

RANT C. LUCKENBILL-ENGIN MO# PE-2012018100

DATE PREPARED 8/5/2025

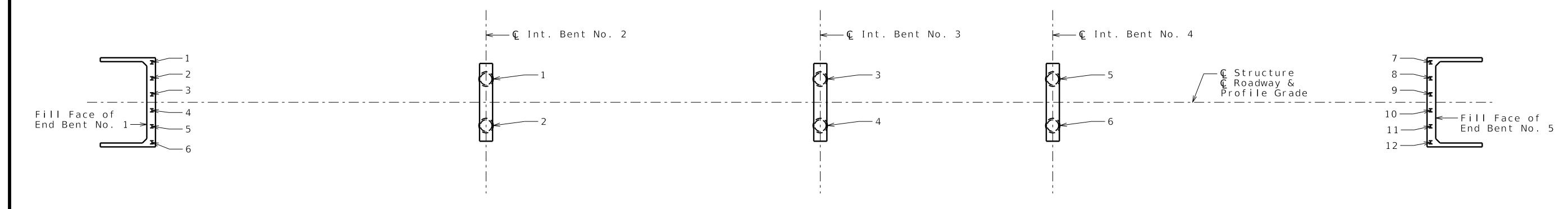
COUNTY

BARRY JOB NO. JSR0119

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9432



PART PLAN SHOWING PILE & DRILLED SHAFT NUMBERING FOR RECORDING AS-BUILT PILE DATA & AS-BUILT DRILLED SHAFT DATA

			As-Built Pile Data
Pile No.	Length in Place (ft)	Computed Nominal Axial Compresseive Resistance (kips)	R ema r k s
			End Bent No. 1
1			
2			
3			
4			
5			
6			
			End Bent No. 5
7			
8			
9			
10			
11			
12			

				As-Built Drilled Shaft Data
Shaft No.	Top of Sound Rock (Elev.)	Tip of Casing (Elev.)	Bottom of Rock Socket (Elev.)	R ema r k s
				Int. Bent No. 2
1				
2				
				Int. Bent No. 3
3				
4				
				Int. Bent No. 4
5				
6				

Note:

Indicate in remarks column:

- A. Pile type and gradeB. BatterC. Driven to practical refusal

This sheet to be completed by owner.

AS-BUILT PILE AND DRILLED SHAFT DATA



Job N	No.: SR	R0119	County: Ba			and Ma		Route: 248				
Desig	gn : _A94	132	Skew: Squ	ıare				Location: Over Flat Creek Operator: Bradley Wadlow Date of Work: 02/07/24-02/07/24				
Bent:	: <u>1</u>		Logged By:	Collin	Wals	sh						
Statio	on:		Northing: _	220359.	5							
Offse	et:		Easting: <u>3029988.7</u>					Depth to Water:				
Eleva	tion: <u>1</u>	075.3	Requested Northing: 220356.3					Depth Hole Open:				
Requ	ested St	tation:	Requested Easting: 3029991.9					Time Change:				
		ffset:		Acker	Ren	egade ,Sp	olit-Spoon Sar	mpler, NQ				
_		levation:										
Drill I	No .: <u>G</u> -	9667	Hammer Eff	ficiency:	93	%		Drilling Method:	Hollow Stem Aug	er		
Depth (ft)	Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
0		0.0-13.1' Brown, SILT trace gra	avel, trace lean	1075								
-	_			+ -								
-				<u> </u>								
5	_			1070			5-5-2			MC = 16.2%		
-				-	X	67	(11)		PP = 2.00 tsf	y _{sat} = 135 pcf ⁽¹⁾ LL = 23		
-	-			+ -	_					PL = 20		
-				+ -	_							
10				1065						MC = 15.0%		
-	_			_	X	20	5-5-2 (11)			$\gamma_{\text{sat}} = 137 \text{ pcf}^{(1)}$		
-				+ -								
-		13.1-14.4' Dolomite, light gray,	thin bedded,	+ -								
15	7/7	highly weathered, fine grained 14.4-19.4' Dolomite, light gray,	medium	1060		0 /	10/0.0', 10/0'					
-	7/	bedded, very strong rock, sligh						Qu Test Results UCS = 2580 ksf				
-		fine grained		_		100 (98)		MC = 0%				
-				+ -				y _{moist} = 153.4 pcf				
20		19.4-24.4' Cherty Dolomite, ligh	nt aray	4055	-							
	7/	medium bedded, very strong ro		1055				Qu Test Results				
-	///	weathered, fine grained		† -		100 (44)		UCS = 1310 ksf MC = 0%				
-	///					(77)		γ _{moist} = 153.3 pcf				
-			445					-				
		Bottom of borehole at 2	4.4 feet.									
	<u> </u>		000/ 07=									
		m N ₆₀ - Corrected N value for standard										
		ystem: Modified U.S. State Plandatum: NAD 83 (CONUS)			_	U.S. Su		Coordinate Pro	oj. Factor : <u>1.000</u>	JU300		

Job No	o.: SR0	119					aterials	Route: 248			
		2						Location: Over			
Bent:	1		Logged By	: Collin	Wals	sh		Operator: _Justin Reynolds			
			Northing:	220341.	4						
Offset	:		Easting: _3	3030005.	1			Depth to Water:			
		75.4	Requested	Northing	g:				n:		
		tion:									
		set:	Requested Easting: Equipment: _Mobile B-31 ,								
		vation:									
		401							Continuous Flight Aug	er	
	<u>UG-g-</u>	+01	Hallille Li	lifeleticy.	·			Diffilling Metriod.	Continuous Filgrit Aug	<u>CI</u>	
Depth (ft)	Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests	
0		0.0-0.7' ASPHALT		1075							
_		0.7-1.7' CRUSHED AGGREG	ATE BASE								
-		1.7-13.3' Brown, SILT trace gr		7 -	-						
		clay, stiff, moist		+ -	-						
5				4070	-						
				1070							
.				† -							
				† -							
10				1065							
				ļ _							
				-							
	·///	13.3-13.8' Highly weathered, L	ikely dolomite								
		13.8-14.8' Slightly weathered,		_ + -							
		Bottom of borehole at	14.8 feet.								
$N_{60} = (E_{00} + E_{00} + $	m/60)Nm	N ₆₀ - Corrected N value for standard	60% SPT efficien	cy; Em - M	leasur	ed hamme	er efficiency in p	ercent; Nm - Observed	N-value; (1) = Assumed, (2) = Actual	
Coord	inate Sys	stem: Modified U.S. State Plan	ne 1983 Coord	linate Zo	ne: _	Missouri	West	Coordinate F	Proj. Factor: _1.000038	8	
Coord	inate Dat	tum: NAD 83 (CONUS)	Coord	linate Un	its: _	U.S. Su	rvey Feet				



GRANT C. LUCKENBILL NUMBER PE-2012018100

GRANT C. LUCKENBILL-ENGINE MO# PE-2012018100

8/5/2025

BARRY JOB NO. JSR0119 CONTRACT ID.

PROJECT NO.

Job N	lo.: <u>S</u>	R0119	County: Ba	arry				Route: _248			
Desig	jn : <u>A</u> 9	9432	Skew: Squ	are				Location: Over F	at Creek		
Bent:	2		Logged By:	Collin	Wals	h		Operator: Bradley Wadlow Date of Work: 02/08/24-02/08/24			
Static	on:		Northing: _2	220432.	4						
Offse	t:		Easting: 30	030084.	3			Depth to Water:	9.5		
Eleva	ition: _	1075.1	Requested N	Northing	g: <u>22</u>	20436.3					
Requ	ested \$	Station:	Requested Easting: 3030088.1					Time Change:10) hours		
Requ	ested (Offset:	Equipment:	Acker	Rene	egade ,Sp	olit-Spoon Sa	mpler, NQ			
Requ	ested l	Elevation:	Location No	te:							
Drill N	No.: _@	G-9667	Hammer Effi					Drilling Method:		<u>r</u>	
Depth (ft)	Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests	
0	P 5 4	0.0-0.6' CONCRETE, (Bridge of	leck)	1075							
	-	0.6-18.2' Air		7 -	-						
				+ -	-						
-]										
5				1070							
				_							
				+ -							
	-			+ -							
10	-			1065							
10				1003							
				† -							
	_			+ -							
15				1060							
-				+ -							
-				† -							
		18.2-19.5' Brown, LEAN CLAY	with silt, trace	1]							
20		☑ gravel, soft, moist 19.5-27.0' SANDY GRAVEL tra	ace lean clay	1055							
		medium dense, wet, fine to coa		+ -	X	47	11-10-8 (28)				
	.00			-	-						
				+ -	1						
25	.90			1050	-						
					X	33	7-8-11 (29)				
		07.0.04.7LOL + D + " " "	of many 11.	_ 			(23)				
	. X.	27.0-31.7' Cherty Dolomite, light bedded, highly weathered, fine	ιι gray, tnin grained	+ -	\times	74	13-33/0.5'				
3U	6 6	·		4045	▋┃	77					
30	. X.			1045		(10)					
	5	0.7000000000000000000000000000000000000									
		31.7-36.8' Cherty Dolomite, light bedded to medium bedded, ver						Qu Test Results			
	<u> </u>	slightly weathered, fine grained				96 (40)		UCS = 1100 ksf MC = 0%			
35 N = 7	Fra/00\\	In Al Compared North Sec. 1 1	600/ CDT -#:-	V. C •	10.55		r officience:	γ _{moist} = 155.6	Lyalica (4) A	and (2) = 1 t	
		Nm N ₆₀ - Corrected N value for standard							l-value; (1) = Assum oj. Factor: 1.00		
		System: Modified U.S. State Pland Datum: NAD 83 (CONUS)					vest vey Feet		-j. ι αυιυι. <u>1.∪∪</u>	00000	
		· · · · · · · · · · · · · · · · · · ·			_			— accuracy of the "log of m			

Job I	No.: SF	R0119	County: B			and Mat		Route: 248				
Desig	gn : _A94	432	Skew: Squ	uare				Location: Over	Flat Creek			
Bent	: _2		Logged By:	Collin V	Valsł	h		Date of Work: 02/08/24-02/08/24				
Statio	on:		Northing: _	220432.4								
Offse	et:		Easting: 3	030084.3	3							
Eleva	ation: _1	075.1	Requested Easting: 3030088.1 Equipment: Acker Renegade, Split-Spoon Salue Location Note:									
Requ	ested S	tation:										
Requ	ested O	ffset:						ampler, NQ				
Requ	ested E	levation:										
Drill	No.: <u>G</u>	-9667	Hammer Ef	ficiency:	93%	<u>/6</u>		Drilling Method:	Casing Advancer			
Depth (ft)	Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
35	/_/			1040				pct				
					H				-			
	7/	36.8-38.8' Cherty Dolomite, light bedded, very strong rock, mode			Н			Qu Test Results UCS = 1500 kst				
	7/7-	weathered, fine grained 38.8-58.3' Cherty Dolomite, ligh	at gray thin		Н	100 (24)		$MC = 0\%$ $\gamma_{\text{moist}} = 172.4$				
40	77	bedded to medium bedded, ver	y strong rock,	1035	Н			pcf				
	7/	slightly weathered, fine grained vertical fracturing	, vuggy,	+ -	\square				_			
_ ,		_			Н			Qu Test Results	,			
					Н	100 (14)		UCS = 1230 ksf MC = 0%				
45				1030	Н	(1.1)		γ _{moist} = 163 pcf				
				+ -	Н							
				+ -	Н			Qu Test Results				
					Н	100 (62)		UCS = 1460 ksf MC = 0%	f			
50				1025	Н	(02)		y moist = 154.3 pcf				
				+ -								
				+ -	Н			Qu Test Results	s			
-					Н	100		UCS = 1100 ksf MC = 0%				
55				1020	Н	(42)		γ _{moist} = 159.8 pcf				
				<u> </u>								
				+ -	Н			Qu Test Results				
		58.3-61.3' Dolomite, gray, thin I	pedded strong			100		UCS = 671 ksf MC = 0%				
60		rock, slightly weathered, fine gr interbedded with shale		1015		(42)		γ _{moist} = 159.8 pcf				
		interpedded with snale						poi				
		Bottom of borehole at 6	1.3 feet.									
					_							
N ₆₀ =	(Em/60)N	m N ₆₀ - Corrected N value for standard	60% SPT efficiend	cy; Em - Me	easure	ed hammer	efficiency in p	percent; Nm - Observed	N-value; (1) = Assumed	d, (2) = Actual		
		system: Modified U.S. State Plane						Coordinate F	Proj. Factor: 1.0000	388		
Coor	dinate D	Datum: NAD 83 (CONUS)	Coordi	inate Unit	ts: _	U.S. Surv	ey Feet					

1 ADDED

GRANT C. LUCKENBILL NUMBER PE-2012018100

GRANT C. LUCKENBILL-ENGINE MO# PE-2012018100

8/5/2025

BARRY JOB NO. JSR0119 CONTRACT ID.

PROJECT NO.

Job N	o.: SF	R0119	County: B			and Mat		Route: 248				
Desig	n : <u>A9</u>	432	Skew: Squ	ıare				Location: Over	Flat Creek			
Bent:	3		Logged By:	Collin	Wals	h		Operator: Bradley Wadlow				
Statio	n:		Northing:	220504.5	5			Depth to Water: 18.8				
			Easting: 3									
		1075.1	Requested						ı:			
		Station:						Time Change:	10 hours			
		Offset:	Equipment:									
		Elevation:						Duilling Mathed				
Drill N	l o .: <u>G</u>	-9007	Hammer Eff	riciency:	939	%		Drilling Method:	Casing Advancer			
Depth (ft)	Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
0	P 4 4	0.0-0.6' CONCRETE, (Bridge de	eck) _	1075						+		
		0.6-18.8' Air		+ -								
				+ -								
5				1070								
				† †								
				4005								
10				1065								
				+ -								
 15				1060								
				1000								
		∇		+ -								
20		18.8-19.0' WATER, (Flat Creek		1055								
		19.0-27.0' SANDY GRAVEL tra medium dense to dense, wet, fi			X	47	2-3-6 (14)			Sieve Analys Sieve # % Pas		
		grained		+ -	$\overline{}$					1½" 100.0 1" 86.8 3/4" 80.4		
				+ -	\times	27	9-13-8 (33)			3/8" 54.8 #4 36.0		
25				1050						#10 20.5 #16 15.9		
					\times	33	8-8-6 (22)			#40 9.4 #50 7.7		
		27.0-33.3' Cherty Dolomite, ligh	t gray, thin	+ -		0 /	33/0.2'			#100 5.0 #200 3.8		
	///	bedded, very strong rock, mode weathered, fine grained, vertica	rately	† †		95		Qu Test Results UCS = 1740 ksf				
30	//	, g 2,	3	1045		(20)		MC = 0% γ _{moist} = 161.8 pcf				
				- - -		96 (40)		Qu Test Results UCS = 1640 ksf MC = 0%				
35	/_/	. N. 5		<u> </u>				γ _{moist} = 161.9	<u> </u>			
		Im N ₆₀ - Corrected N value for standard 6 System: Modified U.S. State Plane							N-value; (1) = Assum Proj. Factor: 1.000			
		Datum: NAD 83 (CONUS)				U.S. Surv						
		g this information are cautioned that the ma					_	occuracy of the Was of				

Job No.: SF	R 0119	County: B				erials	Route: 248			
Design: A94	432	Skew: Squ	uare				Location: Over Flat Creek			
Bent: 3		Logged By:	Collin V	Valsh						
Station:		Northing: _	220504.5	ı						
Offset:		Easting: 3030182.8 Requested Northing: 220503.6								
Elevation: _	1075.1						Depth Hole Open	:		
Requested S	quested Station:		Requested Easting: 3030182.1					10 hours		
Requested C	Offset:	Equipment:	Acker F	Reneg	jade ,Spli	it-Spoon Sa	mpler, NQ			
Requested E	Elevation:	Location Note:								
Drill No.: G	-9667	Hammer Ef	ficiency:	93%			Drilling Method:	Casing Advancer		
Depth (ft) Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests	
35 ///	33.3-54.3' Cherty Dolomite, light bedded to medium bedded, very to extremely strong rock, slightly fine grained, vertical fracturing (/ strong rock / weathered,	1040		100 (22)		pcf Qu Test Results UCS = 1640 ksf MC = 0%			
45 //			1030		98 (64)		Qu Test Results UCS = 1690 ksf MC = 0%			
50 //			1025		96 (66)		UCS = 2160 ksf			
55 /	54.3-56.1' Dolomite, gray, thin b rock, slightly weathered, fine gra interbedded with shale Bottom of borehole at 56	ained,	1020		100 (66)		MC = 0%			
Coordinate S	Im N ₆₀ - Corrected N value for standard 6 System: Modified U.S. State Plane Datum: NAD 83 (CONUS)	1983 Coord		e: <u>M</u>	lissouri W	/est		N-value; (1) = Assumed		

GRANT C. LUCKENBILL NUMBER PE-2012018100

GRANT C. LUCKENBILL-ENGINE MO# PE-2012018100

8/5/2025

BARRY JOB NO. JSR0119 CONTRACT ID.

PROJECT NO.

Job N	l o .: <u>S</u> R	0119	County: Ba				aterials	Route: _248				
Desig	n : <u>A</u> 94	132	Skew: Squa	are				Location: Over F	Flat Creek			
Bent:	4		Logged By:	Collin	Wals	h		Depth to Water: 17.4				
Statio	n:		Northing: _2	220567.	1							
Offset	t:		Easting: 30	030236.	1							
Elevat	tion: <u>1</u>	075.1	Requested N	Northing	j: <u>22</u>	20565.6						
		tation:						Time Change: _8	3 hours			
		ffset:	Equipment:									
		levation:										
Drill N	lo.: <u>G</u> -	9667	Hammer Effi	iciency:	939	%		Drilling Method:	Casing Advancer			
Depth (ft)	Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
0	D & 4	0.0-0.7' CONCRETE, (Bridge de	ack)	1075								
	- · · · · · · · · · · · · · · · · · · ·	0.7-17.4' Air	, J. ()									
				+ -								
5	_			1070								
	_			-								
10				1065								
				+ -								
	-											
15	-			1060								
		$\overline{\alpha}$										
		17.4-18.5' Brown, LEAN CLAY v	with sand, soft,	- + -								
20		─ <u>wet</u> 18.5-26.1' SANDY GRAVEL trac	ce lean clay,	_ 								
		medium dense, wet, fine to coar	se grained	1000	\times	40	9-9-6			Sieve Analysis Sieve # % Pass		
							(23)			1½" 100.0 1" 88.7		
				+ -						3/4" 81.6 3/8" 70.4		
 25				1050						#4 51.5 #10 30.2 #16 20.4		
				1.000	\times	43	6-8-33/0.2'			#40 11.1 #50 8.9		
	·\X.	26.1-28.4' Cherty Dolomite, light bedded, highly weathered, fine of	t gray, thin grained							#100 5.8 #200 4.4		
	7			+ -		69						
30		28.4-33.1' Cherty Dolomite, light bedded, strong rock, moderately fine grained		1045		(0)						
	///			-				Qu Test Results				
35	// // //					100 (38)		UCS = 986 ksf MC = 0% γ_{moist} = 162.6 pcf				
$N_{60} = (E_{00} + E_{00} + $		m N ₆₀ - Corrected N value for standard 6						ercent; Nm - Observed				
		ystem: Modified U.S. State Plane						Coordinate Pi	roj. Factor: 1.000)0388		
Coord	inate D	atum: NAD 83 (CONUS)	Coordir	nate Uni	its: _	U.S. Su	rvey Feet					

Job No.: SR0119	County: Ba			nd Mate		Route: 248				
Design: A9432	Skew: Squa	are				Location: Over	Flat Creek			
Bent: _4	Logged By:	Collin V	Valsh			Operator: Bradley Wadlow				
Station:	Northing: 2	20567.1								
Offset:	Easting: 30	30236.1				Depth to Water:	17.4			
Elevation:1075.1	Requested Northing: 220565.6									
Requested Station:							8 hours			
Requested Offset:	Equipment:	Acker F	Renega	ade ,Split	-Spoon Sa	ımpler, NQ				
Requested Elevation:	Location Not	te:								
Drill No .: _G-9667	Hammer Effic	Efficiency: 93%				Drilling Method:	Casing Advancer			
Graphic Graphic Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
35 / 33 1 56 0' Charty Delemite, lie	tht gray thin	1040				Qu Test Results				
33.1-56.0' Cherty Dolomite, lig bedded, strong rock to very st	rong rock,	+ -				UCS = 836 ksf MC = 0%				
slightly weathered, fine graine fracturing (continued)	d, vertical	+ -				γ _{moist} = 150.6 pcf				
		+ -		94 (6)		poi	_			
40		1035		(0)						
		_								
		_		100						
45				(0)						
45 /		1030								
		+ -								
		_				Qu Test Results UCS = 1180 ksf				
				100 (8)		MC = 0% $\gamma_{\text{moist}} = 158.9$				
50 //		1025				pcf				
		_					_			
		+ -				Qu Test Results				
		+ -		100 (8)		UCS = 1250 ksf MC = 0%				
55		1020		(0)		y _{moist} = 157.7 pcf				
Bottom of borehole at	56.0 feet.									
N ₆₀ = (Em/60)Nm N ₆₀ - Corrected N value for standard	d 60% SPT efficiency	/; Em - Me	easured	hammer e	fficiency in p	ercent; Nm - Observed	N-value; (1) = Assumed	, (2) = Actual		
Coordinate System: Modified U.S. State Plan	ne 1983 Coordin	nate Zon	e: Mi	ssouri W	est	Coordinate P	roj. Factor: 1.0000	388		
Coordinate Datum: NAD 83 (CONUS)	Coordin	nate Unit	:s: _U	I.S. Surve	y Feet					

GRANT C. LUCKENBILL NUMBER PE-2012018100

GRANT C. LUCKENBILL-ENGINE MO# PE-2012018100

8/5/2025

BARRY JOB NO. JSR0119 CONTRACT ID.

PROJECT NO.

Job No.: SR0119	County: Ba			and Ma		Route: 248				
Design: A9432	Skew: Squ	ıare					Flat Creek			
Bent: 5	Logged By:	Collin '	Wals	h		Operator: Justin Reynolds Date of Work: 02/08/24-02/08/24				
Station:	Northing: _	220654.8	3							
Offset:		030328.6	6							
Elevation: 1075.9	Requested	Northing	j:							
Requested Station:	Requested	Easting:				Time Change:	12 hours			
Requested Offset:	Equipment:	Mobile	B-31	1,						
Requested Elevation:	Location No	ote:								
Drill No. : <u>G-9401</u>	Hammer Eff	iciency:				Drilling Method:	Continuous Flight A	uger		
Ographic Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
0 0 0 7' ASDUALT										
0.0-0.7' ASPHALT 0.7-1.4' CRUSHED AGGRE 1.4-15.0' Dark brown, SAND with gravel, medium stiff, mo	Y LEAN CLAY	1075								
5		1070								
10		1065								
15.0-22.5' CLAYEY GRAVE medium dense, moist	_ with lean clay,	1060								
20		1055								
22.5-28.5' Dark gray, SAND's medium stiff, wet	LEAN CLAY,	1050								
28.5-29.1' Highly weathered, 29.1-30.1' Slightly weathered Bottom of borehole a	l, Likely dolomite	 								
N_{60} = (Em/60)Nm N_{60} - Corrected N value for standa Coordinate System: Modified U.S. State Pla							N-value; (1) = Assumed, Proj. Factor: _1.00003			

Job No.:	SR0119	County: Ba				aterials	Route: _248				
Design:	A9432	Skew: Squa	are				Location: Over F	-lat Creek			
Bent : <u>5</u>		Logged By:	Collin	Walsl	h		Operator: Bradley Wadlow				
							Date of Work: 02/05/24-02/05/24				
Offset: _		Easting: 30	30341.	9			Depth to Water: 20.1				
Elevation	ı: _1075.8	Requested N					Depth Hole Open:				
Requeste	ed Station:						Time Change: 9				
Requeste	ed Offset:	Equipment:	Acker	Rene	gade ,S _l	plit-Spoon Sar	mpler, NQ				
Requeste	ed Elevation:										
Drill No.:	G-9667	Hammer Effic	ciency:	939	%		Drilling Method:	Hollow Stem Aug	er		
Depth (ft)	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests		
0	0.0-1.3' ASPHALT		1075								
_	1.3-1.8' CRUSHED AGGREO	SATE BASE									
	1.8-8.3' Dark brown, SANDY gravel, medium stiff, moist		- - -								
5			1070		20	1-2-2			MC = 17.2%		
			_	\triangle	20	(6)			γ _{sat} = 134 pcf		
///											
	8.3-9.8' BOULDERS										
10	9.8-10.3' CLAYEY GRAVEL	with sand,	1065		47	6-5-4		DD - 4 50 to f	MC = 19.6%		
<i>///,</i>	medium dense, moist 10.3-20.1' Dark brown, SANE			\triangle	47	(14)		PP = 1.50 tsf	y _{sat} = 131 pcf		
	trace gravel, stiff, moist	or element of the	<u> </u>								
<i>///</i>			-								
15			1060		_	3-3-4					
			1000	\angle	0	(11)					
			<u> </u>								
20	<u> </u>		4055			0.07					
	20.1-29.0' CLAYEY GRAVEL medium dense, wet	with sand,	1055	\times	20	3-6-7 (20)					
-00			+ -								
25											
			1050	X	33	3-6-12 (28)					
0			+ -			(==)					
			 -								
30	29.0-33.2' Cherty Dolomite, li		<u> </u>		\ 0 /	10/0.0', 10/0'					
2/	bedded, highly weathered, fir		1045		100 (30)	,					
	<u>/ </u>		<u> </u>		(30)						
. <u>DZ</u>	<u> </u>						Qu Test Results UCS = 1070 ksf				
			 -		100 (34)		MC = 0%				
35 $\sqrt{}$	60)Nm N ₆₀ - Corrected N value for standa	rd 60% SPT efficiency	<u>+ </u>	easur		er efficiency in ne	γ _{moist} = 157.1	 N-value: (1) = Δεευπ	ed (2) = Actual		
	te System: Modified U.S. State Pla							roj. Factor: 1.000			
	te Datum: NAD 83 (CONUS)					rvey Feet					
	using this information are cautioned that the										

GRANT C.
LUCKENBILL
NUMBER
PE-2012018100

GRANT C. LUCKENBILL-ENGINE MO# PE-2012018100

8/5/2025

BARRY JOB NO. JSR0119 CONTRACT ID.

PROJECT NO.

BRIDGE NO.

BORING DATA
Note: For locations of borings, see Sheet No. 1

Job No.: SR0119 Design: A9432		Construction and Materials County: Barry					Route: 248			
		Skew: Squ	are				Location: Over Flat Creek			
Bent : 5	Bent: 5 Station:		Logged By: Collin Walsh Northing: 220639.9 Easting: 3030341.9				Operator: Bradley Wadlow Date of Work: 02/05/24-02/05/24 Depth to Water: 20.1			
Station:										
Offset:										
Elevation: 1075.8		Requested Northing:					Depth Hole Open:			
Requested Station:		Requested E	Requested Easting:				Time Change: _	9 hours		
		Equipment: Acker Renegade ,Split-Spoon S					ampler, NQ			
Requested Elevation:		Location Note:								
Drill No. : <u>G-9667</u>		Hammer Efficiency: 93%					Drilling Method: _Hollow Stem Auger			
Depth (ft) Graphic	Description		Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N ₆₀)	Shear Data	Field Tests	Index Tests	
35 / / 33 2-39 //	Dolomite, gray, thin	hedded verv	1040				pct			
strong roc	k, slightly weathered, ed with shale <i>(continu</i>	, fine grained,			100 (97)		Qu Test Results UCS = 1180 ks MC = 0%			
$N_{60} = (Em/60)Nm N_{60} - Correct Coordinate System: Mod$								N-value; (1) = Assume Proj. Factor: _1.000		
Coordinate Datum: NAD					U.S. Surv		_			

	GRANT C. LUCKENBILL NUMBER PE-2012018100 B-6-25 GRANT C. LUCKENBILL—ENGINEER MO# PE-2012018100 DATE PREPARED 8/5/2025 ROUTE STATE 248 MO DISTRICT SHEET NO. BR 36 COUNTY BARRY JOB NO. JSR0119 CONTRACT ID. PROJECT NO. BRIDGE NO. A9432										
	TE DESCRIPTION										
	MISSOURI HIGHWAYS AND TRANSPORTATION DATE	COMMISSION				105 WEST CAPITOL	JEFFERSON CITY, MO 65102	1-888-ASK-MODOT (1-888-275-6636)			
ΈD					550 ST. LOUIS STREET	1	NE:	RTIFICATE OF AUTHORITY NO. 001592			