>DEFAULT ROUTING</b>	
4.1	X		The Company uses <b>NPA/Customer Concentration Based Default Routing</b> . The Company has provided details of the Company's default routing plan and methodology, including current customer concentration data, in this Addendum.	
4.2	X		The Company's switch determines the appropriate 911 trunk group to use for sending a 911 call to the selective router using a <b>trunk group selection method</b> that is based on the NPA of the caller's telephone number.	
4.3	X		When <b>default routing</b> occurs, the 911 selective router will default route 911 calls from <i>the Company's</i> subscribers to the Default PSAP assigned to the incoming trunk group over which the Company sent the 911 call.	
			<b>CONTINGENCY PLANS</b>	
5.1	X		The Company maintains <b>service restoration and disaster recovery plans</b> .	
5.2	X		The Company utilizes default routing in the case of <b>ANI failure, No Record Found conditions, or selective router database failure</b> .	
5.3	X		The Company's 911 trunk groups are designed and engineered with <b>automatic route advance</b> so that if any member in a trunk group fails, the call will advance to the next available circuit. If all members are busy or have failed, the call will route advance to the secondary group.	
5.4	X		The Company's 911 trunk groups are designed and engineered using <b>diverse paths</b> to allow for continuity of service such that the circuits to the primary 911 selective router are diverse from the circuits to the secondary 911 selective router.	
5.5	X		The Company's 911 trunk groups are designed and engineered with <b>carrier system diversity</b> so that members within a 911 trunk group are assigned across different carrier systems in the switch.	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
5.6	X		The Company's 911 trunk groups are designed and engineered so that if <b>all circuits are busy or out of service</b> to both the primary and the secondary 911 selective router for a given default PSAP area, the caller will receive fast busy tone.	
5.7	X		<i>The Company</i> , in the event of a <b>failure of one of the metro area paired selective routers</b> , will route 911 calls to the available 911 selective router.	
5.8	X		The metro area system integrator can contact <i>the Company</i> to <b>busy out trunks or forward 911 calls to a ten-digit number</b> using the 24 Hour number for PSAP Trouble Reporting listed on page one of the Company's 911 Plan. Upon restoration of the network, the Company will route all calls normally over the 911 network.	
5.9	X		The Company maintains <b>power failure backup and/or an alternate power source</b> for the Company's switch and associated carrier, fiber, and transmission equipment. The Company regularly tests their power failure backup and/or alternate power source system(s). In the event of the loss of commercial power, the Company's primary power failure plan is sufficient for a minimum of <u>  8  </u> ( <i>enter #</i> ) hours battery backup supplemented by a secondary plan of: ( <i>briefly describe secondary plan</i> )  Switch locations are also equipped with uninterruptible power supply, and have appropriately-sized standby generators, capable of operating for a minimum of twenty-four (24) hours before refueling, in the event of a failure in commercial power. These powering systems are monitored 24 X 7.	
5.10	X		<i>The Company</i> will notify the metro area system integrator within 15 minutes of detection of an <b>isolation of the Company's switch(es)</b> . (All inbound and outbound traffic is denied.) The system integrator will notify the PSAPs. The Company will report progress at least hourly to the system integrator until the outage is resolved.	
5.11	X		In the event of an <b>isolation of the Company's 911 circuit facilities only</b> , the Company will contact the metro area system integrator within 15 minutes of the Company's detection. The system integrator will notify the PSAPs. The Company will report progress at least hourly to the system integrator until the outage is resolved.	



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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
5.12	X		Depending on the severity and length of a Company switch isolation or other 911-related outage, the Company will <b>notify customers and the media</b> . Various forms of media contact will be used as appropriate, such as radio and/or television, to reach the Company's customers. The Company will advise customers of alternative methods to obtain emergency services such as use of cell phones, neighbors who are not the Company's customers, and physically contacting local authorities.	
5.13	X		The Company has <b>conditional routing procedures on file and accessible 24x7</b> by the Company's network operation center to route 911 calls to the appropriate ten-digit telephone number for each PSAP. Conditional routing procedures will only be invoked with the concurrence of the metro area system integrator and the Default PSAPs.	
			<b>TROUBLE REPORTING</b>	
6.1	X		<i>The Company</i> maintains <b>911 circuit routing profiles</b> , or has made arrangements with another entity to maintain on its behalf.	
6.2	X		<i>The Company</i> maintains <b>911 trouble reporting and trouble escalation procedures</b> .	
6.3	X		<i>The Company</i> <b>accepts trouble reports</b> from the metro area system integrator, the metro area PSAPs, or the MESB at the 24 hour PSAP trouble reporting telephone number listed on page one of the Company's 911 Plan.	
6.4	X		<i>The Company</i> has <b>established communications channels with the metro area system integrator</b> (currently CenturyLink) and has communicated to Company personnel that the 911 System Integrator's 24x7 trouble reporting number is 1-800-357-0911.	
6.5	X		<i>The Company</i> will <b>notify the metro area system integrator</b> within 15 minutes of <i>the Company's</i> detection of a 911 service affecting trouble condition. <i>The Company</i> will also make proactive notification to the metro area system integrator on behalf of the PSAPs in the event it detects 911 service trouble conditions not <i>in the Company's</i> switch or facilities. <i>The Company</i> will coordinate trouble resolution with the metro area system integrator. The metro area system integrator will contact affected PSAPs.	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
6.6	X		The Company has implemented <b>call trace, address verification and busy line verification and interrupt</b> methods and procedures and communicated them to appropriate Company personnel. The Company will handle requests for these procedures through its 24 hour Call Trace telephone number listed on page one of the Company's 911 Plan.	
6.7	X		The Company conducts <b>network monitoring 24 hours, 7 days a week</b> through a network operations center. Network monitoring includes all 911 circuits that originate or terminate in the Company's facilities. The Company monitors circuits to the individual circuit level.	
6.8	X		The Company provides <b>priority restoration to 911 trouble and service interruptions</b> . Internal flags have been placed on 911 trunk groups or circuits for clear identification, allowing Company personnel to react quickly to all alarms indicating a 911 service interruption or impairment.	
6.9	X		When 911 trouble and service interruptions persist, the Company will request <b>trouble escalations, internally and from the metro area system integrator</b> , to assist in communication and resolution.	
			<b>DATABASE</b>	
7.1	X		The Company will share <b>customer information and location data</b> consistent with current national, Minnesota, and Metropolitan Emergency Services Board standards for providing emergency telephone service.	
7.2	X		The Company has entered into a <b>non-disclosure agreement</b> with the metro area ALI database provider (CenturyLink and/or its vendor, Intrado) with which it shares its customer information for the metro area 911 database.	
7.3	X		The Company has obtained a <b>Company service provider ID</b> from the National Emergency Number Association (NENA.) The Company will ensure, or has made arrangements with another entity to ensure, that the Company's service provider ID appears on the ALI records for company subscribers and is displayed at the PSAP as required by the County 911 Plan.	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
7.4	X		The Company provides, or has made arrangements with another entity to provide, <b>911 database record updates</b> to the metro area ALI database provider. The Company electronically exchanges data record <b>updates in the format required by the ALI database provider at the following frequency:</b> <i>(provide description of frequency)</i> Three times per day	
7.5	X		The Company obtains error files from the metro area ALI database provider resulting from the processing of its record updates to the 911 database. The Company <b>obtains the error files at the following frequency:</b> <i>(provide description of frequency)</i>  Three times per day	
7.6	X		The Company uses the information contained in the Master Street Address Guide (MSAG) to <b>pre-validate the addresses of its customer</b> contained on source records and service orders prior to submitting them to the 911 database.	
7.7	X		The Company investigates, corrects, and resubmits 911 database errors associated with its customers to the metro area ALI database provider within 48 hours of error detection. For errors requiring an MSAG change for resolution, the Company refers MSAG change requests according to standard processes within 48 hours of error detection.	
7.8	X		In the instance when a Company customer's <b>address is not valid for 911 according to the current MSAG</b> , the Company contacts the ALI database provider to determine if a MSAG Change Request should be made to the metro area PSAP responsible for the customer's community. The Intrado data analyst will initiate the MSAG Change Request on behalf of the Company.	
7.9	X		The Company <b>corrects errors</b> resulting from daily 911 processing, no record found conditions, or incorrect 911 calls in both the Company's source records and in the 911 database.	
7.10	X		The Company takes <b>action to reduce no record found conditions and/or address errors</b> if the Company's results do not meet the MESB's database standards.	
7.11	X		The Company receives <b>monthly MSAGs</b> for the 9-county metro area from the ALI database provider.	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
7.12	X		The Company receives <b>daily Delta MSAG updates</b> from the metro area ALI database provider and applies those updates to the version of MSAG information it uses to validate customer addresses.	
7.13	X		The Company has access to the <b>911NET system</b> to query information on current MSAG information and MSAG updates in between monthly distributions of the MSAG.	
7.14	X		The Company performs an <b>annual database comparison and reconciliation</b> of Company source records with the ALI database records for its customers. The Company corrects any data errors in the Company's source records and/or the 911 database that were identified through each annual data reconciliation.	
7.15	X		The Company <b>monitors its data quality</b> for 911 through analysis of error rates, no record found conditions, and the annual database reconciliation results. The Company will perform specialized investigations or audits should the Company become aware of data issues affecting the quality of the 911 database information for its customers.	
7.16	X		The Company complies with current NENA data standards for <b>Local Number Portability (LNP)</b> . The Company's contact for LNP coordination is: <i>(provide the contact person's name, telephone number, and email address)</i>  Jason Quick 314-938-5437 Jason.Quick@charter.com	
			<b>OPERATOR SERVICES</b>	
8.1	X		The Company will provide for <b>operator-assisted emergency calls</b> , including calls from speech impaired, hearing impaired, or non-English speaking customers.	
8.2		X	The Company provides its own Operator Services.	
8.3	X		The Company has contracted with the following entity to provide Operator Services: <i>(list operator services provider)</i> KGB	No explanation needed if "yes" is noted for the row above.
8.4	X		The Company has obtained from the MESB and provided to their operator services provider the metro area <b>10-digit PSAP emergency numbers and "Community to PSAP" Table</b> .	

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Line #	YES	NO	Statement of Company's Ability and Intent for the Metro Area	Explanation of "NO" responses
8.5	X		In the event that a caller dials "0-" instead of 911 and requires emergency assistance, <i>the Company</i> will transmit the ANI of the caller to the Company's operator services provider which will <b>reroute the call to the PSAP serving the geographic area of the caller.</b>	
8.6	X		When the Company's operator services provider <b>reroutes a call to a PSAP</b> , the PSAP chosen will be the one assigned in the "Community to PSAP" Table for <b>the jurisdiction/ community specified by the caller</b> , not a PSAP chosen based on the NXX prefix of the ANI. The NXX prefix is no longer an adequate determinant of the caller's location due to local number portability and other factors.	
8.7	X		The Company has made arrangements with the Company's operator services provider to allow for the capability of the operator to <b>reroute emergency calls into the 911 network with the caller's originating ANI</b> , allowing the 911 selective router to route the call to the appropriate PSAP based on the ANI and the 911 database. ( <i>Note: not all companies may have this capability.</i> )	

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**CHTR****Default Routing Plan Methodology**

**Complete sections (a) through (d) to describe the default routing methodology used by the Company:**

(a) The Company uses NPA/Customer Concentration Based Default Routing. 911 Trunk Group selection and associated Default PSAP selection for a given Company subscriber are determined using the NPA of the subscriber's telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company's service area. The following Default PSAPs have been assigned to the Company's 911 Trunk Groups. List all that apply:

<u>NPA</u>	<u>Chosen Default PSAP(s):</u>
612	N/A
651	Dakota Z1
763/320	Hennepin
952	Dakota Z2

(b) The Default PSAPs (*above*) were chosen based on the highest concentration of the Company's subscribers in the specific NPA. Annually, the Company updates and reviews customer concentration data to determine the validity of the Default PSAP selections. The Company's customer concentration data as of 5/1/2016 (*date*) supports the selection of the Default PSAPs specified in this 911 Plan. The customer concentration data listed herein is based on (*choose one*):

Actual Customer Counts  
 Marketing Plans  
 Other (specify)

(c) The Company's customer concentration data is as follows: (For each NPA, enter % of Total for each PSAP Serving Area)

<u>NPA</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
<b>612</b>	Minneapolis ECC	0
<b>Total for 612 NPA</b>		<b>100%</b>
<b>651</b>	Anoka County Central Comm	
<b>651</b>	Hennepin County Sheriff	
<b>651</b>	Dakota Communications Center	99%
<b>651</b>	Ramsey County Emergency Comm Center	1%
<b>651</b>	Washington County Sheriff	
<b>Total for 651 NPA</b>		<b>100%</b>
<b>763</b>	Anoka County Central Comm	
<b>763</b>	Hennepin County Sheriff	100%
<b>763</b>	Isanti County Sheriff	
<b>Total for 763 NPA</b>		<b>100%</b>
<b>952</b>	Carver County Sheriff	1%
<b>952</b>	Dakota Communications Center	96%
<b>952</b>	Hennepin County Sheriff	2%
<b>952</b>	Scott County Sheriff	1%
<b>Total for 952 NPA</b>		<b>100%</b>

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(d) The Company has reviewed its customer concentration data with the MESB Director of 911 Services to obtain initial approval of the chosen Default PSAPs. Annually thereafter, the Company will obtain updated approval from the MESB prior to 911 Plan filing. The Company obtained the MESB Director of 911 Services' approval of the Default PSAP selections listed in this Addendum on the following date: 8 / 23 / 2016.

For 911 Plan Updates, check one of the following:

The listed Default PSAPs are the same as in the Company's last approved 911 Plan.

The listed Default PSAPs have changed since the Company's last approved 911 Plan.  
Specific changes are: \_\_\_\_\_

Default Routing / Trunking Configuration

Trunk Group Name (e.g. 612 NPA or 952 NPA-Hennepin)	Signaling Type	Group Number	Number of Circuits (Voice Paths)	Default PSAP	Selective Router (Primary / Secondary)	Default ESN
MPLSM NDT2E D02911 (NPA 952)	SS7	923	1	Dakota-Z2	MPLS Downtown Primary	35
MPLSM NDT2E D03911 (NPA 763)	SS7	924	1	Hennepin-North	MPLS Downtown Primary	114
MPLSM NDT2E D04911 (NPA 651)	SS7	925	1	Dakota-Z1	MPLS Downtown Primary	39
MPLSM NDT2E D02911 (NPA 952)	SS7	923	1	Dakota-Z2	St Paul Market St Secondary	35

<i>COMPANY NAME</i>	<b>Charter Fiberlink CCO, LLC</b>			<i>NENA ID</i>	<b>CHTR</b>	
MPLSM NDT2E D03911 (NPA 763)	SS7	924	1	Hennepin- North	St Paul Market St Secondary	114
MPLSM NDT2E D04911 (NPA 651)	SS7	925	1	Dakota-Z1	St Paul Market St Secondary	39



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**CHTR****Telecommunications Service Priority (TSP)**

The Company will coordinate with the MESB to ensure that it has one circuit between the Company's switch and one of the metro selective routers registered with the FCC as having Telecommunications Service Priority (TSP) for restoration. The Company will update its TSP designations, as necessary, should it make any metro area 911 network circuit/configuration changes. Annually, at a minimum, the Company will review its TSP designation for a metro area 911 circuit to verify it is appropriate and accurate. The Company's metro area 911 circuit with TSP designation as of the date of this 911 Plan filing is:

**911 Circuit with TSP**

Selective Router	Circuit CAC Code	TSP #
Primary-Minneapolis	MAB3VZ2	TSP0DH44G-03
	OR	
Secondary-St Paul		

**Diversity Plan Detail****Provide a description of the diversity configuration and philosophy in use.**

Primary – DS1 facility provided by CenturyLink from CenturyLink-Minneapolis to the 511 Building. Charter then backhauls on its own network to Waite Park.

Secondary – DS1 facility provided by CenturyLink (Wholesale) from CenturyLink-St. Paul to the Charter-Waite Park headend.

**Provide a more detailed diagram to fully convey the degree of circuit diversity.**

## Default Routing Plan Detail:

NPA 651 calls will default route to the Dakota County PSAP in the dual St. Paul/Minneapolis E911 tandems.

The trunk group for NPA 651 is assigned to Channel 4 on each T1.

Primary – CenturyLink TSC AL141666 – 101/T1ZF/04/MPLSMNCDWAJ/MPLSMNDT

Secondary – CenturyLink TSC AL141665 – 101/T1ZF/04/MNPLMNFDWAA/STPLMNMK

NPA 763 calls will default route to the Hennepin County PSAP in the dual St. Paul/Minneapolis E911 tandems.

The trunk group for NPA 763 is assigned to Channel 3 on each T1.

Primary – CenturyLink TSC 141667 – 101/T1ZF/03/MPLSMNCDWAJ/MPLSMNDT

Secondary – CenturyLink TSC 141664 – 101/T1ZF/03/MPLSMNFDWAA/STPLMNMK

NPA 952 calls will default route to the Dakota County PSAP in the dual St. Paul/Minneapolis E911 tandems.

The trunk group for NPA 952 is assigned to Channel 2 on each T1.

Primary – CenturyLink TSC 141668 – 101/T1ZF/02/MPLSMNCDWAJ/MPLSMNDT

Secondary – CenturyLink TSC 141663 – 101/T1ZF/02/MPLSMNFDWAA/STPLMNMK

<b>COMPANY NAME</b>	<b>Charter Fiberlink CCO, LLC</b>	<b>NENA ID</b>	<b>CHTR</b>
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- Charter Fiberlink CCO assigns line class screening based upon NPA for selection of 911 trunk group in the metro area.
- Charter Fiberlink CCO chose the default PSAP in each NPA based upon volume of customers as of 5/1/2016. The default PSAP covers the area in which Charter Fiberlink CCO is currently serving customers in each NPA.
- The selection of default PSAPs was approved by Pete Eggimann on 8 / 23 / 2016.
- Charter Fiberlink CCO has reviewed the default routing/trunking configuration to confirm the optimal default routing arrangement based on Charter Fiberlink CCO's current concentration of customers.

Describe how the annual audit (review and verification) of 911 circuit diversity will be conducted.

Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits in coordination with the metro area 911 system integrator. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO's circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the MESB will be notified of the results of the audit and any changes resulting from it.

The circuits used by Charter Fiberlink CCO to connect to the Primary selective router are physically diverse routes and diverse carrier systems than the circuits used by Charter Fiberlink CCO to connect to the Secondary selective router.

Charter Fiberlink CCO uses SS7 signaling for both the primary and secondary routes to the selective routers. We affirm that the portion of the SS7 network used to process 911 calls using SS7 technology uses:

- \_ Mated signaling transfer point (STP) processors.
- \_ Redundant SS7 connections between end central office and STPs as well as those between STPs at the various levels.
- \_ SS7 data links have both physical route and carrier system diversity.
- \_ An engineering threshold of forty percent capacity triggers the installation of additional data links.

The 10-digit 24x7 number for Hennepin County-North is 763-525-6220.

The 10-digit 24x7 number for Dakota County Zone 1 is 651-322-8651.

The 10-digit 24x7 number for Dakota County Zone 2 is 651-322-8654.

The 10-digit 24x7 number for Carver County is 952-361-1231.

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NENA ID

**CHTR****Metropolitan Emergency Services Board Network Service Standards**

(Applicable to Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, and Washington Counties)

*INITIAL VERSION – 8/20/96**FIRST REVISION – 10/11/2000**SECOND REVISION – 03/09/2005***ELEMENT OF SERVICE STANDARD****OVERALL**

- 1 **System integration.** There will be a system integrator for the 911 system designated by the county in their 911 plan. The system integrator will perform coordination and oversight functions for the entire 911 system as jointly defined with the county.

**ROUTING**

- 2 **Selective Routing.** 911 calls will automatically be routed, as specified by the county plan, to the PSAP that provides dispatching services for the public safety agencies serving the area from which the 911 is placed.
- 3 **Redundant routing equipment.** There will be redundant routing equipment so that if one router malfunctions the other switching device will continue to route all calls that originate in the 911 system.
- 4 **Default routing plan.** The system shall be designed so that if the normal means of routing a call malfunctions, a default routing plan, as adopted by the county, will be used to route the call to an alternate location.
- 5 **Routing of 911 calls from central offices.** Trunk groups will be set up so that for every trunk group to the primary selective router, a corresponding trunk group is set up to the secondary selective router. If the SS7 system fails and the call cannot be routed to the selective routers, the call will be routed to re-order tone.
- 6 **Routing 911 calls from wireless telephones.** The network will be capable of selectively routing wireless 911 calls to the PSAP that serves the area from which the call was placed.
- 7 **911 calls from PBX extensions.** The network and ALI database will be capable of selectively routing 911 calls from PBX extensions to the appropriate PSAP and delivering the correct ANI and ALI of the extension which placed the 911 call.

**VOICE NETWORK**

- 8 **Call Setup time.** 911 calls will be completed within 8 seconds after the caller dials the last digit, 1.
- 9 **Tone signals to the caller.** The tones heard by the caller will be the same as are used in the public switch telephone network.
- 10 **911 call delivery.** The 911 system will be designed with dedicated voice trunks on dedicated facilities that are not shared with any other telecommunications traffic.
- 11 **Call hold.** The 911 system shall be designed so that the call taker can place a 911 call on hold, answer another call, and then return to the first call.
- 12 **Identify dedicated 911 facilities.** All telephone equipment that is used exclusively for 911, or which is essential to the operation of the 911 system, shall be clearly labeled as a 911 component to ensure proper handling.
- 13 **Network capacity.** P.01 minimum grade of service such that not more than one call out of 100 incoming calls receive a busy signal on the first dialing attempt during a busy hour of an average week during the busy month.

<b>COMPANY NAME</b>	<b>Charter Fiberlink CCO, LLC</b>	<b>NENA ID</b>	<b>CHTR</b>
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- 14 **Traffic studies.** Traffic studies for the entire network will be conducted at least annually with reports given to the PSAPs and the county's 911 system coordinator. If p.01 service is not being met, the system integrator will recommend the required trunking quantities. Carriers will conduct traffic busy studies for their respective end office 911 voice trunks. The system integrator will conduct usage studies on the incoming voice trunks to the tandem as well as busy & usage studies on the tandem to PSAP voice trunks.
- 15 **SS7 Network Standards.** All carriers will review their SS7 network annually and document to the Board and to the State that their systems are compliant with the SS7 Network Standards contained in their 911 Agreement as a part of the annual diversity audit.
- 16 **Central office isolation and alternate routing.** Trunking will be arranged to minimize the likelihood of central office isolation due to cable cuts or other equipment failures. There will be an alternate means of transmitting a 911 call to a PSAP in the event of failures.
- 17 **Diversity.** 911 voice trunks will have interoffice, loop & carrier system diversity when such diversity can be achieved using existing facilities. Voice trunks will be divided as equally as possible across available carrier systems. SS7 "A" links will have interoffice, loop & carrier system diversity. If no diversity, an alternate means of completing the call will be provided at the option of the county. Diversity will be maintained or upgraded to utilize the highest level of diversity available in the network. 120 days notification will be given prior to major network changes. Carriers will conduct & document an annual audit to confirm optimum diversity.
- 18 **Monitoring of equipment and voice trunks.** Carriers will monitor network equipment. SS7 networks, and voice trunks used for 911. Monitoring will be conducted by the system integrator at the individual trunk level for 911 voice trunks of all carriers at the tandem switch.
- 19 **Affects of host-remote central offices on the 911 call delivery system.** Host-remote central office technology will not degrade 911 service or affect 911 in any way. There will be separate trunk groups out of the host for each remote. Where the umbilical is not diverse, an alternate means of completing the 911 call will be provided at the option of the county.
- 20 **Immediate Ring Tone.** If the carrier's switch is capable, immediate ring tone shall be presented to the caller.
- 21 **Transferring 911 calls to another PSAP.** A PSAP receiving a transfer from another connected PSAP will have the correct ANI & ALI. The first call taker will be able to remain connected as a third party to the call. When they go off-line, the caller will remain connected to the transfer location.

### **REPAIR SERVICE**

- 22 **Trouble reporting.** A 24 hour, 7 day a week trouble reporting repair center will be maintained by the system integrator and staffed by employees trained in 911 and knowledgeable in the county's 911 system. All carriers will be available 24 hours, 7 days a week to receive trouble reports from the system integrator.
- 23 **Repair service performance standards.** Repair service will begin within 2 hours of receipt of a report of a malfunction. Repair service includes testing & diagnostic service from a remote location, dispatch of or on-site visit(s) of personnel. Technicians will be dispatched without delay. Priority effort will be given to trouble conditions which, in the opinion of the PSAP manager, require immediate attention due to the severity of the service impact.
- 24 **PSAP notification of network & ALI failures.** Affected PSAPs will be notified by the system integrator within 15 minutes of telco identification of the failure. If the problem persists, the system integrator will provide hourly updates to the impacted PSAP(s). Monthly outage summary reports will be provided by the system integrator to the county's 911 system coordinator, including an analysis of outages not corrected within 1 hour.
- 25 **Disaster recovery plan.** The system integrator will design, implement and maintain a disaster recovery process for the 911 network and database systems. All other carriers will design, implement, and maintain disaster recovery plans for their portion of the network. CLECs will include Disaster Recovery Plans in their 911 Plans filed with the Minnesota Public Utilities Commission.

**COMPANY NAME**

**Charter Fiberlink CCO, LLC**

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**ANI**

- 26 **ANI.** The telephone number of the device used to place the 911 call will be displayed at the PSAP at the time the call is answered. This includes the capability to provide 10-digit call back number.

**ALI NETWORK**

- 27 **ALI delivery time.** ALI information will be delivered to the PSAP within 2 seconds. Depending upon the type of CPE, the first character of the ALI is delivered in less than 2 seconds after the call is received by the equipment, or after the call is answered by a call taker.
- 28 **Redundant location information databases.** Location information databases and related hardware will be redundant and configured so that failure of one unit will not cause a malfunction of the 911 location information system.
- 29 **Diversity of the location information network.** ALI links will have interoffice, loop & carrier system diversity when such diversity can be achieved using existing facilities. ALI links will be divided as equally as possible across available carrier systems. Diversity will be maintained or upgraded to utilize the highest level of diversity available in the network. 120 days notification will be given prior to major network changes. 911 Service Provider will conduct & document an annual audit to confirm optimum diversity.

COMPANY NAME

**Charter Fiberlink CCO, LLC**

NENA ID

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## Metropolitan Emergency Services Board 911 Data Base Service Standards

(Applicable to Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, and Washington Counties)

*Initial version - 8/20/96*

*Updated by the Metropolitan Emergency Services Board - 6/15/05*

### ELEMENT OF SERVICE STANDARD

#### DATA BASE UPDATES

- 1 **Delivery of service order updates to System Integrator.** Data providers will deliver 911 service order updates to the system integrator within 1 business day of the close of service order activity.
- 2 **Service order update processing to ALI database.** The system integrator will process the service order updates received from data providers within 1 business day of receipt by electronic file transfer.

#### MASTER STREET ADDRESS GUIDE

- 3 **Master Street Address Guide (MSAG) copies.** The system integrator will provide to the county and the data providers a copy of the MSAG at least 4 times a year in a mutually agreeable format according to a mutually agreeable schedule.
- 4 **MSAG update turnaround time.** The system integrator will process or refer MSAG updates within 1 business day of receipt, provided the update does not have discrepancies or would not result in errors. Special large volume changes will be separately negotiated between the 911 Coordinator and the system integrator.
- 5 **MSAG update distribution to data providers.** The system integrator will distribute completed MSAG updates to data providers within 1 business day of completion.
- 6 **Use of MSAG updates.** Data providers will establish a documented process to receive and utilize daily MSAG updates distributed from the system integrator.

#### ERROR CORRECTION

- 7 **Error distribution to data providers.** The system integrator will distribute errors from 911 update processing to the appropriate data provider via electronic method within 1 business day of detection.
- 8 **Address error percentage.** No more than 10% of the service order updates of a data provider will err due to a mismatch of addresses to the Master Street Address Guide (MSAG).
- 9 **Error retrieval by data providers.** Data Providers will retrieve 911 error files each business day as distributed to them by the system integrator from 911 update processing.
- 10 **Error correction or referral to the 911 Coordinator.** Data providers will correct or appropriately refer to the 911 Coordinator errors from 911 database update processing within 2 business days of retrieval of the error file by the data provider.
- 11 **Attempts to resolve address errors before referral to 911 Coordinator.** Data providers will refer errors to the 911 Coordinator after use of data provider's resources and three attempts to reach the customer.
- 12 **Identification of any records with specific addresses unknown.** The system integrator will identify the records monthly on a mutually agreeable date.

COMPANY NAME **Charter Fiberlink CCO, LLC**

NENA ID **CHTR**

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**NO RECORD FOUNDS**

- 13 **No record found identification and distribution.** No record found conditions will be identified by the system integrator through the ALI audit trail and distributed to the appropriate data provider within 3 business days.
- 14 **No record found resolution from audit trail.** No record found conditions will be resolved by data providers within 5 business days of notification by the system integrator of the no record found conditions.
- 15 **No record found percentage.** No more than .5% of the 911 calls will receive a no record found condition. Any data provider exceeding .5% no record found conditions for 6 months cumulative average shall submit a corrective action plan to the Metropolitan Emergency Services Board staff.
- 16 **Analysis of no record founds for cause.** The system integrator and 911 coordinator will conduct an analysis at least quarterly of no record found conditions in order to determine causes and recommend corrective or preventative action.

**MISROUTED 911 CALLS**

- 17 **Misroute percentage.** No more than .1% of the 911 calls will be misrouted.
- 18 **Analysis of misrouted 911 calls for cause.** The system integrator and 911 coordinator will conduct an analysis at least quarterly of misrouted 911 calls in order to determine causes and recommend corrective or preventative action.

**911 INQUIRIES**

- 19 **911 inquiry distribution to data providers.** 911 inquiries that identify problems with a data provider's data will be distributed by the system integrator to the appropriate data provider within 1 business day of receipt.
- 20 **911 inquiry turnaround time.** 911 inquiries will be resolved within 5 business days of receipt by the appropriate data provider.

**DATA BASE RECONCILIATION**

- 21 **Copies of data provider data from the ALI system.** Data providers will request and the system integrator will provide to each data provider on an annual basis a copy of the data provider's data residing on the ALI system to allow the data provider to validate the data.
- 22 **Data validation.** Data providers will schedule a date for their annual data validation by 6/30 of each calendar year. Data providers will validate the ALI data for their subscribers annually by 12/31 of each calendar year.

**AUDIT TRAIL**

- 23 **Audit Trail Reports.** Audit trail reports will be provided by the system integrator to the 911 Coordinator monthly by the fifteenth business day of the month.

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

*Addendum B – CenturyLink Duluth*

Service Area

**Check all counties for this Router the Company provides service for:**

Carlton County       Cook County       Saint Louis County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
218/464	Duluth		Charter Fiberlink CCO provides
218/481	Duluth		Connectivity on its own network.
218/522	Duluth		
218/606	Duluth		



**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Duluth, MN	Metaswitch	DLTHMN360MD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
CenturyLink		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
<b>218</b>	<b>464/481/522/606</b>	<b>Duluth</b>	<b>St. Louis South</b>	<b>100%</b>
			<i>Total</i>	<i>100%</i>
			<i>Total</i>	<i>100%</i>
			<i>Total</i>	<i>100%</i>
			<i>Total</i>	<i>100%</i>

(b) The Default PSAPs (*above*) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (5/01/2016) (*date*) supports the selection of the Default PSAPs and is based on (*choose one*):

Check one

Actual Customer Counts

Marketing Plans

Other -specify: \_\_\_\_\_

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: (5/22/2015).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
Duluth	2	AL141657	DLTHMNME72G01911	918	SS7	St. Louis South	0503

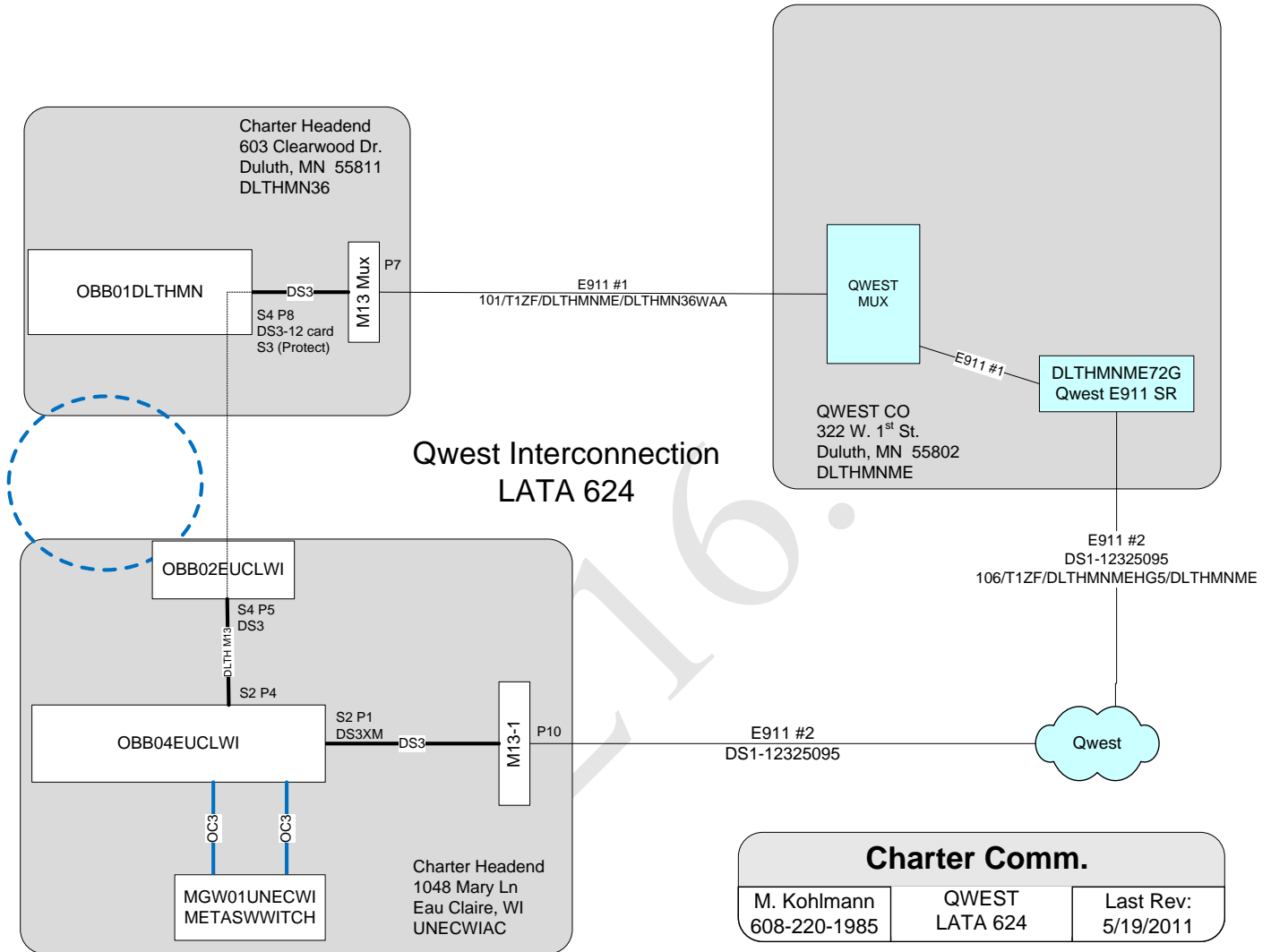
**COMPANY NAME:** Charter Fiberlink CCO, LLC

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
DS1 Facility provided by CenturyLink from CenturyLink-Duluth CO to the Charter-Duluth headend. Charter Fiberlink CCO provides transport between Duluth and Eau Claire. CenturyLink TSC – AL141657 – 101/T1ZF/01/DLTHLMNME/DLTHMN36WAA
DS1 Facility provided by CenturyLink (wholesale) from CenturyLink-Duluth CO to the Charter-Eau Claire headend. CenturyLink TSC – AL141657 – 101/T1ZF/01/DLTHMNMEHG5/DLTHMNME
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO’s circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Circuit Connection Diagram**

Insert a circuit connection diagram for *the Company's* circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs Served:  
St. Louis County South  
dESN = 503

Charter Comm.		
M. Kohlmann 608-220-1985	QWEST LATA 624	Last Rev: 5/19/2011

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

**Addendum D – CenturyLink Minneapolis**

Service Area

**Check all counties for this Router the Company provides service for:**

Benton County  Goodhue County  Isanti County  Meeker County   
 (see also Addendum E) (see also Addendum H)

Sherburne County  Stearns County  Wright County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
763/207 and 763-309	Big Lake		Charter Fiberlink CCO provides connectivity on its own network
320-559	Cokato		
320/626	Dassel – see addendum H		
320/401	Maple Lake		
763/272	Monticello		
320/352	Sauk Centre		
320/217 and 320/281 and 320/774	St Cloud		
320/557	St Joseph		
651/200 and 651/332 and 651/333 and 651/344 and 763/267 and 763/276 and 763/355 and 763/515 and 763/595 and 763/777 and	Twin Cities		

**COMPANY NAME:** Charter Fiberlink CCO, LLC

952/236 and 952/255 and 952/378 and 952/388 and 952/683			

V.031116.0935

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Buffalo, MN	Metaswitch	BFLOMNAE0MD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>4</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
CenturyLink		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	



**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
320	352, 217, 281, 774,	Sauk Centre, St Cloud, St Joseph	Stearns	38%
952	236,255,278,288,683	Twin Cities	Stearns	
<i>Total</i>				<i>100%</i>
763	272, 267, 276, 355, 515, 595, 777	Monticello, Twin Cities	Wright	
320	559, 401	Cokato, Maple Lake	Wright	16%
<i>Total</i>				<i>100%</i>
763	207,309,267,276,355,515,595,777	Big Lake, Twin Cities	Sherburne	33%
320	217,281,774	St Cloud	Benton	13%
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>

(b) The Default PSAPs (*above*) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (\_5/\_1/\_2016\_) (*date*) supports the selection of the Default PSAPs and is based on (*choose one*):

Check one

X \_\_\_\_\_ Actual Customer Counts

\_\_\_\_\_ Marketing Plans

\_\_\_\_\_ Other -specify: \_\_\_\_\_

**COMPANY NAME:** Charter Fiberlink CCO, LLC

\_\_\_\_\_

V.031116.0935

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company's customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: **(5/22/2015)**.

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
MPLSMNDT2ED	4	AL142923	MPLSMNDT2ED07911	926	SS7	Stearns	402

**COMPANY NAME: Charter Fiberlink CCO, LLC**

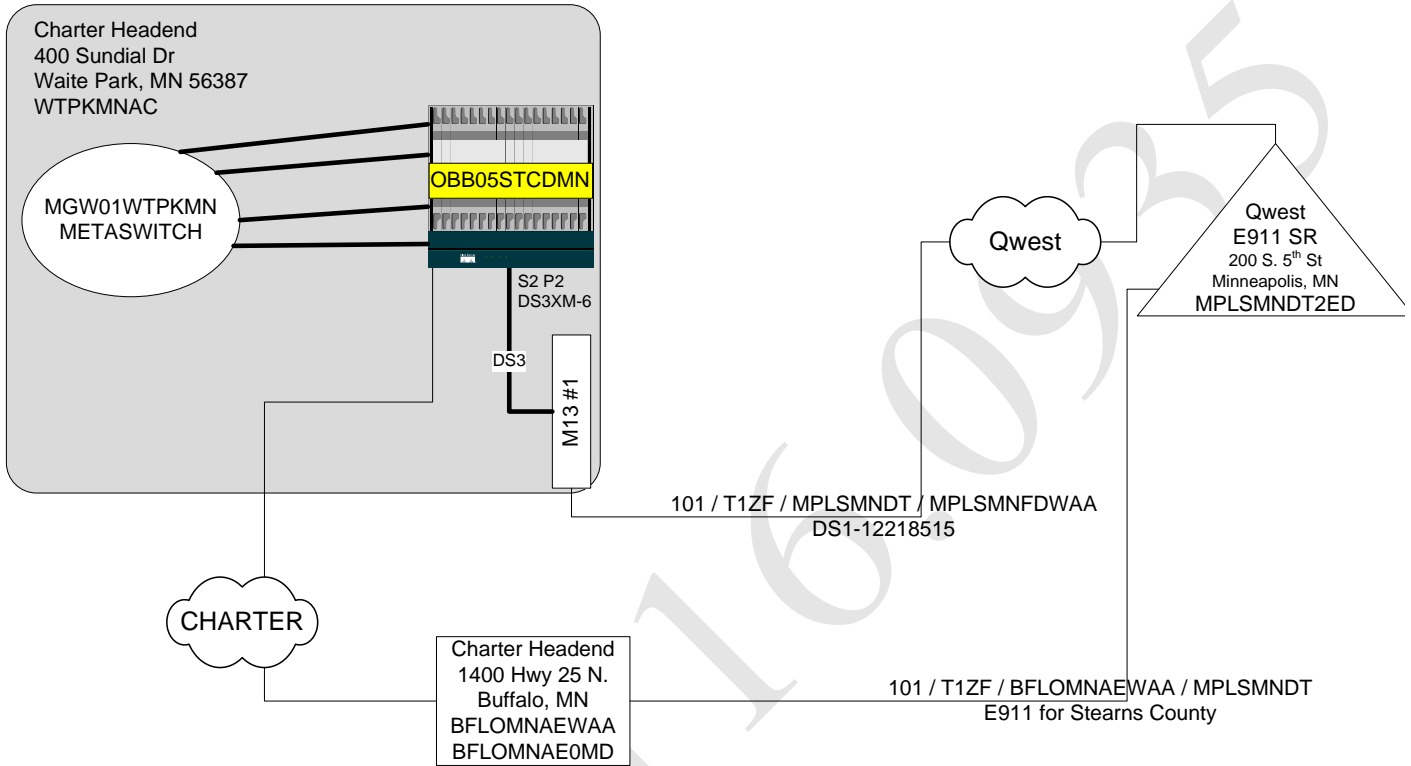
Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
<p>Primary – DS1 facility provided by CenturyLink (LEC) from CenturyLink-Minneapolis to the Charter-Buffalo headend.          CenturyLink TSC – AL 142923 – 101/T1ZF/07/MPLSMNCDWAJ/MPLSMNDT          CenturyLink TSC – AL 142923 – 101/T1ZF/09/MPLSMNCDWAJ/MPLSMNDT</p> <p>Diverse – A diverse DS1 facility provided by CenturyLink (Wholesale) from CenturyLink-Minneapolis to the Charter-Waite Park headend.          CenturyLink TSC – AL142923 – 101/T1ZF/07/MPLSMNDT/MPLSMNFDWAA          CenturyLink TSC – AL142923 – 101/T1ZF/09/MPSLMNDT/MPLSMNFDWAA</p>
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS, the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO’s circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Circuit Connection Diagram**

Insert a circuit connection diagram for *the Company's* circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.

**Qwest Interconnection LATA 626**



Charter Comm.		
M. Kohlmann 608-220-1985	QWEST LATA 626	Last Rev. 3/29/07

PSAPs Served:  
 Stearns  
 Wright  
 Sherburne  
 Benton  
 dESN = 402

**COMPANY NAME:** Charter Fiberlink CCO, LLC

V.031116.0935

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

**Addendum E – CenturyLink Rochester**

Service Area

**Check all counties for this Router *the Company* provides service for:**

Dodge County       Freeborn County       Goodhue County       Mower County   
 (see also Addendum D)

Olmsted County       Rice and Steele Counties       Wabasha County       Winona County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
507/369 and 507/473 and 507/699	Albert Lea		Charter Fiberlink CCO provides connectivity on its own network.
507/396	Austin		
507/624	Byron		
507/799	Eyota		
507/323 and 507/384	Faribault		
507/603	Kasson		
507/604	Lewiston		
507/301 and 507/664	Northfield		
507/413	Owatonna		
651/212 and 651/800	Red Wing		
507/206 and 507/208 and 507/226 and 507/258 and 507/322	Rochester		
507/410	Rollingstone		
507/533	Stewartville		
507/961	Winona		
507/XXX	Altura		

**COMPANY NAME:** Charter Fiberlink CCO, LLC


V.031116.0940



**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Rochester, MN	Metaswitch	ROCHMNHOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>4</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
651	212/800	Red Wing	Goodhue	5%
507	369/473/699	Albert Lea	Freeborn	8%
<i>Total</i>				100%
507	624/799/206/208/226/258/322/533	Byron,Eyota, Rochester,Stewartville	Olmsted	49%
507	323/384/301/664/413	Faribault, Northfield, Owatonna	Rice & Steele	21%
<i>Total</i>				100%
507	961/410/604/XXX	Winona, Rolling Stone, Lewiston, Altura	Winona	7%
507	396	Austin	Mower	9%
<i>Total</i>				100%
507	603	Kasson	Dodge	1%
<i>Total</i>				100%

(b) The Default PSAPs (above) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (5 / 1 / 2016) (date) supports the selection of the Default PSAPs and is based on (choose one):

Check one

Actual Customer Counts

Marketing Plans

Other -specify: \_\_\_\_\_

COMPANY NAME: Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: (5 /22 / 2015).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
Rochester	4	AL142948	ROCHMNR012T02911	927	SS7	Olmsted	303

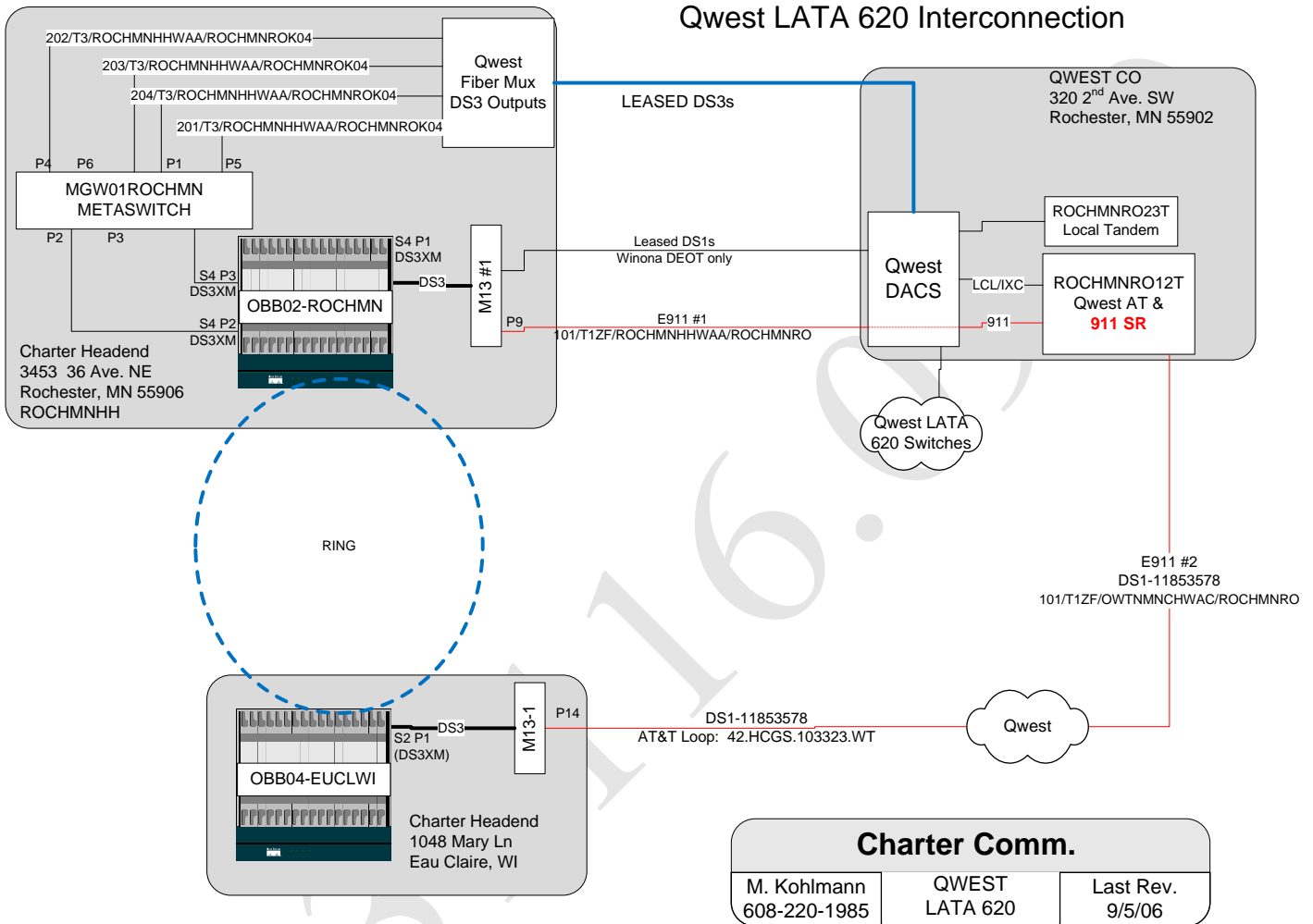
**COMPANY NAME: Charter Fiberlink CCO, LLC**

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
<p>Primary route is DS1 facility provided by CenturyLink (LEC) from CenturyLink-Rochester to the Charter-Rochester headend. CenturyLink TSC – AL142948 - 101/T1ZF/02/ROCHMNHWWAA/ROCHMNRO CenturyLink TSC – AL142948 – 101/T1ZF/07/ROCHMNHWWAA/ROCHMNRO</p> <p>A diverse DS1 facility provided by CenturyLink (Wholesale) from CenturyLink-Rochester to the Charter Eau Claire headend. CenturyLink TSC – AL142948 - 101/T1ZF/02/OWTNMNCWWAC/ROCHMNRO CenturyLink TSC – AL142948 – 191/T1ZF/07/IWTBNBCWWAC/ROCHMNRO</p>
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS, the proposed configuration by Charter Fiberlink CCO of its connectivity to the 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; i.e., the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO’s circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME: Charter Fiberlink CCO, LLC**

**Circuit Connection Diagram**

Insert a circuit connection diagram for the Company’s circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs served:  
Dodge, Freeborn, Goodhue, Mower, Olmsted, Winona, Rice and Steele  
dESN = 303

COMPANY NAME: Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

*Addendum F – IES Brainerd*

Service Area

**Check all counties for this Router *the Company* provides service for:**

- Aitkin County                       Crow Wing County                       Kanabec County   
 (also see Addendum H)
- Mille Lacs County                       Morrison County                       Pine County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
218/429	Aitkin		Charter Fiberlink CCO provides connectivity on its own network
218/394	Bennettville		
218/270 and 218/297	Brainerd		
218/562	Breezy Point		
218/772	Crosby		
218/527	Deerwood		
218/543	Ideal Corners		
320/414	Little Falls		
218/963	Nisswa		
218/568	Pequot Lakes		

**COMPANY NAME:** Charter Fiberlink CCO, LLC


V.022216.1555

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Waite Park, MN	Metaswitch	WTPKMNACOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
IES		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router:		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router:		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	



**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
218	429	Aitkin	Aitken	10%
320	414	Little Falls	Morrison	22%
<i>Total</i>				100%
218	394, 270, 297, 562, 772, 527, 543, 983, 568	Bennettville, Brainerd, Breezy Point, Crosby, Deerwood, Ideal Corners, Nisswa, Pequot Lake	Crow Wing	68%
<i>Total</i>				100%
<i>Total</i>				100%
<i>Total</i>				100%
<i>Total</i>				100%

(b) The Default PSAPs (*above*) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (5 / 1 / 2016) (*date*) supports the selection of the Default PSAPs and is based on (*choose one*):

Check one

- Actual Customer Counts
- Marketing Plans
- Other -specify: \_\_\_\_\_

**COMPANY NAME:** Charter Fiberlink CCO, LLC

\_\_\_\_\_

V.022216.1555

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: (5 /22 /2015).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
BRNRMNXAD S0	2	01/IESMN/18/2/49 01/IESMN/18/1/50	HTSNMNXHDS004911	915	SS7	Crow Wing	5010

**COMPANY NAME:** Charter Fiberlink CCO, LLC

V.022216.1555

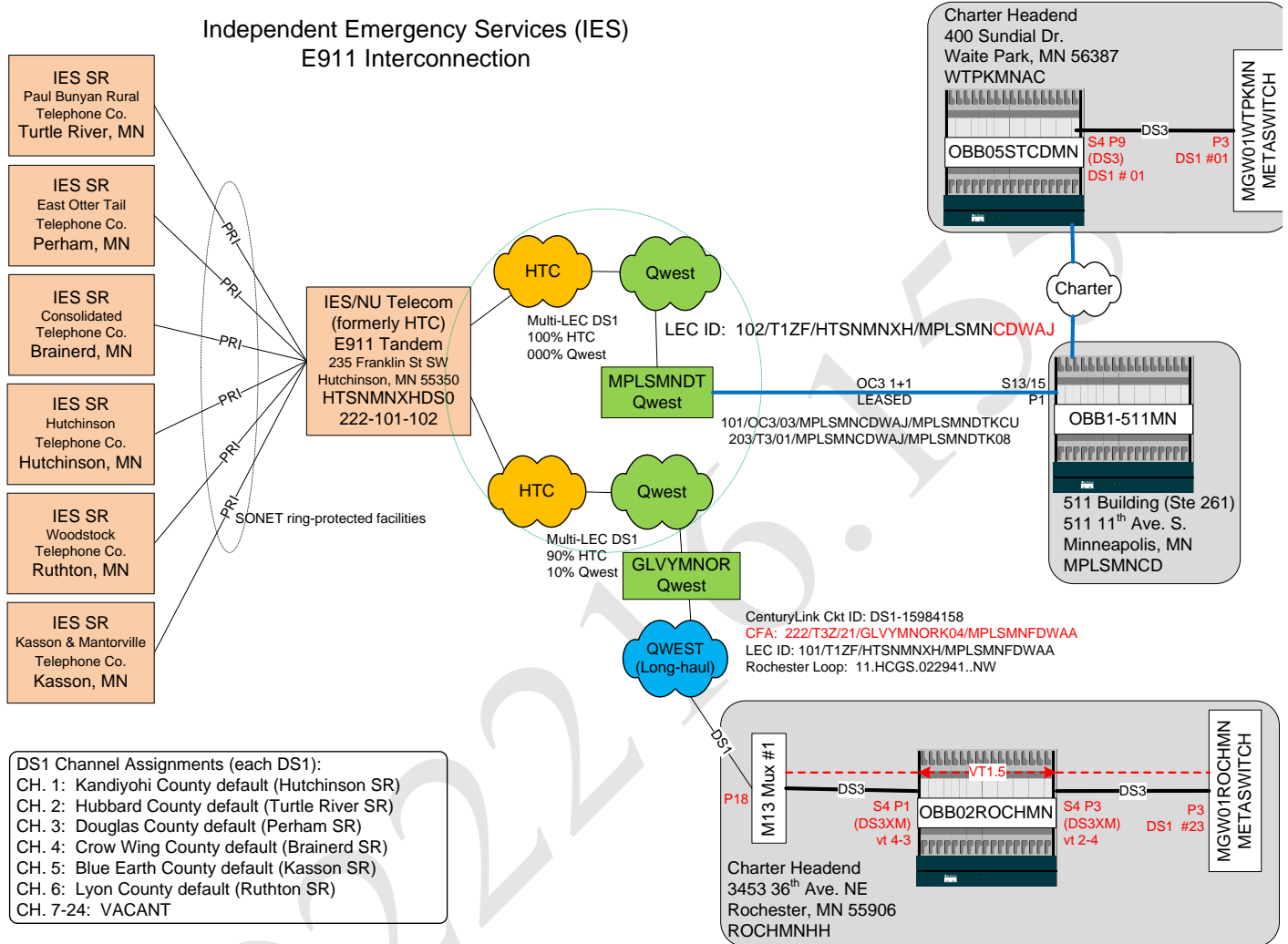
**COMPANY NAME:** Charter Fiberlink CCO, LLC

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
Charter Fiberlink CCO connects at the IES Access Tandem, HTSNMNXHDS0 and will access the Brainerd Selective Router via IES’ PRIs. – 2 SS7 ISUP Trunks, diversely routed.  101/T1ZF/HSTNMNXH/MPLSMNFDWAA 101/T1ZF/HSTNMNXH/MPLSMNCDWAJ 01/IESMN/18/2/49 01/IESMN/18/1/50  Based on discussions with IES, Charter has been advised it is able to use Charter’s existing trunks for the new exchanges.
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO’s circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME: Charter Fiberlink CCO, LLC**

**Circuit Connection Diagram**

Insert a circuit connection diagram for the Company’s circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs served:  
Aitkin, Crow Wing, Morrison  
dESN = 5010

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

**Addendum H – IES Hutchinson**

Service Area

**Check all counties for this Router the Company provides service for:**

Big Stone County

Chippewa County

Kanabec County   
(see also Addendum F)

Kandiyohi County

McLeod County

Hutchinson PD

Meeker County

Renville County

Sibley County

Swift County

(see also Addendum D)

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
320/314	Benson		Charter Fiberlink CCO provides connectivity on its own network
320/626	Dassel		
320/321	Montevideo		
320/347	New London		
320/409	Spicer		
310/262 and 320/403 and 320/441	Willmar		
320/XXX	Kandiyohi		

**COMPANY NAME:** Charter Fiberlink CCO, LLC


V.031116.0930



**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Waite Park, MN	Metaswitch	WTPKMNACOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
IES		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
320	314	Benson	Swift	14%
320	626	Dassel	Meeker	4%
<i>Total</i>				<i>100%</i>
320	321/347/409/262/403/441/XXX	New London, Spicer, Willmar, Kandiyohi	Kandiyohi	67%
320	321	Montevideo	Chippewa	15%
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>

(b) The Default PSAPs (above) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (5/1/2016) (date) supports the selection of the Default PSAPs and is based on (choose one):

- Actual Customer Counts
- Marketing Plans
- Other -specify: \_\_\_\_\_

**COMPANY NAME: Charter Fiberlink CCO, LLC**

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company's customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: (5 / 22 / 2015).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
HTSNMNXHDS0	2	03/IESMN/34/1/37 03/IESMN/34/1/38	HSTNMNXHDS001911	912	SS7	Kandiyo hi	376

**COMPANY NAME:** Charter Fiberlink CCO, LLC

V.031116.0930

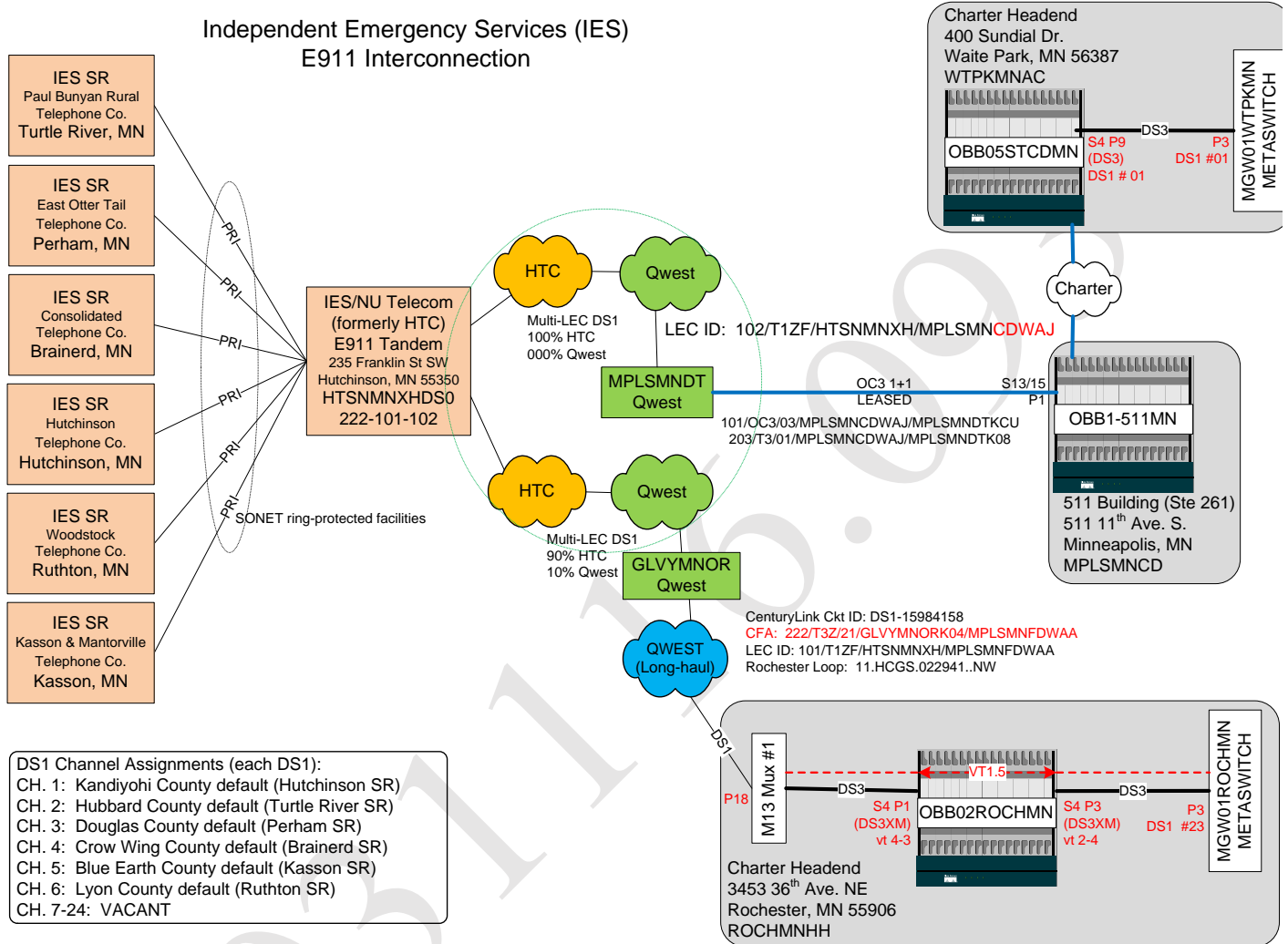
**COMPANY NAME:** Charter Fiberlink CCO, LLC

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
Per DPS, Charter Fiberlink CCO will route its Meeker County traffic to the Hutchinson Router. Charter Fiberlink CCO has chosen to route Meeker County on the same trunks as used today for Kandiyohi County.  Charter Fiberlink CCO connects at the IES Access Tandem, HTSNMNXHDS0, and will access the Hutchinson Selective Router via IES' PRIs. – 2 SS7 ISUP Trunks, diversely routed.  101/T1ZF/HSTNMNXH/MPLSMNFDWAA 101/T1ZF/HSTNMNXH/MPLSMNCDWAJ 03/IESMN/34/1/37 03/IESMN/34/1/38
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS, the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO's circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Circuit Connection Diagram**

Insert a circuit connection diagram for *the Company's* circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs Served:  
Chippewa, Kandiyohi, Meeker, Swift  
dESN = 376

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

***Addendum I – IES Kasson***

**Service Area**

**Check all counties for this Router *the Company* provides service for:**

Blue Earth County  (see also Addendum K)      Faribault County       Fillmore County       Houston County

Le Sueur County       Martin County  (see also Addendum K)      Nicollet County       Waseca County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
507/654	Eagle Lake		Charter Fiberlink provides connectivity on its own network
507/552	La Crescent		
507/720 and 507/779	Mankato		

**COMPANY NAME:** Charter Fiberlink CCO, LLC

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V.022216.1603



**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Waite Park, MN	Metaswitch	WTPKMNACOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
IES		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
507	551	La Crescent	Houston	4%
507	654/720/779	Eagle Lake, Mankato	Blue Earth	72%
<i>Total</i>				<i>100%</i>
507	720/779	Mankato	Nicollet	24%
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>

(b) The Default PSAPs (above) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (\_5 / \_1 / \_2016\_\_\_) (date) supports the selection of the Default PSAPs and is based on (choose one):

Check one

X \_\_\_\_\_ Actual Customer Counts

\_\_\_\_\_ Marketing Plans

\_\_\_\_\_ Other -specify:

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: (5/ 22 /2015).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
Kasson	2	04/IESMN/52/1/13 04/IESMN/52/1/14	HTSNMNXHDS005911	916	SS7	Blue Earth	5004

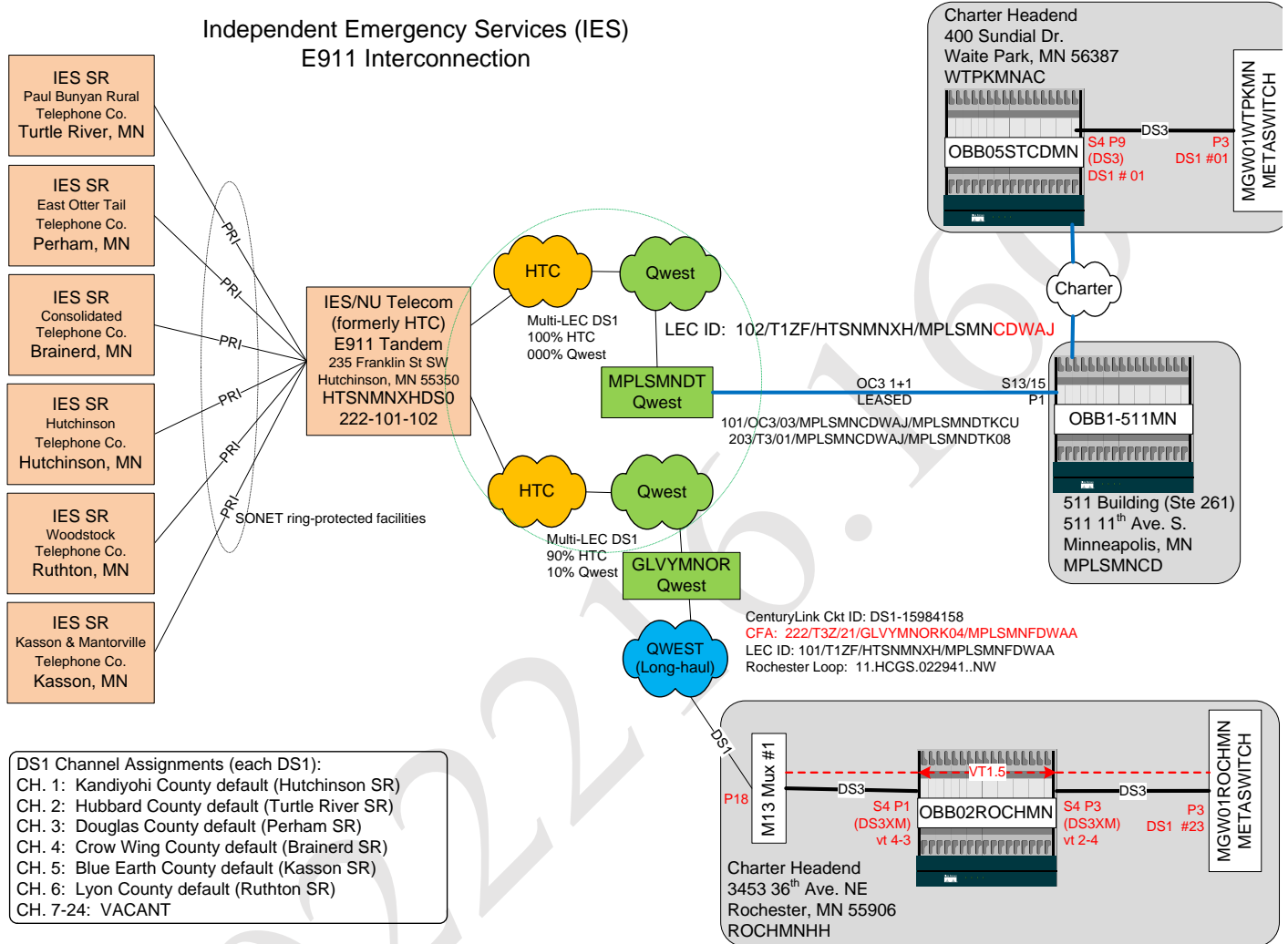
**COMPANY NAME:** Charter Fiberlink CCO, LLC

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
<p>Charter Fiberlink CCO uses the Kasson Selective Router in a paired configuration with the Ruthton Selective Router. For the Ruthton information, please see the Addendum K (IES Ruthton) for Blue Earth County.</p> <p>Charter Fiberlink CCO connects at the IES Access Tandem, HSTNMNXHDS0 and will access the Kasson Selective Router via IES’ PRIs. – 2 SS7 ISUP Trunks, diversely routed.</p> <p>101/T1ZF/HSTNMNXH/MPLSMNFDWAA  101/T1ZF/HSTNMNXH/MPLSMNCDWAJ  04/IESMN/52/1/13  04/IESMN/52/1/14</p>
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS, the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO’s circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME: Charter Fiberlink CCO, LLC**

**Circuit Connection Diagram**

Insert a circuit connection diagram for the Company’s circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs Served:  
Blue Earth, Houston, Nicollet  
dESN = 5004

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

***Addendum J – IES Perham***

**Service Area**

**Check all counties for this Router *the Company* provides service for:**

Becker County  Douglas County  Grant County   
 Otter Tail County  Pope County  Stevens County   
 Todd County  Traverse County  Wadena County  Wilkin County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
320/219	Alexandria		Charter Fiberlink CCO provides connectivity on its own network
320/461	Browerville		
218/531	Fergus Falls		
320/334	Glenwood		
320/533	Long Prairie		
218/296	Staples		
218/430	Wadena		

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Waite Park, MN	Metaswitch	WTPKMNACOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
IES		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router:		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router:		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
<b>320</b>	<b>219</b>	<b>Alexandria</b>	<b>Douglas</b>	<b>44%</b>
<b>218</b>	<b>531</b>	<b>Fergus Falls</b>	<b>Otter Tail</b>	<b>22%</b>
<i>Total</i>				<i>100%</i>
<b>320</b>	<b>334</b>	<b>Glenwood</b>	<b>Pope</b>	<b>10%</b>
<b>320</b>	<b>461/533/296</b>	<b>Browerville, Long Prairie, Staples</b>	<b>Todd</b>	<b>14%</b>
<i>Total</i>				<i>100%</i>
<b>218</b>	<b>430</b>	<b>Wadena</b>	<b>Wadena</b>	<b>10%</b>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>

(b) The Default PSAPs (*above*) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (5 / 1 / 2016) (*date*) supports the selection of the Default PSAPs and is based on (*choose one*):

Check one

Actual Customer Counts

Marketing Plans

Other -specify: \_\_\_\_\_



COMPANY NAME: Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office. The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: ( 5 / 22 / 2015 ).

Default Routing / Trunking Configuration

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
Perham	2	05/IESMN/21/1/34 05/IESMN/21/1/35	HTSNMNXHDS003911	914	SS7	Douglas	5011

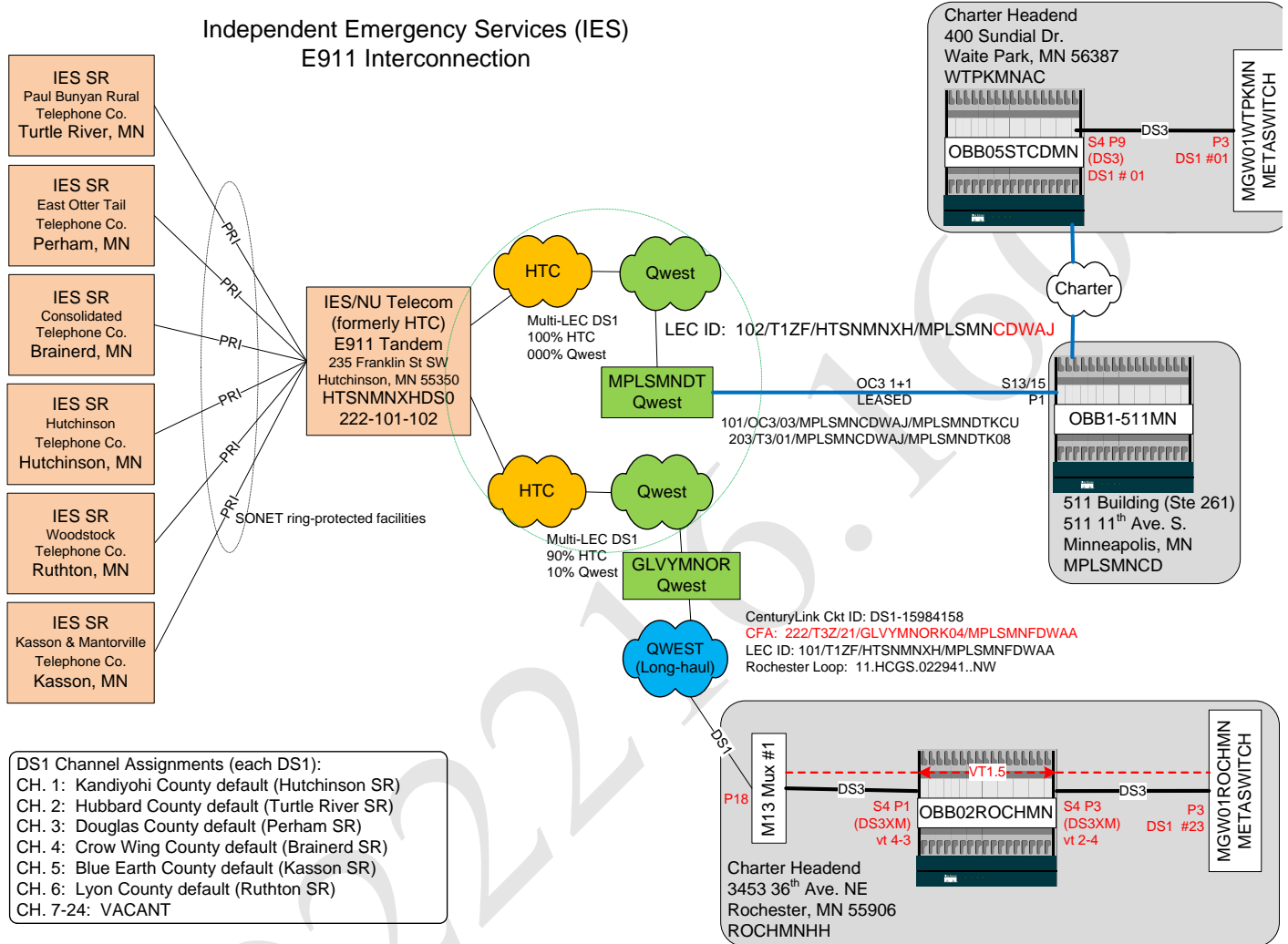
**COMPANY NAME:** Charter Fiberlink CCO, LLC

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
Charter Fiberlink CCO connects at the IES Access Tandem, HTSNMNXHDS0, and will access the Perham Selective Router via IES’ PRIs. – 2 SS7 ISUP Trunks, diversely routed.  101/T1ZF/HSTNMNXH/MPLSMNFDWAA 101/T1ZF/HSTNMNXH/MPLSMNCDWAJ 05/IESMN/21/1/34 05/IESMN/21/1/35
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO’s circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME: Charter Fiberlink CCO, LLC**

**Circuit Connection Diagram**

Insert a circuit connection diagram for the Company’s circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs Served:  
 Becker, Douglas, Otter Tail, Pope, Todd, Wadena  
 dESN = 5011

**COMPANY NAME:** Charter Fiberlink LLC, CCO

(Enter the Company name in the header above)

**Addendum K – IES Ruthton**

Service Area

**Check all counties for this Router the Company provides service for:**

Blue Earth County   
(see also Addendum I)

Brown County

Cottonwood County

Jackson County

Lac Qui Parle County

Lincoln County

Lyon County

Martin County   
(see also Addendum I)

Murray County

Nobles County

Pipestone County

Redwood County

Rock County

Watonwan County

Yellow Medicine County

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
507/992	Cottonwood		Charter Fiberlink CCO provides connectivity on its own network
507/654	Eagle Lake		
507/720 and 507/779	Mankato		
507/401 and 507/591	Marshall		
507/629	Tracy		

**COMPANY NAME:** Charter Fiberlink LLC, CCO

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V.022216.1607

**COMPANY NAME:** Charter Fiberlink LLC, CCO

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Waite Park, MN	Metaswitch	WTPKMNACOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
IES		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink LLC, CCO

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
507	654/720/799	Eagle Lake, Mankato	Blue Earth	26%
507	992/401/591/629	Cottonwood, Marshall, Tracy	Lyon	74%
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>

(b) The Default PSAPs (*above*) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (5/1/2016) (*date*) supports the selection of the Default PSAPs and is based on (*choose one*):

Check one

Actual Customer Counts

Marketing Plans

Other -specify: \_\_\_\_\_

**COMPANY NAME:** Charter Fiberlink LLC, CCO

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: (5 / 22 / 2015).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
Ruthton	2	06/IESMN/42/1/30 06/IESMN/42/1/31	HTSNMNXHDS006911	917	SS7	Lyon	2604



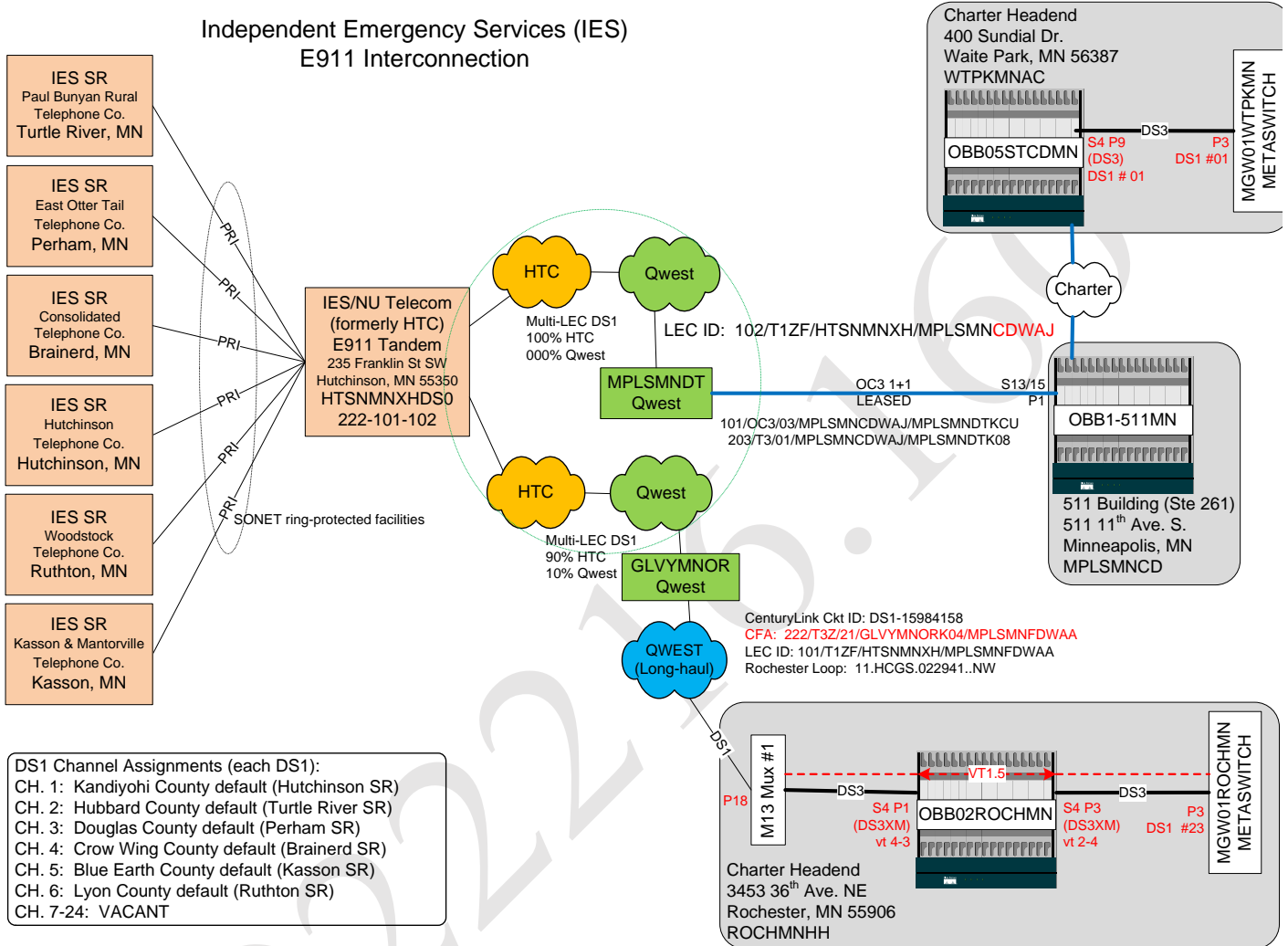
**COMPANY NAME:** Charter Fiberlink LLC, CCO

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
Charter Fiberlink CCO connects at the IES Access Tandem, HTSNMNXHDS0, and will access the Ruthton Selective Router via IES' PRIs. – 2 SS7 ISUP Trunks, diversely routed.  101/T1ZF/HSTNMNXH/MPLSMNFDWAA 101/T1ZF/HSTNMNXH/MPLSMNCDWAJ 06/IESMN/42/1/30 06/IESMN/42/1/31
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO's circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME: Charter Fiberlink LLC, CCO**

**Circuit Connection Diagram**

Insert a circuit connection diagram for the Company’s circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs Served:  
Blue Earth, Lyon  
dESN = 2604

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(Enter the Company name in the header above)

**Addendum L – IES Turtle River**

Service Area

**Check all counties for this Router the Company provides service for:**

Beltrami County

Cass County

Hubbard County

Itasca County

Kittson County   
(see also Addendum G)

Koochiching County

Lake County

Lake of the Woods County   
(see also Addendum G)

Marshall County   
(see also Addendum G)

Pennington County   
(see also Addendum G)

Red Lake County   
(see also Addendum G)

Roseau County   
(see also Addendum G)

**Company Exchange Name(s):**

NPA/NXX or NPA/NXX-X	Company Exchange Names(s)	If connectivity between the Company’s CO and the subscriber location is provided by an ILEC, list the corresponding ILEC exchanges involved.	If connectivity between the Company’s CO and the subscriber location is provided through another provider or other broadband provider, list the franchised area of the cable network or the service area of the broadband network.
TBA	Backus		Charter Fiberlink CCO provides connectivity on its own network
TBA	Hackensack		
218/366	Park Rapids		
218/587	Pine River		

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Company Switch Information:**

City, State	Manufacturer and Switch Model	CLLI
Waite Park, MN	Metaswitch	WTPKMNACOMD
Is the company switch SIP capable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: <u>2</u>		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input checked="" type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	
IES		

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

City, State	Manufacturer and Switch Model	CLLI
Is the company switch SIP capable? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If No above, include any plans and timeframe describing when this will be a possibility.		
Number of DSO Circuits to Selective Router: _____		
Type of Circuits (Mark all that apply): CAMA <input type="checkbox"/> FGD <input type="checkbox"/> SS7 <input type="checkbox"/> PRI <input type="checkbox"/>		
Circuit Meet Point Ownership: List all carriers who own a portion of the circuits to the Selective Router		
Company Name	Miles	

**COMPANY NAME:** Charter Fiberlink CCO, LLC

**Default Routing Plan Methodology**

*Complete sections (a) through (c) to describe the default routing methodology used by the Company:*

(a) The 911 Trunk Group and associated Default PSAP selected for a given Company subscriber are determined using the NPA of the subscriber’s telephone number. 911 Trunk Groups are established for NPA/Customer Concentration Based Default PSAPs within the Company’s service area.

The Company’s customer concentration data is as follows: (add more lines if needed)

For each NPA, enter % of Total for each PSAP Serving area.

<u>NPA</u>	<u>NXX</u>	<u>Exchange Name(s)</u>	<u>Default PSAP</u>	<u>% of Customers in NPA/Default PSAP area</u>
218	366	Park Rapids	Hubbard	70%
218	TBA/TBA/587	Backus/Hackensack/Pine River	Cass	30%
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>
<i>Total</i>				<i>100%</i>

(b) The Default PSAPs (above) were chosen based on the highest concentration of the Company’s subscribers in the given NPA. Annually, the Company will update and review the default routing methodology to determine the validity of the Default PSAP selections. The Company’s customer concentration data as of (\_5\_/\_1\_/\_2016\_) (date) supports the selection of the Default PSAPs and is based on (choose one):

- Check one
- Actual Customer Counts
  - Marketing Plans
  - Other -specify: \_\_\_\_\_

**COMPANY NAME:** Charter Fiberlink CCO, LLC

(c) The Company has reviewed its customer concentration data with the State of Minnesota 911 Program to obtain initial approval of the chosen Default PSAPs. **If the Company’s customer concentration data warrants changes to default PSAP selections, the Company shall request an LOA from the state of Minnesota 911 program. No default PSAP changes can be made without authorization (LOA) from the State of Minnesota 911 Program office.** The Default PSAP selections listed in this Addendum were approved by the State of Minnesota 911 Program on the following date: ( 5/ 22 / 2015 ).

**Default Routing / Trunking Configuration**

Selective Router	Number of Circuits (Voice Paths)	Circuit ID or 2-6 Code	Trunk Group Name	Group Number	Signaling Type	Default PSAP	Default ESN
Turtle River	2	07/IESMN/29/1/21 07/IESMN/29/1/22	HSTNMNXHDS002911	718	SS7	Hubbard	5015

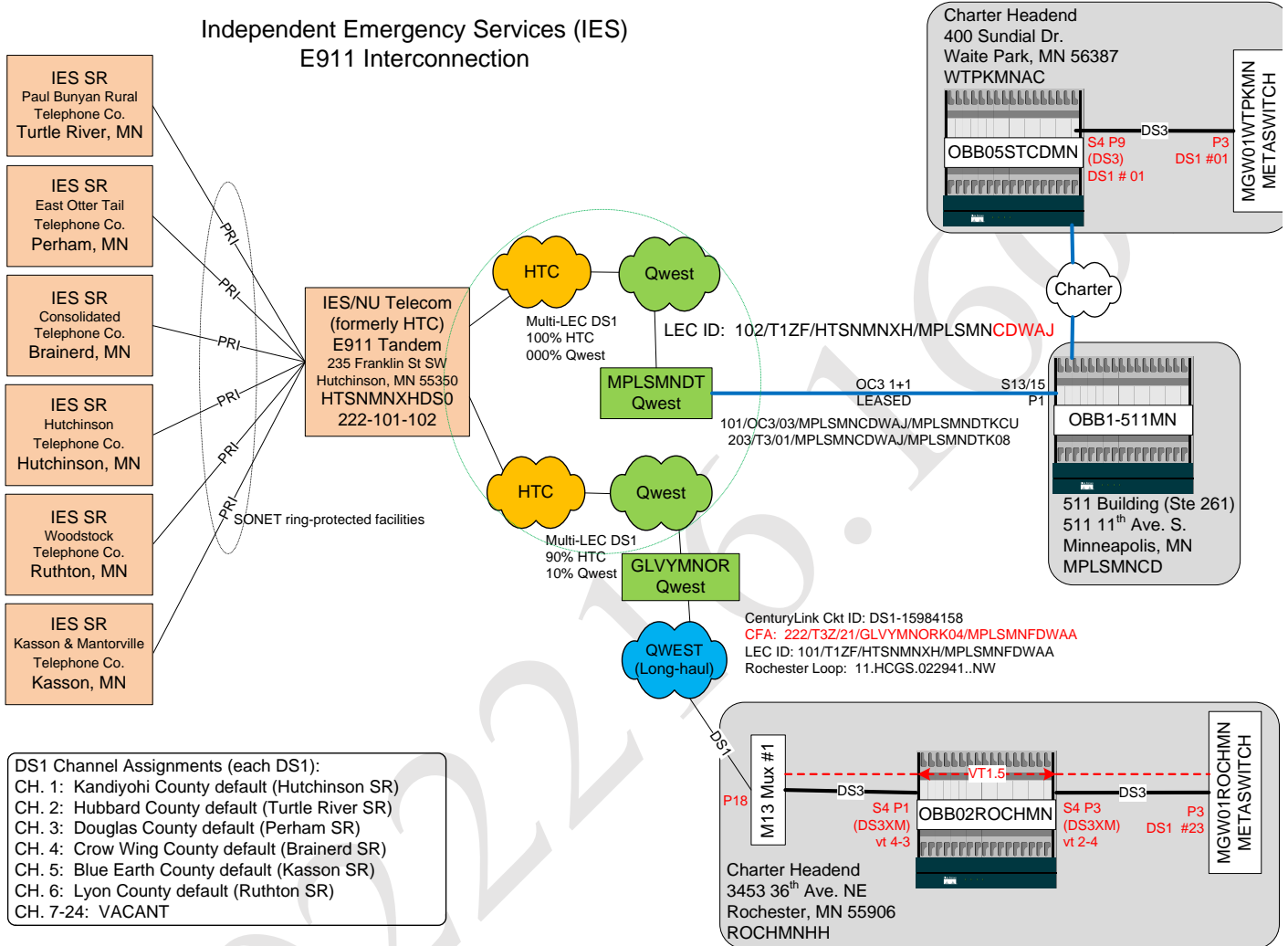
**COMPANY NAME:** Charter Fiberlink CCO, LLC

Describe how <i>the Company</i> implemented the 911 circuitry and how it meets circuit standards described in NENA 03-501 revision dated Oct 3, 2005, section 3.
Charter Fiberlink CCO connects at the IES Access Tandem, HTSNMNXHDS0, and will access the Turtle River Selective Router via IES' PRIs. – 2 SS7 ISUP Trunks, diversely routed.  101/T1ZF/HSTNMNXH/MPLSMNFDWAA 101/T1ZF/HSTNMNXH/MPLSMNCDWAJ 07/IESMN/29/1/20 07/IESMN/29/1/21  Based on discussions with IES, Charter will be using Hubbard County as the default PSAP, using existing trunks.
If the above stated standards are <u>not</u> met, please describe the deficiencies and the plan and date to resolve those deficiencies.
Based upon discussion with DPS the proposed configuration by Charter Fiberlink CCO of its connectivity to each 911 selective router clearly meets DPS minimum standards and provides an adequate level of service (number of trunks) to meet P.01 service; <u>i.e.</u> , the Minnesota 911 system is designed and operated to maintain a grade of service such that no more than one call out of 100 incoming calls will receive a busy signal on the first dialing attempt during the busy hour of an average week during the busy month.
Describe how often <i>the Company</i> audits the diversity of 911 circuitry?
Charter Fiberlink CCO will conduct and document an annual audit to confirm optimum diversity on the 911 circuits. The form of the audit will cover a review of all 911 circuit layouts utilized in connecting Charter Fiberlink CCO's circuits to the 911 tandems to ensure diversity. Any and all changes resulting from the audit will be documented. The system integrator and the DPS will be notified of the results of the audit and any changes resulting from it.

**COMPANY NAME: Charter Fiberlink CCO, LLC**

**Circuit Connection Diagram**

Insert a circuit connection diagram for the Company’s circuitry described in this addendum. See the instructions document for example diagrams showing the details needed for this diagram.



PSAPs Served:  
Cass, Hubbard  
dESN = 5015



**AFFIDAVIT OF SERVICE**

STATE OF GEORGIA            )            In the Matter of the Annual Update of the 911 Plan of Charter  
  ) ss        Fiberlink CCO, LLC  
COUNTY OF DEKALB        )

MPUC Docket No. P6716/EP-

Kennard B. Woods, being first duly sworn on oath, deposes and states that on the 14<sup>th</sup> day of September, 2016, copies of the foregoing were mailed to the following:

Daniel P. Wolf\*  
Executive Secretary  
Minnesota Public Utilities Commission  
121 Seventh Place E, Suite 350  
Saint Paul, MN 55101

Jan Mottaz\*  
Minnesota Department of Commerce  
85 Seventh Place East, Suite 500  
Saint Paul, MN 55101

John Lindell\*  
Minnesota Attorney General’s Office  
1200 NCL Tower  
445 Minnesota Street  
Saint Paul, MN 55101

Ms. Dana Wahlberg\*  
State 911 Program Manager  
Minnesota Department of Public Safety  
445 Minnesota Street, Suite 137  
St. Paul, MN 55101

Mr. Martin Moody\*  
Executive Director  
Metropolitan Emergency Services Board  
2099 University Avenue West, Suite 201  
St. Paul, MN 55104-3431

Charter Fiberlink CC VIII, LLC  
12405 Powerscourt Drive  
St. Louis, MO 63131-3674

Joann Hanson\*  
Vice President, Regulatory Affairs  
Qwest d/b/a CenturyLink  
200 South 5th Street, Suite 2200  
Minneapolis, MN 55402

Charter Advanced Services (MN), LLC  
12405 Powerscourt Drive  
St. Louis, MO 63131-3674

Kim Leigh  
Qwest d/b/a CenturyLink  
200 South 5th Street, Suite 890  
Minneapolis, MN 55402-0000

Charter Advanced Services VIII (MN), LLC  
12405 Powerscourt Drive  
St. Louis, MO 63131-3674

Cliff Woodbury  
Independent Emergency Services, LLC  
235 Franklin Street SW  
Hutchinson, MN 55350

Paul Mraz  
Independent Emergency Services, LLC  
235 Franklin Street SW  
Hutchinson, MN 55350

\* *via e-filing*

/s/ Kennard B. Woods, Esq.  
*Attorney for Charter Fiberlink CCO, LLC*

SWORN TO BEFORE ME this  
14<sup>th</sup> day of September, 2016

/s/ Carol J. Hawley  
NOTARY PUBLIC  
My Commission expires: January 4, 2019