

CONSTRUCTION PLANS OAKLAND GRAVEL SIDEWALK

TAP 2101513

EXISTING SURVEY LEGEND

LINWORK

SS	SANITARY SEWER	949	INTERMEDIATE CONTOUR
FM	SANITARY SEWER FORCE MAIN	950	INDEX CONTOUR
ST	STORM SEWER	---	PROPERTY LINE
W	WATER	---	RIGHT OF WAY
E	UNDERGROUND ELECTRIC	---	SECTION LINE
OE	OVERHEAD ELECTRIC	---	EASEMENT
C	UNDERGROUND COMMUNICATIONS	---	GUARD RAIL
OC	OVERHEAD COMMUNICATIONS	---	FIELD FENCE
T	UNDERGROUND TELEPHONE	---	CHAIN LINK FENCE
OT	OVERHEAD TELEPHONE	---	WOODEN FENCE
FO	UNDERGROUND FIBER OPTIC	+++++	SILT FENCE
OFO	OVERHEAD FIBER OPTIC	---	AGRICULTURE LINE
TV	UNDERGROUND TV/CABLE	---	EDGE OF TREES
OTV	OVERHEAD TV/CABLE	---	TOP/BOTTOM OF SLOPE
G	GAS	---	ROAD CENTERLINE
TR	TRAFFIC	---	WATERWAY FLOWLINE

UTILITY QUALITY LEVELS:

UTILITY QUALITY LEVELS ARE BASED ON THE CI/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

SIDWALK (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
ASPH	ASPHALT	PVC	POLYVINYL CHLORIDE PIPE
PCC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
FL	FLOWLINE	UNK	UNKNOWN
RM	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
		PSE	PERMANENT EASEMENT

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**

www.mo1call.com

ELECTRIC

AC	AIR CONDITIONING UNIT
BB	BREAKER BOX
E	ELECTRIC MANHOLE
EM	ELECTRIC METER
EP	ELECTRIC PEDESTAL
HP	HEAT PUMP

GAS

GM	GAS MARKER
GM	GAS METER
GV	GAS VALVE

GENERAL SITE FEATURES

B	BOLLARD
FP	FLAGPOLE
FL	FLOOD LIGHT
GW	GUY WIRE
MB	MAILBOX
SDP	SIGN- DOUBLE POST
SP	SIGN- SINGLE POST
SB	SOILBORE
SL	STREET LIGHT
UP	UTILITY POLE
UPS	UTILITY POLE W/STREET LIGHT
UM	UNKNOWN MANHOLE

MONUMENTS

BM	BENCHMARK
BT	BENCHMARK (TEMPORARY)
CP	CONTROL POINT
CX	CUT X FOUND
CS	CUT X SET
MF	MONUMENT FOUND (FIRST TYPE)
MS	MONUMENT FOUND (SECOND TYPE)
MS	MONUMENT SET (FIRST TYPE)
MS	MONUMENT SET (SECOND TYPE)
SCF	SECTION CORNER FOUND
SCS	SECTION CORNER SET
TP	T POST
WP	WOODEN POST

RAILROAD

MLM	MAINLINE MILE MARKER
POS	POINT OF SWITCH
RS	RAILROAD SIGNAL

SANITARY SEWER

SSC	SANITARY SEWER CLEANOUT
SSM	SANITARY SEWER MANHOLE
STL	SEPTIC TANK LID

UTILITY WARNING

THE UTILITIES DEPICTED ON THIS DOCUMENT HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED EXCEPT WHERE NOTED AS QUALITY LEVEL A.

STORM SEWER

BI	BEEHIVE INLET
DCI	DOUBLE CURB INLET
SCI	SINGLE CURB INLET
ADI	AREA DRAINAGE INLET
FES	FLARED END SECTION
SM	STORM MANHOLE
SP	STAND PIPE
SSC	STORM SEWER CLEANOUT
SOA	SIDE OPENING AREA INLET

TELECOMMUNICATIONS

CH	COMPOSITE HANDHOLE
FOM	FIBER OPTIC MARKER
SD	SATELLITE DISH
TM	TELEPHONE MANHOLE
TP	TELEPHONE PEDESTAL
TVCB	TV/CABLE BOX
TVM	TV/CABLE MANHOLE

TRAFFIC

PS	PEDESTRIAL SIGNAL
SCC	SIGNAL CONTROL CABINET
TB	TRAFFIC BOX
TH	TRAFFIC HANDHOLE
TM	TRAFFIC MANHOLE
TS	TRAFFIC SIGNAL
TSW	TRAFFIC SIGNAL W/STREET LIGHT

VEGETATION

CT	CONIFEROUS TREE
DT	DECIDUOUS TREE
SH	SHRUB
TS	TREE STUMP

WATER

CS	CURB STOP
FH	FIRE HYDRANT
IV	IRRIGATION VALVE
MO	MONITORING WELL
PIV	POST INDICATOR VALVE
SB	SPRINKLER BOX

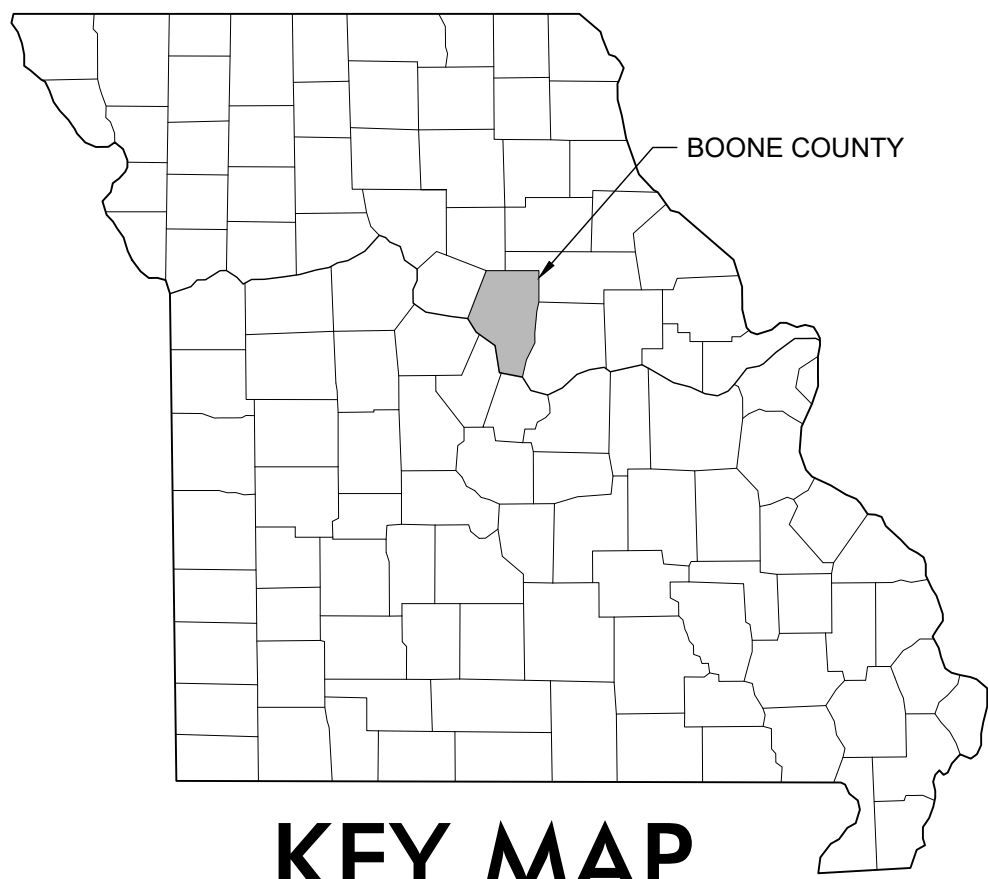
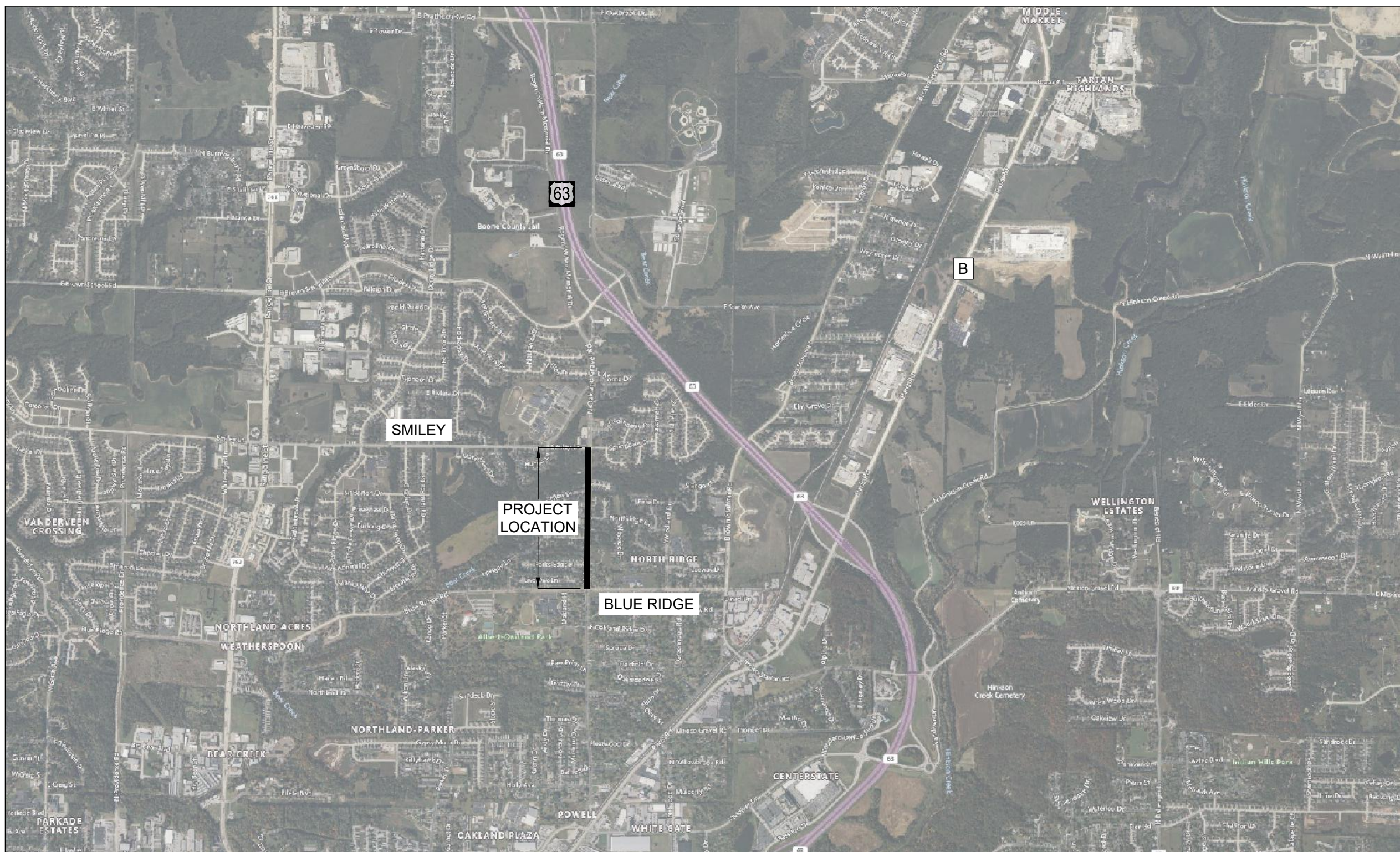
WM	WATER MANHOLE
WM	WATER MARKER
WM	WATER METER
WS	WATER SPIGOT
WV	WATER VALVE
WVM	WATER VALVE MANHOLE
YD	YARD HYDRANT

DEMOLITION

X	REMOVE TREE
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SHEET INDEX

#	TITLE
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2	SUMMARY OF QUANTITIES
3	PROJECT CONTROL & ALIGNMENT
4	RIGHT OF WAY PLAN 1
5	RIGHT OF WAY PLAN 2
6	RIGHT OF WAY PLAN 3



KEY MAP

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH "CITY OF COLUMBIA STREET, STORM DRAIN AND SANITARY SEWER SPECIFICATIONS AND STANDARDS" (CURRENT EDITION).
- KNOWN UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. OTHER UTILITIES MAY EXIST.
- 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.
- ALL DISTURBED EARTH AREAS SHALL BE RESTORED AS PER TS-___ SEEDING AND TS-___ EROSION CONTROL.
- 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.
- 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.
- 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.

UTILITY CONTACTS

ELECTRIC	NATURAL GAS
CITY OF COLUMBIA, WATER & LIGHT 701 E. BROADWAY COLUMBIA, MISSOURI 65201 573-874-2489	AMEREN MISSOURI 2001 MAGUIRE BLVD. COLUMBIA, MISSOURI 65201 573-876-3028
ELECTRIC	SEWER
BOONE ELECTRIC COOPERATIVE 1413 RANGELINE STREET COLUMBIA, MO 65201 573-449-4181	CITY OF COLUMBIA, SEWER UTILITY 701 E. BROADWAY COLUMBIA, MISSOURI 65201 573-874-2489
WATER	SEWER
CITY OF COLUMBIA, WATER & LIGHT 701 E. BROADWAY COLUMBIA, MISSOURI 65201 573-874-2489	BOONE COUNTY REGIONAL SEWER DISTRICT 1314 N. 7TH STREET COLUMBIA, MO 65201 573-443-2774
TELECOMMUNICATION	TELECOMMUNICATION
MEDIACOM 1211 WILKES BLVD. COLUMBIA, MISSOURI 65201 855-633-4226	SOCKET TELECOM 2703 CLARK LANE COLUMBIA, MISSOURI 65202 573-817-0000
TELECOMMUNICATION	TELECOMMUNICATION
MNA BLUEBIRD 573-777-4200	BRIGHTSPEED 833-363-2360



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MISSOURI CERTIFICATE OF
AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2026

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

Joseph Tuey
MO PE-2023031972
March 6, 2025

REVISIONS

PROJECT INFO
2023002047

ENGINEER	DRAWN BY	CHECKED BY
RAF	SMH	JT

OAKLAND GRAVEL SIDEWALK
COLUMBIA, MISSOURI
TAP 2101513

COVER

DRAWING NO.

1

 city of Columbia Public Works	Mission 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	

REMOVALS								
SHEET	STATION	LOCATION	SAWCUT & REMOVAL OF EX. SIDEWALK (S.Y.)	SAWCUT & REMOVAL OF EX. CURB & GUTTER (S.Y.)				

LINEAR GRADING, CURB & GUTTER AND CONCRETE SIDEWALK								
SHEET	STATION	LOCATION	LINEAR GRADING (L.F.)	2'-6" CONCRETE CURB & GUTTER (L.F.)	4" PCC SIDEWALK (S.F.)	7" PCC PAVEMENT WITH C&G (S.Y.)	6" PCC SIDEWALK RAMP/LANDING (S.F.)	ADA DETECTABLE WARNING PANEL (S.F.)

STORM DRAINAGE						
SHEET	STATION	LOCATION	36" RCP PIPE (L.F.)	36" FLARED END SECTION (E.A.)	TYPE 2 MODOT RIPRAP W/ FILTER FABRIC (S.Y.)	EX. STORM BOX LID ADJUSTMENT (E.A.)

EROSION CONTROL					
SHEET	STATION	LOCATION	SILT FENCE (L.F.)	INLET PROTECTION (E.A.)	STRAW BALE DITCH CHECK (E.A.)

RETAINING WALL			
SHEET	STATION	LOCATION	REINFORCED CONCRETE WALL (C.Y.)

PAVEMENT MARKINGS & SIGNS				
SHEET	STATION	LOCATION	30" WHITE CROSSWALK MARKINGS (L.F.)	SOLAR RFFB WITH SIGNS (E.A.)

UTILITY	
ITEMS	QUANTITY

MOBILIZATION	BORROW EXCAVATION
1 LUMP SUM	XX (C.Y.)
UNSUITABLE MATERIAL	SEEDING & MULCHING
XX (C.Y.)	1 LUMP SUM
CLEARING & GRUBBING	EXISTING ROADWAY SIGNAGE RELOCATION
1 LUMP SUM	1 LUMP SUM

NOTE:
CAD FILE OF THE IMPROVEMENTS WILL BE
PROVIDED TO THE SUCCESSFUL BIDDER.



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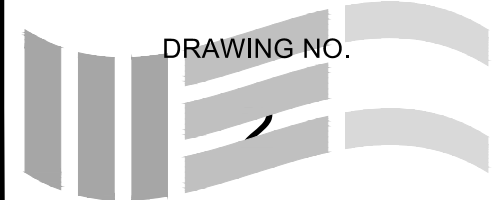
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ENGINEER DRAWN BY CHECKED BY
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OAKLAND GRAVEL SIDEWALK
COLUMBIA, MISSOURI
TAP 2101513

SUMMARY OF QUANTITIES

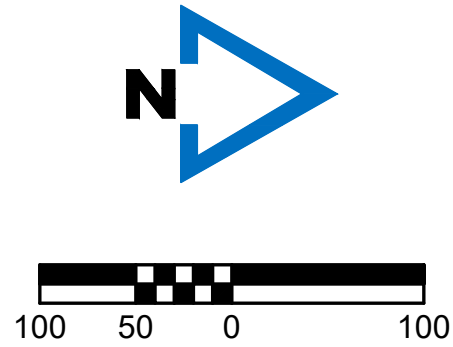


DRAWING NO.



ALIGNMENT TABLE						
NUMBER	STATION (START/END)	LENGTH	RADIUS	LINE/CHORD	START NORTHING/EASTING	END NORTHING/EASTING
L1	START:0+00.00 END:0+54.35	54.35		N00°13'42"E	N:1147708.66 E:1696561.63	N:1147763.01 E:1696561.85
L2	START:0+54.35 END:27+19.20	2664.85		N00°58'52"E	N:1147763.01 E:1696561.85	N:1150427.47 E:1696607.48

PROJECT CONTROL POINTS TABLE				
CP#	NORTHING	EASTING	ELEV.	DESCRIPTION
99	1149035.03'	1696561.82'	769.55'	BM / SQUARE CUT
200	1148457.72'	1696602.75'	760.50'	CP / 12 RBC
201	1150364.20'	1696582.59'	705.61'	CP / PK
202	1149363.62'	1696556.87'	757.40'	CP / 12 RBC
203	1147828.41'	1696532.98'	768.82'	CP / 12 RBC
204	1148965.29'	1696555.39'	769.80'	CP / PKNAIL
205	1149838.53'	1696619.20'	718.12'	CP / 12 RBC





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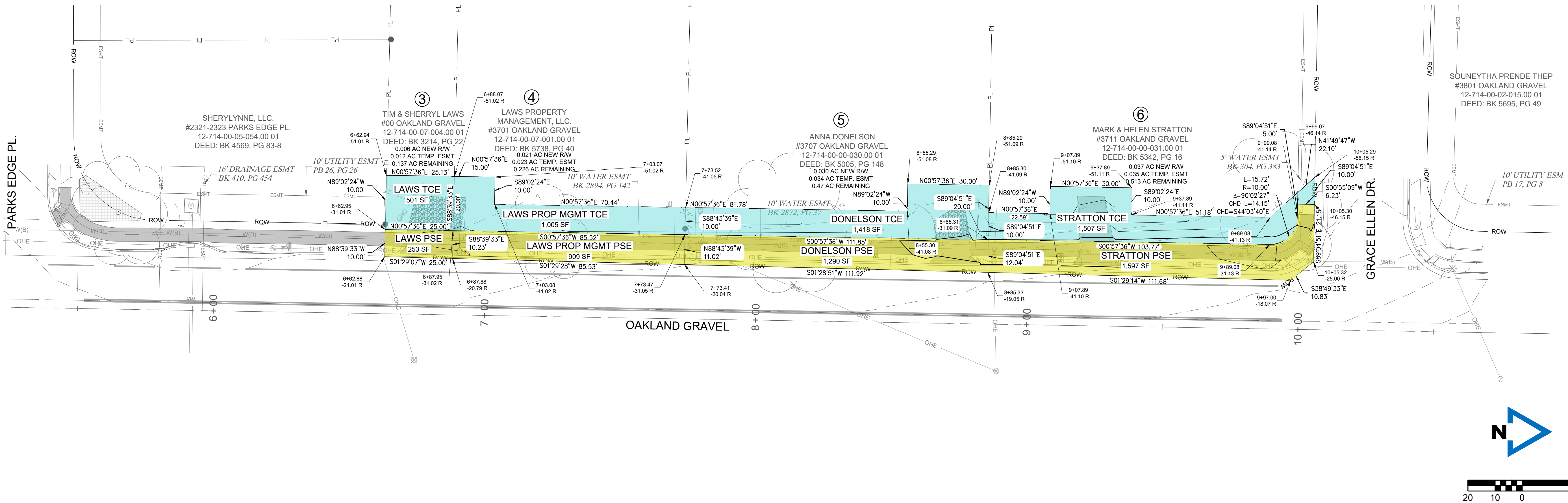
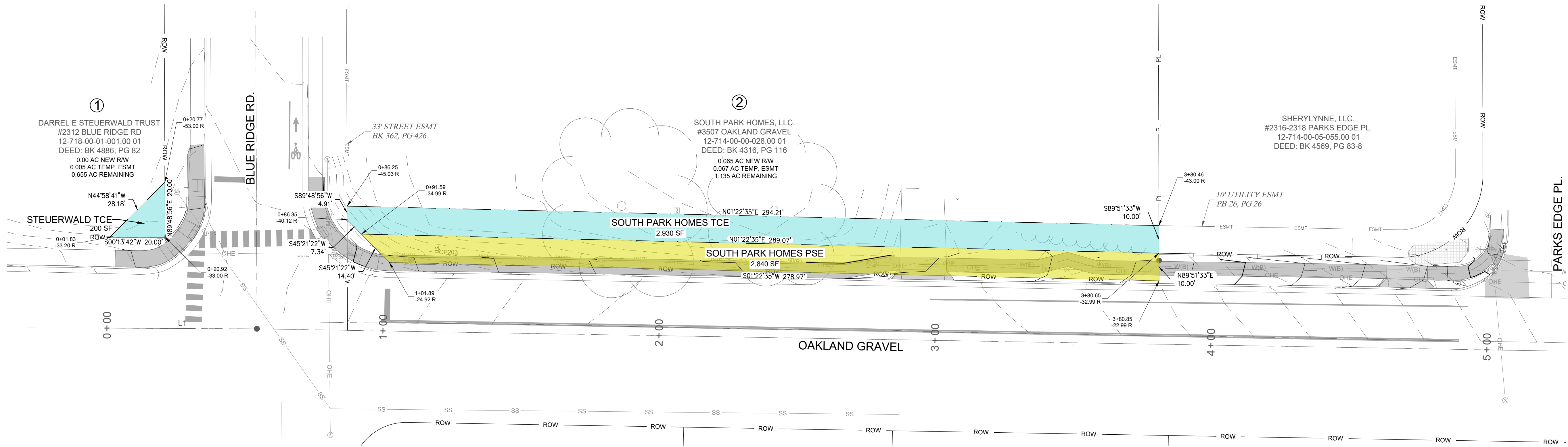
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ENGINEER	DRAWN BY	CHECKED BY
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COLUMBIA, MISSOURI
TAP 2101513

PROJECT CONTROL & ALIGNMENT

DRAWING NO.

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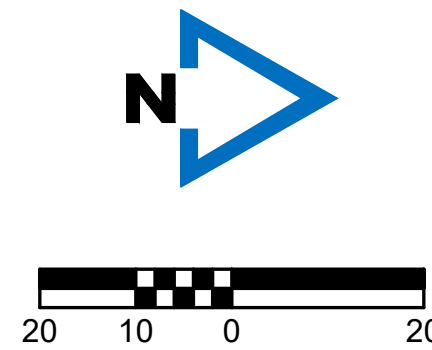
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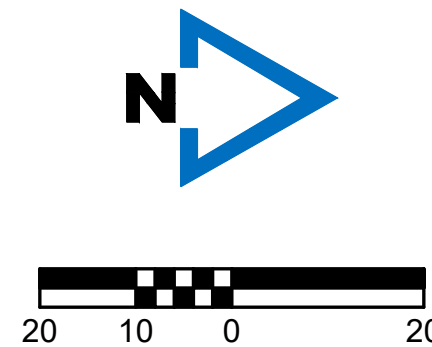
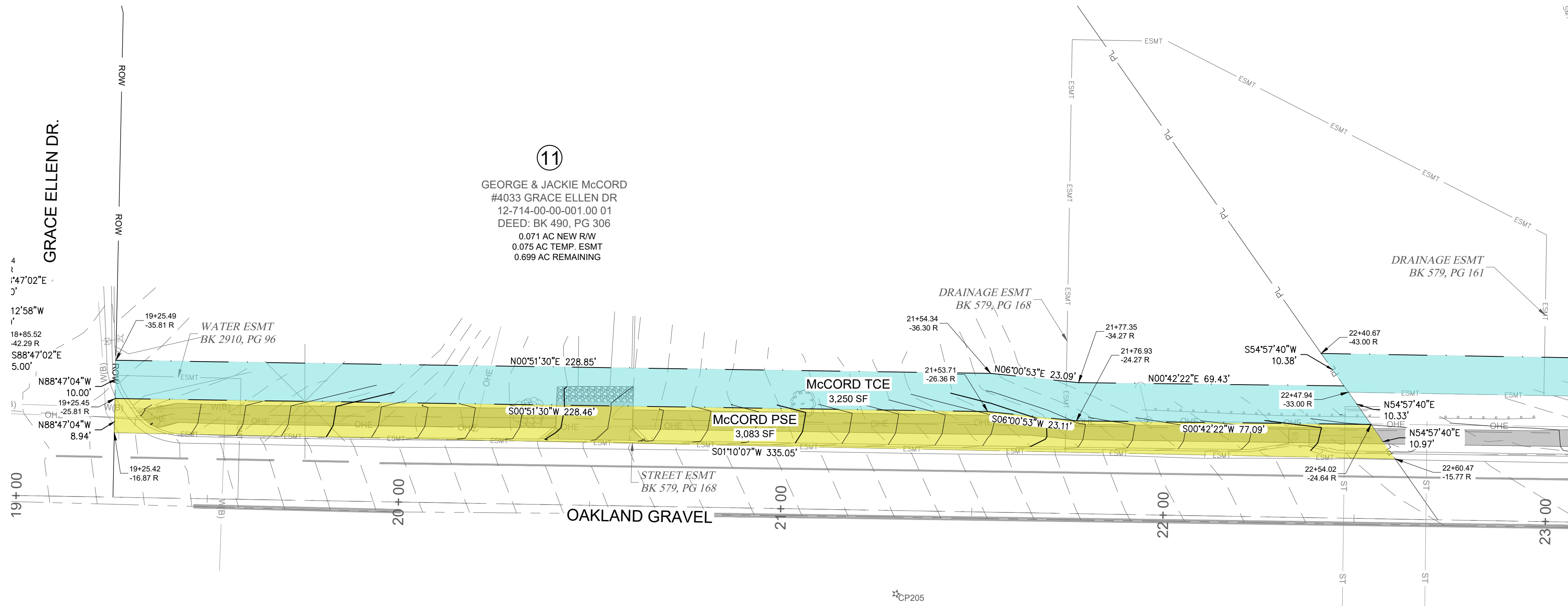
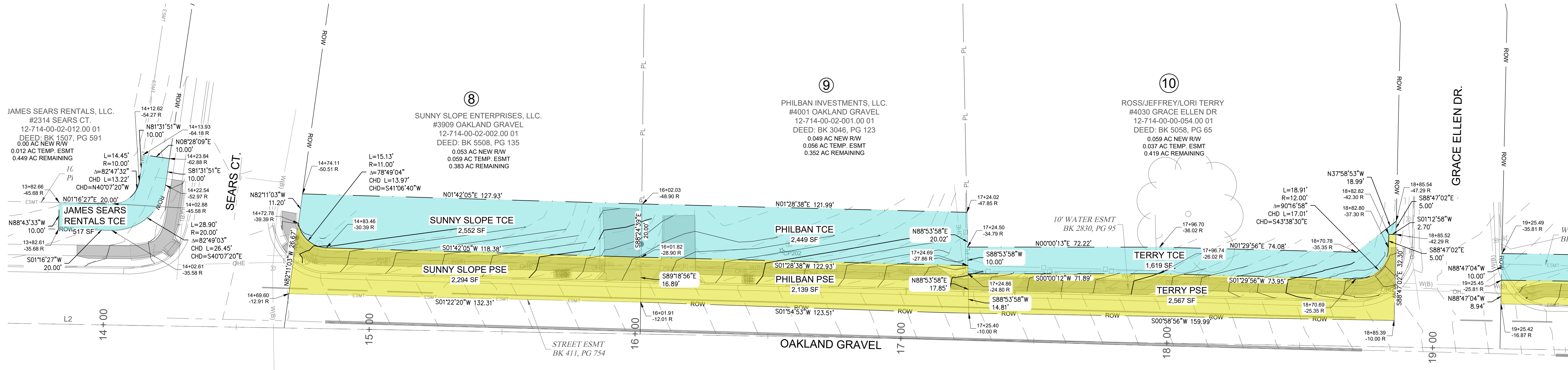
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OAKLAND GRAVEL SIDEWALK
COLUMBIA, MISSOURI
TAP 2101513
RIGHT OF WAY PLAN 1

DRAWING NO.
4





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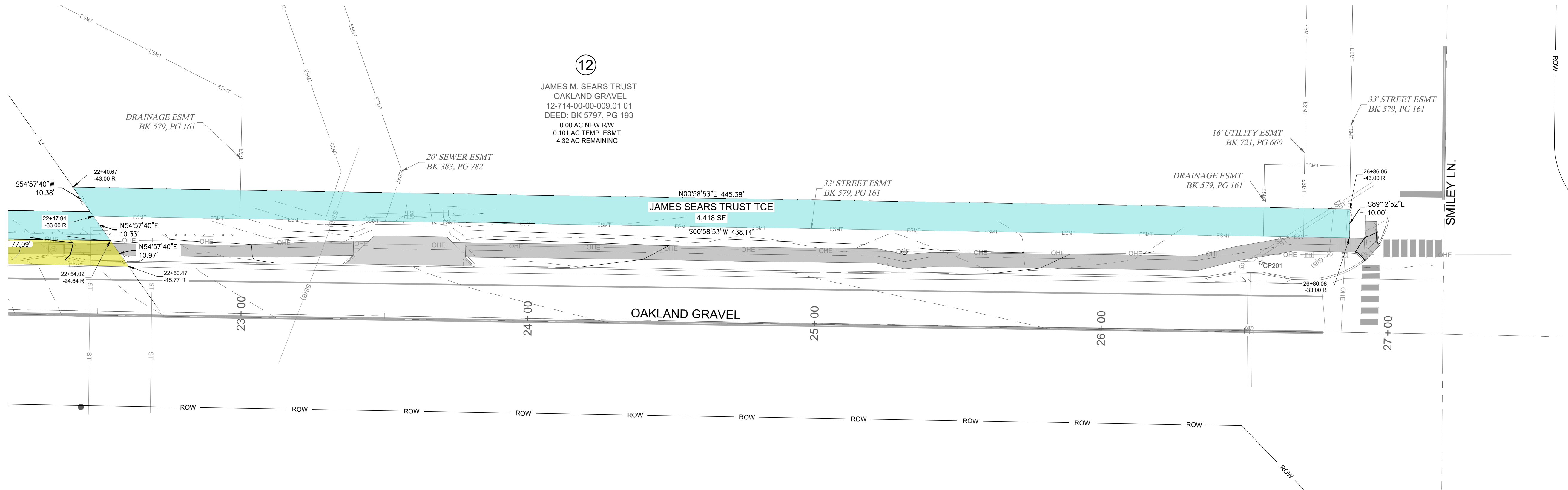
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OAKLAND GRAVEL SIDEWALK
COLUMBIA, MISSOURI
TAP 2101513
RIGHT OF WAY PLAN 2

DRAWING NO.
5



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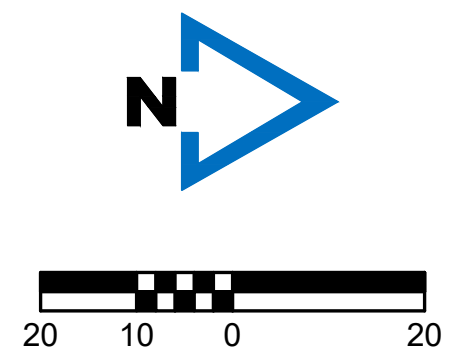
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OAKLAND GRAVEL SIDEWALK
COLUMBIA, MISSOURI
TAP 2101513

RIGHT OF WAY PLAN 3

DRAWING NO.

6



P:2023002047\04-DRAWINGS\06-PLANS\2023002047 ROW PLANS.DWG