

Memorandum

April 25, 2023

Project# 27308

To: Doug Rux, Brett Musick & Kaaren Hoffman, City of Newberg
Ana Bozich & Mike Robinson, Pahlisch Homes
Mimi Doukas, AKS Forestry & Engineering

From: Julia Kuhn and Chris Brehmer

RE: Collina at Springbrook – Proportionate Share Contributions

As a follow-up to our April 17, 2023 transportation addendum, this memo provides the proportionate share calculations at the N Springbrook Road/E Haworth Avenue intersection.

As documented in our previous memos regarding the Collina Subdivision, proportionate share contributions toward intersection signalization and left-turn lanes on E Haworth Avenue are required prior to occupancy of the subdivision. As documented in our October 2022 memo, 15 percent of the trips from the Collina Subdivision are estimated to travel through this intersection (i.e., 42 weekday AM trips and 57 weekday PM trips).

In response to City comments, we collected weekday AM and PM peak hour counts at this intersection in April 2023 for the purposes of the proportionate share calculations. The traffic counts are included in Appendix A of this memo.

Using these counts, the proportionate share contribution would be:

- Cost of Signal per City TSP Project 109 = \$400,000 for signal and left-turn lanes
- Total AM Volumes entering intersection in 2023 = 1,013 vehicles
- Total PM Volumes entering intersection in 2023 = 1,386 vehicles
- Contribution of Collina AM Volumes / Total Entering Volume with Collina = $42 / (1,013 + 42) = 3.98$ percent
- Contribution of Collina PM Volumes / Total Entering Volume with Collina = $57 / (1,386 + 57) = 3.95$ percent
- Most significant impact is in AM peak = $\$400,000 \times 3.98$ percent = approximately \$15,924

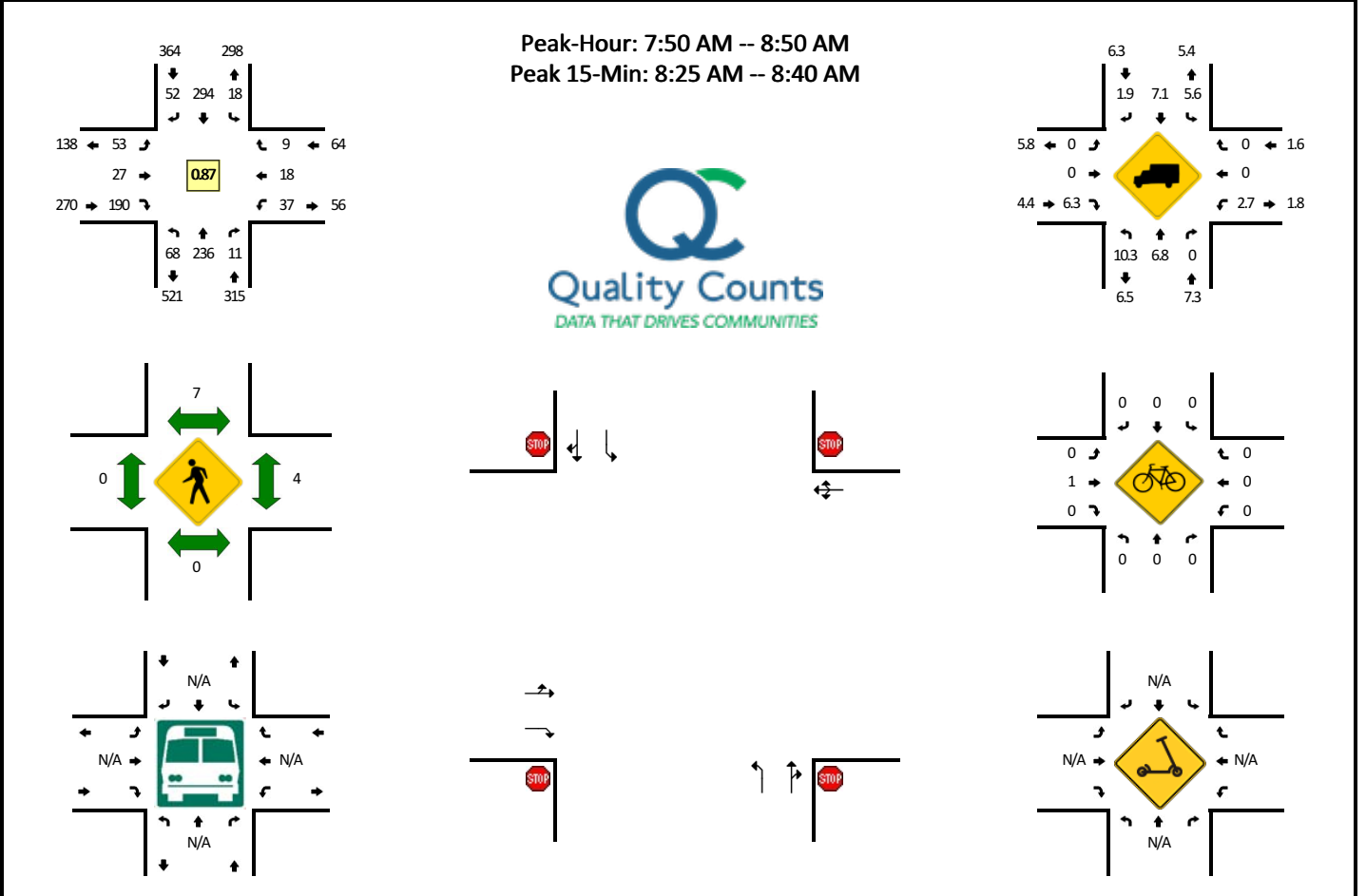
Based on these calculations, the proportionate share contributions would be \$15,924 for the Collina Subdivision impacts at the N Springbrook Road/E Haworth Avenue intersection.

Please let us know if you have any questions as you are reviewing our materials.

Appendix A
Year 2023 Traffic Counts

LOCATION: N Springbrook Rd -- Haworth Ave/Springbrook Plaza Access
CITY/STATE: Newberg, OR

QC JOB #: 16165501
DATE: Tue, Apr 18 2023

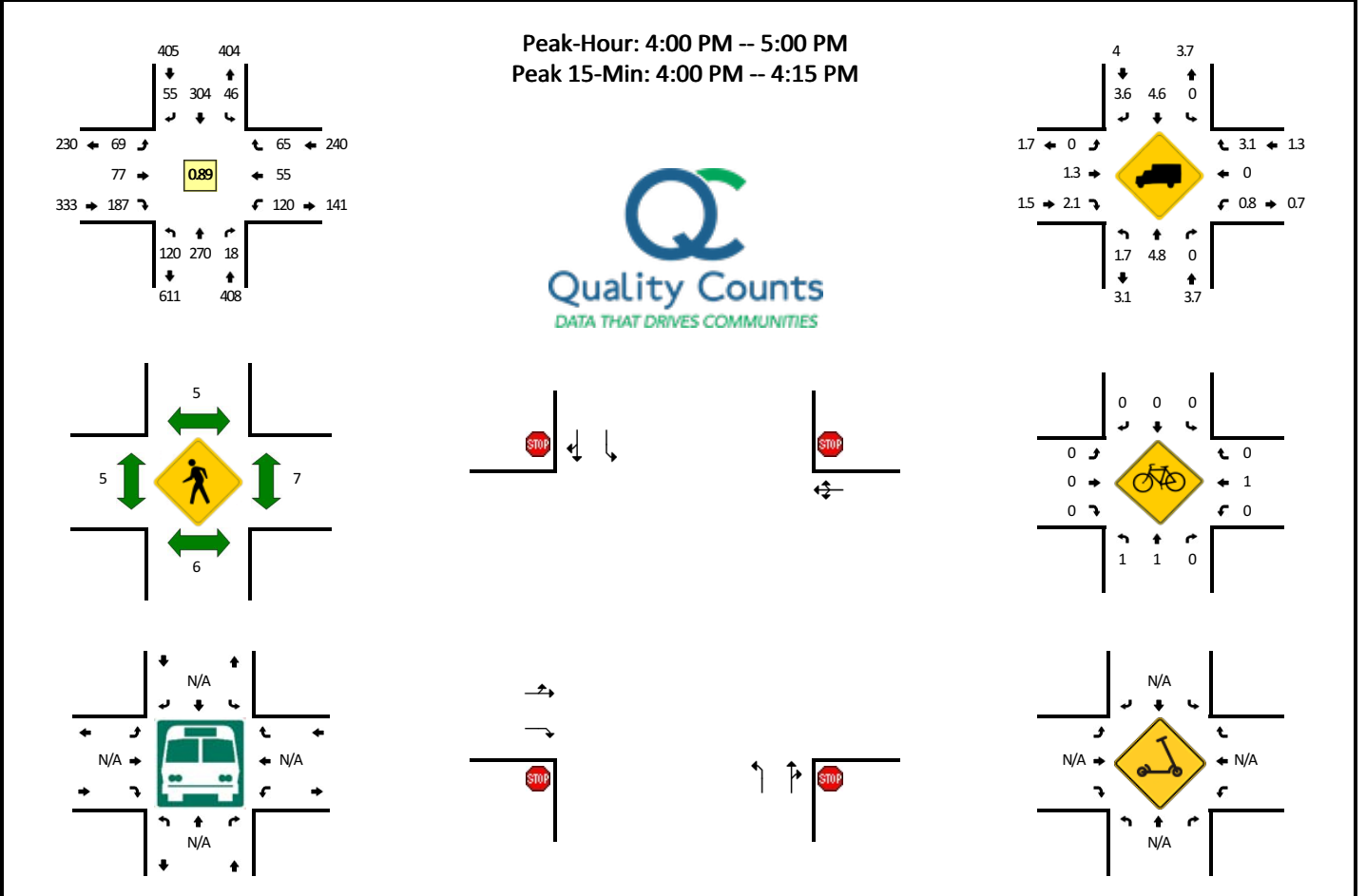


5-Min Count Period Beginning At	N Springbrook Rd (Northbound)				N Springbrook Rd (Southbound)				Haworth Ave/Springbrook Plaza Access (Eastbound)				Haworth Ave/Springbrook Plaza Access (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	7	7	1	0	2	18	3	0	4	0	10	0	5	0	5	0	62	
7:05 AM	3	18	2	0	0	15	1	0	1	3	14	0	1	0	1	0	59	
7:10 AM	5	7	0	0	1	12	4	0	2	2	9	0	2	2	1	0	47	
7:15 AM	3	9	2	0	0	23	8	0	2	0	14	0	4	1	1	0	67	
7:20 AM	2	12	1	0	0	13	2	0	1	1	8	0	1	1	1	0	43	
7:25 AM	4	13	1	0	2	21	3	0	4	3	11	0	3	0	0	0	65	
7:30 AM	4	15	1	0	1	18	3	0	9	2	9	0	4	0	0	0	66	
7:35 AM	3	14	0	0	2	30	6	0	1	2	6	0	3	1	0	0	68	
7:40 AM	5	13	1	0	1	16	6	0	1	1	10	0	4	1	1	0	60	
7:45 AM	5	18	1	0	0	22	5	0	4	2	13	0	6	1	1	0	78	
7:50 AM	2	21	1	0	1	30	1	0	7	3	14	0	3	4	1	0	88	
7:55 AM	2	22	0	0	1	23	2	0	5	3	21	0	2	1	1	0	83	786
8:00 AM	5	22	1	0	1	28	2	0	5	0	20	0	2	2	0	0	88	812
8:05 AM	5	9	1	0	0	18	7	0	4	0	12	0	5	1	1	0	63	816
8:10 AM	5	24	0	0	1	21	2	0	2	2	15	0	2	1	1	0	76	845
8:15 AM	6	17	0	0	0	21	2	0	7	5	20	0	1	1	0	0	80	858
8:20 AM	10	19	0	0	2	22	7	0	3	1	9	0	1	0	1	0	75	890
8:25 AM	8	29	2	0	3	25	4	0	6	0	13	0	4	2	1	0	97	922
8:30 AM	3	21	2	0	1	29	8	0	6	0	15	0	5	2	2	0	94	950
8:35 AM	8	23	0	0	5	29	4	0	5	2	18	0	4	0	1	0	99	981
8:40 AM	9	18	3	0	2	25	6	0	1	7	15	0	4	1	0	0	91	1012
8:45 AM	5	11	1	0	1	23	7	0	2	4	18	0	4	3	0	0	79	1013
8:50 AM	6	20	0	0	4	24	3	0	2	2	10	0	4	1	1	0	77	1002
8:55 AM	6	11	0	0	1	8	5	0	3	0	13	0	5	1	2	0	55	974
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	76	292	16	0	36	332	64	0	68	8	184	0	52	16	16	0	1160	
Heavy Trucks	0	20	0		0	24	4		0	0	12		0	0	0		60	
Buses																		
Pedestrians		0				4				0				0			4	
Bicycles	0	0	0		0	0	0		0	4	0		0	0	0		4	
Scoters																		

Comments:

LOCATION: N Springbrook Rd -- Haworth Ave/Springbrook Plaza Access
CITY/STATE: Newberg, OR

QC JOB #: 16165502
DATE: Tue, Apr 18 2023



5-Min Count Period Beginning At	N Springbrook Rd (Northbound)				N Springbrook Rd (Southbound)				Haworth Ave/Springbrook Plaza Access (Eastbound)				Haworth Ave/Springbrook Plaza Access (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	16	24	4	0	3	26	6	0	4	6	17	0	12	5	5	0	128	
4:05 PM	6	24	0	0	8	30	3	0	7	14	19	0	9	4	5	0	129	
4:10 PM	12	22	3	0	4	31	6	0	8	7	20	0	7	7	4	0	131	
4:15 PM	6	20	1	0	4	25	5	0	10	5	11	0	11	11	8	0	117	
4:20 PM	8	18	1	0	4	28	7	0	4	4	15	0	10	3	6	0	108	
4:25 PM	16	16	2	0	7	30	6	0	6	4	23	0	11	4	5	0	130	
4:30 PM	9	24	1	0	1	21	5	0	6	10	13	0	13	4	11	0	118	
4:35 PM	13	31	0	0	3	21	4	0	4	10	14	0	11	0	11	0	122	
4:40 PM	5	27	2	0	2	26	4	0	6	6	17	0	6	4	3	0	108	
4:45 PM	9	24	2	0	4	24	3	0	10	1	13	0	9	6	3	0	108	
4:50 PM	8	21	0	0	2	20	4	0	2	8	9	0	11	4	1	0	90	
4:55 PM	12	19	2	0	4	22	2	0	2	2	16	0	10	3	3	0	97	1386
5:00 PM	12	19	2	0	1	33	1	0	6	2	17	0	10	3	6	0	112	1370
5:05 PM	10	24	1	0	3	27	6	0	5	5	18	0	11	4	2	0	116	1357
5:10 PM	12	25	3	0	5	23	4	0	5	2	12	0	6	1	4	0	102	1328
5:15 PM	10	11	3	0	2	21	2	0	7	8	13	0	7	8	5	0	97	1308
5:20 PM	11	18	0	0	3	22	1	0	7	6	5	0	7	4	4	0	88	1288
5:25 PM	16	21	1	0	1	21	1	0	10	4	18	0	11	4	6	0	114	1272
5:30 PM	12	23	2	0	3	30	3	0	9	4	18	0	11	3	4	0	122	1276
5:35 PM	14	17	1	0	3	26	9	0	5	7	19	0	11	8	4	0	124	1278
5:40 PM	11	28	1	0	2	15	6	0	4	1	14	0	6	2	4	0	94	1264
5:45 PM	13	23	3	0	3	21	5	0	7	2	12	0	10	9	4	0	112	1268
5:50 PM	9	18	0	0	4	17	0	0	3	1	16	0	7	3	2	0	80	1258
5:55 PM	10	23	2	0	1	16	6	0	8	4	7	0	10	3	4	0	94	1255
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	136	280	28	0	60	348	60	0	76	108	224	0	112	64	56	0	1552	
Heavy Trucks	0	16	0	0	0	8	0	0	0	0	8	0	0	0	0	0	32	
Buses																		
Pedestrians		4				12				8				12			36	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: