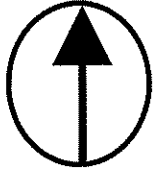


Date: 7/12/95AM 7/11/95PM

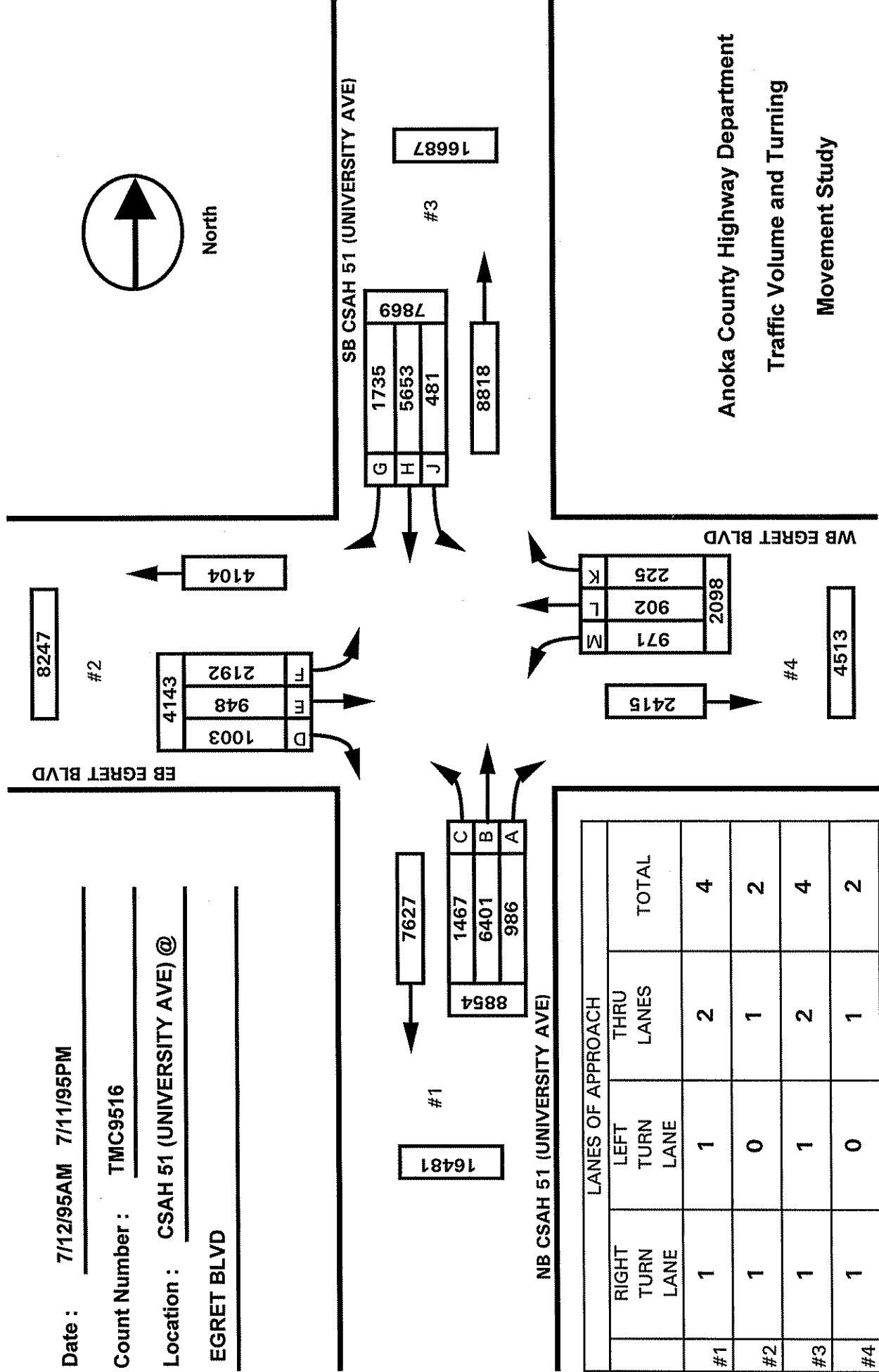
Count Number: TMC9516

Location: CSAH 51 (UNIVERSITY AVE) @

EGRET BLVD



North



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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT
 TRAFFIC ENGINEER 3 SECTION
 TRAFFIC VOLUMES AND
 TURNING MOVEMENT STUDY

Site Code 3160101
 Start Date: 07/11/95
 File I.D. : TMC9516
 Page : 1

Counter : YDC GHY
 Counted by ANN/LAURIE
 AM:STORM; PM:CLEAR&90s

Vehicle group 1

Date 07/11/95	CSAH 51 (UNIVERSITY AVE) Southbound				EGRET BLVD Westbound				CSAH 51 (UNIVERSITY AVE) Northbound				EGRET BLVD Eastbound				Vehicle Total	
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
06:00	0	45	100	1	0	0	10	11	0	1	18	6	0	14	0	12	218	0
06:15	1	42	145	0	0	0	5	9	0	0	20	2	0	23	4	23	273	1
06:30	2	35	217	0	0	0	2	13	0	1	26	3	1	29	2	18	347	2
06:45	1	51	197	3	1	0	6	9	1	2	38	11	1	29	3	31	381	3
Hr Total	4	173	659	4	1	0	23	42	1	4	102	22	2	95	9	84	1219	6
07:00	2	43	210	3	0	1	6	12	0	1	27	3	0	36	3	22	367	2
07:15	2	38	181	1	1	0	6	8	3	5	29	9	0	28	2	37	344	6
07:30	1	29	167	3	0	0	5	9	5	2	34	17	0	22	8	26	322	6
07:45	0	44	167	0	2	1	9	3	4	4	26	13	0	28	3	18	316	6
Hr Total	5	154	725	7	3	2	26	32	12	12	116	42	0	114	16	103	1349	20
08:00	2	33	105	4	2	0	3	9	1	1	25	5	2	19	9	23	238	5
08:15	1	29	85	2	0	0	3	10	3	1	28	9	1	13	5	14	200	4
08:30	5	23	90	8	0	0	1	9	0	0	29	13	2	14	3	23	215	5
08:45	0	21	94	4	2	0	6	9	2	3	29	8	0	15	9	13	211	4
Hr Total	8	106	374	18	4	0	13	37	6	5	111	35	5	61	26	73	864	18
09:00	2	12	53	3	1	2	7	6	1	10	42	8	3	11	15	15	187	4
09:15	3	15	59	1	1	2	4	8	4	9	43	5	3	10	9	11	179	8
09:30	0	17	71	5	0	1	5	7	4	8	51	21	1	10	5	16	218	4
09:45	4	20	87	0	3	2	8	12	3	9	38	9	0	22	7	15	229	10
Hr Total	9	64	270	9	5	7	24	33	12	36	174	43	7	53	36	57	813	26
10:00	2	18	75	4	0	1	9	9	1	7	42	9	0	12	9	23	218	3
10:15	2	20	78	4	2	1	12	7	1	8	38	7	0	9	13	15	212	5
10:30	1	24	61	3	0	1	7	15	3	13	42	12	1	10	6	17	212	4
10:45	1	14	83	4	0	1	6	12	2	15	56	8	1	14	11	25	250	3
Hr Total	6	76	297	15	2	4	34	43	7	43	178	36	2	45	39	80	892	15
11:00	0	14	56	4	1	3	15	17	1	10	64	9	2	13	16	17	240	2
11:15	2	17	81	13	1	2	12	21	1	10	63	18	3	10	15	13	278	4
11:30	5	22	76	7	0	4	16	12	3	12	84	15	3	11	10	24	296	8
11:45	0	15	75	7	3	3	19	21	1	18	73	24	1	10	18	27	311	4
Hr Total	7	68	288	31	5	12	62	71	6	50	284	66	9	44	59	81	1125	18
12:00	4	26	84	2	1	3	19	17	4	25	86	20	1	9	17	32	341	9
12:15	2	12	72	13	0	9	14	16	4	13	90	20	1	21	13	25	319	6
12:30	6	28	88	7	0	4	13	14	2	17	89	20	2	11	9	25	327	8
12:45	1	27	78	9	0	3	12	23	2	26	91	15	2	8	16	23	333	3
Hr Total	13	93	322	31	1	19	58	70	12	81	356	75	6	49	55	105	1320	26

ANOKA COUNTY HIGHWAY DEPARTMENT
 TRAFFIC ENGINEER G SECTION
 TRAFFIC VOLUME AND
 TURNING MOVEMENT STUDY

Site Code 5160101
 Start Date: 07/11/95
 File I.D. : TMC9516}
 Page : 2

Counter : TDC-1181
 Counted by ANN/LAURIE
 AM: STORM; PM: CLEAR&90s

Vehicle group 1

Date 07/11/95	CSAH 51 (UNIVERSITY AVE) Southbound			EGRET BLVD Westbound			CSAH 51 (UNIVERSITY AVE) Northbound			EGRET BLVD Eastbound			Vehicle Total								
	Other	Right	Thru	Left	Thru	Right	Other	Right	Thru	Left	Thru	Right	Other	Left	Total						
13:00	1	19	76	9	2	6	15	65	72	10	63	314	77	7	41	58	98	20	20	293	4
13:15	2	30	78	8	0	6	21	16	19	4	19	75	19	1	9	11	16	16	16	309	6
13:30	1	14	71	6	2	3	18	16	18	3	10	81	27	3	9	14	29	29	301	301	6
13:45	7	19	85	8	1	0	19	18	18	2	22	88	11	3	11	13	33	33	330	330	10
Hr Total	11	82	310	31	5	15	72	65	72	10	63	314	77	7	41	58	98	20	20	1233	26
14:00	2	19	68	10	1	6	11	11	17	1	9	77	20	1	17	7	25	25	287	287	4
14:15	3	22	68	8	1	1	15	5	16	0	13	91	20	1	16	15	32	32	308	308	4
14:30	1	27	77	14	0	0	17	15	17	2	16	109	31	1	7	14	36	36	364	364	3
14:45	0	19	73	8	0	2	18	18	13	1	18	118	22	1	12	26	35	35	365	365	1
Hr Total	6	87	286	40	2	9	49	49	63	4	56	395	93	4	52	62	128	128	1324	1324	12
15:00	1	25	85	9	0	4	12	12	26	1	12	99	21	2	16	16	41	41	368	368	2
15:15	1	20	80	9	1	6	12	15	15	2	21	131	29	0	11	15	48	48	397	397	4
15:30	1	22	72	6	2	1	17	19	19	2	16	160	21	2	17	22	48	48	423	423	5
15:45	3	28	78	9	0	3	11	11	19	5	23	189	46	2	13	16	59	59	496	496	8
Hr Total	6	95	315	33	3	14	52	52	79	10	72	579	117	6	57	69	196	196	1684	1684	19
16:00	0	35	72	12	0	4	24	24	12	0	20	184	42	0	12	29	66	66	512	512	0
16:15	5	30	62	4	0	7	19	19	26	2	19	196	54	2	23	20	80	80	542	542	7
16:30	2	37	78	12	0	6	14	14	12	1	36	226	52	0	18	21	61	61	573	573	3
16:45	0	31	97	10	0	5	22	22	24	4	32	235	50	2	20	21	71	71	620	620	4
Hr Total	7	133	309	38	0	22	79	79	74	7	107	841	198	4	73	91	278	278	2247	2247	14
17:00	1	52	92	10	0	9	32	32	21	1	37	239	54	0	22	32	71	71	671	671	2
17:15	0	49	89	14	0	2	27	27	17	0	32	251	76	0	15	31	58	58	661	661	0
17:30	1	33	94	21	0	5	29	29	20	1	16	245	51	2	26	42	69	69	653	653	2
17:45	2	37	117	6	0	7	27	27	24	1	30	245	57	2	17	27	64	64	660	660	3
Hr Total	4	171	392	51	0	23	115	115	82	3	115	980	238	4	80	132	262	262	2645	2645	7
18:00	1	38	73	7	0	9	32	32	13	0	35	212	30	0	24	24	65	65	562	562	1
18:15	1	33	86	17	1	2	21	21	25	0	32	168	53	0	14	29	60	60	540	540	2
18:30	1	49	92	12	0	3	25	25	21	0	23	140	23	1	15	25	55	55	484	484	1
18:45	0	33	82	10	0	7	23	23	27	1	28	119	30	1	16	17	43	43	436	436	1
Hr Total	3	153	333	46	1	21	101	101	86	1	118	639	136	2	69	95	223	223	2022	2022	5
19:00	2	20	116	14	0	8	18	18	20	0	28	129	33	0	30	17	43	43	476	476	2
19:15	0	32	78	18	0	10	27	27	15	1	31	124	29	0	21	29	43	43	457	457	1
19:30	0	22	80	5	0	6	17	17	16	0	13	124	14	2	14	18	27	27	358	358	0
19:45	1	37	65	9	0	6	15	15	20	0	15	111	19	0	15	18	39	39	369	369	1
Hr Total	3	111	339	46	0	30	77	77	71	1	87	488	95	2	80	82	152	152	1660	1660	4

ANOKA COUNTY HIGHWAY DEPARTMENT
 TRAFFIC ENGINEER 3 SECTION
 TRAFFIC VOLUMES AND
 TURNING MOVEMENT STUDY

Counter : TDC LIGHT
 Counted by ANN/LAURIE
 AM:STORM; PM:CLEAR&90s

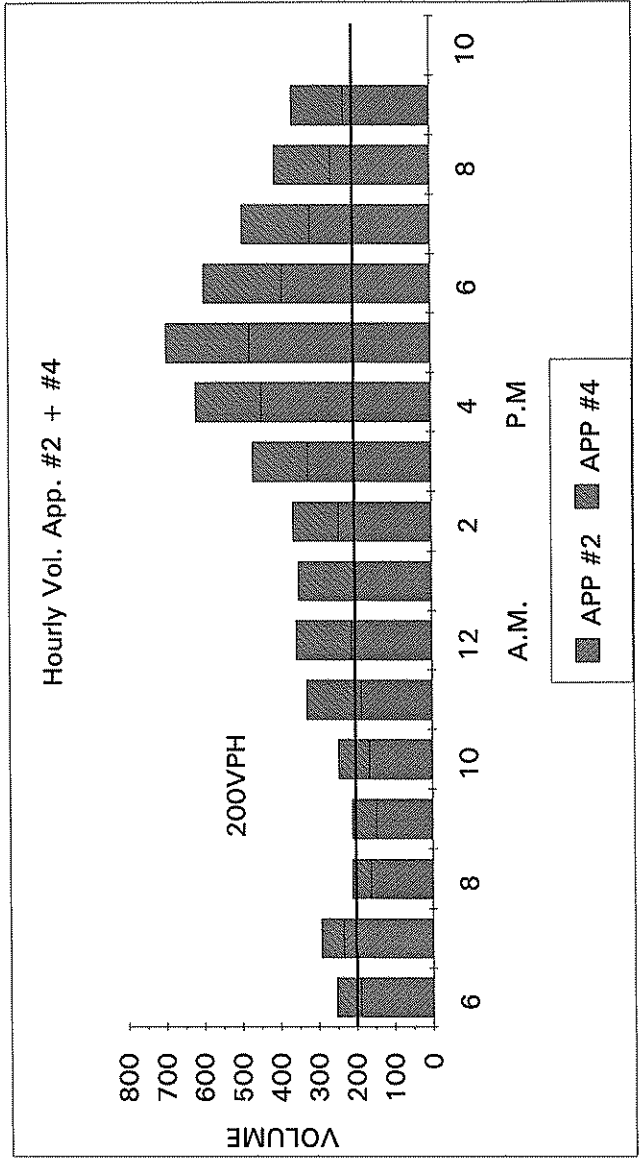
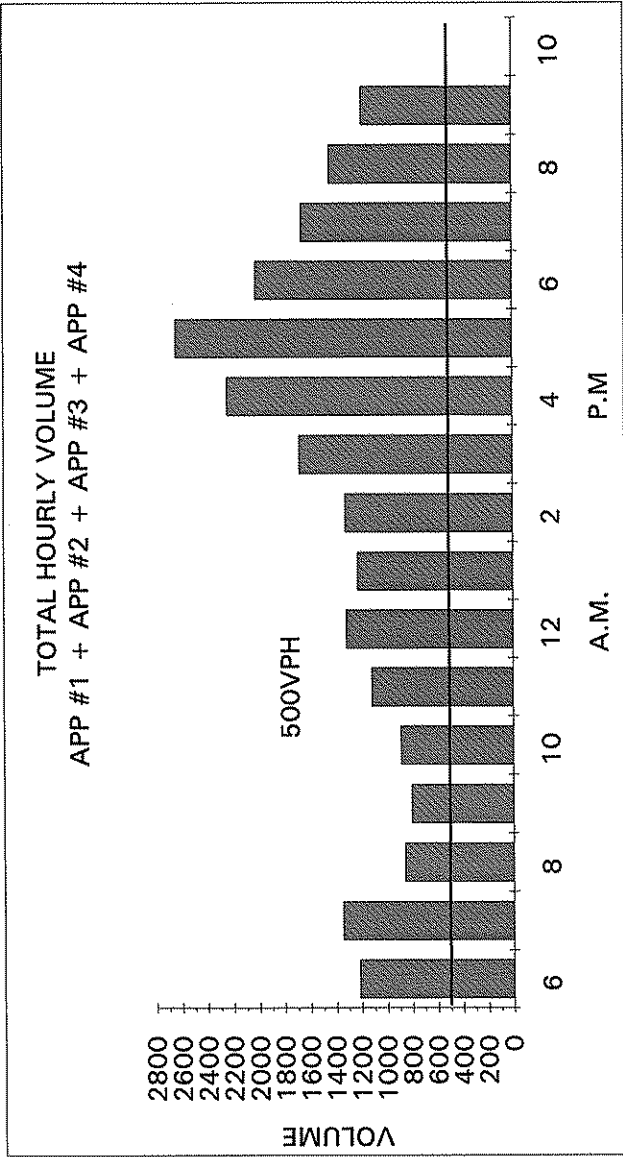
Site Code : 160101
 Start Date: 07/11/95
 File I.D. : TMC9516
 Page : 3

Vehicle group 1

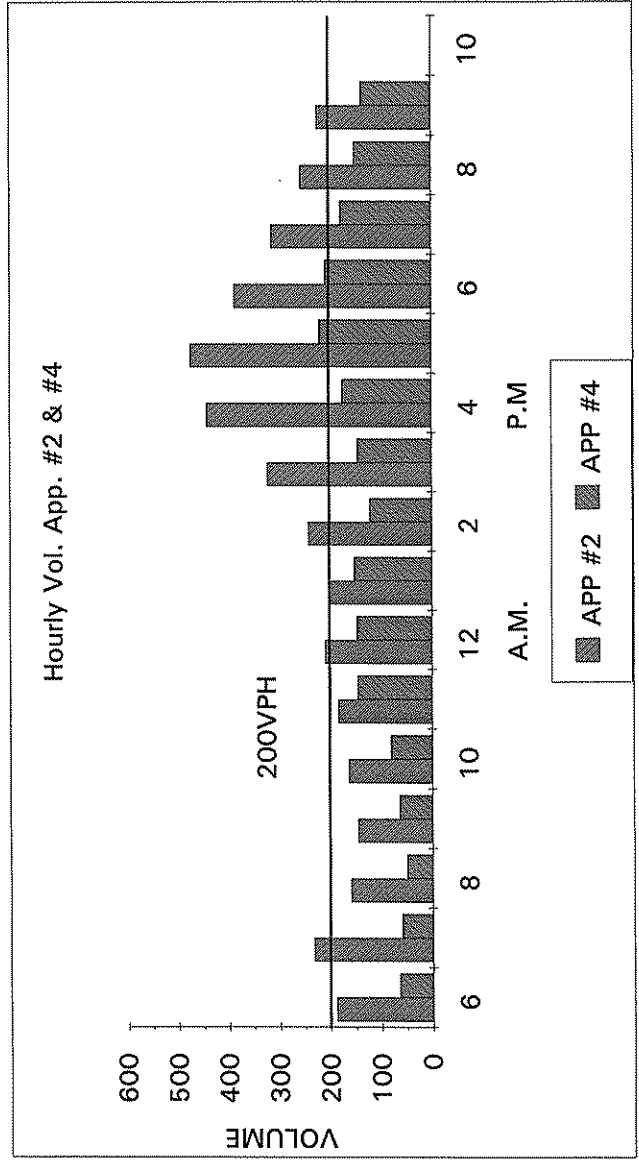
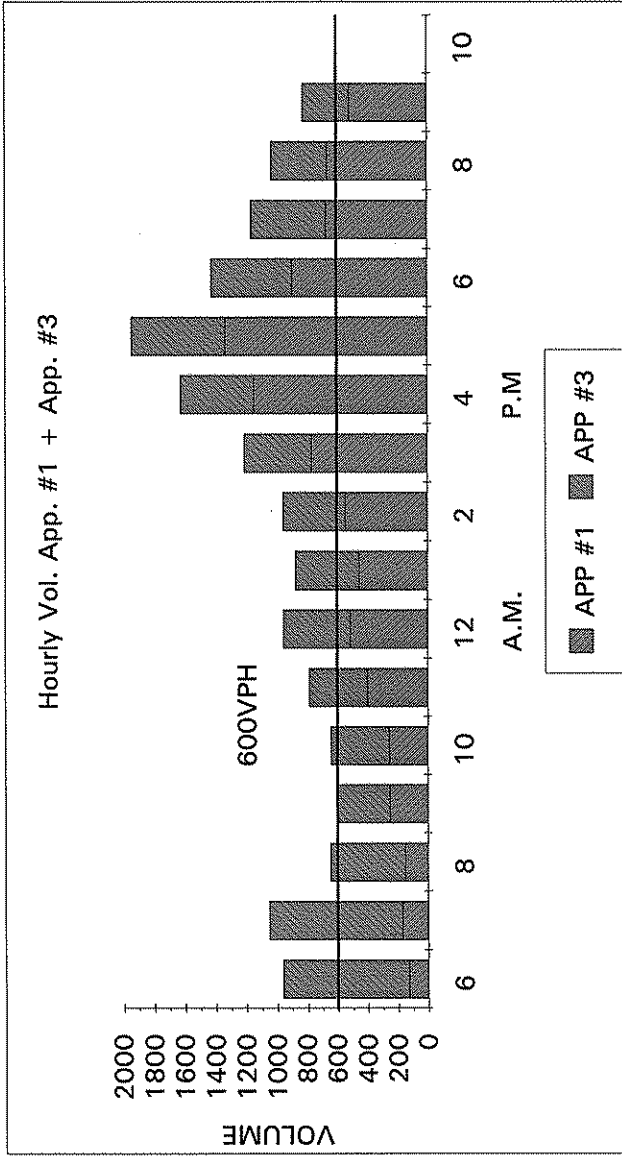
Date 07/11/95	CSAH 51 (UNIVERSITY AVE) Southbound			EGRET BLVD Westbound			CSAH 51 (UNIVERSITY AVE) Northbound			EGRET BLVD Eastbound			Vehicle Total	Other Total				
	Other	Right	Thru	Left	Thru	Right	Other	Right	Thru	Left	Other	Right			Thru	Left	Total	
20:00	1	16	65	4	0	6	18	16	1	23	111	35	1	12	13	38	358	2
20:15	0	25	55	19	0	8	10	18	0	15	133	28	1	13	25	39	389	0
20:30	2	14	65	6	0	5	17	24	2	23	117	29	0	17	14	33	364	4
20:45	0	37	56	12	0	4	11	13	0	20	102	24	0	7	13	33	332	0
Hr Total	3	92	241	41	0	23	56	71	3	81	463	116	2	49	65	143	1443	6
21:00	3	27	52	10	0	6	16	12	0	17	99	23	0	11	14	30	317	3
21:15	0	12	36	13	0	11	19	11	0	15	94	24	0	12	16	36	299	0
21:30	0	19	58	8	0	2	22	10	2	16	99	16	0	8	11	32	301	2
21:45	1	19	47	9	1	5	11	12	0	8	89	15	0	10	13	31	269	2
Hr Total	4	77	193	40	1	24	68	45	2	56	381	78	0	41	54	129	1186	7

TOTAL 99 1735 5653 481 33 225 902 971 97 986 6401 1467 62 1003 948 2192 23026 229

TMC9516 STOP WARRANT STUDY



TMC9516 SIGNAL WARRANT 1 STUDY



TMC9516 SIGNAL WARRANT 2 STUDY

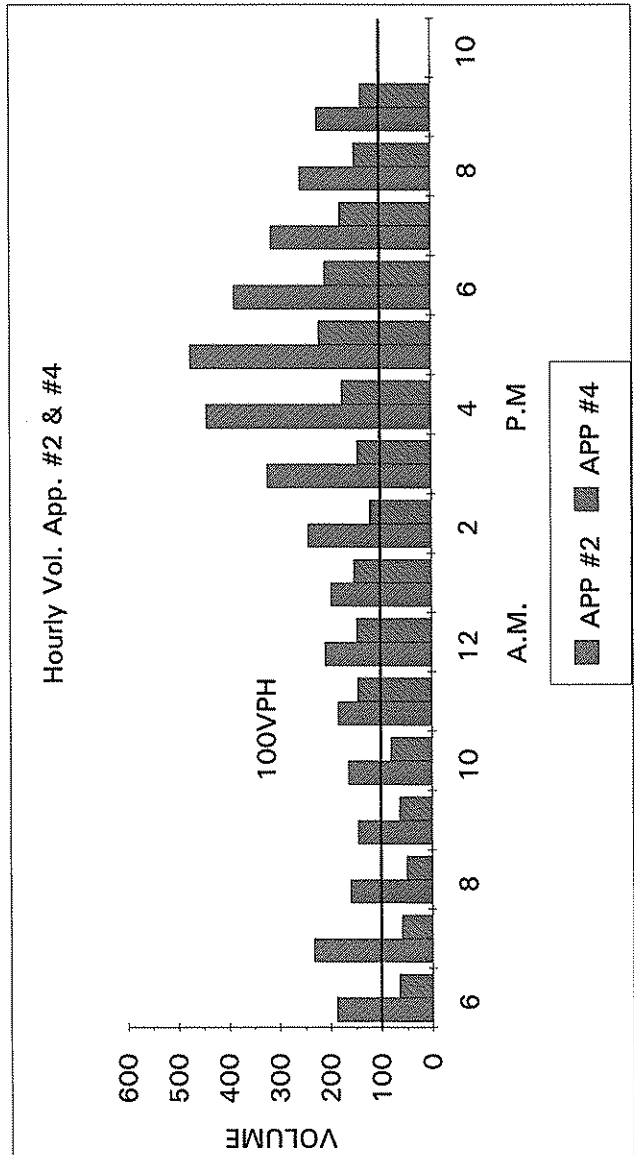
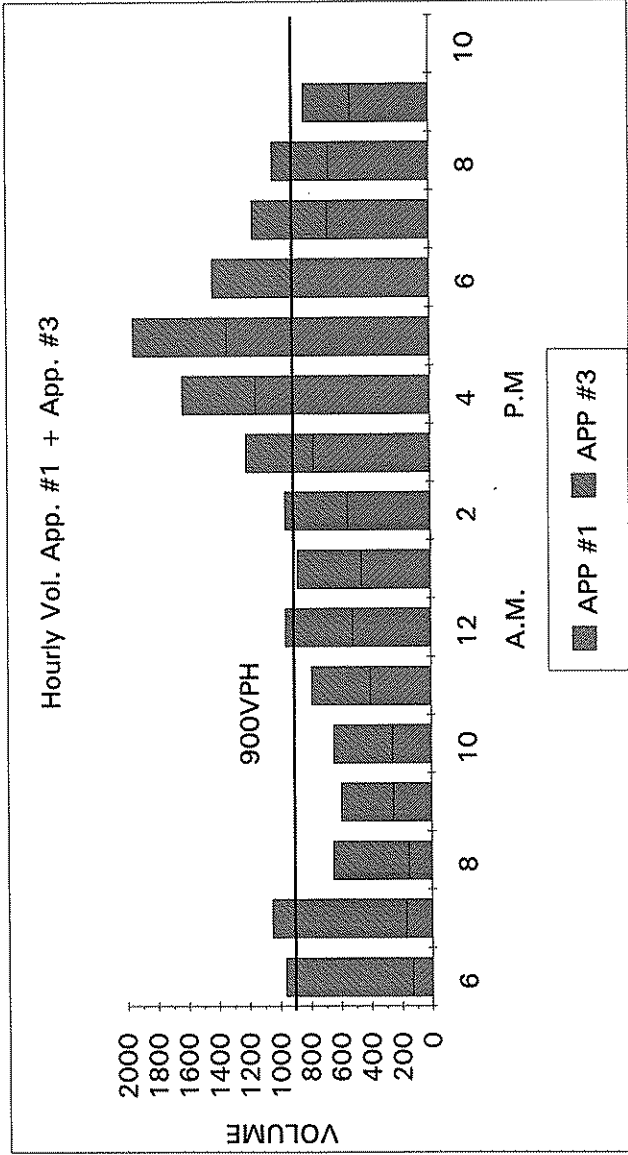
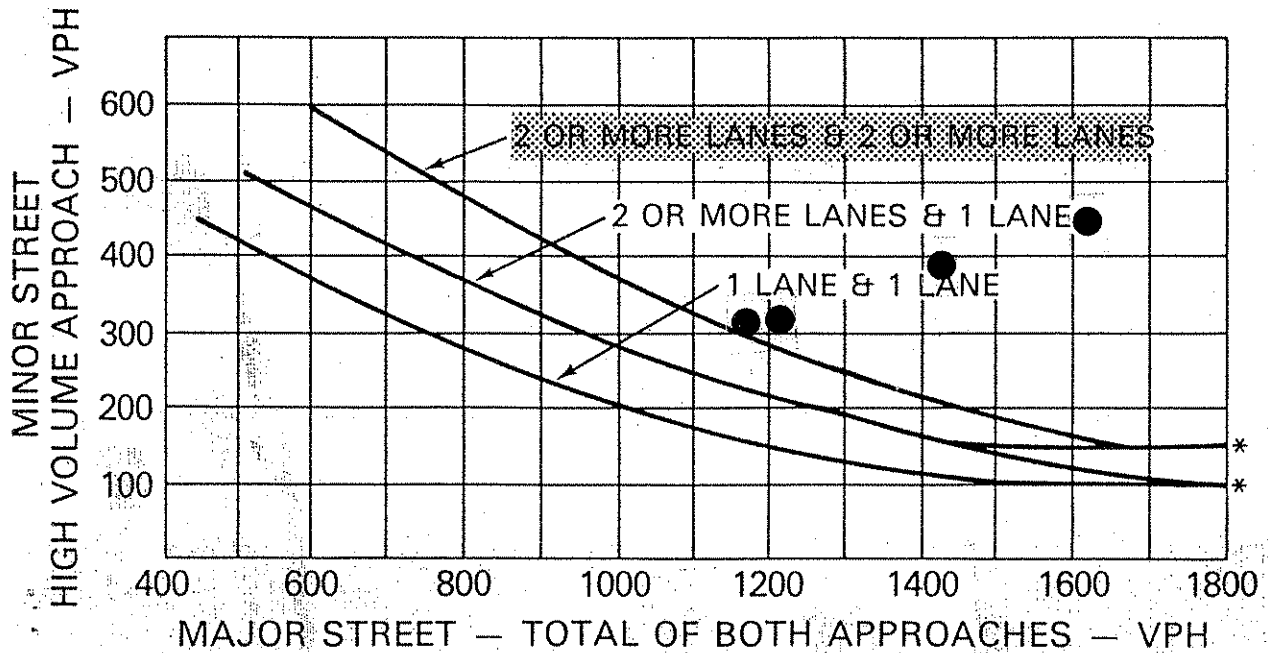


FIGURE 4-5. PEAK HOUR VOLUME WARRANT



*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.

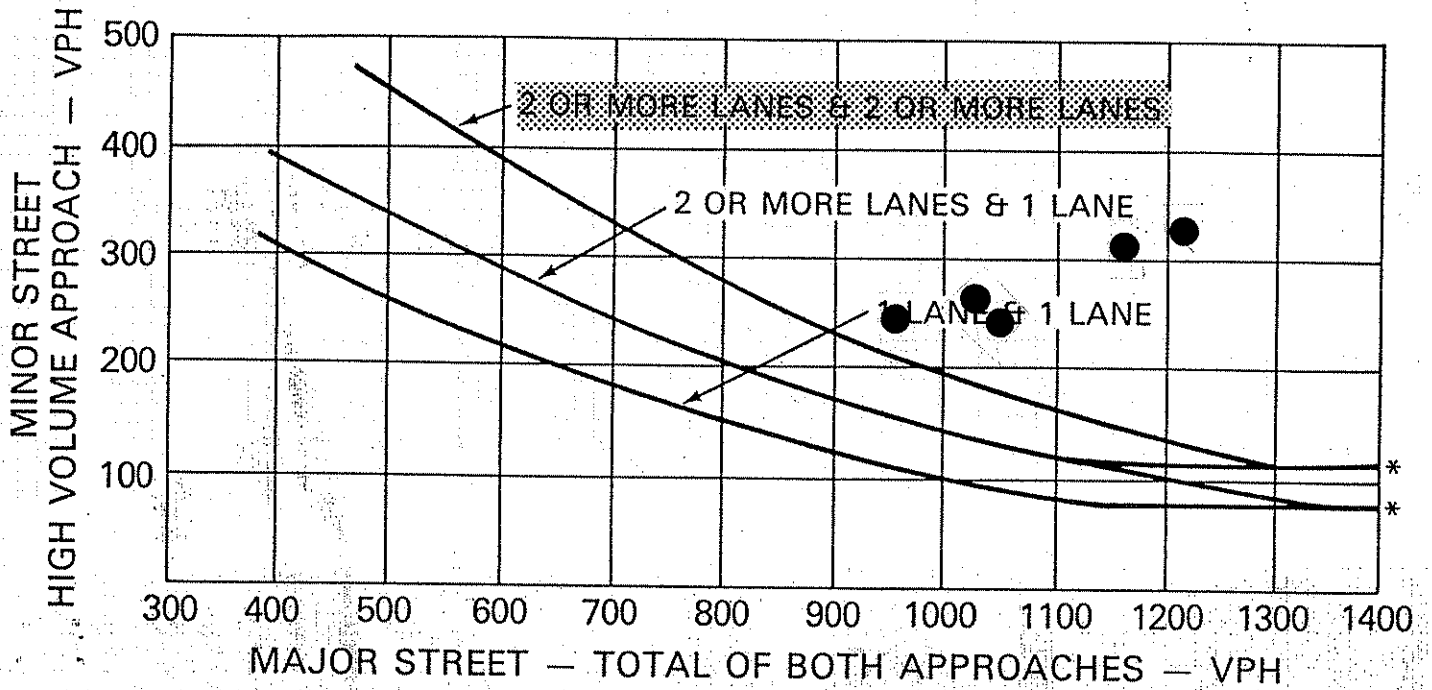
● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

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

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	964	188
7-8 am	1056	233
8-9 am	649	160
9-10 am	596	146
10-11 am	645	164
11-12 pm	787	184
12-1 pm	958	209
1-2 pm	877	197
2-3 pm	957	242
3-4 pm	1211	322
4-5 pm	1626	442
5-6 pm	1947	474
6-7 pm	1425	387
7-8 pm	1166	314
8-9 pm	1034	257
9-10 pm	825	224

TMC9516 CSAH 51 (UNIVERSITY AVE) @ EGRET BLVD.

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 EXCEEDED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

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

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	964	188
● 7-8 am	1056	233
8-9 am	649	160
9-10 am	596	146
10-11 am	645	164
11-12 pm	787	184
12-1 pm	958	209
1-2 pm	877	197
● 2-3 pm	957	242
● 3-4 pm	1211	322
★ 4-5 pm	1626	442
★ 5-6 pm	1947	474
★ 6-7 pm	1425	387
● 7-8 pm	1166	314
● 8-9 pm	1034	257
● 9-10 pm	825	224

TMC9516 CSAH 51 (UNIVERSITY AVE) @ EGRET BLVD.



NORTH

APP. #1= NB CSAH 51

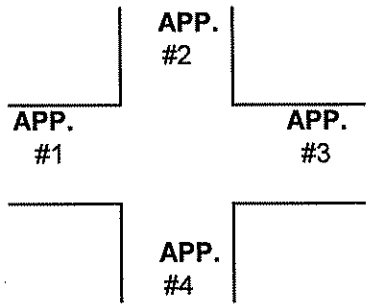
APP. #2= EB EGRET BLVD

APP. #3= SB CSAH 51

APP. #4= WB EGRET BLVD

COUNT LOCATION: CSAH 51 (UNIVERSITY AVE) @
EGRET BLVD

DATE: 7/12/95



- 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								
6:15-6:30								1
6:30-6:45						3		
6:45-7:00				1	1	4		
HOURLY TOTAL					1	HOURLY TOTAL		8
7:00-7:15						2		
7:15-7:30						4		2
7:30-7:45						5		
7:45-8:00						4		1
HOURLY TOTAL						HOURLY TOTAL		18
8:00-8:15						6		1
8:15-8:30						5		2
8:30-8:45						7		
8:45-9:00						3		1
HOURLY TOTAL						HOURLY TOTAL		25
9:00-9:15						7		
9:15-9:30						11		
9:30-9:45						5		
9:45-10:00						10	1	
HOURLY TOTAL						HOURLY TOTAL		34
10:00-10:15						2	1	
10:15-10:30						5		
10:30-10:45				1	1	5		
10:45-11:00				1	1	4		
HOURLY TOTAL					2	HOURLY TOTAL		17
11:00-11:15	2				2	4		
11:15-11:30						6		1
11:30-11:45						7	1	1
11:45-12:00						6		
HOURLY TOTAL					2	HOURLY TOTAL		26
12:00-12:15						8		
12:15-12:30						6		1
12:30-12:45				1	1	9		1
12:45-1:00						5		
HOURLY TOTAL					1	HOURLY TOTAL		30
1:00-1:15						4		
1:15-1:30						7		1
1:30-1:45						7		1
1:45-2:00						14		
HOURLY TOTAL						HOURLY TOTAL		34



COUNT LOCATION: CSAH 51 (UNIVERSITY AVE)
@ EGRET BLVD

DATE: 7/11/95

NORTH
 APP. #1= NB CSAH 51
 APP. #2= EB EGRET BLVD
 APP. #3= CSAH 51
 APP. #4= WB EGRET BLVD

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						4		
2:15-2:30						6		
2:30-2:45	1				1	1		3
2:45-3:00						2		
HOURLY TOTAL					1	HOURLY TOTAL		16
3:00-3:15	1				1	3		1
3:15-3:30						3		1
3:30-3:45				1	1	4		3
3:45-4:00						7	1	
HOURLY TOTAL					2	HOURLY TOTAL		23
4:00-4:15								
4:15-4:30						7		2
4:30-4:45			2		2	4		
4:45-5:00						6		
HOURLY TOTAL					2	HOURLY TOTAL		19
5:00-5:15						2		
5:15-5:30								
5:30-5:45						4		
5:45-6:00						5		
HOURLY TOTAL						HOURLY TOTAL		11
6:00-6:15						1		
6:15-6:30			1		1	1		1
6:30-6:45						1		
6:45-7:00						2		
HOURLY TOTAL					1	HOURLY TOTAL		6
7:00-7:15						2		
7:15-7:30						1		
7:30-7:45	4		4		8	2		
7:45-8:00								
HOURLY TOTAL					8	HOURLY TOTAL		5
8:00-8:15			4	1	5	2		
8:15-8:30			2		2	1		
8:30-8:45			4		4	3		
8:45-9:00								
HOURLY TOTAL					11	HOURLY TOTAL		6
9:00-9:15						3		
9:15-9:30								
9:30-9:45	1				1	2		
9:45-10:00				2	2	2		
HOURLY TOTAL					3	HOURLY TOTAL		7