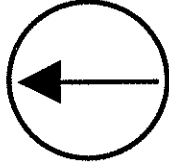


Date : 6/11/99AM 6/15/99PM

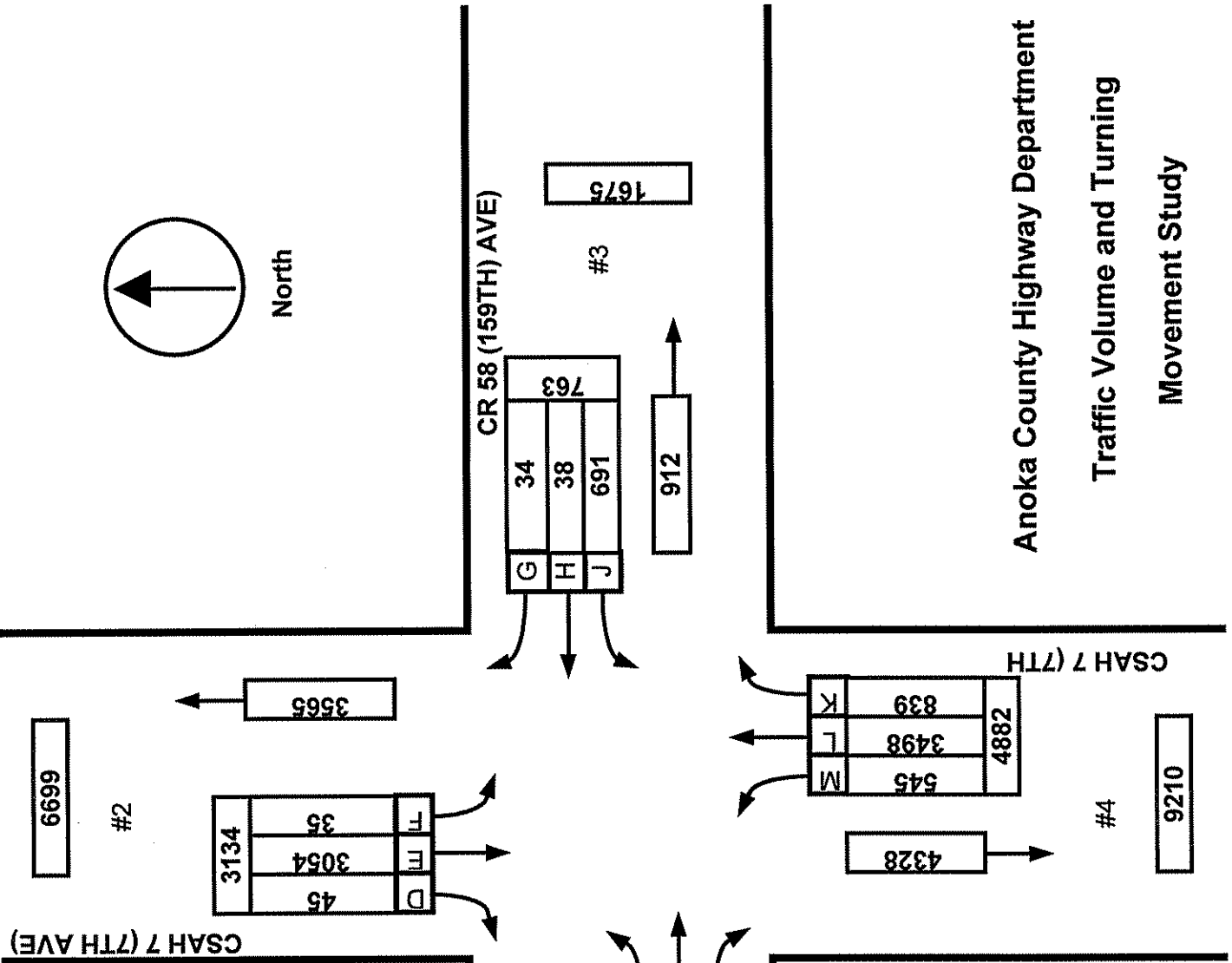
Count Number : TMC9907

Location : CSAH 7 (7TH AVE.) @

CR 58 (159TH AVE)



North



	LANES OF APPROACH			TOTAL
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	
#1	0	0	1	1
#2	1	0	1	2
#3	1	0	1	2
#4	1	0	1	2

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Anoka County Highway Department Traffic Volume & Turning Movement Study

File Name : TMC9907
Site Code : 99070102
Start Date : 06/15/1999
Page : 2

Groups Printed: 1 - 1 - Unshifted

Start Time	CSAH 7 (7th Ave.) Southbound					CR 58 (159th Ave.) Westbound					CSAH 7 (7th Ave.) Northbound					159th Ave. Eastbound					Exclu. Total	Inclu. Total	Int. Total		
	Factor	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds				App. Total	
04:00 PM	1.0	32	1	2	34	1.0	7	1	0	8	1.0	18	117	21	1	156	1.0	0	0	11	0	11	3	209	212
04:15 PM	1	45	0	3	46	1	3	0	1	4	1	16	109	20	2	145	1	0	1	9	0	10	5	205	210
04:30 PM	0	39	0	2	39	0	18	0	1	19	0	11	113	30	1	154	0	1	0	3	0	4	3	216	219
04:45 PM	1	36	2	0	39	0	15	0	0	15	0	19	119	36	0	174	0	0	0	4	0	4	0	232	232
Total	3	152	3	7	158	43	1	2	0	46	64	458	107	4	629	1	1	27	0	29	11	862	873		
05:00 PM	0	32	0	0	32	12	0	0	0	12	12	135	32	3	179	2	2	8	0	12	3	235	238		
05:15 PM	0	47	0	0	47	9	2	2	0	13	12	143	32	1	187	3	0	9	0	12	1	259	260		
05:30 PM	1	43	3	1	47	13	0	0	0	13	14	105	33	1	152	0	2	13	0	15	2	227	229		
05:45 PM	0	38	1	0	39	12	0	1	0	13	15	123	24	0	162	0	1	13	0	14	0	228	228		
Total	1	160	4	1	165	46	2	3	0	51	53	506	121	5	680	5	5	43	0	53	6	949	955		
06:00 PM	1	34	1	1	36	11	2	0	0	13	14	99	28	2	141	0	2	12	0	14	3	204	207		
06:15 PM	1	41	0	0	42	26	1	6	0	33	15	65	17	0	97	1	0	14	0	15	0	187	187		
06:30 PM	0	54	1	2	55	17	1	0	1	18	14	70	19	0	103	0	2	14	0	16	3	192	195		
06:45 PM	1	35	1	0	37	16	0	0	0	16	14	79	21	1	114	0	2	8	0	10	1	177	178		
Total	3	164	3	3	170	70	4	6	1	80	57	313	85	3	455	1	6	48	0	55	7	760	767		
07:00 PM	0	28	0	0	28	8	0	0	0	8	9	70	20	0	99	3	0	14	0	17	0	152	152		
07:15 PM	1	25	1	0	27	12	1	0	0	13	16	62	19	0	97	2	0	6	0	8	0	145	145		
07:30 PM	0	29	0	1	29	14	2	1	0	17	12	79	10	1	101	1	2	6	0	9	2	156	158		
07:45 PM	0	30	0	0	30	4	0	0	0	4	14	54	12	0	80	0	0	3	0	3	0	117	117		
Total	1	112	1	1	114	38	3	1	0	42	51	265	61	1	377	6	2	29	0	37	2	570	572		
08:00 PM	0	20	1	1	21	3	0	0	0	3	6	51	15	0	72	0	0	6	0	6	1	102	103		
08:15 PM	0	30	1	0	31	14	0	0	0	14	13	63	16	0	92	0	1	12	0	13	0	150	150		
08:30 PM	1	22	1	0	24	8	0	3	0	11	17	54	12	0	83	0	0	7	0	7	0	125	125		
08:45 PM	0	26	1	0	27	6	1	2	0	9	14	54	16	0	84	2	2	12	0	16	0	136	136		
Total	1	98	4	1	103	31	1	5	0	37	50	222	59	0	331	2	3	37	0	42	1	513	514		
09:00 PM	2	19	0	0	21	5	2	0	0	7	11	62	19	0	92	0	0	7	0	7	0	127	127		
09:15 PM	0	26	3	0	29	7	0	1	0	8	8	55	16	0	79	0	2	8	0	10	0	126	126		
09:30 PM	0	23	2	0	25	4	0	0	0	4	9	52	14	0	75	2	2	4	0	8	0	112	112		
09:45 PM	0	17	0	0	17	3	0	0	0	3	11	50	12	0	73	0	0	2	0	2	0	95	95		
Total	2	85	5	0	92	19	2	1	0	22	39	219	61	0	319	2	4	21	0	27	0	460	460		
Grand Total	35	305	45	59	3134	691	38	34	12	763	545	349	839	27	4882	33	38	583	38	654	136	9433	9569		
Apprch %	1.1	97.4	1.4			90.6	5.0	4.5			11.2	71.7	17.2			5.0	5.8	89.1							
Total %	0.4	32.4	0.5		33.2	7.3	0.4	0.4		8.1	5.8	37.1	8.9		51.8	0.3	0.4	6.2		6.9	1.4	98.6			

Major Street Approaches:

Northbound:

CSAH 7 (7th Ave.)

Data File: C:\APPS\Data Files\TMC9907.war
 Count Type: IMC. Channel: 0. Count Date: 6/15/99
 Number of Lanes: 2
 Approach Speed: 55
 Total Approach Traffic: 4882

Southbound:

CSAH 7 (7th Ave.)

Data File: C:\APPS\Data Files\TMC9907.war
 Count Type: IMC. Channel: 0. Count Date: 6/15/99
 Number of Lanes: 2
 Approach Speed: 55
 Total Approach Traffic: 3134

Minor Street Approaches:

Eastbound:

159th Ave.

Data File: C:\APPS\Data Files\TMC9907.war
 Count Type: IMC. Channel: 0. Count Date: 6/15/99
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 654

Westbound:

CR 58 (159th Ave.)

Data File: C:\APPS\Data Files\TMC9907.war
 Count Type: IMC. Channel: 0. Count Date: 6/15/99
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 763

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

Hour	Main Begin (Total)	Side			Warrant 1		Warrant 2		Warrant 8	
		Vol.	Dir.	Rank	Meets?	Criteria	Meets?	Criteria	Meets?	Criteria
0	0	0	W	17		140		70		112
1	0	0	W	18		140		70		112
2	0	0	W	19		140		70		112
3	0	0	W	20		140		70		112
4	0	0	W	21		140		70		112
5	0	0	W	22		140		70		112
6	598	93	W	1	MAIN	140	SIDE	70	MAIN	112
7	497	92	W	2	MAIN	140	SIDE	70		112
8	329	68	E	4		105	SIDE	52		84
9	287	30	W	15		140		70		112
10	349	37	W	13		140		70		112
11	377	47	W	7		140		70		112
12	450	49	E	6	MAIN	105		52		84
13	457	40	E	12	MAIN	105		52		84
14	432	43	W	9	MAIN	140		70		112
15	647	31	E	14	MAIN	105	MAIN	52	MAIN	84
16	787	46	W	8	MAIN	140	MAIN	70	MAIN	112
17	845	53	E	5	MAIN	105	--BOTH--	52	MAIN	84
18	625	80	W	3	MAIN	140	SIDE	70	MAIN	112
19	491	42	W	10	MAIN	140		70		112
20	434	42	E	11	MAIN	105		52		84
21	411	27	E	16		105		52		84
22	0	0	W	23		140		70		112
23	0	0	W	24		140		70		112

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. Ped volumes too low. Criteria--190 Peds in peak hour, 100 peds in 4th high hour.

Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

Warrant 5 - Progressive Movement

NOT SATISFIED. Adjacent signals closer than 1000 feet and/or not part of coordinated system.

Warrant 6 - Accident Experience

NOT SATISFIED. 0 correctable accidents is fewer than required 5.

Correctable Accidents: 0; Right Angle Accidents: 0; Left Turn Accidents: 0; Other Accidents: 0.

Warrant 7 - Systems Warrant

NOT SATISFIED. Peak hour total entering volume 949 does not meet criteria of 1000

- Approaches which are part of the principal through traffic roadway network.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

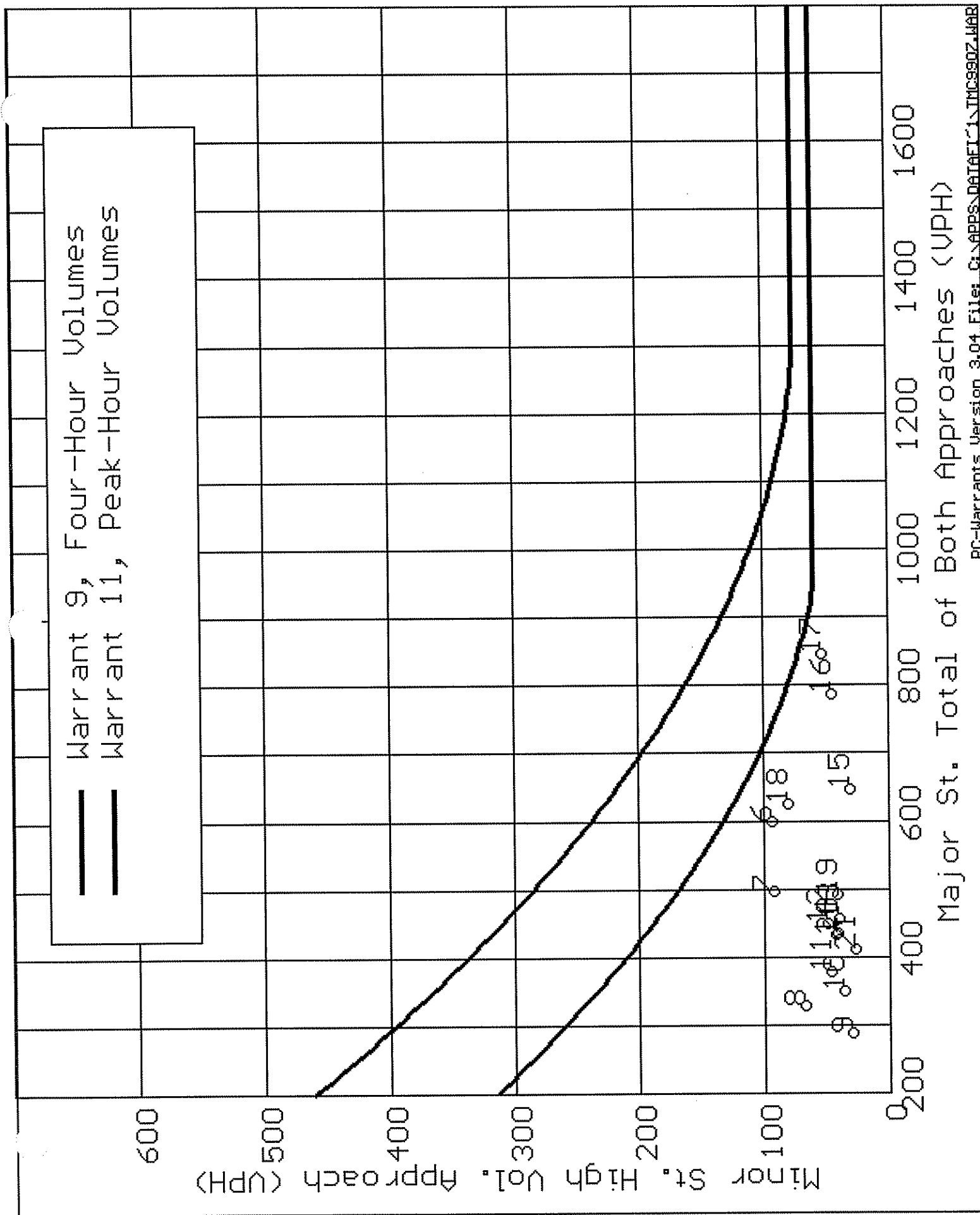
Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1700 hours) volume not adequate.

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 100.

Warrant 11 - Peak Hour Volume

NOT SATISFIED.



Major St. Total of Both Approaches (VPH)



NORTH

COUNT LOCATION:

CSAH 7 (7th Ave.) @

DATE:

6/11/99

CR 58 (159th Ave.)

APP. #1= EB 159th Ave.

APP. #2 = SB CSAH 7
7th Ave.

APP. #3= WB CR 58
159th Ave.

APP. #4= NB CSAH 7
7th Ave.

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
6:00-6:15AM								
6:15-6:30							1	
6:30-6:45								
6:45-7:00								
HOURLY TOTAL						HOURLY TOTAL		1
7:00-7:15						1		
7:15-7:30						2		
7:30-7:45						6		
7:45-8:00								
HOURLY TOTAL						HOURLY TOTAL		9
8:00-8:15						4		
8:15-8:30						3		
8:30-8:45						2		
8:45-9:00						4		
HOURLY TOTAL						HOURLY TOTAL		13
9:00-9:15						4		
9:15-9:30						5		
9:30-9:45								
9:45-10:00						6		
HOURLY TOTAL						HOURLY TOTAL		15
10:00-10:15								
10:15-10:30						5	1	
10:30-10:45						3		
10:45-11:00								
HOURLY TOTAL						HOURLY TOTAL		9
11:00-11:15						1		
11:15-11:30						5		
11:30-11:45						3		
11:45-12:00						3		
HOURLY TOTAL						HOURLY TOTAL		12
12:00-12:15						4	1	
12:15-12:30						2	2	
12:30-12:45						1		
12:45-1:00						1		
HOURLY TOTAL						HOURLY TOTAL		11
1:00-1:15						4	1	
1:15-1:30						1		
1:30-1:45						1		
1:45-2:00						1		
HOURLY TOTAL						HOURLY TOTAL		8



NORTH

COUNT LOCATION:

CSAH 7 (7th Ave.) @

DATE:

6/15/99

CR 58 (159th Ave.)

APP. #1= EB 159th Ave.

APP. #2 = SB CSAH 7
7th Ave.

APP. #3= WB CR 58
159th Ave.

APP. #4= NB CSAH 7
7th Ave.

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						7		
2:15-2:30						2		
2:30-2:45						7		
2:45-3:00						3		
HOURLY TOTAL						HOURLY TOTAL		19
3:00-3:15						3		
3:15-3:30						2		
3:30-3:45				2	2	2		
3:45-4:00						3		
HOURLY TOTAL					2	HOURLY TOTAL		10
4:00-4:15						3		
4:15-4:30						5		
4:30-4:45						3		
4:45-5:00								
HOURLY TOTAL						HOURLY TOTAL		11
5:00-5:15						3		
5:15-5:30						1		
5:30-5:45						2		
5:45-6:00								
HOURLY TOTAL						HOURLY TOTAL		6
6:00-6:15						3		
6:15-6:30						1		
6:30-6:45						2		
6:45-7:00						1		
HOURLY TOTAL						HOURLY TOTAL		7
7:00-7:15								
7:15-7:30								
7:30-7:45						1	1	
7:45-8:00								
HOURLY TOTAL						HOURLY TOTAL		2
8:00-8:15						1		
8:15-8:30								
8:30-8:45								
8:45-9:00								
HOURLY TOTAL						HOURLY TOTAL		1
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		