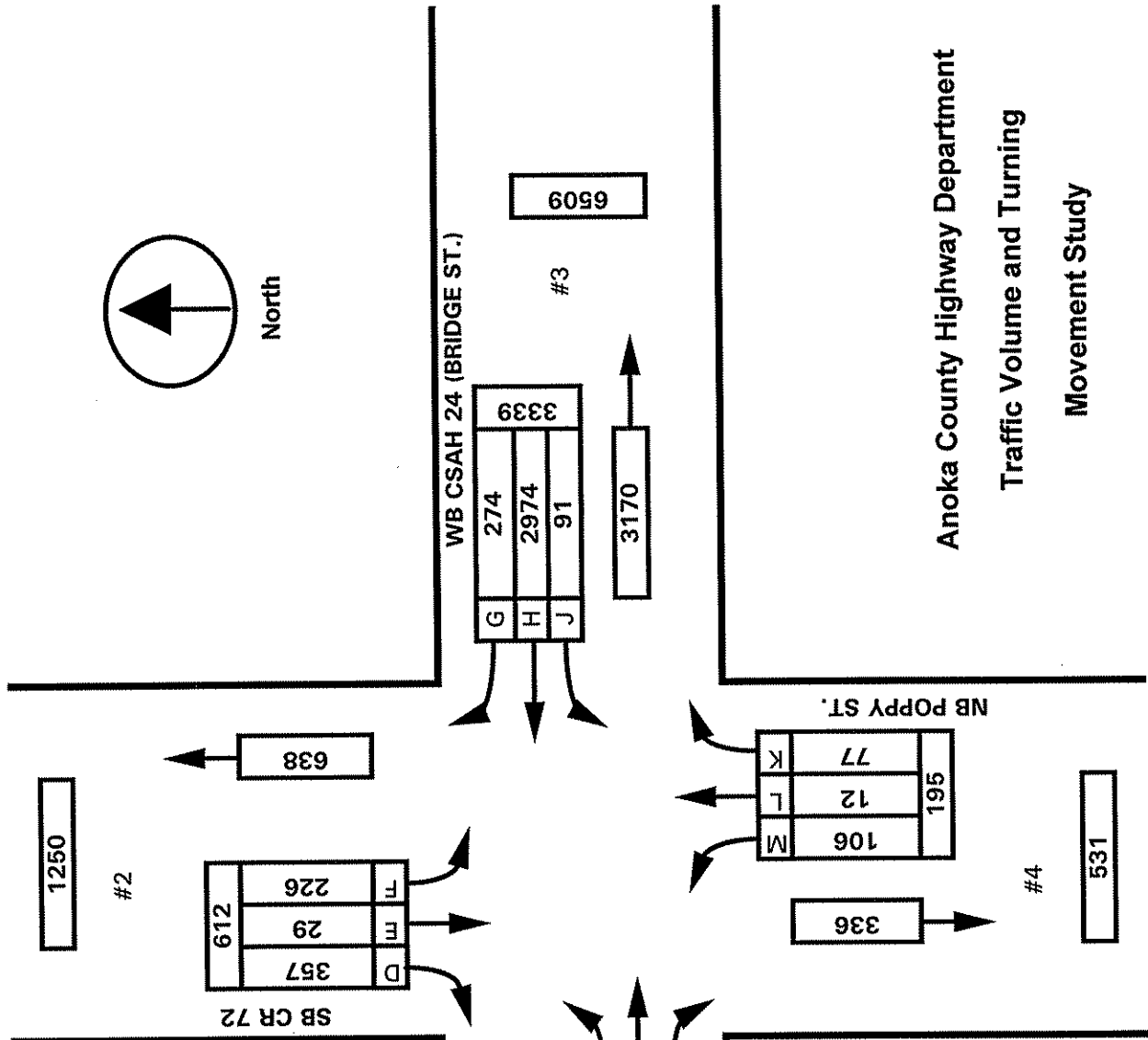


Date : 7/1/96PM 7/2/96AM

Count Number : TMC 9608

Location : CSAH 24 (BRIDGE ST.) @

CR 72/POPPY ST.



Anoka County Highway Department  
Traffic Volume and Turning  
Movement Study

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

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :FAIR  
 Counted by:Ann and Gabe  
 Board # :  
 Ther :

Study Name: TMC9608  
 Site Code : 96080202  
 Start Date: 07/01/96  
 Page : 1

Vehicle group 1

Start Time	CR 72 From North				CSAH 24 (BRIDGE ST.) From East				POPPY ST. From South				CSAH 24 (BRIDGE ST.) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
07/01/96																			
06:00	6	0	3	0	1	24	0	0	0	0	0	0	0	44	3	0	81	0	81
06:15	9	1	1	0	1	24	0	3	0	0	2	0	2	53	1	3	100	6	94
06:30	12	0	6	0	1	21	0	1	0	0	3	0	4	64	6	5	123	6	117
06:45	10	0	1	0	4	36	0	1	1	0	3	0	3	71	2	6	138	7	131
Hour	37	1	11	0	7	105	0	5	1	0	8	0	9	232	12	14	442	19	423
07:00	8	1	4	0	3	24	0	3	3	0	1	0	5	36	9	6	103	9	94
07:15	5	0	2	1	2	24	2	1	1	0	1	1	2	44	4	2	92	5	87
07:30	6	0	0	0	3	15	1	1	1	0	2	0	2	32	4	5	72	6	66
07:45	1	0	2	0	3	25	0	7	1	0	1	0	0	34	6	2	82	9	73
Hour	20	1	8	1	11	88	3	12	6	0	5	1	9	146	23	15	349	29	320
08:00	8	1	4	1	7	28	1	2	3	0	0	1	2	23	5	3	89	7	82
08:15	14	0	2	0	1	26	0	1	0	0	1	0	1	33	1	2	82	3	79
08:30	9	1	1	2	0	27	0	1	0	0	5	0	3	34	7	2	92	5	87
08:45	3	0	4	1	4	34	1	4	1	0	1	0	3	28	7	1	92	6	86
Hour	34	2	11	4	12	115	2	8	4	0	7	1	9	118	20	8	355	21	334
09:00	2	3	2	0	6	40	1	4	0	0	1	0	5	36	4	4	108	8	100
09:15	6	0	2	1	4	33	1	3	1	0	3	0	5	42	6	9	116	13	103
09:30	8	0	5	1	3	35	0	3	1	0	0	0	1	35	4	1	97	5	92
09:45	6	0	5	0	0	35	1	2	0	0	4	0	5	39	5	2	104	4	100
Hour	22	3	14	2	13	143	3	12	2	0	8	0	16	152	19	16	425	30	395
10:00	6	0	4	0	5	36	0	2	1	1	1	0	2	29	4	3	94	5	89
10:15	6	0	6	1	5	30	1	2	1	0	2	0	1	35	4	1	95	4	91
10:30	10	1	4	0	5	45	1	2	0	0	0	0	2	36	8	2	116	4	112
10:45	9	1	7	0	3	35	2	5	0	0	3	0	3	33	6	1	108	6	102
Hour	31	2	21	1	18	146	4	11	2	1	6	0	8	133	22	7	413	19	394
11:00	12	1	2	4	5	38	1	4	2	0	0	0	1	41	4	3	118	11	107
11:15	5	0	3	0	4	32	1	0	1	0	0	0	3	44	3	1	97	1	96
11:30	2	3	7	0	6	41	2	1	0	0	5	0	6	41	6	7	127	8	119
11:45	7	1	2	0	4	37	0	1	2	0	4	0	5	42	7	4	116	5	111
Hour	26	5	14	4	19	148	4	6	5	0	9	0	15	168	20	15	458	25	433
12:00	2	1	2	0	1	49	0	6	0	1	4	0	5	53	4	4	132	10	122
12:15	13	0	3	1	2	53	1	2	1	0	6	0	3	55	8	5	153	8	145
12:30	3	3	1	1	0	50	5	5	0	0	1	0	3	35	2	0	109	6	103
12:45	5	2	1	1	0	36	1	5	2	0	1	0	5	46	6	1	112	7	105
Hour	23	6	7	3	3	188	7	18	3	1	12	0	16	189	20	10	506	31	475

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :FAIR  
 Counted by:Ann and Gabe  
 Board # :  
 Ther :

Study Name: TMC9608  
 Site Code : 96080202  
 Start Date: 07/01/96  
 Page : 2

Vehicle group 1

Start Time	CR 72 From North				CSAH 24 (BRIDGE ST.) From East				POPPY ST. From South				CSAH 24 (BRIDGE ST.) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
13:00	1	0	1	0	3	49	1	4	0	0	1	0	2	41	5	1	109	5	104
13:15	8	1	1	1	5	55	0	6	1	0	2	1	5	41	7	5	139	13	126
13:30	1	0	10	1	2	44	1	2	1	0	2	1	0	43	5	2	115	6	109
13:45	9	0	0	1	2	53	1	3	0	0	3	0	6	61	7	2	148	6	142
Hour	19	1	12	3	12	201	3	15	2	0	8	2	13	186	24	10	511	30	481
14:00	5	0	2	0	6	37	2	1	1	0	1	0	8	41	5	2	111	3	108
14:15	4	0	3	0	3	56	1	4	1	1	0	0	7	43	7	6	136	10	126
14:30	5	0	4	0	7	45	2	4	1	0	2	0	4	34	3	1	112	5	107
14:45	6	3	3	1	5	39	0	5	0	0	1	0	2	33	5	3	106	9	97
Hour	20	3	12	1	21	177	5	14	3	1	4	0	21	151	20	12	465	27	438
15:00	2	0	1	0	3	32	3	3	1	0	3	0	5	44	4	5	106	8	98
15:15	8	0	2	0	3	55	2	1	0	0	1	0	4	46	4	5	131	6	125
15:30	3	0	1	0	3	53	1	4	3	1	0	0	3	44	7	2	125	6	119
15:45	4	0	0	1	3	64	4	2	1	1	2	0	8	46	5	4	145	7	138
Hour	17	0	4	1	12	204	10	10	5	2	6	0	20	180	20	16	507	27	480
16:00	7	1	4	1	3	76	2	4	1	0	1	0	4	50	6	0	160	5	155
16:15	3	0	1	0	4	61	3	0	1	0	2	1	6	81	5	2	170	3	167
16:30	1	0	1	0	9	76	2	3	1	1	2	0	8	58	12	3	177	6	171
16:45	3	0	3	0	4	80	11	7	3	0	2	0	6	55	6	1	181	8	173
Hour	14	1	9	1	20	293	18	14	6	1	7	1	24	244	29	6	688	22	666
17:00	5	0	8	1	14	87	3	3	3	2	1	1	5	72	3	4	212	9	203
17:15	5	0	7	1	12	85	2	4	3	0	1	0	6	41	11	1	179	6	173
17:30	4	2	5	0	10	75	2	2	6	0	5	0	3	55	6	2	177	4	173
17:45	7	0	5	0	6	93	1	0	2	0	5	0	5	80	15	1	220	1	219
Hour	21	2	25	2	42	340	8	9	14	2	12	1	19	248	35	8	788	20	768
18:00	4	0	5	1	6	94	2	3	2	2	1	0	4	76	9	2	211	6	205
18:15	6	0	6	0	5	76	0	4	1	0	0	0	2	54	5	3	162	7	155
18:30	6	1	4	0	14	62	2	1	3	0	2	0	4	60	5	0	164	1	163
18:45	7	0	5	0	8	67	2	3	3	0	0	0	5	40	9	2	151	5	146
Hour	23	1	20	1	33	299	6	11	9	2	3	0	15	230	28	7	688	19	669
19:00	12	1	5	0	10	66	1	3	0	0	1	0	1	44	11	1	156	4	152
19:15	3	0	2	1	4	65	1	1	1	0	2	0	2	50	3	3	138	5	133
19:30	3	0	5	1	6	37	5	2	0	0	2	0	3	33	5	1	103	4	99
19:45	9	0	9	2	3	50	0	1	1	0	1	0	2	31	6	2	117	5	112
Hour	27	1	21	4	23	218	7	7	2	0	6	0	8	158	25	7	514	18	496

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :FAIR  
 Counted by:Ann and Gabe  
 Board # :  
 Number :

Study Name: TMC9608  
 Site Code : 96080202  
 Start Date: 07/01/96  
 Page : 3

Vehicle group 1

Start Time	CR 72 From North				CSAH 24 (BRIDGE ST.) From East				POPPY ST. From South				CSAH 24 (BRIDGE ST.) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
20:00	2	0	7	0	1	47	2	1	1	0	1	0	3	39	6	1	111	2	109
20:15	1	0	2	0	2	28	1	1	1	0	0	1	2	16	2	1	58	3	55
20:30	5	0	4	0	4	53	0	0	0	0	0	0	2	52	7	2	129	2	127
20:45	3	0	1	0	6	43	2	1	1	1	2	0	1	60	5	0	126	1	125
Hour	11	0	14	0	13	171	5	3	3	1	3	1	8	167	20	4	424	8	416
21:00	4	0	5	0	7	62	1	0	4	0	1	0	3	54	6	0	147	0	147
21:15	3	0	11	0	1	33	2	0	2	0	0	0	3	54	3	1	113	1	112
21:30	3	0	3	0	4	31	1	1	0	0	1	0	0	32	3	1	80	2	78
21:45	2	0	4	0	3	12	2	0	4	1	0	0	0	25	3	0	56	0	56
Hour	12	0	23	0	15	138	6	1	10	1	2	0	6	165	15	2	396	3	393
Total	357	29	226	28	274	2974	91	156	77	12	106	7	216	2867	352	157	7929	348	7581
% Apr.	55.7	4.5	35.3	4.3	7.8	85.0	2.6	4.4	38.1	5.9	52.4	3.4	6.0	79.8	9.7	4.3	-	-	-
% Int.	4.5	0.3	2.8	0.3	3.4	37.5	1.1	1.9	0.9	0.1	1.3	-	2.7	36.1	4.4	1.9	-	-	-

Major Street Approaches:

Eastbound:

CSAH 24 (BRIDGE ST.)

Data File: C:\PETRA2\DATAFILE\TMC9608.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/ 1/96  
 Number of Lanes: 1  
 Approach Speed: 40  
 Total Approach Traffic: 3435

Westbound:

CSAH 24 (BRIDGE ST.)

Data File: C:\PETRA2\DATAFILE\TMC9608.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/ 1/96  
 Number of Lanes: 1  
 Approach Speed: 40  
 Total Approach Traffic: 3339

Minor Street Approaches:

Northbound:

POPPY ST.

Data File: C:\PETRA2\DATAFILE\TMC9608.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/ 1/96  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 195

Southbound:

CR 72

Data File: C:\PETRA2\DATAFILE\TMC9608.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/ 1/96  
 Number of Lanes: 1  
 Approach Speed: 55  
 Total Approach Traffic: 612

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? Criteria
0	0	0 S 17	150	75	120
1	0	0 S 18	150	75	120
2	0	0 S 19	150	75	120
3	0	0 S 20	150	75	120
4	0	0 S 21	150	75	120
5	0	0 S 22	150	75	120
6	365	49 S 2	150	75	120
7	280	29 S 13	150	75	120
8	276	47 S 5	150	75	120
9	346	39 S 8	150	75	120
10	331	54 S 1	150	75	120
11	374	45 S 6	150	75	120
12	423	36 S 9	150	75	120
13	439	32 S 12	150	75	120
14	395	35 S 10	150	75	120
15	446	21 S 16	150	75	120
16	628	24 S 15	MAIN 150	75	MAIN 120
17	692	48 S 4	MAIN 150	75	MAIN 120
18	611	44 S 7	MAIN 150	75	MAIN 120
19	439	49 S 3	150	75	120
20	384	25 S 14	150	75	120
21	345	35 S 11	150	75	120
22	0	0 S 23	150	75	120
23	0	0 S 24	150	75	120

## Warrant Summary:

Urban values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 500; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 750; 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 768 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: 600; Side: See Volume Summary.

## Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

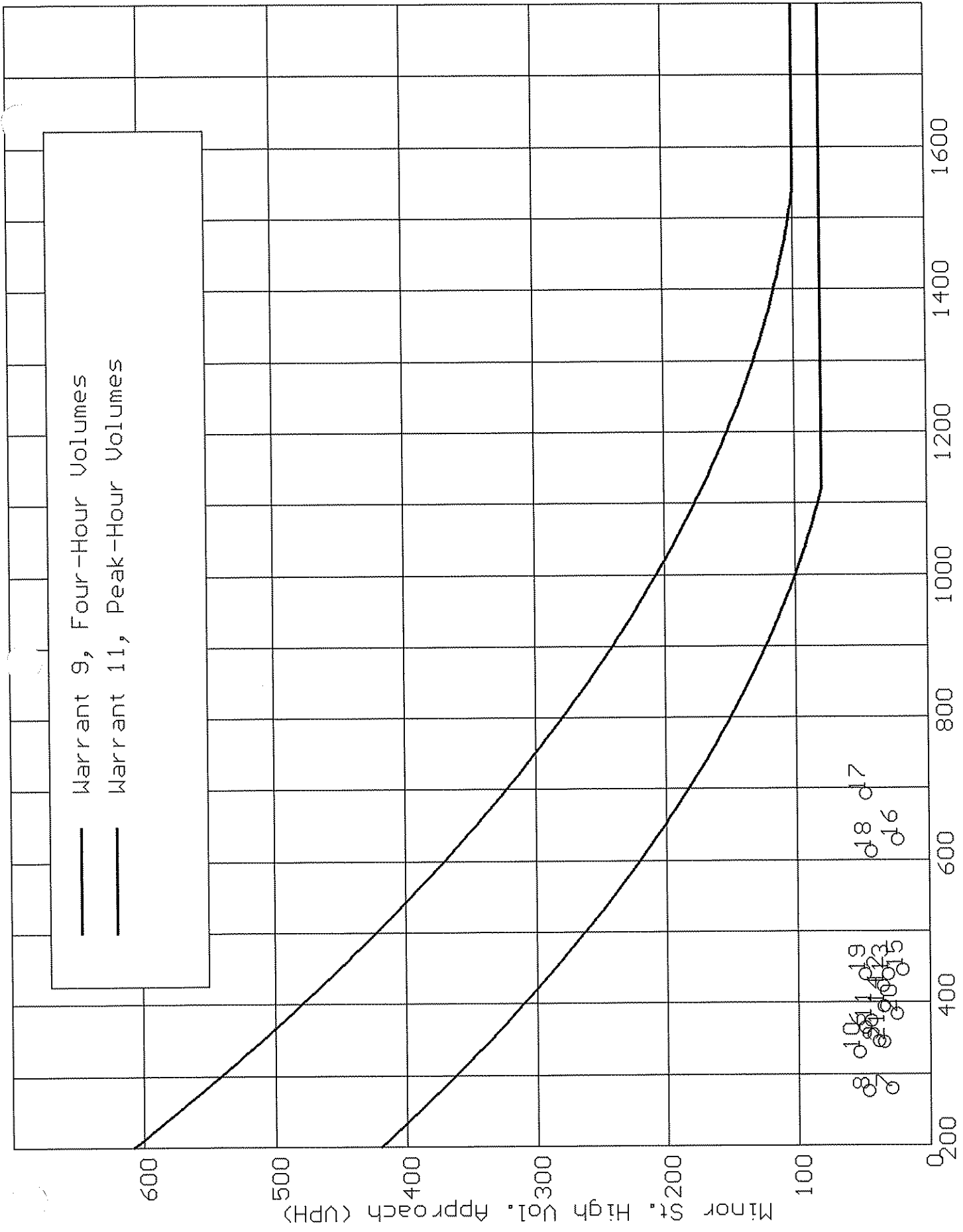
## Warrant 10 - Peak Hour Delay

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 (UPH)



**NORTH**

APP. #1= WB CSAH 24

APP. #2= NB POPPY ST.

APP. #3= EB CSAH 24

APP. #4= CR 72

**COUNT LOCATION:** CSAH 24 (BRIDGE ST.) @  
CR 72/POPPY ST.

**DATE:** 7/2/96

APP. #2

APP. #1  
40MPH

55MPH

APP. #3  
40 MPH

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						5		1
6:30-6:45						5		1
6:45-7:00						3		3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>18</b>
7:00-7:15						6		3
7:15-7:30						4		1
7:30-7:45						6		
7:45-8:00						8		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>29</b>
8:00-8:15						6		1
8:15-8:30						2		1
8:30-8:45						5		
8:45-9:00						5	1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>21</b>
9:00-9:15						7		1
9:15-9:30						12		1
9:30-9:45						5		
9:45-10:00						4		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>30</b>
10:00-10:15						5		
10:15-10:30						3	1	
10:30-10:45	1	1		1	3	1	2	1
10:45-11:00						5		1
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>19</b>
11:00-11:15						10	1	
11:15-11:30			1	2	3	1		
11:30-11:45						5	1	2
11:45-12:00						5		
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>25</b>
12:00-12:15						8		2
12:15-12:30						7		1
12:30-12:45						4		2
12:45-1:00						7		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>31</b>
1:00-1:15						4		1
1:15-1:30						13		
1:30-1:45						5		
1:45-2:00						6		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>29</b>



↓  
**NORTH**

APP. #1= WB CSAH 24

APP. #2= NB POPPY ST.

APP. #3= EB CSAH 24

APP. #4= CR 72

**COUNT LOCATION:** CSAH 24 (BRIDGE ST.) @  
CR 72/POPPY ST.

**DATE:** 7/1/96

APP. #2

APP. #1  
40MPH

55MPH

APP. #3  
40 MPH

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						3		
2:15-2:30		3			3	9	1	
2:30-2:45						5		
2:45-3:00		1	1		2	8		
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>26</b>
3:00-3:15						8		
3:15-3:30						6		
3:30-3:45						6		
3:45-4:00		2			2	6	1	
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>27</b>
4:00-4:15						5		
4:15-4:30						2		1
4:30-4:45						6	1	
4:45-5:00						7	1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>23</b>
5:00-5:15						9		
5:15-5:30						5	1	
5:30-5:45						4		
5:45-6:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>20</b>
6:00-6:15						6		
6:15-6:30						7		
6:30-6:45						1		
6:45-7:00						5		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>19</b>
7:00-7:15						3	1	
7:15-7:30						5		
7:30-7:45						3		
7:45-8:00		2			2	5		
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>17</b>
8:00-8:15		2			2	1		
8:15-8:30						4		
8:30-8:45						1		
8:45-9:00						1		
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>7</b>
9:00-9:15								
9:15-9:30							1	
9:30-9:45						2		
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>3</b>