

**New York City Department of Transportation  
Office of School Safety Engineering**



**School Safety Engineering Project**

**FINAL REPORT: St. Anselm School, Bronx**



**Prepared by  
The RBA Group and URBITRAN Associates Inc.**



**March 22, 2006**

**School Safety Engineering Project  
Final Report: St. Anselm, Bronx**

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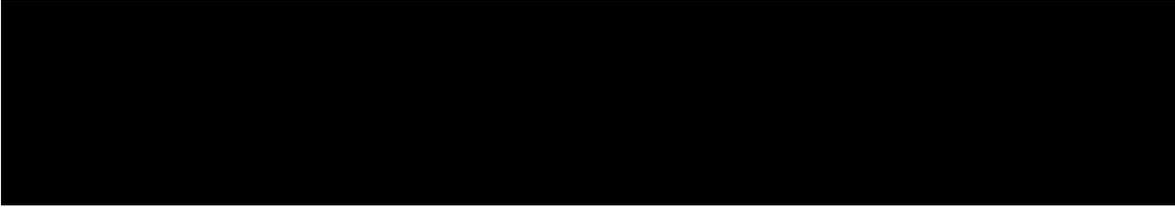
## **1. INTRODUCTION**

### **1.1 PROJECT DESCRIPTION**

The Department of Transportation (DOT) has developed school safety maps for 1,471 schools throughout the City. Schools currently in the program are primarily elementary and intermediate schools with an enrollment of at least 250 students. The safety plans include the designation of official school crosswalks, identified by prominent warning signs and roadway markings. DOT also designates curbside locations for school bus loading and unloading and other parking controls to improve conditions for students. In addition, nearly 350 speed reducers (humps) have been installed in the immediate vicinity of schools.

Under this consultant study, the School Safety Engineering Project, crash data in the vicinity of all program schools was reviewed. As a result, schools were ranked in terms of pedestrian safety, and 135 “priority” schools were identified Citywide. At each of these priority schools, safety improvements are being recommended (e.g., new school crosswalks, new traffic signals and signal timing modifications, new speed reducers). In addition, 32 of these schools will receive further investigation to design physical improvements (e.g., raised center medians, widened sidewalks, “neckdowns” or “bulbouts” at intersections). St. Anselm in the Bronx is one of the 135 “priority” schools identified by the New York City Department of Transportation, Office of School Safety Engineering.

## **2. BACKGROUND—EXISTING CONDITIONS AND ANALYSIS**



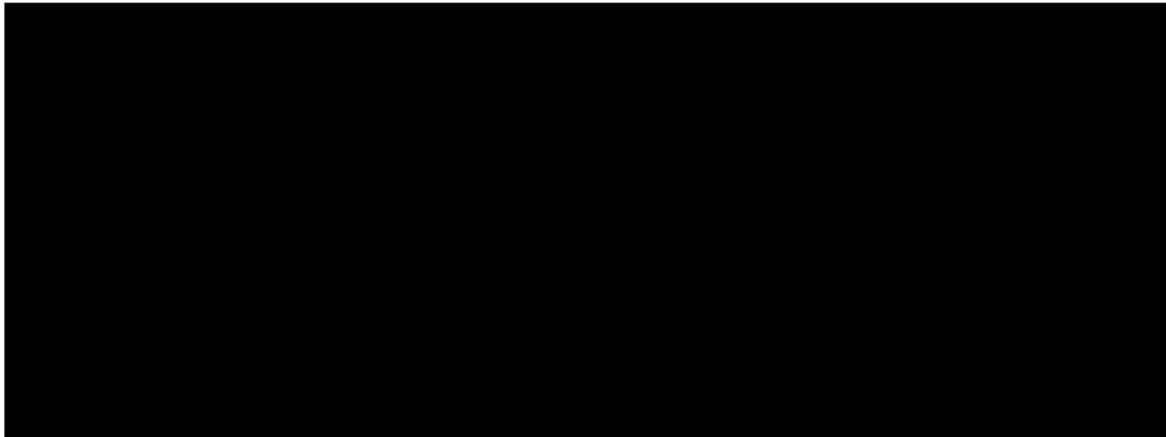
### **2.2 NEIGHBORHOOD DESCRIPTION**

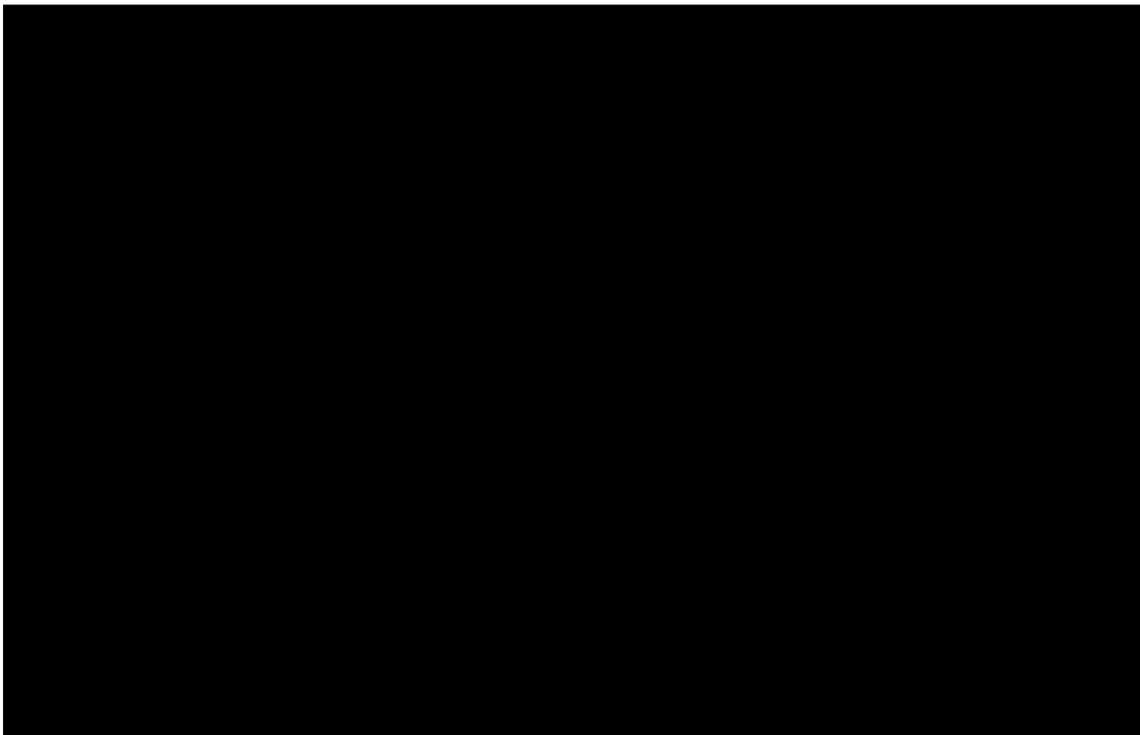
Exhibit 1, at the end of this section, shows an aerial view of the neighborhood surrounding the St. Anselm School, which is generally high density residential in character. St. Anselm is situated on the west side of Tinton Avenue, north of East 152<sup>nd</sup> Street, and is also bounded by Westchester Avenue to the northwest.

### **2.3 MEETING WITH SCHOOL REPRESENTATIVES**

Consultant staff and the Principal of St. Anselm School met at the school in the afternoon of June 7, 2004. According to the Principal, the problems faced by St. Anselm School students are as follows:

- Student safety in general.
- Need for traffic management by a police officer or a safety officer during dismissal time (2:30 – 3:00 p.m.).





## 2.6 PRIMARY MODE OF TRANSPORT TO AND FROM SCHOOL

The school’s catchment area is typically defined by the Department of Education and normally shown in an Exhibit at the end of this section. Since St. Anselm is a private parochial school, the actual “catchment area” is dependent upon other factors, determined by the school administrators. No actual catchment area is available for St. Anselm School, although the school principal reports approximately seventy percent of the students reside within walking distance of the school

Table 1 presents the mode of travel for St. Anselm School as estimated by school representatives in the school questionnaire response.

<b>TABLE 1: MODE OF TRAVEL</b>	<b>STUDENTS (Percentage)</b>
Walk	40%
Driven by car	25%
School bus *	0%
MTA Bus/Subway	35%
Bicycle	0%
<b>TOTAL</b>	<b>100%</b>

\* There are two special education busses (see page 9)

## 2.7 ADDITIONAL STUDENT PEDESTRIAN TRAFFIC GENERATORS

There are several stores in the neighborhood that serve to attract students along East 152<sup>nd</sup> Street between Wales Avenue and Westchester Avenue and along Union Avenue, one block to the east (see Figures 2 and 3). There is another school (P.S. 161 Ponce De Leon) located a short distance away at 628 Tinton Avenue, on the block to the south of

St. Anselm School, that also serves to generate student and vehicular traffic in the neighborhood.



*Figure 2: Stores on East 152nd Street at Wales Avenue near St. Anselm School*



*Figure 3: Deli on Union Avenue at East 152nd Street intersection*

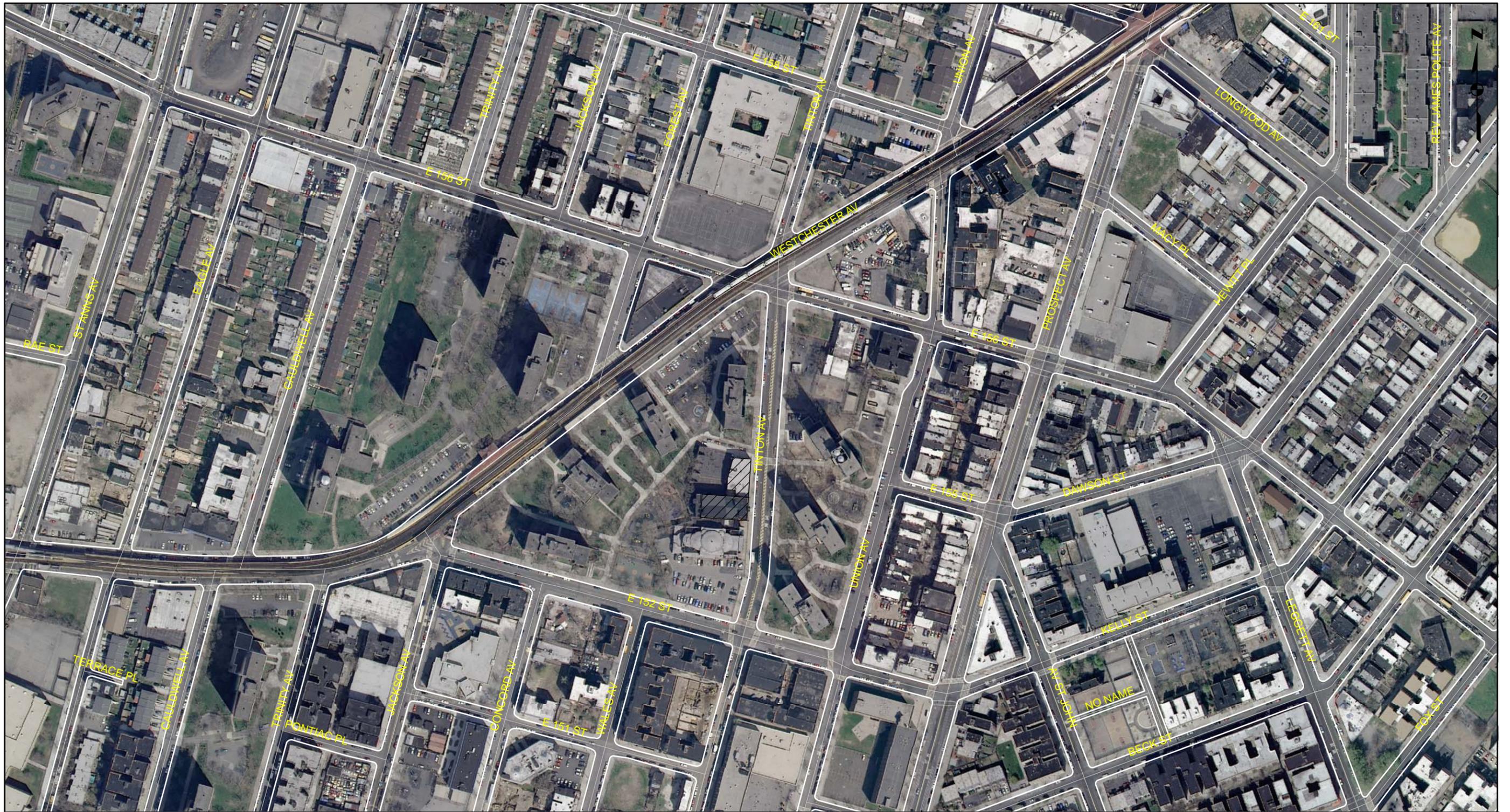
## **2.8 CROSSING GUARD LOCATIONS**

According to school officials, a school crossing guard is assigned to the intersection of Tinton Avenue and East 152<sup>nd</sup> Street (see Figure 4).

The crossing guard location is shown in Exhibit 3 at the end of this section.



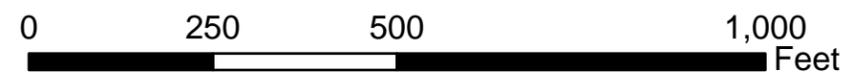
*Figure 4: Looking south at crossing guard at intersection of Tinton Avenue & East 152<sup>nd</sup> Street.*



**EXHIBIT 1**

**ST. ANSELM SCHOOL BRONX**

**AERIAL PHOTOGRAPH**





# School Traffic Safety Map



The School Traffic Safety Map was established to help provide the maximum degree of safety for children going to and from school - by indicating the location of speed reducers, school crosswalks and some traffic control devices. (While virtually all intersections in NYC benefit from traffic control devices - such as stop signs, traffic signals, yield signs, and all way stop signs - this map shows only traffic signals and all way stop signs.) The school crosswalks that are shown are ladder striped and make the crosswalk more visible to drivers and help make the intersection safer. These crosswalks are where school children are recommended to cross.

Note: Every attempt has been made to provide complete and accurate information that is updated regularly. The City's streets are constantly changing and it is not always possible to present information without error.

**LEGEND:**

- SCHOOL LOCATION
- SCHOOL CROSSWALK
- TRAFFIC SIGNAL
- ALL - WAY STOP
- SPEED REDUCER

**Bronx**  
**ST ANSELM SCHOOL**

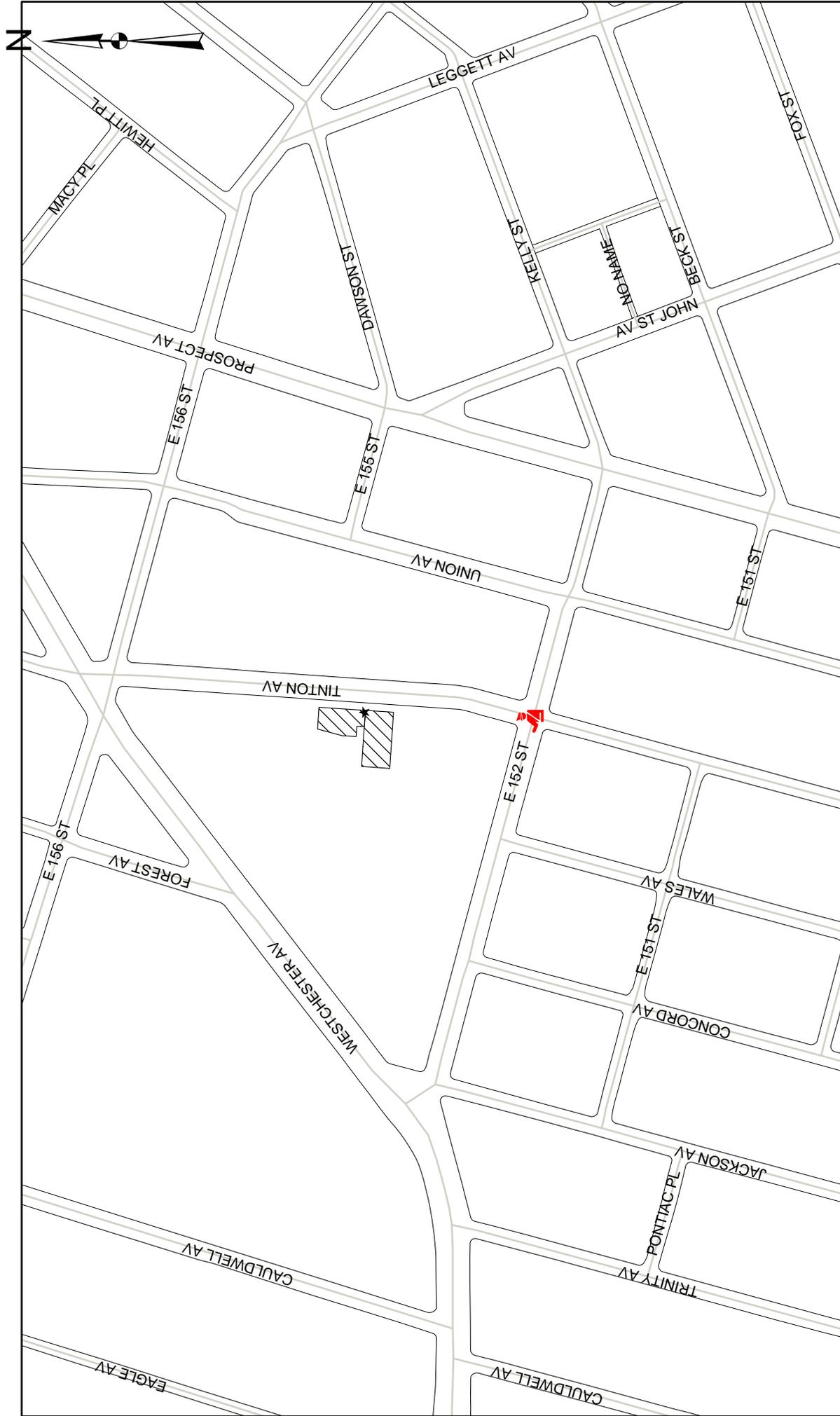
Prepared by the NEW YORK CITY DEPARTMENT OF TRANSPORTATION, Iris Weinshall, COMMISSIONER.

Map created on 11/16/2006

**EXHIBIT 2**

COMM. BOARD: 201  
PRECINCT: 40

1.5.1 7



**LEGEND:**

CROSSING GUARD LOCATION

**EXHIBIT 3**

**ST. ANSELM SCHOOL BRONX**

**CROSSING GUARDS LOCATION**



### 3. TRAFFIC OPERATIONS

#### 3.1 SCHOOL BUS OPERATIONS

No regular school buses serve St. Anselm, but they do have two special education buses.

#### 3.2 PARENT DROP-OFF OPERATIONS

Double parking was observed in both directions on Tinton Avenue during afternoon dismissal. Congestion was observed during the morning arrival period.



*Figure 5: Looking south at congestion and double-parking at dismissal time along Tinton Ave in front of St. Anselm School*



*Figure 6: Looking north along Tinton Avenue at double-parking at dismissal time at St. Anselm School*



*Figure 7: Students using mid-block crosswalk at dismissal time in front of St. Anselm School*

### **3.3 PARKING REGULATIONS**

Parking regulations around the school block are shown in Exhibit 4, at the end of this section.

### **3.4 EXISTING SCHOOL SIGNS AND MARKINGS**

Exhibit 2, at the end of Section 2, shows the existing signals, and school signs and markings assigned to Saint Anselm School. It should be noted that a citywide signage program is currently underway to upgrade school signage to current Federal Manual on Uniform Traffic Control Devices (MUTCD) standards of fluorescent yellow-green accompanied by downward pointing arrows. Signs scheduled to be installed under this program are shown as “existing” in Exhibit 6.



Figure 8: School mid-block crosswalk and sign on Tinton Avenue in front of St. Anselm School

### 3.5 ACCIDENT SUMMARY

The number and severity of accidents at various locations are typical indicators used to help determine the existence and severity of any potentially safety-related situations. Such situations are then examined for possible solutions and/or remedies.

Exhibit 5, at the end of this section, and Table 2 show a summary of accidents, as obtained from the New York State Department of Motor Vehicles (DMV) in the vicinity of Saint Anselm School, for the three-year period from January 1, 1998 through December 1, 2000. The DMV data provides some detail relating to the cause of the accident. Table 3 is a summary of more recent accident data obtained from the New York City Police Department (NYPD). Though current through 2004, the NYPD data does not provide the same level of detail as the DMV data. Further discussions of accidents are included in Section 3.6, Traffic Operations and Issues.

<b>TABLE 2: ACCIDENT SUMMARY OF NYS DMV DATA (1998-2000)</b>				
<b>INTERSECTION</b>	<b>TOTAL ACCIDENTS</b>	<b>PEDESTRIAN ACCIDENTS</b>	<b>PEDESTRIAN FATALITIES</b>	<b>SCHOOL-RELATED ACCIDENTS*</b>
Westchester Ave. & Tinton Ave.	4	0	0	0
Westchester Ave. & E. 156th St.	22	1	0	1
East 156th St. & Tinton Ave.	6	2	0	0
Westchester Ave. & Forest Ave.	6	1	0	1
East 152 <sup>nd</sup> St. & Concord Ave.	0	0	0	0
East 152 <sup>nd</sup> St. & Wales Ave.	4	1	0	0
East 152 <sup>nd</sup> St. & Tinton Ave.	5	1	0	1
East 152 <sup>nd</sup> St. & Union Ave.	3	0	0	0
East 152 <sup>nd</sup> St. & Prospect Ave.	10	2	0	0
<b>TOTAL</b>	<b>60</b>	<b>8</b>	<b>0</b>	<b>3</b>

**TABLE 3: ACCIDENT SUMMARY OF NYPD DATA (2001-2004)**

<b>INTERSECTION</b>	<b>TOTAL ACCIDENTS</b>	<b>PEDESTRIAN ACCIDENTS</b>	<b>PEDESTRIAN FATALITIES</b>	<b>SCHOOL-RELATED ACCIDENTS*</b>
Westchester Ave. & Tinton Ave.	16	1	0	0
Westchester Ave. & E. 156th St.	29	5	0	1
East 156th St. & Tinton Ave.	16	2	0	0
Westchester Ave. & Forest Ave.	24	6	0	1
East 152 <sup>nd</sup> St. & Concord Ave.	6	2	0	0
East 152 <sup>nd</sup> St. & Wales Ave.	9	0	0	0
East 152 <sup>nd</sup> St. & Tinton Ave.	12	2	0	0
East 152 <sup>nd</sup> St. & Union Ave.	5	0	0	0
East 152 <sup>nd</sup> St. & Prospect Ave.	3	1	0	0
<b>TOTAL</b>	<b>120</b>	<b>19</b>	<b>0</b>	<b>2</b>

\* School-related accidents are defined as accidents involving school-age pedestrians (age 4 – 14), occurring on weekdays during the school year.

### **3.6 TRAFFIC OPERATIONS AND ISSUES**

The specific roadway-related physical conditions for each location within the school's vicinity directly affect the safety and efficiency of operations for both pedestrian and vehicular traffic. These specific conditions are required information when analyzing a location, and are the starting point for any revisions that may be considered to improve safety and/or efficiency.

The following sub-sections outline the physical conditions and issues concerning traffic operations and accidents at the intersections in the vicinity of St. Anselm School.

The first intersection to be discussed is a location where three roadways intersect, Westchester Avenue, Tinton Avenue, and East 156<sup>th</sup> Street. The accident database contains three separate nodes for this location, identified as Westchester Avenue & Tinton Avenue, Westchester Avenue & East 156<sup>th</sup> Street, and East 156<sup>th</sup> Street & Tinton Avenue (see Tables 2 and 3, and Exhibit 5). The first three subsections will therefore treat them similarly, as three separate intersections, even though the location appears to be one large intersection when viewed on-site.

#### ***3.6.1 Westchester Avenue & Tinton Avenue***

The first node of this large signalized intersection of Westchester Avenue/ Tinton Avenue/ East 156<sup>th</sup> Street consists of northeast leg of Westchester Avenue and north leg of Tinton Avenue. There is a pedestrian crosswalk located across the north leg of Tinton Avenue and a school crosswalk across the northeast leg of Westchester Avenue.

Westchester Avenue is a two-way street with two travel lanes and a parking lane on each side of the roadway. Westchester Avenue also has an elevated train (No. 2 Train, Seventh Avenue Express and No. 5 Train Lexington Avenue Express) running over the center of the roadway. The supporting columns for the train tracks are located so that they provide an inner and an outer lane for each direction of travel (see Figures 9 and 10). Tinton Avenue is two-way street with one travel lane and a parking lane on each side of

the roadway in front of the school. There is a painted median along the center of the roadway on Tinton Avenue, separating northbound and southbound traffic. This median further serves as a speed reducer by narrowing the traffic lanes (see Figure 6).

This intersection has been the site of four (4) accidents between 1998 and 2000 with no pedestrian accidents. The NYPD accident data (Table 3) shows sixteen (16) accidents between 2001 and 2004 including one pedestrian accident that was not a school-related accident.



*Figure 9: Looking south on Tinton Ave toward Westchester Ave /East 156<sup>th</sup> Street intersection*

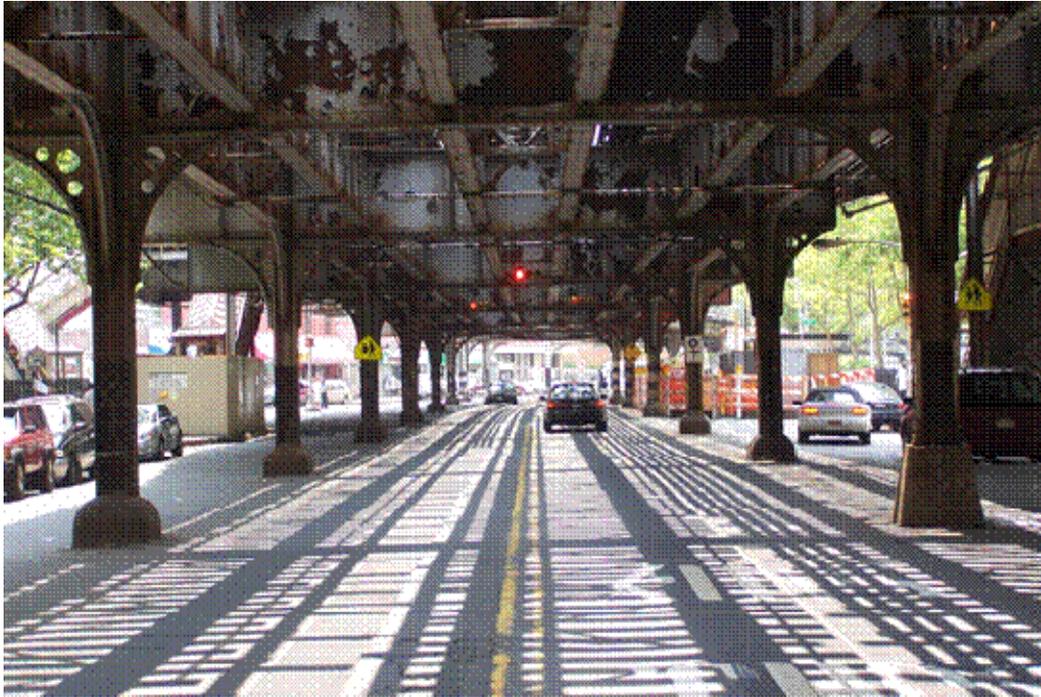


Figure 10: Looking west along Westchester Avenue toward Tinton Ave / East 156<sup>th</sup> St intersection

### 3.6.2 Westchester Avenue & East 156<sup>th</sup> Street

The second node of this signalized intersection of Westchester Avenue/ Tinton Avenue/ East 156<sup>th</sup> Street consists of southwest leg of Westchester Avenue and west leg of East 156<sup>th</sup> Street. There is a school crosswalk across the southwest leg of Westchester Avenue and a pedestrian crosswalk across the west leg of East 156<sup>th</sup> Street. Both of these roadways are designated as east-west roadways, although Westchester Avenue has a southwest-northeast orientation.

Westchester Avenue is a two-way street with two travel lanes and a parking lane on each side of the roadway. Westchester Avenue also has an elevated train (No. 2 Train, Seventh Avenue Express and No. 5 Train, Lexington Avenue Express) running over the center of the roadway. The supports for the train are located so that they provide an inner and an outer lane for each direction of travel (see Figures 10 and 11). East 156<sup>th</sup> Street is a two-way street, with one travel lane and a parking lane on each side of the roadway. It is generally residential in character (see Figure 11).

This intersection has been the site of twenty-two (22) accidents between 1998 and 2000, one (1) of which was a pedestrian accident that was also a school-related accident. The school-related accident occurred on Thursday, February 5, 1998 at 8:00 am and involved a thirteen-year-old pedestrian, whose actions were not reported. The specific accident location was also not reported. The weather was rainy and the road was wet. The reported type of injury was “possible injury.” The NYPD accident data (Table 3) shows twenty-nine (29) accidents between 2001 and 2004 including five (5) pedestrian accidents, one (1) of which was a school-related accident. No further information about the school-related accident is available. There were no pedestrian fatalities during the same four-year period.



*Figure 11: Looking west on East 156th Street toward Westchester Avenue/Tinton Avenue intersection*

### 3.6.3 Tinton Avenue & East 156<sup>th</sup> Street

The third node of this large signalized intersection of Westchester Avenue/ Tinton Avenue/ East 156<sup>th</sup> Street consist of south leg of Tinton Avenue and east leg of East 156<sup>th</sup> Street, with school crosswalks located across the east leg of East 156<sup>th</sup> Street and the south leg of Tinton Avenue.

Tinton Avenue is two-way street with one travel lane and a parking lane on each side of the roadway. East 156<sup>th</sup> Street is a two-way street, with one travel lane and a parking lane on each side of the roadway. It is generally residential in character (see Figures 11 and 12).

This intersection has been the site of six (6) accidents between 1998 and 2000; two (2) of these were pedestrian accidents, neither of which was a school-related accident. The NYPD accident data (Table 3) shows sixteen (16) accidents including two (2) pedestrian accidents, neither of which was school-related, between 2001 and 2004.



*Figure 12: Looking east on East 156th Street toward Tinton Avenue/Westchester Avenue intersection*

#### 3.6.4 Tinton Avenue & East 152<sup>nd</sup> Street

This is an unsignalized, all-way stop-controlled intersection, with school crosswalks located across all legs.

Tinton Avenue, north of East 152<sup>nd</sup> Street, is a two-way street with one travel lane and a parking lane on each side of the roadway. South of East 152<sup>nd</sup> Street, Tinton Avenue is a one-way southbound street (away from the intersection) with one travel lane and parking on both sides of the roadway. East 152<sup>nd</sup> Street is a one-way eastbound street, with three moving lanes and parking on both sides of the roadway (see Figures 13 and 14).

This intersection has been the site of five (5) accidents between 1998 and 2000; one (1) of these was a pedestrian accident that was also a school-related accident. In the school-related accident, an eleven-year-old pedestrian sustained a “non-incapacitating injury” on Friday, May 1, 1998 at 3:00 pm. The pedestrian was reported as crossing against the signal, although there is no signal at this location. The light condition was daylight, the road was dry, and the weather was cloudy. The NYPD accident data (Table 3) shows twelve (12) accidents during the four-year period between 2001 and 2004 including two (2) pedestrian accidents, neither of which was a school-related accident.



*Figure 13: Looking east along East 152<sup>nd</sup> Street toward Tinton Avenue intersection*



*Figure 14: Looking north on Tinton Avenue at intersection of East 152<sup>nd</sup> Street*

### 3.6.5 Westchester Avenue & Forest Avenue

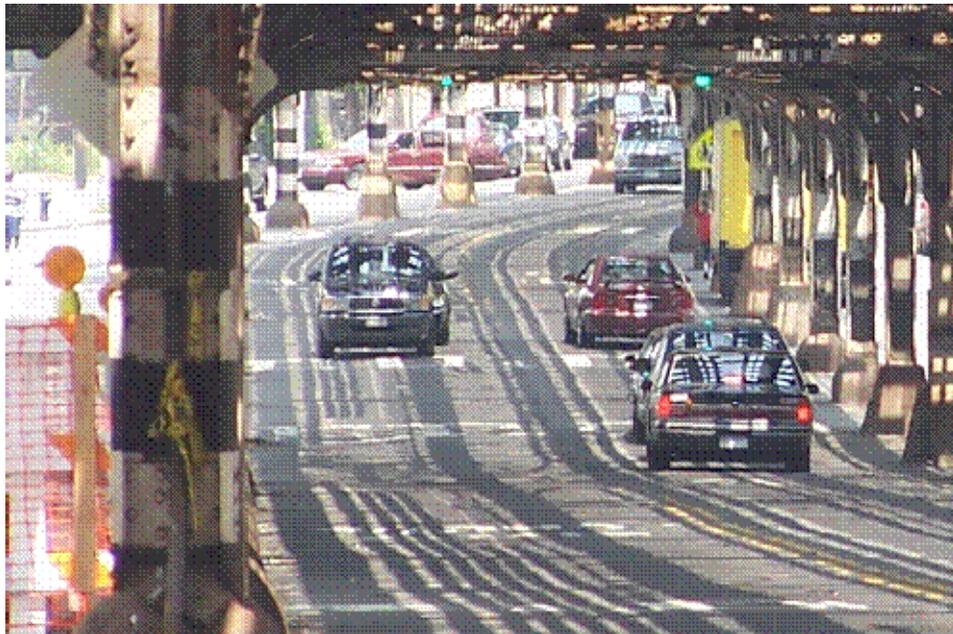
This is an unsignalized Y-type intersection, with school crosswalks located across the north leg of Forest Avenue and both the northeast and southwest legs of Westchester Avenue. A stop sign exists at the southbound approach of Forest Avenue.

Westchester Avenue is a two-way street with two travel lanes and a parking lane on each side of the roadway. Westchester Avenue also has an elevated train (No. 2 Train,

Seventh Avenue Express and No. 5 Train Lexington Avenue Express) running over the center of the roadway. The supports for the train are located so that they provide an inner and an outer lane for each direction of travel (see Figures 10 and 15). Forest Avenue is a one-way southbound street with one travel lane and parking on both sides of the roadway.

This intersection has been the site of six (6) accidents between 1998 and 2000; one (1) of which was a pedestrian accident, which was also a school-related accident. There were no pedestrian fatalities during the same three-year period (Table 2). In the school-related accident, three pedestrians, six, nine and seventeen years old, each sustained a “possible injury” on Wednesday, December 1, 1999 at 5:00 pm. The three pedestrian’s actions were reported as “crossing, no signal, marked crosswalk.” The light condition was daylight, the road was dry, and the weather was clear. The NYPD accident data (Table 3) shows twenty-four (24) accidents between 2001 and 2004. There were six (6) pedestrian accidents during the same four-year periods including one school-related accident. No further information on the school-related accident is available. There were no fatalities during this time period.

A Traffic Signal Warrant Analysis was performed subsequent to a request for a traffic signal at his location. The signal was approved on November 6, 2003 as a result of that investigation, and a traffic signal was installed on March 26, 2004.



*Figure 15: Looking northeast along Westchester Avenue toward Forest Avenue intersection*

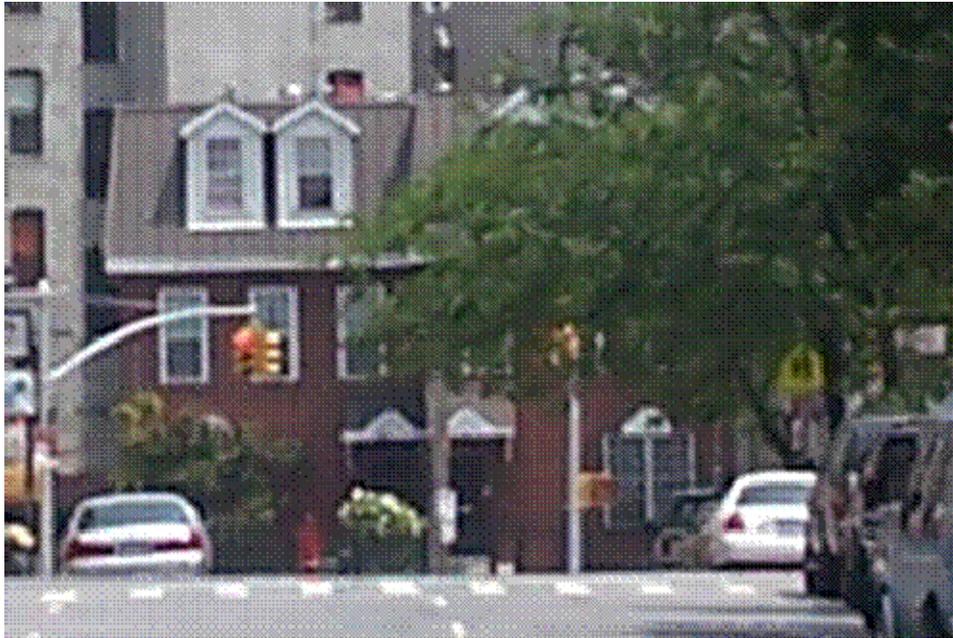
### 3.6.6 Prospect Avenue & East 152<sup>nd</sup> Street / Kelly Street

This is a signalized intersection with a school crosswalk located across the north leg of Prospect Avenue and also across both the west leg of East 152nd Street and the east leg of Kelly Street.

Prospect Avenue is a two-way street with a travel lane, a bicycle lane, and a parking lane on each side of the roadway, and a painted median separating the bicycle lane and the

travel lane in each direction (see Figure 17). East 152<sup>nd</sup> Street is a one-way eastbound street, with one traffic lane and parking on both sides of the roadway between Union Avenue and Prospect Avenue (see Figure 16). Kelly Street is also a one-way eastbound street, with one traffic lane and parking on both sides of the roadway.

This intersection has been the site of ten (10) accidents between 1998 and 2000; two (2) of these were pedestrian accidents, neither of which was a school-related accident. The NYPD accident data (Table 3) shows three (3) accidents between 2001 and 2004 including one pedestrian accident that was a not school-related accident.



*Figure 16: Looking east along East 152nd Street across Union Avenue toward Prospect Avenue*



*Figure 17: Looking north along Prospect Avenue toward intersection of East 152nd Street*

### 3.6.6 Union Avenue & East 152<sup>nd</sup> Street

This is a signalized intersection with a school crosswalk located across the west leg of East 152<sup>nd</sup> Street and across the south leg of Union Avenue. There are no crosswalks at the north leg of Union Avenue and east leg of East 152<sup>nd</sup> Street.

Union Avenue is a one-way northbound street with a wide travel lane and parking on both sides of the roadway. There is angle parking along the west side of Union Avenue between East 152<sup>nd</sup> Street and East 156<sup>th</sup> Street. East 152<sup>nd</sup> Street is a one-way eastbound street, with three travel lanes and parking on both sides of the roadway.

This intersection has been the site of three (3) accidents between 1998 and 2000; with no pedestrian accident. The NYPD accident data (Table 3) shows five (5) accidents between 2001 and 2004. There were no pedestrian accidents during the same four-year period.

### **3.7 SIGNAL TIMING**

Pedestrian crossing times were field-verified for crosswalks at signalized intersections in the vicinity of St. Anselm, and were found to be adequate based upon a child pedestrian walking at the rate of 3 feet per second. Signal timings are shown in Table 4.

TABLE 4: PEDESTRIAN CROSSING TIME AT SIGNALIZED INTERSECTIONS				
INTERSECTION	CROSSWALK LENGTH (FEET)	PEDESTRIAN TIME ACTUAL (SECONDS)	PEDESTRIAN TIME REQUIRED (SECONDS)	TIMING ADJUSTMENT REQUIRED?
Westchester Ave & Tinton Ave/East 156 <sup>th</sup> St				
crossing Westchester Avenue	98	40	36	No
crossing Tinton Ave/ East 156 <sup>th</sup> St	48	47	20	No
Prospect Ave & East 152 <sup>nd</sup> St				
crossing Prospect Ave	66	26	25	No
crossing East 152 <sup>nd</sup> St	38	31	17	No

*Note: A rate of 3 ft/sec plus 3 seconds reaction time was utilized as the child pedestrian walking rate.*

### 3.8 PHYSICAL CONDITIONS

#### 3.8.1 Roadways and Sidewalks

The sidewalks in the vicinity of St. Anselm School are generally ten to twelve feet wide and in fair condition (see Figure 18).

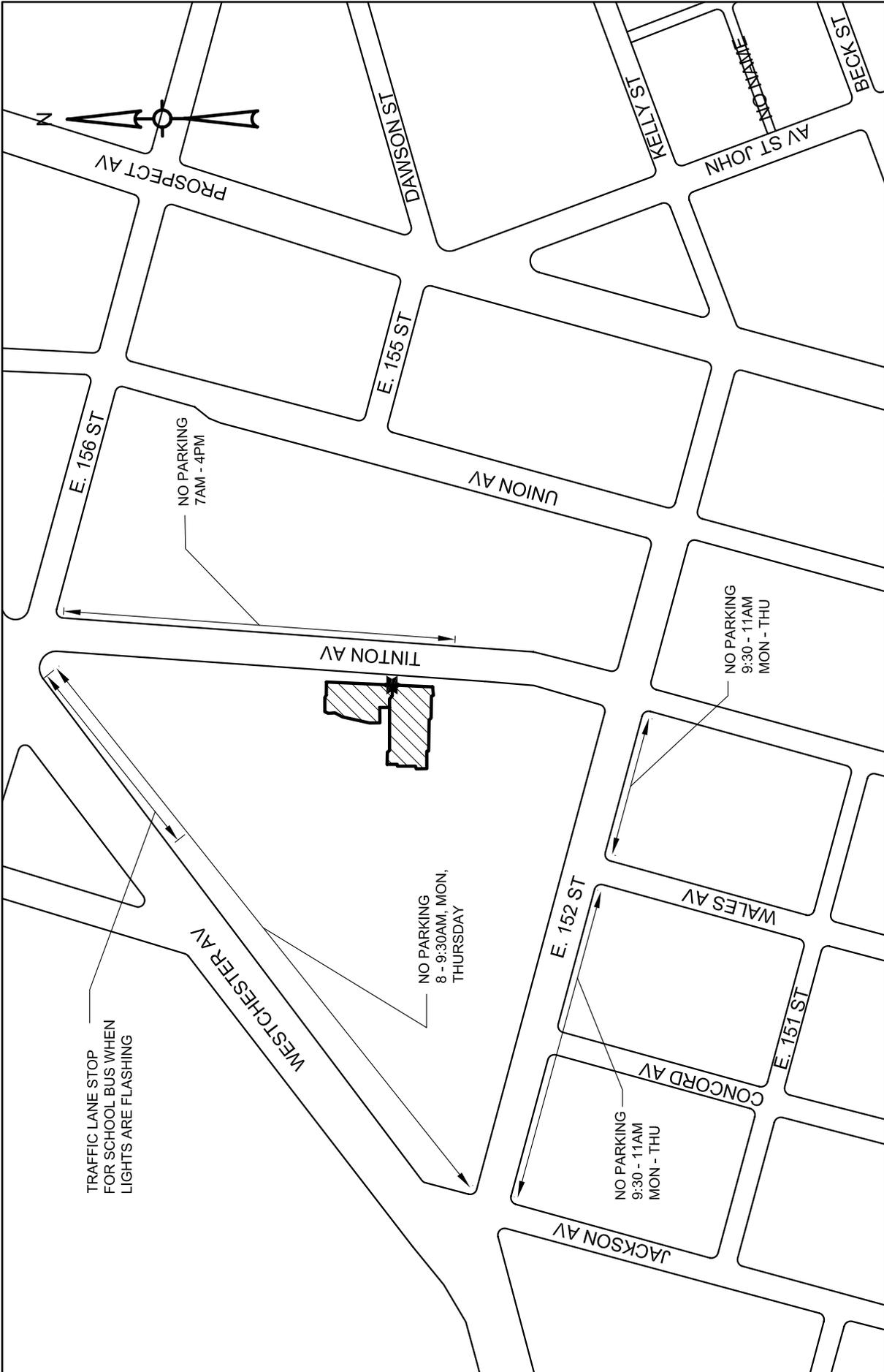


*Figure 18: Looking south along sidewalk in area of St. Anselm School on Tinton Avenue*

#### 3.8.2 Pedestrian Ramps

Overall, pedestrian ramps in the area of the school seem to be standard. With the following exceptions where the pedestrian ramps are missing: the intersection of Westchester Avenue & Forest Avenue where the pedestrian ramps are missing on the

southeast side of Westchester Avenue across from Forest Avenue; the east side of Prospect Avenue on the southeast corner of Kelly Street; and the pedestrian ramp on the west side of Tinton Avenue for the mid-block crosswalk in front of the school.



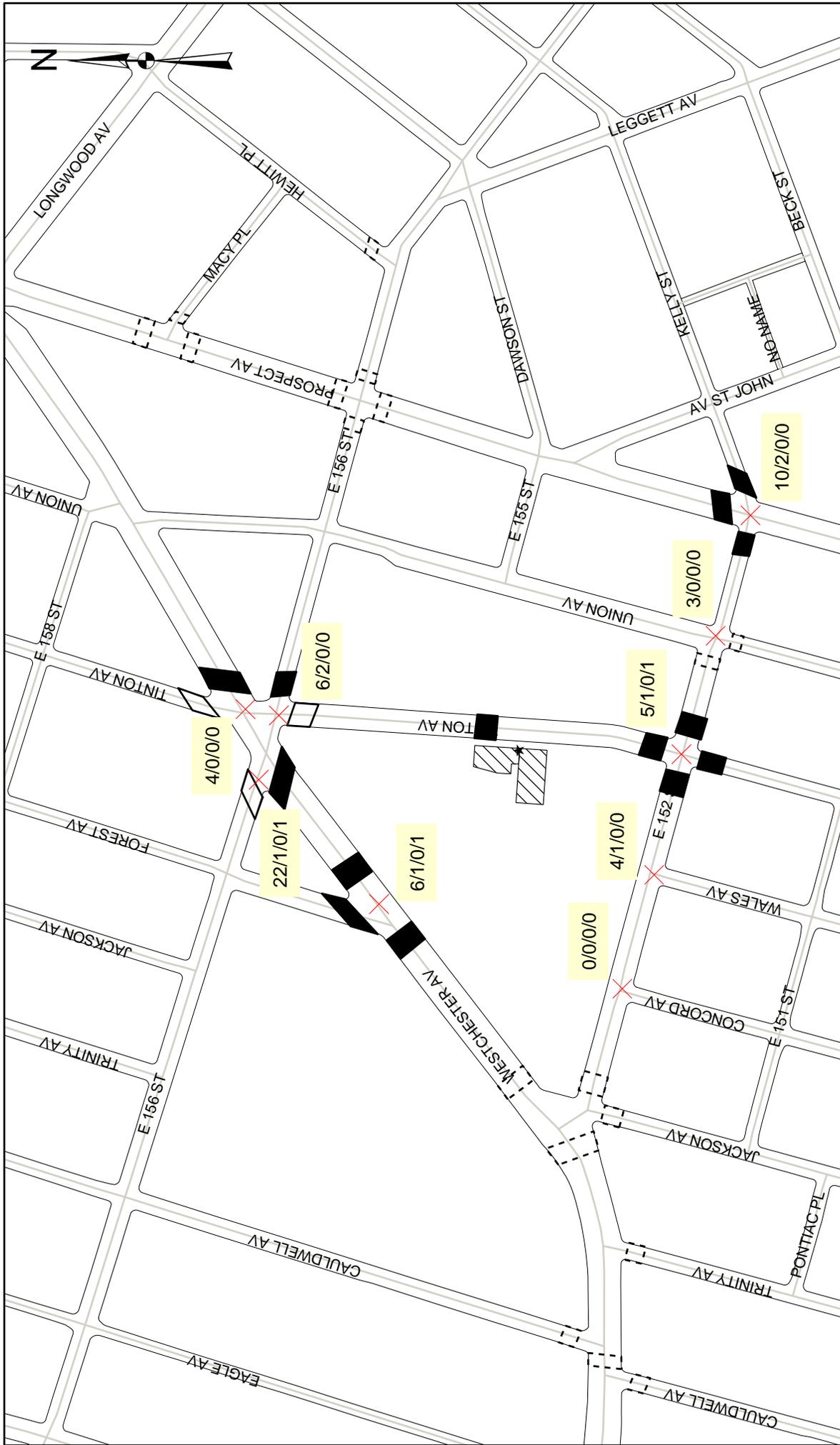
**EXHIBIT 4**  
**ST. ANSELM SCHOOL BRONX**

**LEGEND:**

- ★ MAIN ENTRANCE

0 200 400 FEET

EXISTING PARKING REGULATIONS



**LEGEND:**

ACCIDENT LOCATION

SCHOOL CROSSWALK

SCHOOL CROSSWALK ASSIGNED TO ANOTHER SCHOOL

X/X/X/X  
 TOTAL ACCD / PED ACCD / PED FATAL / SCHOOL PED ACCD



**EXHIBIT 5**

**ST. ANSELM SCHOOL BRONX**

**ACCIDENT SUMMARY (1998-2000)**

## 4. PROPOSED MEASURES TO IMPROVE SCHOOL PEDESTRIAN SAFETY

This section describes the proposed measures to improve student pedestrian safety around Saint Anselm School. The proposed recommendations are divided into short-term and long-term measures. Short-term measures are those that potentially can be performed in-house. Long-term measures involve capital improvements. Each of the short- and long-term measures recommended for Saint Anselm School is discussed as follows, and is shown in more detail in Exhibit 6 at the end of this section.

### 4.1 SHORT-TERM MEASURES

➤ Install “No Standing 7AM-4PM School Days” sign

Replace the existing “No Parking 7AM - 4PM School Days” signs with “No Standing 7AM - 4PM School Days” in front of the school and in particular at the main entrance of the school. (This is a typical requirement for all NYC schools in order to provide for emergency access to and from the school.)

➤ Place advanced stop bar before school crosswalk

The MUTCD and New York City DOT standard for placement of a stop bar is four feet (4’) in advance of a marked crosswalk. At signalized intersections and mid-block crossings, the vehicle stop line can be moved farther back from the pedestrian crosswalk.

For school crosswalks with significant potential for vehicular/pedestrian conflicts, it is recommended that the advance stop bar be placed ten feet (10’) in advance of the crosswalk to maximize the safety benefit for school-aged pedestrians. (This would improve visibility of pedestrians to motorists, and allow pedestrians to proceed in a crosswalk before motor vehicles turn.)

Ten feet (10’) advanced stop bars before school crosswalks are recommended on the following approaches of signalized intersections surrounding Saint Anselm:

- Westchester Avenue/Tinton Avenue/East 156<sup>th</sup> Street: Northbound approach of Tinton Avenue, westbound approach of East 156<sup>th</sup> Street, and northbound and southbound approaches of Westchester Avenue.
- Mid-block pedestrian crossing on Tinton Avenue: Northbound and southbound approaches of Tinton Avenue at mid-block signalized pedestrian crossing.
- Prospect Avenue/East 152<sup>nd</sup> Street: Southbound approach of Prospect Avenue and eastbound approach of East 152<sup>nd</sup> Street.

➤ Install Pedestrian Ramps

The pedestrian ramp on the west side of Tinton Avenue for the mid-block crosswalk in front of the school is missing.

The following is therefore recommended:

- A pedestrian ramp be installed on the west side of Tinton Avenue for the mid-block crosswalk in front of the school

The pedestrian ramp on the east side of Prospect Avenue for the pedestrian crosswalk on the south side of East 152<sup>nd</sup> Street / Kelly Street is missing.

The following is therefore recommended:

- A pedestrian ramp be installed on the east side of Prospect Avenue for the pedestrian crosswalk on the south side of Kelly Street.

The pedestrian ramp on the east side of Westchester Avenue for the pedestrian crosswalk on the east side of Forest Avenue is missing.

The following is therefore recommended:

- A pedestrian ramp be installed on the east side of Westchester Avenue for the pedestrian crosswalk on the east side of Forest Avenue.

➤ Relocate Light Pole

There is a light pole obstructing the path for the mid-block crosswalk in front of the school.

The following is therefore recommended:

- The light pole on the west side of Tinton Avenue at the mid-block crosswalk in front of Saint Anselm School be relocated from the crosswalk path.

➤ Normalize geometry of Forest Avenue at Westchester Avenue

Forest Avenue is a very wide one-way southbound roadway and has unnecessary roadway space at its intersection with Westchester Avenue. The following is therefore recommended:

- Stripe unnecessary roadway space to shorten the crossing distance and calm vehicles. In addition, provide angle parking along the west curbside of Forest Avenue, as shown in Exhibit 6.

#### **4.2 LONG-TERM MEASURES**

➤ Consider refuge islands at the following locations as shown in Exhibit 6:

There is a striped median along the center of Tinton Avenue between East 152<sup>nd</sup> Street and East 156<sup>th</sup> Street, separating northbound and southbound traffic. It is therefore recommended to:

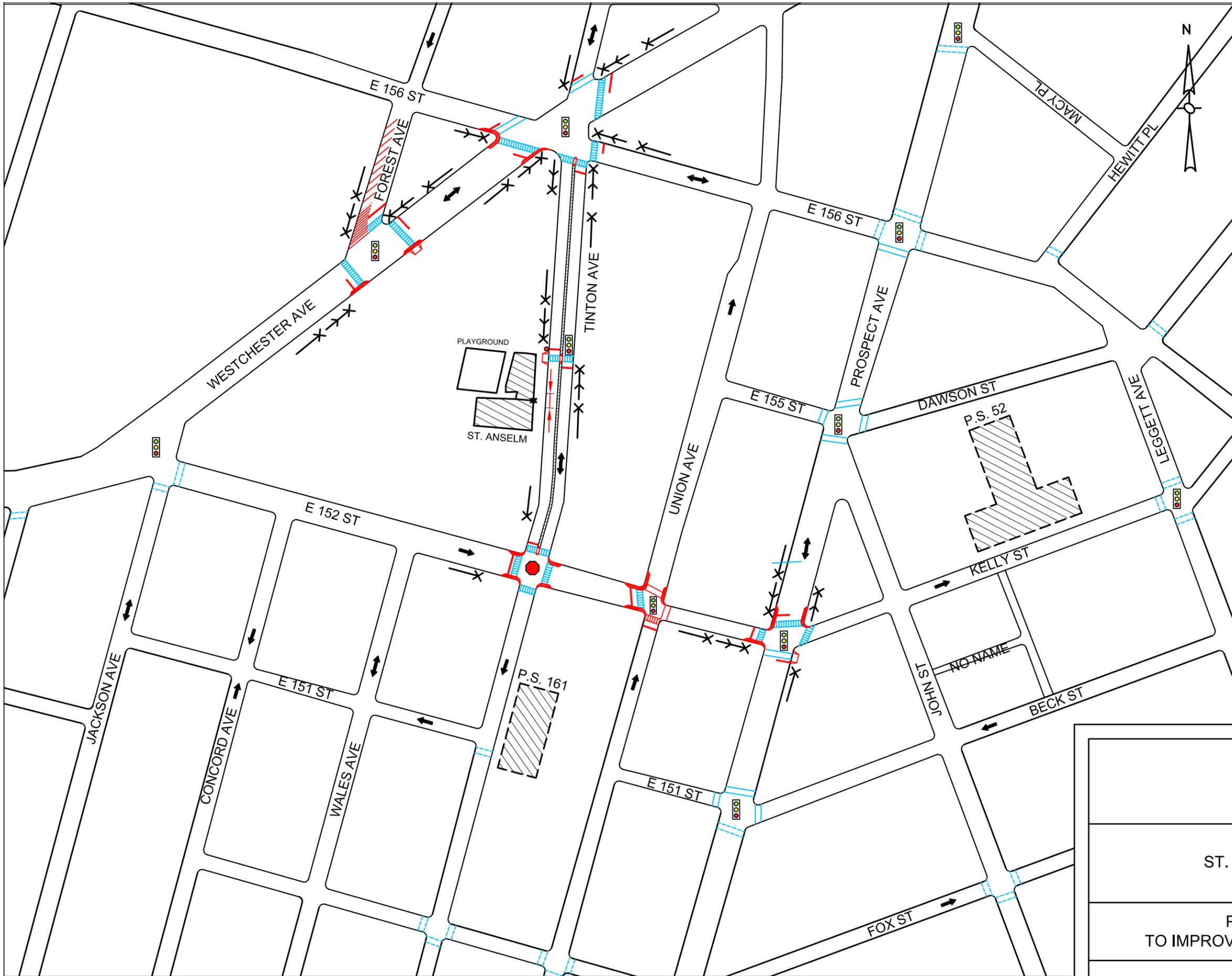
- Provide pedestrian refuge island at the north leg of Tinton Avenue at its intersection with East 152<sup>nd</sup> Street.
- Provide pedestrian refuge island at the mid-block pedestrian crossing on Tinton Avenue.
- Provide pedestrian refuge island at the south leg of Tinton Avenue at its intersection with East 156<sup>th</sup> Street/Westchester Avenue.

The refuge islands with extended medians will provide a refuge for pedestrians who do not complete the crossing during the flashing “Don’t Walk” indication. The proposed median should be at least 5-foot wide, should extend beyond the crosswalk, and should have at least 5-feet at grade cut through section. These medians are not proposed where they would hinder the ability of vehicles to turn. Final details pertaining to proposed refuge islands and curb extensions will be developed during Final Design.

➤ Consider curb extension at the following locations:

- Provide curb extensions (neckdowns) at all four corners of East 152<sup>nd</sup> Street at its intersection with Tinton Avenue.
- Extend the east and west sidewalks by six (6) feet at the mid-block pedestrian crossing on Tinton Avenue in order to reduce the crossing distance.
- Provide curb extensions (neckdowns) at northwest and southwest, and northeast corners of Union Avenue and East 152<sup>nd</sup> Street intersection.
- Provide curb extension (neckdowns) at the northwest, southwest, and northeast corners of East 152<sup>nd</sup> Street and Prospect Street intersection.
- Provide curb extensions (neckdowns) at the southeast and southwest corners of Westchester Avenue at its intersection with E. 156<sup>th</sup> Street.

Curb extensions (neckdowns) should be installed at the corners as shown in Exhibit 6. The purpose of the curb extension is to provide additional reservoir space for pedestrian, to shorten the crossing distance for pedestrians, and to reduce the speed of vehicles approaching and turning on school crosswalks. The curb extension will not eliminate or reduce the width of any travel lanes. Curb extensions are not proposed where they would hinder the ability of a vehicle to turn.



- LEGEND**
- ★ MAIN ENTRANCE
  - OTHER ENTRANCES
  - ↔ EXISTING TRAVEL DIRECTION
  - X EXISTING ADVANCE WARNING SIGN
  - X EXISTING SCHOOL CROSSWALK WARNING ASSEMBLY
  - ▨ EXISTING STRIPED MEDIAN
  - ▤ EXISTING SCHOOL CROSSWALK
  - EXISTING PEDESTRIAN CROSSWALK
  - - - EXISTING SCHOOL CROSSWALK ASSOCIATED WITH ANOTHER SCHOOL
  - 🚦 PROPOSED TRAFFIC SIGN
  - 🚶 PROPOSED PEDESTRIAN RAMP
  - PROPOSED STOP LINE IN ADVANCE OF SCHOOL CROSSWALK
  - 🚫 PROPOSED "NO STANDING 7:00AM - 4:00PM SCHOOL DAYS"
  - 📍 LIGHT POLE TO BE RELOCATED
  - 🛑 EXISTING ALL WAY STOP LOCATION
  - 🚦 EXISTING SIGNALIZED LOCATION
  - 🛤️ PROPOSED CONCRETE REFUGE ISLAND
  - 📏 PROPOSED CURB EXTENSION (NECKDOWN)

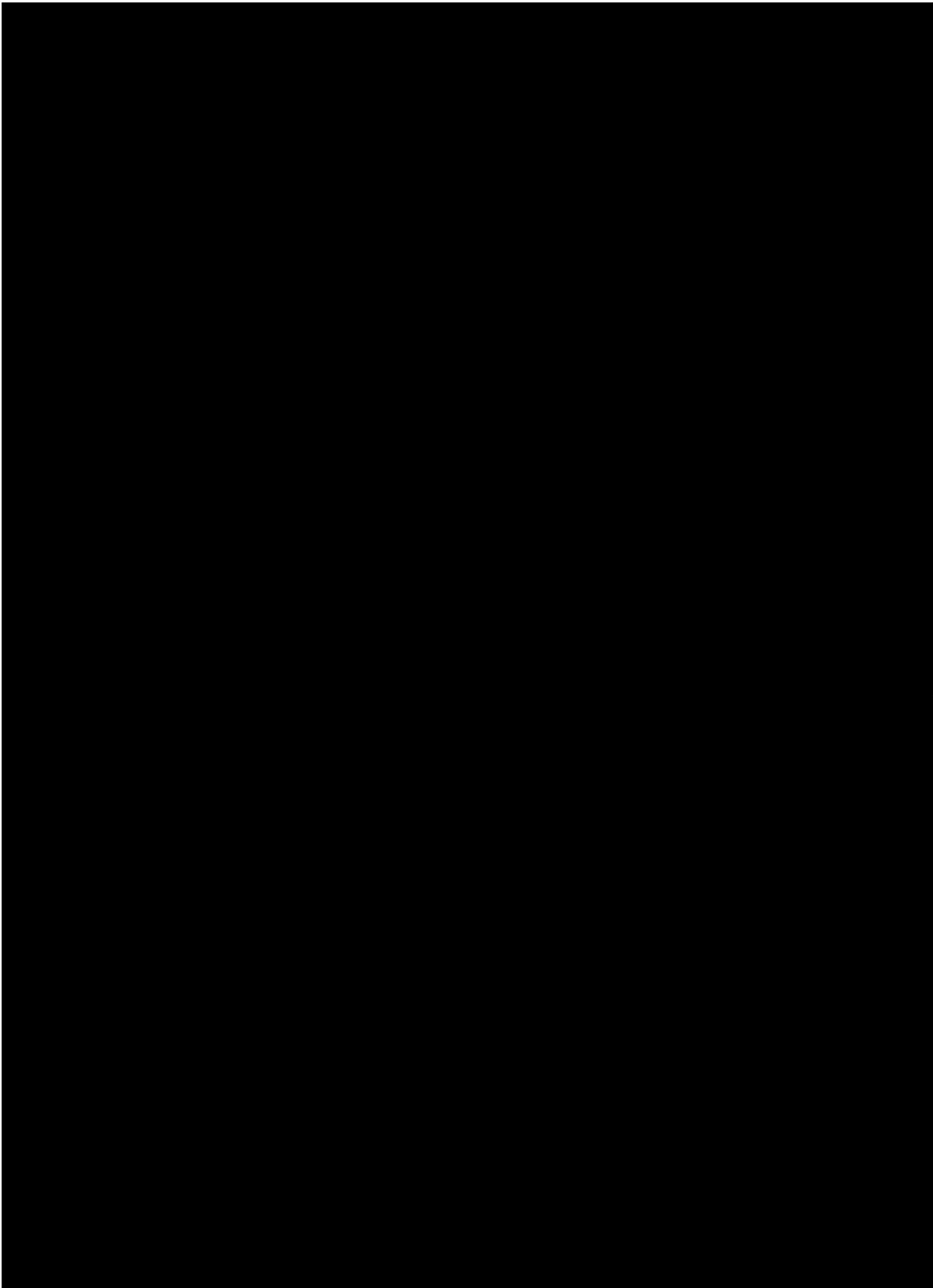
1" = 200'

EXHIBIT 6

ST. ANSELM SCHOOL BRONX

PROPOSED MEASURES TO IMPROVE SCHOOL PEDESTRIAN SAFETY

# APPENDIX

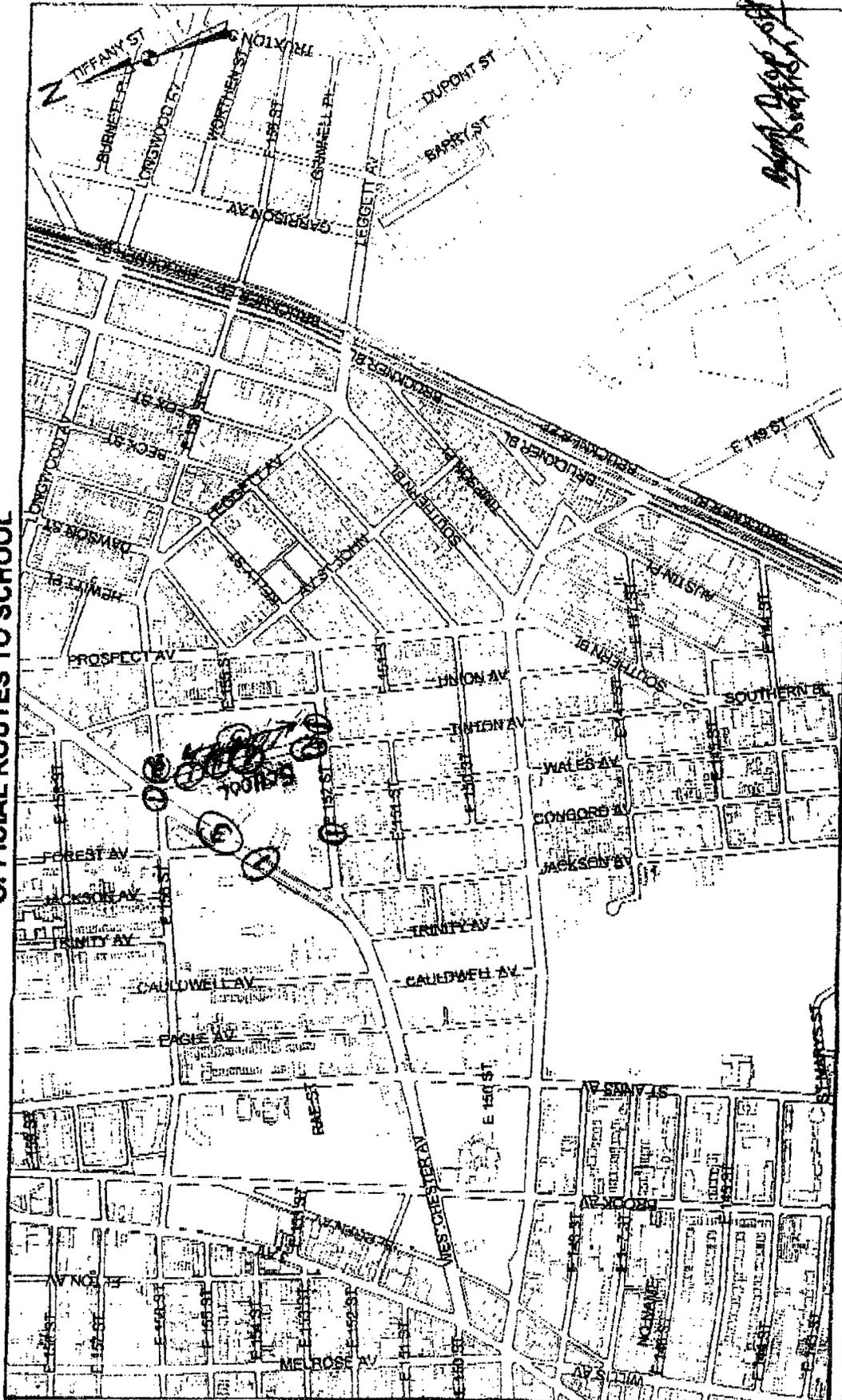


150

NEW YORK CITY  
DEPT. OF TRANSPORTATION

**TRAFFIC SAFETY PLAN  
OFFICIAL ROUTES TO SCHOOL**

BUREAU OF TRAFFIC



The TRAFFIC SAFETY PLAN shown on this map was established to provide the maximum degree of safety for children going to and from school. It is required that all children follow the prescribed routes and use the designated crosswalks.

- LEGEND:**
- TRAFFIC FLOW
  - ROUTE TO SCHOOL
  - ADV. WARNING SIGN
  - SCHOOL LOCATION
  - MAIN SCHOOL ENTRANCE
  - OTHER SCHOOL ENTRANCES
  - SCHOOL X-WALK
  - FED. X-WALK
  - STOP LINE
  - X-WALKS ASSOCIATED WITH OTHER SCHOOLS
  - BREED HUMP
  - TRAFFIC SIGNAL
  - ALL-WAY STOP
  - 2-WAY STOP

**ST ANSELM SCHOOL  
(4)**

Prepared by the NEW YORK CITY DEPARTMENT OF TRANSPORTATION  
POLICE OFFICIALS in cooperation with SCHOOL and

ORIG. DATE: 08/26/58  
DUS. COUNTY: 34/2312  
REVISIONS: \_\_\_\_\_

DRAWING NO. 1  
CC. 1234  
MB. 5534  
CONVA. BOARD BOROUGH 4 PRECINCT 12



