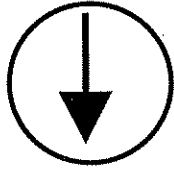


Date : 3/19/99AM 3/18/99PM

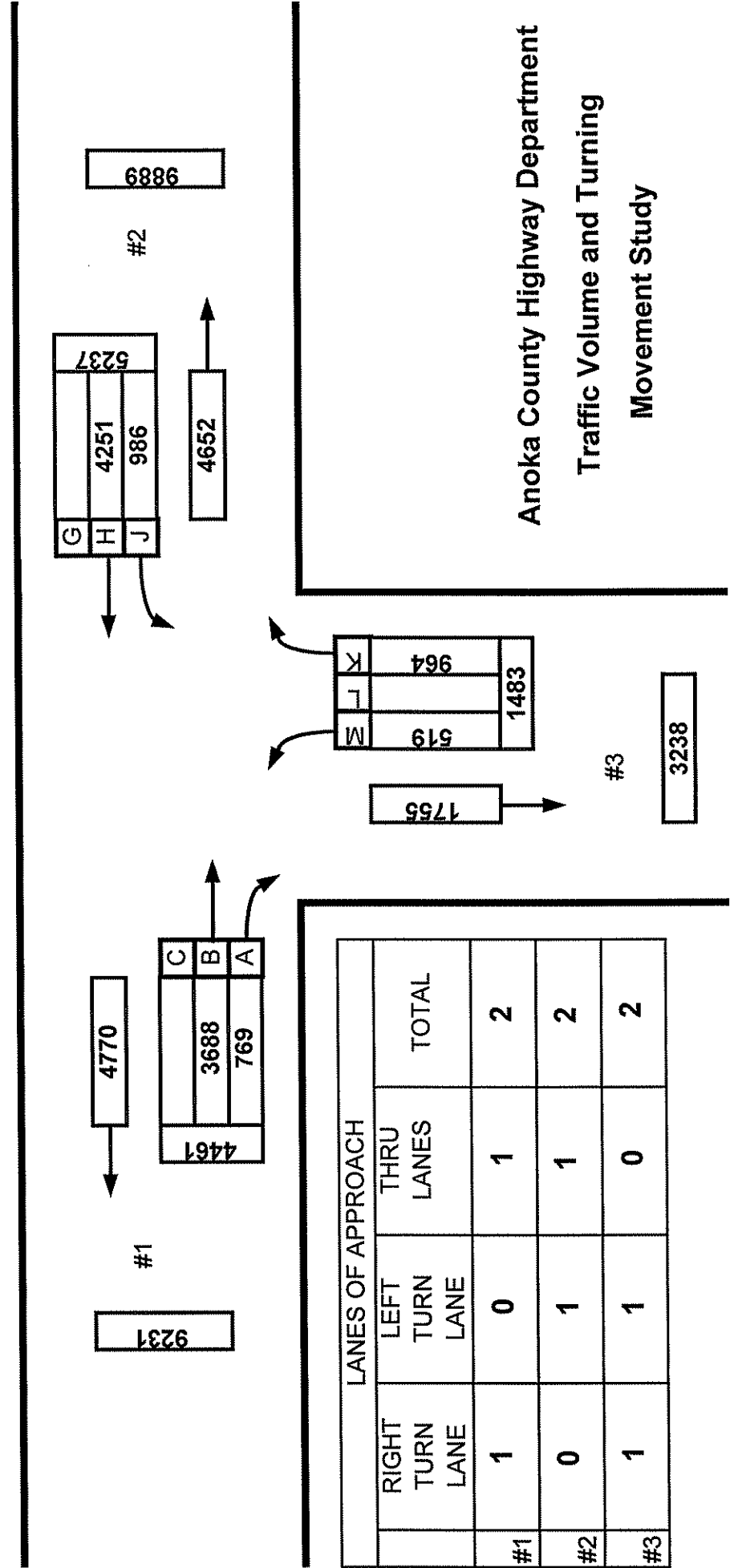
Count Number : TMC9905

Location : CSAH 52 (RADISSON ROAD)

@ CR 87 (105TH AVE)



North



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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

Anoka County Highway Department

Traffic Engineering

Traffic Volume and
Turning Movement Study

File Name : TMC9905

Site Code : 99050101

Start Date : 03/18/1999

Page : 1

WEATHER:
COUNTER TDC-8

COUNTED BY: DICK AND JOSIE

Groups Printed: 1 - Unshifted

Start Time	CSAH 52 (RADISSON RD) Southbound				Not Named Westbound				CSAH 52 (RADISSON RD) Northbound				CR 87 (105TH AVE) Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	Left	Thru	Right	Heavy	Left	Thru	Right	Heavy	Left	Thru	Right	Heavy			
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
06:00	0	99	13	2	0	0	0	0	21	19	0	6	3	0	7	0	8	162	170
06:15	1	166	18	0	0	0	0	0	3	17	0	2	1	0	4	0	2	210	212
06:30	0	157	31	0	0	0	0	0	7	19	0	4	2	0	9	1	5	225	230
06:45	0	143	30	0	0	0	0	0	9	25	0	4	3	0	7	2	6	217	223
Total	1	565	92	2	0	0	0	0	40	80	0	16	9	0	27	3	21	814	835
07:00	1	219	70	0	0	0	0	0	10	21	0	3	3	0	10	1	4	334	338
07:15	0	192	44	0	0	0	0	0	11	26	0	3	3	0	13	2	5	289	294
07:30	0	206	43	0	0	0	0	0	9	29	0	3	2	0	11	0	3	300	303
07:45	0	177	43	0	0	0	0	0	8	41	0	1	4	0	21	2	3	294	297
Total	1	794	200	0	0	0	0	0	38	117	0	10	12	0	55	5	15	1217	1232
08:00	0	162	29	1	0	0	0	0	10	30	0	1	6	0	23	3	5	260	265
08:15	0	116	15	1	0	0	0	0	16	37	0	6	8	0	20	6	13	212	225
08:30	0	125	12	0	0	0	0	0	14	29	0	5	10	0	9	3	8	199	207
08:45	0	70	12	0	0	0	0	0	16	28	0	6	5	0	13	5	11	144	155
Total	0	473	68	2	0	0	0	0	56	124	0	18	29	0	65	17	37	815	852
09:00	1	66	13	0	0	0	0	0	15	39	0	9	4	0	10	3	12	148	160
09:15	0	55	8	0	0	0	0	0	10	17	0	4	2	0	12	2	6	104	110
09:30	0	45	10	0	0	0	0	0	15	26	0	6	4	0	14	3	9	114	123
09:45	0	56	6	0	0	0	0	0	14	29	0	3	5	0	11	3	6	121	127
Total	1	222	37	0	0	0	0	0	54	111	0	22	15	0	47	11	33	487	520
10:00	0	55	14	0	0	0	0	0	10	37	0	5	3	0	12	1	6	131	137
10:15	0	51	12	0	0	0	0	0	11	30	0	6	6	0	9	1	7	119	126
10:30	0	50	6	0	0	0	0	0	11	33	0	1	0	0	10	0	1	110	111
10:45	0	41	7	0	0	0	0	0	15	28	0	2	4	0	18	5	7	113	120
Total	0	197	39	0	0	0	0	0	47	128	0	14	13	0	49	7	21	473	494
11:00	0	31	12	0	0	0	0	0	6	27	0	5	4	0	16	5	10	96	106
11:15	0	38	11	0	0	0	0	0	9	33	0	6	7	0	19	5	11	117	128
11:30	0	22	8	0	0	0	0	0	18	40	0	6	1	0	16	2	8	105	113
11:45	0	32	6	0	0	0	0	0	16	37	0	7	10	0	19	6	13	120	133
Total	0	123	37	0	0	0	0	0	49	137	0	24	22	0	70	18	42	438	480
12:00	0	43	12	0	0	0	0	0	18	37	0	4	8	0	22	3	7	140	147
12:15	0	39	4	2	0	0	0	0	14	50	0	5	13	0	15	6	13	135	148
12:30	0	37	8	0	0	0	0	0	18	66	0	8	7	0	13	2	10	149	159
12:45	0	42	4	0	0	0	0	0	17	53	0	6	2	0	22	4	10	140	150
Total	0	161	28	2	0	0	0	0	67	206	0	23	30	0	72	15	40	564	604
13:00	0	60	10	0	0	0	0	0	18	46	0	6	6	0	20	4	10	160	170
13:15	0	45	4	0	0	0	0	0	17	60	0	6	4	0	24	7	13	154	167
13:30	0	41	8	0	0	0	0	0	16	51	0	4	7	0	10	3	7	133	140
13:45	0	33	3	0	0	0	0	0	18	53	0	8	4	0	23	4	12	134	146
Total	0	179	25	0	0	0	0	0	69	210	0	24	21	0	77	18	42	581	623
14:00	1	39	7	0	0	0	0	0	12	56	0	4	2	0	16	8	12	133	145
14:15	0	51	10	0	0	0	0	0	17	60	0	4	7	0	18	4	8	163	171
14:30	0	40	10	0	0	0	0	0	12	74	0	3	9	0	25	4	7	170	177
14:45	0	52	6	0	0	0	0	0	20	65	0	7	14	0	21	9	16	178	194
Total	1	182	33	0	0	0	0	0	61	255	0	18	32	0	80	25	43	644	687
15:00	0	25	10	0	0	0	0	0	23	117	0	10	20	0	25	6	16	220	236
15:15	0	35	11	0	0	0	0	0	22	114	0	5	15	0	19	12	17	216	233
15:30	0	44	26	0	0	0	0	0	41	165	0	3	13	0	23	5	8	312	320
15:45	0	51	16	0	0	0	0	0	32	150	0	13	24	0	34	7	20	307	327
Total	0	155	63	0	0	0	0	0	118	546	0	31	72	0	101	30	61	1055	1116
16:00	0	36	5	0	0	0	0	0	30	177	0	3	18	0	24	2	5	290	295
16:15	0	41	10	0	0	0	0	0	23	185	0	4	19	0	23	5	9	301	310
16:30	0	45	8	0	0	0	0	0	31	203	0	4	19	0	20	3	7	326	333
16:45	0	68	13	0	0	0	0	0	30	211	0	7	31	0	53	4	11	406	417
Total	0	190	36	0	0	0	0	0	114	776	0	18	87	0	120	14	32	1323	1355

Anoka County Highway Department
 Traffic Engineering
 Traffic Volume and
 Turning Movement Study

File Name : TMC9905
 Site Code : 99050101
 Start Date : 03/18/1999
 Page : 2

Groups Printed: 1 - Unshifted

Start Time	CSAH 52 (RADISSON RD) Southbound				Not Named Westbound				CSAH 52 (RADISSON RD) Northbound				CR 87 (105TH AVE) Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	Left	Thru	Right	Heavy	Left	Thru	Right	Heavy	Left	Thru	Right	Heavy			
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
17:00	0	35	14	0	0	0	0	0	31	193	0	5	31	0	21	5	10	325	335
17:15	0	55	13	0	0	0	0	0	31	215	0	1	26	0	32	2	3	372	375
17:30	0	43	12	0	0	0	0	0	21	213	0	4	23	0	24	1	5	336	341
17:45	0	56	6	0	0	0	0	0	30	195	0	4	27	0	21	0	4	335	339
Total	0	189	45	0	0	0	0	0	113	816	0	14	107	0	98	8	22	1368	1390
18:00	0	35	10	0	0	0	0	0	20	159	0	5	17	0	15	1	6	256	262
18:15	0	53	10	0	0	0	0	0	38	139	0	2	10	0	18	0	2	268	270
18:30	0	46	12	0	0	0	0	0	21	113	0	0	14	0	11	0	0	217	217
18:45	0	21	9	0	0	0	0	0	14	96	0	2	13	0	17	1	3	170	173
Total	0	155	41	0	0	0	0	0	93	507	0	9	54	0	61	2	11	911	922
19:00	0	32	9	0	0	0	0	0	21	73	0	0	6	0	11	0	0	152	152
19:15	0	26	7	0	0	0	0	0	19	59	0	1	4	0	12	0	1	127	128
19:30	0	21	8	0	0	0	0	0	11	62	0	0	5	0	8	0	0	115	115
19:45	0	24	1	0	0	0	0	0	16	44	0	1	1	0	11	1	2	97	99
Total	0	103	25	0	0	0	0	0	67	238	0	2	16	0	42	1	3	491	494
Grand Total	4	3688	769	6	0	0	0	0	986	4251	0	243	519	0	964	174	423	11181	11604
Apprch %	0.1	82.6	17.2	0.1	0.0	0.0	0.0	0.0	18.0	77.6	0.0	4.4	31.3	0.0	58.2	10.5			
Total %	0.0	31.8	6.6	0.1	0.0	0.0	0.0	0.0	8.5	36.6	0.0	2.1	4.5	0.0	8.3	1.5	3.6	96.4	

or Street Approaches:

Northbound:

CSAH 52 (RADISSON RD)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC9905.WAR
 Count Type: IMC. Channel: 0. Count Date: 3/18/99
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 5237

Southbound:

CSAH 52 (RADISSON RD)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC9905.WAR
 Count Type: IMC. Channel: 0. Count Date: 3/18/99
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 4461

Minor Street Approaches:

Eastbound:

CR 87 (105TH AVE)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC9905.WAR
 Count Type: IMC. Channel: 0. Count Date: 3/18/99
 Number of Lanes: 2
 Approach Speed: 55
 Total Approach Traffic: 1483

Westbound:

Not Named

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC9905.WAR
 Count Type: IMC. Channel: 0. Count Date: 3/18/99
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 0

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

Hour	Main	Side			Warrant 1		Warrant 2		Warrant 8		
		Begin	(Total)	Vol.	Dir.	Rank	Meets?	Criteria	Meets?	Criteria	Meets?
0	0	0	E	15		140		70		112	
1	0	0	E	16		140		70		112	
2	0	0	E	17		140		70		112	
3	0	0	E	18		140		70		112	
4	0	0	E	19		140		70		112	
5	0	0	E	20		140		70		112	
6	778	36	E	14	MAIN	140	MAIN	70	MAIN	112	
7	1150	67	E	10	MAIN	140	MAIN	70	MAIN	112	
8	721	94	E	8	MAIN	140	--BOTH--	70	MAIN	112	
9	425	62	E	11	MAIN	140		70		112	
10	411	62	E	12		140		70		112	
11	346	92	E	9		140	SIDE	70		112	
12	462	102	E	6	MAIN	140	SIDE	70		112	
13	483	98	E	7	MAIN	140	SIDE	70		112	
14	532	112	E	5	MAIN	140	SIDE	70	--BOTH--	112	
15	882	173	E	3	--BOTH--	140	--BOTH--	70	--BOTH--	112	
16	1116	207	E	1	--BOTH--	140	--BOTH--	70	--BOTH--	112	
17	1163	205	E	2	--BOTH--	140	--BOTH--	70	--BOTH--	112	
18	796	115	E	4	MAIN	140	--BOTH--	70	--BOTH--	112	
19	433	58	E	13	MAIN	140		70		112	
20	0	0	E	21		140		70		112	
21	0	0	E	22		140		70		112	
22	0	0	E	23		140		70		112	
23	0	0	E	24		140		70		112	

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 5 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. At least one street has no major approaches. Peak hour total entering volume: 1368.

- 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 5 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 4 hours.

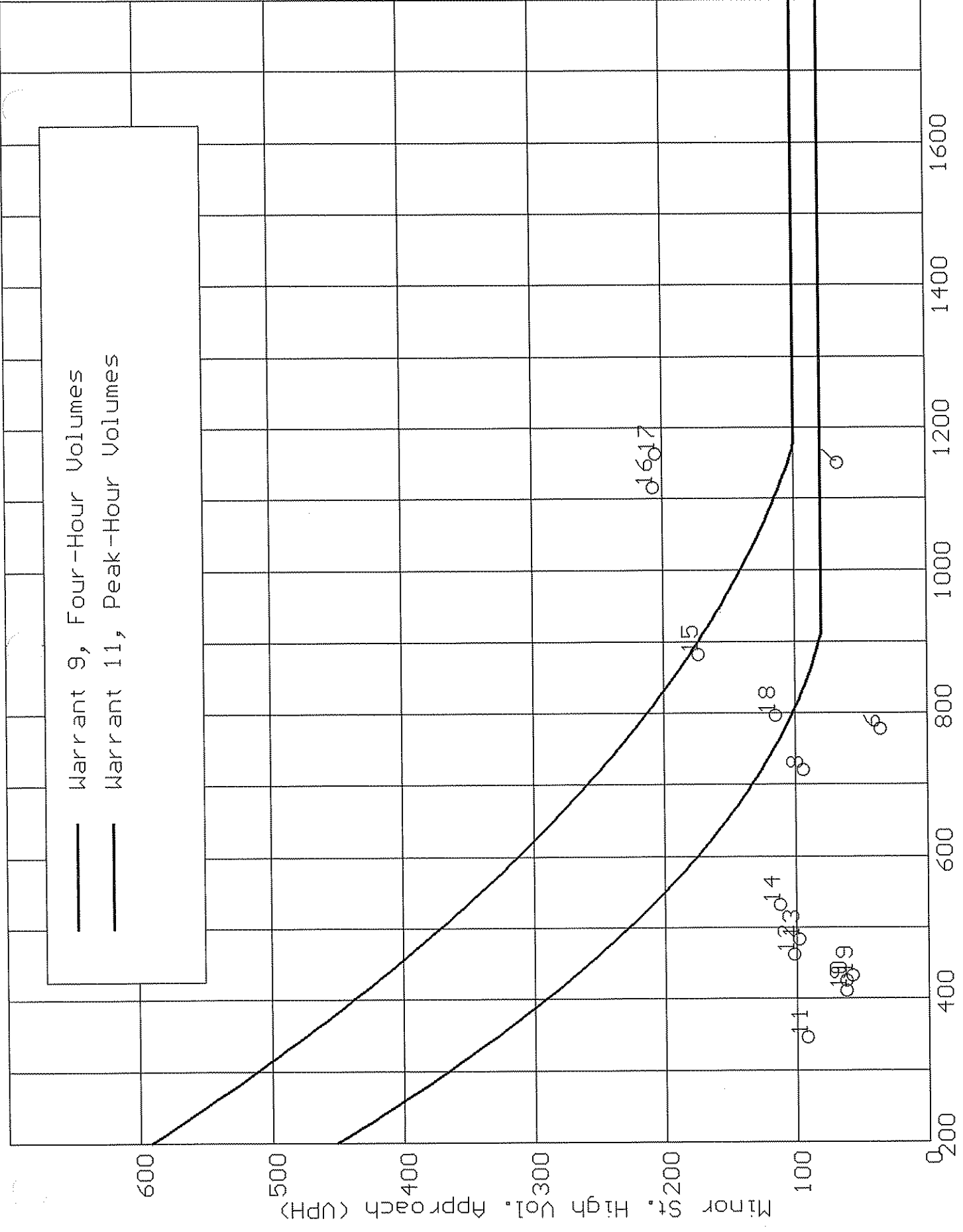
Warrant 10 - Peak Hour Delay

NOT APPLICABLE. Volume requirements satisfied, but side street peak hour delay not defined.

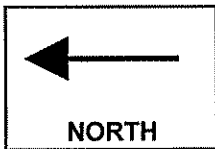
Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 150.

Warrant 11 - Peak Hour Volume

SATISFIED for 2 hours.



Major St. Total of Both Approaches (UPH)



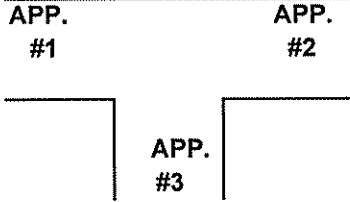
COUNT LOCATION:

CSAH 52 (RADISSON ROAD) @
CR 87 (105TH AVE)

DATE:

3/19/99

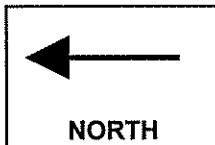
APP. #1=SB CSAH 52
(RADISSON ROAD)
APP. #2 =NB CSAH 52
(RADISSON ROAD)
APP. #3=EB CR 87
(105TH Ave)



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
6:00-6:15AM						8		
6:15-6:30						6		
6:30-6:45						4		1
6:45-7:00						6		2
HOURLY TOTAL						HOURLY TOTAL		27
7:00-7:15						5		2
7:15-7:30						12		1
7:30-7:45						14		
7:45-8:00						5		2
HOURLY TOTAL						HOURLY TOTAL		41
8:00-8:15						6		1
8:15-8:30						16		2
8:30-8:45						12		1
8:45-9:00						14		2
HOURLY TOTAL						HOURLY TOTAL		54
9:00-9:15						17		
9:15-9:30						3		
9:30-9:45						17		
9:45-10:00						10		
HOURLY TOTAL						HOURLY TOTAL		47
10:00-10:15						14		
10:15-10:30						7		4
10:30-10:45						10		
10:45-11:00						19	1	
HOURLY TOTAL						HOURLY TOTAL		55
11:00-11:15						15		
11:15-11:30						14		1
11:30-11:45						9		
11:45-12:00						16		
HOURLY TOTAL						HOURLY TOTAL		55
12:00-12:15						12	1	
12:15-12:30						18		
12:30-12:45						10		
12:45-1:00						15		
HOURLY TOTAL						HOURLY TOTAL		56
1:00-1:15						14		
1:15-1:30						18		
1:30-1:45						7		
1:45-2:00						18		
HOURLY TOTAL						HOURLY TOTAL		57



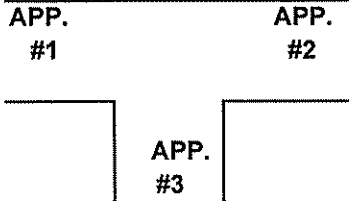
COUNT LOCATION:

CSAH 52 (RADISSON ROAD) @
CR 87 (105TH AVE)

DATE:

3/19/99

APP. #1=SB CSAH 52
(RADISSON ROAD)
APP. #2 =NB CSAH 52
(RADISSON ROAD)
APP. #3=EB CR 87
(105TH 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						15		
2:15-2:30						10		1
2:30-2:45						8		1
2:45-3:00						20		2
HOURLY TOTAL						HOURLY TOTAL		57
3:00-3:15						19		2
3:15-3:30						19		2
3:30-3:45						13		1
3:45-4:00						19		1
HOURLY TOTAL						HOURLY TOTAL		76
4:00-4:15						8		
4:15-4:30						16		
4:30-4:45						8		
4:45-5:00						13		2
HOURLY TOTAL						HOURLY TOTAL		47
5:00-5:15						9		1
5:15-5:30						3		
5:30-5:45						6		1
5:45-6:00						6		
HOURLY TOTAL						HOURLY TOTAL		26
6:00-6:15						7		
6:15-6:30						3		
6:30-6:45						1		
6:45-7:00						3		
HOURLY TOTAL						HOURLY TOTAL		14
7:00-7:15								
7:15-7:30						1		
7:30-7:45								
7:45-8:00						2		
HOURLY TOTAL						HOURLY TOTAL		3
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00								
HOURLY TOTAL						HOURLY TOTAL		
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		