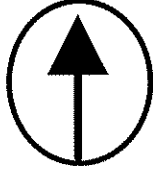


Date : 7/48/95AM 7/19/95PM

Count Number : TMC9518

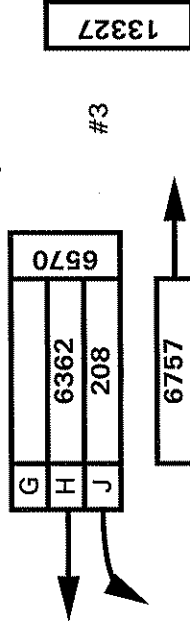
Location : CSAH 51 (UNIVERSITY AVE) @

111TH AVE.

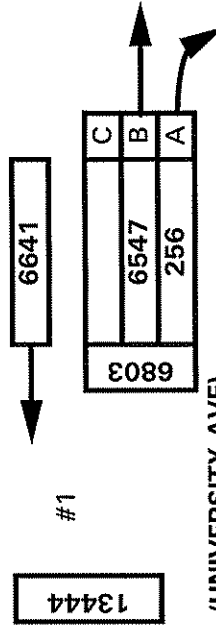


North

SB CSAH 51 (UNIVERSITY AVE)



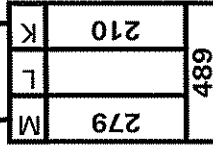
NB CSAH 51 (UNIVERSITY AVE)



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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

WB 111TH



#4

953

Counter : TDC EIGHT
 Counted by ANN/LAURIE
 CLEAR

Date 07/18/95	CSAH 51 (UNIVERSITY AVE) Southbound			111TH AVE Westbound			CSAH 51 (UNIVERSITY AVE) Northbound			Vehicle Total	Other Total
	Other	Thru	Left	Other	Right	Left	Other	Right	Thru		
06:00	0	123	2	0	3	6	1	1	16	151	1
06:15	3	159	4	0	2	6	0	2	12	185	3
06:30	0	188	2	1	4	8	0	1	18	221	1
06:45	3	215	3	0	2	7	0	2	19	248	3
Hr Total	6	685	11	1	11	27	1	6	65	805	8
07:00	2	200	7	0	2	9	2	2	18	238	4
07:15	3	171	11	0	3	8	2	1	33	227	5
07:30	2	187	5	0	4	5	1	0	38	239	3
07:45	0	154	6	0	1	4	1	2	37	204	1
Hr Total	7	712	29	0	10	26	6	5	126	908	13
08:00	2	128	5	1	2	4	0	2	35	176	3
08:15	0	88	1	0	2	4	1	2	26	123	1
08:30	0	78	3	0	2	5	2	2	36	126	2
08:45	0	83	1	1	1	5	2	2	45	137	3
Hr Total	2	377	10	2	7	18	5	8	142	562	9
09:00	4	56	3	0	2	3	0	1	31	96	4
09:15	1	67	0	1	2	6	2	2	35	112	4
09:30	2	75	0	0	1	3	1	4	43	126	3
09:45	1	64	4	0	6	1	1	1	50	126	2
Hr Total	8	262	7	1	11	13	4	8	159	460	13
10:00	3	84	2	0	1	4	2	1	44	136	5
10:15	0	59	3	0	2	4	1	1	59	128	1
10:30	1	71	0	0	2	4	1	3	58	138	2
10:45	2	86	3	0	3	3	3	4	69	168	5
Hr Total	6	300	8	0	8	15	7	9	230	570	13
11:00	2	81	2	0	2	2	1	0	68	155	3
11:15	4	77	1	0	0	1	3	3	67	149	7
11:30	1	73	3	0	1	6	1	0	60	143	2
11:45	2	71	4	1	2	3	2	2	66	148	5
Hr Total	9	302	10	1	5	12	7	5	261	595	17
12:00	3	70	2	0	3	1	4	2	98	176	7
12:15	4	86	1	0	3	4	1	2	87	183	5
12:30	2	89	2	0	2	3	2	5	72	173	4
12:45	0	95	2	0	1	3	0	2	91	194	0
Hr Total	9	340	7	0	9	11	7	11	348	726	16

ANOKA COUNTY HIGHWAY DEPARTMENT
 TRAFFIC ENGINEERING SECTION
 TRAFFIC VOLUME AND
 TURNING MOVEMENT STUDY

Site () : 95180201
 Start date: 07/18/95
 File I.D. : TMC9518}
 Page : 2

Counter : TDC EIGHT
 Counted by ANN/LAURIE
 CLEAR

Vehicle group 1

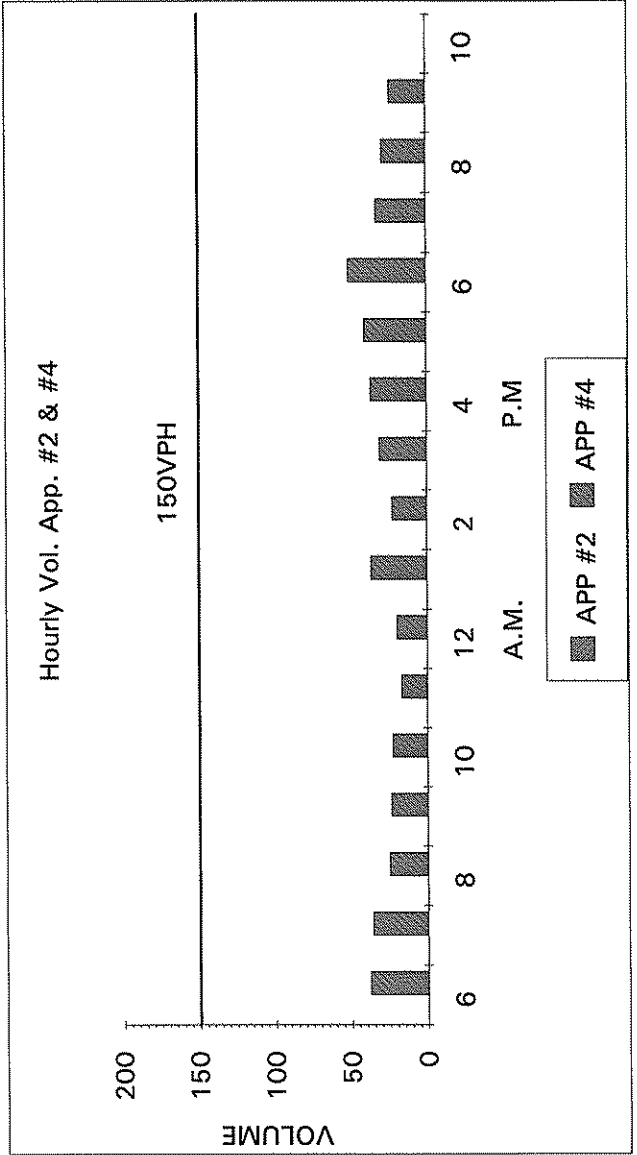
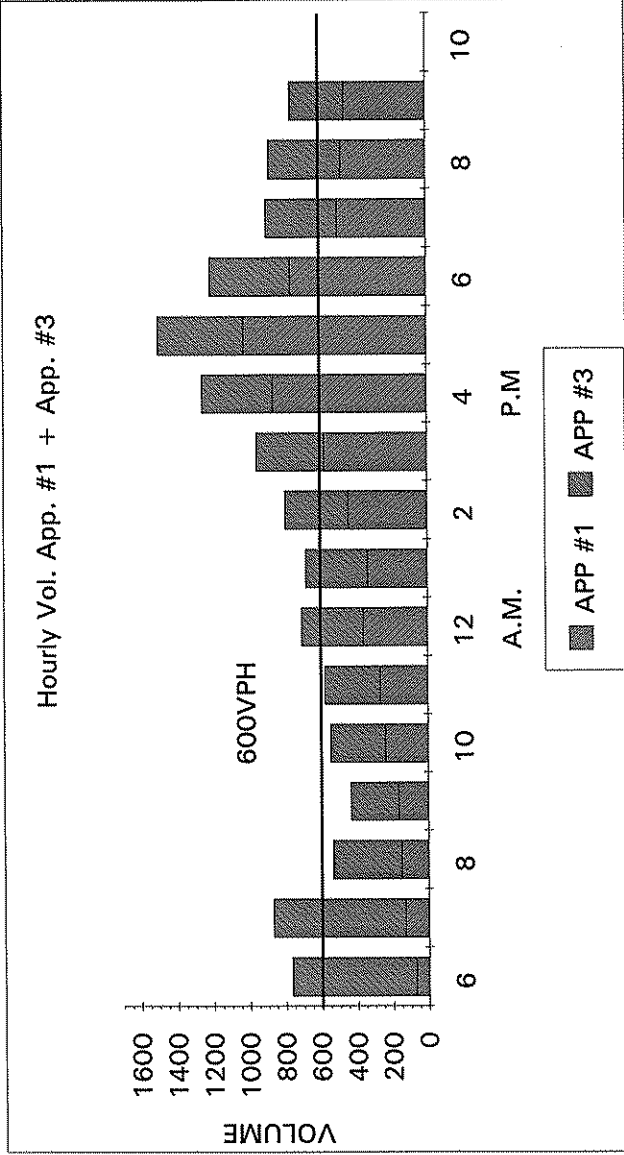
Date 07/18/95	CSAH 51 (UNIVERSITY AVE) Southbound		111TH AVE Westbound		CSAH 51 (UNIVERSITY AVE) Northbound		Vehicle Total	Other Total
	Other	Thru	Left	Other	Right	Left		
13:00	1	77	2	0	4	6	173	2
13:15	3	100	1	0	2	7	180	4
13:30	4	78	2	0	3	8	185	6
13:45	1	87	1	0	2	5	181	3
Hr Total	9	342	6	0	11	26	719	15
14:00	0	77	1	0	3	3	195	2
14:15	2	92	3	1	5	3	196	5
14:30	2	78	1	0	1	3	206	2
14:45	2	98	4	2	3	2	222	7
Hr Total	6	345	9	3	12	11	819	16
15:00	1	92	3	0	1	3	207	4
15:15	0	92	1	0	5	3	245	1
15:30	0	101	3	0	1	5	249	2
15:45	0	82	3	0	6	7	282	4
Hr Total	1	367	10	0	13	18	983	11
16:00	1	82	4	0	4	3	302	1
16:15	1	100	6	0	4	3	304	3
16:30	3	87	5	0	5	5	329	7
16:45	1	102	8	0	7	6	357	2
Hr Total	6	371	23	0	20	17	1292	13
17:00	2	119	7	0	3	2	394	4
17:15	0	119	4	0	4	4	382	3
17:30	0	109	4	0	3	12	381	2
17:45	1	111	4	0	7	6	382	4
Hr Total	3	458	19	0	17	24	1539	13
18:00	0	89	2	0	6	7	331	2
18:15	2	110	4	0	4	7	326	5
18:30	0	125	4	1	10	1	332	1
18:45	0	118	0	0	9	7	273	0
Hr Total	2	442	10	1	29	22	1262	8
19:00	0	104	3	0	6	5	247	1
19:15	0	89	5	0	6	2	224	0
19:30	0	90	5	0	1	2	211	0
19:45	0	98	7	0	4	7	248	0
Hr Total	0	381	20	0	17	16	930	1

Counter : TDC EIGHT
 Counted by ANN/LAURIE
 CLEAR

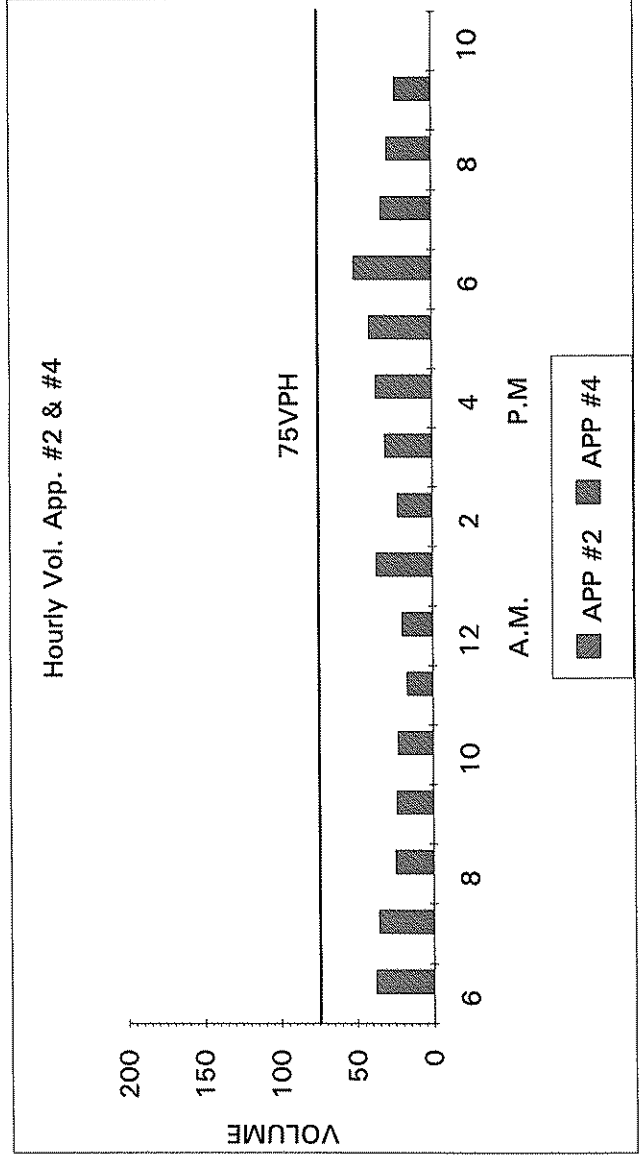
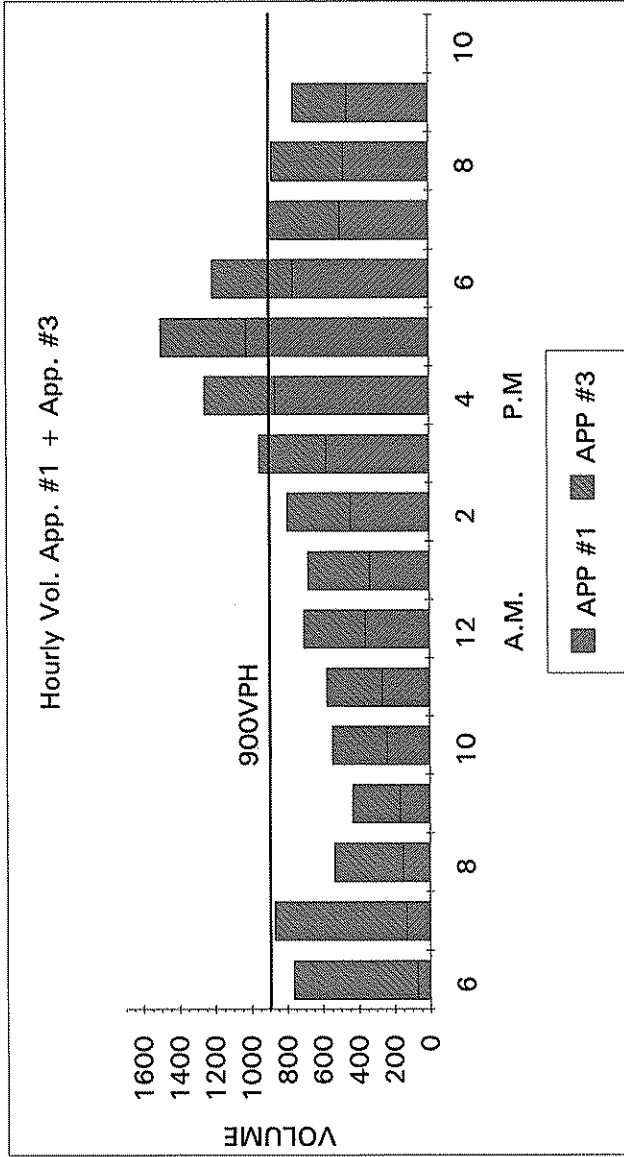
Date 07/18/95	CSAH 51 (UNIVERSITY AVE) Southbound			111TH AVE Westbound			CSAH 51 (UNIVERSITY AVE) Northbound			Vehicle Total	
	Other	Thru	Left	Other	Right	Left	Other	Right	Thru	Vehicle Total	Other Total
20:00	0	109	5	0	1	7	0	12	115	249	0
20:15	0	98	0	0	2	6	1	3	116	225	1
20:30	0	82	2	0	3	3	0	3	140	233	0
20:45	0	103	5	0	6	1	2	5	82	202	2
Hr Total	0	392	12	0	12	17	3	23	453	909	3
21:00	1	69	5	0	3	1	1	7	99	184	2
21:15	1	81	1	0	5	3	1	5	119	214	2
21:30	0	74	3	0	3	1	0	4	116	201	0
21:45	0	62	8	0	7	1	0	2	104	184	0
Hr Total	2	286	17	0	18	6	2	18	438	783	4

TOTAL 76 6362 208 9 210 279 88 256 6547 13862 173

TMC9518 SIGNAL WARRANT 1 STUDY



TMC9518 SIGNAL WARRANT 2 STUDY



TMC9518 STOP WARRANT STUDY

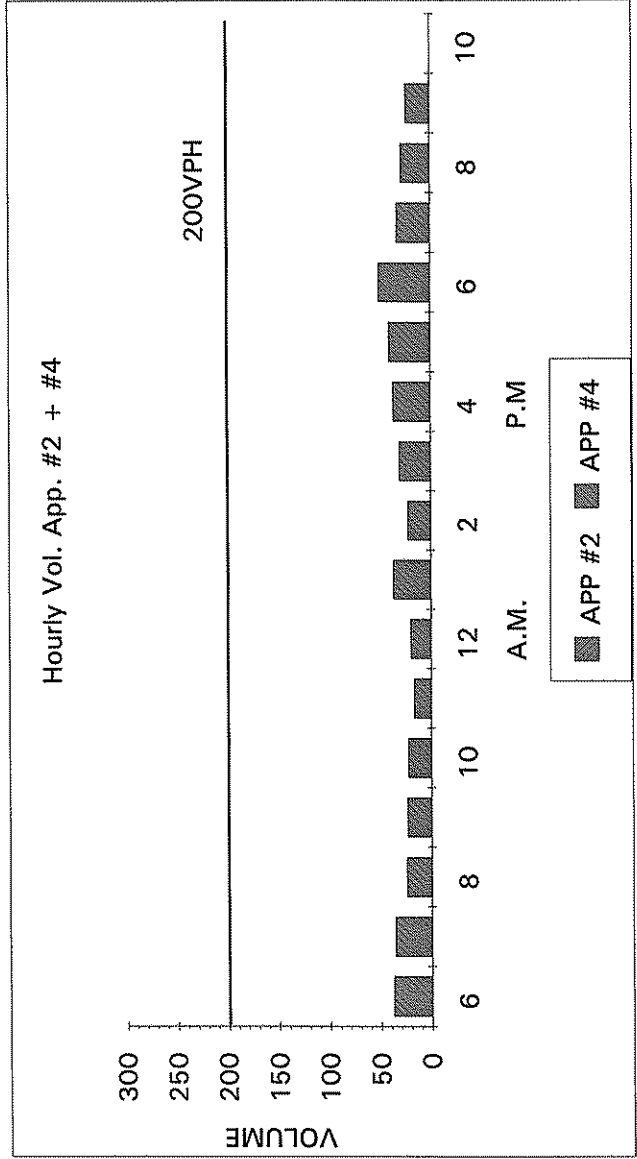
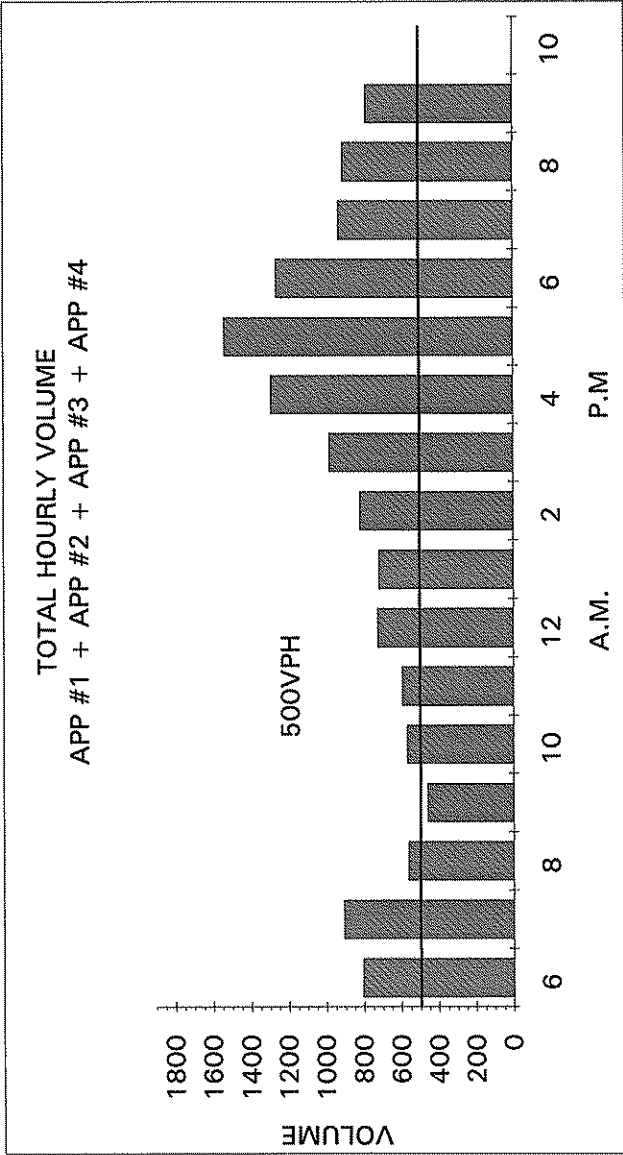
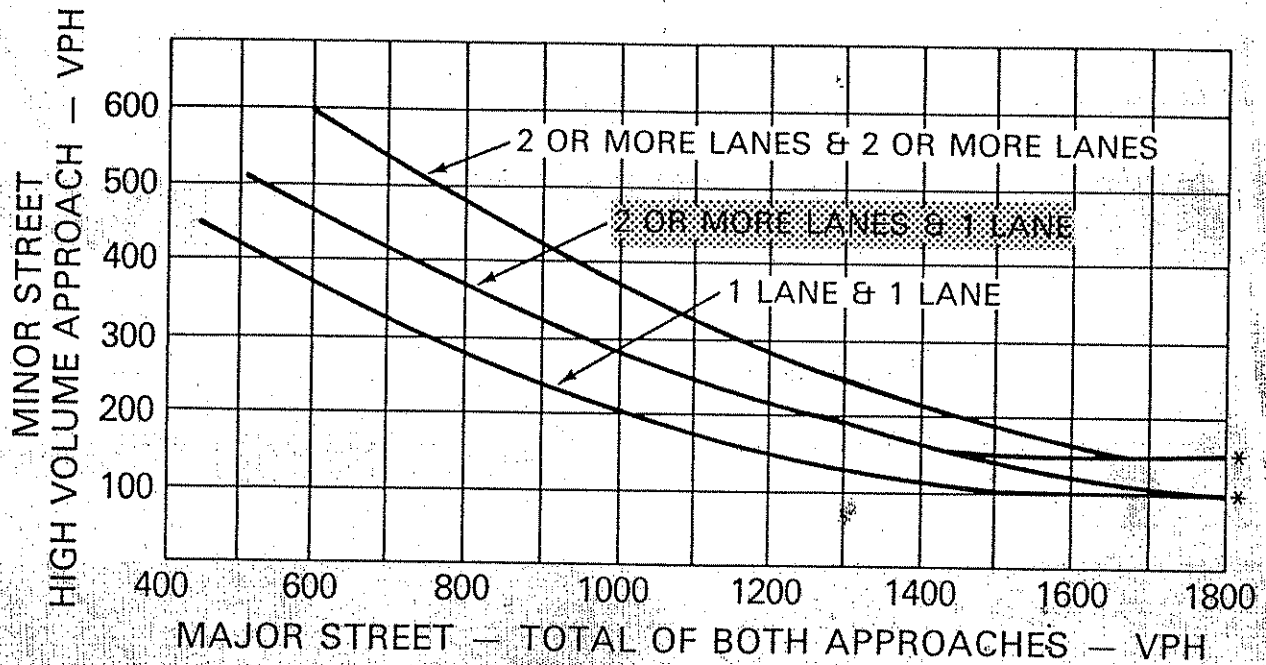


FIGURE 4-5. PEAK HOUR VOLUME WARRANT



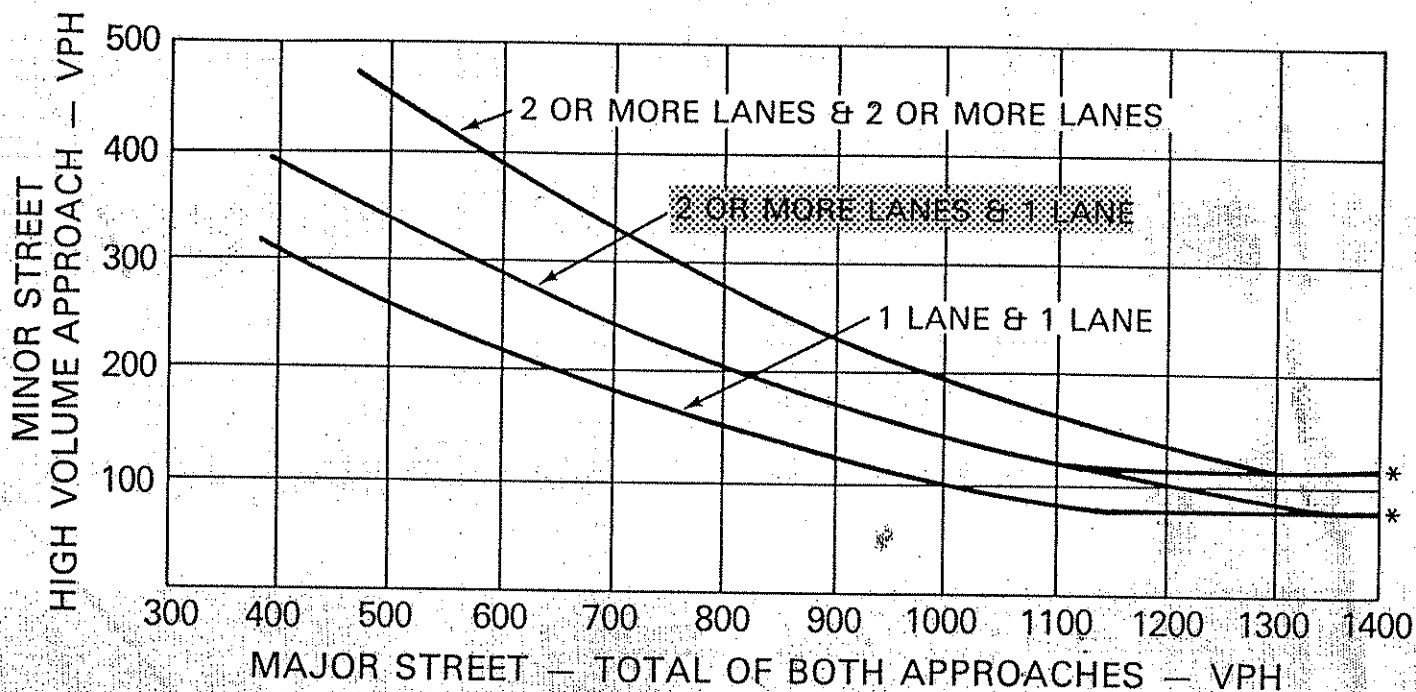
*NOTE: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	767	38
7-8 am	872	36
8-9 am	537	25
9-10 am	436	24
10-11 am	547	23
11-12 pm	578	17
12-1 pm	706	20
1-2 pm	682	37
2-3 pm	796	23
3-4 pm	952	31
4-5 pm	1255	37
5-6 pm	1498	41
6-7 pm	1211	51
7-8 pm	897	33
8-9 pm	880	29
9-10 pm	759	24

FIGURE 4-7. FOUR HOUR VOLUME WARRANT




*NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	767	38
7-8 am	872	36
8-9 am	537	25
9-10 am	436	24
10-11 am	547	23
11-12 pm	578	17
12-1 pm	706	20
1-2 pm	682	37
2-3 pm	796	23
3-4 pm	952	31
4-5 pm	1255	37
5-6 pm	1498	41
6-7 pm	1211	51
7-8 pm	897	33
8-9 pm	880	29
9-10 pm	759	24

TMC9518 CSAH 51 (UNIVERSITY AVE) @ 111TH AVE.


NORTH

APP. #1= NB CSAH 51
(UNIVERSITY AVE)

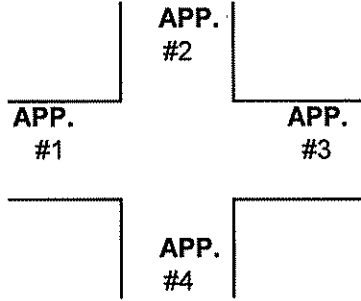
APP. #2= EB 111TH AVE

APP. #3= SB CSAH 51
(UNIVERSITY AVE)

APP. #4= WB 111TH AVE

COUNT LOCATION: CSAH 51 (UNIVERSITY AVE) @
11TH AVE

DATE: 7/18/95



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				2	2			1
6:15-6:30				1	1	1		2
6:30-6:45						1		
6:45-7:00				1	1	1		1
HOURLY TOTAL					4	HOURLY TOTAL		7
7:00-7:15						4		1
7:15-7:30						3		1
7:30-7:45						2		2
7:45-8:00								1
HOURLY TOTAL						HOURLY TOTAL		14
8:00-8:15						1		2
8:15-8:30				1	1	1		
8:30-8:45				1	1	3		1
8:45-9:00				1	1	3		
HOURLY TOTAL					3	HOURLY TOTAL		11
9:00-9:15				1	1	4		
9:15-9:30						4		
9:30-9:45						3		
9:45-10:00						2		
HOURLY TOTAL					1	HOURLY TOTAL		13
10:00-10:15				2	2	5		
10:15-10:30				2	2	1		
10:30-10:45						2		
10:45-11:00						5		
HOURLY TOTAL					4	HOURLY TOTAL		13
11:00-11:15				1	1	3		
11:15-11:30						6		1
11:30-11:45						2		
11:45-12:00						4		1
HOURLY TOTAL					1	HOURLY TOTAL		17
12:00-12:15						6		1
12:15-12:30						3		1
12:30-12:45						2		2
12:45-1:00								
HOURLY TOTAL						HOURLY TOTAL		15
1:00-1:15				1	1	2		
1:15-1:30						5		
1:30-1:45				2	2	5		
1:45-2:00			2		2	3		
HOURLY TOTAL					5	HOURLY TOTAL		15



COUNT LOCATION: CSAH 51 (UNIVERSITY AVE) @
11TH AVE

DATE: 7/19/95

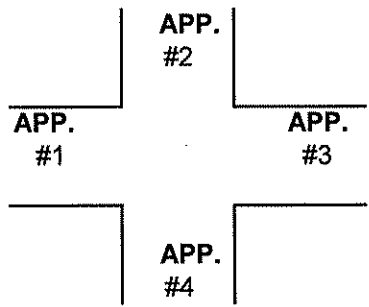
NORTH

APP. #1= NB CSAH 51
(UNIVERSITY AVE)

APP. #2= EB 111TH AVE

APP. #3= SB CSAH 51
(UNIVERSITY AVE)

APP. #4= WB 111TH AVE



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						2		
2:15-2:30				1	1	4		1
2:30-2:45						2		
2:45-3:00						6	1	
HOURLY TOTAL					1	HOURLY TOTAL		16
3:00-3:15						4		
3:15-3:30						1		
3:30-3:45				2	2	1		1
3:45-4:00						4		
HOURLY TOTAL					2	HOURLY TOTAL		11
4:00-4:15				2	2	1		
4:15-4:30						2		1
4:30-4:45						6	1	
4:45-5:00				1	1	2		
HOURLY TOTAL					3	HOURLY TOTAL		13
5:00-5:15				6	6	2	1	1
5:15-5:30				2	2	3		
5:30-5:45				1	1	1		1
5:45-6:00				2	2	3		1
HOURLY TOTAL					11	HOURLY TOTAL		13
6:00-6:15			1	2	3	2		1
6:15-6:30						5		
6:30-6:45						1		
6:45-7:00				2	2			
HOURLY TOTAL					5	HOURLY TOTAL		9
7:00-7:15			1	1	2	1		
7:15-7:30								
7:30-7:45								
7:45-8:00			2		2			
HOURLY TOTAL					4	HOURLY TOTAL		1
8:00-8:15								
8:15-8:30				1	1	1		
8:30-8:45								
8:45-9:00						2		
HOURLY TOTAL					1	HOURLY TOTAL		3
9:00-9:15						2		
9:15-9:30						2		
9:30-9:45				1	1			
9:45-10:00			1	2	3			
HOURLY TOTAL					4	HOURLY TOTAL		4