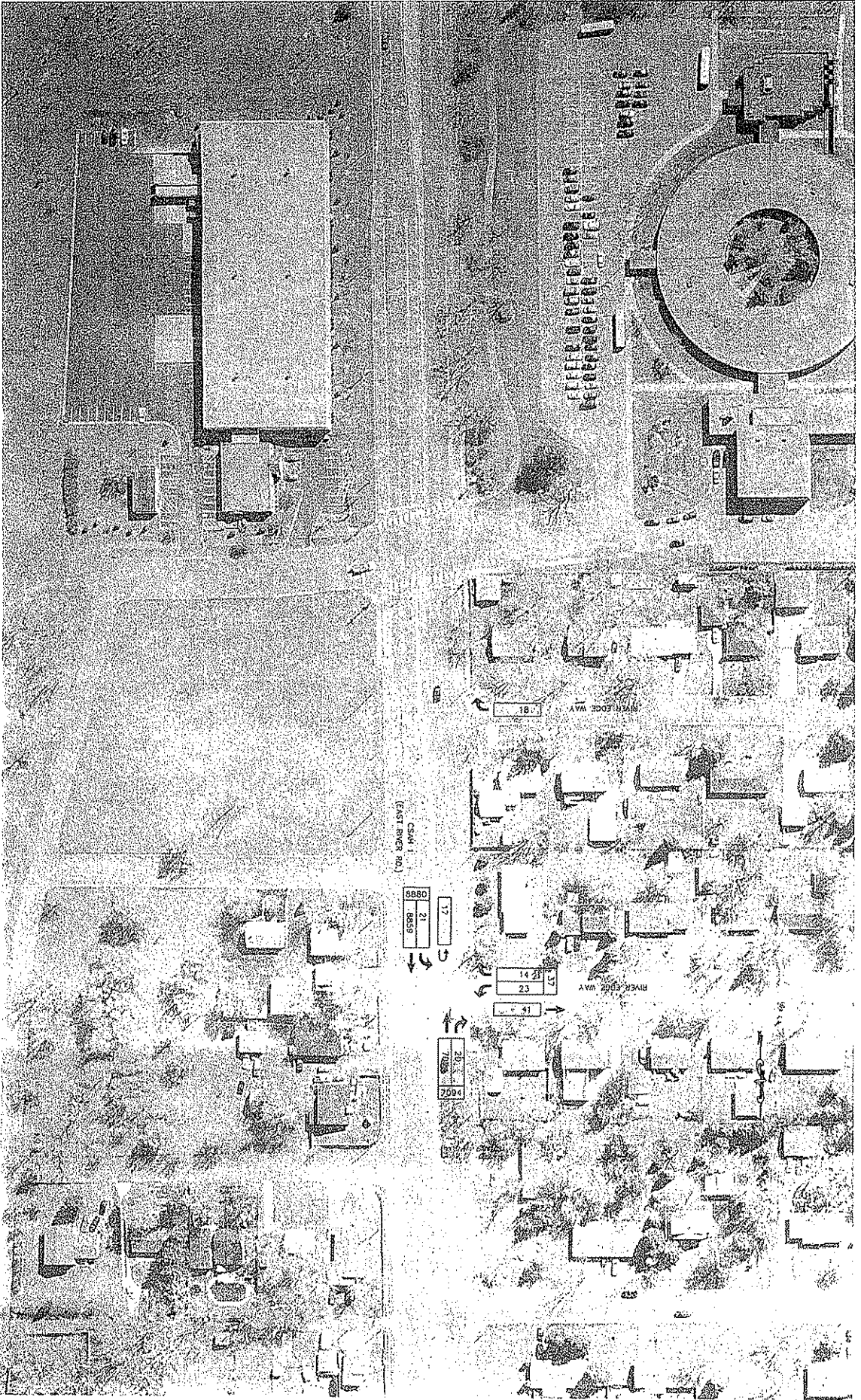


TMC 0933



NO.	DATE	BY	CSO	ADVIS	REVISION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR BY A PERSON UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF OHIO.

DATE: _____ REG. NO. _____

SCALE: _____

DATE: _____

BY: _____



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
POLARITY DEPT. LEFT. N/A

CSAH 1 AT RIVER
EDGE WAY (N&S JCT)
TURN VOLUMES

17	8880
21	8850

14	23
----	----

20	7094
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Anoka County Highway Department

Traffic Engineering Section Traffic Volume and Turning Movement Study

Weather: Rainy and Warm
Counter: DB-400
Counted by: Laura/Jake

File Name : TMC0933
Site Code : 09330202
Start Date : 07/22/2009
Page No : 1

Groups Printed- Unshifted

Start Time	CSAH 1 Southbound					River Edge Way S Jct Eastbound1					CSAH 1 Northbound					River Edge Way N Jct Eastbound2					Exclu. Total	Inclu. Total	Inf. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total			
06:00	0	124	0	1	124	0	0	1	0	1	0	54	0	0	54	0	0	0	0	0	1	179	180
06:15	0	293	1	5	294	0	0	0	0	0	0	58	0	3	58	0	0	0	0	0	8	352	360
06:30	0	360	0	5	360	0	0	0	0	0	0	75	0	4	75	3	0	1	0	4	9	439	448
06:45	0	419	0	8	419	0	0	0	0	0	0	95	0	3	95	0	0	0	0	0	11	514	525
Total	0	1196	1	19	1197	0	0	1	0	1	0	282	0	10	282	3	0	1	0	4	29	1484	1513
07:00	0	304	0	4	304	0	0	0	0	0	0	84	0	4	84	0	0	0	0	0	8	388	396
07:15	0	279	0	3	279	0	0	0	0	0	0	84	0	3	84	0	0	0	0	0	6	363	369
07:30	0	321	0	5	321	0	0	0	0	0	0	91	0	5	91	0	0	1	0	1	10	413	423
07:45	0	281	0	6	281	0	0	1	0	1	1	96	0	6	97	1	0	0	0	1	12	380	392
Total	0	1185	0	18	1185	0	0	1	0	1	1	355	0	18	356	1	0	1	0	2	36	1544	1580
08:00	0	232	1	4	233	0	0	0	0	0	0	78	0	5	78	0	0	0	0	0	9	311	320
08:15	0	257	0	4	257	0	0	0	0	0	0	66	0	3	66	0	0	0	0	0	7	323	330
08:30	0	223	0	7	223	0	0	0	0	0	0	64	0	4	64	0	0	1	0	1	11	288	299
08:45	0	149	0	8	149	0	0	0	0	0	2	69	0	5	71	0	0	1	0	1	13	221	234
Total	0	861	1	23	862	0	0	0	0	0	2	277	0	17	279	0	0	2	0	2	40	1143	1183
09:00	0	88	0	2	88	0	0	0	0	0	0	63	0	3	63	1	0	0	0	1	5	152	157
09:15	0	102	0	10	102	0	0	0	0	0	0	77	0	6	77	2	0	1	1	3	17	182	199
09:30	0	108	1	4	109	0	0	1	0	1	0	69	0	8	69	0	0	0	0	0	12	179	191
09:45	0	107	0	4	107	0	0	0	0	0	1	85	0	8	86	1	0	0	0	1	12	194	206
Total	0	405	1	20	406	0	0	1	0	1	1	294	0	25	295	4	0	1	1	5	46	707	753
10:00	0	46	0	4	46	0	0	0	0	0	0	62	0	11	62	0	0	0	0	0	15	108	123
10:15	0	57	0	5	57	0	0	0	0	0	0	54	0	4	54	0	0	0	0	0	9	111	120
10:30	0	62	0	3	62	0	0	0	0	0	2	85	0	5	87	1	0	2	0	3	8	152	160
10:45	0	57	0	3	57	0	0	0	0	0	0	74	0	5	74	0	0	0	0	0	8	131	139
Total	0	222	0	15	222	0	0	0	0	0	2	275	0	25	277	1	0	2	0	3	40	502	542
11:00	0	87	1	12	88	0	0	0	0	0	0	78	0	5	78	1	0	1	0	2	17	168	185
11:15	0	66	0	8	66	0	0	1	0	1	0	79	0	6	79	0	0	0	0	0	14	146	160
11:30	0	61	1	2	62	0	0	1	0	1	1	107	0	6	108	0	0	0	0	0	8	171	179
11:45	0	103	0	6	103	0	0	0	0	0	1	122	0	10	123	0	0	0	0	0	16	226	242
Total	0	317	2	28	319	0	0	2	0	2	2	386	0	27	388	1	0	1	0	2	55	711	766
12:00	0	95	0	10	95	0	0	1	0	1	0	105	0	11	105	0	0	0	0	0	21	201	222
12:15	0	113	2	4	115	0	0	1	0	1	1	123	0	3	124	0	0	0	0	0	7	240	247
12:30	0	105	0	8	105	0	0	0	0	0	1	110	0	9	111	0	0	0	0	0	17	216	233
12:45	0	133	1	3	134	0	0	0	0	0	0	99	0	8	99	0	0	0	0	0	11	233	244
Total	0	446	3	25	449	0	0	2	0	2	2	437	0	31	439	0	0	0	0	0	56	890	946
13:00	0	100	0	9	100	0	0	1	0	1	0	97	0	7	97	0	0	0	0	0	16	198	214
13:15	0	78	0	5	78	0	0	0	0	0	1	88	0	10	89	0	0	0	0	0	15	167	182
13:30	0	97	0	3	97	0	0	0	0	0	0	120	0	7	120	1	0	0	0	1	10	218	228
13:45	0	92	2	8	94	0	0	1	0	1	1	127	0	9	128	0	0	1	1	1	18	224	242
Total	0	367	2	25	369	0	0	2	0	2	2	432	0	33	434	1	0	1	1	2	59	807	866
14:00	0	74	1	5	75	0	0	1	0	1	1	122	0	8	123	0	0	1	0	1	13	200	213
14:15	0	123	0	8	123	0	0	1	0	1	0	129	0	6	129	1	0	0	0	1	14	254	268
14:30	0	156	1	6	157	0	0	2	1	2	0	132	0	9	132	0	0	0	0	0	16	291	307
14:45	0	74	1	4	75	0	0	0	0	0	0	162	0	6	162	1	0	0	1	1	11	238	249
Total	0	427	3	23	430	0	0	4	1	4	1	545	0	29	546	2	0	1	1	3	54	983	1037
15:00	0	86	1	4	87	0	0	0	0	0	0	193	0	10	193	0	0	0	0	0	14	280	294
15:15	0	83	0	4	83	0	0	0	0	0	1	227	0	8	228	0	0	0	0	0	12	311	323
15:30	0	108	0	7	108	0	0	0	0	0	0	293	0	6	293	0	0	0	0	0	13	401	414
15:45	0	49	0	0	49	0	0	0	0	0	0	354	0	10	354	1	0	0	0	1	10	404	414
Total	0	326	1	15	327	0	0	0	0	0	1	1067	0	34	1068	1	0	0	0	1	49	1396	1445
16:00	0	127	1	3	128	0	0	0	0	0	0	361	0	5	361	1	0	0	0	1	8	490	498
16:15	0	120	0	2	120	0	0	0	0	0	0	403	0	9	403	1	0	1	0	2	11	525	536
16:30	0	115	2	0	117	0	0	0	0	0	0	397	0	7	397	0	0	1	0	1	7	515	522
16:45	0	72	0	0	72	0	0	0	0	0	0	457	0	4	457	0	0	0	0	0	4	529	533
Total	0	434	3	5	437	0	0	0	0	0	0	1618	0	25	1618	2	0	2	0	4	30	2059	2089
17:00	0	74	0	5	74	0	0	0	0	0	0	399	0	4	399	0	0	0	0	0	9	473	482
17:15	0	56	0	1	56	0	0	1	0	1	1	364	0	7	365	0	0	0	0	0	8	422	430
17:30	0	74	0	0	74	0	0	0	0	0	0	317	0	8	317	0	0	0	0	0	8	391	399
17:45	0	74	1	1	75	0	0	0	0	0	0	279	0	4	279	1	0	0	0	1	5	355	360
Total	0	278	1	7	279	0	0	1	0	1	1	1359	0	23	1360	1	0	0	0	1	30	1641	1671



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Rainy and Warm
 Counter: DB-400
 Counted by: Laura/Jake

File Name : TMC0933
 Site Code : 09330202
 Start Date : 07/22/2009
 Page No : 2

Groups Printed- Unshifted

Start Time	CSAH 1 Southbound					River Edge Way S Jct Eastbound1					CSAH 1 Northbound					River Edge Way N Jct Eastbound2					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total			
18:00	0	44	0	1	44	0	0	0	0	0	0	227	0	4	227	1	0	0	0	1	5	272	277
18:15	0	51	1	0	52	0	0	0	0	0	1	156	0	5	157	2	0	0	0	2	5	211	216
18:30	0	41	1	2	42	0	0	1	0	1	0	152	0	5	152	0	0	1	0	1	7	196	203
18:45	0	50	0	0	50	0	0	0	0	0	1	109	0	1	110	0	0	0	0	0	1	160	161
Total	0	186	2	3	188	0	0	1	0	1	2	644	0	15	646	3	0	1	0	4	18	839	857
19:00	0	52	0	1	52	0	0	0	0	0	3	90	0	2	93	0	0	0	0	0	3	145	148
19:15	0	60	0	0	60	0	0	2	0	2	0	80	0	2	80	0	0	0	0	0	2	142	144
19:30	0	45	0	1	45	0	0	1	0	1	1	86	0	0	87	0	0	1	0	1	1	134	135
19:45	0	23	0	1	23	0	0	0	0	0	0	69	0	1	69	0	0	0	0	0	2	92	94
Total	0	180	0	3	180	0	0	3	0	3	4	325	0	5	329	0	0	1	0	1	8	513	521
20:00	0	12	0	2	12	0	0	0	0	0	0	82	0	3	82	0	0	0	0	0	5	94	99
20:15	0	20	0	0	20	0	0	0	0	0	0	67	0	1	67	0	0	0	0	0	1	87	88
20:30	0	30	0	1	30	0	0	0	0	0	0	81	0	1	81	0	0	0	0	0	2	111	113
20:45	0	26	0	0	26	0	0	0	0	0	0	60	0	0	60	0	0	0	0	0	0	86	86
Total	0	88	0	3	88	0	0	0	0	0	0	290	0	5	290	0	0	0	0	0	8	378	386
21:00	0	27	0	0	27	0	0	0	0	0	0	59	0	0	59	0	0	0	0	0	0	86	86
21:15	0	47	0	1	47	0	0	0	0	0	0	84	0	2	84	2	0	0	0	2	3	133	136
21:30	0	44	0	0	44	0	0	0	0	0	0	64	0	0	64	1	0	0	0	1	0	109	109
21:45	0	38	0	0	38	0	0	0	0	0	0	66	0	0	66	0	0	0	0	0	0	104	104
Total	0	156	0	1	156	0	0	0	0	0	0	273	0	2	273	3	0	0	0	3	3	432	435
d Total	0	7074	20	233	7094	0	0	18	1	18	21	8859	0	324	8880	23	0	14	3	37	561	16029	16590
prch %	0	99.7	0.3			0	0	100			0.2	99.8	0			62.2	0	37.8					
Total %	0	44.1	0.1		44.3	0	0	0.1		0.1	0.1	55.3	0		55.4	0.1	0	0.1		0.2	3.4	96.6	

Start Time	CSAH 1 Southbound				River Edge Way S Jct Eastbound1				CSAH 1 Northbound				River Edge Way N Jct Eastbound2				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 to 11:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30																	
06:30	0	360	0	360	0	0	0	0	0	75	0	75	3	0	1	4	439
06:45	0	419	0	419	0	0	0	0	0	95	0	95	0	0	0	0	514
07:00	0	304	0	304	0	0	0	0	0	84	0	84	0	0	0	0	388
07:15	0	279	0	279	0	0	0	0	0	84	0	84	0	0	0	0	363
Total Volume	0	1362	0	1362	0	0	0	0	0	338	0	338	3	0	1	4	1704
% App. Total	0	100	0		0	0	0		0	100	0		75	0	25		
PHF	.000	.813	.000	.813	.000	.000	.000	.000	.000	.889	.000	.889	.250	.000	.250	.250	.829
Peak Hour Analysis From 12:00 to 21:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	0	127	1	128	0	0	0	0	0	361	0	361	1	0	0	1	490
16:15	0	120	0	120	0	0	0	0	0	403	0	403	1	0	1	2	525
16:30	0	115	2	117	0	0	0	0	0	397	0	397	0	0	1	1	515
16:45	0	72	0	72	0	0	0	0	0	457	0	457	0	0	0	0	529
Total Volume	0	434	3	437	0	0	0	0	0	1618	0	1618	2	0	2	4	2059
% App. Total	0	99.3	0.7		0	0	0		0	100	0		50	0	50		
PHF	.000	.854	.375	.854	.000	.000	.000	.000	.000	.885	.000	.885	.500	.000	.500	.500	.973



Anoka County Highway Department

Traffic Engineering Section

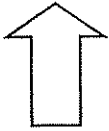
Traffic Volume and Turning Movement Study

Weather: Rainy and Warm
 Counter: DB-400
 Counted by: Laura/Jake

File Name : TMC0933
 Site Code : 09330202
 Start Date : 07/22/2009
 Page No : 1

Groups Printed- Bank 1

		CSAH 1 Northbound		
	Start Time	U-Turn	App. Total	Int. Total
*** BREAK ***				
	10:30	3	3	3
*** BREAK ***				
	Total	3	3	3
*** BREAK ***				
	11:15	1	1	1
	11:30	1	1	1
*** BREAK ***				
	Total	2	2	2
*** BREAK ***				
	12:15	1	1	1
*** BREAK ***				
	Total	1	1	1
*** BREAK ***				
	13:30	1	1	1
	13:45	1	1	1
*** BREAK ***				
	Total	2	2	2
EAK ***				
	15:30	1	1	1
*** BREAK ***				
	Total	1	1	1
*** BREAK ***				
	17:00	1	1	1
*** BREAK ***				
	17:30	2	2	2
	17:45	2	2	2
*** BREAK ***				
	Total	5	5	5
	18:00	2	2	2
*** BREAK ***				
	Total	2	2	2
*** BREAK ***				
	19:45	1	1	1
*** BREAK ***				
	Total	1	1	1
*** BREAK ***				
	Grand Total	17	17	17
	Apprch %	100	100	
	Total %	100	100	



NORTH

COUNT LOCATION:

CSAH 1 (East River Road)

DATE:

7/23/2009

@ River Edge Way

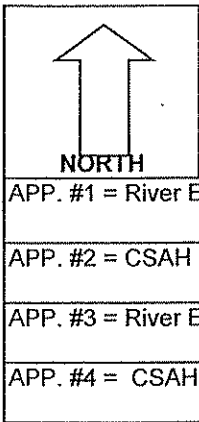
APP. #1 = River Edge Way
APP. #2 = CSAH 1
APP. #3 = River Edge Way
APP. #4 = CSAH 1

APP. #1	APP. #2
APP. #3	APP. #4

- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
 - B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
 - C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						1		
6:15-6:30						7		
6:30-6:45				1	1	9		
6:45-7:00	1		1		2	9		1
HOURLY TOTAL					3	HOURLY TOTAL		27
7:00-7:15						7		
7:15-7:30	1		1		2	6		
7:30-7:45						8		1
7:45-8:00			1		1	11		
HOURLY TOTAL					3	HOURLY TOTAL		33
8:00-8:15	1				1	9		
8:15-8:30			1		1	7		
8:30-8:45						10		1
8:45-9:00						15		2
HOURLY TOTAL					2	HOURLY TOTAL		44
9:00-9:15			1		1	5		
9:15-9:30						15		1
9:30-9:45			1		1	11		1
9:45-10:00						12		1
HOURLY TOTAL					2	HOURLY TOTAL		46
10:00-10:15						14		1
10:15-10:30						8		
10:30-10:45						9		
10:45-11:00						6		1
HOURLY TOTAL						HOURLY TOTAL		39
11:00-11:15						16		
11:15-11:30						16		
11:30-11:45						8		
11:45-12:00						15		1
HOURLY TOTAL						HOURLY TOTAL		56
12:00-12:15	1				1	19		1
12:15-12:30			1		1	8		
12:30-12:45	2		1		3	14		1
12:45-1:00				1	1	10		1
HOURLY TOTAL					6	HOURLY TOTAL		54
1:00-1:15	2				2	13		3
1:15-1:30						15		
1:30-1:45						9		
1:45-2:00			2	2	4	13		2
HOURLY TOTAL					6	HOURLY TOTAL		55
					TOTAL		TOTAL	354
					22			

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COUNT LOCATION:

CSAH 1 (East River Road)

DATE:

7/22/2009

@ River Edge Way

APP. #2
APP. #1
APP. #3
APP. #4

- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
 - B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
 - C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:00-2:15PM						12		1
2:15-2:30	4			3		14		
2:30-2:45	1					16		
2:45-3:00						11		1
HOURLY TOTAL					8	HOURLY TOTAL		55
3:00-3:15						14		1
3:15-3:30						13		
3:30-3:45			2			13		
3:45-4:00						9		1
HOURLY TOTAL					2	HOURLY TOTAL		51
4:00-4:15		2				5		2
4:15-4:30						10		1
4:30-4:45		1	2			7		
4:45-5:00				1		4		
HOURLY TOTAL					6	HOURLY TOTAL		29
5:00-5:15		1	1			8		1
5:15-5:30						8		1
5:30-5:45			3	1		7		1
5:45-6:00				1		4		
HOURLY TOTAL					7	HOURLY TOTAL		30
6:00-6:15	1			1		2		2
6:15-6:30			1			4		1
6:30-6:45			1			7		
6:45-7:00				4				1
HOURLY TOTAL					8	HOURLY TOTAL		17
7:00-7:15	2					1		2
7:15-7:30						2		
7:30-7:45						1		
7:45-8:00						1		1
HOURLY TOTAL					2	HOURLY TOTAL		8
8:00-8:15			2			4		1
8:15-8:30				1		1		
8:30-8:45						2		
8:45-9:00								
HOURLY TOTAL					3	HOURLY TOTAL		8
9:00-9:15								
9:15-9:30						3		
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		3
TOTAL					58	TOTAL		555

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