

Borough of Norwood
Work Session
January 16, 2008

CALL TO ORDER AT 8:05 PM

Mayor Barsa stated:

Adequate notice of this meeting has been provided in accordance with the Open Public Meeting Law, P.L. 1975, Ch. 231, setting forth the time, date, place and purpose of this Public Meeting through a legal notice published in the Record and Press Journal.

PRESENT AT ROLL CALL:

Mayor	James Barsa
Councilman	Tom Brizzolara
Councilman	Michael Knigin
Council President	Barry Scott
Councilman	Anthony Guercio
Councilman	Allen Rapaport
Councilman	Edward Condoleo (8:08 PM)

ALSO PRESENT:

Borough Attorney	Andrew Fede
Borough Engineer	Matthew Neuls
	Brian Intindola

Mr. Rapaport motioned and seconded by Mr. Knigin to open the meeting to the public for comment. The motion passed upon the affirmative vote of all Council Members present.

Ray DeBiosa, 500 Summit Street, referred to the petition submitted sometime in April 2007 regarding speeding on Summit Street and voiced his opinion that the results of the traffic study do not reflect what he observes on a daily basis. Mayor Barsa advised that Neglia Engineering will address the speeding issues during the presentation to be made this evening.

Bill McMahan, 6 Burlington Street, advised that he and his wife were in attendance this evening to support an ordinance regarding excessive dog barking. Mayor Barsa confirmed that the Council would be discussing a draft ordinance. Mr. McMahan questioned the "No Parking" ordinance on the agenda and there was discussion regarding the prohibition of overnight parking on streets. Councilman Rapaport advised that this matter was previously addressed with discussion concerning the increased number of cars per household and the fact that the Police Department is cognizant of unrecognizable vehicles in the area, and, therefore, the matter was tabled at that time.

No one else wishing to be heard, Mr. Scott motioned and seconded by Mr. Knigin to close the meeting to the public. The motion passed upon the affirmative vote of all Council Members present.

Consent Agenda:

Mayor Barsa reviewed the items on the Consent Agenda and asked if any Councilman wished to remove an item.

Mr. Brizzolara questioned 08:42, Authorizing the award of a contract to Gotthold Paving for \$12,665.00 for drainage improvements to the Baseball Snack Shed. Mr. Scott explained it was discussed at the last Work Session and related to the installation of two seepage tanks at the northeast corner of the snack shack to alleviate drainage problems from the bathrooms. Mrs. McMackin advised that the funds for this improvement would be coming from the road program.

Mr. Fede, Borough Attorney, advised that corrections were needed for item 08:38, changing Alfred Sanzari Enterprises to Alsan Realty Co., LP; and 08:40, noting the Original Assessment as \$3,998,500 and the Settlement as \$3,647,600

No one else wishing to be heard, Mayor Barsa asked for a motion to approve the Consent Agenda consisting of the following items:

- 08:36 Authorizing Settlement of Tax Appeals of Alsan Realty Co., LP
- 08:37 Authorizing Settlement of Tax Appeals of Alfred Sanzari, Enterprises
- 08:38 Authorizing Settlement of Tax Appeals of Alsan Realty Co., LP
- 08:39 Authorizing Settlement of Tax Appeals of 355 Chestnut Assoc.
- 08:40 Authorizing Settlement of Tax Appeals of Alsan Realty Co., LP
- 08:41 Authorizing Settlement of Tax Appeals of Alfred Sanzari, Enterprises
- 08:42 Authorizing the award of a contract to Gotthold Paving for \$12,665 for drainage improvements to Baseball Snack Shed

Motion to approve was made by Mr. Scott, seconded by Mr. Knigin and declared carried upon the affirmative vote of all Council Members present.

Items for discussion:

Neglia Engineering Presentation on Traffic Studies:

Mr. Brian Intindola, referred to the traffic studies conducted by Neglia Engineering for Summit Street, High Street, Hudson Avenue and Rockland Avenue dated October 22, 2007 (Attachment A).

Following Mr. Intindola's presentation, Mr. Brizzolara motioned, seconded by Mr. Condoleo to open the meeting to the public for questions related to the report.

Ray DeBiasa, 500 Summit Street, Joe Ascolese, 400 High Street, Gus D'Ercole, 25 Summit Street, and George Hertzberg, 24 Carter Street, posed questions regarding the average speed traveled on Summit Street, whether a police presence showed a reduction in speeding, and if signage would be used to alert motorists "speed bump ahead".

After the question and answer period, motion was made by Mr. Scott, seconded by Mr. Brizzolara to close the meeting to the public.

Mayor Barsa announced that another presentation by Neglia Engineering would be scheduled for the February 13, 2008 Work Session beginning at 7:00 PM and that affected residents would be notified by letter and Swift Reach.

Recreation Ordinance:

Mayor Barsa explained that the Recreation Committee wished to change the configuration of its membership and asked for Council approval to authorize the Borough Attorney to amend Chapter 168, "Recreation" to reflect these changes. No objections were voiced. It was also noted that all applications for the use of fields are to be approved by the Mayor and Council.

LOSAP - cost of living increase outlined in Local Finance Notice 2007-27:

A Resolution will be prepared for approval at a Public Meeting.

Noise Control Ordinance – Excessive Dog Barking:

Mr. Fede recommended that two ordinances be introduced to address excessive dog barking; a revision to Chapter 161, the Borough's general noise control ordinance and a revision to Chapter 85 that regulates animals. Mr. Fede further explained that the fine imposed would be at the discretion of the Municipal Judge, up to but not exceeding what is permitted by law.

Mr. Brizzolara voiced his opinion that it is not the intention of the governing body to put a kennel out of business but that the owner should control the animals. Mr. Guercio advised learning from the owner that the animals are not let outdoors before 9:00AM and stressed that this business has been in operation within the Borough for the past 38 years. Mayor Barsa informed he would speak with the owner of the kennel this week and report back to the Mayor and Council at the January 30, 2008 Work Session.

No Parking Ordinance request from Chief Krapels:

Mayor Barsa explained that currently there is no parking permitted on Walnut Street and Rockland Avenue on Saturday and Sunday and that the Chief of Police has recommended it be permitted to alleviate the parking from Cho Dae Church. It was the consensus of the Council that the Borough Attorney be authorized to prepare an ordinance to permit parking on Walnut Street and Rockland Avenue on Saturday and Sunday for introduction at the February 6, 2008 Public Meeting.

Purchase of lap tops for Mayor and Council:

Mayor Barsa suggested that due to the voluminous amount of paper that is copied and distributed to the governing body, lap tops be purchased for the Mayor and Council to work toward a “paperless office”. Mayor Barsa also suggested that the governing body forgo the \$250 per year phone allowance in order to offset the cost of the computers.

Mrs. McMackin advised that DART computer provided an estimated cost of \$1,100 to \$1,500 per computer and \$900.00 to wire Council Chambers. She was asked to provide a cost analysis regarding the purchase of lap tops as opposed to the personnel, paper and machine costs to duplicate the paperwork. Mr. Scott noted that he prefers paper and would not want the use of computers to be mandatory. Mr. Brizzolara advised he was ambivalent about using computers and Mr. Rapaport voiced being in favor of improved technology but was unhappy about the cost. Mayor Barsa advised that this matter would be further discussed after more financial data was obtained.

Possible uses of Library basement after Bd. of Ed. moves out:

Mr. Rapaport asked that the Council consider the use of the library basement for a teen center once the Board of Education moves out of the area. It was the consensus of the Council that due to the recent passing of Mr. David Beckman and the need to appoint a new library director, that this matter be discussed at a future date.

Borough Attorney Report:

Mr. Fede reported that all the borough professional contracts have been completed. He advised that he had a matter of potential/pending litigation to discuss in closed session.

General Public Comment:

Motion by Mr. Knigin, seconded by Mr. Scott to open the meeting to the public.

A woman identified herself as the one who submitted the petition regarding the dog barking at the kennel and explained her frustration with having to keep her windows closed due to the constant noise at this location. Mayor Barsa advised that he would talk with the owner of the kennel.

Benedetto Ribauda, 401 D'Ercole, questioned the meaning of LOSAP. Mayor Barsa explained it is a Length of Service Award Program, or more specifically a retirement fund the Borough contributes to for volunteer members of the Fire Department and Ambulance Corps with the amount dependent upon the number of service years for the individual.

No other member of the public wishing to be heard, motion was made by Mr. Brizzolara, seconded by Mr. Condoleo to close the meeting to the public.

At this time, Mr. Condoleo asked for an update on the title for the Haring Cemetery. Mr. Fede advised that he had to file again since the first complaint was lost at the County.

Mayor Barsa asked for a motion to approve Resolution 08:43, authorizing the Council to convene in closed session for the purpose of discussing Personnel and Potential/Pending Litigation. The motion was made by Mr. Knigin and seconded by Mr. Brizzolara with all Council Members present voting in favor of the motion.

At 9:45 PM, Mayor Barsa declared a five-minute recess before proceeding in Closed Session.

Mayor Barsa reconvened the meeting at 11:54 PM and asked for a motion to adjourn.

Motion to adjourn was made by Mr. Brizzolara and seconded by Mr. Guercio and declared unanimously carried upon the affirmative vote of all Council Members present.

Respectfully submitted,



Lorraine L. McMackin, RMC, CMC
Administrator/Clerk

ATTACHMENT "A"

Civil Engineering
Municipal Engineering
Traffic Engineering
Planning
Land Surveying
Construction Management



Joseph E. Neglia, P.E., P.L.S., P.P.
CEO, Chairman of the Board
Michael J. Neglia, P.E., P.L.S., P.P.
President
Dominick Villano, P.E.
Gregory Polyniak, P.E., P.P.
Daniel Kaufman, P.E., P.P.
Brian Intindola, P.E.
Joann Signa

October 22, 2007

Borough of Norwood
455 Broadway
Norwood, NJ 07648-1219
Attn.: Mayor Barsa and Borough Council

**RE: INTERIM STATUS REPORT
TRAFFIC CALMING INVESTIGATION
SUMMIT STREET AND VICINITY
BOROUGH OF NORWOOD, BERGEN COUNTY, NEW JERSEY**

Honorable Mayor Barsa and Council Members:

This report has been submitted to advise you of our progress to date on the referenced project. As you are aware, Neglia Engineering Associates ("NEA") is performing a Traffic Calming Investigation for the area bound by Summit Street to the west, the municipal boundary to the north, High Street to the east and Broadway to the south, with a focus on Summit Street. Please see the attached Traffic Calming Study Location Map. The need for this study arises from resident concerns about speeding and the perception unsafe driving in the area.

Accident Data

NEA submitted a request to Chief Krapels of the Norwood Police Department on August 1, 2007 for accident data from January 1, 2004 to present, for the area bound by Summit Street to the west, the municipal boundary to the north, High Street to the east and Broadway to the south. In addition, we also requested a list of citations issued for the same dates and areas.

Based on the accident data provided, a total of 21 accidents were reported in the study area during the three and a half year study period. Of these 21, seven (7) were located at the intersection of Broadway and Summit Street and six (6) were located at the intersection of Rockland Avenue and High Street. At both of these intersections, the majority of the collisions were a direct result of motorists failing to yield the right-of-way.

Typically traffic calming measures are investigated at locations where accidents frequently occur and where the traffic calming measures would eliminate these accidents. In this case, "frequent" is generally defined as five or more accidents of the same type per year over a period of years¹. None of the intersections in our

¹ Per the Manual on Uniform Traffic Control Devices ("MUTCD")



study area have frequent enough accidents to meet this definition.

Volume/Speed Data

NEA issued a proposal to the Borough of Norwood on March 15, 2007. Since that time, several rounds of traffic volume and speed data collection have been performed. Automatic Traffic Recorders (ATRs) were placed along Summit Street, Rockland Avenue, High Street and Hudson Avenue from Friday, March 9, 2007 until Friday, March 16, 2007. Please see the attached Automatic Traffic Recorder Location Map. A manual traffic count was performed to supplement this data at the intersection of Hudson Avenue and Summit Street on Thursday April 12, 2007 from 2:00 p.m. until 5:00 p.m.

A second set of ATRs were placed in the study area from Wednesday, September 12, 2007 until Thursday, September 20, 2007 to record the traffic volumes as well as speed data. Three of these ATRs were placed in various locations along Summit Street while the fourth ATR was placed along Rockland Avenue between Summit Street and High Street. One of these ATRs was placed near the northerly end of Summit Street in an area that was specifically noted as an area of concern for speeding.

Manual speed data was collected using a radar gun at the same locations to verify the ATR data. This was done on Friday, September 28, 2007 from 2:30 p.m. to 4:00 p.m. and again on Saturday, September 30, 2007 from 12:00 p.m. until 2:00 p.m.

Based on this information, we observed the following average daily traffic volumes ("ADT") and peak hour traffic volumes for Summit Street, Rockland Avenue, High Street and Hudson Avenue:

	ADT	PEAK HOUR
Summit Street	764	83
Rockland Avenue	873	84
High Street	498	48
Hudson Avenue	442	45

Note that this data includes traffic in both the northbound and southbound or eastbound and westbound directions. These volumes were consistent with the data collected in the second set of ATRs and by the manual traffic counts at the intersection of Summit Street and Hudson Avenue.

The existing traffic volumes indicate that all four roadways are classified as residential access streets which have a maximum ADT of 1,500 vehicles. Typically these streets have a paved cross section of twenty eight feet with 21 feet designated as the traveled way and one 7 foot wide parking lane. Field measurements show Summit Street to have a paved cross section of 30 feet near the intersection with Hudson Avenue. Parking is permitted along Summit Street throughout the study area.



The following travel speeds were observed along Summit Street:

SPEED (MPH)	# OF VEHICLES	%	CUMULATIVE %
0.0 to 19.9	646	12.8%	12.8%
20.0 to 24.9	790	15.7%	28.5%
25.0 to 29.9	1631	32.4%	60.9%
30.0 to 34.9	1394	27.7%	88.6%
35.0 to 39.9	480	9.5%	98.1%
40.0 to 44.9	83	1.6%	99.7%
45.0 +	9	0.3%	100.0%

Total 5033

This represents an entire week's worth of data. As indicated, 88.6% of the traffic was traveling at 35 miles per hour or less, with only 9 vehicles during the study week traveling over 45 miles per hour. It should be noted that the Manual for Uniform Traffic Control Devices ("MUTCD") recommends that speed limits be established by collecting the speeds of free flowing traffic on the subject roadway and setting the posted speed limit within 5 miles per hour of the existing 85th percentile travel speed. Based on this requirement, the speed limit would be set at either 30 or 35 miles per hour. The supplementary speed data recorded using individual radar gun readings consisted of a total of 186 data points. This data showed an 85th percentile speed of 31 miles per hour with a high of 37 miles per hour.

Data provided by the Norwood Police Department indicates a total of 340 moving violations were issued from January 1, 1996 until August 2007 when the data was reviewed. Of the 340, 62, or 18%, were issued between February and August of 2007. This is indicative of a concerted effort by the Norwood PD to address the situation; however given staffing limitations, it may be difficult to maintain these levels of enforcement.

Summit Street, High Street, Rockland Avenue and Hudson Avenue are all classified as Residential Access Streets per the Residential Site Improvement Standards. This is the lowest classification of street as a function ADT and a 28' cartway with is recommended. This provides a 21' section for two-way traffic and one seven foot parking lane. The existing cartway on Summit Street is 30' near the intersection with Hudson Avenue.

Traffic calming methods

Traffic calming is a loosely defined term which is generally applied to any technique used to decrease the speed and/or volume of traffic flow by physical or non-physical means. Data available from the Institute of Transportation Engineers ("ITE") indicates that non-physical measures such as additional traffic striping are ineffective. There are many physical measures which can be implemented, including but not limited to roundabouts, speed humps, chicanes, diverters, choke points and roadway narrowing. Stop signs are *not* to be used for speed control.



Based on our interpretation of the New Jersey statutes, speed humps would not be permitted along Summit Street due to the fact that Summit Street extends into Northvale and they can only be constructed on streets which are totally contained within the municipality. Representatives of NJDOT were contacted and they were not willing to make any interpretation of this statute, but suggested that legal counsel would be better interpreter of the applicable statute. Based on the broad definition of speed humps in the statute, it is possible that raised intersections also fall under the same restriction; therefore we have also eliminated raised intersections from consideration. Please see the following statute excerpt (39:4-8.10) specific to speed humps:

“A municipality may construct a speed hump on totally self-contained two-lane residential streets and on totally self-contained one-way residential streets under municipal jurisdiction which have no direct connection with any street, in any other municipality, have fewer than 3,000 vehicles per day, with a posted speed of 30 mph or less, and on one-way streets connecting to county roads.”

In any case, this would leave a number of other options for traffic calming. Non physical traffic calming measures generally do not have a significant impact on travel speeds, however most physical measures have the effect of lowering the average travel speed (by up to 20%) based on data provided by the ITE. The following table gives average decreases in speed as a result of various measures along with approximate unit costs. Attached to this report are examples of each traffic calming measure presented on the following table.

TECHNIQUE	% SPEED DECREASE	UNIT COST*
Circle	11%	\$22,000 ²
Chicane	4%	\$16,500
Chokers	4%	\$10,000
Center Island	Undetermined	\$9,000 ²
Median Barrier	Undetermined	\$7,500
Half-Closure	19%	\$50,000 ³
Speed Table	18%	\$10,000

*costs reflect standard concrete and bituminous installations

As indicated, the traffic calming measures have the intended effect of decreasing the average travel speed; however it is not to the extent that many people would commonly anticipate. It may decrease the average speed from 35 miles per hour to 30 miles per hour, but that would be the limit that could reasonably be expected. In addition, any traffic calming proposed will likely not impact the motorist who is inclined to travel well outside the normal range of travel speed.

Aside from speed humps, the New Jersey Department of Transportation does not offer specific requirements for traffic calming measures. The statute states “a municipality may construct traffic calming measures where appropriate.” Among the measures which were considered, the center island and median barrier raise aesthetic concerns for the Borough and would be of questionable effectiveness. Additionally,

² May require property taking, which is not included in the unit cost.

³ Not applicable along Summit Street due to the requirement of NJDOT approval.



the construction of a center island would require right-of-way taking unless the Borough was to eliminate on-street parking. Constructing a circle at one of the study intersections would also require property taking and would have limited effectiveness as speeding appears to be more of a concern toward the northerly end of Summit Street where there are no intersecting streets. A half-closure would require approval from the County as it would effectively make Summit Street a one-way street in some locations. Given the speed and volume data as well as the accident history in this location, it is highly unlikely that the DOT would approve this measure.

A speed table is installed as a long raised speed hump with a flat section in the middle and ramps on the ends; sometimes constructed with brick or other textured materials on the flat section. Speed tables are also referred to as flat top speed humps, trapezoidal humps, speed platforms, raised crosswalks, or raised crossings. Applications include local and collector streets and main roads through small communities. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on top and work well in combination with textured crosswalks, curb extensions, and curb radius reductions and can include a crosswalk. The speed table as a vertical deflection is not specifically cited in NJSA (39:4-8.10).

Other methods which would be effective as well as approvable at these locations are the chicane and the choker. The choker narrows the roadway to the width of one to one and a half lanes at mid-block locations and the chicane forces traffic through an artificially created "s-curve" on the roadway.

The negatives to these methods are the cost to implement them, noise from vehicles slowing down to maneuver through the choker/chicane and then speeding up after passing through, the potential for vehicle damage and the delays incurred by emergency vehicles responding to calls. It should be noted that many of these negatives are experienced by all forms of traffic calming.

Recommendations

Of the roadways in the study area, Summit Street has the combination of relatively high traffic volumes and travel speeds. Summit Street experiences just over one vehicle per minute during the peak periods of the day and 88% of the existing traffic volume is within 10 miles per hour of the posted speed limit. We feel the installation of traffic calming measures in the study area would have a limited effect and the accident history, volume and speed data do not support the need for any such measures.

Should the Borough wish to proceed with the implementation of traffic calming at this location, the installation of a series of speed tables along Summit Street would be the most appropriate method. Chicanes or chokers at mid-block locations along Summit Street and potentially Rockland Avenue would also be a plausible approach to addressing traffic calming issues.

Please review this information at your earliest convenience and contact our office to discuss how you would like us to proceed.



Very truly yours,
Neglia Engineering Associates

Very truly yours,
Neglia Engineering Associates

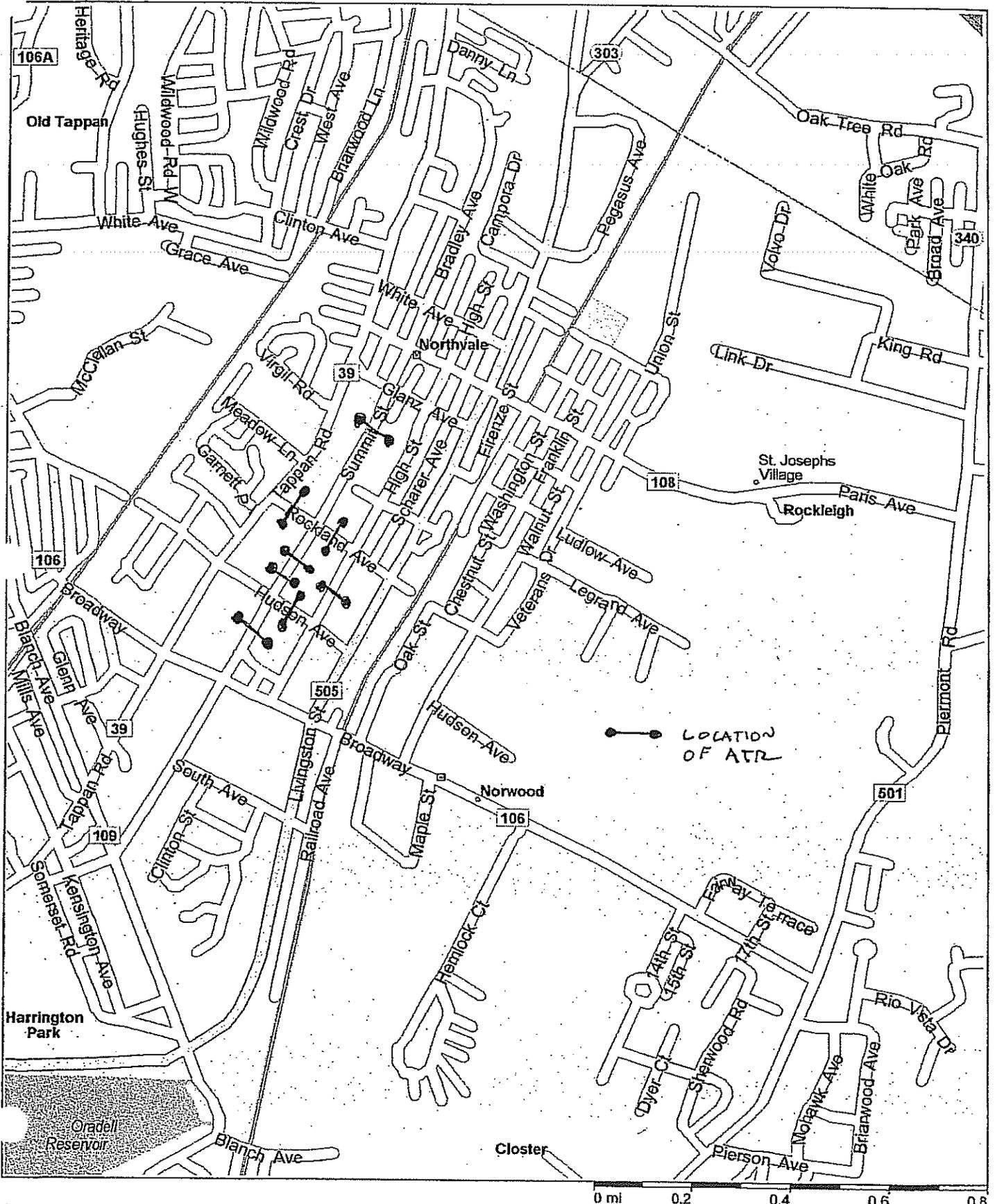
A handwritten signature in black ink, appearing to read 'B. Intindola', with a horizontal line extending to the right.

Brian A. Intindola, P.E.
Principal

A handwritten signature in black ink, appearing to read 'Bill Stimmel', with a horizontal line extending to the right.

William P. Stimmel, P.E.
Project Manager

Automatic Traffic Recorder Locations



ATI - DATA MANAGEMENT SYST.
 60 MINUTES, 2 CHANNEL VEHICLE C. .I
 FILENAME: 970085A.DAT
 WEEK OF MONDAY 03/05/07

REFERENCE: 88001200
 LOCATION : HUDSON AVE BET HIGH ST & SUMMIT ST
 ATR # : 970085
 COMMENTS : LOC #4

HOUR BEGINS	Monday 5		Tuesday 6		Wednesday 7		Thursday 8		Friday 9		Saturday 10		Sunday 11		WEEKDAY AVERAGE	
	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
12 AM	*	*	*	*	*	*	*	*	*	*	3	5	2	2	*	*
1	*	*	*	*	*	*	*	*	*	*	2	0	2	1	*	*
2	*	*	*	*	*	*	*	*	*	*	0	0	3	1	*	*
3	*	*	*	*	*	*	*	*	*	*	0	0	1	0	*	*
4	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	*
5	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	*
6	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	*
7	*	*	*	*	*	*	*	*	*	*	3	3	2	1	*	*
8	*	*	*	*	*	*	*	*	*	*	8	3	5	1	*	*
9	*	*	*	*	*	*	*	*	*	*	14	8	9	4	*	*
10	*	*	*	*	*	*	*	*	*	*	14	11	9	7	11	12
11	*	*	*	*	*	*	*	*	*	*	23	10	14	9	14	14
12 PM	*	*	*	*	*	*	*	*	*	*	17	17	9	7	12	14
1	*	*	*	*	*	*	*	*	*	*	21	16	15	14	13	13
2	*	*	*	*	*	*	*	*	*	*	12	15	17	17	23	13
3	*	*	*	*	*	*	*	*	*	*	11	9	12	14	11	11
4	*	*	*	*	*	*	*	*	*	*	11	17	13	14	27	33
5	*	*	*	*	*	*	*	*	*	*	11	15	9	13	23	17
6	*	*	*	*	*	*	*	*	*	*	16	15	16	8	24	27
7	*	*	*	*	*	*	*	*	*	*	13	9	12	13	15	23
8	*	*	*	*	*	*	*	*	*	*	10	5	8	16	19	15
9	*	*	*	*	*	*	*	*	*	*	4	3	10	12	11	10
10	*	*	*	*	*	*	*	*	*	*	8	4	8	3	4	9
11	*	*	*	*	*	*	*	*	*	*	1	6	8	6	4	5
TOTALS	*	*	*	*	*	*	*	*	*	*	206	174	185	164	213	218
% AVERAGE WEEKDAY	*	*	*	*	*	*	*	*	*	*	100.0	100.0				
AM PK HR VOLUME	*	*	*	*	*	*	*	*	*	*	10:00	11:00	10:00	10:00	10:00	10:00
PM PK HR VOLUME	*	*	*	*	*	*	*	*	*	*	12:00	3:00	1:00	1:00	3:00	3:00

ATI - DATA MANAGEMENT SYSTEM
60 MINUTES, 2 CHANNEL VEHICLE COUNT

REFERENCE: 88001200
LOCATION : HUDSON AVE BET HIGH ST & SUMMIT ST
ATR # : 970085
COMMENTS : LOC #4

FILENAME: 970085A.DAT
WEEK OF MONDAY 03/12/07

CH1 : WB CH2 : EB

HOUR	Monday 12		Tuesday 13		Wednesday 14		Thursday 15		Friday 16		Saturday 17		Sunday 18		WEEKDAY AVERAGE	
	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
12 AM	2	1	2	0	2	2	4	3	2	2	*	*	*	*	2	2
1	0	1	0	1	0	1	4	1	4	1	*	*	*	1	1	1
2	0	0	0	0	0	0	1	0	1	0	*	*	*	0	0	0
3	0	0	0	0	0	0	0	1	0	0	*	*	*	0	0	0
4	0	0	1	1	1	0	1	1	1	1	*	*	*	1	1	0
5	3	0	2	1	1	6	2	2	4	0	*	*	*	4	4	1
6	9	3	14	3	10	5	11	4	11	2	*	*	*	11	11	3
7	13	7	16	6	18	5	12	10	11	6	*	*	*	14	14	7
8	25	12	35	10	31	11	34	17	32	13	*	*	*	31	31	13
9	21	8	17	8	12	4	17	7	22	5	*	*	*	18	18	6
10	14	6	10	9	11	18	12	15	10	6	*	*	*	11	11	11
11	21	8	16	17	9	14	14	17	10	3	*	*	*	14	14	12
12 PM	8	13	11	21	16	12	15	7	17	16	*	*	*	13	13	14
1	5	16	17	10	11	15	12	8	0	3	*	*	*	9	9	10
2	16	10	15	7	15	14	15	12	*	*	*	*	*	15	15	11
3	29	31	21	22	19	19	24	16	*	*	*	*	*	23	23	18
4	19	18	12	18	24	21	21	15	*	*	*	*	*	19	19	18
5	19	18	18	19	18	22	15	15	*	*	*	*	*	18	18	19
6	17	23	18	13	15	24	22	23	*	*	*	*	*	18	18	21
7	13	16	9	16	11	14	11	13	*	*	*	*	*	11	11	15
8	14	14	8	9	12	11	7	12	*	*	*	*	*	10	10	12
9	7	5	3	5	7	11	3	4	*	*	*	*	*	5	5	6
10	4	3	5	9	5	4	2	6	*	*	*	*	*	4	4	6
11	2	3	5	3	2	4	4	2	*	*	*	*	*	3	3	3
TOTALS	261	216	255	208	255	233	259	209	127	58	*	*	*	255	213	

% AVERAGE

WEEKDAY 102.4 101.4 100.0 97.7 100.0 109.4 101.6 98.1 49.8 27.2

AM PK HR 8:00 8:00 8:00 11:00 8:00 10:00 8:00 8:00 8:00 8:00 8:00 8:00 8:00 8:00 8:00 8:00 8:00

VOLUME 25 12 35 17 31 18 34 17 32 13 8:00 8:00 8:00 8:00 8:00 8:00 8:00

PM PK HR 3:00 3:00 3:00 3:00 4:00 6:00 3:00 6:00 12:00 12:00 3:00 3:00 3:00 3:00 3:00 3:00 3:00

VOLUME 29 31 21 22 24 24 24 23 17 16 3:00 3:00 3:00 3:00 3:00 3:00 3:00

ATI - DATA MANAGEMENT SYSTEM
60 MINUTES, 2 CHANNEL CLE COUNT

REFERRAL #: 88000400
LOCATION : HIGH ST BET ROCKLAND AVE & HUDSON AVE
ATR # : 970015
COMMENTS : LOC #1

FILENAME: 970015A.DAT
WEEK OF MONDAY 03/05/07

CH1 : SB CH2 : NB

HOUR	Monday 5		Tuesday 6		Wednesday 7		Thursday 8		Friday 9		Saturday 10		Sunday 11		WEEKDAY AVERAGE	
	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
12 AM	*	*	*	*	*	*	*	*	*	*	3	5	6	3	*	*
1	*	*	*	*	*	*	*	*	*	*	1	2	1	4	*	*
2	*	*	*	*	*	*	*	*	*	*	1	0	0	0	*	*
3	*	*	*	*	*	*	*	*	*	0	1	1	0	3	*	*
4	*	*	*	*	*	*	*	*	*	1	0	0	1	1	*	*
5	*	*	*	*	*	*	*	*	*	2	0	1	0	0	*	*
6	*	*	*	*	*	*	*	*	*	2	0	0	1	0	*	*
7	*	*	*	*	*	*	*	*	*	6	3	1	1	*	*	
8	*	*	*	*	*	*	*	*	*	14	7	3	4	*	*	
9	*	*	*	*	*	*	*	*	*	5	6	6	5	19	10	
10	*	*	*	*	*	*	*	*	*	10	17	8	12	10	14	
11	*	*	*	*	*	*	*	*	*	13	19	23	14	17	13	8
12 PM	*	*	*	*	*	*	*	*	*	14	20	20	22	14	14	14
1	*	*	*	*	*	*	*	*	*	17	11	18	24	16	17	6
2	*	*	*	*	*	*	*	*	*	24	21	22	20	17	24	19
3	*	*	*	*	*	*	*	*	*	16	16	23	22	16	16	31
4	*	*	*	*	*	*	*	*	*	17	21	21	18	15	17	17
5	*	*	*	*	*	*	*	*	*	25	18	17	16	24	25	23-46
6	*	*	*	*	*	*	*	*	*	21	15	13	16	16	21	26
7	*	*	*	*	*	*	*	*	*	23	9	7	19	11	23	23
8	*	*	*	*	*	*	*	*	*	6	7	13	8	6	9	9
9	*	*	*	*	*	*	*	*	*	7	3	9	6	7	5	5
10	*	*	*	*	*	*	*	*	*	11	2	8	2	9	11	14
11	*	*	*	*	*	*	*	*	*	4	8	5	2	4	9	9
TOTALS	*	*	*	*	*	*	*	*	*	227	222	231	218	209	227	228

% AVERAGE WEEKDAY

AM PK HR VOLUME

PM PK HR VOLUME

100.0 100.0

9:00 10:00

5:00 3:00

ATI - DATA MANAGEMENT SYSTEM
60 MINUTES, 2 CHANNEL VEHICLE COUNT

REFERENCE: 88000400
LOCATION : HIGH ST BET ROCKLAND AVE & HUDSON AVE
ATR # : 970015
COMMENTS : LOC #1

FILENAME: 970015A.DAT
WEEK OF MONDAY 03/12/07

HOUR	Monday 12		Tuesday 13		Wednesday 14		Thursday 15		Friday 16		Saturday 17		Sunday 18		WEEKDAY AVERAGE	
	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
12 AM	6	5	2	4	2	1	3	1	2	4	*	*	*	*	*	*
1	0	1	0	0	0	0	0	0	1	2	*	*	*	*	3	3
2	2	0	0	0	0	0	0	0	1	2	*	*	*	*	0	1
3	0	0	0	0	0	0	0	0	3	5	*	*	*	*	2	1
4	3	0	0	0	0	0	0	0	0	0	*	*	*	*	0	0
5	4	0	2	4	1	0	1	0	2	2	*	*	*	*	2	0
6	12	0	6	4	3	0	4	0	4	0	*	*	*	*	4	0
7	18	8	13	4	10	1	4	1	10	2	*	*	*	*	10	2
8	25	10	18	11	18	7	26	10	18	7	*	*	*	*	20	9
9	15	12	9	12	21	10	18	11	17	14	*	*	*	*	19	12
10	6	6	15	9	9	10	10	6	7	6	*	*	*	*	10	9
11	9	12	13	10	20	8	11	11	7	11	*	*	*	*	10	9
12 PM	20	13	17	18	16	22	21	5	12	10	*	*	*	*	15	11
1	15	15	25	19	22	17	9	13	25	9	*	*	*	*	20	15
2	11	11	14	18	9	14	27	17	*	*	*	*	*	*	18	16
3	21	27	23	19	19	27	15	24	*	*	*	*	*	*	15	15
4	15	27	23	11	26	21	21	20	*	*	*	*	*	*	20	24
5	19	20	14	31	22	30	20	28	*	*	*	*	*	*	21	20
6	23	18	25	22	22	26	27	21	*	*	*	*	*	*	24	22
7	16	12	15	21	15	16	12	12	*	*	*	*	*	*	15	15
8	19	13	19	11	11	17	8	10	*	*	*	*	*	*	14	13
9	9	7	3	13	8	9	8	12	*	*	*	*	*	*	7	10
10	2	9	2	7	3	11	13	4	*	*	*	*	*	*	5	8
11	5	3	0	1	3	5	1	3	*	*	*	*	*	*	2	3
TOTALS	275	230	273	261	270	268	282	227	110	68	*	*	*	*	275	246
% AVERAGE	100.0	93.5	99.3	106.1	98.2	108.9	102.5	92.3	40.0	27.6						
AM PK HR	8:00	9:00	7:00	8:00	8:00	11:00	7:00	8:00	7:00	8:00	*	*	*	*	7:00	8:00
VOLUME	25	12	18	16	21	16	26	11	18	14	*	*	*	*	20	12
PM PK HR	6:00	3:00	1:00	5:00	4:00	5:00	2:00	5:00	12:00	12:00	*	*	*	*	6:00	5:00
VOLUME	23	27	25	31	26	30	27	28	25	9	*	*	*	*	24	27

ATI - DATA MANAGEMENT SYSTEM
 60 MINUTES, 2 CHANNEL VEHICLE INT

REFE: 88000500
 LOCAL: SUMMIT ST BET ROCKLAND AVE & HUDSON AVE.
 ATR #: 970084
 COMMENTS: LOC #3

FILENAME: 970084A.DAT
 WEEK OF MONDAY 03/05/07

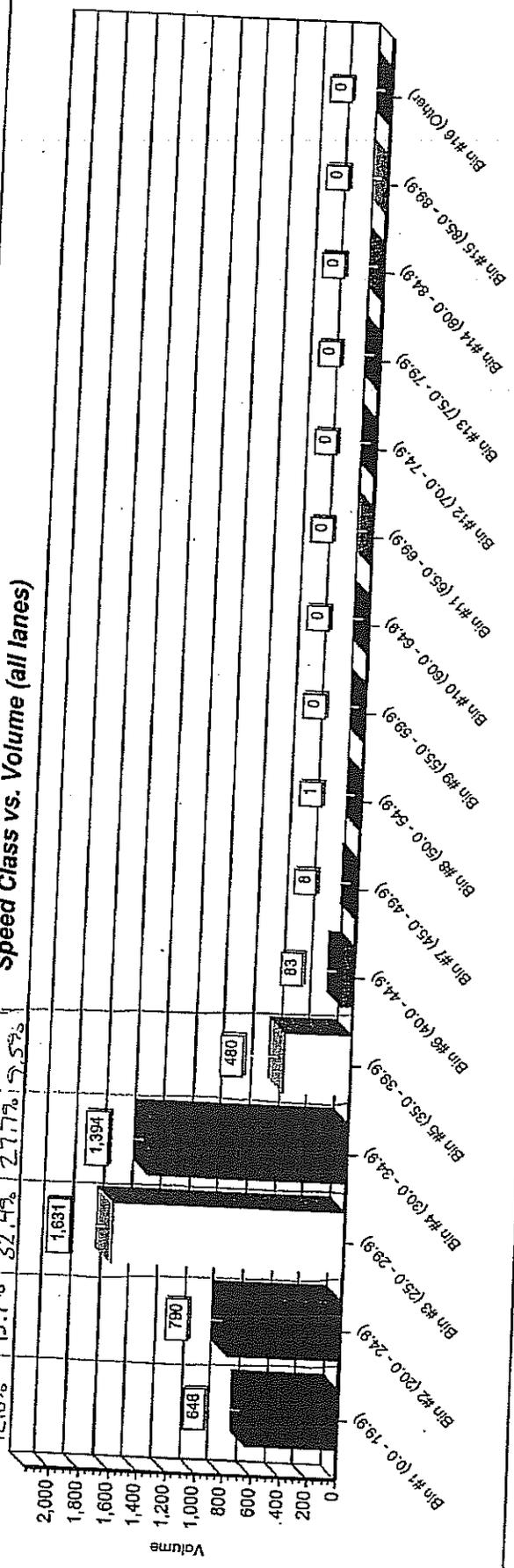
HOUR	Monday 5		Tuesday 6		Wednesday 7		Thursday 8		Friday 9		Saturday 10		Sunday 11		WEEKDAY AVERAGE	
	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
12 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTALS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
% AVERAGE WEEKDAY	265		341		326		324		321		296		265		341	
AM PK HR VOLUME	100.0		11:00 11:00		9:00 11:00		11:00 11:00		11:00 11:00		11:00 11:00		11:00 11:00		11:00 11:00	
PM PK HR VOLUME	3:00 4:00		4:00 3:00		3:00 1:00		1:00 1:00		1:00 12:00		3:00 4:00		3:00 4:00		3:00 4:00	

Summit south of Glanz

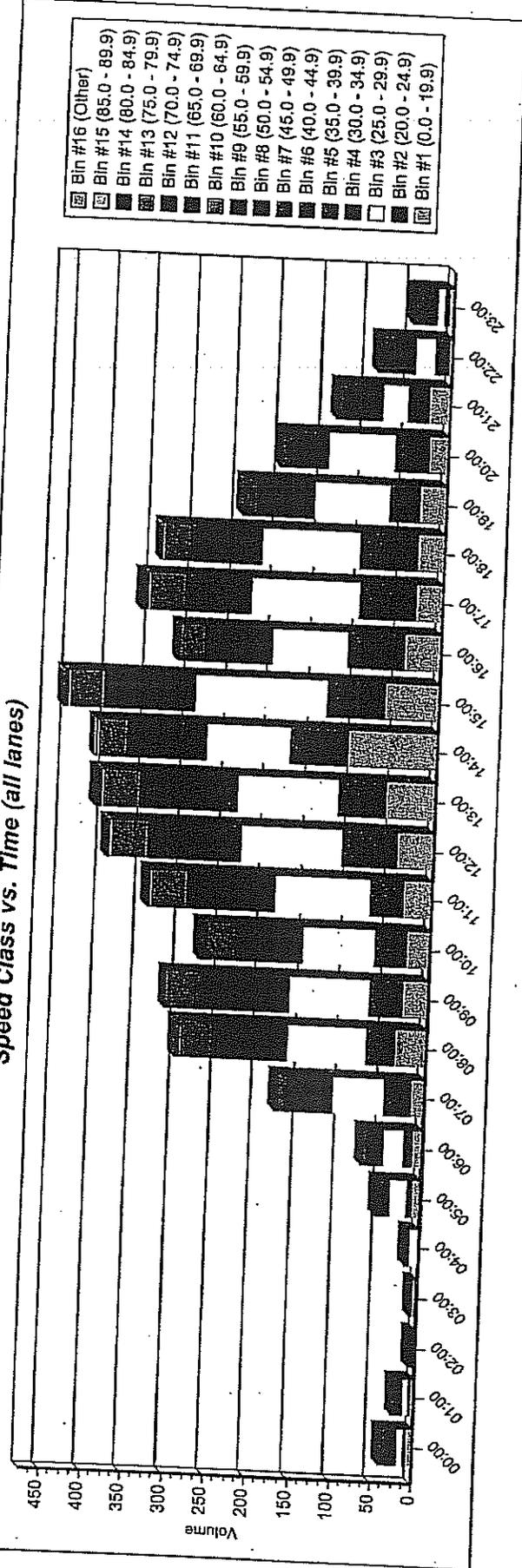
0737004 Speed Class Charts For Data From: 14:00 - 09/12/2007 To: 13:59 - 09/20/2007

→ 28.5 → 60.9 → 88.6 → 98.1
 12.87% 15.7% 32.4% 27.7% 9.5%

Speed Class vs. Volume (all lanes)



Speed Class vs. Time (all lanes)

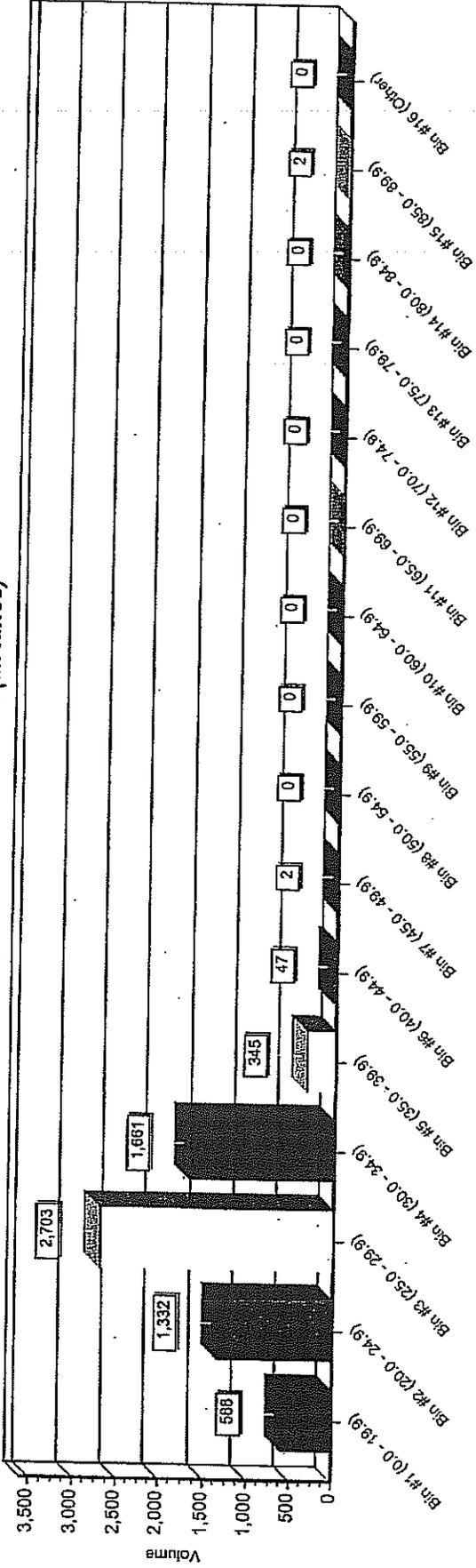


Σ = 5033

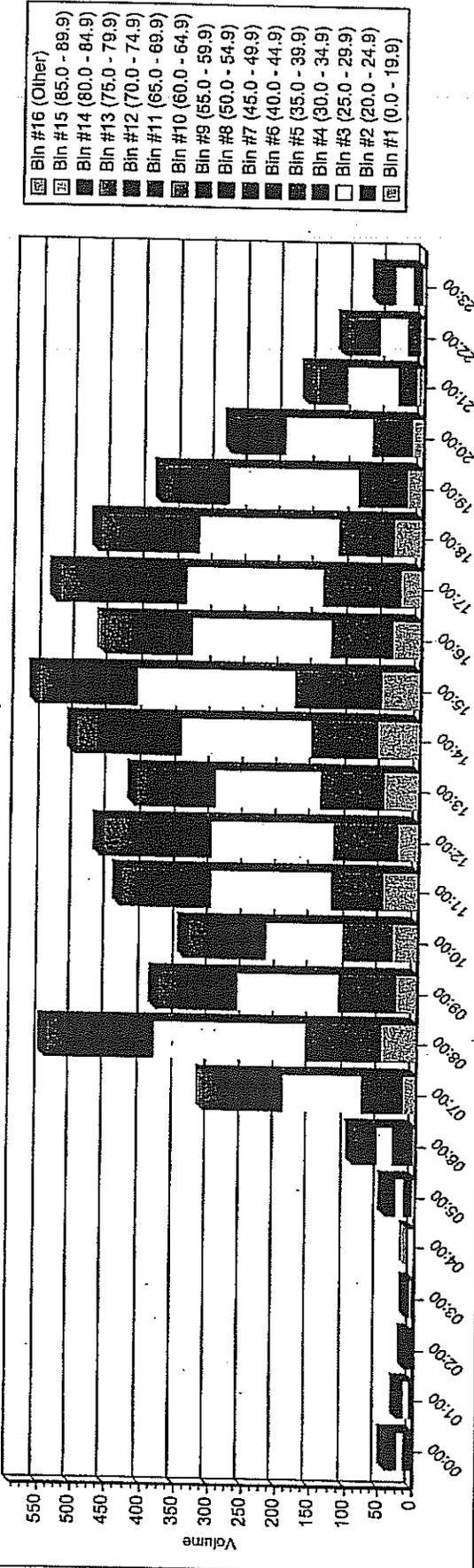
Sum between Norwood Interchange

0737001 Speed Class Charts For Data From: 13:00 - 09/12/2007 To: 12:59 - 09/20/2007

Speed Class vs. Volume (all lanes)



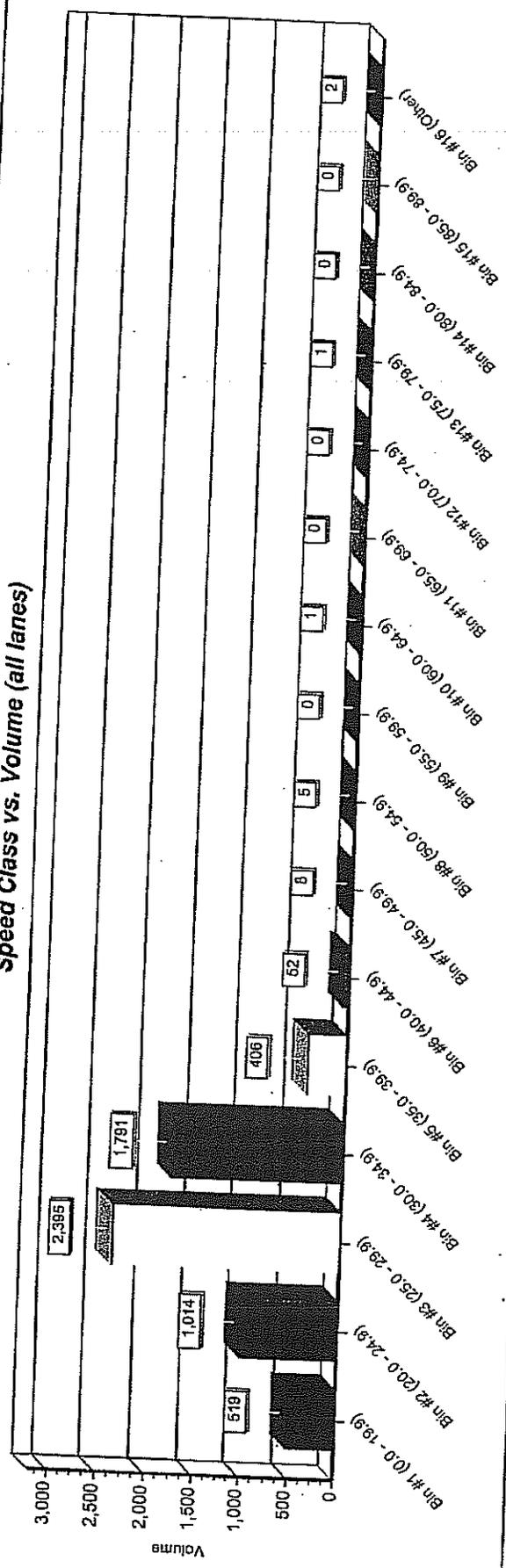
Speed Class vs. Time (all lanes)



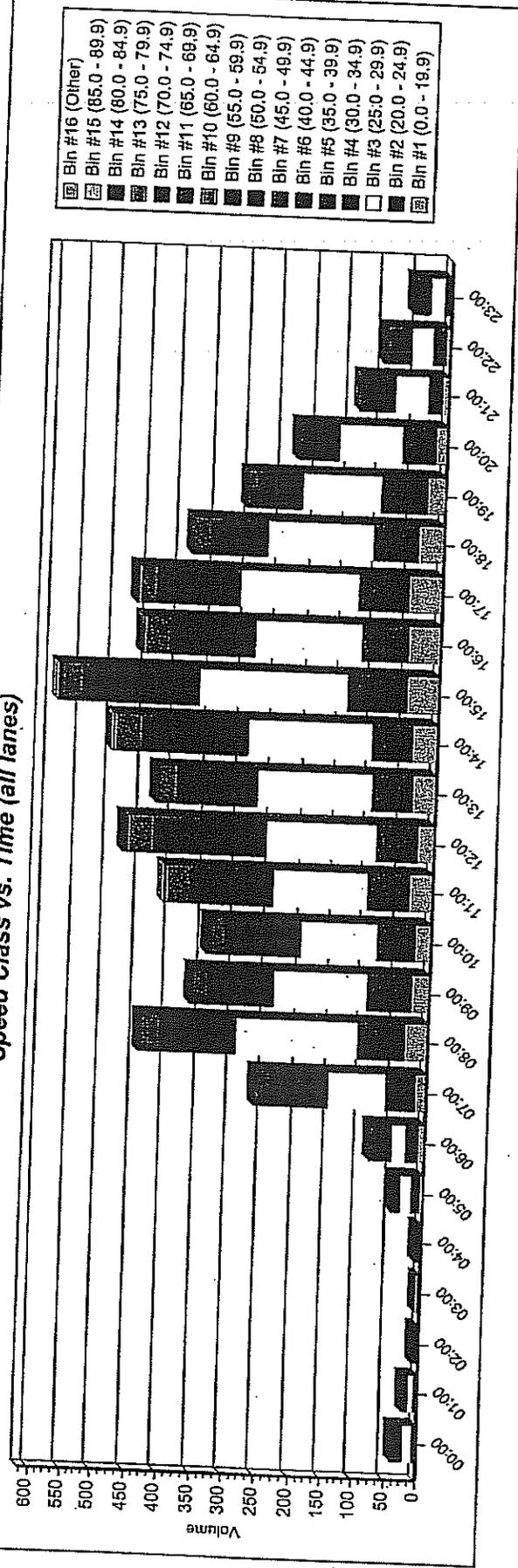
Scan it before Hudson! Rockland

0737002 Speed Class Charts For Data From: 13:00 - 09/12/2007 To: 12:59 - 09/20/2007

Speed Class vs. Volume (all lanes)



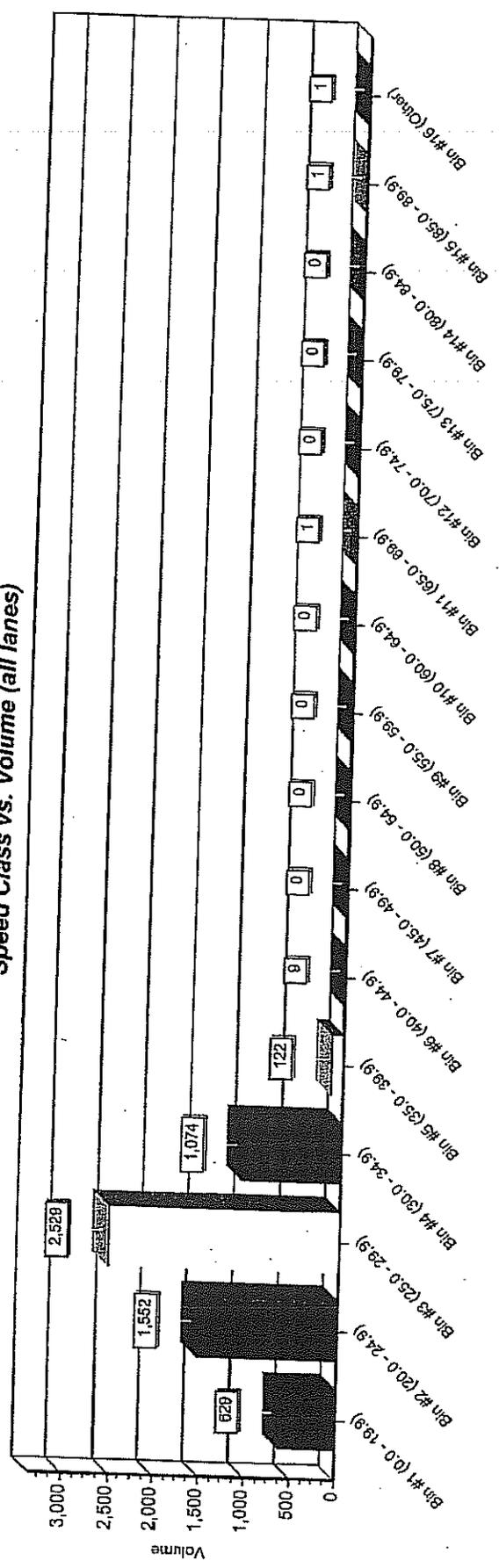
Speed Class vs. Time (all lanes)



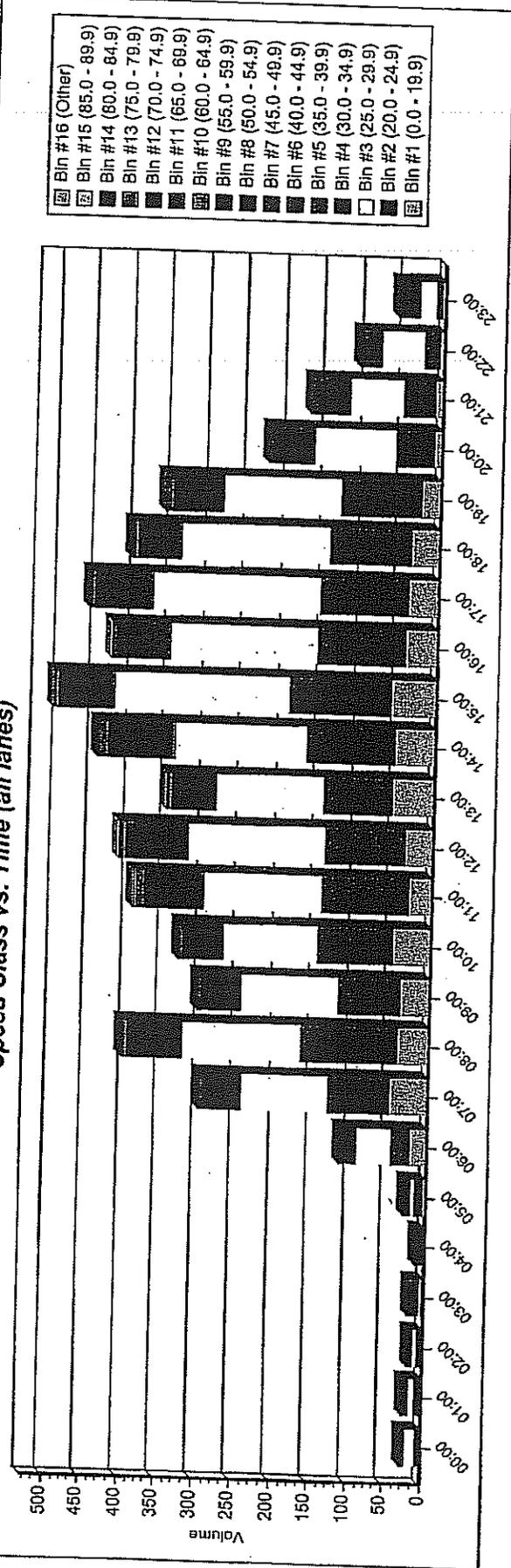
Rockland Hills, Summit, Tappan

0737003 Speed Class Charts For Data From: 14:00 - 09/12/2007 To: 14:59 - 09/20/2007

Speed Class vs. Volume (all lanes)



Speed Class vs. Time (all lanes)



Mariela Mitre

From: Mariela Mitre
Sent: Thursday, August 16, 2007 1:00 PM
To: Bill Stimmel
Subject: Summit street index of citations - NORWMUN07.012

Moving Violations

1996-February 2007
Summit St. = 181
High St. = 22
Hudson Ave. = 27
Rockland Ave. = 48

February 2007-present
Summit St. = 55
High St. = 2
Hudson Ave. = 1
Rockland Ave. = 4

Total:
Summit St. = 236
High St. = 24
Hudson Ave. = 28
Rockland Ave. = 52



NEGLIA ENGINEERING ASSOCIATES
 34 Park Avenue - P.O. Box 426
 Lyndhurst, NJ 07071
 Phone (201) 939-8805 Fax (201) 939-0846

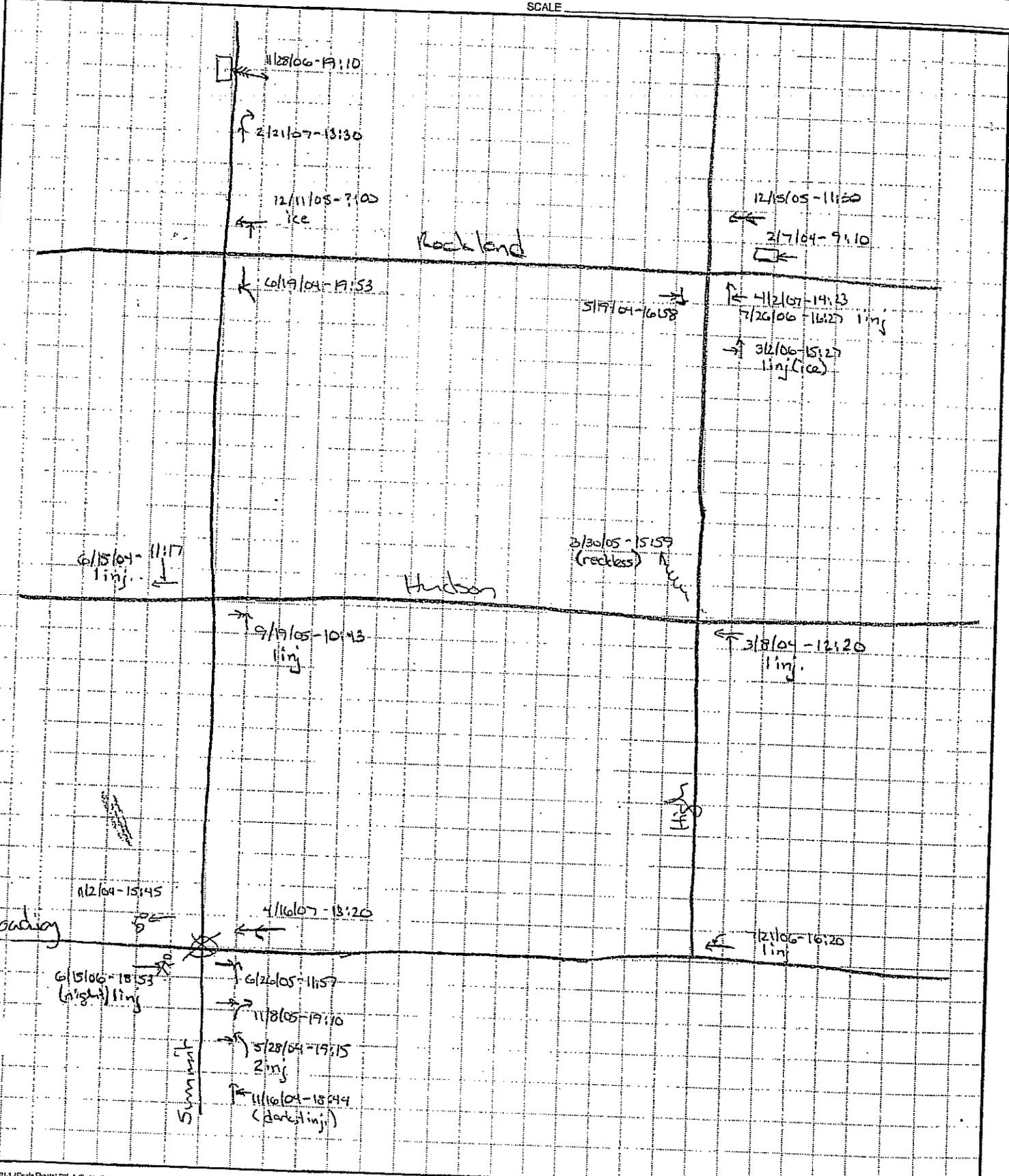
JOB NORW MUN 07.012

SHEET NO. _____ OF _____

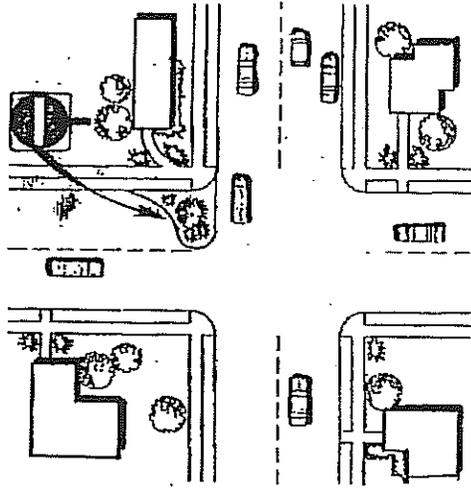
CALCULATED BY WPS DATE 10/2/07

CHECKED BY _____ DATE _____

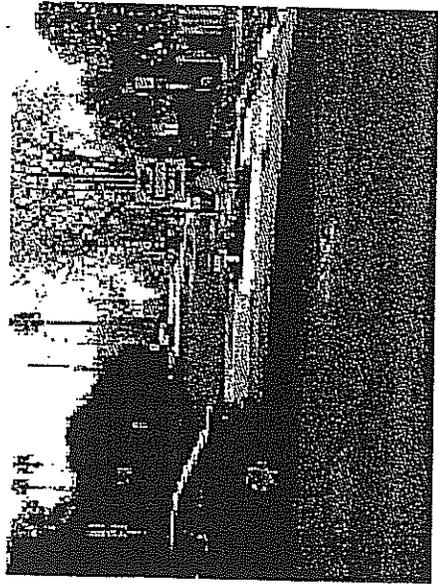
SCALE _____



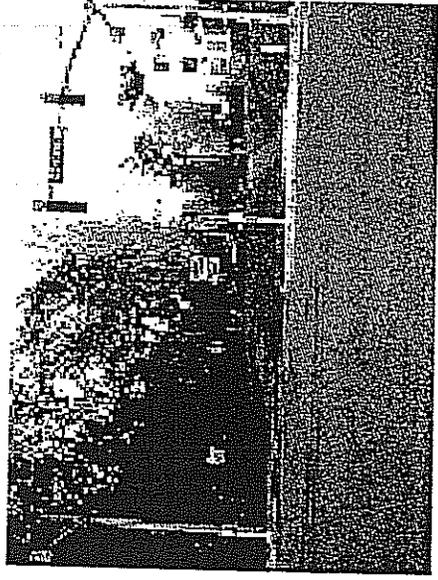
Half Closures (partial closures, one-way closures, directional closures)



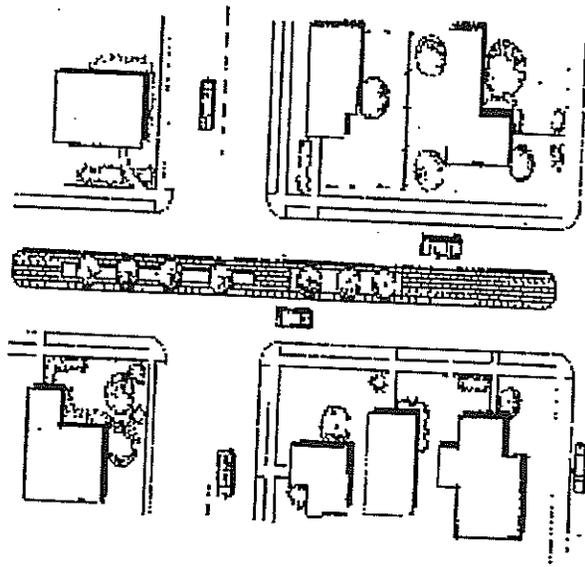
San Jose, CA



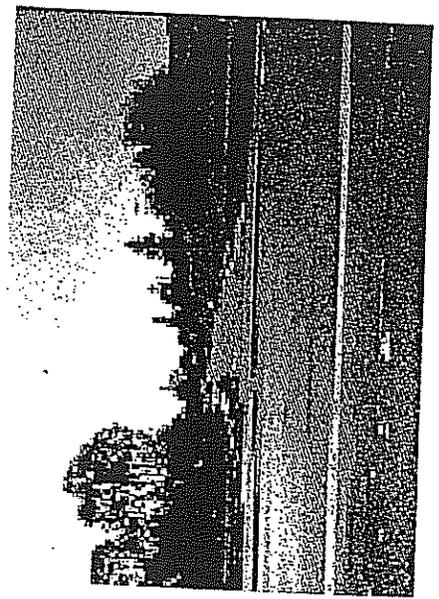
Bellevue, WA



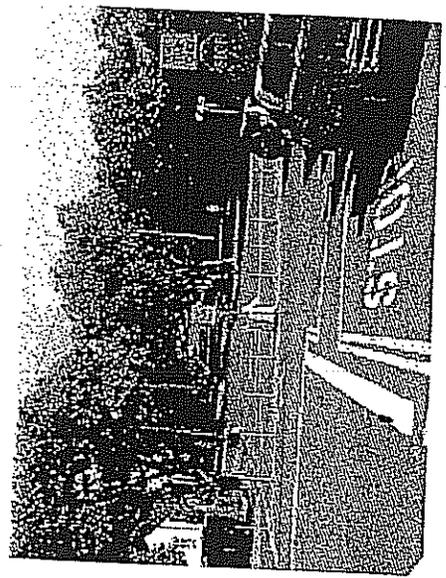
Median Barriers (median diverter, forced turn island, island diverter)



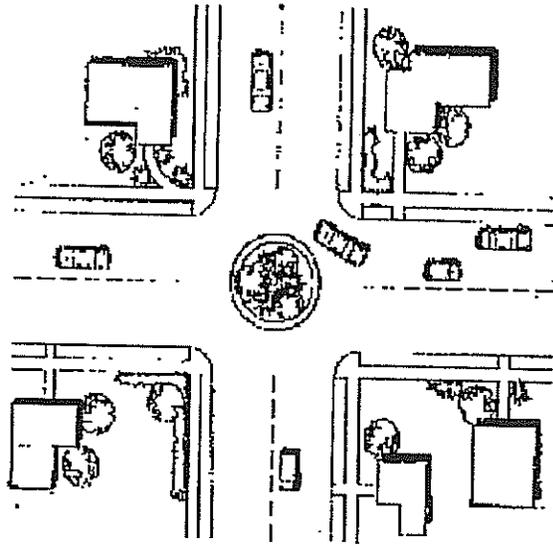
San Diego, CA



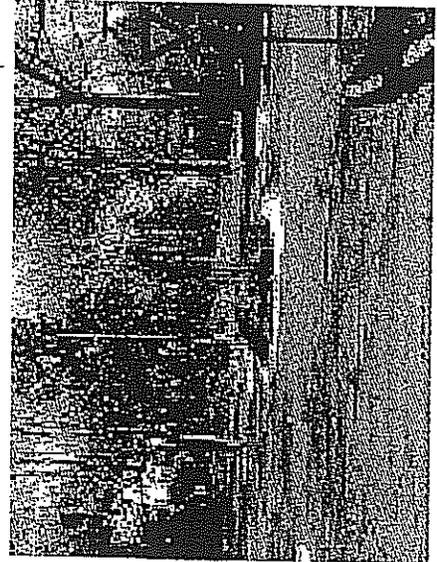
Berkeley, CA



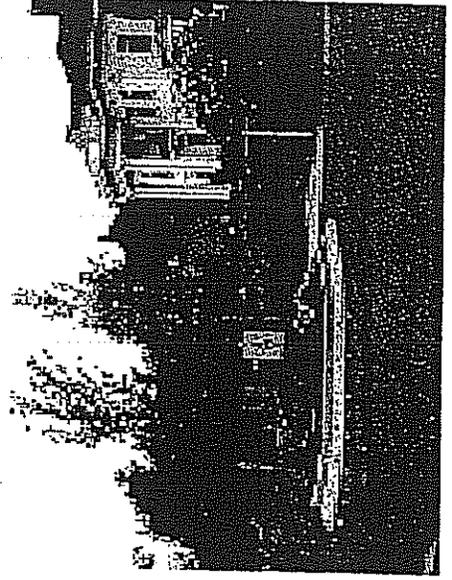
Traffic Circles (rotaries, intersection islands)



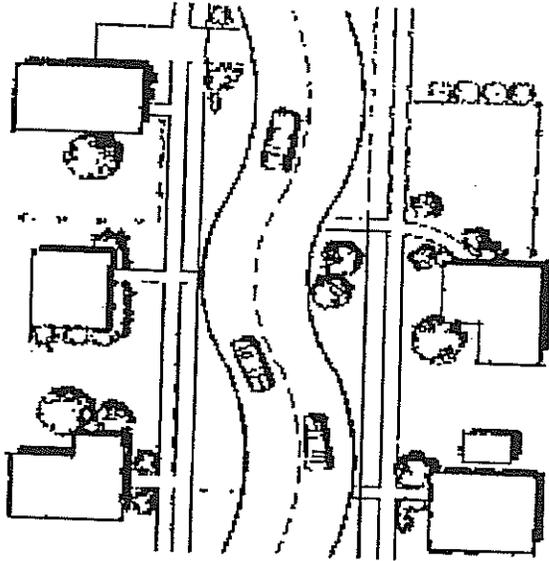
Charlotte, NC



Portland, OR



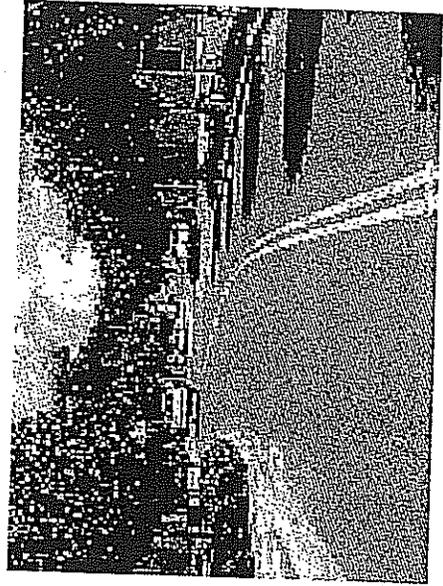
Chicanes (deviations, serpentine, reversing curves)



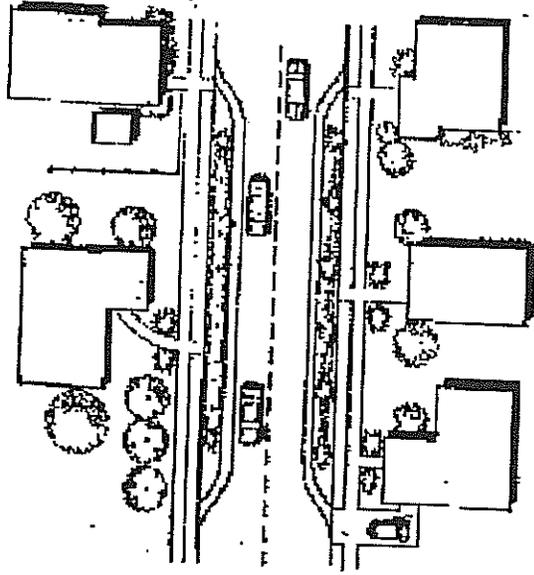
Montgomery County,
MD



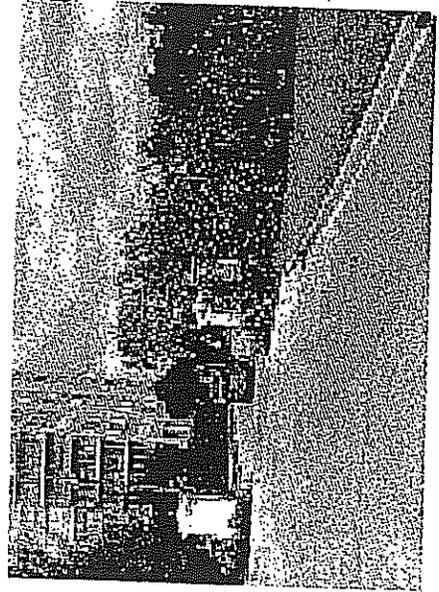
Alachua, FL



Chokers (pinch points, midblock narrowings, curb extensions, midblock yield points)



Ft. Lauderdale, FL



Cambridge, MA

