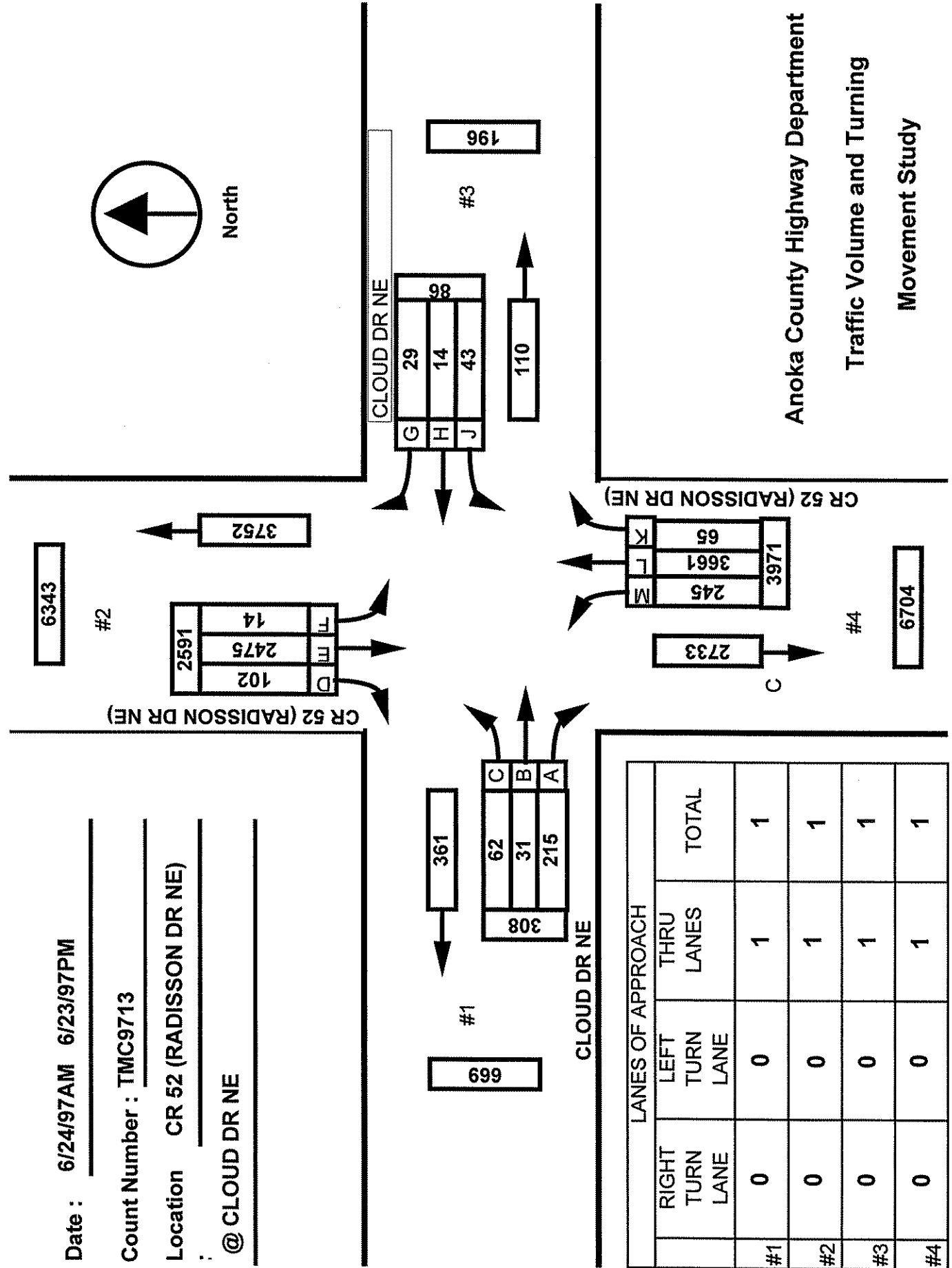


Date : 6/24/97AM 6/23/97PM

Count Number : TMC9713

Location CR 52 (RADISSON DR NE)

@ CLOUD DR NE



	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 Volume and Turning  
 Movement Study

PETRA Software

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Horsham, PA.

Study Name: TMC9713

Site Code : 97130202

Start Date: 06/24/97

Page : 1

Weather : CLOUDY RAINY 85  
 Counted by: SARAH AND JANELLE  
 Board # :  
 Other :

Vehicle group 1

Start Time	RADISSON DR NE (CR 52) Southbound				CLOUD DR NE Westbound				RADISSON DR NE (CR 52) Northbound				CLOUD DR NE Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
06/24/97																			
06:00	0	180	0	0	0	0	1	0	0	9	0	2	0	0	16	0	208	2	206
06:15	0	158	2	1	3	0	0	1	5	18	0	5	3	0	13	0	209	7	202
06:30	0	191	1	5	2	0	0	0	2	24	1	3	2	0	15	0	246	8	238
06:45	0	112	2	5	3	1	1	2	0	25	3	3	0	0	14	0	171	10	161
Hour	0	641	5	11	8	1	2	3	7	76	4	13	5	0	58	0	834	27	807
07:00	0	86	1	2	2	0	0	0	0	25	0	5	0	0	10	2	133	9	124
07:15	0	93	1	2	1	0	0	0	0	25	0	3	0	1	4	1	131	6	125
07:30	0	67	1	5	0	0	0	0	1	18	3	3	1	0	4	0	103	8	95
07:45	1	51	1	2	1	0	1	1	0	27	2	7	1	0	3	0	98	10	88
Hour	1	297	4	11	4	0	1	1	1	95	5	18	2	1	21	3	465	33	432
08:00	0	45	6	9	0	0	0	0	0	9	1	3	0	1	4	0	78	12	66
08:15	0	38	1	4	0	1	1	2	1	17	0	4	0	0	1	0	70	10	60
08:30	1	34	0	4	0	0	0	0	3	19	1	1	0	0	2	0	65	5	60
08:45	0	23	0	1	1	0	1	0	2	16	0	3	0	0	3	0	50	4	46
Hour	1	140	7	18	1	1	2	2	6	61	2	11	0	1	10	0	263	31	232
09:00	0	23	2	1	1	0	0	0	1	20	0	5	0	1	2	1	57	7	50
09:15	0	18	0	3	3	2	2	2	2	20	1	4	2	0	2	1	62	10	52
09:30	0	23	1	7	0	0	0	0	2	28	1	0	0	0	2	0	64	7	57
09:45	0	40	2	9	0	1	2	0	1	19	0	2	1	1	4	1	83	12	71
Hour	0	104	5	20	4	3	4	2	6	87	2	11	3	2	10	3	266	36	230
10:00	0	32	0	2	2	1	0	1	1	28	1	5	1	0	4	1	79	9	70
10:15	0	23	2	3	0	0	1	0	1	34	1	4	1	0	2	0	72	7	65
10:30	0	36	0	4	0	2	0	0	3	24	0	2	0	2	2	0	75	6	69
10:45	0	27	2	2	0	0	0	0	2	24	1	3	2	1	1	0	65	5	60
Hour	0	118	4	11	2	3	1	1	7	110	3	14	4	3	9	1	291	27	264
11:00	1	33	0	1	0	0	0	0	2	15	1	0	1	0	2	0	56	1	55
11:15	3	21	2	2	1	0	1	0	3	29	3	4	1	0	2	0	72	6	66
11:30	0	20	0	1	0	0	1	1	4	29	1	4	0	2	1	0	64	6	58
11:45	0	23	1	2	1	0	0	0	1	31	1	1	2	0	1	0	64	3	61
Hour	4	97	3	6	2	0	2	1	10	104	6	9	4	2	6	0	256	16	240
12:00	0	30	0	2	0	0	0	0	5	31	1	7	1	2	2	1	82	10	72
12:15	0	38	1	4	2	0	0	0	1	31	0	2	0	0	3	0	82	6	76
12:30	0	32	1	6	0	0	0	0	2	33	3	6	0	0	0	0	83	12	71
12:45	0	34	1	6	3	0	1	0	2	30	0	3	3	0	1	0	84	9	75
Hour	0	134	3	18	5	0	1	0	10	125	4	18	4	2	6	1	331	37	294

Weather : CLOUDY RAINY 85  
 Counted by: SARAH AND JANELLE  
 Board # :  
 Other :

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Study Name: TMC9713  
 Site Code : 97130202  
 Start Date: 06/24/97  
 Page : 2

Vehicle group 1

Start Time	RADISSON DR NE (CR 52) Southbound				CLOUD DR NE Westbound				RADISSON DR NE (CR 52) Northbound				CLOUD DR NE Eastbound				Intvl Total	Exclu Total	Inclu Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
13:00	0	37	2	5	0	0	1	0	4	39	0	5	0	0	4	0	97	10	87
13:15	0	30	5	4	1	0	0	0	2	36	0	2	0	0	2	0	82	6	76
13:30	0	31	1	5	0	0	0	0	5	47	0	5	1	0	2	0	97	10	87
13:45	0	33	2	7	0	0	0	0	5	68	2	2	3	0	3	0	125	9	116
Hour	0	131	10	21	1	0	1	0	16	190	2	14	4	0	11	0	401	35	366
14:00	0	24	1	2	0	0	0	0	3	77	0	6	1	0	3	0	117	8	109
14:15	0	20	2	4	0	0	0	0	3	98	0	0	0	0	1	0	128	4	124
14:30	0	31	3	8	0	0	0	1	3	48	4	6	2	0	4	0	110	15	95
14:45	0	19	1	0	1	0	1	0	6	72	0	7	1	0	3	0	111	7	104
Hour	0	94	7	14	1	0	1	1	15	295	4	19	4	0	11	0	466	34	432
15:00	0	30	1	9	1	0	0	1	2	82	4	6	1	0	3	0	140	16	124
15:15	0	18	1	4	2	0	0	0	3	109	2	5	0	2	0	0	146	9	137
15:30	0	39	2	2	2	0	0	0	5	75	1	5	2	1	3	0	137	7	130
15:45	0	23	2	7	0	0	2	0	4	70	2	2	2	0	1	0	115	9	106
Hour	0	110	6	22	5	0	2	1	14	336	9	18	5	3	7	0	538	41	497
16:00	0	32	3	5	0	0	0	0	7	103	2	3	0	0	0	0	155	8	147
16:15	0	20	7	3	1	0	0	0	6	153	2	6	4	0	3	1	206	10	196
16:30	1	34	2	5	1	0	3	0	6	190	1	5	1	0	3	0	252	10	242
16:45	2	29	4	3	0	0	1	0	14	184	4	3	1	0	4	0	249	6	243
Hour	3	115	16	16	2	0	4	0	33	630	9	17	6	0	10	1	862	34	828
17:00	0	28	3	3	0	0	0	0	18	215	2	2	1	0	1	0	273	5	268
17:15	0	29	2	0	1	0	1	0	9	161	2	5	2	0	1	0	213	5	208
17:30	1	25	1	4	1	1	1	0	5	190	1	4	0	0	3	0	237	8	229
17:45	0	43	1	3	2	0	0	0	9	161	1	3	0	0	4	0	227	6	221
Hour	1	125	7	10	4	1	2	0	41	727	6	14	3	0	9	0	950	24	926
18:00	1	23	3	1	2	0	0	0	11	104	0	0	1	0	3	0	149	1	148
18:15	0	25	1	1	0	0	0	0	3	75	1	3	0	0	2	0	111	4	107
18:30	0	32	1	2	1	0	0	0	3	72	2	3	1	0	5	0	122	5	117
18:45	0	30	1	0	1	0	1	0	8	59	1	1	3	0	5	0	110	1	109
Hour	1	110	6	4	4	0	1	0	25	310	4	7	5	0	15	0	492	11	481
19:00	1	26	1	1	0	4	0	0	3	40	1	0	1	15	2	0	95	1	94
19:15	0	35	1	0	0	0	1	0	2	48	0	1	0	0	7	0	95	1	94
19:30	0	21	1	0	0	0	0	0	3	46	0	0	1	0	3	0	75	0	75
19:45	0	22	1	1	0	1	1	0	3	44	1	2	3	0	2	0	81	3	78
Hour	1	104	4	2	0	5	2	0	11	178	2	3	5	15	14	0	346	5	341

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Horsham, PA.

Weather : CLOUDY RAINY 85  
 Counted by: SARAH AND JANELLE  
 Board # :  
 Other :

Study Name: TMC9713  
 Site Code : 97130202  
 Start Date: 06/24/97  
 Page : 3

Vehicle group 1

Start Time	RADISSON DR NE (CR 52) Southbound				CLOUD DR NE Westbound				RADISSON DR NE (CR 52) Northbound				CLOUD DR NE Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
20:00	0	27	1	2	0	0	0	0	6	31	1	2	1	0	1	0	72	4	68
20:15	0	25	1	0	0	0	0	0	5	45	1	0	1	1	4	0	83	0	83
20:30	0	17	2	0	0	0	0	0	2	40	1	0	1	0	4	0	67	0	67
20:45	0	15	2	0	0	0	1	0	10	38	0	1	3	1	3	0	74	1	73
Hour	0	84	6	2	0	0	1	0	23	154	3	3	6	2	12	0	296	5	291
21:00	2	9	1	0	0	0	2	0	7	50	0	0	0	0	4	0	75	0	75
21:15	0	20	4	0	0	0	0	0	3	33	0	1	1	0	0	0	62	1	61
21:30	0	20	3	0	0	0	0	0	2	24	0	0	1	0	1	0	51	0	51
21:45	0	15	0	0	0	0	0	0	2	29	0	2	0	0	1	0	49	2	47
Hour	2	64	8	0	0	0	2	0	14	136	0	3	2	0	6	0	237	3	234
22:00	0	5	1	0	0	0	0	0	5	25	0	0	0	0	0	0	36	0	36
22:15	0	2	0	0	0	0	0	0	1	22	0	0	0	0	0	0	25	0	25
Total	14	2475	102	186	43	14	29	12	245	3661	65	192	62	31	215	9	7355	399	6956
% Apr.	0.5	89.1	3.6	6.6	43.8	14.2	29.5	12.2	5.8	87.9	1.5	4.6	19.5	9.7	67.8	2.8	-	-	-
% Int.	0.1	33.6	1.3	2.5	0.5	0.1	0.3	0.1	3.3	49.7	0.8	2.6	0.8	0.4	2.9	0.1	-	-	-

Major Street Approaches:

Northbound:

RADISSON DR NE (CR 52)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9713.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/97  
 Number of Lanes: 1  
 Approach Speed: 45  
 Total Approach Traffic: 3971

Southbound:

RADISSON DR NE (CR 52)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9713.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/97  
 Number of Lanes: 1  
 Approach Speed: 45  
 Total Approach Traffic: 2591

Minor Street Approaches:

Eastbound:

CLOUD DR NE

Data File: C:\APPS\PETRA2\DATAFILE\TMC9713.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/97  
 Number of Lanes: 1  
 Approach Speed: 30  
 Total Approach Traffic: 308

Westbound:

CLOUD DR NE

Data File: C:\APPS\PETRA2\DATAFILE\TMC9713.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/97  
 Number of Lanes: 1  
 Approach Speed: 30  
 Total Approach Traffic: 86

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

Hour	Main	Side	Warrant 1	Warrant 2	Warrant 3
Begin	(Total)	Vol. Dir. Rank	Meets? Criteria	Meets? Criteria	Meets? Criteria
0	0	0 W 17	105	52	84
1	0	0 W 18	105	52	84
2	0	0 W 19	105	52	84
3	0	0 W 20	105	52	84
4	0	0 W 21	105	52	84
5	0	0 W 22	105	52	84
6	733	63 E 1	MAIN 105	--BOTH-- 52	MAIN 84
7	403	24 E 3	MAIN 105	52	84
8	217	11 E 15	105	52	84
9	204	15 E 8	105	52	84
10	242	16 E 6	105	52	84
11	224	12 E 12	105	52	84
12	276	12 E 13	105	52	84
13	349	15 E 9	105	52	84
14	415	15 E 10	MAIN 105	52	84
15	475	15 E 11	MAIN 105	52	MAIN 84
16	806	16 E 7	MAIN 105	MAIN 52	MAIN 84
17	907	12 E 14	MAIN 105	MAIN 52	MAIN 84
18	456	20 E 4	MAIN 105	52	MAIN 84
19	300	34 E 2	105	52	84
20	270	20 E 5	105	52	84
21	224	8 E 16	105	52	84
22	61	0 W 23	105	52	84
23	0	0 W 24	105	52	84

## Warrant Summary:

Rural values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 350; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main St.: 525; 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 926 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: 420; Side: See Volume Summary.

## Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

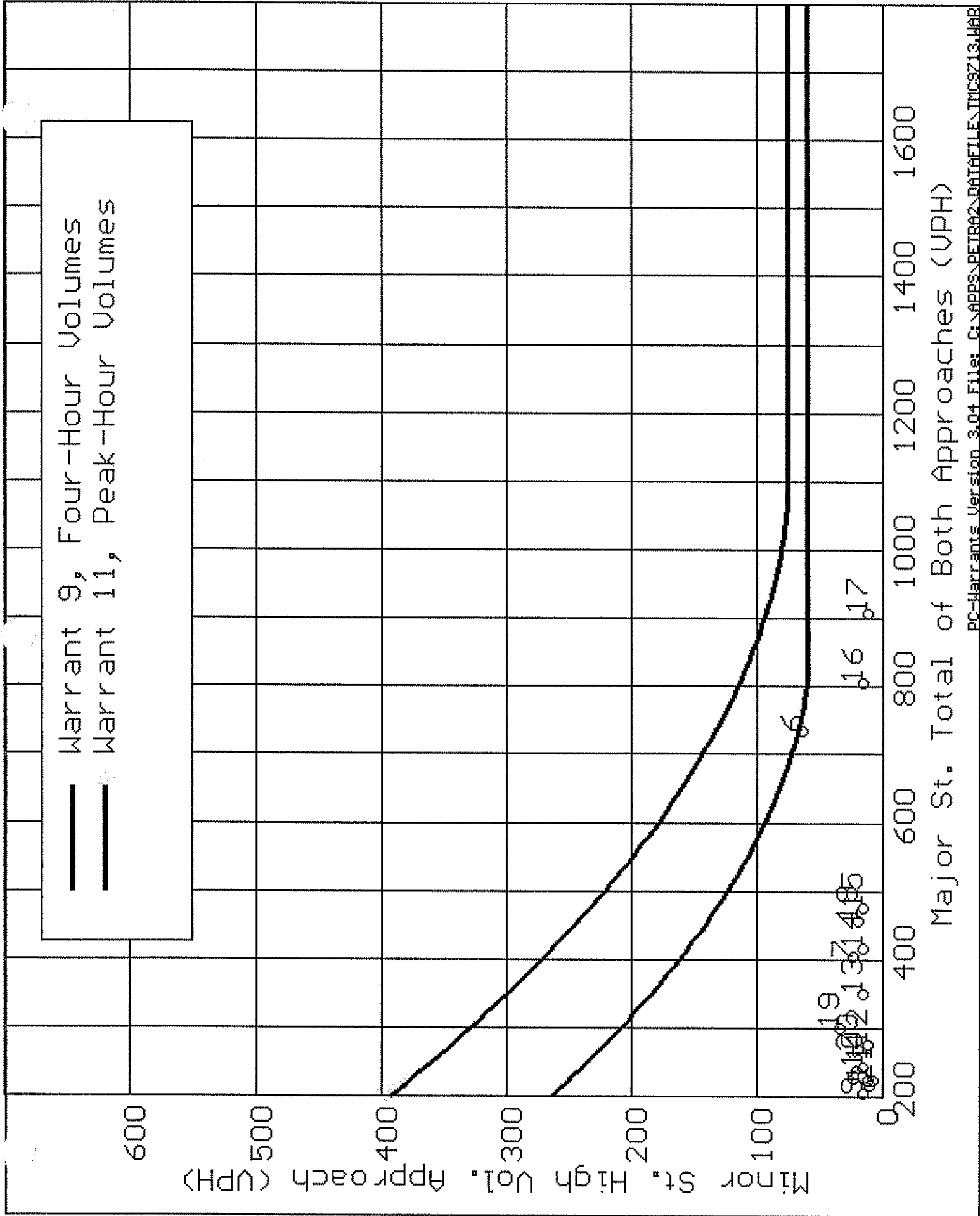
## Warrant 10 - Peak Hour Delay

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 (VPH)



**NORTH**

**COUNT LOCATION:** TMC 9713 CR 52 (RADISSION DR.) @ CLOUD DR. NE

**DATE:** 6/24/97

6/24/97

APP. #1=EB CLOUD DR.

APP. #2 =SB CR 52  
(RADISSION DR. NE)

APP. #3=WB CLOUD DR.

APP. #4=NB CR 52  
(RADISSION DR. NE)

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
6:00-6:15AM						3		
6:15-6:30						5		
6:30-6:45						10		
6:45-7:00						7	1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>26</b>
7:00-7:15						8		
7:15-7:30						4		
7:30-7:45						8		
7:45-8:00						10		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>30</b>
8:00-8:15			1		1	16		
8:15-8:30		2			2	6		
8:30-8:45	2				2	5		
8:45-9:00						4		
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>31</b>
9:00-9:15						7		
9:15-9:30						10		
9:30-9:45						6		
9:45-10:00						12		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>35</b>
10:00-10:15						10		
10:15-10:30						6		
10:30-10:45								
10:45-11:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>17</b>
11:00-11:15								
11:15-11:30						5		
11:30-11:45						11		
11:45-12:00						9		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>25</b>
12:00-12:15						10		
12:15-12:30						6		
12:30-12:45						11		
12:45-1:00						9		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>36</b>
1:00-1:15						8		
1:15-1:30						10		
1:30-1:45						7		
1:45-2:00						9		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>35</b>





**NORTH**

**COUNT LOCATION:** TMC 9713 CR 52 (RADISSION DR.)@  
CLOUD DR. NE

**DATE:**

6/23/97

APP. #1=EB CLOUD DR.

APP. #2 =SB CR 52  
(RADISSION DR. NE)

APP. #3=WB CLOUD DR.

APP. #4=NB CR 52  
(RADISSION DR. NE)

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						7		
2:15-2:30						7		
2:30-2:45						14		
2:45-3:00			2		2	5		
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>33</b>
3:00-3:15						6		
3:15-3:30						8		
3:30-3:45						8		
3:45-4:00						7		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>29</b>
4:00-4:15						2		
4:15-4:30	2				2	4	1	
4:30-4:45						3	2	
4:45-5:00						4	1	
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>17</b>
5:00-5:15						7		
5:15-5:30						5		
5:30-5:45						1		
5:45-6:00						3	1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>17</b>
6:00-6:15						5		
6:15-6:30						1		
6:30-6:45		4	1		5	1		
6:45-7:00		1	1		2	1		
<b>HOURLY TOTAL</b>					<b>7</b>	<b>HOURLY TOTAL</b>		<b>8</b>
7:00-7:15								
7:15-7:30		4			4	3		
7:30-7:45						4		
7:45-8:00	1		1	1	3			
<b>HOURLY TOTAL</b>					<b>7</b>	<b>HOURLY TOTAL</b>		<b>7</b>
8:00-8:15								
8:15-8:30						1		
8:30-8:45								
8:45-9:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>2</b>
9:00-9:15								
9:15-9:30						2		
9:30-9:45								
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>2</b>