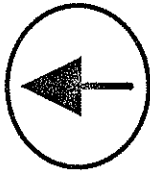


Date : 7/27/95AM 7/28/95PM

Count Number : TMC9526

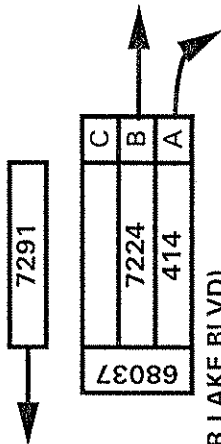
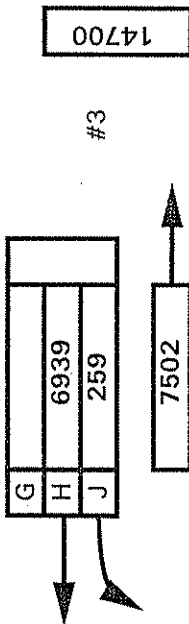
Location : CSAH 16 (BUNKER LAKE BLVD)

@ CROOKED LAKE BLVD



North

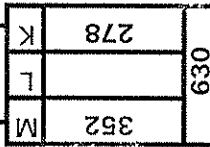
WB CSAH 16 (BUNKER LAKE BLVD)



EB CSAH 16 (BUNKER LAKE BLVD)

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

NB CROOKED LAKE BLVD



#4

1303

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

Vehicle group 1

Date	CR 116 (BUNKER LAKE BLVD) Westbound		CROOKED LAKE BLVD Northbound		CSAH 16 (BUNKER LAKE BLVD) Eastbound		Vehicle Total	Other Total		
	Other	Thru	Left	Other	Right	Left			Other	Right
06:00	0	51	2	0	3	2	101	1	40	1
06:15	1	55	2	1	4	1	121	3	56	5
06:30	2	89	2	0	3	5	167	4	66	6
06:45	5	107	1	0	7	2	211	5	94	10
Hr Total	8	302	7	1	17	10	600	13	256	22
07:00	3	86	2	0	4	7	182	5	81	8
07:15	5	95	3	1	8	0	211	2	105	8
07:30	6	114	5	0	1	4	227	8	99	14
07:45	12	129	2	0	1	5	243	4	102	16
Hr Total	26	424	12	1	14	16	863	19	387	46
08:00	10	104	1	0	1	2	183	9	72	19
08:15	9	99	3	1	4	3	208	10	92	20
08:30	9	81	6	0	3	5	162	3	65	12
08:45	9	89	2	0	4	8	183	6	77	15
Hr Total	37	373	12	1	12	18	736	28	306	66
09:00	3	107	2	0	3	7	205	9	86	12
09:15	7	79	2	0	0	6	166	5	77	12
09:30	6	76	2	1	4	2	172	4	83	11
09:45	3	90	3	0	6	7	189	3	79	6
Hr Total	19	352	9	1	13	22	732	21	325	41
10:00	2	100	4	1	3	8	218	6	100	9
10:15	2	97	4	0	0	4	214	5	103	7
10:30	4	93	0	0	3	1	186	7	86	11
10:45	10	97	1	0	1	1	198	4	93	14
Hr Total	18	387	9	1	7	14	816	22	382	41
11:00	1	107	6	0	4	5	213	3	86	4
11:15	9	97	8	0	1	2	197	3	85	12
11:30	7	91	3	1	4	1	203	5	103	13
11:45	6	103	6	0	1	4	217	6	95	12
Hr Total	23	398	23	1	10	12	830	17	369	41
12:00	8	119	3	1	6	4	261	9	124	18
12:15	5	102	4	3	5	5	253	14	133	22
12:30	4	112	4	2	5	2	227	1	99	7
12:45	5	90	4	1	4	5	195	5	82	11
Hr Total	22	423	15	7	20	16	936	29	438	58

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

Site : 95950101
 Start Date: 07/25/95
 File I.D. : TMC9526
 Page : 2

Enter : TDC RIGHT
 Counted by ANN/LAURIE
 CLOUDY/RAINY

Vehicle group 1

CR 116 (BUNKER LAKE BLVD) Westbound
 CROOKED LAKE BLVD Northbound
 CSAH 16 (BUNKER LAKE BLVD) Eastbound

Date	CR 116 (BUNKER LAKE BLVD) Westbound		CROOKED LAKE BLVD Northbound		CSAH 16 (BUNKER LAKE BLVD) Eastbound		Vehicle Total	Other Total		
	Thru	Left	Other	Right	Left	Right			Thru	
13:00	6	3	0	2	6	2	1	95	200	8
13:15	2	1	1	1	3	7	13	102	210	10
13:30	4	1	3	4	1	6	6	117	218	13
13:45	4	2	2	5	3	7	2	91	195	13
Hr Total	16	364	7	6	12	22	22	405	823	44
14:00	8	104	5	4	2	4	7	110	232	12
14:15	5	100	6	1	7	6	9	95	222	12
14:30	4	108	7	3	3	9	3	117	241	14
14:45	10	100	5	2	11	4	6	120	244	15
Hr Total	27	412	23	3	16	23	25	442	939	53
15:00	6	102	5	3	8	3	12	124	254	10
15:15	6	112	7	5	6	2	6	139	275	8
15:30	5	138	6	5	11	10	11	128	299	15
15:45	8	127	5	8	3	3	7	150	300	11
Hr Total	25	479	23	1	21	18	36	541	1128	44
16:00	3	132	9	4	8	2	9	166	328	9
16:15	4	121	4	6	10	1	12	152	305	5
16:30	4	143	11	0	7	2	17	179	369	6
16:45	0	152	5	10	13	7	17	202	399	7
Hr Total	11	548	29	4	32	12	55	699	1401	27
17:00	3	170	1	6	12	5	6	158	353	8
17:15	1	149	10	9	5	4	17	203	393	5
17:30	3	166	10	5	3	0	14	153	351	3
17:45	1	186	4	7	12	3	7	162	378	4
Hr Total	8	671	25	0	27	12	44	676	1475	20
18:00	3	160	1	6	11	3	7	168	353	7
18:15	1	156	3	7	7	1	5	153	331	2
18:30	1	124	6	8	8	0	14	154	314	1
18:45	0	157	5	9	6	1	9	147	333	1
Hr Total	5	597	15	1	30	5	35	622	1331	11
19:00	3	132	8	5	15	0	6	141	307	3
19:15	0	123	2	2	9	4	9	153	298	4
19:30	0	128	3	8	15	1	9	138	301	1
19:45	2	102	4	4	9	3	13	134	266	5
Hr Total	5	485	17	0	48	8	37	566	1172	13

ANOKA COUNTY HIGHWAY DEPARTMENT

Site le : 95950101
 Start Date: 07/25/95
 File I.D. : TMC9526
 Page : 3

Counter : TDC EIGHT
 Counted by ANN/LAURIE
 CLOUDY/RAINY

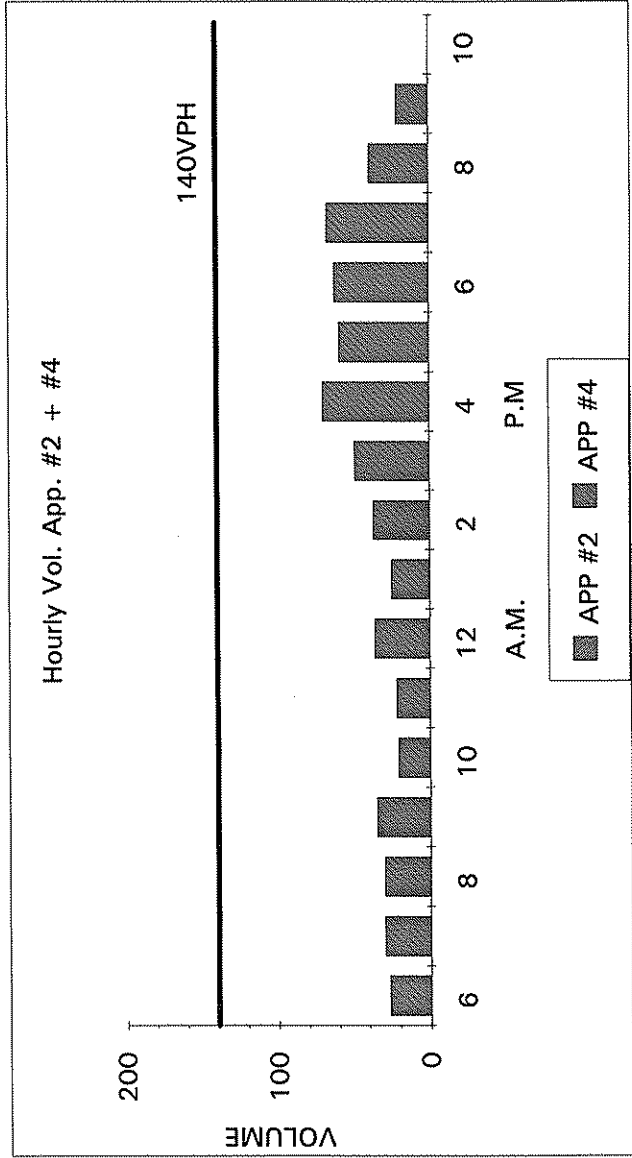
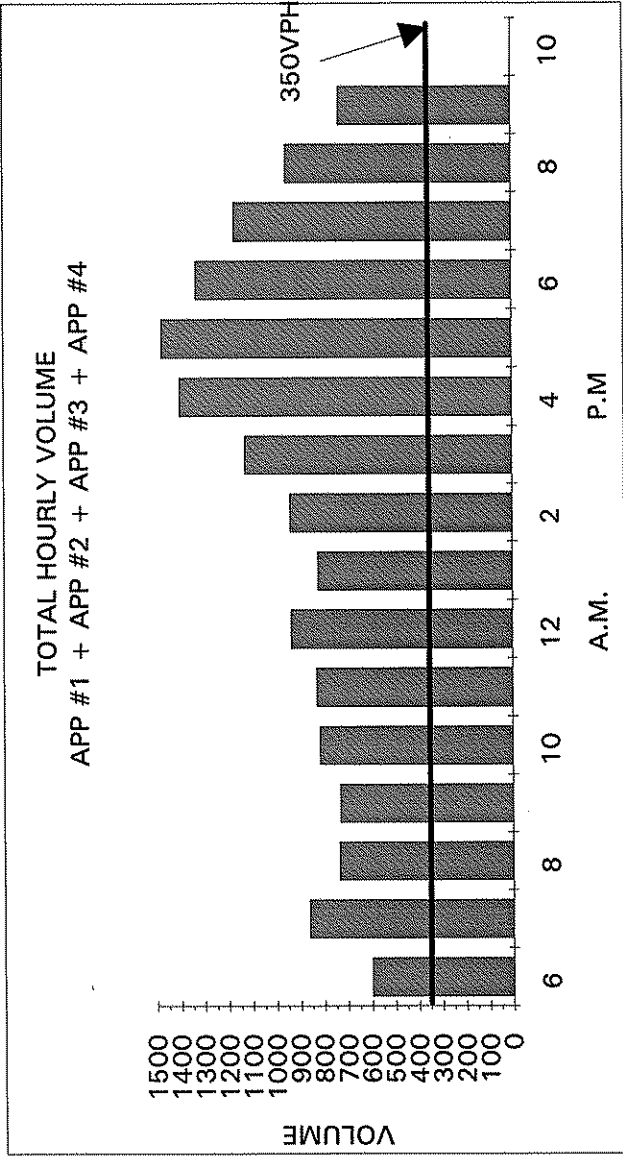
TRAFFIC ENGINEERING SECTION
 TRAFFIC VOLUME AND
 TURNING MOVEMENT STUDY

Vehicle group 1

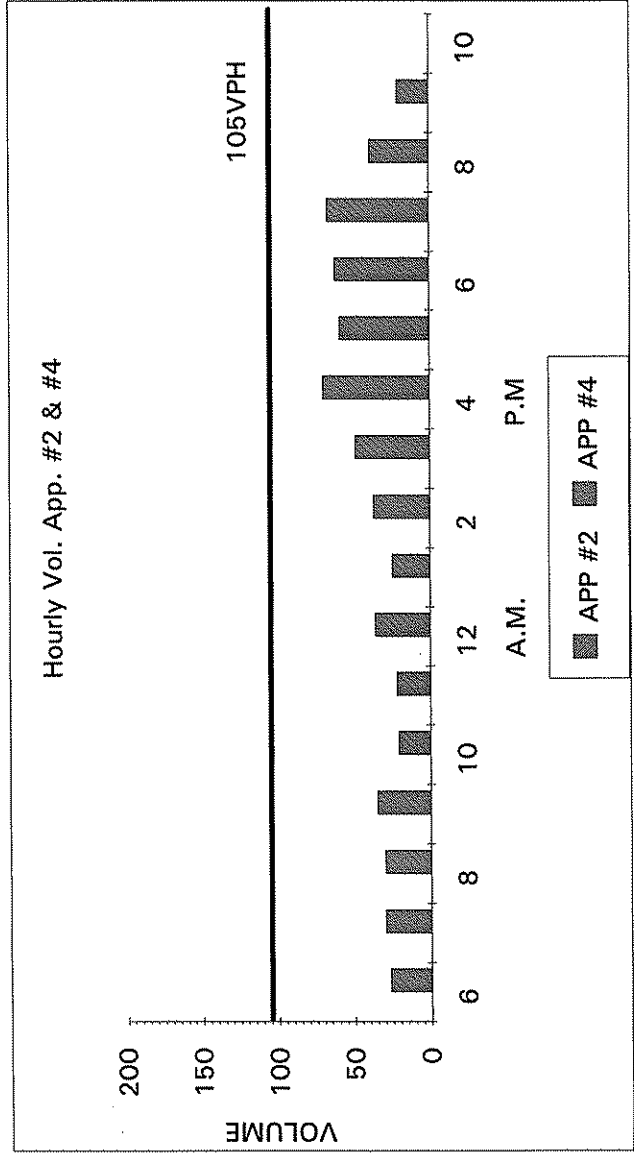
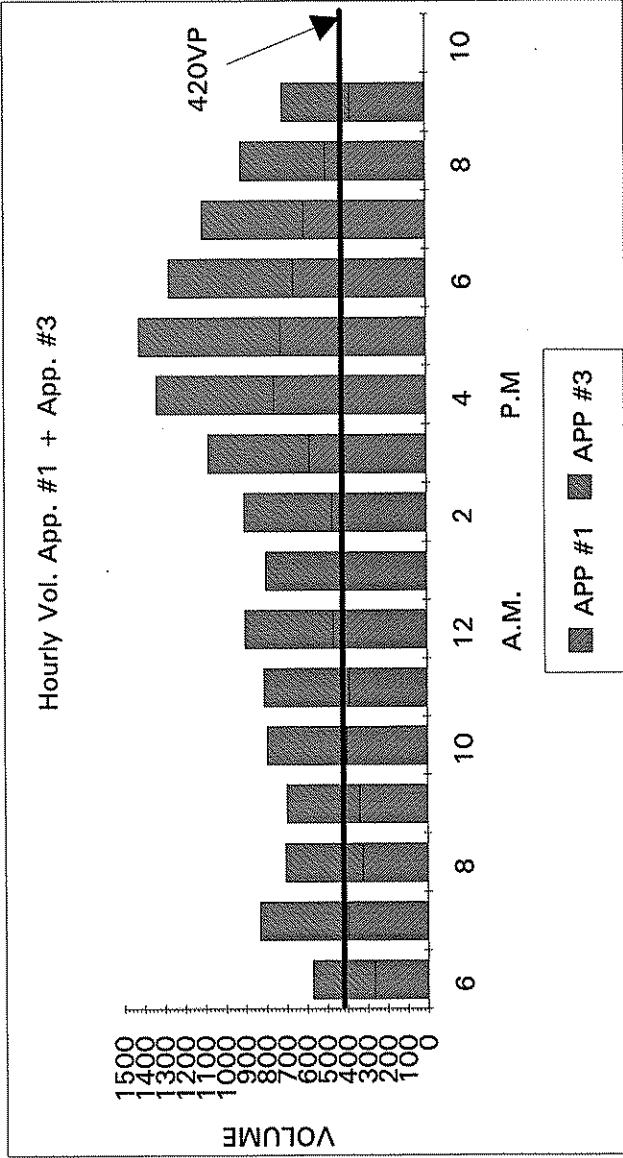
Date 07/25/95	CR 116 (BUNKER LAKE BLVD) Westbound			CROOKED LAKE BLVD Northbound			CSAH 16 (BUNKER LAKE BLVD) Eastbound			Vehicle		
	Other	Thru	Left	Other	Right	Left	Other	Right	Thru	Total	Other	Total
20:00	0	109	6	0	5	3	0	10	116	249	0	249
20:15	1	95	3	0	1	9	1	11	105	224	2	224
20:30	1	110	7	0	5	3	1	5	119	249	2	249
20:45	1	88	3	0	7	6	0	5	123	232	1	232
Hr Total	3	402	19	0	18	21	2	31	463	954	5	954
21:00	0	93	5	0	3	3	1	6	104	214	1	214
21:15	0	92	5	0	7	3	0	10	98	215	0	215
21:30	1	85	1	0	0	2	0	8	64	160	1	160
21:45	0	52	3	0	0	3	0	2	81	141	0	141
Hr Total	1	322	14	0	10	11	1	26	347	730	2	730

TOTAL 254 6939 259 28 278 352 252 414 7224 15466 534

TMC9526 STOP WARRANT STUDY



TMC9526 SIGNAL WARRANT 1 STUDY



TMC9526 SIGNAL WARRANT 2 STUDY

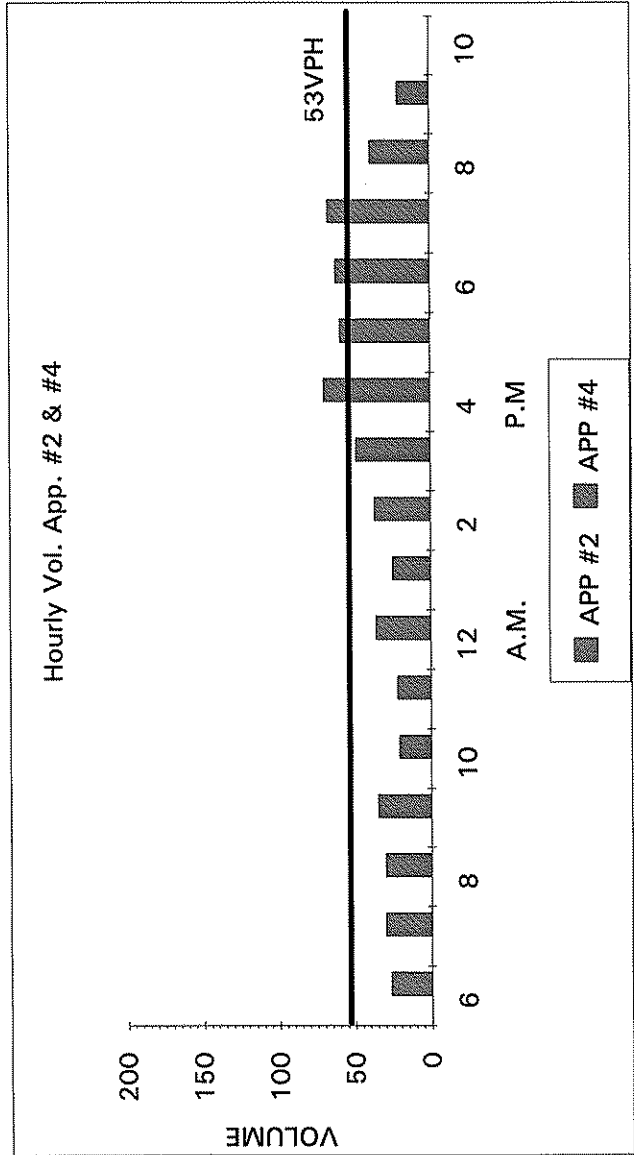
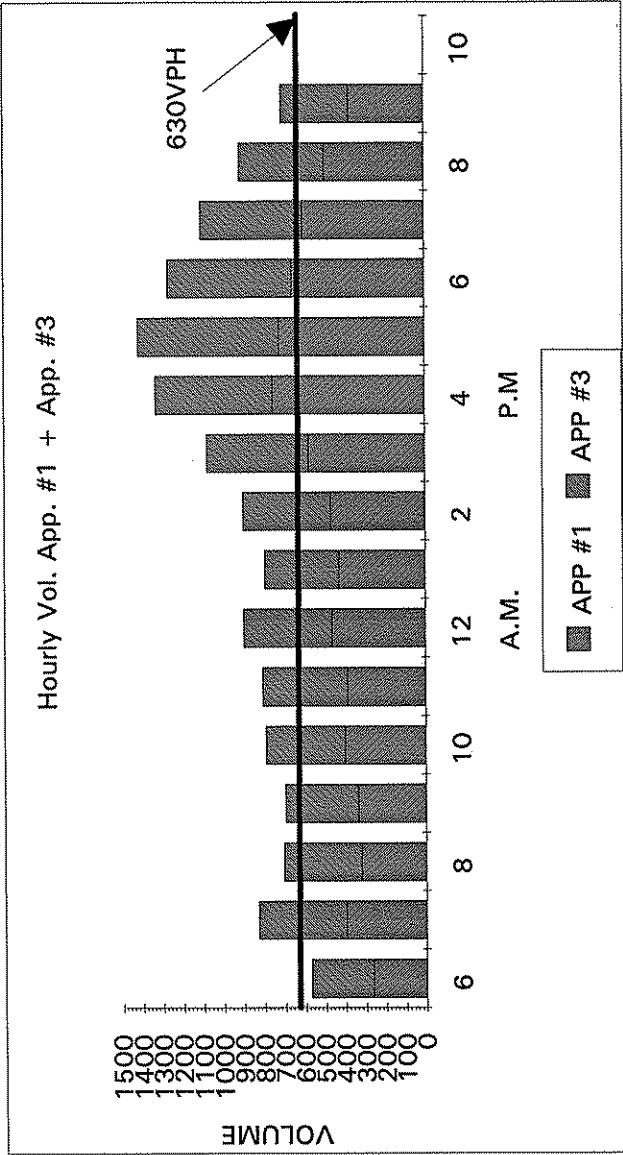
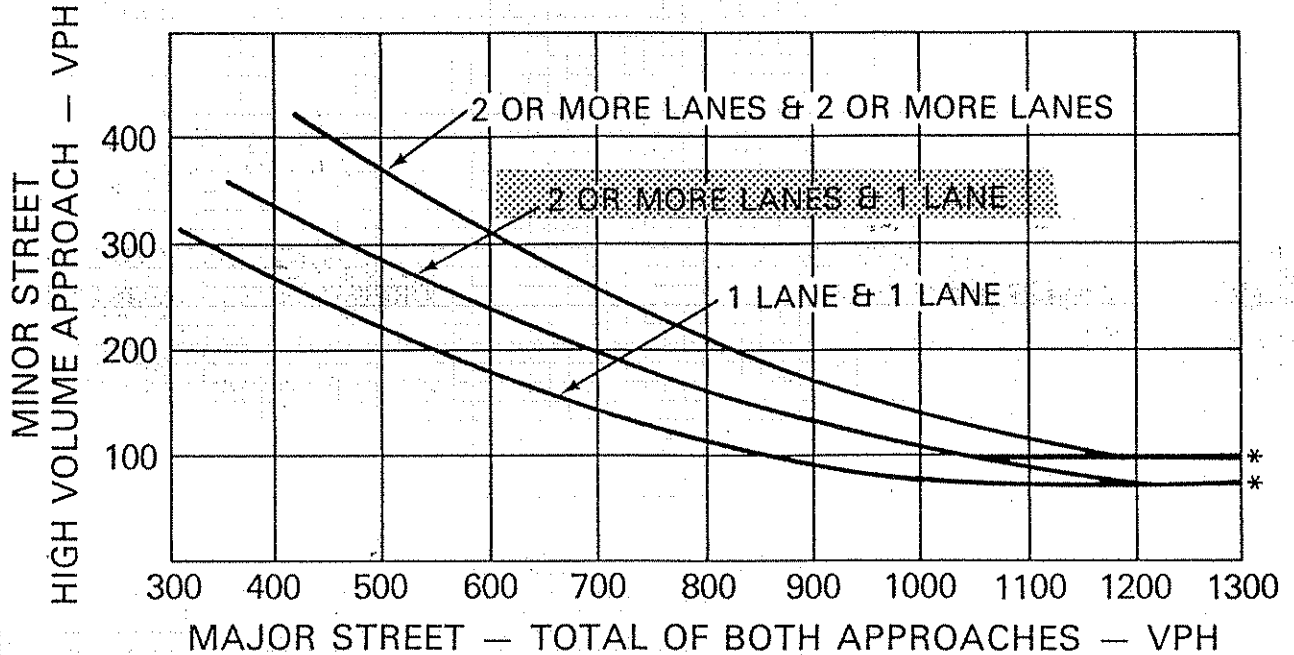


FIGURE 4-6. PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 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.

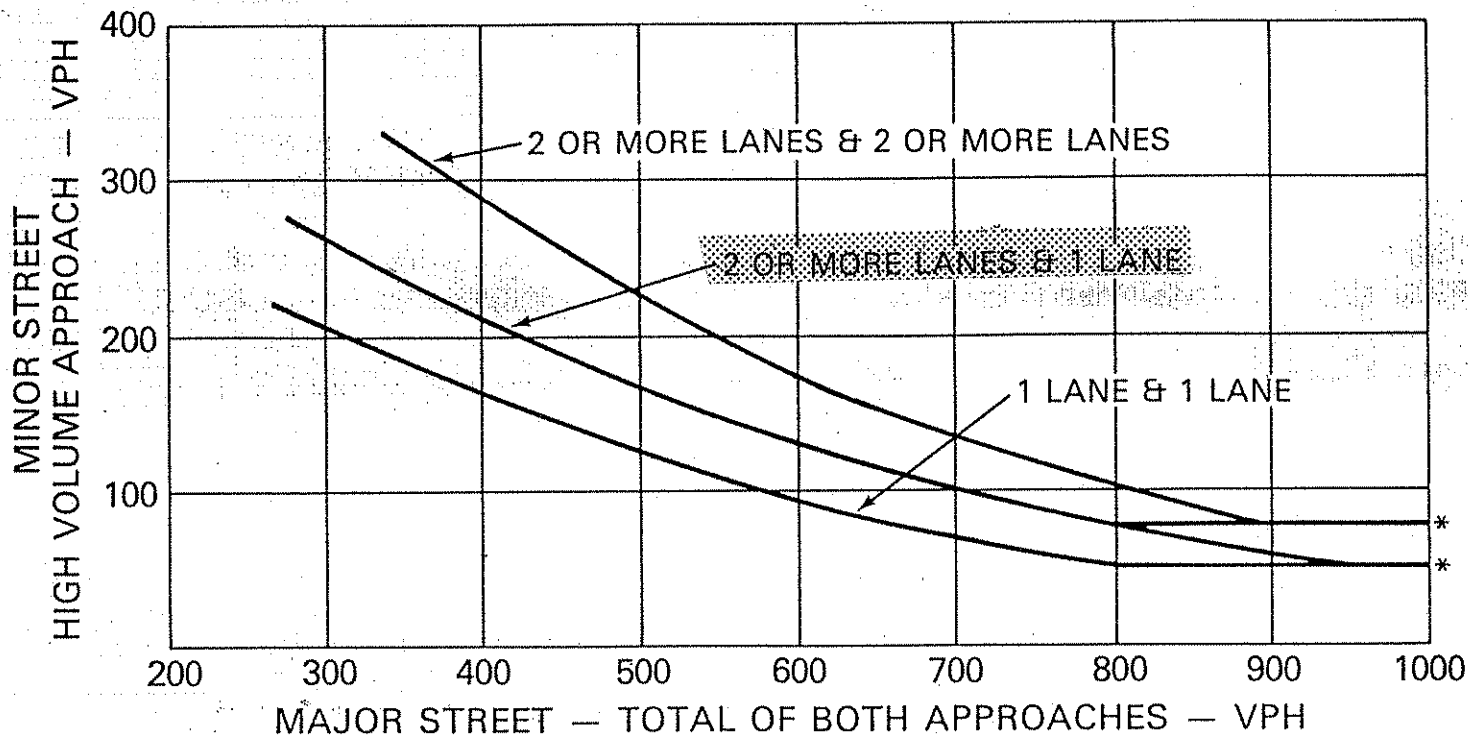
★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	573	27
7-8 am	833	30
8-9 am	706	30
9-10 am	697	35
10-11 am	795	21
11-12 pm	808	22
12-1 pm	900	36
1-2 pm	798	25
2-3 pm	902	37
3-4 pm	1079	49
4-5 pm	1331	70
5-6 pm	1416	59
6-7 pm	1269	62
7-8 pm	1105	67
8-9 pm	915	39
9-10 pm	709	21

TMC 9526 CSAH 16 (BUNKER LAKE BLVD) @ CROOKED LAKE BLVD

FIGURE 4-8. FOUR HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 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	573	27
7-8 am	833	30
8-9 am	706	30
9-10 am	697	35
10-11 am	795	21
11-12 pm	808	22
12-1 pm	900	36
1-2 pm	798	25
2-3 pm	902	37
3-4 pm	1079	49
★4-5 pm	1331	70
5-6 pm	1416	59
★6-7 pm	1269	62
★7-8 pm	1105	67
8-9 pm	915	39
9-10 pm	709	21

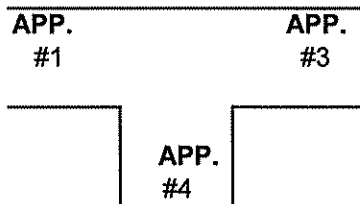
IC 9526 CSAH 16 (BUNKER LAKE BLVD) @ CROOKED LAKE BLVD



COUNT LOCATION: CSAH 16 (BUNKER LAKE BLVD) @
CROOKED LAKE BLVD

DATE: 7/27/95

APP. #1= EB CSAH 16
(BUNKER LAKE BLVD)
APP. #3= WB CSAH 16
(BUNKER LAKE BLVD)
APP. #4= NB
CROOKED LAKE BLVD



- 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.

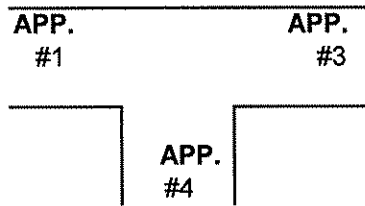
TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						1		
6:15-6:30						5		
6:30-6:45						5		
6:45-7:00						9		
HOURLY TOTAL						HOURLY TOTAL		20
7:00-7:15						7		1
7:15-7:30						5		3
7:30-7:45						13		2
7:45-8:00						15		1
HOURLY TOTAL						HOURLY TOTAL		47
8:00-8:15						15		3
8:15-8:30						20		3
8:30-8:45						12		1
8:45-9:00						14		1
HOURLY TOTAL						HOURLY TOTAL		69
9:00-9:15						8		4
9:15-9:30						12		
9:30-9:45						8		3
9:45-10:00						6		
HOURLY TOTAL						HOURLY TOTAL		41
10:00-10:15						9		
10:15-10:30						7		
10:30-10:45						11		
10:45-11:00						13		1
HOURLY TOTAL						HOURLY TOTAL		41
11:00-11:15						4		
11:15-11:30			1		1	8		4
11:30-11:45						11		3
11:45-12:00						13		
HOURLY TOTAL					1	HOURLY TOTAL		43
12:00-12:15						16		2
12:15-12:30						20	1	1
12:30-12:45						7		
12:45-1:00						10		1
HOURLY TOTAL						HOURLY TOTAL		58
1:00-1:15						5		
1:15-1:30						13		
1:30-1:45						11	1	
1:45-2:00						13	1	
HOURLY TOTAL						HOURLY TOTAL		44



COUNT LOCATION: CSAH 16 (BUNKER LAKE BLVD) @
CROOKED LAKE BLVD

DATE: 7/25/95

APP. #1=EB CSAH 16
(BUNKER LAKE BLVD)
APP. #3= WB CSAH 16
(BUNKER LAKE BLVD)
APP. #4= NB
CROOKED LAKE BLVD



- 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		
2:15-2:30						12		
2:30-2:45						7	1	7
2:45-3:00						12		4
HOURLY TOTAL						HOURLY TOTAL		55
3:00-3:15						10		
3:15-3:30						7		
3:30-3:45						13	1	1
3:45-4:00						5		3
HOURLY TOTAL						HOURLY TOTAL		40
4:00-4:15						9		
4:15-4:30						4		
4:30-4:45						6		
4:45-5:00						7		
HOURLY TOTAL						HOURLY TOTAL		26
5:00-5:15						7		
5:15-5:30						5		
5:30-5:45						3		
5:45-6:00						4		
HOURLY TOTAL						HOURLY TOTAL		19
6:00-6:15						7		
6:15-6:30						2		
6:30-6:45						1		
6:45-7:00						1		
HOURLY TOTAL						HOURLY TOTAL		11
7:00-7:15						3		
7:15-7:30						3		
7:30-7:45						1		
7:45-8:00						5		
HOURLY TOTAL						HOURLY TOTAL		12
8:00-8:15								
8:15-8:30						2		
8:30-8:45						2		
8:45-9:00						1		
HOURLY TOTAL						HOURLY TOTAL		5
9:00-9:15						1		
9:15-9:30								
9:30-9:45						1		
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		2