

**East Harlem Rezoning Proposal  
Draft Scope of Work  
for an Environmental Impact Statement  
CEQR No. 17DCP048M  
ULURP Nos. Pending  
November 10, 2016**

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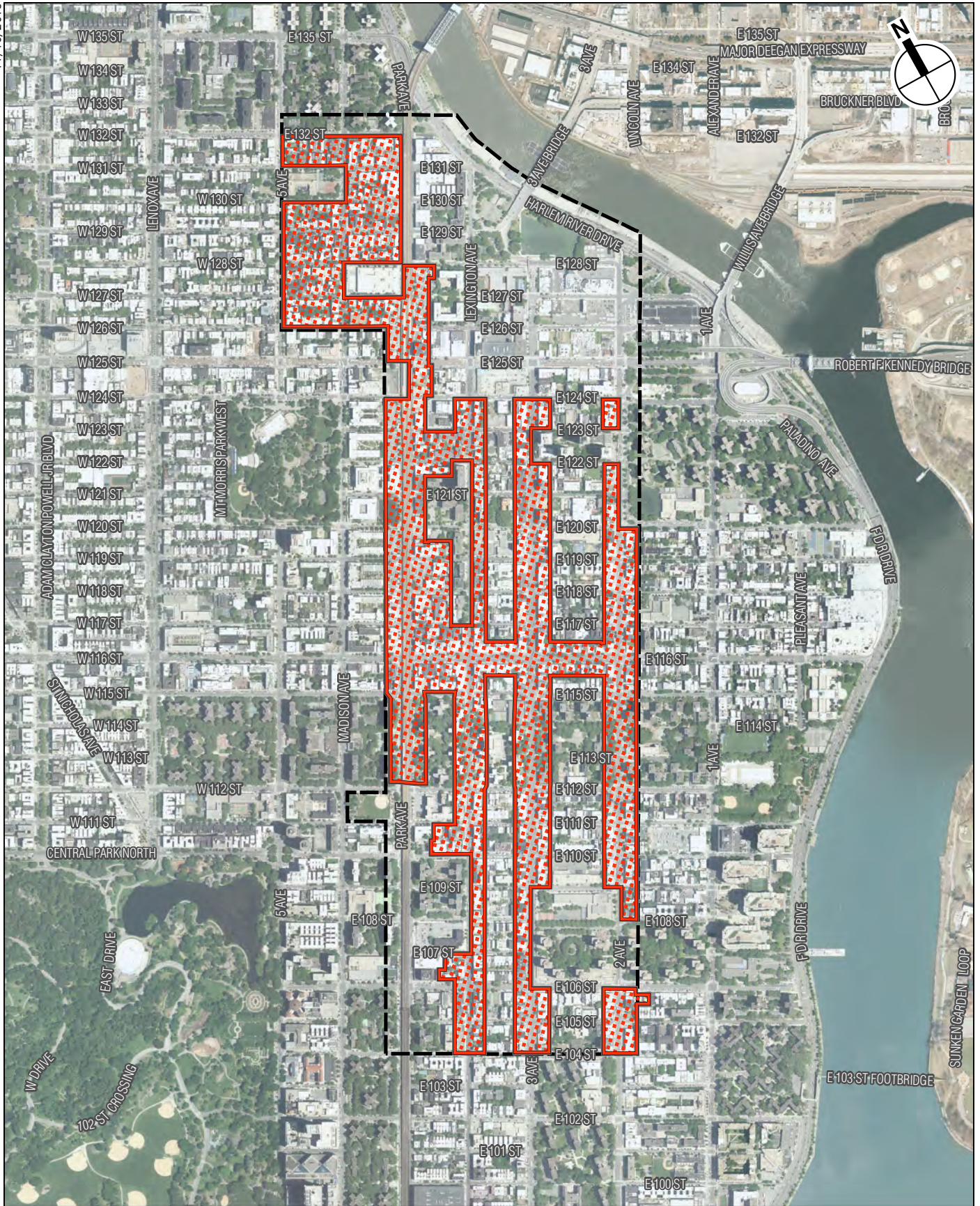
**A. INTRODUCTION**

This Draft Scope of Work (Draft Scope) outlines the technical areas to be analyzed in the preparation of the Environmental Impact Statement (EIS) for the East Harlem Rezoning proposal. The New York City Department of City Planning (DCP), together with the Department of Housing Preservation and Development (HPD), is proposing a series of land use actions—including zoning map amendments, zoning text amendments, and amendments to the Millbank Frawley Circle-East and Harlem-East Harlem Urban Renewal Plans (collectively, the “Proposed Actions”) to implement land use and zoning recommendations in the East Harlem Neighborhood Plan (EHNP). The Proposed Actions are intended to facilitate the development of affordable housing, create new commercial and manufacturing space to support job creation, and preserve existing neighborhood character. This proposal has been prepared as a follow up to DCP’s East Harlem Neighborhood Plan, which is currently the subject of an ongoing engagement and community review process, the objective of which is to create new opportunities for housing (including affordable housing), community facilities, and economic development. The Proposed Actions would affect an approximately 95-block area of the East Harlem neighborhood of Manhattan, Community District 11.

The area that is subject to the Proposed Actions is generally bounded by East 104th Street to the south, East 132nd Street to the north, Park Avenue to the west and Second Avenue to the east (the “Project Area”) (see **Figures 1 and 2**, “Project Location”). The Proposed Actions are expected to result in a net increase of approximately 3,500 dwelling units, a substantial proportion of which are expected to be affordable; 151,100 square feet of commercial space (retail, supermarket, restaurant, and office uses); 98,900 square feet of community facility space; and 132,400 square feet of manufacturing space. The Proposed actions are also expected to result in net decreases of approximately 10,600 square feet of auto-related space, 33,000 square feet of hotel space, and 53,800 square feet of warehouse/storage space (see Section G, “Analysis Framework,” for discussion of the Reasonable Worst Case Development Scenario). This Draft Scope provides a description of the Proposed Actions, the projected and potential development that is reasonably expected to result from those actions, and the technical areas and approaches to be used for analysis in preparing the EIS.

The Proposed Actions evolved from DCP’s East Harlem Neighborhood Study (the “Neighborhood Study”), a comprehensive, community-focused study aimed at identifying opportunities for the creation of new mixed-income housing and the preservation of existing

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Project Area

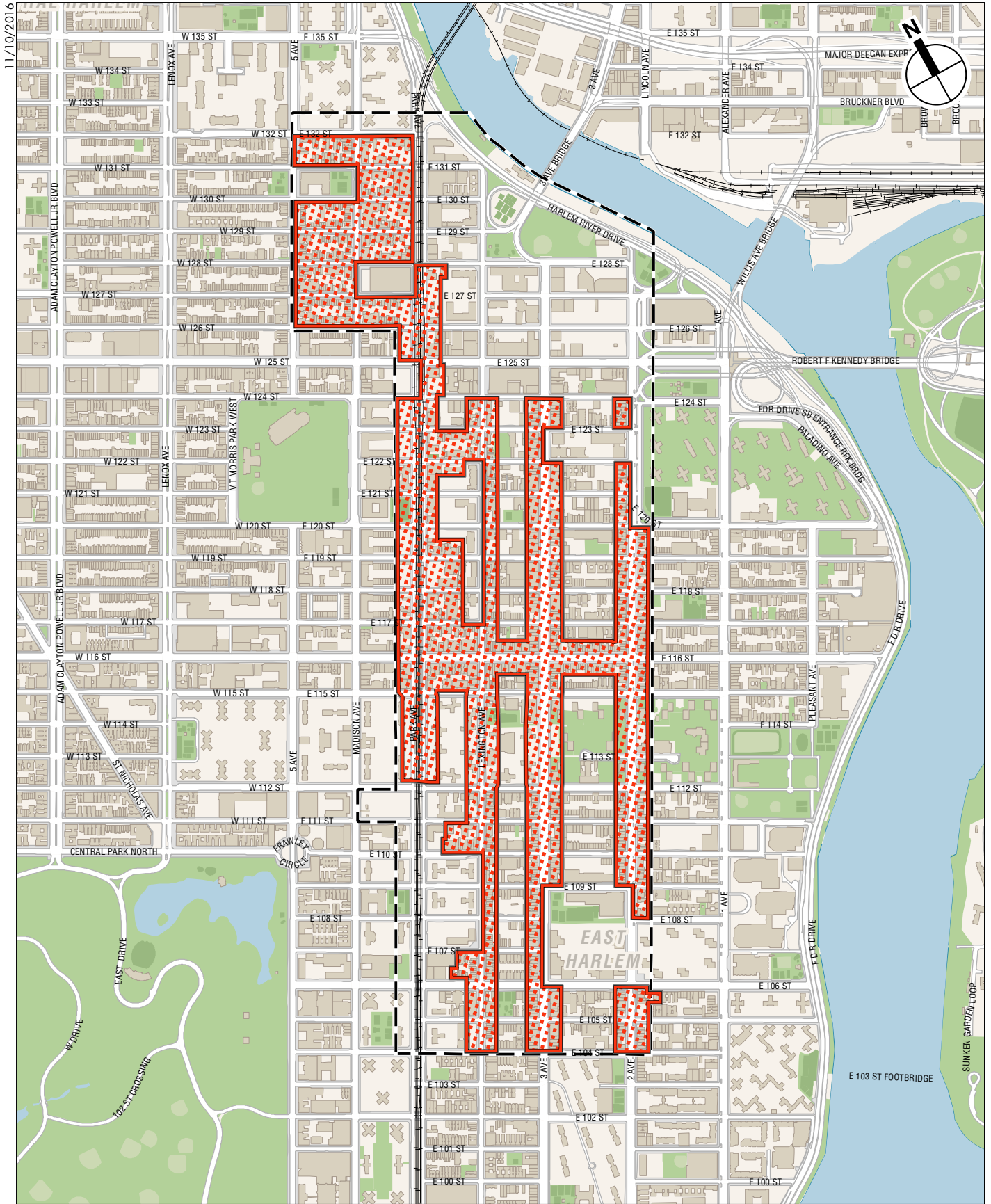


East Harlem Neighborhood Plan Study Area

0 1,000 FEET

**EAST HARLEM REZONING**

Project Location - Aerial View  
**Figure 1**



 East Harlem Neighborhood Plan Study Area

**EAST HARLEM REZONING**

Project Location  
**Figure 2**

affordable units consistent with Mayor de Blasio's housing plan, *Housing New York: A Five-Borough, Ten-Year Plan*. Further, in conjunction with other City agencies, the Neighborhood Study will also identify complementary initiatives to address key infrastructure, economic development, workforce, and community wellness issues. The Neighborhood Study also builds upon the land use and zoning recommendations provided by the EHNP Steering Committee, a group convened by Speaker of the New York City Council Melissa Mark-Viverito to engage the community and local stakeholders in a holistic, community-based planning approach. The EHNP Steering Committee is comprised of local East Harlem organizations, the Manhattan Borough President's Office, and Community Board 11 leadership. Through a series of meetings on various neighborhood topics ranging from open space to zoning and land use, the Steering Committee produced the EHNP that provided 232 recommendations for addressing key neighborhood concerns raised during its engagement process. In February 2016, the EHNP Steering Committee submitted its Plan to the City for review and to help inform the City's planning efforts within East Harlem. DCP's Neighborhood Study, using the work already completed by the Steering Committee and the Community Board as a baseline, has coordinated with interagency partners to identify actionable priorities in the Plan.

The Proposed Actions reflect DCP's on-going engagement with Community Board 11, the Steering Committee, DCP's interagency partners, and local elected officials to achieve the following land use objectives:

- Create opportunities for requiring permanently affordable housing to ensure that the neighborhood continues to serve diverse housing needs;
- Modify the existing zoning, where needed, to preserve the built neighborhood character;
- Create opportunities for economic development while preserving the vitality of the existing commercial and manufacturing uses;
- Establish a Special District that improves the pedestrian experience and establishes urban design controls that balance new development in response to existing neighborhood context and scale; and
- Ensure a successful neighborhood plan by establishing a planning framework that is inclusive of the relevant capital infrastructure needs and services to support current demand and future growth.

An overview of the Project Area, the purpose and need for the Proposed Actions, and the specific components of the Proposed Actions are discussed below in Sections C through F. The New York City Planning Commission (CPC) has determined that an EIS for the Proposed Actions will be prepared in conformance with City Environmental Quality Review (CEQR) guidelines, with DCP acting on behalf of CPC as the lead agency. The environmental analyses in the EIS will assume a development period of 10 years for the Reasonable Worst-Case Development Scenario (RWCDS) for the Proposed Actions (i.e., an analysis year of 2027). DCP will conduct a coordinated review of the Proposed Actions with involved and interested agencies.

## **B. REQUIRED APPROVALS AND REVIEW PROCEDURES**

The Proposed Actions encompass discretionary actions that are subject to review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, and CEQR process. The discretionary actions include:

- **Zoning map amendment.** The proposed rezoning would replace all or portions of existing R7-2, C8-3, M1-2, M1-4, C4-4, C4-4D, R8A, R7A, and C6-3 districts within the rezoning area with M1-6/R9, M1-6/R10, C4-6, C6-4, R10, R9, R7A, R7B, and R7D districts. Also, the proposed rezoning would replace or eliminate portions of existing C1-4, C2-4, and C1-5 overlays with C1-5 or C2-5 overlays and establish new C1-5 overlays. The proposed rezoning action would also amend the Zoning Map to include the boundaries of the Special East Harlem Corridors District (EHC) along major thoroughfares within the rezoning area, as well as modified boundaries of the Special Transit Land Use District (TA).
- **Zoning text amendments.** The proposed actions include amendments to the text of the City's Zoning Resolution to:
  - Establish the EHC Special District along major corridors within the rezoning area including Park Avenue, Lexington Avenue, Third Avenue, Second Avenue, and East 116th Street corridors to establish special use, bulk, ground-floor design and parking regulations;
  - Modify a portion of the Special 125th Special District located at the intersection of East 125th Street and Park Avenue to implement special use, bulk, ground-floor design, and parking regulations;
  - Modify the boundaries of the TA District to reflect the current plans of the Metropolitan Transportation Authority (MTA) for prospective Second Avenue Subway locations, and introduce bulk modifications to facilitate the inclusion of necessary transportation-related facilities in new developments within Special District boundaries; and
  - Amend Appendix F of the Zoning Resolution to apply the Mandatory Inclusionary Housing (MIH) program to portions of the proposed rezoning area, including areas where zoning changes would promote new housing.
- **Urban Renewal Plan (URP) amendments.** The Proposed Actions include amendments to the Millbank Frawley Circle-East and Harlem-East Harlem URPs to make the URPs compatible as warranted with the above zoning actions.
- **Determination of consistency with the Waterfront Revitalization Program (WRP).** Portions of the rezoning area are within the Coastal Zone and will require review by the CPC, in its capacity as the City Coastal Commission (CCC), to determine if they are consistent with the relevant WRP policies.

HPD may provide construction funding in the future through any of its several financing programs intended to facilitate the development of new affordable housing and the preservation of existing affordable units. In addition, the New York City Housing Development Corporation (HDC) may decide to fund construction of new affordable multi-family apartment buildings and the rehabilitation of existing multi-family apartment buildings.

As part of a separate action, the City is proposing a series of land use actions to facilitate the creation of a substantial amount affordable housing related to an HPD project adjacent to the Project Area that involves the development of an entire city block bounded by East 111th Street, East 112th, Park, and Madison Avenues (the "East 111th Street" site). The land use actions necessary to facilitate the development of the East 111th Street site, which are described in Section F, are expected to be under public review concurrent with the Proposed Actions.

## **CITY ENVIRONMENTAL QUALITY REVIEW (CEQR) AND SCOPING**

The Proposed Actions are classified as Type 1, as defined under 6 NYCRR 617.4 and 43 RCNY 6-15, subject to environmental review in accordance with CEQR guidelines. An Environmental Assessment Statement (EAS) that examined the Proposed Actions was completed on November 9, 2016 and a Positive Declaration, issued on November 10, 2016, established that the Proposed Actions may have a significant adverse impact on the environment, thus warranting the preparation of an EIS.

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the Proposed Actions. The process allows elected and appointed officials, governmental officials, other agencies, and the public a voice in framing the scope of the EIS. The scoping document sets forth the analyses and methodologies that will be utilized to prepare the EIS. During the period for scoping, those interested in reviewing the Draft Scope may do so and give their comments to the lead agency. The public, interested agencies, Manhattan Community Board 11, and elected officials are invited to comment on the Draft Scope, either in writing or orally, at a public scoping meeting to be held on December 15, 2016 at the Silberman School of Social Work at Hunter College, 2180 Third Avenue, New York, New York 10035. The public meeting will be held in two sessions, with the first session starting at 2:00 PM and the second starting at 6:00 PM. Comments received during the Draft Scope's public meeting and written comments received up to twenty days after the meeting (until 5:00 PM on January 4, 2017), will be considered and incorporated as appropriate into the Final Scope of Work (Final Scope). The lead agency will oversee preparation of the Final Scope, which will incorporate all relevant comments made on the Draft Scope and revise the extent or methodologies of the studies, as appropriate, in response to comments made during public review of the scope. The Draft EIS (DEIS) will then be prepared in accordance with the Final Scope.

Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for 10 days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will respond to all substantive comments made on the DEIS, along with any revisions to the technical analyses necessary to respond to those comments. The FEIS will then be used by the decision-makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, in deciding whether to approve the requested discretionary actions, with or without modifications.

## **C. BACKGROUND TO THE PROPOSED ACTIONS**

### **COMMUNITY ENGAGEMENT AND INTERAGENCY PARTICIPATION**

#### ***EAST HARLEM NEIGHBORHOOD PLAN***

In May 2014, Mayor de Blasio released *Housing New York*, the Administration's plan to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure investments that together would foster a more equitable and livable New York City through an extensive community engagement process. *Housing New York* calls for 15 neighborhood studies to be undertaken in communities across the five boroughs that are aimed at offering opportunities for new affordable housing. Recognizing East Harlem's neighborhood assets and its position as an area of opportunity, in 2015 the Mayor announced East Harlem as

one of the neighborhoods included in an effort to increase affordable housing opportunities as well as to address other neighborhood-wide needs. In response, City Council Speaker Melissa Mark-Viverito announced the creation of the EHNP Steering Committee, which is comprised of local community stakeholders charged with engaging the community in identifying community needs.

With the help of 12 subgroups focused on neighborhood themes ranging from open space to zoning and land use, the main objective of the Steering Committee process was to create a neighborhood plan that could inform the City's efforts. As a result, the Committee produced a plan that provided 232 recommendations for addressing key neighborhood concerns raised during the community engagement process. In February 2016, the EHNP Steering Committee submitted their East Harlem Neighborhood Plan to the City for review and to help inform planning efforts in East Harlem.

## **PROJECT AREA HISTORY**

The Lenni Lenape and Munsee Delaware groups were the first to inhabit the area now known as Harlem, which was part of a fertile farming plain stretching from the Hudson to the East Rivers with several hundred inhabitants. The area that is today known as East Harlem contained farming plots where corn, beans, squash, and other crops were grown, as well as a seasonally occupied village near where 125th Street today meets the Harlem River.

Beginning in the 17th century, Dutch settlers drawn by the grandiose advertising of the Dutch West India Company began to settle in Lower Manhattan, with some intrepid attempts to range farther north into the Harlem area, then known as Muscoota. Eventually, several large plantations owned by Dutch settlers occupied much of the former Lenape and Delaware lands in Harlem, although these were abandoned and rebuilt at various points as conflicts with the native peoples flared and cooled. The administration of Peter Stuyvesant established the farming community of Nieuw Haarlem in 1658, with a town center near what is now 121st Street, east of Lexington Avenue, and 25-acre plots of farmland granted to settlers willing to move uptown.

Dutch rule was short-lived and the British seized New Amsterdam in 1664, renaming Nieuw Haarlem as Lancaster. The new name never stuck, however, and the area continued to be known as simply Harlem from that point forward. A small but thriving village grew in the area of East Harlem, which contained several inns and a ferry terminal at East 126th Street that connected Harlem with lower Manhattan and Spuyten Duyvil. The area included several small settlements of free and enslaved Africans, who provided much of the labor force for the village and were interred in a burial ground located at East 126th Street. During the Revolutionary War, portions of Harlem served as an important American military encampment before the village was burned to the ground by the British.

Growth in the area was limited in the post-Revolutionary period until the watershed development in the 1830s of the New York and Harlem Railroad along what would become Park Avenue. The completion of the railroad brought Harlem within commuting distance of Lower Manhattan and enabled residents from the crowded tenements in Lower Manhattan to relocate uptown. Distinct from the wealthier rowhouse precincts of West Harlem and the industrial area of Manhattanville, East Harlem was primarily occupied by poorer residents who resided in a shantytown of small shacks. Among the first residents to settle in East Harlem were German Jewish and Irish immigrants with a significant African-American community growing over time. By the late 1800s, however, Italian immigrant families became the dominant ethnic community

## East Harlem Rezoning

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in East Harlem, moving into densely packed tenements that eclipsed the Lower East Side in population and eventually forming the largest Italian community in the nation.

In the 40 years between 1870 and 1910, approximately 65,000 tenement apartments were built in East Harlem, and the neighborhood became segregated into distinct areas divided by ethnicity that found themselves not infrequently in conflict. As East Harlem became more accessible with the completion of the subway and more housing was constructed, more ethnic groups from the Lower East Side began to populate the area.

During the same period, African-Americans—including migrants from the American South as well as West Indian transplants—began to displace the European immigrants and their descendants, eventually leading to East Harlem becoming the City's second-largest black community by the late 1800s. Puerto Ricans also began to arrive in large numbers during the early decades of the 20th century, joined by immigrants from the Dominican Republic and Cuba, eventually leading to a portion of the neighborhood populated by these newcomers to be called "Spanish Harlem." Given the opportunities in the dress and textile industries, as well as institutionalized racism that prevented their settling in other areas of the City, East Harlem became the natural destination for these newly arriving immigrants looking for employment opportunities. By the 1950s, East Harlem was predominantly African-American and Latino.

The arrival of the black and Latino communities changed the dynamics of the community as stores and markets changed to meet the needs of these newcomers, and both groups ignited wide-reaching cultural and political movements that are still felt to this day. As early as the 1930s, East 116th Street was crowded with stores, restaurants, and music shops reflecting the thriving Puerto Rican culture. A pushcart market under Park Avenue viaduct between East 111th and East 116th Streets dates back to the 1920s; in the 1930s, Mayor Fiorello LaGuardia enclosed and equipped it with sheds where it has since evolved into the La Marqueta marketplace.

However, as the population increased and the Great Depression and subsequent economic shifts away from manufacturing took their toll on East Harlem's residents, the area began to experience economic decline, which had a devastating effect on housing stock and social stability. Even as the old tenement buildings deteriorated, more and more newcomers crammed into them.

In response to East Harlem's growing population and the deteriorating conditions of its tenements, the City, with the assistance of the federal government, used urban renewal programs and funds to create new housing. The federal slum clearance program, as outlined in the Federal Housing Act of 1937, was used to raze dilapidated buildings in East Harlem. Starting in 1938, the New York City Housing Authority (NYCHA) began razing existing tenement buildings and replaced approximately 171 acres with modern high-rise housing projects over the ensuing 20 years.

The population grew after World War II to a peak of 210,000 in the 1950s, a density of 142,000 people per square mile. The push for slum clearance accelerated and public housing projects began replacing many of the old tenement buildings. However, the need for the large tracts of vacant land to construct such housing resulted in the demolition of rowhouses, brownstones, clubs and meeting places, small businesses, and neighborhood centers. Low-rise buildings were also replaced by massive high-rise developments, and by 1967, 15,657 units were built, primarily in high-rise buildings. Despite the "greenbelt" of open space created by this new housing typology, these housing projects cut across old neighborhoods and communities and created physical barriers in the street grid.

In 1967, Mayor John Lindsay formalized the need for community input to the planning process by creating community planning boards, building upon a process that had started earlier under then Manhattan Borough President Robert F. Wagner, Jr. Through this geographic subdivision of the City, the southern portion of the neighborhood, by then known as El Barrio (Spanish Harlem), was merged with the predominantly African-American northern section to form Manhattan Community Board 11, or “East Harlem.”

Also included in East Harlem were Randall’s and Wards Islands in the East River, which are located opposite the stretch from East 103rd to East 125th Streets. During the 19th century, these islands were used mainly for garbage disposal, cemeteries, and poorhouses. Wards Island was also used to process immigrants until the operation was transferred to Ellis Island at the end of the 19th century. The islands also became known for their hospitals. The earliest was built in 1843, followed by the Manhattan State Hospital in 1890 and by two 10-story buildings in 1918, which served as a military hospital.

During the 1930s, the islands became accessible with the completion of the Triborough Bridge and shortly after, then Parks Commissioner, Robert Moses set about developing them into recreational parkland. Commissioner Moses connected the islands by landfilling, thereby adding 46 acres. Facilities that were also created included the 22,000-seat Downing Stadium, athletic fields, and a parking lot for 4,000 vehicles. In 1951 the area became further accessible from East Harlem via a footbridge at East 103rd Street to Wards Island, where a park and ball fields were developed.

## **PROJECT AREA**

The Proposed Actions would affect a 95-block area of Manhattan Community District 11, extending from East 104th Street to the south to East 132nd Street to the north, generally between Fifth and Second Avenues (see **Figure 1**). The area is defined by a series of north-south corridors, with 125th Street dividing the north and central sections and East 116th Street dividing the central and southern sections. Major corridors and areas of the neighborhood are described below.

### ***NORTH OF 125TH STREET***

The area north of 125th Street is comprised of mixed land uses, ranging from residential, commercial, automotive uses, manufacturing uses, and parking. The area west of Park Avenue between East 125th and East 132nd Streets is characterized by well-maintained 3- to 4-story brownstones on the mid-blocks and 5- to 7-story mid-rise buildings on the avenue. The surrounding area is predominantly residential with a few ground-floor retail uses along portions of Madison Avenue.

The northern portion of Park Avenue has a different neighborhood character from that found along Madison Avenue. The viaduct is a dominant structure along Park Avenue and provides public parking at grade as well as Department of Sanitation (DSNY) facilities. The predominant uses in this area are automotive and manufacturing. Along the west side of Park Avenue there are residential and commercial uses as well as a structures and surface parking, a gas station, and a large storage facility with office space and community facility uses on the ground floor. The east side of Park Avenue is characterized by manufacturing uses and parking. DSNY leases a large parking facility on the east side of the avenue, and Consolidated Edison has a substation, also on the east side of the avenue. There are also community facility, institutional, and parking uses along the east side. Although residential uses are only zoned in the most northern portion of

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Park Avenue, there are residential uses along the west side of Park Avenue in non-residential districts that predate the 1961 Zoning Resolution.

### ***EAST 125TH STREET AND PARK AVENUE***

The area surrounding the intersection of East 125th Street and Park Avenue represents the meeting of two critical neighborhood corridors that connect the northern portion of Park Avenue to the mid-section of East 125th Street. In 2008, this portion of East Harlem was rezoned; however, there were maximum height and setback rules embedded in the zoning that limited building heights. The southwestern corner was mapped with a higher density zoning to accommodate a known development at the time of the rezoning. The northwestern corner of 125th Street was modified with the Corn Exchange Building. This building, originally known as the Mount Morris Bank, had been a mixed-use building with retail, office, and residential uses, however, the building fell into disrepair after the 1970s. In recent years it was restored, offering new opportunities for retail and office space. The northeast corner is occupied by a 12-story building that is used as office space with ground-floor retail, and the southeast corner is occupied by a number of smaller buildings with ground-floor retail space with residential use above.

In addition to the retail and office uses located at this commercial node, the Harlem-125th Street Metro-North Railroad station is located on the northern portion of East 125th Street and Park Avenue. The current station was built in 1897, and regional rail service provides connections to Grand Central Terminal to the south and to the Bronx, Westchester County, and Connecticut to the north. The southern portion of the block is occupied by a non-functioning comfort station which has not been used in a number of years. In 2013, a New York City Department of Transportation (DOT) Plaza program reactivated the space in front of the comfort station as a public plaza.

### ***BETWEEN EAST 125TH AND EAST 116TH STREETS***

This portion of Park, Lexington, Third, and Second Avenues stretches from East 124th to 115th Streets. This segment of Park Avenue is characterized by residential, institutional, and manufacturing uses with surface parking, including public and institutional parking, beneath the viaduct. The west side of Park Avenue is mainly characterized by a number of parking lots and institutional uses with few residential uses located in the southern portion of this area. As the result of the Millbank Frawley Circle-East and Harlem-East Harlem URP, residential development was prohibited within 100 feet of the viaduct. The east side of Park Avenue, roughly from East 123rd Street to 119th Street, is characterized by active manufacturing uses while the southern portion on both sides of the avenue is primarily residential with few commercial uses. As a result of the number of parking lots fronting Park Avenue and the disconnected and limited amount of commercial space, Park Avenue has very limited pedestrian activity and is mainly used as an east–west connector.

Lexington Avenue is a major north–south corridor in East Harlem. The subway operates along Lexington Avenue with stations at East 103rd, 110th, 116th, and 125th Streets. Express service is also provided at the 125th Street station. Lexington Avenue is characterized by mixed-use buildings with residential and ground-floor retail. The residential character of Lexington Avenue is predominately tenement-style buildings ranging in height from four to six stories. This building form changes between East 118th and 122nd Streets, where tower-in-the-park buildings are located on the west side of Lexington Avenue with heights ranging from 11 to 32 stories. Between East 115th and East 112th Streets, the building heights are typical of the tower-in-the-

park building typology with 14-story buildings located on both sides of Lexington Avenue. The midblocks between Lexington and Park Avenues are predominantly residential in character with some community facility uses. The residential buildings range in height from five to seven stories and the community facility uses include churches and schools. Some of the midblocks contain open spaces that are accessory to the residential towers along Lexington Avenue. There are no commercial uses between Park and Lexington Avenues except along East 116th and 124th Streets, where commercial overlays are currently mapped.

Third Avenue, unlike Park Avenue, has greater pedestrian activity with active local retail uses. Although a 2003 East Harlem Rezoning did not result in new residential developments occupying the higher density envelopes, the corridor remains an active commercial destination for local residents. However, the lack of development has resulted in the underutilization of many sites and buildings with vacant upper stories along Third Avenue. Some buildings along Third Avenue are sealed off and/or used as storage. Although a few recent developments have resulted in building envelopes that reflect the existing zoning, most buildings along Third Avenue have very few residential units and/or are occupied by one-story commercial uses. Taino Towers, located at East 122nd and East 123rd Streets between Third and Second Avenues, is one of largest residential developments in East Harlem. Built in 1979 with federal assistance, Taino Towers includes four 35-story residential towers with 656 units atop a four-story commercial base. Portions of the Robert Wagner Houses, a NYCHA development, are located on a superblock along Second Avenue between East 120th and East 124th Streets. The remainder of Second Avenue is characterized by tenement-type buildings with ground-floor retail.

#### *EAST 116TH STREET*

East 116th Street is one of the major commercial corridors in East Harlem and a major east–west connector connecting East Harlem to Central Harlem. This corridor is the center of the El Barrio/Spanish Harlem Neighborhood and provides a variety of local retail uses that cater to Latino residents. The built form is characterized by four- to seven-story tenement-style residential buildings with ground-floor retail. At Park Avenue and East 116th Street is La Marqueta, a retail space originally created as the Park Avenue Retail Market under Mayor LaGuardia. This underutilized market space was once a thriving market where as many as 500 local vendors operated, selling ethnic food for the Caribbean and Latino diaspora. However, the limited pedestrian traffic and commercial uses along Park Avenue have affected the vitality of the La Marqueta space. Two important nodes along East 116th Street are at Lexington Avenue, where the local subway line is located, and Third Avenue, which connects 116th Street to the Third Avenue commercial corridor.

#### *BETWEEN EAST 104TH STREET AND EAST 116TH STREET*

Much of Park Avenue within this area is typified by large, tower-in-the-park NYCHA developments. The Lehman and Carver houses are located on the west side of Park Avenue between East 104th and 110th Streets. The Metro-North Railroad viaduct transitions at East 110th Street from an open steel to a solid stone structure. The stone viaduct allows pedestrians to cross at each intersection; however, the pedestrian conditions along and underneath the viaduct require improvements to enhance safety and create a more welcoming walking environment. The east side of Park Avenue is characterized by a mix of uses ranging from public housing, commercial uses, and community gardens.

This section of Lexington Avenue has a neighborhood character that is similar to that of the northern part of Lexington Avenue, with mixed-use residential and commercial buildings. With

the exception of the 18-story NYCHA on the west side of Lexington Avenue, the building heights step down to a range of between four and eight stories.

The conditions along Third Avenue south of East 116th Street are similar to those above 115th Street. Despite the 2003 East Harlem Rezoning, which increased the residential density, much of the area is still characterized by four- to seven-story tenement-style buildings with ground-floor retail. Although the area is residentially zoned, there are a number of properties where the upper stories are vacant and ground-floor retail is the only use. Franklin Plaza Co-op Houses is the largest residential development in this area. Created in 1960, it is a multi-family development with fourteen 20-story buildings along segments of Third and Second Avenues. Second Avenue, similar to Third Avenue, is characterized by four- to seven-story residential buildings and ground-floor retail. However, there has been some new residential development on small lots with buildings as tall as 10 stories.

### **D. EXISTING ZONING**

East Harlem in Community District 11 is comprised of approximately 2.4 square miles in Upper Manhattan. The portions of the Community District not affected by the Proposed Actions are generally east of Second Avenue, west of Park Avenue, south of East 104th Street, and Randall's and Wards Islands.

Much of the current zoning has remained unchanged since the 1961 Zoning Resolution was established, with the exception of three zoning map amendments adopted over the last 13 years. The East Harlem Rezoning, adopted in 2003, changed most of the mapped R7-2 and C4-4 districts to contextual districts in an effort to facilitate additional residential and commercial opportunities. The 2003 rezoning boundaries were from East 96th to 124th Streets and east of Lexington Avenue. The 125th Street Rezoning, which rezoned portions of East Harlem, was adopted in 2008, and mapped the 125th Street corridor as a special district from Broadway to Second Avenue between 124th and 126th Streets. The East 125th Street rezoning, also in 2008, rezoned the block bounded by East 125th and East 126th Streets and Second and Third Avenues to C6-3 to facilitate the development of a mixed-use project, including residential, commercial, entertainment, and community facility uses.

Existing zoning districts are shown in **Figure 3** and discussed below.

#### **M1-2 & M1-4**

An M1-2 district is located in the northern portion of the Project Area. The M1-2 district mapped on the east side of Park Avenue between East 128th and East 131st Streets allows manufacturing and commercial uses at a maximum FAR of 2.0 and community facility uses at a maximum FAR of 4.80. M1 districts have a base height limit, above which a structure must fit within a sloping sky exposure plane; this base height is 60 feet in M1-2 districts. M1-2 districts are subject to parking requirements based on the type of use and size of an establishment. M1 districts generally allow one- or two-story warehouses for light-industrial uses, including repair shops, wholesale service facilities, as well as self-storage facilities and hotels. M1 districts are intended for light industry; however, heavy industrial uses are permitted in M1 districts as long as they meet the strict performance standards set forth in the Zoning Resolution (ZR).

M1-4 is a light manufacturing district mapped in the Mid-East Harlem portion of the district. The M1-4 is mapped on the east side of Park Avenue, roughly between East 124th and East 119th Streets, and allows 6.5 FAR for community facility uses and 2.0 FAR for commercial and manufacturing uses. Residential uses and community facility uses with sleeping



accommodations are not permitted in M1 districts, but commercial uses and a wide range of light manufacturing, warehousing, and auto service uses are permitted. Many commercial uses are restricted to 10,000 square feet in M1-4 districts.

Existing land uses within the M1-2 and M1-4 districts include warehouses/storage for light industrial uses, auto-related businesses such as garages and surface parking, wholesale market office, flooring business, a moving facility and vacant or underutilized land.

### **C8-3**

There are two C8-3 districts mapped in the northern portion of the Project Area along the west side of Park Avenue between East 126th and East 127th Streets and between East 128th and East 131st Streets. C8-3 districts are designed for heavy commercial uses, such as auto service, sales, and repairs. C8 districts are found mainly along major traffic arteries and allow automotive and other heavy commercial uses that often require large amounts of land. C8 districts have a base height limit, above which a structure must fit with a sloping sky exposure plane; this base height is 60 feet in C8-3 districts, and typically produces low-rise, one-story structures. C8-3 districts also permit community facility uses at a maximum FAR of 6.5. Typical uses are automobile showrooms and repair shops, warehouses, gas stations, and car washes; community facilities, self-storage facilities, hotels and amusements, such as theatres are also permitted. No new residential uses are permitted.

Existing land uses within the C8 districts include gas stations, car sales lots, auto-repair shops, small local retail shops mixed with residential uses above the ground floor and storage and office space.

### **C6-3**

The C6-3 district is mapped along portions of Park Avenue within the Special 125th Street District. The C6-3 district, outside of the Special 125th Street District of the Core Subdistrict, allows a maximum residential and commercial FAR of 6.0 (8.0 with Voluntary Inclusionary Housing or Visual or Performing Arts Bonus) and community facility FAR of 6.0. As included in the Special 125th Street District provisions, there are special height and setback regulations pertaining to the C6-3 district. The minimum and maximum base height of the streetwall is 60 to 85 feet and the maximum building height is 160 feet. Regarding streetwall location, all portions of buildings or other structures that exceed a height of 85 feet in the C6-3 district shall be set back at least 15 feet from the street line. Additionally, the maximum length of any story located above a height of 85 feet shall not exceed 150 feet.

### **R7-2**

The R7-2 district is currently mapped on approximately 39 full or partial blocks along the Park Avenue corridor, on portions of the mid-blocks between Park and Lexington Avenues, and between Madison and Park Avenues from East 126th and East 132nd Streets. R7 districts are medium-density residential districts that permit a maximum FAR of 3.44 for residential uses and 6.5 for community facility uses. Commercial overlays mapped in this district permits a maximum allowable FAR of 2.0. The R7-2 district regulations encourage residential towers on large lots and allow new development that could be out of scale or that could conflict with the context of certain portions of the neighborhood. R7-2 districts do not have provisions for new buildings to line up with adjacent buildings, allowing new development to break the continuity of the streetwall.

However, the optional Quality Housing Program includes is available in R7-2 districts, with height, setback, and bulk regulations designed to produce a building form that is consistent with the contextual characteristic of the neighborhood. The Quality Housing Program permits a slightly denser development in exchange for height limits and consistent streetwalls. In R7-2 districts on narrow streets (less than 75 feet wide), the Quality Housing Program allows 3.44 residential FAR with a maximum base height of 60 feet and maximum building height of 75 feet. On wide streets, the Quality Housing Program allows buildings up to 4.0 residential FAR with a maximum base height of 65 feet and a maximum building height of 85 feet.

Parking is required for 50 percent of the residential units but may be waived or reduced.

The existing land uses in these areas include parking lots, multi-family residences and community facilities, and vacant land and community gardens.

### **R8A**

The R8A district is mapped mostly in the southern portion of Third Avenue between East 112th and East 104th Streets and along entire portion of Second Avenue within the Project Area. However, an R8A district is mapped on the south side of East 111th Street between Park and Madison Avenues. In R8A districts, the contextual Quality Housing Program bulk regulations are mandatory. These regulations typically result in high lot coverage 10- to 12-story apartment buildings set at or near the street line. Limitations on the base height and maximum building height of new buildings ensure compatibility with existing buildings on the street. R8A districts allow a maximum residential floor area of 6.02 and maximum community facility FAR of 6.5. Commercial overlays mapped in this district allow a maximum FAR of 2.0. The maximum allowable building height is 120 feet (125 feet with a qualifying ground-floor use) and minimum and maximum base height between 60 to 85 feet.

### **R7A**

The R7A district is mapped along East 116th Street, east of Lexington Avenue. In R7A districts, the contextual Quality Housing Program bulk regulations are mandatory. These regulations typically result in high lot coverage buildings up to 80 feet in height. Limitations on the base height and maximum building height of new buildings ensure compatibility with existing buildings on the street. R7A districts allow a maximum residential and community facility floor area ratio of 4.0. Commercial overlays mapped in this district allow a maximum FAR of 2.0. The maximum allowable building height is 80 feet (85 feet with a qualifying ground-floor use) and minimum and maximum base height between 40 and 75 feet.

### **C4-4 AND C4-4D**

There is one C4-4 district mapped on the west side of Third Avenue between East 122nd and 123rd Streets and on both sides of Third Avenue between East 123rd and East 124th Streets. C4-4 districts are intended for larger stores serving an area wider than the immediate neighborhood. Commercial uses in C4-4 districts have a maximum FAR of 3.4. Residential and community facility uses in C4-4 districts must comply with the R7-2 bulk requirements; the maximum residential FAR is 3.44 under the standard R7-2 height factor regulations, or 4.0 on wide streets under the Quality Housing Program. The maximum FAR for community facility uses is 6.5. One off-street parking space per 1,000 feet of commercial floor area is required; however, parking is waived if the retail use requires less than 40 parking spaces.

A C4-4D district is mapped along the entire portion of Third Avenue from East 115th Street to East 122nd Street. The C4-4D district allows the same range and density of commercial uses as

the C4-4 but has a greater residential density. The C4-4D must comply with the R8A bulk requirements; the maximum residential FAR is 6.02 and the community facility FAR is 6.5. Similar to the C4-4, the maximum commercial FAR is 3.4. Building and streetwall heights must comply with the R8A bulk regulations.

### **C1-9**

The C1-9 district is a commercial district that is predominantly residential in character. These commercial districts are mapped along major thoroughfares in medium and higher-density areas. The C1-9 has a maximum commercial FAR is 2.0 and a maximum residential and community FAR of 10.

The C1-9 district in East Harlem is mapped on the westernmost portion of a city block bounded by Third and Second Avenues between East 122nd and East 123rd Streets. The district was designated to accommodate the Taino Towers, a federally funded residential complex with four 35-story towers atop a four-story commercial base.

### **COMMERCIAL OVERLAYS**

Commercial district overlays permitting local commercial retail uses are mapped along Park, Lexington, Third, and Second Avenues, as well as along much of East 116th Street.

#### *C1-2, C1-4 & C1-5*

There are C1-2, C1-4, and C1-5 commercial overlays mapped throughout the Project Area and along the corridors within the Special District. Residential, community facility, and specific commercial uses are permitted within these commercial overlays. C1 districts facilitate local shopping that serves the immediate surrounding residences (Use Group 6). Commercial buildings in C1 overlays have a maximum permitted FAR of 2.0. Otherwise, residential, mixed residential/commercial, and community facility uses in C1 commercial overlays are regulated by the bulk regulations of the underlying residential districts. In addition, commercial uses in mixed commercial and residential buildings in these districts cannot be located above the first floor. Often mapped only in high-density residential areas, C1-4 districts typically require one parking space per 1,000 square feet of commercial use, whereas C1-5 districts do not require parking accessory to commercial use. C1-2 districts are typically mapped in a low density area and require one parking space per 300 square feet.

#### *C2-4 and C2-5*

C2-4 and C2-5 commercial overlays are mapped along select block frontages on Park and Lexington Avenues. The C2-4 district is mapped along portions of Park Avenue north of East 116th Street and along portions of Park and Lexington Avenues below East 112th Street. The C2-5 district is mapped in the southern portion of the Project Area along Third Avenue between East 104th and East 112th Streets. C2 commercial overlays are intended to provide local shopping needs, as well as meet broader shopping and service needs than daily activities typically require (Use Groups 6 through 9). Commercial buildings in C2 district overlays have a maximum permitted FAR of 2.0. Otherwise, residential, mixed residential/commercial, and community facility uses in C2 commercial district overlays are regulated by the bulk regulations of the underlying residential districts. C2-5 districts do not require parking accessory to commercial use, but C2-4 districts typically require one parking space per 1,000 square feet of commercial use.

## **E. PURPOSE AND NEED FOR THE PROPOSED ACTIONS**

East Harlem is a transit-rich community with vibrant commercial corridors and an existing housing stock that is largely affordable. However, like many other neighborhoods throughout the City, new market-rate development under existing zoning has the potential to threaten East Harlem's affordability and neighborhood character. The Neighborhood Study is the City's effort to leverage these community assets and preserve existing affordability while creating new opportunities for housing and economic development. The Proposed Actions were informed by and builds off of the recommendations included in the EHNP, a community-based plan created by local stakeholders and residents.

DCP is proposing these land use actions in response to the recommendations identified in the EHNP and the Community Board's 11 East Harlem Land Use and Rezoning Initiative. DCP, in conjunction with other City agencies, developed a plan to achieve these goals through new zoning and other land use actions, expanded programs and services, and capital investments.

Under the current zoning in the neighborhood, many of the recommendations highlighted in the Plan would not be implementable. New residential developments in key areas and along major corridors are not permitted. In areas where residential use is permitted, the existing zoning restricts new development to densities that limit the production of substantial amounts of housing, particularly affordable housing, which limits the potential of the major corridors from becoming vibrant pedestrian destinations.

The Proposed Actions seek to facilitate a vibrant, inclusive residential neighborhood with a wide variety of local and regional commercial activities, job opportunities, and attractive streets that are safe and inviting for residents, workers, and visitors. Opportunities for new housing, including affordable housing, along key corridors, particularly Park, Third, and Second Avenues, would provide more housing choices for current and future residents. Modification of the zoning, as per the Proposed Actions, would unlock development opportunities and allow for a growing residential population. These actions would also facilitate the expansion of customer bases for existing and new businesses, such as grocery stores, pharmacies, and other services, which would help these businesses continue to flourish. The Proposed Actions also seek to reinforce and protect the existing character and context of the residential core by focusing new residential density along the major north-south corridors in the Project Area, and by introducing contextual residential districts on select mid-blocks.

Additionally, though not part of the Proposed Actions, DCP's East Harlem Neighborhood Study calls for strategic infrastructure investments to support anticipated development activity. These improvements and investments could include streetscape improvements along key corridors, and would be implemented separately from the Proposed Actions. While the Proposed Actions are a key component to facilitate the implementation of the City's overall Plan, they are not dependent on these additional components and as such are not part of a coordinated environmental review. Moreover, there are components of the City's overall Plan for the neighborhood that are not yet known to a sufficient level of detail to include in the EIS analyses. The Proposed Actions reflect DCP's on-going engagement with Community Board 11, the East Harlem Steering Committee, DCP's interagency partners, and local elected officials to achieve the following land use objectives:

- Create opportunities for requiring permanently affordable housing to ensure that the neighborhood continues to serve diverse housing needs;
- Modify the existing zoning, where needed, to preserve the built neighborhood character;

- Create opportunities for economic development while preserving the vitality of the existing commercial and manufacturing uses;
- Establish a Special District that improves the pedestrian experience and establishing urban design controls that balance new development in response to existing neighborhood context and scale; and
- Ensure a successful neighborhood plan by establishing a planning framework that is inclusive of the relevant capital infrastructure needs and services to support current demands and future growth.

**CREATE OPPORTUNITIES FOR REQUIRING PERMANENTLY AFFORDABLE HOUSING AND PRESERVE EXISTING AFFORDABILITY TO ENSURE THAT THE NEIGHBORHOOD CONTINUES TO SERVE DIVERSE HOUSING NEEDS.**

The Proposed Actions would promote the development of permanently affordable housing and facilitate mixed-income communities by requiring affordable housing units to be included in any new residential development, which is not required by zoning today.

As asking rents continue to increase and wages remain stagnant throughout the City, East Harlem, like other neighborhoods, is experiencing a shortage of available affordable housing. In East Harlem, more than 30 percent of the population is living in poverty, approximately 12 percent of the population is unemployed, and nearly 50 percent of households are rent burdened. These conditions have threatened the housing security of existing residents and affect the economic development potential of the neighborhood.

Park, Third, and Second Avenues present the greatest opportunity for the development of affordable housing. The width of the streets, access to transit, and the presence of a number of significant sites with potential for redevelopment provide these corridors with the capacity to support significant growth. Zoning changes to allow residential development at higher densities would enable the construction of affordable apartment buildings along these corridors and would expand the neighborhood's supply of affordable housing.

New multifamily housing in the vicinity of the Project Area has consisted of privately developed and publicly financed housing developments. The proposed MIH program would require that residential development include an affordable component, ensuring that new market-rate development would facilitate mixed-income communities. In addition, it is expected that a variety of City and State financing programs for affordable housing will continue to be available to help support the new development and preservation of affordable housing in the area.

**MODIFY THE EXISTING ZONING, WHERE NEEDED, TO PRESERVE THE BUILT NEIGHBORHOOD CHARACTER.**

East Harlem's rich cultural and social history has made it a community of choice for a number of immigrants, who are drawn to the cultural allure of this vibrant neighborhood. The northern portion of Project Area, bounded by East 126th and East 132nd Streets and Park and Madison Avenues, reflects the neighborhood's historic built character with well-maintained mid-rise row houses and brownstones in the midblock. The existing zoning in this area of East Harlem may encourage development that is out of scale with the existing built context. Changing the existing medium-density height factor district currently mapped in this area would provide a greater level of protection for the existing built context, and would discourage tear downs and the development of out-of-scale buildings. The proposed zoning will preserve residential neighborhoods and promote contextual infill development. Contextual zoning would ensure that

new infill development complements the existing residential character by promoting consistent building height and size.

### **CREATE OPPORTUNITIES FOR ECONOMIC DEVELOPMENT WHILE PRESERVING THE VITALITY OF THE EXISTING COMMERCIAL AND MANUFACTURING USES.**

A vital component of DCP's Neighborhood Study is the creation of new commercial opportunities along key corridors, especially the areas surrounding Park Avenue and East 125th Street. Key corridors in East Harlem, such as East 125th Street, East 116th Street, and Third Avenue, are currently fragmented, disconnected, and do not operate at their full potential. Although the 2003 East Harlem Rezoning and the 125th Street Rezoning in 2008 were both aimed at increasing the commercial capacity of these key corridors, the amount of commercial development envisioned for these areas was never realized. Given the potential Second Avenue Subway terminus and the existing Metro-North Railroad Station at East 125th Street and Park Avenue, these key corridors have the potential for becoming a center for local and regional commercial and economic development activity.

Park Avenue, both in the northern and mid-section of the Project Area, has growth potential that can accommodate new economic development opportunities like life sciences, office space, and commercial uses without precluding residential development. Growth in this area will activate the Park Avenue corridor and facilitate the transformation of this underutilized corridor to accommodate the proposed residential growth.

Although Third Avenue and East 116th Street each have a strong local retail corridor, the Proposed Actions would strengthen the opportunities along these corridors and better situate them economically within the district.

### **ESTABLISH A SPECIAL DISTRICT THAT IMPROVES THE PEDESTRIAN EXPERIENCE AND ESTABLISHES URBAN DESIGN CONTROLS THAT BALANCE NEW DEVELOPMENT IN RESPONSE TO EXISTING NEIGHBORHOOD CONTEXT AND SCALE.**

The Proposed Actions would establish a new special district known as the East Harlem Corridor Special District. The special district would cover the key corridors within the Project Area: East 116th Street and Park, Third, and Second Avenues. The Proposed zoning changes would promote active non-residential ground-floor uses along the key corridors to facilitate a better pedestrian experience by activating the streetscape. This would also create a more active and safe environment along Park Avenue, which is currently underutilized and has very limited pedestrian activity.

The urban design controls that would be included in the Special District would regulate streetwall conditions, minimum and maximum base heights, parking requirements, and eliminate the plaza bonus. These provisions within the special district would allow for the introduction of flexible streetwalls along the key corridors and ensure a balance between existing and new development. These provisions would also strengthen the commercial corridors by requiring base heights that are harmonious with the existing built context and allowing for streetwall continuity. Further, the reduction in the amount of required parking would allow for more active ground-floor uses.

**ENSURE A SUCCESSFUL NEIGHBORHOOD PLAN BY ESTABLISHING A PLANNING FRAMEWORK THAT IS INCLUSIVE OF THE RELEVANT CAPITAL INFRASTRUCTURE NEEDS AND SERVICES TO SUPPORT CURRENT DEMANDS AND FUTURE GROWTH.**

The Proposed Actions would catalyze new development; modifying and enhancing the character of the key corridors included in the Project Area. As a part of the Neighborhood Study, it was essential to coordinate not only with community partners—the Community Board 11 and the Steering Committee—but also DCP’s interagency partners to ensure that planning framework was inclusive of the relevant capital infrastructure needs and services to support growth within the Project Area.

Although many of the infrastructure and service needs are outside of the purview of zoning, they are crucial to the planning and development of the community. The EHNP, through its recommendations, highlighted a number of community needs. The Plan has been used as a guide to inform the on-going engagement process between the Community and the City and has been instrumental in formulating the planning framework for this community. DCP, in conjunction with other city agencies, continues to work with Community Board 11 and the Steering Committee to address as many of the recommendations, as feasible, to ensure that relevant infrastructure and service needs are a part of the overall planning process.

**F. DESCRIPTION OF THE PROPOSED ACTIONS**

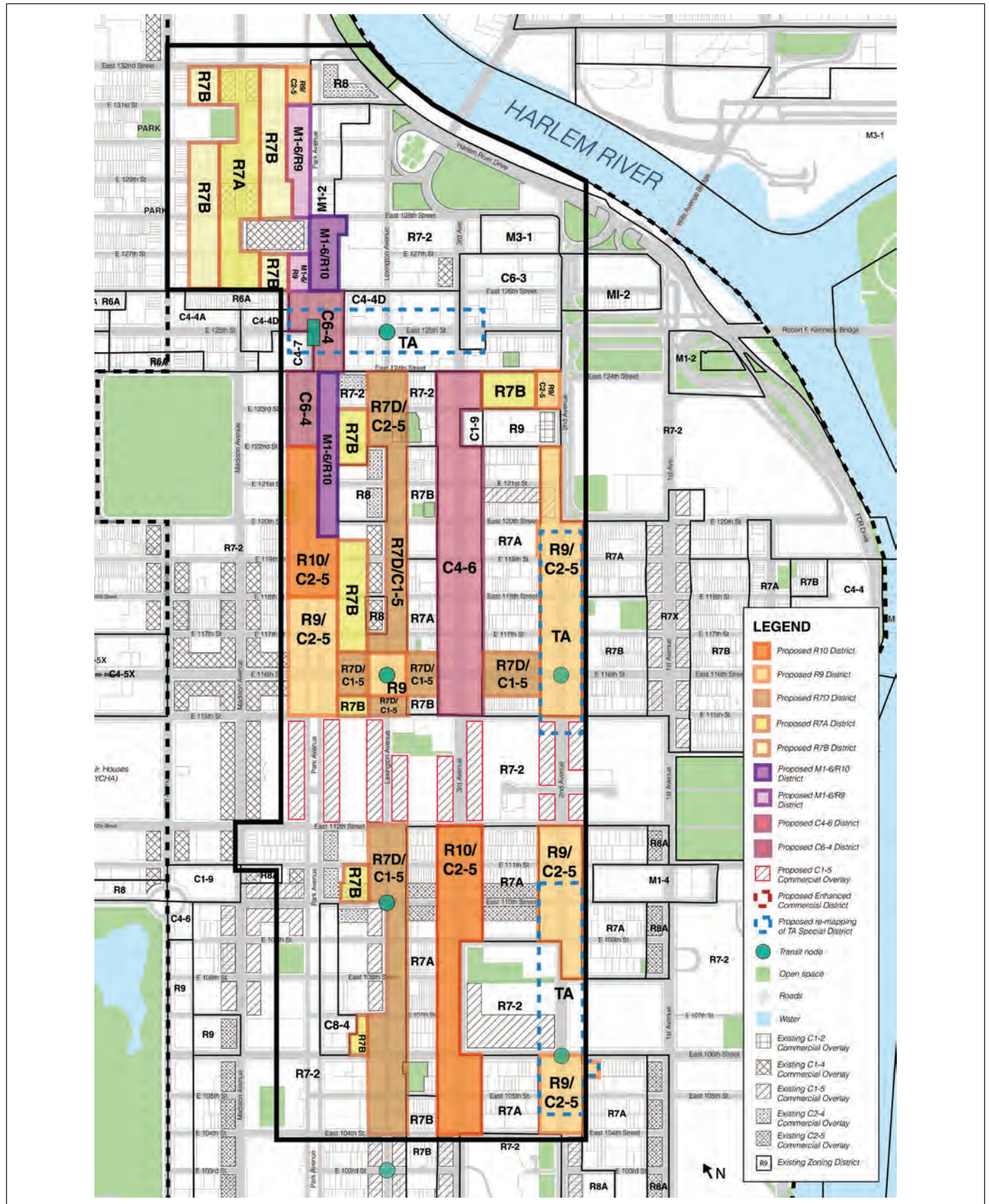
The Proposed Actions are intended to facilitate the implementation of the objectives of DCP’s Neighborhood Study, which shares the long-term vision articulated in the East Harlem Neighborhood Plan for the creation of more affordable housing and more diverse commercial and retail uses, spur economic development, foster safer streets, and generate new community resources. To accomplish these goals, DCP is proposing zoning map and text amendments that would affect a total of approximately 95 blocks in the three sections in East Harlem, described in detail above (see **Appendix 1** for affected blocks and lots). Additionally, HPD is proposing amendments to the Millbank Frawley Circle-East and Harlem-East Harlem URPs to make the plans compatible with the zoning actions.

DCP will be acting as lead agency on behalf of CPC and will conduct a coordinated environmental review. HPD will be the co-applicant for the Urban Renewal Plan amendment and, as the result, will serve as an involved agency under CEQR.

Each of these actions is discretionary and subject to review under ULURP, Section 200 of the City Charter, and the CEQR process. The proposed actions are described in more detail below.

**PROPOSED ZONING DISTRICTS**

The proposed rezoning would replace all or portions of existing R7-2, C8-3, M1-2, M1-4, C4-4, C4-4D, R8A, R7A, and C6-3 districts within the rezoning area with M1-6/R9, M1-6/R10, C4-6, C6-4, R10, R9, R7A, R7B, and R7D districts. The proposed rezoning would replace or eliminate portions of existing C1-4, C2-4, and C1-5 overlays with C1-5 or C2-5 overlays and establish new C1-5 overlays. The proposed rezoning would also amend the Zoning Map to include boundaries of the new EHC Special District as well as modified boundaries of the TA Special District. A portion of the C6-3 District at the intersection of East 125th Street and Park Avenue within the Special 125th Street District would be replaced with a C6-4 district. **Figure 4** presents the proposed zoning map changes, which are discussed in greater detail below.



### *PROPOSED SPECIAL EAST HARLEM CORRIDORS DISTRICT*

The proposed EHC Special District would be mapped along major corridors within the rezoning area, including Park Avenue, Lexington Avenue, Third Avenue, Second Avenue, and East 116th Street, to establish special use, bulk, ground-floor design and parking regulations.

*Use Regulations:* Within proposed M1-6/R9 and M1-6/R10 Districts, the EHC would apply special use regulations similar to that of the Special Mixed Use District (Article XII, Chapter 3). The EHC would allow limited public parking garages to be as-of-right within proposed commercial and manufacturing districts, just as they are currently permitted in the existing districts including C2-4, C4-4, C4-4D, C8-2, and M1-2 districts. Finally, the proposed special district would impose appropriate controls on transient hotels to achieve the goals and objectives of the rezoning.

*Floor Area regulations:* Within certain high-density residential, commercial, and manufacturing districts, the EHC would apply special FAR regulations, as described in detail below, to ensure a desirable mix of these uses. The underlying public plaza and arcade floor area bonus provisions of non-contextual commercial and manufacturing districts would be eliminated.

*Streetwall location:* The EHC would modify the underlying streetwall location regulations to facilitate the creation of a desirable pedestrian environment. Along Park Avenue the EHC would modify the varying streetwall location regulations of proposed districts to apply one consistent streetwall location rule: at least 70 percent of a streetwall must be located within eight feet of a street line. Along Third Avenue, the underlying streetwall location regulation of a tower development option will be modified to require a consistent streetwall at the street line except for permitted recesses and courts.

*Contextual Quality Housing Option:* The EHC would modify the underlying minimum base height requirements of optional contextual Quality Housing bulk regulations of R9, R10, and their equivalent commercial districts. Along Park Avenue, the minimum base height would be lowered to allow the residential portion of a mixed-use building to setback from the Metro-North viaduct. Along other corridors, the minimum base height would be lowered to 60 feet to avoid requiring overly high streetwalls.

*Quality Housing Tower Option:* In non-contextual R9 and R10 districts, and their equivalent commercial districts, where a tower development option is available, the EHC would modify the underlying tower regulations to require a contextual base to create consistent and active pedestrian environment. The EHC would also require such tower to comply with the Quality Housing provisions of Article II, Chapter 8 of the Zoning Resolution to require a building to provide certain amenities to its residents.

*Ground-Floor Design Requirements:* The EHC would require a set of ground-floor design requirements including mandatory active, non-residential uses on the ground floor, minimum levels of transparency limiting curb cuts, where appropriate. The controls would foster a safe and walkable pedestrian experience along these corridors.

*Parking Regulations:* The EHC would eliminate the underlying accessory residential parking requirements. In addition, the EHC would allow limited public parking garages to be as-of-right within proposed commercial and manufacturing districts, just as they are currently permitted in the existing districts including C2-4, C4-4D, M1-2, and C8-3 districts.

*PROPOSED M1-6/R10 WITHIN THE EHC*

*(Existing M1-2 and M1-4 District)*

An M1-6/R10 mixed use district is proposed in two sections of the East Harlem Special District Corridor. In the northern section of the Project Area along the east side of Park Avenue between East 126th and East 128th Streets and in the mid-section roughly along the east side of Park Avenue between East 119th and East 124th Streets. M1-6/R10 districts permit residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 5-15 and 17 at a maximum FAR of 12.0 in a mixed-use building. The EHC would impose a non-residential use requirement of 2.0 FAR before any permitted residential floor area could be utilized. The special streetwall and minimum base height provisions of Park Avenue within the EHC, as described above, would apply. The maximum base height would be 125 feet and the maximum overall building height would be 350 feet with a penthouse allowance of up to 40 feet. The special ground-floor design and parking provisions of the EHC would apply.

*PROPOSED M1-6/R9 WITHIN THE EHC*

*(Existing C8-3 District)*

An M1-6/R9 mixed use district is proposed northern section of the Project Area along the west side of Park Avenue between East 126th and East 128th Streets and between East 128th and East 131st Streets. M1-6/R9 districts permit residential and community facility uses within Use Groups 1 through 4, and commercial and manufacturing uses within Use Groups 5 through 15 and 17 at a maximum FAR of 8.5 in a mixed-use building. The EHC would impose a non-residential use requirement of 1.5 FAR before any permitted residential floor area could be utilized. The special streetwall and minimum base height provisions of Park Avenue within the EHC, as described above, would apply. The maximum base height would be 105 feet and the maximum overall building height would be 350 feet with a penthouse allowance of up to 40 feet. The special ground-floor design and parking provisions of the EHC would apply.

*PROPOSED C4-6 WITHIN THE EHC*

*(Existing R7-2)*

A C6-4 district is proposed on the east side of Park Avenue between East 122nd and East 124th Streets within the EHC Special District.

The C6-4 district would allow a maximum FAR of 10.0 (with MIH requirements) for residential, 10.0 for community facility and commercial uses. The EHC would impose a non-residential use requirement of 2.0 FAR before any permitted residential floor area could be utilized and the overall maximum floor area for a mixed-use development would be 12.0 FAR. Pursuant to the special bulk provisions of the EHC as described above, a development would have contextual Quality Housing and Quality Housing tower bulk options. For both options, the streetwall location and minimum base height provisions along Park Avenue of the EHC would apply. For the contextual Quality Housing option, the maximum base height would be 155 feet and the maximum building height would be 235 feet after a required setback above the base height. For the Quality Housing tower option, the maximum base height would be 85 feet and the maximum residential tower lot coverage would be between 40 and 50 percent depends on the size of a zoning lot and maximum commercial or community facility tower lot coverage would be 50 percent. The special ground-floor design and parking provisions of the EHC would apply.

## **East Harlem Rezoning**

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### *PROPOSED R9/C2-4 WITHIN THE EHC*

*(Existing R7-2 and R8A)*

The proposed R9 district would be mapped within the EHC in the following areas:

- The west side of Park Avenue between East 131st and East 132nd Streets;
- Both sides of Park Avenue between East 115th and East 118th Streets;
- The intersection of East 116th Street and Lexington Avenue;
- The west side of Second Avenue between East 123rd and East 124th Streets;
- The west side of Second Avenue between East 120th and East 122nd Streets;
- Both sides of Second Avenue between East 115th and East 120th Streets;
- Both sides of Second Avenue between East 112th and East 109th Streets;
- The east side of Second Avenue between East 108th and East 109th Streets; and
- Both sides of Second Avenue between East 104th and East 106th Streets.

R9 districts, within the EHC, will have maximum FAR of 8.5 for community facility uses and residential uses under the Inclusionary Housing program. Commercial overlays mapped in this district would allow a maximum FAR of 2.0. Pursuant to the special bulk provisions of the EHC as described above, a development would have contextual Quality Housing and Quality Housing tower bulk options. For both options, the streetwall location and minimum base height provisions along Park Avenue or other avenues, as applicable, of the EHC would apply. For the contextual Quality Housing option, the maximum base height would be 125 feet and the maximum building height would be 175 feet after a required setback above the base height. For the Quality Housing tower option, the maximum base height would be 85 feet and the maximum residential tower lot coverage would be between 40 and 50 percent depends on the size of a zoning lot and maximum commercial or community facility tower lot coverage would be 50 percent. The special ground-floor design and parking provisions of the EHC would apply.

### *PROPOSED R10/C2-5 WITHIN THE EHC*

*(Existing R8A and R7-2)*

The proposed R10 would be mapped within the EHC in the following areas:

- The west side of Park Avenue between East 122nd and East 118th Streets;
- The east side of Park Avenue on the southern portion of the block between East 120th and East 119th Streets;
- Both sides of Third Avenue between East 109th and East 112th Streets;
- The west side of Third Avenue between East 106th and East 109th Streets; and
- Both sides of Third Avenue between East 104th and East 106th Streets.

R10 districts permit residential uses at a maximum FAR of 12.0 in areas designated as part of the Inclusionary Housing program, and a maximum FAR of 10 for community facility uses. Commercial overlays mapped in this district allow a maximum commercial FAR of 2.0. Pursuant to the special bulk provisions of the EHC as described above, a development would have contextual Quality Housing and Quality Housing tower bulk options. For both options, the streetwall location and minimum base height provisions along Park Avenue or other Avenues, as applicable, of the EHC would apply. For the contextual Quality Housing option, the maximum

base height would be 155 feet and the maximum building height would be 235 feet after a required setback above the base height. For the Quality Housing tower option, the maximum base height would be 85 feet and the maximum residential tower lot coverage would be between 40 and 50 percent depends on the size of a zoning lot and maximum commercial or community facility tower lot coverage would be 50 percent. The special ground-floor design and parking provisions of the EHC would apply.

*PROPOSED C4-6 WITHIN THE EHC*

*(Existing C4-4D district)*

A C4-6 district is proposed along Third Avenue in the mid-section of the Project Area between East 115th and East 124th Streets, with the exception of the east side of Third Avenue between East 122nd and East 123rd Streets.

The C4-6 district would allow a maximum FAR of 12.0 (with MIH requirements) for residential, 10.0 for community facility and 3.4 for commercial uses. Pursuant to the special bulk provisions of the EHC as described above, a development would have contextual Quality Housing and Quality Housing tower bulk options. For both options, the streetwall location and minimum base height provisions along Avenues, other than Park Avenue, of the EHC would apply. For the contextual Quality Housing option, the maximum base height would be 155 feet and the maximum building height would be 235 feet after a required setback above the base height. For the Quality Housing tower option, the maximum base height would be 85 feet and the maximum residential tower lot coverage would be between 40 and 50 percent depends on the size of a zoning lot and maximum commercial or community facility tower lot coverage would be 50 percent. The special ground-floor design and parking provisions of the EHC would apply.

*PROPOSED R7D WITHIN THE EHC*

*(Existing R7-2)*

The proposed R7D would be mapped in the following sections within the study area:

- Both sides of Lexington Avenue from East 104th Street to East 107th Street;
- The west side of Lexington Avenue from East 107th Street to East 110th Street;
- Both sides of Lexington Avenue from East 110th Street to East 112th Street;
- Both sides of the mid-blocks on East 116th Street between Park Avenue and 2nd Avenue;
- Both sides of Lexington Avenue from East 115th Street to midway between East 115th and East 116th Streets;
- Both sides of Lexington Avenue from midway between East 116th and East 117th Streets to East 117th Street;
- The east side of Lexington Avenue from East 117th Street to East 122nd Street; and
- Both sides of Lexington Avenue from East 122nd Street to East 124th Street.

R7D is a mid-density contextual district that has a minimum base height of 60 feet, a maximum base height of 95 feet and a maximum building height of 115 feet with a Mandatory Inclusionary Housing development with Qualifying Ground Floor. The maximum residential FAR in a Mandatory Inclusionary Housing Area is 5.6. The maximum allowable community facility FAR is 4.2 and commercial overlays mapped in these districts permit a maximum commercial FAR of 2.0. The special ground-floor design and parking provisions of the EHC would apply.

### *PROPOSED AMENDMENT TO THE SPECIAL 125TH STREET DISTRICT*

The Proposed Actions would modify the Special 125th Street District at three of the corners at 125th Street and Park Avenue. The existing C6-3 currently mapped on both sides of Park Avenue between East 125th and East 126th Streets and on the east side of Park Avenue between East 124th and 125th Streets would be rezoned to a C6-4 and be consistent with the proposed use, bulk, ground-floor design and parking regulations included in the proposed EHC.

#### *PROPOSED C6-4*

##### *(Existing C6-3)*

A C6-4 District is proposed along Park Avenue near the East 125th Street node, within the 125 Special District, at:

- The southeast corner Park Avenue between East 125th and East 124th Streets;
- The northeast corner of Park Avenue between East 125th and East 126th Streets; and
- The northwest corner of Park Avenue between East 125th and East 126th Streets.

The C6-4 district would allow a maximum FAR of 10.0 (with Mandatory Inclusionary Housing requirements) for residential, 10.0 for community facility and commercial uses. The proposed text modifications to the 125 would impose a non-residential use requirement of 2.0 FAR before any permitted residential floor area could be utilized and the overall maximum floor area for a mixed-use development would be 12.0 FAR. Pursuant to the existing special bulk provisions of the 125, developments would provide a contextual base between 60 feet and 85 feet in height along East 125th Street. The streetwall location and minimum base height provisions along Park Avenue of the EHC would apply to the portion of a building along Park Avenue. The maximum length of the portion of a building above the contextual base will be limited to 150 feet or less to prevent an excessively wide tower along Park Avenue. The existing special ground-floor design provisions of the 125 Special District would apply. The underlying parking provisions of the 125 would be modified to be consistent with that of the EHC.

#### *PROPOSED R7A AND R7B*

##### *(Existing R7-2)*

The proposed R7A and R7B would be mapped in the northern section of the Project Area outside of the proposed special district and on a number of the mid-blocks between Lexington and Park Avenues between East 104th and East 124th Streets.

The R7A would be mapped along Madison Avenue between East 126th to East 132nd Streets with the exceptions of the east side of Madison Avenue between East 127th and East 128th Streets and the west side of Madison Avenue between East 130th and East 131st Streets. The R7B would be mapped on the mid-blocks between Fifth and Madison Avenues and Park and Madison Avenues from East 126th to East 132nd Streets. The R7B will not be mapped on the mid-blocks bounded by East 128th Street, East 127th Street, Madison, and Park Avenues and East 130th and East 131st Streets and Madison and Fifth Avenues.

The R7B district will also be mapped along the midblock between East 123rd and East 124th Streets between Third and Second Avenues, and on the following midblocks between Lexington and Park Avenues:

- Roughly between East 121st and East 123rd Streets;
- Roughly between East 116th and East 120th Streets;
- Roughly between East 115th and East 116th Streets;
- Roughly between East 110th and East 111th Streets;
- Roughly between East 106th and East 107th Streets;
- A portion of the mid-block between East 123rd and East 124th Streets; and
- A portion of the mid-block between East 121st and East 122nd Streets.

The R7A and the R7B are contextual districts that have maximum base heights and maximum building heights. The R7B permits buildings of up to 85 feet in height, with a street minimum and maximum base height between 40 and 65 feet. The maximum residential and community facility FAR is 4.0. The R7B permits buildings of up to 75 feet in height, with a street minimum and maximum base height between 40 and 60 feet. The maximum residential and community facility FAR is 3.0. Commercial overlays mapped in these districts have a maximum FAR of 2.0.

#### *PROPOSED R9/C2-5*

The proposed R9/C2-5 district would be mapped over a city block bounded by Park Avenue to the east, East 111th Street to the south, Madison Avenue to the west, and East 112th Street to the north. An R9 district is a high-density non-contextual district that allows 8.0 FAR of residential floor area (with Mandatory Inclusionary Housing) and 10.0 FAR of Community Facility floor area. The C2-5 commercial overlay allows up to 2.0 FAR of local retail and service uses. Within an R9 district, a development may comply with either contextual Quality Housing or tower-on-a-base height and setback options. For the contextual Quality Housing option, the minimum and maximum base heights are 60 feet and 125 feet, respectively, and the maximum overall building heights are 165 feet along narrow streets and 175 feet along wide streets. For the tower-on-a-base option, the minimum and maximum base heights are 60 feet and 85 feet, respectively, and the portion of a building exceeding the maximum base height will be subject to the maximum tower coverage of 40 percent.

#### *PROPOSED COMMERCIAL OVERLAYS*

Existing C1 and C2 commercial overlays are mapped intermittently throughout the Project Area. C1 districts permit commercial Use Groups 5 and 6 while C2 districts permit Use Groups 5 through 9 and 14.

There are C1-5 overlays mapped throughout the Project Area and along the corridors within the Special District. DCP is proactively working with NYCHA to expand commercial overlays to areas where they do not currently exist, in order to increase the potential supply of retail and commercial services available to NYCHA residents on their campuses. Mapping these commercial overlays on NYCHA campuses is only one step in allowing commercial development in these areas, and this action would establish a zoning district that would allow NYCHA to pursue numerous additional approvals to advance commercial development on these campuses. This proposal would map commercial overlays to a depth of 100 feet to reflect the typical depth of existing lots along these corridors, and to prevent commercial uses from encroaching too far into NYCHA campuses.

C1-5 commercial overlays are proposed to be mapped over portions of the proposed R7D districts, and in existing R7-2 districts. The proposed rezoning would replace or eliminate

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portions of existing C1-4 and C2-4 overlays and establish new C1-5 overlays. The affected area is as follows:

- Proposed R7D: five full or partial block frontages on Lexington Avenue between East 116th and East 120th Streets;
- Proposed R7D: two partial block frontages on Lexington Avenue between East 115th and East 116th Streets;
- Proposed R7D: four full or partial block frontages along Lexington Avenue between East 110th and East 112th Streets; and
- Existing R7-2: on Park, Lexington, Third, and Second Avenues, roughly between East 112th and East 115th Streets.

C1-5 overlays permit residential, community facility, and specific commercial uses. C1 districts facilitate local shopping that serves immediate surrounding residences (Use Group 6). Commercial buildings in C1 overlays have a maximum permitted FAR of 2.0. Otherwise, residential, mixed residential/commercial, and community facility uses are regulated by the bulk regulations of the underlying residential districts in C1 commercial overlays. Commercial uses in mixed commercial and residential buildings in these districts cannot be located above the first floor. The C1-5 district does not require parking accessory to the commercial use.

C2-5 commercial overlays are proposed to be mapped over portions of the proposed R7D, R9 and R10 districts as follows. The proposed rezoning would also replace or eliminate portions of existing C1-2, C1-4, C1-5 and C2-4 overlays and establish new C2-5 overlays. The affected area is as follows:

- Proposed R7D: six full block frontages along Lexington Avenue between East 120th and East 124th Streets;
- Proposed R9: one full block frontage along Park Avenue between East 131st and East 132nd Streets;
- Proposed R9: six full block frontages along Park Avenue between East 118th and East 115th Streets;
- Proposed R9: one full block frontage on the east side of Madison Avenue between East 111th and East 112th Streets and one full block frontage on the west side of Park Avenue between East 111th and East 112th Streets;
- Proposed R9: four half block frontages at the intersection of Lexington Avenue and East 116th Street;
- Proposed R9: one block frontage on the east side of Second Avenue between East 123rd and East 124th Streets;
- Proposed R9: 12 full block frontages along Second Avenue between East 115th and East 122nd Streets;
- Proposed R9: seven full block frontages along Second Avenue between East 108th and East 112th Streets;
- Proposed R9: four block frontages along Second Avenue between East 104th and East 106th Streets;
- Proposed R10: six full or partial blocks along Park Avenue between East 118th and East 122nd Streets;

- Proposed R10: 13 full/partial blocks on Third Avenue between East 112th and East 104th Streets; and
- Eight full/partial blocks on the New York Housing Authority superblocks along Park, Third and Second avenues between East 112th and East 115th Streets.

C2-5 commercial overlays allow for local retail uses and commercial development up to 2.0 FAR. In these areas, the C2-5 commercial overlays will support the development of mixed residential/commercial uses. This proposal would map commercial overlays to a depth of 100 feet to reflect the typical depth of existing lots along these corridors and to prevent commercial uses from encroaching on residential side streets.

## **PROPOSED ZONING TEXT AMENDMENTS**

The Proposed Actions include amendments to the text of the New York City Zoning Resolution. A new special district known as the EHC Special District would be established. It would cover the key corridors in the study area. The new MIH program would also be mapped along the corridors within the special district, setting mandatory affordable housing requirements pursuant to the MIH program.

### *EHC SPECIAL DISTRICT*

Once established, the EHC would modify the underlying zoning regulations, establish additional requirements, and allow for greater flexibility in the type and shape of future development, as described in the Zoning Map Amendments section above.

### *MIH Program*

DCP proposes a Zoning Text amendment to apply the MIH program to portions of the proposed rezoning area, including where zoning changes are promoting new housing. The MIH program would apply within the following districts: M1-6/R9, M1-6/R10, R9, R10, C4-6, C6-4, and R7-D districts within the rezoning area. The MIH program requires permanently affordable housing within new residential developments, enlargements, and conversions from non-residential to residential use within the mapped “Mandatory Inclusionary Housing Areas” (MIHAs). The program requires permanently affordable housing set-asides for all developments over 10 units or 12,500 zoning square feet within the MIH designated areas or, as an additional option for developments between 10 and 25 units, or 12,500 to 25,000 square feet, a payment into an Affordable Housing Fund. In cases of hardship, where these requirements would make development financially infeasible, developers may apply to the Board of Standards and Appeals for a special permit to reduce or modify the requirements. Developments, enlargements or conversions that do not exceed either 10 units or 12,500 square feet of residential floor area will be exempt from the requirements of the program.

The MIH program includes two primary options that pair set-aside percentages with different affordability levels to reach a range of low and moderate incomes while accounting for the financial feasibility trade-off inherent between income levels and size of the affordable set-aside. Option 1 would require 25 percent of residential floor area to be for affordable housing units for residents with incomes averaging 60 percent of the AMI. Option 1 also includes a requirement that 10 percent of residential floor area be affordable at 40 percent AMI. Option 2 would require 30 percent of residential floor area to be for affordable housing units for residents with incomes averaging 80 percent AMI. The City Council and CPC could decide to apply an additional, limited workforce option for markets where moderate- or middle-income development is marginally financially feasible without subsidy. For all options, no units could be targeted to

## **East Harlem Rezoning**

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residents with incomes above 130 percent AMI. Additionally a Deep Affordability Option could also be applied in conjunction with Options 1 and 2. The Deep Affordability Option would require that 20 percent of the residential floor area be affordable to residents at 40 percent AMI.

### *PROPOSED AMENDMENT TO THE SPECIAL 125TH STREET DISTRICT*

The Proposed Actions would modify the existing 125th Street Special District at three of the corners at 125th Street and Park Avenue to be consistent with the proposed use, bulk, ground-floor design, and parking regulations included in the proposed Special East Harlem Corridors District, as described in the Zoning Map Amendments section above.

### *PROPOSED AMENDMENT TO THE TAsPECIAL DISTRICT*

The Proposed Actions include modifications to the TA Special District to facilitate the inclusion of necessary transportation-related facilities in new developments. The proposed modifications include:

#### *Proposed Map Modifications*

- Introduce a new TA Special District location along Second Avenue, roughly between East 115th and East 120th Streets.
- Modify existing TA Special District locations as follows:
  - Expand the TA Special District on Second Avenue at 106th Street by 100 feet to the north and south, with a slight 100 foot extension to the east along the south side of East 106th Street.
  - Relocate the TA Special District on Second Avenue near East 125th Street, to be located roughly along East 125th Street between Park and Third Avenues.

#### *Proposed Text Modifications*

- Modify the existing text and add new text to exclude floor area for any subway transit-related uses such as subway entrances and ancillary facilities (e.g., vent facilities, emergency egress) from the definition of zoning floor area
- Modify text and tables to allow for greater flexibility in transit easement volumes to accommodate entrances and/or ancillary facilities that meet ADA requirements, ventilation requirements, and other technical requirements in Community Board 11.
- Modify the text to specifically include ADA-compliant amenities and non-pedestrian transit functions such as ancillary (ventilation) facilities in Community Board 11.

### *PROPOSED AMENDMENT TO MILLBANK FRAWLEY CIRCLE-EAST AND HARLEM-EAST HARLEM URPS, AND LAND DISPOSITION*

The proposed amendments to the Millbank Frawley Circle-East and Harlem-East Harlem URPs would conform land use restrictions to zoning and would refresh the general provisions of the URPs. Additionally, disposition approval of the urban renewal site would allow development pursuant and in accordance with the urban renewal plan. As part of the Proposed Actions, the following sites within the Urban Renewal Area would be granted disposition approval:

- Block 1617: Lots 20, 22, 23, 25, 28, 29, 31, 33, 35, 37-43, 45, 46, 48, 50-54, 121, and 122; bounded by Park Avenue, Madison Avenue, East 111th, and East 112th Streets.

## **WRP REVIEW PROCESS AND DETERMINATION**

Portions of the Project Area are within the coastal zone and would therefore be reviewed by CPC, in its capacity as the City Coastal Commission (CCC) to determine if the Proposed Actions are consistent with the relevant WRP policies.

## **POTENTIAL MODIFICATIONS TO THE PROPOSED ACTIONS TO SUPPORT THE EAST 111TH STREET DEVELOPMENT**

As noted in Section H, “Task 22 – Alternatives,” the DEIS will include an alternative that considers, in addition to the Proposed Actions as described above, a series of actions needed to facilitate an HPD-sponsored affordable housing development proposed on the site bounded by East 112th Street, Park Avenue, and Madison Avenue (the East 111th Street Site). The affected property is a public site owned by the City of New York (under the jurisdiction of HPD). The site is over 76,500 square feet in size and encompasses community gardens and a baseball field. There are two privately owned parcels on the block. HPD is proposing to develop the site to facilitate the creation of a mixed-use development with residential, commercial, and community facility uses. All of the proposed residential units would be affordable in accordance with HPD affordability requirements. Additionally, the proposed development would incorporate four of the existing gardens and relocate two of the other gardens elsewhere within the surrounding neighborhood. These lots will be transferred to the Department of Parks and Recreation (NYC Parks) as GreenThumb gardens. NYC Parks is working with the organization that currently utilizes the baseball field to obtain a permit for another field in the area. HPD is currently evaluating Request for Proposal (RFP) submissions based on the quality and feasibility of the proposals, as well as the responsiveness to the priorities articulated by the community. A developer is anticipated to be selected by the end of 2016.

The land use actions necessary to facilitate the development of the East 111th Street Site are expected to enter public review as a separate land use application concurrent with the Proposed Actions. The actions anticipated include: (a) zoning map amendment to rezone the R7-2 district to R9, (b) zoning text amendment to apply the MIH program to the site, (c) disposition of city-owned land, (d) amendment to the Millbank Frawley Circle-East Urban Renewal Plan, and (e) special permit for a large scale general development (LSGD) to allow for modifications to height and setback requirements and/or accessory off-street parking requirements.

The development of the East 111th Street Site requires significant coordination between HPD, various city agencies, property owners and the developer. This coordination effort will define, among other items, specific requirements for the development’s program and design. Given the uncertainty of the coordination outcome, the DEIS will include an alternative that encompasses the necessary actions to facilitate this proposed HPD-sponsored affordable housing development in addition to the Proposed Actions.

## **G. ANALYSIS FRAMEWORK**

### **RWCDS**

In order to assess the possible effects of the Proposed Actions, an RWCDS was developed for both the current (future No-Action) and proposed zoning (future With-Action) conditions for a 10-year period (analysis year 2027). The incremental difference between the No-Action and With-Action conditions will serve as the basis for the impact analyses of the EIS. A 10-year period typically represents the amount of time developers would act on the proposed action for an area-wide rezoning not associated with a specific development

To determine the With-Action and No-Action conditions, standard methodologies have been used following the *CEQR Technical Manual* guidelines employing reasonable assumptions. These methodologies have been used to identify the amount and location of future development.

### *GENERAL CRITERIA FOR DETERMINING DEVELOPMENT SITES*

In determining the amount and location of new development, several factors have been considered in identifying likely development sites. These include known development proposals, past and current development trends, and the development site criteria described below. Generally, for area-wide rezonings that create a broad range of development opportunities, new development can be expected to occur on selected, rather than all, sites within the rezoning area. The first step in establishing the development scenario for the Proposed Actions was to identify those sites where new development could be reasonably expected to occur.

Development sites were initially identified based on the following criteria:

- Lots located in areas where a substantial increase in permitted FAR is proposed.
- Lots with a total size of 5,000 square feet or larger (may include potential assemblages totaling 4,500 square feet, respectively, if assemblage seems probable<sup>1</sup>) or where a smaller sized site (2,000 square feet or greater) is substantially underutilized as defined below.
- Underutilized lots which are defined as vacant, occupied by a vacant building, a building with only a single occupied floor, or lots constructed to less than or equal to half of the maximum allowable FAR under the proposed zoning.
- Lots located in areas where changes in use would be permitted.

Certain lots that meet these criteria have been excluded from the scenario based on the following conditions because they are very unlikely to be redeveloped as a result of the proposed rezoning:

- Lots where construction is actively occurring, or has recently been completed, as well as lots with recent alterations that would have required substantial capital investment. However, recently constructed or altered lots that were built to less than or equal to half of the maximum allowable FAR under the proposed zoning have been included for consideration as likely development sites.
- The sites of schools (public and private), municipal libraries, government offices, large medical centers and houses of worship. These facilities may meet the development site criteria, because they are built to less than half of the permitted floor area under the current zoning and are on larger lots. However, these facilities have not been redeveloped or expanded despite the ability to do so, and it is extremely unlikely that the increment of additional FAR permitted under the proposed zoning would induce redevelopment or expansion of these structures. Additionally, for government-owned properties, development and/or sale of these lots may require discretionary actions from the pertinent government agency.

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<sup>1</sup> Assemblages are defined as a combination of adjacent lots, which satisfy one of the following conditions: (1) the lots share common ownership and, when combined, meet the aforementioned soft site criteria; or (2) at least one of the lots, or combination of lots, meets the aforementioned soft site criteria, and ownership of the assemblage is shared by no more than three distinct owners.

- Multi-unit buildings (existing individual buildings with six or more residential units, and assemblages of buildings with a total of 10 or more residential units, are unlikely to be redeveloped because of the required relocation of tenants in rent-stabilized units).
- Certain large commercial structures, such as multi-story office buildings, regional centers of national corporations, and hotels. Although these sites may meet the criteria for being built to less than half of the proposed permitted floor area, some of them are unlikely to be redeveloped due to their current or potential profitability, the cost of demolition and redevelopment, and their location.
- Lots whose location, highly irregular shape, or highly irregular topography would preclude or greatly limit future as of right development. Generally, development on highly irregular lots does not produce marketable floor space.
- Lots utilized for public transportation and/or public utilities.

#### *PROJECTED AND POTENTIAL DEVELOPMENT SITES*

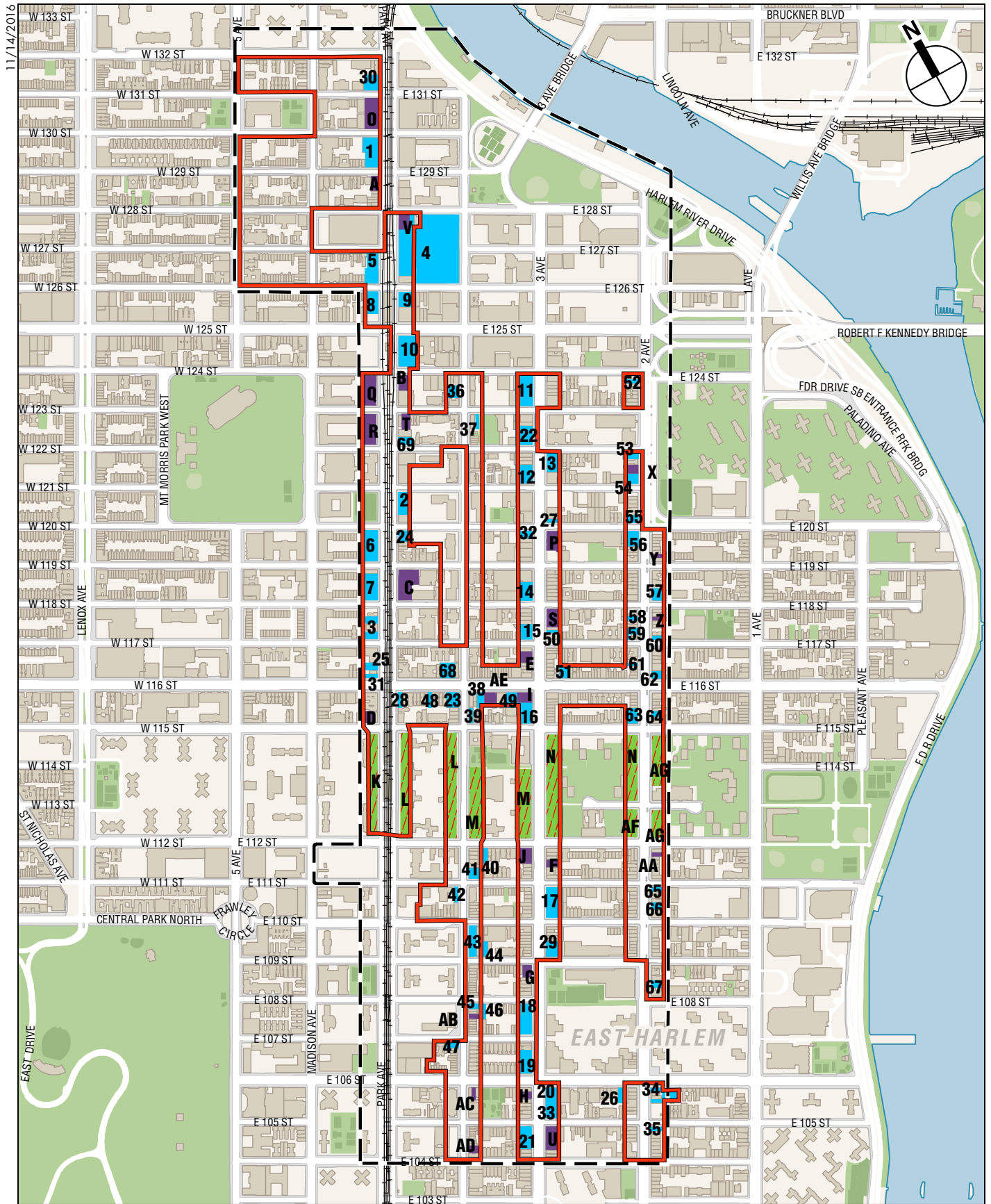
To produce a reasonable, conservative estimate of future growth, the development sites have been divided into two categories: projected development sites and potential development sites. The projected development sites are considered more likely to be developed within the 10-year analysis period. Potential sites are considered less likely to be developed over the approximately 10-year analysis period. Potential development sites were identified based on the following criteria:

- Lots whose with slightly irregular shapes, topographies, or encumbrances would make development more difficult.
- Lots with 10 or more commercial tenants, which may be difficult to dislodge due to long-term leases.
- Lots where the conversion of an existing building to residential use could occur.
- Active businesses, which may provide unique services or are prominent, and successful neighborhood businesses or organizations unlikely to move.
- Sites divided between disparate zoning districts.
- Sites smaller than 9,500 square feet where residential uses are currently permitted unless they are underutilized as defined above and/or within close proximity to subway stations.
- Sites consisting of interior lots whose longest dimension (either width or depth) is less than 80 feet.

Based on the above criteria, a total of 101 development sites (69 projected and 32 potential) have been identified in the rezoning area. These projected and potential development sites are depicted in **Figure 5** and the detailed RWCDs tables provided in **Appendix 2** identify the uses expected to occur on each of these sites under No-Action and With-Action conditions.

The EIS will assess both density-related and site-specific potential impacts from development on all projected development sites. Density-related impacts are dependent on the amount and type of development projected on a site and the resulting impacts on traffic, air quality, community facilities, and open space.

Site-specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site-specific impacts include potential noise impacts from development, the effects on historic resources, and the possible presence of hazardous materials. Development



is not anticipated on the potential development sites in the foreseeable future. Therefore, these sites have not been included in the density-related impact assessments. However, review of site-specific impacts for these sites will be conducted in order to ensure a conservative analysis.

### *DEVELOPMENT SCENARIO PARAMETERS*

#### *Dwelling Unit Factor*

The number of projected dwelling units in apartment buildings is determined by dividing the total amount of residential floor area by 900 and rounding to the nearest whole number.

#### *East 111th Street Site Development Alternative*

As discussed earlier in this document, the East 111th Street site involves the proposed redevelopment of City-owned parcels on the block bounded by East 112th Street to the north, Park Avenue to the west, East 111th Street to the south, and Madison Avenue to the east would be facilitated by a separate land use application by the City. HPD is leading a coordination effort between various governmental agencies, community organizations, and the anticipated developer for the project. Because certain development specifications for this site are unknown at this time pending completion of that coordination effort, the DEIS will include an alternative that encompasses the necessary actions to facilitate the development of the East 111th Street Site in addition to the Proposed Actions.

### **THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)**

In the future without the Proposed Actions (No-Action condition), the identified projected development sites are assumed to either remain unchanged from existing conditions, or become occupied by uses that are as-of-right under existing zoning and reflect current trends if they are vacant, occupied by vacant buildings, or occupied by low intensity uses that are deemed likely to support more active uses. **Table 1a** shows the No-Action conditions for the projected development sites.

As detailed below, it is anticipated that, in the future without the Proposed Actions, there would be a total of approximately 3,076,097 square feet of built floor area on the 69 projected development sites. Under the RWCDs, the total No-Action development would comprise 2,561 residential dwelling units (DUs) with no guarantees for affordability, 401,465 square feet of retail space, 82,853 square feet of office space, 32,974 square feet of hotel space, 10,592 square feet of auto-oriented commercial uses, 53,834 square feet of commercial storage, 7,395 square feet of community facility uses, and 22,777 square feet of industrial space. The No-Action estimated population would include approximately 6,173 residents and 1,800 workers on these projected development sites.

### **THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)**

The Proposed Actions would allow for the development of new uses and higher densities at the projected and potential development sites. As discussed above, the possible future development of the East 111th Street Site will be analyzed as an alternative in the DEIS; the analysis framework for this alternative is described later in this narrative section.

Under the Proposed Actions, the total development expected to occur on the 69 projected development sites would consist of approximately 6,516,688 square feet of built floor area, including approximately 6,055 DUs, a substantial proportion of which are expected to be affordable, 511,598 square feet of retail space, 221,181 square feet of office space, 102,192 square feet of community facility uses and 155,171 square feet of industrial use (see **Table 1a**).

The projected incremental (net) change between the No-Action and With-Action conditions that would result from the Proposed Actions would be a net increase of 3,494 DUs; 151,062 square feet of commercial space;<sup>2</sup> 94,797 square feet of community facility space; and 132,394 square feet of industrial space; and net decreases of 10,592 square feet of auto-related space, 32,974 square feet of hotel space, and 53,834 square feet of commercial storage space.

**Table 1a**  
**2027 RWCDS No-Action and With-Action Land Uses**

| Land Use                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No-Action Condition | With-Action Condition | Increment           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|---------------------|
| <b>Residential</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                       |                     |
| <b>Total Residential</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>2,561 DU</b>     | <b>6,055 DU</b>       | <b>+ 3,494 DU</b>   |
| <b>Commercial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                       |                     |
| Commercial Retail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 401,465 sf          | 511,598 sf            | + 110,133 sf        |
| Hotel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 32,974 sf           | 0 sf                  | - 32,974 sf         |
| Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 82,853 sf           | 221,181 sf            | + 138,328 sf        |
| Auto-related                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10,592 sf           | 0 sf                  | - 10,592 sf         |
| Storage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 53,834 sf           | 0 sf                  | - 53,834 sf         |
| <b>Total Commercial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>581,718 sf</b>   | <b>732,779 sf</b>     | <b>+ 151,061 sf</b> |
| <b>Other Uses</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                       |                     |
| <b>Total Community Facility</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>7,395 sf</b>     | <b>106,317 sf</b>     | <b>+ 98,922 sf</b>  |
| <b>Total Industrial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>22,777</b>       | <b>155,171 sf</b>     | <b>+ 132,394 sf</b> |
| <b>Population<sup>1</sup></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                       |                     |
| Residents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6,173               | 14,593                | + 8,420             |
| Workers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1,800               | 3,279                 | +1,479              |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                       |                     |
| 1. Assumes 2.41 persons per DU for residential units in Manhattan Community District 11. Estimate of workers based on standard industry rates, as follows: 1 employee per 250 sf of office; 3 employees per 1,000 sf of retail, 1 employee per 25 DU, 1 employee per 2.67 hotel rooms (400 sf per hotel room), 1 employee per 1,000 sf of industrial, 1 employee per 15,000 sf of warehouse uses, 1 employee per 11.4 students in Pre-K school uses, 3 employees per 1,000 sf of all other community facility uses, 1 employee per 50 parking spaces, 1 employee per 200 sf restaurant, 1 employee per 250 sf grocery store, and 1 employee per 25 dwelling units (residential). |                     |                       |                     |

Based on 2010 Census data, the average household size for residential units in Manhattan Community District 11 is 2.41. Based on these ratios and standard ratios for estimating employment for commercial, community facility, and industrial uses, **Table 1a** also provides an estimate of the number of residents and workers generated by the Proposed Actions. As indicated in **Table 1a**, the Proposed Actions would result in a net increment of 8,420 residents and a net increase of 1,479 workers.

A total of 32 sites were considered less likely to be developed within the foreseeable future and were thus considered potential development sites (see **Appendix 2**). As noted earlier, the potential sites are deemed less likely to be developed because they did not closely meet the criteria listed above. However, as discussed above, the analysis recognizes that a number of potential development sites could be developed under the Proposed Actions in lieu of one or more of the projected development sites in accommodating the development anticipated in the RWCDS. The potential development sites are therefore also analyzed in the EIS for site-specific effects.

#### **EAST 111TH STREET SITE DEVELOPMENT ALTERNATIVE**

As shown in **Table 1b**, under the alternative where possible future development of the East 111th Street site would occur, the total development expected for that site in combination with the 69 projected development sites of the Proposed Actions would consist of approximately 7,141,190 square feet of built floor area, including approximately 6,723 DUs, a substantial

<sup>2</sup> Includes retail, supermarket, restaurant, and office uses.

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proportion of which are expected to be affordable, 541,598 square feet of retail space, 221,181 square feet of office space, 166,317 square feet of community facility uses, and 155,171 square feet of industrial use. The projected incremental (net) change between the No-Action and With-Action conditions that would result under this alternative would be an increase of a total of 4,162 DUs, 140,133 square feet of retail space, 138,328 square feet of office space, 158,922 square feet of community facility space and 132,394 square feet of industrial space; and a net decrease of 32,974 square feet of hotel space, a net decrease of 10,592 square feet of auto-oriented commercial use, and a net decrease of 53,834 square feet of commercial storage space.

**Table 1b**

**2027 East 111th Street Alternative No-Action and With-Action Land Uses**

| Land Use                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No-Action Condition | With-Action Condition | Increment           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|---------------------|
| <b>Residential</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                       |                     |
| <b>Total Residential</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>2,561 DU</b>     | <b>6,723 DUs</b>      | <b>+ 4,162 DU</b>   |
| <b>Commercial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |                       |                     |
| Commercial Retail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 401,465 sf          | 541,598 sf            | + 140,133 sf        |
| Hotel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 32,974 sf           | 0 sf                  | - 32,974 sf         |
| Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 82,853 sf           | 221,181 sf            | + 138,328 sf        |
| Auto-related                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10,592 sf           | 0 sf                  | - 10,592 sf         |
| Storage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 53,834 sf           | 0 sf                  | - 53,834 sf         |
| <b>Total Commercial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>581,718 sf</b>   | <b>762,779 sf</b>     | <b>+ 181,061 sf</b> |
| <b>Other Uses</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |                       |                     |
| <b>Total Community Facility</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>7,395 sf</b>     | <b>166,317 sf</b>     | <b>+ 158,922 sf</b> |
| <b>Total Industrial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>22,777</b>       | <b>155,171 sf</b>     | <b>+ 132,394 sf</b> |
| <b>Population<sup>1</sup></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                       |                     |
| Residents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6,173               | 16,203                | + 10,030            |
| Workers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1,800               | 3,602                 | + 1,802             |
| <b>Notes:</b><br>1. Assumes 2.41 persons per DU for residential units in Manhattan Community District 11. Estimate of workers based on standard industry rates, as follows: 1 employee per 250 sf of office; 3 employees per 1,000 sf of retail; 1 employee per 25 DU; 1 employee per 2.67 hotel rooms (400 sf per hotel room); 1 employee per 1,000 sf of industrial; 1 employee per 15,000 sf of warehouse uses; 1 employee per 11.4 students in Pre-K school uses; 3 employees per 1,000 sf of all other community facility uses; 1 employee per 50 parking spaces; 1 employee per 200 sf restaurant; 1 employee per 250 sf grocery store; and 1 employee per 25 dwelling units (residential). |                     |                       |                     |

Based on the average household size for residential units in Manhattan Community District 11 of 2.41 and standard ratios for estimating employment for commercial, community facility, and industrial uses, **Table 1b** also provides an estimate of the number of residents and workers generated by the East 111th Street site development alternative. As indicated in **Table 1b**, this alternative would result in a net increment of 10,030 residents and a net increase of 1,802 workers.

The EIS will analyze the projected developments for all technical areas of concern and also evaluate the effects of the potential developments for site-specific effects such as archaeology, shadows, hazardous materials, stationary air quality, and noise.

## H. PROPOSED SCOPE OF WORK FOR THE EIS

Because the Proposed Actions would affect various areas of environmental concern and were found to have the potential for significant adverse impacts in a number of impact categories, pursuant to the EAS and Positive Declaration, an EIS will be prepared for the Proposed Actions that will analyze all technical areas of concern. The EIS will be prepared in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act (SEQRA) (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91

of 1977, as amended, and the Rules and Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York.

The EIS, following the guidance of the 2014 *CEQR Technical Manual*, will include:

- A description of the Proposed Actions and their environmental setting;
- A statement of the environmental impacts of the Proposed Actions, including short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Actions are implemented;
- A discussion of reasonable alternatives to the Proposed Actions;
- An identification of irreversible and irretrievable commitments of resources that would be involved in the Proposed Actions, should they be implemented; and
- A description of mitigation proposed to eliminate or minimize any significant adverse environmental impacts.

As noted above, the EIS will analyze the projected development sites for all technical areas of concern and also evaluate the effects of the potential development sites for site-specific effects, such as archaeology, shadows, hazardous materials, air quality, and noise. The analyses in the EIS will examine the RWCDS with the greater potential environmental impact for each impact area. The specific technical areas to be included in the EIS, as well as their respective tasks and methodologies, are described below.

#### **TASK 1. PROJECT DESCRIPTION**

The first chapter of the EIS introduces the reader to the Proposed Actions and sets the context in which to assess impacts. This chapter contains a description of the Proposed Actions: their location; the background and/or history of the project; a statement of the purpose and need; key planning considerations that have shaped the current proposal; a detailed description of the Proposed Actions; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Actions and their impact and gives the public and decision makers a base from which to evaluate the Proposed Actions.

In addition, the project description chapter will present the planning background and rationale for the actions being proposed and summarize the RWCDS for analysis in the EIS. The section on approval procedure will explain the ULURP, zoning text amendment, and zoning map amendment processes, their timing, and hearings before the Community Board, the Borough President's Office, CPC, and the New York City Council. The role of the EIS as a full disclosure document to aid in decision-making will be identified and its relationship to the discretionary approvals and the public hearings described.

#### **TASK 2. LAND USE, ZONING, AND PUBLIC POLICY**

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed action and determines whether a proposed action is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the action's compliance with, and effect on, the area's zoning and other applicable public policies. This chapter will analyze the potential impacts of the Proposed Actions on land use, zoning, and public policy, pursuant to the methodologies presented in the *CEQR Technical Manual*.

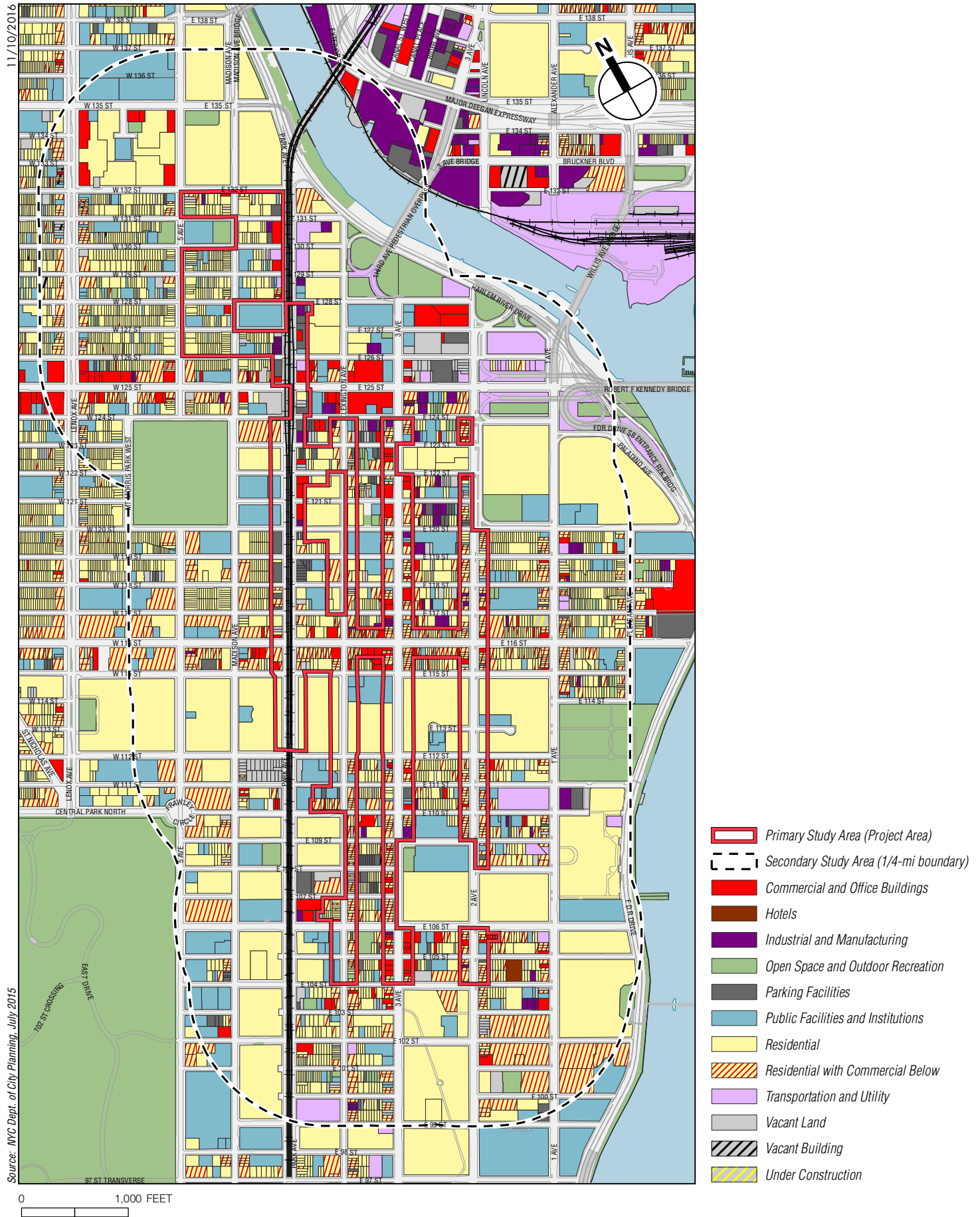
The primary land use study area will consist of the Project Area, where the potential effects of the Proposed Actions would be directly experienced. The secondary land use study area will include neighboring areas within a ¼-mile boundary from the primary study area, which could experience indirect impacts (see **Figure 6**). The analysis will include the following tasks:

- Provide a brief development history of the primary (i.e., rezoning area) and secondary study areas.
- Provide a description of land use, zoning, and public policy in the study areas discussed above (a more detailed analysis will be conducted for the rezoning area). Recent trends in the rezoning area will be noted. Other public policies that apply to the study areas will also be described including: Housing New York, the East Harlem Neighborhood Plan, the Millbank Frawley Circle-East and Harlem-East Harlem URPs, Vision Zero, the FRESH Program, applicable business improvement districts (BIDs), and the City's sustainability/PlaNYC/OneNYC policies.
- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the balance of the study areas. Describe recent land use trends in the study areas and identify major factors influencing land use trends.
- Describe and map existing zoning and recent zoning actions in the study areas.
- Prepare a list of future development projects in the study areas that are expected to be constructed by the 2027 analysis year and may influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas. Based on these planned projects and initiatives, assess future land use and zoning conditions in the future without the Proposed Actions.
- Describe proposed zoning changes and the potential land use changes based on the Proposed Actions' RWCDs for future conditions with the Proposed Actions.
- Discuss the Proposed Actions' potential effects related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, and the effect of the Proposed Actions on development trends and conditions in the primary and secondary study areas.
- Assess the Proposed Actions' conformity to city goals, including consistency with the WRP as revised by the City in 2013 and approved in 2016. The EIS will also discuss all relevant area planning documents and their implications for existing land use and future development.
- If necessary, mitigation measures to avoid or reduce potential significant adverse land use, zoning, and/or public policy impacts will be identified.

### **TASK 3. SOCIOECONOMIC CONDITIONS**

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. This chapter will assess the Proposed Actions' potential effects on the socioeconomic character of the study area as required by CEQR.

The socioeconomic study area boundaries are expected to be similar to those of the land use study area, and will be dependent on the size and characteristics of the RWCDs associated with



the Proposed Actions, pursuant to Section 310 of Chapter 5 of the *CEQR Technical Manual*. A socioeconomic assessment seeks to assess the potential to change socioeconomic character relative to the study area population. The Proposed Actions are expected to generate a net increase of approximately 3,500 residential units. For projects or actions that result in an increase in population, the scale of the relative change is typically represented as a percent increase in population (i.e., a project that would result in a relatively large increase in population may be expected to affect a larger study area). Therefore, the socioeconomic study area would be expanded to a half-mile radius, if the RWCDs associated with the Proposed Actions would increase the population by 5 percent compared to the expected No-Action population in a ¼-mile study area, consistent with the *CEQR Technical Manual*.

The five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on specific industries. As detailed below, the Proposed Actions warrant an assessment of socioeconomic conditions with respect to all but one of these principal issues of concern—direct residential displacement. Direct displacement of fewer than 500 residents would not typically be expected to alter the socioeconomic characteristics of a neighborhood. The Proposed Actions would not exceed the *CEQR Technical Manual* analysis threshold of 500 displaced residents, and therefore, are not expected to result in significant adverse impacts due to direct residential displacement. The EIS will disclose the number of residential units and estimated number of residents to be directly displaced by the Proposed Actions, and will determine the amount of displacement relative to study area population.

The assessment of the four remaining areas of concern will begin with a preliminary assessment to determine whether a detailed analysis is necessary, in conformance with the *CEQR Technical Manual* guidelines. Detailed analyses will be conducted for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. The detailed assessments will be framed in the context of existing conditions and evaluations of the Future No-Action and With-Action conditions in 2027, including any population and employment changes anticipated to take place by the analysis year for the Proposed Actions.

#### ***DIRECT BUSINESS DISPLACEMENT***

For direct business displacement, the type and extent of businesses and workers to be directly displaced by the RWCDs associated with the Proposed Actions will be disclosed. If a project would directly displace more than 100 employees, a preliminary assessment of direct business displacement is appropriate according to the *CEQR Technical Manual*. The Proposed Actions have the potential to exceed the threshold of 100 displaced employees, and therefore, a preliminary assessment will be provided in the EIS.

The analysis of direct business and institutional displacement will estimate the number of employees and the number and types of businesses that would be displaced by the Proposed Actions, and characterize the economic profile of the study area using current employment and business data from the New York State Department of Labor or U.S. Census Bureau. This information will be used in addressing the following CEQR criteria for determining the potential for significant adverse impacts: (1) whether the businesses to be displaced provide products or services essential to the local economy that would no longer be available in its “trade area” to local residents or businesses due to the difficulty of either relocating the businesses or

establishing new, comparable businesses; and (2) whether a category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it.

### *INDIRECT RESIDENTIAL DISPLACEMENT*

Indirect residential displacement is the involuntary displacement of residents that results from a change in socioeconomic conditions created by a proposed action. Indirect residential displacement could occur if a proposed project either introduces a trend or accelerates a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. To assess this potential impact, the analysis will address a series of threshold questions in terms of whether the project substantially alters the demographic character of an area through population change or introduction of more costly housing.

The indirect residential displacement analysis will use the most recent available U.S. Census data, New York City Department of Finance's Real Property Assessment Data (RPAD) database, as well as current real estate market data, to present demographic and residential market trends and conditions for the study area. The presentation of study area characteristics will include population estimates, housing tenure and vacancy status, median value and rent, estimates of the number of housing units not subject to rent protection, and median household income. The preliminary assessment will carry out the following the step-by-step evaluation, pursuant to *CEQR Technical Manual* guidelines:

- Step 1: Determine if the Proposed Actions would add substantial new population with different income as compared with the income of the study area population. If the expected average incomes of the new population would be similar to the average incomes of the study area populations, no further analysis is necessary. If the expected average incomes of the new population would exceed the average incomes of the study area populations, then Step 2 of the analysis will be conducted.
- Step 2: Determine if the Proposed Actions' population is large enough to affect real estate market conditions in the study area. If the population increase may potentially affect real estate market conditions, then Step 3 will be conducted.
- Step 3: Determine whether the study area has already experienced a readily observable trend toward increasing rents and the likely effect of the action on such trends and whether the study area potentially contains a population at risk of indirect displacement resulting from rent increases due to changes in the real estate market caused by the new population.

A detailed analysis, if warranted, would utilize more in-depth demographic analysis and field surveys to characterize existing conditions of residents and housing, identify populations at risk of displacement, assess current and future socioeconomic trends that may affect these populations, and examine the effects of the Proposed Actions on prevailing socioeconomic trends and, thus, impacts on the identified populations at risk.

### *INDIRECT BUSINESS DISPLACEMENT*

The indirect business displacement analysis is to determine whether the Proposed Actions may introduce trends that make it difficult for those businesses that provide products or services essential to the local economy, or those subject to regulations or publicly adopted plans to preserve, enhance, or otherwise protect them, to remain in the area. The purpose of the preliminary assessment is to determine whether a proposed action has potential to introduce such a trend. The Proposed Actions would introduce more than 200,000 square feet of new

commercial uses to the area, which is the CEQR threshold for “substantial” new development warranting a preliminary assessment. The preliminary assessment will entail the following tasks:

- Identify and characterize conditions and trends in employment and businesses within the study area. This analysis will be based on field surveys, employment data from the New York State Department of Labor and/or Census and discussions with real estate brokers.
- Determine whether the Proposed Actions would introduce enough of a new economic activity to alter existing economic patterns.
- Determine whether the Proposed Actions would add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns.
- Determine whether the Proposed Actions would directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses.
- Determine whether the Proposed Actions would directly or indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the area.

If the preliminary assessment determines that the Proposed Actions could introduce trends that make it difficult for businesses that are essential to the local economy to remain in the area, a detailed analysis will be conducted. The detailed analysis would determine whether the Proposed Actions would increase property values and thus increase rents for a potentially vulnerable category of business and whether relocation opportunities exist for those businesses, following the *CEQR Technical Manual* guidelines.

An assessment of the indirect business displacement due to market saturation is not warranted. The Proposed Actions and associated RWCDS are not expected to add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the study area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets. The Proposed Actions and associated RWCDS are expected to result in a net increase in total commercial retail space of approximately 110,100 square feet as compared with the No Action condition. This retail space would not be concentrated on a single site, but would be distributed among the projected development sites in the Project Area, and is expected to largely consist of local retail. Projects resulting in less than 200,000 square feet of regional-serving retail in the study area, or less than 200,000 square feet of locally or regionally serving retail on a single development site would not typically result in socioeconomic impacts, according to the guidelines established in the *CEQR Technical Manual*. As the Proposed Actions and associated RWCDS would not exceed the CEQR threshold, no further analysis is warranted.

#### *ADVERSE EFFECTS ON SPECIFIC INDUSTRIES*

The analysis of direct business displacement will provide sufficient information to determine whether the Proposed Actions could have any adverse effects on a specific industry, compared with the Future without the Proposed Actions. The analysis will determine:

- Whether the Proposed Actions would significantly affect business conditions in any industry or category of businesses within or outside the study areas.
- Whether the Proposed Actions would substantially reduce employment or impair viability in a specific industry or category of businesses.

#### TASK 4. COMMUNITY FACILITIES AND SERVICES

The demand for community facilities and services is directly related to the type and size of the new population generated by the development resulting from the Proposed Actions. The RWCDs associated with the Proposed Actions would add approximately 3,500 (net) new residential units to the area. This level of development would trigger a detailed analysis of elementary, intermediate, and high schools, libraries, and child care centers, according to the *CEQR Technical Manual* guidelines and as presented in the EAS document. While the RWCDs would not trigger detailed analyses of potential impacts on police/fire stations and health care services, for informational purposes, a description of existing police, fire, and health care facilities serving the rezoning area will be provided in the EIS.

##### *PUBLIC SCHOOLS*

- The primary study area for the analysis of elementary and intermediate schools should be the school districts' "sub-district" in which the project is located. As the Project Area is located within Community School District (CSD) 4, Sub-districts 1 and 2 and CSD 5, Sub-district 1, the elementary and intermediate school analyses will be conducted for schools in those sub-districts. The Proposed Actions also trigger an analysis of high schools, which are assessed on a borough-wide basis.
- Public elementary and intermediate schools serving the sub-district will be identified and located. Existing capacity, enrollment, and utilization data for all public elementary and intermediate schools within the affected sub-district will be provided for the current (or most recent) school year, noting any specific shortages of school capacity. Similar data will be provided for Manhattan high schools in accordance with *CEQR Technical Manual* guidelines.
- Conditions that would exist in the No-Action condition for the sub-district will be identified, taking into consideration projected changes in future enrollments, including those associated with other developments in the affected sub-district, using the New York City School Construction Authority's (SCA) Projected New Housing Starts. Plans to alter school capacity either through administrative actions on the part of the New York City Department of Education (DOE) or as a result of the construction of new school space prior to the analysis year will also be identified and incorporated into the analyses. Planned new capacity projects from the DOE's Five Year Capital Plan will not be included in the quantitative analysis unless the projects have commenced site preparation and/or construction. They may, however, be included in a qualitative discussion.
- Future conditions with the Proposed Actions will be analyzed, adding students likely to be generated under the RWCDs to the projections for the No-Action condition. Impacts will be assessed based on the difference between the future With-Action projections and the No-Action projections (at the sub-district level for elementary and intermediate schools) for enrollment, capacity, and utilization in the analysis year.
- A determination of whether the Proposed Actions would result in significant adverse impacts to elementary, intermediate, and/or high schools will be made. A significant adverse impact may result, warranting consideration of mitigation, if the Proposed Actions would result in: (1) a collective utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the With-Action condition (a determination of impact significance for high schools is conducted at the borough level); and (2) an increase of five percent or more in the collective utilization rate

between the No-Action and With-Action conditions. If impacts are identified, mitigation will be developed in consultation with SCA and DOE.

#### *LIBRARIES*

- The local public library branch(es) serving the area within approximately ¾-mile of the rezoning area, which is the distance that one might be expected to travel for such services, will be identified and presented on a map.
- Existing libraries within the study area and their respective information services and user populations will be described. Information regarding services provided by branch(es) within the study area will include holdings and other relevant existing conditions. Details on library operations will be based on publicly available information and/or consultation with New York Public Library officials. If applicable, holdings per resident may be estimated to provide a quantitative gauge of available resources in the applicable branch libraries in order to form a baseline for the analysis.
- For No-Action conditions, projections of population change in the area and information on any planned changes in library services or facilities will be described, and the effects of these changes on library services will be assessed. Using the information gathered for existing conditions, holdings per resident in the No-Action condition will be estimated.
- The effects of the addition of the population resulting from the Proposed Actions on the library's ability to provide information services to its users will be assessed. Holdings per resident in the With-Action condition will be estimated and compared to the No-Action holdings estimate.
- If the Proposed Actions would increase a branch library's ¾-mile study area population by five percent or more over No-Action levels, and it is determined, in consultation with the New York Public Library, that this increase would impair the delivery of library services in the study area, a significant adverse impact may occur, warranting consideration of mitigation.

#### *CHILD CARE CENTERS*

- Existing publicly funded child care centers within approximately two miles of the rezoning area will be identified. Each facility will be described in terms of its location, number of slots (capacity), enrollment, and utilization in consultation with the Administration of Children's Services (ACS).
- For No-Action conditions, information will be obtained for any changes planned for child care programs or facilities in the area, including the closing or expansion of existing facilities and the establishment of new facilities. Any expected increase in the population of children under age six within the eligibility income limitations, using the No-Action RWCDs (see "Analysis Framework"), will be discussed as potential additional demand, and the potential effect of any population increases on demand for child care services in the study area will be assessed. The available capacity or resulting deficiency in slots and the utilization rate for the study area will be calculated for the No-Action condition.
- The potential effects of the additional eligible children resulting from the Proposed Actions will be assessed by comparing the estimated net demand over capacity to a net demand over capacity in the No-Action analysis.
- A determination of whether the Proposed Actions would result in significant adverse impacts to child care centers will be made. A significant adverse impact may result,

warranting consideration of mitigation, if the Proposed Actions would result in both of the following: (1) a collective utilization rate of the group child care centers in the study area that is greater than 100 percent in the With-Action condition; and (2) an increase of five percent or more in the collective utilization rate of child care centers in the study area between the No-Action and With-Action conditions.

### TASK 5. OPEN SPACE

If a project may add population to an area, demand for existing open space facilities would typically increase. Indirect effects may occur when the population generated by the proposed project would be sufficiently large to noticeably diminish the ability of an area's open space to serve the future population. For the majority of projects, an assessment is conducted if the proposed project would generate more than 200 residents or 500 employees, or a similar number of other uses. However, the need for an open space assessment may vary in certain areas of the City that are considered either underserved or well-served by open space; if a project is located in an underserved area, an open space assessment should be conducted if that project would generate more than 50 residents or 125 workers. The Project Area encompasses areas that are neither underserved nor well-served and exceeds the respective residential and worker analysis thresholds. Therefore, an assessment of both residential and nonresidential open space is warranted and will be provided in the EIS.

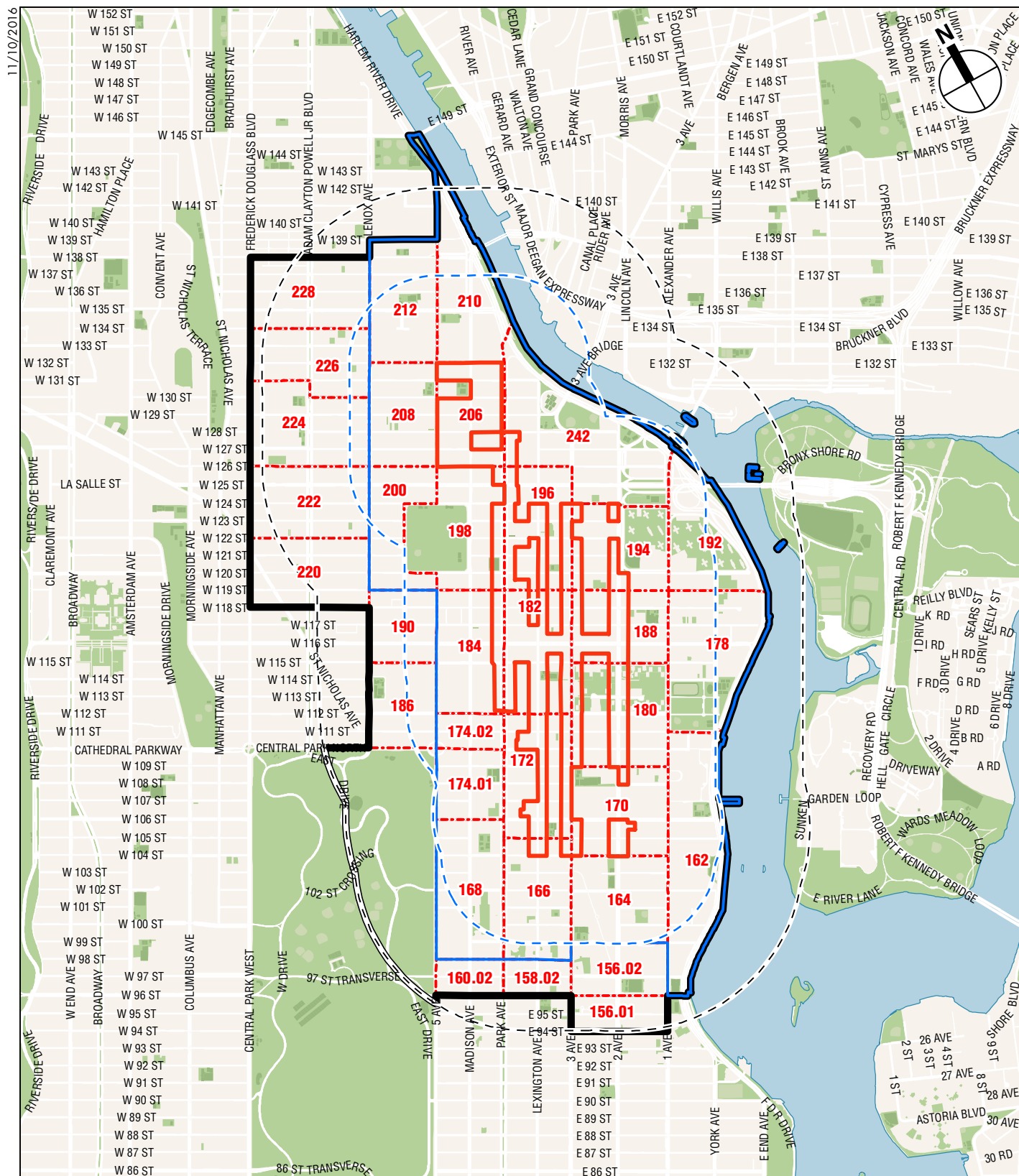
The open space analysis will consider both passive and active open space resources. Passive open space ratios will be assessed within a nonresidential (¼-mile radius) study area and a residential (½-mile radius) study area. Active open space ratios will be assessed for the ½-mile residential study area. Both study areas would generally comprise those census tracts that have 50 percent or more of their area located within the ¼-mile radius and the ½-mile radius of the rezoning area<sup>3</sup> (see **Figure 7**).

The detailed open space analysis in the EIS will include the following tasks:

- Characteristics of the two open space user groups (residents and workers/daytime users) will be determined. To determine the number of residents in the study areas, 2010 U.S. Census data will be compiled for census tracts comprising the residential open space study area. As the study area may include a workforce and daytime population that may also use open spaces, the number of employees and daytime workers in the study areas will also be calculated, based on reverse journey-to-work census data.
- Existing active and passive open spaces within the ¼-mile and ½-mile open space study areas will be inventoried and mapped. The condition and usage of existing facilities will be described based on the inventory and field visits. In accordance with *CEQR Technical Manual* guidelines, field visits will be conducted during peak hours of use and in good weather. Passively programmed open spaces will be visited during peak weekday midday hours and actively programmed open spaces (or actively programmed portions of open spaces that have both active and passive open space resources) will be visited during both weekday midday and peak weekend hours. Acreages of these facilities will be determined

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<sup>3</sup> ¼-mile and ½-mile radii adjusted to be coterminous with the boundaries of census tracts with existing populations that have 50 percent of their area within the radius; the ¼-mile and ½-mile radii was not adjusted to be coterminous with census tracts without existing populations (e.g., census tracts entirely comprised of open space).



- and the total study area acreages will be calculated. The percentage of active and passive open space will also be calculated.
- Based on the inventory of facilities and study area populations, total, active, and passive open space ratios will be calculated for the residential and worker populations and compared to City guidelines to assess adequacy. Open space ratios are expressed as the amount of open space acreage (total, passive, and active) per 1,000 user population.
  - Expected changes in future levels of open space supply and demand in the analysis year will be assessed, based on other planned development projects within the open space study areas. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. Open space ratios will be calculated for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.
  - Effects on open space supply and demand resulting from increased residential populations added under the RWCDs associated with the Proposed Actions will be assessed. The assessment of the Proposed Actions' impacts will be based on a comparison of open space ratios for the No-Action versus With-Action conditions. In addition to the quantitative analysis, a qualitative analysis will be performed to determine if the changes resulting from the Proposed Actions constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether or not the study areas are sufficiently served by open space, given the type (active vs. passive), capacity, condition, and distribution of open space, and the profile of the study area populations.

#### **TASK 6. SHADOWS**

A shadows analysis assesses whether new structures resulting from a proposed action would cast shadows on sunlight sensitive publicly accessible resources or other resources of concern, such as natural resources, and to assess the significance of their impact. This chapter will examine the Proposed Actions' potential for significant and adverse shadow impacts. Generally, the potential for shadow impacts exists if an action would result in new structures or additions to buildings resulting in structures over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on sunlight. New construction or building additions resulting in incremental height changes of less than 50 feet can also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource.

The Proposed Actions would permit development of buildings greater than 50 feet in height and therefore has the potential to result in shadow impacts. The EIS will assess the RWCDs on a site-specific basis for potential shadowing effects of new developments at both the projected and potential development sites on sunlight-sensitive uses and disclose the range of shadow impacts, if any, which are likely to result from the Proposed Actions. The shadows analysis in the EIS will include the following tasks:

- A preliminary shadows screening assessment will be prepared to ascertain whether the projected and potential developments' shadows may potentially reach any sunlight-sensitive resources at any time of year.
  - A Tier 1 Screening Assessment will be conducted to determine the longest shadow study area for the projected and potential developments, which is defined as 4.3 times the height of a structure (the longest shadow that would occur on December 21, the winter

- solstice). A base map that illustrates the locations of the projected and potential developments in relation to the sunlight-sensitive resources will be developed.
- A Tier 2 Screening Assessment will be conducted if any portion of a sunlight-sensitive resource lies within the longest shadow study area. The Tier 2 assessment will determine the triangular area that cannot be shaded by the projected and potential developments, which in New York City is the area that lies between -108 and +108 degrees from true north.
  - If any portion of a sunlight-sensitive resource is within the area that could be potentially shaded by the projected or potential developments, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment will determine if shadows resulting from the projected and potential developments can reach a sunlight-sensitive resource through the use of three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns. The model will include a three-dimensional representation of the sunlight-sensitive resource(s), a three-dimensional representation of the projected and potential development sites identified in the RWCDs, and a three-dimensional representation of the topographical information within the area to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Actions.
  - If the screening analysis does not rule out the possibility that action-generated shadows would reach any sunlight-sensitive resources, a detailed analysis of potential shadow impacts on publicly-accessible open spaces or sunlight-sensitive historic resources resulting from development in the RWCDs (both projected and potential development sites) will be provided in the EIS. The detailed shadow analysis will establish a baseline condition (No-Action), which will be compared to the future condition resulting from the Proposed Actions (With-Action) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the projected and potential developments. The detailed analysis will include the following tasks:
    - The analysis will be documented with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the Proposed Actions, with incremental shadow highlighted in a contrasting color.
    - A summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource will be provided.
    - The significance of any shadow impacts on sunlight-sensitive resources will be assessed.

### **TASK 7. HISTORIC AND CULTURAL RESOURCES**

Historic and cultural resources include both architectural and archaeological resources. Such resources are identified as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. As the Proposed Actions would induce development that could result in new in-ground disturbance, demolition of existing buildings, and new construction, the Proposed Actions have the potential to result in impacts to archaeological and architectural resources.

Impacts on architectural resources are considered on the affected site and in the area surrounding identified development sites. The architectural resources study area is therefore defined as the directly affected area (i.e., the proposed rezoning area), plus a 400-foot radius, as per the guidance provided in the *CEQR Technical Manual*. Archaeological resources are considered

only for projected and potential development sites where new in-ground disturbance would occur compared to No-Action conditions. Architectural resources may be directly affected through demolition and construction activities and also indirectly affected through visual and contextual changes. Therefore, consistent with the *CEQR Technical Manual*, the historic and cultural resources analysis will include the following tasks.

- Provide an overview of the study area's history and land development.
- Initiate consultation with the New York City Landmarks Preservation Commission (LPC) to request a preliminary determination of archaeological sensitivity for any portions of the areas expected to experience subsurface disturbance. These would be the projected and potential development sites where new in-ground disturbance is expected to occur as a result of the Proposed Actions. If LPC determines that no sites are sensitive for archaeological resources, no further archaeological analysis will be required.
- If it is determined that one or more sites require archaeological study, a Phase 1A Archaeological Documentary Report will be prepared for those projected and potential developments sites identified as requiring further study. The Phase 1A study will be submitted to LPC for review. The Phase 1A will include an evaluation of archaeological resources within each of the development sites of concern documenting the site history, its development and use, and the potential to host significant archaeological resources. The EIS will summarize the results of the Phase 1A report.
- If any developments sites are identified as having archaeological potential in the Phase 1A report and LPC concurs, the Proposed Actions effect on those resources will be evaluated to determine if a significant adverse impact would result due to the Proposed Actions. If it is found that a significant adverse impact to archaeological resources would occur, LPC will be consulted on what, if any, mitigation measures may be available to address those impacts.
- In consultation with LPC and consistent with the guidance of the *CEQR Technical Manual*, designated architectural resources will be identified in the project and study area and include: New York City Landmarks (NYCLs), Interior Landmarks, Scenic Landmarks, NYCHDs; resources calendared for consideration as one of the above the by LPC; resources listed on or formally determined eligible for inclusion on the S/NR, or contained within a district listed on or formally determined eligible for listing on the S/NR; resources recommended by the New York State Board for listing on the S/NR; and National Historic Landmarks.
- Conduct a field survey of the project and study area to identify any properties that may meet S/NR and/or NYCL eligibility criteria but have not been designated (potential architectural resources). The field survey will be supplemented with research at relevant repositories and online sources as warranted, and information will be provided to LPC for review and determinations of significance.
- Assess the potential impacts of the Proposed Actions on any identified architectural resources, including visual and contextual changes as well as any direct physical impacts. Potential impacts will be evaluated through a comparison of the future no action condition and future with action condition, and a determination made as to whether any change would alter or eliminate the significant characteristics of the resource that make it important.
- If necessary, measures to avoid, minimize, or mitigate potential significant adverse impacts will be identified in consultation with LPC.

## **TASK 8. URBAN DESIGN AND VISUAL RESOURCES**

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. When an action would potentially obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings, a more detailed analysis of urban design and visual resources would be appropriate.

As the Proposed Actions would rezone some areas to allow higher density and map new zoning districts within the study area, a preliminary assessment of urban design and visual resources will be provided in the EIS. The urban design study area will be the same as that used for the land use analysis (delineated by a ¼-mile radius from the proposed rezoning area boundary), in accordance with the *CEQR Technical Manual*. For visual resources, the view corridors within the study area from which such resources are publicly viewable will be identified. The preliminary assessment will consist of the following:

- Based on field visits, the urban design and visual resources of the directly affected area and adjacent study area will be described using text, photographs, and other graphic material, as necessary, to identify critical features, use, bulk, form, and scale.
- In coordination with Task 2, "Land Use, Zoning, and Public Policy," the changes expected in the urban design and visual character of the study area due to known development projects in the future No-Action condition will be described.
- Potential changes that could occur in the urban design character of the study area as a result of the Proposed Actions will be described. For the projected and potential development sites, the analysis will focus on general building types for the sites that are assumed for development, as well as elements such as streetwall height, setback, and building envelope. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including view of/to resources of visual or historic significance.

A detailed analysis in accordance with *CEQR Technical Manual* guidelines will be prepared if warranted based on the preliminary assessment. Examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline. The detailed analysis would describe the projected and potential development sites and the urban design and visual resources of the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the proposed action condition, in comparison to the future without the proposed action condition, focusing on the changes that could negatively affect a pedestrian's experience of the area. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

## **TASK 9. NATURAL RESOURCES**

Under CEQR, a natural resource is defined as the City's biodiversity (plants, wildlife and other organisms); any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and any areas capable of functioning in support of the ecological systems that maintain the City's environmental stability. Such resources include ground water, soils and geologic features; numerous types of natural and human-created

aquatic and terrestrial habitats (including wetlands, dunes, beaches, grasslands, woodlands, landscaped areas, gardens, parks, and built structures); as well as any areas used by wildlife.

The rezoning area is adjacent to the Harlem River, which is considered under CEQR guidelines to be a natural resource. Therefore, the Proposed Actions have the potential to create a significant adverse impact on natural resources, and further analysis is warranted. Accordingly, an analysis of natural resources will be provided in the EIS following CEQR guidance, as described below. Much of the area of the rezoning area and surrounding area has been developed with building and paved surfaces.

An information and background search will be conducted as part of the Natural Resources Chapter of the EIS that will include a review of existing documentary resources that will help inform the identification of existing natural resources in the study area. Resources to be reviewed will include:

- USGS Map;
- SSURGO Soils Map;
- NYSDEC Tidal and Freshwater Wetlands and streams map;
- USFWS National Wetland Inventory Map;
- FEMA Preliminary DFIRM Flood map;
- NYSDEC mapping of rare plants and animals and significant natural communities;
- USFWS iPaC Trust Resource Data Base; and
- NMFS records of fishery resources and endangered and threatened marine species.

A field investigation effort will be conducted on the project site to document existing ecological conditions in the study area. The field investigation will focus on the study area, as it is the most sensitive area potentially affected by development resulting from the rezoning. The field investigation will identify and characterize environmental characteristics and wildlife, wetlands, and aquatic habitat in the project area. Potential impacts to natural resources will be based upon the results of the field investigation that will include an inventory of existing natural resources features in the study area. The environmental setting within the study area, including the habitat in and adjacent to the Harlem River, will be described. The potential impact of proposed development activities that could have an impact on the environment will be evaluated

The future conditions for the natural resources within the project area without the proposed project will be described in the EIS as the baseline condition. The potential effects of the proposed project on natural resources, in comparison to the No-Action condition, will be assessed. The short-term and long-term impacts of the proposed development on the environment will be discussed, as well as concepts for the potential mitigation of identified significant impacts to natural resources.

#### **TASK 10. HAZARDOUS MATERIALS**

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: (a) elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposures; (b) a project would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or (c) the

project would introduce a population to potential human or environmental exposure from off-site sources.

The hazardous materials assessment will determine which, if any, of the Proposed Actions' projected and potential development sites may have been adversely affected by present or historical uses at or adjacent to the sites. For some proposed projects (e.g., area-wide rezonings), portions of the typical scope for a Phase I Environmental Site Assessment (ESA), such as site inspections, may not be possible. The Proposed Actions include an area-wide rezoning, and nearly all of the identified projected and potential development sites are not in City ownership. As such, a preliminary screening assessment will be conducted for the projected and potential development sites to determine which sites warrant an institutional control, such as an (E) designation<sup>4</sup> in accordance with Section 11-15 (Environmental Requirements) of the Zoning Resolution of the City of New York and Chapter 24 of Title 15 of the Rules of the City of New York governing the placement of (E) designations or, for any City-owned parcel, a restriction comparable to an (E) designation through a future Land Disposition Agreement (LDA) between the City and the selected developer.

The hazardous materials assessment will include the following tasks:

- Perform exterior site inspections of each parcel to identify any possible monitoring wells, vent pipes, and/or manufacturing/commercial/industrial uses that could indicate environmental impact;
- Review existing information sources such as Sanborn Fire Insurance Maps and City directories for the projected and potential development sites and the surrounding area, to develop a profile of the historical uses of properties;
- Review and evaluate relevant existing data to assess the potential for environmental concerns on the subject sites; and
- Prepare a summary of findings and conclusions for inclusion in the EIS to determine where (E) designations and/or land disposition restriction may be appropriate.

### **TASK 11. WATER AND SEWER INFRASTRUCTURE**

The water and sewer infrastructure assessment determines whether a proposed action may adversely affect the City's water distribution or sewer system and, if so, assess the effects of such actions to determine whether their impact is significant. The *CEQR Technical Manual* outlines thresholds for analysis of an action's water demand and its generation of wastewater and stormwater. For the Proposed Actions, an analysis of water supply is warranted as the RWCDs associated with the Proposed Actions are expected to result in a water demand of more than one million gallons per day (gpd) compared with No-Action conditions. A preliminary assessment of the Proposed Actions' effects on wastewater and stormwater infrastructure is warranted as the RWCDs for the Proposed Actions is expected to result in more than 1,000 dwelling units and over 250,000 square feet of development. Therefore, this chapter will analyze the Proposed Actions' potential effects on the water, wastewater and stormwater infrastructure. The water and sewer infrastructure analysis will consider the potential for significant adverse impacts resulting

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<sup>4</sup> A hazardous materials (E) designation is an institutional control that can be placed as a result of the CEQR review of a zoning map or zoning text amendment or action pursuant to the Zoning Resolution. It provides a mechanism to ensure that testing for and mitigation and/or remediation of hazardous materials, if necessary, are completed prior to, or as part of, future development of the affected site, thereby eliminating the potential for a hazardous materials impact.

from the RWCDs for the Proposed Actions. The New York City Department of Environmental Protection (NYCDEP) will be consulted in preparation of this assessment.

#### ***WATER SUPPLY***

- The existing water distribution system serving the rezoning area will be described based on information obtained from NYCDEP's Bureau of Water Supply and Wastewater Collection.
- The existing water demand generated on the projected development sites will be estimated.
- Water demand generated by the projected development sites identified in the RWCDs will be projected for No-Action and With-Action conditions.
- The effects of the incremental demand on the City's water supply system will be assessed to determine if there would be impacts to water supply or pressure. The incremental water demand will be the difference between the water demand on the projected development sites in the With-Action condition and the demand in the No-Action condition

#### ***WASTEWATER AND STORMWATER INFRASTRUCTURE***

- The appropriate study area for the assessment will be established in consultation with NYCDEP. The Proposed Actions' directly affected area is primarily located within the service area of the Wards Island Wastewater Treatment Plant (WWTP).
- The existing stormwater drainage system and surfaces (pervious or impervious) on the projected development sites will be described, and the amount of stormwater generated on those sites will be estimated using NYCDEP's volume calculation worksheet.
- The existing sewer system serving the rezoning area will be described based on records obtained from NYCDEP. The existing flows to the Wards Island WWTP, which serves the directly affected area, will be obtained for the latest twelve-month period, and the average dry weather monthly flow will be presented.
- Any changes to the stormwater drainage plan, sewer system, and surface area expected in the future without the Proposed Actions will be described, as warranted.
- Future stormwater generation from the projected development sites will be assessed to determine the Proposed Actions' potential to result in impacts. Changes to the projected development sites' surface area will be described, runoff coefficients and runoff for each surface type/area will be presented, and volume and peak discharge rates from the sites will be determined based on the NYCDEP volume calculation worksheet.
- Sanitary sewage generation for the projected development sites identified in the RWCDs will also be estimated. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the Wards Island WWTP.

A more detailed assessment may be required if increased sanitary or stormwater discharges from the RWCDs associated with the Proposed Actions are predicted to affect the capacity of portions of the existing sewer system, exacerbate combined sewer overflow (CSO) volumes/frequencies, or contribute greater pollutant loadings in stormwater discharged to receiving water bodies. The scope of a more detailed analysis, if necessary, will be developed based on conclusions from the preliminary infrastructure assessment and coordinated with NYCDEP.

#### **TASK 12. SOLID WASTE AND SANITATION SERVICES**

A solid waste assessment determines whether an action has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or

otherwise be inconsistent with the City's Solid Waste Management Plan or with State policy related to the City's integrated solid waste management system. The Proposed Actions would induce new development that would require sanitation services. If a project's generation of solid waste in the With-Action condition would not exceed 50 tons per week, it may be assumed that there would be sufficient public or private carting and transfer station capacity in the metropolitan area to absorb the increment, and further analysis generally would not be required. As the Proposed Actions are expected to result in a net increase of more than 50 tons per week, compared to No-Action conditions, an assessment of solid waste and sanitation services is warranted. This chapter will provide an estimate of the additional solid waste expected to be generated by the projected development sites under the RWCDs and assesses its effects on the City's solid waste and sanitation services. This assessment will:

- Describe existing and future New York City solid waste disposal practices.
- Estimate solid waste generation by the RWCDs projected development sites for existing, No-Action, and With-Action conditions.
- Assess the impacts of the Proposed Actions' solid waste generation (projected developments) on the City's collection needs and disposal capacity. The Proposed Actions' consistency with the City's Solid Waste Management Plan will also be assessed.

### **TASK 13. ENERGY**

An EIS is to include a discussion of the effects of a proposed action on the use and conservation of energy, if applicable and significant, in accordance with CEQR. In most cases, an action does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to actions that may significantly affect the transmission or generation of energy. For other actions, in lieu of a detailed assessment, the estimated amount of energy that would be consumed annually as a result of the day-to-day operation of the buildings and uses resulting from an action is disclosed, as recommended in the *CEQR Technical Manual*.

An analysis of the anticipated additional demand from the Proposed Actions' RWCDs will be provided in the EIS. Con Edison will be consulted in preparation of the energy impact analysis. The EIS will disclose the projected amount of energy consumption during long-term operation resulting from the Proposed Actions. The projected amount of energy consumption during long-term operation (for projected development sites) will be estimated based on the average and annual whole-building energy use rates for New York City. If warranted, the Mayor's Office of Sustainability (MOS) and/or the power utility serving the area (Con Edison of New York) will be consulted.

### **TASK 14. TRANSPORTATION**

The objective of a transportation analysis is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, the safety of all roadway users (pedestrians, bicyclists and motorists), on-and off-street parking, or goods movement. The Proposed Actions are expected to induce new residential, commercial, and community facility development, which would generate additional vehicular travel and demand for parking, as well as additional subway and bus riders and pedestrian traffic. These new trips have the potential to affect the area's transportation systems. Therefore, the transportation studies will be a key focus of the EIS.

### TRAVEL DEMAND AND SCREENING ASSESSMENT

A detailed travel demand forecast has been prepared for the RWCDS using standard sources, including the *CEQR Technical Manual*, U.S. Census data, previously approved studies, and other references. The travel demand forecast (a Level 1 screening assessment) is summarized by peak hour and, mode of travel, as well as by person and vehicle trips. The travel demand forecast also identifies the number of peak hour person trips made by transit and the numbers of pedestrian trips traversing the area's sidewalks, corner areas, and crosswalks. The results of this forecast has been summarized in a Transportation Planning Factors and Travel Demand Forecast (TPF/TDF) Technical Memorandum (refer to **Appendix 3**). In addition to the travel demand forecast, detailed vehicle, pedestrian and transit trip assignments (a Level 2 screening assessment) will be prepared to validate the intersections and pedestrian/transit elements selected for quantified analysis.

### TRAFFIC

The EIS will provide a detailed traffic analysis focusing on those peak hours and street network intersections where the highest concentrations of action-generated demand would occur. The peak hours for analysis will be selected, and the specific intersections to be included in the traffic study area will be determined based upon the assignment of project-generated traffic and the *CEQR Technical Manual* analysis threshold of 50 additional vehicle trips per hour.

The RWCDS exceeds the minimum development density screening thresholds for a transportation analysis specified in Table 16-1 of the *CEQR Technical Manual*. Therefore, a travel demand forecast is required to determine if the Proposed Actions would generate 50 or more vehicle trips in any peak hour. Based on a preliminary forecast, the Proposed Actions are expected to generate more than 50 additional vehicular trips per hour in the weekday AM, midday, and PM periods, as well as on Saturday. Based on a preliminary vehicle trip assignment, it is anticipated that the traffic study area will include approximately 50 intersections for analysis. These intersections are expected to be primarily concentrated along key corridors within the study area including Second, Third, Lexington, and Park Avenues, and Madison Avenue, and East 111th, 112th, 119th, 120th, 125th, 126th and 128th Streets.

The following outlines the anticipated scope of work for conducting a traffic impact analysis for the Proposed Actions' RWCDS:

- Select peak hours for analysis and define a traffic study area consisting of intersections to be analyzed within and in proximity to the rezoning area and along key routes leading to and from the rezoning area.
- Conduct a count program for traffic analysis locations that includes a mix of automatic traffic recorder (ATR) machine counts and intersection turning movement counts. If needed, vehicle classification counts and travel time studies (speed runs) will be conducted to provide as supporting data for air quality and noise analyses. Turning movement count data will be collected at each analyzed intersection during the weekday and Saturday peak hours, and will be supplemented by nine days of continuous ATR counts. Vehicle classification count data will be collected during each peak hour at several representative intersections along each of the principal corridors in the study area. The turning movement counts, vehicle classification counts and travel time studies will be conducted concurrently with the ATR counts. Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from such agencies as DOT and DCP.

- Inventory physical data at each of the analysis intersections, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, bicycle routes and curbside parking regulations. Signal phasing and timing data for each signalized intersection included in the analysis will be obtained from DOT.
- Determine existing traffic operating characteristics at each analyzed intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per lane group, per intersection approach, and per overall intersection. This analysis will be conducted using the 2000 Highway Capacity Manual (HCM) methodology with the latest approved Highway Capacity Software (HCS).
- Based on available sources, Census data and standard references including the *CEQR Technical Manual*, estimate the travel demand from projected development sites in the future without the Proposed Actions (the No-Action condition), as well as the demand from other major developments planned in the vicinity of the study area by the 2027 analysis year. This will include total daily and peak hour person and vehicular trips, and the distribution of trips by auto, taxi, and other modes. A truck trip generation forecast will also be prepared based on data from the *CEQR Technical Manual* and previous relevant studies. Mitigation measures accepted for all No-Action projects as well as other DOT initiatives, if any, will be included in the future No-Action network, as applicable.
- Compute the No-Action condition traffic volumes based on approved background traffic growth rates for the study area (0.25 percent per year for years one through five, 0.125 percent for years six and beyond, per *CEQR Technical Manual* guidelines) and demand from major development projects expected to be completed in the future without the Proposed Actions. Incorporate any planned changes to the roadway system anticipated by the analysis year, and determine the No-Action v/c ratios, delays, and levels of services at analyzed intersections.
- Using Census data, standard references including the *CEQR Technical Manual*, and data from previous studies, develop a travel demand forecast for projected development sites based on the net change in uses compared to the No-Action condition as defined in the RWCDs. For each analyzed peak hour, determine the net change in vehicle trips expected to be generated by projected development sites under the Proposed Actions as described in the TPF/TDF Technical Memorandum and approved by DCP in consultation with DOT. Assign the net project-generated trips in each analysis period to likely approach and departure routes, and prepare traffic volume networks for the future with the Proposed Actions condition for each analyzed peak hour.
- Determine the v/c ratios, delays, and LOS at analyzed intersections for the With-Action condition, and identify significant adverse traffic impacts in accordance with *CEQR Technical Manual* criteria.
- Identify and evaluate potential traffic mitigation measures, as appropriate, for all significantly impacted locations in the study area in consultation with the lead agency and DOT. Potential traffic mitigation could include both operational and physical measures such as changes to lane striping, curbside parking regulations and traffic signal timing and phasing, roadway widening, and the installation of new traffic signals. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

## TRANSIT

Detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit trips according to the general thresholds used by MTA and specified in the *CEQR Technical Manual*. If a proposed action would result in 50 or more bus trips being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more trips at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted. The Proposed Actions' RWCDs is expected to generate a net increase of more than 200 additional subway trips and bus trips in one or more peak hours, and would therefore require detailed transit analyses based on *CEQR Technical Manual* criteria.

## SUBWAY

There are a total of eight existing subway stations located in proximity to the Project Area that would potentially be utilized by action-generated trips. In addition, MTA is planning to construct in the foreseeable future three additional subway stations within the Project Area as part of their second phase of the Second Avenue Subway. Transit analyses typically focus on the weekday AM and PM commuter peak hours when overall demand on the subway and bus systems is usually highest. The detailed transit analyses will include the following subtasks:

- Identify for analysis those subway stations expected to be utilized by 200 or more action-generated trips in one or more peak hours. At each of these stations, analyze those stairways and entrance control elements expected to be used by significant concentrations of action-generated demand in the weekday AM and PM peak hours.
- Conduct counts of existing weekday AM and PM peak hour demand at analyzed subway station elements and determine existing v/c ratios and levels of service based on *CEQR Technical Manual* criteria.
- Determine volumes and conditions at analyzed subway station elements in the future without the Proposed Actions using approved background growth rates and accounting for any trips expected to be generated by No-Action development on projected development sites or other major projects in the vicinity of the study area.
- Add action-generated demand to the No-Action volumes at analyzed subway station elements and determine AM and PM peak hour volumes and conditions in the future with the Proposed Actions.
- Identify potential significant adverse impacts at subway station stairways and fare control elements based on *CEQR Technical Manual* impact criteria.
- As the Proposed Actions are expected to generate 200 or more new subway trips in one direction on one or more of the five existing subway routes serving the area, subway line haul conditions will also be assessed in the EIS.
- Mitigation needs and potential subway station improvements will be identified, as appropriate, in conjunction with the lead agency and New York City Transit (NYCT). Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

## BUS

East Harlem is served by multiple local bus routes operated by Metropolitan Transportation Authority-New York City Transit (MTA-NYCT) and MTA Bus that connect the area with other parts of Manhattan as well as Queens and the Bronx. A detailed analysis of bus conditions is generally not required if a proposed action is projected to result in fewer than 50 peak hour trips

being assigned to a single bus route (in one direction) based on the general thresholds used by MTA and specified in the *CEQR Technical Manual*. As the incremental person-trips by bus generated by the Proposed Actions would exceed 50 peak hour trips in one direction on one or more of the routes serving the Project Area, the EIS will include a quantitative analysis of local bus conditions. For that analysis, trips will be assigned to each route based on proximity to the projected development sites and current ridership patterns. The analysis will include documenting existing peak hour bus service levels and maximum load point ridership, determining conditions in the No-Action condition, and assessing the effects of new action-generated peak hour trips. Bus transit mitigation, if warranted, will be identified in consultation with the lead agency and MTA.

### PEDESTRIANS

Projected pedestrian volumes of less than 200 persons per hour at any pedestrian element (sidewalks, corner areas, and crosswalks) would not typically be considered a significant impact, since the level of increase would not generally be noticeable and therefore would not require further analysis under *CEQR Technical Manual* criteria. Based on the level of new pedestrian demand generated by the Proposed Actions' RWCDs, it is anticipated that action-generated pedestrian trips would exceed the 200-trip *CEQR Technical Manual* analysis threshold at one or more locations in one or more peak hours. A detailed pedestrian analysis will therefore be prepared for the EIS focusing on selected sidewalks, corner areas, and crosswalks along corridors that would experience more than 200 additional peak hour pedestrian trips. Pedestrian counts will be conducted at each analysis location and used to determine existing levels of service. No-Action and With-Action pedestrian volumes and levels of service will be determined based on approved background growth rates, trips expected to be generated by No-Action development on projected development sites and other major projects in the vicinity of the study area, and action-generated demand. The analysis will evaluate the potential for incremental demand from the Proposed Actions to result in significant adverse impacts based on current *CEQR Technical Manual* criteria. Potential measures to mitigate any significant adverse pedestrian impacts will be identified and evaluated, as warranted, in consultation with the lead agency and DOT.

### VEHICULAR AND PEDESTRIAN SAFETY

Data on crashes involving pedestrians and/or cyclists at study area intersections will be obtained from DOT for the most recent three-year period available. These data will be analyzed to determine if any of the studied locations may be classified (based on *CEQR Technical Manual* criteria) as high crash locations and whether vehicle and/or pedestrian trips and any street network changes resulting from the Proposed Actions may adversely affect vehicular and pedestrian safety in the area. If any high crash locations are identified, practicable measures to enhance pedestrian/bicycle safety at these locations will be explored to alleviate potential safety issues.

### PARKING

Parking demand from commercial and retail uses typically peaks in the midday period and declines during the afternoon and evening. By contrast, residential demand typically peaks in the overnight period.

It is anticipated that the on-site required accessory parking for projected development sites may not be sufficient to accommodate the overall incremental demand that would be generated by the Proposed Actions. As such, detailed existing on-street parking and off-street parking inventories

will be conducted for the weekday overnight period (when residential parking demand typically peaks) and the weekday midday period (when commercial parking demand typically peaks) to document the existing supply and demand for each period. The parking analyses will document changes in the parking supply and utilization in proximity to projected development sites under the No-Action and With-Action conditions based on accepted background growth rates and projected demand from No-Action and With-Action development on projected development sites and other major projects in the vicinity of the study area. The parking study area will encompass the rezoning area as well as a ¼-mile radius around the Project Area.

Parking demand generated by the projected residential component of the Proposed Actions' RWCDs will be forecasted based on auto ownership data for the rezoning area and the surrounding area. Parking demand from all other uses will be derived from the forecasts of daily auto trips generated by these uses. Future parking demand will account for net reductions in demand associated with the projected development sites' No-Action land uses displaced under the Proposed Action.

The forecast of new parking supply under the RWCDs will be based on the net change in parking spaces on projected development sites. As currently contemplated, the Proposed Actions would eliminate required accessory parking for new residential units developed in the proposed special district. The forecast of future supply will also account for accessory parking spaces associated with the With-Action commercial uses, which typically have lower parking demand in the overnight hours.

#### **TASK 15. AIR QUALITY**

An air quality assessment is required for actions that could have potential to result in significant air quality impacts. There are mobile source impacts that could arise when an action increases or causes a redistribution of traffic, creates any other mobile sources of pollutants, or adds new uses near existing mobile sources. There are mobile source impacts that could be produced by parking facilities, parking lots, or garages. Stationary source impacts could occur with actions that create new stationary sources or pollutants such as emission stacks from industrial plants, hospitals, or other large institutional uses, or a building's boilers, that can affect surrounding uses; or when they add uses near existing or planned future emission stacks, and the new uses might be affected by the emissions from the stacks, or when they add structures near such stacks and those structures can change the dispersion of emissions from stacks so that they begin to affect surrounding uses.

##### **MOBILE SOURCE ANALYSIS**

The increased traffic associated with the RWCDs projected development sites would have the potential to affect local air quality levels. Emissions generated by the increased traffic at congested intersections have the potential to impact air quality significantly at nearby sensitive land uses. Carbon monoxide (CO) and particulate matter (PM) are the primary pollutants of concern for microscale mobile source air quality analyses, including assessments of roadways intersections and parking garages. There is the potential for the action-generated trips to exceed the *CEQR Technical Manual* CO analysis screening threshold at a number of locations throughout the study area. In addition, the projected number of heavy-duty trucks or equivalent vehicles associated with the RWCDs could exceed the applicable fine particulate matter (PM<sub>2.5</sub>) screening thresholds. Therefore, an analysis of CO and PM mobile source emissions at affected intersections may be warranted.

The specific work program for the mobile source air quality study will include the following tasks:

- Existing ambient air quality data for the study area (published by the New York State Department of Environmental Conservation [NYSDEC]) will be compiled for the analysis of existing and future conditions.
- Critical intersection locations exceeding the CEQR screening thresholds will be selected, representing locations with the worst potential total and incremental pollution impacts, based on data obtained from the traffic analysis (Task 14, Transportation). At each intersection, multiple receptor sites will be analyzed in accordance with CEQR guidelines.
- The United States Environmental Protection Agency's (USEPA) first-level CAL3QHC intersection model will be utilized to predict maximum changes in CO concentrations. The refined EPA CAL3QHCR intersection model will be used to predict the maximum changes in PM<sub>2.5</sub> concentrations, with five years of meteorological data from La Guardia Airport and concurrent upper air data from Brookhaven, New York to be used for the simulation program.
- Vehicular cruise and idle emissions for the dispersions modeling will be computed using EPA's MOVES model. Factors for re-suspended road dust emissions will be based on *CEQR Technical Manual* guidance and the EPA procedure defined in AP-42.
- At each mobile source microscale receptor site, (1) the one-hour and eight-hour average CO concentrations will be calculated for each applicable peak period for existing, No-Action, and With-Action condition; and (2) the maximum 24-hour and annual average PM<sub>2.5</sub> concentrations will be calculated for the No-Action and With-Action conditions.
- An analysis of CO and PM emissions will be performed for the parking facilities that would have the greatest potential for impact on air quality. Cumulative impacts from on-street sources and emissions from parking garages will be calculated, where appropriate.
- Future pollutant levels with the Proposed Actions for parking facilities will be compared with the CO National Ambient Air Quality Standards (NAAQS) and the City's CO and PM<sub>2.5</sub> *de minimis* guidance criteria to determine the impacts of the Proposed Actions.
- The consistency of the Proposed Actions with the strategies contained in the State Implementation Plan (SIP) for the area will be determined. At any receptor sites where violations of standards occur, analyses will be performed to determine what mitigation measures would be required to attain standards.

### STATIONARY SOURCE ANALYSIS

The stationary source air quality analysis will determine the effects of emissions from projected and potential development sites' fossil-fuel fired heating and hot water systems to impact existing land uses significantly or to significantly impact any of the other projected or potential development sites (i.e., project-on-project impacts). In addition, since portions of the rezoning area are located within or near manufacturing zoned districts, an analysis of emissions from industrial sources would be performed, examining large and major sources of emissions within 1,000 feet of the study area, as per the *CEQR Technical Manual*.

#### *Heat and Hot Water Systems Analysis*

- A screening level analysis will be performed following the procedures outlined in the *CEQR Technical Manual*. The purpose of the screening level analysis is to determine the potential

- for impacts air quality impacts from heating and hot water systems of the projected and potential development sites.
- If the screening analysis for any site demonstrates a potential for air quality impacts, a refined modeling analysis will be performed for that development site using the AERMOD model. For this analysis, five recent years of meteorological data from La Guardia Airport and concurrent upper air data from Brookhaven, New York will be utilized for the simulation program. Concentrations of nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) will be determined at off-site receptors sites, as well as on projected and potential development site receptors. Predicted values will be compared with NAAQS and other relevant standards. If warranted by the analysis, requirements related to fuel type, exhaust stack locations and/or other appropriate parameters will be memorialized by (E) designations (or restricted through an LDA or comparable mechanism for City-owned parcels) placed on the blocks and lots pursuant to Section 11-15 of the New York City Zoning Resolution and the (E) Rules, as referenced above in the Hazardous Materials section.
  - A cumulative impact analysis will be performed for development sites with similar height located in close proximity to one another (i.e., site clusters). Impacts will be determined using the EPA AERSCREEN model. In the event that violations of standards at one or more clusters are predicted, measures to reduce pollutant levels to within standards will be examined.

#### *Industrial Source Analysis*

- A field survey will be performed to identify processing or manufacturing facilities within 400 feet of the projected and potential development sites. A copy of the air permits for each of these facilities will be requested from NYCDEP's Bureau of Environmental Compliance. A review of NYSDEC Title V permits and the EPA Envirofacts database will also be performed to identify any Federal-or State-permitted facilities within 1,000 feet of the development sites.
- Facilities with sources of emissions located within 400 feet of the projected or potential development sites will be considered for analysis.
- For potential development sites with identified industrial sources of air emissions, the industrial sources analysis will be performed assuming that development does take place, as well as assuming that it does not take place.
- A cumulative impact analysis will be performed for multiple sources that emit the same air contaminant. Predicted concentrations of these compounds will be compared to NYSDEC DAR-1 guideline values for short-term (SGC) and annual (AGC) averaging periods. In the event that violations of standards are predicted, measures to reduce pollutant levels to within standards will be examined.
- Potential cumulative impacts of multiple air pollutants will be determined based on the EPA's Hazard Index Approach for non-carcinogenic compounds and using the EPA's Unit Risk Factors for carcinogenic compounds. Both methods are based on equations that use EPA health risk information (established for individual compounds to determine the level of health risk posed by specific ambient concentrations of that compound. The derived values of health risk are additive and can be used to determine the total risk posed by multiple air pollutants.

### *Large and Major Source Analysis*

- An analysis of existing large and major sources of emissions (such as sources having Federal and State permits) identified within 1,000 feet of the development sites will be performed to assess their potential effects of the projected and potential development sites. Predicted criteria pollutant concentrations will be predicted using the AERMOD model compared with NAAQS for NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>, as well as applicable criteria for PM<sub>2.5</sub>.

Further details on the air quality analysis approach for the Proposed Actions is provided in **Appendix 4** to this document (Air Quality Analysis Methodology Memorandum).

### **TASK 16. GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE**

Increased greenhouse gas (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. As the RWCDs associated with the Proposed Actions exceeds the 350,000 square feet development threshold, GHG emissions generated by the Proposed Actions will be quantified and an assessment of consistency with the City's established GHG reduction goal will be performed as part of the EIS. The assessment will examine GHG emissions from the Proposed Action's operations, mobile sources, and construction, as outlined below.

- Sources of GHG from the development projected as part of the Proposed Actions will be identified. The pollutants for analysis will be discussed, as well as various City, State, and Federal goals, policies, regulations, standards, and benchmarks for GHG emissions.
- Fuel consumption will be estimated for the projected developments based on the calculations of energy use estimated as part of Task 13, "Energy."
- GHG emissions associated with the action-related traffic will be estimated for the Proposed Actions using data from Task 14, "Transportation." A calculation of vehicle miles traveled (VMT) will be prepared.
- The types of construction materials and equipment proposed will be discussed along with opportunities for alternative approaches that may serve to reduce GHG emissions associated with construction.
- A qualitative discussion of stationary and mobile sources of GHG emissions will be provided in conjunction with a discussion of goals for reducing GHG emissions to determine if the Proposed Actions are consistent with GHG reduction goals, including building efficient buildings, using clean power, transit-oriented development and sustainable transportation, reducing construction operations emissions, and using building materials with low carbon intensity.

Portions of the Project Area are located within the federally mapped 100- and 500-year floodplains and may be susceptible to storm surge and coastal flooding. This chapter of the EIS will include a qualitative discussion of potential effects of climate change and potential design measures that could be incorporated into new development projected to occur in the Project Area.

### **TASK 17. NOISE**

A noise analysis will be included in the EIS, as the Proposed Actions would result in additional vehicle trips to and from the rezoning area; would introduce new sensitive receptors in the

vicinity of heavily trafficked roadways, as well as an elevated rail line along Park Avenue. The noise analysis will examine both the Proposed Actions' potential effects on sensitive noise receptors (including residences, health care facilities, schools, open space, etc.) and the potential noise exposure at new sensitive uses introduced by the actions. If significant adverse impacts are identified, impacts would be mitigated or avoided to the greatest extent practicable. The Proposed Actions would result in new residential, commercial, community facility, and industrial development. It would also alter traffic conditions in the area. Noise, which is a general term used to describe unwanted sound, will likely be affected by these development changes.

It is assumed that outdoor mechanical equipment would be designed to meet applicable regulations and consequently no detailed analysis of potential noise impacts due to outdoor mechanical equipment will be performed. Consequently, the noise analysis will examine the level of building attenuation necessary to meet CEQR interior noise level requirements. The following tasks will be performed in compliance with *CEQR Technical Manual* guidelines:

- Based on the traffic studies conducted for Task 14, "Transportation," a screening analysis will be conducted to determine whether there are any locations where there is the potential for the RWCDs associated with the Proposed Actions to result in significant noise impacts (i.e., doubling Noise Passenger Car Equivalents [PCEs]) due to action-generated traffic.
- Noise survey locations will be selected to represent sites of future sensitive uses in the RWCDs With-Action condition. These noise survey locations will be placed in areas to be analyzed for building attenuation and would focus on areas of potentially high ambient noise where residential uses are proposed.
- At the identified locations, noise measurements will be conducted during typical weekday AM, PM peak, midnight, 24-hour periods (coinciding with the traffic peak periods as well as sensitive average periods for aircraft flight noise), as applicable. Noise measurements will be measured in units of "A" weighted decibel scale (dBA) as well as one-third octave bands. The measured noise level descriptors will include equivalent noise level ( $L_{eq}$ ), day and night noise level ( $L_{dn}$ ), maximum level ( $L_{max}$ ), minimum level ( $L_{min}$ ), and statistical percentile levels such as  $L_1$ ,  $L_{10}$ ,  $L_{50}$ , and  $L_{90}$ . A summary table of existing measured noise levels will be provided as part of the EIS.
- Following procedures outlined in the *CEQR Technical Manual* for assessing mobile source noise impacts, future No-Action and With-Action noise levels will be estimated at the noise receptor locations based on acoustical fundamentals. All projections will be made with  $L_{eq}$  noise descriptor.
- The level of building attenuation necessary to satisfy CEQR requirements (a function of the exterior noise levels) will be determined based on the highest  $L_{10}$  noise level estimated at each monitoring site. Where necessary, the level of building attenuation necessary to satisfy HUD interior noise level recommendations will be determined based on the estimated  $L_{dn}$  noise level. The building attenuation requirements will be memorialized by (E) designations (or restricted through an LDA or comparable mechanism for City-owned parcels) placed on the blocks and lots requiring specific levels of attenuation pursuant to Section 11-15 of the New York City Zoning Resolution and the (E) Rules, as referenced above in the Hazardous Materials section. The EIS would include (E) designation language describing the requirements for each of the blocks and lots to which they would apply.

- If the results of the screening analysis indicate that any sensitive receptor location would experience a doubling of traffic between the No-Action and With-Action conditions, a detailed mobile source noise analysis would be performed at that location.

Further details on the noise analysis methodology and technical approach for the Proposed Actions is provided in **Appendix 5** (Noise Monitoring Approach Memorandum) to this document.

### **TASK 18. PUBLIC HEALTH**

Public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a proposed project, and, if so, to identify measures to mitigate such effects.

A public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified for the Proposed Actions in any of these technical areas and DCP determines that a public health assessment is warranted, an analysis will be provided for the specific technical area or areas.

### **TASK 19. NEIGHBORHOOD CHARACTER**

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise, etc. The Proposed Actions have the potential to alter certain elements contributing to the affected area's neighborhood character. Therefore, a neighborhood character analysis will be provided in the EIS.

A preliminary assessment of neighborhood character will be provided in the EIS to determine whether changes expected in other technical analysis areas—land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise—may affect a defining feature of neighborhood character. The preliminary assessment will:

- Identify the defining features of the existing neighborhood character.
- Summarize changes in the character of the neighborhood that can be expected in the With-Action condition and compare to the No-Action condition.
- Evaluate whether the Proposed Actions have the potential to affect these defining features, either through the potential for a significant adverse impact or a combination of moderate effects in the relevant technical areas.

If the preliminary assessment determines that the Proposed Actions could affect the defining features of neighborhood character, a detailed analysis will be conducted.

### **TASK 20. CONSTRUCTION**

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources

and the integrity of historic resources, community noise patterns, air quality conditions, and mitigation of hazardous materials. Multi-sited projects with overall construction periods lasting longer than two years and that are near to sensitive receptors should undergo a preliminary impact assessment. This chapter of the EIS will provide a preliminary impact assessment following the guidelines in the *CEQR Technical Manual* based on a conceptual construction schedule with anticipated RWCDS construction timelines for each of the projected development sites. The preliminary assessment will evaluate the duration and severity of the disruption or inconvenience to nearby sensitive receptors. If the preliminary assessment indicates the potential for a significant impact during construction, a detailed construction impact analysis will be undertaken and reported in the EIS in accordance with guidelines outlined in the *CEQR Technical Manual*. Technical areas to be assessed include the following:

- *Transportation Systems:* The assessment will qualitatively consider losses in lanes, sidewalks, and other transportation services on the adjacent streets during the various phases of construction and identify the increase in vehicle trips from construction workers and equipment. A travel demand forecast for the RWCDS peak construction period will be prepared. The construction traffic analysis will be performed, if necessary, for existing conditions, No-Action condition, and With-Action condition.
- *Air Quality:* The construction air quality impact section will include a quantitative dispersion modeling of construction equipment operational impacts on sensitive land uses within the Project Area during the worst-case time period(s). Air pollutant sources will include combustion exhaust associated with non-road engines, on-road engines, and on-site activities that generate fugitive dust. A discussion of measures to reduce impacts, if any, will be included.
- *Noise:* The construction noise impact section will contain discussion of noise impacts at sensitive land uses and buildings within the Project Area to be analyzed with a quantitative noise modeling for the worst-case noise condition from on-site construction equipment/vehicles activity. During the most representative worst-case time period(s), noise levels due to construction activities at sensitive receptors will be predicted and duration of sustained noise levels exceeding the significance threshold will be estimated.
- *Other Technical Areas:* As appropriate, other areas of environmental assessment—such as historic resources, hazardous materials, public health, socioeconomic conditions, and neighborhood character—will be analyzed for potential construction-related impacts.

Further details on the construction air quality and noise analysis methodology and technical approach for the Proposed Actions is provided in **Appendix 6** to this document.

## **TASK 21. MITIGATION**

Where significant adverse impacts have been identified in Tasks 2 through 20, measures to mitigate those impacts will be described. The chapter will also consider when mitigation measures will need to be implemented. These measures will be developed and coordinated with the responsible City/State agencies, as necessary, including the LPC, DOT, and NYCDEP. Where impacts cannot be fully mitigated, they will be described as unavoidable adverse impacts.

## **TASK 22. ALTERNATIVES**

The purpose of an alternative section in an EIS is to examine development options that would tend to reduce action-related impacts. The alternatives will be better defined once the full extent of the Proposed Actions' impacts have been identified. Typically for area-wide actions such as the Proposed Actions, the alternatives will include a No-Action Alternative, a no impact or no

unmitigated significant adverse impact alternative, and a lesser density alternative. A lesser density alternative would be pursued only if it is found to have the potential to reduce the impacts of the Proposed Actions while, to some extent, still meeting the action's stated purpose and need. The alternatives analysis will be qualitative, except in those technical areas where significant adverse impacts for the Proposed Actions have been identified. The level of analysis provided will depend on an assessment of project impacts determined by the analysis connected with the appropriate tasks.

In addition to the alternatives discussed above, the EIS will include an alternative that considers the projected development generated by the Proposed Actions and the development of a City-owned site under HPD jurisdiction known as the East 111th Street site. The site occupies the block bounded by East 112th Street to the north, Park Avenue to the west, East 111th Street to the south, and Madison Avenue to the east. The EIS will analyze the additional development that could be realized on the East 111th Street site in addition to the projected development expected under the Proposed Actions (see Section G, "Analysis Framework," for full details).

### **TASK 23. SUMMARY EIS CHAPTERS**

The EIS will include the following three summary chapters, where appropriate to the Proposed Action:

- *Unavoidable Adverse Impacts*: which summarizes any significant adverse impacts that are unavoidable if the Proposed Actions are implemented regardless of the mitigation employed (or if mitigation is not feasible).
- *Growth-Inducing Aspects of the Proposed Action*: which generally refer to "secondary" impacts of the Proposed Actions that trigger further development.
- *Irreversible and Irretrievable Commitments of Resources*: which summarizes the Proposed Actions and its impact in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

### **TASK 24. EXECUTIVE SUMMARY**

The executive summary will utilize relevant material from the body of the EIS to describe the Proposed Actions, their environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Actions. The executive summary will be written in enough detail to facilitate drafting of a notice of completion by the lead agency. \*

**Appendix 1**  
**Blocks and Lots Included in Proposed Rezoning Area**

## Appendix 1

### List of Blocks and Lots Included in the Rezoning Area

| Block | Lots                                                                                                                                                                                                   |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1620  | 23 (p/o)                                                                                                                                                                                               |
| 1621  | 32, 35, 36, 41 (p/o)                                                                                                                                                                                   |
| 1622  | 31 (p/o), 33, 34, 35, 36, 37                                                                                                                                                                           |
| 1623  | 32, 33, 34, 35, 39, 40, 41                                                                                                                                                                             |
| 1632  | 11 (p/o), 15, 20, 22, 23, 33, 34, 35, 37, 40, 50, 51, 52, 53, 133, 150, 151, 152, 153, 154, 155, 156                                                                                                   |
| 1633  | 13, 19, 20, 28 (p/o), 33, 34, 35, 36, 37, 38, 39, 40, 51, 52, 53, 54                                                                                                                                   |
| 1634  | 9, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 33, 34, 35, 36, 37, 38, 39, 40, 48(p/o), 49, 50, 51, 52, 56, 57, 59, 60, 62, 111, 113, 115, 116, 117, 132, 140, 156, 157, 158                           |
| 1635  | 21, 22, 23, 24, 25 (p/o), 33, 35, 36, 37, 38, 39, 40, 48 (p/o), 49, 50, 51, 52, 121, 122, 124, 132(p/o), 140, 141(p/o), 149, 150, 151                                                                  |
| 1636  | 21, 22, 23, 24, 33, 34, 35, 36, 37, 38, 39, 40, 49, 50, 51, 52, 121, 122, 123, 124, 132(p/o), 138, 139, 140, 141(p/o), 148(p/o), 150, 151                                                              |
| 1637  | 21, 22, 23, 24, 25 (p/o), 28 (p/o), 33, 35, 36, 37, 38, 40, 43(p/o), 50, 51, 52, 137, 141(p/o)                                                                                                         |
| 1638  | 1(p/o), 8, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24(p/o), 32(p/o), 33, 36, 37, 38, 39, 40, 49, 50, 52, 56, 57, 62, 63, 66, 112, 121, 122, 140(p/o), 148(p/o)                                         |
| 1639  | 3(p/o), 17, 21, 34, 35, 36, 38, 39, 40, 41(p/o), 48(p/o), 49, 50, 51, 52, 56, 57, 124, 133(p/o), 137, 150                                                                                              |
| 1640  | 1(p/o), 21(p/o)                                                                                                                                                                                        |
| 1643  | 1, 4, 5, 6, 7, 8, 10, 15, 16, 17, 18, 21, 22, 23, 24, 31(p/o), 33, 35, 37, 38, 39, 40, 41(p/o), 44, 47, 48, 49, 50, 51, 52, 56, 59, 60, 61, 62, 63, 64, 65, 68, 70, 71, 122, 123, 137, 149, 7501, 7502 |
| 1644  | 1, 5, 7, 8, 11, 12, 16, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 51, 57, 58, 59, 65, 66, 67, 68, 69, 70, 72, 120, 121, 122, 124, 129, 156, 164, 7502            |
| 1645  | 1, 3, 5, 6, 7, 12(p/o), 22, 23, 24, 33, 35(p/o), 37, 38, 39, 40, 41(p/o), 50(p/o), 51, 59(p/o), 70, 122, 132, 133, 151, 152, 153, 7501, 7502                                                           |
| 1654  | 1, 2, 3, 4, 11(p/o), 25, 26, 27, 28, 45, 128                                                                                                                                                           |
| 1655  | 1, 3, 5(p/o), 20(p/o), 22, 23, 24, 26, 27, 28, 29(p/o), 45, 102                                                                                                                                        |
| 1659  | 1, 21, 22, 23, 24, 25, 26, 27, 28, 45, 46, 47, 48, 105, 121, 128, 144, 147                                                                                                                             |
| 1660  | 1, 3, 4, 22, 23, 24, 25, 26, 27, 28, 29, 30(p/o), 45, 120, 7501                                                                                                                                        |
| 1661  | 2, 4, 21, 22, 23, 24, 27, 28, 29, 44(p/o), 46, 47, 48, 105(p/o), 121, 7502                                                                                                                             |
| 1662  | 1(p/o), 16(p/o)                                                                                                                                                                                        |
| 1665  | 1, 2, 3, 4, 5(p/o), 23, 24, 25, 27, 28, 30, 31, 33, 34, 36, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 50, 51, 101, 104, 110(p/o), 122(p/o), 127, 130, 145, 147, 150                                      |
| 1666  | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 44(p/o), 45, 47, 48, 104, 105, 107, 116, 118, 119, 120, 121, 127(p/o), 144                                  |
| 1667  | 1, 3, 5, 21, 22, 24, 25, 26, 28, 43(p/o), 45, 102, 120                                                                                                                                                 |
| 1676  | 1, 2, 3, 4, 49, 50, 51, 52, 104, 148                                                                                                                                                                   |
| 1677  | 1, 45, 46, 47, 49, 50, 51, 52                                                                                                                                                                          |

**Appendix 1****List of Blocks and Lots Included in the Rezoning Area**

| <b>Block</b> | <b>Lots</b>                                                                                                                                                                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1680         | 1, 2, 3, 49, 50, 52, 148(p/o)                                                                                                                                                                                                                                                                              |
| 1681         | 1, 2, 3, 4, 52, 104, 149, 7501                                                                                                                                                                                                                                                                             |
| 1682         | 1, 2, 3, 4, 49, 50, 51, 52                                                                                                                                                                                                                                                                                 |
| 1683         | 1, 2, 3, 4, 49, 50, 51, 52, 104, 149                                                                                                                                                                                                                                                                       |
| 1684         | 1(p/o)                                                                                                                                                                                                                                                                                                     |
| 1687         | 1, 2, 3, 4, 49, 51, 52, 102, 104, 149, 151                                                                                                                                                                                                                                                                 |
| 1688         | 1, 2, 45(p/o), 50, 52, 53                                                                                                                                                                                                                                                                                  |
| 1689         | 1, 2, 4, 49, 50, 51, 52, 149                                                                                                                                                                                                                                                                               |
| 1745         | 40, 133, 134, 141                                                                                                                                                                                                                                                                                          |
| 1746         | 32, 33, 41                                                                                                                                                                                                                                                                                                 |
| 1747         | 1(p/o), 70                                                                                                                                                                                                                                                                                                 |
| 1748         | 1(p/o), 35(p/o)                                                                                                                                                                                                                                                                                            |
| 1750         | 32(p/o), 34, 40, 41                                                                                                                                                                                                                                                                                        |
| 1751         | 1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 71, 105, 108, 110, 113, 116, 120, 126, 131, 132, 137, 142, 147, 149, 156, 160, 164, 167 |
| 1752         | 1, 7, 8, 9, 10, 11, 13, 14, 16, 54, 57, 59, 66, 67, 68, 69, 70, 72, 107, 113, 165                                                                                                                                                                                                                          |
| 1753         | 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, 17, 21, 27, 33, 34, 35, 36, 37, 41, 42, 44, 45, 49, 51, 52, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 72, 102, 105, 108, 115, 116, 117, 126, 134, 139, 140, 141, 162, 165, 168, 7501, 7502, 7503, 7504                                                          |
| 1754         | 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 24, 25, 26, 29, 30, 31, 32, 33, 40, 42, 43, 44, 45, 46, 47, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 67, 68, 70, 71, 72, 100, 102, 103, 108, 110, 112, 115, 116, 117, 131, 141, 142, 155, 156, 157, 161, 162, 167, 169, 7501, 7502              |
| 1755         | 20, 22, 23, 24, 25, 26, 27, 31, 33, 41, 43, 44, 47, 50, 126, 143, 7501                                                                                                                                                                                                                                     |
| 1756         | 1, 4, 5, 6, 8, 9, 11, 12, 14, 15, 16, 17, 24, 26, 29, 30, 33, 37, 38, 39, 44, 47, 48, 49, 50, 56, 59, 60, 61, 62, 65, 66, 67, 68, 69, 70, 71, 72, 113, 7501                                                                                                                                                |
| 1767         | 1, 2, 3, 4, 5, 11, 16(p/o), 21, 22(p/o), 28(p/o), 30(p/o), 33, 52, 60, 62, 67, 68, 69, 71, 72, 168, 169                                                                                                                                                                                                    |
| 1768         | 1, 3, 4, 5, 6, 7, 9, 11, 12, 21(p/o), 33, 38, 39, 40, 69, 70, 71, 111, 169, 170                                                                                                                                                                                                                            |
| 1769         | 1, 3, 5(p/o), 21(p/o), 32(p/o), 33, 45(p/o), 132, 7501                                                                                                                                                                                                                                                     |
| 1770         | 20, 21, 23, 24, 25, 36(p/o), 38, 39, 40, 41, 50(p/o), 53, 67, 71, 72, 123, 158(p/o), 159                                                                                                                                                                                                                   |
| 1771         | 1, 2, 3, 5, 6, 7, 10, 14, 17, 20, 21, 22, 23, 24(p/o), 33(p/o), 36, 38, 39, 41(p/o), 49(p/o), 50, 51, 52, 56, 59, 65, 67, 68, 69, 70, 71, 72, 113, 120, 121, 122, 123                                                                                                                                      |
| 1772         | 1, 13, 17, 20, 22, 23, 24(p/o), 31(p/o), 33, 34, 35, 37, 38, 39, 41, 50, 51, 52, 55, 57, 58, 59, 60(p/o), 69, 70, 134, 140, 150, 158                                                                                                                                                                       |
| 1773         | 1, 4, 67, 69, 72                                                                                                                                                                                                                                                                                           |
| 1774         | 1, 5, 6(p/o), 68                                                                                                                                                                                                                                                                                           |
| 1775         | 1, 3, 6(p/o), 71, 165(p/o), 166, 168, 170                                                                                                                                                                                                                                                                  |
|              |                                                                                                                                                                                                                                                                                                            |

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**Appendix 1****List of Blocks and Lots Included in the Rezoning Area**

| Block                           | Lots                                                                                                    |
|---------------------------------|---------------------------------------------------------------------------------------------------------|
| 1783                            | 1, 2, 3, 4, 5(p/o), 23, 24, 25, 26, 27, 28, 43(p/o), 45, 46, 47, 48, 50, 128(p/o), 7501                 |
| 1784                            | 2, 4, 5(p/o), 21, 23, 24, 25, 26, 27, 28, 45, 47, 48, 102, 120(p/o), 122, 128                           |
| 1785                            | 1, 21(p/o), 22, 23, 24, 25, 26, 27, 28, 29, 43, 104, 129, 7502                                          |
|                                 |                                                                                                         |
|                                 |                                                                                                         |
| 1786                            | 1, 4, 18 (p/o), 22, 23, 24, 26, 27, 28, 47, 104, 121, 123                                               |
| 1788                            | 1, 4, 5 (p/o), 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 46 (p/o), 48, 49, 50, 101 (p/o), 104 (p/o), 7501 |
| 1795                            | 1, 2, 3, 4, 51, 53, 104, 150                                                                            |
| 1796                            | 1, 2, 3, 4, 5, 51, 52, 53, 54, 152                                                                      |
|                                 |                                                                                                         |
| <b>Note:</b> p/o = partial lot. |                                                                                                         |

**Appendix 2(a)**  
**Reasonable Worst-Case Development**  
**Scenario for the Proposed Actions**

| Projected Development Site Number | Block | Lots                         | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area- Office | Existing Commercial Floor Area- Retail | Existing Commercial Floor Area- Auto Use | Existing Commercial Floor Area- Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes          |
|-----------------------------------|-------|------------------------------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|---------------------------|
| 1                                 | 1754  | 33,40                        | 19,651   | C8-3              | 1.08         | 21,183                       | 0                                     | 0                       | 21,183                               | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 21,183                            | Commercial parking garage |
| 2                                 | 1769  | 3                            | 13,620   | M1-4              | 2.29         | 31,185                       | 0                                     | 0                       | 31,185                               | 18,500                                 | 2,868                                  | 0                                        | 0                                       | 9,817                                   | 0                                 |                           |
| 3                                 | 1623  | 33,34                        | 10,599   | R7-2              | 0.57         | 6,060                        | 4,545                                 | 6                       | 1,515                                | 0                                      | 1,515                                  | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 4                                 | 1775  | 3,6,165,168,71               | 156,416  | M1-2              | 2.95         | 461,796                      | 450,018                               | 412*                    | 11,778                               | 5,711                                  | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 5                                 | 1751  | 40,137,33,34,37,132,35,38,36 | 16,487   | C8-3              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 6                                 | 1746  | 33                           | 20,183   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking           |
| 7                                 | 1745  | 134                          | 17,642   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking           |
| 8                                 | 1750  | 40                           | 13,493   | C6-3              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking           |
| 9                                 | 1774  | 68                           | 11,491   | C6-3              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface Parking           |
| 10                                | 1773  | 1,69,67,72,4                 | 25,820   | C6-3/C4-4D        | 0.26         | 6,810                        | 0                                     | 0                       | 6,810                                | 0                                      | 6,810                                  | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 11                                | 1772  | 33,34,35,37,38,39,134,140    | 17,967   | C4-4              | 1.83         | 32,952                       | 3,340                                 | 4                       | 29,612                               | 4,728                                  | 8,760                                  | 0                                        | 16,124                                  | 0                                       | 0                                 |                           |
| 12                                | 1770  | 36                           | 18,973   | C4-4D             | 1.78         | 33,736                       | 0                                     | 0                       | 33,736                               | 16,751                                 | 16,985                                 | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 13                                | 1786  | 4,47                         | 13,669   | C4-4D             | 3.55         | 48,500                       | 0                                     | 0                       | 42,500                               | 0                                      | 32,500                                 | 0                                        | 10,000                                  | 0                                       | 0                                 |                           |
| 14                                | 1767  | 33                           | 11,395   | C4-4D             | 2.60         | 29,607                       | 0                                     | 0                       | 29,607                               | 0                                      | 9,215                                  | 0                                        | 20,392                                  | 0                                       | 0                                 |                           |
| 15                                | 1645  | 35,33                        | 10,147   | C4-4D             | 0.98         | 9,895                        | 0                                     | 0                       | 9,895                                | 0                                      | 9,895                                  | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 16                                | 1643  | 35,37,137,33                 | 12,128   | C4-4D             | 0.78         | 9,486                        | 0                                     | 0                       | 9,486                                | 0                                      | 9,486                                  | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 17                                | 1660  | 3,4,45,1                     | 22,201   | R8A               | 1.52         | 33,815                       | 0                                     | 0                       | 33,815                               | 0                                      | 5,500                                  | 15,600                                   | 0                                       | 0                                       | 0                                 |                           |
| 18                                | 1635  | 33,35,36,37,38,39,40         | 18,159   | R8A               | 1.95         | 35,420                       | 0                                     | 0                       | 35,420                               | 0                                      | 17,210                                 | 0                                        | 18,210                                  | 0                                       | 0                                 |                           |
| 19                                | 1634  | 34,35,36,37,38,33            | 12,858   | R8A               | 1.06         | 13,575                       | 0                                     | 6                       | 13,575                               | 0                                      | 13,575                                 | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 20                                | 1655  | 45                           | 16,139   | R8A               | 2.37         | 38,302                       | 0                                     | 0                       | 38,302                               | 0                                      | 30,302                                 | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 21                                | 1632  | 37,40,35                     | 15,183   | R8A               | 1.70         | 25,765                       | 0                                     | 0                       | 25,765                               | 0                                      | 25,765                                 | 0                                        | 0                                       | 0                                       | 0                                 |                           |
| 22                                | 1771  | 33,36                        | 18,647   | C4-4              | 1.79         | 33,372                       | 0                                     | 0                       | 33,372                               | 8,836                                  | 15,036                                 | 0                                        | 9,500                                   | 0                                       | 0                                 |                           |

[illegible]

| Projected Development Site Number | Block | Lots                | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area- Office | Existing Commercial Floor Area- Retail | Existing Commercial Floor Area- Auto Use | Existing Commercial Floor Area- Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes                     |
|-----------------------------------|-------|---------------------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|--------------------------------------|
| 45                                | 1635  | 149,150             | 2,226    | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 46                                | 1635  | 48,49               | 5,148    | R7-2/R7A          | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 47                                | 1634  | 158                 | 2,569    | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 48                                | 1643  | 63                  | 2,523    | R7-2              | 0.79         | 2,000                        | 0                                     | 0                       | 2,000                                | 0                                      | 2,000                                  | 0                                        | 0                                       | 0                                       | 0                                 | Vacant building                      |
| 49                                | 1643  | 41                  | 13,682   | R7A               | 0.79         | 10,800                       | 0                                     | 0                       | 10,800                               | 0                                      | 10,800                                 | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 50                                | 1667  | 102                 | 1,740    | C4-4D             | 3.16         | 5,500                        | 4,900                                 | 6                       | 600                                  | 0                                      | 600                                    | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 51                                | 1666  | 105,5               | 6,042    | C4-4D/R7A         | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 52                                | 1788  | 28                  | 2,265    | R7-2              | 0.89         | 2,014                        | 0                                     | 0                       | 2,014                                | 0                                      | 2,014                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 53                                | 1786  | 28                  | 3,750    | R8A               | 0.99         | 3,700                        | 0                                     | 0                       | 3,700                                | 0                                      | 3,700                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 54                                | 1786  | 123,23,22,121       | 5,594    | R8A               | 0.85         | 4,774                        | 2,790                                 | 3                       | 1,984                                | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 55                                | 1785  | 23,22,21            | 5,306    | R8A               | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking                      |
| 56                                | 1784  | 128,28,27,26,25,120 | 14,971   | R8A               | 2.50         | 37,466                       | 37,466                                | 48                      | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Vacant buildings                     |
| 57                                | 1795  | 3,2,1               | 6,400    | R8A               | 0.63         | 4,023                        | 4,023                                 | 3                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 58                                | 1667  | 26                  | 2,768    | R8A               | 0.98         | 2,725                        | 0                                     | 0                       | 2,725                                | 200                                    | 0                                      | 0                                        | 2,525                                   | 0                                       | 0                                 |                                      |
| 59                                | 1667  | 22,120              | 6,467    | R8A               | 0.34         | 2,200                        | 0                                     | 0                       | 2,200                                | 0                                      | 2,200                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 60                                | 1689  | 1                   | 2,025    | R8A               | 0.99         | 2,000                        | 0                                     | 0                       | 2,000                                | 0                                      | 2,000                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 61                                | 1666  | 23                  | 1,800    | R8A               | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 62                                | 1688  | 2,1                 | 4,892    | R8A               | 0.98         | 4,800                        | 0                                     | 0                       | 4,800                                | 0                                      | 4,800                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 63                                | 1665  | 25,24,23,122        | 11,101   | R8A               | 1.19         | 13,246                       | 4,570                                 | 6                       | 8,676                                | 0                                      | 6,000                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 64                                | 1687  | 3,102               | 3,200    | R8A               | 1.28         | 4,080                        | 3,060                                 | 6                       | 1,020                                | 0                                      | 1,020                                  | 0                                        | 0                                       | 0                                       | 0                                 | Vacant upper floor residential units |
| 65                                | 1682  | 49                  | 2,583    | R8A               | 0.97         | 2,500                        | 0                                     | 0                       | 2,500                                | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |
| 66                                | 1682  | 4,3                 | 5,000    | R8A               | 0.00         | 0                            | 0                                     | 0                       | 2,250                                | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                      |

| Projected Development Site Number | Block | Lots | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area- Office | Existing Commercial Floor Area- Retail | Existing Commercial Floor Area- Auto Use | Existing Commercial Floor Area- Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes |
|-----------------------------------|-------|------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|------------------|
| 67                                | 1680  | 3    | 5,050    | R8A               | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking  |
| 68                                | 1644  | 12   | 10,092   | R7-2              | 0.99         | 10,000                       | 0                                     | 0                       | 10,000                               | 0                                      | 10,000                                 | 0                                        | 0                                       | 0                                       | 0                                 |                  |
| 69                                | 1771  | 1,2  | 4,583    | M1-4              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Community garden |
| Total                             |       |      |          |                   |              | 1,131,000                    | 572,218                               | 585*                    | 555,032                              | 55,526                                 | 301,933                                | 15,600                                   | 79,451                                  | 33,847                                  | 21,183                            |                  |

\*It should be noted that the easternmost portion of Projected Development Site 4 is currently developed with two residential buildings that contain a total of 412 residential units (and are occupied by an estimated 993 residents.) The two residential buildings would not be affected by the Proposed Actions and are expected to remain in place

| Projected Development Site Number | Block | Lots                         | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|------------------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| 1                                 | 1754  | 33,40                        | 19,651   | C8-3                        | 6.50                  | 2.0                 | 39,169                        | 0                                      | 0                        | 10,592                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 10,592                                    | 0                                       | 0                                       | 28,578                             | 30                        |
| 2                                 | 1769  | 3                            | 13,620   | M1-4                        | 6.50                  | 2.3                 | 31,185                        | 0                                      | 0                        | 21,368                                | 2,868                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 18,500                                  | 0                                         | 0                                       | 9,817                                   | 0                                  | 0                         |
| 3                                 | 1623  | 33,34                        | 10,599   | R7-2                        | 6.50                  | 3.3                 | 34,572                        | 26,680                                 | 31                       | 7,892                                 | 7,892                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 4                                 | 1775  | 3,6,165,168,71               | 156,416  | M1-2                        | 6.20                  | 3.0                 | 461,796                       | 450,018                                | 412                      | 11,778                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 11,778                                  | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 5                                 | 1751  | 40,137,33,34,37,132,35,38,36 | 16,487   | C8-3                        | 6.50                  | 2.0                 | 32,974                        | 0                                      | 0                        | 32,974                                | 0                                             | 0                                           | 0                                              | 0                                                   | 32,974                                  | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 45                        |
| 6                                 | 1746  | 33                           | 20,183   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 20,183                             | 0                         |
| 7                                 | 1745  | 134                          | 17,642   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 17,642                             | 0                         |
| 8                                 | 1750  | 40                           | 13,493   | C6-3                        | 10.00                 | 5.9                 | 80,149                        | 68,005                                 | 76                       | 12,144                                | 0                                             | 0                                           | 0                                              | 12,144                                              | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 9                                 | 1774  | 68                           | 11,491   | C6-3                        | 10.00                 | 5.9                 | 68,257                        | 57,915                                 | 64                       | 10,342                                | 0                                             | 0                                           | 0                                              | 10,342                                              | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 10                                | 1773  | 1,69,67,72,4                 | 25,820   | C6-3/C4-4D                  | 9.39                  | 7.6                 | 195,499                       | 159,102                                | 133                      | 36,397                                | 0                                             | 0                                           | 0                                              | 13,110                                              | 0                                       | 0                                             | 23,287                                  | 0                                         | 0                                       | 0                                       | 11,307                             | 135                       |
| 11                                | 1772  | 33,34,35,37,38,39,134,140    | 17,967   | C4-4                        | 6.50                  | 1.8                 | 32,952                        | 3,340                                  | 4                        | 29,612                                | 8,760                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 16,124                                        | 4,728                                   | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 12                                | 1770  | 36                           | 18,973   | C4-4D                       | 6.50                  | 4.9                 | 93,881                        | 73,528                                 | 82                       | 20,353                                | 20,353                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 110                       |
| 13                                | 1786  | 4,47                         | 13,669   | C4-4D                       | 6.50                  | 3.5                 | 48,500                        | 6,000                                  | 0                        | 42,500                                | 32,500                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 10,000                                        | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 14                                | 1767  | 33                           | 11,395   | C4-4D                       | 6.50                  | 6.0                 | 68,101                        | 49,691                                 | 55                       | 18,410                                | 10,256                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 8,154                                   | 0                                         | 0                                       | 0                                       | 0                                  | 110                       |
| 15                                | 1645  | 35,33                        | 10,147   | C4-4D                       | 6.50                  | 5.9                 | 59,513                        | 44,860                                 | 50                       | 14,653                                | 8,359                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 6,294                                   | 0                                         | 0                                       | 0                                       | 0                                  | 120                       |
| 16                                | 1643  | 35,37,137,33                 | 12,128   | C4-4D                       | 6.50                  | 6.0                 | 72,241                        | 53,096                                 | 59                       | 19,145                                | 10,915                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 8,230                                   | 0                                         | 0                                       | 0                                       | 0                                  | 110                       |
| 17                                | 1660  | 3,4,45,1                     | 22,201   | R8A                         | 6.50                  | 6.0                 | 133,614                       | 129,129                                | 143                      | 4,485                                 | 0                                             | 0                                           | 4,485                                          | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 17,217                             | 105                       |
| 18                                | 1635  | 33,35,36,37,38,39,40         | 18,159   | R8A                         | 6.50                  | 5.6                 | 101,135                       | 66,370                                 | 74                       | 34,765                                | 16,555                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 18,210                                        | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 19                                | 1634  | 34,35,36,37,38,33            | 12,858   | R8A                         | 6.50                  | 6.0                 | 76,631                        | 65,059                                 | 64                       | 11,572                                | 11,572                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 120                       |
| 20                                | 1655  | 45                           | 16,139   | R8A                         | 6.50                  | 5.2                 | 83,395                        | 74,539                                 | 83                       | 8,856                                 | 8,856                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 21                                | 1632  | 37,40,35                     | 15,183   | R8A                         | 6.50                  | 6.0                 | 91,416                        | 88,316                                 | 98                       | 3,100                                 | 3,100                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 11,775                             | 105                       |
| 22                                | 1771  | 33,36                        | 18,647   | C4-4                        | 6.50                  | 3.8                 | 70,515                        | 47,751                                 | 53                       | 22,764                                | 11,382                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 9,500                                         | 1,882                                   | 0                                         | 0                                       | 0                                       | 0                                  | 60                        |
| 23                                | 1643  | 56                           | 8,074    | R7-2                        | 6.50                  | 3.4                 | 27,775                        | 19,701                                 | 22                       | 8,074                                 | 8,074                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 24                                | 1768  | 71,169,69,70,170             | 6,480    | M1-4                        | 6.50                  | 2.0                 | 12,960                        | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 12,960                                  | 0                                  | 30                        |
| 25                                | 1622  | 36,35                        | 4,545    | R7-2                        | 6.50                  | 4.0                 | 18,180                        | 13,635                                 | 15                       | 4,545                                 | 4,545                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 26                                | 1655  | 29                           | 5,248    | R8A                         | 6.00                  | 6.0                 | 31,327                        | 26,604                                 | 30                       | 4,723                                 | 4,723                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 27                                | 1785  | 1,104                        | 2,815    | C4-4D                       | 6.50                  | 6.0                 | 16,947                        | 14,413                                 | 16                       | 2,534                                 | 2,534                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 28                                | 1643  | 71                           | 2,523    | R7-2                        | 6.50                  | 2.9                 | 7,200                         | 0                                      | 0                        | 4,800                                 | 4,800                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 2,400                                   | 0                                       | 0                                  | 35                        |
| 29                                | 1659  | 1                            | 9,285    | R8A                         | 6.50                  | 6.0                 | 55,337                        | 46,980                                 | 52                       | 8,357                                 | 8,357                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 30                                | 1756  | 33                           | 9,992    | R7-2                        | 6.50                  | 3.9                 | 39,402                        | 30,409                                 | 34                       | 8,993                                 | 8,993                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 31                                | 1622  | 33                           | 2,250    | R7-2                        | 6.50                  | 4.0                 | 9,000                         | 6,750                                  | 8                        | 2,250                                 | 2,250                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 60                        |
| 32                                | 1768  | 40,39                        | 5,430    | C4-4D                       | 6.50                  | 5.9                 | 32,255                        | 23,458                                 | 26                       | 8,797                                 | 8,797                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 90                        |
| 33                                | 1655  | 1,3,102                      | 9,839    | R8A                         | 6.50                  | 6.0                 | 58,996                        | 50,141                                 | 56                       | 8,855                                 | 8,855                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 105                       |

| Projected Development Site Number | Block | Lots                | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|---------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| 34                                | 1677  | 49,52,47,46,45      | 16,700   | R7A/R8A                     | 5.09                  | 5.1                 | 84,750                        | 76,532                                 | 85                       | 8,218                                 | 8,218                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 35                                | 1676  | 49                  | 1,944    | R8A                         | 6.00                  | 6.0                 | 11,673                        | 9,923                                  | 11                       | 1,750                                 | 1,750                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 36                                | 1772  | 55                  | 6,330    | R7-2                        | 6.50                  | 4.0                 | 25,330                        | 21,010                                 | 23                       | 4,320                                 | 4,320                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 37                                | 1771  | 51                  | 2,573    | R7-2                        | 6.50                  | 3.4                 | 8,729                         | 6,413                                  | 7                        | 2,316                                 | 2,316                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 38                                | 1643  | 50,149,49           | 5,046    | R7-2                        | 6.50                  | 4.0                 | 20,102                        | 15,561                                 | 17                       | 4,541                                 | 4,541                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 39                                | 1643  | 21                  | 2,523    | R7-2                        | 6.50                  | 4.0                 | 10,091                        | 7,820                                  | 9                        | 2,271                                 | 2,271                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 40                                | 1639  | 49,48               | 5,248    | R7-2/R7A                    | 5.30                  | 4.0                 | 20,923                        | 16,200                                 | 18                       | 4,723                                 | 4,723                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 41                                | 1639  | 21                  | 6,800    | R7-2                        | 6.50                  | 4.0                 | 27,180                        | 21,060                                 | 23                       | 6,120                                 | 6,120                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 42                                | 1638  | 56                  | 2,523    | R7-2                        | 6.50                  | 4.0                 | 10,076                        | 7,805                                  | 9                        | 2,271                                 | 2,271                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 43                                | 1637  | 51,52,21,22         | 10,092   | R7-2                        | 6.50                  | 4.0                 | 40,007                        | 30,924                                 | 34                       | 9,083                                 | 9,083                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 44                                | 1637  | 24,25               | 5,046    | R7-2/R7A                    | 5.25                  | 4.0                 | 19,980                        | 19,980                                 | 22                       | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 80                        |
| 45                                | 1635  | 149,150             | 2,226    | R7-2                        | 6.50                  | 4.0                 | 8,913                         | 6,910                                  | 8                        | 2,003                                 | 2,003                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 46                                | 1635  | 48,49               | 5,148    | R7-2/R7A                    | 4.69                  | 3.4                 | 17,700                        | 13,091                                 | 15                       | 4,609                                 | 4,609                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 47                                | 1634  | 158                 | 2,569    | R7-2                        | 6.50                  | 4.0                 | 10,148                        | 7,836                                  | 9                        | 2,312                                 | 2,312                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 48                                | 1643  | 63                  | 2,523    | R7-2                        | 6.50                  | 3.9                 | 9,947                         | 7,676                                  | 9                        | 2,271                                 | 2,271                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 49                                | 1643  | 41                  | 13,682   | R7A                         | 4.00                  | 0.8                 | 10,800                        | 0                                      | 0                        | 10,800                                | 10,800                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 30                        |
| 50                                | 1667  | 102                 | 1,740    | C4-4D                       | 6.50                  | 6.0                 | 10,429                        | 8,863                                  | 10                       | 1,566                                 | 1,566                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 51                                | 1666  | 105,5               | 6,042    | C4-4D/R7A                   | 5.25                  | 4.0                 | 24,171                        | 18,733                                 | 21                       | 5,438                                 | 5,438                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 52                                | 1788  | 28                  | 2,265    | R7-2                        | 6.50                  | 3.4                 | 7,651                         | 5,612                                  | 6                        | 2,039                                 | 2,039                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 53                                | 1786  | 28                  | 3,750    | R8A                         | 6.00                  | 6.0                 | 22,382                        | 19,007                                 | 21                       | 3,375                                 | 3,375                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 54                                | 1786  | 123,23,22,121       | 5,594    | R8A                         | 6.00                  | 5.9                 | 32,818                        | 27,783                                 | 31                       | 5,035                                 | 5,035                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 55                                | 1785  | 23,22,21            | 5,306    | R8A                         | 6.00                  | 5.9                 | 31,332                        | 26,557                                 | 30                       | 4,775                                 | 4,775                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 56                                | 1784  | 128,28,27,26,25,120 | 14,971   | R8A                         | 6.00                  | 5.5                 | 81,619                        | 71,626                                 | 80                       | 9,993                                 | 9,993                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 57                                | 1795  | 3,2,1               | 6,400    | R8A                         | 6.00                  | 5.8                 | 37,152                        | 31,392                                 | 35                       | 5,760                                 | 5,760                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 58                                | 1667  | 26                  | 2,768    | R8A                         | 6.00                  | 5.7                 | 15,910                        | 13,419                                 | 15                       | 2,491                                 | 2,491                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 59                                | 1667  | 22,120              | 6,467    | R8A                         | 6.00                  | 6.0                 | 38,800                        | 32,980                                 | 37                       | 5,820                                 | 5,820                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 60                                | 1689  | 1                   | 2,025    | R8A                         | 6.00                  | 5.7                 | 11,579                        | 9,756                                  | 11                       | 1,823                                 | 1,823                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 61                                | 1666  | 23                  | 1,800    | R8A                         | 6.00                  | 6.0                 | 10,777                        | 9,157                                  | 10                       | 1,620                                 | 1,620                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 62                                | 1688  | 2,1                 | 4,892    | R8A                         | 6.00                  | 6.0                 | 29,352                        | 24,949                                 | 28                       | 4,403                                 | 4,403                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 63                                | 1665  | 25,24,23,122        | 11,101   | R8A                         | 6.00                  | 6.5                 | 71,685                        | 66,690                                 | 74                       | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 4,995                                   | 0                                       | 0                                  | 95                        |
| 64                                | 1687  | 3,102               | 3,200    | R8A                         | 6.00                  | 6.0                 | 19,081                        | 16,201                                 | 18                       | 2,880                                 | 2,880                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 65                                | 1682  | 49                  | 2,583    | R8A                         | 6.00                  | 6.0                 | 15,525                        | 13,200                                 | 15                       | 2,325                                 | 2,325                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 66                                | 1682  | 4,3                 | 5,000    | R8A                         | 6.00                  | 5.9                 | 29,700                        | 25,200                                 | 28                       | 4,500                                 | 4,500                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |

| Projected Development Site Number | Block | Lots | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| 67                                | 1680  | 3    | 5,050    | R8A                         | 6.00                  | 6.0                 | 30,195                        | 25,650                                 | 29                       | 4,545                                 | 4,545                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 68                                | 1644  | 12   | 10,092   | R7-2                        | 6.50                  | 3.4                 | 34,716                        | 24,624                                 | 27                       | 10,092                                | 0                                             | 0                                           | 10,092                                         | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 69                                | 1771  | 1,2  | 4,583    | M1-4                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| Total                             |       |      |          |                             |                       |                     | 3,076,097                     | 2,435,630                              | 2,561                    | 581,718                               | 351,292                                       | 0                                           | 14,577                                         | 35,596                                              | 32,974                                  | 53,834                                        | 82,853                                  | 10,592                                    | 7,395                                   | 22,777                                  | 106,702                            |                           |

| Projected Development Site Number | Block | Lots                         | Lot Area | With Action Zoning | With Action Maximum FAR | With Action Built FAR | With Action Building Floor Area | With Action Total Residential Floor Area | With Action Residential DU | With Action Total Commercial Floor Area | With Action Commercial Floor Area- Local Retail | With Action Commercial Floor Area- Restaurant | With Action Commercial Floor Area- Grocery Store | With Action Commercial Floor Area- Destination Retail | With Action Commercial Floor Area- Hotels | With Action Commercial Floor Area- Storage Area | With Action Commercial Floor Area- Office | With Action Commercial Floor Area- Auto Use | With Action Community Facility Floor Area | With ActionTotal Manufacturing Floor Area | With Action Total Parking Floor Area | With Action Building Height |
|-----------------------------------|-------|------------------------------|----------|--------------------|-------------------------|-----------------------|---------------------------------|------------------------------------------|----------------------------|-----------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------|
| 1                                 | 1754  | 33,40                        | 19,651   | M1-6 / R9          | 9                       | 5                     | 98,255                          | 0                                        | 0                          | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 98,255                                    | 0                                    | 75                          |
| 2                                 | 1769  | 3                            | 13,620   | M1-6 / R10         | 10                      | 12                    | 163,403                         | 114,371                                  | 127                        | 24,516                                  | 12,258                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 12,258                                    | 0                                           | 0                                         | 24,516                                    | 0                                    | 200                         |
| 3                                 | 1623  | 33,34                        | 10,599   | R9 + C2-5          | 9                       | 8                     | 89,546                          | 80,007                                   | 89                         | 9,539                                   | 4,539                                           | 5,000                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 155                         |
| 4                                 | 1775  | 3,6,165,168,71               | 156,416  | M1-6 / R10         | 10                      | 5                     | 793,092                         | 721,502                                  | 802                        | 61,928                                  | 10,000                                          | 10,150                                        | 0                                                | 30,000                                                | 0                                         | 0                                               | 11,778                                    | 0                                           | 0                                         | 0                                         | 9,662                                | 215                         |
| 5                                 | 1751  | 40,137,33,34,37,132,35,38,36 | 16,487   | M1-6 / R9          | 9                       | 8                     | 140,139                         | 107,165                                  | 119                        | 32,974                                  | 4,974                                           | 8,000                                         | 0                                                | 20,000                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| 6                                 | 1746  | 33                           | 20,183   | R10 + C2-5         | 12                      | 12                    | 242,196                         | 218,930                                  | 243                        | 11,633                                  | 11,633                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 11,633                                    | 0                                         | 17,100                               | 200                         |
| 7                                 | 1745  | 134                          | 17,642   | R10 + C2-5         | 12                      | 12                    | 211,614                         | 189,230                                  | 210                        | 11,192                                  | 11,192                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 11,192                                    | 0                                         | 12,900                               | 210                         |
| 8                                 | 1750  | 40                           | 13,493   | C6-4               | 13                      | 13                    | 174,880                         | 107,415                                  | 119                        | 53,972                                  | 0                                               | 0                                             | 0                                                | 13,493                                                | 0                                         | 0                                               | 40,479                                    | 0                                           | 0                                         | 0                                         | 13,493                               | 215                         |
| 9                                 | 1774  | 68                           | 11,491   | C6-4               | 12                      | 12                    | 137,421                         | 106,440                                  | 118                        | 21,236                                  | 8,736                                           | 0                                             | 0                                                | 12,500                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 9,745                                | 185                         |
| 10                                | 1773  | 1,69,67,72,4                 | 25,820   | C6-4               | 12                      | 12                    | 307,927                         | 237,028                                  | 263                        | 59,048                                  | 0                                               | 0                                             | 0                                                | 12,572                                                | 0                                         | 0                                               | 46,476                                    | 0                                           | 0                                         | 0                                         | 11,851                               | 270                         |
| 11                                | 1772  | 33,34,35,37,38,39,134,140    | 17,967   | C4-6               | 12                      | 12                    | 215,604                         | 167,093                                  | 186                        | 8,651                                   | 8,651                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 32,341                                    | 0                                         | 7,519                                | 275                         |
| 12                                | 1770  | 36                           | 18,973   | C4-6               | 12                      | 9                     | 168,400                         | 148,046                                  | 164                        | 20,354                                  | 11,340                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 9,014                                     | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| 13                                | 1786  | 4,47                         | 13,669   | C4-6               | 12                      | 12                    | 162,207                         | 140,063                                  | 156                        | 22,144                                  | 12,302                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 9,842                                     | 0                                           | 0                                         | 0                                         | 0                                    | 190                         |
| 14                                | 1767  | 33                           | 11,395   | C4-6               | 12                      | 12                    | 135,211                         | 116,801                                  | 130                        | 18,410                                  | 10,256                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 8,154                                     | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| 15                                | 1645  | 35,33                        | 10,147   | C4-6               | 12                      | 12                    | 120,546                         | 105,114                                  | 117                        | 15,432                                  | 9,132                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 6,300                                     | 0                                           | 0                                         | 0                                         | 0                                    | 230                         |
| 16                                | 1643  | 35,37,137,33                 | 12,128   | C4-6               | 12                      | 12                    | 144,081                         | 124,936                                  | 139                        | 19,145                                  | 10,915                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 8,230                                     | 0                                           | 0                                         | 0                                         | 0                                    | 220                         |
| 17                                | 1660  | 3,4,45,1                     | 22,201   | R10 + C2-5         | 12                      | 12                    | 264,948                         | 226,667                                  | 252                        | 9,184                                   | 0                                               | 0                                             | 9,184                                            | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 17,100                                    | 0                                         | 11,997                               | 300                         |
| 18                                | 1635  | 33,35,36,37,38,39,40         | 18,159   | R10 + C2-5         | 12                      | 12                    | 217,866                         | 185,180                                  | 206                        | 24,449                                  | 8,106                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 16,343                                    | 0                                           | 0                                         | 0                                         | 8,237                                | 290                         |
| 19                                | 1634  | 34,35,36,37,38,33            | 12,858   | R10 + C2-5         | 12                      | 12                    | 152,753                         | 129,609                                  | 144                        | 23,144                                  | 11,572                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 11,572                                    | 0                                           | 0                                         | 0                                         | 0                                    | 160                         |
| 20                                | 1655  | 45                           | 16,139   | R10 + C2-5         | 12                      | 9                     | 137,864                         | 121,142                                  | 135                        | 16,722                                  | 4,428                                           | 4,428                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 7,866                                     | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| 21                                | 1632  | 37,40,35                     | 15,183   | R10 + C2-5         | 12                      | 12                    | 180,375                         | 153,045                                  | 170                        | 13,665                                  | 13,665                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 13,665                                    | 0                                         | 0                                    | 180                         |
| 22                                | 1771  | 33,36                        | 18,647   | C4-6               | 12                      | 9                     | 170,679                         | 147,915                                  | 164                        | 22,764                                  | 11,382                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 11,382                                    | 0                                           | 0                                         | 0                                         | 0                                    | 180                         |
| 23                                | 1643  | 56                           | 8,074    | R9 + C2-5          | 9                       | 9                     | 68,629                          | 52,657                                   | 59                         | 15,972                                  | 8,074                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 7,898                                     | 0                                           | 0                                         | 0                                         | 0                                    | 100                         |
| 24                                | 1768  | 71,169,69,70,170             | 6,480    | M1-6 / R10         | 12                      | 12                    | 77,760                          | 45,360                                   | 50                         | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 32,400                                    | 0                                    | 175                         |
| 25                                | 1622  | 36,35                        | 4,545    | R9 + C2-5          | 9                       | 9                     | 38,633                          | 34,088                                   | 38                         | 4,545                                   | 4,545                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |
| 26                                | 1655  | 29                           | 5,248    | R9 + C2-5          | 9                       | 8                     | 44,035                          | 39,312                                   | 44                         | 4,723                                   | 0                                               | 4,723                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 165                         |
| 27                                | 1785  | 1,104                        | 2,815    | C4-6               | 12                      | 12                    | 33,781                          | 31,247                                   | 35                         | 2,534                                   | 2,534                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 28                                | 1643  | 71                           | 2,523    | R9 + C2-5          | 9                       | 8                     | 21,445                          | 18,922                                   | 21                         | 2,523                                   | 1,523                                           | 1,000                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 29                                | 1659  | 1                            | 9,285    | R10 + C2-5         | 12                      | 12                    | 110,307                         | 94,160                                   | 105                        | 14,147                                  | 0                                               | 0                                             | 8,357                                            | 0                                                     | 0                                         | 0                                               | 5,790                                     | 0                                           | 2,000                                     | 0                                         | 0                                    | 170                         |
| 30                                | 1756  | 33                           | 9,992    | R9 + C2-5          | 9                       | 8                     | 84,104                          | 66,118                                   | 73                         | 8,993                                   | 8,993                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 8,993                                     | 0                                         | 0                                    | 130                         |
| 31                                | 1622  | 33                           | 2,250    | R9 + C2-5          | 9                       | 9                     | 19,125                          | 16,875                                   | 19                         | 2,250                                   | 2,250                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 32                                | 1768  | 40,39                        | 5,430    | C4-6               | 12                      | 11                    | 61,857                          | 56,970                                   | 63                         | 4,887                                   | 4,887                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 150                         |
| 33                                | 1655  | 1,3,102                      | 9,839    | R10 + C2-5         | 12                      | 12                    | 117,188                         | 100,534                                  | 112                        | 16,654                                  | 8,855                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 7,799                                     | 0                                           | 0                                         | 0                                         | 0                                    | 260                         |
| 34                                | 1677  | 49,52,47,46,45               | 16,700   | R9 + C2-5          | 9                       | 8                     | 141,570                         | 130,050                                  | 145                        | 11,520                                  | 0                                               | 0                                             | 0                                                | 11,520                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 245                         |
| 35                                | 1676  | 49                           | 1,944    | R9 + C2-5          | 9                       | 8                     | 15,941                          | 13,997                                   | 16                         | 1,944                                   | 1,944                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 36                                | 1772  | 55                           | 6,330    | R7D + C2-5         | 6                       | 4                     | 27,540                          | 23,220                                   | 26                         | 4,320                                   | 4,320                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |

| Projected Development Site Number | Block | Lots                | Lot Area | With Action Zoning | With Action Maximum FAR | With Action Built FAR | With Action Building Floor Area | With Action Total Residential Floor Area | With Action Residential DU | With Action Total Commercial Floor Area | With Action Commercial Floor Area- Local Retail | With Action Commercial Floor Area- Restaurant | With Action Commercial Floor Area- Grocery Store | With Action Commercial Floor Area- Destination Retail | With Action Commercial Floor Area- Hotels | With Action Commercial Floor Area- Storage Area | With Action Commercial Floor Area- Office | With Action Commercial Floor Area- Auto Use | With Action Community Facility Floor Area | With ActionTotal Manufacturing Floor Area | With Action Total Parking Floor Area | With Action Building Height |
|-----------------------------------|-------|---------------------|----------|--------------------|-------------------------|-----------------------|---------------------------------|------------------------------------------|----------------------------|-----------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------|
| 37                                | 1771  | 51                  | 2,573    | R7D + C2-5         | 6                       | 4                     | 10,416                          | 8,100                                    | 9                          | 2,316                                   | 2,316                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| 38                                | 1643  | 50,149,49           | 5,046    | R9 + C2-5          | 6                       | 8                     | 42,873                          | 38,332                                   | 43                         | 4,541                                   | 4,541                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 155                         |
| 39                                | 1643  | 21                  | 2,523    | R7D + C2-5         | 6                       | 5                     | 13,625                          | 11,354                                   | 13                         | 2,271                                   | 2,271                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 40                                | 1639  | 49,48               | 5,248    | R7D + C2-5         | 6                       | 6                     | 29,388                          | 24,665                                   | 27                         | 4,723                                   | 4,723                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 41                                | 1639  | 21                  | 6,800    | R7D + C2-5         | 6                       | 6                     | 37,980                          | 31,860                                   | 35                         | 6,120                                   | 6,120                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 42                                | 1638  | 56                  | 2,523    | R7D + C2-5         | 6                       | 5                     | 13,625                          | 11,354                                   | 13                         | 2,271                                   | 2,271                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 43                                | 1637  | 51,52,21,22         | 10,092   | R7D + C2-5         | 6                       | 6                     | 56,333                          | 47,250                                   | 53                         | 9,083                                   | 9,083                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| 44                                | 1637  | 24,25               | 5,046    | R7D                | 6                       | 5                     | 24,120                          | 24,120                                   | 27                         | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 90                          |
| 45                                | 1635  | 149,150             | 2,226    | R7D + C2-5         | 6                       | 5                     | 12,020                          | 10,017                                   | 11                         | 2,003                                   | 2,003                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 46                                | 1635  | 48,49               | 5,148    | R7D + C2-5         | 6                       | 6                     | 28,682                          | 24,073                                   | 27                         | 4,609                                   | 0                                               | 4,609                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 47                                | 1634  | 158                 | 2,569    | R7D + C2-5         | 6                       | 5                     | 13,873                          | 11,561                                   | 13                         | 2,312                                   | 2,312                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 48                                | 1643  | 63                  | 2,523    | R7D + C2-5         | 6                       | 5                     | 11,483                          | 9,212                                    | 10                         | 2,271                                   | 2,271                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| 49                                | 1643  | 41                  | 13,682   | R7D + C2-5 / R7B   | 6                       | 5                     | 66,669                          | 54,355                                   | 60                         | 12,314                                  | 0                                               | 0                                             | 0                                                | 12,314                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| 50                                | 1667  | 102                 | 1,740    | C6-4               | 12                      | 6                     | 10,429                          | 8,863                                    | 10                         | 1,566                                   | 1,566                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 51                                | 1666  | 105,5               | 6,042    | R7D + C2-5         | 6                       | 6                     | 33,585                          | 28,147                                   | 31                         | 5,438                                   | 5,438                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 52                                | 1788  | 28                  | 2,265    | R9 + C2-5          | 9                       | 6                     | 13,490                          | 11,225                                   | 12                         | 2,265                                   | 2,265                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 53                                | 1786  | 28                  | 3,750    | R9 + C2-5          | 9                       | 7                     | 25,097                          | 21,722                                   | 24                         | 3,375                                   | 0                                               | 3,375                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 54                                | 1786  | 123,23,22,121       | 5,594    | R9 + C2-5          | 9                       | 8                     | 46,710                          | 41,675                                   | 46                         | 5,035                                   | 5,035                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 55                                | 1785  | 23,22,21            | 5,306    | R9 + C2-5          | 9                       | 8                     | 44,611                          | 39,836                                   | 44                         | 4,775                                   | 0                                               | 4,775                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 56                                | 1784  | 128,28,27,26,25,120 | 14,971   | R9 + C2-5          | 9                       | 8                     | 127,166                         | 117,173                                  | 130                        | 9,993                                   | 9,993                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 185                         |
| 57                                | 1795  | 3,2,1               | 6,400    | R9 + C2-5          | 9                       | 8                     | 53,795                          | 48,035                                   | 53                         | 5,760                                   | 5,760                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| 58                                | 1667  | 26                  | 2,768    | R9 + C2-5          | 9                       | 6                     | 17,827                          | 15,336                                   | 17                         | 2,491                                   | 0                                               | 2,491                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 59                                | 1667  | 22,120              | 6,467    | R9 + C2-5          | 9                       | 8                     | 54,817                          | 48,997                                   | 54                         | 5,820                                   | 0                                               | 5,820                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| 60                                | 1689  | 1                   | 2,025    | R9 + C2-5          | 9                       | 6                     | 11,579                          | 9,756                                    | 11                         | 1,823                                   | 1,823                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 61                                | 1666  | 23                  | 1,800    | R9 + C2-5          | 9                       | 6                     | 10,958                          | 9,338                                    | 10                         | 1,620                                   | 1,620                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 62                                | 1688  | 2,1                 | 4,892    | R9 + C2-5          | 9                       | 9                     | 41,582                          | 37,179                                   | 41                         | 4,403                                   | 4,403                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 125                         |
| 63                                | 1665  | 25,24,23,122        | 11,101   | R9 + C2-5          | 9                       | 9                     | 99,606                          | 94,338                                   | 105                        | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 5,268                                     | 0                                         | 0                                    | 255                         |
| 64                                | 1687  | 3,102               | 3,200    | R9 + C2-5          | 9                       | 8                     | 27,081                          | 24,201                                   | 27                         | 2,880                                   | 2,880                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 125                         |
| 65                                | 1682  | 49                  | 2,583    | R9 + C2-5          | 9                       | 8                     | 20,923                          | 18,598                                   | 21                         | 2,325                                   | 2,325                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 66                                | 1682  | 4,3                 | 5,000    | R9 + C2-5          | 9                       | 8                     | 42,300                          | 37,800                                   | 42                         | 4,500                                   | 4,500                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 165                         |
| 67                                | 1680  | 3                   | 5,050    | R9 + C2-5          | 9                       | 8                     | 42,345                          | 37,800                                   | 42                         | 4,545                                   | 4,545                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 165                         |
| 68                                | 1644  | 12                  | 10,092   | R9 + C2-5          | 9                       | 9                     | 85,782                          | 75,690                                   | 84                         | 10,092                                  | 0                                               | 0                                             | 10,092                                           | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |
| 69                                | 1771  | 1,2                 | 4,583    | M1-6 / R10         | 12                      | 12                    | 54,996                          | 46,746                                   | 52                         | 4,125                                   | 4,125                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 4,125                                     | 0                                         | 0                                    | 165                         |
| Total                             |       |                     |          |                    |                         |                       | 6,516,688                       | 5,449,917                                | 6,055                      | 732,779                                 | 317,195                                         | 54,371                                        | 27,633                                           | 112,399                                               | 0                                         | 0                                               | 221,181                                   | 0                                           | 106,317                                   | 155,171                                   | 102,504                              |                             |

[illegible]

[illegible]

| Projected Development Site Number | Block | Lots                | Lot Area | Increment Residential Floor Area | Increment Residential DU | Increment Commercial Floor Area | Increment Commercial Floor Area- Local Retail | Increment Commercial Floor Area- Restaurant | Increment Commercial Floor Area- Grocery Store | Increment Commercial Floor Area- Destination Retail | Increment Commercial Floor Area- Hotels | Increment Commercial Floor Area- Storage Area | Increment Commercial Floor Area- Office | Increment Commercial Floor Area- Auto Use | Increment Community Facility Floor Area | Increment Total Manufacturing Floor Area |
|-----------------------------------|-------|---------------------|----------|----------------------------------|--------------------------|---------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|------------------------------------------|
| 55                                | 1785  | 23,22,21            | 5,306    | 13,279                           | 15                       | 0                               | -4,775                                        | 4,775                                       | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 56                                | 1784  | 128,28,27,26,25,120 | 14,971   | 45,547                           | 51                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 57                                | 1795  | 3,2,1               | 6,400    | 16,643                           | 18                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 58                                | 1667  | 26                  | 2,768    | 1,917                            | 2                        | 0                               | -2,491                                        | 2,491                                       | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 59                                | 1667  | 22,120              | 6,467    | 16,017                           | 18                       | 0                               | -5,820                                        | 5,820                                       | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 60                                | 1689  | 1                   | 2,025    | 0                                | 0                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 61                                | 1666  | 23                  | 1,800    | 181                              | 0                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 62                                | 1688  | 2,1                 | 4,892    | 12,230                           | 14                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 63                                | 1665  | 25,24,23,122        | 11,101   | 27,648                           | 31                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 273                                     | 0                                        |
| 64                                | 1687  | 3,102               | 3,200    | 8,000                            | 9                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 65                                | 1682  | 49                  | 2,583    | 5,398                            | 6                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 66                                | 1682  | 4,3                 | 5,000    | 12,600                           | 14                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 67                                | 1680  | 3                   | 5,050    | 12,150                           | 14                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 68                                | 1644  | 12                  | 10,092   | 51,066                           | 57                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 69                                | 1771  | 1,2                 | 4,583    | 46,746                           | 52                       | 4,125                           | 4,125                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 4,125                                   | 0                                        |
| Total                             |       |                     |          | 3,014,287                        | 3,494                    | 151,062                         | -34,097                                       | 54,371                                      | 13,056                                         | 76,803                                              | -32,974                                 | -53,834                                       | 138,328                                 | -10,592                                   | 98,922                                  | 132,394                                  |

| Potential Development Site Number | Block | Lots                           | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area- Office | Existing Commercial Floor Area- Retail | Existing Commercial Floor Area- Auto Use | Existing Commercial Floor Area- Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes                 |
|-----------------------------------|-------|--------------------------------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|----------------------------------|
| A                                 | 1753  | 37                             | 4,973    | C8-3              | 0.34         | 1,680                        | 0                                     | 0                       | 1,680                                | 0                                      | 0                                      | 1,680                                    | 0                                       | 0                                       | 0                                 |                                  |
| B                                 | 1772  | 69,70                          | 9,083    | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking and loading area |
| C                                 | 1767  | 1,2,3,4,67,68,69,71,72,168,169 | 23,172   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 23,172                            | Surface parking - NYPD           |
| D                                 | 1621  | 32                             | 7,440    | R7-2              | 0.91         | 6,765                        | 0                                     | 0                       | 6,765                                | 0                                      | 6,765                                  | 0                                        | 0                                       | 0                                       | 0                                 | Vacant ground floor commercial   |
| E                                 | 1644  | 37,38,39                       | 9,646    | C4-4D             | 2.32         | 22,395                       | 0                                     | 0                       | 22,395                               | 0                                      | 12,072                                 | 0                                        | 10,323                                  | 0                                       | 0                                 |                                  |
| F                                 | 1661  | 4                              | 4,875    | R8A               | 1.00         | 4,875                        | 0                                     | 0                       | 4,875                                | 0                                      | 4,875                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| G                                 | 1636  | 40,138,38,39                   | 4,895    | R8A               | 1.45         | 7,080                        | 3,060                                 | 3                       | 4,020                                | 0                                      | 4,020                                  | 0                                        | 0                                       | 0                                       | 0                                 | Vacant ground floor commercial   |
| H                                 | 1633  | 39,38                          | 5,050    | R8A               | 1.19         | 5,985                        | 0                                     | 0                       | 5,985                                | 0                                      | 5,985                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| I                                 | 1643  | 38,40,39                       | 6,709    | C4-4D             | 2.09         | 14,000                       | 4,656                                 | 4                       | 9,344                                | 0                                      | 9,344                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| J                                 | 1639  | 39,40,41,38,137                | 14,942   | R8A               | 0.52         | 7,755                        | 2,200                                 | 4                       | 5,555                                | 0                                      | 3,815                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| K                                 | 1620  | 23                             | 271,850  | R7-2              | 2.44         | 662,000                      | 662,000                               | 672                     | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Taft Houses                      |
| L                                 | 1640  | 1                              | 262,446  | R7-2              | 2.45         | 642,289                      | 630,713                               | 720                     | 11,776                               | 4,723                                  | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Johnson Houses                   |
| M                                 | 1640  | 21                             | 194,545  | R7-2              | 2.58         | 502,522                      | 491,745                               | 587                     | 10,777                               | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Johnson Houses                   |
| N                                 | 1662  | 1                              | 329,800  | R7-2              | 1.69         | 557,872                      | 27,276                                | 689                     | 13,601                               | 12,267                                 | 1,334                                  | 0                                        | 0                                       | 0                                       | 0                                 | Jefferson Houses                 |
| O                                 | 1755  | 33                             | 17,985   | C8-3              | 5.93         | 106,596                      | 0                                     | 0                       | 106,596                              | 0                                      | 0                                      | 0                                        | 106,596                                 | 0                                       | 0                                 |                                  |
| P                                 | 1784  | 45,4,47,48                     | 13,406   | C4-4D             | 2.76         | 36,990                       | 0                                     | 0                       | 36,990                               | 15,765                                 | 400                                    | 0                                        | 2,082                                   | 13,118                                  | 0                                 |                                  |
| Q                                 | 1748  | p/o 35                         | 20,183   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 20,183                            | Surface parking                  |
| R                                 | 1748  | p/o 1                          | 20,183   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 20,183                            | Surface parking                  |
| S                                 | 1667  | 45                             | 10,520   | C4-4D             | 3.20         | 33,612                       | 0                                     | 0                       | 33,612                               | 0                                      | 33,612                                 | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| T                                 | 1771  | 70,69,71                       | 6,054    | M1-4              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| U                                 | 1654  | 3,4,45                         | 18,326   | R8A               | 1.15         | 21,062                       | 0                                     | 0                       | 21,062                               | 0                                      | 21,062                                 | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| V                                 | 1775  | 170                            | 6,950    | M1-2              | 0.78         | 5,390                        | 0                                     | 0                       | 5,390                                | 0                                      | 0                                      | 0                                        | 0                                       | 5,390                                   | 0                                 |                                  |

[illegible]

| Potential Development Site Number | Block | Lots                           | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|--------------------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| A                                 | 1753  | 37                             | 4,973    | C8-3                        | 6.50                  | 0.3                 | 1,680                         | 0                                      | 0                        | 1,680                                 | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 1,680                                     | 0                                       | 0                                       | 0                                  | 0                         |
| B                                 | 1772  | 69,70                          | 9,083    | R7-2                        | 6.50                  | 3.9                 | 35,035                        | 26,861                                 | 30                       | 8,174                                 | 8,174                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 65                                 |                           |
| C                                 | 1767  | 1,2,3,4,67,68,69,71,72,168,169 | 23,172   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 23,172                             | 0                         |
| D                                 | 1621  | 32                             | 7,440    | R7-2                        | 6.50                  | 3.4                 | 25,594                        | 18,154                                 | 20                       | 7,440                                 | 7,440                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| E                                 | 1644  | 37,38,39                       | 9,646    | C4-4D                       | 6.50                  | 5.8                 | 55,890                        | 43,740                                 | 49                       | 12,150                                | 12,150                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 140                                |                           |
| F                                 | 1661  | 4                              | 4,875    | R8A                         | 6.50                  | 6.0                 | 29,054                        | 24,666                                 | 27                       | 4,388                                 | 4,388                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 115                                |                           |
| G                                 | 1636  | 40,138,38,39                   | 4,895    | R8A                         | 6.50                  | 5.9                 | 29,077                        | 24,671                                 | 27                       | 4,406                                 | 4,406                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 85                                 |                           |
| H                                 | 1633  | 39,38                          | 5,050    | R8A                         | 6.50                  | 6.0                 | 30,389                        | 25,844                                 | 29                       | 4,545                                 | 4,545                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 105                                |                           |
| I                                 | 1643  | 38,40,39                       | 6,709    | C4-4D                       | 6.50                  | 6.0                 | 40,058                        | 29,160                                 | 32                       | 10,898                                | 6,038                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 4,860                                   | 0                                         | 0                                       | 0                                       | 90                                 |                           |
| J                                 | 1639  | 39,40,41,38,137                | 14,942   | R8A                         | 6.50                  | 0.5                 | 7,755                         | 2,200                                  | 0                        | 5,555                                 | 5,555                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| K                                 | 1620  | 23                             | 271,850  | R7-2                        | 6.50                  | 2.4                 | 662,000                       | 662,000                                | 672                      | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 170                                |                           |
| L                                 | 1640  | 1                              | 262,446  | R7-2                        | 6.50                  | 2.4                 | 642,489                       | 630,713                                | 720                      | 11,776                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 7,053                                         | 4,723                                   | 0                                         | 0                                       | 0                                       | 130                                |                           |
| M                                 | 1640  | 21                             | 194,545  | R7-2                        | 6.50                  | 2.6                 | 502,522                       | 491,745                                | 587                      | 10,777                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 10,777                                  | 0                                         | 0                                       | 0                                       | 130                                |                           |
| N                                 | 1662  | 1                              | 329,800  | R7-2                        | 6.50                  | 1.7                 | 557,872                       | 544,271                                | 689                      | 13,601                                | 1,334                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 12,267                                  | 0                                         | 0                                       | 0                                       | 60                                 |                           |
| O                                 | 1755  | 33                             | 17,985   | C8-3                        | 6.50                  | 5.9                 | 106,596                       | 0                                      | 0                        | 106,596                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 106,596                                       | 0                                       | 0                                         | 0                                       | 0                                       | 90                                 |                           |
| P                                 | 1784  | 45,4,47,48                     | 13,406   | C4-4D                       | 6.50                  | 4.1                 | 54,548                        | 37,620                                 | 42                       | 9,404                                 | 9,404                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 7,524                                   | 0                                       | 0                                  | 80                        |
| Q                                 | 1748  | p/o 35                         | 20,183   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 20,183                             | 0                         |
| R                                 | 1748  | p/o 1                          | 20,183   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 20,183                             | 0                         |
| S                                 | 1667  | 45                             | 10,520   | C4-4D                       | 6.50                  | 3.2                 | 33,612                        | 0                                      | 0                        | 33,612                                | 33,612                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| T                                 | 1771  | 70,69,71                       | 6,054    | M1-4                        | 6.50                  | 2.0                 | 12,108                        | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 12,108                                  | 0                                  | 45                        |
| U                                 | 1654  | 3,4,45                         | 18,326   | R8A                         | 6.50                  | 6.0                 | 110,243                       | 106,534                                | 118                      | 3,709                                 | 3,709                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 14,205                             | 115                       |
| V                                 | 1775  | 170                            | 6,950    | M1-2                        | 4.80                  | 0.8                 | 5,390                         | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 5,390                                   | 0                                  | 0                         |
| X                                 | 1786  | 24,26                          | 5,484    | R8A                         | 6.00                  | 1.9                 | 10,276                        | 0                                      | 0                        | 10,276                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 10,276                                  | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| Y                                 | 1796  | 2                              | 1,875    | R8A                         | 6.00                  | 5.3                 | 9,978                         | 8,280                                  | 9                        | 1,698                                 | 1,698                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| Z                                 | 1689  | 51                             | 2,533    | R8A                         | 6.00                  | 6.0                 | 15,193                        | 12,852                                 | 15                       | 2,341                                 | 2,341                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| AA                                | 1683  | 50                             | 1,875    | R8A                         | 6.00                  | 5.7                 | 10,705                        | 8,906                                  | 10                       | 1,799                                 | 1,799                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| AB                                | 1635  | 51,52                          | 2,167    | R7-2                        | 6.50                  | 3.4                 | 7,343                         | 5,393                                  | 6                        | 1,950                                 | 1,950                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AC                                | 1633  | 52                             | 2,023    | R7-2                        | 6.50                  | 3.3                 | 6,584                         | 4,719                                  | 5                        | 1,865                                 | 1,865                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AD                                | 1632  | 20                             | 3,500    | R7-2                        | 6.50                  | 3.4                 | 12,019                        | 8,869                                  | 10                       | 3,150                                 | 3,150                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AE                                | 1643  | 48,47                          | 8,242    | R7A                         | 4.00                  | 4.0                 | 32,815                        | 25,397                                 | 28                       | 7,418                                 | 7,418                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AF                                | 1662  | 16                             | 39,003   | R7-2                        | 4.00                  | 2.4                 | 95,284                        | 95,284                                 | 108                      | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 145                       |
| AG                                | 1684  | 1                              | 393,600  | R7-2                        | 4.00                  | 1.9                 | 733,050                       | 733,050                                | 1,493                    | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 145                       |

| Potential Development Site Number | Block | Lots                           | Lot Area | With Action Zoning | With Action Maximum FAR | With Action Built FAR | With Action Building Floor Area | With Action Total Residential Floor Area | With Action Residential DU | With Action Total Commercial Floor Area | With Action Commercial Floor Area- Local Retail | With Action Commercial Floor Area- Restaurant | With Action Commercial Floor Area- Grocery Store | With Action Commercial Floor Area- Destination Retail | With Action Commercial Floor Area- Hotels | With Action Commercial Floor Area- Storage Area | With Action Commercial Floor Area- Office | With Action Commercial Floor Area- Auto Use | With Action Community Facility Floor Area | With ActionTotal Manufacturing Floor Area | With Action Total Parking Floor Area | With Action Building Height |
|-----------------------------------|-------|--------------------------------|----------|--------------------|-------------------------|-----------------------|---------------------------------|------------------------------------------|----------------------------|-----------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------|
| A                                 | 1753  | 37                             | 4,973    | M1-6 / R9          | 9                       | 8                     | 41,403                          | 31,457                                   | 35                         | 9,946                                   | 4,973                                           | 4,973                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| B                                 | 1772  | 69,70                          | 9,083    | M1-6 / R10         | 12                      | 12                    | 107,526                         | 91,177                                   | 101                        | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 16,349                                    | 0                                    | 170                         |
| C                                 | 1767  | 1,2,3,4,67,68,69,71,72,168,169 | 23,172   | R10 + C2-5         | 12                      | 12                    | 269,535                         | 231,266                                  | 257                        | 27,258                                  | 0                                               | 0                                             | 0                                                | 12,500                                                | 0                                         | 0                                               | 14,758                                    | 0                                           | 0                                         | 0                                         | 11,011                               | 280                         |
| D                                 | 1621  | 32                             | 7,440    | R9 + C2-5          | 9                       | 9                     | 63,240                          | 55,800                                   | 62                         | 7,440                                   | 7,440                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 155                         |
| E                                 | 1644  | 37,38,39                       | 9,646    | C4-6               | 12                      | 10                    | 95,310                          | 83,160                                   | 92                         | 12,150                                  | 6,570                                           | 5,580                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 160                         |
| F                                 | 1661  | 4                              | 4,875    | R10 + C2-5         | 12                      | 12                    | 57,488                          | 50,400                                   | 56                         | 7,088                                   | 4,388                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 2,700                                     | 0                                           | 0                                         | 0                                         | 0                                    | 230                         |
| G                                 | 1636  | 40,138,38,39                   | 4,895    | R10 + C2-5         | 12                      | 12                    | 57,434                          | 49,302                                   | 55                         | 8,132                                   | 8,132                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| H                                 | 1633  | 39,38                          | 5,050    | R10 + C2-5         | 12                      | 12                    | 60,120                          | 52,394                                   | 58                         | 7,726                                   | 4,545                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 3,181                                     | 0                                           | 0                                         | 0                                         | 0                                    | 210                         |
| I                                 | 1643  | 38,40,39                       | 6,709    | C4-6               | 12                      | 12                    | 80,246                          | 68,846                                   | 76                         | 11,400                                  | 6,038                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 5,362                                     | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| J                                 | 1639  | 39,40,41,38,137                | 14,942   | R10 + C2-5         | 12                      | 9                     | 138,361                         | 119,565                                  | 133                        | 9,398                                   | 9,398                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 9,398                                     | 0                                         | 0                                    | 175                         |
| K                                 | 1620  | 23                             | 271,850  | R7-2 + C1-5        | 3                       | 3                     | 734,550                         | 662,000                                  | 736                        | 72,550                                  | 72,550                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| L                                 | 1640  | 1                              | 262,446  | R7-2 + C1-5        | 3                       | 3                     | 783,589                         | 630,713                                  | 720                        | 152,876                                 | 141,100                                         | 0                                             | 0                                                | 0                                                     | 0                                         | 7,053                                           | 4,723                                     | 0                                           | 0                                         | 0                                         | 0                                    | 130                         |
| M                                 | 1640  | 21                             | 194,545  | R7-2 + C1-5        | 3                       | 3                     | 595,250                         | 491,745                                  | 587                        | 103,505                                 | 92,728                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 10,777                                    | 0                                           | 0                                         | 0                                         | 0                                    | 130                         |
| N                                 | 1662  | 1                              | 329,800  | R7-2 + C1-5        | 3                       | 2                     | 672,314                         | 544,271                                  | 689                        | 128,043                                 | 115,776                                         | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 12,267                                    | 0                                           | 0                                         | 0                                         | 0                                    | 60                          |
| O                                 | 1755  | 33                             | 17,985   | M1-6 / R9          | 9                       | 6                     | 106,596                         | 70,626                                   | 78                         | 17,985                                  | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 17,985                                    | 0                                           | 17,985                                    | 0                                         | 0                                    | 0                           |
| P                                 | 1784  | 45,4,47,48                     | 13,406   | C4-6               | 12                      | 12                    | 159,747                         | 140,063                                  | 156                        | 9,842                                   | 9,842                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 9,842                                     | 0                                         | 0                                    | 190                         |
| Q                                 | 1748  | p/o 35                         | 20,183   | C6-4               | 12                      | 12                    | 233,561                         | 203,148                                  | 226                        | 30,413                                  | 0                                               | 0                                             | 0                                                | 12,248                                                | 0                                         | 0                                               | 18,165                                    | 0                                           | 0                                         | 0                                         | 26,757                               | 330                         |
| R                                 | 1748  | p/o 1                          | 20,183   | C6-4               | 12                      | 12                    | 242,196                         | 164,773                                  | 183                        | 77,423                                  | 0                                               | 0                                             | 0                                                | 16,874                                                | 0                                         | 0                                               | 60,549                                    | 0                                           | 0                                         | 0                                         | 23,492                               | 295                         |
| S                                 | 1667  | 45                             | 10,520   | C4-6               | 12                      | 12                    | 125,525                         | 107,810                                  | 120                        | 17,715                                  | 10,035                                          | 7,680                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| T                                 | 1771  | 70,69,71                       | 6,054    | M1-6 / R10         | 12                      | 12                    | 72,648                          | 60,540                                   | 67                         | 12,108                                  | 12,108                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 240                         |
| U                                 | 1654  | 3,4,45                         | 18,326   | R10 + C2-5         | 12                      | 12                    | 217,713                         | 187,477                                  | 208                        | 30,236                                  | 7,613                                           | 0                                             | 9,867                                            | 0                                                     | 0                                         | 0                                               | 12,756                                    | 0                                           | 0                                         | 0                                         | 0                                    | 210                         |
| V                                 | 1775  | 170                            | 6,950    | M1-6 / R10         | 12                      | 12                    | 83,400                          | 52,125                                   | 58                         | 18,765                                  | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 18,765                                    | 0                                           | 0                                         | 12,510                                    | 0                                    | 205                         |
| X                                 | 1786  | 24,26                          | 5,484    | R9 + C2-5          | 9                       | 8                     | 46,243                          | 41,018                                   | 46                         | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 5,225                                     | 0                                         | 0                                    | 135                         |
| Y                                 | 1796  | 2                              | 1,875    | R9 + C2-5          | 9                       | 5                     | 9,978                           | 8,280                                    | 9                          | 1,698                                   | 1,698                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| Z                                 | 1689  | 51                             | 2,533    | R9 + C2-5          | 9                       | 6                     | 15,492                          | 13,212                                   | 15                         | 2,280                                   | 2,280                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| AA                                | 1683  | 50                             | 1,875    | R9 + C2-5          | 9                       | 6                     | 10,705                          | 8,906                                    | 10                         | 1,799                                   | 1,799                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| AB                                | 1635  | 51,52                          | 2,167    | R7D + C2-5         | 6                       | 6                     | 12,059                          | 10,109                                   | 11                         | 1,950                                   | 1,950                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 100                         |
| AC                                | 1633  | 52                             | 2,023    | R7D + C2-5         | 6                       | 4                     | 8,944                           | 7,079                                    | 8                          | 1,865                                   | 1,865                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| AD                                | 1632  | 20                             | 3,500    | R7D + C2-5         | 6                       | 6                     | 19,598                          | 16,448                                   | 18                         | 3,150                                   | 3,150                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| AE                                | 1643  | 48,47                          | 8,242    | R7D + C2-5         | 6                       | 6                     | 46,146                          | 38,728                                   | 43                         | 7,418                                   | 7,418                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| AF                                | 1662  | 16                             | 39,003   | R7-2/C1-5          | 3                       | 3                     | 112,421                         | 95,284                                   | 108                        | 17,137                                  | 17,137                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |
| AG                                | 1684  | 1                              | 393,600  | R7-2/C1-5          | 3                       | 2                     | 784,462                         | 733,050                                  | 1,493                      | 51,412                                  | 51,412                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |

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**Appendix 2(b)**  
**Reasonable Worst-Case Development Scenario for**  
**East 111th Street Site Development Alternative**

| Projected Development Site Number | Block | Lots                         | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area-Office | Existing Commercial Floor Area-Retail | Existing Commercial Floor Area-Auto Use | Existing Commercial Floor Area-Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes          |
|-----------------------------------|-------|------------------------------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|-----------------------------------|---------------------------|
| 1                                 | 1754  | 33,40                        | 19,651   | C8-3              | 1.08         | 21,183                       | 0                                     | 0                       | 21,183                               | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 21,183                            | Commercial parking garage |
| 2                                 | 1769  | 3                            | 13,620   | M1-4              | 2.29         | 31,185                       | 0                                     | 0                       | 31,185                               | 18,500                                | 2,868                                 | 0                                       | 0                                      | 9,817                                   | 0                                 |                           |
| 3                                 | 1623  | 33,34                        | 10,599   | R7-2              | 0.57         | 6,060                        | 4,545                                 | 6                       | 1,515                                | 0                                     | 1,515                                 | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 4                                 | 1775  | 3,6,165,168,71               | 156,416  | M1-2              | 2.95         | 461,796                      | 450,018                               | 412*                    | 11,778                               | 5,711                                 | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 5                                 | 1751  | 40,137,33,34,37,132,35,38,36 | 16,487   | C8-3              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 6                                 | 1746  | 33                           | 20,183   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 | Surface parking           |
| 7                                 | 1745  | 134                          | 17,642   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 | Surface parking           |
| 8                                 | 1750  | 40                           | 13,493   | C6-3              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 | Surface parking           |
| 9                                 | 1774  | 68                           | 11,491   | C6-3              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 | Surface parking           |
| 10                                | 1773  | 1,69,67,72,4                 | 25,820   | C6-3/C4-4D        | 0.26         | 6,810                        | 0                                     | 0                       | 6,810                                | 0                                     | 6,810                                 | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 11                                | 1772  | 33,34,35,37,38,39,134,140    | 17,967   | C4-4              | 1.83         | 32,952                       | 3,340                                 | 4                       | 29,612                               | 4,728                                 | 8,760                                 | 0                                       | 16,124                                 | 0                                       | 0                                 |                           |
| 12                                | 1770  | 36                           | 18,973   | C4-4D             | 1.78         | 33,736                       | 0                                     | 0                       | 33,736                               | 16,751                                | 16,985                                | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 13                                | 1786  | 4,47                         | 13,669   | C4-4D             | 3.55         | 48,500                       | 0                                     | 0                       | 42,500                               | 0                                     | 32,500                                | 0                                       | 10,000                                 | 0                                       | 0                                 |                           |
| 14                                | 1767  | 33                           | 11,395   | C4-4D             | 2.60         | 29,607                       | 0                                     | 0                       | 29,607                               | 0                                     | 9,215                                 | 0                                       | 20,392                                 | 0                                       | 0                                 |                           |
| 15                                | 1645  | 35,33                        | 10,147   | C4-4D             | 0.98         | 9,895                        | 0                                     | 0                       | 9,895                                | 0                                     | 9,895                                 | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 16                                | 1643  | 35,37,137,33                 | 12,128   | C4-4D             | 0.78         | 9,486                        | 0                                     | 0                       | 9,486                                | 0                                     | 9,486                                 | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 17                                | 1660  | 3,4,45,1                     | 22,201   | R8A               | 1.52         | 33,815                       | 0                                     | 0                       | 33,815                               | 0                                     | 5,500                                 | 15,600                                  | 0                                      | 0                                       | 0                                 |                           |
| 18                                | 1635  | 33,35,36,37,38,39,40         | 18,159   | R8A               | 1.95         | 35,420                       | 0                                     | 0                       | 35,420                               | 0                                     | 17,210                                | 0                                       | 18,210                                 | 0                                       | 0                                 |                           |
| 19                                | 1634  | 34,35,36,37,38,33            | 12,858   | R8A               | 1.06         | 13,575                       | 0                                     | 6                       | 13,575                               | 0                                     | 13,575                                | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 20                                | 1655  | 45                           | 16,139   | R8A               | 2.37         | 38,302                       | 0                                     | 0                       | 38,302                               | 0                                     | 30,302                                | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 21                                | 1632  | 37,40,35                     | 15,183   | R8A               | 1.70         | 25,765                       | 0                                     | 0                       | 25,765                               | 0                                     | 25,765                                | 0                                       | 0                                      | 0                                       | 0                                 |                           |
| 22                                | 1771  | 33,36                        | 18,647   | C4-4              | 1.79         | 33,372                       | 0                                     | 0                       | 33,372                               | 8,836                                 | 15,036                                | 0                                       | 9,500                                  | 0                                       | 0                                 |                           |
| 23                                | 1643  | 56                           | 8,074    | R7-2              | 1.00         | 8,073                        | 0                                     | 0                       | 8,073                                | 0                                     | 8,073                                 | 0                                       | 0                                      | 0                                       | 0                                 |                           |

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| Projected Development Site Number | Block | Lots                                                                            | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area-Office | Existing Commercial Floor Area-Retail | Existing Commercial Floor Area-Auto Use | Existing Commercial Floor Area-Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes                                    |
|-----------------------------------|-------|---------------------------------------------------------------------------------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|-----------------------------------|-----------------------------------------------------|
| 70                                | 1617  | 23,40,51,39,37,54,42,41,33,29,45,50,25,43,38,35,28,53,20,48,46,52,31,22,122,121 | 76,578   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                     | 0                                     | 0                                       | 0                                      | 0                                       | 0                                 | Baseball fields, community gardens, and vacant land |
| Total                             |       |                                                                                 |          |                   |              | 1,131,000                    | 572,218                               | 585*                    | 555,032                              | 55,526                                | 301,933                               | 15,600                                  | 79,451                                 | 33,847                                  | 21,183                            |                                                     |

\*It should be noted that the easternmost portion of Projected Development Site 4 is currently developed with two residential buildings that contain a total of 412 residential units (and are occupied by an estimated 993 residents.) The two residential buildings would not be affected by the Proposed Actions and are expected to remain in place

| Projected Development Site Number | Block | Lots                         | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|------------------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| 1                                 | 1754  | 33,40                        | 19,651   | C8-3                        | 6.50                  | 2.0                 | 39,169                        | 0                                      | 0                        | 10,592                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 10,592                                    | 0                                       | 0                                       | 28,578                             | 30                        |
| 2                                 | 1769  | 3                            | 13,620   | M1-4                        | 6.50                  | 2.3                 | 31,185                        | 0                                      | 0                        | 21,368                                | 2,868                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 18,500                                  | 0                                         | 0                                       | 9,817                                   | 0                                  | 0                         |
| 3                                 | 1623  | 33,34                        | 10,599   | R7-2                        | 6.50                  | 3.3                 | 34,572                        | 26,680                                 | 31                       | 7,892                                 | 7,892                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 4                                 | 1775  | 3,6,165,168,71               | 156,416  | M1-2                        | 6.20                  | 3.0                 | 461,796                       | 450,018                                | 412                      | 11,778                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 11,778                                  | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 5                                 | 1751  | 40,137,33,34,37,132,35,38,36 | 16,487   | C8-3                        | 6.50                  | 2.0                 | 32,974                        | 0                                      | 0                        | 32,974                                | 0                                             | 0                                           | 0                                              | 0                                                   | 32,974                                  | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 45                        |
| 6                                 | 1746  | 33                           | 20,183   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 20,183                             | 0                         |
| 7                                 | 1745  | 134                          | 17,642   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 17,642                             | 0                         |
| 8                                 | 1750  | 40                           | 13,493   | C6-3                        | 10.00                 | 5.9                 | 80,149                        | 68,005                                 | 76                       | 12,144                                | 0                                             | 0                                           | 0                                              | 12,144                                              | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 9                                 | 1774  | 68                           | 11,491   | C6-3                        | 10.00                 | 5.9                 | 68,257                        | 57,915                                 | 64                       | 10,342                                | 0                                             | 0                                           | 0                                              | 10,342                                              | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 10                                | 1773  | 1,69,67,72,4                 | 25,820   | C6-3/C4-4D                  | 9.39                  | 7.6                 | 195,499                       | 159,102                                | 133                      | 36,397                                | 0                                             | 0                                           | 0                                              | 13,110                                              | 0                                       | 0                                             | 23,287                                  | 0                                         | 0                                       | 0                                       | 11,307                             | 135                       |
| 11                                | 1772  | 33,34,35,37,38,39,134,140    | 17,967   | C4-4                        | 6.50                  | 1.8                 | 32,952                        | 3,340                                  | 4                        | 29,612                                | 8,760                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 16,124                                        | 4,728                                   | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 12                                | 1770  | 36                           | 18,973   | C4-4D                       | 6.50                  | 4.9                 | 93,881                        | 73,528                                 | 82                       | 20,353                                | 20,353                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 110                       |
| 13                                | 1786  | 4,47                         | 13,669   | C4-4D                       | 6.50                  | 3.5                 | 48,500                        | 6,000                                  | 0                        | 42,500                                | 32,500                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 10,000                                        | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 14                                | 1767  | 33                           | 11,395   | C4-4D                       | 6.50                  | 6.0                 | 68,101                        | 49,691                                 | 55                       | 18,410                                | 10,256                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 8,154                                   | 0                                         | 0                                       | 0                                       | 0                                  | 110                       |
| 15                                | 1645  | 35,33                        | 10,147   | C4-4D                       | 6.50                  | 5.9                 | 59,513                        | 44,860                                 | 50                       | 14,653                                | 8,359                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 6,294                                   | 0                                         | 0                                       | 0                                       | 0                                  | 120                       |
| 16                                | 1643  | 35,37,137,33                 | 12,128   | C4-4D                       | 6.50                  | 6.0                 | 72,241                        | 53,096                                 | 59                       | 19,145                                | 10,915                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 8,230                                   | 0                                         | 0                                       | 0                                       | 0                                  | 110                       |
| 17                                | 1660  | 3,4,45,1                     | 22,201   | R8A                         | 6.50                  | 6.0                 | 133,614                       | 129,129                                | 143                      | 4,485                                 | 0                                             | 0                                           | 4,485                                          | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 17,217                             | 105                       |
| 18                                | 1635  | 33,35,36,37,38,39,40         | 18,159   | R8A                         | 6.50                  | 5.6                 | 101,135                       | 66,370                                 | 74                       | 34,765                                | 16,555                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 18,210                                        | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 19                                | 1634  | 34,35,36,37,38,33            | 12,858   | R8A                         | 6.50                  | 6.0                 | 76,631                        | 65,059                                 | 64                       | 11,572                                | 11,572                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 120                       |
| 20                                | 1655  | 45                           | 16,139   | R8A                         | 6.50                  | 5.2                 | 83,395                        | 74,539                                 | 83                       | 8,856                                 | 8,856                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 21                                | 1632  | 37,40,35                     | 15,183   | R8A                         | 6.50                  | 6.0                 | 91,416                        | 88,316                                 | 98                       | 3,100                                 | 3,100                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 11,775                             | 105                       |
| 22                                | 1771  | 33,36                        | 18,647   | C4-4                        | 6.50                  | 3.8                 | 70,515                        | 47,751                                 | 53                       | 22,764                                | 11,382                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 9,500                                         | 1,882                                   | 0                                         | 0                                       | 0                                       | 0                                  | 60                        |
| 23                                | 1643  | 56                           | 8,074    | R7-2                        | 6.50                  | 3.4                 | 27,775                        | 19,701                                 | 22                       | 8,074                                 | 8,074                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 24                                | 1768  | 71,169,69,70,170             | 6,480    | M1-4                        | 6.50                  | 2.0                 | 12,960                        | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 12,960                                  | 0                                  | 30                        |
| 25                                | 1622  | 36,35                        | 4,545    | R7-2                        | 6.50                  | 4.0                 | 18,180                        | 13,635                                 | 15                       | 4,545                                 | 4,545                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 26                                | 1655  | 29                           | 5,248    | R8A                         | 6.00                  | 6.0                 | 31,327                        | 26,604                                 | 30                       | 4,723                                 | 4,723                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 27                                | 1785  | 1,104                        | 2,815    | C4-4D                       | 6.50                  | 6.0                 | 16,947                        | 14,413                                 | 16                       | 2,534                                 | 2,534                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 28                                | 1643  | 71                           | 2,523    | R7-2                        | 6.50                  | 2.9                 | 7,200                         | 0                                      | 0                        | 4,800                                 | 4,800                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 2,400                                   | 0                                       | 0                                  | 35                        |
| 29                                | 1659  | 1                            | 9,285    | R8A                         | 6.50                  | 6.0                 | 55,337                        | 46,980                                 | 52                       | 8,357                                 | 8,357                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 30                                | 1756  | 33                           | 9,992    | R7-2                        | 6.50                  | 3.9                 | 39,402                        | 30,409                                 | 34                       | 8,993                                 | 8,993                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 31                                | 1622  | 33                           | 2,250    | R7-2                        | 6.50                  | 4.0                 | 9,000                         | 6,750                                  | 8                        | 2,250                                 | 2,250                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 60                        |
| 32                                | 1768  | 40,39                        | 5,430    | C4-4D                       | 6.50                  | 5.9                 | 32,255                        | 23,458                                 | 26                       | 8,797                                 | 8,797                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 90                        |
| 33                                | 1655  | 1,3,102                      | 9,839    | R8A                         | 6.50                  | 6.0                 | 58,996                        | 50,141                                 | 56                       | 8,855                                 | 8,855                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 105                       |
| 34                                | 1677  | 49,52,47,46,45               | 16,700   | R7A/R8A                     | 5.09                  | 5.1                 | 84,750                        | 76,532                                 | 85                       | 8,218                                 | 8,218                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |

| Projected Development Site Number | Block | Lots                | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|---------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| 35                                | 1676  | 49                  | 1,944    | R8A                         | 6.00                  | 6.0                 | 11,673                        | 9,923                                  | 11                       | 1,750                                 | 1,750                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 36                                | 1772  | 55                  | 6,330    | R7-2                        | 6.50                  | 4.0                 | 25,330                        | 21,010                                 | 23                       | 4,320                                 | 4,320                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 37                                | 1771  | 51                  | 2,573    | R7-2                        | 6.50                  | 3.4                 | 8,729                         | 6,413                                  | 7                        | 2,316                                 | 2,316                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 38                                | 1643  | 50,149,49           | 5,046    | R7-2                        | 6.50                  | 4.0                 | 20,102                        | 15,561                                 | 17                       | 4,541                                 | 4,541                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 39                                | 1643  | 21                  | 2,523    | R7-2                        | 6.50                  | 4.0                 | 10,091                        | 7,820                                  | 9                        | 2,271                                 | 2,271                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 40                                | 1639  | 49,48               | 5,248    | R7-2/R7A                    | 5.30                  | 4.0                 | 20,923                        | 16,200                                 | 18                       | 4,723                                 | 4,723                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 41                                | 1639  | 21                  | 6,800    | R7-2                        | 6.50                  | 4.0                 | 27,180                        | 21,060                                 | 23                       | 6,120                                 | 6,120                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 42                                | 1638  | 56                  | 2,523    | R7-2                        | 6.50                  | 4.0                 | 10,076                        | 7,805                                  | 9                        | 2,271                                 | 2,271                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 43                                | 1637  | 51,52,21,22         | 10,092   | R7-2                        | 6.50                  | 4.0                 | 40,007                        | 30,924                                 | 34                       | 9,083                                 | 9,083                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 44                                | 1637  | 24,25               | 5,046    | R7-2/R7A                    | 5.25                  | 4.0                 | 19,980                        | 19,980                                 | 22                       | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 80                        |
| 45                                | 1635  | 149,150             | 2,226    | R7-2                        | 6.50                  | 4.0                 | 8,913                         | 6,910                                  | 8                        | 2,003                                 | 2,003                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 46                                | 1635  | 48,49               | 5,148    | R7-2/R7A                    | 4.69                  | 3.4                 | 17,700                        | 13,091                                 | 15                       | 4,609                                 | 4,609                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 47                                | 1634  | 158                 | 2,569    | R7-2                        | 6.50                  | 4.0                 | 10,148                        | 7,836                                  | 9                        | 2,312                                 | 2,312                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 48                                | 1643  | 63                  | 2,523    | R7-2                        | 6.50                  | 3.9                 | 9,947                         | 7,676                                  | 9                        | 2,271                                 | 2,271                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| 49                                | 1643  | 41                  | 13,682   | R7A                         | 4.00                  | 0.8                 | 10,800                        | 0                                      | 0                        | 10,800                                | 10,800                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 30                        |
| 50                                | 1667  | 102                 | 1,740    | C4-4D                       | 6.50                  | 6.0                 | 10,429                        | 8,863                                  | 10                       | 1,566                                 | 1,566                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 51                                | 1666  | 105,5               | 6,042    | C4-4D/R7A                   | 5.25                  | 4.0                 | 24,171                        | 18,733                                 | 21                       | 5,438                                 | 5,438                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 52                                | 1788  | 28                  | 2,265    | R7-2                        | 6.50                  | 3.4                 | 7,651                         | 5,612                                  | 6                        | 2,039                                 | 2,039                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |
| 53                                | 1786  | 28                  | 3,750    | R8A                         | 6.00                  | 6.0                 | 22,382                        | 19,007                                 | 21                       | 3,375                                 | 3,375                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 54                                | 1786  | 123,23,22,121       | 5,594    | R8A                         | 6.00                  | 5.9                 | 32,818                        | 27,783                                 | 31                       | 5,035                                 | 5,035                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 55                                | 1785  | 23,22,21            | 5,306    | R8A                         | 6.00                  | 5.9                 | 31,332                        | 26,557                                 | 30                       | 4,775                                 | 4,775                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 56                                | 1784  | 128,28,27,26,25,120 | 14,971   | R8A                         | 6.00                  | 5.5                 | 81,619                        | 71,626                                 | 80                       | 9,993                                 | 9,993                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 57                                | 1795  | 3,2,1               | 6,400    | R8A                         | 6.00                  | 5.8                 | 37,152                        | 31,392                                 | 35                       | 5,760                                 | 5,760                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 58                                | 1667  | 26                  | 2,768    | R8A                         | 6.00                  | 5.7                 | 15,910                        | 13,419                                 | 15                       | 2,491                                 | 2,491                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 59                                | 1667  | 22,120              | 6,467    | R8A                         | 6.00                  | 6.0                 | 38,800                        | 32,980                                 | 37                       | 5,820                                 | 5,820                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 60                                | 1689  | 1                   | 2,025    | R8A                         | 6.00                  | 5.7                 | 11,579                        | 9,756                                  | 11                       | 1,823                                 | 1,823                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 61                                | 1666  | 23                  | 1,800    | R8A                         | 6.00                  | 6.0                 | 10,777                        | 9,157                                  | 10                       | 1,620                                 | 1,620                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| 62                                | 1688  | 2,1                 | 4,892    | R8A                         | 6.00                  | 6.0                 | 29,352                        | 24,949                                 | 28                       | 4,403                                 | 4,403                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 63                                | 1665  | 25,24,23,122        | 11,101   | R8A                         | 6.00                  | 6.5                 | 71,685                        | 66,690                                 | 74                       | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 4,995                                   | 0                                       | 0                                  | 95                        |
| 64                                | 1687  | 3,102               | 3,200    | R8A                         | 6.00                  | 6.0                 | 19,081                        | 16,201                                 | 18                       | 2,880                                 | 2,880                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 85                        |
| 65                                | 1682  | 49                  | 2,583    | R8A                         | 6.00                  | 6.0                 | 15,525                        | 13,200                                 | 15                       | 2,325                                 | 2,325                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 75                        |
| 66                                | 1682  | 4,3                 | 5,000    | R8A                         | 6.00                  | 5.9                 | 29,700                        | 25,200                                 | 28                       | 4,500                                 | 4,500                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 67                                | 1680  | 3                   | 5,050    | R8A                         | 6.00                  | 6.0                 | 30,195                        | 25,650                                 | 29                       | 4,545                                 | 4,545                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 115                       |
| 68                                | 1644  | 12                  | 10,092   | R7-2                        | 6.50                  | 3.4                 | 34,716                        | 24,624                                 | 27                       | 10,092                                | 0                                             | 0                                           | 10,092                                         | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 55                        |

| Projected Development Site Number | Block | Lots                                                                            | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|---------------------------------------------------------------------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| 69                                | 1771  | 1,2                                                                             | 4,583    | M1-4                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| 70                                | 1617  | 23,40,51,39,37,54,42,41,33,29,45,50,25,43,38,35,28,53,20,48,46,52,31,22,122,121 | 76,578   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| Total                             |       |                                                                                 |          |                             |                       |                     | 3,076,097                     | 2,435,630                              | 2,561                    | 581,718                               | 351,292                                       | 0                                           | 14,577                                         | 35,596                                              | 32,974                                  | 53,834                                        | 82,853                                  | 10,592                                    | 7,395                                   | 22,777                                  | 106,702                            |                           |

| Projected Development Site Number | Block | Lots                         | Lot Area | With Action Zoning | With Action Maximum FAR | With Action Built FAR | With Action Building Floor Area | With Action Total Residential Floor Area | With Action Residential DU | With Action Total Commercial Floor Area | With Action Commercial Floor Area- Local Retail | With Action Commercial Floor Area- Restaurant | With Action Commercial Floor Area- Grocery Store | With Action Commercial Floor Area- Destination Retail | With Action Commercial Floor Area- Hotels | With Action Commercial Floor Area- Storage Area | With Action Commercial Floor Area- Office | With Action Commercial Floor Area- Auto Use | With Action Community Facility Floor Area | With ActionTotal Manufacturing Floor Area | With Action Total Parking Floor Area | With Action Building Height |
|-----------------------------------|-------|------------------------------|----------|--------------------|-------------------------|-----------------------|---------------------------------|------------------------------------------|----------------------------|-----------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------|
| 1                                 | 1754  | 33,40                        | 19,651   | M1-6 / R9          | 9                       | 5                     | 98,255                          | 0                                        | 0                          | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 98,255                                    | 0                                    | 75                          |
| 2                                 | 1769  | 3                            | 13,620   | M1-6 / R10         | 10                      | 12                    | 163,403                         | 114,371                                  | 127                        | 24,516                                  | 12,258                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 12,258                                    | 0                                           | 0                                         | 24,516                                    | 0                                    | 200                         |
| 3                                 | 1623  | 33,34                        | 10,599   | R9 + C2-5          | 9                       | 8                     | 89,546                          | 80,007                                   | 89                         | 9,539                                   | 4,539                                           | 5,000                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 155                         |
| 4                                 | 1775  | 3,6,165,168,71               | 156,416  | M1-6 / R10         | 10                      | 5                     | 793,092                         | 721,502                                  | 802                        | 61,928                                  | 10,000                                          | 10,150                                        | 0                                                | 30,000                                                | 0                                         | 0                                               | 11,778                                    | 0                                           | 0                                         | 0                                         | 9,662                                | 215                         |
| 5                                 | 1751  | 40,137,33,34,37,132,35,38,36 | 16,487   | M1-6 / R9          | 9                       | 8                     | 140,139                         | 107,165                                  | 119                        | 32,974                                  | 4,974                                           | 8,000                                         | 0                                                | 20,000                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| 6                                 | 1746  | 33                           | 20,183   | R10 + C2-5         | 12                      | 12                    | 242,196                         | 218,930                                  | 243                        | 11,633                                  | 11,633                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 11,633                                    | 0                                         | 17,100                               | 200                         |
| 7                                 | 1745  | 134                          | 17,642   | R10 + C2-5         | 12                      | 12                    | 211,614                         | 189,230                                  | 210                        | 11,192                                  | 11,192                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 11,192                                    | 0                                         | 12,900                               | 210                         |
| 8                                 | 1750  | 40                           | 13,493   | C6-4               | 13                      | 13                    | 174,880                         | 107,415                                  | 119                        | 53,972                                  | 0                                               | 0                                             | 0                                                | 13,493                                                | 0                                         | 0                                               | 40,479                                    | 0                                           | 0                                         | 0                                         | 13,493                               | 215                         |
| 9                                 | 1774  | 68                           | 11,491   | C6-4               | 12                      | 12                    | 137,421                         | 106,440                                  | 118                        | 21,236                                  | 8,736                                           | 0                                             | 0                                                | 12,500                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 9,745                                | 185                         |
| 10                                | 1773  | 1,69,67,72,4                 | 25,820   | C6-4               | 12                      | 12                    | 307,927                         | 237,028                                  | 263                        | 59,048                                  | 0                                               | 0                                             | 0                                                | 12,572                                                | 0                                         | 0                                               | 46,476                                    | 0                                           | 0                                         | 0                                         | 11,851                               | 270                         |
| 11                                | 1772  | 33,34,35,37,38,39,134,140    | 17,967   | C4-6               | 12                      | 12                    | 215,604                         | 167,093                                  | 186                        | 8,651                                   | 8,651                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 32,341                                    | 0                                         | 7,519                                | 275                         |
| 12                                | 1770  | 36                           | 18,973   | C4-6               | 12                      | 9                     | 168,400                         | 148,046                                  | 164                        | 20,354                                  | 11,340                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 9,014                                     | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| 13                                | 1786  | 4,47                         | 13,669   | C4-6               | 12                      | 12                    | 162,207                         | 140,063                                  | 156                        | 22,144                                  | 12,302                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 9,842                                     | 0                                           | 0                                         | 0                                         | 0                                    | 190                         |
| 14                                | 1767  | 33                           | 11,395   | C4-6               | 12                      | 12                    | 135,211                         | 116,801                                  | 130                        | 18,410                                  | 10,256                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 8,154                                     | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| 15                                | 1645  | 35,33                        | 10,147   | C4-6               | 12                      | 12                    | 120,546                         | 105,114                                  | 117                        | 15,432                                  | 9,132                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 6,300                                     | 0                                           | 0                                         | 0                                         | 0                                    | 230                         |
| 16                                | 1643  | 35,37,137,33                 | 12,128   | C4-6               | 12                      | 12                    | 144,081                         | 124,936                                  | 139                        | 19,145                                  | 10,915                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 8,230                                     | 0                                           | 0                                         | 0                                         | 0                                    | 220                         |
| 17                                | 1660  | 3,4,45,1                     | 22,201   | R10 + C2-5         | 12                      | 12                    | 264,948                         | 226,667                                  | 252                        | 9,184                                   | 0                                               | 0                                             | 9,184                                            | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 17,100                                    | 0                                         | 11,997                               | 300                         |
| 18                                | 1635  | 33,35,36,37,38,39,40         | 18,159   | R10 + C2-5         | 12                      | 12                    | 217,866                         | 185,180                                  | 206                        | 24,449                                  | 8,106                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 16,343                                    | 0                                           | 0                                         | 0                                         | 8,237                                | 290                         |
| 19                                | 1634  | 34,35,36,37,38,33            | 12,858   | R10 + C2-5         | 12                      | 12                    | 152,753                         | 129,609                                  | 144                        | 23,144                                  | 11,572                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 11,572                                    | 0                                           | 0                                         | 0                                         | 0                                    | 160                         |
| 20                                | 1655  | 45                           | 16,139   | R10 + C2-5         | 12                      | 9                     | 137,864                         | 121,142                                  | 135                        | 16,722                                  | 4,428                                           | 4,428                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 7,866                                     | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| 21                                | 1632  | 37,40,35                     | 15,183   | R10 + C2-5         | 12                      | 12                    | 180,375                         | 153,045                                  | 170                        | 13,665                                  | 13,665                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 13,665                                    | 0                                         | 0                                    | 180                         |
| 22                                | 1771  | 33,36                        | 18,647   | C4-6               | 12                      | 9                     | 170,679                         | 147,915                                  | 164                        | 22,764                                  | 11,382                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 11,382                                    | 0                                           | 0                                         | 0                                         | 0                                    | 180                         |
| 23                                | 1643  | 56                           | 8,074    | R9 + C2-5          | 9                       | 9                     | 68,629                          | 52,657                                   | 59                         | 15,972                                  | 8,074                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 7,898                                     | 0                                           | 0                                         | 0                                         | 0                                    | 100                         |
| 24                                | 1768  | 71,169,69,70,170             | 6,480    | M1-6 / R10         | 12                      | 12                    | 77,760                          | 45,360                                   | 50                         | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 32,400                                    | 0                                    | 175                         |
| 25                                | 1622  | 36,35                        | 4,545    | R9 + C2-5          | 9                       | 9                     | 38,633                          | 34,088                                   | 38                         | 4,545                                   | 4,545                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |
| 26                                | 1655  | 29                           | 5,248    | R9 + C2-5          | 9                       | 8                     | 44,035                          | 39,312                                   | 44                         | 4,723                                   | 0                                               | 4,723                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 165                         |
| 27                                | 1785  | 1,104                        | 2,815    | C4-6               | 12                      | 12                    | 33,781                          | 31,247                                   | 35                         | 2,534                                   | 2,534                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 28                                | 1643  | 71                           | 2,523    | R9 + C2-5          | 9                       | 8                     | 21,445                          | 18,922                                   | 21                         | 2,523                                   | 1,523                                           | 1,000                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 29                                | 1659  | 1                            | 9,285    | R10 + C2-5         | 12                      | 12                    | 110,307                         | 94,160                                   | 105                        | 14,147                                  | 0                                               | 0                                             | 8,357                                            | 0                                                     | 0                                         | 0                                               | 5,790                                     | 0                                           | 2,000                                     | 0                                         | 0                                    | 170                         |
| 30                                | 1756  | 33                           | 9,992    | R9 + C2-5          | 9                       | 8                     | 84,104                          | 66,118                                   | 73                         | 8,993                                   | 8,993                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 8,993                                     | 0                                         | 0                                    | 130                         |
| 31                                | 1622  | 33                           | 2,250    | R9 + C2-5          | 9                       | 9                     | 19,125                          | 16,875                                   | 19                         | 2,250                                   | 2,250                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 32                                | 1768  | 40,39                        | 5,430    | C4-6               | 12                      | 11                    | 61,857                          | 56,970                                   | 63                         | 4,887                                   | 4,887                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 150                         |
| 33                                | 1655  | 1,3,102                      | 9,839    | R10 + C2-5         | 12                      | 12                    | 117,188                         | 100,534                                  | 112                        | 16,654                                  | 8,855                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 7,799                                     | 0                                           | 0                                         | 0                                         | 0                                    | 260                         |
| 34                                | 1677  | 49,52,47,46,45               | 16,700   | R9 + C2-5          | 9                       | 8                     | 141,570                         | 130,050                                  | 145                        | 11,520                                  | 0                                               | 0                                             | 0                                                | 11,520                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 245                         |
| 35                                | 1676  | 49                           | 1,944    | R9 + C2-5          | 9                       | 8                     | 15,941                          | 13,997                                   | 16                         | 1,944                                   | 1,944                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 36                                | 1772  | 55                           | 6,330    | R7D + C2-5         | 6                       | 4                     | 27,540                          | 23,220                                   | 26                         | 4,320                                   | 4,320                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |

| Projected Development Site Number | Block | Lots                                                                            | Lot Area | With Action Zoning | With Action Maximum FAR | With Action Built FAR | With Action Building Floor Area | With Action Total Residential Floor Area | With Action Residential DU | With Action Total Commercial Floor Area | With Action Commercial Floor Area- Local Retail | With Action Commercial Floor Area- Restaurant | With Action Commercial Floor Area- Grocery Store | With Action Commercial Floor Area- Destination Retail | With Action Commercial Floor Area- Hotels | With Action Commercial Floor Area- Storage Area | With Action Commercial Floor Area- Office | With Action Commercial Floor Area- Auto Use | With Action Community Facility Floor Area | With ActionTotal Manufacturing Floor Area | With Action Total Parking Floor Area | With Action Building Height |
|-----------------------------------|-------|---------------------------------------------------------------------------------|----------|--------------------|-------------------------|-----------------------|---------------------------------|------------------------------------------|----------------------------|-----------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------|
| 37                                | 1771  | 51                                                                              | 2,573    | R7D + C2-5         | 6                       | 4                     | 10,416                          | 8,100                                    | 9                          | 2,316                                   | 2,316                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| 38                                | 1643  | 50,149,49                                                                       | 5,046    | R9 + C2-5          | 6                       | 8                     | 42,873                          | 38,332                                   | 43                         | 4,541                                   | 4,541                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 155                         |
| 39                                | 1643  | 21                                                                              | 2,523    | R7D + C2-5         | 6                       | 5                     | 13,625                          | 11,354                                   | 13                         | 2,271                                   | 2,271                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 40                                | 1639  | 49,48                                                                           | 5,248    | R7D + C2-5         | 6                       | 6                     | 29,388                          | 24,665                                   | 27                         | 4,723                                   | 4,723                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 41                                | 1639  | 21                                                                              | 6,800    | R7D + C2-5         | 6                       | 6                     | 37,980                          | 31,860                                   | 35                         | 6,120                                   | 6,120                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 42                                | 1638  | 56                                                                              | 2,523    | R7D + C2-5         | 6                       | 5                     | 13,625                          | 11,354                                   | 13                         | 2,271                                   | 2,271                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 43                                | 1637  | 51,52,21,22                                                                     | 10,092   | R7D + C2-5         | 6                       | 6                     | 56,333                          | 47,250                                   | 53                         | 9,083                                   | 9,083                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| 44                                | 1637  | 24,25                                                                           | 5,046    | R7D                | 6                       | 5                     | 24,120                          | 24,120                                   | 27                         | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 90                          |
| 45                                | 1635  | 149,150                                                                         | 2,226    | R7D + C2-5         | 6                       | 5                     | 12,020                          | 10,017                                   | 11                         | 2,003                                   | 2,003                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 46                                | 1635  | 48,49                                                                           | 5,148    | R7D + C2-5         | 6                       | 6                     | 28,682                          | 24,073                                   | 27                         | 4,609                                   | 0                                               | 4,609                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 47                                | 1634  | 158                                                                             | 2,569    | R7D + C2-5         | 6                       | 5                     | 13,873                          | 11,561                                   | 13                         | 2,312                                   | 2,312                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 65                          |
| 48                                | 1643  | 63                                                                              | 2,523    | R7D + C2-5         | 6                       | 5                     | 11,483                          | 9,212                                    | 10                         | 2,271                                   | 2,271                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| 49                                | 1643  | 41                                                                              | 13,682   | R7D + C2-5 / R7B   | 6                       | 5                     | 66,669                          | 54,355                                   | 60                         | 12,314                                  | 0                                               | 0                                             | 0                                                | 12,314                                                | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| 50                                | 1667  | 102                                                                             | 1,740    | C6-4               | 12                      | 6                     | 10,429                          | 8,863                                    | 10                         | 1,566                                   | 1,566                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 51                                | 1666  | 105,5                                                                           | 6,042    | R7D + C2-5         | 6                       | 6                     | 33,585                          | 28,147                                   | 31                         | 5,438                                   | 5,438                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 52                                | 1788  | 28                                                                              | 2,265    | R9 + C2-5          | 9                       | 6                     | 13,490                          | 11,225                                   | 12                         | 2,265                                   | 2,265                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 53                                | 1786  | 28                                                                              | 3,750    | R9 + C2-5          | 9                       | 7                     | 25,097                          | 21,722                                   | 24                         | 3,375                                   | 0                                               | 3,375                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 54                                | 1786  | 123,23,22,121                                                                   | 5,594    | R9 + C2-5          | 9                       | 8                     | 46,710                          | 41,675                                   | 46                         | 5,035                                   | 5,035                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 55                                | 1785  | 23,22,21                                                                        | 5,306    | R9 + C2-5          | 9                       | 8                     | 44,611                          | 39,836                                   | 44                         | 4,775                                   | 0                                               | 4,775                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| 56                                | 1784  | 128,28,27,26,25,120                                                             | 14,971   | R9 + C2-5          | 9                       | 8                     | 127,166                         | 117,173                                  | 130                        | 9,993                                   | 9,993                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 185                         |
| 57                                | 1795  | 3,2,1                                                                           | 6,400    | R9 + C2-5          | 9                       | 8                     | 53,795                          | 48,035                                   | 53                         | 5,760                                   | 5,760                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| 58                                | 1667  | 26                                                                              | 2,768    | R9 + C2-5          | 9                       | 6                     | 17,827                          | 15,336                                   | 17                         | 2,491                                   | 0                                               | 2,491                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 59                                | 1667  | 22,120                                                                          | 6,467    | R9 + C2-5          | 9                       | 8                     | 54,817                          | 48,997                                   | 54                         | 5,820                                   | 0                                               | 5,820                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| 60                                | 1689  | 1                                                                               | 2,025    | R9 + C2-5          | 9                       | 6                     | 11,579                          | 9,756                                    | 11                         | 1,823                                   | 1,823                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 61                                | 1666  | 23                                                                              | 1,800    | R9 + C2-5          | 9                       | 6                     | 10,958                          | 9,338                                    | 10                         | 1,620                                   | 1,620                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 62                                | 1688  | 2,1                                                                             | 4,892    | R9 + C2-5          | 9                       | 9                     | 41,582                          | 37,179                                   | 41                         | 4,403                                   | 4,403                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 125                         |
| 63                                | 1665  | 25,24,23,122                                                                    | 11,101   | R9 + C2-5          | 9                       | 9                     | 99,606                          | 94,338                                   | 105                        | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 5,268                                     | 0                                         | 0                                    | 255                         |
| 64                                | 1687  | 3,102                                                                           | 3,200    | R9 + C2-5          | 9                       | 8                     | 27,081                          | 24,201                                   | 27                         | 2,880                                   | 2,880                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 125                         |
| 65                                | 1682  | 49                                                                              | 2,583    | R9 + C2-5          | 9                       | 8                     | 20,923                          | 18,598                                   | 21                         | 2,325                                   | 2,325                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| 66                                | 1682  | 4,3                                                                             | 5,000    | R9 + C2-5          | 9                       | 8                     | 42,300                          | 37,800                                   | 42                         | 4,500                                   | 4,500                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 165                         |
| 67                                | 1680  | 3                                                                               | 5,050    | R9 + C2-5          | 9                       | 8                     | 42,345                          | 37,800                                   | 42                         | 4,545                                   | 4,545                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 165                         |
| 68                                | 1644  | 12                                                                              | 10,092   | R9 + C2-5          | 9                       | 9                     | 85,782                          | 75,690                                   | 84                         | 10,092                                  | 0                                               | 0                                             | 10,092                                           | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |
| 69                                | 1771  | 1,2                                                                             | 4,583    | M1-6 / R10         | 12                      | 12                    | 54,996                          | 46,746                                   | 52                         | 4,125                                   | 4,125                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 4,125                                     | 0                                         | 0                                    | 165                         |
| 70                                | 1617  | 23,40,51,39,37,54,42,41,33,29,45,50,25,43,38,35,28,53,20,48,46,52,31,22,122,121 | 76,578   | R9 + C2-5          | 9                       | 8                     | 624,502                         | 534,502                                  | 668                        | 30,000                                  | 8,000                                           | 2,000                                         | 20,000                                           | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 60,000                                    | 0                                         | 37,500                               | 352                         |
| Total                             |       |                                                                                 |          |                    |                         |                       | 7,141,190                       | 5,984,419                                | 6,723                      | 762,779                                 | 325,195                                         | 56,371                                        | 47,633                                           | 112,399                                               | 0                                         | 0                                               | 221,181                                   | 0                                           | 166,317                                   | 155,171                                   | 140,004                              |                             |

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| Projected Development Site Number | Block | Lots                                                                            | Lot Area | Increment Residential Floor Area | Increment Residential DU | Increment Commercial Floor Area | Increment Commercial Floor Area- Local Retail | Increment Commercial Floor Area- Restaurant | Increment Commercial Floor Area- Grocery Store | Increment Commercial Floor Area- Destination Retail | Increment Commercial Floor Area- Hotels | Increment Commercial Floor Area- Storage Area | Increment Commercial Floor Area- Office | Increment Commercial Floor Area- Auto Use | Increment Community Facility Floor Area | Increment Total Manufacturing Floor Area |
|-----------------------------------|-------|---------------------------------------------------------------------------------|----------|----------------------------------|--------------------------|---------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|------------------------------------------|
| 55                                | 1785  | 23,22,21                                                                        | 5,306    | 13,279                           | 15                       | 0                               | -4,775                                        | 4,775                                       | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 56                                | 1784  | 128,28,27,26,25,120                                                             | 14,971   | 45,547                           | 51                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 57                                | 1795  | 3,2,1                                                                           | 6,400    | 16,643                           | 18                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 58                                | 1667  | 26                                                                              | 2,768    | 1,917                            | 2                        | 0                               | -2,491                                        | 2,491                                       | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 59                                | 1667  | 22,120                                                                          | 6,467    | 16,017                           | 18                       | 0                               | -5,820                                        | 5,820                                       | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 60                                | 1689  | 1                                                                               | 2,025    | 0                                | 0                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 61                                | 1666  | 23                                                                              | 1,800    | 181                              | 0                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 62                                | 1688  | 2,1                                                                             | 4,892    | 12,230                           | 14                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 63                                | 1665  | 25,24,23,122                                                                    | 11,101   | 27,648                           | 31                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 273                                     | 0                                        |
| 64                                | 1687  | 3,102                                                                           | 3,200    | 8,000                            | 9                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 65                                | 1682  | 49                                                                              | 2,583    | 5,398                            | 6                        | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 66                                | 1682  | 4,3                                                                             | 5,000    | 12,600                           | 14                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 67                                | 1680  | 3                                                                               | 5,050    | 12,150                           | 14                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 68                                | 1644  | 12                                                                              | 10,092   | 51,066                           | 57                       | 0                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                        |
| 69                                | 1771  | 1,2                                                                             | 4,583    | 46,746                           | 52                       | 4,125                           | 4,125                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 4,125                                   | 0                                        |
| 70                                | 1617  | 23,40,51,39,37,54,42,41,33,29,45,50,25,43,38,35,28,53,20,48,46,52,31,22,122,121 | 76,578   | 534,502                          | 668                      | 30,000                          | 8,000                                         | 2,000                                       | 20,000                                         | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 60,000                                  | 0                                        |
| Total                             |       |                                                                                 |          | 3,548,789                        | 4,162                    | 181,062                         | -26,097                                       | 56,371                                      | 33,056                                         | 76,803                                              | -32,974                                 | -53,834                                       | 138,328                                 | -10,592                                   | 158,922                                 | 132,394                                  |

| Potential Development Site Number | Block | Lots                           | Lot Area | Underlying Zoning | Existing FAR | Existing Building Floor Area | Existing Total Residential Floor Area | Existing Residential DU | Existing Total Commercial Floor Area | Existing Commercial Floor Area- Office | Existing Commercial Floor Area- Retail | Existing Commercial Floor Area- Auto Use | Existing Commercial Floor Area- Storage | Existing Total Manufacturing Floor Area | Existing Total Parking Floor Area | Additional Notes                 |
|-----------------------------------|-------|--------------------------------|----------|-------------------|--------------|------------------------------|---------------------------------------|-------------------------|--------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|----------------------------------|
| A                                 | 1753  | 37                             | 4,973    | C8-3              | 0.34         | 1,680                        | 0                                     | 0                       | 1,680                                | 0                                      | 0                                      | 1,680                                    | 0                                       | 0                                       | 0                                 |                                  |
| B                                 | 1772  | 69,70                          | 9,083    | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Surface parking and loading area |
| C                                 | 1767  | 1,2,3,4,67,68,69,71,72,168,169 | 23,172   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 23,172                            | Surface parking - NYPD           |
| D                                 | 1621  | 32                             | 7,440    | R7-2              | 0.91         | 6,765                        | 0                                     | 0                       | 6,765                                | 0                                      | 6,765                                  | 0                                        | 0                                       | 0                                       | 0                                 | Vacant ground floor commercial   |
| E                                 | 1644  | 37,38,39                       | 9,646    | C4-4D             | 2.32         | 22,395                       | 0                                     | 0                       | 22,395                               | 0                                      | 12,072                                 | 0                                        | 10,323                                  | 0                                       | 0                                 |                                  |
| F                                 | 1661  | 4                              | 4,875    | R8A               | 1.00         | 4,875                        | 0                                     | 0                       | 4,875                                | 0                                      | 4,875                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| G                                 | 1636  | 40,138,38,39                   | 4,895    | R8A               | 1.45         | 7,080                        | 3,060                                 | 3                       | 4,020                                | 0                                      | 4,020                                  | 0                                        | 0                                       | 0                                       | 0                                 | Vacant ground floor commercial   |
| H                                 | 1633  | 39,38                          | 5,050    | R8A               | 1.19         | 5,985                        | 0                                     | 0                       | 5,985                                | 0                                      | 5,985                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| I                                 | 1643  | 38,40,39                       | 6,709    | C4-4D             | 2.09         | 14,000                       | 4,656                                 | 4                       | 9,344                                | 0                                      | 9,344                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| J                                 | 1639  | 39,40,41,38,137                | 14,942   | R8A               | 0.52         | 7,755                        | 2,200                                 | 4                       | 5,555                                | 0                                      | 3,815                                  | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| K                                 | 1620  | 23                             | 271,850  | R7-2              | 2.44         | 662,000                      | 662,000                               | 672                     | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Taft Houses                      |
| L                                 | 1640  | 1                              | 262,446  | R7-2              | 2.45         | 642,289                      | 630,713                               | 720                     | 11,776                               | 4,723                                  | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Johnson Houses                   |
| M                                 | 1640  | 21                             | 194,545  | R7-2              | 2.58         | 502,522                      | 491,745                               | 587                     | 10,777                               | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 | Johnson Houses                   |
| N                                 | 1662  | 1                              | 329,800  | R7-2              | 1.69         | 557,872                      | 27,276                                | 689                     | 13,601                               | 12,267                                 | 1,334                                  | 0                                        | 0                                       | 0                                       | 0                                 | Jefferson Houses                 |
| O                                 | 1755  | 33                             | 17,985   | C8-3              | 5.93         | 106,596                      | 0                                     | 0                       | 106,596                              | 0                                      | 0                                      | 0                                        | 106,596                                 | 0                                       | 0                                 |                                  |
| P                                 | 1784  | 45,4,47,48                     | 13,406   | C4-4D             | 2.76         | 36,990                       | 0                                     | 0                       | 36,990                               | 15,765                                 | 400                                    | 0                                        | 2,082                                   | 13,118                                  | 0                                 |                                  |
| Q                                 | 1748  | p/o 35                         | 20,183   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 20,183                            | Surface parking                  |
| R                                 | 1748  | p/o 1                          | 20,183   | R7-2              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 20,183                            | Surface parking                  |
| S                                 | 1667  | 45                             | 10,520   | C4-4D             | 3.20         | 33,612                       | 0                                     | 0                       | 33,612                               | 0                                      | 33,612                                 | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| T                                 | 1771  | 70,69,71                       | 6,054    | M1-4              | 0.00         | 0                            | 0                                     | 0                       | 0                                    | 0                                      | 0                                      | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| U                                 | 1654  | 3,4,45                         | 18,326   | R8A               | 1.15         | 21,062                       | 0                                     | 0                       | 21,062                               | 0                                      | 21,062                                 | 0                                        | 0                                       | 0                                       | 0                                 |                                  |
| V                                 | 1775  | 170                            | 6,950    | M1-2              | 0.78         | 5,390                        | 0                                     | 0                       | 5,390                                | 0                                      | 0                                      | 0                                        | 0                                       | 5,390                                   | 0                                 |                                  |

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| Potential Development Site Number | Block | Lots                           | Lot Area | No Action Underlying Zoning | No Action Maximum FAR | No Action Built FAR | No Action Building Floor Area | No Action Total Residential Floor Area | No Action Residential DU | No Action Total Commercial Floor Area | No Action Commercial Floor Area- Local Retail | No Action Commercial Floor Area- Restaurant | No Action Commercial Floor Area- Grocery Store | No Action Commercial Floor Area- Destination Retail | No Action Commercial Floor Area- Hotels | No Action Commercial Floor Area- Storage Area | No Action Commercial Floor Area- Office | No Action Commercial Floor Area- Auto Use | No Action Community Facility Floor Area | No ActionTotal Manufacturing Floor Area | No Action Total Parking Floor Area | No Action Building Height |
|-----------------------------------|-------|--------------------------------|----------|-----------------------------|-----------------------|---------------------|-------------------------------|----------------------------------------|--------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| A                                 | 1753  | 37                             | 4,973    | C8-3                        | 6.50                  | 0.3                 | 1,680                         | 0                                      | 0                        | 1,680                                 | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 1,680                                     | 0                                       | 0                                       | 0                                  | 0                         |
| B                                 | 1772  | 69,70                          | 9,083    | R7-2                        | 6.50                  | 3.9                 | 35,035                        | 26,861                                 | 30                       | 8,174                                 | 8,174                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 65                                 |                           |
| C                                 | 1767  | 1,2,3,4,67,68,69,71,72,168,169 | 23,172   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 23,172                             | 0                         |
| D                                 | 1621  | 32                             | 7,440    | R7-2                        | 6.50                  | 3.4                 | 25,594                        | 18,154                                 | 20                       | 7,440                                 | 7,440                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| E                                 | 1644  | 37,38,39                       | 9,646    | C4-4D                       | 6.50                  | 5.8                 | 55,890                        | 43,740                                 | 49                       | 12,150                                | 12,150                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 140                                |                           |
| F                                 | 1661  | 4                              | 4,875    | R8A                         | 6.50                  | 6.0                 | 29,054                        | 24,666                                 | 27                       | 4,388                                 | 4,388                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 115                                |                           |
| G                                 | 1636  | 40,138,38,39                   | 4,895    | R8A                         | 6.50                  | 5.9                 | 29,077                        | 24,671                                 | 27                       | 4,406                                 | 4,406                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 85                                 |                           |
| H                                 | 1633  | 39,38                          | 5,050    | R8A                         | 6.50                  | 6.0                 | 30,389                        | 25,844                                 | 29                       | 4,545                                 | 4,545                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 105                                |                           |
| I                                 | 1643  | 38,40,39                       | 6,709    | C4-4D                       | 6.50                  | 6.0                 | 40,058                        | 29,160                                 | 32                       | 10,898                                | 6,038                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 4,860                                   | 0                                         | 0                                       | 0                                       | 90                                 |                           |
| J                                 | 1639  | 39,40,41,38,137                | 14,942   | R8A                         | 6.50                  | 0.5                 | 7,755                         | 2,200                                  | 0                        | 5,555                                 | 5,555                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| K                                 | 1620  | 23                             | 271,850  | R7-2                        | 6.50                  | 2.4                 | 662,000                       | 662,000                                | 672                      | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 170                                |                           |
| L                                 | 1640  | 1                              | 262,446  | R7-2                        | 6.50                  | 2.4                 | 642,489                       | 630,713                                | 720                      | 11,776                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 7,053                                         | 4,723                                   | 0                                         | 0                                       | 0                                       | 130                                |                           |
| M                                 | 1640  | 21                             | 194,545  | R7-2                        | 6.50                  | 2.6                 | 502,522                       | 491,745                                | 587                      | 10,777                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 10,777                                  | 0                                         | 0                                       | 0                                       | 130                                |                           |
| N                                 | 1662  | 1                              | 329,800  | R7-2                        | 6.50                  | 1.7                 | 557,872                       | 544,271                                | 689                      | 13,601                                | 1,334                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 12,267                                  | 0                                         | 0                                       | 0                                       | 60                                 |                           |
| O                                 | 1755  | 33                             | 17,985   | C8-3                        | 6.50                  | 5.9                 | 106,596                       | 0                                      | 0                        | 106,596                               | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 106,596                                       | 0                                       | 0                                         | 0                                       | 0                                       | 90                                 |                           |
| P                                 | 1784  | 45,4,47,48                     | 13,406   | C4-4D                       | 6.50                  | 4.1                 | 54,548                        | 37,620                                 | 42                       | 9,404                                 | 9,404                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 7,524                                   | 0                                       | 0                                  | 80                        |
| Q                                 | 1748  | p/o 35                         | 20,183   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 20,183                             | 0                         |
| R                                 | 1748  | p/o 1                          | 20,183   | R7-2                        | 6.50                  | 0.0                 | 0                             | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 20,183                             | 0                         |
| S                                 | 1667  | 45                             | 10,520   | C4-4D                       | 6.50                  | 3.2                 | 33,612                        | 0                                      | 0                        | 33,612                                | 33,612                                        | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| T                                 | 1771  | 70,69,71                       | 6,054    | M1-4                        | 6.50                  | 2.0                 | 12,108                        | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 12,108                                  | 0                                  | 45                        |
| U                                 | 1654  | 3,4,45                         | 18,326   | R8A                         | 6.50                  | 6.0                 | 110,243                       | 106,534                                | 118                      | 3,709                                 | 3,709                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 14,205                             | 115                       |
| V                                 | 1775  | 170                            | 6,950    | M1-2                        | 4.80                  | 0.8                 | 5,390                         | 0                                      | 0                        | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 5,390                                   | 0                                  | 0                         |
| X                                 | 1786  | 24,26                          | 5,484    | R8A                         | 6.00                  | 1.9                 | 10,276                        | 0                                      | 0                        | 10,276                                | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 10,276                                  | 0                                         | 0                                       | 0                                       | 0                                  | 0                         |
| Y                                 | 1796  | 2                              | 1,875    | R8A                         | 6.00                  | 5.3                 | 9,978                         | 8,280                                  | 9                        | 1,698                                 | 1,698                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| Z                                 | 1689  | 51                             | 2,533    | R8A                         | 6.00                  | 6.0                 | 15,193                        | 12,852                                 | 15                       | 2,341                                 | 2,341                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| AA                                | 1683  | 50                             | 1,875    | R8A                         | 6.00                  | 5.7                 | 10,705                        | 8,906                                  | 10                       | 1,799                                 | 1,799                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 95                        |
| AB                                | 1635  | 51,52                          | 2,167    | R7-2                        | 6.50                  | 3.4                 | 7,343                         | 5,393                                  | 6                        | 1,950                                 | 1,950                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AC                                | 1633  | 52                             | 2,023    | R7-2                        | 6.50                  | 3.3                 | 6,584                         | 4,719                                  | 5                        | 1,865                                 | 1,865                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AD                                | 1632  | 20                             | 3,500    | R7-2                        | 6.50                  | 3.4                 | 12,019                        | 8,869                                  | 10                       | 3,150                                 | 3,150                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AE                                | 1643  | 48,47                          | 8,242    | R7A                         | 4.00                  | 4.0                 | 32,815                        | 25,397                                 | 28                       | 7,418                                 | 7,418                                         | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 65                        |
| AF                                | 1662  | 16                             | 39,003   | R7-2                        | 4.00                  | 2.4                 | 95,284                        | 95,284                                 | 108                      | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 145                       |
| AG                                | 1684  | 1                              | 393,600  | R7-2                        | 4.00                  | 1.9                 | 733,050                       | 733,050                                | 1,493                    | 0                                     | 0                                             | 0                                           | 0                                              | 0                                                   | 0                                       | 0                                             | 0                                       | 0                                         | 0                                       | 0                                       | 0                                  | 145                       |

| Potential Development Site Number | Block | Lots                           | Lot Area | With Action Zoning | With Action Maximum FAR | With Action Built FAR | With Action Building Floor Area | With Action Total Residential Floor Area | With Action Residential DU | With Action Total Commercial Floor Area | With Action Commercial Floor Area- Local Retail | With Action Commercial Floor Area- Restaurant | With Action Commercial Floor Area- Grocery Store | With Action Commercial Floor Area- Destination Retail | With Action Commercial Floor Area- Hotels | With Action Commercial Floor Area- Storage Area | With Action Commercial Floor Area- Office | With Action Commercial Floor Area- Auto Use | With Action Community Facility Floor Area | With ActionTotal Manufacturing Floor Area | With Action Total Parking Floor Area | With Action Building Height |
|-----------------------------------|-------|--------------------------------|----------|--------------------|-------------------------|-----------------------|---------------------------------|------------------------------------------|----------------------------|-----------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------|
| A                                 | 1753  | 37                             | 4,973    | M1-6 / R9          | 9                       | 8                     | 41,403                          | 31,457                                   | 35                         | 9,946                                   | 4,973                                           | 4,973                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 115                         |
| B                                 | 1772  | 69,70                          | 9,083    | M1-6 / R10         | 12                      | 12                    | 107,526                         | 91,177                                   | 101                        | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 16,349                                    | 0                                    | 170                         |
| C                                 | 1767  | 1,2,3,4,67,68,69,71,72,168,169 | 23,172   | R10 + C2-5         | 12                      | 12                    | 269,535                         | 231,266                                  | 257                        | 27,258                                  | 0                                               | 0                                             | 0                                                | 12,500                                                | 0                                         | 0                                               | 14,758                                    | 0                                           | 0                                         | 0                                         | 11,011                               | 280                         |
| D                                 | 1621  | 32                             | 7,440    | R9 + C2-5          | 9                       | 9                     | 63,240                          | 55,800                                   | 62                         | 7,440                                   | 7,440                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 155                         |
| E                                 | 1644  | 37,38,39                       | 9,646    | C4-6               | 12                      | 10                    | 95,310                          | 83,160                                   | 92                         | 12,150                                  | 6,570                                           | 5,580                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 160                         |
| F                                 | 1661  | 4                              | 4,875    | R10 + C2-5         | 12                      | 12                    | 57,488                          | 50,400                                   | 56                         | 7,088                                   | 4,388                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 2,700                                     | 0                                           | 0                                         | 0                                         | 0                                    | 230                         |
| G                                 | 1636  | 40,138,38,39                   | 4,895    | R10 + C2-5         | 12                      | 12                    | 57,434                          | 49,302                                   | 55                         | 8,132                                   | 8,132                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| H                                 | 1633  | 39,38                          | 5,050    | R10 + C2-5         | 12                      | 12                    | 60,120                          | 52,394                                   | 58                         | 7,726                                   | 4,545                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 3,181                                     | 0                                           | 0                                         | 0                                         | 0                                    | 210                         |
| I                                 | 1643  | 38,40,39                       | 6,709    | C4-6               | 12                      | 12                    | 80,246                          | 68,846                                   | 76                         | 11,400                                  | 6,038                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 5,362                                     | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| J                                 | 1639  | 39,40,41,38,137                | 14,942   | R10 + C2-5         | 12                      | 9                     | 138,361                         | 119,565                                  | 133                        | 9,398                                   | 9,398                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 9,398                                     | 0                                         | 0                                    | 175                         |
| K                                 | 1620  | 23                             | 271,850  | R7-2 + C1-5        | 3                       | 3                     | 734,550                         | 662,000                                  | 736                        | 72,550                                  | 72,550                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 170                         |
| L                                 | 1640  | 1                              | 262,446  | R7-2 + C1-5        | 3                       | 3                     | 783,589                         | 630,713                                  | 720                        | 152,876                                 | 141,100                                         | 0                                             | 0                                                | 0                                                     | 0                                         | 7,053                                           | 4,723                                     | 0                                           | 0                                         | 0                                         | 0                                    | 130                         |
| M                                 | 1640  | 21                             | 194,545  | R7-2 + C1-5        | 3                       | 3                     | 595,250                         | 491,745                                  | 587                        | 103,505                                 | 92,728                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 10,777                                    | 0                                           | 0                                         | 0                                         | 0                                    | 130                         |
| N                                 | 1662  | 1                              | 329,800  | R7-2 + C1-5        | 3                       | 2                     | 672,314                         | 544,271                                  | 689                        | 128,043                                 | 115,776                                         | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 12,267                                    | 0                                           | 0                                         | 0                                         | 0                                    | 60                          |
| O                                 | 1755  | 33                             | 17,985   | M1-6 / R9          | 9                       | 6                     | 106,596                         | 70,626                                   | 78                         | 17,985                                  | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 17,985                                    | 0                                           | 17,985                                    | 0                                         | 0                                    | 0                           |
| P                                 | 1784  | 45,4,47,48                     | 13,406   | C4-6               | 12                      | 12                    | 159,747                         | 140,063                                  | 156                        | 9,842                                   | 9,842                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 9,842                                     | 0                                         | 0                                    | 190                         |
| Q                                 | 1748  | p/o 35                         | 20,183   | C6-4               | 12                      | 12                    | 233,561                         | 203,148                                  | 226                        | 30,413                                  | 0                                               | 0                                             | 0                                                | 12,248                                                | 0                                         | 0                                               | 18,165                                    | 0                                           | 0                                         | 0                                         | 26,757                               | 330                         |
| R                                 | 1748  | p/o 1                          | 20,183   | C6-4               | 12                      | 12                    | 242,196                         | 164,773                                  | 183                        | 77,423                                  | 0                                               | 0                                             | 0                                                | 16,874                                                | 0                                         | 0                                               | 60,549                                    | 0                                           | 0                                         | 0                                         | 23,492                               | 295                         |
| S                                 | 1667  | 45                             | 10,520   | C4-6               | 12                      | 12                    | 125,525                         | 107,810                                  | 120                        | 17,715                                  | 10,035                                          | 7,680                                         | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 200                         |
| T                                 | 1771  | 70,69,71                       | 6,054    | M1-6 / R10         | 12                      | 12                    | 72,648                          | 60,540                                   | 67                         | 12,108                                  | 12,108                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 240                         |
| U                                 | 1654  | 3,4,45                         | 18,326   | R10 + C2-5         | 12                      | 12                    | 217,713                         | 187,477                                  | 208                        | 30,236                                  | 7,613                                           | 0                                             | 9,867                                            | 0                                                     | 0                                         | 0                                               | 12,756                                    | 0                                           | 0                                         | 0                                         | 0                                    | 210                         |
| V                                 | 1775  | 170                            | 6,950    | M1-6 / R10         | 12                      | 12                    | 83,400                          | 52,125                                   | 58                         | 18,765                                  | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 18,765                                    | 0                                           | 0                                         | 12,510                                    | 0                                    | 205                         |
| X                                 | 1786  | 24,26                          | 5,484    | R9 + C2-5          | 9                       | 8                     | 46,243                          | 41,018                                   | 46                         | 0                                       | 0                                               | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 5,225                                     | 0                                         | 0                                    | 135                         |
| Y                                 | 1796  | 2                              | 1,875    | R9 + C2-5          | 9                       | 5                     | 9,978                           | 8,280                                    | 9                          | 1,698                                   | 1,698                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| Z                                 | 1689  | 51                             | 2,533    | R9 + C2-5          | 9                       | 6                     | 15,492                          | 13,212                                   | 15                         | 2,280                                   | 2,280                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| AA                                | 1683  | 50                             | 1,875    | R9 + C2-5          | 9                       | 6                     | 10,705                          | 8,906                                    | 10                         | 1,799                                   | 1,799                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 95                          |
| AB                                | 1635  | 51,52                          | 2,167    | R7D + C2-5         | 6                       | 6                     | 12,059                          | 10,109                                   | 11                         | 1,950                                   | 1,950                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 100                         |
| AC                                | 1633  | 52                             | 2,023    | R7D + C2-5         | 6                       | 4                     | 8,944                           | 7,079                                    | 8                          | 1,865                                   | 1,865                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 75                          |
| AD                                | 1632  | 20                             | 3,500    | R7D + C2-5         | 6                       | 6                     | 19,598                          | 16,448                                   | 18                         | 3,150                                   | 3,150                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| AE                                | 1643  | 48,47                          | 8,242    | R7D + C2-5         | 6                       | 6                     | 46,146                          | 38,728                                   | 43                         | 7,418                                   | 7,418                                           | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 105                         |
| AF                                | 1662  | 16                             | 39,003   | R7-2/C1-5          | 3                       | 3                     | 112,421                         | 95,284                                   | 108                        | 17,137                                  | 17,137                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |
| AG                                | 1684  | 1                              | 393,600  | R7-2/C1-5          | 3                       | 2                     | 784,462                         | 733,050                                  | 1,493                      | 51,412                                  | 51,412                                          | 0                                             | 0                                                | 0                                                     | 0                                         | 0                                               | 0                                         | 0                                           | 0                                         | 0                                         | 0                                    | 145                         |

[illegible]



## **Appendix 3**

### **TDF Memo**



**DRAFT**

**TECHNICAL MEMORANDUM**

**TO:** NYCDCP

**FROM:** Philip Habib & Associates

**DATE:** November 1, 2016

**PROJECT:** East Harlem Rezoning Proposal EIS (PHA No. 1223E)

**RE:** Transportation Planning Factors and Travel Demand Forecast

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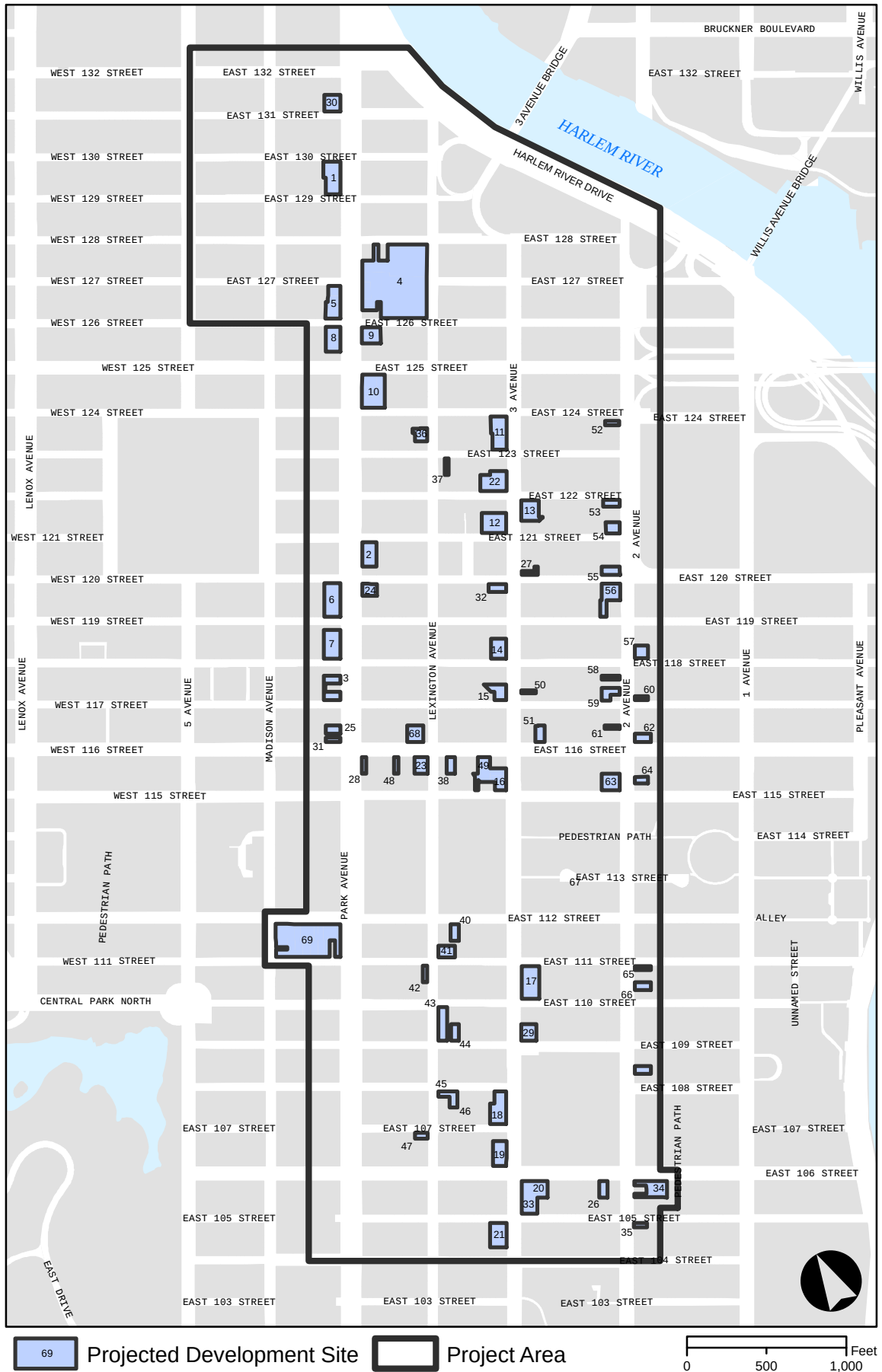
This memorandum summarizes the transportation planning factors to be used for the analyses of traffic, parking, transit, and pedestrian conditions for the *East Harlem Rezoning Proposal EIS*. Estimates of the peak travel demand for the Proposed Actions' reasonable worst-case development scenario (RWCDs) are provided, along with a discussion of trip assignment methodologies and study area definitions.

**THE PROPOSED ACTIONS**

The New York City Department of City Planning (DCP), together with the Department of Housing Preservation and Development (HPD), are proposing a series of land use actions (collectively the "Proposed Actions") in response to the recommendations of the East Harlem Neighborhood Plan, which is the subject of an ongoing community process, to create opportunities for housing, including affordable housing, community facilities, economic development and other services in an approximately 115-block area of the East Harlem neighborhood of Manhattan, Community District 11. The project area within East Harlem is generally bounded by East 104<sup>th</sup> Street to the south, East 132<sup>nd</sup> Street to the north, Park and Fifth avenues to the west and Second Avenue to the east (see **Figure 1**). Within this area, the Proposed Actions are anticipated to facilitate new residential, commercial, community facility, and manufacturing development.

**THE REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDs)**

In order to assess the potential effects of the Proposed Actions, a RWCDs for both "future without the proposed actions" (No-Action) and "future with the proposed actions" (With-Action) conditions is analyzed for an analysis year of 2027. To develop a reasonable estimate of future growth, likely development sites were identified and divided into two categories: projected development sites and



potential development sites. The projected development sites are those considered more likely to be developed within the 10-year analysis period for the Proposed Actions (i.e., by the 2027 analysis year), while potential sites are considered less likely to be developed over the same period. A total of 69 projected development sites were identified and are considered for the purposes of the transportation analyses<sup>1</sup> (see **Figure 1**). **Table 1** shows the total anticipated No-Action and With-Action land uses on projected development sites in 2027 under the RWCDs. As shown in **Table 1**, the Proposed Actions are expected to generate a net increase of 4,107 dwelling units (DU), 279,898 square feet (sf) of commercial space, 154,797 sf of community facility space and 49,128 sf of research laboratory space on the 69 projected development sites (the “Proposed Project”). There would also be a net decrease of 19,695 sf of light industrial space which includes wholesale/warehousing, storage and manufacturing uses.

**TABLE 1**  
**2027 RWCDs<sup>1</sup> No-Action and With-Action Land Uses**

| Land Use                                                                                                                                                                             | No-Action Condition     | With-Action Condition  | Net Increment             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------|---------------------------|
| <b>Residential</b>                                                                                                                                                                   |                         |                        |                           |
| Residential                                                                                                                                                                          | 2,565 DU                | 6,672 DU               | +4,107 DU                 |
| <b>Commercial</b>                                                                                                                                                                    |                         |                        |                           |
| Local Retail                                                                                                                                                                         | 351,292 sf              | 321,070 sf             | -30,222 sf                |
| Destination Retail                                                                                                                                                                   | 35,596 sf               | 112,399 sf             | +76,803 sf                |
| Supermarket                                                                                                                                                                          | 14,577 sf               | 47,633 sf              | +33,056 sf                |
| Restaurant                                                                                                                                                                           | 0 sf                    | 56,371 sf              | +56,371 sf                |
| Office                                                                                                                                                                               | 82,853 sf               | 270,309 sf             | +187,456 sf               |
| Hotel                                                                                                                                                                                | 32,974 sf<br>(82 rooms) | 0 sf                   | -32,974 sf<br>(-82 rooms) |
| Auto Repair                                                                                                                                                                          | 10,592 sf               | 0 sf                   | -10,592 sf                |
| <b>Total Commercial</b>                                                                                                                                                              | <b>527,884 sf</b>       | <b>807,782 sf</b>      | <b>+279,898 sf</b>        |
| <b>Other Uses</b>                                                                                                                                                                    |                         |                        |                           |
| Community Facility <sup>2</sup>                                                                                                                                                      | 7,395 sf                | 162,192 sf             | +154,797 sf               |
| Light Industrial                                                                                                                                                                     | 76,611 sf <sup>3</sup>  | 56,916 sf <sup>4</sup> | -19,695 sf                |
| Research Laboratory                                                                                                                                                                  | 0 sf                    | 49,128 sf              | +49,128 sf                |
| <b>Total Floor Area</b>                                                                                                                                                              | <b>84,006 sf</b>        | <b>268,236 sf</b>      | <b>+184,230 sf</b>        |
| <b>Parking</b>                                                                                                                                                                       |                         |                        |                           |
| Parking Spaces <sup>5</sup>                                                                                                                                                          | 350                     | 466                    | +116                      |
| <b>Notes:</b>                                                                                                                                                                        |                         |                        |                           |
| <sup>1</sup> 111 <sup>th</sup> Street alternative site is included as a worst-case condition for preliminary transportation planning purposes.                                       |                         |                        |                           |
| <sup>2</sup> Community facility space assumed to be medical office use for planning purposes.                                                                                        |                         |                        |                           |
| <sup>3</sup> Includes 9,817 sf of wholesale/warehousing uses, 53,834 sf of storage uses and 12,960 sf of manufacturing uses.                                                         |                         |                        |                           |
| <sup>4</sup> Includes 24,516 sf of wholesale/warehousing uses and 32,400 sf of manufacturing uses.                                                                                   |                         |                        |                           |
| <sup>5</sup> Conservatively assumes that 30 percent of DUs would be designated as affordable and would therefore not require accessory parking under Mandatory Inclusionary Housing. |                         |                        |                           |

<sup>1</sup> The 111th Street alternative site (Site 69) is included as a worst-case condition for preliminary transportation planning purposes.

## TRANSPORTATION PLANNING FACTORS

The transportation planning factors used to forecast travel demand for the RWCDs land uses are summarized in **Table 2** and discussed below. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factors for each potential land use were primarily based on those cited in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, factors developed for recent environmental reviews, 2010-2014 American Community Survey (ACS) journey-to-work data, AASHTO CTPP reverse journey-to-work 5-year data (2006-2010), and data from other standard professional references. Factors are shown for the AM and PM peak hours (typical peak periods for commuter travel) and the midday and Saturday peak hours (typical peak periods for retail demand).

### Retail

The trip generation rates and temporal distributions for local and destination retail uses were based on data from the *CEQR Technical Manual*. The local retail modal split was based on survey data provided by the New York City Department of Transportation (NYCDOT), the directional in/out splits and vehicle occupancy rates were based on the *West Harlem Rezoning FEIS* (2012), and truck trip factors were based on data from the *CEQR Technical Manual*. The modal and directional in/out splits, vehicle occupancy rates and truck trip factors for destination retail uses were based on data from the *East 125<sup>th</sup> Street Development FEIS* (2008). To reflect the large scale of the project area, it was assumed that 40 percent of all local retail trips would be linked trips. Factors for the supermarket use were derived from data from *The Food Retail Expansion to Support Health (FRESH) Food Store Program* (2009).

### Non-Retail Commercial Uses

Non-retail commercial land uses include office, restaurant, hotel and auto repair uses. As shown in **Table 2**, the factors used to forecast travel demand from these uses were developed from a variety of sources, including the *CEQR Technical Manual*, the *West Harlem Rezoning FEIS*, the *East New York Rezoning FEIS* (2016), the *Vanderbilt Corridor and One Vanderbilt FEIS* (2015), the *Broadway Triangle FEIS* (2009) and AASHTO CTPP reverse journey-to-work data for workers in census tracts encompassing East Harlem (Manhattan Census Tracts 166, 168, 170, 172, 174.01, 174.02, 180, 182, 184, 188, 194, 196, 198, 206, and 242). A linked-trip credit of 25 percent was assumed for the restaurant use in the midday period and 15 percent in the PM and Saturday periods, consistent with the *Vanderbilt Corridor and One Vanderbilt FEIS*.

### Community Facility

For transportation planning purposes it was assumed that the community facility uses that would be developed on the projected development sites under the RWCDs in the No-Action and With-Action conditions would consist primarily of medical office space. As shown in **Table 2**, the factors used to forecast travel demand from this land use were derived from the *Jamaica Plan Rezoning FGEIS* (2007), the *St. Vincent's Campus Redevelopment FEIS* (2012), and AASHTO CTPP reverse journey-to-work data for workers in census tracts encompassing East Harlem.

**TABLE 2: Transportation Planning Factors**

| Land Use:              | Local Retail |        | Office       |        | Residential  |          | Restaurant   |          | Destination Retail |             | Supermarket  |        |
|------------------------|--------------|--------|--------------|--------|--------------|----------|--------------|----------|--------------------|-------------|--------------|--------|
| Size/Units:            | -30,222 gsf  |        | 187,456 gsf  |        | 4,107 DU     |          | 56,371 gsf   |          | 76,803 gsf         |             | 33,056 gsf   |        |
| Trip Generation:       | (1)          |        | (1)          |        | (1)          |          | (7)          |          | (1)                |             | (9,10)       |        |
| Weekday                | 205          |        | 18.0         |        | 8.075        |          | 173.0        |          | 78.2               |             | 205          |        |
| Saturday               | 240          |        | 3.9          |        | 9.600        |          | 181.0        |          | 92.5               |             | 271          |        |
|                        | per 1,000 sf |        | per 1,000 sf |        | per DU       |          | per 1,000 sf |          | per 1,000 sf       |             | per 1,000 sf |        |
| Temporal Distribution: | (1)          |        | (1)          |        | (1)          |          | (7)          |          | (1)                |             | (9,11)       |        |
| AM                     | 3.0%         |        | 12.0%        |        | 10.0%        |          | 0.0%         |          | 3.0%               |             | 3.0%         |        |
| MD                     | 19.0%        |        | 15.0%        |        | 5.0%         |          | 6.2%         |          | 9.0%               |             | 12.0%        |        |
| PM                     | 10.0%        |        | 14.0%        |        | 11.0%        |          | 8.3%         |          | 9.0%               |             | 10.0%        |        |
| SatMD                  | 10.0%        |        | 17.0%        |        | 8.0%         |          | 11.0%        |          | 11%                |             | 12.0%        |        |
|                        | (17)         |        | (3) (18)     |        | (5)          |          | (8)          |          | (4)                |             | (9,11)       |        |
| Modal Splits:          | AM/MD/PM     | SAT    | AM/PM        | MD/SAT | All Periods  | AM/MD/PM | SAT          | AM/MD/PM | SAT                | All Periods | AM/MD/PM     | SAT    |
| Auto                   | 2.5%         | 7.0%   | 17.6%        | 2.0%   | 8.1%         | 2.5%     | 7.0%         | 15.0%    | 17.0%              | 4.0%        | 15.0%        | 17.0%  |
| Taxi                   | 0.5%         | 0.0%   | 1.6%         | 3.0%   | 0.8%         | 0.5%     | 0.0%         | 9.0%     | 10.0%              | 3.0%        | 9.0%         | 10.0%  |
| Subway/Railroad        | 16.5%        | 21.0%  | 48.5%        | 6.0%   | 65.0%        | 16.5%    | 21.0%        | 27.0%    | 16.0%              | 5.0%        | 27.0%        | 16.0%  |
| Bus                    | 4.0%         | 9.0%   | 16.2%        | 6.0%   | 11.9%        | 4.0%     | 9.0%         | 12.0%    | 20.0%              | 5.0%        | 12.0%        | 20.0%  |
| Walk/Other             | 76.5%        | 63.0%  | 16.1%        | 83.0%  | 14.2%        | 76.5%    | 63.0%        | 37.0%    | 37.0%              | 83.0%       | 37.0%        | 37.0%  |
|                        | 100.0%       | 100.0% | 100.0%       | 100%   | 100.0%       | 100.0%   | 100.0%       | 100.0%   | 100.0%             | 100.0%      | 100.0%       | 100.0% |
| In/Out Splits:         | (2)          |        | (2)          |        | (2)          |          | (7)          |          | (4)                |             | (9,11)       |        |
|                        | In           | Out    | In           | Out    | In           | Out      | In           | Out      | In                 | Out         | In           | Out    |
| AM                     | 50%          | 50%    | 95.0%        | 5.0%   | 16.0%        | 84.0%    | 50%          | 50%      | 61.0%              | 39.0%       | 45%          | 55%    |
| MD                     | 50%          | 50%    | 48.0%        | 52.0%  | 50.0%        | 50.0%    | 50%          | 50%      | 55.0%              | 45.0%       | 46%          | 54%    |
| PM                     | 50%          | 50%    | 15.0%        | 85.0%  | 67.0%        | 33.0%    | 67%          | 33%      | 47.0%              | 53.0%       | 47%          | 53%    |
| Sat MD                 | 50%          | 50%    | 60.0%        | 40.0%  | 53.0%        | 47.0%    | 50%          | 50%      | 55.0%              | 45.0%       | 46%          | 54%    |
|                        |              |        |              |        | (2,5,6)      |          |              |          | (4)                |             |              |        |
| Vehicle Occupancy:     | (2)          |        | (2,3)        |        | AM/PM MD/SMD |          | (7)          |          | AM/MD/PM SAT       |             | (9,11)       |        |
| Auto                   | 2.00         |        | 1.15         |        | 1.15 1.61    |          | 2.20         |          | 2.00 2.70          |             | 1.65         |        |
| Taxi                   | 2.00         |        | 1.40         |        | 1.40 1.96    |          | 2.30         |          | 2.00 2.80          |             | 1.40         |        |
| Truck Trip Generation: | (1)          |        | (1)          |        | (1)          |          | (7)          |          | (4)                |             | (9,11)       |        |
| Weekday                | 0.35         |        | 0.32         |        | 0.06         |          | 3.60         |          | 0.35               |             | 0.35         |        |
| Saturday               | 0.04         |        | 0.01         |        | 0.02         |          | 3.60         |          | 0.02               |             | 0.04         |        |
|                        | per 1,000 sf |        | per 1,000 sf |        | per DU       |          | per 1,000 sf |          | per 1,000 sf       |             | per 1,000 sf |        |
|                        | (1)          |        | (1)          |        | (1)          |          | (7)          |          | (4)                |             | (9,11)       |        |
| AM                     | 8.0%         |        | 10.0%        |        | 12.0%        |          | 0.0%         |          | 7.7%               |             | 10.0%        |        |
| MD                     | 11.0%        |        | 11.0%        |        | 9.0%         |          | 6.0%         |          | 11.0%              |             | 8.0%         |        |
| PM                     | 2.0%         |        | 2.0%         |        | 2.0%         |          | 1.0%         |          | 1.0%               |             | 5.0%         |        |
| Sat MD                 | 11.0%        |        | 11.0%        |        | 9.0%         |          | 6.0%         |          | 11.0%              |             | 10.0%        |        |
|                        | (1)          |        | (1)          |        | (1)          |          | (7)          |          | (4)                |             | (9,11)       |        |
|                        | In           | Out    | In           | Out    | In           | Out      | In           | Out      | In                 | Out         | In           | Out    |
|                        | 50.0%        | 50.0%  | 50.0%        | 50.0%  | 50.0%        | 50.0%    | 50.0%        | 50.0%    | 50.0%              | 50.0%       | 50.0%        | 50.0%  |

**TABLE 2: Transportation Planning Factors (continued)**

| Land Use:                     | Auto Repair/<br>Related | Light<br>Industrial | Office<br>(Staff) | Office<br>(Visitors) | Laboratory<br>Space | Hotel       |
|-------------------------------|-------------------------|---------------------|-------------------|----------------------|---------------------|-------------|
| <b>Size/Units:</b>            | -10,592 gsf             | -19,695 gsf         | 154,797 gsf       | 154,797 gsf          | 49,128 gsf          | -82 Rooms   |
| <b>Trip Generation:</b>       | (18)                    | (12)                | (14,15)           | (14,15)              | (19)                | (1)         |
| Weekday                       | 19.42                   | 14.7                | 10.0              | 33.6                 | 14.7                | 9.40        |
| Saturday                      | 19.42                   | 2.2                 | 4.3               | 14.5                 | 2.2                 | 9.40        |
|                               | per 1,000 sf            | per 1,000 sf        | per 1,000 sf      | per 1,000 sf         | per 1,000 sf        | per room    |
| <b>Temporal Distribution:</b> | (18)                    | (12)                | (14,15)           | (14,15)              | (19)                | (1)         |
| AM                            | 13.2%                   | 13.2%               | 24.0%             | 6.0%                 | 13.2%               | 8.0%        |
| MD                            | 11.0%                   | 11.0%               | 17.0%             | 9.0%                 | 11.0%               | 14.0%       |
| PM                            | 14.2%                   | 14.2%               | 24.0%             | 5.0%                 | 14.2%               | 13.0%       |
| SatMD                         | 10.7%                   | 10.7%               | 17.0%             | 9.0%                 | 10.7%               | 9.0%        |
|                               | (18)                    | (13)                | (13)              | (15)                 | (19)                | (12)        |
| <b>Modal Splits:</b>          | All Periods             | AM/PM MD/SAT        | AM/PM MD/SAT      | All Periods          | AM/PM MD/SAT        | All Periods |
| Auto                          | 85.0%                   | 17.6% 2.0%          | 17.6% 2.0%        | 25%                  | 17.6% 2.0%          | 30.1%       |
| Taxi                          | 5.0%                    | 1.6% 3.0%           | 1.6% 3.0%         | 25%                  | 1.6% 3.0%           | 12.3%       |
| Subway/Railroad               | 1.0%                    | 48.5% 6.0%          | 48.5% 6.0%        | 29%                  | 48.5% 6.0%          | 18.8%       |
| Bus                           | 1.0%                    | 16.2% 6.0%          | 16.2% 6.0%        | 11%                  | 16.2% 6.0%          | 5.5%        |
| Walk/Other                    | 8.0%                    | 16.1% 83.0%         | 16.1% 83.0%       | 10%                  | 16.1% 83.0%         | 33.3%       |
|                               | 100.0%                  | 100.0% 100%         | 100.0% 100%       | 100%                 | 100.0% 100.0%       | 100%        |
|                               | (18)                    | (12)                | (14,15)           | (14,15)              | (19)                | (12)        |
| <b>In/Out Splits:</b>         | In Out                  | In Out              | In Out            | In Out               | In Out              | In Out      |
| AM                            | 65% 35%                 | 88% 12%             | 100% 0%           | 90% 10%              | 88% 12%             | 41% 59%     |
| MD                            | 50% 50%                 | 50% 50%             | 50% 50%           | 50% 50%              | 50% 50%             | 68% 32%     |
| PM                            | 50% 50%                 | 12% 88%             | 0% 100%           | 30% 70%              | 12% 88%             | 59% 41%     |
| Sat MD                        | 50% 50%                 | 47% 53%             | 50% 50%           | 50% 50%              | 47% 53%             | 56% 44%     |
| <b>Vehicle Occupancy:</b>     | (18)                    | (12)                | (3,15)            | (15)                 | (19)                | (12)        |
| Auto                          | 1.30                    | 1.20                | 1.15              | 1.65                 | 1.20                | 1.60        |
| Taxi                          | 1.30                    | 1.20                | 1.40              | 1.20                 | 1.20                | 1.40        |
| <b>Truck Trip Generation:</b> | (18)                    | (12)                | (14,15)           |                      | (19)                | (23)        |
| Weekday                       | 0.89                    | 0.67                | 0.40              | N/A                  | 0.67                | 6.0%        |
| Saturday                      | 0.89                    | 0.67                | 0.00              | N/A                  | 0.67                | 1.0%        |
|                               | per 1,000 sf            | per 1,000 sf        | per 1,000 sf      |                      | per 1,000 sf        | per room    |
|                               | (18)                    | (12)                | (14,15)           |                      | (19)                | (23)        |
| AM                            | 14.0%                   | 14.0%               | 9.7%              | N/A                  | 14.0%               | 12.0%       |
| MD                            | 9.0%                    | 9.0%                | 7.8%              | N/A                  | 9.0%                | 9.0%        |
| PM                            | 1.0%                    | 1.0%                | 5.1%              | N/A                  | 1.0%                | 0.0%        |
| Sat MD                        | 0.0%                    | 0.0%                | 0.0%              | N/A                  | 0.0%                | 9.0%        |
|                               | In Out                  | In Out              | In Out            | In Out               | In Out              | In Out      |
|                               | 50.0% 50.0%             | 50.0% 50.0%         | 50.0% 50.0%       | 50.0% 50.0%          | 50.0% 50.0%         | 50.0% 50.0% |

**TABLE 2: Transportation Planning Factors (continued)**

**Notes :**

- (1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual*, 2014.
- (2) Based on data from *West Harlem Rezoning FEIS*, 2012.
- (3) Based on AASHTO CTPP Reverse Journey to Work 5-Year (2006-2010) data for Manhattan Census Tracts 166, 168, 170, 172, 174.01, 174.02, 180, 182, 184, 188, 194, 196, 198, 206, and 242.
- (4) Based on data from *East 125th Street Development FEIS*, 2008.
- (5) Based on American Consumer Survey Journey to Work 5-Year (2010-2014) data for Manhattan Census Tracts 166, 168, 170, 172, 174.01, 174.02, 180, 182, 184, 188, 194, 196, 198, 206, and 242.
- (6) Midday and Saturday vehicle occupancy determined by applying a multiplier (1.4) to the AM/PM rate.
- (7) Based on data from *Vanderbilt Corridor and One Vanderbilt FEIS*, 2015.
- (8) Assumes similar modal split as that assumed for a local retail use.
- (9) Based on data from *The Food Retail Expansion to Support Health (FRESH) Food Store Program*, 2009.
- (10) Assumes a 32% increase in peak hour trips on Saturday; based on ratio between weekday and Saturday rates for supermarket use provided by the *CEQR Technical Manual*, 2014.
- (11) Assumes for Saturday the same temporal distribution, modal split, directional split, and vehicle occupancy as the weekday midday.
- (12) Based on data from *Broadway Triangle FEIS*, 2009.
- (13) Assumes similar modal split as that assumed for an office use.
- (14) Based on data from *Jamaica Plan Rezoning FGEIS*, 2007.
- (15) Based on data from *Saint Vincent's Campus Redevelopment FEIS*, 2012.
- (16) Assumes similar weekday midday and Saturday temporal distribution as that assumed for an office use.
- (17) Derived using data from NYCDOT Trip Generation and Mode Choice Survey.
- (18) Based on data from *East New York Rezoning Proposal FEIS*, 2015.
- (19) Assumes similar transportation planning factors as those assumed for light industrial use.
- (20) Based on data from the *Atlantic Yards Arena and Redevelopment FEIS*, 2006.

### **Light Industrial/Warehouse/Storage/Research Laboratory**

The trip generation rates, temporal distributions, directional in/out splits, and vehicle occupancies for manufacturing, wholesale/warehousing, storage and research laboratory uses were based on data from the *Broadway Triangle FEIS*, and the modal splits were based on data from the *East New York Rezoning FEIS* and AASHTO CTPP reverse journey-to-work data for workers in the census tracts encompassing East Harlem. Truck trip generation rates and temporal distributions for light industrial uses were based on data from the *Broadway Triangle FEIS*.

### **Residential**

Residential person trip and truck trip generation rates and temporal distributions reflect those cited in the *CEQR Technical Manual*. The directional in/out splits were based on data from the *West Harlem Rezoning FEIS* while the modal splits were derived from 5-year ACS journey-to-work data for census tracts encompassing East Harlem (Manhattan Census Tracts 166, 168, 170, 172, 174.01, 174.02, 180, 182, 184, 188, 194, 196, 198, 206, and 242). Vehicle occupancies for residential uses were also derived from 2010-2014 5-year ACS journey-to-work data along with data from the *West Harlem Rezoning FEIS*.

It should be noted that ACS vehicle occupancy data reflect the average vehicle occupancy for personal auto trips to and from work, and do not present the complete picture of average vehicle occupancy for other purposes (e.g., shopping, errands, social and recreational activities, school trips, etc.). In general, vehicle occupancy rates for non-work-related trips have been found to be higher than vehicle occupancy rates for work-related trips. Both national data from USDOT-FHA's *Summary of Travel Trends: 2009 National Household Travel Survey* and regional data from the *Regional Travel-Household Interview Survey* prepared for the New York Metropolitan Transportation Council (NYMTC) and the North Jersey Transportation Planning Authority (NJTPA) indicate that average vehicle occupancy rates for all auto trips are over 1.4 times the average vehicle occupancy rates for auto trips to and from work.<sup>2</sup> As such, the weekday AM/PM peak hour vehicle occupancy rates derived from the ACS data were adjusted by a factor of 1.4 for the weekday midday and Saturday midday peak hours to reflect the predominance of non-work-related trips during these periods. While not all AM and PM peak hour trips are work-related, the lower vehicle occupancy rates for trips to and from work were conservatively applied to all auto trips in these latter peak hours.

Although residential-based trips in the weekday midday and Saturday peak hours would likely be more local in nature than in the commuter peak hours (and therefore have a higher walk share, for example), the modal splits based on the ACS journey-to-work data were conservatively assumed for all periods.

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<sup>2</sup> Source: Table 16 of the USDOT-FHA's 2009 *National Household Travel Survey* and pages 20 and 21 of NYMTC/NJTPA 2000 *Regional Travel – Household Interview Survey*. (See **Appendix A**.)

## TRIP GENERATION

The net incremental change in person and vehicle trips expected to result from the Proposed Actions by the 2027 analysis year was estimated based on the net change in land uses shown in **Table 1** and the transportation planning factors shown in **Table 2**. **Table 3** shows an estimate of the net incremental change in peak hour person trips and vehicle trips (versus the No-Action condition) that would occur in 2027 with implementation of the Proposed Actions. As shown in **Table 3**, under the RWCDs, the Proposed Actions would generate a net increase of approximately 4,746 person trips (in + out combined) in the weekday AM peak hour, 4,014 in the weekday midday, 6,316 in the weekday PM peak hour, and 5,972 in the Saturday peak hour. Peak hour vehicle trips (including auto, school bus, truck, and taxi trips balanced to reflect that some taxis arrive or depart empty) would increase by a net total of approximately 614, 506, 686, and 448 (in + out combined) in the weekday AM, midday, and PM, and Saturday peak hours, respectively. Peak hour subway trips would increase by a net total of 2,766, 1,485, 3,172, and 2,446 during these periods, respectively, while bus trips would increase by approximately 604, 381, 729, and 676, respectively. Lastly, walk-only trips would increase by 758, 1,631, 1,681, and 2,197 trips during the weekday AM, midday, and PM, and Saturday peak hours, respectively.

The Proposed Actions are expected to generate relatively few (i.e., less than 100) trips by commuter rail at the Metro-North Railroad 125<sup>th</sup> Street station in any one peak hour. As some Metro-North trips would also likely start or end on another mode of transit, commuter rail trips were conservatively included in the totals for the subway mode in the travel demand forecast shown in **Table 3**.

**Table 4** shows the net incremental change in peak hour vehicle trips (auto, school bus, taxi and truck) that would be generated by each individual projected development site during the weekday AM, midday and PM and Saturday peak hours.<sup>3</sup> Overall, site 69 (the 111th Street alternative site) would generate the greatest number of new vehicle trips in all peak hours, accounting for approximately 23 to 30 percent of the total vehicle trips generated by the Proposed Actions in each period. The next highest number of trips would be generated by site 4 which would account for six to 16 percent of total trips, followed by site 11 which would account for seven to 12 percent. Under the RWCDs, there would be net decreases in vehicle trips during one or more peak hours at 11 sites, primarily due to reductions in local retail uses, but also due to reductions in auto repair space (site 1), hotel space (site 5), light industrial space (site 13), and medical office space (site 28) in the With-Action condition.

## ANALYSIS PERIODS

Based on *CEQR Technical Manual* guidelines, a quantified traffic analysis is typically required if a proposed action would result in more than 50 vehicle trip ends in a peak hour. As shown in **Table 4**, the Proposed Actions are expected to result in more than 50 total vehicle trips during the weekday AM and PM peak hours (which are typical peak periods for commuter travel demand) and the weekday midday

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<sup>3</sup> Detailed travel demand forecasts for each projected development site are provided in Tables 1 through 69 in **Appendix B**.

**TABLE 3: RWCDs Travel Demand Forecast**

| Land Use:        | Local Retail |      | Office        |     | Residential |       | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     |
|------------------|--------------|------|---------------|-----|-------------|-------|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|
| Size/Units:      | -30,222 gsf  |      | 187,455.5 gsf |     | 4,107 DU    |       | 56,371 gsf |     | 76,803 gsf         |     | 33,056 gsf  |     | -10,592 gsf          |     |
| Peak Hour Trips: |              |      |               |     |             |       |            |     |                    |     |             |     |                      |     |
| AM               | -118         |      | 418           |     | 3,388       |       | 0          |     | 186                |     | 206         |     | -28                  |     |
| MD               | -716         |      | 518           |     | 1,728       |       | 468        |     | 546                |     | 814         |     | -24                  |     |
| PM               | -382         |      | 484           |     | 3,708       |       | 702        |     | 546                |     | 680         |     | -30                  |     |
| SAT              | -444         |      | 134           |     | 3,210       |       | 966        |     | 784                |     | 1,078       |     | -24                  |     |
| Person Trips:    |              |      |               |     |             |       |            |     |                    |     |             |     |                      |     |
| AM               | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto             | 1            | 1    | 70            | 2   | 42          | 224   | 0          | 0   | 17                 | 11  | 4           | 5   | -16                  | -9  |
| Taxi             | 0            | 0    | 5             | 0   | 1           | 16    | 0          | 0   | 11                 | 7   | 3           | 3   | -1                   | 0   |
| Subway/Railroad  | -9           | -9   | 197           | 11  | 350         | 1,874 | 0          | 0   | 32                 | 22  | 5           | 5   | 0                    | 0   |
| Bus              | 0            | 0    | 66            | 2   | 60          | 342   | 0          | 0   | 13                 | 7   | 5           | 5   | 0                    | 0   |
| Walk/Other       | -51          | -51  | 63            | 2   | 67          | 412   | 0          | 0   | 40                 | 26  | 76          | 95  | -1                   | -1  |
| Total            | -59          | -59  | 401           | 17  | 520         | 2,868 | 0          | 0   | 113                | 73  | 93          | 113 | -18                  | -10 |
| MD               | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto             | -8           | -8   | 2             | 2   | 62          | 62    | 5          | 5   | 45                 | 38  | 15          | 17  | -10                  | -10 |
| Taxi             | 3            | 3    | 6             | 6   | 2           | 2     | 0          | 0   | 26                 | 23  | 12          | 13  | -1                   | -1  |
| Subway/Railroad  | -59          | -59  | 17            | 17  | 585         | 585   | 38         | 38  | 78                 | 66  | 19          | 22  | 0                    | 0   |
| Bus              | -16          | -16  | 16            | 16  | 94          | 94    | 10         | 10  | 36                 | 30  | 19          | 22  | 0                    | 0   |
| Walk/Other       | -278         | -278 | 214           | 222 | 121         | 121   | 181        | 181 | 111                | 93  | 311         | 364 | -1                   | -1  |
| Total            | -358         | -358 | 255           | 263 | 864         | 864   | 234        | 234 | 296                | 250 | 376         | 438 | -12                  | -12 |
| PM               | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto             | -6           | -6   | 16            | 73  | 200         | 93    | 11         | 4   | 39                 | 44  | 13          | 15  | -13                  | -13 |
| Taxi             | -1           | -1   | 0             | 5   | 15          | 4     | 0          | 0   | 23                 | 26  | 9           | 12  | -1                   | -1  |
| Subway/Railroad  | -32          | -32  | 35            | 201 | 1,642       | 795   | 78         | 37  | 68                 | 77  | 16          | 19  | 0                    | 0   |
| Bus              | -8           | -8   | 12            | 66  | 291         | 143   | 21         | 10  | 32                 | 35  | 16          | 19  | 0                    | 0   |
| Walk/Other       | -144         | -144 | 12            | 64  | 352         | 173   | 362        | 179 | 95                 | 107 | 264         | 297 | -1                   | -1  |
| Total            | -191         | -191 | 75            | 409 | 2,500       | 1,208 | 472        | 230 | 257                | 289 | 318         | 362 | -15                  | -15 |
| SAT              | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto             | -15          | -15  | 0             | 0   | 132         | 120   | 36         | 36  | 73                 | 61  | 20          | 23  | -10                  | -10 |
| Taxi             | 0            | 0    | 2             | 0   | 7           | 6     | 0          | 0   | 43                 | 36  | 15          | 17  | -1                   | -1  |
| Subway/Railroad  | -48          | -48  | 3             | 2   | 1,105       | 998   | 101        | 101 | 68                 | 57  | 25          | 29  | 0                    | 0   |
| Bus              | -19          | -19  | 3             | 2   | 205         | 180   | 46         | 46  | 86                 | 70  | 25          | 29  | 0                    | 0   |
| Walk/Other       | -140         | -140 | 70            | 52  | 240         | 217   | 300        | 300 | 159                | 131 | 413         | 482 | -1                   | -1  |
| Total            | -222         | -222 | 78            | 56  | 1,689       | 1,521 | 483        | 483 | 429                | 355 | 498         | 580 | -12                  | -12 |
| Vehicle Trips :  |              |      |               |     |             |       |            |     |                    |     |             |     |                      |     |
| AM               | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto (Total)     | 1            | 1    | 61            | 2   | 40          | 198   | 0          | 0   | 10                 | 6   | 3           | 4   | -12                  | -7  |
| Taxi             | 0            | 0    | 4             | 0   | 1           | 14    | 0          | 0   | 6                  | 5   | 2           | 2   | -1                   | 0   |
| Taxi (Balanced)  | 0            | 0    | 4             | 4   | 15          | 15    | 0          | 0   | 11                 | 11  | 4           | 4   | -1                   | -1  |
| Truck            | 0            | 0    | 2             | 2   | 0           | 0     | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  |
| Total            | 1            | 1    | 67            | 8   | 55          | 213   | 0          | 0   | 21                 | 17  | 7           | 8   | -14                  | -9  |
| MD               | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto (Total)     | -5           | -5   | 2             | 2   | 45          | 45    | 0          | 0   | 25                 | 20  | 8           | 11  | -8                   | -8  |
| Taxi             | 3            | 3    | 4             | 4   | 2           | 2     | 0          | 0   | 14                 | 13  | 8           | 9   | -1                   | -1  |
| Taxi (Balanced)  | 9            | 9    | 8             | 8   | 4           | 4     | 0          | 0   | 25                 | 25  | 16          | 16  | -1                   | -1  |
| Truck            | 0            | 0    | 2             | 2   | 0           | 0     | 6          | 6   | 1                  | 1   | 0           | 0   | 0                    | 0   |
| Total            | 4            | 4    | 12            | 12  | 49          | 49    | 6          | 6   | 51                 | 46  | 24          | 27  | -9                   | -9  |
| PM               | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto (Total)     | -8           | -8   | 16            | 64  | 179         | 86    | 2          | 0   | 21                 | 25  | 8           | 8   | -10                  | -10 |
| Taxi             | -1           | -1   | 0             | 4   | 13          | 3     | 0          | 0   | 13                 | 14  | 6           | 8   | -1                   | -1  |
| Taxi (Balanced)  | -1           | -1   | 4             | 4   | 16          | 16    | 0          | 0   | 25                 | 25  | 13          | 13  | -1                   | -1  |
| Truck            | 0            | 0    | 0             | 0   | 0           | 0     | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   |
| Total            | -9           | -9   | 20            | 68  | 195         | 102   | 2          | 0   | 46                 | 50  | 21          | 21  | -11                  | -11 |
| SAT              | In           | Out  | In            | Out | In          | Out   | In         | Out | In                 | Out | In          | Out | In                   | Out |
| Auto (Total)     | -8           | -8   | 0             | 0   | 81          | 73    | 14         | 14  | 27                 | 23  | 12          | 14  | -8                   | -8  |
| Taxi             | 0            | 0    | 2             | 0   | 6           | 5     | 0          | 0   | 15                 | 12  | 10          | 12  | -1                   | -1  |
| Taxi (Balanced)  | 0            | 0    | 2             | 2   | 11          | 11    | 0          | 0   | 24                 | 24  | 20          | 20  | -1                   | -1  |
| Truck            | 0            | 0    | 0             | 0   | 0           | 0     | 6          | 6   | 0                  | 0   | 0           | 0   | 0                    | 0   |
| Total            | -8           | -8   | 2             | 2   | 92          | 84    | 20         | 20  | 51                 | 47  | 32          | 34  | -9                   | -9  |

Notes:

40% link trip credit for local retail use; 0%, 25%, 15%, and 15% for restaurant use for AM, MD, PM, and SAT, respectively.

25% taxi overlap credit

**TABLE 3: RWCDs Travel Demand Forecast (continued)**

| Land Use:        | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel     |     | Total |       |
|------------------|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-----------|-----|-------|-------|
| Size/Units:      | -19,695 gsf      |     | 154,797 gsf            |     | 154,797 gsf               |     | 49,128 gsf       |     | -82 rooms |     |       |       |
| Peak Hour Trips: |                  |     |                        |     |                           |     |                  |     |           |     |       |       |
| AM               | -40              |     | 378                    |     | 322                       |     | 96               |     | -62       |     | 4,746 |       |
| MD               | -36              |     | 270                    |     | 474                       |     | 80               |     | -108      |     | 4,014 |       |
| PM               | -40              |     | 378                    |     | 268                       |     | 104              |     | -102      |     | 6,316 |       |
| SAT              | -8               |     | 122                    |     | 212                       |     | 12               |     | -70       |     | 5,972 |       |
| Person Trips:    |                  |     |                        |     |                           |     |                  |     |           |     |       |       |
| AM               | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto             | -5               | 0   | 66                     | 0   | 72                        | 10  | 15               | 2   | -8        | -11 | 258   | 235   |
| Taxi             | 0                | 0   | 5                      | 0   | 71                        | 10  | 1                | 0   | -3        | -4  | 93    | 32    |
| Subway/Railroad  | -19              | -3  | 182                    | 0   | 83                        | 11  | 40               | 6   | -5        | -7  | 856   | 1,910 |
| Bus              | -6               | 0   | 63                     | 0   | 32                        | 2   | 14               | 2   | -1        | -2  | 246   | 358   |
| Walk/Other       | -7               | 0   | 62                     | 0   | 29                        | 2   | 14               | 2   | -8        | -13 | 284   | 474   |
| Total            | -37              | -3  | 378                    | 0   | 287                       | 35  | 84               | 12  | -25       | -37 | 1,737 | 3,009 |
| MD               | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto             | 0                | 0   | 2                      | 2   | 60                        | 60  | 1                | 1   | -23       | -10 | 151   | 159   |
| Taxi             | 0                | 0   | 3                      | 3   | 59                        | 59  | 1                | 1   | -9        | -4  | 102   | 105   |
| Subway/Railroad  | -1               | -1  | 9                      | 9   | 69                        | 69  | 2                | 2   | -14       | -6  | 743   | 742   |
| Bus              | -1               | -1  | 9                      | 9   | 26                        | 26  | 2                | 2   | -4        | -2  | 191   | 190   |
| Walk/Other       | -16              | -16 | 113                    | 111 | 23                        | 23  | 34               | 34  | -24       | -12 | 789   | 842   |
| Total            | -18              | -18 | 136                    | 134 | 237                       | 237 | 40               | 40  | -74       | -34 | 1,976 | 2,038 |
| PM               | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto             | 0                | -6  | 0                      | 66  | 22                        | 46  | 2                | 16  | -19       | -13 | 265   | 319   |
| Taxi             | 0                | 0   | 0                      | 5   | 20                        | 46  | 0                | 1   | -7        | -5  | 58    | 92    |
| Subway/Railroad  | -2               | -19 | 0                      | 182 | 25                        | 50  | 6                | 45  | -11       | -8  | 1,825 | 1,347 |
| Bus              | 0                | -6  | 0                      | 63  | 10                        | 21  | 2                | 15  | -3        | -2  | 373   | 356   |
| Walk/Other       | 0                | -7  | 0                      | 62  | 10                        | 18  | 2                | 15  | -20       | -14 | 932   | 749   |
| Total            | -2               | -38 | 0                      | 378 | 87                        | 181 | 12               | 92  | -60       | -42 | 3,453 | 2,863 |
| SAT              | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto             | 0                | 0   | 0                      | 0   | 28                        | 28  | 0                | 0   | -12       | -9  | 252   | 234   |
| Taxi             | 0                | 0   | 1                      | 1   | 25                        | 25  | 0                | 0   | -5        | -4  | 87    | 80    |
| Subway/Railroad  | 0                | 0   | 2                      | 2   | 31                        | 31  | 0                | 0   | -7        | -6  | 1,280 | 1,166 |
| Bus              | 0                | 0   | 2                      | 2   | 11                        | 11  | 0                | 0   | -2        | -2  | 357   | 319   |
| Walk/Other       | -4               | -4  | 56                     | 56  | 11                        | 11  | 6                | 6   | -13       | -10 | 1,097 | 1,100 |
| Total            | -4               | -4  | 61                     | 61  | 106                       | 106 | 6                | 6   | -39       | -31 | 3,073 | 2,899 |
| Vehicle Trips :  |                  |     |                        |     |                           |     |                  |     |           |     |       |       |
| AM               | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto (Total)     | -5               | 0   | 56                     | 0   | 43                        | 8   | 13               | 2   | -5        | -7  | 205   | 207   |
| Taxi             | 0                | 0   | 4                      | 0   | 60                        | 10  | 1                | 0   | -2        | -3  | 75    | 28    |
| Taxi (Balanced)  | 0                | 0   | 4                      | 4   | 60                        | 60  | 1                | 1   | -2        | -2  | 96    | 96    |
| Truck            | 0                | 0   | 2                      | 2   | 0                         | 0   | 2                | 2   | 0         | 0   | 5     | 5     |
| Total            | -5               | 0   | 62                     | 6   | 103                       | 68  | 16               | 5   | -7        | -9  | 306   | 308   |
| MD               | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto (Total)     | 0                | 0   | 2                      | 2   | 35                        | 35  | 1                | 1   | -14       | -6  | 91    | 97    |
| Taxi             | 0                | 0   | 2                      | 2   | 48                        | 48  | 1                | 1   | -6        | -3  | 75    | 78    |
| Taxi (Balanced)  | 0                | 0   | 4                      | 4   | 86                        | 86  | 2                | 2   | -6        | -6  | 147   | 147   |
| Truck            | 0                | 0   | 2                      | 2   | 0                         | 0   | 1                | 1   | 0         | 0   | 12    | 12    |
| Total            | 0                | 0   | 8                      | 8   | 121                       | 121 | 4                | 4   | -20       | -12 | 250   | 256   |
| PM               | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto (Total)     | 0                | -5  | 0                      | 56  | 13                        | 28  | 2                | 13  | -12       | -8  | 211   | 249   |
| Taxi             | 0                | 0   | 0                      | 4   | 18                        | 39  | 0                | 1   | -5        | -4  | 43    | 67    |
| Taxi (Balanced)  | 1                | 1   | 4                      | 4   | 55                        | 55  | 1                | 1   | -5        | -5  | 112   | 112   |
| Truck            | 0                | 0   | 1                      | 1   | 0                         | 0   | 0                | 0   | 0         | 0   | 1     | 1     |
| Total            | 1                | -4  | 5                      | 61  | 68                        | 83  | 3                | 14  | -17       | -13 | 324   | 362   |
| SAT              | In               | Out | In                     | Out | In                        | Out | In               | Out | In        | Out | In    | Out   |
| Auto (Total)     | 0                | 0   | 0                      | 0   | 17                        | 17  | 0                | 0   | -8        | -6  | 127   | 119   |
| Taxi             | 0                | 0   | 1                      | 1   | 22                        | 22  | 0                | 0   | -4        | -3  | 51    | 48    |
| Taxi (Balanced)  | 0                | 0   | 2                      | 2   | 41                        | 41  | 0                | 0   | -4        | -4  | 95    | 95    |
| Truck            | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0         | 0   | 6     | 6     |
| Total            | 0                | 0   | 2                      | 2   | 58                        | 58  | 0                | 0   | -12       | -10 | 228   | 220   |

**Notes:**

40% link trip credit for local retail use; 0%, 25%, 15%, and 15% for restaurant use for AM, MD, PM, and SAT, respectively.

25% taxi overlap credit

TABLE 4:

RWCD<sup>4</sup> Net Incremental Vehicle Trips by Projected Development Site

|         | AM | MD | PM | SAT |         | AM  | MD  | PM  | SAT |
|---------|----|----|----|-----|---------|-----|-----|-----|-----|
| Site 1  | 18 | -2 | 17 | -16 | Site 36 | 0   | 0   | 0   | 0   |
| Site 2  | 14 | 10 | 15 | 10  | Site 37 | 0   | 0   | 0   | 0   |
| Site 3  | 4  | 2  | 2  | 4   | Site 38 | 1   | 0   | 2   | 2   |
| Site 4  | 38 | 58 | 67 | 73  | Site 39 | 0   | 0   | 0   | 0   |
| Site 5  | 3  | -3 | 6  | 17  | Site 40 | 1   | 0   | 0   | 0   |
| Site 6  | 36 | 32 | 38 | 29  | Site 41 | 1   | 0   | 1   | 0   |
| Site 7  | 34 | 26 | 34 | 28  | Site 42 | 0   | 0   | 0   | 0   |
| Site 8  | 20 | 12 | 23 | 4   | Site 43 | 1   | 0   | 1   | 2   |
| Site 9  | 5  | 16 | 12 | 8   | Site 44 | 0   | 0   | 0   | 0   |
| Site 10 | 19 | 6  | 23 | 4   | Site 45 | 0   | 0   | 0   | 0   |
| Site 11 | 53 | 62 | 48 | 37  | Site 46 | 1   | -2  | -1  | 0   |
| Site 12 | 8  | -4 | 7  | -3  | Site 47 | 0   | 0   | 0   | 0   |
| Site 13 | 10 | -4 | 7  | -2  | Site 48 | 0   | 0   | 0   | 0   |
| Site 14 | 4  | 2  | 5  | 2   | Site 49 | 9   | 11  | 17  | 12  |
| Site 15 | 5  | 2  | 6  | 2   | Site 50 | 0   | 0   | 0   | 0   |
| Site 16 | 4  | 2  | 5  | 3   | Site 51 | 1   | 0   | 1   | 0   |
| Site 17 | 38 | 35 | 40 | 26  | Site 52 | 0   | 0   | 0   | 0   |
| Site 18 | 7  | 2  | 10 | 0   | Site 53 | 0   | 0   | -2  | 0   |
| Site 19 | 7  | 2  | 9  | 3   | Site 54 | 1   | 0   | 1   | 0   |
| Site 20 | 7  | 0  | 6  | 2   | Site 55 | 0   | 0   | -2  | 0   |
| Site 21 | 28 | 34 | 27 | 18  | Site 56 | 4   | 2   | 3   | 2   |
| Site 22 | 8  | 2  | 10 | 4   | Site 57 | 1   | 0   | 1   | 2   |
| Site 23 | 5  | 2  | 7  | 2   | Site 58 | 0   | -2  | 0   | 0   |
| Site 24 | 14 | 4  | 12 | 2   | Site 59 | 0   | 0   | -1  | 4   |
| Site 25 | 1  | 0  | 2  | 2   | Site 60 | 0   | 0   | 0   | 0   |
| Site 26 | 1  | 0  | -1 | 2   | Site 61 | 0   | 0   | 0   | 0   |
| Site 27 | 1  | 0  | 1  | 2   | Site 62 | 1   | 0   | 1   | 0   |
| Site 28 | -3 | -8 | -5 | -2  | Site 63 | 3   | 0   | 4   | 2   |
| Site 29 | 16 | 18 | 18 | 17  | Site 64 | 1   | 0   | 0   | 0   |
| Site 30 | 15 | 16 | 17 | 8   | Site 65 | 0   | 0   | 0   | 0   |
| Site 31 | 1  | 0  | 1  | 0   | Site 66 | 0   | 0   | 1   | 0   |
| Site 32 | 2  | 0  | 1  | 0   | Site 67 | 1   | 0   | 1   | 0   |
| Site 33 | 7  | 2  | 8  | 2   | Site 68 | 4   | 2   | 4   | 2   |
| Site 34 | 10 | 15 | 17 | 13  | Site 69 | 143 | 154 | 158 | 119 |
| Site 35 | 0  | 0  | 1  | 0   | Total   | 614 | 506 | 686 | 448 |

<sup>4</sup> The 111th Street alternative site (Site 69) is included as a worst-case condition for preliminary transportation planning purposes.

and Saturday peak hours (which are typical peak periods for retail demand). All of these periods are therefore included in the quantified analysis of traffic conditions. Based on existing traffic volumes in the study area as reflected in automatic traffic recorder (ATR) count data from secondary sources, the weekday 7:45-8:45 a.m., 12:30-1:30 p.m. (midday) and 4:30-5:30 p.m. peak hours have been tentatively selected for analysis along with the Saturday 2:15-3:15 p.m. peak hour. When available, ATR count data collected for the Proposed Project will be used to validate these peak hours.

Transit (subway and bus) analyses typically examine conditions during the weekday AM and PM commuter peak periods, as it is during these times that overall transit demand (and the potential for significant adverse impacts) is generally greatest. Based on count data at area subway stations available from secondary sources, the peak hours tentatively selected for the analysis of subway station conditions are 7:45-8:45 a.m. and 5-6 p.m. Count data collected for the Proposed Project will be used to validate these peak hours upon completion of the planned data collection program.

According to *CEQR Technical Manual* guidelines, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips. As shown in **Table 3**, the net increase in pedestrian trips resulting from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold during the weekday AM and PM commuter peak hours and the weekday midday and Saturday peak hours for retail demand. Based on pedestrian count data available from secondary sources, the peak hours tentatively selected for the analysis of pedestrian conditions are the weekday 7:30-8:30 a.m., 12:15-1:15 p.m. (midday) and 5-6 p.m. peak hours along with the Saturday 2:30-3:30 p.m. peak hour. Count data collected for the Proposed Project will be used to validate these pedestrian analysis peak hours upon completion of the planned data collection program.

## **TRAFFIC STUDY AREA**

### **Project Area Street Network**

As shown in **Figure 1**, the street network in proximity to the project area is comprised of the typical Manhattan grid system of north-south avenues and east-west cross-streets. The primary north-south corridors serving the project area include First, Second, Third, Lexington, Park, Madison and Fifth avenues along with Malcolm X Boulevard. Major cross-streets include East 125<sup>th</sup>, East 116<sup>th</sup> and East 106<sup>th</sup> Street. One limited access roadway—the FDR/Harlem River Drive—also provides non-commercial vehicles with access between East Harlem and other areas of Manhattan to the north and south.

In proximity to the project area, **First Avenue** operates one-way northbound, typically with three moving lanes for general traffic plus a dedicated bus-only lane for New York City Transit (NYCT) M15 and M15 Select Bus Service (SBS) buses. On-street parking is typically accommodated between this bus lane and the east curb except at locations where the sidewalk has been extended into the parking lane to accommodate a bus stop. A bicycle lane is located along the west curb and is separated from the vehicle

travel lanes by a striped median and/or parking. First Avenue is a designated local truck route and at its northern end it provides direct access to the Willis Avenue Bridge to the Bronx. **Second Avenue**, which functions as a southbound couplet to First Avenue, similarly operates with three moving lanes for general traffic flanked by a dedicated bus lane for M15 and M15 SBS buses and curbside parking along the west curb, and a striped bicycle lane and parking along the east curb. The bus lane along Second Avenue is in effect from 7 a.m. to 10 a.m. and 4 p.m. to 7 p.m., Monday through Friday, and the corridor is a designated local truck route. Second Avenue begins at East 128<sup>th</sup> Street, and there is direct access to it from both the southbound Harlem River Drive and the RFK Bridge.

**Third Avenue** operates with five northbound travel lanes plus parking along both curbs. It is a designated local truck route south of East 125<sup>th</sup> Street, and in proximity to the project area is traversed by NYCT's M98, M101, M102 and M103 local bus routes. Third Avenue terminates at East 128<sup>th</sup> Street. **Lexington Avenue**, which functions as a southbound couplet to northbound Third Avenue, is relatively narrow and operates with two moving lanes plus parking along both curbs in proximity to the project area. Like Third Avenue, it is traversed by NYCT's M98, M101, M102 and M103 local bus routes and is a designated local truck route south of East 125<sup>th</sup> Street. Lexington Avenue originates at East 131<sup>st</sup> Street, and it can be directly accessed from the Third Avenue Bridge.

**Park Avenue** is a two-way corridor that extends south from East 135<sup>th</sup> Street in the southbound direction, and terminates at East 132<sup>nd</sup> Street in the northbound direction at an on-ramp to the southbound Harlem River Drive. In proximity to the project area, a viaduct used by Metro-North Railroad trains separates the northbound and southbound roadways which each operate with a single moving lane plus a parking lane. To the west of Park Avenue is the northbound Madison Avenue/southbound Fifth Avenue couplet. **Madison Avenue** operates with three northbound moving lanes plus parking along each curb. It terminates at East 138<sup>th</sup> Street where it provides access to the Madison Avenue Bridge to/from the Bronx. **Fifth Avenue** originates at West 143<sup>rd</sup> Street where there also is an off-ramp from the southbound Harlem River Drive. It is discontinuous between 124<sup>th</sup> and 120<sup>th</sup> Streets due to Marcus Garvey Park. To the north of the park it typically operates with two southbound moving lanes plus parking along each curb, while to the south of the park it typically operates with three southbound moving lanes plus parking along each curb. At 110<sup>th</sup> Street, Fifth Avenue passes through Duke Ellington Circle at the northeast corner of Central Park. To the south of the circle it again operates with two moving lanes plus parking along each curb, except between the hours of 7 a.m. and 10 a.m., Monday through Friday, when the west curb lane functions as a dedicated bus lane. Both Madison Avenue and Fifth Avenue function as major bus corridors. NYC Transit M1 local buses traverse both corridors north of East 110<sup>th</sup> Street, while to the south M1 buses are joined by M2, M3, M4 and M106 local buses. A number of express bus routes also traverse Madison and Fifth avenues in proximity to the project area. Both Madison Avenue and Fifth Avenue are designated as local truck routes north of East 125<sup>th</sup> Street.

To the east of the project area is **Malcolm X Boulevard** (also known as **Lenox Avenue**) which extends northward from Central Park North (West 110<sup>th</sup> Street). This north-south roadway typically operates with two moving lanes plus a curbside parking lane in each direction. The northbound and southbound

lanes are separated by a planted median, and left-turn bays are provided at many intersections. North of West 116<sup>th</sup> Street, Malcolm X Boulevard is used by NYCT M7 and M102 local buses.

As noted above, major east-west crosstown corridors include 125<sup>th</sup> Street, 116<sup>th</sup> Street and 106<sup>th</sup> Street. **East 125<sup>th</sup> Street** is the primary crosstown corridor in proximity to the project area. It typically operates with one moving lane, an exclusive bus lane and a curbside parking lane in each direction. At its eastern end, East 125<sup>th</sup> Street provides access to the RFK and Willis Avenue bridges along with the northbound and southbound FDR Drive/Harlem River Drive. It is a major bus corridor that is used by M60 SBS buses, M100 and M101 buses, and Bx15 buses to and from the Bronx. East 125<sup>th</sup> Street is also a designated local truck route.

The next major crosstown corridor to the south is **East 116<sup>th</sup> Street** which typically operates with two moving lanes plus curbside parking in each direction. At its eastern end, East 116<sup>th</sup> Street terminates at on and off-ramps to the southbound FDR drive. **East 106<sup>th</sup> Street**, which extends from Fifth Avenue to the FDR Drive, typically operates with one moving lane, a bike lane and a parking lane in each direction. The eastbound and westbound lanes are separated by a striped median, and left-turn bays are provided at many locations. The corridor is traversed by M106 buses.

Most other east-west cross-streets in proximity to the project area typically operate with one to two moving lanes plus parking along each curb. At many locations there are discontinuities in the east-west street system due to the presence of superblock developments or parks (e.g., Marcus Garvey Park and Central Park).

To the east of the project area is the **FDR Drive**, a limited access parkway restricted to non-commercial vehicles that runs along the west bank of the East River to South Ferry in Lower Manhattan. North of the RFK Bridge, the parkway becomes the **Harlem River Drive** which continues along the west bank of the Harlem River to Tenth Avenue and Dyckman Street in Inwood and provides access to and from the George Washington Bridge (I-95) to New Jersey.

### **Traffic Assignment Methodology**

The assignments of auto and taxi trips to the street network in proximity to the project area will be based on the locations of each projected development site and the anticipated origins and destinations of vehicle trips associated with the different land uses projected for each site under the RWCDs (e.g., commercial, residential, etc.). The origins/destinations of residential and hotel trips used for the assignments will be based upon 2006-2010 ACS journey-to-work data, while the origins/destinations of office, medical office (staff), light industrial and research laboratory uses will be based on 2006-2010 ACS reverse journey-to-work data. The assignment of destination retail trips will be based on population density within three miles of the project area. Origins/destinations for uses that generate mostly local trips, including local retail, supermarket, restaurant, auto-related and medical office (patient) uses, will be based on population density in proximity to the project area and surrounding neighborhoods within a 0.5-mile radius. **Tables 5 and 6** show the directional distributions of auto and taxi trips by land use

**TABLE 5: Directional Distributions of Auto/Taxi Trips for Non-Local Commercial and Residential Uses**

| Land Use                                                                                                                                           | Manhattan | Bronx | Brooklyn | Queens | Staten Island | Long Island | New Jersey | Upstate/ Connecticut | Other Out-of-State |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------|--------|---------------|-------------|------------|----------------------|--------------------|
| Office/Light Industrial/Research Lab <sup>1</sup>                                                                                                  | 11.8%     | 15.0% | 8.4%     | 16.1%  | 2.0%          | 8.9%        | 19.2%      | 17.4%                | 1.2%               |
| Residential/Hotel                                                                                                                                  | 62.1%     | 11.4% | 5.8%     | 8.3%   | 0%            | 1.3%        | 5.3%       | 5.8%                 | 0%                 |
| Destination Retail                                                                                                                                 | 64.0%     | 23.7% | 0%       | 12.3%  | 0%            | 0%          | 0%         | 0%                   | 0%                 |
| <b>Notes:</b><br><sup>1</sup> Includes office, medical office (staff), wholesale/warehousing, storage, manufacturing and research laboratory uses. |           |       |          |        |               |             |            |                      |                    |

**TABLE 6: Directional Distributions of Auto/Taxi Trips for Local Retail/Community Uses**

| Land Use                                                                                                                      | Manhattan |       |      |      |
|-------------------------------------------------------------------------------------------------------------------------------|-----------|-------|------|------|
|                                                                                                                               | North     | South | East | West |
| Local Retail/Community Uses <sup>1</sup>                                                                                      | 13%       | 31%   | 20%  | 36%  |
| <b>Notes:</b><br><sup>1</sup> Includes local retail, supermarket, restaurant, auto-related and medical office (patient) uses. |           |       |      |      |

based on the origin/destination data. Using these distributions, auto and taxi trips will first be assigned to various portals on the periphery of the project area, and from there via the most direct route to each projected development site. Although some project-generated auto demand is expected to park at off-street public parking facilities in the area, auto trips will be assigned directly to their respective projected development sites. This can be considered a conservative approach with respect to the traffic impact analysis as it concentrates project traffic at analyzed intersections in proximity to the project area rather than dispersing it to outlying public parking facilities.

Truck trips will be assigned to designated local truck routes and then to the most direct paths to and from each projected development site. It is assumed that the majority of truck trips will use the local truck routes along First, Second, Third and Lexington avenues and 116<sup>th</sup> and 125<sup>th</sup> streets, and that many of these trips would enter and depart the area via the Willis, Third Avenue and RFK bridges which are also designated local truck routes.

As discussed above, projected development associated with the Proposed Actions would result in a net incremental increase of 614 vehicle trips during the weekday AM peak hour, 506 during the midday peak hour, 686 during the PM peak hour and 448 during the Saturday peak hour. As these traffic volumes would exceed 50 trips in each peak hour (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), a preliminary assignment of net increment traffic volumes will be prepared for each period to help identify individual intersections that would potentially exceed 50 trips per hour (a Level 2 screening assessment). In consultation with the Department of City Planning (DCP), representative intersections most likely to be used by concentrations of action-generated vehicles traveling to and from the projected development sites will then be selected for detailed analysis based on the preliminary assignments. Existing bottleneck locations and prevailing travel patterns in the study area will also be taken into consideration. It is anticipated that up to 60 intersections between East 106<sup>th</sup> Street and East 128<sup>th</sup> Street will be selected for detailed analysis.

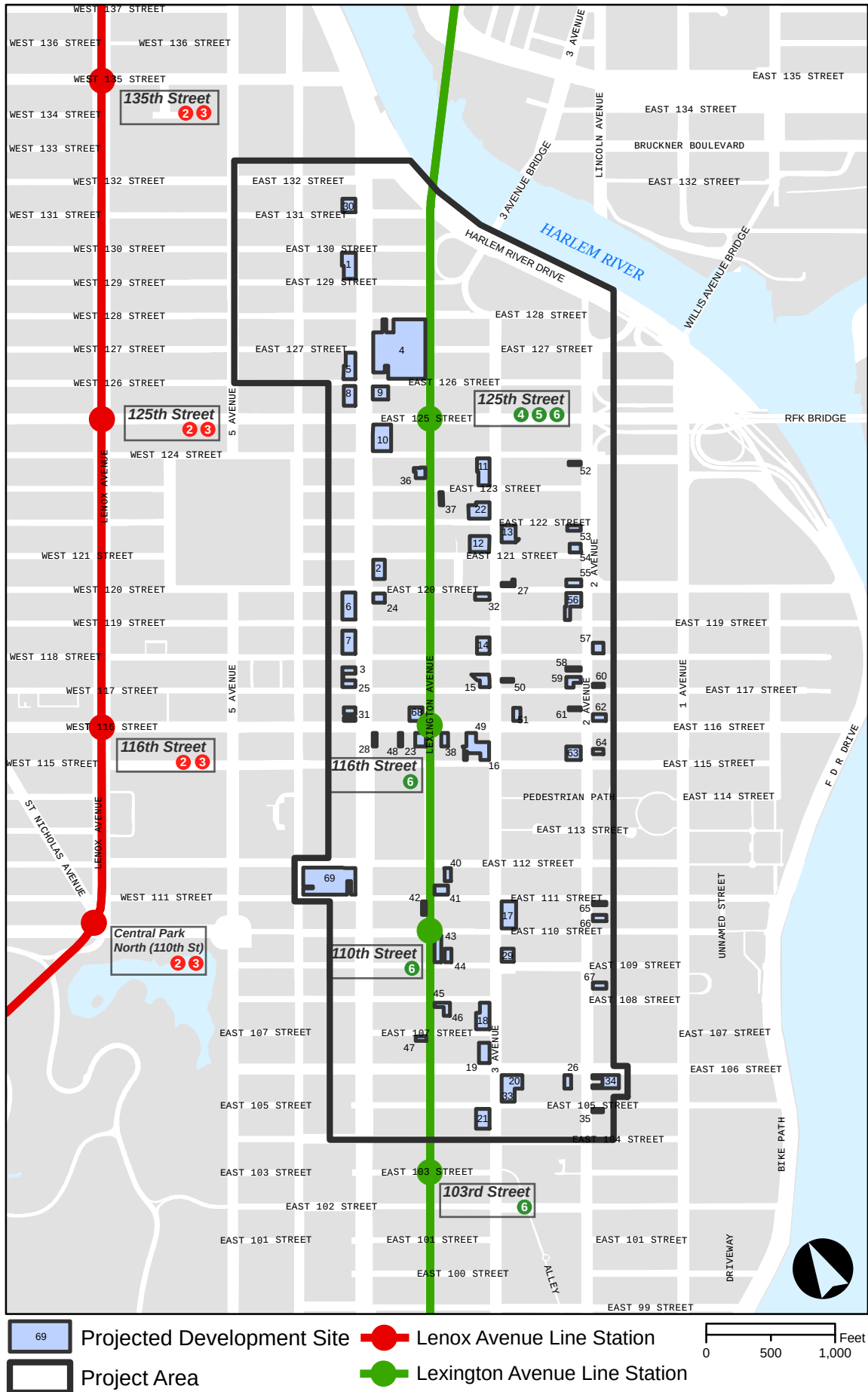
## **TRANSIT**

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted.

### **Subway Analysis**

#### Subway Stations

There are currently a total of eight NYCT subway stations located in proximity to projected development sites. As shown in **Figure 2**, No. 6 trains operating on the Lexington Avenue Line serve four below-grade



stations at 103<sup>rd</sup> Street, 110<sup>th</sup> Street, 116<sup>th</sup> Street and 125<sup>th</sup> Street. The 125<sup>th</sup> Street station is also served by Nos. 4 and 5 Lexington Avenue Line express trains. To the west of the project area, Nos. 2 and 3 trains operating on the Lenox Avenue Line serve four stations located beneath Malcolm X Boulevard (Lenox Avenue) at Central Park North (110<sup>th</sup> Street), 116<sup>th</sup> Street, 125<sup>th</sup> Street and 135<sup>th</sup> Street.

#### Subway Assignment and Analyzed Stations

As shown in **Table 3**, under the RWCDs the Proposed Actions would generate a net increment of approximately 2,766 and 3,172 subway trips during the weekday AM and PM commuter peak hours, respectively. Based on the travel demand forecast, the proximity of projected development sites to individual subway stations, the subway routes serving each station, and census journey-to-work data, it is anticipated that action-generated subway demand would be most concentrated at the four stations on the Lexington Avenue Line. Although the four stations on the Lenox Avenue Line are all located more than ¼-mile from the nearest projected development site, some action-generated demand is also expected to utilize these stations.

**Table 7** shows the estimated net incremental subway trips generated by the Proposed Actions during the weekday AM and PM peak hours at each of the eight existing subway stations in proximity to the project area. As shown in **Table 7**, the highest greatest number of peak hour subway trips are expected to occur at the 125<sup>th</sup> Street station on the Lexington Avenue Line which would experience an estimated 897 incremental trips (in + out combined) in the AM peak hour and 1,044 in the PM peak hour. The second highest number of trips would occur at the 116<sup>th</sup> Street Lexington Avenue Line station which would experience an estimated 783 incremental trips in the AM peak hour and 896 in the PM. By contrast, all four Lenox Avenue Line stations are expected to experience fewer than 100 new trips in both the AM and PM peak hour.

The analysis of subway station conditions focuses on the four subway stations at which incremental demand from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or both peak hours. As shown in **Table 7**, these are the four Lexington Avenue Line stations at 103<sup>rd</sup> Street, 110<sup>th</sup> Street, 116<sup>th</sup> Street and 125<sup>th</sup> Street. For each of these stations, key circulation elements (e.g., street stairs and fare arrays) expected to be used by concentrations of new demand from the Proposed Actions will be analyzed.

In addition to the existing subway stations discussed above, it should be noted that three new stations are expected to open in proximity to the project area under Phase II of the Second Avenue Line project in the Proposed Actions' 2027 analysis year. These stations, to be served by Q trains, will be located beneath Second Avenue at 106<sup>th</sup> Street and 116<sup>th</sup> Street, and beneath 125<sup>th</sup> Street at Park Avenue where there will be a connection to Lexington Avenue Line 4, 5 and 6 trains. Upon the opening of these new subway stations, demand at existing stations located in proximity to the project area is expected to decrease as both No Action demand and trips generated by the Proposed Actions would be diverted to the Second Avenue Line which will provide an alternate route to Midtown and Lower Manhattan. Conditions at existing Lexington Avenue Line and Lenox Avenue Line stations are therefore expected to

improve with the new subway service. To be conservative, the EIS will assess 2027 conditions at area subway stations both with and without Phase II of the Second Avenue Line in operation. Data from the 2004 *Second Avenue Subway FEIS* will be used to assess future conditions with completion of Phase II of the Second Avenue Line.

**TABLE 7: RWCDS Net Incremental Peak Hour Subway Trips by Station**

| Subway Station                                       | AM Peak Hour Trips |                |              | PM Peak Hour Trips |                |              |
|------------------------------------------------------|--------------------|----------------|--------------|--------------------|----------------|--------------|
|                                                      | Into Project       | Out of Project | Total        | Into Project       | Out of Project | Total        |
| <b>Project Summary</b>                               |                    |                |              |                    |                |              |
| Peak Hour Project Increment Person Trips:            | 1,737              | 3,009          | 4,746        | 3,453              | 2,863          | 6,316        |
| Peak Hour Project Increment Subway Trips:            | 856                | 1,910          | 2,766        | 1,825              | 1,347          | 3,172        |
| <b>Subway Station Summary</b>                        |                    |                |              |                    |                |              |
| 103 <sup>rd</sup> Street (6)                         | 83                 | 144            | 227          | 155                | 111            | 266          |
| 110 <sup>th</sup> Street (6)                         | 219                | 450            | 669          | 417                | 322            | 739          |
| 116 <sup>th</sup> Street (6)                         | 174                | 609            | 783          | 551                | 345            | 896          |
| 125 <sup>th</sup> Street (4, 5, 6)                   | 313                | 584            | 897          | 577                | 467            | 1,044        |
| Central Park North (110 <sup>th</sup> Street) (2, 3) | 20                 | 37             | 57           | 35                 | 28             | 63           |
| 116 <sup>th</sup> Street (2, 3)                      | 14                 | 43             | 57           | 38                 | 27             | 65           |
| 125 <sup>th</sup> Street (2, 3)                      | 31                 | 42             | 73           | 50                 | 47             | 97           |
| 135 <sup>th</sup> Street (2, 3)                      | 2                  | 1              | 3            | 2                  | 0              | 2            |
| <b>Total</b>                                         | <b>856</b>         | <b>1,910</b>   | <b>2,766</b> | <b>1,825</b>       | <b>1,347</b>   | <b>3,172</b> |

### Subway Line Haul

As discussed above, the project area is currently served by a total of five NYCT subway routes—the Nos. 4, 5 and 6 trains operating along the Lexington Avenue Line and the Nos. 2 and 3 train operating along the Lenox Avenue Line. As the Proposed Actions are expected to generate 200 or more new peak hour subway trips in one direction, an analysis of subway line haul conditions will be included in the EIS. The analysis will utilize existing maximum load point subway service and ridership data provided by NYCT to assess existing, future No-Action, and future With-Action conditions at the maximum load points of each analyzed subway route during the weekday AM and PM peak hours. Data from the 2004 *Second Avenue Subway FEIS* will be used to assess future conditions with completion of Phase II of the Second Avenue Line.

### **Bus Analysis**

#### Bus Routes

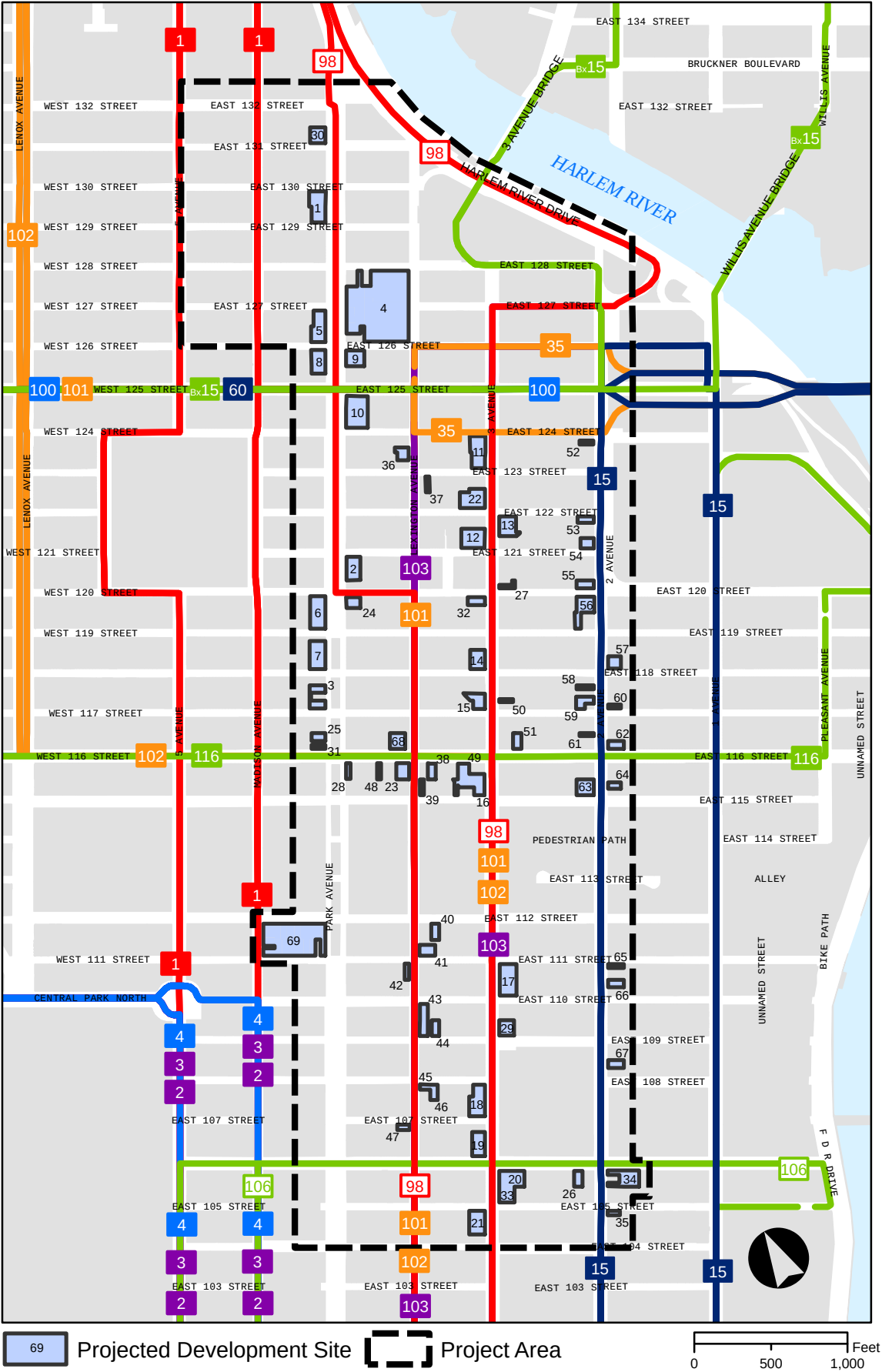
The project area is served by a total of 13 local bus routes, six Limited (LTD) bus routes and two Select Bus Service (SBS) routes operated by the MTA. Limited bus routes provide limited-stop service along all or a portion of the route. Some Limited services only operate in the peak direction and/or during peak

periods. Select Bus Service routes are designed to provide faster service through dedicated bus lanes, greater spacing between stops, and a fare collection system where customers pay prior to boarding and may enter through all doors on the bus. SBS buses also have a unique livery to distinguish them from other bus services. The bus routes operating in proximity to the project area are shown in **Figure 3** and described in **Table 8**.

**TABLE 8**  
**RWCDs Net Incremental Peak Hour Bus Trips by Route**

| Route                                                                                                                                                                                      | Description                                                                                                                                              | Direction | AM Peak Hour |           |       | PM Peak Hour |           |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------|-----------|-------|--------------|-----------|-------|
|                                                                                                                                                                                            |                                                                                                                                                          |           | In           | Out       | Total | In           | Out       | Total |
| M1                                                                                                                                                                                         | Daily service btwn the E. Village and Harlem via 5 <sup>th</sup> Av & Madison Av.                                                                        | NB        | 5            | 0         | 5     | 6            | 0         | 6     |
| M1 (LTD)                                                                                                                                                                                   | (See M1 above.) Operates weekdays SB in AM peak period and NB in PM.                                                                                     | SB        | 0            | 10        | 10    | 0            | 17        | 17    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 0            | 0         | 0     | 14           | 0         | 14    |
| M2                                                                                                                                                                                         | 24-Hr service btwn the E. Village and Washington Hts. via 5 <sup>th</sup> Av & Madison Av.                                                               | SB        | 0            | 9         | 9     | 0            | 10        | 10    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 0            | 0         | 1     | 0            | 0         | 0     |
| M2 (LTD)                                                                                                                                                                                   | (See M2 above.) Operates during daytime hours with limited stops south of 110 <sup>th</sup> St.                                                          | SB        | 0            | 0         | 0     | 0            | 0         | 0     |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 2            | 2         | 4     | 4            | 4         | 8     |
| M3                                                                                                                                                                                         | Daily service btwn the E. Village and Washington Hts. via 5 <sup>th</sup> Av & Madison Av and 110 <sup>th</sup> St.                                      | SB        | 6            | 7         | 12    | 6            | 6         | 12    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 2            | 2         | 4     | 4            | 4         | 8     |
| M4                                                                                                                                                                                         | Daily service btwn Penn Station and Washington Hts. via 5 <sup>th</sup> Av & Madison Av and 110 <sup>th</sup> St.                                        | SB        | 3            | 3         | 6     | 3            | 3         | 6     |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 3            | 4         | 7     | 3            | 4         | 7     |
| M4 (LTD)                                                                                                                                                                                   | (See M4 above.) Limited stops south of 157 <sup>th</sup> St weekdays SB in AM peak period and NB in PM.                                                  | SB        | 4            | 4         | 8     | 4            | 4         | 8     |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 0            | 0         | 0     | 3            | 3         | 6     |
| M15                                                                                                                                                                                        | 24-Hour service btwn S. Ferry and E. Harlem via 1 <sup>st</sup> Av & 2 <sup>nd</sup> Av.                                                                 | SB        | 3            | 3         | 6     | 0            | 0         | 0     |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 8            | 0         | 8     | 17           | 0         | 17    |
| M15 SBS                                                                                                                                                                                    | Daily service btwn S. Ferry and E. Harlem via 1 <sup>st</sup> Av & 2 <sup>nd</sup> Av.                                                                   | SB        | 0            | 18        | 18    | 0            | 14        | 14    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 31           | 0         | 31    | 27           | 0         | 27    |
| M35                                                                                                                                                                                        | Daily service btwn E. Harlem and Randall's/Ward's Islands via RFK Bridge and 125 <sup>th</sup> St.                                                       | SB        | 0            | <b>50</b> | 50    | 0            | 25        | 25    |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 8            | 9         | 18    | 11           | 12        | 23    |
| M96                                                                                                                                                                                        | 24-Hr crosstown service btwn Yorkville and the Upper West Side via 96 <sup>th</sup> St.                                                                  | WB        | 2            | 2         | 5     | 7            | 8         | 15    |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 0            | 0         | 0     | 0            | 0         | 0     |
| M98 (LTD)                                                                                                                                                                                  | Weekday AM/PM peak service btwn Upper East Side and Washington Hts via 3 <sup>rd</sup> Av, Lexington Av & Harlem River Dr.                               | WB        | 0            | 0         | 0     | 0            | 0         | 0     |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 5            | 7         | 12    | 15           | 15        | 30    |
| M100                                                                                                                                                                                       | Daily service btwn Inwood and Harlem via 125 <sup>th</sup> St.                                                                                           | SB        | 13           | 18        | 32    | 18           | 18        | 36    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 0            | 9         | 9     | 0            | 11        | 11    |
| M101 (LTD)*                                                                                                                                                                                | Daily service btwn the E. Village and Inwood via 125 <sup>th</sup> St, 3 <sup>rd</sup> Av and Lexington Av. Limited stops south of 122 <sup>nd</sup> St. | SB        | 8            | 0         | 8     | 10           | 0         | 10    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 28           | 40        | 68    | <b>58</b>    | <b>58</b> | 116   |
| M102                                                                                                                                                                                       | 24-Hr service btwn the E. Village and Harlem via 3 <sup>rd</sup> Av, Lexington Av, 116 <sup>th</sup> St and Malcolm X Blvd.                              | SB        | 29           | 41        | 70    | 42           | 42        | 84    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 9            | 0         | 9     | 27           | 0         | 27    |
| M103                                                                                                                                                                                       | 24-Hr service btwn City Hall and Harlem via 3 <sup>rd</sup> Av & Lexington Av.                                                                           | SB        | 0            | 19        | 19    | 0            | 16        | 16    |
|                                                                                                                                                                                            |                                                                                                                                                          | NB        | 12           | 0         | 12    | 27           | 0         | 27    |
| M106                                                                                                                                                                                       | Daily service btwn E. Harlem and the Upper West Side via 96 <sup>th</sup> St, 106 <sup>th</sup> St, 5 <sup>th</sup> Av & Madison Av.                     | SB        | 0            | 22        | 22    | 0            | 18        | 18    |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 2            | 0         | 2     | 2            | 0         | 2     |
| M116                                                                                                                                                                                       | Daily service btwn E. Harlem and Morningside Hts. via 116 <sup>th</sup> St.                                                                              | WB        | 0            | 2         | 2     | 0            | 3         | 3     |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 12           | 0         | 12    | 18           | 0         | 18    |
| M60 SBS                                                                                                                                                                                    | 24-Hr service btwn W. Harlem and LaGuardia Airport via 125 <sup>th</sup> St.                                                                             | WB        | 0            | 26        | 26    | 0            | 12        | 12    |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 8            | 9         | 17    | 11           | 11        | 22    |
| Bx15 (LTD)*                                                                                                                                                                                | Daily service btwn W. Harlem and Fordham Plaza in the Bronx via 125 <sup>th</sup> St and the 3 <sup>rd</sup> Av & Willis Av bridges.                     | WB        | 11           | 12        | 23    | 11           | 11        | 22    |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 10           | 9         | 19    | 13           | 14        | 27    |
| Bx33                                                                                                                                                                                       | Daily service btwn E. Harlem and Port Morris in the Bronx via 135 <sup>th</sup> St and the Madison Ave Bridge.                                           | WB        | 20           | 19        | 39    | 12           | 13        | 25    |
|                                                                                                                                                                                            |                                                                                                                                                          | EB        | 0            | 0         | 0     | 0            | 0         | 0     |
| Total                                                                                                                                                                                      |                                                                                                                                                          |           | 246          | 358       | 604   | 373          | 356       | 729   |
| <b>Notes:</b><br><b>Bold</b> - denotes greater than 50 incremental trips per direction.<br>* Local service does not serve the project area during analyzed weekday AM and PM peak periods. |                                                                                                                                                          |           |              |           |       |              |           |       |

Project Area Bus Routes



*Bus Assignment and Analyzed Routes*

As shown in **Table 3**, projected development sites are expected to generate a net total of approximately 604 and 729 incremental bus trips during the weekday AM and PM peak hours, respectively. These trips were assigned to each bus route based on proximity to individual projected development sites and current ridership patterns. **Table 8** shows the anticipated numbers of new riders expected on each route in the AM and PM peak hours. According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, a detailed analysis of bus conditions is generally not required if a proposed action is projected to result in fewer than 50 peak hour trips being assigned to a single bus route (in one direction), as this level of new demand is considered unlikely to result in significant adverse impacts. As shown in **Table 8**, with project-generated demand distributed among a total of 21 bus routes, only two routes are expected to experience 50 or more new trips in one direction in at least one peak hour. These two routes—the M15 SBS and the M101 (LTD)—will therefore be analyzed in the EIS.

**Metro-North Commuter Rail Service**

The Metro-North Railroad (MNR) 125<sup>th</sup> Street commuter rail station is located in proximity to the project area on Park Avenue at East 125<sup>th</sup> Street. As the Proposed Actions are expected to generate a total of less than 100 trips by commuter rail in any one peak hour, impacts to the 125<sup>th</sup> Street rail station are not anticipated to result from the Proposed Actions, and it will not be analyzed in the EIS. As some Metro-North trips would also likely start or end on another mode of transit, commuter rail trips are conservatively included in the totals for the subway mode for travel demand forecasting purposes.

**PEDESTRIANS**

Under *CEQR Technical Manual* guidelines, detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner area or crosswalk. As shown in **Table 3**, the Proposed Actions are expected to generate approximately 758 walk-only trips (in + out combined) in the weekday AM peak hour, 1,631 in the midday, 1,681 in the PM, and 2,197 in the Saturday peak hour. Persons en route to and from subway station entrances and bus stops would add approximately 3,370, 1,866, 3,901 and 3,122 additional pedestrian trips to sidewalks and crosswalks in the vicinity of the project area during these same periods, respectively. In the weekday AM and PM peak hours, new pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to projected development sites as well as along corridors connecting these sites to area subway station entrances. In the midday and Saturday periods, pedestrian trips would tend to be more dispersed, as people travel throughout the area for lunch, shopping and/or errands.

Given the relatively large numbers of pedestrian trips that would be generated by the Proposed Actions, a quantitative pedestrian analysis will be provided in the EIS. The analysis will focus on sidewalks, corner areas and crosswalks where new pedestrian demand would be most concentrated and most likely to result in significant adverse impacts.

**PARKING**

Parking demand from commercial and retail uses typically peaks in the weekday midday period and declines during the afternoon and evening. By contrast, residential demand typically peaks during the overnight period.

It is anticipated that the on-site required accessory parking may not be sufficient to accommodate the overall incremental demand that would be generated by the Proposed Actions. As such, detailed existing on-street and off-street parking inventories for the weekday midday and overnight periods will be provided in the EIS to document the existing supply and demand during each period. The parking analyses will document changes in the parking supply and utilization in the project area and within a ¼-mile radius of the project area under both No-Action and With-Action conditions.

The forecast of parking demand generated by the residential component of the Proposed Actions' RWCDs will be based on 2010-2014 5-year ACS data on average vehicles per household for Manhattan Census Tracts 166, 168, 170, 172, 174.01, 174.02, 180, 182, 184, 188, 194, 196, 198, 206, and 242 which encompass the project area. Parking demands from all other uses will be derived from the forecasts of daily auto trips from these uses. Estimates of future parking utilization will account for net reductions in demand associated with No-Action land uses displaced from projected development sites under the RWCDs.

The forecast of new parking supply under the RWCDs will be based on the number of accessory parking spaces that would be provided on projected development sites in both the No-Action and With-Action conditions. The forecast of future supply will also account for accessory parking spaces associated with the With-Action commercial uses, which have lower commercial demand in the overnight hours.

## **APPENDIX A**

### **REFERENCE MATERIAL**

- (1) 2009 National Household Travel Study (Table 16)**
- (2) 2000 Regional Travel Household Interview Survey  
(pages 20-21)**



# SUMMARY OF TRAVEL TRENDS

## 2009 National Household Travel Survey



U.S. Department of Transportation  
**Federal Highway Administration**



The trend of declining vehicle occupancy may have started to reverse, as overall occupancy shows an increase in 2001 and 2009. In 2009, the rise in occupancy was the result of a significant rise in vehicle occupancy for social and recreational travel – changes in occupancy for other purposes were not noteworthy. The calculated occupancy in this table is miles-weighted, using the reported number of people on the trip and the length of the trip together.

**Table 16.** Average Vehicle Occupancy for Selected Trip Purpose 1977, 1983, 1990, and 1995 NPTS, and 2001 and 2009 NHTS (Person Miles per Vehicle Mile).

| Trip Purpose                  | 1977       | 1983        | 1990        | 1995        | 2001        | 2009        | 95% CI      |
|-------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| To or From Work               | 1.3        | 1.29        | 1.14        | 1.14        | 1.14        | 1.13        | 0.01        |
| Shopping                      | 2.1        | 1.79        | 1.71        | 1.74        | 1.79        | 1.78        | 0.05        |
| Other Family/Personal Errands | 2          | 1.81        | 1.84        | 1.78        | 1.83        | 1.84        | 0.04        |
| Social and Recreational       | 2.4        | 2.12        | 2.08        | 2.04        | 2.03        | 2.20        | 0.06        |
| <b>All Purposes</b>           | <b>1.9</b> | <b>1.75</b> | <b>1.64</b> | <b>1.59</b> | <b>1.63</b> | <b>1.67</b> | <b>0.03</b> |

**Note:**

- All purposes includes other trip purposes not shown, such as trips to school, church, and work-related business.
- "Other Family/Personal Errands" includes personal business and medical/dental. Please see Appendix A - Glossary for definition.
- NPTS is Nationwide Personal Transportation Survey. CI is Confidence Interval.



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# *RT-HIS* Regional Travel - Household Interview Survey

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## **EXECUTIVE SUMMARY GENERAL FINAL REPORT**

*Prepared for the New York Metropolitan Transportation Council (NYMTC)  
and the North Jersey Transportation Planning Authority (NJTPA)*



*prepared by:  
Parsons Brinckerhoff Quade & Douglas, Inc.  
in association with  
Cambridge Systematics, Inc.  
NuStats International*

**February 2000**

**EXECUTIVE SUMMARY:  
GENERAL FINAL REPORT**  
for the  
**RT-HIS: REGIONAL TRAVEL -  
HOUSEHOLD INTERVIEW SURVEY**

Prepared for the  
New York Metropolitan Transportation Council  
and the  
North Jersey Transportation Planning Authority, Inc.

*February 2000*

NYMTC Transportation Models and Data Initiative: Task 12.6  
NJTPA Regional Household Interview Survey: NJTPA Component

PRIME CONSULTANT: PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.  
ONE PENN PLAZA  
NEW YORK, NEW YORK 10119

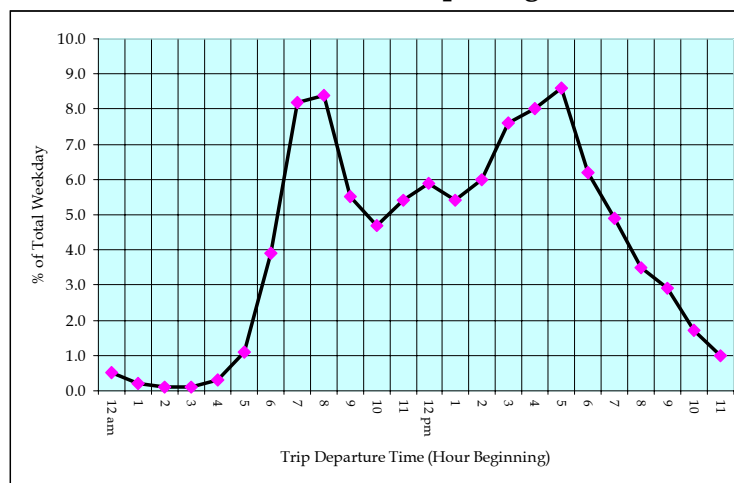
TASK SUPPORT: NUSTATS INTERNATIONAL  
3006 Bee Caves Road, Suite A-300  
Austin, TX 78746

This study is funded by a matching grant from the Federal Highway Administration, under NYSDOT PIN PT 1923.895, FHWA Grant PL100T (03) and NJDOT Agreement 93-TC-NJI-CO48, FHWA Agreement PL 0850011025, and Federal Transit Administration Grant PL NJ80X01000.

## Focus on Auto Trips

- The two peak travel times for auto trips made by area residents peak in the morning between 8 and 9 am, and in the afternoon between 5 and 6 pm.

**Diurnal Distribution - Hour of Departing - Auto Weekday Trips**

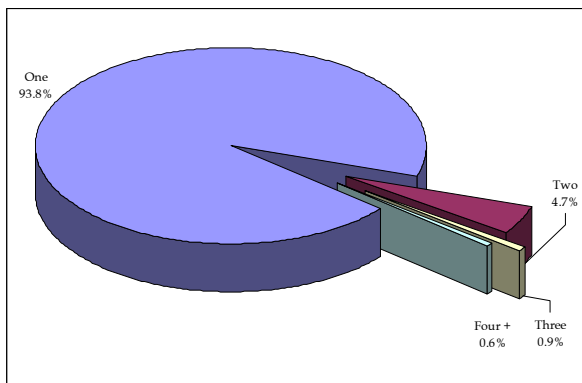


- The average auto vehicle trip is 8.7 miles long, and takes 21.0 minutes to complete at an average travel speed of 23.3 miles per hour.
- Auto trips in New York City are shorter (7.7 miles), but slower (16.4 mph) and take longer in time (27.5 minutes).
- About one-quarter (29.3%) of auto trips in the region are in the 1-3 mile range, about one-fifth (19.0%), in the 5-10 mile range, and one-tenth (9.6%) between 3 and 5 miles in length.
- New York City accounts for about 15% (4.0% Manhattan; 11.1% other NYC) of regional Vehicle Miles of Travel (VMT) by accounted for by area residents' automobiles.
- Trips from Long Island account for about 18% of VMT.
- The three counties of Middlesex, Morris, and Somerset in New Jersey represent about 13% of the total of auto VMT in the region.
- About 21% is associated with relatively long trips – 30 to 60 miles in length.
- Vehicle occupancy rates are reasonably uniform across the region, with most counties fairly close to the regional average of 1.40 persons per car for weekday travel.
- Vehicle occupancy rates are lower than average for trips in the longer trips in the 10 to 60 mile range (1.29 to 1.23). They are highest (1.52) for the very shortest trips under a mile and for the longest trips over 60 miles in length.
- For work travel, vehicle occupancy across the region is close to the average of 1.10.

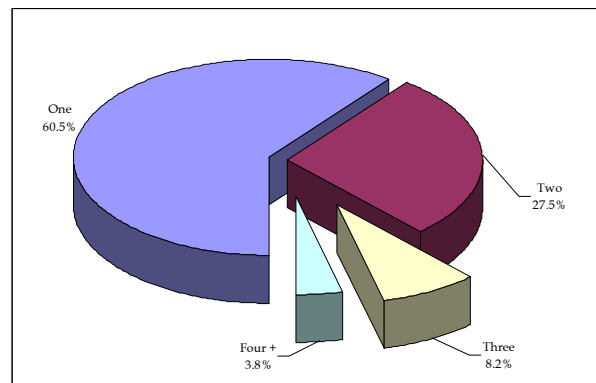
- Similarly, there is not a great deal of variation for non-work travel from the regional average of 1.57 persons per vehicle.
- About three-quarters (72.5%) of weekday auto trips are made as single occupant, or driver only trips; about one in five (19.2%) with a single passenger, and only 8.3% representing "HOV" auto trips with 3 or more occupants.
- Single Occupant Vehicle (SOV) auto trip shares generally increase with trip distance, and are the highest for work travel in the region at 93.7%.

### Distribution of Auto Trips - by Number of Occupants

#### Work Trips



#### Other (non-Work) Trips



**APPENDIX B**

**DETAILED TRIP GENERATION TABLES**

**FOR PROJECTED DEVELOPMENT SITES**

Site 1

| Land Use:           | Local Retail |     | Office     |       | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |  |
|---------------------|--------------|-----|------------|-------|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|--|
| Size/Units:         | 0 gsf        |     | 49,128 gsf |       | 0 DU        |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | -10,592 gsf          |     | 0 gsf            |     | 0 gsf                  |     | 0 gsf                     |     | 49,128 gsf       |     | 0 gsf |     |       |     |  |
| Peak Hour Trips:    |              |     |            |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | 0            |     | 108        |       | 0           |     | 0          |     | 0                  |     | 0           |     | -28                  |     | 0                |     | 0                      |     | 0                         |     | 96               |     | 0     |     | 176   |     |  |
| MD                  | 0            |     | 134        |       | 0           |     | 0          |     | 0                  |     | 0           |     | -24                  |     | 0                |     | 0                      |     | 0                         |     | 80               |     | 0     |     | 190   |     |  |
| PM                  | 0            |     | 124        |       | 0           |     | 0          |     | 0                  |     | 0           |     | -30                  |     | 0                |     | 0                      |     | 0                         |     | 104              |     | 0     |     | 198   |     |  |
| SAT                 | 0            |     | 34         |       | 0           |     | 0          |     | 0                  |     | 0           |     | -24                  |     | 0                |     | 0                      |     | 0                         |     | 12               |     | 0     |     | 22    |     |  |
| Person Trips:       |              |     |            |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 17         | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -16                  | -9  | 0                | 0   | 0                      | 0   | 0                         | 0   | 15               | 2   | 0     | 0   | 16    | -6  |  |
| Taxi                | 0            | 0   | 2          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 0   | 0     | 0   | 2     | 0   |  |
| Subway/Railroad     | 0            | 0   | 49         | 3     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 40               | 6   | 0     | 0   | 89    | 9   |  |
| Bus                 | 0            | 0   | 17         | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 14               | 2   | 0     | 0   | 31    | 3   |  |
| Walk/Other          | 0            | 0   | 17         | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 14               | 2   | 0     | 0   | 30    | 2   |  |
| Total               | 0            | 0   | 102        | 6     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -18                  | -10 | 0                | 0   | 0                      | 0   | 0                         | 0   | 84               | 12  | 0     | 0   | 168   | 8   |  |
| MD                  | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -10                  | -10 | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | -8    | -8  |  |
| Taxi                | 0            | 0   | 2          | 2     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | 2     | 2   |  |
| Subway/Railroad     | 0            | 0   | 4          | 4     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 2   | 0     | 0   | 6     | 6   |  |
| Bus                 | 0            | 0   | 4          | 4     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 2   | 0     | 0   | 6     | 6   |  |
| Walk/Other          | 0            | 0   | 54         | 58    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 34               | 34  | 0     | 0   | 87    | 91  |  |
| Total               | 0            | 0   | 65         | 69    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -12                  | -12 | 0                | 0   | 0                      | 0   | 0                         | 0   | 40               | 40  | 0     | 0   | 93    | 97  |  |
| PM                  | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 3          | 19    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -13                  | -13 | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 16  | 0     | 0   | -8    | 22  |  |
| Taxi                | 0            | 0   | 0          | 2     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 1   | 0     | 0   | -1    | 2   |  |
| Subway/Railroad     | 0            | 0   | 9          | 51    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 6                | 45  | 0     | 0   | 15    | 96  |  |
| Bus                 | 0            | 0   | 3          | 17    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 15  | 0     | 0   | 5     | 32  |  |
| Walk/Other          | 0            | 0   | 3          | 17    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 15  | 0     | 0   | 4     | 31  |  |
| Total               | 0            | 0   | 18         | 106   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -15                  | -15 | 0                | 0   | 0                      | 0   | 0                         | 0   | 12               | 92  | 0     | 0   | 15    | 183 |  |
| SAT                 | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 0          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -10                  | -10 | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -10   | -10 |  |
| Taxi                | 0            | 0   | 1          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | -1  |  |
| Subway/Railroad     | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |  |
| Bus                 | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |  |
| Walk/Other          | 0            | 0   | 18         | 11    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 6                | 6   | 0     | 0   | 23    | 16  |  |
| Total               | 0            | 0   | 21         | 13    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -12                  | -12 | 0                | 0   | 0                      | 0   | 0                         | 0   | 6                | 6   | 0     | 0   | 15    | 7   |  |
| Vehicle Trips :     |              |     |            |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 15         | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -12                  | -7  | 0                | 0   | 0                      | 0   | 0                         | 0   | 13               | 2   | 0     | 0   | 16    | -4  |  |
| Taxi                | 0            | 0   | 1          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 0   | 0     | 0   | 1     | 0   |  |
| Taxi (Balanced)     | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | 1     | 1   |  |
| Truck               | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 2   | 0     | 0   | 2     | 2   |  |
| Total               | 0            | 0   | 17         | 3     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -14                  | -9  | 0                | 0   | 0                      | 0   | 0                         | 0   | 16               | 5   | 0     | 0   | 19    | -1  |  |
| MD                  | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -8                   | -8  | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | -6    | -6  |  |
| Taxi                | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | 1     | 1   |  |
| Taxi (Balanced)     | 0            | 0   | 2          | 2     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 2   | 0     | 0   | 3     | 3   |  |
| Truck               | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | 2     | 2   |  |
| Total               | 0            | 0   | 4          | 4     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -9                   | -9  | 0                | 0   | 0                      | 0   | 0                         | 0   | 4                | 4   | 0     | 0   | -1    | -1  |  |
| PM                  | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 3          | 17    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -10                  | -10 | 0                | 0   | 0                      | 0   | 0                         | 0   | 2                | 13  | 0     | 0   | -5    | 20  |  |
| Taxi                | 0            | 0   | 0          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 1   | 0     | 0   | -1    | 1   |  |
| Taxi (Balanced)     | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 1                | 1   | 0     | 0   | 1     | 1   |  |
| Truck               | 0            | 0   | 0          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Total               | 0            | 0   | 4          | 18    | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -11                  | -11 | 0                | 0   | 0                      | 0   | 0                         | 0   | 3                | 14  | 0     | 0   | -4    | 21  |  |
| SAT                 | In           | Out | In         | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 0          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -8                   | -8  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -8    | -8  |  |
| Taxi                | 0            | 0   | 1          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | -1  |  |
| Taxi (Balanced)     | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -1                   | -1  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Truck               | 0            | 0   | 0          | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Total               | 0            | 0   | 1          | 1     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | -9                   | -9  | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -8    | -8  |  |
| Total Vehicle Trips |              |     |            |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
|                     |              | In  | Out        | Total |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  |              | 19  | -1         | 18    |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| MD                  |              | -1  | -1         | -2    |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| PM                  |              | -4  | 21         | 17    |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| SAT                 |              | -8  | -8         | -16   |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |

Site 2

| Land Use:           | Local Retail |     | Office     |     | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |
|---------------------|--------------|-----|------------|-----|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|
| Size/Units:         | 9,390 gsf    |     | -6,242 gsf |     | 127 DU      |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | 0 gsf                |     | 14,699 gsf       |     | 0 gsf                  |     | 0 gsf                     |     | 0 gsf            |     | 0 gsf |     |       |     |
| Peak Hour Trips:    |              |     |            |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | 36           |     | -14        |     | 104         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 30               |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 156   |     |
| MD                  | 220          |     | -18        |     | 52          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 24               |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 278   |     |
| PM                  | 116          |     | -16        |     | 114         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 32               |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 246   |     |
| SAT                 | 136          |     | -6         |     | 98          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 4                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 232   |     |
| Person Trips:       |              |     |            |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 0            | 0   | -2         | 0   | 1           | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 5                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 4     | 8   |
| Taxi                | 0            | 0   | 0          | 0   | 0           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 1   |
| Subway/Railroad     | 3            | 3   | -7         | 0   | 11          | 58  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 12               | 2   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 19    | 63  |
| Bus                 | 1            | 1   | -2         | 0   | 2           | 10  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 4                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 12  |
| Walk/Other          | 14           | 14  | -3         | 0   | 2           | 12  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 4                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 17    | 27  |
| Total               | 18           | 18  | -14        | 0   | 16          | 88  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 25               | 5   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 45    | 111 |
| MD                  | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 3            | 3   | 0          | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 5   |
| Taxi                | 1            | 1   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |
| Subway/Railroad     | 18           | 18  | -1         | -1  | 17          | 17  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 35    | 35  |
| Bus                 | 4            | 4   | -1         | -1  | 3           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 7     | 7   |
| Walk/Other          | 84           | 84  | -6         | -8  | 4           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 10               | 10  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 92    | 90  |
| Total               | 110          | 110 | -8         | -10 | 26          | 26  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 12               | 12  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 140   | 138 |
| PM                  | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 1            | 1   | 0          | -2  | 6           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 5   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 8     | 7   |
| Taxi                | 0            | 0   | 0          | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 0   |
| Subway/Railroad     | 10           | 10  | -1         | -8  | 51          | 24  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 2                | 13  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 62    | 39  |
| Bus                 | 2            | 2   | 0          | -2  | 9           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 5   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 12    | 9   |
| Walk/Other          | 45           | 45  | 0          | -3  | 11          | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 4   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 57    | 51  |
| Total               | 58           | 58  | -1         | -15 | 78          | 36  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 5                | 27  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 140   | 106 |
| SAT                 | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 5            | 5   | 0          | 0   | 4           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 9     | 9   |
| Taxi                | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Subway/Railroad     | 14           | 14  | 0          | 0   | 34          | 31  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 48    | 45  |
| Bus                 | 6            | 6   | 0          | 0   | 6           | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 12    | 11  |
| Walk/Other          | 43           | 43  | -3         | -3  | 7           | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 2                | 2   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 49    | 49  |
| Total               | 68           | 68  | -3         | -3  | 51          | 47  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 2                | 2   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 118   | 114 |
| Vehicle Trips :     |              |     |            |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 0            | 0   | -2         | 0   | 1           | 6   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 4                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 3     | 7   |
| Taxi                | 0            | 0   | 0          | 0   | 0           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 1   |
| Taxi (Balanced)     | 0            | 0   | 0          | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |
| Truck               | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 1   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |
| Total               | 0            | 0   | -2         | 0   | 2           | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 5                | 2   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 9   |
| MD                  | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 2            | 2   | 0          | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 3     | 3   |
| Taxi                | 1            | 1   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |
| Taxi (Balanced)     | 2            | 2   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 2     | 2   |
| Truck               | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 4            | 4   | 0          | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 5   |
| PM                  | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 1            | 1   | 0          | -2  | 5           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 4   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 7     | 6   |
| Taxi                | 0            | 0   | 0          | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 0   |
| Taxi (Balanced)     | 0            | 0   | 0          | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1   |
| Truck               | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 1            | 1   | 0          | -2  | 6           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 1                | 4   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 8     | 7   |
| SAT                 | In           | Out | In         | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 3            | 3   | 0          | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 5   |
| Taxi                | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Taxi (Balanced)     | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Truck               | 0            | 0   | 0          | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 3            | 3   | 0          | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 5   |
| Total Vehicle Trips |              |     |            |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
|                     | In           | Out | Total      |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | 5            | 9   | 14         |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| MD                  | 5            | 5   | 10         |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| PM                  | 8            | 7   | 15         |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| SAT                 | 5            | 5   | 10         |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |









Site 7

| Land Use:           | Local Retail |     | Office |     | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |
|---------------------|--------------|-----|--------|-----|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|
| Size/Units:         | 11,192 gsf   |     | 0 gsf  |     | 210 DU      |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | 0 gsf                |     | 0 gsf            |     | 11,192 gsf             |     | 11,192 gsf                |     | 0 gsf            |     | 0 gsf |     |       |     |
| Peak Hour Trips:    |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | 42           |     | 0      |     | 170         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 28                     |     | 24                        |     | 0                |     | 0     |     | 264   |     |
| MD                  | 262          |     | 0      |     | 86          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 20                     |     | 34                        |     | 0                |     | 0     |     | 402   |     |
| PM                  | 138          |     | 0      |     | 188         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 28                     |     | 20                        |     | 0                |     | 0     |     | 374   |     |
| SAT                 | 162          |     | 0      |     | 162         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 10                     |     | 16                        |     | 0                |     | 0     |     | 350   |     |
| Person Trips:       |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 1            | 1   | 0      | 0   | 2           | 12  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 0   | 5                         | 1   | 0                | 0   | 0     | 0   | 13    | 14  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 6                         | 1   | 0                | 0   | 0     | 0   | 6     | 2   |
| Subway/Railroad     | 3            | 3   | 0      | 0   | 18          | 93  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 13                     | 0   | 6                         | 1   | 0                | 0   | 0     | 0   | 40    | 97  |
| Bus                 | 1            | 1   | 0      | 0   | 3           | 17  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 0   | 2                         | 0   | 0                | 0   | 0     | 0   | 11    | 18  |
| Walk/Other          | 16           | 16  | 0      | 0   | 4           | 20  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 0   | 2                         | 0   | 0                | 0   | 0     | 0   | 27    | 36  |
| Total               | 21           | 21  | 0      | 0   | 27          | 143 | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 28                     | 0   | 21                        | 3   | 0                | 0   | 0     | 0   | 97    | 167 |
| MD                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 3            | 3   | 0      | 0   | 3           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 4                         | 4   | 0                | 0   | 0     | 0   | 10    | 10  |
| Taxi                | 1            | 1   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 4                         | 4   | 0                | 0   | 0     | 0   | 5     | 5   |
| Subway/Railroad     | 22           | 22  | 0      | 0   | 29          | 29  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 1                      | 1   | 5                         | 5   | 0                | 0   | 0     | 0   | 57    | 57  |
| Bus                 | 5            | 5   | 0      | 0   | 5           | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 1                      | 1   | 2                         | 2   | 0                | 0   | 0     | 0   | 13    | 13  |
| Walk/Other          | 100          | 100 | 0      | 0   | 6           | 6   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 8                      | 8   | 2                         | 2   | 0                | 0   | 0     | 0   | 116   | 116 |
| Total               | 131          | 131 | 0      | 0   | 43          | 43  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 10                     | 10  | 17                        | 17  | 0                | 0   | 0     | 0   | 201   | 201 |
| PM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 2            | 2   | 0      | 0   | 10          | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 5   | 2                         | 3   | 0                | 0   | 0     | 0   | 14    | 15  |
| Taxi                | 0            | 0   | 0      | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 3   | 0                | 0   | 0     | 0   | 3     | 3   |
| Subway/Railroad     | 11           | 11  | 0      | 0   | 83          | 40  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 13  | 2                         | 3   | 0                | 0   | 0     | 0   | 96    | 67  |
| Bus                 | 3            | 3   | 0      | 0   | 15          | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 5   | 1                         | 2   | 0                | 0   | 0     | 0   | 19    | 17  |
| Walk/Other          | 53           | 53  | 0      | 0   | 18          | 9   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 5   | 1                         | 1   | 0                | 0   | 0     | 0   | 72    | 68  |
| Total               | 69           | 69  | 0      | 0   | 127         | 61  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 28  | 8                         | 12  | 0                | 0   | 0     | 0   | 204   | 170 |
| SAT                 | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 6            | 6   | 0      | 0   | 7           | 6   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 15    | 14  |
| Taxi                | 0            | 0   | 0      | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 3     | 3   |
| Subway/Railroad     | 17           | 17  | 0      | 0   | 56          | 49  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 75    | 68  |
| Bus                 | 7            | 7   | 0      | 0   | 10          | 9   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 18    | 17  |
| Walk/Other          | 51           | 51  | 0      | 0   | 12          | 11  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 5   | 1                         | 1   | 0                | 0   | 0     | 0   | 69    | 68  |
| Total               | 81           | 81  | 0      | 0   | 86          | 76  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 5   | 8                         | 8   | 0                | 0   | 0     | 0   | 180   | 170 |
| Vehicle Trips :     |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 1            | 1   | 0      | 0   | 2           | 10  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 4                      | 0   | 3                         | 1   | 0                | 0   | 0     | 0   | 10    | 12  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 5                         | 1   | 0                | 0   | 0     | 0   | 5     | 2   |
| Taxi (Balanced)     | 0            | 0   | 0      | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 5                         | 5   | 0                | 0   | 0     | 0   | 6     | 6   |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 1            | 1   | 0      | 0   | 3           | 11  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 4                      | 0   | 8                         | 6   | 0                | 0   | 0     | 0   | 16    | 18  |
| MD                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 2            | 2   | 0      | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 6     | 6   |
| Taxi                | 1            | 1   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 3                         | 3   | 0                | 0   | 0     | 0   | 4     | 4   |
| Taxi (Balanced)     | 2            | 2   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 5                         | 5   | 0                | 0   | 0     | 0   | 7     | 7   |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 4            | 4   | 0      | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 7                         | 7   | 0                | 0   | 0     | 0   | 13    | 13  |
| PM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 1            | 1   | 0      | 0   | 9           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 4   | 1                         | 2   | 0                | 0   | 0     | 0   | 11    | 11  |
| Taxi                | 0            | 0   | 0      | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 3   | 0                | 0   | 0     | 0   | 3     | 3   |
| Taxi (Balanced)     | 0            | 0   | 0      | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 5                         | 5   | 0                | 0   | 0     | 0   | 6     | 6   |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 1            | 1   | 0      | 0   | 10          | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 4   | 6                         | 7   | 0                | 0   | 0     | 0   | 17    | 17  |
| SAT                 | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 3            | 3   | 0      | 0   | 4           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 8     | 8   |
| Taxi                | 0            | 0   | 0      | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 3     | 3   |
| Taxi (Balanced)     | 0            | 0   | 0      | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 4                         | 4   | 0                | 0   | 0     | 0   | 6     | 6   |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 3            | 3   | 0      | 0   | 6           | 6   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 5                         | 5   | 0                | 0   | 0     | 0   | 14    | 14  |
| Total Vehicle Trips |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
|                     | In           | Out | Total  |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | 16           | 18  | 34     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| MD                  | 13           | 13  | 26     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| PM                  | 17           | 17  | 34     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| SAT                 | 14           | 14  | 28     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |



Site 9

| Land Use:           | Local Retail |     | Office |     | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |  |
|---------------------|--------------|-----|--------|-----|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|--|
| Size/Units:         | 8,736 gsf    |     | 0 gsf  |     | 54 DU       |     | 0 gsf      |     | 2,158 gsf          |     | 0 gsf       |     | 0 gsf                |     | 0 gsf            |     | 0 gsf                  |     | 0 gsf                     |     | 0 gsf            |     | 0 gsf |     |       |     |  |
| Peak Hour Trips:    |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | 34           |     | 0      |     | 44          |     | 0          |     | 6                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 84    |     |  |
| MD                  | 206          |     | 0      |     | 22          |     | 0          |     | 16                 |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 244   |     |  |
| PM                  | 108          |     | 0      |     | 48          |     | 0          |     | 16                 |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 172   |     |  |
| SAT                 | 126          |     | 0      |     | 42          |     | 0          |     | 22                 |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 190   |     |  |
| Person Trips:       |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 0      | 0   | 1           | 3   | 0          | 0   | 1                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 3     |     |  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Subway/Railroad     | 3            | 3   | 0      | 0   | 5           | 24  | 0          | 0   | 1                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 9   | 29    |     |  |
| Bus                 | 1            | 1   | 0      | 0   | 1           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 5     |     |  |
| Walk/Other          | 13           | 13  | 0      | 0   | 1           | 5   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 15  | 19    |     |  |
| Total               | 17           | 17  | 0      | 0   | 8           | 36  | 0          | 0   | 3                  | 3   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 28  | 56    |     |  |
| MD                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 3            | 3   | 0      | 0   | 1           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 5   | 5     |     |  |
| Taxi                | 1            | 1   | 0      | 0   | 0           | 0   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     |     |  |
| Subway/Railroad     | 17           | 17  | 0      | 0   | 7           | 7   | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 26  | 26    |     |  |
| Bus                 | 4            | 4   | 0      | 0   | 1           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 6   | 6     |     |  |
| Walk/Other          | 78           | 78  | 0      | 0   | 2           | 2   | 0          | 0   | 3                  | 3   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 83  | 83    |     |  |
| Total               | 103          | 103 | 0      | 0   | 11          | 11  | 0          | 0   | 8                  | 8   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 122 | 122   |     |  |
| PM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 1            | 1   | 0      | 0   | 3           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 5   | 3     |     |  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Subway/Railroad     | 9            | 9   | 0      | 0   | 21          | 10  | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 32  | 21    |     |  |
| Bus                 | 2            | 2   | 0      | 0   | 4           | 2   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 7   | 5     |     |  |
| Walk/Other          | 42           | 42  | 0      | 0   | 5           | 2   | 0          | 0   | 3                  | 3   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 50  | 47    |     |  |
| Total               | 54           | 54  | 0      | 0   | 33          | 15  | 0          | 0   | 8                  | 8   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 95  | 77    |     |  |
| SAT                 | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 4            | 4   | 0      | 0   | 2           | 2   | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 8   | 8     |     |  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Subway/Railroad     | 13           | 13  | 0      | 0   | 14          | 13  | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 29  | 28    |     |  |
| Bus                 | 6            | 6   | 0      | 0   | 3           | 2   | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 11  | 10    |     |  |
| Walk/Other          | 40           | 40  | 0      | 0   | 3           | 3   | 0          | 0   | 4                  | 4   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 47  | 47    |     |  |
| Total               | 63           | 63  | 0      | 0   | 22          | 20  | 0          | 0   | 11                 | 11  | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 96  | 94    |     |  |
| Vehicle Trips :     |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 0      | 0   | 1           | 3   | 0          | 0   | 1                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 3     |     |  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Total               | 0            | 0   | 0      | 0   | 1           | 3   | 0          | 0   | 1                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 3     | 0   |  |
| MD                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 2            | 2   | 0      | 0   | 1           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 4     | 0   |  |
| Taxi                | 1            | 1   | 0      | 0   | 0           | 0   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     | 0   |  |
| Taxi (Balanced)     | 2            | 2   | 0      | 0   | 0           | 0   | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 4     | 0   |  |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Total               | 4            | 4   | 0      | 0   | 1           | 1   | 0          | 0   | 3                  | 3   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 8   | 8     | 0   |  |
| PM                  | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 1            | 1   | 0      | 0   | 3           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 5   | 3     | 0   |  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     | 0   |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 2                  | 2   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     | 0   |  |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Total               | 1            | 1   | 0      | 0   | 3           | 1   | 0          | 0   | 3                  | 3   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 7   | 5     | 0   |  |
| SAT                 | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 2            | 2   | 0      | 0   | 1           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 4     | 0   |  |
| Taxi                | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Truck               | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |  |
| Total               | 2            | 2   | 0      | 0   | 1           | 1   | 0          | 0   | 1                  | 1   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 4     | 0   |  |
| Total Vehicle Trips |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
|                     | In           | Out | Total  |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | 2            | 3   | 5      |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| MD                  | 8            | 8   | 16     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| PM                  | 7            | 5   | 12     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| SAT                 | 4            | 4   | 8      |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |







Site 13

| Land Use:           | Local Retail |      | Office    |     | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |      |
|---------------------|--------------|------|-----------|-----|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|------|
| Size/Units:         | -20,198 gsf  |      | 9,842 gsf |     | 156 DU      |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | 0 gsf                |     | -10,000 gsf      |     | 0 gsf                  |     | 0 gsf                     |     | 0 gsf            |     | 0 gsf |     |       |      |
| Peak Hour Trips:    |              |      |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| AM                  | -76          |      | 22        |     | 126         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | -20              |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 52    |      |
| MD                  | -474         |      | 28        |     | 64          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | -18              |     | 0                      |     | 0                         |     | 0                |     | 0     |     | -400  |      |
| PM                  | -250         |      | 26        |     | 140         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | -22              |     | 0                      |     | 0                         |     | 0                |     | 0     |     | -106  |      |
| SAT                 | -292         |      | 8         |     | 120         |     | 0          |     | 0                  |     | 0           |     | 0                    |     | -4               |     | 0                      |     | 0                         |     | 0                |     | 0     |     | -168  |      |
| Person Trips:       |              |      |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| AM                  | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto                | -1           | -1   | 4         | 0   | 2           | 9   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -3               | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 2     | 8    |
| Taxi                | 0            | 0    | 0         | 0   | 0           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 1    |
| Subway/Railroad     | -6           | -6   | 11        | 1   | 13          | 68  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -9               | -2  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 9     | 61   |
| Bus                 | -2           | -2   | 3         | 0   | 2           | 13  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -3               | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 11   |
| Walk/Other          | -29          | -29  | 3         | 0   | 3           | 15  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -3               | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -26   | -14  |
| Total               | -38          | -38  | 21        | 1   | 20          | 106 | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -18              | -2  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -15   | 67   |
| MD                  | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto                | -6           | -6   | 0         | 0   | 3           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -3    | -3   |
| Taxi                | -1           | -1   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -1    | -1   |
| Subway/Railroad     | -39          | -39  | 1         | 1   | 20          | 20  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -1               | -1  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -19   | -19  |
| Bus                 | -9           | -9   | 1         | 1   | 4           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -1               | -1  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -5    | -5   |
| Walk/Other          | -182         | -182 | 12        | 12  | 5           | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -7               | -7  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -172  | -172 |
| Total               | -237         | -237 | 14        | 14  | 32          | 32  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -9               | -9  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -200  | -200 |
| PM                  | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto                | -3           | -3   | 1         | 4   | 8           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | -4  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 6     | 1    |
| Taxi                | -1           | -1   | 0         | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | -1   |
| Subway/Railroad     | -21          | -21  | 2         | 10  | 61          | 30  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -1               | -9  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 41    | 10   |
| Bus                 | -5           | -5   | 1         | 4   | 11          | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | -4  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 7     | 0    |
| Walk/Other          | -95          | -95  | 1         | 3   | 13          | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | -4  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -81   | -89  |
| Total               | -125         | -125 | 5         | 21  | 94          | 46  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -1               | -21 | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -27   | -79  |
| SAT                 | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto                | -10          | -10  | 0         | 0   | 5           | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -5    | -5   |
| Taxi                | 0            | 0    | 0         | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 0    |
| Subway/Railroad     | -31          | -31  | 0         | 0   | 40          | 37  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 9     | 6    |
| Bus                 | -13          | -13  | 0         | 0   | 8           | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -5    | -6   |
| Walk/Other          | -92          | -92  | 4         | 4   | 9           | 8   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -2               | -2  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -81   | -82  |
| Total               | -146         | -146 | 4         | 4   | 63          | 57  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -2               | -2  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -81   | -87  |
| Vehicle Trips :     |              |      |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| AM                  | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto (Total)        | -1           | -1   | 3         | 0   | 2           | 8   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -3               | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 7    |
| Taxi                | 0            | 0    | 0         | 0   | 0           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 1    |
| Taxi (Balanced)     | 0            | 0    | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1    |
| Truck               | 0            | 0    | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0    |
| Total               | -1           | -1   | 3         | 0   | 3           | 9   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | -3               | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 2     | 8    |
| MD                  | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto (Total)        | -3           | -3   | 0         | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -1    | -1   |
| Taxi                | -1           | -1   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -1    | -1   |
| Taxi (Balanced)     | -1           | -1   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -1    | -1   |
| Truck               | 0            | 0    | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0    |
| Total               | -4           | -4   | 0         | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -2    | -2   |
| PM                  | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto (Total)        | -2           | -2   | 1         | 3   | 7           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | -3  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 6     | 1    |
| Taxi                | -1           | -1   | 0         | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | -1   |
| Taxi (Balanced)     | -1           | -1   | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0    |
| Truck               | 0            | 0    | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0    |
| Total               | -3           | -3   | 1         | 3   | 8           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | -3  | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 6     | 1    |
| SAT                 | In           | Out  | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out  |
| Auto (Total)        | -5           | -5   | 0         | 0   | 3           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -2    | -2   |
| Taxi                | 0            | 0    | 0         | 0   | 1           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 0    |
| Taxi (Balanced)     | 0            | 0    | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 1     | 1    |
| Truck               | 0            | 0    | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0    |
| Total               | -5           | -5   | 0         | 0   | 4           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | -1    | -1   |
| Total Vehicle Trips |              |      |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
|                     | In           | Out  | Total     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| AM                  | 2            | 8    | 10        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| MD                  | -2           | -2   | -4        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| PM                  | 6            | 1    | 7         |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |
| SAT                 | -1           | -1   | -2        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |      |















Site 21

| Land Use:        | Local Retail |     | Office |     | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |
|------------------|--------------|-----|--------|-----|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|
| Size/Units:      | 10,565 gsf   |     | 0 gsf  |     | 72 DU       |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | 0 gsf                |     | 0 gsf            |     | 13,665 gsf             |     | 13,665 gsf                |     | 0 gsf            |     | 0 gsf |     |       |     |
| Peak Hour Trips: |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM               | 40           |     | 0      |     | 60          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 34                     |     | 28                        |     | 0                |     | 0     |     | 162   |     |
| MD               | 248          |     | 0      |     | 30          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 24                     |     | 42                        |     | 0                |     | 0     |     | 344   |     |
| PM               | 130          |     | 0      |     | 64          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 34                     |     | 24                        |     | 0                |     | 0     |     | 252   |     |
| SAT              | 154          |     | 0      |     | 56          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 10                     |     | 18                        |     | 0                |     | 0     |     | 238   |     |
| Person Trips:    |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM               | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto             | 1            | 1   | 0      | 0   | 1           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 6                      | 0   | 6                         | 1   | 0                | 0   | 0     | 0   | 14    | 6   |
| Taxi             | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 1                      | 0   | 6                         | 1   | 0                | 0   | 0     | 0   | 7     | 1   |
| Subway/Railroad  | 3            | 3   | 0      | 0   | 6           | 34  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 16                     | 0   | 7                         | 1   | 0                | 0   | 0     | 0   | 32    | 38  |
| Bus              | 1            | 1   | 0      | 0   | 1           | 6   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 6                      | 0   | 3                         | 0   | 0                | 0   | 0     | 0   | 11    | 7   |
| Walk/Other       | 15           | 15  | 0      | 0   | 1           | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 0   | 3                         | 0   | 0                | 0   | 0     | 0   | 24    | 22  |
| Total            | 20           | 20  | 0      | 0   | 9           | 51  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 34                     | 0   | 25                        | 3   | 0                | 0   | 0     | 0   | 88    | 74  |
| MD               | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto             | 3            | 3   | 0      | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 5                         | 5   | 0                | 0   | 0     | 0   | 9     | 9   |
| Taxi             | 1            | 1   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 6                         | 6   | 0                | 0   | 0     | 0   | 7     | 7   |
| Subway/Railroad  | 20           | 20  | 0      | 0   | 10          | 10  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 1                      | 1   | 6                         | 6   | 0                | 0   | 0     | 0   | 37    | 37  |
| Bus              | 5            | 5   | 0      | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 1                      | 1   | 2                         | 2   | 0                | 0   | 0     | 0   | 10    | 10  |
| Walk/Other       | 95           | 95  | 0      | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 10                     | 10  | 2                         | 2   | 0                | 0   | 0     | 0   | 109   | 109 |
| Total            | 124          | 124 | 0      | 0   | 15          | 15  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 12                     | 12  | 21                        | 21  | 0                | 0   | 0     | 0   | 172   | 172 |
| PM               | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto             | 2            | 2   | 0      | 0   | 3           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 6   | 2                         | 4   | 0                | 0   | 0     | 0   | 7     | 14  |
| Taxi             | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 1   | 2                         | 4   | 0                | 0   | 0     | 0   | 2     | 5   |
| Subway/Railroad  | 11           | 11  | 0      | 0   | 28          | 14  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 16  | 2                         | 4   | 0                | 0   | 0     | 0   | 41    | 45  |
| Bus              | 3            | 3   | 0      | 0   | 5           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 6   | 1                         | 2   | 0                | 0   | 0     | 0   | 9     | 14  |
| Walk/Other       | 49           | 49  | 0      | 0   | 6           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 5   | 1                         | 2   | 0                | 0   | 0     | 0   | 56    | 59  |
| Total            | 65           | 65  | 0      | 0   | 42          | 22  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 34  | 8                         | 16  | 0                | 0   | 0     | 0   | 115   | 137 |
| SAT              | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto             | 5            | 5   | 0      | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 9     | 9   |
| Taxi             | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 2     | 2   |
| Subway/Railroad  | 16           | 16  | 0      | 0   | 20          | 17  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 3                         | 3   | 0                | 0   | 0     | 0   | 39    | 36  |
| Bus              | 7            | 7   | 0      | 0   | 4           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 12    | 11  |
| Walk/Other       | 49           | 49  | 0      | 0   | 4           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 5   | 1                         | 1   | 0                | 0   | 0     | 0   | 59    | 59  |
| Total            | 77           | 77  | 0      | 0   | 30          | 26  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 5   | 9                         | 9   | 0                | 0   | 0     | 0   | 121   | 117 |
| Vehicle Trips :  |              |     |        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM               | In           | Out | In     | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)     | 1            | 1   | 0      | 0   | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 5                      | 0   | 4                         | 1   | 0                | 0   | 0     | 0   | 11    | 5   |
| Taxi             | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 1                      | 0   | 5                         | 1   | 0                | 0   | 0     | 0   | 6     | 1   |
| Taxi (Balanced)  | 0            | 0   | 0      | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                |     |                        |     |                           |     |                  |     |       |     |       |     |















Site 29

| Land Use:           | Local Retail |     | Office    |     | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |
|---------------------|--------------|-----|-----------|-----|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|
| Size/Units:         | -8,357 gsf   |     | 5,790 gsf |     | 53 DU       |     | 0 gsf      |     | 0 gsf              |     | 8,357 gsf   |     | 0 gsf                |     | 0 gsf            |     | 2,000 gsf              |     | 2,000 gsf                 |     | 0 gsf            |     | 0 gsf |     |       |     |
| Peak Hour Trips:    |              |     |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | -32          |     | 14        |     | 44          |     | 0          |     | 0                  |     | 52          |     | 0                    |     | 0                |     | 6                      |     | 6                         |     | 0                |     | 0     |     | 90    |     |
| MD                  | -196         |     | 16        |     | 22          |     | 0          |     | 0                  |     | 206         |     | 0                    |     | 0                |     | 4                      |     | 8                         |     | 0                |     | 0     |     | 60    |     |
| PM                  | -104         |     | 16        |     | 48          |     | 0          |     | 0                  |     | 172         |     | 0                    |     | 0                |     | 6                      |     | 4                         |     | 0                |     | 0     |     | 142   |     |
| SAT                 | -122         |     | 4         |     | 42          |     | 0          |     | 0                  |     | 272         |     | 0                    |     | 0                |     | 2                      |     | 4                         |     | 0                |     | 0     |     | 202   |     |
| Person Trips:       |              |     |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 0            | 0   | 2         | 0   | 1           | 3   | 0          | 0   | 0                  | 0   | 1           | 1   | 0                    | 0   | 0                | 0   | 1                      | 0   | 1                         | 0   | 0                | 0   | 0     | 0   | 6     | 4   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 1           | 1   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 0   | 0                | 0   | 0     | 0   | 2     | 1   |
| Subway/Railroad     | -3           | -3  | 7         | 1   | 5           | 24  | 0          | 0   | 0                  | 0   | 1           | 1   | 0                    | 0   | 0                | 0   | 3                      | 0   | 2                         | 0   | 0                | 0   | 0     | 0   | 15    | 23  |
| Bus                 | -1           | -1  | 2         | 0   | 1           | 4   | 0          | 0   | 0                  | 0   | 1           | 1   | 0                    | 0   | 0                | 0   | 1                      | 0   | 1                         | 0   | 0                | 0   | 0     | 0   | 5     | 4   |
| Walk/Other          | -12          | -12 | 2         | 0   | 1           | 5   | 0          | 0   | 0                  | 0   | 19          | 25  | 0                    | 0   | 0                | 0   | 1                      | 0   | 1                         | 0   | 0                | 0   | 0     | 0   | 12    | 18  |
| Total               | -16          | -16 | 13        | 1   | 8           | 36  | 0          | 0   | 0                  | 0   | 23          | 29  | 0                    | 0   | 0                | 0   | 6                      | 0   | 6                         | 0   | 0                | 0   | 0     | 0   | 40    | 50  |
| MD                  | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | -2           | -2  | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 4           | 3   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 4     | 3   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 3           | 3   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 4     | 4   |
| Subway/Railroad     | -16          | -16 | 1         | 1   | 7           | 7   | 0          | 0   | 0                  | 0   | 5           | 6   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | -1    | 0   |
| Bus                 | -4           | -4  | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 5           | 6   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 2     | 3   |
| Walk/Other          | -76          | -76 | 7         | 7   | 2           | 2   | 0          | 0   | 0                  | 0   | 79          | 92  | 0                    | 0   | 0                | 0   | 2                      | 2   | 0                         | 0   | 0                | 0   | 0     | 0   | 14    | 27  |
| Total               | -98          | -98 | 8         | 8   | 11          | 11  | 0          | 0   | 0                  | 0   | 96          | 110 | 0                    | 0   | 0                | 0   | 2                      | 2   | 4                         | 4   | 0                | 0   | 0     | 0   | 23    | 37  |
| PM                  | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | -1           | -1  | 0         | 2   | 3           | 1   | 0          | 0   | 0                  | 0   | 3           | 4   | 0                    | 0   | 0                | 0   | 0                      | 1   | 0                         | 1   | 0                | 0   | 0     | 0   | 5     | 8   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 2           | 3   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 1   | 0                | 0   | 0     | 0   | 2     | 4   |
| Subway/Railroad     | -9           | -9  | 2         | 8   | 21          | 10  | 0          | 0   | 0                  | 0   | 4           | 5   | 0                    | 0   | 0                | 0   | 0                      | 3   | 1                         | 1   | 0                | 0   | 0     | 0   | 19    | 18  |
| Bus                 | -2           | -2  | 0         | 2   | 4           | 2   | 0          | 0   | 0                  | 0   | 4           | 5   | 0                    | 0   | 0                | 0   | 0                      | 1   | 0                         | 0   | 0                | 0   | 0     | 0   | 6     | 8   |
| Walk/Other          | -40          | -40 | 0         | 2   | 5           | 2   | 0          | 0   | 0                  | 0   | 67          | 75  | 0                    | 0   | 0                | 0   | 0                      | 1   | 0                         | 0   | 0                | 0   | 0     | 0   | 32    | 40  |
| Total               | -52          | -52 | 2         | 14  | 33          | 15  | 0          | 0   | 0                  | 0   | 80          | 92  | 0                    | 0   | 0                | 0   | 0                      | 6   | 1                         | 3   | 0                | 0   | 0     | 0   | 64    | 78  |
| SAT                 | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | -4           | -4  | 0         | 0   | 2           | 2   | 0          | 0   | 0                  | 0   | 5           | 6   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 4     | 5   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 4           | 4   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 4     | 4   |
| Subway/Railroad     | -13          | -13 | 0         | 0   | 14          | 13  | 0          | 0   | 0                  | 0   | 6           | 7   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 8     | 8   |
| Bus                 | -5           | -5  | 0         | 0   | 3           | 2   | 0          | 0   | 0                  | 0   | 6           | 7   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 4     | 4   |
| Walk/Other          | -39          | -39 | 2         | 2   | 3           | 3   | 0          | 0   | 0                  | 0   | 105         | 122 | 0                    | 0   | 0                | 0   | 1                      | 1   | 0                         | 0   | 0                | 0   | 0     | 0   | 72    | 89  |
| Total               | -61          | -61 | 2         | 2   | 22          | 20  | 0          | 0   | 0                  | 0   | 126         | 146 | 0                    | 0   | 0                | 0   | 1                      | 1   | 2                         | 2   | 0                | 0   | 0     | 0   | 92    | 110 |
| Vehicle Trips :     |              |     |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 0            | 0   | 2         | 0   | 1           | 3   | 0          | 0   | 0                  | 0   | 1           | 1   | 0                    | 0   | 0                | 0   | 1                      | 0   | 1                         | 0   | 0                | 0   | 0     | 0   | 6     | 4   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 1           | 1   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 0   | 0                | 0   | 0     | 0   | 2     | 1   |
| Taxi (Balanced)     | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 2           | 2   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 3     | 3   |
| Truck               | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | 0            | 0   | 2         | 0   | 1           | 3   | 0          | 0   | 0                  | 0   | 3           | 3   | 0                    | 0   | 0                | 0   | 1                      | 0   | 2                         | 1   | 0                | 0   | 0     | 0   | 9     | 7   |
| MD                  | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | -1           | -1  | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 2           | 2   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 3     | 3   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 2           | 2   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 3     | 3   |
| Taxi (Balanced)     | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 4           | 4   | 0                    | 0   | 0                | 0   | 0                      | 0   | 2                         | 2   | 0                | 0   | 0     | 0   | 6     | 6   |
| Truck               | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | -1           | -1  | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 6           | 6   | 0                    | 0   | 0                | 0   | 0                      | 0   | 3                         | 3   | 0                | 0   | 0     | 0   | 9     | 9   |
| PM                  | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | -1           | -1  | 0         | 2   | 3           | 1   | 0          | 0   | 0                  | 0   | 2           | 2   | 0                    | 0   | 0                | 0   | 0                      | 1   | 0                         | 1   | 0                | 0   | 0     | 0   | 4     | 6   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 1           | 2   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 1   | 0                | 0   | 0     | 0   | 1     | 3   |
| Taxi (Balanced)     | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 3           | 3   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 4     | 4   |
| Truck               | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | -1           | -1  | 0         | 2   | 3           | 1   | 0          | 0   | 0                  | 0   | 5           | 5   | 0                    | 0   | 0                | 0   | 0                      | 1   | 1                         | 2   | 0                | 0   | 0     | 0   | 8     | 10  |
| SAT                 | In           | Out | In        | Out | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | -2           | -2  | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 3           | 4   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 3     | 4   |
| Taxi                | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 3           | 3   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 3     | 3   |
| Taxi (Balanced)     | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 5           | 5   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 5     | 5   |
| Truck               | 0            | 0   | 0         | 0   | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     | 0   |
| Total               | -2           | -2  | 0         | 0   | 1           | 1   | 0          | 0   | 0                  | 0   | 8           | 9   | 0                    | 0   | 0                | 0   | 0                      | 0   | 1                         | 1   | 0                | 0   | 0     | 0   | 8     | 9   |
| Total Vehicle Trips |              |     |           |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
|                     | In           | Out | Total     |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | 9            | 7   | 16        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| MD                  | 9            | 9   | 18        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| PM                  | 8            | 10  | 18        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| SAT                 | 8            | 9   | 17        |     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |





















































Site 56

| Land Use:           | Local Retail |     | Office |       | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |
|---------------------|--------------|-----|--------|-------|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|
| Size/Units:         | 0 gsf        |     | 0 gsf  |       | 50 DU       |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | 0 gsf                |     | 0 gsf            |     | 0 gsf                  |     | 0 gsf                     |     | 0 gsf            |     | 0 gsf |     |       |     |
| Peak Hour Trips:    |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | 0            |     | 0      |       | 42          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 42    |     |
| MD                  | 0            |     | 0      |       | 22          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 22    |     |
| PM                  | 0            |     | 0      |       | 46          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 46    |     |
| SAT                 | 0            |     | 0      |       | 40          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 40    |     |
| Person Trips:       |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 0            | 0   | 0      | 0     | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 3     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 4           | 23  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 23    |     |
| Bus                 | 0            | 0   | 0      | 0     | 1           | 4   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 4     |     |
| Walk/Other          | 0            | 0   | 0      | 0     | 1           | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 5     |     |
| Total               | 0            | 0   | 0      | 0     | 7           | 35  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 7   | 35    |     |
| MD                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 7           | 7   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 7   | 7     |     |
| Bus                 | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |
| Walk/Other          | 0            | 0   | 0      | 0     | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     |     |
| Total               | 0            | 0   | 0      | 0     | 11          | 11  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 11  | 11    |     |
| PM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 0            | 0   | 0      | 0     | 2           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 1     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 21          | 10  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 21  | 10    |     |
| Bus                 | 0            | 0   | 0      | 0     | 4           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 2     |     |
| Walk/Other          | 0            | 0   | 0      | 0     | 4           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 2     |     |
| Total               | 0            | 0   | 0      | 0     | 31          | 15  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 31  | 15    |     |
| SAT                 | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto                | 0            | 0   | 0      | 0     | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 13          | 12  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 13  | 12    |     |
| Bus                 | 0            | 0   | 0      | 0     | 3           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 2     |     |
| Walk/Other          | 0            | 0   | 0      | 0     | 3           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 3     |     |
| Total               | 0            | 0   | 0      | 0     | 21          | 19  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 21  | 19    |     |
| Vehicle Trips :     |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 0            | 0   | 0      | 0     | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 3     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Total               | 0            | 0   | 0      | 0     | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 3     |     |
| MD                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Total               | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |
| PM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 0            | 0   | 0      | 0     | 2           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 1     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Total               | 0            | 0   | 0      | 0     | 2           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 1     |     |
| SAT                 | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |
| Auto (Total)        | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |
| Total               | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |
| Total Vehicle Trips |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
|                     |              | In  | Out    | Total |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| AM                  |              | 1   | 3      | 4     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| MD                  |              | 1   | 1      | 2     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| PM                  |              | 2   | 1      | 3     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |
| SAT                 |              | 1   | 1      | 2     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |

Notes:  
40% link trip credit for local retail use; 0%, 25%, 15%, and 15% for restaurant use for AM, MD, PM, and SAT, respectively.  
25% taxi overlap























Site 68

| Land Use:           | Local Retail |     | Office |       | Residential |     | Restaurant |     | Destination Retail |     | Supermarket |     | Auto Repair/ Related |     | Light Industrial |     | Medical Office (Staff) |     | Medical Office (Visitors) |     | Laboratory Space |     | Hotel |     | Total |     |  |
|---------------------|--------------|-----|--------|-------|-------------|-----|------------|-----|--------------------|-----|-------------|-----|----------------------|-----|------------------|-----|------------------------|-----|---------------------------|-----|------------------|-----|-------|-----|-------|-----|--|
| Size/Units:         | 0 gsf        |     | 0 gsf  |       | 57 DU       |     | 0 gsf      |     | 0 gsf              |     | 0 gsf       |     | 0 gsf                |     | 0 gsf            |     | 0 gsf                  |     | 0 gsf                     |     | 0 gsf            |     | 0 gsf |     |       |     |  |
| Peak Hour Trips:    |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | 0            |     | 0      |       | 48          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 48    |     |  |
| MD                  | 0            |     | 0      |       | 24          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 24    |     |  |
| PM                  | 0            |     | 0      |       | 52          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 52    |     |  |
| SAT                 | 0            |     | 0      |       | 44          |     | 0          |     | 0                  |     | 0           |     | 0                    |     | 0                |     | 0                      |     | 0                         |     | 0                |     | 0     |     | 44    |     |  |
| Person Trips:       |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 0      | 0     | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 3     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 5           | 26  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 5   | 26    |     |  |
| Bus                 | 0            | 0   | 0      | 0     | 1           | 5   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 5     |     |  |
| Walk/Other          | 0            | 0   | 0      | 0     | 1           | 6   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 6     |     |  |
| Total               | 0            | 0   | 0      | 0     | 8           | 40  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 8   | 40    |     |  |
| MD                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 8           | 8   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 8   | 8     |     |  |
| Bus                 | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Walk/Other          | 0            | 0   | 0      | 0     | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     |     |  |
| Total               | 0            | 0   | 0      | 0     | 12          | 12  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 12  | 12    |     |  |
| PM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 0      | 0     | 3           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 1     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 24          | 11  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 24  | 11    |     |  |
| Bus                 | 0            | 0   | 0      | 0     | 4           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 4   | 2     |     |  |
| Walk/Other          | 0            | 0   | 0      | 0     | 5           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 5   | 2     |     |  |
| Total               | 0            | 0   | 0      | 0     | 36          | 16  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 36  | 16    |     |  |
| SAT                 | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto                | 0            | 0   | 0      | 0     | 2           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 2   | 2     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Subway/Railroad     | 0            | 0   | 0      | 0     | 16          | 13  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 16  | 13    |     |  |
| Bus                 | 0            | 0   | 0      | 0     | 3           | 2   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 2     |     |  |
| Walk/Other          | 0            | 0   | 0      | 0     | 3           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 3     |     |  |
| Total               | 0            | 0   | 0      | 0     | 24          | 20  | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 24  | 20    |     |  |
| Vehicle Trips :     |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 0      | 0     | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 3     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Total               | 0            | 0   | 0      | 0     | 1           | 3   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 3     |     |  |
| MD                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Total               | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| PM                  | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 0      | 0     | 3           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 1     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Total               | 0            | 0   | 0      | 0     | 3           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 3   | 1     |     |  |
| SAT                 | In           | Out | In     | Out   | In          | Out | In         | Out | In                 | Out | In          | Out | In                   | Out | In               | Out | In                     | Out | In                        | Out | In               | Out | In    | Out | In    | Out |  |
| Auto (Total)        | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Taxi                | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Taxi (Balanced)     | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Truck               | 0            | 0   | 0      | 0     | 0           | 0   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 0   | 0     |     |  |
| Total               | 0            | 0   | 0      | 0     | 1           | 1   | 0          | 0   | 0                  | 0   | 0           | 0   | 0                    | 0   | 0                | 0   | 0                      | 0   | 0                         | 0   | 0                | 0   | 0     | 1   | 1     |     |  |
| Total Vehicle Trips |              |     |        |       |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
|                     |              | In  | Out    | Total |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| AM                  |              | 1   | 3      | 4     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| MD                  |              | 1   | 1      | 2     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| PM                  |              | 3   | 1      | 4     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |
| SAT                 |              | 1   | 1      | 2     |             |     |            |     |                    |     |             |     |                      |     |                  |     |                        |     |                           |     |                  |     |       |     |       |     |  |

Notes:  
40% link trip credit for local retail use; 0%, 25%, 15%, and 15% for restaurant use for AM, MD, PM, and SAT, respectively.  
25% taxi overlap



**Appendix 4**  
**Air Quality Methodology Memo**



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## Memorandum

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**To:** New York City Department of City Planning  
**From:** Henry Kearney  
**Subject:** East Harlem Rezoning EIS – Air Quality Analysis Methodology  
**Date:** November 3, 2016  
**cc:** Robert White, Patrick Blanchfield

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The purpose of this memorandum is to describe the air quality analysis approach for the proposed development sites for the East Harlem Rezoning Environmental Impact Statement (EIS). A total of 99 development sites (68 projected and 31 potential) have been identified in the proposed rezoning area. Under the reasonable worst case development scenario (RWCDs) for the proposed action, the total development expected to occur on the 68 projected development sites under the With-Action condition would consist of approximately 6,461,692 sf of total floor area, including 5,403,171 sf of residential floor area (6,003 dwelling units), 728,654 sf of commercial uses, 155,171 sf of industrial uses, and 102,192 sf of community facility uses, as well as 102,504 sf of parking. The analysis year is 2027. In addition, there are 20 industrial source permits in the area that are assumed to be active (see **Table 1**) and may need to be analyzed for their potential impact future residents of the Proposed Actions.

This memorandum presents a summary of the methodology and assumptions to be used for the both the mobile and stationary source air quality analyses of the Proposed Actions.

### **MOBILE SOURCE ANALYSIS**

#### *INTERSECTION SELECTION*

The mobile source analysis will evaluate the proposed action for potential impacts from carbon monoxide (CO), and fine particulate matter less than 10 microns in diameter (PM<sub>10</sub>) and less than 2.5 microns in diameter (PM<sub>2.5</sub>) due to vehicular traffic anticipated to be generated by the proposed action. Based on a preliminary review of the study area roadway configuration and traffic patterns, it is anticipated that projected vehicle trips generated by the proposed action will not exceed the CO threshold of 170 vehicles in a peak hour at any intersections in the study area. For PM<sub>10</sub> and PM<sub>2.5</sub>, the screening procedure outlined in the *CEQR Technical Manual* is based on determining whether the projected number of vehicles trips at an intersection exceeds thresholds based on heavy-duty diesel vehicle (HDDV) equivalents. The thresholds are as follows:

- 12 or more HDDV for paved roads with average daily traffic fewer than 5,000 vehicles;
- 19 or more HDDV for collector roads;
- 23 or more HDDV for principal and minor arterials; or
- 23 or more HDDV for expressways and limited access roads.

To determine whether any of these thresholds are exceeded, the worksheet referenced in Section 201 of the *CEQR Technical Manual* will be utilized to calculate the equivalent number of HDDV equivalents at intersections in the traffic study area. The worksheet uses vehicle classification information based on the traffic data collected for the project, and assigns these classifications to vehicle categories using a table referenced in the *CEQR Technical Manual*<sup>1</sup>. Roadway classifications will be determined by corridor at each intersection, based on NYCDOT functional class criteria and With Action traffic volumes.

It is anticipated that the highest concentration of vehicle trips will be in the following areas:

- Along the Park Avenue corridor between East 111th Street and East 128th Street;
- Along Lexington Avenue between East 125th and East 128th Street;
- Along the Third Avenue corridor between East 108th Street and East 111th Street, and between East 119th Street and East 125th Street; and
- Along the Second Avenue corridor between East 120th and East 126th Street.

If any intersection is determined to exceed the CO and/or PM mobile source screening thresholds, it will be analyzed. Selection of specific intersections for analysis will depend on the baseline and No Action traffic conditions along with the vehicular trip generation and distribution under the proposed action (this data is anticipated to be available in January 2017). The selected intersections will be submitted for review and approval to DCP. If additional intersections warrant analysis, justification for their inclusion will be provided to DCP for review and approval; however, it is anticipated that no more than four (4) intersections in total will be analyzed.

### *DISPERSION MODELING*

The CO mobile source analysis will be conducted, if necessary, using the Tier 1 CAL3QHC model Version 2.0<sup>2</sup> at all intersections identified. The CAL3QHC model employs a Gaussian (normal distribution) dispersion assumption and includes an algorithm for estimating vehicular queue lengths at signalized intersections. CAL3QHC calculates emissions and dispersion of CO from idling and moving vehicles. The queuing algorithm includes site-specific traffic parameters, such as signal timing and delay (from the 2000 *Highway Capacity Manual* traffic forecasting model), saturation flow rate, vehicle arrival type, and signal actuation (i.e., pre-timed or actuated signal) characteristics to project the number of idling vehicles.

Following the EPA guidelines<sup>3</sup>, CAL3QHC computations will be performed using a wind speed of 1 meter per second, and the neutral stability class D. An assumed surface roughness of 3.21 meters will be used. The 8-hour average CO concentrations will be estimated from the predicted

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<sup>1</sup> MOBILE6 Input Data Format Reference Tables, August 14, 2003.

<sup>2</sup> EPA, User's Guide to CAL3QHC, A Modeling Methodology for Predicted Pollutant Concentrations Near Roadway Intersections, Office of Air Quality, Planning Standards, Research Triangle Park, North Carolina, EPA-454/R-92-006.

<sup>3</sup> *Guidelines for Modeling Carbon Monoxide from Roadway Intersections*, EPA Office of Air Quality Planning and Standards, Publication EPA-454/R-92-005.

1-hour average CO concentrations using a factor of 0.7 to account for persistence of meteorological conditions and fluctuations in traffic volumes. The PM<sub>2.5</sub> mobile source analysis will be conducted, if necessary, using the refined (Tier 2) version of the model, CAL3QHCR. CAL3QHCR is an extended module of the CAL3QHC model which allows for the incorporation of hourly traffic and meteorological data. Five years of meteorological data from LaGuardia Airport and concurrent upper air data from Brookhaven, New York will be used in the refined modeling. Off-peak traffic volumes will be determined by adjusting the peak period volumes based on the 24-hour distributions of actual vehicle counts collected at appropriate locations.

## METEOROLOGY

### *Tier I CO Analysis—CAL3QHC*

Following the EPA guidelines<sup>4</sup>, CAL3QHC computations would be performed using a wind speed of one meter per second, and the neutral stability class D. The eight-hour average CO concentrations will be estimated by multiplying the predicted one-hour average CO concentrations by a factor of 0.7 to account for persistence of meteorological conditions and fluctuations in traffic volumes. A surface roughness of 3.21 meters would be used. At each receptor location, concentrations will be calculated for all wind directions, and the highest predicted concentration was reported, regardless of frequency of occurrence. These assumptions ensure that reasonable worst-case meteorology would be used to estimate impacts.

### *Tier II PM<sub>2.5</sub> Analysis—CAL3QHCR*

The CAL3QHCR model includes the modeling of hourly concentrations based on hourly traffic data and five years of monitored hourly meteorological data. The data would consist of surface data collected at LaGuardia Airport and upper air data collected at Brookhaven, New York for the period 2011–2015. All hours would be modeled, and the highest resulting concentration for each averaging period will be presented.

## ANALYSIS YEAR

The microscale analyses would be performed for 2027, the year by which the Proposed Actions is likely to be completed. The future analysis would be performed both without the Proposed Actions (the No-Action condition) and with the Proposed Actions (the With-Action condition).

## BACKGROUND CONCENTRATIONS

The background concentrations that would be used in the mobile source analysis are on concentrations recorded at a monitoring station representative of the county or from the nearest available monitoring station and in the statistical format of the NAAQS (see Table 14-1), as provided in the *CEQR Technical Manual*. These represent the most recent 3-year average for 24-hour average PM<sub>2.5</sub>, the highest value from the three most recent years of data available for PM<sub>10</sub>, and the highest value from the five most recent years of data available for CO. The background concentrations are presented in **Table 1**.

**Table 1**

**Maximum Background Pollutant Concentrations for Mobile Source Analysis**

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<sup>4</sup> *Guidelines for Modeling Carbon Monoxide from Roadway Intersections*, EPA Office of Air Quality Planning and Standards, Publication EPA-454/R-92-005.

| Pollutant                                   | Average Period | Location          | Concentration          | NAAQS                 |
|---------------------------------------------|----------------|-------------------|------------------------|-----------------------|
| CO                                          | 1-hour         | CCNY, Manhattan   | 2.7 ppm                | 35 ppm                |
|                                             | 8-hour         | CCNY, Manhattan   | 2.5 ppm                | 9 ppm                 |
| PM <sub>10</sub>                            | 24-hour        | IS 52, Bronx      | 39 µg/m <sup>3</sup>   | 150 µg/m <sup>3</sup> |
| PM <sub>2.5</sub>                           | 24-hour        | JHS 45, Manhattan | 23.7 µg/m <sup>3</sup> | 35 µg/m <sup>3</sup>  |
| <b>Source:</b> CEQR Technical Manual, 2014. |                |                   |                        |                       |

### RECEPTOR PLACEMENT

Multiple receptors (i.e., precise locations at which concentrations are predicted) would be modeled at each of the selected sites; receptors will be placed along the approach and departure links at a 25 foot interval out to 75 feet in each direction, with an additional receptor at a distance of 125 feet from the intersection. Ground-level receptors would be placed at sidewalk or roadside locations near intersections with continuous public access, at a pedestrian height of 1.8 meters. Based on the DEP guidance for neighborhood-scale corridor PM<sub>2.5</sub> modeling, receptors in that analysis would be placed at a distance of 15 meters, from the nearest moving lane at each analysis location.

### Emission Factors

Vehicular cruise and idle CO and PM emission factors to be utilized in the dispersion modeling would be computed using EPA's mobile source emissions model, Motor Vehicle Emission Simulator, or MOVES.<sup>5</sup> This emissions model is capable of calculating engine emission factors for various vehicle types, based on the fuel type (gasoline, diesel, or natural gas), meteorological conditions, vehicle speeds, vehicle age, roadway types, number of starts per day, engine soak time, and various other factors that influence emissions, such as inspection maintenance programs. Project specific traffic data obtained through field studies as well as county-specific hourly temperature and relative humidity data obtained from NYSDEC will be used.

To account for the suspension of fugitive road dust in air from vehicular traffic in the local microscale analysis, PM<sub>2.5</sub> emission rates will include fugitive road dust. However, since the New York City Department of Environmental Protection (DEP) considers fugitive road dust to have an insignificant contribution on a neighborhood scale, fugitive road dust will not be included in the neighborhood scale PM<sub>2.5</sub> microscale analyses. Road dust emission factors will be calculated according to the latest procedure delineated by EPA<sup>6</sup> and the *CEQR Technical Manual*.

If maximum predicted PM<sub>2.5</sub> concentrations result in a potential impact, refinements to the analysis would be implemented. Seasonal and off-peak emission factors can be prepared using additional runs of the MOVES model to capture the effect of temperature differences as well as changing vehicular classification mixes in off peak hours. If further refinements are necessary, the potential for additional and/or more detailed traffic data to be used within the air quality analysis, or the use of traffic mitigation measures, will be discussed with both DCP and PHA.

### Parking Garage Analysis

It is anticipated that a number of projected development sites will have parking garages, particularly the larger sites. Based on parking garage locations and sizes (to be provided by DCP), an analysis of CO and PM emissions will be performed for the parking facilities that

<sup>5</sup> EPA, MOVES Model, User Guide for MOVES2014a, December 2015.

<sup>6</sup> EPA, Compilations of Air Pollutant Emission Factors AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources, Ch. 13.2.1, NC, <http://www.epa.gov/ttn/chief/ap42>, January 2011.

would have the greatest potential for impact on air quality. The analysis will use the procedures outlined in the *CEQR Technical Manual* for assessing potential impacts from proposed parking facilities. Cumulative impacts from on-street sources and emissions from parking garages will be calculated. AKRF will provide DCP with a list (up to three locations) of parking facilities to be analyzed.

## **STATIONARY SOURCES**

### *HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) SYSTEMS*

#### *Projected and Potential Development Site Screening*

The analysis of the HVAC systems of the proposed development sites will consider impacts following the screening procedures outlined in the 2014 *CEQR Technical Manual* to determine the potential for impacts on existing developments as well as “project-on-project impacts” for both projected and potential development sites. The nearest existing building and/or projected development of a similar or greater height will be analyzed as the potential receptor. Since information on the HVAC systems’ design is not available, it will be assumed that exhaust stacks would be located 3 feet above roof height (as per the *CEQR Technical Manual*), and that No. 2 fuel oil or natural gas would be utilized. If the results pass the screening analysis, the proposed development site is determined to result in no potential significant adverse air quality impacts using No. 2 fuel oil or natural gas.

If the results fail the initial screening with No. 2 fuel oil and/or natural gas, a refined analysis would be performed for that development site using the AERMOD model. For this analysis, five years of meteorological data (2011–2015) from the LaGuardia Airport National Weather Service station and concurrent upper air data, will be utilized for the simulation program. Concentrations of nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>, for sites where fuel oil was modeled), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) will be determined at affected sites.

#### *Receptors*

Receptors would be placed at elevated locations on all facades and at multiple elevations on buildings that were predicted to be potentially impacted based on the screening analysis, to identify maximum pollutant concentrations. Generally, receptors would be spaced at a 10 foot interval vertically to represent individual floors of a building, while horizontally, receptor spacing would be a minimum of 25 feet.

#### *Emission Estimates and Stack Parameters*

Fuel consumption will be estimated based on procedures outlined in the *CEQR Technical Manual*. Using worst-case assumptions, fuel will be assumed to be No. 2 fuel oil for SO<sub>2</sub> and PM, and natural gas for NO<sub>2</sub>.

Emission factors from the fuel oil and natural gas combustion sections of EPA’s AP-42 will be used to calculate emission rates for the projected and potential development site’s heat and hot water systems. Annual NO<sub>2</sub> concentrations from heating and hot water sources will be estimated using a NO<sub>2</sub> to NO<sub>x</sub> ratio of 0.75, as described in EPA’s *Guideline on Air Quality Models* at 40 CFR part 51 Appendix W, Section 5.2.4.<sup>7</sup>

One-Hour average NO<sub>2</sub> concentration increments associated with the projected and potential development sites’ hot water systems will be estimated using AERMOD model’s Plume Volume Molar Ratio Method (PVMRM) module to analyze chemical transformation within the model. The PVMRM module incorporates hourly background ozone concentrations to estimate NO<sub>x</sub>

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<sup>7</sup> [http://www.epa.gov/scram001/guidance/guide/appw\\_05.pdf](http://www.epa.gov/scram001/guidance/guide/appw_05.pdf)

transformation within the source plume. Ozone concentrations will be taken from the NYSDEC IS 52 monitoring station that is the nearest ozone monitoring station and has complete five years of hourly data available. An initial NO<sub>2</sub> to NO<sub>x</sub> ratio of ten percent at the source exhaust stack will be assumed, which is considered representative for boilers.

The methodology used to determine the compliance of total one-hour NO<sub>2</sub> concentrations from the proposed sources with the one-hour NO<sub>2</sub> NAAQS will be based on adding the monitored background to modeled concentrations, as follows: hourly modeled concentrations from proposed sources will be first added to the seasonal hourly background monitored concentrations; then the highest combined daily one-hour NO<sub>2</sub> concentration will be determined at each receptor location and the 98<sup>th</sup> percentile daily one-hour maximum concentration for each modeled year calculated within the AERMOD model; finally the 98<sup>th</sup> percentile concentrations will be averaged over the latest five years.

#### *Background Concentrations*

To estimate the maximum expected pollutant concentration at a given location (receptor), the predicted impacts must be added to a background value that accounts for existing pollutant concentrations from other sources that are not directly accounted for in the model (see **Table 2**). To develop background levels, concentrations measured at the most representative NYSDEC ambient monitoring station over the latest available five-year period (2011-2015) will be used for annual average NO<sub>2</sub> and three-hour average SO<sub>2</sub> background (consistent with DEP guidance), while the latest available three-year period will be used for the 24-hour PM<sub>10</sub> background concentration.

**Table 2**  
**Background Pollutant Concentrations for Stationary Source Analysis**

| Pollutant         | Average Period       | Location          | Concentration (µg/m <sup>3</sup> ) | NAAQS (µg/m <sup>3</sup> ) |
|-------------------|----------------------|-------------------|------------------------------------|----------------------------|
| NO <sub>2</sub>   | Annual <sup>1</sup>  | IS 52, Bronx      | 39.1                               | 100                        |
|                   | 1-hour <sup>2</sup>  |                   | 121                                | 188                        |
| SO <sub>2</sub>   | 1-hour <sup>3</sup>  | IS 52, Bronx      | 36.9                               | 196                        |
|                   | 3-hour <sup>4</sup>  |                   | 136.1                              | 1,300                      |
| PM <sub>2.5</sub> | 24-hour              | JHS 45, Manhattan | 23.7                               | 35                         |
| PM <sub>10</sub>  | 24-Hour <sup>5</sup> | IS 52, Manhattan  | 39                                 | 150                        |

**Notes:**  
<sup>1</sup> Annual average NO<sub>2</sub> background concentration is based on the 5-year highest value from 2011-2015.  
<sup>2</sup> The One-Hour NO<sub>2</sub> background concentration is based on the maximum 98<sup>th</sup> percentile One-Hour NO<sub>2</sub> concentration averaged over three years of data, from 2013-2015.  
<sup>3</sup> The One-Hour SO<sub>2</sub> background concentration is based on the maximum 99<sup>th</sup> percentile concentration averaged over three years of data, from 2013-2015.  
<sup>4</sup> The Three-hour SO<sub>2</sub> background concentration is based on the five-year highest second-highest measured value from 2008–2012, which is the latest available NYSDEC published data.  
<sup>5</sup> PM<sub>10</sub> is based on the 3-year highest second-highest value from 2013-2015.  
**Source:** New York State Air Quality Report Ambient Air Monitoring System, NYSDEC, 2008-2015.

PM<sub>2.5</sub> annual average impacts are assessed on an incremental basis and compared with the PM<sub>2.5</sub> *de minimis* criteria, without considering the annual background. Therefore the annual PM<sub>2.5</sub> background is not presented in the table. The PM<sub>2.5</sub> 24-hour average background concentration of 23.7 µg/m<sup>3</sup> (based on the 2013 to 2015 average of 98<sup>th</sup> percentile concentrations measured at the JHS 45 monitoring station) will be used to establish the *de minimis* value for the 24-hour increment, consistent with the guidance provided in the *CEQR Technical Manual*.

### *Determining the Significance of Air Quality Impacts*

For the refined stationary source analysis, the exhaust stacks for the heat and hot water systems will be assumed to be located at the edge of the development massing closest to the receptor, unless the source and receptor were immediately adjacent to each other. In these cases, the stack will be assumed to be located at an initial distance of 10 feet from the nearest receptor. If a source could not meet the NAAQS or PM<sub>2.5</sub> *de minimis* criteria, the stack would then be set back in 5 foot increments, until the source met the respective criteria. If necessary, further restrictive measures will be considered, including use of low NO<sub>x</sub> burners, increasing stack heights, or a combination of these measures.

Predicted values will be compared with National Ambient Air Quality Standards (NAAQS) for NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>10</sub>, and the City's CEQR *de minimis* criteria for PM<sub>2.5</sub>. In the event that violations of standards are predicted, an air quality E-designation (or other equivalent restriction, as appropriate) would be proposed for the site, describing the fuel and/or HVAC exhaust stack restrictions that would be required to avoid a significant adverse air quality impact.

### *HVAC CLUSTER ANALYSIS*

A cumulative impact analysis will be performed for development sites with a similar height located in close proximity to one another (i.e., site clusters). The proposed action area will be studied to determine cluster selection. Development sites will be evaluated for grouping based on the following criteria:

- Density and scale of development;
- Similarity of height; and
- Proximity to other buildings of a similar or greater height.

Three following (3) clusters have been selected for the air quality analysis:

- Projected Development Sites 4, 5, 8, & 9 and Potential Development Site V; and
- Projected Development Sites 12, 13 & 22; and/
- Projected Development Sites 19, 20, & 33.

Figure 1 shows the locations of the potential clusters to be analyzed.

The HVAC cluster analysis will be performed using the EPA AERSCREEN Model (Version 15181). The AERSCREEN model is a screening version of the AERMOD refined model, and is used for determining maximum concentrations from a single source using predefined meteorological conditions.

The AERSCREEN analysis will be performed to identify impacts of SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Using information in the Air Quality Appendix of the *CEQR Technical Manual*, an estimate of the emissions from the cluster development's HVAC systems will be made. The appendix includes tables which can be used to estimate emissions based on the development size, type of fuel used and type of construction. Fuel consumption factors of 58.5 ft<sup>3</sup>/ft<sup>2</sup>-year and 0.43 gal/ft<sup>2</sup>-year will be used for natural gas and fuel oil, respectively, for residential developments. For commercial developments, fuel consumption emission factors of 45.2 ft<sup>3</sup>/ft<sup>2</sup>-year for natural gas and 0.21 gal/ft<sup>2</sup>-year for fuel oil will be used. Mixed-use developments will use the residential fuel consumption factors since they are more conservative. Short-term factors will be determined by using peak hourly fuel consumption estimates for heating and cooling systems.

**Figure 1**  
**Potential Locations of HVAC Clusters of Sites**

Emission factors for each fuel will be obtained from the EPA *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources*. The SO<sub>2</sub> emissions rates will be calculated based on a maximum fuel oil sulfur content of 0.0015 percent (based on use of ultra-low sulfur No. 2 oil) the fuel using the appropriate AP-42 formula.

The distance from the source clusters to the nearest buildings will be used in the modeling analysis. The analysis will focus on existing buildings or other projected or potential development sites which are of a similar or greater height compared to the source cluster.

The AERSCREEN model predicts impacts over a 1-hour average using default meteorology. In order to predict pollutant concentrations over longer periods of time, EPA-referenced persistence factors will be used. These consist of 0.6 and 0.1 for the 24-hour and annual average periods, respectively.

The AERSCREEN analysis will initially be performed assuming No. 2 oil as the fuel type for the clusters. The results of the analysis will be added to background concentrations to determine whether impacts are below ambient air quality standards. If maximum predicted concentrations from a cluster are predicted to exceed a standard, the analysis will be performed using natural gas as the fuel type. In the event that an exceedance of a standard is predicted with both No. 2 fuel oil and natural gas, a refined modeling analysis using the EPA AERMOD model will be performed. Buildings within the cluster would be modeled individually since the AERMOD model is capable of analyzing impacts from multiple pollutant sources. In the event that violations of standards are predicted, an air quality E-designation would be proposed for the site, describing the fuel and/or HVAC exhaust stack restrictions that would be required to avoid a significant adverse air quality impact.

#### *Industrial Source Analysis*

On October 13, 2016 City Planning identified potential process and manufacturing sources located within a radius of 400 feet of the development sites based on a search of the PLUTO database. A total of 20 industrial source permits were identified. As per the scope of work, AKRF reviewed the DEP permit data received from City Planning to determine which industrial sources are within 400 feet of a projected or potential development site. Any industrial sources beyond 400 feet of a projected or potential development site were excluded from analysis. In addition, the analysis excludes industrial sources located at projected development sites since the proposed action assumes that all such sites would be redeveloped. However, for potential development sites, the industrial analysis will be performed two ways, as follows:

- Assuming the site is developed, in which case the industrial source is not assumed to be operating in the Build Condition. In this case, potential air quality impacts from other industrial sources in the study area will be analyzed to evaluate their potential effects on the development site.
- Assuming the site is not developed, in which case the industrial source is assumed to be operating in the Build Condition, and its potential effects on other proposed development sites will be determined.

As shown in **Table 3**, of the 20 industrial source permits found within the project area, a total of 14 permits were determined to be within 400 feet of at least one projected or potential development site, and not located on a projected development site. Therefore, these permits will be included in the industrial source analysis. Development sites will not be considered as receptors for the industrial source analysis if there are no industrial sources analyzed that are located within 400 feet of the site.

Once the industrial permits are received, they will be reviewed to determine if any should be excluded from the analysis based on the type of operation. For example, emergency generators are not considered industrial sources of emissions; therefore, these sources would not be analyzed. A field survey will be performed to confirm the operational status of the sites identified in the permit search, and to identify any additional sites have sources of emissions that would warrant an analysis. If any such sources are identified; further consultation will be made with DCP to determine procedures for estimating emissions from these sources.

**Table 4** summarizes the projected development sites proposed for the East Harlem Rezoning EIS, presenting whether industrial sources were identified within 400 feet of the site. **Table 5** summarizes the potential development sites proposed for the East Harlem Rezoning EIS. As seen in the tables, 31 of the projected development sites and 16 of the potential development sites are located within 400 feet from an analyzed industrial source. Therefore, these sites will be considered as receptors for the industrial source air quality analysis.

#### *Large or Major Sources*

A review of New York State Department of Environmental Conservation (NYSDEC) Title V permits and the Environmental Protection Agency (EPA) Envirofacts database will be performed to identify any federal or state-permitted facilities. Existing large and major sources of emissions (i.e., sources having a Title V or State Facility Air Permit) within 1,000 feet of the development sites will be identified. An analysis of these sources will be performed to assess their potential effects on projected and potential development sites. Predicted criteria pollutant concentrations will be predicted using the AERSCREEN model compared with NAAQS for NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>, as well as the *de minimis* criteria for PM<sub>2.5</sub>. In the event that an exceedance of a standard is predicted, a refined modeling analysis using the EPA AERMOD model will be performed.

#### *Metro North Diesel Locomotives*

Metro North operates dual-mode locomotives along the elevated Park Avenue viaduct. Information will be obtained from Metro North to determine whether locomotives operate using electric or diesel along the Park Avenue corridor within the proposed rezoning area. AKRF will consult with DCP to determine if a quantitative analysis is required to evaluate potential air quality impacts on nearby proposed development sites. If an analysis is required, this technical memorandum will be revised to provide a summary of the methodology to be employed for assessing impacts.

**Table 3**  
**Received Industrial Source Permits**

|    | <b>Permit ID</b> | <b>Block</b> | <b>Lot</b> | <b>Address</b>      | <b>Projected Site Location (Y/N)</b> |
|----|------------------|--------------|------------|---------------------|--------------------------------------|
| 1  |                  | 1790         | 46         | 2315 3 Avenue       | N                                    |
| 2  |                  | 1621         | 48         | 56 East 116 Street  | N                                    |
| 3  |                  | 1665         | 4          | 2113 3 Avenue       | N                                    |
| 4  |                  | 1771         | 52         | 146 East 123 Street | N                                    |
| 5  |                  | 1667         | 24         | 2291 2 Avenue       | N                                    |
| 6  |                  | 1615         | 56         | 1644 Madison Avenue | N                                    |
| 7  |                  | 1667         | 20         | 245 East 117 Street | N                                    |
| 8  |                  | 1775         | 166        | 108 East 128 Street | N                                    |
| 9  |                  | 1655         | 27         | 2059 2 Avenue       | N                                    |
| 10 |                  | 1917         | 35         | 459 Lenox Avenue    | N                                    |
| 11 |                  | 1755         | 33         | 1916 Park Avenue    | Site O                               |
| 12 |                  | 1802         | 43         | 310 East 126 Street | N                                    |
| 13 |                  | 1654         | 28         | 2039 2 Avenue       | N                                    |
| 14 |                  | 1773         | 7          | 118 East 125 Street | N                                    |
| 15 |                  | 1683         | 43         | 318 East 112 Street | N                                    |
| 16 |                  | 1802         | 32         | 334 East 126 Street | N                                    |
| 17 |                  | 1729         | 72         | 434 Lenox Avenue    | N                                    |
| 18 |                  | 1683         | 7502       | 317 East 111 Street | N                                    |
| 19 |                  | 1612         | 1          | 1250 5 Avenue       | N                                    |
| 20 |                  | 1618         | 1          | 1337 5 Avenue       | N                                    |

**Table 4**  
**Projected Development Sites**

| Site No. | Block | Lot(s)                               | Within 400 ft of an Industrial Source? |
|----------|-------|--------------------------------------|----------------------------------------|
| 1        | 1754  | 33, 40                               | Yes                                    |
| 2        | 1769  | 3                                    | No                                     |
| 3        | 1623  | 33, 34                               | Yes                                    |
| 4        | 1775  | 3, 6, 71, 165, 168                   | Yes                                    |
| 5        | 1751  | 33, 34, 35, 36, 37, 38, 40, 132, 137 | Yes                                    |
| 6        | 1746  | 33                                   | No                                     |
| 7        | 1745  | 134                                  | No                                     |
| 8        | 1750  | 40                                   | Yes                                    |
| 9        | 1774  | 68                                   | Yes                                    |
| 10       | 1773  | 1, 4, 67, 69, 72                     | Yes                                    |
| 11       | 1772  | 33, 34, 35, 37, 38, 39, 134, 140     | Yes                                    |
| 12       | 1770  | 36                                   | Yes                                    |
| 13       | 1786  | 4, 47                                | No                                     |
| 14       | 1767  | 33                                   | No                                     |
| 15       | 1645  | 33, 35                               | No                                     |
| 16       | 1643  | 33, 35, 37, 137                      | Yes                                    |
| 17       | 1660  | 1, 3, 4, 45                          | No                                     |
| 18       | 1635  | 33, 35, 36, 37, 38, 39, 40           | No                                     |
| 19       | 1634  | 33, 34, 35, 36, 37, 38               | No                                     |
| 20       | 1655  | 45                                   | Yes                                    |
| 21       | 1632  | 35, 37, 40                           | No                                     |
| 22       | 1771  | 33, 36                               | Yes                                    |
| 23       | 1643  | 56                                   | No                                     |
| 24       | 1768  | 69, 70, 71, 169, 170                 | No                                     |
| 25       | 1622  | 35, 36                               | Yes                                    |
| 26       | 1655  | 29                                   | Yes                                    |
| 27       | 1785  | 1, 104                               | No                                     |
| 28       | 1643  | 71                                   | No                                     |
| 29       | 1659  | 1                                    | No                                     |
| 30       | 1756  | 33                                   | Yes                                    |
| 31       | 1622  | 33                                   | Yes                                    |
| 32       | 1768  | 39, 40                               | No                                     |
| 33       | 1655  | 1, 3, 102                            | No                                     |
| 34       | 1677  | 45, 46, 47, 49, 52                   | Yes                                    |
| 35       | 1676  | 49                                   | Yes                                    |
| 36       | 1772  | 55                                   | Yes                                    |
| 37       | 1771  | 51                                   | Yes                                    |
| 38       | 1643  | 49, 50, 149                          | No                                     |
| 39       | 1643  | 21                                   | No                                     |
| 40       | 1639  | 48, 49                               | No                                     |
| 41       | 1639  | 21                                   | No                                     |

**Table 4**  
**Projected Development Sites (Cont'd)**

| Site No. | Block | Lot(s)                   | Within 400 ft of an Industrial Source? |
|----------|-------|--------------------------|----------------------------------------|
| 42       | 1638  | 56                       | No                                     |
| 43       | 1637  | 21, 22, 51, 52           | No                                     |
| 44       | 1637  | 24, 25                   | No                                     |
| 45       | 1635  | 149, 150                 | No                                     |
| 46       | 1635  | 48, 49                   | No                                     |
| 47       | 1634  | 158                      | No                                     |
| 48       | 1643  | 63                       | No                                     |
| 49       | 1643  | 41                       | Yes                                    |
| 50       | 1667  | 102                      | Yes                                    |
| 51       | 1666  | 5, 105                   | Yes                                    |
| 52       | 1788  | 28                       | No                                     |
| 53       | 1786  | 28                       | No                                     |
| 54       | 1786  | 22, 23, 121, 123         | No                                     |
| 55       | 1785  | 21, 22, 23               | No                                     |
| 56       | 1784  | 25, 26, 27, 28, 120, 128 | No                                     |
| 57       | 1795  | 1, 2, 3                  | Yes                                    |
| 58       | 1667  | 26                       | Yes                                    |
| 59       | 1667  | 22, 120                  | Yes                                    |
| 60       | 1689  | 1                        | Yes                                    |
| 61       | 1666  | 23                       | Yes                                    |
| 62       | 1688  | 1, 2                     | Yes                                    |
| 63       | 1665  | 23, 24, 25, 122          | No                                     |
| 64       | 1687  | 3, 102                   | No                                     |
| 65       | 1682  | 49                       | Yes                                    |
| 66       | 1682  | 3, 4                     | Yes                                    |
| 67       | 1680  | 3                        | No                                     |
| 68       | 1644  | 12                       | No                                     |

**Table 5**  
**Potential Development Sites**

| <b>Site No.</b> | <b>Block</b> | <b>Lot</b>                               | <b>Within 400 ft of an Industrial Source?</b> |
|-----------------|--------------|------------------------------------------|-----------------------------------------------|
| A               | 1753         | 37                                       | Yes                                           |
| B               | 1772         | 69, 70                                   | Yes                                           |
| C               | 1767         | 1, 2, 3, 4, 67, 68, 69, 71, 72, 168, 169 | No                                            |
| D               | 1621         | 32                                       | Yes                                           |
| E               | 1644         | 37, 38, 39                               | Yes                                           |
| F               | 1661         | 4                                        | No                                            |
| G               | 1636         | 38, 39, 40, 138                          | No                                            |
| H               | 1633         | 38, 39                                   | No                                            |
| I               | 1643         | 38, 39, 40                               | Yes                                           |
| J               | 1639         | 38, 39, 40, 41, 137                      | No                                            |
| K               | 1620         | 23                                       | Yes                                           |
| L               | 1640         | 1                                        | No                                            |
| M               | 1640         | 21                                       | No                                            |
| N               | 1662         | 1                                        | Yes                                           |
| O               | 1755         | 33                                       | Yes                                           |
| P               | 1784         | 4, 45, 47, 48                            | No                                            |
| Q               | 1748         | 35                                       | Yes                                           |
| R               | 1748         | 1                                        | No                                            |
| S               | 1667         | 45                                       | Yes                                           |
| T               | 1771         | 69, 70, 71                               | Yes                                           |
| U               | 1654         | 3, 4, 45                                 | No                                            |
| V               | 1775         | 170                                      | Yes                                           |
| W               | 1771         | 1, 2                                     | Yes                                           |
| X               | 1786         | 24, 26                                   | No                                            |
| Y               | 1796         | 2                                        | No                                            |
| Z               | 1689         | 51                                       | Yes                                           |
| AA              | 1683         | 50                                       | Yes                                           |
| AB              | 1635         | 51, 52                                   | No                                            |
| AC              | 1633         | 52                                       | No                                            |
| AD              | 1632         | 20                                       | No                                            |
| AE              | 1643         | 47, 48                                   | Yes                                           |



- Project Area
- Projected Development Sites
- East Harlem Neighborhood Plan Study Area
- Potential Development Sites

0 1,000 FEET

**Appendix 5**  
**Noise Monitoring Methodology Memo**



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## Memorandum

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**To:** New York City Department of City Planning  
**From:** Lucas Johnson / AKRF  
**Date:** November 3, 2016  
**Re:** East Harlem Rezoning — Noise Monitoring Approach  
**cc:** Christian Thompson, Patrick Blanchfield, Robert White, Henry Kearney / AKRF

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The purpose of this memorandum is to describe the noise analysis approach for the proposed development sites for the East Harlem Rezoning Environmental Impact Statement (EIS). A total of 99 development sites (68 projected and 31 potential) have been identified in the proposed rezoning area. Under the reasonable worst case development scenario (RWCDs) for the proposed action, the total development expected to occur on the 68 projected development sites under the With-Action condition would consist of approximately 6,461,692 sf of total floor area, including 5,403,171 sf of residential floor area (6,003 dwelling units), 728,654 sf of commercial uses, 155,171 sf of industrial uses, and 102,192 sf of community facility uses, as well as 102,504 sf of parking. The analysis year is 2027.

This memorandum presents a summary of the selection of noise receptor locations and describes the noise monitoring approach to determine existing ambient noise levels in the rezoning area. The measured existing noise levels will be used as part of the noise analysis to examine: 1) whether there are any locations where there is the potential for the Reasonable Worst Case Development Scenario (RWCDs) associated without/with the Proposed Actions to result in significant noise impacts, and 2) what level of building attenuation is necessary to provide acceptable interior noise levels at each development site under guidelines contained in the 2014 *CEQR Technical Manual*.

### Selection of Noise Receptor Locations

As the first step in this process, a field visit was performed to develop a list of proposed receptor locations. According to AKRF's field observations, vehicular traffic is the dominant noise source throughout the study area, except along Park Avenue, although stationary sources (e.g., building HVAC equipment) contribute noise levels at some locations as well. Along Park Avenue, elevated MTA MetroNorth trains are the dominant noise sources. In general, the levels of existing noise at each location are primarily influenced by the amount of vehicular traffic including buses and rail traffic on the immediately adjacent roadway or nearby roadways. It is expected that measurements from one monitoring location could apply to multiple sites along the same road corridor as well as to sites along similar road corridors.

The proposed noise receptor locations were selected based on the following three criteria: 1) locations of the projected and potential development sites under the RWCDs; 2) providing comprehensive geographic coverage across the study area in order to get a comprehensive characterization of the ambient noise

environment; and 3) existing land use patterns (e.g., along major commercial road corridors, along bus routes, near rail lines, and near existing stationary noise sources).

A total of 18 receptor sites will be selected for the noise analysis in the rezoning area where a total of 99 development sites (68 projected and 31 potential) have been identified, as well as the East 111th Street site which is to be analyzed as an alternative in the environmental analysis for the Proposed Actions. These receptors, due to their proximity to the development sites, provide an effective and conservative representation of existing ambient noise levels at the projected and potential development sites.

### Noise Monitoring

AKRF plans to conduct a noise survey with noise measurements at 18 locations in the rezoning area. Traffic and/or train counts will be included during the all measurements for the rail line and/or roadway immediately adjacent to each receptor site. **Figure 1** shows the locations of the 18 noise receptor sites, and **Table 1** lists the noise receptor sites, the duration of measurements, development sites, and receptor locations.

At receptor sites 1-8, which are adjacent to the elevated MTA Metro-North Railroad, 1-hour spot noise measurements will be conducted during typical weekday AM (7:15 AM – 9:15 AM), midday (12:00 PM – 2:00 PM), and PM (4:00 PM – 6:00 PM) peak periods. At all other receptor sites, 20-minute spot noise measurements will be conducted during the same peak periods. At receptor sites 10 and 14, additional 20-minute spot noise measurements will be conducted during the pre-PM typical school peak period (2:30 PM – 3:30 PM). At receptor site 6, an additional 60-minute spot noise measurement will be conducted during the pre-PM typical school peak period (2:30 PM – 3:30 PM). All noise measurement locations will be approximately 5 feet above grade, with the exception of receptor site 5 which will be located approximately 30 feet above grade on the northbound platform of the elevated MTA Metro-North 125th Street-Harlem station. Traffic on adjacent roadways and trains on the elevated MTA Metro-North Railroad (for receptor sites 1- 8) will be counted concurrently with the noise measurements.

Measurements will be performed using Type 1 Sound Level Meter (SLM) instruments according to ANSI Standard S1.4-1983 (R2006). The SLMs will have laboratory calibration dates within one year of the date of the measurements. All measurement procedures will be based on the guidelines outlined in ANSI Standard S1.13-2005.

It is also proposed that the air traffic noise would not be removed from the noise measurements. This would ensure that recommended attenuation levels within the study area take the aircraft noise into account in order to determine acceptable interior noise levels.

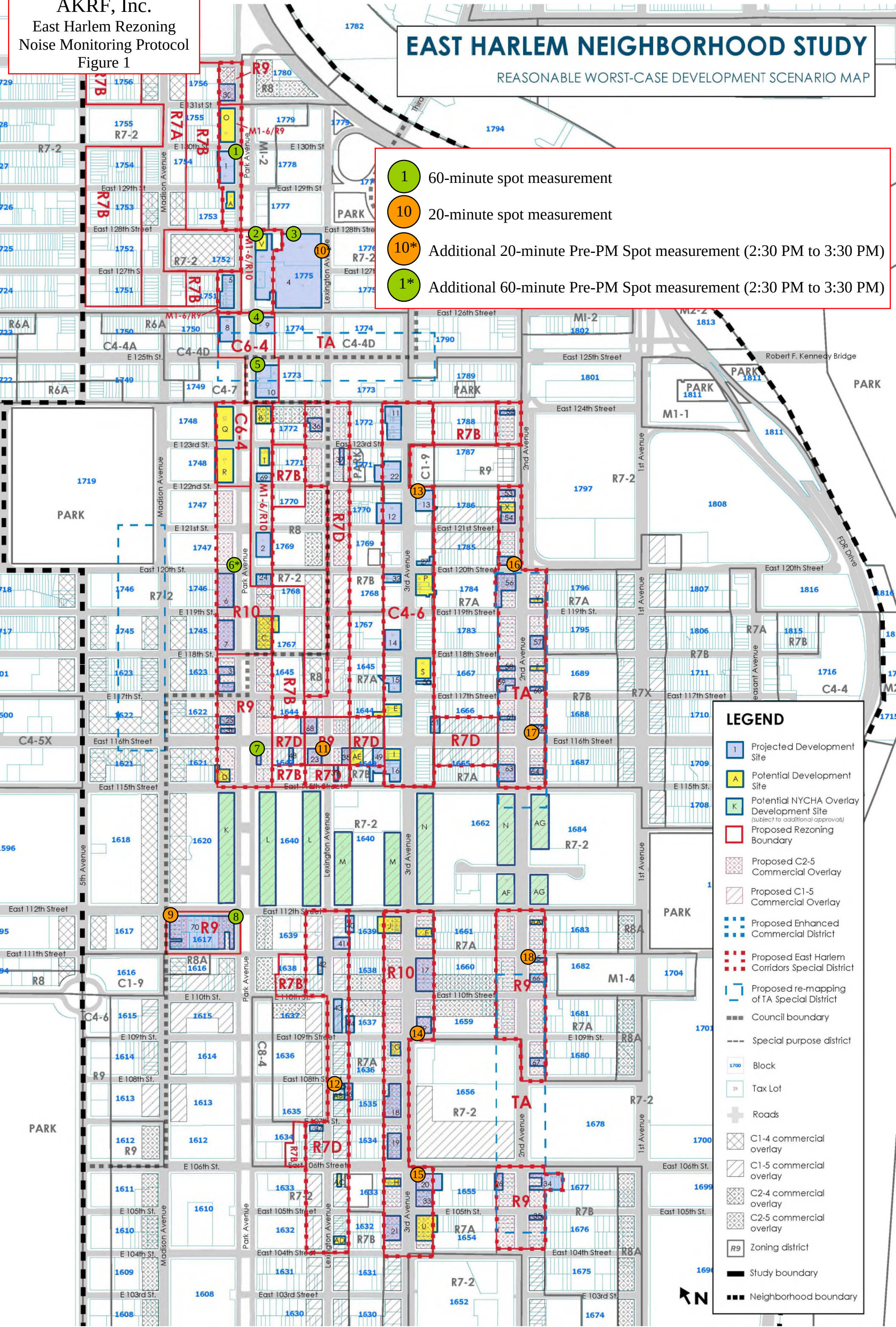
**Table 1**  
**Noise Receptor Locations**

| Noise Receptor Site                                                                                                                                                                                                                                                                                                                                                                                           | Duration  | Projected Development Sites    | Potential Development Sites | Location                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------|-----------------------------|-------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                             | 1-hour    | 1,30                           | A,O                         | Southwest corner of East 130th Street and Park Avenue                               |
| 2                                                                                                                                                                                                                                                                                                                                                                                                             | 1-hour    | 4 (West Façade)                | V                           | Southeast corner of East 128th Street and Park Avenue                               |
| 3                                                                                                                                                                                                                                                                                                                                                                                                             | 1-hour    | 4 (North and South Facades)    |                             | East 128th Street between Park Avenue and Lexington Avenue                          |
| 4                                                                                                                                                                                                                                                                                                                                                                                                             | 1-hour    | 5,8,9                          |                             | On Northbound platform of MTA Metro-North 125th Street Station at East 126th Street |
| 5                                                                                                                                                                                                                                                                                                                                                                                                             | 1-hour    | 10                             | B,Q,R,T,W                   | Southeast corner of East 125th Street and Park Avenue                               |
| 6*                                                                                                                                                                                                                                                                                                                                                                                                            | 1-hour    | 2,6,7,24                       | C                           | Northwest corner of East 120th Street and Park Avenue                               |
| 7                                                                                                                                                                                                                                                                                                                                                                                                             | 1-hour    | 3,25,28,31                     | D                           | Southeast corner of East 116th Street and Park Avenue                               |
| 8**                                                                                                                                                                                                                                                                                                                                                                                                           | 1-hour    |                                | K,L                         | Southwest corner of East 112th Street and Park Avenue                               |
| 9***                                                                                                                                                                                                                                                                                                                                                                                                          | 20-minute |                                |                             | Southeast corner of East 112th Street and Madison Avenue                            |
| 10*                                                                                                                                                                                                                                                                                                                                                                                                           | 20-minute | 4 (East Façade), 36,37         |                             | Lexington Avenue between East 127th Street and East 128th Street                    |
| 11                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 23,38,39,48,49,68              | L,M,AE                      | Southwest corner of East 116th Street and Lexington Avenue                          |
| 12                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 40,41,42,43,44,45, 46,47       | AB,AC,AD                    | Southeast corner of East 108th Street and Lexington Avenue                          |
| 13                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 11,12,13,14,15,16, 22,27,32,50 | E,I,N,P,S                   | Southeast corner of East 122nd Street and 3rd Avenue                                |
| 14*                                                                                                                                                                                                                                                                                                                                                                                                           | 20-minute | 17,18,29                       | G,J,F                       | Northeast corner of East 109th Street and 3rd Avenue                                |
| 15                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 19,20,21,26,33,34, 35          | H,U                         | Southeast corner of East 106th Street and 3rd Avenue                                |
| 16                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 52,53,54,55,56,57              | X,Y                         | Northwest corner of East 120th Street and 2nd Avenue                                |
| 17                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 51,58,59,60,61,62, 63,64       | Z,N                         | Northeast corner of East 116th Street and 2nd Avenue                                |
| 18                                                                                                                                                                                                                                                                                                                                                                                                            | 20-minute | 65,66,67                       | AA                          | Southeast corner of East 111th Street and 2nd Avenue                                |
| <b>Notes:</b> Noise measurements will be conducted during typical weekday AM, midday, and PM peak periods.<br>*An additional Pre-PM noise measurement will be conducted between 2:30 -3:30 PM.<br>** Measurements to be taken for the north, east and south facades of the East 111th Street alternative site.<br>*** Measurements to be taken for the west facade of the East 111th Street alternative site. |           |                                |                             |                                                                                     |

# EAST HARLEM NEIGHBORHOOD STUDY

REASONABLE WORST-CASE DEVELOPMENT SCENARIO MAP

- 1 60-minute spot measurement
- 10 20-minute spot measurement
- 10\* Additional 20-minute Pre-PM Spot measurement (2:30 PM to 3:30 PM)
- 1\* Additional 60-minute Pre-PM Spot measurement (2:30 PM to 3:30 PM)



**Appendix 6**  
**Construction Air Quality and Noise Methodology Memo**



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## Memorandum

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**To:** New York City Department of City Planning  
**From:** Kenny Mui, Neha Sareen, Christian Thompson—AKRF  
**Date:** November 3, 2016  
**Re:** East Harlem Rezoning FEIS Construction Air Quality and Noise Analysis Methodology  
**cc:** Henry Kearney, Dan Abatemarco, Patrick Blanchfield—AKRF

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### INTRODUCTION

A total of 99 development sites (68 projected and 31 potential) have been identified in the proposed rezoning area. Under the reasonable worst case development scenario (RWCDS) for the proposed action, the total development expected to occur on the 68 projected development sites under the With-Action condition would consist of approximately 6,461,692 sf of total floor area, including 5,403,171 sf of residential floor area (6,003 dwelling units), 728,654 sf of commercial uses, 155,171 sf of industrial uses, and 102,192 sf of community facility uses, as well as 102,504 sf of parking. The build year is 2027. The East Harlem Rezoning Environmental Impact Statement (EIS) will include detailed quantitative analyses for air quality and noise during construction with the proposed action. This memorandum presents the proposed methodology for the quantitative analyses.

### CONSTRUCTION AIR QUALITY ANALYSIS METHODOLOGY

Emissions from on-site construction equipment and on-road construction vehicles, as well as dust-generating construction activities, all have the potential to affect air quality. The analysis of potential construction air quality impacts will include an analysis of both on-site and on-road sources of air emissions, and the combined impact of both sources, where applicable.

In general, much of the heavy equipment used in construction is powered by diesel engines that have the potential to produce relatively high levels of nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM) emissions. Fugitive dust generated by construction activities is also a source of PM. Gasoline engines produce relatively high levels of carbon monoxide (CO). Since the United States Environmental Protection Agency (EPA) mandates the use of ultra-low sulfur diesel (ULSD) fuel for all highway and non-road diesel engines, sulfur oxides (SO<sub>x</sub>) emitted from the proposed action's construction activities would be negligible. Therefore, the pollutants to be analyzed for the construction period are nitrogen dioxide (NO<sub>2</sub>)—which is a component of NO<sub>x</sub> that is a regulated pollutant, particles with an aerodynamic diameter of less than or equal to 10 micrometers (PM<sub>10</sub>), particles with an aerodynamic diameter of less than or equal to 2.5 micrometers (PM<sub>2.5</sub>), and carbon monoxide (CO). **Table 1** shows the pollutants to be analyzed in the construction air quality analysis and the corresponding averaging periods.

**Table 1**  
**Pollutants for Analysis and Averaging Periods**

| Pollutant         | Averaging Period |
|-------------------|------------------|
| PM <sub>2.5</sub> | 24-hour          |
|                   | Annual Local     |
| PM <sub>10</sub>  | 24-hour          |
| NO <sub>2</sub>   | Annual           |
| CO                | 1-hour           |
|                   | 8-hour           |

Concentrations will be predicted using dispersion models to determine the potential for air quality impacts during on-site construction activities and due to construction-generated traffic on local roadways. Concentrations for each pollutant of concern due to construction activities at each sensitive receptor will be predicted during the most representative worst-case time period.

The potential for significant adverse impacts will be determined by comparing modeled PM<sub>10</sub>, NO<sub>2</sub> and CO concentrations to National Ambient Air Quality Standards (NAAQS), and modeled PM<sub>2.5</sub> and CO increments to applicable *de minimis* thresholds. The analysis will identify any specific control measures required to reduce the effects of construction and to eliminate any significant adverse air quality impacts and may include strategies such as diesel equipment reduction, best available tailpipe reduction technologies, utilization of equipment that meets specified emission standards, location of equipment away from sensitive uses, and fugitive dust control measures.

The detailed approach for assessing the effect of construction activities resulting from the proposed action on air quality is discussed further below.

#### **DATA SOURCES**

The New York City Department of City Planning (DCP) will develop a preliminary construction phasing schedule for all projected development sites for the with-action and no-action conditions. Subsequently, projections of the construction workforce, truck, and equipment projections will be developed based on similarly-sized sites from a recent rezoning project (i.e., East New York Rezoning Final Environmental Impact Statement).

#### **ON-SITE CONSTRUCTION ACTIVITY ASSESSMENT**

To determine which construction periods constitute the worst-case periods for the pollutants of concern (PM, CO, NO<sub>2</sub>), construction-related emissions will be calculated for each calendar year throughout the duration of construction on a rolling annual and peak day basis for PM<sub>2.5</sub>. PM<sub>2.5</sub> is selected for determining the worst-case periods for all pollutants analyzed, because the ratio of predicted PM<sub>2.5</sub> incremental concentrations to impact criteria is anticipated to be higher than for other pollutants. Therefore, initial estimates of PM<sub>2.5</sub> emissions throughout the construction years will be used for determining the worst-case periods for analysis of all pollutants. Generally, emission patterns of PM<sub>10</sub> and NO<sub>2</sub> would follow PM<sub>2.5</sub> emissions, since they are related to diesel engines by horsepower. CO emissions may have a somewhat different pattern but would also be anticipated to be highest during periods when the most activity would occur.

In general, where the construction duration at a single development site is expected to be short-term (i.e., less than two years), any impacts resulting from such short-term construction generally do not require detailed assessment. However, as construction activities associated with the proposed rezoning may occur on multiple sites in proximity with each other, there is a potential for cumulative construction impacts. Therefore, emissions profiles will be generated for all projected development sites to determine the construction periods with the highest potential to affect air quality.

Based on the emission profiles and the proximity of construction activities to receptors, the dispersion analysis will include modeling of the worst-case annual and short-term (i.e., 24-hour, 8-hour, and 1-hour)

averaging periods identified in **Table 1**. Dispersion of the relevant air pollutants from the construction sites during these periods will then be analyzed. Broader conclusions regarding potential concentrations during other periods, which will not be modeled, will be presented as well, based on the multi-year emissions profiles and the reasonable worst-case period results. Depending on the results of the construction emissions profile, two short-term and two annual periods will be selected for the quantitative air quality analysis.

#### *Engine Emissions*

The sizes, types, and number of units of construction equipment will be estimated based on the construction activity schedule developed for the proposed action. Emission factors for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> from on-site construction engines will be developed using the EPA's NONROAD2008 emission model (NONROAD). Emission rates for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> from truck engines will be developed using the EPA Motor Vehicle Emission Simulator (MOVES2014a) emission model. The emission factor calculations will take into account any emissions reduction measures (i.e., the application of diesel particulate filters, etc.) that is required for the projected development sites.

#### *On-Site Fugitive Dust*

In addition to engine emissions, fugitive dust emissions from operations (e.g., excavation and transferring of excavated materials into dump trucks) will be calculated based on USEPA procedures delineated in AP-42 Table 13.2.3-1. Since construction is required to follow the New York City Air Pollution Control Code regarding construction-related dust emissions, a 50 percent reduction in particulate emissions from fugitive dust will be conservatively assumed in the calculation (dust control methods such as wet suppression would often provide at least a 50 percent reduction in particulate emissions).

#### *Analysis Periods*

As discussed above, the construction periods with activities closest to sensitive receptors—both off-site and completed portions of the projected development sites—and with the most intense activities and highest emissions will be selected as the worst-case periods for analysis. The dispersion analysis will include modeling of the two worst-case annual and two short-term (i.e., 24-hour, 8-hour, and 1-hour) averaging periods identified in **Table 1**.

#### *Dispersion Modeling*

Potential impacts from the proposed action's construction sources will be evaluated using a refined dispersion model, the EPA/AMS AERMOD dispersion model. AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain and includes updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and handling of terrain interactions.

#### *Source Simulation*

For short-term model scenarios (predicting concentration averages for periods of 24 hours or less), all stationary sources, such as compressors, cranes, or concrete trucks, which idle in a single location while unloading, will be simulated as point sources. Other engines, which would move around the site on any given day, will be simulated as area sources. For periods of 8 hours or less (less than the length of a shift), it will be assumed that all engines would be active simultaneously. All sources with the exception of tower cranes would move around the site throughout the year and will therefore be simulated as area sources in the annual analyses.

#### *Meteorological Data*

The meteorological data set will consist of five consecutive years of latest available meteorological data: surface data collected at the nearest representative National Weather Service Station (La Guardia Airport) from 2011 to 2015 and concurrent upper air data collected at Brookhaven, New York. The meteorological

data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevation over the five-year period. These data will be processed using the USEPA AERMET program to develop data in a format which can be readily processed by the AERMOD model.

#### *Background Concentrations*

To estimate the maximum expected total pollutant concentrations, the calculated impacts from the emission sources must be added to a background value that accounts for existing pollutant concentrations from other sources. The background levels are based on concentrations monitored at the nearest New York State Department of Environmental Conservation (NYSDEC) ambient air monitoring stations, and will be consistent with the background concentrations to be used for the operational stationary source air quality analysis.

#### *Receptor Locations*

Receptors will be placed at locations that would be publicly accessible, at residential and other sensitive uses at both ground-level and elevated locations (e.g., residential windows), at adjacent sidewalk locations, at publically accessible open spaces, and at completed and occupied buildings at projected development sites where applicable. In addition, a ground-level receptor grid will be placed to enable extrapolation of concentrations throughout the study area at locations more distant from construction activities.

#### *On-Road Sources*

The traffic increments during construction are expected to be lower than the operational traffic increments for the full build-out with the proposed action. In addition, construction worker commuting trips and construction truck deliveries would generally occur during off-peak hours. Furthermore, when distributed over the transportation network, the construction trip increments would not be concentrated at any single location. Therefore, a standalone mobile-source analysis is likely not required. Nevertheless, since emissions from on-site construction equipment and on-road construction-related vehicles may contribute to concentration increments concurrently, on-road emissions adjacent to the construction sites will be included with the on-site dispersion analysis (in addition to on-site truck and non-road engine activity) to address all local project-related emissions cumulatively.

#### *On-Road Vehicle Emissions*

Vehicular engine emission factors will be computed using the EPA mobile source emissions model, MOVES2014a.<sup>1</sup> This emissions model is capable of calculating engine emission factors for various vehicle types, based on the fuel type (gasoline, diesel, or natural gas), meteorological conditions, vehicle speeds, vehicle age, roadway type and grade, number of starts per day, engine soak time, and various other factors that influence emissions, such as inspection maintenance programs. The inputs and use of MOVES incorporate the most current guidance available from NYSDEC.

#### *On-Road Fugitive Dust*

PM<sub>2.5</sub> emission rates will be determined with fugitive road dust to account for their impacts. However, fugitive road dust will not be included in the annual average PM<sub>2.5</sub> microscale analyses, as per current *CEQR Technical Manual* guidance used for mobile source analysis. Road dust emission factors will be calculated according to the latest procedure delineated by EPA<sup>2</sup>. An average weight of 17.5 tons and 2.5 tons will be assumed for construction trucks and worker vehicles in the analyses, respectively.

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<sup>1</sup> EPA, Motor Vehicle Emission Simulator (MOVES), User Guide for MOVES2014a, November 2015.

<sup>2</sup> EPA, Compilations of Air Pollutant Emission Factors AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources, Ch. 13.2.1, NC, <http://www.epa.gov/ttn/chief/ap42>, January 2011.

### *Traffic Data*

Traffic data for the air quality analysis will be derived from existing traffic counts, projected future growth in traffic, and other information developed as part of the construction traffic analysis for the proposed action.

### *Impact Criteria*

The 2014 *CEQR Technical Manual* state that the significance of a predicted consequence of a project (i.e., whether it is material, substantial, large or important) should be assessed in connection with its setting (e.g., urban or rural), its probability of occurrence, its duration, its irreversibility, its geographic scope, its magnitude, and the number of people affected.<sup>3</sup> In terms of the magnitude of air quality impacts, any action predicted to increase the concentration of a criteria air pollutant to a level that would exceed the concentrations defined by the NAAQS would be deemed to have a potential significant adverse impact. In addition, to maintain concentrations lower than the NAAQS in attainment areas, or to ensure that concentrations will not be significantly increased in non-attainment areas, threshold levels have been defined for certain pollutants; any action predicted to increase the concentrations of these pollutants above the thresholds would be deemed to have a potential significant adverse impact, even in cases where violations of the NAAQS are not predicted.

### *Potential Mitigation Measures*

An emissions reduction program would likely need to be implemented for all construction activities at large development sites with anticipated construction durations of two years or longer to minimize the effects of construction on air quality. Measures may include such as diesel equipment reduction, best available tailpipe reduction technologies, utilization of equipment that meets specified emission standards, location of equipment away from sensitive uses, and fugitive dust control measures. However, if the construction of the projected development sites is predicted to result in significant adverse effects on air quality, the EIS will explore additional measures to eliminate the significant adverse effects to the greatest extent practicable.

## **CONSTRUCTION NOISE ANALYSIS METHODOLOGY**

A detailed modeling analysis will be conducted to quantify potential construction noise effects at existing noise receptors (i.e., residences) near projected development sites as well as at completed and occupied projected development sites. A noise-sensitive receptor is defined in Chapter 19, “Noise” Section 124 of the 2014 *CEQR Technical Manual* and includes indoor receptors such as residences, hotels, health care facilities, nursing homes, schools, houses of worship, court houses, public meeting facilities, museums, libraries, and theaters. Outdoor sensitive receptors include parks, outdoor theaters, golf courses, zoos, campgrounds, and beaches. Using the construction schedule, three development sites will be analyzed for each phase of construction: (1) the largest projected development site, (2) a typical projected development site on Park Avenue, and (3) a typical development site on Third Avenue will be analyzed for each phase of construction. The analyzed typical development site on Park Avenue will be used to represent construction noise from all projected development sites on Park Avenue and the analyzed typical development site on Third Avenue will be used to represent construction noise from all projected development sites on Third Avenue.

### **CONSTRUCTION NOISE MODELING**

Noise effects from construction activities will be evaluated using the CadnaA model, a computerized model developed by DataKustik for noise prediction and assessment. The model can be used for the analysis of a wide variety of noise sources, including stationary sources (e.g., construction equipment, industrial equipment, power generation equipment), transportation sources (e.g., roads, highways, railroad

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<sup>3</sup> New York City. *CEQR Technical Manual*. Chapter 1, section 222. March 2014; and New York State Environmental Quality Review Regulations, 6 NYCRR § 617.7

lines, busways, airports), and other specialized sources (e.g., sporting facilities). The model takes into account the reference sound pressure levels of the noise sources at 50 feet, attenuation with distance, ground contours, reflections from barriers and structures, attenuation due to shielding, etc. The CadnaA model is based on the acoustic propagation standards promulgated in International Standard ISO 9613-2. This standard is currently under review for adoption by the American National Standards Institute (ANSI) as an American Standard. The CadnaA model is a state-of-the-art tool for noise analysis and is approved for construction noise level prediction by the *CEQR Technical Manual*.

Geographic input data used with the CadnaA model will include CAD drawings that define site work areas, adjacent building footprints and heights, locations of streets, and locations of sensitive receptors. For each analysis period, the geographic location and operational characteristics—including equipment usage rates (percentage of time operating at full power) for each piece of construction equipment operating at the projected development sites, as well as noise control measures—will be input to the model. In addition, reflections and shielding by barriers erected on the construction site and shielding from adjacent buildings will be accounted for in the model. In addition, construction-related vehicles will be assigned to the adjacent roadways. The model will produce A-weighted  $L_{eq(1)}$  noise levels at each receptor location for each analysis period, as well as the contribution from each noise source. The  $L_{10(1)}$  noise levels will be conservatively estimated by adding 3 dBA to the  $L_{eq(1)}$  noise levels, as is standard practice<sup>4</sup>.

#### ANALYSIS TIME PERIOD SELECTION

At each of the three (3) analyzed projected development sites, construction noise levels at the site will be analyzed for each major construction phase (i.e., excavation/foundation work, superstructure work, interior fit-out work, etc.). Based on the construction activities expected to occur during each month of the construction period over the build-out period according to the conceptual construction schedule, an analysis will be performed to determine the month with the maximum potential for result in construction noise impact criteria exceedances at nearby receptors (i.e., the month during each year of the construction period when the maximum number of projected development sites are under construction).

This analysis will conservatively assume that the worst-case month of each year would represent the entire year, and the year will be modeled according to its peak month. To be conservative, the noise analysis will assume that both peak on-site construction activities and peak construction-related traffic conditions would occur simultaneously.

#### DETERMINATION OF NON-CONSTRUCTION NOISE LEVELS

Noise generated by construction activities (calculated using the CadnaA model as described above) will be added to noise generated by non-construction traffic on adjacent roadways to determine the total noise levels at each receptor location. Construction equipment source strength will be determined by the  $L_{max}$  levels presented in **Table 22-1** of the 2014 *CEQR Technical Manual*. For construction equipment not included in this table, manufacturer specifications or field measured noise levels will be used. Noise levels generated by traffic in the future with the proposed action will be used as non-construction noise levels to which construction noise levels will be added. The non-construction noise level from the nearest operational noise receptor site (i.e., Sites 1 through 10) will be applied to each calculation point in the CadnaA model.

#### EVALUATION OF CONSTRUCTION NOISE LEVELS

##### *Existing Noise-Sensitive Receptors*

The predicted exterior  $L_{10(1)}$  noise levels during construction of the large projected development site at the analyzed residential receptor sites will be compared to the *CEQR Technical Manual* impact criteria. At façades and floors of nearby noise receptors (e.g., residences, schools, hospitals, open space areas, etc.)

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<sup>4</sup> Federal Highway Administration Roadway Construction Noise Model User's Guide, Page 15. [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/rcnm/rcnm.pdf](http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf)

where construction noise levels would have the potential to result in exceedances of the *CEQR Technical Manual* impact criteria, the duration of such exceedances would be determined and disclosed based on the conceptual construction schedule.

The maximum distance from each projected development site at which exceedances are expected to occur will be determined. Using these distances and the conceptual construction schedule, the noise-sensitive receptors that experience exceedances of the *CEQR Technical Manual* noise impact criteria during the worst-case months as determined above will be graphically determined and reported. The significance of the exceedances will be determined based on the predicted magnitude and duration of the construction noise at these locations. The incremental noise level increase due to construction will be determined. Based on the incremental noise level increase, overall exterior noise levels will be determined for each analysis period and estimated interior noise levels will also be determined.

*Projected Development Sites Completed and Occupied During Subsequent Construction*

For analysis time periods during which one or more projected development sites would be completed and occupied, construction noise would be projected at those occupied development sites. The predicted construction noise levels will be compared to *CEQR Technical Manual* noise exposure guidelines, and exceedances of recommended noise exposure levels will be identified. The significance of the exceedances will be determined based on the predicted magnitude and duration of the construction noise at these locations.

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