

HUDSON TUNNEL PROJECT

NEPA RE-EVALUATION #2

PROPOSED MODIFICATION OF MANHATTAN TWELFTH AVENUE CONSTRUCTION STAGING AREA

April 26, 2024

Table of Contents

1.0	Introduction	1
2.0	Construction Staging Area	1
2.1	Location of Construction Staging Area in FEIS/ROD	1
2.2	Proposed Modification to the Twelfth Avenue Construction Staging Area.....	2
3.0	Affected Environment: “No Action” Conditions	9
4.0	Construction-Related Impacts	12
4.1	Traffic and Pedestrians (FEIS Chapter 5A).....	12
4.2	Transportation Services - Bus Service (FEIS Chapter 5B).....	14
4.3	Land Use, Zoning and Public Policy (FEIS Chapter 6A)	14
4.4	Property Acquisition/Easements (FEIS Chapter 6B).....	15
4.5	Socioeconomic Conditions (FEIS Chapter 7).....	15
4.6	Open Space and Recreational Resources (FEIS Chapter 8)	15
4.7	Historic and Archaeological Resources (FEIS Chapter 9).....	17
4.8	Visual and Aesthetic Resources (FEIS Chapter 10)	18
4.9	Natural Resources (FEIS Chapter 11).....	18
4.10	Noise (FEIS Chapter 12A).....	19
4.11	Vibration (FEIS Chapter 12B).....	19
4.12	Air Quality (FEIS Chapter 13).....	20
4.13	Greenhouse Gas Emissions and Resilience (FEIS Chapter 14)	22
4.14	Geology and Soils (FEIS Chapter 15).....	22
4.15	Contaminated Materials (FEIS Chapter 16).....	22
4.16	Utilities and Energy (FEIS Chapter 17).....	23
4.17	Safety & Security (FEIS Chapter 18)	23
4.18	Public Health and Electromagnet Fields (FEIS Chapter 19).....	24
4.19	Indirect and Cumulative Effects (FEIS Chapter 20)	24
4.20	Coastal Zone Consistency (FEIS Chapter 21).....	24
4.21	Environmental Justice (FEIS Chapter 22).....	25
4.22	Commitment of Resources (FEIS Chapter 23).....	25
4.23	Section 4(f) (FEIS Chapter 24)	25
6.0	Change in Permit Requirements	25
7.0	Public and Stakeholder Outreach	25
8.0	Conclusion.....	26

List of Figures

Figure 1: Construction Staging Area Per FEIS/ROD, Dated May 2021 3
Figure 2: Alternative Locations to Replace Block 675, Lot 12 Construction Staging Area..... 4
Figure 3: Full Closure of West 29th Street..... 8
Figure 4: No Action Projects in the Vicinity of the Modified Construction Staging Area.....10

List of Tables

Table 1: No Action Projects in the Vicinity of the Modified Construction Staging Area as Presented in the FEIS/ROD 9
Table 2: Maximum Predicted With Action Concentrations (ppm).....22
Table 3: Maximum Predicted With Action PM₁₀ & PM_{2.5} Concentrations (µg/m³)22

Appendices

- Appendix A: Traffic Study for Full Closure of West 29th Street
- Appendix B: Air Quality Analysis for Full Closure of West 29th Street
- Appendix C: Phase II Environmental Site Assessment – Block 675, Lot 1
- Appendix D: Public and Stakeholder Outreach

1.0 INTRODUCTION

This National Environmental Policy Act (“NEPA”) re-evaluation considers a proposed modification to the Hudson Tunnel Project (“HTP” or “the Project”) at the Twelfth Avenue Construction Staging Area in Manhattan, following the issuance of the Project’s Combined Final Environmental Impact Statement (“FEIS”) and Record of Decision (“ROD”) on May 28, 2021. This re-evaluation is particular to only the Manhattan portion of the study area reviewed in the FEIS/ROD and relates to:

- the removal of a portion of the Twelfth Avenue Construction Staging Area previously proposed at Block 675, Lot 12 and addition of the western portion of West 29th Street to replace it, resulting in a full closure of West 29th Street to vehicular through traffic between Eleventh and Twelfth avenues, with the exception of emergency vehicles and authorized Con Edison and City of New York Department of Sanitation (“DSNY”) vehicles; and
- updates to background conditions since the issuance of the FEIS/ROD.

Given that permanent, operational conditions were analyzed in the FEIS/ROD, and the aforementioned modification to the Project would not change operational conditions, this NEPA re-evaluation focuses on construction-period effects and mitigation.

As described in the FEIS/ROD, the HTP is intended to preserve the current functionality of the Northeast Corridor’s (“NEC”) Hudson River passenger rail crossing between New Jersey and New York and to strengthen the NEC’s resilience. The existing NEC rail tunnel beneath the Hudson River is known as the North River Tunnel. This tunnel is used by the National Railroad Passenger Corporation (“Amtrak”) for intercity passenger rail service and by the New Jersey Transit Corporation (“NJ TRANSIT”) for commuter rail service. The Project’s Selected Alternative includes construction of an additional passenger rail tunnel to the south of the North River Tunnel under the Hudson River, including railroad infrastructure in New Jersey and New York connecting the new rail tunnel to the existing NEC, and rehabilitation of the existing NEC tunnel.

The Federal Railroad Administration (“FRA”) was the lead Federal agency for the Project’s environmental review, in accordance with NEPA. The Federal Transit Administration (“FTA”) was a Cooperating Agency for the FEIS/ROD and issued the ROD jointly with FRA. The Port Authority of New York and New Jersey (“PANYNJ”) was the Project Sponsor at the time the FEIS/ROD was issued. On October 21, 2022, PANYNJ and the Gateway Development Commission (“GDC”) formally notified FRA and FTA that GDC was assuming the role of NEPA Project Sponsor. At the request of the Project Sponsor, Amtrak provided technical assistance in the development of this re-evaluation through the Gateway Trans-Hudson Partnership (“GTHP”), a joint venture of WSP USA Inc., STV Incorporated, and AECOM USA, Inc.

2.0 CONSTRUCTION STAGING AREA

2.1 Location of Construction Staging Area in FEIS/ROD

As described in the FEIS/ROD, a construction staging area at Twelfth Avenue (Route 9A) in Manhattan, between West 29th and West 30th streets, from Eleventh to Twelfth avenues, would support all Manhattan construction activities. A vertical shaft from the surface to the tunnel would also be constructed at the Twelfth Avenue Construction Staging Area for construction access to

the tunnel, removal of the Tunnel Boring Machines (“TBMs”) after boring, and to serve as a permanent ventilation shaft and emergency access point. A permanent ventilation fan plant would be constructed above or near the shaft.

The Twelfth Avenue Construction Staging Area identified in the FEIS/ROD comprises the following two properties (see **Figure 1**):

- **Block 675, Lot 1:** This area is located east of Twelfth Avenue at the western end of Block 675 between West 29th and West 30th streets. This would be the permanent location of an approximately 130-foot-diameter ventilation shaft and associated fan plant. This property was acquired by Amtrak through eminent domain as of August 16, 2021.
- **Western Portion of Block 675, Lot 12:** This area comprises the western portion of Lot 12 (approximately 0.3 acre or 12,672 square feet (“sf”)) on the southern side of Block 675 (north of West 29th Street), just east of Block 675, Lot 1.

The FEIS described this western portion of Block 675, Lot 12 as a location proposed for a potential new facility for the Fire Department of the City of New York (“FDNY”) Emergency Medical Services (“EMS”) to replace a facility currently located on West 23rd Street. The EMS facility would be developed as part of the 601 West 29th Street mixed-use development project. This potential EMS facility would serve as a base and support area for ambulance operators but not as a staging area for ambulances (e.g., ambulances would stage in locations throughout their service area waiting for calls). The FEIS further stated that these components of the 601 West 29th Street mixed use development project are therefore likely to be delayed by construction of the Project. As such, the FEIS considered the possibility that the EMS facility be completed as part of the HTP, if agreed to by the developer, and thus analyzed the impacts associated with this potential delay.

2.2 Proposed Modification to the Twelfth Avenue Construction Staging Area

Subsequent to issuance of the FEIS/ROD, the City of New York advanced its plans to develop the western portion of Block 675, Lot 12 into a new, permanent EMS facility prior to completion of the HTP’s construction by completing an environmental review pursuant to New York State Environmental Quality Review Act (“SEQRA”) and New York City Environmental Quality Review (“CEQR”), as well as a Uniform Land Use Review Procedure (“ULURP”) application. As such, Amtrak and the Project Sponsor (GDC) evaluated alternate locations to replace the portion of the Twelfth Avenue Construction Staging Area located on Block 675, Lot 12 (see **Figure 2**), including:

Alternative #1	Partial / Full Closure of West 29 th Street
Alternative #2	Partial / Full closure of West 30 th Street
Alternative #3	Use of an adjacent parcel (Block 674, Lot 1), owned by Con Edison, south of West 29 th Street and across from Block 675, Lot 1
Alternative #4	Use of an adjacent parcel (Block 676, Lot 1), owned by the Metropolitan Transportation Authority (“MTA”) with overbuild rights by Related Companies, north of West 30 th Street and across from Block 675, Lot 1

Figure 1

Construction Staging Area Per FEIS / ROD, Dated May 2021



Route 9A / 12th Avenue

West 30th Street

Block 675
Lot 1

Block 675
Lot 12

11th Avenue

West 29th Street

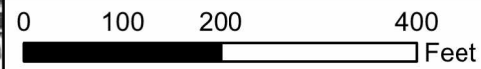


Figure 2

Alternate Locations to Replace Block 675, Lot 12 Construction Staging Area



Route 9A / 12th Avenue

11th Avenue

Alt. #4:
Block 676
Lot 1

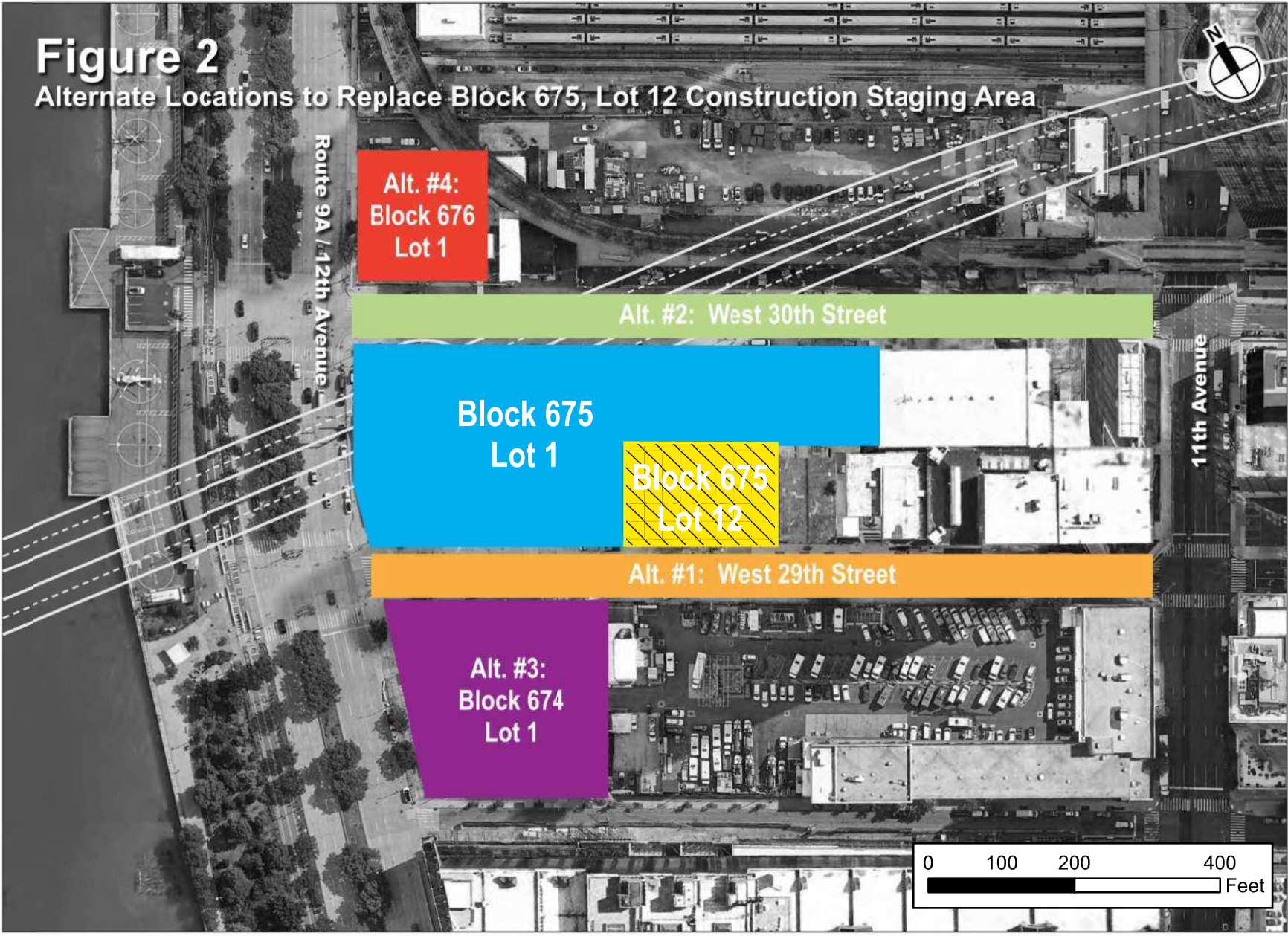
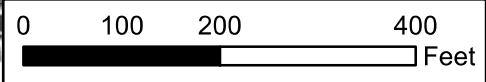
Alt. #2: West 30th Street

Block 675
Lot 1

Block 675
Lot 12

Alt. #1: West 29th Street

Alt. #3:
Block 674
Lot 1



Alternative #1 would serve as an extension of the main construction site on Block 675, Lot 1 south into the western portion of West 29th Street, similar in proximity to what would have been available on the western portion of Block 675, Lot 12. As such, it would provide required additional space for contractor lay down area directly adjacent to the main construction site, which could include temporary facilities for construction activities, such as the slurry plant and freeze plant.

Use of West 30th Street, as proposed with Alternative #2, would not be as practical as Alternative #1. A partial street closure is already established to support construction activities for the Hudson Yards Concrete Casing – Section 3 (“HYCC-3”) right-of-way preservation tunnel, located in the West Rail Yard to the north of West 30th Street. Additionally, the segment of the Hudson River Tunnel extending from the Twelfth Avenue shaft across West 30th Street would be excavated using Sequential Excavation Method (“SEM”) mining, requiring the temporary relocation of combined sewer structures and other utilities in the roadway. These construction activities would likely delay any potential use of West 30th Street as an additional space for the Twelfth Avenue Construction Staging Area. Alternative #2 would have limited feasibility considering the complex interactions of the Project with other nearby construction.

While Alternative #3 (i.e., use of Block 674, Lot 1) and Alternative #4 (i.e., use of a portion of Block 676, Lot 1) would each provide sufficient space and would be physically accessible due to their location adjacent to the main construction site on Block 675, Lot 1 and nearby construction activities. However, there are a number of challenging circumstances that limit these properties’ viability as alternative staging locations. For example, the temporary use of either parcel to support construction activities on Block 675, Lot 1 would result in road closures to accommodate trench excavation, installation of slurry or freeze piping, and street restoration, as well as coordination with other existing below-ground utilities.

Further, the site considered with Alternative #3 is owned by Con Edison and is critical to the utility’s operation. Reimagining and relocating these operations – some of which require constant access – would likely require a lengthy and potentially costly negotiation with Con Edison that could jeopardize the planned schedule for the Project. Con Edison indicated that the property is important to its future plans and has not expressed any interest in allowing any portion of it to be acquired for a different use.

The site considered with Alternative #4 is owned by MTA and is planned for use over the coming years to serve Related Companies’ West Rail Yard overbuild staging and construction, as well as the advancement of the HYCC-3.

Based upon this further evaluation and additional coordination with City officials, it was concluded that Alternative #1 would be the most effective solution for HTP to replace the portion of the Twelfth Avenue Construction Staging Area located on Block 675, Lot 12, which would involve the use of the western portion of West 29th Street between Eleventh and Twelfth avenues, adjacent to Block 675, Lot 1, and associated full street closure to vehicular through traffic on West 29th Street (“the Modified Construction Staging Area”). For the purposes of this re-evaluation, the Modified Construction Staging Area comprises the entirety of Block 675, Lot 1, as well as the portions of sidewalks, parking lanes, and travel lane adjacent to the Block 675, Lot 1 frontage on West 29th Street.

The Project Sponsor (GDC) and Amtrak continue to coordinate with FDNY regarding the EMS facility and access for emergency vehicles along West 29th Street, DSNY regarding access for

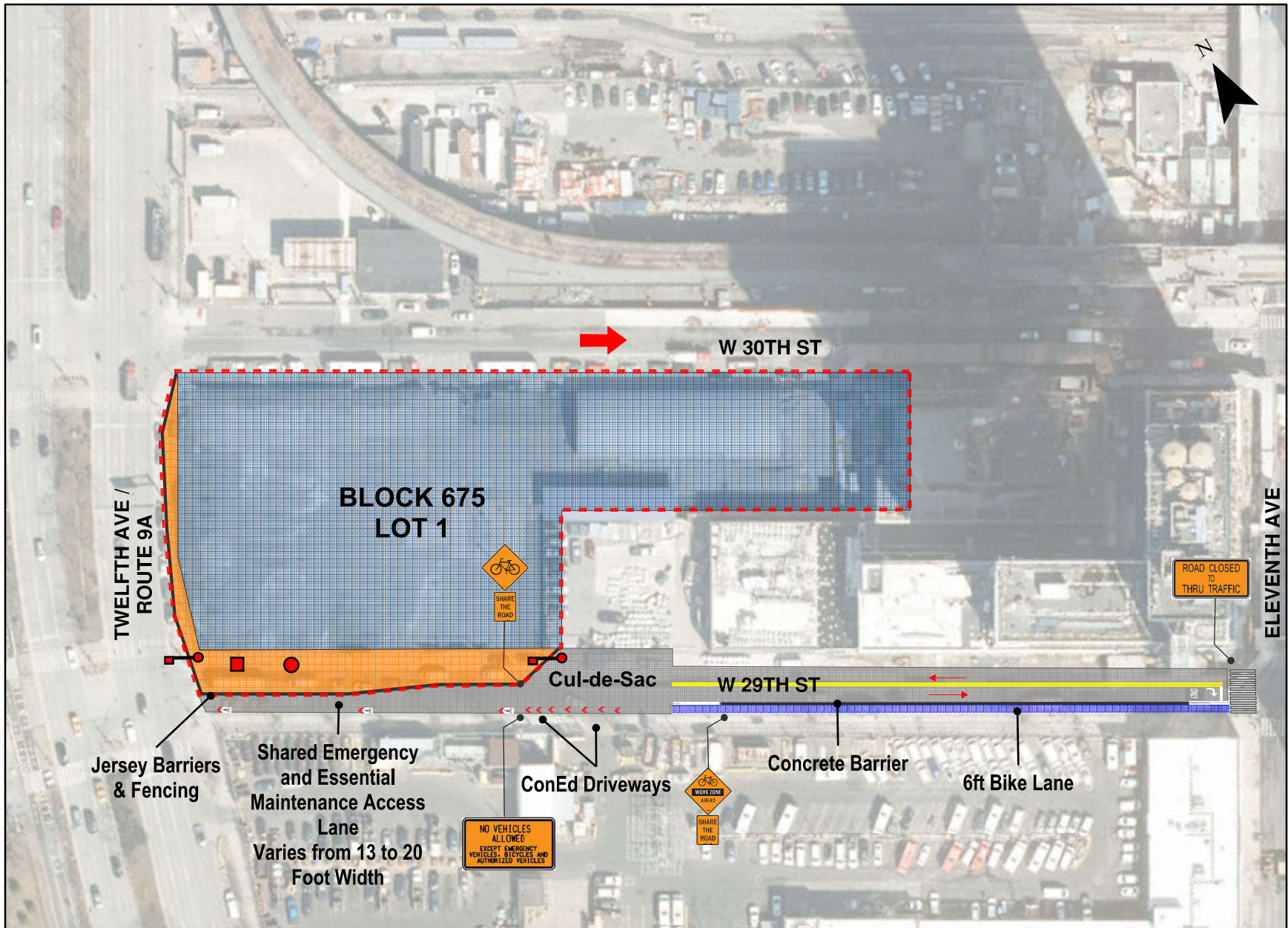
sanitation and maintenance services, as well as with Con Edison regarding access to their driveway located on the south side of West 29th Street. Based upon these further discussions, it has been determined that the preferred configuration for the closure of West 29th Street would comprise a minimum 13-foot-wide shared emergency access and bike lane. HTP construction vehicles, emergency vehicles, and certain Con Edison vehicles that utilize their property – specifically, the Silver Bullet and cable reels trucks – would be permitted to continue through the closure area.¹ Garbage/recycling pick up, street sweeping, and salt spreaders and snowplows would utilize the emergency lane as per DSNY’s schedule throughout the construction period. Other City departments’ authorized vehicles may utilize the emergency lane when necessary for the public safety. The preferred configuration is as follows (see **Figure 3**):

- **North Sidewalk:** Pedestrian access (i.e., sidewalk) would be maintained on the north side of West 29th Street from Eleventh Avenue west toward the vehicular turn-around area.
- **Eastern Portion of West 29th Street:** The eastern portion of West 29th Street to Eleventh Avenue would be converted from a one-way to a two-way street allowing for access to and egress from Eleventh Avenue. The Project contractor would access the Modified Construction Staging Area from the eastern portion of West 29th Street using this two-way travel lane.
- **Vehicular Turn-Around (Cul-de-Sac):** A vehicular turn-around area (e.g., cul-de-sac) would be located at the westernmost end of the open portion of West 29th Street for local traffic to make U-turns to egress to Eleventh Avenue, as necessary.
- **Western Portion of West 29th Street:** The western portion of West 29th Street would be closed to vehicular through traffic approximately 260 feet east of Twelfth Avenue for the Modified Construction Staging Area. This closure would facilitate the inclusion of the northern sidewalk, both parking lanes, and a single vehicular travel lane adjacent to the Block 675, Lot 1 frontage on West 29th Street as part of the Modified Construction Staging Area. The southern boundary of the Modified Construction Staging Area would be configured to accommodate a 13-foot-wide emergency access lane, which would be a shared use traffic lane for emergency vehicles, bicycles, and authorized Con Edison and DSNY vehicles to access to Twelfth Avenue. An approximately 130-foot length of the emergency access lane would be widened to up to an approximately 20-foot width to accommodate authorized Con Edison vehicles, while maintaining sufficient width for an emergency vehicle to bypass a Con Edison vehicle servicing the adjacent Con Edison facility from this new emergency access lane on West 29th Street.
- **Access to Twelfth Avenue:** Access to Twelfth Avenue via a shared lane with a minimum width of 13 feet would be limited to emergency vehicles, bicycles, and authorized Con Edison and DSNY vehicles. Construction vehicles would exit the Modified Construction Staging Area directly onto northbound Twelfth Avenue.

¹ The New York City Department of Transportation (“NYCDOT”) has approved the use of the emergency access lane for Con Edison’s Silver Bullet tanker truck and their 53-foot long flat-bed tractor trailer, used for cable reels delivery, as these vehicles are too large to make a “U” turn within the West 29th Street right-of-way. Con Edison has indicated that these vehicles are scheduled to access West 29th Street for a total of five times a week. All other Con Edison traffic will make a “U” turn to exit their site via Eleventh Avenue.

- **Bicycles:** The existing unprotected West 29th Street westbound bike lane would be maintained for the entire block between Eleventh and Twelfth avenues to provide continuous access to the Hudson River Bikeway. On the eastern portion of West 29th Street, the bike lane would be shifted adjacent to the south curb; the bike lane would be protected as a concrete barrier would separate it from the converted two-way street. On the western portion of West 29th Street, adjacent to the Modified Construction Staging Area, the bike lane would be reconfigured into the emergency access lane for shared use with emergency and authorized vehicles.
- **South Sidewalk:** Pedestrian access (i.e., sidewalk) would be maintained along the south side of West 29th Street for the entire block between Eleventh and Twelfth avenues utilizing the existing south sidewalk.

It is anticipated that the HTP Manhattan Tunnel contractor would be awarded a Notice to Proceed (“NTP”) in or around the fourth quarter (“Q4”) of 2024, with anticipated construction activities to begin in or around the first quarter (“Q1”) 2025. Heavy construction would occur for a duration of seven years and would be followed by systems testing and commissioning, ending in or around Q1 2033. West 29th Street would be reopened and restored, including all sidewalks, bike paths, and parking and travel lanes, to its pre-existing condition as a one-way street in or around 2035. Additionally, construction operations at the Modified Construction Staging Area would be the same as identified in the FEIS/ROD, and construction activities would occur in two eight-hour shifts per day (7AM – 3PM and 3PM – 11PM). It is anticipated that construction of the EMS facility would occur from 2028 to 2030, which would therefore be partially concurrent with HTP construction.



- Modified Construction Staging Area
- Main Staging Area
- Extended Staging Area
- Protected Bike Lane
- Fire Call Box
- Fire Hydrant
- Flagger

0 50 100 200
 Feet

Full Closure of West 29th Street
Figure 3

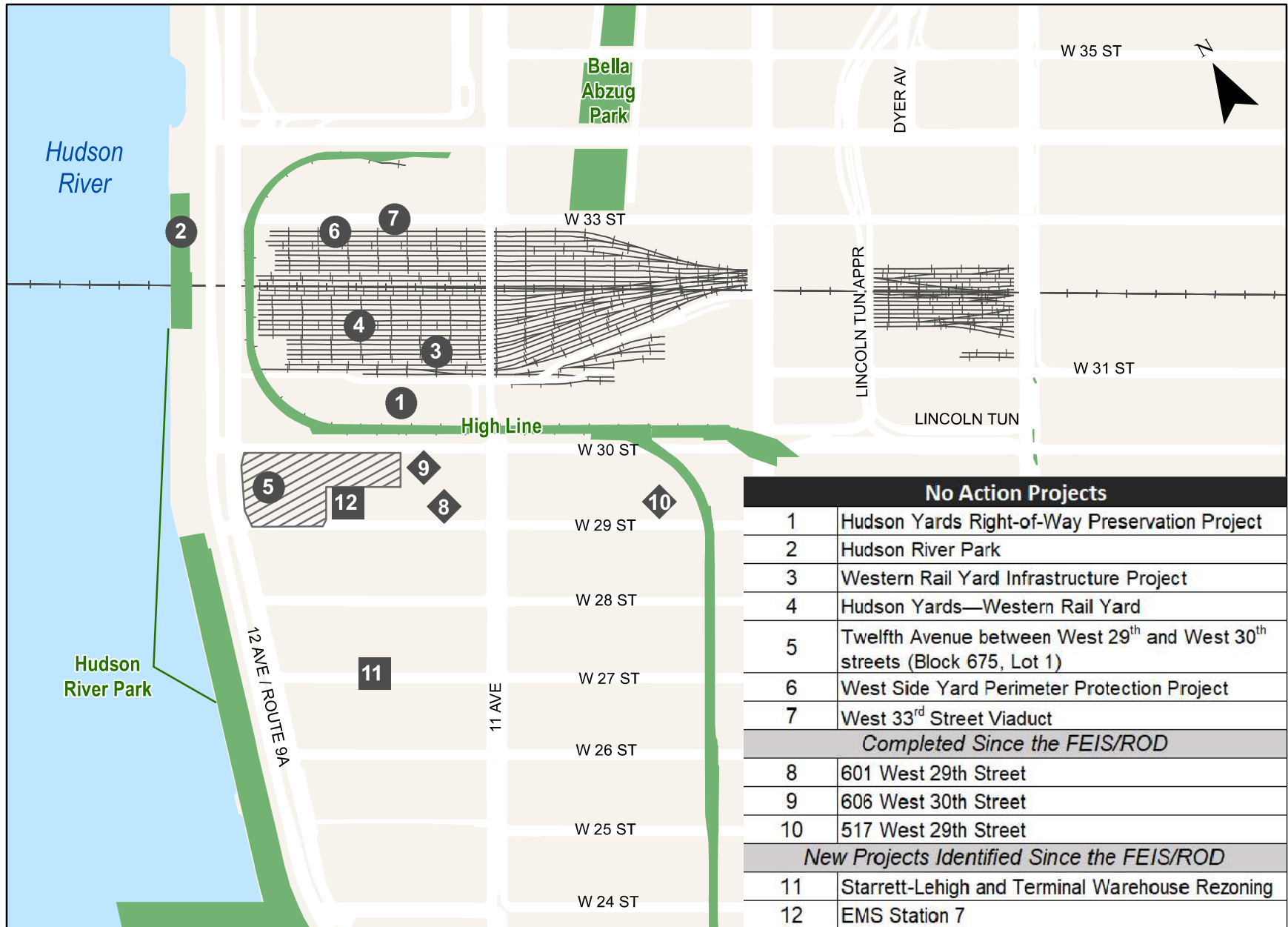
3.0 AFFECTED ENVIRONMENT: “NO ACTION” CONDITIONS




As described in the FEIS/ROD, the area surrounding the Modified Construction Staging Area is currently undergoing extensive redevelopment as a result of recent public policy initiatives in the area; many sites have recently been developed and others are currently under construction with high-density developments.



Table 1 provides a summary of No Action projects in the vicinity of the Modified Construction Staging Area that were described in the FEIS/ROD; that is, projects that would occur whether the HTP is implemented or not (see **Figure 4**). However, new development projects and updated information have been identified as part of this re-evaluation. These new development projects and those which have been completed since the publication of the FEIS/ROD are described in the following sections. As noted in the FEIS/ROD, the Project Sponsor (GDC) will coordinate project activities to minimize disruptions wherever possible.

Table 1: No Action Projects in the Vicinity of the Modified Construction Staging Area as Presented in the FEIS/ROD

Project Name/Address	Project Description/Program	Completion Year
Hudson Yards Right-of-Way Preservation Project	Concrete casing preserving rail right-of-way underneath Western and Eastern Rail Yards	Under Construction
Hudson River Park	Park improvements, 29 th -34 th streets	Under Construction
Western Rail Yard Infrastructure Project	Section of Hudson Yards Right-of-Way Preservation Project with platform above the concrete casing and rail yard to support Hudson Yards development above	2026
Hudson Yards – Western Rail Yard	Mixed-Use: eight towers (approximately 30 to 75 stories), 6.2 million sf of residential, office, retail, and school space with public open space	2030
Twelfth Avenue between West 29 th and West 30 th streets (Block 675, Lot 1)*	Approximately 941,000 sf of hotel and/or commercial space*	Unknown*
West Side Yard Perimeter Protection Project	Resiliency project to construct protection for the West Side Yard	Unknown
West 33 rd Street Viaduct	Regrading of West 33 rd Street between Eleventh and Twelfth avenues to correspond with new construction over Hudson Yards.	Unknown
<p>Notes: * Since the FEIS/ROD, Amtrak acquired Block 675, Lot 1; no further development projects are currently planned for this property. Completed since the FEIS/ROD: 601 West 29th Street, 606 West 30th Street, and 517 West 29th Street</p>		



-  Proposed Staging Area
-  Existing Northeast Corridor
-  No Action Project

-  Project Completed Since the FEIS/ROD
-  New Project Identified Since the FEIS/ROD

0 250 500 1,000 Feet

No Action Projects in the Vicinity of the Modified Construction Staging Area
Figure 4

EMS Station 7

FDNY's existing EMS Station 7 is currently located at 512 West 23rd Street in a construction trailer situated at a temporary location under the High Line. Opened in 2011 upon the closure of St. Vincent's Hospital in the West Village, the 5,000-sf facility was meant to house a maximum of seven units (15 tours); however, it currently supports 10 units (24 tours). Given current and anticipated growth in the Clinton/Hell's Kitchen, West Chelsea, and Hudson Yards neighborhoods, as well as continued growth in call volume, FDNY has identified the need for a new and expanded EMS Station 7.

The construction activities at the Modified Construction Staging Area would occur immediately adjacent to Block 675, Lot 12, the western portion of which is proposed for a potential new EMS facility that would serve as a base and support area for ambulance operators. This 18,000-sf facility would not serve as a staging area for ambulances; ambulances would stage in locations throughout their service area while waiting for calls. It is anticipated construction of the EMS facility would occur from 2028 to 2030.

Starrett-Lehigh and Terminal Warehouse Rezoning

Just south of the Modified Construction Staging Area, the City Council recently approved the Starrett-Lehigh and Terminal Warehouse Rezoning for the two-block area (Block 672, Lot 1 and Block 673, Lot 1) bounded by West 28th Street to the north, Eleventh Avenue to the east, West 26th Street to the south, and Twelfth Avenue to the west. The as-of-right Starrett-Lehigh food market project (i.e., the transformation of approximately 43,000 sf of the Starrett-Lehigh Building's ground floor into commercial space, including food hall use and exposition space) was completed in 2022. The Terminal Warehouse is currently under construction to facilitate the conversion of approximately 500,000 sf of storage into new office space and to reposition the ground floor to include food and beverage retail uses, as well as to create a courtyard and rooftop addition to the western portion of the building. The rezoning allows for a more diverse range of tenant types to lease space in the Starrett-Lehigh Building and Terminal Warehouse.

Projects Completed Since the FEIS/ROD

Since publication of the FEIS/ROD, two separate high-rise residential buildings located at the eastern end of Block 675 and one residential development east of the Modified Construction Staging Area have been completed. These developments are:

- **601 West 29th Street** – a mixed-use tower approximately 695 feet tall containing both residential and retail space located on West 29th Street at Eleventh Avenue (consisting of former Lots 12, 29, and 36, now consolidated as Lot 12).
- **606 West 30th Street** – a mixed-use tower approximately 545 feet tall containing both residential and retail space located on West 30th Street (consisting of Lot 39, which has been consolidated with former Lot 38).
- **517 West 29th Street** – a residential development located east of the Modified Construction Staging Area, along West 29th Street between Tenth and Eleventh avenues comprising 60 residential units.

4.0 CONSTRUCTION-RELATED IMPACTS

The Modified Construction Staging Area would, in addition to providing support for construction activities, serve as a permanent ventilation shaft and emergency access point for the new Hudson River Tunnel. The FEIS/ROD considered 23 technical areas for both final operational conditions and temporary construction-period conditions. The permanent, operational conditions and mitigations would not change with the Modified Construction Staging Area and proposed full closure of West 29th Street between Eleventh and Twelfth avenues described herein. As such, this re-evaluation focuses on the construction-period effects and mitigation of these Project modifications. A re-analysis of these 23 technical areas to identify any new or additional construction-period impacts and required mitigation not previously documented in the FEIS/ROD is provided below.

4.1 Traffic and Pedestrians (FEIS Chapter 5A)

Traffic

A traffic study was prepared to identify any potential impacts that may occur as a result of the full closure of West 29th Street between Eleventh and Twelfth avenues and detour of traffic to nearby intersections. The traffic study was submitted to the New York City Department of Transportation (“NYCDOT”) on April 19, 2023 and, following multiple iterations incorporating NYCDOT’s comments, NYCDOT provided approval of the traffic study and proposed improvements on November 15, 2023 (see **Appendix A**).

Of the 20 traffic intersections studied, level of service would be reduced at eight intersections, but improved to acceptable conditions through signal timing adjustments and the reconfiguration of intersection approaches, as described below:

- Twelfth Avenue and West 34th Street: Shift two seconds of green time from the north- and southbound phase to the westbound phase during the AM peak period.
- Twelfth Avenue and West 24th Street: Shift five seconds of green time from the north- and southbound phase to the westbound phase during the AM and afternoon peak periods. During the evening peak period, shift seven seconds of green time from the north- and southbound phase to the westbound phase and shift one second of green time from the north- and southbound phase to the southbound left-turn phase.
- Eleventh Avenue and West 34th Street: Shift two seconds of green time from the southbound phase to the east- and westbound phase in the AM peak hour. In the afternoon and evening peak periods, shift five seconds of green time from the southbound phase to the east- and westbound phase, and one additional second of green time from the southbound phase to the east- and westbound dual left turn phase.
- Eleventh Avenue and West 29th Street: Reconfigure the westbound approach to operate with a left-turn lane and a shared left-through lane. An eastbound right-turn movement is provided for local traffic accessing the eastern portion of the West 29th Street block between Eleventh and Twelfth avenues. The eastbound right-turn and westbound left-turn movements operate on a protected phase, separate from the south crosswalk walk-time.

- Eleventh Avenue and West 24th Street: Shift one second of green time from the left-turn phase to the southbound phase during all peak periods.
- Tenth Avenue and West 33rd Street: Add a lagging split phase for the northbound left-turn to enhance driver and pedestrian safety at this intersection since high northbound left-turn volumes are projected as a result of the proposed detour. Implementing this lagging split phase will allow the northbound left-turn to operate as a protected phase, separate from the west crosswalk walk-time. Remove parking for approximately 100 feet on the west side of the northbound approach to create a left-turn bay. Additionally, shift two seconds of green time from the westbound phase to the northbound phase during the afternoon and evening peak periods to improve the adverse traffic effect.
- Tenth Avenue and West 29th Street: Reconfigure the westbound approach to operate with a right-turn lane and a shared through-right turn lane. Change northbound protected left-turn phase to permitted left-turn. Shift one second of green time from the northbound phase to the westbound phase during the afternoon and evening peak periods. During all time periods, shift an additional three seconds from the northbound phase to the leading pedestrian interval (“LPI”). Increasing the LPI from 7 seconds to 10 seconds will enhance safety for pedestrians using the north crosswalk by reducing conflict with the heavy westbound right-turn traffic.
- Tenth Avenue and West 34th Street: Add a lagging split phase for the northbound left-turn to enhance driver and pedestrian safety at this intersection since high northbound left-turn volumes are projected as a result of the proposed detour. Implementing this lagging split phase will allow the northbound left-turn to operate as a protected phase, separate from the west crosswalk walk-time. Remove parking for approximately 100 feet on the west side of the northbound approach to create a left-turn bay.

To verify the need for and effectiveness of these mitigation measures, GDC will require that the contractor conduct a transportation monitoring plan (“TMP”) to monitor the traffic operations at all study intersections or other locations experiencing congestions due to the Project’s construction and to maintain periodic improvements, if warranted. Maintenance and Protection of Traffic (“MPT”) plans would be developed by the Project contractor, and approved by NYCDOT, prior to construction (see **Appendix A**).

Pedestrians and Bicyclists

The existing West 29th Street westbound bike path would be maintained throughout the duration of construction to provide continuous access to the Hudson River Bikeway.

Pedestrian access (i.e., sidewalk) would be maintained on the north side of West 29th Street from Eleventh Avenue west toward the vehicular turn-around area. In the vicinity of the Modified Construction Staging Area, the north sidewalk would be closed to pedestrians for approximately 250 feet east of the eastern right-of-way line at Twelfth Avenue. Pedestrian access would be maintained along the south side of West 29th Street for the entire block between Eleventh and Twelfth avenues. Pedestrian access to and across Twelfth Avenue would be maintained via the south crosswalk at the intersection of Twelfth Avenue and West 29th Street.

GDC will continue to work with the NYCDOT Office of Construction Mitigation and Coordination (“OCMC”) to develop measures to enhance pedestrian safety as part of the street closure and MPT permitting process.

The bike lane, currently five-feet-wide, would be shifted to a curbside lane along the south curb of West 29th Street and would be expanded to a width of six feet. On the eastern portion of West 29th Street, a concrete barrier would be provided between this bike lane and adjacent roadway traffic. On the western portion of West 29th Street, adjacent to the Modified Construction Staging Area, the bike lane would be reconfigured into a 13-foot shared lane to accommodate both bicycles and emergency vehicles. The shared 13-foot lane would be protected by jersey barriers and fencing. Access to Twelfth Avenue via the shared 13-foot lane would be limited to emergency and authorized vehicles and bicyclists through the use of plastic delineators.

With these measures in place, the Modified Construction Staging Area would not result in adverse impacts related to pedestrians and bicyclists.

4.2 Transportation Services - Bus Service (FEIS Chapter 5B)

The proposed closure of West 29th Street between Eleventh and Twelfth avenues would not directly affect bus service. There are no existing MTA New York City Transit (“NYCT”) bus routes that operate on West 29th Street. The M12 bus route operates northbound on Twelfth Avenue. The nearest M12 bus stops are located on Twelfth Avenue north of West 30th Street and south of West 27th Street and would not need to be relocated to accommodate the Modified Construction Staging Area. Designated on-street bus parking used by tour and charter buses is located along the east curb of Twelfth Avenue between West 29th and West 30th streets. As previously described in the FEIS/ROD, this bus parking would be relocated during construction of the Project and coordinated with NYCDOT’s Office of Construction Mitigation and Coordination.

4.3 Land Use, Zoning and Public Policy (FEIS Chapter 6A)

The Modified Construction Staging Area would not require or result in any permanent changes to land use or zoning, or be inconsistent with public policy. The Modified Construction Staging Area would temporarily use Block 675, Lot 1 and the western portion of West 29th Street. Following completion of construction activities, Block 675 Lot 1 would be available for development, except for the portion of Block 675, Lot 1 that would be occupied by the proposed fan plant to serve the Project, as previously analyzed in the FEIS/ROD.

Although construction of the Project would occur immediately adjacent to an operational EMS facility upon the facility’s completion expected in 2030, full closure of West 29th Street to vehicular through traffic and conversion of the eastern portion of the street to a cul-de-sac would not be anticipated to disrupt EMS operations because the new EMS facility will not serve as a staging area for ambulances (i.e., ambulances would stage in locations throughout their service area waiting for calls). The provision of a 13-foot-wide lane to accommodate bicycles, authorized Con Edison and DSNY vehicles, and emergency vehicles on the south side of West 29th Street would enable FDNY emergency vehicles to access Twelfth Avenue.

As with the previously contemplated Twelfth Avenue Construction Staging Area, construction activities associated with the Modified Construction Staging Area would result in traffic diversions, heavy truck activity, and the use of noisy equipment, which would at times be disruptive to nearby

activities. The proposed Project modification would extend the portion of the construction staging area adjacent to the Hudson River Park. However, as noted in the FEIS/ROD, the disruption to the park users would be limited by the presence of the heavily trafficked Twelfth Avenue and the nearby West 30th Street Heliport within the park. The construction activities at the Modified Construction Staging Area would also occur adjacent to two recently completed mixed-use residential and commercial high-rise buildings (601 West 29th Street and 606 West 30th Street) and may be disruptive to residents of the new buildings, some of whom would have windows overlooking the construction site. Consistent with the FEIS/ROD, it is assumed the new residential buildings are of modern construction, with well-insulated windows, so interior noise levels would be expected to remain acceptable.

South of the Modified Construction Staging Area, beyond the Con Edison West 28th Street facility, is the Terminal Warehouse (Block 673, Lot 1), which is currently under construction and will comprise office and retail space (see **Figure 4**). The Project Sponsor (GDC) and Amtrak are coordinating with Con Ed to ensure that access to their facility on West 29th Street directly across from the Modified Construction Staging Area is maintained throughout HTP construction activities.

As noted in the FEIS/ROD, the Project Sponsor (GDC) will implement measures to minimize construction impacts on nearby land uses, including the use of site enclosures or temporary noise barriers at construction sites to buffer surrounding areas from construction noise and activity. With these measures in place, the proposed full closure of West 29th Street and Modified Construction Staging Area would not result in new significant adverse impacts related to land use.

4.4 Property Acquisition/Easements (FEIS Chapter 6B)

The FEIS/ROD indicated that the use of Block 675, Lot 12 would require Amtrak to acquire a temporary construction easement. The proposed full closure of West 29th Street and Modified Construction Staging Area would not require a temporary easement or property acquisition. As noted in **Section 6**, "Change in Permit Requirements," the closure of West 29th Street for approximately 10 years would, however, necessitate a Street Closure Permit from NYCDOT.

4.5 Socioeconomic Conditions (FEIS Chapter 7)

Any localized adverse effects associated with the Modified Construction Staging Area during construction activities would not result in the potential for community disruption, possibility of demographic shifts, need for or availability of relocation housing, adverse effects on commerce, or adverse impacts to local government services and revenues. Additionally, as described in the FEIS/ROD, construction would generate economic benefits for New York from the creation of construction jobs, wages and salaries paid to construction workers, and indirect economic activity from those expenditures throughout the regional economy (i.e., the multiplier effect).

4.6 Open Space and Recreational Resources (FEIS Chapter 8)

As discussed in the FEIS/ROD, construction activities at the previously contemplated Twelfth Avenue Construction Staging Area in the vicinity of Hudson River Park and the High Line may result in temporary disruptions in user experience. These temporary disruptions would be similar or the same with the Modified Construction Staging Area and corresponding full closure of West 29th Street.

Hudson River Park

The portion of the Modified Construction Staging Area on the western portion of West 29th Street would be located approximately 125 feet east of Hudson River Park. Twelfth Avenue is located in between the Modified Construction Staging Area and the park; therefore, the staging area would not directly affect Hudson River Park. During surface construction activities, a temporary barrier along the Modified Construction Staging Area's western edge would be used to buffer the park from construction noise and views of construction equipment. Taller equipment would be visible above the wall, as would the permanent fan plant structure at Block 675, Lot 1 as it is erected. As with the previously contemplated Twelfth Avenue Construction Staging Area, the overall construction activities at the Modified Construction Staging Area may result in an adverse visual impact, but this effect would be temporary.

As described in the FEIS/ROD, construction activities at the previously contemplated Twelfth Avenue Construction Staging Area would produce noise levels at Hudson River Park that would be noticeable and audible, but would be below FTA's noise impact criteria.

Though the Modified Construction Staging Area would extend the portion of the construction staging area adjacent to Hudson River Park, construction noise at this location would not affect Hudson River Park visitors' ability to utilize or enjoy the park. Moreover, as noted in the FEIS/ROD, extensive construction has been occurring across from the park in many locations, and the park is located on a busy and noisy traffic arterial (i.e., Twelfth Avenue). Therefore, construction activities associated with the Modified Construction Staging Area would not change the character or usefulness of the park's recreational resources.

As described in the FEIS/ROD, the New York City Department of City Planning ("NYCDPC") and HRPT have identified Block 675, Lot 1 – which, along with the western portion of West 29th Street, would comprise the Modified Construction Staging Area – as a future site for use of transferred development rights from the HRPT pursuant to the Hudson River Park Act. Until any such sale of development rights, the proceeds will not be available to HRPT to improve the park. The FEIS/ROD noted that Amtrak will need to negotiate several necessary agreements with HRPT for entry permits, as well as temporary and permanent easements. The FEIS/ROD also noted that the relevant agreements could include negotiated provisions that take into account potential financial losses and funding delays.

High Line

Construction activities at the Modified Construction Staging Area would occur in close proximity to the High Line. As with the previously contemplated Twelfth Avenue Construction Staging Area, these construction activities would be noticeable and could be temporarily disruptive to people on the High Line. Consistent with the FEIS/ROD mitigation commitment for construction sites in New York, a 15-foot noise wall (e.g., ¾-inch plywood) would temporarily surround the Modified Construction Staging Area, which would also serve to partially block views into the site. Taller equipment would be visible above the wall, as would the permanent fan plant structure at Block 675, Lot 1 as it is erected. People on the High Line would have views over the wall into the Modified Construction Staging Area. As described in the FEIS/ROD, construction activities may result in an adverse visual impact, but this effect would be temporary.

The FEIS/ROD indicated that construction at the previously contemplated Twelfth Avenue Construction Staging Area would result in noise levels at the High Line that would constitute a

significant adverse noise impact according to *CEQR Technical Manual* criteria. However, they would not exceed FTA construction noise impact criteria. This would only affect the area of the High Line within 400 feet of the Modified Construction Staging Area, leaving the rest of this 1.5-mile-long park available for recreation without increased noise levels. Construction activities at the Modified Construction Staging Area would not result in an adverse impact to the recreational use of the High Line.

4.7 Historic and Archaeological Resources (FEIS Chapter 9)

The FEIS/ROD included a historic and archaeological resources analysis that identified known and eligible historic architectural resources in the Project's Area of Potential Effects ("APE"), as well as prehistoric and historic-period archaeological sensitivity in the APE, and assessed the potential for the Project to impact these resources. The Modified Construction Staging Area is within the APE that was considered in the FEIS/ROD.

Historic Architectural Resources

Both the previously contemplated Twelfth Avenue Construction Staging Area and the Modified Construction Staging Area would be located in close proximity to the High Line, a resource eligible for listing in the National Register of Historic Places ("NRHP-Eligible") located on the north side of West 30th Street between Eleventh and Twelfth avenues. The northern edge of the previously contemplated Twelfth Avenue Construction Staging Area, which would be nearest the High Line, would not be changed with the modified Construction Staging Area, which would extend the total construction area southward, away from the High Line. As such, the Modified Construction Staging Area would not result in any additional adverse effects as compared with the previously contemplated Twelfth Avenue Construction Staging Area. To avoid inadvertent adverse effects to the historic High Line structure from the adjacent construction, including associated construction vibration, the Project Sponsor (GDC), in accordance with Stipulation V.C.1 of the Section 106 Programmatic Agreement ("PA"), would develop construction protection measures that would be set forth in a Construction Protection Plan ("CPP") to be developed in consultation with FRA and the New York State Historic Preservation Office ("NYSHPO") prior to Project demolition, excavation, and construction activities. Therefore, the findings of the FEIS/ROD with regard to the NRHP-Eligible High Line remain valid with the Modified Construction Staging Area on the western portion of West 29th Street.

Archaeological Resources

As described in the FEIS/ROD, the use of Block 675, Lot 1 as a portion of the construction staging area – as well as for the site of a permanent new ventilation shaft and fan plant – would have the potential to impact industrial and manufacturing sites, domestic sites, and historic piers, wharves, and landfill-retaining devices. These resource types are expected below the depth of modern disturbance, utilities, or buried tanks. Construction staging at this location would affect areas of moderate archaeological sensitivity for historic-period resources, which may be present at a depth of 0 to 20 feet below ground surface. PA Stipulation VI.A requires preparation of an archaeological testing plan and/or monitoring plan to determine the presence or absence of archaeological resources.

No ground-disturbing impacts are anticipated within the West 29th Street portion of the Modified Construction Staging Area. As such, the Project is not expected to affect potential archaeological resources in the West 29th Street portion of the Modified Construction Staging Area.

4.8 Visual and Aesthetic Resources (FEIS Chapter 10)

The area on the west side of Manhattan in the general vicinity of the Modified Construction Staging Area is characterized by the rapidly developing, mixed urban environment, Hudson River Park, and the natural environment of the Hudson River. As with the previously contemplated Twelfth Avenue Construction Staging Area, construction activities relating to the Modified Construction Staging Area and subsequent construction of the fan plant would be visible from the surrounding streets, Hudson River Park, and the High Line, as well as from the two new high-rise developments on the eastern end of Block 675. As previously stated in the FEIS/ROD, these two new high-rise residential buildings on Block 675 would block views of the construction staging area from residents of the tower at 15 Hudson Yards, and increased heavy truck activity resulting from the Project would also be visible from the surrounding areas.

As noted in **Section 4.6**, “Open Space and Recreational Resources,” the portion of the Modified Construction Staging Area located on the western portion of West 29th Street would be in the vicinity of both Hudson River Park and the High Line. As with the previously contemplated Construction Staging Area, during surface construction activities, a temporary barrier along the Modified Construction Staging Area’s western edge would be used to buffer the parks from construction noise and views of construction equipment. This construction barrier would block most views of construction site activities on the surrounding pedestrian streetscapes, including Hudson River Park across Twelfth Avenue. As previously stated in the FEIS/ROD, taller equipment would be visible above the wall to visitors on the elevated High Line, as would the permanent fan plant structure at Block 675, Lot 1 as it is erected. Therefore, as described in the FEIS/ROD, construction activities may result in an adverse visual impact to some visitors on the High Line looking toward the river, but this effect would be momentary for the park user and the overall construction condition would be temporary.

Construction lighting at the Modified Construction Staging Area would be visible during nighttime hours from nearby streets and from nearby residential uses such as the two new high-rise residential buildings located at the eastern end of Block 675. As noted in the FEIS/ROD, the Project Sponsor (GDC) will design construction lighting to minimize light pollution affecting adjacent residential areas, with targeted and downward-directed, shielded lighting, and minimal site lighting after construction hours.

4.9 Natural Resources (FEIS Chapter 11)

As with the previously contemplated Twelfth Avenue Construction Staging Area, the Modified Staging Area would be located within the 100-year floodplain. No adverse impacts related to floodplains are anticipated as a result of construction at the Modified Construction Staging Area. Groundwater infiltration during construction in New York is expected to be low and, with the measures described in the FEIS/ROD, construction at the Modified Construction Staging Area would not result in an adverse effect to groundwater. During construction, stormwater on the Modified Construction Staging Area would be discharged to the New York City sewer system and, from there, directed to municipal wastewater treatment facilities for treatment before discharge to the Hudson River. Construction at the Modified Construction Staging Area would not disturb vegetated communities with high ecological value, or threatened, endangered, or special concern species (i.e., yellow bumblebee and peregrine falcon). Although construction activities would increase levels of disturbance to the extent that there would be temporary alterations in species

assemblages or otherwise temporary changes to wildlife communities in the surrounding area, the same community of generalist species of wildlife would occur as at present.

Along the south sidewalk of West 29th Street between Eleventh and Twelfth avenues, there are 11 street trees. These street trees would not be removed; however, given that work activities with the Modified Construction Staging Area would be within 50 feet of City-owned trees, a Tree Work Permit would be required, which covers tree pruning and proper protection of the tree (including the root zone below the trees). As part of the Tree Work Permit, a Tree Protection Plan would be prepared by the Project contractor and approved by the New York City Department of Parks and Recreation (“NYCDPR”).²

4.10 Noise (FEIS Chapter 12A)

Although the Modified Construction Staging Area comprises the removal of a portion of the Twelfth Avenue Construction Staging Area previously proposed at Block 675, Lot 12 and addition of the western portion of West 29th Street to replace it, the construction activities and equipment assumed in the FEIS/ROD would remain unchanged.

As noted in **Section 4.3**, “Land Use,” the construction activities at the Modified Construction Staging Area would occur adjacent to two mixed-use residential and commercial high-rise buildings (601 West 29th Street and 606 West 30th Street), completed since the publication of the FEIS/ROD. The FEIS/ROD noted that the construction activities at the previously contemplated Twelfth Avenue Construction Staging Area would constitute adverse noise impacts according to FTA noise impact criteria and significant noise impacts according to the *CEQR Technical Manual*. However, it was assumed in the FEIS/ROD that these mixed-use development buildings would have been designed to account for the Project’s construction noise with window/wall attenuation that would result in acceptable interior noise levels.

As with the previously contemplated Twelfth Avenue Construction Staging Area, an area along the High Line within 400 feet of the Modified Construction Staging Area would experience increased noise levels according to CEQR criteria, but not FTA criteria.

As per the FEIS/ROD, for construction staging areas in Manhattan, construction of the Project would include sufficient mitigation to meet New York City Noise Control Code construction noise limits at the exteriors of residential properties. Site enclosures, or temporary noise barriers (e.g. 3/4-inch thick plywood) approximately 15 feet high, would provide noise mitigation and would avoid adverse impacts according to the FTA noise impact criteria during most construction activities. These mitigation measures proposed in the FEIS/ROD would still be required with the Modified Construction Staging Area.

4.11 Vibration (FEIS Chapter 12B)

The nearest vibration receptors to the Modified Construction Staging Area would be the High Line and the two new mixed-use residential and commercial high-rise buildings (601 West 29th Street and 606 West 30th Street). Although now completed and previously yet to be built, potential vibration effects to these two mixed-use developments were analyzed in the FEIS/ROD. The FEIS/ROD indicated that augured pile installation on Block 675, Lot 1 during construction of

² As described in the FEIS/ROD, construction of the new alignment in Manhattan would result in the removal of approximately 15 street trees within the median of Twelfth Avenue, therefore necessitating a NYCDPR Tree Work Permit.

Twelfth Avenue shaft would exceed the threshold of human annoyance from vibration. However, it would not have potential to result in damage to the residential buildings.

As described in **Section 4.7**, “Historic and Archeological Resources,” the High Line is a historic structure and the Project Sponsor (GDC) will develop and implement a CPP for construction activities near the High Line to protect it from accidental damage during pile installation on Block 675, Lot 1. Given that there would be no change in the location of pile installations from the FEIS/ROD with the Modified Construction Staging Area, construction would not have the potential to produce vibration levels at the High Line that would damage the structure.

As also described in the FEIS/ROD, vibration resulting from pile installation would exceed the threshold for potential human annoyance at portions of the High Line within approximately 65 feet of non-impact pile installation activity, which would represent just a small portion of the full extent of the High Line. Consequently, the predicted level of vibration would not have the potential to result in an adverse construction vibration impact. As with the previously contemplated Twelfth Avenue Construction Staging Area, the use of drilled piles rather than driven piles for installation of piles at the Modified Construction Staging Area would be employed to the extent practicable.

4.12 Air Quality (FEIS Chapter 13)

The FEIS/ROD included an analysis of air quality, both at the local level (microscale) at the previously contemplated Twelfth Avenue Construction Staging Area and at the regional level (mesoscale). The FEIS/ROD included information about existing pollutant concentrations in New York and the region’s attainment status for each of the Nation Ambient Air Quality Standards (“NAAQS”). The FEIS/ROD microscale analysis projected pollutant concentrations from both on-site construction activities and on-road construction sources (i.e., trucks and other construction vehicles), and found that the maximum predicted total concentrations from combined emissions (i.e., from the on-site and on-road sources, added to background concentrations) at the previously contemplated Twelfth Avenue Construction Staging Area would be projected to be lower than the corresponding NAAQS.

The FEIS/ROD concluded that the Project is exempt from transportation conformity, and that because the Project’s combined annual construction emissions would remain lower than the *de minimis* rates defined in the general conformity regulations, no general conformity determination is required for the Project.

The FEIS/ROD also described mitigation measures to limit air pollutant emissions during the construction period, including measures for construction trucks, e.g., use of clean fuel, idling restrictions, and use of best available tailpipe emission reduction technologies. These measures would be implemented with the Modified Construction Staging Area and are anticipated to be similarly effective.

Similarly, as described in the following sections, the maximum pollutant concentrations and concentration increments from mobile sources associated with the Modified Construction Staging Area and full closure of West 29th Street are projected to be lower than the corresponding NAAQS and *CEQR Technical Manual de minimis* criteria (see **Appendix B**).

Mobile Source Analysis

The maximum projected hourly incremental traffic volumes generated by the full closure of West 29th Street would exceed the *CEQR Technical Manual* carbon monoxide (“CO”) screening

threshold of 170 peak-hour vehicle trips at certain intersections in the traffic study area, as well as the particulate matter (“PM”) emission screening threshold discussed in Chapter 17, Sections 210, and 311 of the *CEQR Technical Manual*. Therefore, a quantitative assessment of emissions from traffic generated by the full closure of West 29th Street was performed for CO and PM (both particles with an aerodynamic diameter of less than or equal to 2.5 micrometers [“PM_{2.5}”] and particles with an aerodynamic diameter of less than or equal to 10 micrometers [“PM₁₀”]). The microscale analyses were performed at the following intersections:

- Eleventh Avenue & West 24th Street
- Eleventh Avenue & West 26th Street
- Eleventh Avenue & West 27th Street
- Eleventh Avenue & West 28th Street
- Tenth Avenue & West 30th Street
- Tenth Avenue & West 31st Street
- Tenth Avenue & West 33rd Street

The future analysis was performed for both the future condition without the full closure of West 29th Street (the “No Action condition”) and with the full closure of West 29th Street (the “With Action condition”). The concentrations for the 2035 With Action condition were predicted using models approved by U.S. Environmental Protection Agency (“EPA”) that have been used for evaluating air quality impacts of projects in New York City, other parts of New York State, and throughout the country. The modeling approach includes a series of conservative assumptions relating to traffic, and background concentration levels resulting in a conservatively high estimate of expected pollutant concentrations that could ensue from the closure of West 29th Street.

Table 2, “Maximum Predicted With Action CO Concentrations (ppm),” shows the future maximum predicted 1-hour and 8-hour average CO concentrations at the study area intersections. The values shown are the highest predicted concentrations. The results indicate that the full closure of West 29th Street would not result in any violations of the 1-hour or 8-hour CO standard. In addition, the incremental increases in 8-hour average CO concentrations are small, and consequently would not result in a violation of the *CEQR Technical Manual de minimis* CO criteria. Therefore, mobile source CO emissions from the full closure of West 29th Street would not result in a significant adverse air quality impact.

Table 3, “Maximum Predicted With Action PM₁₀ & PM_{2.5} Concentrations (µg/m₃),” presents the predicted PM₁₀ 24-hour concentrations at the analyzed intersections in the With Action condition. The value shown is the highest predicted concentration for the modeled receptor locations and includes background concentration. Maximum predicted 24-hour and annual average PM_{2.5} concentration increments were calculated so that they could be compared with the *de minimis* criteria. Based on this analysis, the maximum predicted localized 24-hour average and neighborhood-scale annual average incremental PM_{2.5} concentrations are presented in **Table 3**.

Table 2: Maximum Predicted With Action Concentrations (ppm)

Pollutant	Averaging Period	Background Concentration	Maximum Predicted Modeled Concentration	Maximum Predicted Total Concentration	Maximum Predicted Project Increments	De Minimis Criteria	NAAQS
CO	1-hour	1.5	2.851	4.351	N/A	N/A	9
	8-hour	0.9	0.952	1.852	0.058	4.1	35

Table 3: Maximum Predicted With Action PM₁₀ & PM_{2.5} Concentrations (µg/m³)

Pollutant	Averaging Period	Background Concentration	Maximum Predicted Modeled Concentration	Maximum Predicted Total Concentration	Maximum Predicted Project Increments	De Minimis Criteria	NAAQS
PM ₁₀	24-hour	44	53.4	97.4	N/A	N/A	150
PM _{2.5}	24-hour	N/A	N/A	N/A	0.59	7.7	N/A
	Annual	N/A	N/A	N/A	0.005	0.1	N/A

Note:
µg/m³—micrograms per cubic meter (unit of measure for gases and particles, including lead)

On-Site Construction Source Assessment

The Modified Construction Staging Area comprises the removal of a portion of the Twelfth Avenue Construction Staging Area previously proposed at Block 675, Lot 12 and addition of the western portion of West 29th Street to replace it. However, the construction activities and equipment assumed in the FEIS/ROD would remain unchanged.

4.13 Greenhouse Gas Emissions and Resilience (FEIS Chapter 14)

Similar to the FEIS/ROD, construction at the Modified Construction Staging Area would be in accordance with Project-specific sustainable design criteria based on best practices related to sustainability, so no changes in greenhouse gas emissions are anticipated with the modified location. As with the previously contemplated Twelfth Avenue Construction Staging Area, the Modified Construction Staging Area would be located within the 100-year floodplain. As such, walls would be built up around the perimeter of the Twelfth Avenue ventilation shaft as an early construction activity to protect the shaft from potential flood waters up to the potential flooding levels identified in the FEIS/ROD.

4.14 Geology and Soils (FEIS Chapter 15)

During construction at the Modified Construction Staging Area, a number of measures will be incorporated into the Project's final design to avoid, minimize, or mitigate impacts related to geologic or soil conditions consistent with measures described in the FEIS/ROD. Such measures include, erosions control, dust control, ground improvement, etc.

4.15 Contaminated Materials (FEIS Chapter 16)

As part of the Project, a Phase II Environmental Site Assessment was undertaken on April 21, 2022 for Block 675, Lot 1 (see **Appendix C**). Results of these investigations reveal that Block

675, Lot 1 has been impacted by past industrial uses, the presence of contaminated historic fill material used to raise the topographic grade of the site, and on-site petroleum use. Soil and groundwater at Block 675, Lot 1 are contaminated with semi-volatile organic compounds (“SVOCs”) and metals above New York State Department of Environmental Protection (“NYSDEC”) Unrestricted Use Soil Cleanup Criteria (“UUSCO”), and the New York Technical and Operational Guidance Series (“TOGS”) and Class GA (for protection of groundwater) Groundwater Standards (“NYTOGS-GWS”), respectively. These materials also have the potential to impact soil and groundwater within the portion of the Modified Construction Staging Area comprising the adjacent portion of West 29th Street.

As described in the FEIS/ROD, the contractor will be required to comply with a Materials Management Plan (“MMP”) and a Site Specific Health and Safety Plan (“HASP”) during construction. These documents will outline requirements for managing contaminated materials on the Modified Construction Staging Area and off-site disposal requirements, as well as any health and safety monitoring that may be required (air monitoring, personnel training, etc.).

4.16 Utilities and Energy (FEIS Chapter 17)

With both the previously contemplated Twelfth Avenue Construction Staging Area and the Modified Construction Staging Area, several large New York City Department of Environmental Protection (“NYCDEP”) sewers located in Twelfth Avenue and in West 30th Street would be protected during nearby construction.

The Modified Construction Staging Area may require the relocation of a catch basin located at the northeast corner of West 29th Street and Twelfth Avenue. The Project Sponsor (GDC) will coordinate with NYCDEP to determine the requirements for this relocation.

The Modified Construction Staging Area would also require the relocation of a fire hydrant currently located along the north sidewalk of West 29th Street, as well as a fire call box, both of which are located at the western end of West 29th Street. The Project Sponsor (GDC) will coordinate with FDNY and NYCDEP to determine the requirements for the relocation of the fire hydrant and call box, as appropriate.

Two street lights located within the Modified Construction Staging Area would require relocation. Similarly, the Project Sponsor (GDC) will coordinate with NYCDOT to determine the requirements for these relocations.

4.17 Safety & Security (FEIS Chapter 18)

As described in the FEIS/ROD, all construction sites would be secured at a minimum through the use of fencing or other passive security measures (e.g., security lighting, concrete bollards). In addition, security personnel, active security measures (e.g., cameras, intrusion detection), and strict adherence to procedural security measures (e.g., entry protocols into construction sites, inspection of materials) would also be employed at the construction sites. The Modified Construction Staging Area would be subject to the same safety and security protocols as other areas of the Project site during Project construction.

Additionally, as described in **Section 4.1**, “Pedestrians and Bicyclists,” the existing south sidewalk of West 29th Street would be maintained at the Modified Construction Staging Area throughout the duration of construction. The West 29th Street westbound bike lane would be maintained and relocated to the southside of West 29th Street. The bike lane, currently five-feet-wide, would be

shifted to a curbside lane along the south curb of West 29th Street and would be expanded to a width of six feet. On the eastern portion of West 29th Street, a concrete barrier would be provided between this bike lane and adjacent roadway traffic.

On the western portion of West 29th Street, adjacent to the Modified Construction Staging Area, the bike lane would be reconfigured into a 13-foot shared lane to accommodate, bicycles, emergency vehicles, and authorized Con Edison and DSNY vehicles. The shared 13-foot lane would be protected by jersey barriers and fencing.

Prior to the closure of West 29th Street, the required construction signage, temporary markings, and traffic control devices to facilitate the safe and orderly flow of all road users (e.g., motorists, bicyclists, and pedestrians) will be installed by the Project contractor.

4.18 Public Health and Electromagnet Fields (FEIS Chapter 19)

The full closure of West 29th Street and construction activities at the Modified Construction Staging Area would not result in any new significant impacts regarding air quality, water quality, contaminated materials, or noise.

4.19 Indirect and Cumulative Effects (FEIS Chapter 20)

As described in the FEIS/ROD, construction of the Project would result in temporary beneficial and adverse indirect effects during the construction period (e.g., economic activity generated, community disruption, etc.). Construction of the Project could temporarily affect development patterns in the general vicinity of the Modified Construction Staging Area (i.e., delays to the development of Block 675, Lot 1 and improvements to Hudson River Park between West 29th and West 34th streets); however, because the Modified Construction Staging Area would not require the use of Block 675, Lot 12, the Project would no longer result in delays to the completion of the permanent EMS facility.

With other ongoing and planned transportation, development, and infrastructure projects in and near the Modified Construction Staging Area as identified in **Table 1**, the Project would have the potential to result in cumulative adverse construction impacts such as increased noise and traffic within the general vicinity of the Modified Construction Staging Area for approximately seven years; the FEIS/ROD includes a commitment that the Project Sponsor (GDC) would coordinate with the agencies responsible for implementing or overseeing these projects to minimize the potential for cumulative adverse construction effects.

The Modified Construction Staging Area would not introduce new significant increases in noise or traffic cumulative effects. As described previously in this re-evaluation, the Modified Construction Staging Area and full closure of West 29th Street would result in a reduction in level of service at eight intersections, though they would be improved to acceptable conditions through signal timing adjustments and the reconfiguration of intersection approaches. As such, the Modified Construction Staging Area would not create the potential for cumulative effects to traffic. Therefore, the findings would be consistent with what was described in the FEIS/ROD.

4.20 Coastal Zone Consistency (FEIS Chapter 21)

As with the previously contemplated Twelfth Avenue Construction Staging Area, the Modified Construction Staging Area is located within the coastal zone. The New York State Department of State ("NYSDOS") issued concurrence on January 2, 2019, that the Project is consistent with

the New York Coastal Management Program. Changes associated with the Modified Construction Staging Area do not trigger additional coordination with NYS DOS.

4.21 Environmental Justice (FEIS Chapter 22)

Neither the previously contemplated Twelfth Avenue Construction Staging Area nor the Modified Construction Staging Area would be located within an environmental justice community. Environmental justice communities are located east of Tenth Avenue and north of West 38th Street, several blocks from the major construction activities for the Project at the Modified Construction Staging Area.

4.22 Commitment of Resources (FEIS Chapter 23)

As with the previously contemplated Twelfth Avenue Construction Staging Area, construction at the Modified Construction Staging Area would require the irreversible and irretrievable commitment of building materials, including construction materials such as concrete, steel, and aggregate, as well as consumption of energy in the form of fossil fuels and electricity. However, similar to the FEIS/ROD, the localized impacts from construction at the Modified Construction Staging Area would be temporary and would facilitate the preservation and resiliency of critical passenger rail service along the NEC.

4.23 Section 4(f) (FEIS Chapter 24)

The FEIS/ROD describes the Project's effects on Section 4(f) properties. Section 4(f) properties include publicly owned parklands, recreation areas, or wildlife and waterfowl refuges, and publicly or privately owned historic sites of national, state, or local significance. As described above in **Section 4.6**, "Open Space and Recreational Resources," and **Section 4.7**, "Historic and Archaeological Resources," the Modified Construction Staging Area would not result in any new or different Project-related effects on these categories of resources.

6.0 CHANGE IN PERMIT REQUIREMENTS

The Modified Construction Staging Area would require a Street Closure Permit from NYCDOT for the closure of West 29th Street for approximately 10 years. Additionally, a NYCDPR Tree Work Permit would be required given that work activities at the Modified Construction Staging Area would be within 50 feet of City-owned trees.

7.0 PUBLIC AND STAKEHOLDER OUTREACH

To avoid delays in the construction and operation of the future EMS facility on Lot 12, the Project Sponsor (GDC), Amtrak, and GTHP have been coordinating with the City and State agencies and stakeholders regarding the proposed full closure of West 29th Street (see **Appendix D**):

- New York State Department of Transportation (NYSDOT) – February 22, 2023
- NYCDOT – April 3, 2023
- NYCDOT / NYSDOT – May 25, 2023
- NYCDEP – May 30, 2023
- NYCDOT – July 6, 2023

- FDNY – July 17, 2023
- NYCDOT Manhattan Borough Commissioner – July 19, 2023
- Con Edison – July 27, 2023
- NYCDOT Manhattan Borough Commissioner – July 28, 2023
- NYCDOT Manhattan Borough Commissioner – August 4, 2023
- FDNY – August 14, 2023
- Con Edison – September 6, 2023
- Con Edison – September 14, 2023
- NYCDOT – September 14, 2023
- NYCDOT – September 25, 2023
- Con Edison – November 1, 2023
- NYCDOT – December 21, 2023
- DSNY – February 8, 2024

NYCDOT has completed its review of this NEPA re-evaluation and provided approval on March 5, 2024 (see **Appendix A**).

8.0 CONCLUSION

Either the Twelfth Avenue Construction Staging Area, as analyzed previously in the FEIS/ROD, or the Modified Construction Staging Area, as analyzed in this re-evaluation, would result in similar effects, including effects related to noise, vibration, air quality, open space, and visual and aesthetic resources. However, this Modified Construction Staging Area, which is the subject of this NEPA re-evaluation, would result in the following specific changes to findings previously reported in the FEIS/ROD:

- Eight intersections of the 20 analyzed would experience reduced levels of service as a result of the full closure of West 29th Street and the associated detour of traffic to nearby intersections. However, the level of service at these eight intersections would be improved to acceptable conditions with the implementation of signal timing adjustments and the reconfiguration of intersection approaches.
- The West 29th Street bike lane, currently five-feet-wide, would be shifted to a curbside lane along the south curb of West 29th Street.
- Pedestrian access (i.e., sidewalk) would be maintained on the north side of West 29th Street from Eleventh Avenue west toward the vehicular turn-around area. In the vicinity of the Modified Construction Staging Area, the north sidewalk would be closed to pedestrians for approximately 250 feet east of the eastern right-of-way line at Twelfth Avenue. Pedestrian access would be maintained along the south side of West 29th Street for the entire block between Eleventh and Twelfth avenues. Pedestrian access to and

across Twelfth Avenue would be maintained via the south crosswalk at the intersection of Twelfth Avenue and West 29th Street.

- The Project would no longer require a temporary construction easement for use of Block 675, Lot 12, nor would one be required for the Modified Construction Staging Area and the full closure of West 29th Street. The closure of West 29th Street for approximately 10 years would, however, necessitate a Street Closure Permit from NYCDOT.
- Street trees would not be removed. However, given that work activities at the Modified Construction Staging Area would be within 50 feet of City-owned trees, a Tree Work Permit would be required, which covers tree pruning and proper protection of the tree (including the root zone below the trees). As part of the Tree Work Permit, a Tree Protection Plan would be prepared by the Project contractor and approved by NYCDPR.

In conclusion, after comprehensive consideration of how the proposed Project change would impact the affected environment, the original FEIS/ROD remains valid. Supplemental NEPA analysis is not required