

**CAPE COD PLANNING AND ECONOMIC DEVELOPMENT COMMISSION**

1ST DISTRICT COURT HOUSE, BARNSTABLE, MASSACHUSETTS 02630

TELEPHONE: 617-362-2511

TRAFFIC/ACCIDENT

DATA

REPORT:

Rt. 134

DENNIS, MASSACHUSETTS

By

The

CAPE COD PLANNING & ECONOMIC

DEVELOPMENT COMMISSION

September, 1984

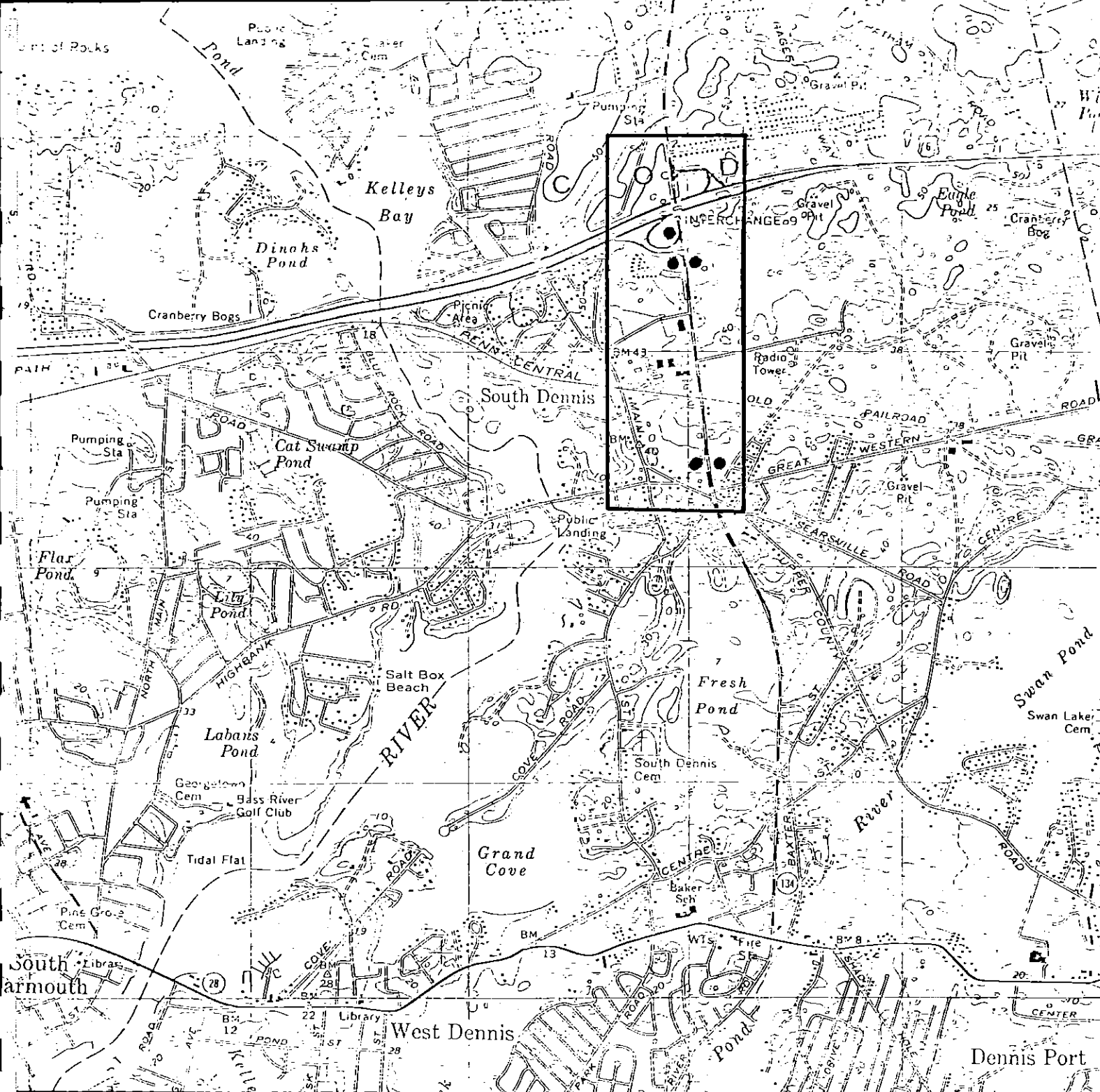
## ACKNOWLEDGEMENTS

The Cape Cod Planning and Economic Development Commission would like to thank the following parties for their assistance in developing this report:

Robert Wheately, Dennis Town Engineering  
Richard Callinan, Dennis Town Planner  
Lt. John Symington, Dennis Police Department  
Sumner Campbell, Dennis Police Department  
Arlene Dowd, Dennis Police Department  
Vanesse/Hangen, Associates  
Jim Wick, Town of Dennis  
Jenny York, Town of Dennis  
Bob Cody, Town of Dennis  
Charles Battle, Town of Dennis

## TRANSPORTATION STAFF

Robert E. Robes, Executive Director  
Wayne R. Duchemin, Transportation Program Manager  
Douglas Jones, Transportation Technician  
Barbara Grenier, Transportation Program Clerk



Locus Map	Rt. 134 Traffic/Accident Data Report Dennis, MA.	September, 1984
Cape Cod Planning & Economic Development Commission		Scale: 2.5 inches/1 Mile
		● Denotes count location

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## INTRODUCTION

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### Project Request

The Cape Cod Planning and Economic Development Commission (CCPEDC), in February, 1984 was asked by the Dennis Town Selectmen to assist in conducting traffic and turning counts along Rt. 134. The request was included in the transportation work program of the Commission and was complemented by a program of traffic counts awarded by the Mass. Department of Public Works (MDPW). Both the Town's requests and the MDPW counts were performed concurrently in August of 1984. The main concern of this study was to identify the current traffic situation within this corridor and to use this data for planning and design improvements for Rt. 134.

### Study Area

The study area is approximately 1 mile long. Contained along the route is significant commercial development beginning from the off/on ramps of Rt. 6 at Exit 9 southward to the Upper County Road intersection. In addition to the existing commercial/retail development, new development is pending and sufficient land is available for further development. This route serves as a principal north/south arterial with only limited alternative routes available. Rt. 134 is a two lane highway with two 12-14 foot travel lanes, one in each direction.

Traffic congestion along this town facility is historically heavy. With the current development proposals now moving forward, including the 150,000 sq. ft. shopping center, the congestion on Rt. 134 will further exacerbate the problem. The proposed shopping plaza alone, is anticipated to generate an additional 67% increase in Traffic.<sup>1</sup>

### Scope of Work

A scope of work was designed which called for a data inventory of a series of traffic volume counts, turning movement analysis, and an accident report summary. With input from the Dennis Town Engineers and the Town Planner, five traffic counts were selected and counted between midweek and the weekend. This provided an average weekday traffic volume along with the peak weekend traffic on Friday afternoon and Saturday morning. Ten turning movement counts were also taken at curb-cuts along Rt. 134. Accident data from January, 1982 to August 1984 was compiled by the Dennis Police Department. Some field work was performed by Vanesse/Hangen Associates on geometrics, and controls and safety were included as part of the inventory task.

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<sup>1</sup>

From Vanesse/Hangen report, "Traffic Impact: Access Study; March 1984

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Rt. 134 -- 48 Hour Counts

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The Cape Cod Planning and Economic Development Commission, in cooperation with the Dennis Police and Engineering Departments, completed five 48 hour directional counts at the following locations:

- Rt. 134 - Southbound, North of Exit 9/Rt. 6
- Rt. 134 - Southbound, North of Great Western Road
- Rt. 134 - Northbound, North of Great Western Road
- Rt. 134 - Southbound, South of Exit 9
- Rt. 134 - Northbound, South of Exit 9

The above counts were taken on August 17-19, August 10-14, August 10-14, August 17-19 and August 17-19, respectively.

The directional counts in both the northbound and southbound lanes provided a more precise account of the traffic patterns on Rt. 134. These directional counts also provided information on total daily traffic volume within the study area.

The average week-end traffic at the Exit 9 sites generated 29,663 vehicles. The Upper County Road sites produced 23,823 vehicles. This difference is due to the fact that the Exit 9 counts had to be retaken on the following week-end because of counter malfunctions. An average week-end count of 8,744 was also produced at the Exit 9 off-ramp (southbound).

Week-end peak hour traffic at all locations was generally during late morning and mid-day. The peaks ranged from a high 41,394 (southbound, south of Exit 9) vehicles on a Saturday to 496 vehicles on the southbound lane north of Exit 9. The latter location was a Sunday peak occurring between 4:00 and 5:00 p.m. Refer to Appendix A for more detailed data. Generally, traffic flow was heaviest in the morning and reversed itself in the afternoon.

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## Rt. 134 Turning Movement Counts

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The turning movement study was designed to augment the 48 hour traffic counts by providing an insight into what the traffic was doing once inside the study area. Traffic data was collected on the existing (10) curb cuts which included a percentage on how many cars entered each entrance and how many had to cross traffic for entering and exiting. This information provides a basis in determining the need for left hand turn lanes, geometric improvements and traffic lights. The time period chosen for the turning movements was a Saturday morning between 8 A.M. 12 noon. The weather, along with the summer rental changeover provided the study with a typical peak traffic scenerio. (see Appendix B for more detail)

The ten locations included the following:

- Post Office Road
- Rt. 134/Shell Gas Station Lot North Entrance
- Rt. 134/Shell Gas Station Lot South Entrance
- Rt. 134/Main Entrance to Harney's
- Rt. 134/Harney's Entrance Only
- Rt. 134/Mid-Cape Center
- Rt. 134/Theophilus Smith Road
- Rt. 134/Cumberland Farms Shopping Center South Entrance
- Rt. 134/Cumberland Farms Shopping Center South Exit
- Rt. 134/Upper County Road

The data compiled from the turning movements taken August 11th over a 4 hour period produced a low percentage of total turning movements of 3% (Shell station) to a high of 12% at Theophilus Smith Road. The peak hour at the latter location produced 13% or 327 vehicles entering and exiting the landfill site.

Left hand turns from Rt. 134 (both directions) produced a total of 1,161 vehicles. This cross traffic movement represented close to 15% of the total traffic flow recorded between the hours of 8:00 and 12:00 p.m.

Activity within the curb cuts in the northern end of the study area show a trend of existing traffic travelling in a northerly direction. Post Office Road, which is a limited alternative to Rt. 134, has 87% of its exiting traffic moving southerly thereby enabling vehicles to reach destinations in the northern end without having to travel the whole length of Rt. 134. Concurrently 68% of the traffic entering Post Office Road is moving in a northerly direction.

Activity within the curb cuts at the northern end of the study area show a trend for exiting traffic to move northward towards Post Office Rd. or Main St. which are alternative routes North/South to 134. This enables a shopper at Harney's an alternative to bypass the congestion and delays of traveling Rt. 134 during the summer months. This is seen in the reverse in that 87% of the traffic exiting from Post Office Rd. moves in a southward direction towards the commercial area. These figures also indicate that Main St. handles a considerable amount of the overflow from Rt. 134 during its peak usage.

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Rt. 134 Additional Traffic Counts

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Traffic Impact and Access Study- Vanasse/Hangen Associates

Twenty-four hour counts were obtained by both manual and mechanical recorders during January, 1984. A mechanical recorder was located adjacent to the proposed shopping plaza. Manual counts were conducted during a Saturday afternoon peak period at the intersections of Route 134/Upper County Road/High Bank Road and Route 134/Rt. 6 ramps. All counts were seasonally adjusted to peak summer conditions.

The average Saturday traffic at the 134/Plaza site was calculated to be 22,100 vehicles. Traffic on Theophilus F. Smith Road was 2,908.

Massachusetts Department of Public Works Coverage Counts

Other 48 hour coverage counts taken during the month of August in the vicinity of the study area included:

- Main Street-north of Hibbards Road (8,237)
- North Dennis Road - over Rt. 6 (5,329)
- Rt. 28 at Dennis/Harwich Town Line (17,808)

These counts represent the average weekday traffic in the area and have not been factored to average daily traffic conditions.



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## Rt. 134 Accident Data

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Recent accident data for Rt. 134 was accumulated from two parties: Vanasse/Hangen Associates, January, 1982-December, 1983; and, the Cape Cod Planning and Economic Development Commission (CCPEDC), January, 1984-August 1984. Both parties accumulated their data from the Dennis Police Department records. The data recorded included date, time of accident, road condition, day of the week, day--light or dark, number of injuries/fatalities and damage estimates. A collision diagram form produced by the Massachusetts Department of Public Works was used to record the location and the above information. In addition the CCPEDC staff augmented "Table 3, Accident Summary" produced by Vanasse/Hangen Associates. This table was up-dated to September, 1984.

A total of 115 accidents were reported in the study area during the 3 year period. A summary of accidents by location is presented in Appendix B. Review of the records highlights the following trends.

- 24% (27 accidents) occurred at intersection of Rt. 134/Upper County Rd., 14% (16 accidents) occurred at intersection of Rt. 134/Theophilus F. Smith Rd., 30% (35 accidents) occurred on Rt. 134 at the Route 6 ramps and the remaining 32% (37 accidents) occurred on the Rt. 134 link.
- 49% of the total accidents (56 accidents) were cross movement type collisions involved in turning movements. 34% (39 accidents) were rear end collisions.
- 33% of the total accidents (38) involved personal injury, while no fatalities occurred.
- 55% (63 accidents) occurred during the peak summer months and 15% in each of the winter, fall, and spring seasons.
- 11% of the accidents recorded took place during the morning commuter hours, while 13% occurred during the afternoon hours. The remaining 76% were recorded during the remaining hours.

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Rt. 134    Field and Other Traffic Data

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The following information was produced by Vanasse/Hangan Associates. The data is provided for completeness and reference.

- Pavement markings - double yellow center line
- Posted speed limit is 35 mph
- Rt. 134/Upper County Road/High Bank Road currently operates at level of Service (LOS) "B" or at 69% of capacity during design peak hour.
- Rt. 134 with the Rt. 6 westbound and eastbound ramps operate at LOS "C" and "E", respectively. (C, 80% capacity) (E, unstable traffic flow)
- Right of Way Width 100'
- Pavement Width 25'

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## Analysis/Recommendations

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The analysis phase of the Rt. 134 Traffic Study currently being coordinated by the Town, will be performed by a private consultant. This report stands as the first phase of this study. Input from the Cape Cod Planning and Economic Development Commission during the analysis phase will be available at the Town request.

The analysis should contain the following activities:

- Traffic data adjustment to peak seasonal conditions
- Traffic generation forecasts for pending and planned developments
- Trip distribution (origin/destination)
- Travel time studies within corridor
- Systems analysis (level of service)
- Intersection analysis (signal timing, stop control etc.)
- Road link analysis

APPENDIX A:

48 Hour

TRAFFIC VOLUME SUMMARY

Stations 0002 - 0006

1-5

MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS  
BUREAU OF TRANSPORTATION PLANNING & DEVELOPMENT

VOLUME SUMMARY

CONDUCTED IN COOPERATION WITH FEDERAL HIGHWAY ADMINISTRATION

Year 1984

Station No. 0002

Month 8/17-8/19

Route No. SB Rt.134 North

Town Dennis

or  
Street of Exit 9, Rt.6

Day Date	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
2-1 A.M.	134						94	24 hr
1-2	76						58	Day 1- 1,375
2-3	50						34	
3-4	17						12	24 hr
4-5	20						17	Day 2 - 7140
5-6	36						33	
5-7	90						77	ADT - 7257
7-8	149						189	
8-9	294						413	Avg. Peak-541
9-10	423						512	"
10-11	459						495	Hi Peak - 573
11-12	475(48)						486(24)	
12-1 P.M.	386				Start-7	517	424	
-2	390					444	415	
-3	393					443	442	
3-4	486					509	485	
-5	496*					553*	573*	
-6	467					549	493	
6-7	408					444	488	
7-8						419	435	
-9						373	456	
9-10						257	302	
10-11						271	236	
11-12						176	168	
Total								

LOCATION OF COUNT- Southbound Rt.134 North of Exit 9 Rt.6

Box No. 40

Day	Weather	Road Conditions
Monday		
Tuesday		
Wednesday		
Thursday		
Friday	Cool & Clear	Good
Saturday	" "	
Sunday	" "	

A.W.D.= \_\_\_\_\_  
FACTOR= \_\_\_\_\_  
A.D.T.= \_\_\_\_\_

\*Peak Volume

MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS  
BUREAU OF TRANSPORTATION PLANNING & DEVELOPMENT

VOLUME SUMMARY

CONDUCTED IN COOPERATION WITH FEDERAL HIGHWAY ADMINISTRATION

Year 1984  
Month 8/10-8/14  
Town Dennis

Station No. 0003  
Route No. SB on Rt.134  
or  
Street North of Great Western Rd.

Day Date	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
1-1 A.M.	224	113	104					
1-2	144	54	67				266	24 hr.
2-3	93	51	38				190	Day 1-13, 696
3-4	43	37	17				116	
4-5	34	24	30				47	24 hr.
5-6	20	41	41				36	Day 2-11, 819
6-7	70	138	131				41	
7-8	146	287	299				132	24 hr.
8-9	288	489					301	Day 3- 9, 716
9-10	433	572					625	
10-11	532	752					834	ADT 11, 744
11-12	670(48)	845(70)					853	
12-1 P.M.	727*	892			Start-	878	877(70)	Avg. Peak-912
-2	651	878				906	906	
-3	690	916				794	959	Hi Peak- 999
3-4	677	943*				877	951	
-5	653	880				944	981*	
-6	559	871				982	980	
6-7	593	586				999*	838	
7-8	519	567				772	789	
-9	428	467				792	761	
-10	365	469				783	658	
10-11	269	376				751	556	
11-12	182	183				673	405	
						433	338	
Total								

LOCATION OF COUNT- SB Rt.134 North of Great Western Road

Box No. 40	Day	Weather	Road Conditions
	Monday		
	Tuesday		
	Wednesday		
	Thursday		
	Friday		
	Saturday		
	Sunday		

A.W.D.= \_\_\_\_\_  
FACTOR= \_\_\_\_\_  
A.D.T.= \_\_\_\_\_

\*Peak Volume

MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS  
BUREAU OF TRANSPORTATION PLANNING & DEVELOPMENT

VOLUME SUMMARY

CONDUCTED IN COOPERATION WITH FEDERAL HIGHWAY ADMINISTRATION

Year 1984  
Month 8/10-8/14  
Town Dennis

Station No. 0004  
Route No. NB Rt.134 North  
or  
Street of Great Western Road

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Date								
1-1 A.M.	168	100	98				147	24 hr
1-2	168	83	89				148	Day 1-12,895
2-3	102	47	50				69	
3-4	49	33	23				60	24 hr
4-5	26	63	30				38	Day 2 10,850
5-6	52	189	91				73	
6-7	104	331	205				192	24 hr.
7-8	202	502	456				386	Day 3-12,937
8-9	394	705	632				692	
9-10	551	814	725				1017	24 hr
10-11	823	1094*	874*				1103*	Day 4-11,633
11-12	*947(48)	1075(72)	858(96)				1061(24)	
12-1 P.M.	881	1002	739		Start	978*	923	ADT 12,079
1-2	805	932	691			840	804	
2-3	787	920	667			840	690	Avg. Peak-999
3-4	782	852				848	719	
4-5	726	777				839	693	Hi Peak 1103
5-6	744	714				699	673	
6-7	759	601				656	688	
7-8	734	569				614	641	
8-9	671	407				554	392	
9-10	469	302				446	420	
10-11	335	268				325	337	
11-12	208	158				270	284	
Total								

LOCATION OF COUNT- NB Rt.134 North of Great Western Road

Box No. 42

Day	Weather	Road Conditions
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

A.W.D.= \_\_\_\_\_  
FACTOR= \_\_\_\_\_  
A.D.T.= \_\_\_\_\_

MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS  
BUREAU OF TRANSPORTATION PLANNING & DEVELOPMENT

VOLUME SUMMARY

CONDUCTED IN COOPERATION WITH FEDERAL HIGHWAY ADMINISTRATION

Year 1984 Station No. 0005  
Month 8/17-8/19 Route No. SB Rt.134 South  
Town Dennis or Street of Exit 9

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Date								
1-1 AM.	296						351	24 hrs
1-2	220						211	Day 1-17,443
2-3	122						110	
3-4	48						48	24 hrs
4-5	36						37	Day 2-14,518
5-6	34						54	
6-7	92						123	ADT - 15,980
7-8	197						338	
8-9	388						843	Avg. Peak-1,154
9-10	595						1109	
10-11	731						1394 *	Hi Peak- 1394
11-12	*815(48)						1392(24)	
1-1 PM.	746				Start	1150	1016	
2-3	695					945	983	
3-4	759					987	1110	
4-5	788					1064	1234	
5-6	796					1140	1257	
6-7	780					1253*	1024	
7-8	658					971	944	
8-9						940	910	
9-10						925	775	
10-11						601	720	
11-12						820	573	
12-1						637	398	
Total								

LOCATION OF COUNT- SB Rt.134 South of Exit 9 Rt.6

Box No. 42

Day	Weather	Road Conditions
Monday		
Tuesday		
Wednesday		
Thursday		
Friday	Cool & Clear	Good
Saturday		
Sunday		

A.W.D.= \_\_\_\_\_  
FACTOR= \_\_\_\_\_  
A.D.T.= \_\_\_\_\_



MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS  
BUREAU OF TRANSPORTATION PLANNING & DEVELOPMENT

VOLUME SUMMARY  
CONDUCTED IN COOPERATION WITH FEDERAL HIGHWAY ADMINISTRATION

Year 1984 Station No. 0006  
 Month 8/17-8/19 Route No. NB Rt.134 South  
 or  
 Town Dennis Street of Exit 9

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Date								
1-1 A.M.	234						157	24 hr.
1-2	192						152	Day 1 -14048
2-3	96						73	
3-4	65						43	24 hr.
4-5	35						53	Day 2 -13319
5-6	70						95	
6-7	160						237	ADT 13683
7-8	294						487	
8-9	518						841	Avg. Peak 1051
9-10	801						1085	"
10-11	988						1146*	Hi Peak 1146
11-12	*1025(48)						1034(24)	
12-1 P.M.	865				Start 7	893	889	
1-2	845					851	780	
2-3	922					839	826	
3-4	981					870	831	
4-5	931					979*	938	
5-6	941					894	925	
6-7	882					845	858	
7-8						721	801	
8-9						629	715	
9-10						478	558	
10-11						359	402	
11-12						281	318	
Total								

LOCATION OF COUNT- NB Rt.134 at Exit 9 (Rt.6)

Box No. \_\_\_\_\_

Day	Weather	Road Conditions
Monday		
Tuesday		
Wednesday		
Thursday		
Friday	Cool & Clear	Good
Saturday	" "	"
Sunday	" "	"

A.W.D.= \_\_\_\_\_  
 FACTOR= \_\_\_\_\_  
 A.D.T.= \_\_\_\_\_

APPENDIX B:

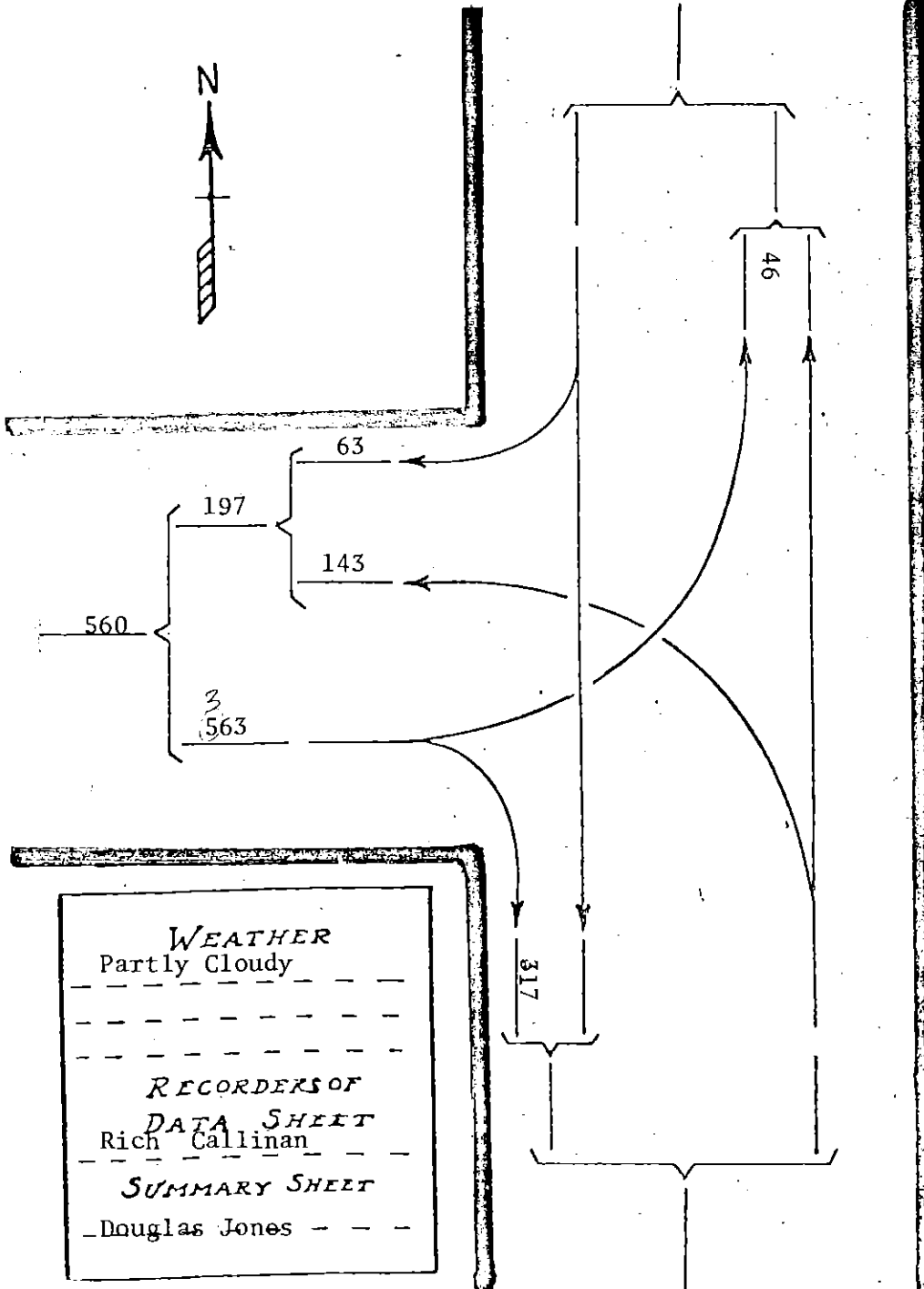
Rt. 134 TURNING MOVEMENT COUNTS

Stations 01 - 10

COMMONWEALTH OF MASSACHUSETTS  
 DEPARTMENT OF PUBLIC WORKS  
 DISTRICT No. .... STATION No. 01....  
 Room 801, 100 Nashua St., Boston

CITY OR TOWN... Dennis.....  
 LOCATION... Post Office Rd.....  
 DATE OF COUNT... 8/11/84... DAY... Sat.....

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	SOURCES		
	ALL	Mass	Foreign
ALL	X		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

TIME	No. of Hours			
	24	16	8	2 4
7 <sup>AM</sup> to 7 <sup>AM</sup>				
7 <sup>AM</sup> to 11 <sup>PM</sup>				
11 <sup>PM</sup> to 7 <sup>AM</sup>				
4 <sup>PM</sup> to 6 <sup>PM</sup>				
8 <sup>am</sup> to 12 noon				X

WEATHER  
Partly Cloudy

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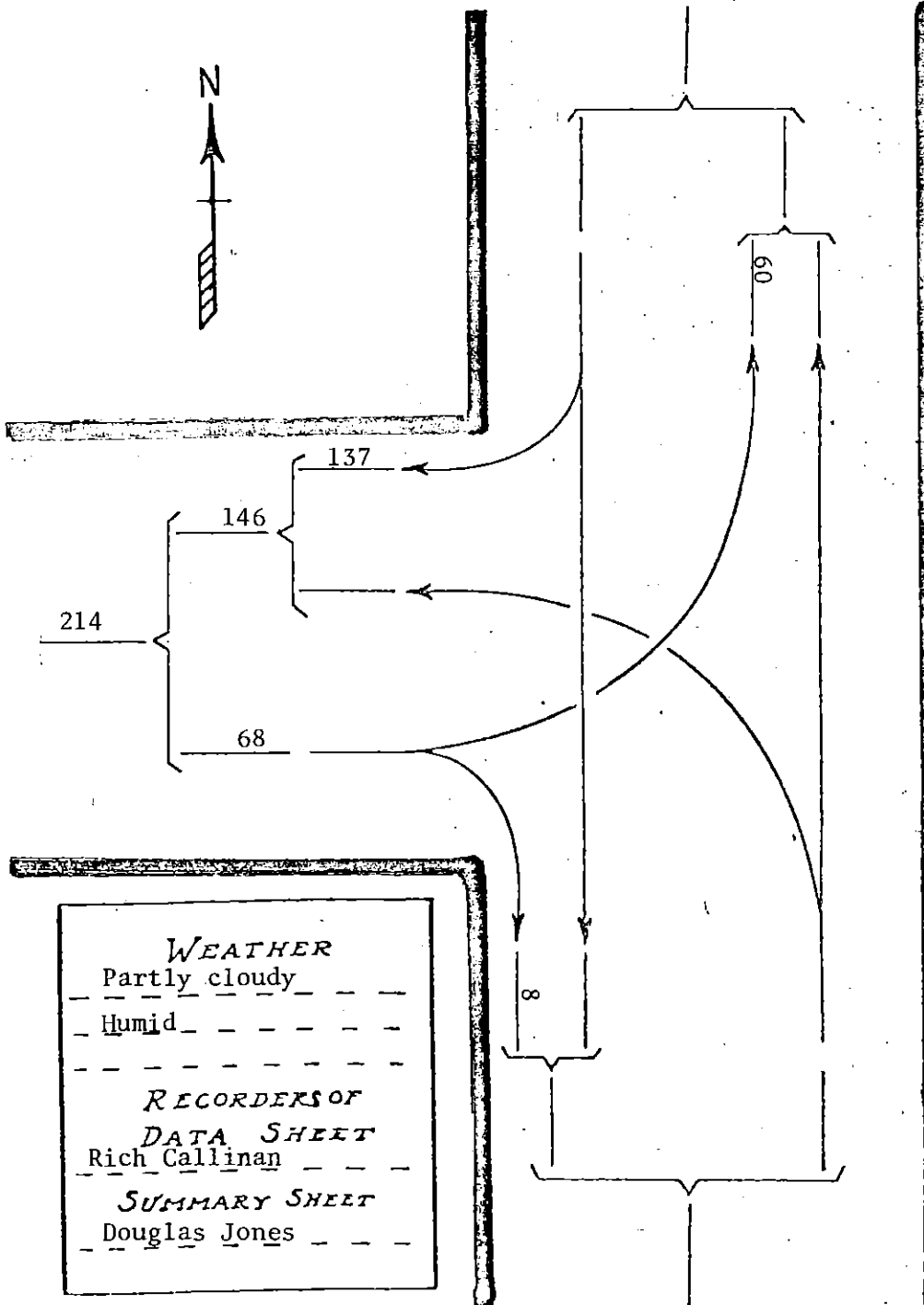
RECORDERS OF  
DATA SHEET  
Rich Callinan

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SUMMARY SHEET  
Douglas Jones

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	Number of hours	PERCENT	Time	PERCENT	INBOUND	OUTBOUND
Rt. 134	7953	93%	2249	93%		
Post Office Rd.	560	7%	172	7%		
<b>TOTAL</b>	<b>8513</b>	<b>100%</b>	<b>2421</b>	<b>100%</b>		

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	SOURCES		
	ALL	MASS.	FOR.
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSES			
STREET CARS			

**WEATHER**  
 Partly cloudy  
 Humid

**RECORDERS OF DATA SHEET**  
 Rich Callinan  
 Douglas Jones

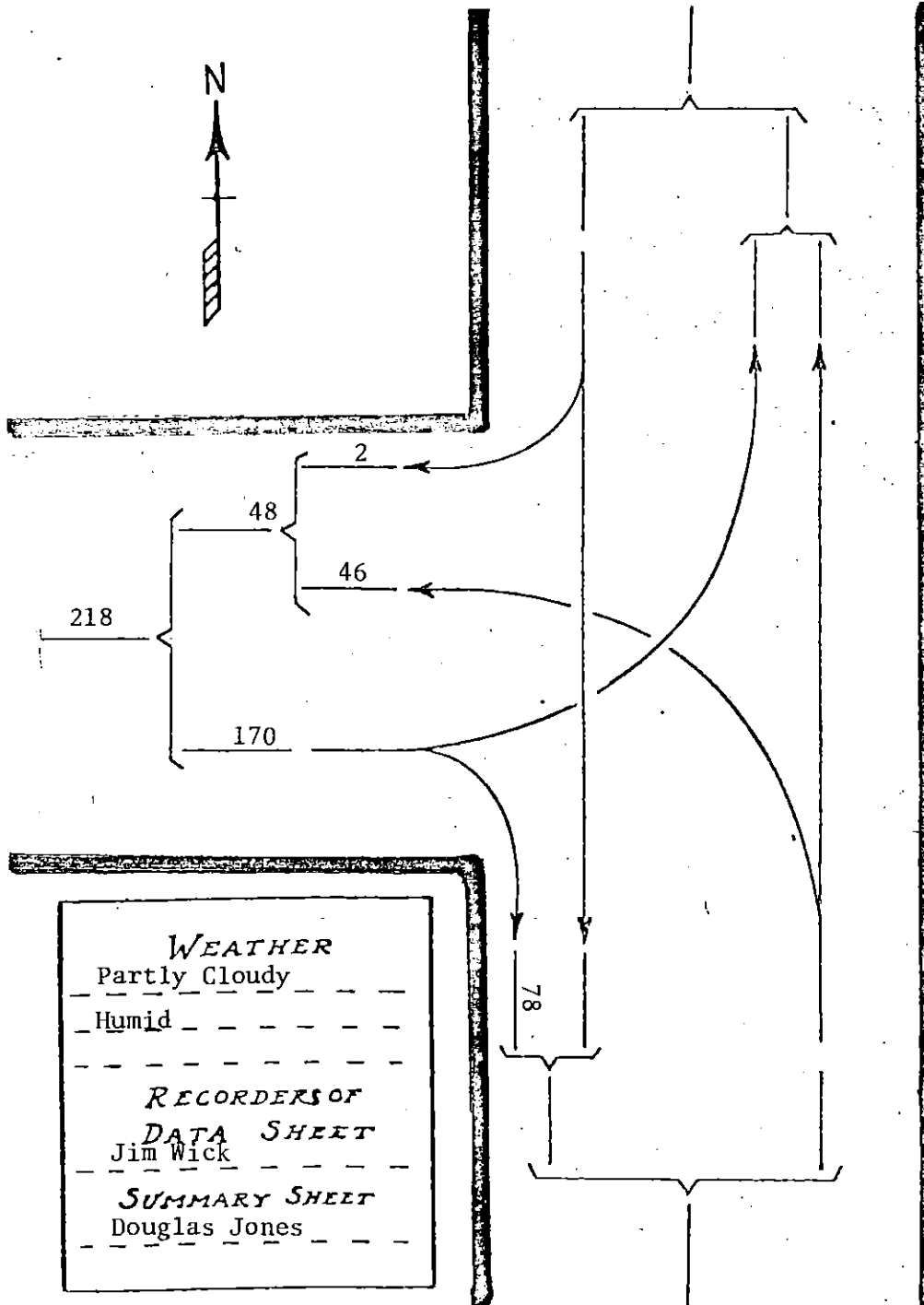
TIME	No. of Hours				
	24	16	8	2	4
7 <sup>AM</sup> to 7 <sup>AM</sup>					
7 <sup>AM</sup> to 11 <sup>AM</sup>					
11 <sup>AM</sup> to 7 <sup>AM</sup>					
4 <sup>PM</sup> to 6 <sup>PM</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					x

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW Number of hours		PEAK HOUR FLOW Time		CHECK	
	NUMBER	PER CENT	NUMBER	PER CENT	INBOUND	OUTBOUND
Rt. 134	7953	97%	2249	97%		
Imports Street	214	3%	64	3%		
Side Street						
<b>TOTAL</b>	<b>8167</b>	<b>100%</b>	<b>2313</b>	<b>100%</b>		

COMMONWEALTH OF MASSACHUSETTS  
 DEPARTMENT OF PUBLIC WORKS  
 DISTRICT No. STATION No. 3  
 Room 801, 100 Nashua St., Boston

CITY OR TOWN.....Dennis.....  
 LOCATION Rt. 134 Southerly entrance to Shell Station.....  
 DATE OF COUNT.....8/11/84..... DAY Sat.....

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET

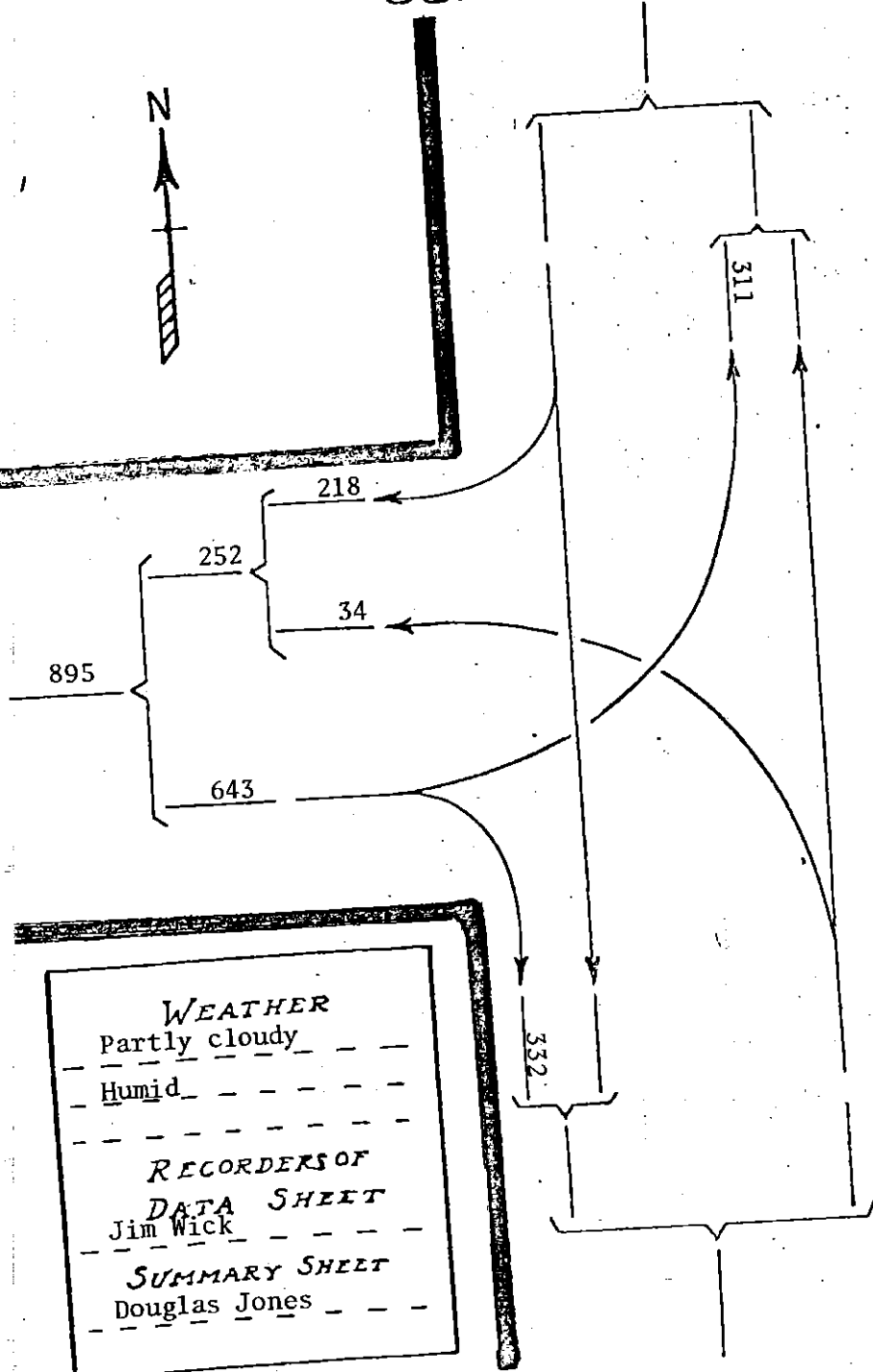


CLASSES	SOURCES		
	ALL	MASS	FORM
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

TIME	No. of Hours				
	24	16	8	2	4
7 <sup>AM</sup> to 7 <sup>AM</sup>					
7 <sup>AM</sup> to 11 <sup>AM</sup>					
11 <sup>AM</sup> to 7 <sup>AM</sup>					
4 <sup>PM</sup> to 6 <sup>PM</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					x

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW <small>Number of hours</small>		PEAK HOUR FLOW <small>Time</small>		CHECK	
	NUMBER	PER CENT	NUMBER	PER CENT	INBOUND	OUTBOUND
Rt. 134 <i>Important Street</i>	7953	97%	2249	97%		
Shell Station Southern ent. <i>5th Street</i>	218	3%	63	3%		
<b>TOTAL</b>	8171	100%	2312	100%		

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	VEHICLES COUNTED		
	ALL	MASS	FORM
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

TIME	LENGTH OF COUNT				
	24	16	8	2	4
7 <sup>AM</sup> to 7 <sup>AM</sup>					
7 <sup>AM</sup> to 11 <sup>AM</sup>					
11 <sup>AM</sup> to 7 <sup>AM</sup>					
4 <sup>PM</sup> to 6 <sup>PM</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					x

WEATHER  
 Partly cloudy  
 Humid

RECORDERS OF  
 DATA SHEET  
 Jim Wick

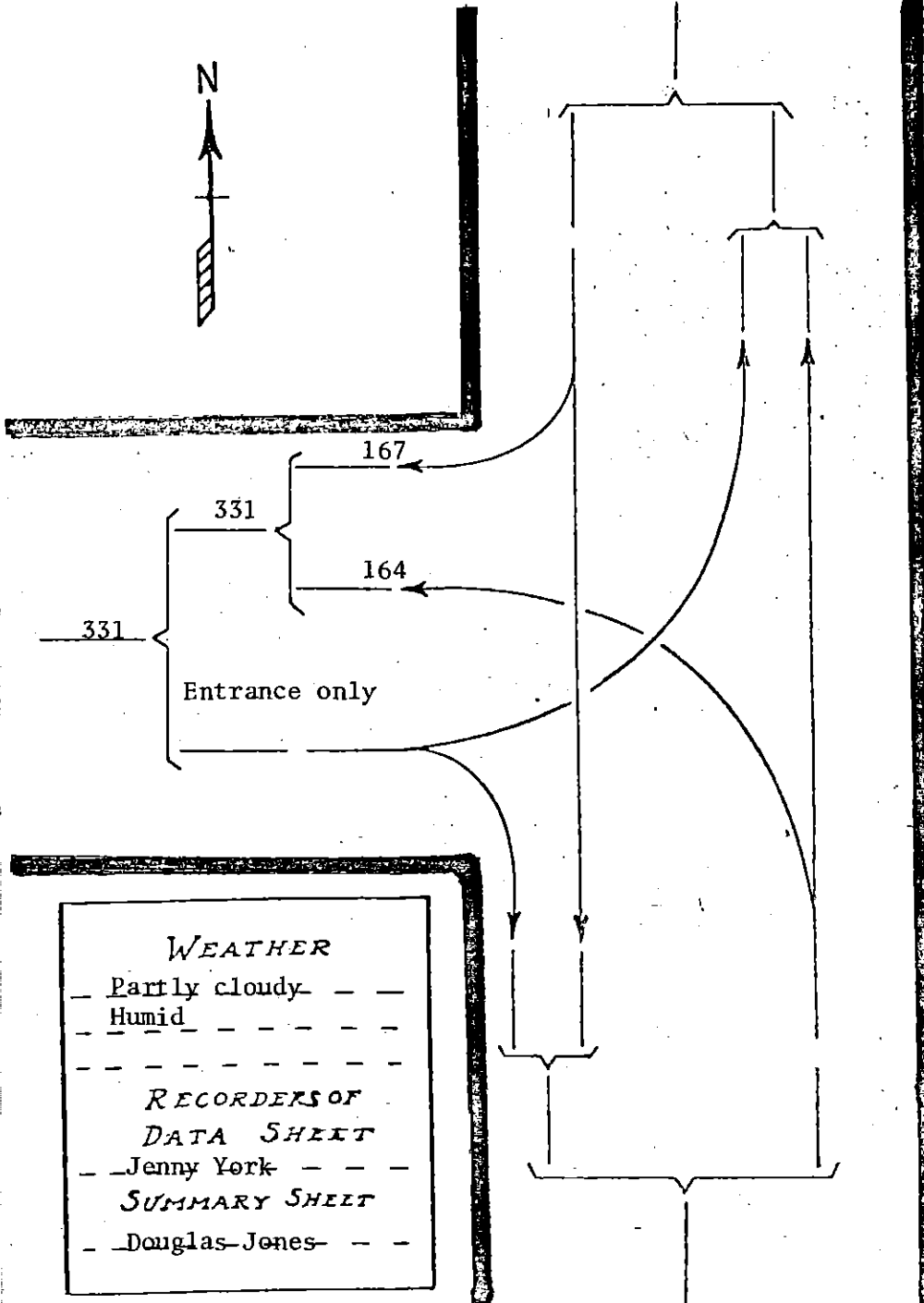
SUMMARY SHEET  
 Douglas Jones

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	Number of hours NUMBER	PER CENT	Time NUMBER	PER CENT	INBOUND	OUTBOUND
Rt. 134	7953	89%	2749	89%		
Harney's Main Ent.	895	11%	265	11%		
<b>TOTAL</b>	8948	100%	2514	100%		

COMMONWEALTH OF MASSACHUSETTS  
 DEPARTMENT OF PUBLIC WORKS  
 DISTRICT No. .... STATION No. ....05....  
 Room 801, 100 Nashua St., Boston

CITY OR TOWN..... Dennis.....  
 LOCATION...Rt. 134 & Harneys.....  
 Entrance only.....  
 DATE OF COUNT..... 8/11/84 ..DAY..... Sat

## INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	SOURCES		
	ALL	MASS	FORM
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

**WEATHER**

Partly cloudy - - -  
 Humid - - -

**RECORDEES OF  
 DATA SHEET**

Jenny York - - -  
 Douglas Jones - - -

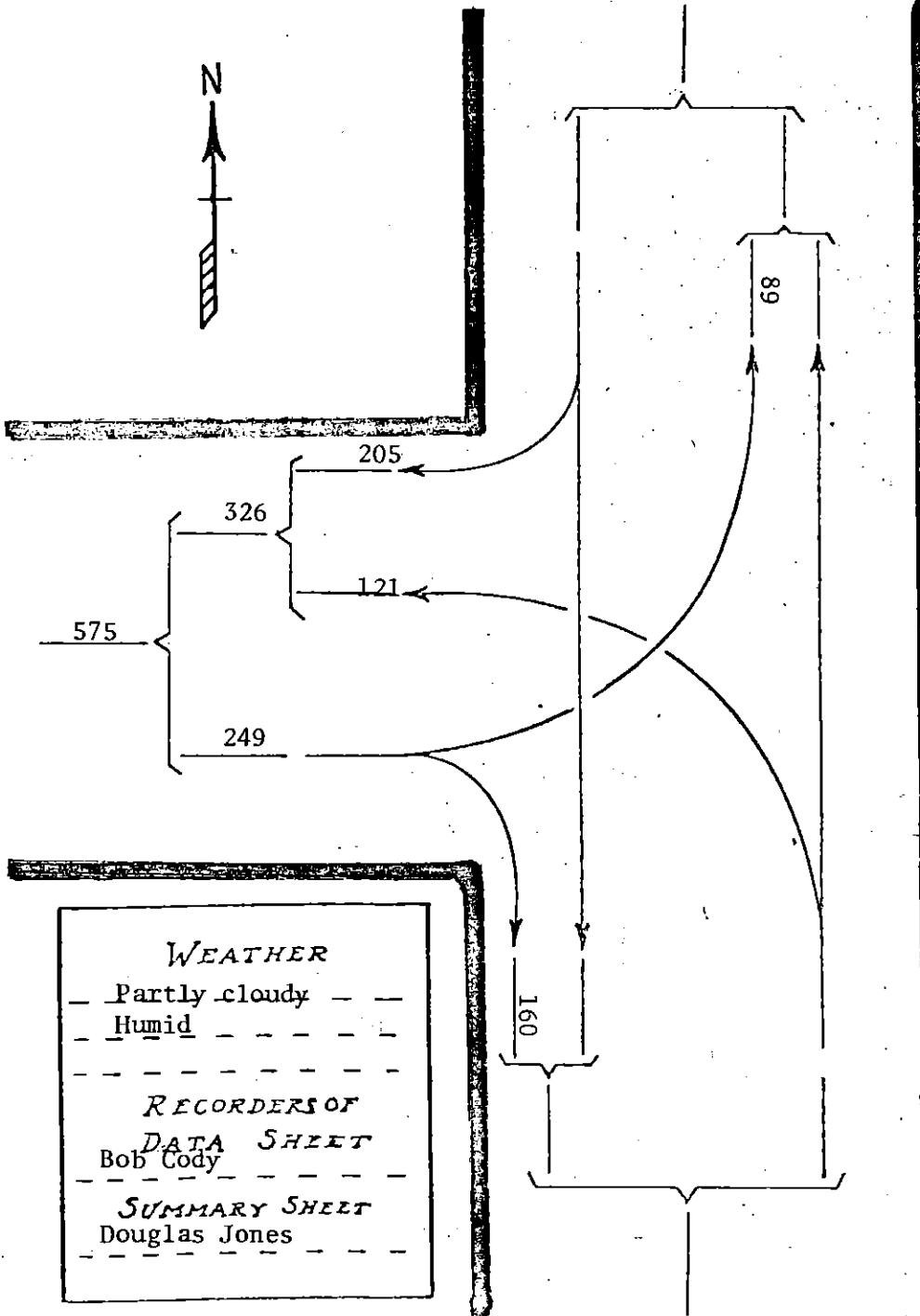
TIME	No. of Hours				
	24	16	8	2	4
7 <sup>AM</sup> to 7 <sup>AM</sup>					
7 <sup>AM</sup> to 11 <sup>PM</sup>					
11 <sup>PM</sup> to 7 <sup>AM</sup>					
4 <sup>PM</sup> to 6 <sup>PM</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					x

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	Number of hours	PERCENT	Time	PERCENT	INBOUND	OUTBOUND
Rt. 134 <i>Important Street</i>	7953	96%	2249	96%		
Harney's Ent. <i>Side Street</i>	331	4%	103	4%		
<b>TOTAL</b>	8284	100%	2352	100%		

COMMONWEALTH OF MASSACHUSETTS  
 DEPARTMENT OF PUBLIC WORKS  
 DISTRICT No. .... STATION No. .... 06....  
 Room 801, 100 Nashua St., Boston

CITY OR TOWN..... Dennis.....  
 LOCATION Rt., 134 and Mid Cape Center..  
 DATE OF COUNT..... 8/11/84..... DAY .. Sat.....

## INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



VEHICLES COUNTED			
CLASSES	SOURCES		
	ALL	MASS	FORM
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSES			
STREET CARS			

**WEATHER**  
 - Partly cloudy -  
 - Humid -  
 -----  
**RECORDERS OF**  
**DATA SHEET**  
 Bob Cody  
 -----  
**SUMMARY SHEET**  
 Douglas Jones  
 -----

LENGTH OF COUNT				
TIME	No. of Hours			
	24	16	8	24
7 <sup>AM</sup> to 7 <sup>AM</sup>				
7 <sup>AM</sup> to 11 <sup>PM</sup>				
11 <sup>PM</sup> to 7 <sup>AM</sup>				
4 <sup>PM</sup> to 6 <sup>PM</sup>				
8 <sup>am</sup> to 12 <sup>pm</sup>				CX

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	Number of hours	PER CENT	Time	PER CENT	INBOUND	OUTBOUND
Rt. 134	7953	93%	2249	92%		
<del>Timesford Street</del> Mid Cape Center	575	7%	186	8%		
<del>See Street</del> <b>TOTAL</b>	8528	100%	2435	100%		



# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	VEHICLES COUNTED		
	ALL	MASS	FOREIGN
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

WEATHER  
 Partly cloudy  
 Humid

RECORDERS OF DATA SHEET  
 Chas. Battle  
 SUMMARY SHEET  
 Douglas Jones

TIME	LENGTH OF COUNT				
	24	16	8	2	4
7 <sup>AM</sup> to 7 <sup>AM</sup>					
7 <sup>AM</sup> to 11 <sup>AM</sup>					
11 <sup>AM</sup> to 7 <sup>AM</sup>					
4 <sup>PM</sup> to 6 <sup>PM</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					x

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	NUMBER	PER CENT	NUMBER	PER CENT	INBOUND	OUTBOUND
Rt. 134	7953	88%	2249	87%		
T.F. Smith Rd.	1036	12%	327	13%		
<b>TOTAL</b>	<b>8989</b>	<b>100%</b>	<b>2576</b>	<b>100%</b>		

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	SOURCES		
	ALL	MASS	FEAR
ALL	X		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

WEATHER  
Partly cloudy  
Humid

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RECORDER OF  
DATA SHEET  
Chas. Battle

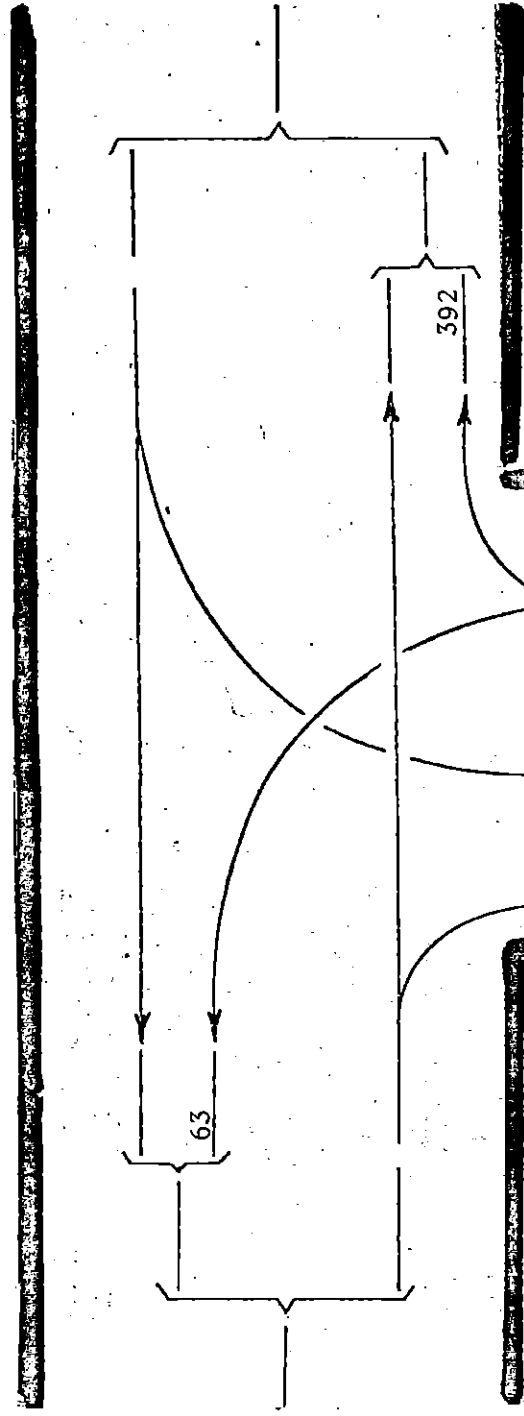
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SUMMARY SHEET  
- Douglas Jones -

TIME	No. of Hours				
	24	16	8	2	4
7 <sup>am</sup> to 7 <sup>am</sup>					
7 <sup>am</sup> to 11 <sup>am</sup>					
11 <sup>am</sup> to 7 <sup>am</sup>					
4 <sup>pm</sup> to 6 <sup>pm</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					X

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	Number of Hours	PER CENT	NUMBER	PER CENT	INBOUND	OUTBOUND
Rt. 134	7953	94%	2249	93%		
Cumberland Farms South ent.	494	6%	174	7%		
<b>TOTAL</b>	<b>8447</b>	<b>100%</b>	<b>2423</b>	<b>100%</b>		

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET



CLASSES	VEHICLES COUNTED		
	SOURCES		
	ALL	Mass.	Foreign
ALL	x		
PASS. CARS			
LIGHT TRUCKS			
HEAVY TRUCKS			
BUSSES			
STREET CARS			

WEATHER  
 Partly Cloudy  
 Humid

RECORDERS OF  
 DATA SHEET  
 Jenny York

SUMMARY SHEET  
 Douglas Jones

TIME	LENGTH OF COUNT				
	No. of Hours				
	24	16	8	2	4
7 <sup>am</sup> to 1 <sup>pm</sup>					
1 <sup>pm</sup> to 11 <sup>pm</sup>					
11 <sup>pm</sup> to 7 <sup>am</sup>					
4 <sup>pm</sup> to 6 <sup>pm</sup>					
8 <sup>am</sup> to 12 <sup>pm</sup>					x

ENTERING TRAFFIC (NAME OF STREET)	TOTAL FLOW		PEAK HOUR FLOW		CHECK	
	Number of hours	PER CENT	NUMBER	PER CENT	INBOUND	OUTBOUND
Rt. 134	7953	91%	2249	91%		
Cumberland Farms North ent. SEE STREET	746	9%	206	9%		
<b>TOTAL</b>	<b>8699</b>	<b>100%</b>	<b>2455</b>	<b>100%</b>		

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC WORKS

DISTRICT NO. STATION No. 10

ROOM 601, 100 NASHUA ST. BOSTON

CITY OR TOWN: Dennis

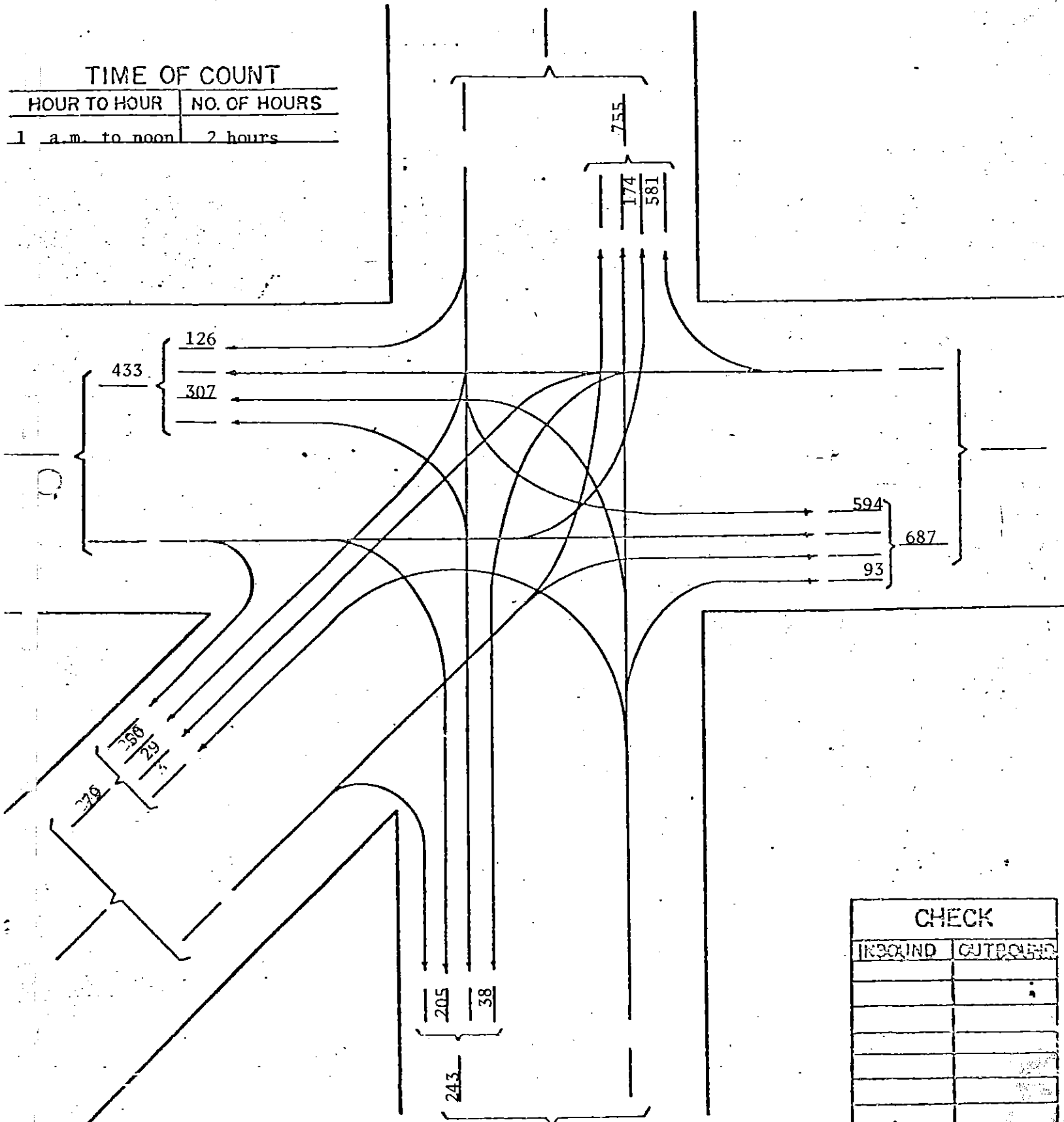
LOCATION: Rt. 134 & Upper County Rd.

DATE OF COUNT: 8/11/84 DAY: Sat

# INTERSECTION COUNT OF VEHICULAR TRAFFIC SUMMARY SHEET

### TIME OF COUNT

HOUR TO HOUR	NO. OF HOURS
1 a.m. to noon	2 hours



CHECK	
INSOUND	OUTBOUND

APPENDIX C

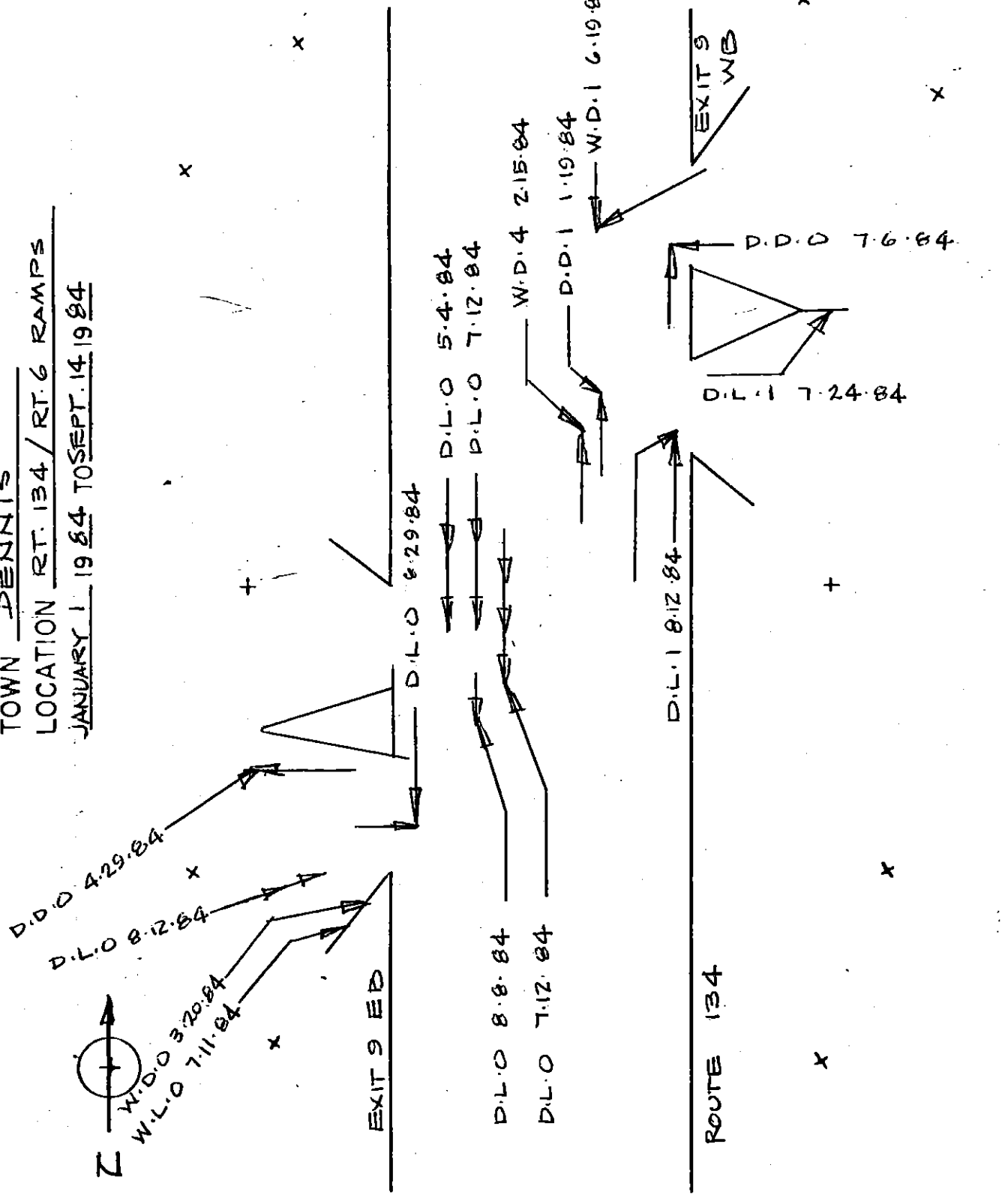
Rt. 134 COLLISION DIAGRAMS

and

TABLE 3, ACCIDENT SUMMARY

COMMUNITY OF MASON JUNCTIONS TOWN ENGINE DIVISION DEPT. OF PUBLIC WORKS  
 COLLISION DIAGRAM TOWN PENNIS DATE:  
 LOCATION RT. 134 / RT. 6 RAMPS  
 JANUARY 1 1984 TO SEPT. 14 1984

- LEGEND**
- CAR IN MOTION
  - ⊠ CAR STOPPED OR STOPPING
  - ▭ CAR PARKED
  - ⊕ FATAL ACCIDENT
  - L = LIGHT
  - D = DARK/DRY
  - ⊞ = FIXED OBJECT
  - O = PEDESTRIAN
  - ⊗ = BICYCLIST



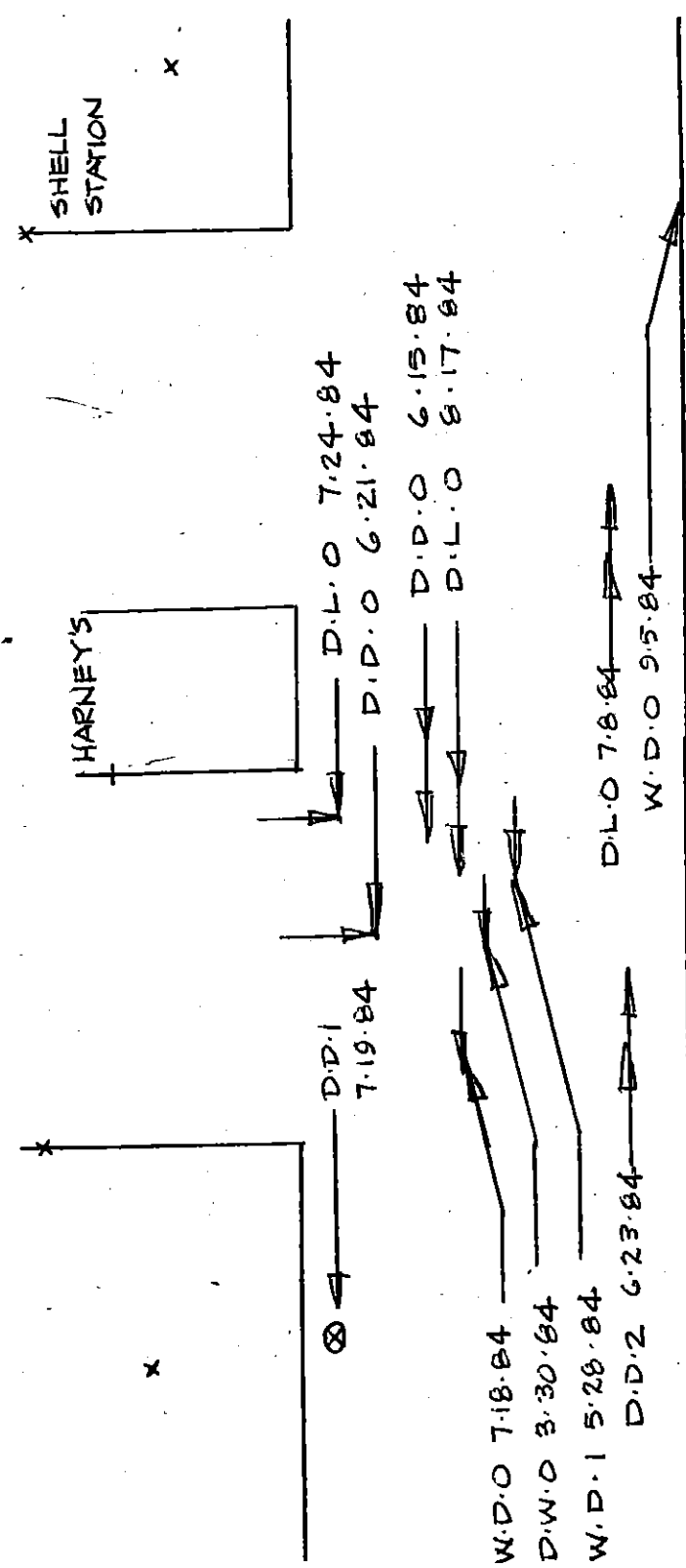
**SUMMARY**

YEAR	ACC.	INJ.	KILLED
1984	15	8	0
19			
19			
19			
19			

DATE: \_\_\_\_\_  
 COLLISION DIAGRAM  
 TOWN DENNIS  
 LOCATION RT. 134 / HARNEY'S  
 JANUARY 1 19 84 TO SEPT. 14 19 84

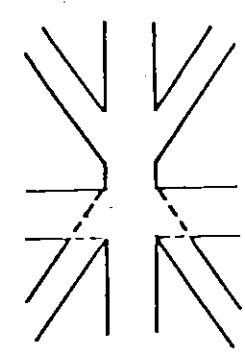


- LEGEND**
- CAR IN MOTION
  - ⊠ CAR STOPPED OR STOPPING
  - ⊡ CAR PARKED
  - ⊕ FATAL ACCIDENT
  - L = LIGHT
  - D = DARK / DRY
  - ⊠ = FIXED OBJECT
  - O = PEDESTRIAN
  - ⊗ = BICYCLIST



**SUMMARY**

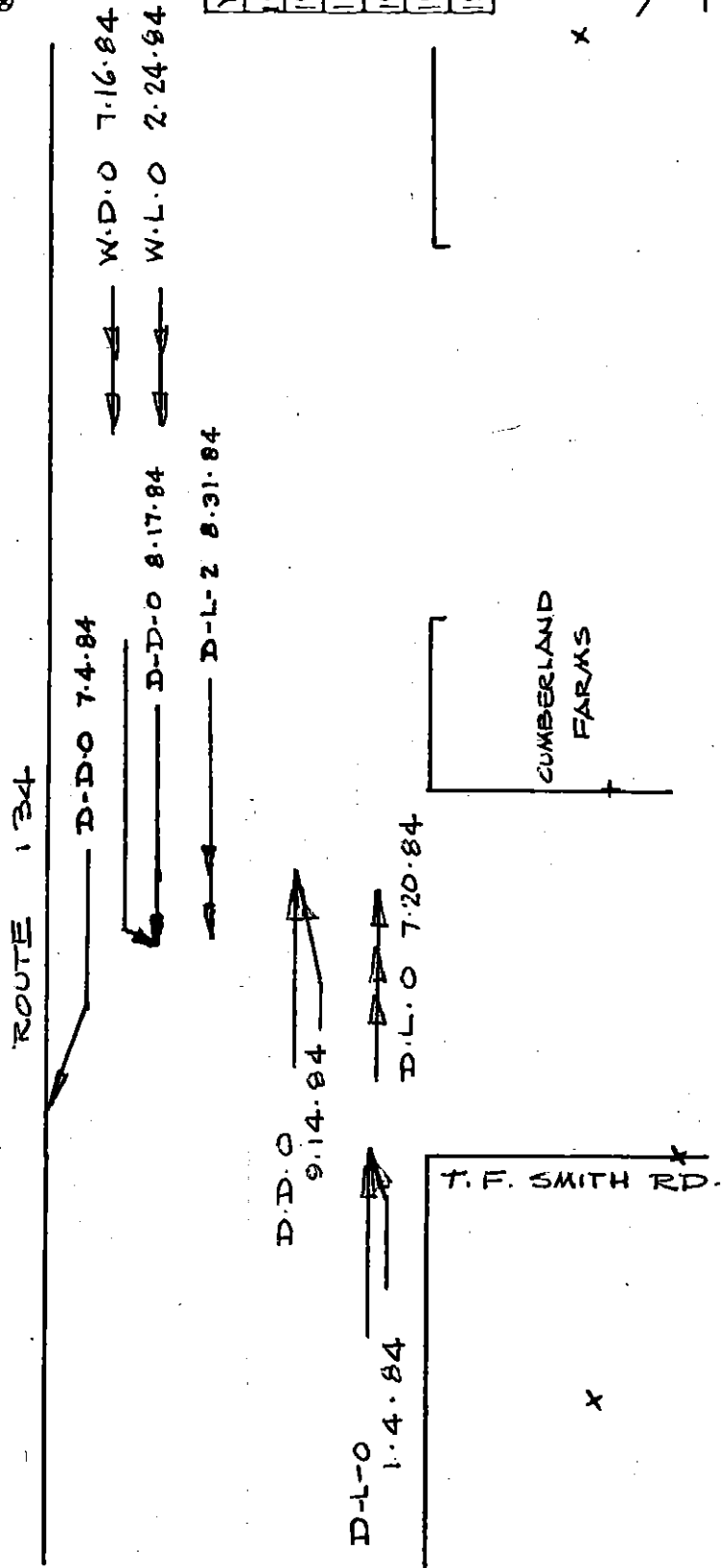
YEAR	ACC.	INJ.	KILLED
1984	11	2	0
19			
19			
19			
19			
19			



TOWN PENNIS  
 LOCATION RT. 134/T.F. SMITH RD  
JANUARY 1 1984 TO SEPT. 14 1984

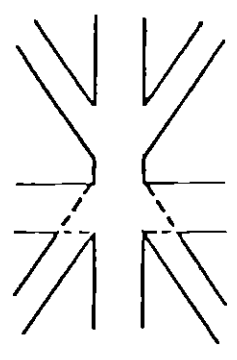


- LEGEND**
- ↑ CAR IN MOTION
  - ☒ CAR STOPPED OR STOPPING
  - ☑ CAR PARKED
  - ⊕ FATAL ACCIDENT
  - L = LIGHT
  - D = DARK / DRY
  - ☒ = FIXED OBJECT
  - O = PEDESTRIAN
  - ⊗ = BICYCLIST



**SUMMARY**

YEAR	ACC.	INJ.	KILLED
1984	8	2	0
19			
19			
19			
19			
19			



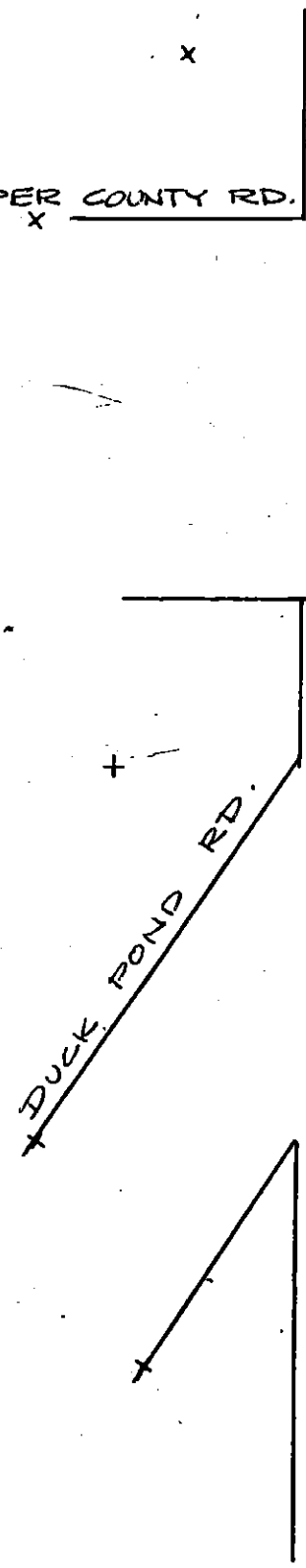


COLLISION DIAGRAM

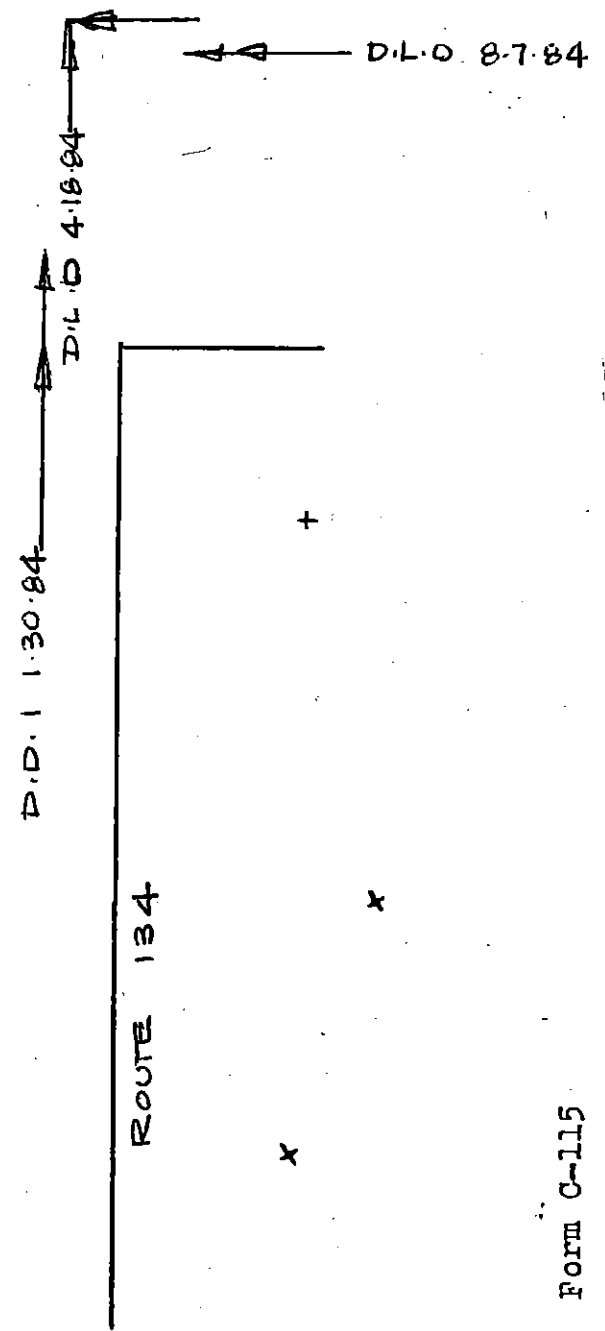
TOWN DENNIS  
 LOCATION RT. 134/GREAT WESTERN/UPPER COUNTY  
 JANUARY 1 19 84 TO SEPT. 14 19 84

- LEGEND
- CAR IN MOTION
  - ⊠ CAR STOPPED OR STOPPING
  - ▢ CAR PARKED
  - ⊕ FATAL ACCIDENT
  - L = LIGHT
  - D = DARK/ DRY
  - ⊗ = FIXED OBJECT
  - O = PEDESTRIAN
  - ⊙ = BICYCLIST

(⊕)



D.D.O 6.23.84



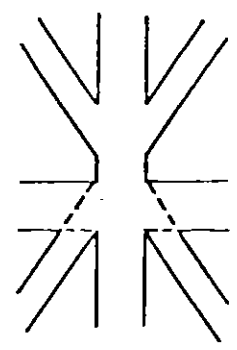
D.D.O 1.30.84

D.L.O 4.18.84

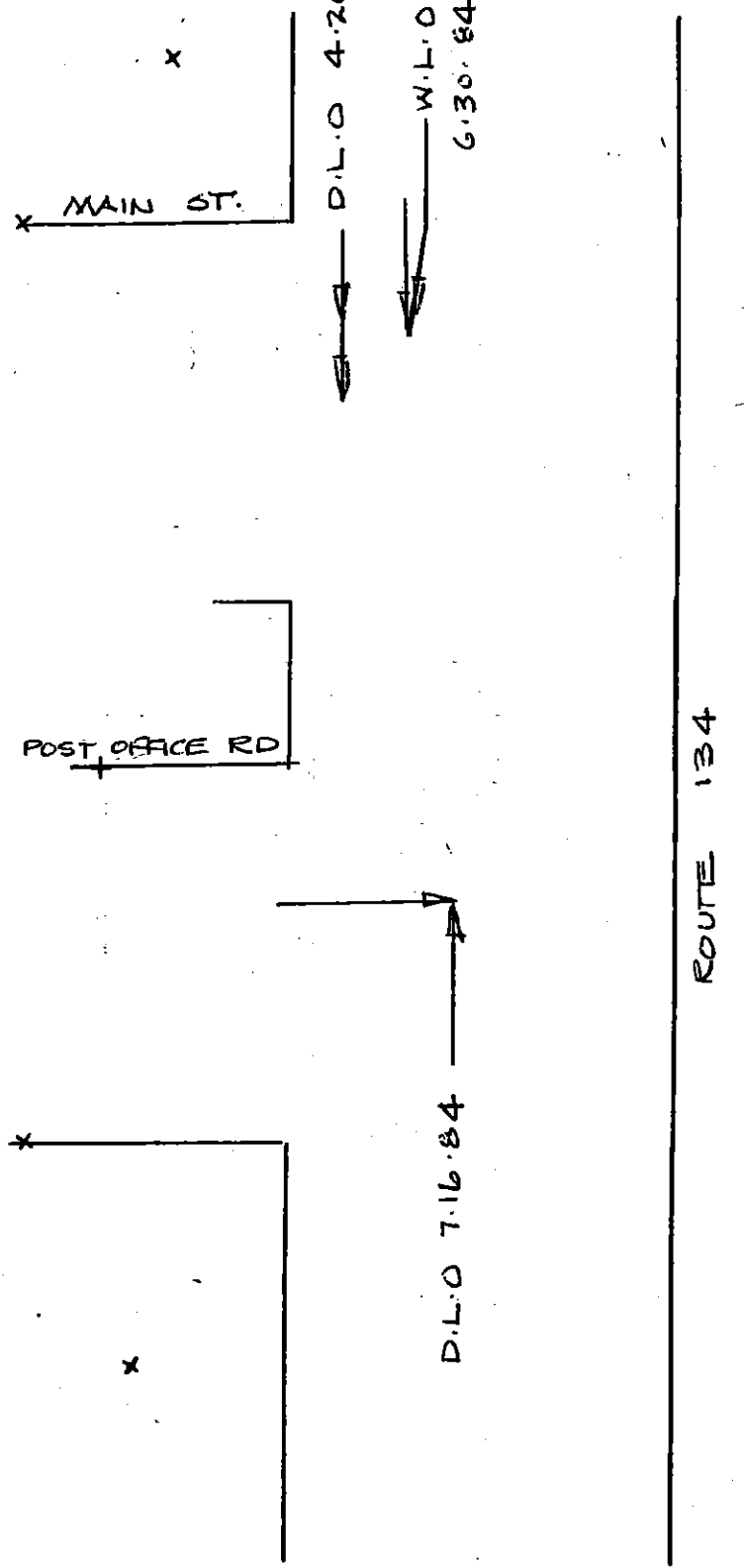
D.L.O 8.7.84

SUMMARY

YEAR	ACC.	INJ.	KILLED
19 84	4	1	0
19			
19			
19			
19			
19			



- LEGEND**
- CAR IN MOTION
  - ☒ CAR STOPPED OR STOPPING
  - ☑ CAR PARKED
  - ⊕ FATAL ACCIDENT
  - L = LIGHT
  - D = DARK / DRY
  - ▣ = FIXED OBJECT
  - O = PEDESTRIAN
  - ⊗ = BICYCLIST



**SUMMARY**

YEAR	ACC.	INJ.	KILLED
19			
19			
19			
19			
19			
19			



TABLE 3  
ACCIDENT SUMMARY  
JANUARY, 1982 to DECEMBER, 1983

	Route 134/Upper County Road/ High Bank Road	Route 134/ Theo. F. Smith Road	Route 134/ Route 6 Ramps	Route 134 Link	Total
<u>ACCIDENT TYPE</u>					
Rear-end	12	4	11	12	39
Cross-Movement	14	10	15	17	56
Fixed Object	1	1	4	2	8
Other	<u>0</u>	<u>1</u>	<u>5</u>	<u>6</u>	<u>12</u>
Total	27	16	35	37	115
<u>SEVERITY</u>					
Property Damage Only	18	8	25	26	77
Personal Injury	<u>9</u>	<u>8</u>	<u>10</u>	<u>11</u>	<u>38</u>
Total	27	16	35	37	115
<u>SEASON</u>					
Winter	7	2	3	5	17
Spring	3	2	4	9	18
Summer	14	10	22	17	63
Fall	<u>3</u>	<u>2</u>	<u>6</u>	<u>6</u>	<u>17</u>
Total	27	16	35	37	115
<u>DAY OF WEEK</u>					
Monday-Thursday	17	6	24	17	64
Friday-Sunday	<u>10</u>	<u>10</u>	<u>11</u>	<u>20</u>	<u>41</u>
Total	27	16	35	37	115
<u>TIME OF DAY</u>					
7:00-9:00 AM	2	2	4	5	13
4:00-6:00 PM	6	0	4	5	15
Rest of Day	<u>19</u>	<u>14</u>	<u>27</u>	<u>27</u>	<u>87</u>
Total	27	16	35	37	115