

**MOUNTAIN BROOK CITY COUNCIL
PRE-MEETING DISCUSSION
OCTOBER 12, 2020**

[Pursuant to a proclamation issued by Governor Kay Ivey on March 18, 2020, elected officials are allowed to meet remotely by means of Internet video or telephone conference and the public was invited to listen to, observe, or participate in the meeting by such means. The elected officials met by way of Internet video conference and allowed the public to listen, observe and participate by the same means.]

The City Council of the City of Mountain Brook, Alabama met informally by way of Internet video conference at 6:15 p.m. on the 12th day of October, 2020. The Council President called the pre-meeting to order and the roll was called with the following results:

Present: Virginia C. Smith, Council President
William S. Pritchard III, Council President Pro Tempore
Philip E. Black
Lloyd C. Shelton
Alice B. Womack
Stewart Welch III, Mayor

Absent: None

Also present were City Attorney Carl Johnson, City Manager Sam Gaston, and City Clerk Steven Boone.

1. AGENDA

1. Traffic studies presentations—Richard Caudle of Skipper Consultants (Appendix 1.)

a. Three-way stop at Brookwood Road and South Brookwood Road

Richard Caudle:

- There are painted crosswalks but no stops signs that often confuses motorists
- Sight distance (looking left) from South Brookwood Road is inadequate (page 5 of the traffic study report)
- There have been no reported crashes at the intersection
- There are fewer than 300 vehicles per hour for any 8-hour period during the day
- Criteria used to determine the necessity for traffic control measures are located at the bottom of page 6
- A 3-way stop is recommended at this intersection along with stop sign warning signs for approaching motorists traveling in either direction on Brookwood Road (page 7)

Laura Silsbee of 3340 Brookwood Road (and husband):

- Supports the installation of stop signs at this intersection for safety reasons
- Views speed to be excessive
- There are more pedestrians and cyclists traveling this area since the sidewalks were installed
- Would like to see a street light installed at the intersection too

Caudle:

- At least 50% of the motorists are traveling more than 5 miles per hour above the speed limit

Council member Black:

- Agrees that the crosswalks are confusing

- Views this intersection as very similar to the Westbury intersection where a stop sign has been installed

Caudle:

- There is no power available to install a street light at this intersection without significant cost and coordination with Alabama Power Company

The general consensus of the elected officials was to send out notices to the area residents that the multi-way stop signs will be considered at the October 26, 2020 meeting of the City Council.

b. Four-way stop at Briar Oak Drive and River Bend Road

Caudle:

- Three requests were made for traffic control measures (b-d below)
- There are stop signs on Briar Oak Drive but none River Bend Road
- Sight distances are below standards
- Due to the seriously substandard sight distances, a 4-way stop is recommended (page 7)

Chris Powanda, area resident, expressed his support for this recommendation.

The general consensus of the elected officials was to send out notices to the area residents that the multi-way stop signs will be considered at the October 26, 2020 meeting of the City Council.

c. Three-way stop at Briar Oak Drive and River Oaks Road

Caudle:

- There is no compelling reason for a multi-way stop at this intersection

Richard Epstein [initially] agreed that no stop sign is warranted.

Powanda:

- Disagrees with the recommendation
- While traffic counts do not support the necessity of a multi-way, the street is not designed to be cut-through street and speed is still excessive in a residential neighborhood
- Views the 24-hour traffic study period as insufficient to gather meaningful data
- There will be no one in the area that will complain if stop signs are installed

Epstein expressed his support for the stop sign having not considered the perspective of parents with young children.

Powanda asked what is the downside for installing stop signs at this intersection.

Caudle:

- Generally, traffic engineers avoid recommending stop signs where the traffic study does not find one warranted is avoid training drivers to ignore unwarranted stop signs which could lead them to ignore those that are warranted
- Will not object if the City wishes to follow the recommendation or to install multi-way stops as the neighborhood apparently wants

At the suggestion of Council President Pro Tempore Pritchard, the general consensus of the elected officials was to send out notices to the area residents that the multi-way stop signs will be considered at the October 26, 2020 meeting of the City Council to determine whether there is any opposition.

d. Speed limit on Briar Oak Drive (page 14)

Caudle:

- The current speed limit is 30 miles per hour
- There are a lot speed limit signs indicating that speed has been of concern to the residents for some time
- The 85th percentile speed is less than the posted speed limit and less than 3% of the motorists observed exceed the speed limit by more than 5 miles per hour
- The safe curve speed analysis revealed 2 curves (out of 5) that are problematic (page 14)
- Recommends reducing the speed limit to 20 miles per hour at “curve #2”
- Stop signs generally only slow traffic 50 to 100 feet on either side of the stop sign so the recommendation is unaffected by the expected installation of stop signs on this road

Powanda expressed his appreciation to the Council’s attention and believes the stop signs, if installed, will improve safety in the area.

2. Review of the other matters to be considered at the formal (7 p.m.) meeting.

- a. Also added to the formal meeting agenda was Resolution No. 2020-178, expressing the City’s gratitude to Penny Page for her service on the O’Neal Library Board.

2. ADJOURNMENT

There being no further business or matters for discussion, Council President Smith adjourned the meeting at approximately 6:56 p.m.

3. CERTIFICATION

I, Steven Boone, City Clerk of the City of Mountain Brook, Alabama, certify the above is a true and correct synopsis of the discussion from the work session of the City Council of the City of Mountain Brook, Alabama held by way of Internet videoconference on October 12, 2020, and that the meeting was duly called and held in all respects in accordance with the laws of the State of Alabama and bylaws of the City and that no formal action or votes were conducted at said work session.

City Clerk Approved by
City Council October 26, 2020

Brookwood Road at South Brookwood Road
Mountain Brook, Alabama
Multi-Way Stop Evaluation

Introduction

This report documents a traffic study to determine if a multi-way stop is warranted at the intersection of Brookwood Road at South Brookwood Road in the City of Mountain Brook. Currently, the intersection is a "T" intersection controlled by a side street stop sign on South Brookwood Road. The intersection is somewhat unique, in that there is a pedestrian crosswalk crossing Brookwood Road on the south side of the intersection, and 2' white stop lines are present on both approaches of Brookwood Road for the crosswalk, even though there are no stop signs on Brookwood Road.



The posted speed limit on Brookwood Road is 30 miles per hour. The posted speed limit on South Brookwood Road is 30 miles per hour.

Intersection Turning Movement Traffic Count

An intersection turning movement traffic count was performed at the intersection of Brookwood Road at South Brookwood Road on Wednesday, September 23, 2020 from 7:00 to 9:00 a.m., 2:30 to 3:30 p.m., and 4:00 to 6:00 p.m. by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The intersection turning movement traffic count data is included in Appendix A. The peak hour turning movement traffic counts are shown in Figure 1.



Figure 1. Intersection Traffic Count

Table 1. Existing Intersection Capacity Analysis

Intersection	Approach	Movement	Level of Service		
			7:00-9:15 AM	2:30-3:30 PM	4:00-6:00 PM
Brookwood Rd at South Brookwood Road	S Brookwood Rd Westbound	Left-Right	B	B	B
	Brookwood Rd Northbound	Through-Right	A	A	A
	Brookwood Rd Southbound	Left-Through	A	A	A

Machine Traffic Counts

Machine traffic counts were performed on each leg of the intersection of Brookwood Road at South Brookwood Road for a twenty-four (24) hour period on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The machine traffic count data is included in Appendix C. The hourly traffic count data is summarized in Table 2.

Intersection Capacity Analysis

Existing peak hour intersection capacity analyses were performed for the intersection of Brookwood Road at South Brookwood Road using the method of analysis as presented in the 2010 Highway Capacity Manual, published by the Transportation Research Board. Capacities are expressed as levels of service, and range from a level of service "A" (highest quality of service) to a level of service "F" (jammed conditions). As a general rule, operation at a level of service "C" or better is desirable, with a level of service "D" considered acceptable during peak hours of traffic flow. The results of the intersection capacity analyses are included in Appendix B and are summarized in Table 1. As shown in Table 1, the South Brookwood Road approach operates at a level of service "B" for all peak hours analyzed. The Brookwood Road approaches operate at a level of service "A".

APPENDIX 1

Table 2. Machine Traffic Counts

Time	S Brookwood Road			Brookwood Road			south of S Brookwood Rd			Total
	Westbound	Eastbound	Total	Westbound	Eastbound	Total	Northbound	Southbound	Total	
12-1 AM	0	0	0	0	0	0	0	0	0	0
1-2 AM	0	0	0	0	0	0	0	0	0	0
2-3 AM	1	0	1	2	2	4	0	1	1	3
3-4 AM	1	0	1	1	2	3	1	2	3	3
4-5 AM	1	0	1	0	0	0	0	0	0	0
5-6 AM	1	6	7	8	10	18	6	34	40	20
6-7 AM	11	32	43	14	44	58	18	56	74	286
7-8 AM	44	84	128	95	122	217	115	118	233	156
8-9 AM	33	52	85	75	109	184	78	118	196	149
9-10 AM	38	57	95	65	97	162	62	87	149	125
10-11 AM	28	38	66	46	67	113	50	75	125	119
11-12 AM	30	33	63	54	59	113	55	64	119	164
12-1 PM	30	45	75	69	82	151	72	91	163	182
1-2 PM	41	30	71	67	81	148	81	82	163	200
2-3 PM	47	40	87	92	84	176	103	82	185	248
3-4 PM	65	72	137	130	113	243	154	126	280	310
4-5 PM	73	58	131	124	98	222	137	111	248	310
5-6 PM	120	63	183	141	121	262	205	105	310	310
6-7 PM	45	70	115	95	66	161	90	89	179	179
7-8 PM	20	49	69	64	50	114	48	63	111	111
8-9 PM	11	19	30	35	21	56	36	29	65	65
9-10 PM	8	7	15	12	12	24	11	10	21	21
10-11 PM	5	1	6	6	6	12	4	4	8	8
11-12 AM	1	0	1	2	0	2	3	0	3	3
Total	654	718	1372	1179	1252	2431	1123	1400	2523	2723

Speed Surveys

Speed surveys were performed for a twenty-four (24) hour period on each leg of the intersection of Brookwood Road at South Brookwood Road on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The results of the speed surveys are included in Appendix D and are summarized in Table 3. Of particular note:

- the speed surveys found that the 85th percentile speed of traffic on both Brookwood Road and South Brookwood Road are 7-10 miles per hour greater than posted speed limit on these roadways
- On Brookwood Road, 50% of the vehicles are exceeding the speed limit by more than 5 miles per hour, and 12%-14% are exceeding the posted speed limit by more than 10 miles per hour

Table 3. Speed Survey Results

	Brookwood Road		
	South Brookwood Road	North of S Brookwood Rd.	South of S Brookwood Rd.
Vehicle Count	1369	2431	2723
Minimum Speed	17 mph	8 mph	8 mph
Average Speed	33 mph	35 mph	35 mph
85 th Percentile Speed	37 mph	39 mph	40 mph
Maximum Speed	62 mph	63 mph	61 mph
Vehicles over 30 mph	1085 (79%)	2131 (88%)	2287 (84%)
Vehicles over 35 mph	390 (28%)	1203 (49%)	1370 (50%)
Vehicles over 40 mph	48 (4%)	295 (12%)	380 (14%)

Sight Distance

The minimum criteria for intersection sight distance for traffic attempting to enter Brookwood Road from South Brookwood Road was determined based on information in the AASHTO A Policy on the Geometric Design of Highways and Streets. The minimum criteria are based on the 85th percentile speed of traffic on Brookwood Road, which is 40 miles per hour. The minimum intersection sight distance criteria are as follows:

- Making a left turn - 445 feet
- Making a right turn - 385 feet

Intersection sight distance was measured in the field. The available intersection sight distance is displayed in Figure 2. Pictures of the sight distance are also provided on the following page. The measured sight distance looking to right indicates that minimum criteria are met and exceeded by over 500 feet. However, looking to the left, sight distance is restricted, such that the minimum criteria for making a left turn is exceeded by only 20 feet. Sight distance is limited by numerous objects, including signposts, trees, and landscaping.

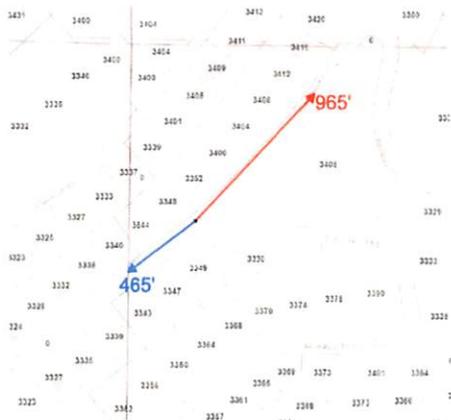


Figure 2. Intersection Sight Distance



Crash History

Five (5) years of crash history for the Intersection of Brookwood Road at South Brookwood Road were provided by the Mountain Brook Police Department. Two crashes were reported during this time period.

One crash (in 2017) occurred at the driveway of 3347 Brookwood Road, which is immediately south of the intersection of South Brookwood Road. A driver of vehicle exiting the driveway of 3347 Brookwood Road was struck by a vehicle approaching from the south on Brookwood Road. No injuries or fatalities were reported.

The second reported crash (in 2018) occurred on South Brookwood Road at the intersection of Brookwood Road. A driver stopped at the stop sign backed into a vehicle located behind him as he attempted to allow room for an oversized turning vehicle. No injuries or fatalities were reported.

The review of crash information shows that neither crash would have been mitigated if a multi-way stop were installed at the intersection of Brookwood Road at South Brookwood Road.

Multi-Way Stop Warrant Analysis

The 2009 Manual on Uniform Traffic Control Devices, Section 2B.07, establishes minimum criteria for consideration of a multi-way stop sign installation. The criteria include the following:

- Crash history criteria
- Traffic volume criteria
- Engineering judgement criteria

The applicable sections from the MUTCD are copied below:

The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

- A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
- C. Minimum volumes:
 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
 3. If the 65th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

Other criteria that may be considered in an engineering study include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

APPENDIX I

The data and analysis presented in this report show that neither the crash history criteria nor traffic volume criteria are currently met at the intersection of Brookwood Road at South Brookwood Road.

Considering the four (A-D) engineering judgement criteria, it is the opinion that neither A (the need to control left turn conflicts) or B (the need to control vehicle/pedestrian conflicts) are sufficient justification for the installation of a multi-way stop at the intersection.

Regarding criteria C (the inability to see conflicting traffic), this study has shown that sight distance looking to the left from South Brookwood Road at the stop sign for Brookwood Road is limited, such that the measurement only exceeds minimum criteria by 20 feet. Mitigation of the sight distance restriction would be difficult.

Regarding criteria D (intersection of two residential collector roadways of similar character), it is the opinion of the engineer that the intersection of Brookwood Road at South Brookwood Road does in fact constitute an intersection which meets this criteria. Traffic volumes indicate that Brookwood Road carries more traffic than South Brookwood Road (2,400 to 2,700 vehicles per day as compared to 1,400 vehicles per day). However, the traffic volumes clearly indicate that South Brookwood Road is more than a simple residential side street.

Recommendations

Based on the engineering judgment related to intersection sight distance (criteria C above) and the character of the two roadways (criteria D above), the engineer recommends that the City install a multi-way stop at the intersection of Brookwood Road at South Brookwood Road.

Specific actions to accomplish this recommendation are as follows:

1. Remove the two existing pedestrian crossing warning signs on Brookwood Road at the intersection of South Brookwood Road
2. Install two R1-1 "STOP" signs with R1-3P "ALL WAY" placards in place of the two pedestrian crossing warning signs on Brookwood Road



3. Install a R1-3P "ALL WAY" placard below the existing "STOP" sign on South Brookwood Road

4. Install two W3-1 "STOP AHEAD" warning signs on Brookwood Road in advance of the intersection of South Brookwood Road. The signs should be a minimum of 125 feet in advance of the "STOP" signs. Approximate sign locations are indicated in Figure 3.

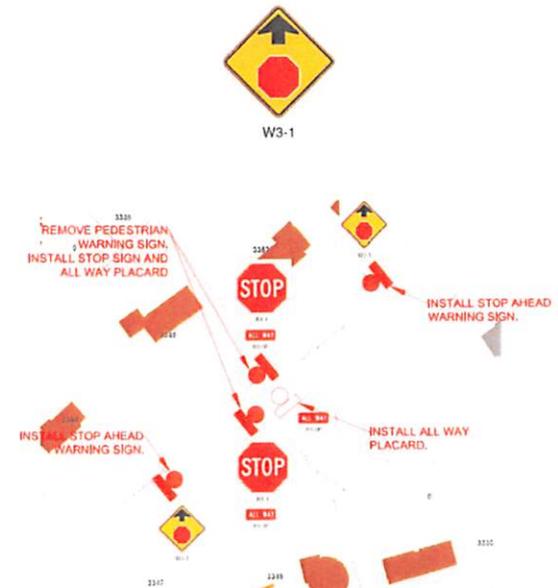


Figure 3. Recommendations

Appendix A

Intersection Turning Movement Traffic Count

Start Time	BROOKWOOD RD Southbound			BROOKWOOD RD Westbound			BROOKWOOD RD Northbound			DK Total
	Left	Thru	App. Total	Left	Thru	App. Total	Thru	Left	App. Total	
07:00 AM	0	18	18	7	11	18	7	4	4	70
07:15 AM	0	18	18	7	11	18	7	4	4	119
07:30 AM	3	28	31	8	25	33	8	9	9	103
07:45 AM	0	29	29	17	19	36	8	9	9	103
Total	3	110	113	22	56	78	23	26	26	323
08:00 AM	1	28	29	8	25	33	18	7	7	84
08:15 AM	2	23	25	10	4	14	12	7	7	54
08:30 AM	3	14	17	4	8	12	7	1	1	34
08:45 AM	10	34	44	4	15	19	23	2	2	88
Total	16	89	105	26	29	55	60	18	18	240
02:30 PM	4	25	29	3	4	7	23	0	0	82
02:45 PM	4	18	22	4	4	8	25	0	0	87
Total	8	43	51	7	8	15	48	0	0	169
03:00 PM	0	30	30	2	16	18	16	4	4	88
03:15 PM	0	30	30	5	4	9	21	12	12	88
Total	0	60	60	7	20	27	37	16	16	176
04:00 PM	4	18	22	8	4	12	19	8	8	61
04:15 PM	0	23	23	0	8	8	25	11	11	80
04:30 PM	0	21	21	0	8	8	25	9	9	78
04:45 PM	4	21	25	0	10	10	20	0	0	85
Total	8	63	71	8	22	30	69	38	38	304
05:00 PM	0	20	20	0	7	7	22	0	0	73
05:15 PM	2	18	20	10	11	21	23	13	13	83
05:30 PM	0	18	18	3	0	3	30	22	22	61
05:45 PM	2	18	20	0	3	3	23	14	14	73
Total	4	54	58	13	21	34	68	52	52	312
Grand Total	67	478	545	139	198	337	474	173	173	1918
Approach %	15.8	84.5	86.3	32.0	30.1	31.3	73.3	28.7	28.7	
Total %	0.7	21.4	22.1	12.5	7.7	8.1	31.3	11.4	11.4	

Start Time	BROOKWOOD RD Southbound			BROOKWOOD RD Westbound			BROOKWOOD RD Northbound			DK Total
	Left	Thru	App. Total	Left	Thru	App. Total	Thru	Left	App. Total	
07:15 AM	14	119	133	88	21	109	104	36	140	0
Percent	10.5	89.5	90	75.8	24.1	80	74.8	25.2	80	0
07:30 AM	3	38	41	30	0	30	34	0	34	0
High Int.	07:30 AM	3	38	41	30	0	34	0	34	0
Volume	3	38	41	30	0	30	34	0	34	0
Peak Factor			0.811			0.840			0.760	

APPENDIX

Appendix B

Intersection Capacity Analysis Worksheets

Start Time	BROOKWOOD RD Southbound			BROOKWOOD RD Westbound			BROOKWOOD RD Northbound			DK Total
	Left	Thru	App. Total	Left	Thru	App. Total	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:00 AM - Peak 1 of 1										
By Approach	07:15 AM	07:30 AM	07:45 AM	07:15 AM	07:30 AM	07:45 AM	07:30 AM			
Volume	14	119	133	88	21	109	104	36	140	0
Percent	10.5	89.5	90	75.8	24.1	80	74.8	25.2	80	0
High Int.	07:30 AM	07:30 AM	07:30 AM	07:30 AM	07:30 AM	07:30 AM	07:30 AM	07:30 AM	07:30 AM	0
Volume	3	38	41	30	0	30	34	0	34	0
Peak Factor			0.811			0.840			0.760	
Peak Hour From 02:30 PM to 03:45 PM - Peak 1 of 1										
By Approach	02:30 PM	02:45 PM	03:00 PM	02:30 PM	02:45 PM	03:00 PM	02:30 PM			
Volume	8	43	51	7	8	15	48	0	0	323
Percent	14.9	85.1	86.1	73.8	26.4	77.5	22.8	0	0	85
High Int.	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	0
Volume	0	30	30	5	4	9	31	12	43	0
Peak Factor			0.744			0.531			0.802	
Peak Hour From 02:30 PM to 05:45 PM - Peak 1 of 1										
By Approach	02:30 PM	04:30 PM	04:45 PM	04:30 PM	04:45 PM	05:00 PM	02:30 PM			
Volume	8	43	51	7	8	15	48	0	0	323
Percent	14.9	85.1	86.1	47.8	52.2	58.2	20.8	0	0	85
High Int.	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	03:00 PM	0
Volume	0	30	30	5	4	9	31	12	43	0
Peak Factor			0.744			0.531			0.813	

HCM 2010 TWSC
1: Brookwood Rd & S Brookwood Rd 09/28/2020

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	W	T	T	T	T	T
Traffic Vol, veh/h	66	21	104	35	14	119
Future Vol, veh/h	66	21	104	35	14	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None	- None	- None	- None	- None	- None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	79	79	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	103	33	132	44	17	147
Macro/Micro	Minor1	Major1	Major2			
Conflicting Flow All	335	154	0	0	178	0
Stage 1	154	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Sig 1	5.4	-	-	-	-	-
Critical Hdwy Sig 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	684	897	-	-	1412	-
Stage 1	879	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	655	897	-	-	1412	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.4	0	0.8			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR/WBL1	SBL	SBR		
Capacity (veh/h)	-	-	701	1412	-	
HCM Lane VIC Ratio	-	-	0.194	0.012	-	
HCM Control Delay (s)	-	-	11.4	7.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %ile Q(veh)	-	-	0.7	0	-	

Brookwood Rd at S Brookwood Rd 09/28/2020 Existing AM Synchro 9 Report Page 1

HCM 2010 TWSC
1: Brookwood Rd & S Brookwood Rd 09/28/2020

Intersection						
Int Delay, s/veh	2.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	W	T	T	T	T	T
Traffic Vol, veh/h	33	36	117	52	23	83
Future Vol, veh/h	33	36	117	52	23	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None	- None	- None	- None	- None	- None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	81	71	74	74
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	40	44	144	73	31	112
Macro/Micro	Minor1	Major1	Major2			
Conflicting Flow All	355	181	0	0	217	0
Stage 1	181	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Sig 1	5.4	-	-	-	-	-
Critical Hdwy Sig 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	647	867	-	-	1355	-
Stage 1	855	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	631	867	-	-	1355	-
Mov Cap-2 Maneuver	631	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.5	0	1.7			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR/WBL1	SBL	SBR		
Capacity (veh/h)	-	-	735	1355	-	
HCM Lane VIC Ratio	-	-	0.114	0.023	-	
HCM Control Delay (s)	-	-	10.5	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %ile Q(veh)	-	-	0.4	0.1	-	

Brookwood Rd at S Brookwood Rd 09/28/2020 Existing PM Synchro 9 Report Page 1

HCM 2010 TWSC
1: Brookwood Rd & S Brookwood Rd 09/28/2020

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	W	T	T	T	T	T
Traffic Vol, veh/h	14	39	107	31	20	114
Future Vol, veh/h	14	39	107	31	20	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None	- None	- None	- None	- None	- None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	60	60	74	74
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	62	134	39	27	154
Macro/Micro	Minor1	Major1	Major2			
Conflicting Flow All	362	154	0	0	173	0
Stage 1	154	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Sig 1	5.4	-	-	-	-	-
Critical Hdwy Sig 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	641	897	-	-	1416	-
Stage 1	879	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	628	897	-	-	1415	-
Mov Cap-2 Maneuver	628	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10	0	1.1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR/WBL1	SBL	SBR		
Capacity (veh/h)	-	-	805	1416	-	
HCM Lane VIC Ratio	-	-	0.104	0.019	-	
HCM Control Delay (s)	-	-	10	7.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %ile Q(veh)	-	-	0.3	0.1	-	

Brookwood Rd at S Brookwood Rd 09/28/2020 Existing 2:30-3:30 Synchro 9 Report Page 1

APPENDIX 1

Appendix C
Machine Traffic Counts

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

9/22/2020
Tuesday

Date:

Location: BROOKWOOD RD east of S BROOKWOOD RD
City, State: MOUNTAIN BROOK, AL
Speed Limit: 30 mph

24 Hour Speed Combined Channels. Table with columns for mph (Total, 0-15, 15-20, 20-25, 25-30, 30-35, 35-40, 40-45, 45-50, 50-55, 55-60, 60-65, 65-70, 70-75, 75-80) and rows for time intervals from 10:00 AM to 9:00 AM.

Percentile Speeds (mph): 10%, 15%, 50%, 85%, 90%
10 mph Pace Speed Number in Pouch: 30.3 - 40.3, Average 34.9 mph, Minimum 7.6 mph, Maximum 63.4 mph
Speeds Exceeded: 28 mph 99.4%, 30 mph 87.7%, 40 mph 12.1%
Count: 2417, 2131, 295

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

9/22/2020
Tuesday

Date:

Location: S BROOKWOOD RD east of S BROOKWOOD RD
City, State: MOUNTAIN BROOK, AL
Speed Limit: 30 mph

24 Hour Speed Combined Channels. Table with columns for mph (Total, 0-15, 15-20, 20-25, 25-30, 30-35, 35-40, 40-45, 45-50, 50-55, 55-60, 60-65, 65-70, 70-75, 75-80) and rows for time intervals from 10:00 AM to 9:00 AM.

Percentile Speeds (mph): 10%, 15%, 50%, 85%, 90%
10 mph Pace Speed Number in Pouch: 28.6 - 38.6, Average 33.1 mph, Minimum 17.2 mph, Maximum 62.1 mph
Speeds Exceeded: 28 mph 99.8%, 30 mph 79.3%, 40 mph 3.5%
Count: 1366, 1085, 48

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

9/22/2020
Tuesday

Date:

Location: BROOKWOOD RD south of S BROOKWOOD RD
City, State: MOUNTAIN BROOK, AL
Speed Limit: 30 mph

24 Hour Speed Combined Channels. Table with columns for mph (Total, 0-15, 15-20, 20-25, 25-30, 30-35, 35-40, 40-45, 45-50, 50-55, 55-60, 60-65, 65-70, 70-75, 75-80) and rows for time intervals from 10:00 AM to 9:00 AM.

Percentile Speeds (mph): 10%, 15%, 50%, 85%, 90%
10 mph Pace Speed Number in Pouch: 30.6 - 39.6, Average 34.8 mph, Minimum 7.8 mph, Maximum 61.0 mph
Speeds Exceeded: 28 mph 98.9%, 30 mph 84.0%, 40 mph 14.0%
Count: 2693, 2287, 380

Briar Oak Drive
Mountain Brook, Alabama

Traffic Study

Prepared for:
The City of Mountain Brook
56 Church Street
Mountain Brook, Alabama 35213
Phone (205) 802-2400 Fax (205) 879-6913

Prepared by:
Skipper Consulting, Inc.
3644 Vann Road, Suite 100
Birmingham, Alabama 35235
Phone (205) 655-8855 Fax (205) 655-8825

September 30, 2020



b-ok

SECTION 1
FOUR-WAY STOP EVALUATION
BRIAR OAK DRIVE AT RIVER BEND ROAD

Introduction

This report section documents a traffic study to determine if a multi-way stop is warranted at the intersection of Briar Oak Drive at River Bend Road in the City of Mountain Brook. The location of the intersection is shown in Figure 1. Currently, the intersection is a four-way intersection controlled by stop signs on Briar Oak Drive. The posted speed limit on Briar Oak Drive is 30 miles per hour. The posted speed limit on River Bend Road is 30 miles per hour.



Figure 1. Site Location Map - Briar Oak Drive at River Bend Road

Intersection Turning Movement Traffic Count

An intersection turning movement traffic count was performed at the intersection of Briar Oak Drive at River Bend Road on Wednesday, September 23, 2020 from 7:00 to 9:00 a.m., 2:30 to 3:30 p.m., and 4:00 to 6:00 p.m. by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The intersection turning movement traffic count data is included in Appendix A. The peak hour turning movement traffic counts are shown in Figure 2.

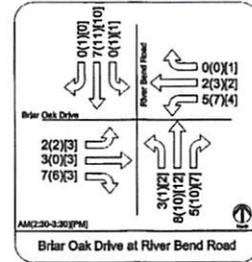


Figure 2. Intersection Traffic Count

Intersection Capacity Analysis

Existing peak hour intersection capacity analyses were performed for the intersection of Briar Oak Drive at River Bend Road using the method of analysis as presented in the 2010 Highway Capacity Manual, published by the Transportation Research Board. Capacities are expressed as levels of service, and range from a level of service "A" (highest quality of service) to a level of service "F" (jammed conditions). As a general rule, operation at a level of service "C" or better is desirable, with a level of service "D" considered acceptable during peak hours of traffic flow. The results of the intersection capacity analyses are included in Appendix B and are summarized in Table 1. As shown in Table 1, all approaches to the intersection operate at a level of service "A" for all time periods analyzed.

Table 1. Existing Intersection Capacity Analysis

Intersection	Approach	Movement	Level of Service		
			7:15-8:15 AM	2:30-3:30 PM	4:00-5:00 PM
Briar Oak Drive at River Bend Road	Briar Oak Dr Eastbound	Left-Through-Right	A	A	A
	Briar Oak Dr Westbound	Left-Through-Right	A	A	A
	River Bend Rd Northbound	Left-Through-Right	A	A	A
	River Bend Rd Southbound	Left-Through-Right	A	A	A

APPENDIX I

Machine Traffic Counts

Machine traffic counts were performed on each leg of the intersection of Briar Oak Drive at River Bend Road for a twenty-four (24) hour period on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The machine traffic count data is included in Appendix C. The hourly traffic count data is summarized in Table 2.

Speed Surveys

Speed surveys were performed for a twenty-four (24) hour period on each leg of the intersection of Briar Oak Drive at River Bend Road on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The results of the speed surveys are included in Appendix D and are summarized in Table 3. Of particular note:

- the speed surveys found that the 85th percentile speed of traffic on both Briar Oak Drive and River Bend Road are equal to or less than posted speed limit on these roadways
- 3% or less of all vehicles are exceeding the posted speed limit by more than 5 miles per hour

Table 3. Speed Survey Results

	Briar Oak Drive		River Bend Road	
	West of River Bend Rd	East of River Bend Rd	South of Briar Oak Dr	North of Briar Oak Dr
Vehicle Count	149	205	411	237
Minimum Speed	6 mph	7 mph	8 mph	5 mph
Average Speed	24 mph	23 mph	25 mph	19 mph
85 th Percentile Speed	30 mph	29 mph	29 mph	23 mph
Maximum Speed	38 mph	39 mph	38 mph	35 mph
Vehicles over 30 mph	26 (17%)	20 (10%)	40 (10%)	1 (0%)
Vehicles over 35 mph	5 (3%)	6 (3%)	6 (1%)	0 (0%)

Table 2. Machine Traffic Counts

Time	Briar Oak Drive				River Bend Road			
	West of River Bend Rd		East of River Bend Rd		South of Briar Oak Dr		North of Briar Oak Dr	
	Westbound	Eastbound	Westbound	Eastbound	Southbound	Northbound	Southbound	Northbound
11-11 AM	0	0	0	0	0	0	0	0
11-12 AM	0	0	0	0	0	0	0	0
12-1 AM	0	0	0	0	0	0	0	0
1-1 AM	0	0	0	0	0	0	0	0
2-2 AM	0	0	0	0	0	0	0	0
3-3 AM	0	0	0	0	0	0	0	0
4-4 AM	0	0	0	0	0	0	0	0
5-5 AM	0	0	0	0	0	0	0	0
6-6 AM	0	0	0	0	0	0	0	0
7-7 AM	1	6	2	3	4	4	4	1
8-8 AM	13	7	20	12	3	17	20	4
9-9 AM	4	1	5	6	3	11	13	5
10-10 AM	5	1	6	8	16	11	15	11
11-11 AM	6	11	3	7	10	9	10	7
12-12 PM	3	5	4	3	7	6	12	18
1-1 PM	8	10	18	7	17	19	13	29
2-2 PM	10	2	12	8	9	17	18	39
3-3 PM	6	3	8	11	11	11	13	27
4-4 PM	8	2	14	10	10	10	15	18
5-5 PM	12	2	14	10	10	23	19	42
6-6 PM	3	11	9	4	13	14	12	26
7-7 PM	4	1	5	9	4	13	9	27
8-8 PM	1	0	1	3	6	6	7	13
9-9 PM	1	1	2	1	2	2	3	2
10-10 PM	0	1	1	1	0	0	1	0
11-11 PM	0	1	1	1	0	0	0	0
12-12 AM	0	0	0	0	0	0	0	0
TOTAL	59	59	149	205	411	237	411	237

Sight Distance

The minimum criteria for intersection sight distance for traffic attempting to enter or cross River Bend Road from both directions of travel on Briar Oak Drive was determined based on information in the AASHTO A Policy on the Geometric Design of Highways and Streets. The minimum criteria are based on the 85th percentile speed of traffic on River Bend Road, which is 30 miles per hour. The minimum intersection sight distance criteria are as follows:

- Making a left turn – 335 feet
- Making a right turn – 290 feet
- Crossing – 290 feet

Intersection sight distance was measured in the field. The available intersection sight distance is displayed in Figure 3.

The measured sight distance looking to right and left from Briar Oak Drive eastbound indicates that minimum criteria are met and exceeded. However, for Briar Oak Drive westbound sight distance is restricted looking to both the right and left, such that the minimum criteria for making any movement is significantly less than the minimum requirement.

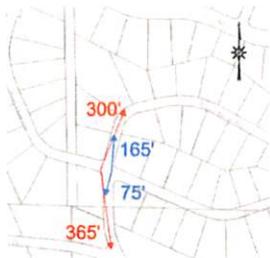


Figure 3. Intersection Sight Distance

Crash History

Five (5) years of crash history for the intersection of Briar Oak Drive at River Bend Road were provided by the Mountain Brook Police Department. There were no crashes reported at the intersection during this time period.

Multi-Way Stop Warrant Analysis

The 2009 Manual on Uniform Traffic Control Devices, Section 2B.07, establishes minimum criteria for consideration of a multi-way stop sign installation. The criteria include the following:

- Crash history criteria
- Traffic volume criteria
- Engineering judgement criteria

The applicable sections from the MUTCD are copied below:

The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

- Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
- Minimum volumes:
 - The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
 - The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 50 seconds per vehicle during the highest hour; but
 - If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

Other criteria that may be considered in an engineering study include:

- The need to control left-turn conflicts;
- The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

The data and analysis presented in this report show that neither the crash history criteria nor traffic volume criteria are currently met at the intersection of Briar Oak Drive at River Bend Road.

Considering the four (A-D) engineering judgement criteria, it is the opinion of the engineer that neither A (the need to control left turn conflicts), nor B (the need to control vehicle/pedestrian conflicts), nor D (intersection of two residential collector roadways of similar character) are sufficient justification for the installation of a multi-way stop at the intersection.

Regarding criteria C (the inability to see conflicting traffic), this study has shown that sight distance looking to the left and right from Briar Oak Drive westbound at the stop sign for River Bend Road is severely limited, and is sufficient justification for installation of a four-way stop at the intersection.

APPENDIX 1

Recommendations

Based on the engineering judgment related to intersection sight distance (criteria C above), the engineer recommends that the City install a multi-way stop at the intersection of Briar Oak Drive at River Bend Road.

Specific actions to accomplish this recommendation are as follows:

1. Install two R1-1 "STOP" signs with R1-3P "ALL WAY" placards on River Bend Road



2. Install two R1-3P "ALL WAY" placards below the existing "STOP" signs on Briar Oak Drive

3. Install one W3-1 "STOP AHEAD" warning signs on River Bend Road northbound in advance of the intersection of Briar Oak Drive. The signs should be a minimum of 100 feet in advance of the "STOP" sign.



SECTION 2
THREE-WAY STOP EVALUATION
BRIAR OAK DRIVE AT RIVER OAKS ROAD

Introduction

This report section documents a traffic study to determine if a multi-way stop is warranted at the intersection of Briar Oak Drive at River Oaks Road in the City of Mountain Brook. The location of the intersection is shown in Figure 4. Currently, the intersection is a three-way intersection controlled by a stop sign on River Oaks Road. The posted speed limit on Briar Oak Drive is 30 miles per hour. The prima facie speed limit on River Oaks Road is 30 miles per hour.



Figure 4. Site Location Map - Briar Oak Drive at River Oaks Road

Intersection Turning Movement Traffic Count

An intersection turning movement traffic count was performed at the intersection of Briar Oak Drive at River Oaks Road on Wednesday, September 23, 2020 from 7:00 to 9:00 a.m., 2:30 to 3:30 p.m., and 4:00 to 6:00 p.m. by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The intersection turning movement traffic count data is included in Appendix A. The peak hour turning movement traffic counts are shown in Figure 5.



Figure 5. Intersection Traffic Count

Intersection Capacity Analysis

Existing peak hour intersection capacity analyses were performed for the intersection of Briar Oak Drive at River Oaks Road using the method of analysis as presented in the 2010 Highway Capacity Manual, published by the Transportation Research Board. Capacities are expressed as levels of service, and range from a level of service "A" (highest quality of service) to a level of service "F" (jammed conditions). As a general rule, operation at a level of service "C" or better is desirable, with a level of service "D" considered acceptable during peak hours of traffic flow. The results of the intersection capacity analyses are included in Appendix B and are summarized in Table 4. As shown in Table 4, all approaches to the intersection operate at a level of service "A" for all time periods analyzed.

Table 4. Existing Intersection Capacity Analysis

Intersection	Approach	Movement	Level of Service		
			7:00-8:00 AM	2:30-3:30 PM	5:00-6:00 PM
Briar Oak Drive at River Oaks Road	Briar Oak Dr Eastbound	Left-Through	A	A	A
	Briar Oak Dr Westbound	Through-Right	A	A	A
	River Oaks Rd Southbound	Left-Right	A	A	A

Machine Traffic Counts

Machine traffic counts were performed on each leg of the intersection of Briar Oak Drive at River Oaks Road for a twenty-four (24) hour period on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The machine traffic count data is included in Appendix C. The hourly traffic count data is summarized in Table 5.

Speed Surveys

Speed surveys were performed for a twenty-four (24) hour period on each leg of the intersection of Briar Oak Drive at River Oaks Road on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The results of the speed surveys are included in Appendix D and are summarized in Table 6. Of particular note:

- the speed surveys found that the 85th percentile speed of traffic on both Briar Oak Drive and River Oaks Road are equal to or less than posted speed limit on these roadways
- 3% or less of all vehicles are exceeding the posted speed limit by more than 5 miles per hour

Table 6. Speed Survey Results

	Briar Oak Drive		River Oaks Road
	West of River Oaks Rd	East of River Oaks Rd	North of Briar Oak Dr
Vehicle Count	205	134	205
Minimum Speed	7 mph	6 mph	6 mph
Average Speed	23 mph	19 mph	18 mph
85 th Percentile Speed	29 mph	24 mph	22 mph
Maximum Speed	39 mph	27 mph	28 mph
Vehicles over 30 mph	20 (10%)	3 (2%)	0 (0%)
Vehicles over 35 mph	6 (3%)	1 (1%)	0 (0%)

Table 5. Machine Traffic Counts

Time	River Oaks Road Southbound			Briar Oak Drive			River Oaks Road Northbound			Total
	Northbound	Southbound		Total	West of River Oaks Rd		East of River Oaks Rd		Total	
		Westbound	Eastbound		Westbound	Eastbound	Westbound	Eastbound		
12-1 AM	0	0	0	0	0	0	0	0	0	0
1-2 AM	0	0	0	0	0	0	0	0	0	0
2-3 AM	0	0	0	0	0	0	0	0	0	0
3-4 AM	0	0	0	0	0	0	0	0	0	0
4-5 AM	0	0	0	0	0	0	0	0	0	0
5-6 AM	1	1	2	0	2	2	1	1	2	2
6-7 AM	6	7	13	3	3	6	2	6	8	14
7-8 AM	15	9	24	12	5	17	5	6	11	28
8-9 AM	8	4	12	6	5	11	2	4	7	19
9-10 AM	6	5	11	6	2	8	4	5	9	17
10-11 AM	6	6	12	8	3	11	3	2	5	17
11-12 PM	3	3	6	3	7	10	3	4	7	17
1-2 PM	2	4	6	4	3	7	1	3	4	10
2-3 PM	0	5	5	8	7	15	5	2	7	12
3-4 PM	0	17	17	21	8	29	17	2	19	48
4-5 PM	10	11	21	8	9	17	6	5	11	28
5-6 PM	13	12	25	12	10	22	11	3	14	39
6-7 PM	5	11	16	10	10	20	7	4	11	27
7-8 PM	7	5	12	9	4	13	4	1	5	17
8-9 PM	2	6	8	9	3	12	2	2	4	12
9-10 PM	0	0	0	1	1	2	1	1	2	4
10-11 PM	0	0	0	0	0	0	0	0	0	0
11-12 AM	0	0	0	0	0	0	0	0	0	0
Total	105	100	205	109	96	205	69	65	134	439

Sight Distance

The minimum criteria for intersection sight distance for traffic attempting to enter Briar Oak Drive from River Oaks Road was determined based on information in the AASHTO A Policy on the Geometric Design of Highways and Streets. The minimum criteria are based on the 85th percentile speed of traffic on Briar Oak Drive, which is 30 miles per hour. The minimum intersection sight distance criteria are as follows:

- Making a left turn – 335 feet
- Making a right turn – 250 feet

Intersection sight distance was measured in the field. The available intersection sight distance is displayed in Figure 6.

The measured sight distance looking to right and left from River Oaks Road indicates that minimum criteria are met and exceeded.



Figure 6. Intersection Sight Distance

Crash History

Five (5) years of crash history for the intersection of Briar Oak Drive at River Oaks Road were provided by the Mountain Brook Police Department. There were no crashes reported at the intersection during this time period.

Multi-Way Stop Warrant Analysis

The 2009 Manual on Uniform Traffic Control Devices, Section 2B.07, establishes minimum criteria for consideration of a multi-way stop sign installation. The criteria include the following:

- Crash history criteria
- Traffic volume criteria
- Engineering judgement criteria

The applicable sections from the MUTCD are copied below:

The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

- Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- Minimum volumes:**
 - The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 - The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 50 seconds per vehicle during the highest hour; but*
 - If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*

Other criteria that may be considered in an engineering study include:

- The need to control left-turn conflicts;
- The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

The data and analysis presented in this report show that neither the crash history criteria nor traffic volume criteria are currently met at the intersection of Briar Oak at River Oaks Road.

Considering the four (A-D) engineering judgement criteria, it is the opinion of the engineer that the intersection of Briar Oak Drive at River Oaks Road meets none of the criteria for justification for the installation of a multi-way stop at the intersection.

Recommendations

The engineer recommends that the City take no action regarding the installation of a multi-way stop at the intersection of Briar Oak Drive at River Oaks Road.

**SECTION 3
SPEED LIMIT EVALUATION
BRIAR OAK DRIVE**

Introduction

This report section documents an analysis to determine the appropriate posted speed limit for Briar Oak Drive in the City of Mountain Brook.

Existing Signage

The existing posted speed limit on Briar Oak Drive is 30 miles per hour. The locations of existing 30 mile per hour speed limit signs are shown in Figure 7.

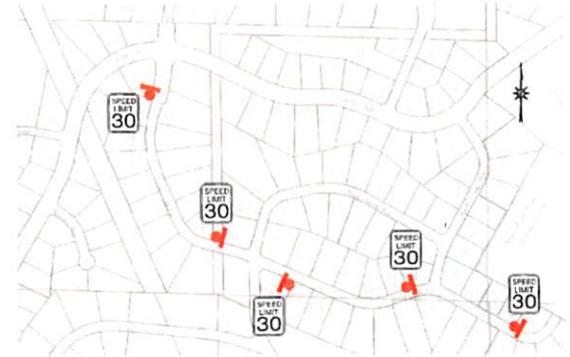


Figure 7. Speed Limit Sign Locations - Briar Oak Drive

APPENDIX I

Speed Surveys

Speed surveys were performed for a twenty-four (24) hour period at three locations on Briar Oak Drive on Tuesday to Wednesday, September 22 to 23, 2020 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The results of the speed surveys are included in Appendix D and are summarized in Table 7. Of particular note:

- the speed surveys found that the 85th percentile speed of traffic on Briar Oak Drive are equal to or less than posted speed limit on the roadway
- 3% or less of all vehicles are exceeding the posted speed limit by more than 5 miles per hour

Table 6. Speed Survey Results

	Briar Oak Drive		
	West of River Bend Rd	East of River Bend Rd	East of River Oaks Rd
Vehicle Count	149	205	134
Minimum Speed	6 mph	7 mph	6 mph
Average Speed	24 mph	23 mph	19 mph
85 th Percentile Speed	30 mph	29 mph	24 mph
Maximum Speed	38 mph	39 mph	37 mph
Vehicles over 30 mph	26 (17%)	20 (10%)	3 (2%)
Vehicles over 35 mph	5 (3%)	6 (3%)	1 (1%)

Safe Curve Speed Analysis

Skipper Consulting, Inc. performed a curve study on Briar Oak Drive. The roadway was driven at the posted speed limit, and a ball-bank Indicator was used to measure the degree of curvature on the curves of the roadway.

Safety criteria for curves is as follows:

Speed	Maximum Bank
20 mph or less	16°
25 mph	14°
30 mph	14°
35+ mph	12°

There are five significant curves on Briar Oak Drive which registered on the ball-bank Indicator. The location of the two curves is shown in Figure 8.

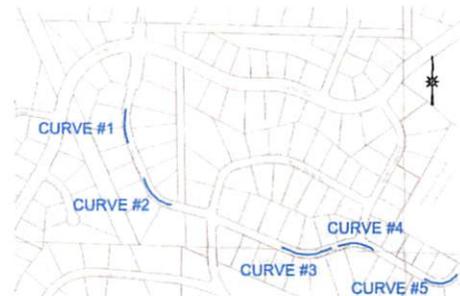


Figure 8. Curve Locations

The ball-bank measurements for the five curves were as follows:

	Eastbound	Westbound
Curve #1	14°	14°
Curve #2	18°	20°
Curve #3	14°	10°
Curve #4	14°	14°
Curve #5	22°	19°

As shown, there are two curves which have a ball-bank indicator reading of greater than 14 degrees, which are curve #2 and curve #5. Curve #5 is approaching the dead end, so is not of concern. Curve #2 should have an appropriate treatment applied, which is discussed in the "Recommendations".

Crash History

Five (5) years of crash history for Briar Oak Drive were provided by the Mountain Brook Police Department. There were two reported crashes reported during this time period.

The first crash (in 2017) was caused by a driver backing a vehicle from 3941 Briar Oak Drive into a vehicle parked on Briar Oak Drive.

The second crash (in 2020) was attributed to a medical condition causing a driver to cross the centerline of Briar Oak Drive and strike a vehicle parked on Briar Oak Drive near the dead end of Briar Oak Drive. Speed was not cited as a contributing circumstance to this crash.

Recommendations

Based on the results of the analysis presented in this report, the recommendation of the engineer is that no change be made to the posted speed limit on Briar Oak Drive. The study shows that the average speed of drivers is currently less than 25 miles per hour, and that the 85th percentile travel speed is equal to or less than the posted speed limit of 30 miles per hour. Furthermore, traffic volumes are extremely low on Briar Oak Drive, even for a residential roadway. There is no crash history which indicates the need for a change in the posted speed limit.

The study does indicate that one curve on Briar Oak Drive should receive treatment due to the ball-bank indicator reading being in excess of a safe level for 30 miles per hour. It is recommended that the City post two W1-2 curve warning signs with W13-1P 20 MPH placards at locations approximately as shown in Figure 9.



Figure 9. Recommendations

Appendix A

Intersection Turning Movement Traffic Counts

APPENDIX I

Mountain Brook, AL
TRAFFIC DATA, LLC
 1409 Turnham Lane
 Birmingham, AL 35216
 205-824-0125
 File Name : mountainbrook03
 Site Code : 00000000
 Start Date : 09/23/2020
 Page No : 1

Start Time	RIVER BEND RD Southbound			BRIAR OAK DR Westbound			RIVER BEND RD Northbound			BRIAR OAK DR Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	1	0	3	0	0	0	0	0	0	0	0	4
07:15 AM	0	1	0	1	1	0	1	4	0	1	1	2	12
07:30 AM	0	2	0	0	0	0	2	4	0	0	2	3	18
07:45 AM	0	2	0	1	1	0	0	0	2	0	0	2	8
Total	0	6	0	5	2	0	3	8	6	1	3	7	40
08:00 AM	0	2	0	3	0	0	0	0	0	1	0	0	6
08:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	1	1	0	1	1	0	1	0	1	0	0	1	7
08:45 AM	0	3	0	0	0	0	0	1	3	0	1	1	9
Total	1	7	0	4	1	0	1	1	4	1	1	2	23
02:30 PM	0	1	0	0	0	0	1	1	1	0	0	2	6
02:45 PM	1	3	1	0	1	0	0	4	2	1	0	2	15
Total	1	4	1	0	1	0	1	5	3	1	0	4	21
03:00 PM	0	9	0	4	1	0	0	2	5	0	0	1	22
03:15 PM	0	2	0	3	1	0	0	3	2	1	0	1	13
Total	0	11	0	7	2	0	0	5	7	1	0	2	35
04:00 PM	0	4	0	0	0	0	1	1	4	1	1	1	13
04:15 PM	1	1	0	1	1	0	0	5	0	1	0	0	11
04:30 PM	0	4	0	0	0	0	0	4	1	0	1	1	11
04:45 PM	0	1	0	3	1	0	1	2	2	1	1	1	13
Total	1	10	0	4	2	1	2	12	7	3	3	3	48
05:00 PM	0	2	0	0	0	0	0	1	2	1	0	0	6
05:15 PM	0	3	1	0	1	0	1	2	2	0	0	0	10
05:30 PM	0	3	0	4	0	0	1	2	2	1	1	0	14
05:45 PM	0	0	1	1	0	0	0	4	1	1	0	1	9
Total	0	8	2	5	1	0	2	9	7	3	1	1	39
Grand Total	3	46	3	25	9	1	9	40	33	10	8	19	208
Approach %	8.8	88.5	5.8	71.4	25.7	2.9	11.0	48.8	40.2	27.0	21.8	51.4	
Total %	1.5	22.3	1.5	12.1	4.4	0.5	4.4	18.4	16.0	4.9	3.9	9.2	

Start Time	RIVER BEND RD Southbound				BRIAR OAK DR Westbound				RIVER BEND RD Northbound				BRIAR OAK DR Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection																	
Volume	0	7	0	7	5	2	0	7	3	8	5	16	2	3	7	12	42
Percent	0.0	100.0	0.0	0.0	71.4	28.5	0.0	0.0	18.8	50.0	31.3	16.7	25.0	68.3			
07:30 AM	0	2	0	2	0	0	0	0	2	4	3	9	0	2	3	5	16
Peak Factor																	0.856
High Int. 07:30 AM					08:00 AM				07:30 AM								
Volume	0	2	0	2	3	0	0	3	2	4	3	9	0	2	3	5	
Peak Factor				0.875				0.583				0.444					0.800

Mountain Brook, AL
TRAFFIC DATA, LLC
 1409 Turnham Lane
 Birmingham, AL 35216
 205-824-0125
 File Name : mountainbrook03
 Site Code : 00000000
 Start Date : 09/23/2020
 Page No : 2

Start Time	RIVER BEND RD Southbound				BRIAR OAK DR Westbound				RIVER BEND RD Northbound				BRIAR OAK DR Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	08:00 AM				07:00 AM				07:00 AM				07:15 AM				
Volume	1	7	0	8	5	2	0	7	3	8	5	16	2	3	7	12	
Percent	12.5	87.5	0.0	0.0	71.4	28.6	0.0	0.0	18.8	50.0	31.3	16.7	25.0	68.3			
High Int. 08:45 AM	0	3	0	3	0	0	0	0	3	2	4	3	9	0	2	3	5
Peak Factor				0.807					0.583				0.444				0.800
Peak Hour From 02:30 PM to 05:45 PM - Peak 1 of 1																	
Intersection																	
Volume	1	15	1	17	7	3	0	10	1	10	10	21	2	0	8	8	58
Percent	5.9	88.2	5.9	0.0	70.0	30.0	0.0	0.0	4.8	47.8	47.8	25.0	0.0	75.0			
03:00 AM	0	9	0	9	4	1	0	5	0	2	5	7	0	0	1	1	22
Peak Factor									0.800			0.780					0.836
High Int. 03:00 PM					03:00 PM				02:45 PM								
Volume	0	9	0	9	4	1	0	5	0	2	5	7	1	0	2	3	
Peak Factor				0.472				0.800				0.780					0.867
Peak Hour From 02:30 PM to 05:45 PM - Peak 1 of 1																	
By Approach	02:30 PM				02:30 PM				04:00 PM				04:00 PM				
Volume	1	15	1	17	7	3	0	10	1	10	10	21	3	3	3	9	
Percent	5.9	88.2	5.9	0.0	70.0	30.0	0.0	0.0	4.8	47.8	47.8	33.3	33.3	33.3			
High Int. 03:00 PM	0	9	0	9	4	1	0	5	0	2	5	7	1	1	1	3	
Peak Factor				0.472				0.800				0.780					0.780

MINUTE BOOK 91

TRAFFIC DATA, LLC
1409 Turnham Lane
Birmingham, AL 35216
205-824-0125

File Name : mountainbrook04
Site Code : 00000000
Start Date : 09/23/2020
Page No : 1

TRAFFIC DATA, LLC
1409 Turnham Lane
Birmingham, AL 35216
205-824-0125

File Name : mountainbrook04
Site Code : 00000000
Start Date : 09/23/2020
Page No : 2

Start Time	RIVER OAKS RD Southbound			BRIAR OAK DR Westbound			BRIAR OAK DR Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	1	1	1	0	1	0	0	0	2
07:15 AM	1	0	1	0	1	1	2	0	2	4
07:30 AM	0	2	2	0	3	3	9	0	12	14
07:45 AM	3	2	5	1	0	1	2	0	3	8
Total	4	5	9	2	4	6	13	0	17	28
08:00 AM	0	0	0	0	1	1	1	0	2	2
08:15 AM	0	0	0	0	1	1	0	0	1	1
08:30 AM	1	0	1	0	1	1	1	0	2	3
08:45 AM	1	0	1	0	1	1	3	1	4	6
Total	2	0	2	0	3	3	5	1	9	12
02:30 PM	0	0	0	0	0	0	1	1	2	2
02:45 PM	0	0	0	0	3	3	5	1	6	9
Total	0	0	0	0	3	3	6	2	8	11
03:00 PM	3	2	5	1	0	1	2	1	3	9
03:15 PM	0	3	3	0	1	1	2	1	3	7
Total	3	5	8	1	1	2	4	2	6	16
03:45 PM	0	0	0	0	1	1	0	0	1	1
Total	0	0	0	0	1	1	0	0	1	2
04:00 PM	1	0	1	0	0	0	2	1	3	4
04:15 PM	0	2	2	0	0	0	1	1	2	3
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	1	1	2	0	0	0	2	2	4	6
Total	2	4	6	0	0	0	5	4	9	18
05:00 PM	1	1	2	0	2	2	0	0	2	4
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	1	3	4	0	0	0	1	1	2	6
05:45 PM	4	0	4	0	1	1	2	0	3	7
Total	6	4	10	0	3	3	4	1	8	18
06:00 PM	1	1	2	0	2	2	0	0	2	4
06:15 PM	0	0	0	0	0	0	1	0	1	1
06:30 PM	1	3	4	0	0	0	1	1	2	6
06:45 PM	4	0	4	0	1	1	2	0	3	7
Total	6	4	10	0	3	3	4	1	8	18
Grand Total	17	18	35	7	15	22	37	10	47	104
Approach %	48.8	51.4	31.8	69.2	78.7	21.3				
Total %	18.3	17.3	8.7	14.4	35.6	9.6				

Start Time	RIVER OAKS RD Southbound			BRIAR OAK DR Westbound			BRIAR OAK DR Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	4	5	9	2	4	6	0	13	0	13
07:15 AM	44.4	56.8	101.2	0	66.7	66.7	0	100.0	0.0	166.7
07:30 AM	0	2	2	0	3	3	0	9	0	9
07:45 AM	3	2	5	0	3	3	0	9	0	9
Total	47	60	107	2	70	72	0	122	0	122
Peak Factor	0.450	0.500	0.500							0.361

Start Time	RIVER OAKS RD Southbound			BRIAR OAK DR Westbound			BRIAR OAK DR Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	4	5	9	2	4	6	0	13	0	13
07:15 AM	44.4	56.8	101.2	0	66.7	66.7	0	100.0	0.0	166.7
07:30 AM	0	2	2	0	3	3	0	9	0	9
07:45 AM	3	2	5	0	3	3	0	9	0	9
Total	47	60	107	2	70	72	0	122	0	122
Peak Factor	0.450	0.500	0.500							0.361

Start Time	RIVER OAKS RD Southbound			BRIAR OAK DR Westbound			BRIAR OAK DR Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
02:30 PM	0	0	0	0	0	0	1	1	2	2
02:45 PM	0	0	0	0	3	3	5	1	6	9
Total	0	0	0	0	3	3	6	2	8	11
03:00 PM	3	2	5	1	0	1	2	1	3	9
03:15 PM	0	3	3	0	1	1	2	1	3	7
Total	3	5	8	1	1	2	4	2	6	16
03:45 PM	0	0	0	0	1	1	0	0	1	1
Total	0	0	0	0	1	1	0	0	1	2
04:00 PM	1	0	1	0	0	0	2	1	3	4
04:15 PM	0	2	2	0	0	0	1	1	2	3
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	1	1	2	0	0	0	2	2	4	6
Total	2	4	6	0	0	0	5	4	9	18
05:00 PM	1	1	2	0	2	2	0	0	2	4
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	1	3	4	0	0	0	1	1	2	6
05:45 PM	4	0	4	0	1	1	2	0	3	7
Total	6	4	10	0	3	3	4	1	8	18
06:00 PM	1	1	2	0	2	2	0	0	2	4
06:15 PM	0	0	0	0	0	0	1	0	1	1
06:30 PM	1	3	4	0	0	0	1	1	2	6
06:45 PM	4	0	4	0	1	1	2	0	3	7
Total	6	4	10	0	3	3	4	1	8	18
Grand Total	17	18	35	7	15	22	37	10	47	104
Approach %	48.8	51.4	31.8	69.2	78.7	21.3				
Total %	18.3	17.3	8.7	14.4	35.6	9.6				

Appendix B

Intersection Capacity Analysis Worksheets

HCM 2010 TWSC

3: River Bend Rd & Briar Oak Dr

09/30/2020

Intersection												
Int Delay, s/veh 4.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NET	NBR	SBL	SBT	SBR
Lane Configurations	EBL		EBT		EBR		WBL		WBT		WBR	
Traffic Vol, veh/h	2	3	7	0	2	5	3	5	0	7	0	0
Future Vol, veh/h	2	3	7	0	2	5	3	5	0	7	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	58	58	58	44	44	44	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	5	12	0	3	9	7	18	11	0	8	0
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	52	51	8	55	46	24	8	0	0	29	0	0
Stage 1	5	8	-	38	38	-	-	-	-	-	-	-
Stage 2	44	43	-	17	8	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	952	844	1080	948	850	1058	1625	-	-	1597	-	-
Stage 1	1019	893	-	982	867	-	-	-	-	-	-	-
Stage 2	975	863	-	1008	893	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	939	841	1080	931	847	1058	1625	-	-	1597	-	-
Mov Cap-2 Maneuver	939	841	-	931	847	-	-	-	-	-	-	-
Stage 1	1015	893	-	978	864	-	-	-	-	-	-	-
Stage 2	959	860	-	992	893	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	8.7	8.7	1.4	0								
HCM LOS	A	A										
Minor Lane/Minor Mvmt	NBL	NET	NBR	EBL	EBT	EBR	SBL	SBT	SBR			
Capacity (veh/h)	1625	-	-	965	968	1597	-	-	-			
HCM Lane V/C Ratio	0.004	-	-	0.02	0.012	-	-	-	-			
HCM Control Delay (s)	7.2	0	-	8.7	8.7	0	-	-				

Intersection												
Int Delay, s/veh 3.5												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔		↔		↔		↔		↔		↔	
Traffic Vol, veh/h	2	0	6	7	3	0	1	10	10	1	11	1
Future Vol, veh/h	2	0	6	7	3	0	1	10	10	1	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	50	50	75	75	75	75	47	47	47
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	9	14	6	0	1	13	13	2	23	2
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	53	55	24	55	51	20	25	0	0	26	0	0
Stage 1	28	28	-	22	22	-	-	-	-	-	-	-
Stage 2	25	28	-	33	26	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Slg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Slg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	951	839	1058	948	844	1064	1603	-	-	1601	-	-
Stage 1	994	876	-	1002	881	-	-	-	-	-	-	-
Stage 2	958	876	-	986	875	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	944	837	1058	939	842	1064	1603	-	-	1601	-	-
Mov Cap-2 Maneuver	944	837	-	939	842	-	-	-	-	-	-	-
Stage 1	993	875	-	1001	880	-	-	-	-	-	-	-
Stage 2	960	875	-	979	874	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	8.5	9.1	0.3	0.6								
HCM LOS	A	A										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
Capacity (veh/h)	1603	-	-	1027	908	1601	-	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	0.012	0.022	0.001	-	-	-	-	-	-
HCM Control Delay (s)	7.2	0	-	6.5	9.1	7.3	0	-	-	-	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-	-	-	-	-
HCM 95th %ile Q(veh)	0	-	-	0	0.1	0	-	-	-	-	-	-

Intersection												
Int Delay, s/veh 6.4												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR				
Lane Configurations	↔		↔		↔		↔					
Traffic Vol, veh/h	13	0	2	4	4	5						
Future Vol, veh/h	13	0	2	4	4	5						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	-						
Veh in Median Storage, #	-	0	0	-	0	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	36	36	50	50	45	45						
Heavy Vehicles, %	0	0	0	0	0	0						
Mvmt Flow	36	0	4	8	9	11						
Major/Minor	Major1	Major2	Minor2									
Conflicting Flow All	12	0	-	0	80	8						
Stage 1	-	-	-	-	8	-						
Stage 2	-	-	-	-	72	-						
Critical Hdwy	4.1	-	-	-	6.4	6.2						
Critical Hdwy Slg 1	-	-	-	-	5.4	-						
Critical Hdwy Slg 2	-	-	-	-	5.4	-						
Follow-up Hdwy	2.2	-	-	-	3.5	3.3						
Pot Cap-1 Maneuver	1620	-	-	-	927	1080						
Stage 1	-	-	-	-	1020	-						
Stage 2	-	-	-	-	956	-						
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	1620	-	-	-	907	1080						
Mov Cap-2 Maneuver	-	-	-	-	907	-						
Stage 1	-	-	-	-	966	-						
Stage 2	-	-	-	-	956	-						
Approach	EB	WB	SB									
HCM Control Delay, s	7.3	0	8.7									
HCM LOS	A											
Minor Lane/Major Mvmt	EBL	EBT	WBL	WBR	SBL	SBR						
Capacity (veh/h)	1520	-	-	-	996	-						
HCM Lane V/C Ratio	0.022	-	-	-	0.02	-						
HCM Control Delay (s)	7.3	0	-	-	8.7	-						
HCM Lane LOS	A	A	-	-	A	-						
HCM 95th %ile Q(veh)	0.1	-	-	-	0.1	-						

Intersection												
Int Delay, s/veh 3.5												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔		↔		↔		↔		↔		↔	
Traffic Vol, veh/h	3	3	3	4	2	1	2	12	7	1	10	0
Future Vol, veh/h	3	3	3	4	2	1	2	12	7	1	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	50	50	75	75	75	75	47	47	47
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	4	4	8	4	2	3	16	9	2	21	0
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	55	59	21	55	52	21	21	0	0	25	0	0
Stage 1	25	25	-	27	27	-	-	-	-	-	-	-
Stage 2	30	31	-	29	25	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Slg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Slg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	948	839	1062	946	843	1062	1608	-	-	1603	-	-
Stage 1	996	878	-	996	877	-	-	-	-	-	-	-
Stage 2	992	873	-	993	878	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	940	836	1052	937	840	1062	1608	-	-	1603	-	-
Mov Cap-2 Maneuver	940	836	-	937	840	-	-	-	-	-	-	-
Stage 1	996	877	-	994	875	-	-	-	-	-	-	-
Stage 2	984	871	-	984	877	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	8.9	9	0.7	0.7								
HCM LOS	A	A										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
Capacity (veh/h)	1608	-	-	927	922	1603	-	-	-	-	-	-
HCM Lane V/C Ratio	0.002	-	-	0.013	0.015	0.001	-	-	-	-	-	-
HCM Control Delay (s)	7.2	0	-	8.9	9	7.2	0	-	-	-	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-	-	-	-	-
HCM 95th %ile Q(veh)	0	-	-	0	0	0	-	-	-	-	-	-

Intersection												
Int Delay, s/veh 5.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR				
Lane Configurations	↔		↔		↔		↔					
Traffic Vol, veh/h	10	4	1	5	3	5						
Future Vol, veh/h	10	4	1	5	3	5						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	-						
Veh in Median Storage, #	-	0	0	-	0	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	56	56	42	42	40	40						
Heavy Vehicles, %	0	0	0	0	0	0						
Mvmt Flow	17	7	2	12	8	13						
Major/Minor	Major1	Major2	Minor2									
Conflicting Flow All	14	0	-	0	49	8						
Stage 1	-	-	-	-	8	-						
Stage 2	-	-	-	-	41	-						
Critical Hdwy	4.1	-	-	-	6.4	6.2						
Critical Hdwy Slg 1	-	-	-	-	5.4	-						
Critical Hdwy Slg 2	-	-	-	-	5.4	-						
Follow-up Hdwy	2.2	-	-	-	3.5	3.3						
Pot Cap-1 Maneuver	1617	-	-	-	965	1080						
Stage 1	-</											

MINUTE BOOK 91

F

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

Location: I-65 (North of I-20) at I-20, AL
City: Birmingham, AL
Speed Limit: 50 mph

DATE: 10/12/2020
Time: 7:00 AM - 4:00 PM
Count: 450
Peak Hour: 7:00 AM - 8:00 AM
Volume: 450
OCC: 0.45

Hour	Count	Peak Hour	Volume	OCC
7:00 AM	110	7:00 AM - 8:00 AM	450	0.45
8:00 AM	100			
9:00 AM	100			
10:00 AM	100			
11:00 AM	100			
12:00 PM	100			
1:00 PM	100			
2:00 PM	100			
3:00 PM	100			
4:00 PM	100			

H

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

Location: I-65 (North of I-20) at I-20, AL
City: Birmingham, AL
Speed Limit: 50 mph

DATE: 10/12/2020
Time: 7:00 AM - 4:00 PM
Count: 450
Peak Hour: 7:00 AM - 8:00 AM
Volume: 450
OCC: 0.45

Hour	Count	Peak Hour	Volume	OCC
7:00 AM	110	7:00 AM - 8:00 AM	450	0.45
8:00 AM	100			
9:00 AM	100			
10:00 AM	100			
11:00 AM	100			
12:00 PM	100			
1:00 PM	100			
2:00 PM	100			
3:00 PM	100			
4:00 PM	100			

G

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

Location: I-65 (North of I-20) at I-20, AL
City: Birmingham, AL
Speed Limit: 50 mph

DATE: 10/12/2020
Time: 7:00 AM - 4:00 PM
Count: 450
Peak Hour: 7:00 AM - 8:00 AM
Volume: 450
OCC: 0.45

Hour	Count	Peak Hour	Volume	OCC
7:00 AM	110	7:00 AM - 8:00 AM	450	0.45
8:00 AM	100			
9:00 AM	100			
10:00 AM	100			
11:00 AM	100			
12:00 PM	100			
1:00 PM	100			
2:00 PM	100			
3:00 PM	100			
4:00 PM	100			

I

TRAFFIC DATA, LLC
1409 Turnham Lane, Birmingham, AL 35216
205-824-0125

Location: I-65 (North of I-20) at I-20, AL
City: Birmingham, AL
Speed Limit: 50 mph

DATE: 10/12/2020
Time: 7:00 AM - 4:00 PM
Count: 450
Peak Hour: 7:00 AM - 8:00 AM
Volume: 450
OCC: 0.45

Hour	Count	Peak Hour	Volume	OCC
7:00 AM	110	7:00 AM - 8:00 AM	450	0.45
8:00 AM	100			
9:00 AM	100			
10:00 AM	100			
11:00 AM	100			
12:00 PM	100			
1:00 PM	100			
2:00 PM	100			
3:00 PM	100			
4:00 PM	100			

APPENDIX I

**MINUTES OF THE REGULAR OF THE
CITY COUNCIL OF THE CITY OF MOUNTAIN BROOK
OCTOBER 12, 2020**

[Pursuant to a proclamation issued by Governor Kay Ivey on March 18, 2020, elected officials are allowed to meet remotely by means of Internet or telephone conference and the public was invited to listen to, observe, or participate in the meeting by such means. The elected officials met by way of Internet video conference and allowed the public to listen, observe and participate by the same means.]

The City Council of the City of Mountain Brook, Alabama and Board of Directors of the Mountain Brook Emergency Communications District met by way of Internet video conference at 7:00 p.m. on the 12th day of October, 2020. The Council President called the meeting to order and the roll was called with the following results:

Present: Virginia C. Smith, Council President
William S. Pritchard III, Council President Pro Tempore
Philip E. Black
Lloyd C. Shelton
Alice B. Womack
Stewart Welch III, Mayor

Absent: None

Also present were City Attorney Carl Johnson, City Manager Sam Gaston, and City Clerk Steven Boone.

The Council President stated that a quorum was present and that the meeting was open for the transaction of business

1. PRESENTATION

Library Director Lindsay Gardner read aloud Resolution No. 2020- 178 (Exhibit 12) expressing the City's gratitude to Penny Page for her service on the O'Neal Library Board.

2. CONSENT AGENDA

Council President Smith announced that the following matters will be considered at one time on the consent agenda provided no one in attendance objects:

Approval of the minutes of the September 28, 2020, regular meeting of the City Council

2020-167	Authorize the execution of a service agreement between the City and All In Mountain Brook	Exhibit 1, Appendix 1
2020-168	Authorize the execution of a service agreement between the City and Mountain Brook Chamber of Commerce	Exhibit 2, Appendix 2
2020-169	Authorize the execution of a service agreement between the City and Birmingham Zoo	Exhibit 3, Appendix 3
2020-170	Authorize the execution of a service agreement between the City and Birmingham Botanical Society	Exhibit 4, Appendix 4
2020-171	Authorize the execution of a service agreement between the City and Jefferson Blount St. Clair Mental Health Authority	Exhibit 5, Appendix 5

2020-172	Authorize the execution of a service agreement between the City and Prescott House	Exhibit 6, Appendix 6
2020-173	Accept the professional services proposal submitted by Skipper Consulting, Inc. for a traffic study and potential traffic control device design for the crosswalk crossing Montevallo Road west of Canterbury Road and design of a pedestrian-actuated flashing beacon for the crosswalk crossing Overbrook Road at Pine Crest Road	Exhibit 7, Appendix 7
2020-174	Authorize the execution of the engagement letter for the financial and compliance audit of the City as of and for the year ended September 30, 2020	Exhibit 8, Appendix 8
2020-175	Accept the professional services proposal submitted by Fontenot Benefits & Actuarial Consulting for their valuation of the City's retiree medical benefit plan as required every two year by GASB 75 and assist in the development of the required financial disclosures of the fiscal years ending September 30, 2020 and 2021	Exhibit 9, Appendix 9
2020-176	Ratify the acceptance of the professional services proposal submitted by Segal Consulting for actuarial consultation services	Exhibit 10, Appendix 10
2020-177	Declare certain property surplus and authorizing its sale at public Internet auction (or disposal of items not sold at said auction)	Exhibit 11, Appendix 11
2020-178	Resolution expressing gratitude to Penny Page for her service on the O'Neal Library Board	Exhibit 12
2020-179	Authorize the installation of a fire hydrant to serve the Overton Village Townhomes the cost of installation to be paid by the developer	Exhibit 13

Thereupon, the foregoing minutes and resolutions were introduced by Council President Smith and a motion for their immediate adoption made by Council member Shelton. The minutes and resolutions were then considered by the City Council. Council member Black seconded the motion to adopt the foregoing minutes and resolutions. Then, upon the question being put and the roll called, the vote was recorded as follows:

Ayes: Virginia C. Smith, Council President
William S. Pritchard III, Council President Pro Tempore
Philip E. Black
Lloyd C. Shelton
Alice B. Womack

Nays: None

Abstained: None

Council President Smith thereupon declared that said minutes and resolutions (Nos. 2020-167 through 2020-179) were adopted by a vote of 5—0 that and as evidence thereof she signed the same.

3. PUBLIC COMMENTS

Council member Black:

- Will not be present at the next meeting due to a business conflict
- It has been an incredible honor to serve with everyone over the past four years
- Has enjoyed working with Sam, Janet, Steve, Lindsay, Ronnie, and Shanda
- The City is blessed to have such a dedicated staff who put the City first
- The Mayor has been so enthusiastic, set the bar so high and has been great to watch you work
- Chief Cook and Chief Mullins are appreciated more than you will ever know. The City is in good hands under your respective leadership.
- Alice has been so patient and a real source of strength
- In spite of the reputation of CPAs, Lloyd has a terrific personality. Lloyd has taught me a lot and the City is in good hands with you and Steve. You do such great and essential work for the City.
- It would be hard to overstate the kind of leadership you represent. Any important thing that happens in the City has your hand prints on it. Has sat through many contentious meetings but through your calmness and fairness we have made it through the meetings and you are such an inspiration.
- Billy has taken me under your wings and has done so much for me personally and on the Council. You seem to be everywhere that business is taking place in the City.
- Hopes all of you continue to serve the City and it is amazing the type of work you have done and I have really enjoyed it.

4. ANNOUNCEMENT

The next regular meeting of the City Council is October 26, 2020, at 7:00 p.m. (means and location to be announced).

4. EXECUTIVE SESSION AND ADJOURNMENT

There being no further business or matters for discussion, Council President Pro Tempore Pritchard made a motion that the City Council convene in executive session to discuss a matter involving good name and character and that the City Council shall not reconvene upon conclusion of the executive session. The City Attorney then certified that the subject matter of the executive session is permissible under the Open Meetings Act. The motion was seconded by Council President Smith. Then, upon the question being put and the roll called, the vote was recorded as follows:

Ayes: Virginia C. Smith, Council President
William S. Pritchard III, Council President Pro Tempore
Philip E. Black
Lloyd C. Shelton
Alice B. Womack

Nays: None

Abstained: None

Council President Smith announced that the motion carried by a vote of 5—0 then adjourned the meeting at approximately 7:05 p.m.

5. CERTIFICATION

I, Steven Boone, City Clerk of the City of Mountain Brook, Alabama, certify the above is a true and correct transcript of the regular meeting of the City Council of the City of Mountain Brook, Alabama by Internet videoconference on October 12, 2020, and that the meeting was duly called and held in all respects in accordance with the laws of the State of Alabama and bylaws of the City and that a quorum was present.

City Clerk Approved by
City Council October 26, 2020

EXHIBIT 1**RESOLUTION NO. 2020-167**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, that either the Mayor or the City Manager of the City is hereby authorized and directed, for and on behalf of the City, to enter into an agreement with All In Mountain Brook, in the form as attached hereto as Exhibit A, subject to such minor changes as may be determined appropriate by the City Attorney.

APPENDIX 1**EXHIBIT 2****RESOLUTION NO. 2020-168**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama that the City Council hereby authorizes the execution of an agreement between the City and Mountain Brook Chamber of Commerce, in the form as attached hereto as Exhibit A, subject to minor changes as may be determined appropriate by the City Attorney.

APPENDIX 2**EXHIBIT 3****RESOLUTION NO. 2020-169**

WHEREAS, the Birmingham Zoo (“Zoo”) is a regional educational and entertainment attraction located adjacent to the municipal limits of the City of Mountain Brook (“City”); and

WHEREAS, the Zoo serves the Mountain Brook community and its citizens through educational and informational programs, offering educational and family entertainment options, and through its cooperation in the City’s recent flood control efforts; and

WHEREAS, the City, as a community partner, supports the mission and purpose of the Zoo, and has provided financial commitments to the Zoo as a result of the Zoo’s commitments and service to the City; and

WHEREAS, the City Council of the City of Mountain Brook wishes to extend those financial commitments to the Zoo for an additional year, all as set forth in the attached Agreement.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain Brook that the City's financial commitments to the Zoo shall be and hereby is extended for an additional year as set forth in the attached Agreement.

BE IT FURTHER RESOLVED that the commitments between the parties expressed in the Agreement are deemed to be fair and adequate and serve a public purpose, and the Mayor is hereby authorized to execute the Agreement on behalf of the City.

APPENDIX 3

EXHIBIT 4

RESOLUTION NO. 2020-170

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, that either the Mayor or the City Manager of the City is hereby authorized and directed, for and on behalf of the City, to enter into a contract with the Birmingham Botanical Society subject to such minor changes as may be determined appropriate by the City Attorney, a copy of which contract is attached hereto as Exhibit A.

APPENDIX 4

EXHIBIT 5

RESOLUTION NO. 2020-171

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, that either the Mayor or the City Manager of the City is hereby authorized and directed, for and on behalf of the City, to enter into an agreement with the Jefferson–Blount–St. Clair Mental Health Authority, in the form as attached hereto as Exhibit A, subject to such minor changes as may be determined appropriate by the City Attorney.

APPENDIX 5

EXHIBIT 6

RESOLUTION NO. 2020-172

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, that either the Mayor or the City Manager of the City is hereby authorized and directed, for and on behalf of the City, to enter into a contract with the Prescott House subject to such minor changes as may be determined appropriate by the City Attorney, a copy of which contract is attached hereto as Exhibit A.

APPENDIX 6

EXHIBIT 7**RESOLUTION NO. 2020-173**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, that City Council hereby authorizes the execution of a professional services agreement between the City and Skipper Consulting, Inc., in the form as attached hereto as Exhibit A, for a traffic study and potential traffic control device design for the crosswalk crossing Montevallo west of Canterbury Road and for a pedestrian-actuated flashing beacon for the crosswalk crossing Overbrook Road at Pine Crest Road.

APPENDIX 7

EXHIBIT 8**RESOLUTION NO. 2020-174**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, that the City Council hereby authorizes either the Mayor or City Manager to execute, for and on behalf of the City Council, the audit engagement letter, in the form attached hereto as Exhibit A, with respect to the City's annual independent financial audit.

APPENDIX 8

EXHIBIT 9**RESOLUTION NO. 2020-175**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama that the City Council hereby accepts the professional services proposal submitted by Fontenot Benefits & Actuarial Consulting (Exhibit A attached hereto) for their actuarial valuation of the City's retiree medical benefit plan as required [every two years] by GASB Statement 75 and assist in the development of the required financial disclosures for the fiscal years ending September 30, 2020 and 2021.

APPENDIX 9

EXHIBIT 10**RESOLUTION NO. 2020-176**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama that the City Council hereby ratifies the acceptance of the professional services proposal submitted by Segal Consulting (Exhibit A attached hereto) for actuarial consultation services.

APPENDIX 10

EXHIBIT 11**RESOLUTION NO. 2020-177**

**A RESOLUTION AUTHORIZING THE SALE OR DISPOSAL
OF CERTAIN SURPLUS PROPERTY**

WHEREAS, the City of Mountain Brook, Alabama, has certain items of personal property which are no longer needed for public or municipal purposes; and

WHEREAS, Section 11-43-56 of the Alabama Code of 1975 authorizes the municipal governing body to dispose of unneeded personal property.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain Brook, as follows:

Section 1. It is hereby established and declared that the following property owned by the City of Mountain Brook, Alabama is not needed for public or municipal purposes and is hereby declared surplus property:

Five (5) office chairs with arms and casters

Section 2. That the City Manager, or his designated representative, is hereby authorized and directed to sell said property by way of public Internet auction or to dispose of said items not sold.

APPENDIX 11

EXHIBIT 12

RESOLUTION NO. 2020-178

WHEREAS, Virginia “Penny” White Page has served on the O’Neal Library Board since 2010; and

WHEREAS, Penny Page served as President of the O’Neal Library Board in 2018—2019; and

WHEREAS, Penny Page exemplified commitment to the O’Neal Library and to providing exceptional library services to Mountain Brook; and

WHEREAS, Penny Page generously shared her love of gardening to enhance the beautiful grounds of the O’Neal Library; and

WHEREAS, Penny Page personally signed more than 12,000 solicitation letters to potential donors; and

WHEREAS, Penny Page was unfailingly kind and gracious to her colleagues, Library staff, patrons, and City leaders; and now therefore,

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama that, on behalf of the residents of the City of Mountain Brook, the City Council does hereby proclaim and express its deep and abiding gratitude and special appreciation to Virginia “Penny” Page for her meaningful guidance and devoted service to the City of Mountain Brook.

EXHIBIT 13**RESOLUTION NO. 2020-179**

BE IT RESOLVED by the City Council of the City of Mountain Brook, Alabama, as follows:

1. That the Water Works and Sewer Board of the City of Birmingham, Alabama, be requested to install one fire hydrant to service the Overton Village Townhomes, at the following location:

Overton Village Townhomes, 4004 Fairhaven Drive, 35223

2. That Overton Partners, LLC will pay the Water Works and Sewer Board of the City of Birmingham, Alabama, the installation cost.
3. That the Water Works and Sewer Board of the City of Birmingham, Alabama, be authorized to charge the City additional rental charges for said fire hydrant to serve the Overton Village Townhomes area.
4. That the City Clerk be hereby directed to furnish the Water Works and Sewer Board of the City of Birmingham a certified copy of the resolution.

MINUTE BOOK 91

STATE OF ALABAMA)
COUNTY OF JEFFERSON)

CONTRACT AGREEMENT

THIS AGREEMENT is entered into on this the 12th day of October, 2020, by and between the City of Mountain Brook (hereinafter referred to as "City") and All In Mountain Brook (hereinafter referred to as "Contractor"):

WHEREAS, municipalities in the State of Alabama are authorized to promote the public health, safety, morals, security, prosperity, contentment and the general welfare of the community;

WHEREAS, All In Mountain Brook is an organization which has as one of its goals the promotion of public health, safety, morals, security, prosperity, contentment and the general welfare in the City of Mountain Brook—specifically, the enhancement and protection of the lives of Mountain Brook youth;

WHEREAS, the City Council of the City of Mountain Brook, Alabama desires to enter into a contract with the Contractor for the purpose of providing services and resources to residents of the City of Mountain Brook which are designed to combat issues and problems that place the lives and well-being of Mountain Brook youth at risk;

WITNESSETH,

1. That the City, for and in consideration of the covenants and agreements hereinafter set out to be kept and performed by the Contractor, does hereby agree to pay the Contractor the sum of \$10,000.00 (Ten Thousand and No/100 Dollars) (hereinafter referred to as the "Contract Amount") for performing the services herein provided for the period beginning October 1, 2020, through September 30, 2021.

2. SCOPE OF SERVICES:

In consideration of the covenants and agreements made herein by the City, the Contractor agrees that the Contractor shall be totally responsible for, and shall have exclusive control over, the management and disbursement of the Contract Amount, and that the Contract Amount shall be used only for the purposes herein described:

- a. To underwrite All In Mountain Brook parent and student educational programming, thereby targeting families and youth in grades Kindergarten through twelfth grade, including but not limited to All In Mountain Brook speakers, activities, services, materials, and communications designed to combat issues and problems that place the lives and well-being of Mountain Brook youth at risk.
b. Activities will be planned by appointed Parent Teacher Organization representatives in each school, along with administrators and school counselors.
c. Contractor anticipates the following disbursement of the contract amount:
(1) approximately \$7,000 for parent and community programs
(2) approximately \$3,000 for student programs
d. Contractor agrees to provide any and all personnel, supplies, and/or equipment necessary for the services herein to be provided.

3. The Contractor agrees to provide to the City at all reasonable times and places an accounting of the Contractor's expenditure of the Contract Amount.

4. The Contractor shall not transfer or assign this contract or any of the rights and privileges granted herein without the prior written consent of the City.

5. The Contractor agrees that upon violation of any of the covenants and agreements herein contained, on account of any act or omission of the Contractor, the City may, at its option, terminate and cancel this contract and to exercise any remedy, at its option, available to it whether in law or equity.

6. The Contractor agrees it will comply with Title 6 of the Civil Rights Act of 1964 assuring that no person under its employ will be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination on the grounds of race, sex, color, national origin or handicap.

7. Notwithstanding any of the other provisions contained in this contract, the City shall maintain the right to terminate this contract upon proper notice, which shall be in writing and shall be provided to the Contractor at least 30 days prior to the intended date of cancellation.

8. Except as otherwise expressly provided in this Agreement, any notice, consent or other communication required or permitted under this Agreement must be in writing and will be deemed received at the time it is personally delivered, on the day it is sent by facsimile transmission, on the second day after its deposit with any commercial air courier or express service, or, if mailed, three days after the notice is deposited in the United States mail addressed as follows:

To City of Mountain Brook: City Manager, City of Mountain Brook, Post Office Box 130009, Mountain Brook, Alabama 35213
To Contractor: All In Mountain Brook, c/o Dr. Dale Wisely

9. Any time period stated in a notice will be computed from the time the notice is deemed received. Either party may change its mailing address or the individual to receive notice by notifying the other party as provided in this paragraph.

10. No oral agreement or communication with any officer, agent, employee, or consultant of the City either before or after execution of this Agreement will affect or modify any of the terms or obligations contained in this Agreement. Any such oral agreement or communication will be considered as unofficial information and in no way binding upon City or Contractor. Any amendment to this Agreement must be in writing and signed by both parties.

APPENDIX

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this the ___ day of ___, 2020

CITY OF MOUNTAIN BROOK,
A Municipal Corporation
BY:
Mayor, City of Mountain Brook

WITNESSED:
BY:

ALL IN MOUNTAIN BROOK
BY:
Its Authorized Agent
Print name: Dale Wisely
Title: Executive Director, All in Mountain Brook

STATE OF ALABAMA)
COUNTY OF JEFFERSON)

I, a notary public in and for said County in said State, hereby certify that Dale Wisely whose name as Authorized Agent of All in Mountain Brook, a nonprofit corporation, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the instrument, she, as such officer and with full authority executed the same voluntarily for and as the act of said corporation.

Given under my hand this the ___ day of ___, 2020.

NOTARY PUBLIC
My Commission Expires:

EXHIBIT A

AGREEMENT FOR SERVICES

This Agreement entered into between the City of Mountain Brook, an Alabama municipal corporation ("City") and Mountain Brook Chamber of Commerce, an Alabama non-profit corporation ("Chamber"). City and Chamber hereby agree as follows.

- 1. This Agreement shall be in effect for a period of two years (October 1, 2020 through September 30, 2022).
2. Notwithstanding any other provision of this Agreement, it is agreed that City shall not be liable for any of the debts or obligations incurred by Chamber, nor shall City be deemed or considered a partner, joint venture or otherwise interested in the assets of Chamber, or profits earned or derived by Chamber, nor shall Chamber at any time use the name or credit of City in purchasing, or attempting to purchase, any equipment, supplies or any other materials or services.
3. Chamber, in the performance of its operations and obligations hereunder, shall not be deemed to be an agent of City, but shall be deemed to be an independent contractor in every respect and shall take all steps, at Chamber's expense, as City may, from time to time, request to indicate that Chamber is an independent contractor.
4. City shall allow Chamber to include membership application, Chamber information and cover letter to be included with the City's annual business license renewal mailing.
5. Chamber may not transfer or assign its interest in this Agreement or assign its rights, duties or obligations under this Agreement without the prior written approval of City.
6. City shall not assume any responsibility for the means by which, or the manner in which, services are provided by Chamber.
7. Chamber agrees to comply strictly with all applicable ordinances and laws while performing its obligations under this Agreement.
8. City agrees to pay Chamber an amount not to exceed the sum of \$153,235.00 each year from October 1, 2020 through September 30, 2022 for all services to be performed by Chamber under this Agreement. Said sum shall be paid as follows:

Table with 2 columns: Installment Due Date or Event, Amount. Rows include: Upon execution of this Agreement (\$38,308.75), December 1, 2020 (\$38,308.75), May 1, 2021 (\$38,308.75), September 1, 2021 (\$38,308.75), On or after October 1, 2020 and after the fiscal 2021 budget is approved by the City (\$38,308.75), December 1, 2021 (\$38,308.75).

or otherwise contact Chamber, but would otherwise have to call upon City for the services and information enumerated in the above item;

- (j) welcome individuals and groups deemed by City to be important to City, and assist and help in coordinating ground-breaking ceremonies, openings, -civic presentations and other activities involving City and its officials;
(k) report semi-annually to the Mountain Brook City Council on activities within City relating to economic development and other important subjects relating to City;
(l) assist businesses in conjunction with the City Council and assist new and expanding businesses, agencies, institutions and people moving to the area; and through management and staff of the Chamber, as well as volunteers, to do what is possible to foster and promote the City to create and maintain its good name.
10. In addition to the foregoing services to be provided by Chamber to City:
(a) The Chamber shall solicit and secure funds from various merchants located in the City where such funds shall be used toward the cost of advertising.
(b) Chamber will assist in the planning and implementation of at least two major promotional campaigns for each of the three major commercial areas of the City and assist in any other planned and approved minor event for any of the villages or commercial areas of the City. I.e. Highway 280 or Overton Village, which may include but is not limited to advertising, five entertainment, promotional prizes, contest prizes, and refreshments.
(c) Chamber shall use its best good faith efforts to sell advertisements for the Mountain Brook Reporter, City's quarterly newsletter. The gross receipts ("Receipts") from the sale of such advertisements shall be divided equally between City and Chamber. Chamber shall pay City its share of the Receipts on the fifteenth day of each month following the end of each calendar quarter (April 15, July 15, October 15 and January 15) for advertisements sold during each such calendar quarter.
(d) Chamber will conduct a yearly membership drive.
(e) Chamber shall continue to aggressively promote, market and administer the Village Gold Gift Certificate Program along with developing, marketing and administering other phases of the Village Gold Program.
(f) Chamber shall continue to develop its web technology as one of the primary methods of marketing the City, its commercial areas and individual businesses, along with serving as a primary communication tool to the residence and general public.

Table with 2 columns: Installment Due Date or Event, Amount. Rows include: May 1, 2021 (\$38,308.75), September 1, 2021 (\$38,308.75).

- 9. In consideration of the foregoing, Chamber agrees to provide City the following services:
(a) provide and maintain within the Chamber organization a program for citywide economic development;
(b) provide a professionally qualified Chamber staff to carry on the functions of Chamber,
(c) seek, discover and endeavor to attract and promote tourism and commercial development for the benefit and economic improvement of City;
(d) gather, keep updated, research and distribute information and data to be used as advertisements and presentations for general and specific commercial prospects;
(e) develop, produce and secure maps, charts, photographs, brochures, briefing facilities, reports, etc., as are necessary and required to promote adequately new and expanding commercial and office development within City;
(f) for the economic development of City, maintain contact, and cooperate and work closely, with other agencies and organizations with similar purposes such as the Alabama Development Office, industrial development departments of public and private utilities, The Metropolitan Development Board, local, area and regional planning agencies, highway, air and other transportation agencies, organizations and individuals;
(g) stay familiar with local, state, regional and national trends in economic development; create more and better jobs, for the benefit of City and its citizens, through land control, site development, local and area technical institutions and any and all other sources and aids.
(h) receive, study and respond to all mail inquiries and City referrals which are directly or otherwise sent to City by potential visitors, businesses and professional people, students from all over the United States and the world, research and survey agencies and outside sources, individuals seeking information about the community, its people, government, history, economic base, institutions, professions, state and federal agencies, schools and educational institutions, housing, job opportunities, legal professions, hospitals, and paramedical services, churches, climatic conditions, laws and statutes, taxes and licenses;
(i) serve as principal public relations and information agency for City and for people who are referred to Chamber by City and who come to Chamber's office

- (g) Chamber will continue to develop a branding image for the organization and its membership to include marketing materials in keeping with the image of the Chamber and the City of Mountain Brook.

IN WITNESS WHEREOF, City of Mountain Brook has caused this Agreement to be executed by its duly authorized Mayor and Mountain Brook Chamber of Commerce has caused this Agreement to be executed by its duly authorized corporate officer, on the date or dates beneath their signatures.

ATTEST: CITY OF MOUNTAIN BROOK
By _____ Its City Clerk
By _____ Its Mayor

ATTEST: MOUNTAIN BROOK CHAMBER OF COMMERCE
By _____ Its _____
By _____ Its _____
Date of execution

APPENDIX 2

AGREEMENT FOR SERVICES

THIS AGREEMENT made this 12th day of October 2020 by and between the CITY OF MOUNTAIN BROOK, ALABAMA ("Mountain Brook" a municipal corporation of the State of Alabama, and the BIRMINGHAM ZOO, INC. ("Zoo" an Alabama non-profit corporation.

WHEREAS, the City desires to increase the learning opportunities for students who attend Mountain Brook City Schools; and

WHEREAS, the Zoo has developed certain programs, exhibits, and learning opportunities which, in the City's opinion, will be helpful and instructive to said students; and

WHEREAS, such programs, exhibits, and learning experiences are not available at Mountain Brook City Schools; and

WHEREAS, the Zoo has agreed to work cooperatively with and assist the City with future public works projects; and

WHEREAS, the City has agreed to pay the Zoo the sum of Ten Thousand Dollars (\$10,000.00), in consideration of the Zoo providing the City the services referred to in this Agreement.

NOW, THEREFORE, consideration of the promises and in consideration of the covenants and agreements contained herein, the City and the Zoo hereby agree as follows:

- 1. The City shall pay to the Zoo Ten Thousand Dollars (\$10,000.00) within sixty (60) days of execution of the agreement and receipt of the Zoo's annual report for the fiscal year ended September 30, 2020.
2. In consideration of the payment of the funds as provided herein, the Zoo shall provide at least the following services to the City ("Services") to the best of their ability based on the health and well-being of all parties due to COVID-19, and the guidelines for public safety issued by Jefferson County:
a. The Zoo will provide educational resources for all pre-scheduled field trips to the Zoo from Mountain Brook City Schools for one (1) year from the date of execution of this Agreement.
b. The Zoo will provide to Mountain Brook City Schools a series of educational programming and classes targeting elementary, middle, and high school students free of charge.
c. The Zoo will use its best efforts to work cooperatively with the City and provide assistance and support to the City with the City's future public works projects that are located near the Zoo.
3. The Zoo shall provide the personnel, supplies, equipment, and expertise necessary to fulfill its obligations to Mountain Brook City Schools under the terms of this Agreement.

business for or on behalf of the Zoo be deemed to be agents or employees of the City.

4. The Zoo shall indemnify the City and its agents, employees, and elected officials and hold them harmless from and against all actions, causes of action, claims, demands, damages, losses and expenses of any kind, including, but not limited to attorney's fees and court costs, which may be asserted against, or suffered by the City or its agents and employees arising out of, or in connection with: (a) the performance or attempted performance by the Zoo or its agents or employees of the Zoo's obligations under this Agreement; and (b) any claim that the payments described herein were improperly paid by the City to the Zoo.

5. The Zoo agrees to employ accounting procedures which are appropriate to the types of operation conducted by the Zoo and which are customary to similar operations. All financial records and other documents pertaining to this Agreement shall be maintained by the Zoo for a period of three (3) years after the expiration or termination of this Agreement. The City shall have full access to, and the right to examine any of such financial records and other documents at all reasonable times during the term of this Agreement and during said three-year period. The Zoo agrees that upon request from the City, the Zoo will submit to and cooperate with periodic audits by the Alabama Department of Public Examiners or other audit procedures requested by the City.

6. If the Zoo fails to comply with the provisions of this Agreement, such failure shall constitute a default under this Agreement and, unless corrected by the Zoo within thirty (30) days following receipt of written notice for the City of such default, shall be deemed a breach of this Agreement and the City shall have a right to terminate this Agreement by giving the Zoo twelve (12) days prior written notice of such termination, and the City shall not be obligated to make any additional payments to the Zoo. Such termination of this Agreement by the City shall not relieve the Zoo of any of its obligations or liabilities to the City under the provisions of paragraph 4 of this Agreement, whether such obligations or liabilities occur or accrue before or after the termination of this Agreement.

In witness whereof, the Birmingham Zoo, Inc. has caused this Agreement to be executed by its duly authorized Chief Executive Officer and the City of Mountain Brook has caused this Agreement to be executed by its duly authorized Mayor, all as of the 12th day of October 2020.

CITY OF MOUNTAIN BROOK

Stewart Welch III
Mayor, City of Mountain Brook

Ast: _____

Name/Title: _____

BIRMINGHAM ZOO, INC.

Chris Pfefferkorn
Chief Executive Officer, Birmingham Zoo, Inc.

Karen N. Carroll
VP, Development

APPENDIX 3

Page 2 of 2

A Living Collection



Mr. Sam Gaston, City Manager
City of Mountain Brook
56 Church Street
Mountain Brook, AL 35213

October 1, 2020

RE: FY-2021 City of Mountain Brook Funding Request

Dear Mr. Gaston:

On behalf of the Birmingham Zoo, we would like to thank you for your continued support. The Birmingham Zoo would like to provide a 2019 report to the City of Mountain Brook. Prior to COVID-19, the Birmingham Zoo was one of the state's top tourist attractions. In 2019, the Zoo had over 555,000 visitors.

During FY 2019-2020 the Zoo provided educational programming for 889 students attending Cherokee Bend Elementary. The Zoo also provided group discounts for students attending Cherokee Bend Elementary (104), Crestline Elementary School (162) and Mountain Brook Jr. High School (18).

Approximately 8% of Mountain Brook citizens visited the Zoo in 2019. The majority of Zoo visitors come from outside the 5-county area, attracting visitors to the Mountain Brook area, who will visit neighboring stores and restaurants. The Birmingham Zoo has an annual \$28 million economic impact. I have enclosed the Zoo's 2019 Annual Report.

In addition, the Zoo has spent \$52 million in capital asset improvements since 1999. It launched its Renew the Zoo capital campaign in 2011 and, since then, has raised over \$18 million. Construction for the Asian Passage has been delayed due to COVID-19, along with other capital projects. COVID-19 closed the Birmingham Zoo in March of 2020 for three months. The Zoo is now open 5 days a week due to the loss of revenue. The Zoo is expected to have a \$2.5 million operating loss at year-end.

The Zoo is ranked as a 4-Star Charity for the seventh year in a row by Charity Navigator for strong financial health, accountability and transparency with an overall score of 96.18 out of 100. The Zoo is one of only 10 non-profits in the Birmingham area to receive this highly coveted distinction.

As an AZA member, the Birmingham Zoo ranks in the top 10% of animal exhibitors in the nation and is the only accredited Zoo in Alabama. With more than 550 animals and 230 species, the Zoo protects endangered animals and promotes conservation. We invite you to become a part of our vision to educate the public and enhance the Zoo's habitats and guest experiences and help us to Inspire Passion to Conserve the Natural World.

If I can provide any additional information, please let me know. Thank you for your continued support.

Sincerely,

Karen Carroll
Vice President, Development

cc: Steve Boone, City Clerk, City of Mountain Brook
Robert Aland, Board Chair
Chris Pfefferkorn, President & CEO

- Board: Robert B. Aland, Chair; Nancy Collet Goodrich, Vice Chair; Thomas E. Sisson, Treasurer; Wally Nett II, Past Chair; Leigh Collier; Alexis B. Borton; Jack Demall; Kelvin Datcher; Austin Davis; Will French; Joe Hampton; Geyrall H. Hendricks; Joshua Jones; Randall W. Jordan; Philippe W. Latrop; Mary Pat Lawrence; Lee McConney II; Jerry Perkins, Jr.; Bill Redden; Ex-Officio: Rosemary N. Alexander, Junior Board President; Chris Pfefferkorn, President and CEO; Emeritus: Arthur C. J. Henley; Colin H. Luke; Michael D. Thompson; Jesse S. Vogtle, Jr.



2020-170

Contract for Services
Fiscal Year 2021

This contract for services ("Contract") is entered into by and between City of Mt. Brook, an Alabama Municipal corporation ("City"), and the Birmingham Botanical Society, a nonprofit corporation organized under the laws of the State of Alabama ("Association").

Whereas, City desires to increase the learning opportunities for students in its school system including: and

Whereas, Contractor has developed certain programs, exhibits, and learning laboratories which, in the City's opinion, will be helpful and instructive to such students; and

Whereas, such programs, exhibits and learning laboratories are not available in the Mt. Brook school system; and

Whereas, City has agreed to pay contractor the sum of ten thousand dollars (\$10,000.00) in consideration of Contractor providing City services referred to in the Contract.

Now, therefore, in consideration of the premises and in consideration of the covenants and agreements contained herein, City and Contractor hereby agree as follows:

1. City shall pay to Contractor the sum of ten thousand dollars (\$10,000.00), upon execution of this contract for services for one year from date of execution and receipt of the Association's annual report for the fiscal year ended September 30, 2020.
2. In consideration of the payment of the Contract Funds as provided herein, Contractor shall provide at least the following services to City ("Services"):
 - a. Contractor will continue to provide city students with a variety of free science curriculum-based field trips. The trained docents provide activities which are based on Alabama Course of Study: Science
 - b. Contractor agrees to inform the teachers about the Contractor's field trips and invite their participation
 - c. Field trips are for students in grades Kindergarten (K) through High School, inclusive
 - d. During The following field trips are available during the following months:

none of its agents or employees shall be deemed to be under the control of City nor shall any of the agents, or employees or other persons, firms, or corporations conducting business for or on behalf of Contractor be deemed to be agents, or employees of City.

4. Contractor shall indemnify City and its agents, employees and elected officials harmless, from and against all actions, causes of action, claims, demands, damages, losses and expenses of any kind, including, but not limited to attorneys' fees and court costs which may be asserted against, or suffered by, City or its agents and employees arising out of, or in connection with: (a) the performance, or attempted performance, by Contractor or its agents or employees of Contractor's obligations under this contract; and (b) any claim that the Contract Funds were improperly paid by City to Contractor.
5. Contractor agrees to employ accounting procedures which are appropriate to the types of operations conducted by Contractor and which are customary to similar operations. All financial records and other documents pertaining to this Contract shall be maintained by Contractor for a period of three (3) years after the expiration or termination of the Contract. City shall have full access to, and the right to examine, any of such financial records and other documents at all reasonable times during the term of this Contract and during said three-year period. Contractor agrees that upon request from City, Contractor will submit to, and cooperate with, periodic audits by Alabama Department of Public Examiners or other audit procedures requested by the city.
6. If Contractor fails to comply with the provisions of the Contract, such failure shall constitute a default under this Contract and, unless corrected by Contractor within thirty (30) days following receipt of written notice from City of such default, shall be deemed a breach of this Contract and City shall have a right to terminate this Contract by giving Contractor ten (10) days prior written notice of such termination, and City shall not be obligated to make any additional payments to Contractor. Such termination of this Contract by City shall not relieve Contractor of any of its obligations or liabilities to City under the provisions of paragraph 4 of this Contract, whether such obligations or liabilities occur or accrue before or after the termination of this Contract.
7. The Association and the representative of the Association who executes this Contract, by the execution of the Contract, certify that:
 - a. no part of the Contract Funds paid by City pursuant to this Contract shall be paid to, or used in any way for personal benefit of, any elected official, employee or representative of any government or any family member of any such official, employee or representative, including federal, state, county and municipal governments and any agency of any such government;

Native American Area	September-November March-May
Dr. George Washington Carver	September-November
Garden Gates Workshop (Plant Propagation)	January-February
Tropical Rain Forest	March-May
Alabama Woodlands (Interdependence)	September-November March-May
Secret Life of Trees	September-November March-May
Plants: Inside Out	September-November March-May
Pollinator Observation	March-May

- e. Field Trips are available Monday through Friday, inclusive, from 9:30-11:30am. No field trips are offered on federal and state holidays
 - f. Schools shall select the students that will attend the contractors' field trips. The Contractor shall not be responsible for providing transportation
 - g. Schools shall contact the contractor at least ten (10) business days in advance of a proposed field trip to schedule a date that shall be reasonably convenient for schools and the contractor
 - h. The Contractor requires the presence of one (1) adult per ten (10) children for the duration of each field trip.
 - i. The city and the contractor shall each monitor the number of students that attend the contractor's field trips and shall agree to reconcile the number at the end of the contract period
 - j. The Contractor will engage with sophomore-through-senior city high school students
 - k. During COVID-19 safety protocols, select field trips will be made available virtually in English and Spanish
 - l. City Chamber of Commerce shall seek additional opportunities with the contractor
3. Contractor shall provide the personnel, supplies, equipment, and expertise necessary to fulfill its obligations under this Contract. Contractor is an independent contractor and

APPENDIX 4

- b. neither the Association nor any of its officers, agents, representatives or employees has in any way colluded, conspired or connived with any elected official, employee, or representative of City, or any other elected official or public employee, in any manner whatsoever to secure or obtain the Contract; and
- c. except as expressly set out in this scope of services of this Contract, no promise or commitment of any nature whatsoever of anything of value whatsoever has been made to any such elected official, employee or representative of City as an inducement or consideration for this Contract.

Any violation of the certification shall constitute a breach and default of this Contract which shall be cause for termination. Upon such termination, the Association shall immediately refund to City all amounts paid by City pursuant to this Contract.

In witness whereof, the Birmingham Botanical Society has caused this Contract to be executed by its duly authorized Executive Director on Oct. 5, 2020, and City of Mt. Brook has caused this Contract to be executed by its duly authorized representative, on Oct. 6, 2020, but this Contract shall be effective as of October 1, 2020.

Birmingham Botanical Society, Inc.

By: *Ann J. Wood*
It's Executive Director

City of Mountain Brook

By: _____
By: It's Mayor

STATE OF ALABAMA)
COUNTY OF JEFFERSON)

CONTRACT AGREEMENT

THIS AGREEMENT is entered into on this the _____ day of _____ 2020, by and between the City of Mountain Brook (hereinafter referred to as "City") and the Jefferson - Blount - St. Clair Mental Health Authority (hereinafter referred to as "Contractor"):

WHEREAS, municipalities in the State of Alabama are authorized to promote the public health, safety, morals, security, prosperity, contentment and the general welfare of the community;

WHEREAS, Jefferson - Blount - St. Clair Mental Health Authority, is an organization which has as one of its goals the promotion of public health, safety, morals, security, prosperity, contentment and the general welfare in the City of Mountain Brook;

WHEREAS, the City Council of the City of Mountain Brook, Alabama desires to enter into a contract with the Contractor for the purpose of providing mental health services to residents of the City of Mountain Brook;

WITNESSETH,

1. That the City, for and in consideration of the covenants and agreements hereinafter set

1

To City of Mountain Brook: City Manager
City of Mountain Brook
P.O. Box 130009
Mountain Brook, AL 35213

To Contractor: Jefferson - Blount - St. Clair Health Authority
Yvonne Gallman, Associate Director
940 Montclair Road, Suite 200
Birmingham, AL 35213

Any time period stated in a notice will be computed from the time the notice is deemed received. Either party may change its mailing address or the person to receive notice by notifying the other party as party has provided in this paragraph.

No verbal agreement or conversation with any officer, agent, employee, or consultant of the City either before or after execution of this Agreement, will affect or modify any of the terms or obligations contained in this Agreement. Any such verbal agreement or conversation will be considered as unofficial information and in no way binding upon City or Contractor. Any amendment to this Agreement must be in writing and signed by both parties.

4

out to be kept and performed by the Contractor, does hereby agree to pay the Contractor the sum of TWO THOUSAND ONE HUNDRED AND NO/100 (\$2,100.00) Dollars, for performing the services herein provided for the period beginning October 1, 2020 through September 30, 2021.

2. SCOPE OF SERVICES:

In consideration of the covenants and agreements made herein by the City, the Contractor agrees that it shall be totally responsible for, and shall have exclusive control over the management and disbursement for all such monies received from the City, and that all monies received under this contract shall be used only for the purposes herein described:

- a. Provide relief for residents who are in need of crisis stabilization for uninsured mentally ill persons;
- b. Provide medication and outpatient therapy for mentally ill persons;
- c. Provide housing and treatment for mentally ill persons;
- d. Provide in-home therapy for at-risk youths who are in danger of being removed from their homes;
- e. Provide case management to access housing and other supports to avoid unnecessary admissions to state hospitals;
- f. Provide social work assistance to families; and
- g. Contractor agrees to provide any all personnel, supplies, equipment necessary for the services herein to be provided.

3. The Contractor agrees to provide to the City at all reasonable times and places

accounting for the expenditure of funds granted herein.

4. The Contractor shall not transfer or assign this contract or the license or any of the rights

2

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this the _____ day of _____, 2020.

CITY OF MOUNTAIN BROOK,
A Municipal Corporation

BY: _____
Stewart Welch
Mayor, City of Mountain Brook

WITNESSED:

BY: _____

JEFFERSON - BLOUNT - ST. CLAIR
MENTAL HEALTH AUTHORITY

BY: Yvonne Gallman
Its Authorized Agent
Print name: Yvonne Gallman
Title: Associate Director

5

and privileges granted herein without the prior written consent of the City.

5. The Contractor agrees that upon violation of any covenants and agreements herein contained, on account of any act or omission of the Contractor, the City may, at its option, terminate and cancel this contract and to exercise any remedy, at its option, available to it whether in law or equity.

6. The Contractor agrees that it will comply with Title 6 of the Civil Rights Act of 1964 assuring that no person under its employ will be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination on the grounds of race, sex, color, national origin or handicap.

7. Notwithstanding any of the other provisions contained in this contract, the City shall maintain the right to terminate this contract upon proper notice, which shall be in writing and shall be provided to the Contractor at least thirty (30) days prior to the intended date of cancellation.

8. Except as otherwise expressly provided in this Agreement, any notice, consent or other communication required or permitted under this Agreement must be in writing and will be deemed received at the time it is personally delivered, on the day it is sent by facsimile transmission, on the second day after its deposit with any commercial air courier or express service, or, if mailed, 3 days after the notice is deposited in the United States mail addressed as follows:

3

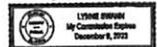
STATE OF ALABAMA)
COUNTY OF JEFFERSON)

Lynne Swann a notary public in and for said County in said State, hereby certify that Yvonne Gallman whose name as Authorized Agent of the JEFFERSON - BLOUNT - ST. CLAIR MENTAL HEALTH AUTHORITY, a nonprofit corporation, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the instrument, he/she, as such officer and with full authority executed the same voluntarily for and as the act of said corporation.

Given under my hand this the 6 day of October, 2020

Lynne Swann
NOTARY PUBLIC

My Commission Expires



6

2020-171

2020-172



CONTRACT FOR SERVICES

Prescott House Child Advocacy Center hereby proposes to provide services to the City of Mountain Brook Police Department in the form of forensic interviews, counseling, team reviews, court preparation, and court accompaniment in all reported cases alleging child abuse, child sexual abuse, and children who have witnessed violent crime.

Prescott House proposes to provide said services, and additional related services as the case may require for FY2021, October 1, 2020 through September 30, 2021.

The City of Mountain Brook agrees to compensate Prescott House Child Advocacy Center for said services in the amount of five thousand dollars (\$5,000.00) to be paid during the period stated above.

APPENDIX 6

Maribeth Thomas
Maribeth Thomas, M.A., LPC Director

10/05/2020
Date signed

On behalf of the City of Mountain Brook, AL

Date signed

where healing begins and hope is restored

PROFESSIONAL SERVICES AGREEMENT

Between
The City of Mountain Brook and Skipper Consulting, Inc.

This Agreement is made by and between the City of Mountain Brook, Alabama ("Client"), doing business at 58 Church Street, Mountain Brook, Alabama 35213 and, Skipper Consulting, Inc. ("Consultant"), doing business at 3644 Vann Road, Suite 100, Birmingham, Alabama 35235.

WHEREAS, the Client requests that the Consultant perform professional traffic engineering services related to a traffic study and potential traffic control device design for the crosswalk crossing Montevallo Road immediately west of Canterbury Road and traffic control device design for a pedestrian-actuated flashing beacon for the crosswalk crossing Overbrook Road at Pine Crest Road, all in the City of Mountain Brook (the "Project" or "Services");

WHEREAS, the parties intend that the Consultant be authorized to start work on the services outlined in this agreement upon execution of this Agreement, and

WHEREAS, the Client and Consultant agree that the Services be performed pursuant to the terms of this Agreement, together with the attached Exhibit A and the Addendum related hereto, which writings constitute the entire agreement between them relating to this assignment.

1. PROFESSIONAL SERVICES: The Consultant agrees to perform the following Services under this Agreement:

SEE SCOPE OF WORK SET FORTH ON EXHIBIT 'A'

The Consultant agrees to perform its Services in a manner that is consistent with professional skill and care that would be provided by other professionals in its industry under same or similar conditions, and in the orderly progress of the Project.

2. CLIENT'S RESPONSIBILITIES: Client, at its expense, will provide the Consultant with all required site information, existing plans, reports, studies, project schedules and similar information that is contained in its files. The Consultant may rely on the information provided by the Client without verification.

The Client will designate a representative who shall have the authority to act on behalf of the Client for this project.

The Client shall participate with the Consultant by providing all information and criteria in a timely manner, review documents and make decisions on project alternatives to the extent necessary to allow the Consultant to perform the scope of work within established schedules.

3. COMPENSATION/ BILLING/ PAYMENT: Skipper Consulting Inc. will undertake and perform the work and Services outlined in Exhibit "A" for a fixed fee (inclusive of all expenses) for a fixed fee in the following amounts:

Traffic Study - Montevallo Rd at Canterbury Rd Crosswalk	\$ 3,000.00
Traffic Control Device Design - Montevallo at Canterbury	\$ 3,500.00
Flashing Warning Beacon Design - Overbrook at Pine Crest	\$ 3,500.00
Total	\$10,000.00

The CLIENT will bill for its Services monthly based on the work completed during the billing period. Invoices for uncontested amounts are payable within 30 days from the receipt by the Client, and such payment shall not be contingent or dependent upon any conditions or any action or undertaking of the Client other than those conditions, if any, specifically set forth in this Agreement.

If complications or other unforeseen factors cause a change in the scope of Work outlined in Exhibit "A", the Consultant will notify the Client in writing of the changes and any adjustments to the fee required by such change. If the Client wishes to undertake tasks that are identified as being outside the proposed scope of services, the Consultant will submit a proposal for the additional work. No additional work or services other than those contemplated herein shall be performed without the written approval of the Client.

If for any reason, payment for uncontested amounts reflected on invoices is more than 30 days delinquent, the Consultant shall have the right to stop work on the assignment until such payment is made. The Consultant will not be liable for any delays to project schedules caused for such work stoppage.

4. STANDARD TERMS AND CONDITIONS

The Client shall have final right of review and approval of all plans and specifications that shall be delivered in connection with the performance of the Services; however, review and approval shall not be withheld unreasonably.

The rights and obligations of the parties to this Agreement may not be assigned or transferred to any other person, firm, corporation, or other entity without the prior, express, and written consent of the other party.

Either party may terminate this Agreement upon 10 days' written notice to the other party should the defaulting party substantially fail to perform any or its material responsibilities in the Agreement through no fault of the party desiring to terminate. In the event of termination of this Agreement, due to the fault of a person or party other than the Consultant, Consultant shall be paid for Services performed to termination date.

The Consultant agrees to furnish consulting services only related to the Project. Consultant shall be responsible for coordination of its work with that of Client.

This Agreement (including Exhibit A and the Addendum) shall constitute the entire agreement between the parties concerning the matters herein, and any prior understanding or representation of any kind preceding the date of this agreement shall not be binding upon either party except to the extent incorporated into this Agreement.

Any modification or amendment of this Agreement shall be binding only if placed in writing and signed by each party or an authorized representative of each party.

This agreement shall be governed by, construed, and enforced in accordance with the laws of the State of Alabama.

The failure of either party to this agreement to insist upon the performance of any of the terms and conditions of this agreement, or the waiver of any breach of any of the terms and conditions of this agreement, shall not be construed as thereafter waiving any such terms and conditions but the same shall continue and remain in full force and effect as if no such forbearance or waiver had occurred.

The invalidity of any portion of this Agreement will not and shall not be deemed to affect the validity of any other provision. In the event that any provision of this agreement is held to be invalid, the parties agree that the remaining provisions shall be deemed to be in full force and effect.

APPENDIX 7

Neither party to this Agreement shall be liable to the other for any loss, cost, or damages, arising out from or resulting from, any failure to perform in accordance with its terms where the causes of such failure shall occur due to events beyond a party's reasonable control, include, but not limited to, the following: acts of God, strikes, lockouts, or other industrial disturbances, wars, whether declared or undeclared, blockades, insurrections, riots, governmental action, explosions, fire, floods, or any other cause not within the reasonable control of either party.

Consultant shall secure and maintain such insurance as is reflected on the Addendum.

Client shall provide Consultant access to the Project site necessary for the Consultant to provide the services outlined.

The Client's reuse of any report, documents or other deliverables prepared by the Consultant for the Project on any other project without written verification by the Consultant shall be at the Client's risk.

The persons signing this Agreement warrant that they have the authority to sign on behalf of the Client and Consultant.

CLIENT: CITY OF MOUNTAIN BROOK, AL CONSULTANT: SKIPPER CONSULTING INC.

By: _____ By: *Darrell B. Skipper*

Printed Name: _____ Printed Name: Darrell B. Skipper, P.E.

Title: _____ Title: President

Date: _____ Date: September 29, 2020

EXHIBIT "A"
SCOPE OF WORK

The Consultant shall perform the following scope of work in relation to preparing a traffic study and traffic control device design for the crosswalk crossing Montevallo Road immediately west of Canterbury Road in the City of Mountain Brook.

Traffic Study - Montevallo Road at Canterbury Road Crosswalk

The Consultant will undertake the following scope of work:

- Perform a 24-hour machine traffic count on Montevallo Road, including speed, near the existing crosswalk
- Conduct a video survey of pedestrian activity and vehicular interaction at the crosswalk from 7:00 a.m. to 7:00 p.m.
- Perform vehicle and pedestrian sight distance measurements for the existing crosswalk
- Request and analyze the crash history for the existing crosswalk
- Perform engineering research and analysis to determine the appropriate level of traffic control device treatment for the existing crosswalk
- Prepare a cost estimate to implement recommendations
- Document the study findings in a report
- Present the report and recommendations to City staff and the City Council for action

Traffic Control Device Design - Montevallo Road at Canterbury Road Crosswalk

If the recommended action for traffic control for the existing crosswalk as adopted by the City requires engineering design (such as flashing beacons), the Consultant will prepare design plans for construction. It is anticipated that construction efforts would be less than \$50,000, and thus could be performed under Public Works bid law. The Consultant will assist the City in selection of a contractor, reviewing equipment submittals, coordinating any required power service with the City and APCO, and performing an inspection of contractor work.

Flashing Warning Beacon Design - Overbrook Road at Pine Crest Road Crosswalk

Based on the Council decision of September 28, 2020, the Consultant will prepare design plans for construction of a Rapid Rectangular Flashing Beacon warning system with pedestrian pushbutton actuation. It is anticipated that construction efforts would be less than \$50,000, and thus could be performed under Public Works bid law. The Consultant will assist the City in selection of a contractor, reviewing equipment submittals, coordinating any required power service with the City and APCO, and performing an inspection of contractor work.

Schedule

The Consultant will perform the scope of work described in "Traffic Study" above, up to and including issuing reports of the study findings, within a period of four (4) weeks from notice to proceed, barring unforeseen circumstances outside of the control of the Consultant. Design services will be accomplished within a period of three (3) weeks from notice to proceed, up to completion of the construction plans.

ADDENDUM TO PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF MOUNTAIN BROOK AND SKIPPER CONSULTING, INC. - TRAFFIC ENGINEERING SERVICES (Montevallo Road/Canterbury Road and Overbrook Road/Fine Crest Road Crosswalks)

THIS ADDENDUM TO PROFESSIONAL SERVICES AGREEMENT ("the/this Addendum") between the City of Mountain Brook, Alabama ("the City") and Skipper Consulting, Inc. ("the Contractor") is entered between the parties.

This Addendum is a part of the Professional Services Agreement between the parties (the "Agreement") concerning the work, services or project described in the Agreement. In the event of any conflict between the terms and provisions of this Addendum and the Agreement, the terms herein supersede and control any conflicting or inconsistent terms or provisions, particularly to the extent the conflicting or inconsistent terms or provisions in the Agreement purport either to (a) confer greater rights or remedies on the Contractor than are provided herein or under otherwise applicable law, or to (b) reduce, restrict, or eliminate rights or remedies that would be available to the City under otherwise applicable law. The Addendum shall remain in full force and effect with respect to any amendment, extension, or supplement of or to the principal Agreement, whether or not expressly acknowledged or incorporated therein. No agent, employee, or representative of the City is authorized to waive, modify, or suspend the operation of the Addendum or any of its terms or provisions without the express approval of the Mountain Brook City Council.

1. Definitions. For purposes of this Addendum, the terms below have the following meanings:

- A. "The City" refers to and includes the City of Mountain Brook, Alabama, and its constituent departments, boards, and agencies. The City may also be referenced in the Agreement as the "Client."
B. "The (this) Agreement" refers to the principal contract, agreement, proposal, quotation, or other document that sets forth the basic terms and conditions under which the Contractor is engaged to provide goods, materials, or services to the City, including the payment or other consideration to be provided by the City in exchange therefor.
C. "The Contractor" refers to the person, firm, or other legal entity that enters the Agreement with the City to provide goods, materials, or services to the City, and includes vendors and suppliers providing goods, materials, and services to the City with or without a formal contract as well as the Contractor's vendors, suppliers, and subcontractors. The Contractor may also be referenced in the Agreement as the "Consultant."

2. Dispute Resolution. If a disagreement, claim, issue or disagreement arises between the parties with respect to the performance of this Agreement or the failure of a Party to perform their respective rights or obligations hereunder (a "Dispute"), the parties will use reasonable efforts to resolve any Dispute at the designated representative level. If the parties are unable to amicably resolve any Dispute at that level, each agree to escalate that matter to senior managers or senior officials for consideration by and potential resolution by them. If the Dispute is not resolved at the senior level, the dispute resolution

mechanism shall be litigation in a court with competent jurisdiction that is located in Jefferson County, Alabama.

3. Attorney's Fees; Court Costs; Litigation Expenses. The City shall not be liable for attorney's fees, court costs, litigation expenses, and like charges except and to the extent such fees, costs, and charges would be assessed against the City under applicable law in the absence of any contractual provision imposing or assigning liability therefor.

4. Late Payment Charges; Fees; Interest. The City shall not be liable for any late payment charges, interest, or fees on any delinquent bill for goods, materials, or services, and bills rendered to the City shall not be considered delinquent any earlier than thirty (30) days after rendition of a complete and accurate bill by the Contractor. Contested bills shall not be considered delinquent pending resolution of the dispute.

5. Indemnification; Hold-Harmless; Release; Waiver; Limitations of Liability or Remedies. The City shall not and does not indemnify, hold harmless, or release the Contractor or any other person, firm, or legal entity for, from, or with respect to any claim, cause of action, cost, charge, fee, expense, or liability whatsoever arising out of or relating to the subject matter of the Agreement or the performance or nonperformance thereof; nor shall or does the City waive its right to assert or pursue any remedy or claim for relief of any kind that it may have against the Contractor or any other person, firm, or entity for any actual or alleged default or other breach of legal duty on the part of the Contractor or any person, firm, or entity in privity therewith or acting on Contractor's behalf. Any limitation or restriction regarding the type, nature, form, amount, or extent of any right, remedy, relief, or recovery that would otherwise be available to the City is expressly disavowed, excluded from the terms of the agreement, and void.

6. Choice of Law; Choice of Venue or Forum. The meaning, legal effect, and enforcement of terms and provisions of the Agreement and the resolution of any disputes arising thereunder or relating thereto shall be governed by the laws of the State of Alabama except to the extent otherwise required by applicable conflict-of-law principles. The venue of any suit, action, or legal proceeding brought to enforce or secure relief by reason of any asserted breach of duty arising out of or relating to the performance or nonperformance of the Agreement shall be Jefferson County, Alabama except to the extent otherwise required by applicable principles of law.

7. Construction of Addendum. Nothing in this Addendum shall be construed to create or impose any duty or liability on the City, to create a right or remedy in favor of the Contractor against the City, or to restrict or abrogate any right or remedy that is available to the City against the Contractor or any other person, firm, or entity under either the principal Agreement or as a matter of law.

8. Independent Contractor. Consultant's relationship to Client at all times is that of an independent contractor. Consultant exclusively controls the means and methods in which it performs its operations or provides the goods, services or undertaking described in the Agreement. The Client does not reserve any right of control over Consultant's operations or the activities it utilizes to perform its obligations in the Agreement.

9. Contractor's Insurance Requirements. For the duration of this Agreement and for limits not less than stated below, the Contractor shall maintain the following insurance with a company(ies) lawfully authorized to do business in the location of the Project and reasonably acceptable to the City:

APPENDIX 7

1. Comprehensive General Liability. This insurance shall cover all operations performed by or on behalf of Contractor, and provide coverage for bodily injury and property damage with a combined single limit of not less than \$500,000 per occurrence.

2. Automobile Liability: If the work or services performed by the Contractor involves use of motor vehicles on public streets, Automobile Liability covering owned and rented vehicles operated by Contractor with policy limits of not less than Five Hundred Thousand Dollars (\$500,000) combined single limit and aggregate for bodily injury and property damage, per occurrence.

3. Workers Compensation: Workers' Compensation and Employers Liability as required by statute.

4. Professional Liability: If Contractor is providing professional services, Professional Liability covering Contractor's negligent acts, errors and omissions in its performance of professional services with policy limits of not less One Million Dollars (\$1,000,000) per claim and in the aggregate.

Contractor may use umbrella or excess liability insurance to achieve the required coverage for Comprehensive General Liability and Automobile Liability, provided that such umbrella or excess insurance results in the same type of coverage as required for the individual policies. These insurance requirements are in addition to and do not affect any indemnification obligation of Contractor herein.

All policies, except for the Workers Compensation and Professional Liability policies shall contain endorsements naming the City, and its officers, employees and agents as additional named insured with respect to liabilities that arise out of and result from the operations of the Contractor or its performance of Services or work. The additional named insured endorsement shall not limit the scope of coverage to the City to vicarious liability, but shall allow coverage for the City to the fullest extent provided by the policy.

All insurance policies required herein are to be primary and non-contributory with any insurance or self-insurance program administered by the City.

Before commencement of Services hereunder, Contractor shall provide the City a certificate(s) of insurance and endorsements (including the additional insured endorsements) evidencing compliance with the requirements in this section. This certificate(s) shall provide that such insurance shall not be terminated or expire without thirty (30) days advance notice to the City.

10. Indemnification for Claims by Third Parties. The Contractor agrees to defend, indemnify, and hold harmless the City, and its agents, employees and officials (collectively hereinafter the "Indemnitees") from and against all demands, actions, damages, judgments, expenses (including but not limited to attorneys' fees, expert fees, court costs and other litigation costs), losses, damages, and claims (including those for bodily injury, sickness, disease or death, or to injury to, destruction or loss of use of tangible property, or those for financial loss or damages, collectively hereinafter "Claim(s)") that are made against the City by any third parties (including any employee, agent or representative of the Contractor, collectively "Third Parties") to the extent that such Claims are caused or allegedly caused by

the negligence of the Consultant in the performance of its Services, its work on the Project described in the Agreement or its failure to perform its obligations in the Agreement.

11. EXCLUSION OF CONSEQUENTIAL DAMAGES. THE CONTRACTOR AGREES AND ACKNOWLEDGES THAT, IN THE EVENT THAT IT ASSERTS ANY CLAIM, DEMAND OR ACTION OF ANY TYPE AGAINST THE CITY ARISING FROM ITS ALLEGED BREACH OF THE AGREEMENT OR ITS FAILURE TO PERFORM ANY OF ITS OBLIGATIONS THEREUNDER, THE MAXIMUM AMOUNT THAT THE CONTRACTOR MAY RECOVER FROM THE CITY AS DAMAGES IN ANY SUCH ACTION IS LIMITED TO THE ACTUAL DAMAGES THAT DIRECTLY ARISE FROM THAT BREACH. THE CONTRACTOR FURTHER ACKNOWLEDGES THAT THE COMMERCIAL TERMS HEREIN WERE PROPOSED AND BASED ON THE ASSUMPTION THAT THIS SPECIFIC LIMITATION IS APPLICABLE, AND THAT THE CITY WOULD NOT ENTERED INTO THIS AGREEMENT WITHOUT INCLUDING THIS LIMITATION. IN NO EVENT WILL THE CITY BE LIABLE TO THE CONTRACTOR FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, RELIANCE OR OTHER SPECIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, ADVANTAGE, SAVINGS OR REVENUES OR FOR INCREASED COST OF OPERATIONS. NOTHING IN THIS PROVISION IS INTENDED TO IMPACT, MODIFY, AMEND OR LIMIT THE TERMS OR APPLICATION OF THE INDEMNIFICATION PROVISION IN THE PROVISION ABOVE THAT PERTAINS TO THE CONTRACTOR'S OBLIGATIONS TO INDEMNIFY THE CITY FOR CLAIMS MADE AGAINST THE CITY BY THIRD PARTIES.

CITY: CITY OF MOUNTAIN BROOK CONTRACTOR: SKIPPER CONSULTING INC.
By: [Signature] By: Darrell B. Skipper, P.E.
Printed Name: Darrell B. Skipper, P.E.
Title: President
Date: September 28, 2020

City of Mountain Brook
October 5, 2020
Page 3

policy used and the responsibilities of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable assurance that the financial statements are free from material misstatement, whether from (1) error, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violation of laws or governmental regulations that are attributable to the government or to acts by management or employees acting on behalf of the government. Because the determination of waste and abuse is subjective, we will not attempt to identify waste and abuse. We will, however, identify and report on direct waste or abuse in financial audits not do they report subject to provide reasonable assurance of detecting waste or abuse.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, some material misstatements or noncompliance may exist and not be detected by us, even though the audit was planned and performed in accordance with generally accepted auditing standards. In addition, an audit is not designed to detect immaterial misstatements or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements or on major programs. However, we will inform the appropriate level of management of any material errors, any fraudulent financial reporting, or misappropriation of assets that we become aware of during the audit. We will also inform the appropriate level of management of any governmental regulations that come to our attention, unless clearly inconsequential. We will include such matters in the reports required for a Single Audit. Our responsibility as auditors is limited to the period covered by our audit and does not extend to any later periods for which we are not engaged as auditors.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the financial statements. We will also perform analytical procedures, including ratio analysis, trend analysis, and other procedures, to identify areas of potential concern. We will also perform tests of internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Tests of controls may be performed as part of the engagement, and they may be performed in response to this inquiry. At the conclusion of our audit, we will provide you with a written report that includes our findings and conclusions regarding the financial statements, schedule of expenditures of federal awards, federal award program compliance with laws, regulations, contracts, and grant agreements; and other responsibilities required by generally accepted auditing standards.

Audit Procedures – Internal Control

Our audit will include obtaining an understanding of the government and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Tests of controls may be performed as part of the engagement, and they may be performed in response to this inquiry. At the conclusion of our audit, we will provide you with a written report that includes our findings and conclusions regarding the financial statements, schedule of expenditures of federal awards, federal award program compliance with laws, regulations, contracts, and grant agreements; and other responsibilities required by generally accepted auditing standards.

As directed by the Uniform Guidance, we will perform tests of controls over compliance to evaluate the effectiveness of the design and operation of controls that we consider relevant to preventing or detecting material noncompliance with compliance requirements applicable to each major federal award program. However, our tests will be less in scope than would be necessary to render an opinion on those controls.

City of Mountain Brook
October 5, 2020
Page 5

You are also responsible for the preparation of the other supplementary information, which we have been engaged to report on, in conformity with U.S. generally accepted accounting principles. You agree to provide us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

Management is responsible for establishing and maintaining a process for tracking the status of audit findings. Management is also responsible for establishing and maintaining a process for tracking the status of audit findings to the objectives discussed in the Audit Objectives section of this letter. This responsibility includes taking to corrective actions taken to address significant findings and recommendations resulting from the audit. Management's views on our current findings, conclusions, and recommendations, as well as planned corrective actions, for the report, and for the timing and format for providing that information.

You agree to assume all management responsibilities relating to preparing the OMB data collection form and other data collection forms provided to you. You will be required to acknowledge in the management report that you have read and understood the instructions and have accepted responsibility for them. Further, you agree to oversee the non-audit services by designating an individual, Steven Boone, Finance Director, with suitable skill, knowledge, or experience; evaluate the adequacy and results of those services; and accept responsibility for them.

Dispute Resolution
In the event of a dispute between the parties provided for or to be provided hereunder, if the dispute is not resolved by mutual agreement, the parties shall refer the dispute to mediation. If the dispute is not resolved by mediation, the parties shall refer the dispute to arbitration. All parties agree that an alternative form of dispute resolution shall not be undertaken by either party until the expiration of fifteen (15) calendar days following notice being provided to the other party. The American Arbitration Association under the Dispute Resolution Rules for Professional Accounting and Related Services Chapter. The costs of any mediation proceedings shall be shared equally by all parties.

Limitation of Liability
Except as provided in this agreement, CRI shall not be liable for incidental, consequential, exemplary, special, punitive or ancillary damages of any kind alleged as a result of any cause of action from this agreement, whether arising out of breach of contract, tort or otherwise. Unless otherwise stated in this agreement, both CRI and you agree that the sole and exclusive remedy for any claim related to this agreement shall be the amount of the fee paid to CRI. This limitation of liability shall not apply to any engagement during the twelve months preceding the event giving rise to the claim, as such amount shall

City of Mountain Brook
October 5, 2020
Page 2

- 3) Comparing and individual financial statements and schedules.
- 4) Schedule of general fund revenues by source.
- 5) Schedule of general fund expenditures by object class.
- 6) Schedule of Expenditures of Federal Awards.

Audit Objectives

The objective of our audit is to express an opinion on your financial statements as fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles and to report on the fairness of the supplementary information referred to in the second paragraph when considered in relation to the financial statements as a whole. The objective also includes reporting on—

- Internal control over financial reporting and compliance with provisions of laws, regulations, contracts, and award agreements, noncompliance with which could have a material effect on the financial statements in accordance with Government Auditing Standards.
- Internal control over compliance related to major programs and an opinion (or disclaimer of opinion) on the effectiveness of the entity's internal control over compliance, and (2) the awards that could have a direct and material effect on each major program in accordance with the Single Audit Act Amendments of 1996 and Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance).

The Government Auditing Standards report on internal control over financial reporting and on compliance with laws, regulations, contracts, and award agreements. The report also includes an opinion on the effectiveness of the entity's internal control over compliance and the results of that testing, and (2) the report as an integral part of an audit performed in accordance with Government Auditing Standards in accordance with the Uniform Guidance. The report will include a separate table that states the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America, the standards of the Government Auditing Standards Act of 1996, and the provisions of the Uniform Guidance, and will include tests of accounting records, a determination of major program(s) in accordance with the Uniform Guidance and other procedures we consider necessary to enable us to express such opinion. We will issue written reports upon completion of our Single Audit. Our reports will include a separate table that states the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

Audit Procedures – General

An audit includes inherent risk. Inherent risk is the risk that errors or omissions exist in the financial statements that are not detected by the audit. Inherent risk is higher in some areas than in others. We will include judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting

City of Mountain Brook
October 5, 2020
Page 5

and the provisions of contracts and grant agreements (including award agreements). Your responsibilities also include identifying significant contractor relationships in which the contractor has responsibility for program compliance and for the accuracy and completeness of that information.

Management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

Your responsibilities include adjusting the financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements of each opinion unit as well as to the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the government involving (1) management, (2) employees who have significant roles in internal control, and (3) other persons where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the government involving (1) management, (2) employees who have significant roles in internal control, and (3) other persons where the fraud could have a material effect on the financial statements. You also agree to include the audited financial statements with any presentation of the schedule of expenditures of federal awards that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the schedule of expenditures of federal awards and (2) you have not been engaged to audit the schedule of expenditures of federal awards. Both CRI and you agree that the sole and exclusive remedy for any claim related to this agreement shall be the amount of the fee paid to CRI. This limitation of liability shall not apply to any engagement during the twelve months preceding the event giving rise to the claim, as such amount shall

management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

You are responsible for identifying all federal awards received and understanding and complying with the compliance requirements and for the preparation of the schedule of expenditures of federal awards (including notes and related substance needed) in conformity with the Uniform Guidance. You agree to include our report on the schedule of expenditures of federal awards and the schedule of federal awards with any presentation of the schedule of expenditures of federal awards. You also agree to include the audited financial statements with any presentation of the schedule of expenditures of federal awards that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the schedule of expenditures of federal awards and (2) you have not been engaged to audit the schedule of expenditures of federal awards. Both CRI and you agree that the sole and exclusive remedy for any claim related to this agreement shall be the amount of the fee paid to CRI. This limitation of liability shall not apply to any engagement during the twelve months preceding the event giving rise to the claim, as such amount shall

management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

City of Mountain Brook
October 5, 2020
Page 2

- 1) Management's Discussion and Analysis.
- 2) Schedule of Revenues, Expenditures, and Changes in Fund Balances – Budget and Actual – General Fund.
- 3) Schedule of Changes in the Net Pension Liability and Related Ratios.
- 4) Schedule of Employer Contributions – Pension.
- 5) Schedule of Changes in the OPEB Liability and Related Ratios.
- 6) Schedule of Employer Contributions – OPEB.
- 7) Schedule of Investment Earnings.

We have been engaged to report on supplementary information other than BSIs that accompanies the City's financial statements. We will subject the following information to the auditing procedures applied in our audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements, and to other information that we believe is relevant to our audit of the financial statements and to other information that we believe is relevant to our audit of the financial statements. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America, the standards of the Government Auditing Standards Act of 1996, and the provisions of the Uniform Guidance, and will include tests of accounting records, a determination of major program(s) in accordance with the Uniform Guidance and other procedures we consider necessary to enable us to express such opinion. We will issue written reports upon completion of our Single Audit. Our reports will include a separate table that states the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America, the standards of the Government Auditing Standards Act of 1996, and the provisions of the Uniform Guidance, and will include tests of accounting records, a determination of major program(s) in accordance with the Uniform Guidance and other procedures we consider necessary to enable us to express such opinion. We will issue written reports upon completion of our Single Audit. Our reports will include a separate table that states the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America, the standards of the Government Auditing Standards Act of 1996, and the provisions of the Uniform Guidance, and will include tests of accounting records, a determination of major program(s) in accordance with the Uniform Guidance and other procedures we consider necessary to enable us to express such opinion. We will issue written reports upon completion of our Single Audit. Our reports will include a separate table that states the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

City of Mountain Brook
October 5, 2020
Page 4

and, accordingly, no opinion will be expressed in our report on internal control based pursuant to the Uniform Guidance.

An audit includes inherent risk. Inherent risk is the risk that errors or omissions exist in the financial statements that are not detected by the audit. Inherent risk is higher in some areas than in others. We will include judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting

management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

management is also responsible for making all records and related information available to us and for providing us with all the information and documents we need to perform our audit. We will not be held responsible for any misstatements or omissions in the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for the preparation of the supplementary information in accordance with (2) you have not been engaged to audit the supplementary information and (3) you have not been engaged to audit the GAAP. (2) The methods of measurement or presentation have not changed from those used in the prior period for, if they have changed, the reasons for such change; and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.



Fontenot Benefits & Actuarial Consulting

www.FBACLLC.com

September 30, 2020

Steven Boone
City of Mountain Brook
P.O. Box 130009
Mountain Brook, AL 35213

Re: Government Accounting Standards Board (GASB)
Statements 75 Calculations on Other Postemployment Benefits (OPEB)

I am writing this engagement letter for providing the necessary actuarial calculations as required by the published GASB 75.

This engagement would involve the following steps:

1. Preparation of a written actuarial valuation report setting forth results of the calculations and the information required by GASB Statement 75.
2. Assist in the development of the required financial statement reports and assumptions required by GASB 75 for two years.
3. Complete an actuarial review of assumptions.

Our annual professional fee for this engagement will be \$3,000 for the GASB 75 valuation and footnotes for September 30, 2020 and 2021.

ACCEPTANCE:

The terms and conditions for this engagement letter correctly state the scope of work to be performed and are accepted by us.

Accepted By:
Title

Date:

Louisiana 448 Julia Street, Suite 301 New Orleans, LA 70130
Alabama One Perimeter Park South, Suite 100N Birmingham, AL 35243
Florida 495 Grand Boulevard, Suite 206 Miramar Beach, FL 32550
Mailing P.O. Box 6765 Metairie, LA 70009 Email ScottF@FBACLLC.com

APPENDIX 9

2020-176



#10011006401

2727 Paces Ferry Road SE,
Building One, Suite 1400
Atlanta, GA 30339-4053
T 678.306.3100
F 678.669.1887
segalco.com

October 6, 2020

Mr. Steve Boone
Assistant City Manager/
Finance Director
Mountain Brook, Alabama

Re: Consulting Services Contract

Dear Steve:

We look forward to working with you. This letter will serve as our consulting services agreement. Our services will be:

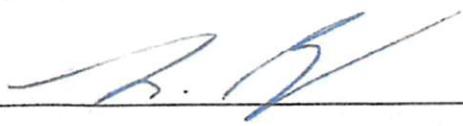
1. Review the documents you provided
2. Be prepared to address questions your compensation committee may have concerning whether or not to provide Tier 2 employees with Tier 1 benefits, with a special focus on the long-term stability of the Plan.
3. Participate in a Zoom call with the committee.

We will bill for our services at our hourly time charge rates not to exceed \$5,000. My billing rate is \$500 an hour. Other Segal staff as needed range from \$280 to \$400 an hour. I anticipate that most (if not all) of this project will be my work since this is a high-level review. I anticipate approximately 5-7 hours for prep and review and about 2 hours participating in a group discussion. If this Agreement reflects our mutual understanding, please return one original signed by you (email is preferred), as indicated in the space provided below.

We look forward to working with you on this project.

Sincerely yours,

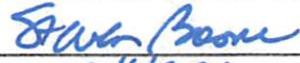
Segal

By: 

Name: Leon F. (Rocky) Joyner, Jr. FCA, ASA, MAAA, EA

Title: Senior Vice President and Actuary

ACCEPTED AND AGREED BY Mountain Brook, Alabama

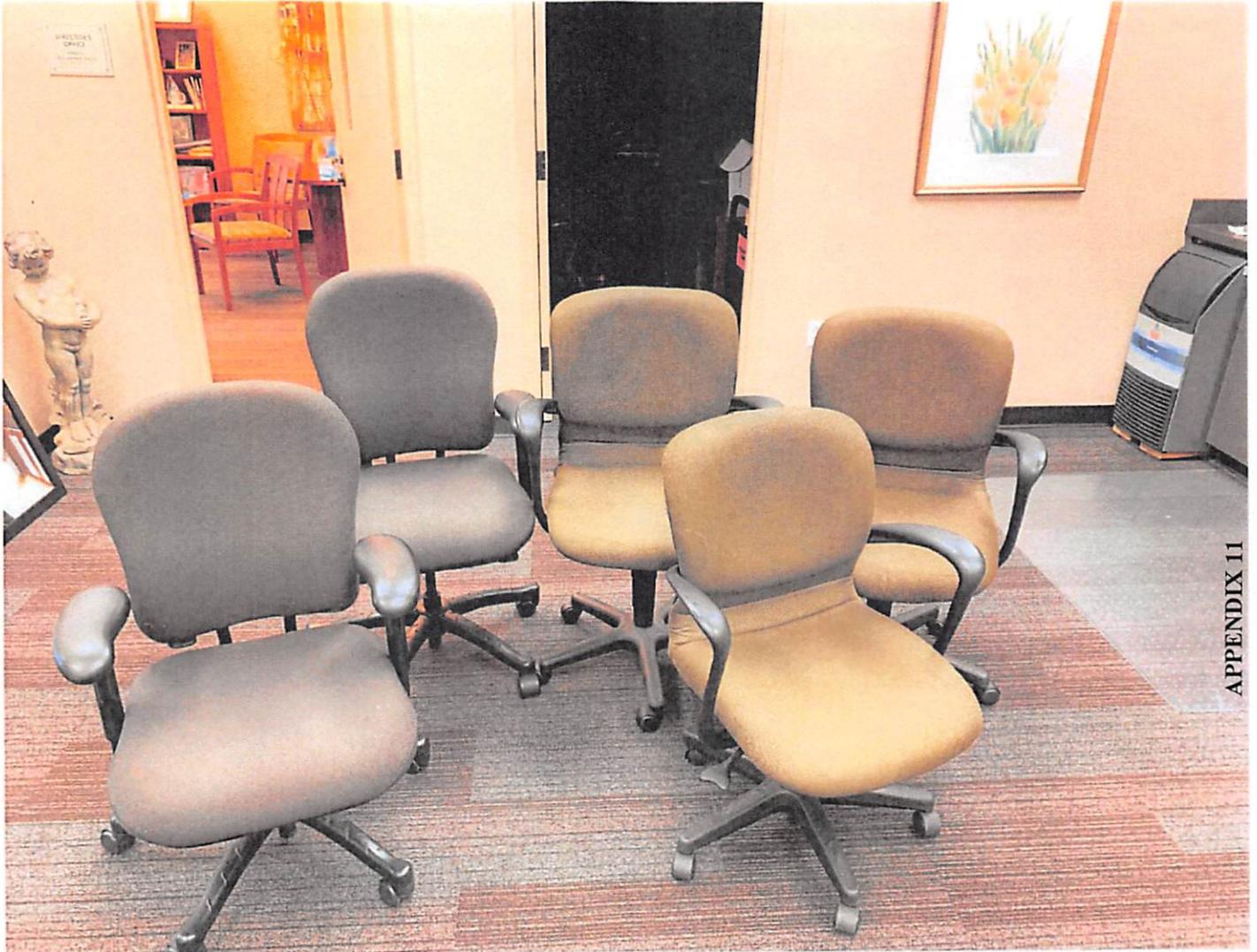
By: 

Date: 10/6/2020

Name: Steve Boone
Title: Assistant City Manager and Finance Director

9176747v1/96050.902

APPENDIX 10



[This page is blank intentionally.]