

# CONSTRUCTION PLANS ST CHARLES ROAD SIDEWALK TAP 2101511

## EXISTING SURVEY LEGEND

<b>LINWORK</b>	<ul style="list-style-type: none"> <li>— SS — SANITARY SEWER</li> <li>— FM — SANITARY SEWER FORCE MAIN</li> <li>— ST — STORM SEWER</li> <li>— W — WATER</li> <li>— E — UNDERGROUND ELECTRIC</li> <li>— OE — OVERHEAD ELECTRIC</li> <li>— C — UNDERGROUND COMMUNICATIONS</li> <li>— OC — OVERHEAD COMMUNICATIONS</li> <li>— T — UNDERGROUND TELEPHONE</li> <li>— OT — OVERHEAD TELEPHONE</li> <li>— FO — UNDERGROUND FIBER OPTIC</li> <li>— OFO — OVERHEAD FIBER OPTIC</li> <li>— TV — UNDERGROUND TV/CABLE</li> <li>— OTV — OVERHEAD TV/CABLE</li> <li>— G — GAS</li> <li>— TR — TRAFFIC</li> </ul>	<ul style="list-style-type: none"> <li>— 949 — INTERMEDIATE CONTOUR</li> <li>— 950 — INDEX CONTOUR</li> <li>— — — — — PROPERTY LINE</li> <li>— — — — — RIGHT OF WAY</li> <li>— — — — — SECTION LINE</li> <li>— — — — — EASEMENT</li> <li>— o — o — GUARD RAIL</li> <li>— x — FIELD FENCE</li> <li>— o — CHAIN LINK FENCE</li> <li>— o — WOODEN FENCE</li> <li>+++++ SILT FENCE</li> <li>— — — — — AGRICULTURE LINE</li> <li>— — — — — EDGE OF TREES</li> <li>— — — — — TOP/BOTTOM OF SLOPE</li> <li>— — — — — ROAD CENTERLINE</li> <li>— — — — — WATERWAY FLOWLINE</li> </ul>
<b>ELECTRIC</b>	<ul style="list-style-type: none"> <li>AC AIR CONDITIONING UNIT</li> <li>BB BREAKER BOX</li> <li>E ELECTRIC MANHOLE</li> <li>EM ELECTRIC METER</li> <li>E ELECTRIC PEDESTAL</li> <li>HP HEAT PUMP</li> </ul>	<b>STORM SEWER</b>
<b>GAS</b>	<ul style="list-style-type: none"> <li>GM GAS MARKER</li> <li>GM GAS METER</li> <li>GV GAS VALVE</li> </ul>	<b>TELECOMMUNICATIONS</b>
<b>GENERAL SITE FEATURES</b>	<ul style="list-style-type: none"> <li>B BOLLARD</li> <li>FP FLAGPOLE</li> <li>FL FLOOD LIGHT</li> <li>GW GUY WIRE</li> <li>MB MAILBOX</li> <li>SD SIGN- DOUBLE POST</li> <li>SS SIGN- SINGLE POST</li> <li>SO SOILBORE</li> <li>SL STREET LIGHT</li> <li>UP UTILITY POLE</li> <li>UW UTILITY POLE W/STREET LIGHT</li> <li>UM UNKNOWN MANHOLE</li> </ul>	<ul style="list-style-type: none"> <li>BI BEEHIVE INLET</li> <li>DI DOUBLE CURB INLET</li> <li>SI SINGLE CURB INLET</li> <li>AI AREA DRAINAGE INLET</li> <li>FE FLARED END SECTION</li> <li>SM STORM MANHOLE</li> <li>SP STAND PIPE</li> <li>SC STORM SEWER CLEANOUT</li> <li>SO SIDE OPENING AREA INLET</li> <li>CH COMPOSITE HANDHOLE</li> <li>FO FIBER OPTIC MARKER</li> <li>SD SATELLITE DISH</li> <li>TM TELEPHONE MANHOLE</li> <li>TP TELEPHONE PEDESTAL</li> <li>TC TV/CABLE BOX</li> <li>TM TV/CABLE MANHOLE</li> <li>PS PEDESTRIAL SIGNAL</li> <li>SC SIGNAL CONTROL CABINET</li> <li>TB TRAFFIC BOX</li> <li>TH TRAFFIC HANDHOLE</li> <li>TM TRAFFIC MANHOLE</li> <li>TS TRAFFIC SIGNAL</li> <li>TSW TRAFFIC SIGNAL W/STREET LIGHT</li> </ul>

### UTILITY QUALITY LEVELS:

UTILITY QUALITY LEVELS ARE BASED ON THE C/ASCE 38-02 STANDARD.

**UTILITY QUALITY LEVEL A:**  
PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES

**UTILITY QUALITY LEVEL B:**  
INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

**UTILITY QUALITY LEVEL C:**  
INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGEMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

**UTILITY QUALITY LEVEL D:**  
INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.

ADDITIONALLY IN THE CASE OF MULTIPLE OWNERS OF THE SAME UTILITY TYPE SAID UTILITIES WILL BE ABBREVIATED WITH AN OWNER NUMBER (1, 2, 3, ETC) AND REFERENCED IN THE IOWA ONE CALL UTILITY INFORMATION SECTION.

**EXAMPLES:**  
C1(B) UNDERGROUND COMMUNICATIONS- OWNER 1  
C2(B) UNDERGROUND COMMUNICATIONS- OWNER 2

### TYPICAL HATCHING

	SIDEWALK (MATERIAL NOTED)		PERMEABLE PAVER
	CONCRETE		WATER
	ASPHALT		BUILDING OUTLINE
	RIP RAP		SAND
	GRAVEL		MULCH LANDSCAPING
	GRASS		ROCK LANDSCAPING
	TEMPORARY CONSTRUCTION EASEMENT		

### ABBREVIATIONS

CP CONTROL POINT	CI CAST IRON PIPE
BM BENCHMARK	DI DUCTILE IRON PIPE
ROW RIGHT-OF-WAY	CMP CORRUGATED METAL PIPE
GU GUTTER	HDPE HIGH-DENSITY POLYETHYLENE PIPE
CL CENTERLINE	VCP VITRIFIED CLAY PIPE
ASP ASPHALT	PVC POLYVINYL CHLORIDE PIPE
PCC CONCRETE	RCP REINFORCED CONCRETE PIPE
FL FLOWLINE	UNK UNKNOWN
RIM ELEVATION AT RIM	DH DRILL HOLE
W/ WITH	RBC REBAR W/ PLASTIC CAP
TYP TYPICAL	IPC IRON PIPE W/ PLASTIC CAP
FND FOUND	MON MONUMENT
FF FINISHED FLOOR	PK PK NAIL
	TCE TEMPORARY CONSTRUCTION ESMT

**ONE CALL UTILITY INFORMATION:**  
DESIGN INFORMATION REQUEST TICKET #:  
232371747, 232371748, 232371782, 232371802, 232371803, 232414896, 232414897

CALL OR CLICK 3 DAYS BEFORE YOU DIG!

1-800-DIG-RITE OR 811

MISSOURI ONE CALL SYSTEM [www.mo1call.com](http://www.mo1call.com)

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UTILITY CONTACTS	
<b>ELECTRIC</b> CITY OF COLUMBIA, WATER & LIGHT 701 E. BROADWAY COLUMBIA, MISSOURI 65201 573-874-2489	<b>NATURAL GAS</b> AMEREN MISSOURI 2001 MAGUIRE BLVD. COLUMBIA, MISSOURI 65201 573-876-3028
<b>ELECTRIC</b> BOONE ELECTRIC COOPERATIVE 1413 RANGLINE STREET COLUMBIA, MO 65201 573-449-4181	<b>SEWER</b> CITY OF COLUMBIA, SEWER UTILITY 701 E. BROADWAY COLUMBIA, MISSOURI 65201 573-874-2489
<b>WATER</b> CITY OF COLUMBIA, WATER & LIGHT 701 E. BROADWAY COLUMBIA, MISSOURI 65201 573-874-2489	<b>SEWER</b> BOONE COUNTY REGIONAL SEWER DISTRICT 1314 N. 7TH STREET COLUMBIA, MO 65201 573-443-2774
<b>WATER</b> PUBLIC WATER SUPPLY DISTRICT #9 391 E. BROADWAY COLUMBIA, MISSOURI 65201 573-474-9521	<b>TELECOMMUNICATION</b> SOCKET TELECOM 2703 CLARK LANE COLUMBIA, MISSOURI 65202 573-817-0000
<b>TELECOMMUNICATION</b> AT&T TRANSMISSION 800-252-1113	<b>TELECOMMUNICATION</b> BRIGHTSPEED 833-363-2360

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH "CITY OF COLUMBIA STREET, STORM DRAIN AND SANITARY SEWER SPECIFICATIONS AND STANDARDS" (CURRENT EDITION).
2. KNOWN UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. OTHER UTILITIES MAY EXIST.
3. ALL EXCAVATION TO BE IN ACCORDANCE WITH SECTIONS 319.010-319.050, REVISED STATUTES OF THE STATE OF MISSOURI. SUCH COMPLIANCE SHALL NOT, HOWEVER, EXCUSE ANY PERSON MAKING ANY EXCAVATION FROM DOING SO IN A CAREFUL AND PRUDENT MANNER, NOR SHALL IT EXCUSE SUCH PERSON FROM LIABILITY FOR ANY DAMAGE OR INJURY TO UNDERGROUND UTILITIES RESULTING FROM THE EXCAVATION.
4. ALL DISTURBED EARTH AREAS SHALL BE RESTORED AS PER TS-\_\_\_ SEEDING AND TS-\_\_\_ EROSION CONTROL.
5. REMOVE ALL PAVEMENT SURFACES, INLETS, PIPES AND SIDEWALKS WITHIN THE CONSTRUCTION LIMITS AS PER TS-\_\_\_ EXCEPT THOSE NOTED TO REMAIN. THE FIELD INSPECTOR SHALL VERIFY REMOVAL OF ALL DRIVEWAY PAVEMENT.
6. REMOVAL OF TREES AND BUSHES SHALL BE VERIFIED BY FIELD INSPECTORS. EXERCISE CAUTION WHEN WORKING NEAR THE CONSTRUCTION LIMITS TO MINIMIZE DISTURBANCE TO ADJACENT TREES AND SHRUBS THAT ARE NOT BEING REMOVED BY CONSTRUCTION ACTIVITIES.
7. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT. ASPHALTIC "COLD MIX" SHALL BE USED AS A TEMPORARY PATCH OVERNIGHT. TEMPORARY PATCHING SHALL BE CONSIDERED INCIDENTAL TO THE WORK.

	<b>Mission</b> Provide safe, sustainable Infrastructure that promotes positive communities.	701 East Broadway P.O. Box 6015 Columbia, MO 65205 (573) 875-2489
Shane Steven Crech Registered Professional Engineer PE-2007011061	Approved By _____ Director of Public Works	Date _____

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MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253  
 EXPIRES: DECEMBER 31, 2024

\*\* PRELIMINARY \*\*  
NOT FOR CONSTRUCTION

Ryan Fuller  
 MO PE-2016001250  
 October 23, 2024

REVISIONS

PROJECT INFO  
 2023000517

ENGINEER: RAF    DRAWN BY: SMH    CHECKED BY: JT

ST CHARLES ROAD SIDEWALK  
COLUMBIA, MISSOURI  
TAP 2101511

COVER

DRAWING NO. 1

P:2023000517/04-DRAWINGS/05-PLANS/2023000517\_COVER.DWG





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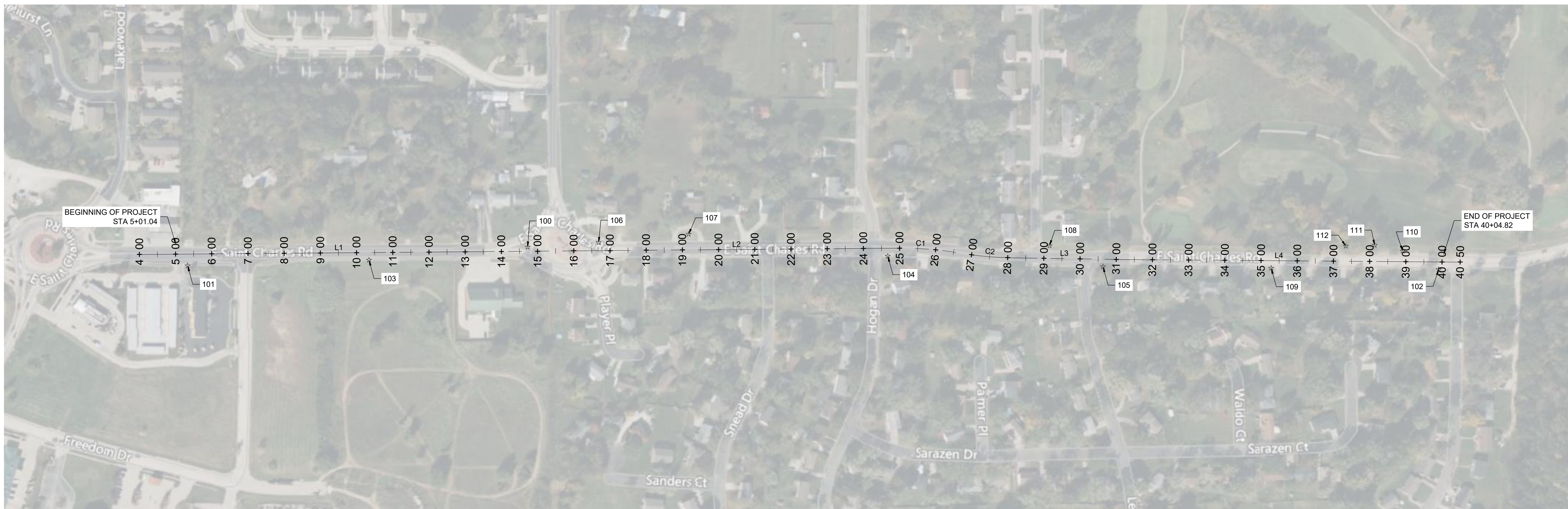
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RAF            SMH            JT

**ST CHARLES ROAD SIDEWALK  
COLUMBIA, MISSOURI  
TAP 2101511**

**SUMMARY OF QUANTITIES**

DRAWING NO.  
**2**





ALIGNMENT TABLE						
NUMBER	STATION (START/END)	LENGTH	RADIUS	LINE/CHORD	START NORTHING/EASTING	END NORTHING/EASTING
L1	START:4+00.00 END:15+44.01	1144.01		N89°31'24"E	N:1139674.06 E:1711449.94	N:1139683.58 E:1712593.91
L2	START:15+44.01 END:24+99.63	955.61		N89°31'46"E	N:1139683.58 E:1712593.91	N:1139691.43 E:1713549.49
C1	START:24+99.63 END:26+65.19	165.57	950.00	S85°28'40"E	N:1139691.43 E:1713549.49	N:1139678.39 E:1713714.33
C2	START:26+65.19 END:28+16.22	151.03	1000.00	S84°48'42"E	N:1139678.39 E:1713714.33	N:1139664.75 E:1713864.60
L3	START:28+16.22 END:31+38.35	322.13		S89°08'17"E	N:1139664.75 E:1713864.60	N:1139659.90 E:1714186.69
L4	START:31+38.35 END:40+50.00	911.65		S89°33'45"E	N:1139659.90 E:1714186.69	N:1139652.94 E:1715098.32

PROJECT CONTROL POINTS TABLE				
CP#	NORTHING	EASTING	ELEV.	DESCRIPTION
100	1139694.65	1712522.56	833.43	12 RBC
101	1139642.97	1711583.33	840.27	12 RBC
102	1139632.59	1715039.14	806.04	12 RBC
103	1139658.69	1712084.24	836.28	12 RBC
104	1139669.32	1713517.47	838.49	12 RBC
105	1139640.31	1714111.90	844.13	12 RBC
106	1139707.13	1712718.76	830.98	12 RBC
107	1139730.11	1712967.17	830.82	12 RBC
108	1139698.45	1713964.26	851.33	12 RBC
109	1139636.12	1714576.52	826.10	12 RBC
110	1139683.86	1714939.54	809.00	60D
111	1139699.80	1714862.28	807.88	60D
112	1139697.36	1714782.56	815.28	60D NAIL



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**ST CHARLES ROAD SIDEWALK  
 COLUMBIA, MISSOURI  
 TAP 2101511**

**PROJECT CONTROL & ALIGNMENT**

DRAWING NO.  
**3**



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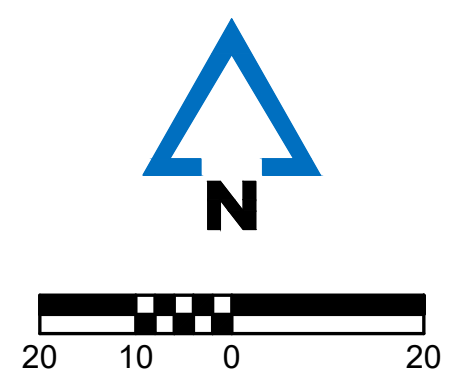
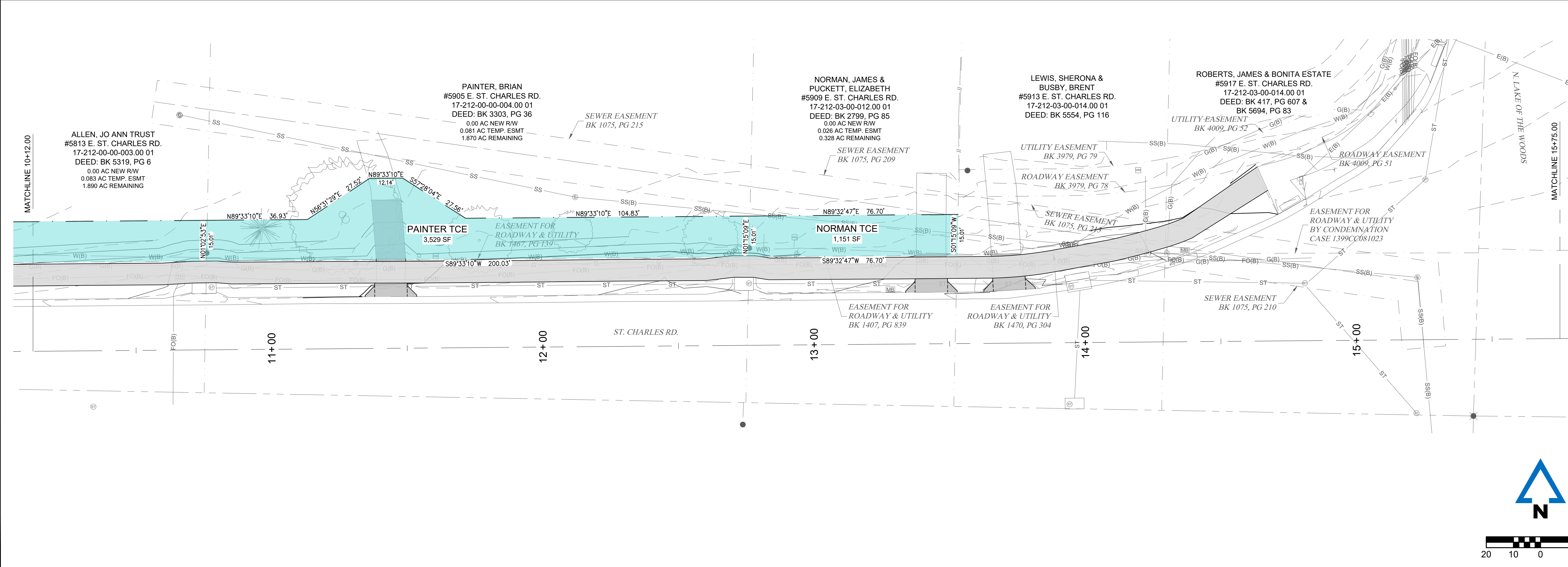
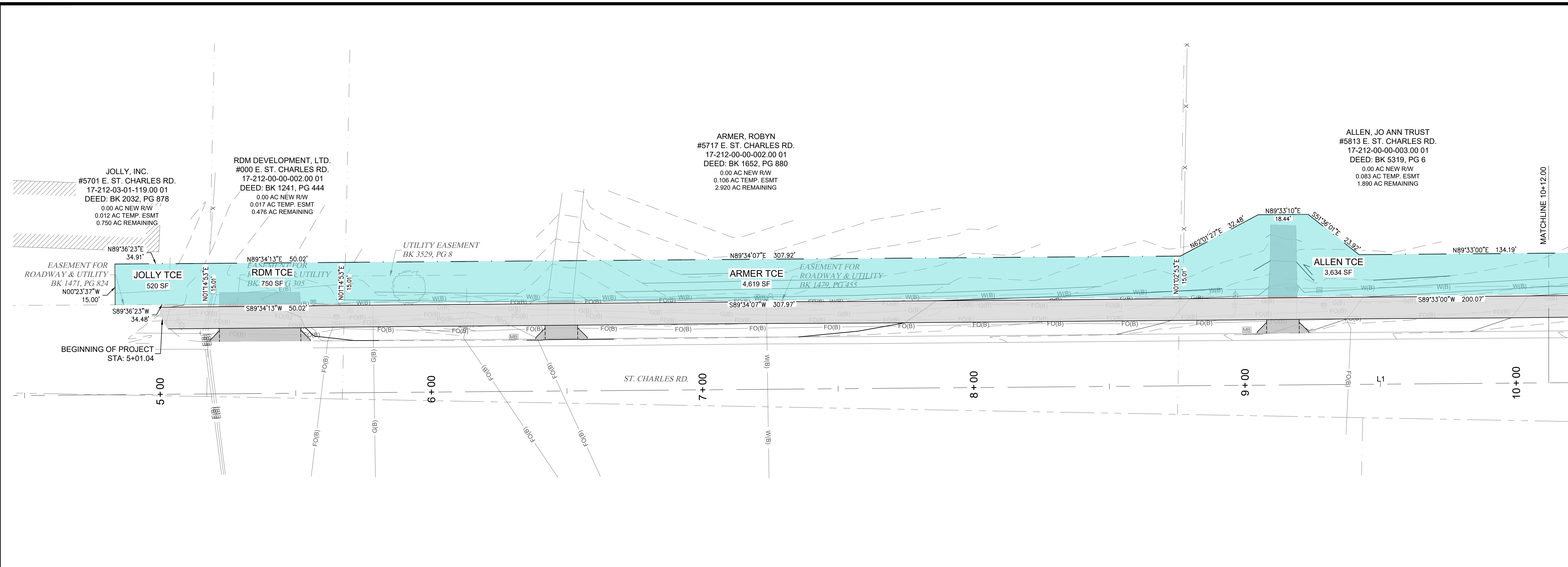
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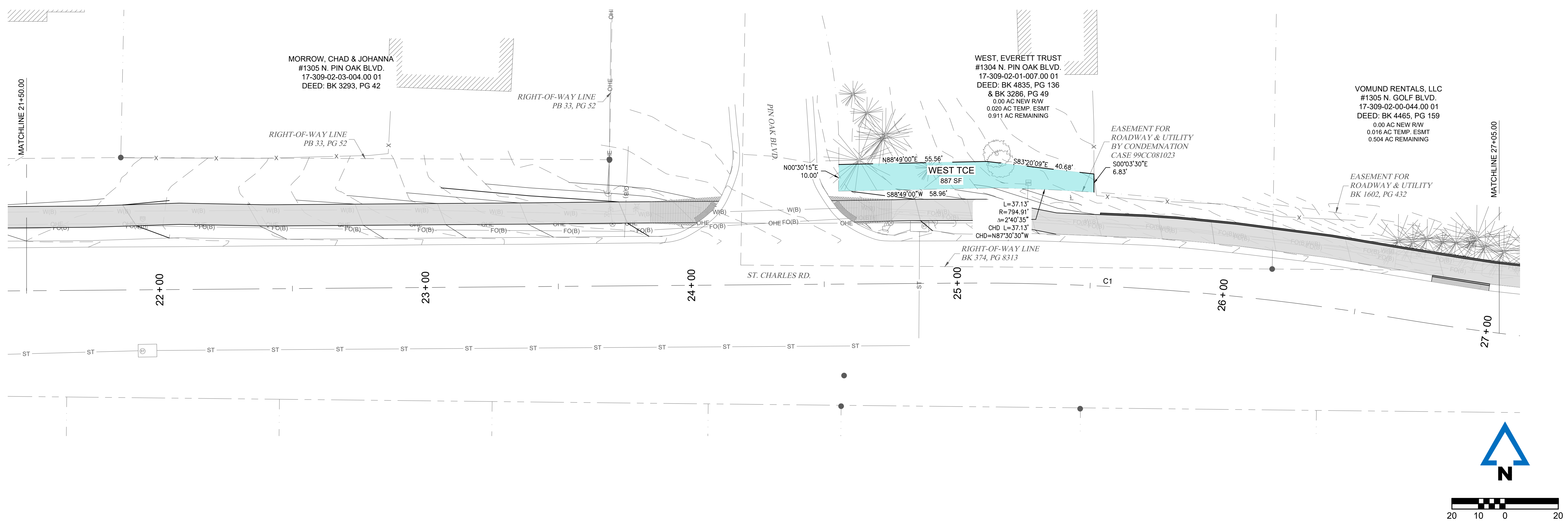
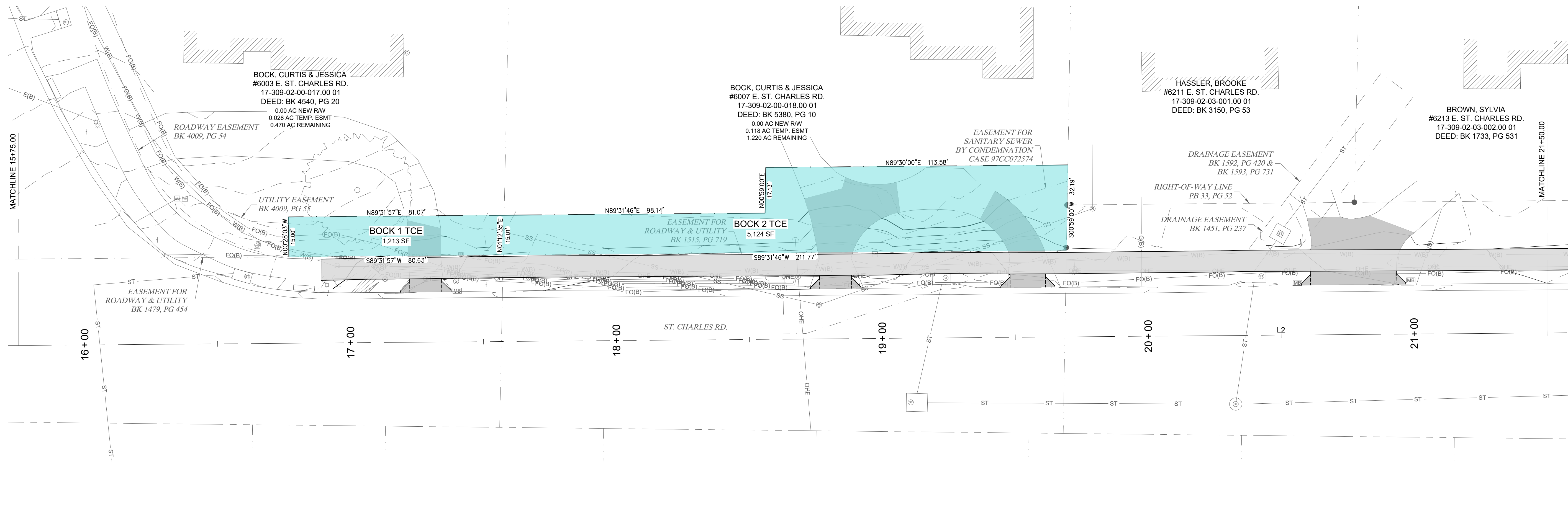
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COLUMBIA, MISSOURI  
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RIGHT OF WAY PLAN 1**

DRAWING NO.

4







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**ST CHARLES ROAD SIDEWALK  
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 RIGHT OF WAY PLAN 2**

DRAWING NO.  
**5**

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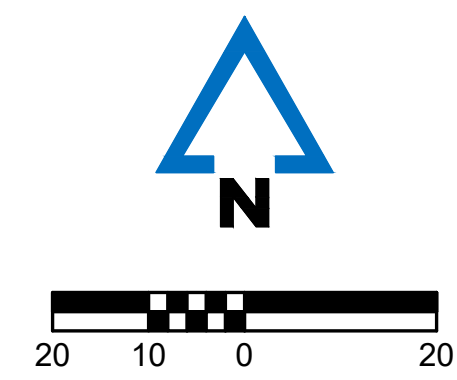
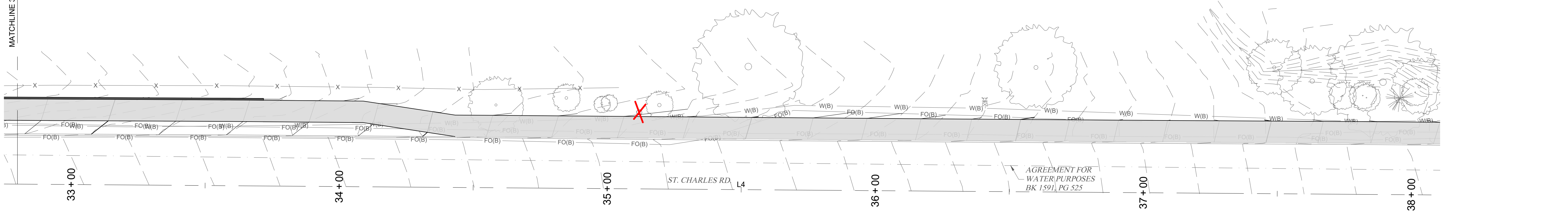
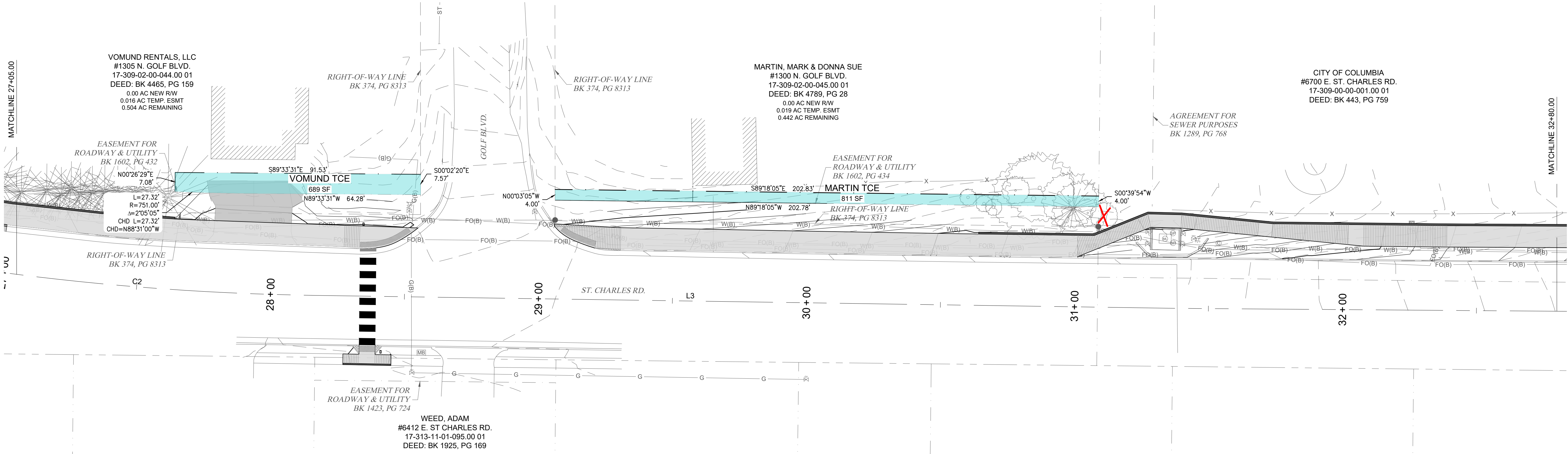
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**ST CHARLES ROAD SIDEWALK  
COLUMBIA, MISSOURI  
TAP 2101511  
RIGHT OF WAY PLAN 3**

DRAWING NO.

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**ST CHARLES ROAD SIDEWALK  
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RIGHT OF WAY PLAN 4**

DRAWING NO.

**7**

