FILED March 23, 2018 Data Center Missouri Public

Exhibit No.:

327

Service Commission

Issue:

Main Replacement Scheduling and Coordination with City

Departments

Witness:

Britt E. Smith, PE

Sponsoring Party:

City of Jefferson City, Missouri

Case No.:

Case No. WR-2017-0285

### CITY OF JEFFERSON CITY, MISSOURI

Case No. WR-2017-0285

#### **DIRECT TESTIMONY**

OF

BRITT E. SMITH, PE

Jefferson City, Missouri November 2017

City of Jeff City Exhibit No 327

Date 35-18 Reporter Beccat.

File No. WR-2017-0285

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Request for Authority	to Implement a General Rate ) Case No. WR-2017-0285, et al. d Seiver Service Provided in )
	AFFIDAVIT OF BRITT E. SMITH, PE
STATE OF MISSOU	RI ) ) ss.
COUNTY OF COLE	)
I, Britt E. Smi	h, PE, of lawful age, and being duly sworn, do hereby depose and state:
I. My na	me is Britt E. Smith. I am presently Operations Divisions Director within
the Department of Pu	olic Works for the City of Jefferson, intervener in the referenced matter.
2. Attach	ed hereto and made a part hereof for all purposes is my direct testimony.
3. I hereb	y swear and affirm that my answers contained in the attached testimony to
the questions therein	propounded are true and correct to the best of my personal knowledge,
information and belief	Britt E. Smith
Subscribed and	sworn to before me, a Notary Public, this 29th ay of November, 2017.
My Commission expi	es: Notary Public
September 14,	JENNIFER SUCHANEK Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: September 14, 2020 Commission Number: 16165377

- Q. WHAT IS YOUR NAME, TITLE AND BUSINESS ADDRESS?
- A. My name is Britt E. Smith, PE, and I am the Operation Divisions Director within the
   Department of Public Works for the City of Jefferson. My business address is City Hall,
   320 East McCarty, Jefferson City, Missouri.
- Q. ON WHOSE BEHALF DO YOU APPEAR IN THIS PROCEEDING?
- A. City of Jefferson.
- Q. WHAT ARE YOUR RESPONSIBILITIES AS OPERATION DIVISIONS DIRECTOR?
- A. I oversee four divisions within the public works department: Street, Central Maintenance, Airport and Parking Divisions. The divisions have a combined workforce of forty-six (46) full-time employees (FTEs) and a total annual operating budget of over \$5 million. My responsibilities include leveraging all available resources including materials, equipment and personnel to accomplish the varying missions of each respective division. Our key tasks include emergency preparedness, right-of-way management, street maintenance, snow fighting operations, in-house construction projects, parking facility maintenance, parking ordinance enforcement, vehicle maintenance, airport facility maintenance, and consultant design & construction project management.
- Q. HAVE YOU ATTACHED A SCHEDULE WHICH SUMMARIZES YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE?
- A. Yes, it is attached as BES Schedule 1.
- Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
- A. I will be discussing the process by which my department schedules street improvements in coordination with underground facility owners including Missouri American Water

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Company (MAWC). I also have a recommendation on improving coordination with the Company on such projects.

- Q. PLEASE EXPLAIN THE PROCEDURES YOUR DEPARTMENT USES TO ENGAGE UNDERGROUND FACILITY OWNERS IN ROAD IMPROVEMENT PROJECTS.
- A. My department has adopted a procedure of giving advance notice of City financed street improvement projects and other capital improvement projects to affected underground facility owners. The department prepares a list of projects that are anticipated to be started and completed within a three year time frame and provides that list to entities which may have facilities at risk including Cole County, the state Office of Administration, electricity, gas, telecommunications, and water providers including Missouri American Water Company. This list of projects and the schedule are not absolute. The schedule for and the identity of projects are subject to modification to accommodate other entities that are in or adjacent to the right of way. The purpose of the notice is to encourage coordination between affected utilities and the City so that improvements needed under the street can be scheduled at the same time or proximate to the improvements needed on the street
- Q. ARE MEETINGS WITH AFFECTED PARTIES CONDUCTED AS WELL?
- A. Yes. The department holds a semi-annual government agency and utility coordination summit as well. Those in attendance at that meeting include representatives of the Missouri Department of Transportation, the Missouri Office of Administration, Cole County, local engineering consultants, and utility owners such as MAWC. At this meeting the City's construction projects, current and prospective, as well as those of the

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other attendees are discussed. This meeting is designed as a place for affected entities to update each other on project details and in so doing increase the effectiveness and useful life of all their new construction in the City. Additional project specific meetings are scheduled for each capital improvement project and all utility companies possibly affected by that project are invited.

- Q. DO YOU AND MAWC WORK COOPERATIVELY RESPECTING THE MAINTENANCE AND REPAIR OF ITS WATER SYSTEM.
- A. In general, my department and the Company enjoy a good relationship. For instance, my department understands that the water system serving Jefferson City has a number of mains that were installed over 80 to 100 years ago and naturally there will be a regular frequency of leaks in that system. To minimize time loss in obtaining curb or street cut permits for repairs, my department allows MAWC to call in permits for work after or during the repair. This process has proven to be quick and administratively convenient for the City and also for the Company, as far as I know. I am attaching for illustration the record of excavation permits MAWC has requested for the period of time commencing November 1, 2013 to November 12, 2017. I have marked the record as BES Schedule 2. We assist MAWC in scheduling repairs to both minimize impact to the public and cost of repair. For example when maintenance work requires crossing a major roadway, we will work with MAWC to develop a work plan to minimize traffic impact. Many times, by reducing the traffic impact, we lower total repair cost by avoiding the cost of extensive detour plans.

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We also understand that not all work can be planned. As an example, on Christmas Eve a year or two ago, the water main on Industrial Boulevard broke. The main break caused roadway damage and as a result mud was deposited on the roadway over a distance to 300 to 400 feet from the break location. Normal practice would require companies to address this type of issue by using contract forces of their choosing. Because it was Christmas Eve we understood that would be very difficult to arrange so, after receiving a call from the MAWC contractor on my cell phone, we were able to call in City staff to assist with the cleanup effort by use of our street sweepers. This is just one example of how we partner with MAWC, and other utilities, to provide both quality and timely services to our citizens.

However, an element of my department's relationship with MAWC that needs serious improvement is the Company's communication with the department about its own schedule of construction projects within the City.

#### Q. PLEASE EXPLAIN.

A. During my tenure as Operation Divisions Director MAWC has not disclosed to me or the department its long or short range capital improvement or expenditure plan. As far as I know the Company has not disclosed the age of its infrastructure, the life cycle of its critical components or its forecasts for replacement. For lack of this information, the City has not been able to make a reliable link between its own construction schedule and that of MAWC. The absence of careful planning in this respect encourages inefficiencies and undue expense. Let me explain this situation with another example. In late 2015 or early 2016, the City proposed a major street improvement project for East Capitol Avenue

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> between Adams Street and Lafayette Street. From conceptual design through final design several meetings were held with MAWC staff discussing the scope of the project. The project included a surface treatment with an estimated 15 to 20 year life and included ornamental type street parking places and bike lanes. Missouri American has a large dimension water main under East Capitol Avenue along the route of the improvement. I believe that this main is one of the oldest in the City. MAWC was notified about the scope of the project and that it would commence in 2017. The department encouraged MAWC to replace the water main at the same time as the improvements to East Capitol Avenue were being made. By replacing the main and/or services then the cost would the lowest possible due to limited roadway restoration cost. This in my opinion would be a "win - win" for everyone. MAWC did not agree to replace that main nor the service under the proposed improvements, unless those services were lead lines. MAWC's unwillingness to make any substantial repairs/replacement when costs would be at the lowest (during street reconstruction), the City moved ahead with the improvements to East Capitol Avenue and the ribbon cutting for the project was conducted on November 15, 2017.

- Q. ARE THEIR ANY RISKS TO THE IMPROVEMENTS TO EAST CAPITOL AVENUE BECAUSE THE WATER MAIN HAS NOT BEEN REPLACED?
- A. In my estimation there are. When the main under East Capitol Avenue breaks or suffers a substantial leak, MAWC will excavate in the new road bed for purposes of the repair and be required by City code or ordinance to restore the street to the condition it was before the excavation. I fully suspect that such a break or leak will occur within the next

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three or four years. An excavation for the repair will be detrimental to the pavement surfaces and the resulting "patch" in the road will generate public objection. The result will be higher repair cost for MAWC and a reduced life of the road because in my experience no roadway patch is as good as the original undisturbed surface. Instead of the "win – win" we hoped for we have a "lose – lose" scenario.

- Q. ARE OTHER CAPITAL PROJECTS PLANNED ALONG EAST CAPITOL AVENUE?
- A. The City is planning the redevelopment of the former Missouri State Penitentiary site and various properties along the street are under redevelopment. At some point there will be an analysis of the water pressure and flow that is available for facilities proposed in that redevelopment. Without information from the Company on its construction schedule, I believe the City and the Company lost yet another opportunity; specifically the opportunity to address as part of the East Capitol Avenue project the prison redevelopment and any needed improvements.
- Q. WHAT IS YOUR RECOMMENDATION IN THIS CASE?
- A. I recommend that the Company be directed as part of the Commission report and order in this case to provide the following information to my department:
  - 1. On a regular basis, its annual or multi-year capital expenditure or improvement plan for the Jefferson City service area, and any updates made to those plans shortly after they have been approved. If this information should be covered by a confidentiality agreement my department is prepared to enter one approved by the parties' counsel.
  - 2. Any leak studies of the water system in the Jefferson City service area.

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- The current pressure and volume model for the water system in the Jefferson City service area with the understanding and authority that it be shared with the fire department.
- 4. The age of the water system infrastructure.
- 5. The current and subsequent versions of MAWC's Resource Supervised Plan as outlined in 10 CSR 60-10.010 (2) C. 2.

Greater coordination between the City and the Company with regard to the Company's major improvement projects is certainly possible provided the Company shares this information.

- Q. WHAT ARE THE LONG TERM ADVANTAGES OF HAVING THIS INFORMATION?
- A. I suggest that one advantage is obvious. This information will greatly benefit the objective of maintaining new pavement surfaces for the length of their design life. It has been my unfortunate experience as Operation Divisions Director that after a major street in the City will be overlaid within three years the Company will ask to dig up the street to make a repair. To the extent conceivably possible the problem of fixing water leaks in new streets should be stopped.

Another advantage is meeting public expectations and reducing their cause for objection. Roads are improved at public expense and if instead of a smooth and integrated road surface the citizens driving on those roads are met with repairs resembling a "patchwork quilt" they are justifiably dissatisfied. Water mains should not be repaired or replaced a foot at a time.

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Additionally, water under the pavement greatly reduces the life span of any pavement section. Sometime the full damage caused by a water leak is not seen until month or years after any repairs were made.

Public safety is another major concern. A water leak near a drainage way may go undetected for extended periods of time. During this time, under-pavement erosion can occur. In many cases across the nation, large sink holes have developed, resulting in damage to both public and private property and the potential to harm life.

Finally, better coordination of City and Company projects will reduce the Company's expenses in making road repairs and the quarrels that sometimes occur over the quality of the Company's repair of the excavated surface.

- Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- A. Yes.

#### BES Schedule 1

#### EDUCATIONAL AND PROFESSIONAL EXPERIENCE

#### **FOR**

#### BRITT E. SMITH, PE

#### **EDUCATION**

University of Missouri - Rolla

Bachelors of Science in Aerospace Engineering,

Northeast Missouri State University

Major: Pre-Engineering

#### PROFESSIONAL EXPERIENCE

City of Jefferson Operations Division Director August 2011 – Present

City of Jefferson Street and Parking Division Director December 2003 - August 2011

Missouri Department of Conservation Project Supervisor Jefferson City, Missouri February 2001 - December 2003

City of Jefferson Civil Engineer October 1995 - January 2001

MECO Engineering Company, Inc. Engineer/Project Manager Jefferson City, Missouri August 1991 - October 1995

#### PROFESSIONAL CERTIFICATIONS

Professional Engineer (P.E. in Civil Engineering) - EN 029126

#### HONORS AND ACHIEVEMENTS

National Society of Professional Engineers
Missouri Representative to the National House of Delegates

### Missouri Society of Professional Engineers

President

President-Elect

Vice President

Treasurer

Director

# Jefferson City Chapter of the Missouri Society of Professional Engineers President

President-Elect

Vice President

Secretary/Treasurer

# Missouri American Water

Street Cut and Right-of-Way November 1, 2013 -November 29, 2017

[135]	ESTE STATE	Factorista de la constantida de la cons		vember 1, 2013 -November 29, 2		
Date work	Date called	Date	Days	Location	Permit	Description
done	tation:	Completed	Active		: No ::	
11/21/17	11/21/17	11/27/17	3	1918 Hayselton	21716	Closed
11/16/17	11/16/17	11/27/17	5	140 Booneville	21715	Closed
11/13/17	11/13/17	CLANGE CANCEL		1913 Cole Dr	21717	
11/10/17	11/10/17	18300818888	16576576	1760 Southridge Dr	21713	93/4/2010/03/19
11/10/17	11/10/17	11/14/17	4	131 E High	21712	Closed
	11/6/17	11/21/17	10	2424 Livingston	21646	Closed
11/4/17				E Cedar Way/Madison	21645	Closed
11/1/17	11/1/17	11/3/17	3	1202 Bald Hill	21644	Closed
10/30/17	10/30/17	11/15/17	12		21643	Closed
10/27/17	10/27/17	10/31/17	4	E McCarty Lafayette		
10/25/17	10/25/17	11/17/17	18	420 Holiday	21642	Closed
10/24/17	10/24/17	11/17/17	19	1111 Leslie Blvd	21641	Closed
10/7/17	10/7/17	11/21/17	32	1813 Swifts Hwy	21640	Closed
10/4/17	10/4/07	10/17/07	10	1812 Stadium	21639	Closed
9/3/17	9/6/17	9/12/17	6	1126 E Atchsion	21638	Closed
8/13/17	8/15/17	8/28/17	.11	1003 Indiana Ave	21637	Closed
8/2/17	8/4/17	8/28/17	20	1715 Hayselton	21636	Closed
7/22/17	7/22/17	8/8/17	12	900 Witter	21635	Closed
7/21/17	7/21/17	7/27/17	-5	1100 Industrial Driv	21634	Closed
6/2/17	6//17	6/8/17	5	111Industrial Dr	21633	Closed
5/28/17	5/28/17	6/8/16		MO Blvd and High St	21632	Closed
5/17/17	5/17/17	7/12/17	39	2308 Hyde Park	21586	Closed
5/13/17	5/13/17	5/25/17	9	2211 Brandy Ln	21585	Closed
4/25/17	4/25/17	5/19/17	19	603 Ohio	21584	Closed
3/27/17	3/27/17	4/17/17	16	1220 W High Street	21583	Closed
	3/14/17	3/16/17	4	1405 Moreland	21582	Closed
3/13/17		3/29/17	13	103 E Cirice	21581	Closed
3/13/17	3/13/17			716 W Main		Closed
3/10/17	3/10/17	3/15/17	4			Closed
3/9/17	3/9/17	4/17/17		Adams/Capitol		Closed
3/1/17	3/3/17	3/10/17	8	2409 Hyde Park		Closed
3/1/17	3/1/17	4/26/17		526 E Capitol		
2/23/17	2/27/17	3/7/17		1011 Industrial		Closed
2/27/17	2/27/17	6/1/17		E Cirice	21575	Closed
2/27/17	2/27/17	3/13/17		603 Linn		Closed
2/19/17	2/19/17	2/28/17		109 Bluff		Closed
2/17/17	2/17/17	3/7/17		205 Clay St	21572	Closed
1/13/17	2/7/17	2/14/17		West Tanner Way		Closed
1/13/17	2/7/17	2/17/17		1031 Buna Vista		Closed
2/3/17	2/3/17	2/17/17	11	1810 Stadium		Closed
12/18/16	1/6/17	1/23/17	25	1200 Elmerine		Closed
12/14/16	1/6/17	1/12/17		Hart/ W McCarty	21534	Closed
12/13/16	12/14/16	12/22/16		714 Michigan		Closed
12/12/16	12/14/16	12/14/16		923 Dockery St		Closed
12/10/16	12/10/16	4/17/17		1323 Karen		Closed
12/9/16	12/9/16	2/28/17		708 Belair		Closed
12/8/16	12/8/16	1/23/17		1609 Bevelry		Closed
10/27/16	10/26/16	10/26/16		1010 Rosewood Circle		Closed
		10/25/16		Edmunds/Buna Vista		Closed
10/20/16	10/21/16			Edmunds/Elizabeth		Closed
10/20/16	10/21/16	10/25/16		Edmunds/Mydle		Closed
10/20/16	10/21/16	10/25/16				Closed
9/30/16	9/30/16	11/2/16		701 Belair		Closed
9/17/16	9/17/16	11/2/16		1618 E Miller		Closed
9/14/16	9/14/16	11/2/16		909 E Capitol		
9/14/16	9/14/16	11/2/16		200 Hub St		Closed
9/9/16	9/9/16	10/6/16	;	1901 Glenwood		Closed
8/19/16	8/19/16	9/27/16		1105 and 106 Carri Ann		Closed
8/15/16	8/15/16	9/12/16	21	200 Block Clay Street		Closed
8/13/16	8/13/16	9/14/16	23	1810 Stadium		Closed
7/25/16	8/11/16	8/29/16	26	Rosewood/Carol		Closed
8/8/16	8/8/16	8/24/16	13	611 Hibernia		Closed
7/26/16	7/26/16	7/29/16		Stadium and Carter		Closed
7/26/16	7/26/16	7/29/16		1228 Carter	21438	Closed
1120110			- 1			

# Missouri American Water

Street Cut and Right-of-Way November 1, 2013 -November 29, 2017

Datainait	Date called	Date	Days	vember 1, 2013 -November 29, 2		<b> </b>
done	Date Caned	Completed			Permit	Description
7/26/16	7/26/16	8/12/16			4	
7/25/16	7/25/16	8/12/16	15	Rosewood/Carroll 1011 Winston	21437 21436	Closed Closed
7/20/16	7/20/16	8/12/16	18	East Ashley and Madison	21435	Closed
7/8/16	7/8/16	8/26/16	37	2653 Sue Drvie	21434	Closed
7/7/16	7/7/16	7/29/16	17	613 Michigan	21433	Closed
7/6/16	7/16/16	8/2/16	12	701 E McCaty	21432	Closed
7/5/16	7/5/16	8/29/16	40	901 E Capitol	21431	Closed
7/4/16	7/4/16	7/11/16	4	901 Madison	21430	Closed
7/3/16	7/3/16	8/26/16	40 .	2201 Marilyn	21429	Closed
7/2/16	7/2/16	7/11/16	5	104 Jackson	21428	Closed
7/1/16	7/1/16	8/23/16	37	824 SW Blvd	21427	Closed
6/30/16	6/30/16	9/7/16	49	908 Westwood	21426	Closed
6/30/16	6/30/16	7/20/16	14	1816 Green Meadow	21405	Closed
6/28/16	6/28/16	7/11/16	11	1401 E Elm	21404	Closed
6/28/16	6/28/16	8/2/16		613 Waverly	21403	Closed
6/26/16	6/26/16	7/20/16	17	2406 James Street	21402	Closed
6/19/16	6/19/16	7/11/16	26	Cottage Ln/ Gordon	21401	Closed
6/14/16	6/14/16	8/12/16	44	Adams/State	21400	Closed
6/14/16	6/14/16	7/20/16		1101 Maplewood Ct	21399	Closed
5/26/16	5/26/16	6/28/16		1805 W Main	21398	Closed
5/10/16	5/10/16	5/31/16		1115 E Miller	21397	Closed
5/5/16	5/4/16			1827 Mississippi		Closed
5/5/16	5/5/16	5/18/16	9	617 Houchin		Closed
5/2/16	5/2/16	54045		1900 Summers Way		Closed
5/1/16	5/1/16	5/10/16		938 Fairmont Blvd		Closed
4/21/16	4/21/16	5/4/16		1209 West Main		Closed
4/20/16 4/19/16	4/20/16 4/19/16	5/4/16 4/27/16		127 W Cirlce 1210 Moreland		Closed Closed
4/19/16	4/15/16	4/2//10		2207 Merlin		Closed
4/12/16	4/12/16	4/19/16		620 Ohio		Closed
4/12/16	4/12/16	4/19/16		608 Ohio		Closed
4/11/16	4/11/16	4/15/16		High Street ramp/MO Blvd		Closed
4/7/16	4/7/16	4/15/16		207 Vista		Closed
4/5/16	4/5/16	5/3/16		2015 Tower		Closed
3/29/16	3/29/16	5/4/16		2026 W Main		Closed
3/25/16	3/25/16	7/11/16		1428 Bald Hill		Closed
3/25/16	3/25/16	4/6/16		513 Gipfert Ln		Closed
3/23/16	3/23/16	4/6/16		1805 Bald Hill Rd		Closed
3/18/16	3/18/16	4/6/16		1014 Laural		Closed
3/10/16	3/10/16	4/6/16	20	333 Old Gibbler		Closed
3/10/16	3/10/16	4/6/16	20	2210 Melody Dr		Closed
3/10/16	3/10/16	3/15/16	4 4	100 Donna Bella		Closed
3/7/16	3/7/16	3/9/16		518 E High		Closed
3/2/16	3/2/16			2025 Edgewood (Hydrent)		Closed
2/26/16	2/26/16	4/6/16		2025 Edgewood		Closed
2/23/16	2/23/16	8/24/16		1415 Stadium		Closed
2/19/16	2/19/16	12/7/16		300 blk E State St		Closed
2/18/16	2/18/16	2/29/16		Jnion/Jackson		Closed
2/12/16	2/12/16	3/9/16		2109 Edgewood Drive		Closed
2/12/16	2/12/16	3/9/16		318 Air View		Closed
2/11/16	2/11/16	3/9/16		2500 Orchard Ln		Closed
2/11/16	2/11/16	2/25/16		1722 South Ridge		Closed
2/5/16	2/5/16	3/9/16		2000 Meadow Ln		Closed
2/3/16	2/3/16	2/15/16		2128 Green Meadow Dr		Closed
2/1/16	2/1/16	2/15/16		308 Moreau		Closed
1/29/16	1/29/16	2/1/16		709 Francis		Closed
1/28/16	1/28/16	2/1/16		10 Belair		Closed Closed
1/28/16 1/26/16	1/28/16 1/26/16	2/1/16 2/1/16		lough Park and Kolb 22 Boonville		Closed
1/26/16	1/26/16	1/27/16		26 E Circle		Closed
1/22/16	1/22/16	3/9/16		20 E Circle		Closed
1166110	1122110	V10/10	<u> </u>	LET EVIIVE	-1000 1	-14449

## Missouri American Water

Street Cut and Right-of-Way November 1, 2013 -November 29, 2017

CZ TEN TATAL				vember 1, 2013 -November 29, 2		
Date work	Date called	Date	Days		Permit	
done	·····in:	Completed			·· No	Description
				<u> </u>		
1/21/16	1/21/16	2/4/16	11	1200 Moreland	21305	Closed
1/17/16	1/17/16	3/9/16	37	1822 Tanner Bridge	21304	Closed
1/15/16	1/15/16	1/25/16	5	906 Broadway	21303	Closed
1/11/16	1/12/16	1/14/16	3	810 Stadium	21302	Closed
1/11/16	1/12/16	1/13/16	2	Ridgewood and W McCarty	21301	Closed
1/2/16	1/12/16	1/29/16	20	Southwest and Sunvally	21211	Closed
1/2/16	1/12/16	1/14/16	9	1837 W McCarty	21210	Closed
12/24/15	12/30/15	1/6/16	8	1812 W Stadium Blvd	21209	Closed
12/21/15	12/23/15	1/6/16	10	1228 West Edgewood	21208	Closed
12/4/15	12/7/15	12/21/15	12	W. McCarty and Manilla	21207	Closed
12/4/15	12/7/15	12/21/15	12	1808 Greenberry x2	21206	Closed
11/28/15	11/30/15	2/23/16	60	2224 Oakview	21205	Closed
11/19/15	11/18/15			Oakview/Hillsdale		• · · · · · · · · · · · · · · · · · · ·
		2/23/16			21204	Closed
10/28/15	10/28/15	12/4/15	25	2619 Schellridge	21203	Closed
10/23/15	10/26/15	12/4/15	28	319 Meier	21202	Closed
		10/23/2015	10	400 E Cedar Way	21201	Closed
10/7/2015	10/8/2015	10/9/2015	3	1409 Moreland	21200	Closed
10/3/2015	10/5/2015	10/22/2015	14	MO Blvd and Stadium	21199	Closed
9/15/2015	9/15/2015	9/22/2015	6	213 E Elm	21198	Closed
9/8/2015	9/14/2015	9/22/2015	8	1025 Weslwood	21197	Closed
9/7/2015	9/8/2015	9/22/2015	9	2601 Schellridge		Closed
9/5/2015	9/8/2015	9/22/2015	11	1901 Bassman	21195	Closed
9/2/2015	9/8/2015	10/30/2015		804 Adams		Closed
8/18/2015	8/20/2015	8/20/2015		E Elm/Linn		Closed
8/10/2015	8/20/2015	9/22/2015		933 Leslie		Closed
8/7/2015		9/15/2015		1312 Lynnwood	21141	Closed
6/30/2015		7/6/2015		313 Hart		Closed
6/30/2015	6/30/2015	7/2/2015		100 E Cedar Way		Closed
6/22/2015	6/22/2015	6/25/2015		1707 West Main	21137	Closed
6/19/2015	6/22/2015	7/7/2015	13	800 Adams	21138	Closed
6/17/2015	6/18/2015	6/24/2015	6	Satinwood/Brandy Lane	21136	Closed
	6/10/2015	6/15/2015		100 Jefferson	21135	Closed
6/2/2015	6/3/2015	6/9/2015	5	2406 James Street	21134	Closed
5/29/2015	5/29/2015	6/9/2015		623 Ohio		Closed
5/26/2015	5/26/2015	6/9/2015		1313 Moreland		Closed
5/21/2015	5/21/2015	6/24/2015		Hibernia/Mokane Road		Closed
	5/21/2015	6/3/2015		1900 Stadium		Closed
		6/3/2015		319 Stadium		Closed
	5/14/2015	6/3/2015		205 Boonville		Closed
5/6/2015	5/6/2015	5/11/2015		1317 Monroe		Closed
		5/7/2015		312 E Capitol		Closed
4/19/2015		5/4/2015		1110 Lee Street	21125	Closed
4/15/2015	4/15/2015	5/7/2015	17	1711/1713 Haysellon	21124	Closed
	4/10/2015	5/7/2015		217 Stadium Blvd		Closed
3/27/2015		6/24/2015		1419 Hough Park		Closed
3/26/2015		3/30/2015		209 E Atchison		Closed
3/26/2015		5/7/2015		Jackson/Stadium		Closed
3/19/2015				419 Oak Valley Ct		Closed
		4/24/2015				
	3/20/2015	5/21/2015		1902 Stadium Blvd		Closed
	3/18/2015	3/30/2015		Ounklin/Jefferson		Closed
3/6/2015	3/9/2015	3/12/2015		909 Indiana		Closed
3/5/2015	3/6/2015	VOID		1104 Madison St (in ally)		VOID
3/3/2015	3/3/2015			1808 Crader Dr	20973	Closed
	3/4/2015	3/26/2015	18	110 block Jackson	20974	Closed
2/27/2015		4/15/2015		Boonville and Norris		Closed
2/27/2015	3/4/2015	4/15/2015		W. McCarty and Hart		Closed
	2/25/2015	3/24/2015		719 Jefferson		Closed
		ULTILEGIS		1212 Moreland Ave		Closed
	2/23/2015	211212045		2717 Lola Dr		Closed
	2/11/2015	3/12/2015				
	2/9/2015	3/3/2015		1924 Haysellon		Closed
2/(3/27/15)	2/9/2015	3/2/2015	32   5	525 E High	20969	Closed

### Missouri American Water Street Cut and Right-of-Way November 1, 2013 -November 29, 2017

	** ********		No	ovember 1, 2013 -November 29, 2	T	
Date work	Date called	Dafe	Days		Permit	
done	i in	Completed			. No	Description
1/29/2015	<u> </u>	3/30/2015	44		<u> </u>	(Classed
				Dunklin and Jefferson	20967	Closed
	5 1/26/2015	1/30/2015	4	104 N. Taylor	20966	Closed
	1/21/2015	1/30/2015	7	400 E Hess Way	20965	<b>•</b> · · · · · · · · · · · · · · · · · · ·
	1/21/2015	1/27/2015	5	117 E Circle	20958	Closed
1/19/2015		1/27/2015	7	412 E Cirice	20960	Closed
	1/21/2015	3/24/2015	47	401 Capitol	20963	Closed
	1/21/2015	2/6/2015	14	319 Meier	20964	Closed
	1/21/2015	2/6/2015	15	823 Primrose	20957	Closed
1/17/2015	1/21/2015	1/27/2015	7	917 Moreau	20961	Closed
1/16/2015	1/21/2015	1/30/2015	11	414 Hess Way	20959	Closed
1/11/2015	1/11/2015	1/21/2015	8	Boonville and West Main	20956	Closed
1/10/2015	1/11/2015	1/27/2015	11	Moreland and Moreau	20953	Closed
	1/11/2015	1/20/2015	7	1320 Moreland	20954	Closed
1/10/2015	1/11/2015	2/6/2015	20	2306 Hillsdale	20955	Closed
1/7/2015		1/14/2015	6	2503 Industrial Drive	20952	Closed
1/6/2015		1/21/2015	12	300 Berry St	20951	Closed
	1/5/2015	2/6/2015	26	1902 MO Blyd/Beck St	20949	Closed
	1/15/2015	2/11/2015	30	413 Beck St	20950	Closed
	12/29/2014	1/20/2015	16	1308 Houchins	20930	Closed
	12/29/2014	1/20/2015	16	Dunklin and Houchins		Closed
						<del>}</del>
	12/3/2014	12/15/2014	12	Donald Dr		Closed
	12/1/2014	12/15/2014	14	Donald Dr		Closed
	11/19/2014	12/15/2014	18	1924 Hayselton		Closed
	11/17/2014	12/2/2014	18	837 Crestmere		Closed
	11/17/2014			501 Mesa		Closed
	10/29/2014	12/2/2014	22	2600 Schellridge		Closed
	10/20/2014	11/4/2014	13	1605 Bald Hill Rd		Closed
	10/16/2014	11/4/2014		Dogwood/Buehrle		Closed
10/7/2014		10/19/2015		212 Broadway		Closed
9/16/2014		10/1/2014		2500 Country Club		Closed
9/8/2014	9/8/2014	9/17/2014	9	Ridgeway and Oakview	20936	Closed
8/22/2014	8/26/2014	10/7/2014		East Miller and Marshall	20934	Closed
8/21/2014	8/22/2014	9/15/2014		421 Union		Closed
8/16/2014	8/1/2014	11/4/2014	65	1827 W. McCarty	20933	Closed
7/30/2014	7/31/2014			West Ashley and Mulberry		Closed
7/28/2014	7/26/2014			200 block of S. Bluff Street	20859	Closed
7/23/2014	7/23/2014	8/11/2014	19	1319 E Elm Street		Closed
7/23/2014	7/25/2014	8/1/2014	10	103 East Circle	20857	Closed
7/23/2014	7/25/2014	8/11/2014	19	700 Block of Michigam	20858	Closed
7/17/2014				2025 West Edgewood Dr		Closed
7/17/2014	7/22/2014			Hiebernia		Closed
7/13/2014	7/22/2014	8/19/2014	37	1429 Dixon Drive		Closed
7/7/14	7/8/14	7/15/14		1502 Greenberry	20852	
7/5/14	7/8/14	10/3/14		114 Ridgeway		Closed
7/1/14	7/3/14	8/14/14		1120 Lee Street		Closed
6/30/14	7/1/14	7/15/14		400 Block Jackson		Closed
6/30/14	7/3/14	7/15/14		1306 West Main		Closed
6/20/14	6/23/14	7/15/14		1505 Stadium		Closed
6/6/14	6/9/14			327 Fox Creek		Closed
6/4/14	6/5/14	4/20/15		West Main and MO Blvd		Closed
5/27/14	5/28/14			Industrial and Jaycee Dr		Closed - New Main
5/21/14	5/21/14	6/4/14		321 Wilson Drive		Closed
5/20/14	5/20/14	6/4/14		4411 Industrial		Closed
5/13/14	5/14/14			1101 Industrial Drive		Closed
5/8/14	5/13/14	5/14/14		Hillsdale and Binder		Closed
5/1/14				505 Meier Dr		Closed
4/29/14	4/29/14	5/6/14		421 Ladue Rd		Open - Driveway Issues
4/28/14		11/17/14		700 Block SW Blvd		Closed
	4100144	5/15/14	17	102 Vista		Closed
4/28/14	4/29/14					
4/28/14 4/28/14	4/29/14	5/1/14		1308 Cottage Lane		Closed
4/28/14 4/28/14 4/28/14			8 2	2215 Hillsdale	20834	Closed
4/28/14 4/28/14	4/29/14	5/1/14	8 2		20834 20831	

### Missouri American Water Street Cut and Right-of-Way November 1, 2013 -November 29, 2017

12.40.000.000	2345000000000000000000000000000000000000	40020000	17.77.4.4.4	vember 1, 2013 -November 29, 2	Permit	
	Date called	Date	Days	Location	Pennit	Description
::done	ln 💮	Completed	Active		No	
4/23/14				606 Washington Street	20828	Closed
4/16/14				2107 Buehrle Dr	20825	Closed
4/16/14				1010 Holly	20826	Closed
4/16/14				Maryland and Lowell	20827	Closed
4/7/14				2940 Valley View Drive	20824	Closed
4/2/14				1215 Edgewood	20822	Closed
4/2/14				1801 Notre Dame	20823	Closed
3/18/14				104 W. Franklin	20821	Closed
3/7/14				Hiberia/Mokane Road	20820	Closed
2/28/14				Locust / Walsch	20819	Closed
2/24/14				Edmonds / Dulle	20818	Closed
2/21/14				2708 Twin Hills	20817	Closed - Driveway question
2/18/14				306 N Lincoln	20815	Closed
2/18/14				Pondarosa Street	20816	Closed
2/13/14				100 Blk East Ashley	20814	Closed
2/11/14		-		317 Stadium	20813	Closed
2/4/14				216 - 218 McKinley Street	20811	Closed
2/3/14				1408 East High (Alley)	20812	Closed
1/20/14		= 10.1.1	465	1314 Moreau Drive	20751	Closed
1/20/14	1/20/14	5/6/14	106	311 E High Street	20752	Closed
1/12/14				Douglas / Wayne	20749 20750	Closed Closed
1/12/14				130 Boonville Road		Closed
1/7/14				1120 Carol Street	20748 20747	Closed
1/5/14				1515 Rosewood		Closed - New Main
1/3/14				708 Wicker Lane	20745	Closed - New Main
1/2/14				710 Wicker Lane McCarty Street / Manilla	20743	Closed
1/1/14				Pierce / Edwards	20744	Closed
12/26/13				1504 Bald Hill Road	20742	Closed
12/23/13		· · · ·		1122 East Alchison	20741	Closed
12/23/13				1505 Southwest Blvd.	20739	Closed
12/18/13				Marilyn / Oakview	20740	Closed
12/11/13				1306 Emmience	20737	Closed
12/11/13				623-625 W McCarty Street	20738	Closed
12/10/13				709 E McCarty Street	20734	Closed
12/10/13				2107 Rear Mo. Blvd.		Closed
12/10/13				200 Blk Filmore		Closed
12/8/13		-		719 Wicker Lane		Closed
12/3/13				2109 Edgewood Drive	20731	Closed
12/3/13				1119 Darlene	20732	Closed
11/28/13				636 Belmont	20730	Closed
11/27/13				1210 Edgewood		Closed
11/19/13				1310 East High Street		Closed
11/14/13				603 Meir		Closed
11/14/13				Westwood / Wood Cliff	20727	Closed
11/13/13				3032 Oak Valley Drive	20723	Closed
11/13/13				1901 Bassman	20724	
11/13/13	11/15/13	5/14/13		316 Ash Street		Closed - New Main
11/5/13				Salinwood Drive / Melody		Closed
11/4/13				2207 Schell Ridge		Closed
11/4/13				1822 Cedar Ridge		Closed
5/30/13	6/3/14	6/4/14	370	2212 Oakview Drive		Closed
5/12/13	5/13/14			2600 Jason Road		Closed
				138 Forest Hill		Closed
				1225 High Cliff		Closed
				1551 Bald Hill Road		Closed
	6/11/14	6/9/14		619 Houchin	20846	Closed