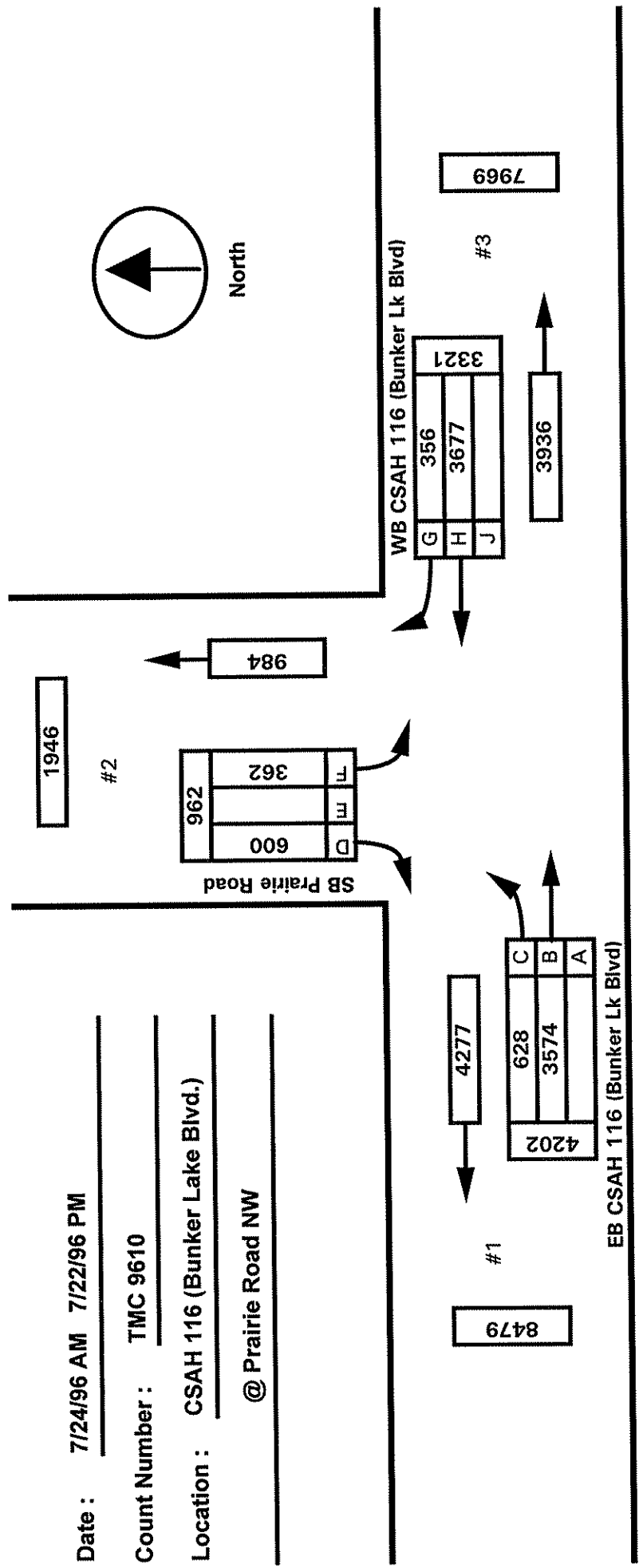


Date : 7/24/96 AM 7/22/96 PM
 Count Number : TMC 9610
 Location : CSAH 116 (Bunker Lake Blvd.)
 @ Prairie Road NW



	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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :
 Counted by: Ann and Gabe
 Ward # :
 Other :

Study Name: TMC9610
 Site Code : 96100202
 Start Date: 07/22/96
 Page : 1

Vehicle group 1

Start Time	PRAIRIE RD NW From North				CSAH 116 (BUNKER LK BL) From East				NO ROAD From South				CSAH 116 (BUNKER LK BL) From West				Intvl	Exclu	Inclu	
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY				Total
07/22/96																				
06:00	10	0	10	1	0	21	0	0	0	0	0	0	0	58	4	2	106	3	103	
06:15	14	0	11	0	4	35	0	6	0	0	0	0	0	74	4	1	149	7	142	
06:30	18	0	13	1	3	43	0	0	0	0	0	0	0	83	3	1	165	2	163	
06:45	16	0	17	1	3	31	0	2	0	0	0	0	0	82	5	3	160	6	154	
Hour	58	0	51	3	10	130	0	8	0	0	0	0	0	297	16	7	580	18	562	
07:00	23	0	8	1	2	39	0	1	0	0	0	0	0	79	7	7	167	9	158	
07:15	26	0	11	2	3	45	0	4	0	0	0	0	0	112	5	4	212	10	202	
07:30	26	0	17	3	2	52	0	3	0	0	0	0	0	78	6	4	191	10	181	
07:45	14	0	8	0	3	51	0	3	0	0	0	0	0	107	8	4	198	7	191	
Hour	89	0	44	6	10	187	0	11	0	0	0	0	0	376	26	19	768	36	732	
08:00	10	0	7	0	3	46	0	3	0	0	0	0	0	73	5	3	150	6	144	
08:15	11	0	9	0	4	37	0	3	0	0	0	0	0	56	5	5	130	8	122	
08:30	14	0	11	3	3	43	0	4	0	0	0	0	0	43	7	5	133	12	121	
08:45	11	0	5	1	4	44	0	2	0	0	0	0	0	48	6	3	124	6	118	
Hour	46	0	32	4	14	170	0	12	0	0	0	0	0	220	23	16	537	32	505	
09:00	15	0	3	1	4	31	0	1	0	0	0	0	0	32	3	5	95	7	88	
09:15	6	0	1	0	4	37	0	6	0	0	0	0	0	40	5	3	102	9	93	
09:30	6	0	3	0	2	39	0	4	0	0	0	0	0	53	10	4	121	8	113	
09:45	6	0	9	1	2	29	0	4	0	0	0	0	0	67	5	6	129	11	118	
Hour	33	0	16	2	12	136	0	15	0	0	0	0	0	192	23	18	447	35	412	
10:00	5	0	4	0	3	46	0	4	0	0	0	0	0	53	5	4	124	8	116	
10:15	8	0	5	0	3	33	0	2	0	0	0	0	0	49	2	5	107	7	100	
10:30	7	0	4	1	4	39	0	4	0	0	0	0	0	42	4	5	110	10	100	
10:45	2	0	1	0	1	36	0	6	0	0	0	0	0	37	7	3	93	9	84	
Hour	22	0	14	1	11	154	0	16	0	0	0	0	0	181	18	17	434	34	400	
11:00	10	0	3	1	2	48	0	5	0	0	0	0	0	43	8	6	126	12	114	
11:15	5	0	6	0	6	40	0	5	0	0	0	0	0	39	9	2	112	7	105	
11:30	8	0	3	0	3	47	0	6	0	0	0	0	0	58	12	6	143	12	131	
11:45	9	0	3	1	2	48	0	4	0	0	0	0	0	45	4	3	119	8	111	
Hour	32	0	15	2	13	183	0	20	0	0	0	0	0	185	33	17	500	39	461	
12:00	7	0	4	1	2	56	0	4	0	0	0	0	0	54	10	5	143	10	133	
12:15	9	0	3	1	3	52	0	5	0	0	0	0	0	58	7	5	143	11	132	
12:30	11	0	4	1	8	51	0	5	0	0	0	0	0	45	12	3	140	9	131	
12:45	6	0	6	0	7	47	0	2	0	0	0	0	0	44	9	4	125	6	119	
Hour	33	0	17	3	20	206	0	16	0	0	0	0	0	201	38	17	551	36	515	

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :
 Counted by: Ann and Gabe
 Ward # :
 Other :

Study Name: TMC9610
 Site Code : 96100202
 Start Date: 07/22/96
 Page : 2

Vehicle group 1

Start Time	PRAIRIE RD NW From North				CSAH 116 (BUNKER LK BL From East				NO ROAD From South				CSAH 116 (BUNKER LK BL From West				Intvl Total	Exclu Total	Inclu Total	
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY				
13:00	9	0	8	0	6	53	0	8	0	0	0	0	0	0	57	7	3	151	11	140
13:15	8	0	7	0	3	48	0	2	0	0	0	0	0	0	53	10	5	136	7	129
13:30	8	0	6	0	1	41	0	3	0	0	0	0	0	0	49	15	5	128	8	120
13:45	8	0	2	0	2	41	0	1	0	0	0	0	0	0	46	6	2	108	3	105
Hour	33	0	23	0	12	183	0	14	0	0	0	0	0	0	205	38	15	523	29	494
14:00	8	0	2	0	3	52	0	4	0	0	0	0	0	0	51	13	6	139	10	129
14:15	10	0	7	0	9	60	0	4	0	0	0	0	0	0	50	6	4	150	8	142
14:30	6	0	3	0	2	66	0	2	0	0	0	0	0	0	56	7	6	148	8	140
14:45	5	0	4	0	6	62	0	2	0	0	0	0	0	0	45	5	3	132	5	127
Hour	29	0	16	0	20	240	0	12	0	0	0	0	0	0	202	31	19	569	31	538
15:00	6	0	4	0	7	63	0	5	0	0	0	0	0	0	66	10	3	164	8	156
15:15	6	0	6	1	1	56	0	3	0	0	0	0	0	0	59	5	6	143	10	133
15:30	6	0	1	0	10	98	0	5	0	0	0	0	0	0	65	12	6	203	11	192
15:45	2	0	5	0	6	86	0	2	0	0	0	0	0	0	66	8	2	177	4	173
Hour	20	0	16	1	24	303	0	15	0	0	0	0	0	0	256	35	17	687	33	654
16:00	7	0	5	0	11	94	0	9	0	0	0	0	0	0	63	13	4	206	13	193
16:15	11	0	3	1	4	102	0	3	0	0	0	0	0	0	73	19	4	220	8	212
16:30	10	0	7	1	9	93	0	3	0	0	0	0	0	0	69	15	2	209	6	203
16:45	14	0	7	3	13	119	0	4	0	0	0	0	0	0	89	19	3	271	10	261
Hour	42	0	22	5	37	408	0	19	0	0	0	0	0	0	294	66	13	906	37	869
17:00	8	0	6	1	12	119	0	3	0	0	0	0	0	0	70	22	3	244	7	237
17:15	10	0	5	0	10	117	0	1	0	0	0	0	0	0	63	24	2	232	3	229
17:30	5	0	1	0	12	96	0	0	0	0	0	0	0	0	59	17	5	195	5	190
17:45	7	0	7	1	13	113	0	1	0	0	0	0	0	0	65	24	1	232	3	229
Hour	30	0	19	2	47	445	0	5	0	0	0	0	0	0	257	87	11	903	18	885
18:00	8	0	6	0	14	99	0	3	0	0	0	0	0	0	47	28	1	206	4	202
18:15	11	0	5	0	8	87	0	1	0	0	0	0	0	0	61	19	3	195	4	191
18:30	10	0	4	0	15	64	0	1	0	0	0	0	0	0	56	13	2	165	3	162
18:45	9	0	5	0	4	72	0	2	0	0	0	0	0	0	58	20	2	172	4	168
Hour	38	0	20	0	41	322	0	7	0	0	0	0	0	0	222	80	8	738	15	723
19:00	10	0	9	0	14	59	0	2	0	0	0	0	0	0	57	15	2	168	4	164
19:15	7	0	5	0	9	64	0	1	0	0	0	0	0	0	40	8	0	134	1	133
19:30	13	0	11	2	11	52	0	0	0	0	0	0	0	0	62	13	0	164	2	162
19:45	4	0	2	0	4	51	0	0	0	0	0	0	0	0	35	10	0	106	0	106
Hour	34	0	27	2	38	226	0	3	0	0	0	0	0	0	194	46	2	572	7	565

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :
 Counted by: Ann and Gabe
 Ward # :
 Other :

Study Name: TMC9610
 Site Code : 96100202
 Start Date: 07/22/96
 Page : 3

Vehicle group 1

Start Time	PRAIRIE RD NW From North				CSAH 116 (BUNKER LK BL) From East				NO ROAD From South				CSAH 116 (BUNKER LK BL) From West				Intvl	Exclu	Inclu	
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY				Total
20:00	12	0	3	1	6	56	0	0	0	0	0	0	0	0	36	6	0	120	1	119
20:15	12	0	6	0	8	56	0	1	0	0	0	0	0	0	42	5	3	133	4	129
20:30	9	0	5	0	8	37	0	0	0	0	0	0	0	0	39	17	2	117	2	115
20:45	5	0	4	0	5	58	0	0	0	0	0	0	0	0	43	9	2	126	2	124
Hour	38	0	18	1	27	207	0	1	0	0	0	0	0	0	160	37	7	496	9	487
21:00	9	0	3	0	7	48	0	0	0	0	0	0	0	0	46	4	2	119	2	117
21:15	3	0	3	0	2	46	0	0	0	0	0	0	0	0	37	8	1	100	1	99
21:30	8	0	0	0	5	55	0	0	0	0	0	0	0	0	27	11	0	106	0	106
21:45	3	0	6	0	6	28	0	0	0	0	0	0	0	0	22	8	0	73	0	73
Hour	23	0	12	0	20	177	0	0	0	0	0	0	0	0	132	31	3	398	3	395
Total	600	0	362	32	356	3677	0	174	0	0	0	0	0	0	3574	628	206	9609	412	9197
% Apr.	60.3	-	36.4	3.2	8.4	87.4	-	4.1	-	-	-	-	-	-	81.0	14.2	4.6	-	-	-
% Int.	6.2	-	3.7	0.3	3.7	38.2	-	1.8	-	-	-	-	-	-	37.1	6.5	2.1	-	-	-

or Street Approaches:

Eastbound:

CSAH 116 (BUNKER LK BLVD)

Data File: C:\PETRA2\DATAFILE\TMC9610.PDF

Count Type: IMC. Channel: 0. Count Date: 7/22/96

Number of Lanes: 1

Approach Speed: 55

Total Approach Traffic: 4202

Westbound:

CSAH 116 (BUNKER LK BLVD)

Data File: C:\PETRA2\DATAFILE\TMC9610.PDF

Count Type: IMC. Channel: 0. Count Date: 7/22/96

Number of Lanes: 1

Approach Speed: 55

Total Approach Traffic: 4033

Minor Street Approaches:

Northbound:

NO ROAD

Data File: C:\PETRA2\DATAFILE\TMC9610.PDF

Count Type: IMC. Channel: 0. Count Date: 7/22/96

Number of Lanes: 1

Approach Speed: 0

Total Approach Traffic: 0

Southbound:

PRAIRIE RD NW

Data File: C:\PETRA2\DATAFILE\TMC9610.PDF

Count Type: IMC. Channel: 0. Count Date: 7/22/96

Number of Lanes: 1

Approach Speed: 35

Total Approach Traffic: 962

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.	Meets? Criteria	Meets? Criteria	Meets? Criteria
0	0	0 S 17	105	52	84
1	0	0 S 18	105	52	84
2	0	0 S 19	105	52	84
3	0	0 S 20	105	52	84
4	0	0 S 21	105	52	84
5	0	0 S 22	105	52	84
6	453	109 S 2	--BOTH-- 105	SIDE 52	--BOTH-- 84
7	599	133 S 1	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
8	427	78 S 3	MAIN 105	SIDE 52	MAIN 84
9	363	49 S 10	MAIN 105	52	84
10	364	36 S 14	MAIN 105	52	84
11	414	47 S 12	MAIN 105	52	84
12	465	50 S 9	MAIN 105	52	MAIN 84
13	438	56 S 7	MAIN 105	SIDE 52	MAIN 84
14	493	45 S 13	MAIN 105	52	MAIN 84
15	618	36 S 15	MAIN 105	MAIN 52	MAIN 84
16	805	64 S 4	MAIN 105	--BOTH-- 52	MAIN 84
17	836	49 S 11	MAIN 105	MAIN 52	MAIN 84
18	665	58 S 6	MAIN 105	--BOTH-- 52	MAIN 84
19	504	61 S 5	MAIN 105	SIDE 52	MAIN 84
20	431	56 S 8	MAIN 105	SIDE 52	MAIN 84
21	360	35 S 16	MAIN 105	52	84
22	0	0 S 23	105	52	84
23	0	0 S 24	105	52	84

Warrant Summary:

General values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 2 hours. Criteria--Main St.: 350; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 3 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 885 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 2 hours. Criteria--Main: 420; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 2 hours.

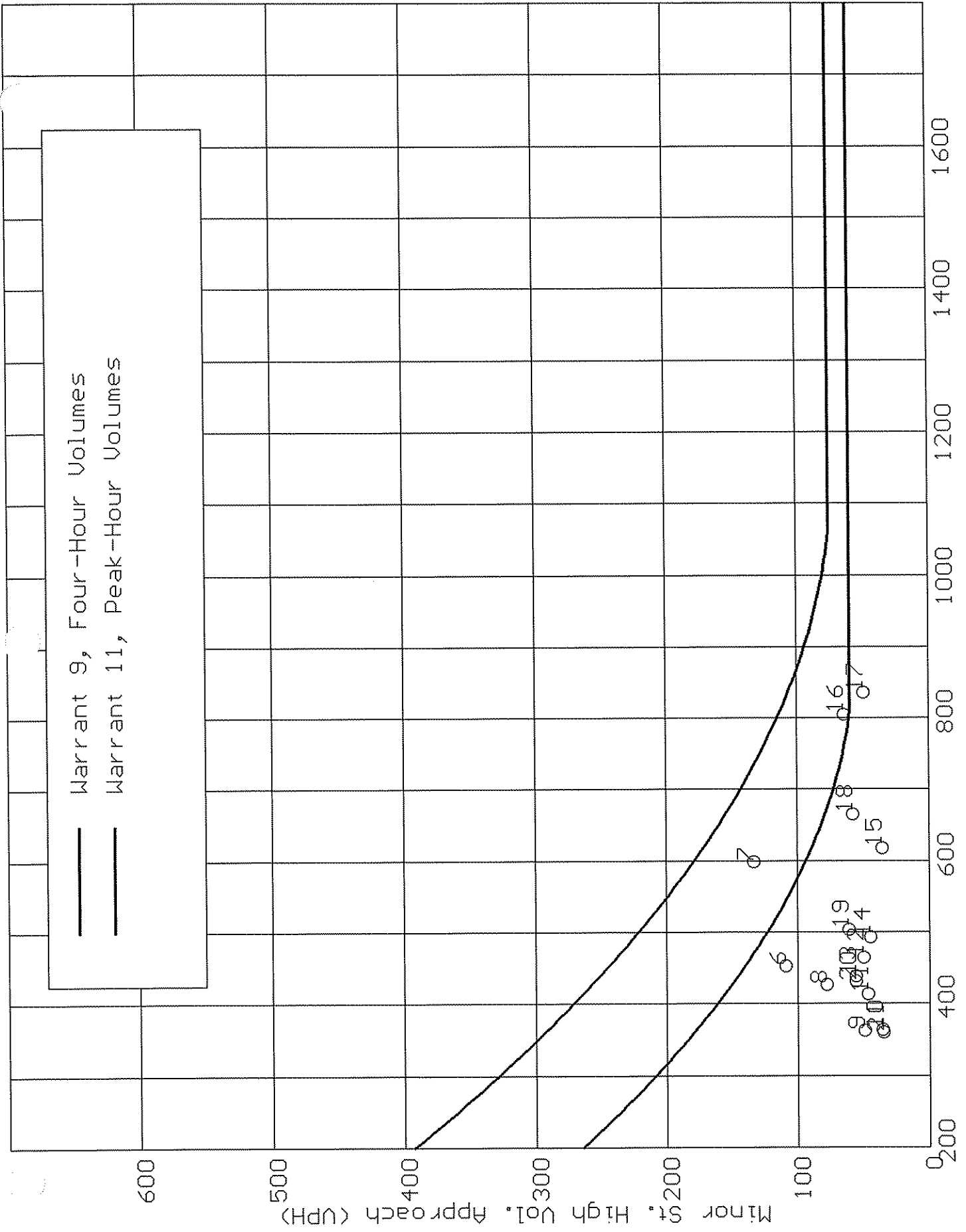
Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1700 hours) volume not adequate.

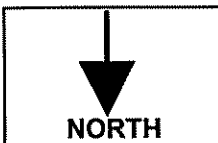
Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 100.

Warrant 11 - Peak Hour Volume

NOT SATISFIED.



Major St. Total of Both Approaches (UPH)



COUNT LOCATION: CSAH 116 (Bunker Lake Blvd.) @
 Prairie Road NW

DATE: 7/24/96

APP. #1=
 WB CSAH 116
 APP. #2 =
 APP. #3=
 EB CSAH 116
 APP. #4=
 SB Prairie Rd. NW

APP. #1 55 mph
 APP. #3 55 mph
 35 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						3		
6:15-6:30						6	1	
6:30-6:45						2		
6:45-7:00						6		
HOURLY TOTAL						HOURLY TOTAL		18
7:00-7:15						7		2
7:15-7:30						10		
7:30-7:45						10		
7:45-8:00						7		
HOURLY TOTAL						HOURLY TOTAL		36
8:00-8:15						5		1
8:15-8:30						8		
8:30-8:45						11		1
8:45-9:00						6		
HOURLY TOTAL						HOURLY TOTAL		32
9:00-9:15						6		1
9:15-9:30						9		
9:30-9:45						8		
9:45-10:00						11		
HOURLY TOTAL						HOURLY TOTAL		35
10:00-10:15						8		
10:15-10:30						7		
10:30-10:45						10		
10:45-11:00						9		
HOURLY TOTAL						HOURLY TOTAL		34
11:00-11:15						11		1
11:15-11:30						6		1
11:30-11:45						11		1
11:45-12:00						7		1
HOURLY TOTAL						HOURLY TOTAL		39
12:00-12:15						9		1
12:15-12:30						9		1
12:30-12:45						8		1
12:45-1:00						8		
HOURLY TOTAL						HOURLY TOTAL		37
1:00-1:15						11		
1:15-1:30						7		
1:30-1:45				3	3	8		
1:45-2:00						3		
HOURLY TOTAL					3	HOURLY TOTAL		29

↓
NORTH

APP. #1=
WB CSAH 116

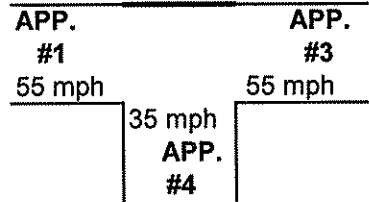
APP. #2 =

APP. #3=
EB CSAH 116

APP. #4=
SB Prairie Rd. NW

COUNT LOCATION: CSAH 116 (Bunker Lake Blvd.) @
Prairie Road NW

DATE: 7/22/96



- 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						8	1	1
2:15-2:30						8		
2:30-2:45				1	1	8		
2:45-3:00						5		
HOURLY TOTAL					1	HOURLY TOTAL		31
3:00-3:15						9		
3:15-3:30						11		
3:30-3:45						11		
3:45-4:00						5		
HOURLY TOTAL						HOURLY TOTAL		36
4:00-4:15						13		
4:15-4:30						7		1
4:30-4:45						5		1
4:45-5:00						8		2
HOURLY TOTAL						HOURLY TOTAL		37
5:00-5:15						7		
5:15-5:30						3		
5:30-5:45				1	1	4		
5:45-6:00						4		
HOURLY TOTAL					1	HOURLY TOTAL		18
6:00-6:15						4		
6:15-6:30						4		
6:30-6:45						3		
6:45-7:00						4		
HOURLY TOTAL						HOURLY TOTAL		15
7:00-7:15						4		
7:15-7:30						1		
7:30-7:45						2		
7:45-8:00								
HOURLY TOTAL						HOURLY TOTAL		7
8:00-8:15						1		
8:15-8:30						4		
8:30-8:45						2		
8:45-9:00						2		
HOURLY TOTAL						HOURLY TOTAL		9
9:00-9:15						2		
9:15-9:30						1		
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		3