

2. Maspeth Industrial Park

Land Use

The Maspeth study area includes the area between the Maspeth Creek and Rust Street north of the intersection of Metropolitan and Flushing Avenues (see Figure 6-25). The study area is located within the Maspeth Industrial Park, just east of the border between Kings County and Queens County. 54th, 55th, 47th, and 48th Streets as well as Rust Street are designated Local Truck Routes within the study area. Grand and Flushing Avenues are designated Through Truck Routes within the study area and Metropolitan Avenue is a designated Local Truck Route.

Due to the amount of industrial uses within the study area, there is no one site within the study area that is a truck generator in itself but rather, for this analysis, two smaller sections of the study area are considered as the truck generator site. The first section is the area south of Grand Avenue, north of Metropolitan Avenue, and between the Maspeth Creek and 54th Street. The second section is the area north of Grand Avenue, south of 48th Street between the Maspeth Creek and Rust Street.

The entire truck generator site is comprised of large parcels of land developed with factory and warehouse buildings with a substantial portion used for parking and loading trucks. The industrial uses within the truck generator site include food and beverage distributors, textile manufacturers, automobile repair facilities, and freight companies.

East of the truck generator site, the study area is a mix of light industrial and residential uses. The industrial uses are primarily automobile related facilities or storage warehouses and the residential uses are single- and multi-family homes. Also, present in this section of the study area are a park and an elementary school. The area west of the truck generator site is similar in character to the rest of the study area. The dominant land use is industrial and there are large warehouses and manufacturing facilities. A map of the land uses within and surrounding the Maspeth Industrial Park study area can be found in Figure 6-26.

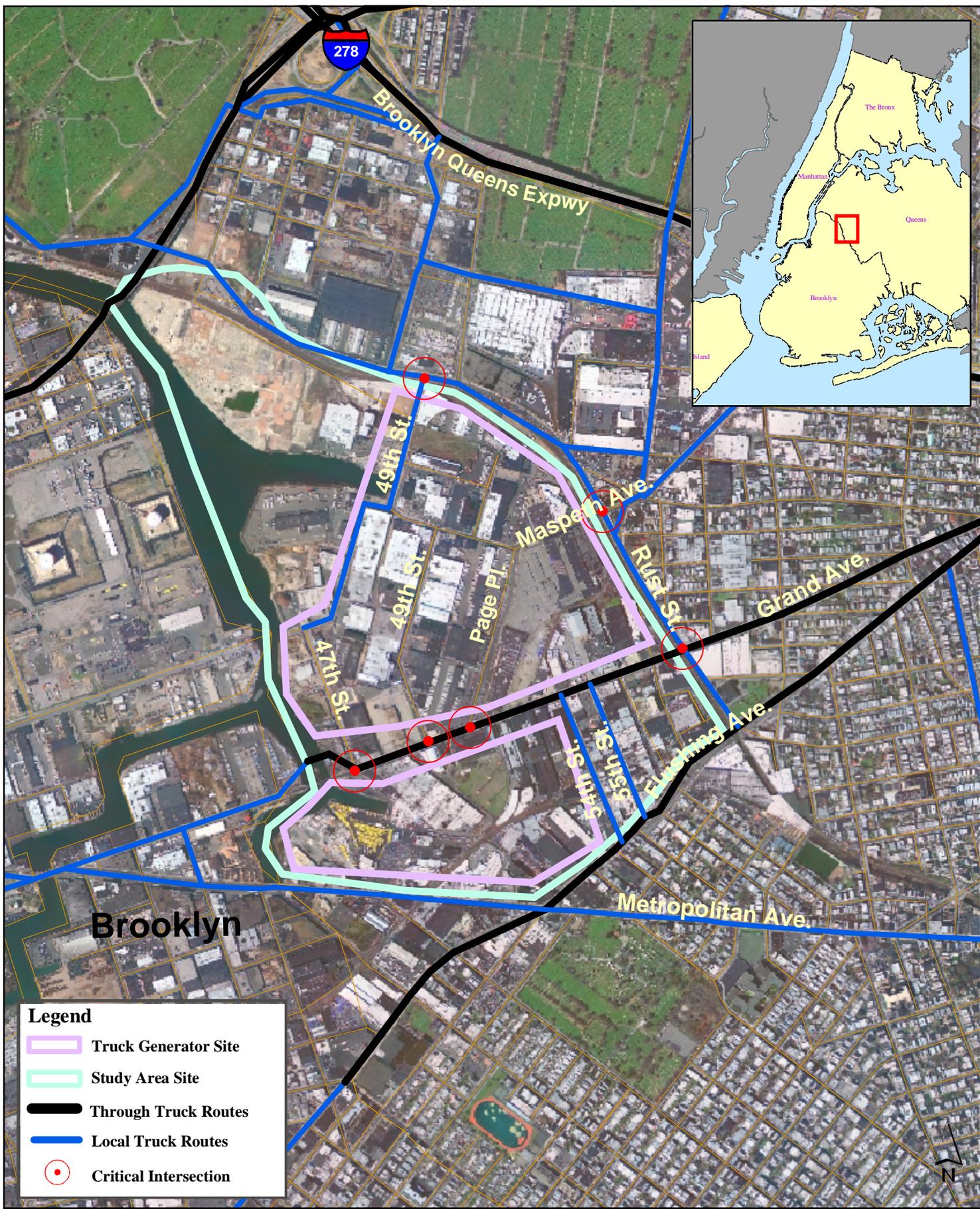


Figure 6-25
Site Map
Maspeth Industrial Park - Queens

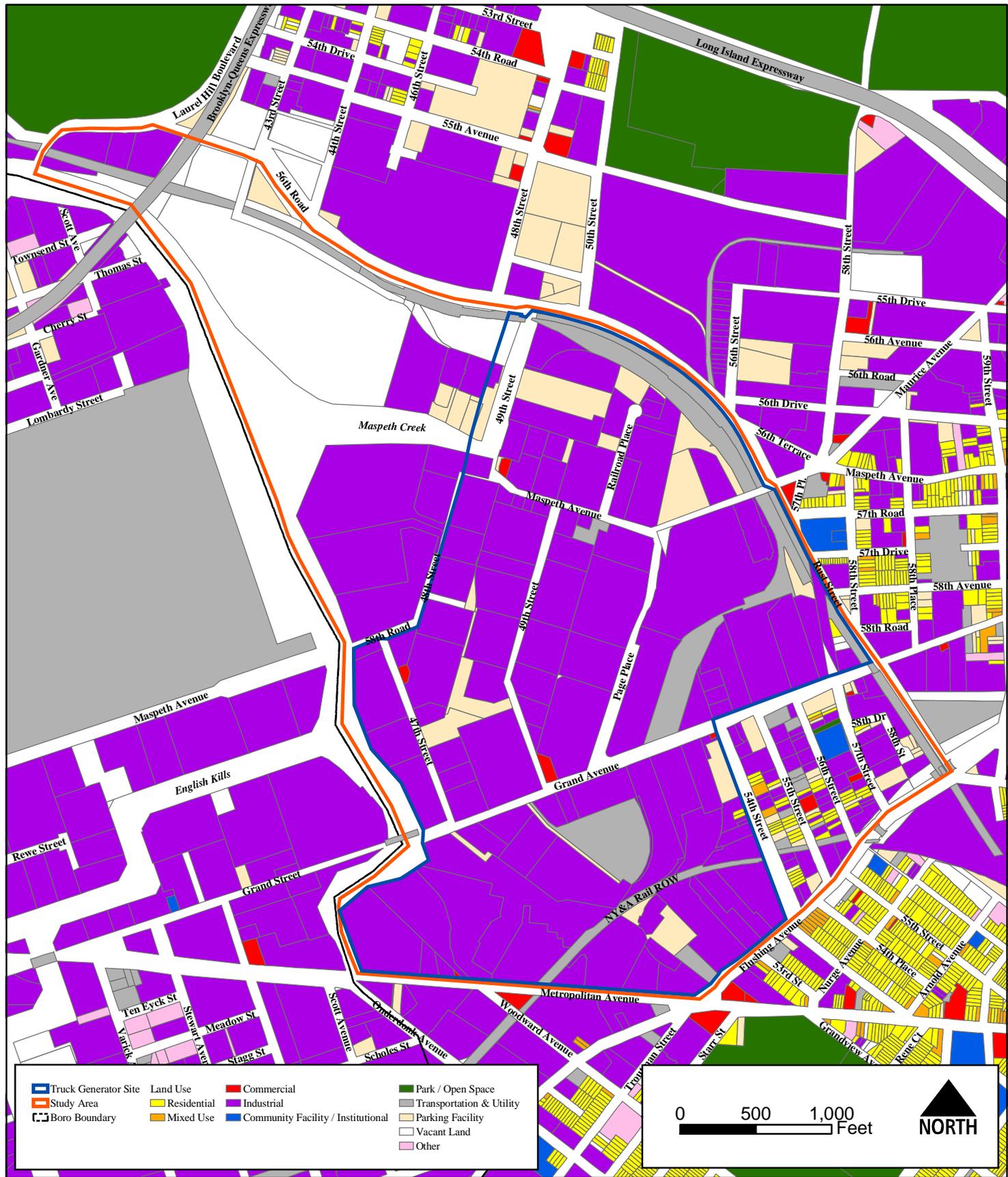


Figure 6-26
Land Use
Maspeth Industrial Park - Queens

Zoning

Bordered by Laurel Hill Boulevard and 56th Avenue to the north, Metropolitan and Flushing Avenues to the south, Rust Street to the east and the Newtown Creek to the west, the Maspeth Industrial Park study area contains parcels that are zoned for manufacturing uses, including M1-1 and M3-1 zoning districts. As seen in Figure 6-27, the Maspeth Industrial Park represents the truck generator site for this portion of Queens and occupies much of the study area. Similar to the overall study area the truck generator site is comprised of parcels contained within M1-1 and M3-1 zoning districts. The M1-1 district contains parcels located in the southeastern portion of both the truck generator site and the study area. The light-manufacturing district requires permitted uses to adhere to a series of strict performance standards set forth by the *New York City Zoning Ordinance*. This district which functions as a buffer between more intense manufacturing areas and adjacent residential and commercial zoning districts, including the R4 district located southeast of Flushing Avenue also permits certain retail, commercial, community facility and recreational uses. A floor area ratio (FAR) of 1.0 is the maximum allowed in the district. Off-street parking requirements vary depending on land use contained on the parcel. The remainder of the truck generator site and study area is zoned M3-1. This district permits heavy industrial uses that require minimal performance standards and a maximum FAR of 2.0. Required off-street parking varies based on land use.

Community Facilities

P.S. 9, the **Walter Reed School**, is located on a through lot fronting on both 56th and 57th streets, both of which are not designated Truck Routes. The cross streets, Grand Avenue and Flushing Avenue are both designated local NYC truck routes.

Access to Truck Routes from Site/Study Area

There are several regional and Local Truck Routes that are accessible to the Maspeth Industrial Park study area. The truck generator site is directly accessible to Grand Avenue, which is a regional Through Truck Route within the Borough of Queens. However, Grand Avenue transitions to a Local Truck Route at the Brooklyn/Queens border. The southern boundary of the Maspeth Industrial Park study area is Flushing Avenue, which is also a designated Through Truck Route. Local Truck Routes within the Maspeth Industrial Park study area include Rust Street and 49th Street, north of Grand Avenue, and 54th and 55th streets, south of Grand Avenue. Rust Street intersects with Maspeth Avenue on the eastern boundary of the study area. Though not a designated truck route at the intersection, Maspeth Avenue is a direct route to Maurice Avenue, which can be used to access the Brooklyn Queens Expressway (BQE, I-278), another regional Through Truck Route.

An inconsistency exists at the Brooklyn/Queens border where Grand Avenue and Flushing Avenue are Through Truck Routes in Queens, but change to Local Truck Routes in Brooklyn. This condition prevents trucks with destinations in Queens but none in Brooklyn from continuing south into Brooklyn to access the BQE. The current routing requires these trucks to use the Long Island Expressway (LIE) to the BQE.

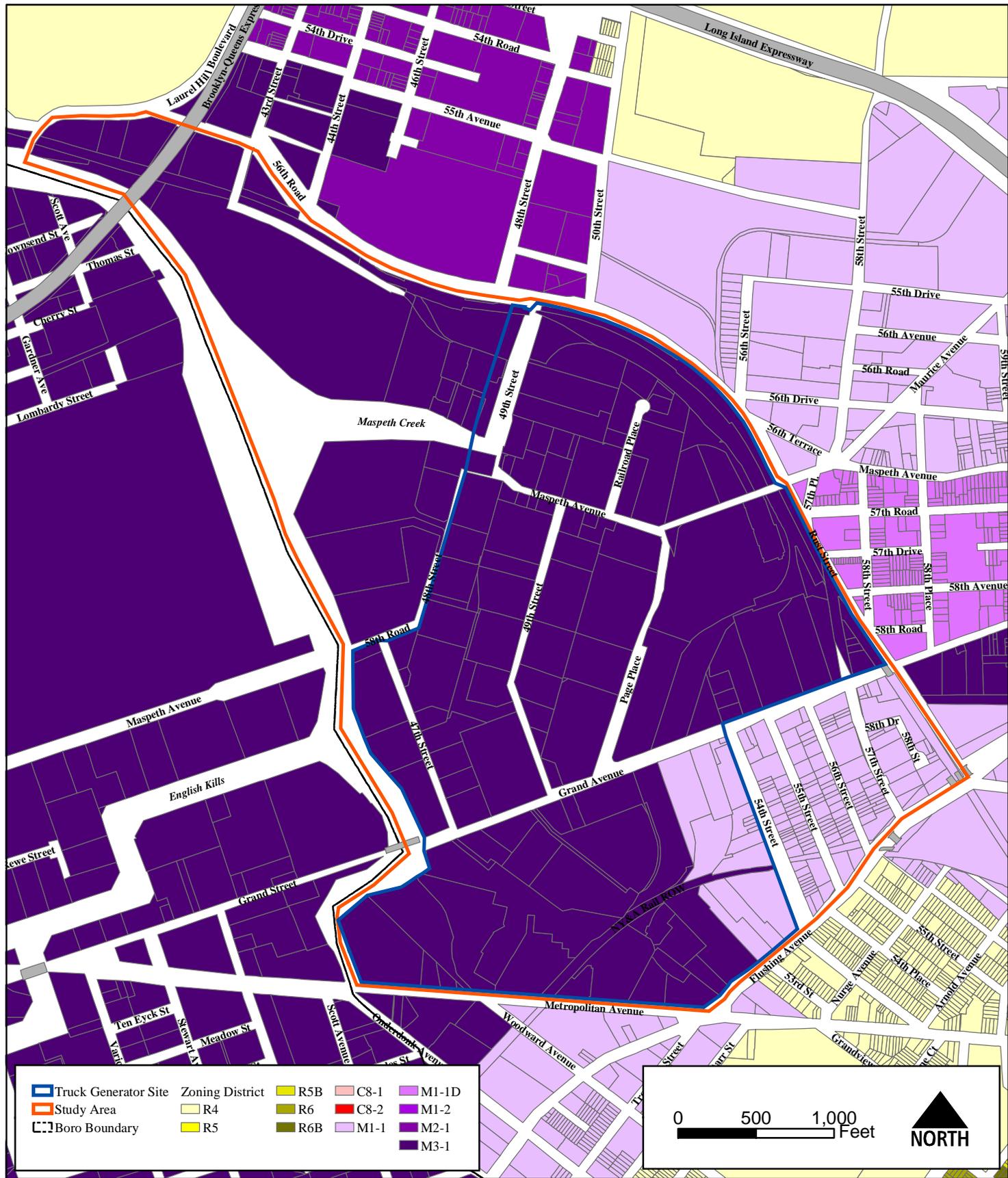


Figure 6-27
Zoning
Maspeth Industrial Park - Queens

NYC Truck Route Management and Community Impact Reduction Study



Critical Intersections

There are six intersections within the Maspeth Industrial Park study area that have been identified as critical intersections. Those intersections include:

- Grand Avenue at 47th Street/Western Beef Gate
- Grand Avenue at 49th Street
- Grand Avenue at Page Place
- Rust Street at 49th Street
- Rust Street at Maspeth Avenue
- Rust Street at Grand Avenue

Grand Avenue is a designated Through Truck Route that dissects the Maspeth Industrial Park study area. Four of the six intersections identified are located on Grand Avenue and directly access the Maspeth Industrial Park truck generator sites. Therefore, high volumes of truck traffic are expected at these locations. Rust Street is a Local Truck Route that straddles the eastern boundary of the Maspeth Industrial Park study area. The three intersections identified on Rust Street have direct access to the truck generator sites. Maspeth Avenue, though not a designated Local Truck Route at the intersection with Rust Street, is used to access other Local Truck Routes, such as Maurice Avenue and 58th Street. All six intersections are expected to have high volumes of vehicular traffic as well as a high percentage of truck traffic.

Traffic Operations

Traffic counts were conducted at the six key intersections within the Maspeth Industrial Park study area on Tuesday, June 29th, 2004. The traffic counts were conducted to determine the amount of heavy vehicle traffic at the intersection and to conduct an operations analysis of the intersection. The morning hours were determined to be the time of day where the most significant amount of truck traffic was likely to occur. Maps of the AM peak hour truck traffic at the six critical intersections within the Maspeth Industrial Park study area can be found in Figures 6-28 and Figure 6-29.

The truck traffic counts indicate that the majority of the trucks are entering and exiting the Maspeth Park truck generator sites from Page Place at Grand Avenue and from 49th Street at Rust Street. There is a significant amount of through truck traffic along Grand Avenue and Rust Street and there is a high volume of truck traffic at the intersection of Rust Street and Maspeth Avenue, despite the fact that turning movements are prohibited at that intersection.

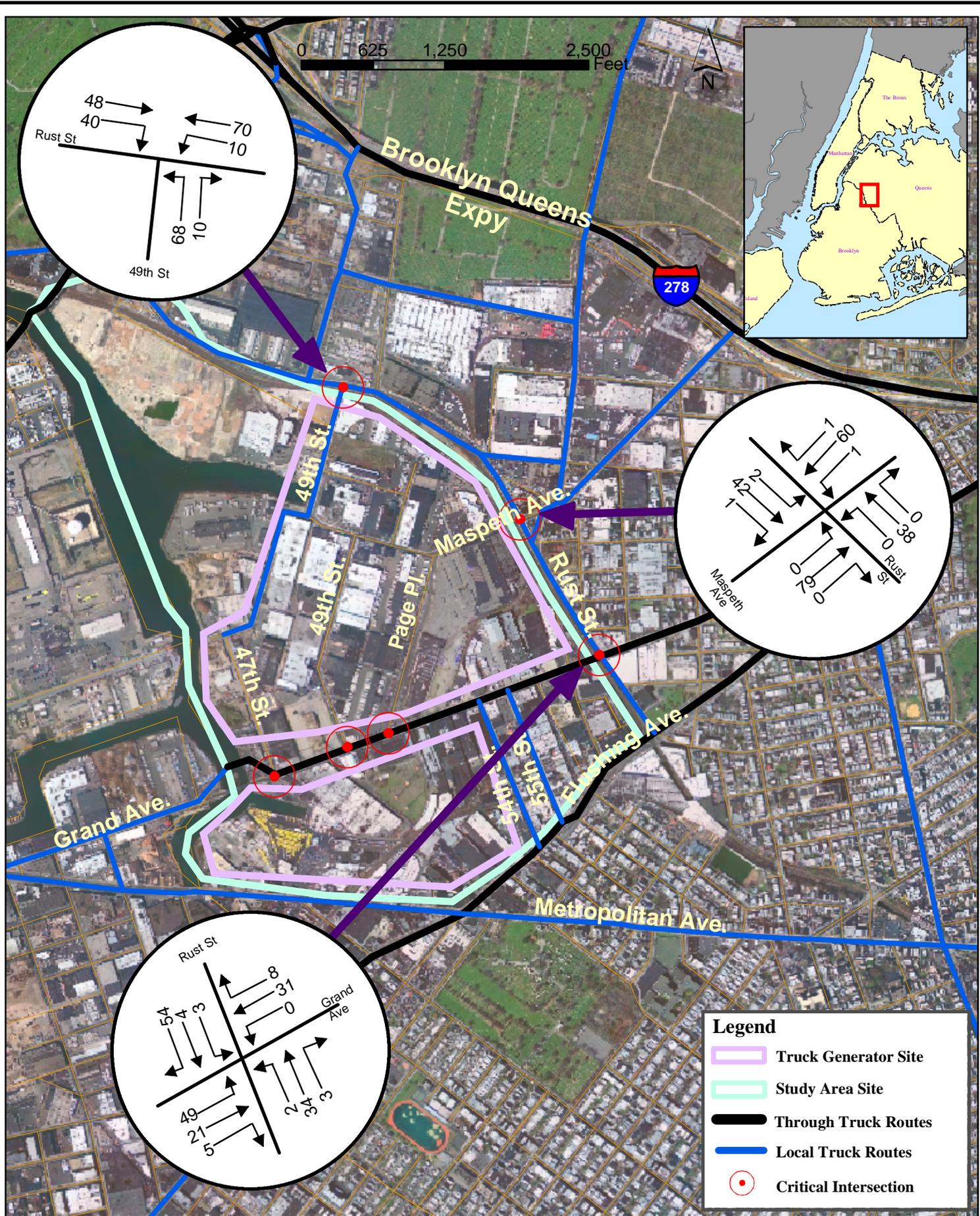


Figure 6-28
AM Peak Hour Truck Traffic Counts
Maspeth Industrial Park - Queens

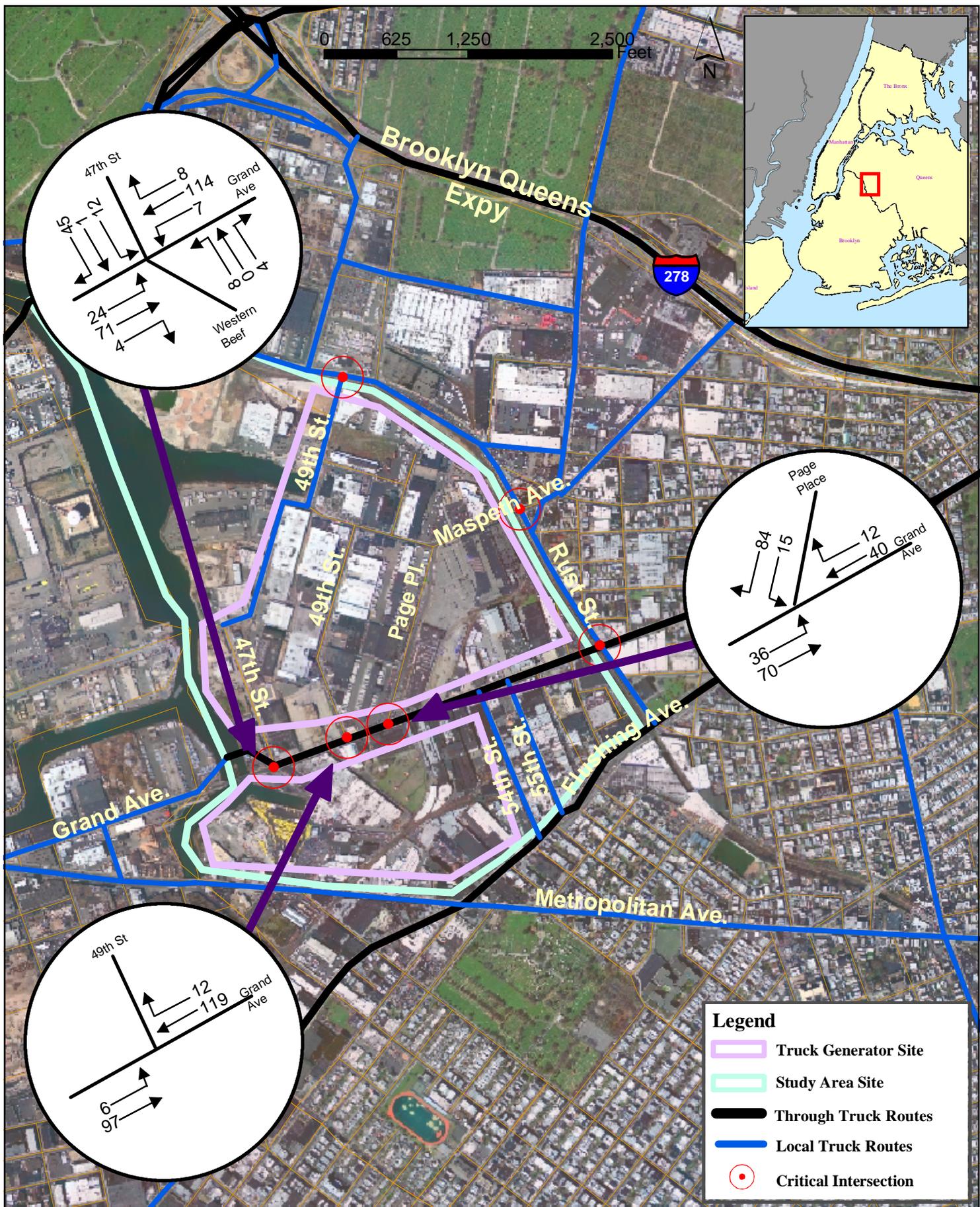


Figure 6-29
AM Peak Hour Truck Traffic Counts
Maspeth Industrial Park - Queens

The results of the Level of Service (LOS) analysis for the six key intersections within the Maspeth Industrial Park study area are shown in Table 6-4. A description of the LOS analyses and the movement of truck traffic at each intersection are discussed below:

Table 6-4: Intersection Operational Levels of Service 2004 Existing Conditions Maspeth Industrial Park - Queens

Intersection	Approach	Lane Group	AM Peak Hour	
			Delay	LOS
Grand Avenue at Western Beef Gate/47 th Street	EB	LTR	9.1	A
	WB	LTR	7.9	A
	NB	LTR	23.2	C
	SB	LTR	23.3	C
	Intersection		-	-
49 th Street at Grand Avenue	EB	LT	9.1	A
	WB	TR	-	-
	Intersection		-	-
Page Place at Grand Avenue	EB	LT	9.3	A
	SB	LR	40.0	E
	Intersection		-	-
Rust Street at 49 th Street	EB	TR	28.3	D
	WB	LT	41.6	E
	NB	LTR	7.9	A
	Intersection		-	-
Rust Street at Maspeth Avenue	EB	LTR	8.6	A
	WB	LTR	7.9	A
	NB	LTR	57.3	F
	SB	LTR	84.6	F
	Intersection		-	-
Rust Street at Grand Avenue	EB	L	53.8	D
	EB	TR	21.4	C
	WB	L	18.8	B
	WB	TR	28.6	C
	NB	LTR	55.1	E
	SB	L	19.9	B
	SB	TR	46.8	D
	Intersection		44.3	D

Grand Avenue at the Western Beef Gate/47th Street

The intersection of Grand Avenue and 47th Street is an unsignalized intersection. The entrance/exit to Western Beef is also located at the intersection, making the intersection a two-way stop controlled intersection. Grand Avenue is the major roadway at this intersection. The traffic counts conducted at the intersection indicate that the morning peak hour is from 8:15 AM to 9:15 AM.



Truck traffic on 47th Street looking north

The traffic counts conducted at the intersection indicate that there is a significant amount of truck traffic at the intersection. Along Grand Avenue, in the eastbound direction, 36% of the vehicles counted was truck traffic, 34% of the vehicles making the left turn onto 47th Street was truck traffic, while 27% of the right turn movements into Western Beef was truck traffic. In the westbound direction, 16% of the left turn movements into Western Beef were trucks, 36% of the right turn movements onto 47th Street were trucks and 28% of the through trips were trucks. Although there was not a significant amount of vehicles exiting the Western Beef plant,

67% of the left-turn movements onto Grand Avenue westbound were trucks. In the southbound direction, the majority of the traffic is making the right-turn onto Grand Avenue westbound. Of those right-turn movements, 37% were trucks. There was a minimal amount of traffic making the left turn onto Grand Avenue eastbound. However, of those left-turn movements, 60% were trucks.

The operations analysis conducted indicate that the intersection of Grand Avenue and 47th Street operates efficiently. Both Grand Avenue approaches operate at LOS A, while the 47th Street and Western Beef approaches operate at LOS C. The operations analyses indicate that queuing is not a problem that would create a long delay for truckers passing through the intersection.

Grand Avenue at 49th Street

The intersection of Grand Avenue and 49th Street is unsignalized. 49th Street is a one-way facility with access to 49th Street from Grand Avenue. Traffic exiting 49th Street is prohibited. The traffic counts conducted at the intersection indicate that the morning peak hour is from 8:15 AM to 9:15 AM. Trucks account for 43% of the thru traffic on Grand Avenue eastbound and 26% of the through traffic westbound. Sixteen percent of the left-turn movements from Grand Avenue eastbound to 49th Street are trucks, while 22% of the right-turn movements onto 49th Street are trucks. The operations analysis indicates the intersection of Grand Avenue and 49th Street operates efficiently. There is minimal delay for truckers accessing 49th Street from Grand Avenue, despite the higher volume of traffic along Grand Avenue westbound.



Truck traffic on Grand Avenue looking west

Grand Avenue at Page Place

The intersection of Grand Avenue and Page Place is unsignalized. Page Place is a two-way roadway with traffic entering and exiting at the intersection. Page Place is stop controlled. The traffic counts indicate that the morning peak hour of traffic is from 8:15 AM to 9:15 AM. There is a significant amount of truck traffic at this intersection. Trucks account for 51% of the left-turn movements from Grand Avenue eastbound to Page Place northbound. Forty-four percent of the through trips on Grand Avenue eastbound are trucks. In the westbound direction, 27% of the right-turn movements onto Page Place are trucks. Out of the vehicles exiting Page Place onto Grand Avenue, 39% of the left-turn movements are trucks while 29% of the right-turn movements are trucks.

The operations analyses for the intersection indicate that the southbound approach (Page Place) is operating at LOS E. Therefore, there is a significant queuing of traffic as a result of the stop-controlled intersection and the high volume of traffic along Grand Avenue. Truckers accessing Grand Avenue from Page Place are experiencing lengthy delays. The eastbound and westbound approaches operate at LOS A, which indicates that truckers traveling along Grand Avenue at this location are experiencing little delay.



Truck exiting Page Place looking north

Rust Street/56th Road at 49th Street

The intersection of Rust Street and 49th Street is an unsignalized T-intersection, which is stop-controlled at the eastbound and westbound approaches. The eastbound approach is 56th Road while the westbound approach is Rust Street. 49th Street is the major roadway within this intersection.

The traffic counts conducted at the intersection indicate that the morning peak hour is between 7:30 AM and 8:30 AM. The traffic counts indicate that 39% of the left-turn movements from 49th



Truck making left-turn onto 49th Street from Rust Street

Street to 56th Road are trucks while 40% of the right-turn movements onto Rust Street are trucks. At the eastbound approach (56th Road), 26% of the right-turn movements onto 49th Street are trucks while 18% of the through trips continuing onto Rust Street are trucks. In the westbound direction, 18% of the left-turn movements onto 49th Street are trucks.

Through movements from Rust Street westbound to 56th Road make up the highest amount of vehicle counts at the intersection. The operations analyses indicate that the westbound approach operates at LOS E, as a result of the high volume of traffic at this approach. Since this approach is stop-controlled, truckers using Rust Street experience delays

of over five minutes at this intersection. The eastbound (56th Road) approach operates at LOS D; as a result, truckers accessing 49th Street from 56th Road also experience some delay. The northbound (49th Street) approach operates at LOS A, since the approach is not stop-controlled. The 49th Street northbound approach experienced the lowest traffic volumes of the three approaches at this intersection.

Rust Street at Maspeth Avenue

Rust Street is a two-way stop controlled intersection. Maspeth is the major roadway with stop-controlled approaches at Rust Street northbound and southbound. The traffic counts conducted at the intersection indicate that the morning peak hour of traffic is between 7:30 AM and 8:30 AM. The traffic counts also indicate significant truck volumes at this intersection. Turning movements are prohibited at the intersection, although the traffic indicates that illegal turning movements have been made. At the Rust Street southbound approach, 50% of the left-turn movements and 100% of the right turn movements were trucks. 15% of the through movements at the Rust Street southbound approach and 8% of the northbound through movements were trucks. At the Maspeth Avenue approaches, 41% of the through movements at the eastbound approach are trucks while at the westbound approach, 14% of the left-turn movements and 18% of the through movements were trucks. Although turning movements are prohibited at the intersection, truckers are entering/exiting the Maspeth Industrial Park area to and from Rust Street.

The operations analyses indicate the Rust Street approaches operate at LOS F, as a result of the stop controlled conditions. The turning movement counts indicate that the Rust Street northbound approach has the highest volumes of all four approaches. Since this approach has the stop condition, there is a significant delay at this approach. Although the southbound approach has a smaller amount of traffic volumes, there is also a significant delay at this approach. Therefore, truckers using Rust Street, which is designated as a Local Truck Route, experience significant delays at Maspeth Avenue, as the result of the stop-controlled intersection. The analyses indicate that there are delays of up to over three minutes at the Rust Street approaches.



Truck traffic at stop-controlled Rust Street northbound approach

Rust Street at Grand Avenue

The intersection of Rust Street and Grand Avenue is a three-phase signalized intersection with extra green time for left-turn movements from Grand Avenue eastbound to Rust Street northbound. There is a dedicated left-turn lane at both the Grand Avenue eastbound and westbound approaches as well as the Rust Street southbound approach.

The turning movement counts conducted at the Rust Street and Grand Avenue intersection indicate that the morning peak hour of traffic is between 7:00 AM and 8:00 AM. The turning movement counts also indicate that along Rust Street, 30% of the right-turn movements from Rust Street northbound to Grand Avenue westbound are trucks. 15% of the left-turn

movements from Rust Street southbound to Grand Avenue westbound are trucks and 16% of the right-turn movements onto Grand Avenue eastbound, are trucks. At the Grand Avenue approaches, 15% of the left-turn movements from Grand Avenue eastbound to Rust Street northbound are trucks. A significant amount of traffic at this intersection makes the left turn from Grand Avenue eastbound to Rust Street northbound as well as Rust Street southbound to Grand Avenue westbound. 18% of the vehicles passing through Grand Avenue eastbound are trucks while 10% of the vehicles passing through Grand Avenue westbound are trucks. 33% of the right-turn movements from Grand Avenue eastbound to Rust Street southbound are trucks, although there is not a significant amount of traffic making this turning movement.



Truck turning onto Rust Street northbound from Grand Avenue

The operations analysis conducted indicates that the intersection of Rust Street and Grand Avenue operates at LOS D. The Rust Street northbound approach operates at LOS E, as a result of high traffic volumes with a short amount of green time. Since 30% of the right-turn movements at this approach are making the right turn onto Grand Avenue westbound, there is a lengthy delay for truckers passing through this intersection on Rust Street. The Rust Street southbound approach operates at LOS D. Since there is no dedicated right-turn lane at this approach, there is a lengthy delay for the high amount of right-turn movements, which includes 15% trucks. The Grand Avenue eastbound and westbound approaches operate efficiently, although there is some delay for truckers making the left-turn from Grand Avenue eastbound to Rust Street northbound. The delays are minimal for all other turning movements from Grand Avenue.

Roadway Network Capacity/Geometrics

The designated truck route roads approaching the site are wide enough to carry truck traffic. Although no vehicle height restrictions were posted, the two-lane bridge on Metropolitan Avenue that crosses the Newtown Creek, are very narrow. Trucks double-park on streets throughout the site; traffic must wait while trucks back into the loading dock.

Accidents

A map of the truck-related accident locations, within and around the Maspeth Industrial Park study area, is shown in Figure 6-30. For the Maspeth Industrial Park, accidents were recorded at two identified critical intersections during the two-month study period: the intersection of Grand Avenue and 49th Street and the intersection of Grand Avenue and Page Place. In addition, two other critical intersections were adjacent to locations where truck accidents were recorded: the intersection of Rust Street and 49th Street and the intersection of Rust Street and Grand Avenue. There were no off-route truck accidents recorded within the Maspeth Industrial Park study area, and only six locations within the study area had recorded accidents on a truck route within the two-month study period.



Figure 6-30
Truck Accidents
Maspeth Industrial Park - Queens

Recommendations for Maspeth Industrial Park

Improvements to the intersection of Maspeth Avenue and Rust Street are recommended. Recommendations include the installation of a traffic signal, repaving of the intersection area including street maintenance along Maspeth Avenue and striping of the intersection approaches and removal of parking on all approaches within 100 feet of the intersection. Although there is not a significant amount of truck traffic at this intersection, a traffic signal would help to reduce the queuing of truck traffic on Rust Street.

Truck route signs with the appropriate arrow panel identifying the direction of the truck route should be placed at the following intersections:

- Rust Street at Maspeth Avenue
- Rust Street at Grand Avenue
- Grand Avenue at 54th Street
- Grand Avenue at 55th Street

Two truck route signs should be placed at each approach, one sign before the approach and one sign beyond the approach. The current signage at the intersection of Rust Street and 49th Street should be replaced with new signage for better visibility. The truck route signage should also indicate Local Truck Route or Through Truck Route.

In consideration of the Maspeth Bypass and existing truck movements, it is recommended that the Local/Through Route differences be addressed to allow for legal access from Maspeth to the BQE for vehicles destined to a location out

A traffic signal should be considered at the following intersection:

1. Rust Street and Maspeth Avenue

The traffic signal phases should be retimed at the intersection of Rust Street and Grand Avenue.

In addition, please see the recommendations proposed as part of the Maspeth Bypass investigation.

3. Springfield Gardens

Land Use

North Conduit Avenue to the north, Rockaway Boulevard links the Springfield Gardens study area to the south, and Springfield Boulevard to the east, and Farmers Boulevard to the west (see Figure 6-31). The study area borders John F. Kennedy International Airport and as a result many of the industries in the study area focus on global freight operations. North Conduit and South Conduit Avenues and Rockaway Boulevard are designated Through Truck Routes, while Farmers Boulevard is a designated Local Truck Route. There are no designated truck routes located within the study area boundaries.

Due to the amount of industrial uses within the study area, there is no one site within the study area that is a truck generator in itself but rather, for this analysis, a smaller section of the study area is considered as the truck generator site. With the exception of the northern boundary of the truck generator site, which is 147th Avenue, the truck generator site has the same boundaries as the study area.

The truck generator site contains part of the 11-acre Springfield Gardens Air Services Industrial Park, which includes three two-story light industrial buildings for airfreight transport companies. The majority of the industrial buildings within the site are one to one-and-a half stories with distribution facilities on the first floor and office space above; loading areas are usually in the front of the buildings. Non-industrial uses within the truck generator site include a temporary housing facility for homeless families, a few residential structures, and a bar.

147th Avenue serves as the general boundary between the industrial uses to the south and the residential and institutional uses to the north. North of 147th Avenue, the study area is predominately residential with a mix of single- and two-family homes. Interspersed with the residential uses are locally oriented commercial uses, various community facilities, which include two schools, religious facilities, a day care center, and a playground. Additionally, a school, a park, and a firehouse have frontage on Springfield Boulevard. Along the western boundary of the study area, there are a small number of locally oriented commercial uses. A map of the land uses within and surrounding the Springfield Gardens study area can be found in Figure 6-32.

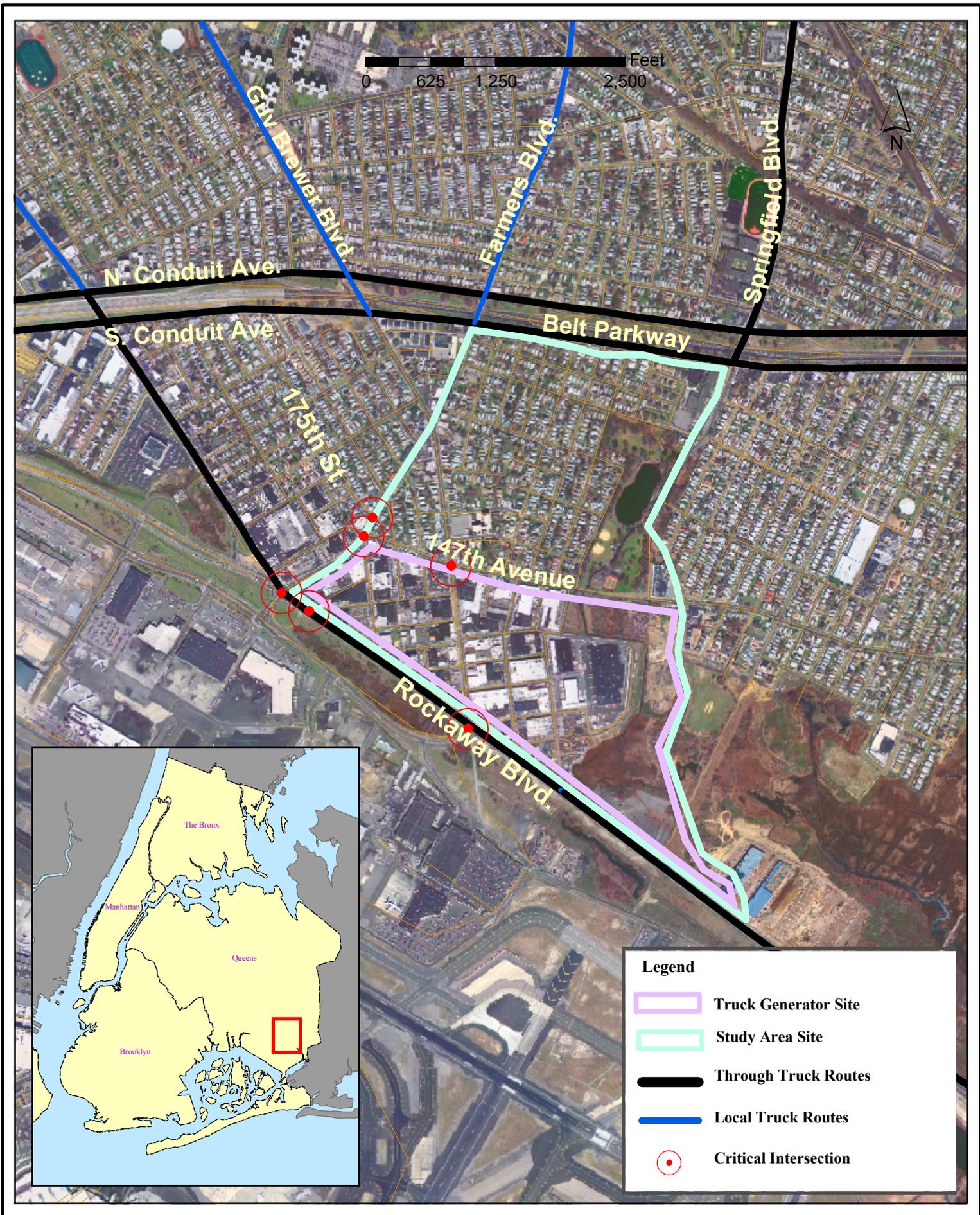


Figure 6-31
Site Map
Springfield Gardens - Queens



Truck Generator Site	Land Use	Industrial	Transportation & Utility
Study Area	Residential	Community Facility / Institutional	Parking Facility
	Commercial	Park / Open Space	Vacant Land
			Other

0 500 1,000 Feet

NORTH

Figure 6-32
Land Use
Springfield Gardens / JFK - Queens