



# **I-26 DESIGN BUILD WIDENING FROM MM 85 TO MM 101 LEXINGTON, RICHLAND, & NEWBERRY COUNTIES**



## **PRELIMINARY UTILITY REPORT**

**SCDOT PROJECT ID: P029208  
CECS PROJECT ID: 916**

**MARCH 2018**



**Civil Engineering  
Consulting Services, Inc.**



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**CIVIL ENGINEERING CONSULTING SERVICES INC. (CECS)**



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Consulting Services, Inc.**

**PREPARED BY: SHEILA FRAME**



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**NOTE: THIS REPORT IS BASED ON THE CONCEPTUAL DESIGN.  
ALL STATIONING IS APPROXIMATE AND TAKEN FROM THE PROPOSED ALIGNMENT.**

## OVERALL SUMMARY OF UTILITY COORDINATION

On June 16, 2017 Civil Engineering Consulting Services in partnership with SCDOT held a Utility Coordination meeting for the I-26 Design Build Widening Project at 10:00 AM in the offices of Civil Engineering Consulting Services Inc. – 2000 Park Street, Suite 201 Columbia SC.

In attendance were the following:

Michael Hood	SCDOT Project Manager
Warren Davis	CECS Design Manager
Sheila Frame	CECS Utility Designer / Coordinator
Chris Bullock	Charter Communications
John Hilbert	City of Columbia
Dan Lambert	Town of Chapin
Brian Sandifer	Mid Carolina Electric Cooperative
Jordan Reese	SCE&G Gas
James Gunter	SCE&G Power
Ryan Mc Cumber	Spirit Communications / TPRC Broadband

- A separate meeting was held with Paul Capps of Santee Cooper Transmission on 6/21/17.
- CECS coordinated a second meeting with Brian Sandifer of MCEC on 7/5/17.
- CECS coordinated with AT&T and Newberry County Water and Sewer by phone conference.
- Richland County Utilities, Clinton Newberry Natural Gas and Newberry Electric Cooperative were not present at the meeting but were provided utility information.

## MEETING PURPOSE

The meeting was held to present the project and schedule so the utility companies can plan and budget in advance for the project. CECS requested information from each utility owner for existing facilities, prior to the meeting. During the meeting, the utilities were asked for input with respect to alternative alignments, long lead items and critical infrastructure. Additionally, CECS asked for information regarding future maintenance and capital improvement plans, prior rights, and impact / conflict identification.

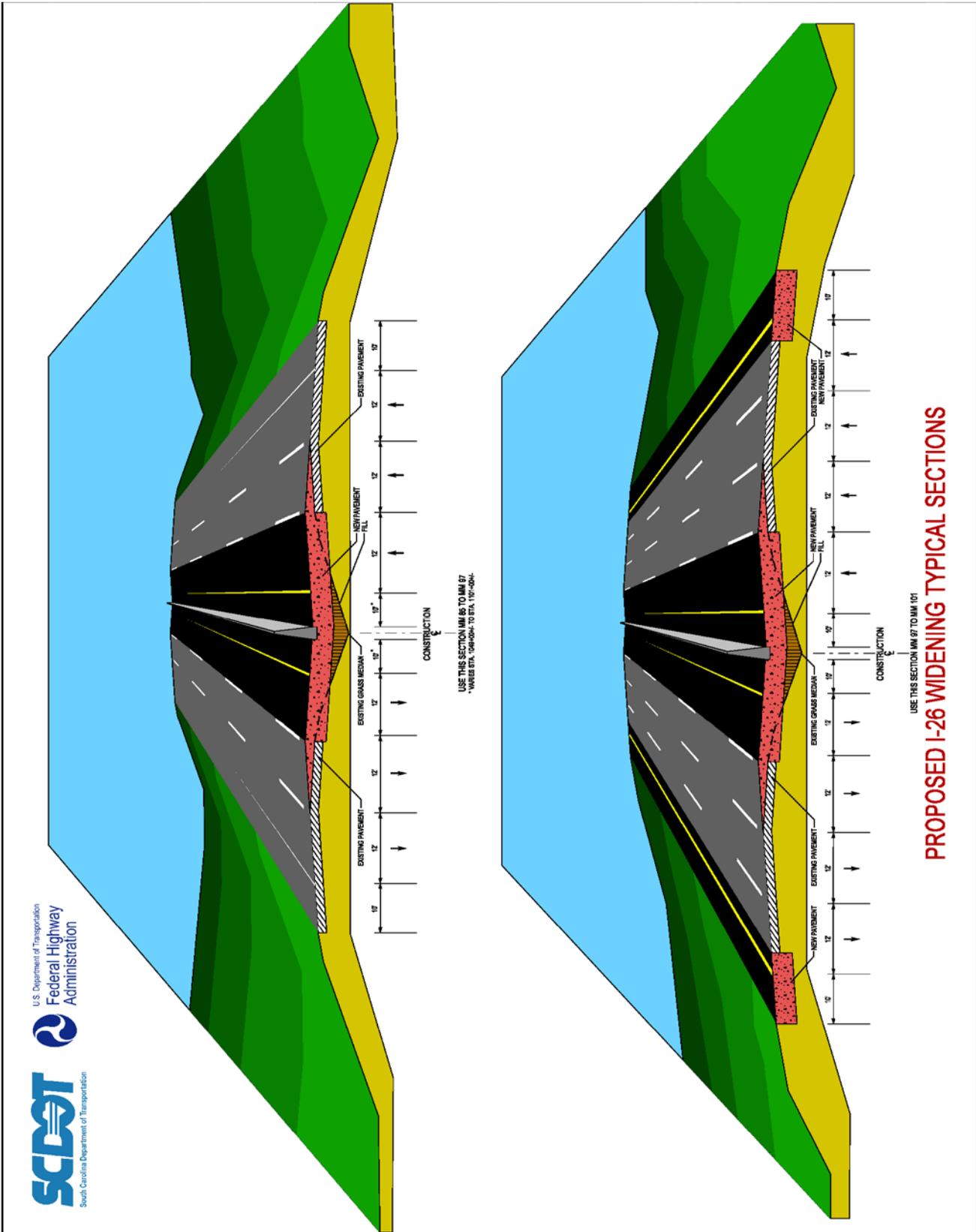
The utility companies were introduced to Mr. Michael Hood who is the SCDOT Project Manager and Mr. Warren Davis of CECS; the Preliminary Design Manager for the project. Each utility received an agenda and a spreadsheet showing known utility crossings over I-26 as well as utilities in the interchanges. The spreadsheet itemized potential conflicts. The utility crossings and markups showing the locations of lines were depicted in Quality Level “C”, determined from record drawings and field observations. The feedback from the utilities at the meeting, and subsequent to the meeting was used to determine where SUE should be performed, plus which alternatives were the better options. It was noted that SUE was previously performed at Exit 91 - Columbia Avenue as part of a separate project. However, the interstate widening and a portion of the surrounding area will be part of this project. The utilities were asked to advise the project team of any critical concerns. Transmission companies were asked to provide guidelines with regards to restriction requirements for their structures.

Mr. Davis gave an overview showing the expanse of the project, and the proposed widening of I-26 along with the interchange improvements and proposed bridge relocations overlaid on Google Earth. The work encompasses about 17 miles of roadway along I-26, from mile marker 101 to mile marker 85 not including intersection improvements. The project starts just past Exit 101 at Broad River Road and continues along I-26 to Exit 85 at SC 202 (Pomaria Street) and ends just past Exit 85. All bridges at crossings over I-26 will be replaced on new alignment with the exception of Koon Road. The Koon Road bridge will be replaced and constructed in place, therefore Koon Road will be closed during construction. At Exit 85 and 97 there were several alternative alignments displayed. Utilities with prior rights were asked to give an opinion and cost of impact on each of the alternative alignments. The results were evaluated in the selection of the final alternatives along with other criteria. Most utility impacts appeared to be a result of proposed drainage, bridge relocations, new alignments and ramps in existing developed areas.

The utilities were informed that the project has Federal Monies, therefore the MAP 21 directive applies to any company who has prior rights and are to be compensated by SCDOT.

Following the meeting utilities were provided with preliminary conceptual drawings so that they could further investigate their impacts.

# TYPICAL SECTIONS



# GENERAL SUPPORTING INFORMATION

## 1. UTILITY CONTACTS

SCDOT PROJECT-P029208 I-26 STUDY UTILITY CONTACT SHEET										CECS-916	
ID	LEGEND	ABBREV	UTILITY	ADDRESS	CITY / STATE / ZIP	CONTACT/S	PHONE MAIN	EXT	MOBILE/OTHER	EMAIL	
T1	PHONE	AT&T	AT&T DISTRIBUTION	1600 WILLIAMS ST RM 4410	COLUMBIA SC 29201	STEVE MARTIN	(803) 401-2121			sm6480@att.com	
T2	PHONE	PBT	POND BRANCH TELEPHONE	1660 JUNIPER SPRINGS ROAD	GILBERT SC 29054	STEVE ROBINSON	(803) 894-1184			steve.robinson@comporium.com	
T3	PHONE	SPRT	SPIRIT COMMUNICATIONS	1500 HAMPTON STE 101	COLUMBIA SC 29210	JOEY ADAMS	(803) 726-8319		(803) 230-3490	joey.adams@sprint.com	
T3	PHONE	SPRT	TPRC BROADBAND	306 W JI DRIVE	GREENSBORO NC 27406	RYAN McCLUMBER	(336) 483-4254			Ryan@TPRCBroadband.com	
TV1	CABLE	CCC	CHARTER COMMUNICATIONS	3347 PLATT SPRING RD	WEST COLUMBIA SC 29170	CHRIS BULLOCK	(803) 744-5514		(803) 348-4768	C-Christopher.Bullock@charter.com	
TF1	TRAFFIC	SCDOT	SCDOT	1408 SHOP ROAD	COLUMBIA SC 29201	STEVE LITTLEJOHN	(803) 737-0256			Littlejos@scdot.org	
W1	WATER	COGW	CITY OF COLUMBIA	PO BOX 147	COLUMBIA SC	JOHN HILBERT	(803) 545-3400			jhilbert@columbiasc.net	
W2	WATER	NCW	NEWBERRY COUNTY WATER & SEWER	13903 CR VOON HWY	NEWBERRY SC 29108	BRENT RICHARDSON	(803) 276-7020	3		brichardson@newberrycountysc.gov	
S1	SEWER	COCS	CITY OF COLUMBIA	PO BOX 147	COLUMBIA SC	JOHN HILBERT	(803) 545-3400			jhilbert@columbiasc.net	
S2	SEWER	TOCS	TOWN OF CHAPIN	157 NW COLUMBIA AVENUE	CHAPIN SC	DAN LAMBERT	(803) 575-8501			dani@chapin-sc.com	
S3	SEWER	RCUS	RICHLAND COUNTY UTILITIES	7525 BROAD RIVER ROAD	IRMO SC	BOB JENNINGS	(803) 401-0044			bjenningsbob@rcgov.us	
S4	SEWER	NCS	NEWBERRY COUNTY WATER & SEWER	13903 CR VOON HWY	NEWBERRY SC 29108	BRENT RICHARDSON	(803) 276-7020	3		brichardson@newberrycountysc.gov	
DH1	ELECTRIC	INCEC	MID CAROLINA ELECTRIC COOPERATIVE	P O BOX 669	LEXINGTON SC 29071	BRIAN SANDIFER	(803) 749-6481			brian@mcecoop.com	
DH2	ELECTRIC	SCE&G-D	SCE&G ELECTRIC DISTRIBUTION	220 OPERATIONS WAY	CAVCE SC 29033	JAMES GUNTER	(803) 217-6466			jgunter@scana.com	
DH3	ELECTRIC	SCE&G-T	SCE&G ELECTRIC TRANSMISSION	220 OPERATIONS WAY	CAVCE SC 29033	MATT TALLEY	(803) 217-1983			Matt.Talley@scana.com	
DH4	ELECTRIC	NEC	NEWBERRY ELECTRIC COOP	882 WILSON ROAD/PO BOX 477	NEWBERRY SC 29108	ROBERT SHEALY	(803) 944-3166			rshealy@nec.coop	
DH5	ELECTRIC	SCT	SANTEE COOPER TRANSMISSION	1 RIVERWOOD DR	MONCK'S CORNER SC 29461	ZAC SMITH	(843) 761-8000	5337		ZACHARY.K.SMITH@santeecooper.com	
G1	GAS	SCE&G-G	SCE&G GAS	6011 SHAKESPEARE RD	COLUMBIA SC 29223	JORDAN REESE	(803) 217-6141		(803) 603-4630	William.Reese@scana.com	
G2	GAS	CNIGA	CLINTON NEWBERRY NGA	668 WILSON ROAD	NEWBERRY SC 29108	BOBBY COATS	(803) 276-1550			bcoats@cniga.com	

## UTILITIES BY AREA

SCDOT PID-029208		I-26 UTILITY BY AREA															
STATION	590-592	615	625-628	646	KOON RD	697	703	730	SHADY GROVE	770	797	806	US 176-PEAK	853	885	916	
ID	UTILITY																
T1	ATT					ATT			ATT				ATT				
T2	PBT												PBT				
T3	SPRT					SPRT			SPRT				SPRT				
TV1	CCC					CCC			CCC				CCC				
TF1	SCDOT			SCDOT					SCDOT				SCDOT				
W1	COC	COCW				COCW	COCW		COCW	COCW			COCW	COCW			
W2	NCWS																
SS1	COC																
SS2	TOC																
SS3	RCUS	RCUS						RCUS				RCUS	RCUS	RCUS			
SS4	NCWS																
OH1	MCEC			MCEC	MCEC	MCEC			MCEC				MCEC				
OH2	SCE&G-D		SCE&G-D														
OH3	SCE&G-T															SCE&G-T	
OH4	NEC																
OH5	SCT							SCT								SCT	
G1	SCE&G-G					SCE&G-G							SCE&G-G		SCE&G-G		
G2	CNNGA																

SCDOT PID-029208		I-26 UTILITY BY AREA															
STATION	MT VERNON	952	961	981	OLD HILTON	1065	COLUMBIA AVE	1181	PEAK ST	1223	1268-1269	HOLY TRINITY	1364	PARR RD	SC 202 POMARIA	1464	
ID	UTILITY																
T1	ATT	ATT				ATT		ATT		ATT			ATT		ATT	ATT	
T2	PBT																
T3	SPRT	SPRT															
TV1	CCC	CCC				CCC		CCC				CCC				CCC	
TF1	SCDOT									SCDOT							
W1	COC	COCW	COCW					COCW	COCW								
W2	NCWS															NCW	
SS1	COC																
SS2	TOC							TOCS	TOCS								
SS3	RCUS																
SS4	NCWS															NCS	
OH1	MCEC	MCEC		MCEC	MCEC	MCEC		MCEC		MCEC	MCEC		MCEC				
OH2	SCE&G-D							SCE&G-D				SCE&G-D		SCE&G-D	SCE&G-D	SCE&G-D	
OH3	SCE&G-T							SCE&G-T		SCE&G-T		SCE&G-T	SCE&G-T				
OH4	NEC															NEC	
OH5	SCT	SCT								SCT					SCT	SCT	
G1	SCE&G-G	SCE&G-G						SCE&G-G									
G2	CNNGA														CNNGA	CNNGA	

## **INITIAL EVALUATION OF UTILITY INFRASTRUCTURE AND PRIOR RIGHTS**

### **AT&T (ATT) (T1)**

#### **● Communications Fiber / Copper**

AT&T owns and maintains underground fiber and copper telephone lines throughout the project corridor. The lines generally run along the shoulders of the existing primary and secondary roadways. AT&T is attached to the majority of bridges crossing I-26, and also has a couple of underground crossings. There are three substations (cabinet sites), two of which are substantial.

#### **The preliminary assessment for AT&T facilities:**

##### **Koon Road and Western Lane:**

Several lines extend down Western Lane tying into Koon Road. At Koon Road there are I-26 crossings with 3 – 4 inch ducts attached to the bridge containing 72 strand fiber optic / 1200 pair copper / 50 pair copper lines, and there is aerial fiber optic on MCEC poles crossing I-26 east of the bridge. A large substation site is on north side of I-26 situated on the east side of Koon Road. Underground copper and fiber lines are running along both sides of Koon Road.

##### **Shady Grove Road:**

Interstate 26 crossings with 3 – 4 inch ducts attached to the bridge containing 24 strand fiber optic / 100 pair copper / empty or abandoned duct. There are underground copper and fiber lines running along both sides of Shady Grove Road.

##### **Exit 97 - US 176 (Broad River Road):**

There is no Interstate 26 crossing at US 176 (Broad River Road). A large substation site exists on the north side of I-26 at intersection of W. Shady Grove Road and US 176. A small substation site sits on the south side of I-26; east side of US 176 between Bickley Road and Ballentine Crossing Lane. There are underground copper and fiber lines running along both sides of US 176.

##### **Mount Vernon Church Road:**

AT&T has an I-26 underground crossing east of the existing bridge containing 36 strand fiber optic cables. There are underground copper and fiber lines running along both sides of Mt. Vernon Church Road.

##### **Old Hilton Road:**

An aerial copper line is on MCEC poles crossing over I-26 west of the bridge. There are underground lines running along both sides of Mt. Vernon Church Road.

##### **Exit 91 -S 48 (Columbia Avenue)**

At I-26 there are crossings in 2 – 3 inch ducts attached to the bridge containing 900 pair copper / 600 pair copper. An underground 216 strand fiber optic crosses under I-26 east of the bridge. Underground copper and fiber lines are running along both sides of Columbia Avenue.

**Peak Street:**

There are I-26 crossings with 2 – 4 inch ducts attached to the bridge containing 72 strand fiber optic / 288 strand fiber optic cable and 50/200/400 pair copper.

Underground copper and fiber lines are running along both sides of Peak Street.

**Holy Trinity Church Road:**

There are no Interstate 26 crossings.

Underground lines run on the west side of Holy Trinity Church Road. The lines dead end before the bridge.

**Parr Road:**

There are no Interstate 26 crossings.

Underground lines run along both sides of Parr Road. The lines dead end before the bridge.

**Exit 85 - SC 202 (Pomaria Street):**

There is an I-26 underground crossing east of the existing bridge containing 36 strand fiber optic.

Underground copper and fiber are lines are running along both sides of SC 202.

**Easements / prior rights based on preliminary review:**

**AT&T is located within the existing right of way and does not have prior rights with respect to underground lines.**

**AT&T should have private easements for the substations with prior rights.**

*The cost to relocate each individual substation is considerable. Additionally, relocating the substations should be considered as a long lead move. The transfer of the equipment can be complicated with new easements as well as concerns for possible outages. This could affect the time constraints necessary to complete a fast paced project.*



**AT&T Cabinet Site  
Koon Road North**



**AT&T Cabinet Site  
W. Shady Grove Road - US 176  
North Side**



**AT&T Cabinet Site  
US 176 South Side**

## **Pond Branch Telephone (PBT) (T2)**

### **● Communications Fiber**

Pond Branch Telephone maintains an aerial fiber line at Exit 97 along US 176 (Broad River Rd).

### **The preliminary assessment for PBT facilities:**

#### **Exit 97 - US 176 (Broad River Road):**

A fiber line is attached to the MCEC poles on the south side of I-26 in the west shoulder of US 176. The line starts at the pole adjacent to the Exit ramp and extends for about 750 feet south aerially. The PBT line dips at the pole in front of the Sunoco Station and crosses underground for service to the Spectrasite Communications / American Cell Tower. The line ends at the cell tower.

#### **Exit 91 -S 48 (Columbia Avenue)**

PBT has an aerial fiber line attached to the poles along the south side of I-26 on Columbia Avenue just outside the project.



**PBT Dip to Cell Tower  
US 176 - South Side**

### **Prior rights based on preliminary review:**

**PBT is on the poles without easement and underground within the existing right of way; therefore should not have prior rights.**

## **Spirit Communications (SPRT) (T2)**

### **● Communications Fiber**

Spirit Communications (SPRT) maintains underground fiber lines throughout the first half of the project corridor. All of these lines are dark fiber to the cell towers.

### **The preliminary assessment for Spirit facilities:**

#### **Koon Road and Western Lane:**

An underground Spirit fiber line coming from Broad River Road south of the project, turns onto Koon Road and extends along the east side of Koon Road crossing to the north under I-26 east of the bridge. Once across, this line turns down Western Lane to feed the Pinnacle Cell Tower near the intersection of Howard Coogler Road and Western Lane. The line ends at the cell tower.

#### **Shady Grove Road:**

An underground Spirit fiber line runs along the east side of Shady Grove Road and crosses under I-26 east of the bridge. The cell tower which this line feeds is outside the project limits.

**Exit 97 - US 176 (Broad River Road):**

Spirit has an underground fiber line that runs along the east side of US 176 north of I-26 and crosses under I-26 east of the bridge. This line services the Spectrasite Communications / American Cell Tower located south of I-26. The line ends at the cell tower.

**Mount Vernon Church Road:**

Spirit owns a fiber line that runs along the west side of Mount Vernon Church Road, south of I-26. The line turns into the Pinnacle Cell Tower easement that sits about 1,000 feet away from I-26. The line ends at the cell tower.



**Cell Tower Site  
US 176 - South Side  
MCEC/AT&T/PBT/SPIRIT**

**Prior rights based on preliminary review:**

**Spirit is located in the existing right of way without prior rights.**

*Any disruption of cell tower service is of concern.*

**Charter Communications (CCC) (TV1)**

**● Communications Fiber / Coax**

Charter Communications (CCC) owns and maintains both fiber and coax lines running aerial and underground throughout the project corridor.

**The preliminary assessment for Charter facilities:**

**Koon Road:**

Charter has an aerial fiber and coax crossing I-26 on MCEC poles east of the Koon Road Bridge. The lines remain aerial for the most part with some underground dips.

**Shady Grove Road:**

Charter has an aerial coax line along Shady Grove Road on MCEC poles. The lines are fed from both directions ending just short of the interstate. There is no interstate crossing.

**Exit 97 - US 176 (Broad River Road):**

Charter has an underground coax trunk and feeder line along US 176 that is fed from both directions ending just short of the interstate. There is no interstate crossing.

**Mount Vernon Church Road:**

Charter has an aerial fiber crossing I-26 on MCEC poles. Charter also has underground coax stopping short of the bridge along Mount Vernon Church Road on each side of the interstate.

**Exit 91 -S 48 (Columbia Avenue)**

An underground fiber line extends along the east side of Columbia Avenue and crosses under I-26 at approximately 200 feet east of the bridge.

**Holy Trinity Church Road:**

An underground coax line runs along Sam Koon Road south of I-26 crossing under Holy Trinity Church Road to the first lot adjacent to I-26 on the west side of Holy Trinity Church Road.

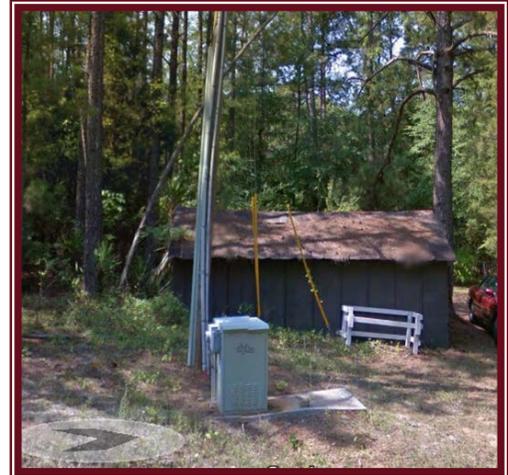
**Exit 85 - SC 202 (Pomaria Street):**

Charter has an aerial fiber crossing I-26 on SCE&G poles. The fiber line continues aerially through the main corridor. 4 Oaks Road, which is a side road near the ramp and I-26 has CCC underground dips and runs. A large AMP Ped is located on 4 Oaks Road.

**Prior rights based on preliminary review:**

Charter Communications does not have prior rights.

*Charter does not have any long lead items but requires 30-90 days to relocate aerially following pole relocations. The same lead time is required for fiber relocations. This should be considered when evaluating the time constraints necessary to complete a design build project.*



**Charter Amp Ped  
SC 202 – 4 Oaks Road**

**South Carolina Department of Transportation (SCDOT) (TF1)**

**● Communications IT**

SCDOT owns and maintains ITS facilities along I-26 primarily up to Exit 97 - US 176 (Broad River Road) along with a short feed to DMS signage near Peak Street. Currently there are two DMS signs.

**Fiber and Power:**

From the beginning of the project up to Koon Road SCDOT has an underground fiber line “only” on the right side of I-26 running about 10 feet off the existing paved shoulder. Once reaching Koon Road a power service dips from a MCEC pole east of the Koon Road and joins the fiber line in the same trench. The “fiber and power” continue until 1,000 feet before Exit 97 - US 176 near Station 822+00 where the power line ends but the fiber line continues on. At about 100 feet past the US 176 bridge the fiber crosses I-26 near Station 836+00, and curls around the existing ramps to the SCDOT DMV facility; south of the interstate. There are several pedestals and electric boxes. SCDOT has traffic facilities at Exit 91 as well. Maps are included in the appendix.



**SCDOT – DMS I-26 at Peak Street**

**DMS Sign Boards:**

There is an aerial crossing to a DMS sign at Station 628+00 in the westbound lane. There is an underground feed from a MCEC pole to a DMS sign between Station 1210+50 and 1212+50 at Peak Street for the westbound lane.

## **City of Columbia Water (COCW) (W1)**

### **● Water**

The City of Columbia Water (COCW) owns and operates transmission and distribution water mains from the beginning of the project up to Columbia Avenue. The COCW service area extends to Peak Street, however there are no facilities within the project corridor along Peak Street.

### **The preliminary assessment for City of Columbia Water facilities:**

#### **Station 592+00:**

COCW owns a 12 inch water line crossing under I-26 extending from a valve in front of the Sleep Number facility. Once across the interstate it goes into an easement adjacent to Main Street Home.

#### **Koon Road and Western Lane:**

A 36 inch transmission water main runs along Western Lane from the beginning of the project to Koon Road, with distribution lines and services extending to the side streets and to the local businesses. Once reaching Koon Road the line crosses under Koon Road into an easement running northwest of Koon Road and paralleling the interstate. A 54 inch transmission water line runs down Koon Road on the west side; north of the interstate. The 54 inch line turns west into an easement about 525 feet south of Annie Adkins Road. Both lines meet up about 1,290 feet west of the Koon Road Bridge. (Station 697+00)

#### **Station 697+00:**

Where the two lines intersect west of Koon Road they cross under I-26. The 36 inch transmission is in 54 inch casing and the 54 inch transmission is in a 78 inch casing. The design drawings indicate that the lines are 8 feet to 10 feet deep on the north side at the ditch line.

#### **Shady Grove Road:**

A 16 inch water line is in the west shoulder on the north side of Shady Grove Road. Approaching the bridge the line goes further to the west and down the slope paralleling I-26. A short leg turns down Broad Bill Road. On the south side of I-26 a 16 inch water line hugs the west shoulder and turns down the slope paralleling I-26.

#### **Station 769+00:**

The 16 inch water mains paralleling I-26 on both sides of the interstate are joined by a crossing underneath I-26. On the south side the 16 inch water main I-26 extends beyond the crossing into the back of Arbor Springs Subdivision.

#### **Exit 97 - US 176 (Broad River Road):**

On the north side of I-26 a water main runs along the west shoulder all the way to the third entrance to the Food Lion Parking lot where the line terminates. The line is 24 inches up to a tee that extends through an easement along the side and behind the Peak Exit Storage. The line reduces to a 16 inch and then an 8 inch at the Food Lion. There is a service leg that turns down West Shady Grove Road as well. On the south side of I-26 a 24 inch water line hugs the west shoulder of the road through the project corridor. A leg turns down Broad Stone Road. There is also a 12 inch water Broad Stone Road coming from the west at Rauch Metz Road.

**Station 853+00:**

A 24 inch water transmission main crosses under I-26 and continues in easement to each side of the interstate, back up to Broad River Road.

**Mount Vernon Church Road:**

Along the west side of Mount Vernon Church Road there is a 16 inch DIP water main. This line turns off to the west in easement and crosses under I-26 about 200 feet west of the bridge.

**Station 952+00:**

COCW has a crossing under I-26 for a 16 inch DIP water main which is encased in a 24 inch DIP casing.



**36 inch Water Transmission  
COCW – Western Lane**

**Exit 91 -S 48 (Columbia Avenue)**

At Exit 91 - Columbia Avenue, COCW has a 24 inch DIP water main crossing under I-26 at about 400 feet west of the bridge. Drawings indicate that the line is about 6 feet to 7 feet deep under I-26. On the south side of I-26 this line runs on the west side of Columbia Avenue with a 16 inch leg that turns west down the Frontage Road. A 12 inch leg that extends along Columbia Avenue. On the north side of I-26 the line remains 24 inches and crosses over to the east side continuing towards US 176.

**Old Hilton Road and Peak Street:**

The City of Columbia has no facilities within the project corridor along these two roads and overpasses, although these roads are within the City’s service area.

**The City of Columbia has partial prior rights throughout the project corridor.**

**Easements / prior rights based on preliminary review:**

**Station 592+00: A 12 inch crossing – partial prior rights**

No prior rights at the crossing but prior rights by easement on both sides of the current right of way.

**Western Lane: A 36 inch transmission water main – prior rights**

The 36 inch water line is in an easement along Western Lane.

**Koon Road and parallel to Interstate: A 36 inch water main parallel to I-26 – partial prior rights**

The 36 inch water line is in an easement except where it crosses Koon Road. It is also in an easement along I-26 up to where it crosses.

**Easement West of Koon Road: A 36 inch water west of Koon Road – prior rights**

The 36 inch water line is in an easement.

**Station 697+00: A 36 inch and 54 inch casing transmission water mains – partial prior rights**

The 36 inch and 54 inch water lines are in easement except for the I-26 crossing.

**Shady Grove Road: A 16 inch water parallel to interstate both sides of I-26 – partial prior rights**  
The 16 inch is in easement on both sides except at the crossing.

**Station 769+00: A 16 inch water crossing – partial prior rights**  
The 16 inch is in easement on both sides except at the crossing.

**Exit 97 - US 176 (Broad River Road): An 8 inch 12 inch and 24 inch water line – prior rights**  
The City has prior rights on most of the water lines in and around the Peak Exit. That includes the 8 inch water line near Black Stone Road and the 8 inch line that fronts the Food Lion on the opposite side of I-26, both fronting US 176.

**Station 853+00: A 24 inch water crossing – partial prior rights**  
The 24 inch is in easement on both sides except at the crossing.

**Mount Vernon Church Road / Station 952+00: A 16 inch water crossing – partial prior rights**  
The water line is in an easement up to Hill Stone Road on the western side of I-26 and in an easement from the ROW on the eastern side.

**Exit 91 -S 48 (Columbia Avenue) A 24 inch water crossing – partial prior rights**  
The 24 inch water line is in easement on the northern side of I-26 except where it crosses Columbia Avenue. It is not in easement on the southern side (Chapin side) of I-26, along the I-26 off ramp; between the off ramp and Brent Wood Court. The 12 inch water line starts at the convenience store (corner Brent Wood and Columbia) along Columbia Avenue is in an easement.

***The cost to relocate any larger transmission water lines will be significant. Any line 16 inches or greater should to be evaluated to see if relocation can be avoided by adjusting drainage and / or design. In particular, relocating any of the interstate crossings should be considered a long lead effort. The logistics of boring these larger lines and obtaining new easement should be weighed. This could affect the time restrictions for a design build project.***

***Underground water crossings that are most critical for the City of Columbia are the 54 and 36 inch water transmissions crossing under I-26 at Station 697+00. These transmission lines should be allowed to remain in place at all costs with careful drainage design. It will take several years to relocate these lines according to the City, and they are critical to the City's infrastructure, therefore impact should be avoided. Test holes of the lines were inconclusive due to the amount of rock and debris in the area. Records indicate the depth varies between 8-10 feet on the North side of I-26. It was determined that this area could be designed with no conflicts.***



**54 inch Water Transmission  
COCW – Station 697+00**

***Crossings under I-26 with larger lines are difficult to bore due to rock in the I-26 shoulders.***

**Newberry County Water and Sewer Authority (Water) (NCW) (W2)**

**● Water**

Newberry County Water and Sewer Authority (Water) (NCW) owns and maintains a 12 inch C900 PVC water main within the project corridor along Pomaria Street and 4 Oaks Road.

**The preliminary assessment for Newberry County Water and Sewer Authority - water facilities:**

**SC 202 (Pomaria Street):**

NWC has a 12 inch water main running along the east shoulder of SC 202 (Pomaria Street) from the south side of I-26 going across the interstate to the north. The line crosses under I-26 east of the bridge. The line is in easement on the north side, and crosses under 4 Oaks Road ending at a fire hydrant near the intersection of 4 Oaks Road and Pomaria Street.

A 6 inch PVC leg turns down the right side of 4 Oaks Road for services to that community.



**NCW - 4 Oaks Road Hydrant & end of line**

**Easements / prior rights based on preliminary review:**

**Newberry County Water 12 inch water main – partial prior rights**

There is easement on the north side of the interstate between I-26, and 4 Oaks Road. This easement is parallel and east of Pomaria Street.

*NCWS is a small utility company with 4,000 water customers. Therefore, relocation would be a significant financial burden. The interstate bore in this area was difficult to complete for both the water and the sewer due to large rock. It was determined that the area in easement on the North side of the interstate could be designed with no conflicts.*

**City of Columbia Sewer (COCS) (S1)**

**● Sewer**

Although the City of Columbia has sewer facilities near the project corridor, currently there are no facilities within the corridor. Part of the project corridor is in the City’s sewer limits.

At this time there are no plans for sewer construction within the corridor.

**The following roads are in the City of Columbia Sewer limits:**

**Broad River Road near Exit 101**

**Koon Road**

**Shady Grove Road**

**Mount Vernon Church Road**

**Easements / prior rights based on preliminary review:**

**COCS has no facilities at this time, therefore prior rights are not an issue.**

**Town of Chapin Sewer (TOCS) (S2)**

**● Sewer**

The Town of Chapin has sewer facilities south of I-26 on the Chapin side of the interstate. The system is comprised of both force main and gravity sewer, with a pump station near the interstate along the frontage road to Brent Wood Court. Full SUE was provided in this area as part of another project. There is also a sewer discharge crossing under I-26 that belongs to the Town.

**The preliminary assessment for the Town of Chapin Sewer facilities:**

**Station 1065+00:**

TOCS owns a 12 inch DIP sewer discharge encased in a 20 inch STL pipe crossing under I-26 just north of the aeration basin that sits between I-26 and the SCE&G transmission easement, east of Columbia Avenue.

**Exit 91 - S 48 (Columbia Avenue)**

At Exit 91 - Columbia Avenue TOCS has a 12 inch PVC force main that crosses Columbia Avenue at the westbound entrance ramp to the Frontage Road and a 6 inch PVC force main that runs along the west side of Columbia Avenue and turns into an easement to the TOCS Pump Station. The Pump Station is situated on the Frontage Road behind the Corner Pantry and the BP Station on west side of Columbia Avenue. On the south side of the interstate there is gravity sewer in front of the Taco Bell and Exxon Station on the east side of Columbia Avenue.



**TOCS Pump Station  
On the Frontage Road**

**Easements / prior rights based on preliminary review:**

**Station 1065+00: The Town of Chapin has partial prior rights**

The 12 inch DIP is in easement on both sides except at the crossing.

**Exit 91 -S 48 (Columbia Avenue) The Town of Chapin has partial prior rights**

The 12 inch DIP crossing the road is not in easement, but the Pump Station and the lines coming in from the back side (6 inch force main) should be in easement.

***For this project the critical concern would be any impact to the Pump Station and the force main for cost purposes.***

***There is an environmental concern to relocate the sewer lines.***



**TOCS Pump Station  
I-26 Crossing (Easement)**

## **Richland County Utilities Sewer (RCUS) (S3)**

### **● Sewer**

Richland County Utilities has sewer facilities along I-26 from the beginning of the project just past Exit 101, up to Exit 97 - US 176 (Broad River Road); where the system is extensive. The system consists of both force main and gravity sewer, with several pump stations within the project corridor. RCU has several crossings under I-26 as well.

### **The preliminary assessment for the Richland County Utilities facilities:**

#### **Station 591+00:**

RCUS has a 15 inch sewer crossing under I-26 that follows Rocky Creek on the north. On the north side of I-26 the line goes under Western Lane just east of the entrance to the Sleep Number facility. Once across I-26 on the south side of the interstate this line is in easement adjacent to Main Street Home.

#### **Station 797+00:**

RCUS owns a 10 inch HDPE gravity sewer line that is encased in 30 inch steel pipe crossing under I-26.

#### **Station 806+00 / 806+50 (2 crossings):**

RCUS maintains both a gravity and force main crossing under I-26. At Station 806+00 an 8 inch DI force main is encased in a 16 inch steel pipe. At Station 806+50 a 16 inch DI gravity sewer in a 24 inch steel casing crosses under the interstate. This line is aerial on the south side of the interstate inside the ROW and controlled access fence. The line is above ground starting at approximately 68 feet from the existing edge of pavement. (I-26 westbound lane)

#### **Exit 97 - US 176 (Broad River Road):**

On the south side of the interstate along Broad River Road a 6 inch force main runs along the east side of the road. This line turns down an easement next to the AT&T Cabinet Site. The line winds around and eventually crosses the interstate. A second force main line comes from Bickley Road and crosses Broad River right at the proposed limits. On Broad Stone Road there is a force main and a pump station near the second entrance of the SCDOT DMV Center. An 8 inch sanitary service from Ardmore Ballentine Apartments crosses Broad Stone to the pump station. An 8 inch sewer line extends from the businesses on the backside of Broad Stone Road also turns into the pump station.



**RCU Pump Station  
Broad Stone Road**

On the north side of the interstate on Broad River Road between the intersection of West Shady Grove Road and the entrance to River Springs Church there is a pump station with a 12 inch force main connected from the left side and a 6 inch force main to the right. The 6 inch force main extends along Broad River Road keeping to the east, with a service from the Food Lion Shopping Center.

Once the line nears the ramp it circles around the ramp to a manhole at the intersection of the ramp and Julius Richardson Road. From this manhole the line crosses Julius Richardson Road and turns down Broad Berry Road. Broad Berry Road is paved for about 800 feet and then it becomes a dirt road. This line follows the old road bed until it joins with the other RCU lines that crossed under I-26 at Station 806+00 and 806+50.

**Easements / prior rights based on preliminary review:**

**Station 591+00: RCU has partial prior rights.**

RCU has no prior rights at crossing but prior rights by easement on both sides of the current right of way.

**Station 797+00: RCU has partial prior rights.**

RCU has no prior rights at crossing but prior rights by easement on both sides of the current right of way.

**Station 806+00 / 806+50 (2 crossings): RCU has partial prior rights.**

RCU has no prior rights at crossing but prior rights by easement on both sides of the current right of way.

**Exit 97 - US 176 (Broad River Road): RCU has partial prior rights.**

RCU has no prior rights along US 176 / Broad River Road or Broad Stone Road. RCU should have prior rights at the pump stations at the easements on the back side of Broad River Road, between Broad River Road and the I-26

*For this project the critical concern would be any impact to the pump stations and sewers at the interstate crossings. The interstate crossings are larger lines and the boring can be quite expensive. Bypassing the force main is a concern with respect to timing. There is a portion of gravity sewer that is aerial at Station 806+50. This line becomes aerial inside the fence, at approximately 10 feet inside the right of way, or 68 feet from the edge of pavement. This line will be extremely difficult to rework. Relocation of the above noted situations should be considered long lead items and expensive.*



**RCU Pump Station  
US 176 near W Shady Grove Road**



**RCU Manhole - US 176 off Ramp  
At Julius Richardson Road**



**RCU – Station 806+50  
Aerial Sewer**

## **Newberry County Water and Sewer Authority (Sewer) (NCWS) (S4)**

### **● Sewer**

Newberry County Water and Sewer Authority (Sewer) (NCWS) owns and maintains a 6 inch C900 PVC force main within the project corridor along Pomaria Street and Meadow Brook Road.

### **The preliminary assessment for Newberry County Water facilities:**

#### **Exit 85 - SC 202 (Pomaria Street):**

On the south side of the interstate NCWS has a 6 inch force main running along the west shoulder of SC 202 (Pomaria Street) coming from Little Mountain. As it nears the interstate ramps it crosses to the east shoulder and into an easement and then goes under I-26 (encased) to the north and east of the bridge. The line is in easement on the north side, and enters a pump station at the intersection of 4 Oaks Road. A 6 inch line leaves the pump station crossing SC 202 (Pomaria Street) heading south turning down Meadow Brook Road, and continuing to the project termini.



**NCS Pump Station  
4 Oaks Rd at SC 202**

### **Easements / prior rights based on preliminary review:**

#### **Newberry County Sewer 6 inch force main – partial prior rights**

There is easement on the north side of the interstate between I-26, and 4 Oaks Road. This easement is parallel and east of Pomaria Street. The pump station is in this easement.

***NCWSA is a small utility with 500 sewer customers. Any relocation would be a significant financial burden. Bypassing the force main is a concern with respect to timing. If relocation is needed NCS will be required to drain the existing line which could result in a sewer spill. The interstate bore in this area was difficult to complete for water and sewer due to large rock. It was determined that the area on the north side of I-26 in easement can be designed to avoid impact, and that NCWSA can maintain future access to the substation and underground lines adjacent to SC 202.***

## **Mid Carolina Electric Cooperative (Distribution) (MCEC) (OH1/E1/FO)**

### **● Power**

Mid Carolina Electric Cooperative (MCEC) has overhead primary and secondary power facilities from the beginning of the project to Holy Trinity Church Road. Additionally MCEC has fiber optic lines in some areas.

### **The preliminary assessment for Mid Carolina Electric Cooperative facilities:**

#### **Western Lane:**

MCEC shares poles with SCE&G-D along Western Lane with a three phase line from Station 590+00 to 626+00. At Station 626+00 the line turns north in an easement and continues outside the project.

#### **Station 646+00:**

MCEC has a three phase aerial crossing over I-26 that runs north / south.

**Koon Road:**

MCEC has a three phase line that extends primarily on the east side of Koon Road with service crossings. This power line crosses over I-26 at approximately 51 feet east of the existing bridge location. Cable and telephone are attached to the poles as well. There are services to the SCDOT ITS facilities along I-26 and Western Lane. A three phase runs down Western Lane to Wayne McCaw Road for about six spans and reduces to a one phase for about two spans ending with a service.

**Shady Grove Road:**

MCEC maintains both one phase and three phase lines along Shady Grove Road with services. The three phase mainline on the south side crisscrosses Shady Grove Road east to west. It passes over I-26 on the west side at about 18 feet off the existing bridge location. Once on the north side the line stays to the west for about 450 feet and then crosses over to the east. A one phase extends down Broad Bill Road for a couple of spans and services to Silver Fox Storage and SCDOT ITS.

**Exit 97 - US 176 (Broad River Road):**

At Exit 97 - US 176 (Broad River Road) south of the interstate there is a three phase MCEC power line running along the west side of Broad River Road. This line has cable, telephone and fiber optic lines attached. One of the fiber lines is owned by MCEC. Most of the cable and fiber attached end before the interstate ramps with the exception of the MCEC fiber. There is a three phase coming off this mainline that turns down Broad Stone Road on the south side and continues to the west. Another separate three phase line extends west to east from Rauch-Metz Road and turns down the back side of Broad Stone Road where it dead ends. There is a three phase leg that crosses west to the Spectrasite Communications cell tower. The MCEC three phase line with fiber only crosses over I-26 at Station 854+00, which is approximately 1,350 feet west of the existing bridge. (Taken from the center) This line continues in easement on the north and eventually reaches Broad River Road; tying into the system along Broad River Road. A one phase line near the Exxon / Corner Pantry crosses east of the bridge, at Station 830+00, approximately 174 feet east of the bridge. (Taken from the center) Once on the north side this line services the SCDOT ITS facilities and continues north across the Ramps to private residences along Julius Richardson Road. A three phase line turns south from the easement near Shady Grove Road and goes towards the interstate crossing back and forth to service the businesses on both sides of the road. This line reduces to a one phase in front of the Food Lion. The line ends with a service to the SCDOT ITS facilities near the interstate.



**MCEC Three Phase Easement US 176**

**Mount Vernon Church Road:**

On the south side of the interstate MCEC owns one phase power that extends along the west side of Mount Vernon Church Road. There is also Cable TV running on these poles. A one phase leg turns down the access road to service the Pinnacle Tower cell tower, on the left going toward the interstate.

The power line crosses over I-26 on the west side of the existing bridge, approximately 43 feet from the bridge. The line continues along the west side until it nears the Santee Cooper Power easement where it crosses to the east. The line remains to the east with service crossings to the Center for Advanced Technical Studies. A one phase leg turns down White Rock Road as well, with Cable TV attached.

**Station 961+00:**

A one phase power line crosses over I-26 from Stone Hill Road south of the interstate to an easement on the north tying in on White Rock Road, with Cable TV attached.

**Station 981+00 / Weigh Station:**

A one phase power line crosses over I-26 from Three Dog Road on the south side of the interstate to an easement on the north that ties into Mount Olivet Church Road. There is a service leg to the SCDOT Weigh Station on the north side of the interstate.



**MCEC service to Cell Tower  
Mt. Vernon Church Road**

**Old Hilton Road:**

MCEC owns a three phase line along Old Hilton Road south of I-26. This line is on the east side of Old Hilton Road until it reaches the interstate. Right before the interstate the line crosses to the west side of Old Hilton Road and crosses over I-26 at approximately 60 feet west of the bridge. There is fiber and telephone on the poles as well. A one phase leg turns down Julius Eleazer Road and a one phase leg turns down Three Dog Road on the south side. On the north side the line extends on the west side for about 600 feet before crossing back to the east side of the road.

**Exit 91 -S 48 (Columbia Avenue)**

MCEC has a three phase line that runs in an easement south and parallel to I-26, servicing the sewer aeration basin east of Columbia Avenue. Approaching Columbia Avenue this line splits with a one phase leg going south to service the the American Tower Cell Tower, and a three phase line crossing over I-26 east of the existing bridge, approximately 475 feet from the bridge. Once across I-26, it continues to the north staying to the east in an easement with a service to the SCDOT traffic signals.

**Peak Street:**

MCEC maintains a one phase line on the south side of Peak Street that crosses east to west; back and forth. This line crosses I-26 on the west side of the bridge, at about 130 feet from the bridge. (Taken from the center) It continues to the north in an easement that eventually ties into Peak Street. At that point a three phase line with fiber crosses perpendicular to Peak Street and ties into this existing run. (This line comes from the interstate crossing at Station 1223+00.) At the tie-in the line running along Peak Street increases to a three phase power.

**Station 1223+00:**

A three phase MCEC powerline with fiber crosses over I-26.

**Holy Trinity Church Road:**

A one phase line extends along the east side of Sam Koon Road and crosses over Holy Trinity Church Road at the intersection of Sam Koon and Holy Trinity Church Roads. This line continues northwest, in an easement crossing over I-26 at Station 1291+00 which is about 435 feet west of the bridge. (Taken from the center) Once across on the north side the line is in an easement that parallels Clark Road. The line ends at the intersection of Clark Road and Holy Trinity Church Road.

**Easements / prior rights based on preliminary review:**

The majority of MCEC poles are located outside the existing right of way or in existing private easement. MCEC will have prior rights.

*Based on preliminary review MCEC has estimated that there will be roughly 41 poles requiring relocation, and 6 poles that will require removal. Of significance for MCEC is the time constraints for I-26 crossing relocations. This will be a concern if pacing operations are necessary. A possible pole relocation near the Station 961+00 crossing in the corner of Bookie Richardson Road may create an issue. Additionally, I-26 finished road elevations could affect other interstate crossings due to height clearances.*

**South Carolina Electric and Gas (Distribution) (SCE&G-D) (OH2/E2)**

**● Power**

South Carolina Electric and Gas Distribution (SCE&G-D) has overhead primary and secondary power facilities at the very beginning of the project and at the end of the project.

**The preliminary assessment for South Carolina Electric and Gas Distribution facilities:**

**Western Lane:**

SCE&G-D shares poles with MCEC along Western Lane with a three phase line from Station 590+00 to 655+50, which includes an interstate crossing at Station 615+00. There are several services to businesses and at Station 637+00 there is a line that turns north to feed the Pinnacle Tower cell tower. At Station 655+50 the main line ends in a service to the SCDOT ITS system.

**Station 615+00:**

SCE&G-D has a three phase crossing I-26 going into a private easement on the south side.

**Exit 91 -S 48 (Columbia Avenue)**

SCE&G-D has a three phase crossing Columbia Avenue in the transmission easement on the south side. There is also a three phase line running parallel on the east side of Columbia Avenue that crosses to the west to service the BP Station / Corner Pantry. A service line runs in an easement behind the Town of Chapin Pump Station off the frontage road.



**SCE&G-D service to Cell Tower  
On Western Lane**

**Station 1268:**

SCE&G-D has a three phase crossing I-26 going into a private easements on each side. This corridor is shared with an SCE&G-T line - three circuits (transmission).

**Station 1364:**

SCE&G-D has a one phase crossing I-26 going into a private easements on each side of the interstate.

**Parr Road:**

On the south side of I-26, SCE&G-D has an overhead one phase line extending in an easement on the east side of Parr Road that fluctuates between 62 feet to 125 feet off the existing edge of pavement. This line crosses over I-26 at roughly 100 feet east of the existing bridge.

**Exit 85 - SC 202 (Pomaria Street):**

SCE&G-D maintains a three phase power line running on the east side of Pomaria Street with Cable TV attached. The line crosses over I-26 east of the existing bridge, at about 100 feet away from the existing bridge. Once across on the north side the line stays east for about 500 feet and then shifts over to the west side of the road. Most of this line is in easement. A one phase leg turns down 4 Oaks Road adjacent to the Santee Cooper Easement to service the homes in that community.

**Easements / prior rights based on preliminary review:**

The majority of the SCE&G-D poles are located outside the existing right of way or in private easement. SCE&G-D will have prior rights.

*Based on preliminary review the SCE&G-D impact will be minimal. Of concern is the lead time for any I-26 crossing relocations if pacing operations are necessary. At this time there is no known impact, however if the I-26 finished road elevation increases at the crossings it could be an issue. It was determined that the area on the north side of I-26 in easement adjacent to SC 202, can be designed in a way that future access to the SCE&G-D power lines can remain.*



**SCE&G-D/SCE&G-T Power Crossing over Columbia Ave.**

**South Carolina Electric and Gas (Transmission) (SCE&G-T) (OH3)**

**● Power**

South Carolina Electric and Gas Transmission (SCE&G-T) has overhead transmission facilities within the project corridor from mile marker 96 to mile marker 87.

**The preliminary assessment for South Carolina Electric and Gas Transmission facilities:**

**Station 885+00:**

SCE&G-T owns a 230 kV – four circuit crossing over I-26, in easement on each side. This easement is shared with an SCE&G-G gas transmission line.

### **Exit 91 -S 48 (Columbia Avenue)**

SCE&G-T maintains two transmission crossings in easement over Columbia Avenue, situated about 400 feet from the ramps on the south side of I-26. There is a 230 kV – four circuit crossing, and a 230 kV – two circuit crossing.

### **Peak Street:**

On the south side of I-26, SCE&G-T has a 230 kV – double circuit crossing over Peak Street, in easement.

### **Station 1269:**

SCE&G-T owns a 230 kV – three circuit crossing over I-26, in easement on each side. This easement corridor shares a SCE&G-D three phase line.



**SCE&G-D/SCE&G-T Power Crossing Station 1269+00**

### **Holy Trinity Church Road:**

SCE&G-T owns a 230 kV – double circuit crossing over Holy Trinity Church Road south of I-26, in easement on each side.

### **Easements / prior rights based on preliminary review:**

The majority of the SCE&G-T towers are located outside the existing right of way and/or in existing private easement. SCE&G-T will have prior rights.

*Of concern is the lead time for any I-26 crossing relocations especially if pacing operations are necessary. At this time there is no known impact over I-26, but finished road profile increases at the SCE&G-T crossings could be an issue. Allowances should be made for the 230 kV – double circuit crossing at Peak Street. No more than a five foot rise in the profile can be tolerated at this location without replacement of the towers. The minimum acceptable distance laterally is twenty five feet. Since SCE&G transmission is 2-230 kV within the project corridor, any and all relocations should be considered long lead items. Design time, steel extrusion and fabrication, in accordance to the MAP 21 directive, plus seasonal construction limits can add up to a year and a half for replacement. High voltage relocations are not constructed during peak usage; summer and winter. SCE&G-T will require a driveway for access to all easements at any new crossings.*

### **Newberry Electric Cooperative (Distribution) (NEC) (OH4)**

#### **● Power**

Newberry Electric Cooperative (NEC) has primary and secondary facilities from SC 202 up through Newberry S.C. NEC has power facilities on the outskirts of the project corridor, currently there are no facilities within the corridor. Part of the project corridor is within the cooperatives service area limits. Newberry Electric Cooperative is in this report in the event that future lines are placed.

**The following road is in the NEC limits:**

**Exit 85 - SC 202 (Pomaria Street and onward to the west):**

A one phase line crosses I-26 just outside the project corridor at Station 1471+00.

**Easements / prior rights based on preliminary review:**

NEC has no facilities at this time, therefore at this time prior rights are not an issue.

**Santee Cooper (Transmission) (SCT) (OH5)**

**● Power**

Santee Cooper Transmission (SCT) has overhead transmission facilities within the project corridor from mile marker 99 to the project termini.

**The preliminary assessment for Santee Cooper Transmission facilities:**

**Station 730+00:**

SCT owns a 115 kV – two circuit transmission crossing over I-26, in easement as part of the Friarsgate Tap. (TA5X045 and TA5X028)

**Exit 97 - US 176 (Broad River Road):**

On the south side of I-26 SCT has a transmission line in easement that parallels the interstate and turns to the south behind the Exit ramps, crossing perpendicular over Rauch Metz Road paralleling Broad Stone Road. This 115 kV – one circuit transmission is part of the Friarsgate Chapin Tap. (JA5X013)

**Station 916+00:**

SCT has a 115 kV – one circuit transmission crossing over I-26, from the south side easement that parallels the interstate to the north of I-26. This is part of the Spring Hill Tap. (JA5X024)

**Mount Vernon Church Road:**

The 115 kV – one circuit line that crossed I-26 at Station 916+00 (JA5X024) turns west and crosses over Mount Vernon Church Road beside the Center for Advanced Technical Studies parking lot. This line goes behind the school parking lot and crosses US 176 to service the MCEC Sub Station outside the project corridor. (Spring Hill Tap)

**Station 1181+00:**

SCT has a 115 kV – two circuit crossing over I-26 in easement. The two circuits are part of the Pomaria – Chapin Tap. (TA5X082 and TA5X015)

**Exit 85 - SC 202 (Pomaria Street):**

On the north side of the interstate near 4 Oaks Road, SCT has a 115 kV – two circuit running east to west, crossing the entrance to 4 Oaks Road, and crossing SC 202 (Pomaria Street).



**Santee Cooper Transmission  
at 4 Oaks Rd**

One circuit is part of the Pomaria – Federal Paper Tap (TA5X058) and the other circuit is part of the Newberry – Pomaria Tap. (TA5X028) this line continues to the west behind Meadow Brook Road in easement.

**Station 1464+00:**

The Pomaria – Federal Paper Tap (TA5X058) and the Newberry – Pomaria Tap. (TA5X028) that crosses SC 202 angles toward the interstate, crossing over I-26 at Station 1464+00, and continues on to the west.

**Easements / prior rights based on preliminary review:**

The SCT poles and towers are located outside the existing right of way and/or in existing private easement. SCT will have prior rights. Included are SCT’s transmission encroachment restrictions.

*Of concern is the lead time for any I-26 crossing relocations. This will be in situations where pacing operations are necessary. If the I-26 finished road elevation increases at the crossings it could be an issue. SCT transmission is 115 kV within the project corridor. Design time, steel extrusion and fabrication, will be in accordance to the MAP 21 directive. There may be seasonal construction limits. High voltage relocations may not be feasible during peak seasons, which is summer and winter. At this time there are known impacts, which require replacing the current poles with taller poles. The locations of these impacts are at the proposed ramps for SC 202 (Pomaria Street), and the realignment of Rauch Metz and Broad Stone Roads at Exit 97 / US 176 (Broad River Road). Santee Cooper will require a 16 foot driveway for access to all easements at all new crossings.*

**SCE&G Gas Distribution / Transmission (SCE&G-G) (G1)**

**● Underground Gas**

SCE&G Gas (SCE&G-G) owns and maintains gas distribution and transmission lines within the project corridor.

**The preliminary assessment for SCE&G Gas facilities:**

**Western Lane:**

SCE&G-G owns a 4 inch plastic gas distribution line along Western Lane coming from the bend between Select Comfort and Ridan Composites to Lowman Road. The line ends at Lowman Road.

**Koon Road:**

A 6 inch plastic distribution gas line extends along Koon Road on the west side.

This line crosses under I-26 at about 27 feet west of the current bridge location. SCE&G-G stated that this line is about 20 feet deep under the interstate.



**SCE&G-G/SCE&G-T Power Crossing I-26 at Station 885+00**

**Exit 97 - US 176 (Broad River Road):**

On the south side of the interstate a four inch plastic gas distribution line runs along the west side of US 176. The line turns down Broad Stone Road reducing to a 2 inch plastic line at the intersection. There are 3/4 inch services to businesses along this route. On the north side of the interstate there is a 4 inch plastic distribution line that reduces to a two inch line in front of the Food Lion Grocery.

**Station 885+00:**

SCE&G-G has a 12 inch steel (pressure) gas transmission crossing under I-26, in easement on each side. This easement is shared with an SCE&G-T 230 kV – four circuit power transmission.

**Easements / prior rights based on preliminary review:**

The SCE&G Gas distribution lines are located inside the existing right of way without prior rights. The transmission is in easement on either side of the interstate. SCE&G Gas will have prior rights in the private easement only.

*Of concern is the lead time for any I-26 crossing relocations. This is the crossing at Koon Road since the proposed bridge will be constructed in place. The transmission crossing at Station 885+00 is critical to the SCE&G-G overall system.*

**Clinton Newberry Natural Gas Authority (CNINGA) (G2)**

**● Underground Gas**

Clinton Newberry Natural Gas Authority (CNINGA) maintains an underground 4 inch plastic gas line along SC 202 (Pomaria Street).

**The preliminary assessment for CNINGA Gas facilities:**

**Exit 85 - SC 202 (Pomaria Street):**

On the south side of the interstate CNINGA owns a 4 inch plastic 25 PSI gas line that runs toward the north along the east side of SC 202 heading toward I-26. At roughly 215 feet from I-26, this line crosses over to the west side and under I-26 in an 8 inch steel casing. Once across the interstate the line stays to the west and then crosses to the east at about 230 feet from the interstate. The line continues on the east side through the project corridor.

**Easements / prior rights based on preliminary review:**

CNINGA lines are located within the existing right of way, therefore prior rights do not exist.

*Of concern is the lead time for any underground I-26 crossing relocations. Accommodations can be made at the I-26 crossing west of SC 202 near the proposed MSE wall. An adjustment can be made for CNINGA to go under or through the wall depending on the final plans.*



**Exit 85 - SC 202 (Pomaria Street)  
/ I-26 Interchange**

## 2. CELL TOWERS WITHIN THE PROJECT CORRIDOR

### ● All Cell Towers

The cell towers within the area of the project should not be impacted by the realignments. However, the utilities feeding the towers could cause a disruption to services if not monitored closely during relocations or if damaged during roadway construction. Below is a list of the locations of the towers and the owners.

**Western Lane:** Tower located at the Intersection of Western Lane and Howard Coogler Road.

Pinnacle Towers LLC

Attention To: Regulatory Department

2000 Corporate Dr. / Canonsburg, Pa 29063

Contact: Christine A. Verre Phone: 724-416-2000

E-Mail: [Regulatory.Department@Crowncastle.com](mailto:Regulatory.Department@Crowncastle.com)

Latitude / Longitude: 34.114722 / -81.186389

Street City, State: On Western Lane / Irmo, SC

**Exit 97 - US 176 (Broad River Road):** Tower on south side of I-26, east side of US 176.

Spectrasite Communications, LLC

(Through American Towers, LLC)

Attention To: Regulatory Compliance

1898 Leland Drive, Suite A / Marietta, Ga 29063

Contact: B Carter Phone: 678-265-6770

1898 Leland Drive, Suite A

Marietta, Ga 29063

E-Mail: [Colofaa-Fccsoutheast@americantower.com](mailto:Colofaa-Fccsoutheast@americantower.com)

Latitude / Longitude: 34.142417 / -81.234667

Street City, State: 11046 Broad River Road (#308870) / Ballentine, SC

**Mount Vernon Church Road:** Tower on south side of I-26, west side of Mount Vernon Church Road.

Pinnacle Towers LLC

Attention To: Regulatory Department

2000 Corporate Dr. / Canonsburg, Pa 29063

Contact: Christine A. Verre Phone: 724-416-2000

E-Mail: [Regulatory.Department@Crowncastle.com](mailto:Regulatory.Department@Crowncastle.com)

Latitude / Longitude: 34.157667 / -81.274889

Street City, State: Mount Vernon Church Road / Chapin, SC

**Exit 91 -S 48 (Columbia Avenue)** Tower on south side of I-26, east side of Columbia Avenue behind ramp.

American Towers, LLC. Cell Site

1898 Leland Dr.

Marietta, Ga 29036

Contact: B Carter Phone: 678-265-6770

1898 Leland Dr. / Marietta, Ga 29036

E-Mail: [Bridget.Carter@americantower.com](mailto:Bridget.Carter@americantower.com)

Latitude / Longitude: 34.175556 / -81.321889

Street City, State: 1232 Crooked Creek Road (21503) / Chapin, SC

**Holy Trinity Church Road:** Tower on south side of I-26, to the east off Beagle Run Road.

Pinnacle Towers LLC

Attention To: Regulatory Department

2000 Corporate Dr. / Canonsburg, Pa 29063

Contact: Christine A. Verre Phone: 724-416-2000

E-Mail: [Regulatory.Department@Crowncastle.com](mailto:Regulatory.Department@Crowncastle.com)

Latitude / Longitude: 34.194611 / -81.360889

Street City, State: Beagle Run Road / Chapin, SC

**Exit 85 - SC 202 (Pomaria Street):**

Cingular Wireless Pcs, LLC

Attention: Reginald Youngblood

2200 N. Greenville Ave, 1W / Richardson, TX 29075

Contact: Michael P Goggin Phone: 972-234-7003

2200 N. Greenville Ave, 1W

Richardson, TX 29075

E-Mail: [Fccmw@att.com](mailto:Fccmw@att.com)

Latitude / Longitude: 34.222056 / -81.406139

Street City, State: 341 Four Oaks Road / Little Mountain, SC

### **3. AREAS WITH CONTROLLED ACCESS**

There are areas beyond the Interstate which will require controlled access. Since access is necessary to maintain utilities, relocations will be required in those areas even though there may be no impact otherwise.

**The following locations should be considered with respect to relocation planning:**

**Exit 97** - US 176 (Peak Exit) – areas around proposed ramps, especially on northeast side of I-26.

**Exit 91** - Columbia Ave. – along Columbia Ave. on each side up to 1000 feet beyond the I-26 Bridge.

**Exit 85** - SC-202 (Pomaria Street) – along Pomaria Street on each side up to 1000 feet beyond the I-26 Bridge. An adjustment should be allowed in the controlled access fence for an entrance to the Pump Station and Transmission Easements on the north side of I-26. This will allow access to easements.

#### 4. ESTIMATED COST FOR RELOCATING UTILITIES WITH PRIOR RIGHTS

The estimate of cost to SCDOT for relocating the utility conflicts, shown below, is for “Information-Only.” Final costs will be determined by final design.

UTILITY	COST
AT&T DISTRIBUTION	400,000.00
POND BRANCH TELEPHONE	0.00
SPIRIT COMMUNICATIONS	0.00
CHARTER	0.00
CITY OF COLUMBIA	475,000.00
NEWBERRY COUNTY WATER & SEWER AUTHORITY	0.00
TOWN OF CHAPIN	0.00
RICHLAND COUNTY UTILITIES	100,000.00
MID CAROLINA ELECTRIC COOPERATIVE	430,000.00
SCE&G ELECTRIC DISTRIBUTION	235,000.00
SCE&G ELECTRIC TRANSMISSION	0.00
NEWBERRY ELECTRIC COOP	0.00
SANTEE COOPER TRANSMISSION	4,200,000.00
SCE&G GAS	0.00
CLINTON NEWBERRY NGA	0.00
<b>TOTAL ESTIMATED COST TO SCDOT</b>	<b>5,840,000.00</b>

These costs do not include Senate Bill 932 which is currently residing in the “Senate Committee on Transportation” as of February 1, 2018 pending approval:

“By Adding Section 57-5-880, to provide that an entity undertaking a transportation improvement project shall bear the costs related to relocating water and sewer lines; to provide the requirements for utilities to be eligible for relocation payments”.

#### 5. SCDOT ITS INFRASTRUCTURE RELOCATIONS

<b>TOTAL ESTIMATED SCDOT ITS COST</b>	<b>2,480,000.00</b>
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#### 6. RECOMMENDATIONS FOR EARLY RELOCATIONS / COORDINATIONS

Possible early relocations could take place in areas that are developed.

Early coordination should be addressed to companies with long lead items.

**The following early coordination is recommended:**

AT&T	Substations if conflict is evident
City of Columbia	Utility lines impacted 12” or greater – Interstate crossings
Newberry County Water & Sewer	Force Mains if not In Contract – budget constraints
Richland County Utilities	Interstate crossings
SCE&G Transmission	Allow up to 1 ½ years to relocate
Santee Cooper Transmission	Allow up to 1 ½ years to relocate
Clinton Newberry Natural Gas	Interstate crossings – time and budget



**Civil Engineering  
Consulting Services, Inc.**

# APPENDIX



**I-26 DESIGN BUILD WIDENING - FROM  
MM 85 TO MM 101**

**PRELIMINARY  
UTILITY REPORT**



**Civil Engineering  
Consulting Services, Inc.**