

21. Conceptual Analysis

21.1 INTRODUCTION

As described in Chapter 1, “Project Description,” the Proposed Action would create a zoning framework, in the form of a Special Permit for superior development, to allow an increase in the maximum floor area ratio (FAR) above that permitted as-of-right in the Grand Central Core¹ (from 24.0 FAR up to 30.0 FAR), and along the Park Avenue frontage (from 21.6 FAR up to 24.0 FAR). In the future with the Proposed Action (the With-Action condition), the development of such higher maximum FARs would require application to the City Planning Commission (CPC) for a Special Permit, which may be granted only upon the CPC making certain findings.

The reasonable worst-case development scenario (RWCDs) for the Proposed Action is based on several factors and assumptions regarding where new development could reasonably be expected to occur in the With-Action condition, as well as the type and amount of new development. The RWCDs does not include specific development sites that would achieve the higher maximum FARs available under the Special Permit, since the number and locations of sites that may utilize the Special Permit cannot be predicted with certainty. Accordingly, this chapter provides a conceptual analysis to generically assess potential environmental impacts that could result from development at higher FARs pursuant to the Special Permit mechanism. Each such Special Permit would be subject to a separate discretionary approval and any environmental impacts associated with such action would be assessed and disclosed pursuant to separate environmental review, with a project-specific analysis beyond what is analyzed in this chapter on a conceptual and generic basis.

21.2 PRINCIPAL CONCLUSIONS

The proposed East Midtown Subdistrict zoning text would include a provision to allow a Special Permit for superior development upon approval by the CPC. For most technical areas, development under the Special Permit scenario, described below, would not result in any additional significant adverse impacts as compared with the RWCDs analyzed for the Proposed Action. With respect to transportation, as compared with the total trip generation associated with the RWCDs, the Special Permit scenario would result in increases in the number of vehicles, parking demand, transit and pedestrian trips within the rezoning area during the AM, Midday, and PM peak hours. With respect to traffic, the total number of intersections with significant adverse impacts during the AM peak hour under the Special Permit scenario

¹ The Grand Central Core represents the area directly around the Grand Central Terminal, bounded by East 42nd and East 46th Streets, and Lexington and Madison Avenues.

21 – Conceptual Analysis

would be the same as the Proposed Action. During the Midday peak hour, the Special Permit scenario would have significant adverse traffic impacts at two additional intersections: an unmitigated impact at Madison Avenue and East 43rd Street, and a mitigated impact at Fifth Avenue and 45th Street. During the PM peak hour, the Special Permit scenario would have the same number of intersections with unmitigated significant impacts compared to the RWCDs for the Proposed Action. With respect to parking, there would be a higher demand for parking compared to the Proposed Action, although no additional off-street parking would be provided on the three development sites analyzed under the Special Permit scenario. As with the Proposed Action, the Special Permit scenario would not result in a shortfall of parking spaces within a ¼-mile radius of the rezoning area. With respect to transit, under the Special Permit scenario, new significant adverse impacts would occur at pedestrian elements of the following subway stations: Grand Central-42nd Street, 47th-50th Street-Rockefeller Center, and Lexington Avenue-53rd Street. The project-specific environmental review conducted for each Special Permit, as applications are made to the CPC, would consider the extent to which connections to the underground pedestrian network (in the Grand Central Subarea), would address transit impacts, as well as identify potential mitigation measures not addressed by those improvements.

21.3 METHODOLOGY AND ANALYSIS FRAMEWORK

The Proposed Action would create a zoning framework that would allow for additional development on an as-of-right basis for sites which meet certain specific criteria. In this regard, the City believes the existing Special Midtown District's bulk regulations—intended to permit design flexibility for high-density development while limiting the impact of buildings on access of light and air to the streets—can, with limited modifications only, reasonably accommodate contemporary office buildings of up to 24.0 FAR for sites around Grand Central Terminal and 21.6 FAR along Park Avenue, without triggering the need for case-by-case scrutiny by the CPC.

However, given its extraordinarily transit-rich location, the City believes that East Midtown can in fact accommodate greater densities than the proposed as-of-right maximums and that allowing this would further the City's objective of seeding the district with major new buildings that will help make the area continue to function as the City's premier office district. However, densities above the proposed as-of-right maximums cannot be easily accommodated within the framework of as-of-right bulk regulations.

Given this, the City believes it is appropriate that developers who seek to build more than the Proposed Action's as-of-right maximum FARs be required to undergo a public review process to demonstrate that the building massing, orientation and other features successfully accommodate the FAR and do not have undue negative impacts on the existing built environment or the skyline, and provide improvements to the public realm.

The East Midtown Subdistrict would therefore include a Special Permit for superior development that would allow an increase in the maximum FAR above that permitted as-of-right in the Grand Central Core (24.0 FAR) up to 30.0 FAR, and an increase in the maximum FAR above that permitted as-of-right along the Park Avenue frontage (21.6) up to 24.0 FAR. Additionally, the Special Permit would allow for the modification of certain bulk and urban design regulations. The City believes that the modification of bulk and urban design regulations must not only be done in a way that minimizes negative effects to the maximum extent possible, but that the development must provide a significant public benefit. These benefits should take the form of a development that demonstrates superior qualities in terms of: overall design; relationship to the street and function at street level; the size and caliber of on-site public amenities such as major new public spaces (indoor and/or outdoor), and, in the case of sites within the Grand Central Core, the size and generosity of connections to the underground pedestrian network.

The Special Permit would require a public review process to demonstrate that the building is a superior development—considered in relation to its massing, orientation, relationship on the skyline, and interactions with the public realm above- and below grade. In addition, there would also be significant prerequisites to apply for the Special Permit:

- Sites would have to meet the Qualifying Site requirements, i.e., sites with full avenue frontage, a minimum site size of 25,000 square feet (sf), and that provide all their floor area as commercial use, with the exception of the Grand Central Core, where the minimum site size would be 40,000 sf.
- Buildings would have to provide public spaces and, within the Grand Central Core, connections to the below-grade pedestrian network.
- All floor area above the maximum permitted as-of-right FAR levels (24.0/21.6, respectively) would have to be earned by contributions to the DIF or, in the Grand Central Subarea, from the DIF and/or landmarks in the Subarea.

As shown in Table 21-1, there are nine sites in the rezoning area that meet these criteria (five projected development sites and four potential development sites). Four of the sites meeting the above criteria are located within the Grand Central Core, and the remaining five sites have Park Avenue frontage. However, the number of sites that could reasonably be expected to seek the Special Permit in the With-Action condition is limited, given the long-term projections of the area's potential to capture a proportionate share of the City's new office development over the next 20 years, as well as the extensive Special Permit prerequisites, which require the CPC to find that the development demonstrates superior qualities in terms of overall design, relationship to the street and function at street level, the size and caliber of on-site public amenities, and, in the case of sites within the Grand Central Subarea, the size and generosity of connections to the underground pedestrian network.

21 – Conceptual Analysis**TABLE 21-1: PROJECTED AND POTENTIAL DEVELOPMENT SITES THAT MEET CRITERIA FOR SPECIAL PERMIT¹****Projected Development Sites**

	Site Data			With-Action Scenario RWCDs														Conceptual Analysis		
	Block	Lo	Lot Area	Changes	Area	FAR	Bldg Area gsf (including office mechanical)	ComArea gsf (not incl office mech)	Res Area gsf	OfficeArea gsf (usable)	Retail Area gsf	Hotel Area gsf	Num of Res Units	Num of Hotel rooms	Parking # of spaces	Office mechanical gsf	Retail Breakdown - Neighborhood retail	Retail Breakdown - Destination retail	Development Scenario with Special Permit	Comparison to RWCDs
Site 4	1277	2	23,025	Develops as Office Building	GC Core	24.0	1,194,832	1,090,933	-	1,047,642	43,291	-	-	-	-	103,898	21,646	21,646	30.0 FAR commercial building, including up to 1,320,376 gsf office and 43,291 gsf retail	Increase of up to 272,733 gsf of office space
	1277	2	10,250																	
	1277	4	3,350																	
	1277	5	6,666																	
	TOTAL		43,291				1,194,832	1,090,93	-	1,047,642	43,29	-	-	-	-	103,898	21,646	21,646		
Site 7	1279	2	5,000	Develops as Office Building	GC Core	24.0	1,194,004	1,090,177	-	1,046,916	43,261	-	-	-	-	103,826	21,631	21,631	30.0 FAR commercial building, including up to 1,319,460 gsf office and 43,261 gsf	Increase of up to 272,544 gsf of office space
	1279	2	2,541																	
	1279	2	2,510																	
	1279	4	15,000																	
	1279	2	9,105																	
	1279	4	9,105																	
	TOTAL		43,261				1,194,004	1,090,17	-	1,046,916	43,26	-	-	-	-	103,826	21,631	21,631		
Site 9				Develops as Office Building	GC Core	24.0	1,195,439	1,091,48	-	1,048,175	43,31	-	-	-	-	103,951	21,657	21,657	30.0 FAR commercial building, including up to 1,321,047 gsf office and 43,313 gsf retail	Increase of up to 272,872 gsf of office space
	1281	2	43,313																	
		TOTAL	43,313																	
Site 12				develops as office building	Park Avenue Area	21.6/14.4	791,982	723,114	-	689,064	34,050	-	-	-	-	68,868	34,050	-	24.0/14.4 FAR building, including up to 758,490 gsf office and 34,050 gsf retail	Increase of up to 69,426 gsf of office space
	1285	3	34,050																	
		TOTAL	34,050																	
Site 18				develops as office building	Park Avenue Area	21.6/14.4	694,278	633,906	-	605,956	27,950	-	-	-	-	60,372	27,950	-	24.0/14.4 FAR commercial building, including up to 676,390 gsf office and 27,950 gsf retail	Increase of up to 70,434 gsf of office space
	1310	1	27,950																	
		TOTAL	27,950																	

Potential Development Sites

	Site Data			With-Action Scenario RWCDs														Conceptual Analysis		
	Block	Lo	Lot Area	Changes	area	FAR	BldgArea gsf (including office mechanical)	ComArea gsf (not incl office mech)	ResArea gsf	OfficeArea gsf (usable)	Retail Area gsf	Hotel Area gsf	Num of Res Units	Num of Hotel rooms	Parking # of spaces	Office mechanical gsf	Retail Breakdown - Neighborhood retail	Retail Breakdown - Destination retail	Development Scenario with Special Permit	Comparison to RWCDs
Potential Site 1	89	1	25675	Develops as Office Building	GC subdistrict outer area (Park Avenue frontage)	rebuilds existing FA	581,462	530,900	-	505,225	25,67	-	-	-	-	50,562	25,675	-	24.0/14.4 FAR commercial building, including up to 564,214 gsf office and 25,675 gsf retail	Increase of up to 58,989 gsf of office space
	TOTAL		25,675				581,462	530,900	-	505,225	25,67	-	-	-	-	50,562	25,675	-		
Potential Site 3	1278	2	43,313	Develops as Office Building	GC Core	24.0	1,195,439	1,091,48	-	1,048,175	43,31	-	-	-	-	103,951	21,657	21,657	30.0 FAR commercial building, including up to 1,321,047 gsf office and 43,313 gsf retail	Increase of up to 272,872 gsf of office space
	TOTAL		43,313				1,195,439	1,091,48	-	1,048,175	43,31	-	-	-	-	103,951	21,657	21,657		
Potential Site 6	1287	3	27,925	develops as office building	Park Avenue Area	21.6/14.4	693,657	633,339	-	605,414	27,925	-	-	-	-	60,318	27,925	-	24.0/14.4 FAR commercial building, including up to 675,785 gsf office and 27,925 gsf retail	Increase of up to 70,371 gsf of office space
	TOTAL		27,925				693,657	633,339	-	605,414	27,925	-	-	-	-	60,318	27,925	-		
Potential Site 7	1290	3	11,715	develops as office building	Park Avenue Area	21.6/14.4	655,180	598,208	-	571,832	26,376	-	-	-	-	56,972	26,376	-	24.0/14.4 FAR commercial building, including up to 638,299 gsf office and 26,376 gsf retail	Increase of up to 66,467 gsf of office space
	1290	3	12,552																	
	1290	3	2,109																	
	TOTAL		26,376				655,180	598,208	-	571,832	26,376	-	-	-	-	56,972	26,376	-		

NOTES

1. Criteria for meeting the prerequisites to apply for a special permit:

- Sites located within the Grand Central Core that have a minimum site size of 40,000 sf; or
- Sites with frontage on Park Avenue and a minimum site size of 25,000 sf.

While it is not known which sites may be developed utilizing the Special Permit granting higher maximum FARs, for the purposes of this conceptual analysis, it is assumed that the following two largest projected development sites meeting the specified criteria within the Grand Central Core, and the largest projected development site with frontage on Park Avenue, would utilize the Special Permit.² These sites were chosen because they are considered the most likely sites in these areas that meet the specified criteria to be redeveloped—given their ownership pattern, low existing floor area relative to future potential, and current press reports indicating an interest in future redevelopment.

- **Projected Development Site 4** (Block 1277, Lots 20, 27, 46, 52). As this site is located within the Grand Central Core, it is assumed to be developed to a maximum commercial FAR of 30.0 under the conceptual analysis. Therefore, with the Special Permit, this site could be developed with a commercial building including up to 1,320,376 gsf of office space and 43,291 gsf of retail. As compared with the RWCDs for the Proposed Action, this would result in a net increase in the With-Action condition of up to up to 272,734 gsf of office space.
- **Projected Development Site 9** (Block 1281, Lot 21). As this site is located within the Grand Central Core, it is assumed to be developed to a maximum commercial FAR of 30.0 under the conceptual analysis. Therefore, with the Special Permit, this site could be developed with a commercial building including up to 1,321,047 gsf of office space and 43,313 gsf of retail. As compared with the RWCDs for the Proposed Action, this would result in a net increase in the With-Action condition of up to up to 272,872 gsf of office space.
- **Projected Development Site 12** (Block 1285, Lot 36). As this site is located along the Park Avenue frontage, it is assumed to be developed to a maximum commercial FAR of 24.0 under the conceptual analysis. Therefore, with the Special Permit, this site could be developed with a commercial building including up to 758,490 gsf of office space and 34,050 gsf of retail. As compared with the RWCDs for the Proposed Action, this would result in a net increase in the With-Action condition of up to up to 69,426 gsf of office space.

21.3.1 Increment for Conceptual Analysis

The conceptual analysis considers the potential effects of development under the new Special Permit as compared to those described for the Proposed Action. This analysis conservatively considers the three projected development sites described above in combination, rather than as separate scenarios occurring independently. Therefore, as compared with the RWCDs for the Proposed Action, the increment for the

² Since issuance of the DEIS, the owner of Projected Development Site 4 has indicated an interest in applying for a Superior Development Special Permit, in the event that the Proposed Action is adopted. Preliminary information provided by the owner indicates that the proposal would be for development to the maximum commercial FAR of 30.0; however, the ability to achieve 30.0 FAR would depend on the results of the special permit review process. The conceptual analysis conservatively assumes a development at 30.0 FAR on this site.

21 – Conceptual Analysis

conceptual Special Permit scenario is a net increase of up to 615,032 gsf of office floor area in the With-Action condition (Table 21-2).

TABLE 21-2: COMBINED INCREMENT FOR CONCEPTUAL ANALYSIS

Site/Property	With-Action RWCDs	With-Action Special Permit Scenario	Comparison of Special Permit Scenario to RWCDs
Projected Site 4 Grand Central Core (Block 1277, Lots 20, 27, 46, 52)	24.0 FAR Commercial Building 1,090,933 total gsf 1,047,642 gsf office 43,291 gsf retail (21,646 gsf neighborhood, 21,646 gsf destination)	30.0 FAR Commercial Building 1,363,667 total gsf 1,320,376 gsf office 43,291 gsf retail (21,646 gsf neighborhood, 21,646 gsf destination)	- Increase of up to 272,734 gsf total floor area - Increase of up to 272,734 gsf office
Projected Site 9 Grand Central Core (Block 1281, Lot 21)	24.0 FAR Commercial Building 1,090,488 total gsf 1,048,175 gsf office 43,313 gsf retail (21,657 gsf neighborhood, 21,657 gsf destination)	30.0 FAR Commercial Building 1,364,360 total gsf 1,321,047 gsf office 43,313 gsf retail (21,657 gsf neighborhood, 21,657 gsf destination)	- Increase of up to 272,872 gsf total floor area - Increase of up to 272,872 gsf office
Projected Site 12 Park Avenue Frontage (Block 1285, Lot 36)	21.6/14.4 FAR Commercial Building 723,114 total gsf 689,064 gsf office 34,050 gsf retail (34,050 gsf neighborhood)	24.0/14.4 FAR Commercial Building 792,540 total gsf 758,490 gsf office 34,050 gsf retail (34,050 gsf neighborhood)	- Increase of up to 69,426 gsf total floor area - Increase of up to 69,426 gsf office
Combined Increment for Conceptual Analysis			Increase of up to 615,032 gsf office floor area

21.3.2 Analysis Framework for Conceptual Analysis

This conceptual analysis assesses the potential environmental impacts that could result from development at higher FARs pursuant to the Special Permit mechanism to be established as part of the Proposed Action, compared with the RWCDs analyzed for the Proposed Action. For some analysis areas, full analysis at a level consistent with the methodologies for the *City Environmental Quality Review (CEQR) Technical Manual* will only be possible at the time that a site-specific application for a Special Permit is made (e.g., direct business displacement, historic resources, shadows, urban design, hazardous materials, construction impacts). For some technical areas—including open space, water and sewer infrastructure, solid waste and sanitation, energy, greenhouse gas emissions—the three specific sites selected for the conceptual Special Permit scenario (projected development sites 4, 9, and 12) are likely to be generally representative of the type and amount of development that could occur elsewhere, should development

under the Special Permit take place at locations other than these sites. Therefore, for these technical areas, the combined increment associated the Special Permit scenario (Table 21-2) is assessed in comparison with the RWCDs selected as the basis for comparison for that technical area. The build year assumed for this analysis is 2033, by which time it is assumed that the RWCDs may be fully developed.

21.4 ENVIRONMENTAL ASSESSMENT

21.4.1 Land Use, Zoning, and Public Policy

Similar to the future With-Action condition analyzed in Chapter 2, “Land Use, Zoning and Public Policy,” development under the Special Permit scenario would not result in a significant adverse impact on land use, zoning and public policy.

No new land use would be introduced under the Special Permit scenario. The combined increment associated with higher FAR development by Special Permit on Projected Development Sites 4, 9, and 12, as compared with the With-Action RWCDs, is a net increase of up to 615,032 gsf of office space. Similar to the conclusions of the analysis provided in Chapter 2, the Special Permit scenario would not directly displace any land use; nor would it generate new land uses that would be incompatible with surrounding land uses, or conflict with existing zoning or applicable public policies. As such, the Special Permit scenario would not result in any significant adverse impacts to land use, zoning, and public policy.

21.4.2 Socioeconomic Conditions

As with the RWCDs analyzed for the Proposed Action, the Special Permit scenario would not result in a significant adverse impact with respect to socioeconomic conditions.

As development would occur on the same 19 RWCDs projected development sites under the Special Permit scenario, neither the Proposed Action nor the Special Permit scenario would result in any direct residential displacement, or induce a trend that could potentially result in changing socioeconomic conditions for the residents within the East Midtown rezoning area. The Special Permit scenario would not result in any additional direct or indirect business/institutional displacement. In addition, like the Proposed Action, the Special Permit scenario would not result in any significant adverse impacts on specific industries.

Though there could be additional office development as compared with the RWCDs, East Midtown is one of the most sought-after dynamic office markets and central business districts (CBD) in the New York region that is largely defined by a wide variety of office space. The proposed rezoning area includes approximately 73 million gsf of office space, and the quarter-mile secondary study area has approximately 96 million gsf of office. Given the area’s transit-rich location, the City believes that East Midtown can

21 – Conceptual Analysis

accommodate greater densities than the proposed as-of-right maximums, and that allowing this additional commercial development would further the City’s objective of seeding the district with major new buildings that would help sustain the area as the City’s premier office district. The Special Permit provisions—which would allow an increase in the maximum FAR above that permitted as-of-right in the Grand Central Core (24.0 FAR) up to 30.0 FAR, and an increase in the maximum FAR above that permitted as-of-right along the Park Avenue frontage (21.6 FAR) up to 24.0 FAR—would require developers who seek to build more than the as-of-right maximum FARs to undergo a public review process to identify and disclose the potential for environmental impacts, and to ensure that the additional FAR would result in a significant public benefit.³ The additional office space developed under the Special Permit scenario would not represent enough of new economic activity to alter existing economic patterns in the area. As with the RWCDs, the Special Permit scenario would not result in any significant adverse impacts due to indirect business/institutional displacement.

21.4.3 Open Space

As with the RWCDs, there would be no significant adverse impacts on open space as a result of the Special Permit scenario.

The Special Permit scenario would result in a net increase of 615,032 gsf of office floor area compared to the RWCDs for the Proposed Action. This would introduce approximately 2,460 additional workers (i.e., 1 employee per 250 gsf of office floor area) to the open space study area. The Special Permit scenario would not create any new publicly accessible open spaces compared with the RWCDs. Therefore, in the Special Permit scenario, the open space user population would increase from that under the Proposed Action, but the acreage of publicly accessible open space would remain the same. The resulting passive open space ratio in the Special Permit scenario would be 0.071 acres per 1,000 non-residents, which is very slightly lower than that in the RWCDs (0.072); the passive open space ratio in the Special Permit scenario would be 2.74 percent lower than that in the No-Action condition (0.073), whereas the ratio in the RWCDs would be 1.37 percent lower than that in the No-Action condition. The combined open space ratio in the Special Permit scenario would be 0.064 acres per 1,000 non-residents and residents, which is the same as the ratio with the Proposed Action and represents a reduction of approximately 1.54 percent from the No-Action condition.

As with the RWCDs for the Proposed Action, the Special Permit scenario would not result in significant adverse open space impacts. While the acreage of passive open space resources in the study area is and would continue to be deficient in comparison to the CEQR benchmark (i.e., 0.15 for the non-residential

³ Significant public benefit in the form of a development that demonstrates superior qualities in terms of: overall design; relationship to the street and function at street level; the size and caliber of on-site public amenities such as major new public space (indoor and/or outdoor); and, in the case of sites within the Grand Central Subdistrict, the size and generosity of connections to the underground pedestrian network.

population and 0.187 for the combined non-residential and residential population), the deficiency would not be substantially exacerbated in the Special Permit scenario, as there would be no significant decrease in the open space ratios compared to the Proposed Action. Therefore, the increased demand resulting from the Special Permit scenario would not result in any significant adverse indirect open space impacts. Furthermore, as with the Proposed Action, the Special Permit scenario would not result in the direct displacement of any existing publicly accessible open space resources, nor would it result in any significant adverse impacts on any open spaces due to construction, shadows, noise, or air quality.

21.4.4 Shadows

Site-specific analyses of the effects of potential incremental shadows resulting from the Special Permit scenario cannot be provided because the specific bulk modifications that may be sought in connection with the Special Permit are not known.

Any Special Permit application within the proposed East Midtown Subdistrict would very likely include bulk modifications, along with the request for additional floor area. It is likely that shadows impacts identified with the Proposed Action would continue to occur with the Special Permit scenario, and there is the potential for additional incremental shadows because the Special Permit scenario could result in taller buildings. Of the sites that meet the criteria for the Special Permit, under the RWCDs for the Proposed Action, Projected Development Site 12, Projected Development Site 18, and Potential Development Site 6 would contribute to the significant adverse shadows impacts on sunlight-sensitive windows at St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Cathedral, and Christ Church United Methodist. Therefore, development on these sites, pursuant to the Special Permit, could potentially exacerbate these impacts. However, a conceptual analysis of future use of a Special Permit that involves bulk modifications cannot predict with any precision how the modifications would be utilized. Therefore, it is unclear whether and to what extent the incremental shadows that would be cast in the Special Permit scenario would differ from those with the Proposed Action. Additionally, it is not known which, if any, of the sites in the proposed rezoning area that meet the criteria for the Special Permit would apply for the Special Permit. Consequently, a site-specific analysis cannot be provided at this time. For the shadows technical area, analysis at a level consistent with the methodologies in the *CEQR Technical Manual* would only be possible at the time that a site-specific application is made for a Special Permit.

21.4.5 Historic and Cultural Resources

As with the RWCDs, the special permit scenario would not result in any significant adverse impacts to archaeological resources. The Special Permit scenario would result in the same direct and construction-related significant adverse impacts compared with the Proposed Action. Site-specific analyses, including a determination of possible indirect (visual/contextual) impacts on historic resources, cannot be provided

21 – Conceptual Analysis

for the Special Permit scenario because the specific bulk modifications that may be sought in connection with the Special Permit are not known. However, as with the RWCDs for the Proposed Action, development pursuant to the Special Permit is not expected to alter the visual relationship of architectural resources to their setting within the East Midtown street grid.

As discussed in Chapter 6, “Historic and Cultural Resources,” as-of-right development that is assumed to occur with the RWCDs would not result in any significant adverse impacts on archaeological resources. The New York City Landmarks Preservation Commission (LPC) reviewed all of the projected and potential development sites that could experience new/additional in-ground disturbance and concluded that none of the lots comprising those sites have any archaeological significance. Therefore, as with the Proposed Action, the Special Permit scenario would not result in any significant adverse impacts to archaeological resources.

Since sites that meet the criteria to apply for the Special Permit were analyzed as part of the RWCDs, the Special Permit scenario would result in the same—but no additional—direct impacts to historic resources compared with the RWCDs. The development sites are not located within any historic districts, and they do not contain any landmark buildings or structures; but they do contain a number of resources that are eligible for designation as a New York City Landmark (NYCL) or listing on the State/National Registers of Historic Places (S/NR).

In both the Special Permit scenario and the Proposed Action, any development that would be located within 90 feet of a designated/listed historic resource—where new development has the potential to cause damage due to ground-borne construction vibrations—would be subject to the procedures of the New York City Department of Buildings (DOB) Technical Policy and Procedure Notice (TPPN) #10/88, which governs the protection of adjacent historic properties from accidental construction damage. However, for development within 90 feet of eligible historic resources, the protective measures under DOB TPPN #10/88 would apply only if they become designated/listed. Therefore, as with the Proposed Action, the Special Permit scenario could result in construction-related impacts to eligible historic resources, as described in Chapter 6, “Historic and Cultural Resources.”

Overall, the direct and construction-related impacts to historic resources in the Special Permit scenario would be the same as those in the RWCDs for the Proposed Action. It is not known which, if any, of the sites in the proposed rezoning area that meet the criteria for the Special Permit would apply for the Special Permit, or whether any bulk modifications would be utilized. Consequently, a site-specific analysis—including a determination of possible indirect (visual/contextual) impacts on historic resources—cannot be provided at this time. As discussed above, similar to the RWCDs for the Proposed Action, the Special Permit scenario is not expected to significantly alter the context of historic resources. However, any Special Permit development would be a discretionary action requiring a separate environmental review. As such, any significant adverse impacts on historic resources that could result from a Special Permit

development would be assessed and disclosed to the public under and pursuant to a separate environmental review.

21.4.6 Urban Design and Visual Resources

Site-specific analyses of the effects of the Special Permit scenario on urban design and visual resources cannot be provided because the specific bulk modifications that may be sought in connection with the Special Permit are not known.

Any Special Permit application within the proposed East Midtown Subdistrict would likely include bulk modifications, along with the request for additional floor area. Special Permit developments that include the modification of bulk and urban design regulations would be expected to demonstrate superior qualities in terms of overall design, relationship to the street and function at street level, the size and caliber of on-site public amenities such as new public space (indoor and/or outdoor), and, in the case of sites within the Grand Central Subdistrict, the size and generosity of connections to the underground pedestrian network.

As mentioned previously, a conceptual analysis of future use of a Special Permit that involves bulk modifications cannot predict with any precision how the modifications would be utilized. Consequently, a site-specific analysis—including a determination of possible impacts to visual resources—cannot be provided at this time. As with the Proposed Action, the Special Permit scenario would not be expected to change the built environment’s arrangement, appearance, or functionality. However, any Special Permit development would be a discretionary action requiring a separate environmental review, and any adverse impacts on urban design and visual resources that could result from the development would be assessed and disclosed to the public under and pursuant to that environmental review.

21.4.7 Hazardous Materials

As with the RWCDs, there would be no significant adverse impacts with respect to hazardous materials as a result of the Special Permit scenario.

As discussed in Chapter 8, “Hazardous Materials,” the five projected and four potential development sites that meet the criteria for the Special Permit would have (E) designations placed on them as part of the Proposed Action. Therefore, the effects of development on these sites with the Special Permit would be the same as with the RWCDs analyzed for the Proposed Action with respect to hazardous materials, and would not result in significant adverse impacts.

21 – Conceptual Analysis

21.4.8 Water and Sewer Infrastructure

Compared to the RWCDs analyzed in Chapter 9, “Water and Sewer Infrastructure,” the additional office square footage under the Special Permit scenario would result in minimal increases in water demand and sanitary sewage generation. As such, development under the Special Permit scenario would not result in significant adverse impacts to the City’s water and sewer infrastructure.

This conceptual analysis considers the potential for higher FARs pursuant to the Special Permit mechanism to be established as part of the Proposed Action, compared with the RWCDs. As discussed above, three of the projected development sites (sites 4, 9 and 12) were selected as representative of the type and amount of development that could occur under the conceptual Special Permit scenario. The combined increment associated with the conceptual analysis as compared with the RWCDs is a net increase of up to 615,032 gsf of office space; all other uses would remain as in the RWCDs.

21.4.8.1 Water Supply

The Special Permit scenario would result in greater incremental water demand and sanitary sewage flows compared with the RWCDs analyzed in Chapter 9, “Water and Sewer Infrastructure.” The incremental water demand generated by the Special Permit scenario would be approximately 1.2 million gallons per day (mgd) compared with the No-Action condition. This incremental water demand represents a 16 percent increase over the RWCDs incremental increase in water demand of 1.1 mgd over the No-Action condition. As the incremental increase in water demand in both the RWCDs and the Special Permit scenario would represent less than 0.0002 percent of the City’s overall water supply, there would be adequate water service to meet the demand. Therefore, there would be no significant adverse impacts on the City’s water supply.

21.4.8.2 Wastewater Treatment

The incremental sanitary sewage generated by the Special Permit scenario would be approximately 427,644 gallons per day (gpd) compared to the No-Action condition. This incremental volume in sanitary flows to the combined sewer system represents an approximately 16 percent increase over the RWCDs incremental increase in sanitary flows and approximately 0.1 percent of the State Pollution Discharge Elimination System (SPDES)-permitted capacity of the Newtown Creek water pollution control plant (WPCP). Pursuant to CEQR methodology, as the projected increase in sanitary sewage would not cause the Newtown Creek WPCP to exceed its operational capacity or its SPDES-permitted capacity, the Special Permit scenario would not result in significant adverse impacts to sanitary sewage conveyance and treatment.

21.4.8.3 Stormwater and Drainage Management

As development under the Special Permit scenario would occur on the same projected development sites as analyzed for the RWCDs, the Special Permit scenario would not be expected to result in any change to

impervious surfaces as compared with the RWCDS. However, as the Special Permit scenario would generate 16 percent more sanitary flow volumes compared to the RWCDS, combined flow to the Newtown Creek combined sewer system would increase accordingly. As both projected development sites 4 and 9 are located within Subcatchment Area NCM-037, the total volume to this subcatchment area would increase by approximately 0.03 to 0.20 mgd compared to existing conditions, depending on rain volume and duration; the total volume that would be conveyed to the Newtown Creek WPCP via Subcatchment Area NCM-036 (within which Projected Development Site 12 is located) would increase by approximately 0.06 to 0.31 mgd over existing conditions; the incremental increase in combined flows to Subcatchment Area NCM-017 would remain similar to the conditions analyzed in the RWCDS, increasing by approximately 0.00 to 0.03 over existing conditions. In total, this would represent a 0.09 to 0.54 mgd increase in total flows to the Newtown Creek WPCP, compared to existing conditions.

As discussed in Chapter 9, due to the New York City Department of Environmental Protection's (DEP) new stormwater management requirements established in July 2012, stormwater runoff from new developments in both the RWCDS and Special Permit scenario is expected to substantially decrease as compared to existing conditions. With the incorporation of best management practices (BMPs) (such as those outlined in the BMP concept in Chapter 10, "Solid Waste and Sanitation Services") on each projected development site by their respective developer, it is concluded that the Special Permit scenario would not result in significant adverse impacts on stormwater conveyance and treatment infrastructure.

21.4.9 Solid Waste and Sanitation Services

While the incremental solid waste generated under the Special Permit scenario would be greater than the RWCDS analyzed in Chapter 10, "Solid Waste and Sanitation Services," development under this scenario would not result in a significant adverse impact on solid waste and sanitation services.

As the Special Permit scenario would result in a 615,032 gsf increase in commercial use on 3 of the 19 projected development sites (sites 4, 9, and 12) compared to the RWCDS, the incremental increase in solid waste generation from the No-Action condition would be greater under the Special Permit scenario. Under this scenario, a net increment of 120.6 tons of solid waste would be generated per week over the No-Action condition. This incremental solid waste generation represents a 15.3 percent increase over the additional solid waste generated in the RWCDS. As with the RWCDS, this incremental increase in solid waste generation would be a minimal addition to the City's solid waste stream, representing 0.03 percent of current waste generation. As such, the Special Permit scenario would not result in a significant adverse impact on solid waste or sanitation services.

21 – Conceptual Analysis

21.4.10 Energy

Development under the Special Permit scenario would result in a minimal increase in incremental energy demand compared to the future With-Action condition analyzed in Chapter 11, “Energy.” This incremental increase in demand would not result in a significant adverse impact on energy systems.

Three of the projected development sites (sites 4, 9 and 12) were selected as representative of the type and amount of development that could occur under the conceptual Special Permit scenario. The combined increment associated with the conceptual analysis as compared with the RWCDs is a net increase of up to 615,032 gsf of office space. Compared with the RWCDs assessed in Chapter 11, the Special Permit scenario would result in slightly more energy demand over the No-Action condition; the Special Permit scenario would result in an additional 964,431 million Btu annually, whereas the RWCDs would result in an additional 831,400 million Btu annually. Under both scenarios, this increase in annual energy demand would represent approximately 0.4 percent of the City’s forecasted future annual energy demand, and therefore is not expected to result in a significant adverse impact on energy systems.

21.4.11 Transportation

As discussed below, compared with the total trip generation associated with the RWCDs, the Special Permit scenario would result in increases in the number of vehicles, parking demand, transit and pedestrian trips within the rezoning area during the AM, Midday, and PM peak hours. With respect to traffic, the total number of intersections with significant adverse impacts during the AM peak hour under the Special Permit scenario would be the same as the Proposed Action. During the Midday peak hour, the Special Permit scenario would have significant adverse traffic impacts at two additional intersections: an unmitigated impact at Madison Avenue and East 43rd Street, and a mitigated impact at Fifth Avenue and 45th Street. During the PM peak hour, the Special Permit scenario would have an additional intersection with an unmitigated significant adverse impact at Madison Avenue and East 49th Street. With respect to parking, there would be a higher demand for parking compared to the Proposed Action, although no additional off-street parking would be provided on the three sites analyzed under the Special Permit scenario. As with the Proposed Action, the Special Permit scenario would not result in a shortfall of parking spaces within a ¼-mile radius of the rezoning area. With respect to transit, under the Special Permit scenario, new significant adverse impacts would occur at pedestrian elements of the following subway stations: Grand Central-42nd Street, 47th-50th Street-Rockefeller Center, and Lexington Avenue-53rd Street. The project-specific environmental review conducted for each Special Permit, as applications are made to the CPC, would consider the extent to which connections to the underground pedestrian network (in the Grand Central Subarea) would address transit impacts, as well as identify potential mitigation measures not addressed by those improvements.

21 – Conceptual Analysis

The Special Permit scenario would have a net increase of 615,032 gsf office space on Projected Development Sites 4, 9, and 12. Therefore, the Special Permit scenario would generate more trips compared to the Proposed Action. Travel demand forecasts were prepared for the Special Permit scenario based on the transportation planning factors summarized in Chapter 12, “Transportation.” Table 21-3 presents a comparison of the total peak-hour person trips that would be generated by the Special Permit scenario and the Proposed Action during the weekday AM, Midday, and PM peak hours. As shown in the table, the Special Permit scenario would result in 1,329, 1,662, and 1,551 additional person trips during the weekday AM, Midday, and PM peak hours, respectively, which represents an approximate 13 to 16 percent increase compared to the Proposed Action. Table 21-4 presents a similar comparison of the total peak-hour vehicle trips and shows that the Special Permit scenario would result in 143, 97, and 146 additional vehicle trips during the weekday AM, Midday, and PM peak hours, respectively.

TABLE 21-3: NET DIFFERENCE IN PERSON TRIPS BETWEEN THE SPECIAL PERMIT SCENARIO AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Bus		Subway		Railroad		Walk/Other		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
Special Permit	562	11	290	13	1,356	46	4,434	124	1,748	61	1,020	9	9,410	264	9,674
Proposed Action	485	8	252	11	1,170	38	3,823	99	1,506	51	898	4	8,134	211	8,345
Difference	77	3	38	2	186	8	611	25	242	10	122	5	1,276	53	1,329
Midday Peak Hour															
Special Permit	157	160	221	230	409	434	431	448	-4	-4	5,600	5,957	6,814	7,225	14,039
Proposed Action	141	143	197	204	361	382	383	396	-4	-4	4,938	5,240	6,016	6,361	12,377
Difference	16	17	24	26	48	52	48	52	0	0	662	717	798	864	1,662
PM Peak Hour															
Special Permit	51	663	45	347	106	1,588	294	5,156	98	2,018	393	1,439	987	11,211	12,198
Proposed Action	46	575	43	303	95	1,373	257	4,451	83	1,738	385	1,298	909	9,738	10,647
Difference	5	88	2	44	11	215	37	705	15	280	8	141	78	1,473	1,551

Source: Parsons Brinckerhoff, 2013

TABLE 21-4: NET DIFFERENCE IN VEHICLE TRIPS BETWEEN THE SPECIAL PERMIT SCENARIO AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Truck		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour									
Special Permit	466	9	231	231	72	72	769	312	1,081
Proposed Action	402	6	203	203	62	62	667	271	938
Difference	64	3	28	28	10	10	102	41	143
Midday Peak Hour									
Special Permit	118	122	202	202	79	79	399	403	802
Proposed Action	105	108	178	178	68	68	351	354	705
Difference	13	14	24	24	11	11	48	49	97
PM Peak Hour									
Special Permit	33	543	257	257	14	14	304	814	1,118
Proposed Action	29	469	225	225	12	12	266	706	972
Difference	4	74	32	32	2	2	38	108	146

Source: Parsons Brinckerhoff, 2013

21 – Conceptual Analysis

21.4.11.1 Traffic

As the Special Permit scenario would generate additional trips compared to the Proposed Action, for study area intersections where unmitigatable significant adverse traffic impacts were identified in the With-Action condition, the same conclusion of unmitigatable significant adverse impacts were made. A targeted level of service analysis was conducted at 25 study area intersections in proximity to Projected Development Sites 4, 9, and 12 where additional traffic resulting with the Special Permit scenario would be most heavily concentrated. The intersections selected for quantified traffic analysis included a combination of intersections where significant impacts were identified in the With-Action condition but were mitigatable (i.e., to determine if there would be additional intersections with unmitigatable significant impacts under the Special Permit scenario) and intersections where no significant impacts were identified in the With-Action condition (i.e., to determine if there would be additional intersections with significant impacts under the Special Permit scenario and if these could be mitigated).

Table 21-5 presents a comparison of the number of approach movements and intersections that would have significant adverse impacts and unmitigated significant adverse impacts for the Special Permit scenario and Proposed Action (the results shown for the Proposed Action in Table 21-5 refer to only those intersections located within the targeted area and are common to those analyzed for the Special Permit scenario). The results of the targeted analysis are summarized below:

- For the weekday AM peak hour, the total number of intersections with unmitigated significant impacts under the Special Permit scenario would be the same as with the RWCDs for the Proposed Action. Under the Special Permit scenario, there would be one additional approach movement with a significant impact and compared to the Proposed Action; this would occur at the intersection of Fifth Avenue and 42nd Street.
- For the weekday Midday peak hour, the Special Permit scenario would have two additional intersections (Madison Avenue at East 43rd Street and Madison Avenue at East 44th Street) with unmitigated significant impacts compared to the Proposed Action. The Special Permit scenario would also have significant impacts at two intersections (Madison Avenue at East 43rd Street, and Fifth Avenue at 45th Street) that were not affected in the Proposed Action. Under the Special Permit scenario, there would be two additional approach movements with significant impacts (at the intersections of Madison Avenue at East 43rd Street, and Fifth Avenue at 45th Street) compared to the RWCDs for the Proposed Action.
- For the weekday PM peak hour, the Special Permit scenario would have the same number of intersections with unmitigated significant impacts compared to the RWCDs for the Proposed Action. Under the Special Permit scenario, there would be two additional approach movements with significant impacts; both of these would occur at the intersection of Fifth Avenue and 47th Street.

The additional approach movements that were mitigated for the Special Permit scenario used the same types of mitigation measures as the Proposed Action (i.e., signal timing changes or modifications to curbside parking regulations).

TABLE 21-5: NUMBER OF INTERSECTIONS AND APPROACHES WITH SIGNIFICANT ADVERSE TRAFFIC IMPACTS – COMPARISON OF SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Peak Hour	Development Scenario	Movements/ Intersections Analyzed	Movements/ Intersections With No Significant Impacts	Movements/ Intersections With Significant Impacts	Mitigated Movements/ Intersections	Unmitigated Movements/ Intersections
AM	Special Permit	93/25	62/5	31/20	20/13	11/7
	Proposed Action	93/25	63/5	30/20	19/13	11/7
Midday	Special Permit	91/25	67/8	24/17	15/10	9/7
	Proposed Action	91/25	69/10	22/15	14/10	8/5
PM	Special Permit	93/25	65/9	28/16	16/9	12/7
	Proposed Action	93/25	67/9	26/16	14/9	12/7

Source: Parsons Brinckerhoff, 2013

Note: This table has been revised for the FEIS.

21.4.11.2 Transit

a. Subway Stations

As shown in Table 21-3, the Special Permit scenario would generate approximately 636 additional trips by subway in the AM peak hour and 742 additional subway trips in the PM compared to the Proposed Action. Table 21-6 presents a comparison of the number of analyzed subway station elements that would have significant adverse impacts for the Special Permit scenario and Proposed Action. The results of this analysis are summarized below.

The issuance of a special permit by the CPC would allow certain sites—if abutting a below-grade pedestrian network or a proposed extension thereto—to increase their FAR, provided that the site includes below-grade improvements to the pedestrian network, which is open to the public. Such improvements could include additional entrances/exits to Grand Central Terminal, and similar connections, all subject to review by the Metropolitan Transportation Authority (MTA). Because such improvements have not been proposed or designed, it is not possible to address their ability to mitigate impacts on transit operations or facilities. Any future specific proposal for such improvements would be analyzed and considered through a separate environmental review. Mitigation measures noted below for subway station impacts that would occur under the Special Permit scenario are for that reason discussed only a conceptual and generic basis.

21 – Conceptual Analysis

- At the Grand Central-42nd Street subway station complex there would be a significant adverse impact to escalators ES255 and ES256 during the AM peak period under the Special Permit scenario. As discussed in Chapter 12, “Transportation,” the Proposed Action condition for the Grand Central-42nd Street subway station includes certain DIF-funded improvements. With the same improvements for the Special Permit scenario, there would be an overall improvement in the station operation; however the operation of those two escalators would not be sufficiently improved to avoid a significant adverse impact. Under the Proposed Action, these escalators would return to their No-Action v/c ratio of 1.11 (LOS D). However, under the Special Permit scenario, the v/c ratio increases to 1.14 (LOS D). Because the Special Permit scenario fails to bring the v/c ratio back to the previous condition (i.e., v/c ratio of 1.11), it would constitute a significant adverse impact.
- Upon consultation with New York City Transit (NYCT), it was determined that speeding up these two escalators to 100 feet per minute (fpm) would decrease the v/c ratio to an acceptable level of service with a v/c ratio of 1.02 (LOS D).
- At the 47th-50th Streets-Rockefeller Center subway station, there would be a significant adverse impact to platform stair P1 in the AM peak hour under the Special Permit scenario. This significant impact would not occur under the RWCDs for the Proposed Action. Measures to mitigate a significant subway stair impact typically include widening the affected stair to increase capacity, or providing additional vertical circulation elements (e.g., a new stair or escalator) to reduce demand on the impacted stair, if physically and operationally feasible.
- At the Lexington Avenue-53rd Street subway station, three escalators—E243, E244, and E254X—would be significantly adversely affected in the AM peak hour under the Special Permit scenario. None of these significant impacts would occur under the Proposed Action. As discussed in Chapter 12, “Transportation,” potential transit improvements funded under the DIF may include the replacement of 24-inch-wide escalator E254X with a new 40-inch-wide escalator that would operate in the up direction in both the AM and PM peak hours. The potential improvements may also include operating this and all other analyzed escalators at a higher speed (100 fpm versus 90 fpm). If these improvements were implemented in the With-Action condition, it is anticipated that there would be no significant adverse impacts to escalators E243, E244, and E254X in the AM peak hour under the Special Permit scenario.

TABLE 21-6: ANALYZED SUBWAY STATION PEDESTRIAN ELEMENTS WITH SIGNIFICANT ADVERSE IMPACTS – COMPARISON OF SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Subway Station	Station Element	Significant Impacts					
		Proposed Action ⁽¹⁾		Special Permit Scenario		Special Permit Scenario w/Additional DIF Improvements	
		AM	PM	AM	PM	AM	PM
Grand Central-42nd Street	Escalators ES255	No Significant Impact under Proposed Action		X			
	Escalators ES256			X			
47th-50th Streets-Rockefeller Center	Stair P1			X		X	
Lexington Avenue-53rd Street	Escalator E243			X			
	Escalator E244			X			
	Escalator E254X			X			

¹ For Grand Central-42nd Street subway station, the Proposed Action is the Action-With-Improvements condition

b. Subway Line Haul

The Special Permit scenario would not result in a significant adverse impact to subway line haul conditions. Line haul is the volume of transit riders passing a defined point on a given transit route. Subway line haul is typically measured at the maximum load point on each route (the point where the trains carry the greatest number of passengers during the peak hour). In the Special Permit scenario, all routes are expected to experience fewer than five incremental trips per car in each direction in each peak hour, where route is projected to exceed guideline capacity ($v/c > 1.00$) as a result of the Special Permit scenario (Table 21-7). Therefore, significant adverse impacts to subway line haul conditions are not anticipated in the Special Permit Scenario based on *CEQR Technical Manual* criteria.

It is anticipated that the platform circulation improvements on Lexington Avenue Line platforms at the Grand Central-42nd Street subway station would reduce dwell time on the No. 4 and No. 5 trains and would result in additional capacity of one peak-hour train on the northbound PM and southbound AM Lexington Avenue express service. The line haul analysis for the future Action-with-Improvements condition is shown in Table 21-7. For purposes of the line haul analysis, this capacity increase is deemed to be one additional No. 4 train in the Action-With-Improvements condition, but service reliability and capacity improvements would benefit both No. 4 and No. 5 riders in Manhattan where the two lines provide the same service.

- In the AM peak hour, southbound No. 4 trains would operate with an improved v/c ratio of 1.06, compared to a v/c ratio of 1.13 without the improvements.
- In the PM peak hour, the northbound the No. 4 would operate with a v/c ratio of 0.97, compared to 1.05 without the improvements.

21 – Conceptual Analysis

TABLE 21-7: SUBWAY LINE HAUL ANALYSIS –SPECIAL PERMIT SCENARIO

Peak Hour	Route	Direction	Maximum Load Point (leaving station)	NO ACTION					WITH ACTION						IMPROVEMENTS					
				Average Trains Per Hour (1)	Cars Per Hour (1)	Passengers per Hour (2)	Peak Hour Capacity (3)	V/C Ratio (4)	Build Increment Pass/Hr	Average Trains Per Hour (1)	Cars Per Hour (1)	Passengers per Hour	Peak Hour Capacity (3)	V/C Ratio (4)	Avg. Added Passengers per Car	Average Trains Per Hour	Cars Per Hour	Passengers per Hour	Peak Hour Capacity (3)	V/C Ratio (4)
AM	4	SB	86 St	14.1	141.0	17,364	15,485	1.12	216	14.1	141.0	17,580	15,510	1.13	1.5	15.1	151.0	17,580	16,610	1.06
	5	SB	86 St	13.8	138.0	15,625	15,235	1.03	194	13.8	138.0	15,819	15,180	1.04	1.4	13.8	138.0	15,819	15,180	1.04
	6	SB	68 St-Hunter College	22.5	225.0	22,497	24,750	0.91	388	22.5	225.0	22,885	24,750	0.92	1.7					
	7 exp	SB	Woodside-61 St	14.0	153.6	17,993	16,831	1.07	150	14.0	154.0	18,143	16,831	1.08	1.0					
	7 loc	SB	40 St-Lowery St	14.2	156.0	16,315	17,155	0.95	184	14.2	156.2	16,499	17,155	0.96	1.2					
	7 loc	NB	Times Sq-42 St	26.0	286.0	8,490	31,460	0.27	506	26.0	286.0	8,996	31,460	0.29	1.8					
	F	SB	Roosevelt Island	16.0	160.0	21,959	22,910	0.96	286	16.0	160.0	22,245	22,910	0.97	1.8					
	4	NB	Fulton St	13.7	137.0	11,316	15,033	0.75	284	13.7	137.0	11,600	15,033	0.77	2.1					
	5	NB	Fulton St	12.3	123.0	10,087	13,567	0.74	254	12.3	123.0	10,341	13,567	0.76	2.1					
	D	NB	36 St	12.3	98.4	13,951	16,236	0.86	234	12.3	98.4	14,185	16,236	0.87	2.4					
F	NB	2 Av	14.9	148.9	19,551	20,105	0.97	335	14.9	148.9	19,886	20,105	0.99	2.2						
S	NB	Times Sq-42 St	29.5	98.5	4,602	10,835	0.42	581	29.5	98.5	5,183	10,835	0.48	5.9						
PM	4	NB	59 St	12.5	125.0	14,273	13,750	1.04	231	12.5	125.0	14,504	13,750	1.05	1.8	13.5	135.0	14,504	14,850	0.98
	5	NB	59 St	12.8	128.0	12,587	14,025	0.90	234	12.8	128.0	12,821	14,080	0.91	1.8	12.8	128.0	12,821	14,080	0.91
	6	NB	59 St	20.3	203.0	20,139	22,367	0.90	490	20.3	203.0	20,629	22,367	0.92	2.4					
	7	NB	Queensboro Plaza	23.2	232.0	22,402	28,012	0.80	407	23.2	232.0	22,809	28,012	0.81	1.8					
	7	SB	Grand Central-42 St	26.0	286.0	8,660	31,460	0.28	595	26.0	286.0	9,255	31,460	0.29	2.1					
	F	NB	Lexington Av/63 St	15.0	150.0	21,077	21,750	0.97	381	15.0	150.0	21,458	21,750	0.99	2.5					
	4	SB	Bowling Green	13.0	130.0	12,910	14,300	0.90	366	13.0	130.0	13,276	14,300	0.93	2.8					
	5	SB	Bowling Green	8.0	80.0	8,484	8,800	0.96	270	8.0	80.0	8,754	8,800	0.99	3.4					
	B	SB	Atlantic Av	9.5	76.0	10,358	13,431	0.77	246	9.5	76.0	10,604	13,431	0.79	3.2					
	D	SB	Pacific St	8.5	68.0	8,323	10,540	0.79	320	8.5	68.0	8,643	10,540	0.82	4.7					
	F	SB	Jay St-Borough Hall	13.0	130.0	11,672	17,550	0.67	368	13.0	130.0	12,040	17,550	0.69	2.8					
	S	SB	Grand Central-42 St	27.5	92.0	4,705	10,120	0.46	672	27.5	92.0	5,377	10,120	0.53	7.3					

Notes:

(1) Based on existing average throughput and future anticipated capacity increases

(2) Based on Regional Transit Forecasting Model (RTFM) outputs.

(3) Capacity based on NYCT rush hour guideline capacities.

(4) Volume-to-capacity ratio.

c. *Bus*

As shown in Table 21-5, the Special Permit scenario would generate a total of 194 additional trips by bus in the AM peak hour and 225 additional subway trips in the PM compared to the Proposed Action. Of these, approximately 113 and 131 are expected to occur on local bus routes in the AM and PM peak hours, respectively, and 81 and 94, respectively, on express bus routes as well as the Q32 route between Manhattan and Queens. As with the RWCDS for the Proposed Action, the bus demand that would be generated under the Special Permit Scenario is not expected to exceed the 50-trip *CEQR Technical Manual* analysis threshold at the maximum load points on any express bus route serving East Midtown. Similarly, this level of additional demand is not expected to result in an increase of more than 50 trips at the maximum load point on any local bus route, other than on the three routes analyzed for the Proposed Action—the M1, M4, and M42.

Table 21-8 presents a comparison of those analyzed bus routes that would have significant adverse impacts under the Proposed Action and the Special Permit scenario. As shown in Table 21-8, eastbound M42 buses would be significantly affected in the AM peak hour under both the RWCDS for the Proposed Action and the Special Permit scenario, as would westbound M42 buses in the PM peak hour. The addition of two eastbound standard buses in the AM peak hour and two westbound standard buses in the PM peak hour would fully mitigate the significant adverse impacts under both, the RWCDS for the Proposed Action and the Special Permit scenario.

TABLE 21-8: ANALYZED LOCAL BUS ROUTES WITH SIGNIFICANT ADVERSE IMPACTS – COMPARISON OF SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Peak Hour	Route	Direction	Proposed Action			Special Permit Scenario		
			Available Capacity	Additional Peak Hour Buses Needed to Accommodate Project-Generated Demand	Available Capacity w/Mitigation	Available Capacity	Additional Peak Hour Buses Needed to Accommodate Project-Generated Demand	Available Capacity w/Mitigation
AM	M42	EB	-64	2	44	-78	2	30
PM	M42	WB	-56	2	52	-65	2	43

Notes:

- (1) Peak Hours: 8:00–9:00 a.m. and 5:00–6:00 p.m.
- (2) Assumes service levels adjusted to address capacity shortfalls in the No-Action condition.
- (3) Available capacity based on MTA NYCT loading guideline of 54 passengers per standard bus.

21.4.11.3 Pedestrians

Compared to the RWCDS for the Proposed Action, the Special Permit scenario would generate an estimated 1,289 additional pedestrian trips in the AM peak hour, 1,612 additional in the Midday and 1,505 additional in the PM peak hour. These would include walk-only trips as well as pedestrian trips en

21 – Conceptual Analysis

route to and from area transit services and parking garages, and they are expected to be widely dispersed as they would be distributed between three separate projected development sites (Nos. 4, 9 and 12).

As noted previously, each action requiring a Special Permit would be subject to separate discretionary approval, and any environmental impacts associated with such actions would be assessed and disclosed pursuant to a separate environmental review, beyond what is analyzed in this chapter on a conceptual and generic basis. A targeted level of service analysis was conducted at two analyzed sidewalks and three analyzed corner areas where it is expected that the Special Permit scenario would result in an incremental increase in pedestrian demand of 200 or more trips in one or more peak hours compared to demand under the Proposed Action. (Incremental demand from the Special Permit scenario on analyzed crosswalks is expected to total less than 200 additional trips compared to the Proposed Action in all peak hours.) The five pedestrian elements analyzed for the Special Permit scenario include:

- East 42nd Street north sidewalk between Vanderbilt and Madison Avenues
- East 45th Street north sidewalk between Vanderbilt and Madison Avenues
- Madison Avenue and East 42nd Street northeast corner
- Madison Avenue and East 45th Street northeast corner
- Fifth Avenue and East 42nd Street southeast corner

As noted in Chapter 12, “Transportation,” under the RWCDs for the Proposed Action, the zoning regulations for the proposed East Midtown Subdistrict would mandate that new buildings with full-block frontages along Madison and Lexington Avenues between East 39th and East 49th Streets be set back to provide 20-foot-wide sidewalks. New buildings with full-block frontages along crosstown streets between Vanderbilt and Madison Avenues from East 43rd Street to East 46th Street, inclusive, would need to be similarly set-back to provide 15-foot-wide sidewalks. Consequently, it is anticipated that under both the RWCDs for the Proposed Action and the Special Permit scenario, the East 45th Street north sidewalk between Vanderbilt and Madison Avenues would be widened to 15 feet in width and additional pedestrian circulation area would be provided at both the northeast corner at Madison Avenue and East 42nd Street, and the northeast corner at Madison Avenue and East 45th Street. As shown in the analyses in Chapter 12, “Transportation,” taking the sidewalk widenings mandated under the proposed zoning regulations into account, incremental demand from the Proposed Action would not significantly adversely impact any of the two sidewalks and three corner areas analyzed for the Special Permit Scenario in any analyzed peak hour. Similarly, the additional pedestrian demand that would be generated under the Special Permit scenario is not expected to result in any new significant adverse impacts at these five locations in any analyzed peak hour.

21.4.11.4 Parking

With the additional development in the Special Permit scenario, there would be a higher demand for parking compared to the Proposed Action, although no additional off-street parking would be provided on the three sites analyzed under the Special Permit scenario. Table 21-9 provides a comparison of the off-street parking supply and demand under the Special Permit scenario and RWCDs for the Proposed Action for the weekday Midday period. As with the RWCDs for the Proposed Action, the Special Permit scenario would not result in a shortfall of parking spaces within a ¼-mile radius of the rezoning area.

TABLE 21-9: OFF-STREET PARKING CAPACITY, DEMAND, AND UTILIZATION – COMPARISON OF SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Development Scenario	Total Capacity	Demand	Utilization Rate	Available Spaces
Special Permit	18,468	16,193	88%	2,275
Proposed Action	18,468	16,087	87%	2,381

Source: Parsons Brinckerhoff, 2013

21.4.12 Air Quality

No significant air quality impacts are anticipated due to additional development pursuant to the Special Permit scenario.

Traffic associated with the additional development pursuant to the Special Permit scenario is estimated to be greater than under the RWCDs by 15.2 percent in the AM peak hour, 13.8 percent in the Midday peak hour, and 15.0 percent in the PM peak hour (see Table 21-4). These increases, which would be spread over the traffic study area, are not expected to cause a violation of National Ambient Air Quality Standards (NAAQS) as the estimated mobile source concentrations under the RWCDs would be well below the NAAQS threshold.

Potential stationary source impacts under the RWCDs would not be significant because the HVAC systems for 38 of the 39 development sites, as part of the Proposed Action, would use Con Edison steam (which has no local impacts), and the potential impacts of the 39th building (Projected Development Site 12) was not anticipated to be significant because it would be taller than nearby buildings. The same conditions would apply to the analysis for additional development pursuant to the Special Permit scenario.

21.4.13 Greenhouse Gas Emissions

As with the RWCDs, there would be no significant adverse greenhouse gas (GHG) emission impacts as a result of the Special Permit scenario.

21 – Conceptual Analysis

Increases in GHG emissions are anticipated to be slightly greater than under the RWCDs but still only a very small fraction of regional emissions. As with the RWCDs analyzed for the Proposed Action, construction and operation of buildings developed pursuant to the Special Permit scenario would be consistent with goals of PlaNYC.

21.4.14 Noise

As with the RWCDs analyzed for the Proposed Action, there would be no significant adverse noise impacts as a result of the Special Permit scenario.

The mobile noise exposure from traffic movements under the Special Permit scenario would not be perceptibly higher than those projected under the Proposed Action. Therefore, no significant adverse noise impacts would likely occur at any of the 10 representative noise receptor locations evaluated within the study area. The largest noise-level increase would likely occur at mobile noise receptor site R4 (located at the southeast corner of Madison Avenue and East 46th Street adjacent to Projected Development Site 9) where under the Proposed Action noise level increase in the range of 0.7 dBA is projected to occur. A doubling of the projected noise level increase to 1.4 dBA as a worst-case analysis would not be perceptible and the exterior noise exposure would remain within the marginally unacceptable range in the immediate vicinity of Projected Development Sites 9 and 10 on Madison Avenue between East 45th and East 47th Streets.

21.4.15 Public Health

As with the RWCDs, no significant adverse impacts are anticipated with respect to public health as a result of the Special Permit scenario.

As discussed in other sections of this chapter, the Special Permit scenario is not expected to result in any unmitigated significant adverse impacts related to hazardous materials, air quality, or noise. Site-specific analyses of the construction-related impacts resulting from the Special Permit scenario cannot be provided because the specific features of the buildings that may be constructed in connection with the Special Permit are not known. Development pursuant to the Special Permit would be a discretionary action requiring a separate environmental review; any adverse impacts on public health that could result from such development would be assessed and disclosed to the public under and pursuant to that environmental review.

21.4.16 Neighborhood Character

As with the RWCDs analyzed for the Proposed Action, the Special Permit scenario is not expected to result in any significant adverse impacts on neighborhood character.

As discussed in Chapter 17, “Neighborhood Character,” the East Midtown area has a varied neighborhood context and its defining features are the dominance of commercial land uses, the interspersing of older buildings with modern construction, high levels of pedestrian and vehicular activity and associated noise, a primarily high-density built context, and the presence of a number of iconic historic resources, including Grand Central Terminal, the Helmsley Building, the Chrysler Building, St. Bartholomew’s Church and Community House, St. Patrick’s Cathedral, the Seagram Building, and Lever House. In the Special Permit scenario, as with the Proposed Action, the East Midtown area would continue to be defined by this combination of features. However, as noted above, site-specific analyses pertaining to urban design and visual resources, and incremental shadows related to the Special Permit scenario cannot be provided because the specific bulk modifications that may be sought in connection with the Special Permit are not known.

In the Special Permit scenario, as with the Proposed Action, it is expected that there would be an increase in the level of pedestrian and vehicular activity, as well as the noise that is generated from such activity. However, the resulting conditions with both the Special Permit scenario and the Proposed Action would not be out of character with the East Midtown area, and thus the incremental changes would not constitute significant impacts on neighborhood character.

The Special Permit scenario and the RWCDS for the Proposed Action would both result in significant adverse impacts to historic resources. However, in neither case would this constitute a significant adverse impact to neighborhood character. As with the as-of-right development under the Proposed Action, eleven eligible historic resources could be demolished, either partially or entirely, due to their location on projected or potential development sites. However, these impacts would not alter the overall character of East Midtown as an area characterized by a varied context of older buildings interspersed with modern buildings. In addition, the individual iconic historic structures that are defining features of neighborhood character—Grand Central Terminal, the Chrysler Building, the Helmsley Building, St. Patrick’s Cathedral, St. Bartholomew’s Church and Community House, the Seagram Building, and Lever House—would not be displaced.

21.4.17 Construction

The Special Permit scenario is expected to result in the same significant adverse construction-related impacts compared with the Proposed Action. However, site-specific analyses of the construction-related impacts resulting from the Special Permit scenario cannot be provided because the specific features of the buildings that may be constructed in connection with the Special Permit are not known.

As with the RWCDS for the Proposed Action, the Special Permit scenario is expected to result in significant adverse construction-related impacts with respect to traffic. As described in Chapter 18, “Construction,” the detailed traffic analysis shows that the RWCDS would result in significant adverse

21 – Conceptual Analysis

construction-related impacts to the following nine intersections during the 6:00–7:00 a.m. peak hour: Second Avenue at East 44th Street; Second Avenue at East 46th Street; Second Avenue at East 49th Street; Third Avenue at East 39th Street; Third Avenue at East 42nd Street; Park Avenue at East 39th Street; Madison Avenue at East 44th Street; Fifth Avenue at 43rd Street; and Fifth Avenue at 47th Street. These construction-related traffic impacts would also be expected to occur in the Special Permit scenario.

For the purposes of this conceptual analysis, the assessment of potential construction-related impacts focuses on the three sites identified in Table 21-2, which would be representative of the sites that meet the Special Permit criteria. As shown in Table 21-2, Projected Development Sites 4, 9, and 12 would be redeveloped with an additional 272,734 gsf, 272,872 gsf, and 69,426 gsf, respectively, in the Special Permit scenario compared with the RWCDS. As discussed previously, the Special Permit applications for these developments would likely include bulk modifications, along with the request for additional floor area, and this conceptual analysis cannot predict with any precision how the modifications would be utilized. While the construction period for the demolition of existing structures on the three sites would likely be the same in the RWCDS and the Special Permit scenario, it is unclear absent further definition of the Special Permit projects how the construction periods for the foundation, tower core, and interior work on these sites would differ in the two scenarios. Consequently, a site-specific analysis cannot be provided at this time, although the construction periods for these three sites in the Special Permit scenario would likely be longer than those under the RWCDS. Based on the conceptual construction schedule discussed in Chapter 18, “Construction,” and presented in Figure 18-2, Projected Development Site 12 would be the last of the 19 projected development sites to be redeveloped in the RWCDS, and thus the redevelopment of this site in the Special Permit scenario could potentially push out the completion date of the overall construction schedule to later in the 2033 calendar year or beyond.

Overall, it is expected that the Special Permit scenario would result in the same significant adverse construction-related impacts compared with the RWCDS. It is anticipated that the incremental changes to the amount, type, and duration of construction activity associated with the Special Permit scenario would not result in additional significant adverse impacts. Moreover, since any Special Permit development would be a discretionary action requiring a separate environmental review, any construction-related impacts that could result from the development would be assessed and disclosed to the public under and pursuant to that environmental review.