

**Combined Final Environmental Impact
Statement/Record of Decision
And Final Section 4(f) Evaluation**

**Addressing the Construction and Operation of
the
Western Rail Yard Infrastructure Project
New York, New York**

November 2021



U.S. Department
of Transportation

**Federal Railroad
Administration**

Western Rail Yard Infrastructure Project

Record of Decision

Prepared by:

**US Department of Transportation –
Federal Railroad Administration**

Submitted Pursuant To:

National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. § 4321 et seq.) and the Council on Environmental Quality Implementing Regulations for NEPA (40 CFR Parts 1500-1508);
Department of Transportation Environmental Impact and Related Procedures (23 CFR Part 771)
Efficient Environmental Reviews for Project Decision making (23 U.S.C. § 139);
Section 4(f) of the United States Department of Transportation Act of 1966 (49 U.S.C. § 303)
and implementing regulations at 23 CFR part 774;
Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. § 306101);
the Clean Air Act of 1970, as amended (42 U.S.C. § 7401 et seq.);
the Clean Water Act of 1972 (33 U.S.C. § 1251-1387); and the
Endangered Species Act of 1973 (16 U.S.C. § 1531-1544).



Paul Nissenbaum
Associate Administrator for Railroad Policy and Development
Federal Railroad Administration

November 22, 2021
Date of Approval

Part 2: Western Rail Yard Infrastructure Project Record of Decision

1 INTRODUCTION

WRY Tenant LLC (an affiliate of The Related Companies, LP) and the National Railroad Passenger Corporation (Amtrak) are partnering in a joint venture (the Project Sponsor) and may seek Federal financial assistance from the U.S. Department of Transportation (USDOT) for the Western Rail Yard Infrastructure Project (Proposed Action). This document is the Record of Decision (ROD) for the Proposed Action issued by the Federal Railroad Administration (FRA). FRA is the lead Federal agency to evaluate the Proposed Action in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 USC § 4321 et seq.). The Proposed Action put forth by the Project Sponsor includes the construction and operation of the following: (1) a structural Platform (Platform); and (2) a railroad right-of-way preservation Tunnel Encasement (Tunnel Encasement). The Proposed Action will be located on the 13-acre Western Rail Yard site, located on the western half of the Metropolitan Transportation Authority (MTA) Long Island Rail Road (LIRR) John D. Caemmerer Yard (aka “Hudson Yards”).

2 DECISION

FRA has determined, pursuant to 23 USC § 139(n), 23 CFR Part 771, and 40 CFR Parts 1500–1508,¹ that the requirements of NEPA have been satisfied for the Proposed Action. This ROD memorializes FRA’s review of the Proposed Action described in Section 3.4.2 of this ROD and in the Final Environmental Impact Statement (FEIS), and FRA’s selection of the Preferred Alternative as the Selected Alternative. FRA determined the Preferred Alternative is the Selected Alternative for the Western Rail Yard Infrastructure Project based on a thorough and careful consideration of the potential short-term and long-term benefits and impacts, mitigation of those impacts, and public and agency comments.

¹ CEQ issued revised NEPA regulations that became effective September 14, 2020, at 40 CFR parts 1500-1508. Because FRA issued the Notice of Intent (NOI) for this project prior to the effective date of the revised regulations, on June 15, 2020, FRA permissibly prepared the EIS and ROD in accordance with the CEQ NEPA regulations that were effective at the time of the issuance of the NOI. All citations to CEQ regulations (40 CFR parts 1500-1508) in the EIS and ROD are to the version of the regulations in effect prior to September 14, 2020.

FRA finds that the Preferred Alternative satisfies the Proposed Action's purpose and need. Specifically, the Preferred Alternative will (1) cover and protect the active railroad tracks and LIRR support facilities in the Western Rail Yard so that the Project Sponsor can provide additional new capacity for real estate development and house critical life safety and mechanical, electrical, and plumbing support services for the yard, including new lighting, sprinklers, and an extensive Platform ventilation system; and (2) preserve a right-of-way through the Western Rail Yard to support the future construction of a trans-Hudson passenger rail crossing into New York Penn Station.

FRA has also completed its Section 4(f) Determination in accordance with Section 4(f) of the U.S. Department of Transportation Act of 1966 (provided in Section 6.2).² FRA's decision is consistent with its obligation under Section 4(f) to protect land in publicly owned parks, recreational areas, wildlife and waterfowl refuges, or historic sites on public or private land.

CEQ regulations implementing NEPA require that an agency identify the alternative considered to be environmentally preferable.³ The environmentally preferable alternative is the alternative that, on balance, causes the least harm to the natural and physical environment and that best protects, preserves, and enhances historical, cultural, and natural resources, after consideration of relevant factors and national policy. While the No Action Alternative would avoid the temporary and permanent impacts to the natural and built environment that would occur with the Preferred Alternative, the Preferred Alternative would have substantial beneficial impacts that outweigh its adverse impacts. Specifically, the Preferred Alternative would preserve opportunities to enable future growth of passenger rail service and improved trans-Hudson passenger rail crossing into New York Penn Station; maintain safe and continuous LIRR operations within Western Rail Yard; modernize operational facilities; provide support for the economic, social, and recreational life of the Hudson Yards area and the City; and support the ability to meet the revenue-generation goals of the MTA. These benefits promote fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations and achieving a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities by enhancing sustainable travel options. The Preferred Alternative benefits would not occur with the No Action Alternative. FRA considered and balanced the environmental effects of the Preferred Alternative against those of the No Action Alternative and identified the Preferred Alternative as the Environmentally Preferable Alternative.

After review of the FEIS and NEPA documentation associated with the Proposed Action, FRA is issuing this ROD, in accordance with the requirements of CEQ (40 CFR 1505.2 and 23 CFR 771.124).

² 49 USC § 303.

³ 40 CFR 1505.2(b).

3 BASIS OF DECISION

The documents FRA considered in making this decision include the June 2021 DEIS; the 2021 FEIS (Part 1); the Final Section 4(f) Evaluation (FEIS, Section 1.7 and Appendix D); the 2009 Restrictive Declaration (RD) (FEIS Appendix O1); the 2010 Letter of Resolution (LOR) (FEIS Appendix O2); agency, organization, and public comments received on the DEIS (FEIS Errata Appendix C); as well as correspondence and other supporting documents, including the FEIS prepared under the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR), which was published on October 9, 2009 (2009 SEQRA/CEQR FEIS) on the Platform and Overbuild, the Findings of No Significant Impact (FONSI) in 2013 for the concrete casing project's EA, and in 2014 for the concrete casing project's Supplemental EA (SEA) (see Section 3.1).⁴

The 2009 SEQRA/CEQR FEIS resulted in a requirement to develop a Construction Environmental Protection Plan (CEPP) that will establish commitments for protecting environmental resources on or near the Project Site. All commitments from 2009 SEQRA/CEQR FEIS and 2013/2014 FONSI remain in place. In addition, the LOR remains in effect. The commitments from the RD, which incorporates commitments associated with the design and construction of the Platform and Overbuild to protect sensitive resources, are still in force. The RD commitments include environmental controls during construction, noise attenuation, restrictions on fuel use and location of air intakes for ventilation systems, procedures for addressing hazardous materials on site, and commitments to sustainable development. The RD [Article III, Section 3.01(h)] incorporates the requirement for historic resource protection measures in the form of a Construction Protection Plan (CPP) to be developed to protect the High Line during adjacent project construction.⁵

This ROD provides background on the development of the Proposed Action; describes the alternatives FRA considered in the DEIS; discusses the public opportunity for comment on the DEIS; explains the basis for FRA's decision; identifies the Selected Alternative; identifies the environmentally preferred alternative; documents compliance with applicable Federal environmental laws, regulations, and executive orders; and sets forth the commitments, required as part of the decision, to provide mitigation to minimize harm. The DEIS (published in June 2021), the FEIS, and this ROD are part of the environmental record for the Proposed Action.

In accordance with 23 USC § 139(n), and 23 CFR § 771.124, FRA is issuing the FEIS and ROD simultaneously, as it has been determined that circumstances, such as substantial changes to the Proposed Action or significant new information, do not preclude issuance of a the FEIS and ROD as a single document.

⁴ Publicly available study documents, including the DEIS, FEIS, and meeting materials are available online at westernrailroadinfrastructure.com

⁵ The "Construction Protection Plan" (as referenced in the RD) is the same as the "Construction Environmental Protection Plan" (referenced in the Stipulations in the LOR), and is a component of the larger "Construction Environmental Protection Plan" (as referenced in the RD).

3.1 PRIOR ENVIRONMENTAL REVIEWS

The Project Site and individual elements of the Proposed Action have been the subject of prior environmental reviews. The sections below describe the previous environmental reviews to provide additional background and context for the Proposed Action. FRA has used information and analysis contained in the prior project-related environmental reviews to support the corresponding impact analysis for the Proposed Action in the preparation of the EIS, to the maximum extent applicable and practicable. In addition, FRA has incorporated findings and analyses from these documents, where appropriate. This included using information such as estimates of construction worker and trucking activity, equipment and logistical information, and operational characteristics of the project elements, accounting for any updates needed.

3.1.1 PLATFORM

The Platform and Overbuild⁶ were the subject of an FEIS prepared under SEQRA and CEQR, which was published on October 9, 2009 (2009 SEQRA/CEQR FEIS). The CPC and the MTA acted as co-lead agencies for the environmental review and issued environmental findings under CEQR and SEQRA. Subsequent zoning actions associated with the Overbuild development were approved by the CPC and adopted by the New York City Council as zoning text and map amendments to the New York City Zoning Resolution. The Overbuild development is now as-of-right development, since it will be built in accordance with the New York City Zoning Resolution's existing zoning controls, which regulate type of use, building envelopes, publicly accessible open space areas, street wall controls, retail continuity, and maximum floor area ratio (i.e., the ratio of floor area to lot size).

The actions evaluated in the 2009 SEQRA/CEQR FEIS pertaining to the Western Rail Yard site specifically were: (1) the lease of, with option to purchase, the air space over the Western Rail Yard and related property interests by MTA to the developer; (2) zoning map and text amendments and accessory parking special permits by the City of New York pursuant to the Uniform Land Use Review Procedure (ULURP); (3) the establishment of new legal grades on West 33rd Street between Eleventh and Twelfth Avenues; and (4) the site selection by the New York City School Construction Authority (SCA) for an elementary/intermediate public school ("PS/IS school") on the Western Rail Yard site. For more information about the MTA and CPC's past environmental review of the Western Rail Yard project, please refer to the following website: <https://www1.nyc.gov/site/planning/applicants/env-review/western-rail-yard.page>.

⁶ The Overbuild is privately funded mixed-use development and public open space to be constructed independently above the existing rail yard, and proposed Platform and Tunnel Encasement. The Overbuild is not a component of the Proposed Action and is not the subject of the Western Rail Yard Infrastructure Project EIS.

Following the completion of the 2009 SEQRA/CEQR FEIS, the WRY Tenant LLC entered into a RD with New York City, which incorporates commitments associated with the design and construction of the Platform and Overbuild to protect sensitive resources. Chapter 22, "Mitigation Measures and Project Commitments," of the DEIS includes a summary of the RD's design and construction commitments. These commitments, which are still in force, include environmental controls during construction, noise attenuation, restrictions on fuel use and location of air intakes for ventilation systems, procedures for addressing hazardous materials on site, and commitments to sustainable development.

3.1.2 TUNNEL ENCASEMENT

FRA conducted an environmental assessment (EA) in accordance with NEPA for the construction of a concrete casing in the Hudson Yards, and issued Findings of No Significant Impact (FONSIs) in 2013 for the concrete casing project's EA, and in 2014 for the concrete casing project's Supplemental EA (SEA). The purpose of the project was to preserve underground right-of-way in Hudson Yards to maintain opportunities to expand rail services, meet future demand, and improve intercity and commuter rail system safety and reliability. The preservation of the right-of-way is necessary to ensure that any development at the yard would not eliminate the possibility of future rail development and expansion into New York Penn Station.

Amtrak's previous engineering analyses confirmed that construction of the Tunnel Encasement would need to start prior to construction of the Overbuild foundations for the buildings proposed on this portion of the Project Site. If the Tunnel Encasement were not constructed before or at the same time as those Overbuild foundations, the right-of-way (ROW) for the Tunnel Encasement would be permanently lost as a potential alignment for the future expansion of rail service between New York and New Jersey via a rail tunnel under the Hudson River. FRA's consideration of this factor in the planning and design of the Tunnel Encasement component supports the purpose and need statement to preserve a ROW through the Western Rail Yard to support the future construction of a trans-Hudson passenger rail crossing into New York Penn Station.

Since FRA's issuance of the 2013 and 2014 FONSIs, Amtrak has constructed the portion of concrete casing extending beneath the Eastern Rail Yard and under Eleventh Avenue. The final section is the Tunnel Encasement that the Project Sponsor will construct as a part of the Proposed Action will extend on a diagonal alignment from the western edge of Eleventh Avenue to the northern edge of 30th Street underneath the Western Rail Yard. For more information about FRA's past environmental review of the concrete casing and Tunnel Encasement, please see <https://www.fra.dot.gov/Page/P0666>.

3.2 NEPA PROCESS

Table 1 summarizes the steps of the NEPA process completed for the Western Rail Yard Infrastructure Project.

Table 1

Western Rail Yard Infrastructure Project NEPA Process Milestones

Date	Milestone
June 15, 2020	FRA initiated the NEPA process and announced the start of the Scoping comment period with publication of the Notice of Intent (NOI) in the <i>Federal Register</i>
July 1, 2020 – July 31, 2020	Scoping comment period
July 21, 2020	FRA held a virtual agency scoping meeting
September 2020	FRA completed Scoping Summary Report and posted on the Project website
October 15, 2020	FRA held agency coordination meeting to review EIS analysis methodologies
June 11, 2021	FRA published Notice of Availability of DEIS in the <i>Federal Register</i> , which initiated the DEIS public comment period
June 30, 2021	FRA held a virtual DEIS Public Hearing
July 26, 2021	Comment period on the DEIS ended (comments were accepted and reviewed after the deadline)
November 2021	Issuance of FEIS and ROD

FRA initiated the NEPA process with publication of the NOI in the *Federal Register* on June 15, 2020. The NOI announced FRA’s intent to prepare an EIS, provided background information on the Project, presented the draft Purpose and Need Statement, explained the alternatives development process, and provided an initial list of environmental resources to be analyzed. The NOI also announced the start of the public scoping comment period and invited the public and other interested parties to submit comments through the end of the scoping comment period, July 31, 2020.

Public and agency coordination are integral aspects of the NEPA process. Pursuant to the CEQ NEPA regulations, “Cooperating agencies” are Federal agencies other than the lead Federal agency that have jurisdiction by law, or special expertise with respect to a particular environmental issue involved in a particular project (40 CFR 1501.5). While CEQ regulations (40 CFR § 1501.6) state that an agency may request the lead agency to designate it a Cooperating agency, no such requests were made, and no Cooperating agencies have been identified for this Project. DEIS Chapter 23 provides a list of Participating Agencies for the Project.⁷ FRA conducted regular outreach to Participating Agencies throughout the NEPA process, notifying them of important milestones and requesting agency review of key technical documents. Chapter 23 of the DEIS and Section 1.5 of the FEIS describe the agency coordination conducted as part of the Project.

FRA provided information to the public throughout the NEPA process using the Project website and virtual public meetings to present information and solicit comments at the following Project milestones: during scoping (July 1, 2020 – July 31, 2020), during the development of the methodology report in October 2020, and during the public comment period on the DEIS (June 11, 2021 – July 26, 2021).

⁷ “Participating agencies” are those Federal, state, or local agencies or Federally recognized tribal governmental organizations with an interest in the Project.

3.3 PURPOSE AND NEED

3.3.1 PURPOSE FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to:

- (1) cover and protect the active railroad tracks and LIRR support facilities in the Western Rail Yard so that the Project Sponsor can provide additional new capacity for real estate development and house critical life safety and mechanical, electrical, and plumbing support services for the yard, including new lighting, sprinklers, and an extensive Platform ventilation system; and
- (2) preserve a right-of-way through the Western Rail Yard to support the future construction of a trans-Hudson passenger rail crossing into New York Penn Station.

3.3.2 NEED FOR THE PROPOSED ACTION

Collectively, MTA's operating agencies (Bridges and Tunnels, Construction and Development, Long Island Rail Road, Metro-North Railroad, MTA Bus Company, and New York City Transit) serve a population of 15.3 million people across a 5,000-square-mile travel area surrounding New York City. Consequently, MTA provides over 2.6 billion trips each year, accounting for about one-third of the nation's mass transit users and two-thirds its commuter rail passengers. However, MTA has ongoing financial needs as the agency responsible for operating and maintaining North America's largest transportation network, which comprises the nation's largest bus fleet and more subway and commuter rail cars than all other U.S. transit systems combined.⁸

The fares and tolls MTA collects do not solely cover their operating costs. MTA's revenues typically come from a combination of fare and toll revenues, dedicated taxes, revenues generated by MTA's real estate holdings, and state and local subsidies. However, the agency has often faced operating budget deficits. For example, after the financial crisis in 2008, MTA faced a \$400 million deficit. These deficits have become more severe in the face of decreased ridership and toll revenues resulting from the COVID-19 public health emergency. At present, MTA faces a \$15.9 billion deficit through 2024.^{9,10,11} As a result of these recurrent deficits, MTA is consistently looking for additional revenue streams to sustain the operation, maintenance, expansion, and upgrading of the vast public transportation systems it operates.

⁸ <http://web.mta.info/mta/network.htm> (accessed January 15, 2021)

⁹ <https://www.nytimes.com/2020/11/25/nyregion/mta-budget.html> (accessed January 15, 2021)

¹⁰ <https://new.mta.info/document/25291> (accessed January 15, 2021)

¹¹ <https://new.mta.info/transparency/financial-information/financial-and-budget-statements> (accessed January 15, 2021)

Use of the air space above the Western Rail Yard has been a long-standing goal of both MTA and New York City. MTA has sought to maximize the revenue generation potential of its real estate assets, and when LIRR constructed the West Side Yard in 1986, the tracks and other facilities were reconfigured to accommodate columns that would be required for a Platform needed to allow future private development to occur. In 2015, MTA completed construction on the No. 7 subway line extension. MTA NYCT extended service from Times Square (Seventh Avenue and 41st Street) to West 34th Street and Eleventh Avenue enabling riders to easily get to the far west side of Manhattan and access Hudson Yards. MTA agreed to make the investment to construct, operate, and maintain the No. 7 Subway Extension because of the anticipated high-density development proposed to take place in Hudson Yards.

MTA plans to use the revenue from the lease of the Western Rail Yard property to support issuing bonds, the proceeds of which would be used to fund capital infrastructure upgrades, maintenance, and other operational needs. The Platform is needed to support the provision of developable land area that would generate revenue for the MTA and its subsidiary agencies, to protect the rail yard, and to provide modern state-of-the-art life safety systems for the entire Western Rail Yard.

As the Proposed Action would benefit MTA and New York City, it is also consistent with and supports USDOT's mission to ensure America has the safest, most efficient and modern transportation system in the world, which boosts our economic productivity and global competitiveness and enhances the quality of life in communities both rural and urban.¹²

The Tunnel Encasement is needed to maintain the ability to preserve passenger rail service in and out of New York Penn Station. As detailed in FRA's 2013 EA and FONSI¹³ and 2014 SEA and FONSI,¹⁴ studies have shown that Hudson Yards is the only clear alignment on the west side of Manhattan that would allow a rail tunnel under the Hudson River to fully connect to New York Penn Station from the west. If the underground ROW is not preserved prior to private development on the Project Site, the use of this location under Hudson Yards would be permanently lost as a possible alignment for future expansion of rail service between New York and New Jersey that is dependent on this ROW. New rail infrastructure is part of the effort to maintain a functional, resilient, and improved trans-Hudson passenger rail crossing into New York Penn Station, maintain existing Amtrak intercity and NJ TRANSIT commuter rail service on the Northeast Corridor, and to support future increases in the capacity of the regional rail system should they be pursued.

¹² <https://www.transportation.gov/about> (accessed January 15, 2021)

¹³ Amtrak and FRA, Finding of No Significant Impact, *Environmental Assessment for Construction of a Concrete Casing in the Hudson Yards*, New York, New York. May 2013.

¹⁴ Amtrak and FRA, Finding of No Significant Impact, *Supplemental Environmental Assessment for Construction of a Concrete Casing Extension in the Hudson Yards*, New York, New York. November 2014.

3.4 ALTERNATIVES

The Project Sponsor developed and presented the Proposed Action to FRA for consideration. For each project component of the Proposed Action, FRA reviewed the design standards, relevant site constraints, design process, and stakeholder input to identify potential feasible alternatives to advance for analysis in the EIS. As the result of this process, and using the information regarding the engineering constraints, FRA identified two alternatives for analysis in the EIS: the No Action Alternative and the Preferred Alternative.

As described in the DEIS, because of the unique engineering considerations and site constraints considered by the Project Sponsor in the planning and design of the Platform and Tunnel Encasement, FRA concluded that only the Preferred Alternative meets the purpose and need. FRA, in collaboration with the Project Sponsor and MTA, has determined that other options for location, size and alignment for the Platform and Tunnel Encasement are infeasible as they would fail to satisfy the engineering and design constraints of the Project Site. FRA has determined the Preferred Alternative is the Selected Alternative.

3.4.1 NO ACTION ALTERNATIVE

CEQ regulations for implementing NEPA require consideration of a No Action Alternative, which represents the conditions that would exist in the planning year if a proposed action is not implemented. Under the No Action Alternative, the Western Rail Yard Platform and Tunnel Encasement would not be built. The existing use of the rail yard and associated LIRR facilities, as well as their maintenance regimen would continue. Therefore, the No Action Alternative includes only those projects that are necessary to keep the Western Rail Yard and the associated LIRR facilities in service and provide continued maintenance. The No Action Alternative does not meet the purpose and need of the Proposed Action because it does not protect or enhance MTA's assets, it would not preserve the ROW for a future trans-Hudson passenger rail connection into New York Penn Station, and would not advance New York City's land use objectives for Hudson Yards. The No Action Alternative instead serves as a baseline for comparison against the potential impacts of the Proposed Action in the DEIS.

3.4.2 PREFERRED ALTERNATIVE (SELECTED ALTERNATIVE)

FRA conducted an extensive review of documentation prepared by the Project Sponsor related to engineering and site constraints, design criteria, and resulting design development. FRA has determined that there is only one reasonable, feasible and constructible alternative that meets the purpose and need statement and objectives. FRA has included in this determination a review of information obtained through coordination with government agencies, interest groups and the public during the scoping process, and information from previous studies.

3.4.2.1 PLATFORM

The approximately 9.8-acre Platform spanning the Western Rail Yard would include deep footings and a concrete slab to cover the active rail yard below, and reinforced building foundations to support the future Overbuild. The deep footings and a concrete slab would transfer the building loads to the bedrock below to support the Overbuild. Approximately 400 caissons (i.e., watertight columns) would be drilled into bedrock through the water table and soil and to the rock that is up to 120 feet below the surface in certain locations.

The Platform's support columns would be threaded between the existing railroad tracks and associated infrastructure in Western Rail Yard. No existing storage tracks would be displaced and train service would be maintained during the construction of the Platform.

Platform construction would also include the modernization of LIRR support services for the yard, including new life-safety systems. The following Platform infrastructure components are necessary to support rail yard operations for LIRR:

- Ventilation system;
- Emergency electrical equipment;
- Life safety equipment (i.e., fire protection and fire alarm system);
- Crash walls (i.e., concrete barriers to redirect trains away from support columns);
- Lighting;
- Rail car cleaning services;
- Associated mechanical, electrical, and plumbing services;
- LIRR service buildings (LIRR staff locker rooms and train maintenance and inspection equipment rooms); and
- Electrical Substation

In accordance with MTA's 1989 Master Plan for Caemmerer West Side Yard, the placement of a Platform over the rail yard was included in the original design criteria for the yard, which MTA established to provide safety considerations and to ensure reliable train operations with a minimum disruption of service.

The ventilation system would require ventilation fan plants and localized exhaust hoods for Dual Mode (DM-30) LIRR train engines that must be located within the Western Rail Yard. Ventilation of the yard is a necessary component to the Platform to remove the heat and emissions from train operations. As such, a heating, ventilating, and air condition (HVAC) system would be incorporated into the design of the Platform.

The existing LIRR support facilities that house the LIRR locker room and the equipment room must be removed and temporarily relocated to allow for construction of the Platform. The permanent LIRR service buildings would be re-constructed in the same locations and within the same footprint. The substation would house mechanical and electrical equipment, fuel oil storage, office space and LIRR substation equipment. Besides Consolidated Edison (Con Edison) service connection and its associated electrical equipment, the substation would house the Medium-Voltage Substation, Emergency Generators for the Eastern and Western Rail Yards, an Electrical Distribution Room, Western Rail Yard Fire Pump, Fire Protection Valves, Communication Rooms, as well as office and storage spaces.

3.4.2.2 TUNNEL ENCASEMENT

The Tunnel Encasement in the Western Rail Yard would start at the western edge of Eleventh Avenue and extend underground across the Project Site to the northern edge of 30th Street. The tunnel box would be between 50 and 65 feet wide and between 27 and 38 feet high. The Tunnel Encasement has been designed to be constructed completely independent of the above ground structures and would not take on any load from the Platform. Together, the Tunnel Encasement below both rail yards (Eastern and Western Rail Yards) would preserve a total ROW of approximately 1,400 feet. It would extend underneath a portion of the High Line and require underpinning an approximately 100-foot segment of the historic elevated structure during construction. This Selected Alternative does not include any permanent operational component for the Tunnel Encasement. No permanent operational components, such as tracks, lighting, ventilation, or electrical systems, will be constructed as part of the Selected Alternative. Minor, temporary systems, such as sump pumps, lighting, and ventilation will be installed to enable its construction, which would be removed once construction is completed.

4 SUMMARY OF ENVIRONMENTAL CONSEQUENCES AND MEASURES TO MINIMIZE HARM

Table 2 provides a summary of the benefits and impacts of the Selected Alternative as well as a summary of measures to avoid, minimize, or mitigate those impacts. The Project Sponsor is responsible for implementing mitigation measures through construction of the Selected Alternative. FRA determined the mitigation identified as part of the 2009 SEQRA/CEQR FEIS and 2013/2014 FONSI environmental review is adequate/appropriate to mitigate the adverse effects from the construction and operation of the Platform and Tunnel Encasement. Prior mitigation and commitments associated with those environmental reviews are still required of the Project Sponsor. If Federal financial assistance is granted to the Project Sponsor for implementation of the Selected Alternative, FRA will require the Project Sponsor to adhere to the mitigation in Table 2. Implementation of this mitigation is also required under the terms of the 2009 SEQRA/CEQR FEIS decision documents. In addition, FRA expects that the Project Sponsor will adhere to best management practices (BMPs) to comply with Federal, State and local laws, permits, and ordinances. To document the commitments during construction, the Project Sponsor will develop a CEPP for the Preferred Alternative that will utilize BMPs. Portions of the CEPP will be reviewed and approved by the relevant regulatory agencies (e.g., NYSHPO, NYSDEC, NYCDEP, NYCDOT, NYCDOT-OCMC, etc.), and the Project Sponsor would be responsible for the implementation of these commitments.

The CEPP—which includes the commitments from the prior environmental review processes, described above—will comply with the control measures as part of the construction commitments, described in Table 2.

The indirect effects include the construction and operation of the as-of-right mixed-used development above the Platform and Tunnel Encasement (Overbuild), and the mitigation measures included in the 2009 SEQRA/CEQR FEIS approvals previously committed by the Overbuild Developer, WRY Tenant LLC (Overbuild Developer) as well as proposed project commitments carried forward from the 2013 EA and 2014 SEA. **Table 3** provides a summary of the indirect effects of the Selected Alternative as well as a summary of measures to avoid, minimize, or mitigate those impacts, which appear as high level descriptions throughout the table as relevant (e.g., development of MPT Plan, Emissions Reduction Program, etc.).

As provided in Table 2, FRA has identified commitments to provide mitigation for the Western Rail Yard Infrastructure Project. These commitments are the result of agency consultations, comments on the DEIS, and regulatory requirements and reflect all practicable means to avoid or minimize environmental harm from the Selected Alternative. If Federal financial assistance is granted to the Project Sponsor by the FRA or DOT, the Project Sponsor is responsible for implementing the mitigation measures during design, construction, and/or following construction. Actual dates for future design and implementation are dependent upon identifying and securing funding, completing design, and finalizing all necessary approvals and permits.

Table 2
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Land Use, Land Planning, and Property	<ul style="list-style-type: none"> • The Platform will allow MTA LIRR's commuter railroad storage yard and maintenance facility to be fully functional and will be consistent with the Hudson Yards Special District, as the Platform will enable development to take place above the Yard once construction of the Platform is completed. • The southern portion of the Project Site will have a utility building, which is similar to the current use on this portion of the Project Site. • The High Line (that is partially located on the Project Site) will remain an active open space upon the completion of the Selected Alternative and will not be affected by the Selected Alternative. • The Selected Alternative will not hinder the construction of any of the other projects that are anticipated to be completed. • The Selected Alternative will not require any property acquisition or displacements. • Construction of the Selected Alternative is not anticipated to affect land uses, land planning, or existing public policies on the Project Site or within the Study Area. 	<p>The Project Sponsor will:</p> <ul style="list-style-type: none"> • Contain construction staging and construction activities within the Project Site and adjacent roadways. • Coordinate with LIRR on the relocation of LIRR maintenance and operations facilities on the Project Site as they will be relocated during construction. The facilities will be housed in temporary facilities under the Construction Agreement between the Project Sponsor and LIRR. • Coordinate with MTA and LIRR to provide interim facilities to enable the Yard to be functional during construction.

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Transportation	<ul style="list-style-type: none"> • The Platform and Tunnel Encasement will generate no new vehicular trips or parking demand once completed and operational. • Construction activity could require temporary closure of curb lanes, and temporary closure, reduction in width, or relocation of sidewalks along segments of the streets and avenues bordering the Project Site. • Construction activity will require temporary sidewalk closures. • At no time will access to occupied buildings be closed, nor will access to the Western Rail Yard and other Caemmerer Rail Yard facilities be closed to LIRR personnel and equipment. No streets will be completely closed to vehicular traffic nor transit buses due to construction of the Selected Alternative. 	<p>The Project Sponsor will develop Maintenance and Protection of Traffic (MPT) plans for submission to New York City Department of Transportation (NYCDOT) for review and approval. Based on common MPT measures for a large-scale construction project in New York City and preliminary construction logistics plan developed by the Project Sponsor, the MPT plans will likely require:</p> <ul style="list-style-type: none"> • Temporary closure of curb lanes, and temporary closure, reduction in width, or relocation of sidewalks along segments of the streets and avenues bordering the Project Site. • Construction trucks, such as dump trucks or concrete trucks, are anticipated to enter the “construction area” via West 33rd Street and Eleventh Avenue throughout the duration of Platform construction, and via West 30th Street for the construction of the substation. • Pedestrian circulation adjacent to the Project Site may be temporarily closed during Platform construction on Eleventh Avenue and West 33rd Street. However, at no time will access to occupied buildings be closed, nor will access to the Western Rail Yard and other Caemmerer Rail Yard facilities be closed to LIRR personnel and equipment. It is likely that the pedestrian passage can be maintained via overhead protections or temporary sidewalks. Any pedestrian access changes will be part of the MPT plan approved by NYCDOT’s OCMC. • No streets will be completely closed to vehicular traffic nor transit buses due to construction of the Selected Alternative. The Project Sponsor will coordinate with the New York City Economic Development Corporation on nearby projects (such as the West 33rd Street Viaduct project) to allow construction trucks for the Selected Alternative to use the entrance to the “construction area” via West 33rd Street and Eleventh Avenue throughout the duration of Platform construction • Nearby non-emergency vehicle detour routes will include West 34th Street, West 30th Street, and West 29th Street and none of the streets are likely to be disrupted by the detour, nor will other nearby projects during the construction period. • In areas where temporary sidewalk closure is required, MPT plans will be developed by the Project Sponsor for review and approval by NYCDOT OCMC. These plans will likely include having the affected sidewalk relocated to the curb lane with a barrier that could be erected to separate motor vehicle traffic from pedestrian traffic. Furthermore, 34th and 29th Streets will be available as alternative pedestrian routes to 33rd and 29th Streets, respectively. • In areas where access to bordering lots is not needed—along segments of the streets and avenues bordering the Project Site—the sidewalk and/or curb lane may be closed. In such instances, pedestrians will be routed to the opposite side of the street at the nearest crosswalk. • Sidewalk modification may include the construction of a protective shed over segments of sidewalk bordering construction sites. The width of any relocated or modified sidewalks will be at least five feet, as specified in the 2009 RD.

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
<p>Air Quality, Greenhouse Gas (GHG) Emissions and Resilience</p>	<ul style="list-style-type: none"> • Air Modeling indicates no adverse air quality impacts during operation of the Selected Alternative. • Particulate Matter fine respirable particulate matter (PM_{2.5}) and carbon monoxide (CO) incremental concentrations during construction with the Selected Alternative will be below the City's <i>de minimis</i> criteria for these pollutants. 	<p>The Project Sponsor will implement measures to reduce pollutant emissions during construction in accordance with all applicable laws, regulations, and building codes. The Project Sponsor will implement an emissions reduction program to minimize the air quality effects from construction of the Selected Alternative, consisting of the following components:</p> <ul style="list-style-type: none"> • Clean Fuel. Only ultra-low sulfur diesel (ULSD) fuel will be used by the Project Sponsor for all diesel engines throughout the construction site. • Diesel Equipment Reduction. Electrically powered equipment such as welders and saws will be used instead of diesel-powered versions of that equipment, to the extent feasible and practicable. Dust Control Measures. Contract specifications will require a dust control plan, including a watering program, to minimize dust emissions from construction activities. For example, all trucks hauling loose material will be equipped with tight-fitting tailgates and their loads securely covered prior to leaving the Project Site and water sprays will be used for all demolition, excavation, and transfer of soils to ensure that materials will be dampened as necessary to avoid the suspension of dust into the air. • Idling Restriction. As required by local law, all stationary vehicles on roadways adjacent to the Project Site will be prohibited from idling for more than three minutes. The idling restriction excludes vehicles that are using their engines to operate a loading, unloading, or processing device (e.g., concrete-mixing trucks) or otherwise required for the proper operation of the engine. • Engine Retrofits. Non-road diesel engines, used by the Project Sponsor, with a power rating of 50 horsepower (hp) or greater and controlled truck fleets (i.e., truck fleets under long-term contract with the Project Sponsor), including but not limited to, concrete mixing and pumping trucks, will utilize the best available technology (BAT) (e.g., diesel particulate filters) for reducing diesel particulate matter emissions. • Utilization of Newer Equipment. USEPA's Tier 1 through 4 standards for non-road engines regulate the emission of criteria pollutants from new engines, including PM, CO, nitrogen oxides (NO_x), and hydrocarbons (HC). All diesel-powered non-road construction equipment with a power rating of 50 hp or greater, used by the Project Sponsor, will meet at least the Tier 3 emissions standard. <p>The Project Sponsor will develop a stormwater management plan and identify measures to address risk from potential flooding due to precipitation.</p> <p>The Project Sponsor will install a new ventilation system with several fan plants which will ventilate daily emissions and emergency smoke events from the Western Rail Yard to maintain air quality under operational conditions. The new ventilation system will be designed in compliance with all applicable laws, regulations, and building codes to ensure no adverse air quality effects from operation of these systems.</p>

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Noise and Vibration	<ul style="list-style-type: none"> Modeling shows no indication of adverse impacts from operation of the Selected Alternative related to noise or vibration. Vibration from construction will not exceed the Federal Transit Administration (FTA) guidance manual thresholds for damage at any building, as confirmed by vibration monitoring at the High Line when necessary, and will not exceed the FTA guidance manual thresholds for human annoyance over an extended duration at any receptor. Noise from construction will not have the potential to result in exceedances of the general construction noise assessment screening-level thresholds included in the FTA guidance manual. However, construction of the Selected Alternative will have the potential to result in noise impacts based on CEQR thresholds at the High Line within approximately 630 feet of the nearest work area, residential buildings along Eleventh Avenue between 29th and 33rd Streets, along 30th Street between Eleventh and Twelfth Avenues, and along West 33rd Street between Tenth and Eleventh Avenues. 	<ul style="list-style-type: none"> Noise from construction equipment will comply with New York City noise emission standards. These standards mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards, and construction material be handled and transported in such a manner to not create unnecessary noise. The Project Sponsor will meet the New York City Noise Control Code construction noise limit of an L_{max} of 85 dB(A) at the exteriors of any adjacent residential properties. The Project Sponsor will be required to obtain NYCDOB approval for construction outside of weekdays 7 AM to 6 PM, which is prohibited by the NYC Noise Control Code. To the extent practicable given space constraints at the work sites, the Project Sponsor will use acoustical noise tent and/or enclosures surrounding hoe rams, jackhammers, or pavement breakers that can provide up to 15 dB(A) of noise reduction during any demolition activities. For additional noise reduction, jackhammer noise mufflers that can provide up to an additional 10 dB(A) of noise reduction can also be used. To minimize the noise from the backup warning alarms on trucks, the Project Sponsor will route vehicles through the construction sites to minimize the use of alarms. In addition, vehicles will be equipped with Occupational Safety and Health Administration (OSHA)-approved quieter backup alarms. The Project Sponsor will coordinate and conduct any blasting activities associated with excavation of rock during Tunnel Encasement with permission from the Fire Department of the City of New York (FDNY). The Project Sponsor will provide a blasting schedule to neighboring building owners and occupants. Construction vibration monitoring will be required during blasting activities to ensure that vibration does not exceed a level that could result in damage to any nearby buildings or structures. Consistent with the protection and monitoring procedures developed for the High Line, construction vibration monitoring will be required whenever construction will occur within 90 feet of the High Line structure to ensure that construction activities do not result in vibration levels that will be capable of causing damage.

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Noise and Vibration (cont'd)		<ul style="list-style-type: none"> As noise levels at the High Line will exceed CEQR nuisance levels, the Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect park users, such as providing signage alerting park users to the potential for increased noise levels of certain portions of the park where high noise levels are anticipated. The Project Sponsor will develop a CPP for the construction of the Platform and Tunnel Encasement in order to protect the North River Tunnel (NRT). The CPP is required to meet the guidelines set forth in the NYCDOB <i>TPPN #10/88, the Protection for Landmarked Buildings</i> guidance document of the LPC, and the National Park Service's <i>Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction</i>. The Project Sponsor will incorporate sufficient noise control measures in the final design of the ventilation system plans to ensure operation of the Selected Alternative will be in compliance with the New York City Noise Control Code (NYCNCC) noise limits at all surrounding residential receptors.
Cultural Resources	<ul style="list-style-type: none"> The Selected Alternative could have potential inadvertent effects to the NRT and High Line during construction. 	<ul style="list-style-type: none"> To avoid the potential for damage to the NRT from vibration produced by caisson drilling, the Project Sponsor will locate the caissons outside of Amtrak's influence line exclusion zone (see DEIS, Chapter 9). The Project Sponsor will develop a CPP¹⁵ (as part of the CEPP) for the construction of the Platform and Tunnel Encasement in order to protect the NRT and High Line. The CPP will meet the guidelines set forth in the NYCDOB <i>TPPN #10/88, the Protection for Landmarked Buildings</i> guidance document of the New York City Landmarks and Preservation Committee (NYCLPC)s, and the National Park Service's <i>Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction</i>. The CPP(s) will set forth the specific protection and monitoring measures that will be implemented during construction to avoid inadvertent damage to these historic properties and will be implemented in coordination with New York State Historic Preservation Office (NYSHP) and NYCLPC. The Project Sponsor will meet the conditions in the LOR, including coordination with the SHPO during design phases related to aspects of the design that relate to the High Line. The LOR requires continued consultation under Section 14.09 regarding aspects of the development's design that could affect the High Line (specifically, review of preliminary and pre-final design plans). The Project Sponsor will meet all requirements set forth in the 2009 SEQRA/CEQR FEIS process, including compliance with the LOR.

¹⁵ The requirement for a Construction Protection Plan (CPP) to protect the High Line during adjacent project construction was also incorporated into the RD for the 2009 Western Rail Yard project and is part of the "Construction Environmental Protection Plan" (as referenced in the RD).

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Parks and Recreation Areas	<ul style="list-style-type: none"> • Construction and operation of the Selected Alternative will not eliminate or diminish any parks, open spaces, or recreation areas, or change the use of any resource so that it no longer serves the same user population. • The Selected Alternative will have potential construction-related effects to the High Line. 	<ul style="list-style-type: none"> • The Project Sponsor will develop a CPP (as part of the CEPP) for the construction of the Platform and Tunnel Encasement in order to protect the High Line and meet the conditions of the 2009 LOR. • The Project Sponsor will consult with NYC Parks regarding aspects of the Platform design that relate to the High Line. The Project Sponsor will coordinate with NYC Parks on the design plans for the Platform at the preliminary and pre-final design stages. If NYC Parks identifies substantive concerns with maintenance and operation access, the Project Sponsor will continue to coordinate with NYC Parks to mitigate those concerns. • To address potential noise impacts during construction of the Selected Alternative, the Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect park users, such as providing signage alerting park users to the potential for increased noise levels of certain portions of the park where high noise levels are anticipated. • The Project Sponsor will adhere to the terms of the Amended, Modified, and Restated High Line Easement Agreement among WRY Tenant LLC, the City of New York, the Metropolitan Transportation Authority, and the Long Island Rail Road Company, which provides for, but is not limited to the following: <ul style="list-style-type: none"> ○ Perpetual easements over the Western Rail Yard for the High Line structure, including "any alterations, replacements, substitutions and renewals thereof" and for structural supporting elements. ○ Reciprocal easements as between the City of New York and the owners of the Western Rail Yard parcels to enter the Western Rail Yard parcels and the High Line easement area, respectively. The access easement benefiting the City of New York provides explicitly for access for City personnel "to perform any inspections, repairs, maintenance, construction, restoration, improvements, alterations or capital improvements" to the High Line and related support facilities. ○ The City's review of any work that involves the Western Rail Yard developer's exercise of its rights under the Easement Agreement (e.g., construction of the Platform that affects the High Line). ○ The Western Rail Yard developer's responsibility for the restoration of any High Line structures damaged in the course of the developer's exercise of its rights under the Easement Agreement; and

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Parks and Recreation Areas (cont'd)		<ul style="list-style-type: none"> ○ Construction-period coordination between the City and the Western Rail Yard developer to ensure that the Western Rail Yard mixed-use development (which included the Platform that is the subject of the current DEIS) and the restoration and use of the High Line as a park proceed in a timely and safe manner. • In addition, the High Line Easement Agreement includes a perpetual easement that applies to Amtrak's ownership rights of the Tunnel Encasement. The Tunnel Encasement will be 15-20 feet below grade and Amtrak's use and operations of the tunnel will not affect the City's ability to inspect and maintain the High Line. Those activities will be governed by the terms of the High Line Easement Agreement (see FEIS Attachment 1, Appendix F4).
Contaminated Materials	<ul style="list-style-type: none"> • Potential to encounter contaminated soil or groundwater during construction. • Presence of potential building materials, equipment, or utilities containing suspect polychlorinated biphenyls (PCBs), lead-based paint (LBP), and/or asbestos-containing materials (ACM). 	<ul style="list-style-type: none"> • The Project Sponsor will conduct a Subsurface (Phase II) Investigation in areas of proposed disturbance to characterize subsurface conditions. • The Project Sponsor will implement appropriate health and safety precautionary and remedial measures including the implementation of a site-specific remedial action plan (RAP) and construction health and safety plan (CHASP) in accordance with the RD. • The Project Sponsor will perform additional remedial activities to address known or potential residual contamination on the southwestern portion of the Project Site related to Spill #1802063 and on the northwestern portion of the Project Site under the New York State Department of Environmental Conservation's (NYSDEC) State Hazardous Waste Site (SHWS) program (ID #231083). • Any underground storage tanks (USTs) encountered during redevelopment will be properly closed and removed, along with any contaminated soil, by the Project Sponsor, in accordance with federal, state, and local regulations, including NYSDEC for registration and, if applicable, spill reporting. • During any future subsurface disturbance, The Project Sponsor will handle and properly dispose of excavated soil in accordance with all applicable regulatory requirements, with spill reporting as required. Transportation of material leaving the Project Site for off-site disposal will be in accordance with federal, state, and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc.

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Contaminated Materials (cont'd)		<ul style="list-style-type: none"> • The Project Sponsor will install appropriate permanent ventilation systems during construction of the Selected Alternative, as necessary, (to be operated post-construction) for areas under the Platform at the Project Site in accordance with LIRR's engineering design criteria for yard ventilation. • The Project Sponsor will install the appropriate vapor mitigation systems to protect buildings on the terra firma portion of the Project Site. • Any building materials, equipment, or utilities containing suspect PCBs, LBP, and/or ACM will be properly handled and disposed of by the Project Sponsor, in accordance with the applicable regulations, prior to demolition or construction which may disturb them. • The Project Sponsor will conduct dewatering activities in accordance with New York City Department of Environmental Protection (NYCDEP) requirements, including pre-treatment as required.
Utilities and Energy	<ul style="list-style-type: none"> • During operation of the Selected Alternative, no additional demand for existing utilities and energy is expected. • During construction of the Platform, the Project Sponsor will make temporary infrastructure improvements to maintain utility services on the rail yard. 	<ul style="list-style-type: none"> • The Project Sponsor will maintain utility services during temporary and permanent on-site sewer improvements. The existing storm sewers on the Project Site will be diverted to the sanitary sewer system to accommodate the Platform support piles, and temporary drainage provision (such as pits and pumps) will be installed as temporary bypasses if needed during construction to maintain stormwater drainage in the rail yard. The Project Sponsor will relocate the existing sanitary sewer system and potable water mains in order to avoid conflicts with the Platform support piles; however, sanitary service and water supply to the rail yard will continue to function during and after construction. In addition, the Project Sponsor will remove or abandon the alternating currents (AC) duct banks that service the rail yard's lighting during construction of Platform foundations, with temporary power and lighting system provided to maintain lighting on the rail yard during construction. As needed to avoid conflicts with the Platform support piles, the Project Sponsor will reroute the direct current (DC) feeders that supply energy to the rail yard's traction power system around foundations in compliance with LIRR practices and standards.

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Utilities and Energy (cont'd)		<ul style="list-style-type: none"> The storm sewer currently serving the rail yard will continue to operate following construction of the Platform in order to convey stormwater collected on the terra firma portion of the Project Site; this sewer operates in accordance with a municipal separate storm sewer systems (MS4) permit, and will continue to meet the permit requirements (no additional detention and/or onsite treatment measures are required). The drainage system in the railyard and on the Platform will discharge to the NYCDEP sewers adjacent to the Project Site and will be designed to meet all NYCDEP permit requirements.
Soils and Geology	<ul style="list-style-type: none"> Excavation of soils and bedrock will not alter soils or geological typologies, characteristics or features in the Study Area. 	<ul style="list-style-type: none"> The Project Sponsor will develop a CEPP that will provide a detailed outline of environmental protection commitments and any other procedures to be implemented during the construction phase to protect sensitive resources that may be affected during construction. This includes a fugitive dust control plan; dewatering plan; noise mitigation plan; coordination with MTA and LIRR; and utility protection plan. <p>FUGITIVE DUST CONTROL PLAN</p> <p>The Project Sponsor will develop a fugitive dust control plan that will include, at a minimum, the following provisions:</p> <ul style="list-style-type: none"> Controlling fugitive dust through water spraying or use of a biodegradable dust suppressant solution; Maintaining large piles of soil, rock or sediment in a wet condition, coated with a dust suppressant and/or covered to prevent wind erosion and fugitive dust and covering longer-term stockpiles with weighted tarps. Performing concrete- and rock-grinding, drilling, and saw-cutting operations with a wet blade or using mist if the activity is generating significant dust. Such operations in an enclosed space will utilize vacuum collection or extraction fans. Stabilizing or wetting loose material during loading and unloading if the activity is generating dust plumes, and covering this material during transportation to and from the Project Site.

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Soils and Geology (cont'd)		<p>DEWATERING PLAN The Project Sponsor will include a dewatering plan that will require pumping of dewatering water into sedimentation tanks for removal of sediments prior to reuse on the sites or discharge into the City's sewer system or the Hudson River via the existing LIRR outfall that serves the rail yard. The Project Sponsor will periodically test water and particles in such tanks for pH and contaminants. Depending on test results, the Project Sponsor will treat the water for contaminants prior to disposal, as per NYSDEC, or NYCDEP regulations, and depending on point of discharge (i.e., City sewers or stormwater conveyance pipe to the Hudson River).</p> <p>NOISE MITIGATION PLAN The Project Sponsor will use construction practices to the extent feasible and practicable to reduce noise and vibration levels associated with construction, as listed under the Noise and Vibration.</p> <p>LIRR/MTA COORDINATION The Project Sponsor will conduct construction work in accordance with LIRR guidelines and design/construction criteria, which require persons engaged in pre-construction or construction activities located on or near the tracks, or with the potential of fouling a track in the Western Rail Yard to attend the LIRR Contractor Roadway Worker and Safety Training in accordance with provisions of 48 CFR Part 214 and LIRR Rules and Regulations. The Project Sponsor will enter into a construction agreement with MTA and LIRR that requires that MTA and LIRR receive and approve plans for construction activities related to work at the Western Rail Yard.</p> <p>UTILITY PROTECTION The Project Sponsor's contractor will confirm location of underground utility lines to ensure avoidance by digging test pits at each caisson location. The Project Sponsor's contractor will conduct additional geotechnical surveys if necessary. If needed, the Project Sponsor will conduct additional soil and groundwater testing to characterize more fully soil constituents for disposal purposes.</p>

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Water and Natural Resources	<ul style="list-style-type: none"> • Will not displace quality ecological communities or habitat. • No impact to groundwater. 	<ul style="list-style-type: none"> • To avoid exposing construction workers and the general public to existing groundwater contaminants and to minimize potential adverse impacts to groundwater resources, the Project Sponsor will perform demolition, disposal, excavation, dewatering, and other construction activities in accordance with all applicable federal, state, and local regulations and guidelines. As such, the Project Sponsor will implement a site-specific CHASP during ground disturbance to protect workers, the public, and the environment from exposure to groundwater contaminants. • To minimize potential adverse impacts to NYSDEC littoral zone tidal wetlands of the Hudson River due to discharge of sediment during construction, the Project Sponsor will implement the erosion and sediment control measures contained in the stormwater pollution prevention plan (SWPPP) prepared for the Project. • To minimize potential adverse impacts to water quality and aquatic biota of the Hudson River during construction, the Project Sponsor will treat all groundwater recovered during dewatering in accordance with NYCDEP requirements prior to discharge to the municipal sewer. Additionally, to minimize the potential for discharge of sediment to the Hudson River during construction, the Project Sponsor will implement erosion and sediment control measures contained in the SWPPP prepared for the Project in accordance with SPDES requirements.
Coastal Zone Consistency	<ul style="list-style-type: none"> • Promotes policies of the Waterfront Revitalization Plan. 	<p>The Project Sponsor will implement erosion and sediment control measures identified in the SWPPP prepared in accordance with a SPDES permit for the Selected Alternative.</p> <ul style="list-style-type: none"> • The Project Sponsor will pump, test, and treat any groundwater recovered during dewatering of excavation sites before disposal to the New York City stormwater or combined sewer system under an NYCDEP Discharge Permit from the Bureau of Wastewater Treatment and in conformance with applicable discharge limits. • The Project Sponsor will treat any groundwater recovered during dewatering activities prior to discharge to the Hudson River through existing stormwater outfalls within the Western Rail Yard in accordance with NYSDEC requirements. • The Project Sponsor will implement the following remedial and protective measures to avoid, minimize, or mitigate exposure pathways to these potential contaminants during construction and operation.

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Coastal Zone Consistency	<ul style="list-style-type: none"> • Promotes policies of the Waterfront Revitalization Plan. 	<ul style="list-style-type: none"> • A Phase II Investigation will be conducted in areas of proposed disturbance (above the bedrock interface) to characterize subsurface conditions. • Prior to any excavation or construction activity, the Project Sponsor will prepare a site-specific RAP and CHASP. • Remedial activities in areas of known spills will continue to be conducted in coordination with NYSDEC and New York City Office of Environmental Remediation (NYCOER), as required. • Any USTs encountered during redevelopment will be properly closed and removed, along with any contaminated soil, in accordance with federal, state, and local regulations, including NYSDEC for registration and, if applicable, spill reporting. • During subsurface disturbance, excavated soil will be handled and disposed of properly in accordance with all applicable regulatory requirements, with spill reporting as required. Transportation of material for off-site disposal will be in accordance with federal, state, and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc. • The appropriate vapor mitigation systems will be installed to protect buildings on the terra firma portion of the Project Site. If required, the design of new buildings will consider soil vapor mitigation measures to prevent any volatile contaminants that may remain present in the soil and groundwater from migrating into the new buildings, in accordance with NYCDEP, NYCOER and/or NYSDEC requirements. • Any building materials, equipment, or utilities containing suspect PCBs, LBP, and/or ACM will be properly handled and disposed of, in accordance with the applicable regulations, prior to demolition or construction which may disturb them. • Appropriate permanent ventilation systems will be installed during redevelopment (to be operated post-construction) for areas under the Platform at the Project Site in accordance with LIRR's engineering design criteria for yard ventilation.

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Socioeconomics	<ul style="list-style-type: none"> • No direct displacement of any residential or business populations. • Will facilitate substantial economic opportunities. • Construction activities associated with the Selected Alternative will generate substantial economic benefits for the local and regional economies in terms of jobs supported, labor income, and value added. 	<ul style="list-style-type: none"> • The Project Sponsor will provide interim MTA LIRR facilities to enable the railyard to be fully functional during construction. • The Project Sponsor will develop MPT plans to ensure the safety of pedestrian, bicyclist, and vehicle circulation near the Project Site during construction of the Selected Alternative as required by NYCDOT.
Public Health	<ul style="list-style-type: none"> • Construction of the Selected Alternative includes noise and air emissions, and potential to encounter contaminated materials. • Construction of the Selected Alternative includes the potential to disturb pests occupying the Project Site. 	<ul style="list-style-type: none"> • Prior to any excavation or construction activity, a site-specific RAP and CHASP will be prepared by the Project Sponsor. The Project Sponsor will install appropriate permanent ventilation systems during construction of the Selected Alternative (to be operated post-construction) for areas under the Platform at the Project Site, in accordance with LIRR's engineering design criteria for yard ventilation. • During any subsurface disturbance, the Project Sponsor will handle and dispose of excavated soil properly in accordance with all applicable regulatory requirements, with spill reporting as required. • The Project Sponsor will treat any groundwater recovered during dewatering in accordance with NYCDEP requirements prior to discharge to the municipal sewer. • The Project Sponsor will transport all material leaving the Project Site for off-site disposal in accordance with federal, state, and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc. • The Project Sponsor will incorporate sufficient noise control measures in the final design of the ventilation system plans to ensure compliance with the NYCNCC at all surrounding residential receptors. • Construction of the Selected Alternative will include sufficient mitigation to meet the NYCNCC construction noise limit of an L_{max} of 85 dB(A) at the exteriors of any adjacent residential properties. • The Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect users of the High Line during construction.

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Public Health (cont'd)	<ul style="list-style-type: none"> Construction of the Selected Alternative includes noise and air emissions, and potential to encounter contaminated materials. Construction of the Selected Alternative includes the potential to disturb pests occupying the Project Site. 	<p>The Project Sponsor will develop and implement an integrated pest management plan to control pests (unwanted vermin, insects and weeds) during construction as part of the overarching CEPP. The pest management plan will include the following provisions:</p> <ul style="list-style-type: none"> Keep the Project Site as clean as possible. Food waste will be segregated from construction waste and deposited in covered bins; Pump out standing water before the water becomes septic; Trim vegetation fostering vermin; and Elevate construction trailers, dumpsters, and sheds off the ground to discourage vermin from burrowing or hiding under them.
Environmental Justice	<ul style="list-style-type: none"> The Selected Alternative will overall result in beneficial effects. It will support local plans for development over the Project Site and will provide benefits to the transit system by providing cover above the existing Western Rail Yard and preserving right-of-way for future passenger rail service improvements. The Selected Alternative will not result in any operational adverse effects to environmental justice populations. Noise and vibration from construction activities will be temporarily disruptive at portions of the High Line, a linear park adjacent to the Project Site that serves as an attraction to the region, including environmental justice populations within the Study Area. 	<p>Construction activities of the Selected Alternative, including vibration, also have the potential to result in structural impacts to the High Line (a recreational and historic resource); however, measures will be implemented by the Project Sponsor (as described above for Noise and Vibration, Cultural Resources, and Parks and Recreation Areas) to avoid adverse impacts, including development and implementation of a CEPP. With these measures in place, adverse construction impacts will be avoided, including to environmental justice populations. As noise levels at the High Line will exceed CEQR nuisance levels, the Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect park users, such as providing signage alerting park users to the potential for increased noise levels of certain portions of the park where high noise levels are anticipated.</p>
Section 4(f)	<ul style="list-style-type: none"> FRA has concluded that noise levels at portions of the High Line during construction activities for the Selected Alternative and the temporary underpinning of the High Line will be a <i>de minimis</i> Section 4(f) impact. To ensure that potential construction-related effects on the NRT and the High Line are not adverse, the Project Sponsor will be required by FRA to develop and implement a Construction Protection Plan (as part of the CEPP) for the construction of the Platform and Tunnel Encasement. 	<ul style="list-style-type: none"> The Project Sponsor will develop a CPP (as part of the CEPP) for the construction of the Platform and Tunnel Encasement in order to protect the High Line and the NRT and meet the conditions of the 2009 LOR. The Project Sponsor will consult with NYC Parks regarding aspects of the Platform design that relate to the High Line. The Project Sponsor will coordinate with NYC Parks on the design plans for the Platform at the preliminary and pre-final design stages. If NYC Parks identifies substantive concerns with maintenance and operation access, the Project Sponsor will continue to coordinate with NYC Parks to mitigate those concerns. The Project Sponsor will adhere to the terms of the Amended, Modified, and Restated High Line Easement Agreement among WRY Tenant LLC, the City of New York, the Metropolitan Transportation Authority, and the Long Island Rail Road Company, which provides for, but is not limited to the following:

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Section 4(f) (cont'd)	<ul style="list-style-type: none"> • FRA has concluded that noise levels at portions of the High Line during construction activities for the Selected Alternative and the temporary underpinning of the High Line will be a <i>de minimis</i> Section 4(f) impact. To ensure that potential construction-related effects on the NRT and the High Line are not adverse, the Project Sponsor will be required by FRA to develop and implement a Construction Protection Plan (as part of the CEPP) for the construction of the Platform and Tunnel Encasement. 	<ul style="list-style-type: none"> ○ Perpetual easements over the Western Rail Yard for the High Line structure, including “any alterations, replacements, substitutions and renewals thereof” and for structural supporting elements. ○ Reciprocal easements as between the City of New York and the owners of the Western Rail Yard parcels to enter the Western Rail Yard parcels and the High Line easement area, respectively. The access easement benefiting the City of New York provides explicitly for access for City personnel “to perform any inspections, repairs, maintenance, construction, restoration, improvements, alterations or capital improvements” to the High Line and related support facilities. ○ The City’s review of any work that involves the Western Rail Yard developer’s exercise of its rights under the Easement Agreement (e.g., construction of the Platform that affects the High Line). ○ The Western Rail Yard developer’s responsibility for the restoration of any High Line structures damaged in the course of the developer’s exercise of its rights under the Easement Agreement; and ○ Construction-period coordination between the City and the Western Rail Yard developer to ensure that the Western Rail Yard mixed-use development (which included the Platform that is the subject of the current DEIS) and the restoration and use of the High Line as a park proceed in a timely and safe manner. ○ In addition, the High Line Easement Agreement includes a perpetual easement that applies to Amtrak’s ownership rights of the Tunnel Encasement. The Tunnel Encasement will be 15-20 feet below grade and Amtrak’s use and operations of the tunnel will not affect the City’s ability to inspect and maintain the High Line. Those activities will be governed by the terms of the attached High Line Easement Agreement (see FEIS Attachment 1, Appendix F4). <ul style="list-style-type: none"> • The Project Sponsor will implement practices to reduce impacts to the High Line resulting from noise levels associated with construction of the Selected Alternative.

Table 2 (cont'd)

Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Section 4(f) (cont'd)		<ul style="list-style-type: none"> • To address potential noise impacts during construction of the Selected Alternative, the Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect park users, such as providing signage alerting park users to the potential for increased noise levels of certain portions of the park where high noise levels are anticipated. • The Project Sponsor will include a specification in construction documents indicating the following: the only allowable construction work hours on the High Line structure and columns for underpinning work (column load transfer) are between 11 PM and 7 AM – when the High Line is not open – unless otherwise approved by NYC Parks and Friends of the High Line. • Noise from construction equipment will comply with New York City noise emission standards. These requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards, and construction material be handled and transported in such a manner to not create unnecessary noise. • Construction of the Selected Alternative will include sufficient mitigation to meet the NYCNCC construction noise limit of an L_{max} of 85 dB(A) at the exteriors of any adjacent residential properties. • The Project Sponsor will be required to obtain NYCDOB approval for construction outside of weekdays 7 AM to 6 PM, which is prohibited by the NYCNCC. The Project Sponsor expects discretionary approval will be granted to reduce interference with LIRR operations. <ul style="list-style-type: none"> ○ To the extent practicable given space constraints at the work sites, construction will use acoustical noise tent and/or enclosures surrounding hoe rams, jackhammers, or pavement breakers that can provide up to 15 dB(A) of noise reduction during any demolition activities. For additional noise reduction, jackhammer noise mufflers that can provide up to an additional 10 dB(A) of noise reduction can also be used. ○ To minimize the noise from the backup warning alarms on trucks, the Project Sponsor will route vehicles through the construction sites to minimize the use of alarms. In addition, vehicles will also be equipped with OSHA-approved quieter backup alarms. ○ Any blasting activities associated with excavation of rock during Tunnel Encasement will be coordinated and conducted with permission from the FDNY. The Project Sponsor will provide a blasting schedule to neighboring building owners and occupants. Construction vibration monitoring will be required during blasting activities to ensure that vibration does not exceed a level that could result in damage to any nearby buildings or structures.

Table 2 (cont'd)
Summary of Effects and Associated Measures to Minimize Harm of the Selected Alternative

Environmental Category	Beneficial and Adverse Effects	Commitment Measures to Avoid, Minimize, or Mitigate Impacts
Section 4(f) (cont'd)		<ul style="list-style-type: none"> ○ To address potential noise impacts during construction of the Selected Alternative, the Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect park users, such as providing signage alerting park users to the potential for increased noise levels of certain portions of the park where high noise levels are anticipated. ○ Consistent with the protection and monitoring procedures developed for the High Line, construction vibration monitoring will be required whenever construction will occur within 90 feet of the High Line structure to ensure that construction activities do not result in vibration levels that will be capable of causing damage.

Table 3

Summary of Indirect Effects of the Selected Alternative and Measures to Avoid, Minimize, or Mitigate Impacts

Resource Categories	Indirect Effects and Commitment Measures
Land Use, Land Planning, and Property	The indirect effects of the operation and construction of the Selected Alternative will be consistent with land planning, zoning, and local and regional plans and policies.
Transportation	<p>Operation</p> <ul style="list-style-type: none"> • The indirect effects of the Selected Alternative will include increasing vehicular traffic demand in the Study Area. • The Selected Alternative will not result in any indirect parking effects. • The Selected Alternative will indirectly increase pedestrian volumes given the features and function of the Overbuild. The Overbuild Developer’s commitments made in the 2009 SEQRA/CEQR FEIS that relate to pedestrians would still apply and minimize impacts related to pedestrian activities. • No indirect effects from the Selected Alternative on subway station elements in the Study Area are anticipated. • The indirect effects of the Selected Alternative will add demand for bus ridership. The Overbuild Developer’s commitments made in the 2009 SEQRA/CEQR FEIS that relate to bus serve would still apply. <p>Construction</p> <ul style="list-style-type: none"> • Indirect construction effects of the Selected Alternative will be related to the construction of the Overbuild. The Overbuild Developer will prepare MPT plans and submit them to NYCDOT for approval.
Air Quality, Greenhouse Gas Emissions, and Resilience	<p>Operation</p> <ul style="list-style-type: none"> • Emissions from increased traffic or changed traffic patterns as an indirect effect of the Selected Alternative will not cause or exacerbate a violation of National Ambient Air Quality Standard (NAAQS) or cause an exceedance of NYSDEC/NYCDEP significant threshold values (STVs) for PM_{2.5} or of the NYCDEP de minimis criteria for CO, and thus will not have an adverse air quality impact. <p>Construction</p> <ul style="list-style-type: none"> • The indirect construction impacts of the Selected Alternative will not have an adverse impact on air quality. To ensure that the construction of the Overbuild will result in the lowest practicable diesel PM emissions, the Overbuild Developer will implement an emissions reduction program for construction activities.
Noise and Vibration	<p>Operation</p> <ul style="list-style-type: none"> • The indirect effects on noise levels due to vehicular traffic associated with the Selected Alternative will not be a significant impact. <p>Construction</p> <ul style="list-style-type: none"> • The indirect construction impacts of the Selected Alternative will not have an adverse impact on noise and vibration. The Overbuild Developer will provide measures and construction procedures to avoid an adverse impact related to construction noise and vibration.
Cultural Resources	<p>Operation</p> <ul style="list-style-type: none"> • The Overbuild, which is an indirect consequence of the Selected Alternative, will result in impacts to cultural resources. To ensure that the effects to the High Line that are an indirect effect of the Selected Alternative are not adverse, the Project Sponsor (which includes the Overbuild Developer) is required to meet all the conditions of the LOR, which includes review of Overbuild design by NYSHPO and NYCLPC and development of a CPP. <p>Construction</p> <ul style="list-style-type: none"> • With the mitigation measures required in the RD as a result of the 2009 SEQRA/CEQR FEIS (meeting the conditions of the LOR), no significant adverse impacts to cultural resources are anticipated as an indirect effect of the Selected Alternative.

Table 3 (cont'd)
Summary of Indirect Effects of the Proposed Action and Measures to Avoid, Minimize, or Mitigate Impacts

Resource Categories	Indirect Effects and Commitment Measures
Parks and Recreation	<p>Operation</p> <ul style="list-style-type: none"> The Selected Alternative will have no indirect effects on parks and recreation areas. <p>Construction</p> <ul style="list-style-type: none"> The indirect construction impacts of the Selected Alternative will not have an adverse impact on parks and recreation with the mitigation measures required as a result of the 2009 SEQRA/CEQR FEIS.
Aesthetics and Visual Quality	The operation and construction of the Selected Alternative are not anticipated to have indirect adverse impacts on urban design and visual resources (i.e., aesthetics and visual quality).
Contaminated Materials	The operation and construction of the Selected Alternative are not anticipated to result in an indirect adverse impact on hazardous materials with the implementation of remediation and protective measures.
Utilities and Energy	<p>Operation</p> <ul style="list-style-type: none"> The indirect effects of the Selected Alternative will result in increased demands on New York City's water supply and sanitary sewage treatment systems; however, the additional demand will be negligible on utility infrastructure and services. <p>Construction</p> <ul style="list-style-type: none"> The indirect construction impacts of the Selected Alternative are not anticipated to impact provision of utility services to the Project Site, including water supply, wastewater, and stormwater services; solid waste and sanitation services; and energy.
Soils and Geology	The operation and construction of the indirect effects of the Selected Alternative will result in minimal disturbance to soils at the Project Site and will not alter the geological character or integrity.
Water and Natural Resources	<p>Operation</p> <ul style="list-style-type: none"> The indirect effects of the Selected Alternative will not adversely affect flooding of areas adjacent to the Project Site. The indirect effects of the Selected Alternative will not result in adverse impacts on designated NYSDEC littoral zone tidal wetlands in the Hudson River. The indirect effects of the Selected Alternative will not result in adverse impacts on groundwater, terrestrial resources, threaten and endangered species, or aquatic resources. The indirect effects of the Selected Alternative will not result in adverse impacts on groundwater. <p>Construction</p> <ul style="list-style-type: none"> Construction of the Overbuild, which is an indirect effect of the Selected Alternative, is not anticipated to result in an adverse impact to natural resources with implementation of the Overbuild Developer's commitments related to construction practices.
Coastal Zone Consistency	<p>Operation</p> <ul style="list-style-type: none"> The indirect effects of the Selected Alternative will be consistent with the Local Waterfront Revitalization Plan (LWRP) by supporting its policies. <p>Construction</p> <p>With implementation of Overbuild Developer's commitments, the indirect construction effects of the Selected Alternative will be consistent with the LWRP.</p>

Table 3 (cont'd)

Summary of Indirect Effects of the Proposed Action and Measures to Avoid, Minimize, or Mitigate Impacts

Resource Categories	Indirect Effects and Commitment Measures
Socioeconomics	<p>Operation</p> <ul style="list-style-type: none"> • The indirect effects of the Selected Alternative, the Overbuild, will not result in adverse impacts due to indirect residential displacement. • The Selected Alternative will not result in an adverse impact due to indirect business displacement within the Study Area and will not adversely affect any specific industries. • The new population that will indirectly result from the Selected Alternative due to the Overbuild will not adversely affect public schools, public libraries, police, fire, EMS, or health care facility services in the Study Area. The projected increase in demand for publicly funded child care services could adversely affect services, but will be mitigated through the RD. <p>Construction</p> <ul style="list-style-type: none"> • The indirect construction effects of the Selected Alternative will result in temporary disruptions in the surrounding area. However, such disruptions will not adversely affect socioeconomic conditions.
Public Health	The indirect effects of the operation and construction of the Selected Alternative are not anticipated to result in any adverse effects to air quality, noise, contaminated materials, or water quality, and as a result will not result in any adverse public health impacts. Implementation of the Overbuild Developer's commitments for noise, air quality, and contaminated materials will mitigate, either in part or in whole, any adverse impacts.
Environmental Justice	The indirect effect of the operation and construction of the Selected Alternative will not result in disproportionately high and adverse effects on environmental justice populations.

5 PUBLIC OUTREACH AND OPPORTUNITIES TO COMMENT

During preparation of the DEIS, FRA informed and solicited early and continued feedback from the public and provided opportunities for comments and questions. FRA conducted outreach that included compiling a comprehensive mailing list of stakeholders, including elected officials, and potentially interested organizations, and providing multiple forums for those stakeholders to provide input. Project outreach efforts included:

- A Project website (www.westernrailyardinfrastructure.com) with a library of Project documents for public review, additional information on the Project, and a means for providing comments and requesting further information.
- A presentation providing an overview of the Project was posted on the Project website. The presentation was available in English and in Spanish (due to the presence of large Spanish-speaking communities in the vicinity of the Project area).
- A virtual public meeting during the public comment period (June 30, 2021). FRA used the Project website, meeting flyers, and email notices to the Project mailing list to publicize the public meeting. The meeting flyers were in English and Spanish (due to the presence of notable Spanish-speaking communities in the vicinity of the Project area) and were mailed or emailed to the Project mailing list. FRA also distributed flyers to libraries and community centers. Flyers and meeting notices were sent out at least two weeks in advance of meetings. In addition, meetings were advertised in area newspapers (in English, with Spanish ads in corresponding local area papers) and on the Project website.

- Public and interested agencies had the opportunity to submit comments in writing, via the Docket system at Regulations.gov (Docket FRA-2020-0039), email, voicemail to a Project phone number, or U.S. mail.

6 DETERMINATIONS AND FINDINGS REGARDING OTHER LAWS

6.1 SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT

FRA completed consultation in accordance with Section 106 of the National Historic Preservation Act of 1966¹⁶ (Section 106) and its implementing regulations,¹⁷ which require Federal agencies to consider the impacts of their undertakings on historic properties. Section 106 regulations require that FRA identify historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP) within the Project's Area of Potential Effects (APE); assess effects to historic properties; avoid, minimize, or mitigate any adverse effects; and consult with the relevant State Historic Preservation Officer (SHPO), which for the Western Rail Yard Infrastructure Project is the NYSHPO. Through the Section 106 process, FRA determined, and the NYSHPO concurred in a letter dated February 11, 2021, that there will be no adverse effects to historic properties as a result of construction or operation of the Selected Alternative, provided the Project Sponsor follows certain conditions. Specifically, the Project Sponsor is required to develop a CEPP for the construction of the Selected Alternative, in order to avoid the potential for construction-related effects (including vibration effects) on the High Line and the New York Improvements and Tunnel Extension of the Pennsylvania Railroad (NRT).

At the time of the 2009 SEQRA/CEQR FEIS, the Overbuild Developer executed a Letter of Resolution (LOR) with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP), with stipulations developed in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law, to address the potential for adverse effects to the High Line. The LOR requires preparation of a Construction Environmental Protection Plan (CEPP) to protect the High Line during adjacent construction of the Platform and Overbuild. That LOR remains in effect. The requirement for a CPP to protect the High Line during adjacent construction of the Platform and Overbuild was also incorporated into the RD for the 2009 Western Rail Yard project.¹⁸ Stipulation 1 of the LOR requires the Overbuild Developer to continue consultation with OPRHP in accordance with Section 14.09, regarding aspects of the development's design that could affect the High Line (specifically, review of preliminary and pre-final design plans). The Project Sponsor will meet all requirements set forth in the SEQRA process including compliance with the LOR.

¹⁶ 54 USC 306108.

¹⁷ 36 CFR Part 800.

¹⁸ The "Construction Protection Plan" (as referenced in the LOR) is part of the "Construction Environmental Protection Plan" (as referenced in the RD).

The CPP for the protection of the NRT and the High Line will be incorporated into the overarching CEPP that will be developed for the Selected Alternative (see Chapter 22). The CPP is required to meet the guidelines set forth in New York City Department of Building's (NYCDOB's) *Technical Policy and Procedure Notice (TPPN) #10/88*, the Protection Programs for Landmarked Buildings guidance document of the New York City Landmarks Preservation Commission (LPC), and the National Park Service's Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction. The CPP will set forth the specific protection and monitoring measures that will be implemented during construction to avoid inadvertent damage to these historic properties and will be implemented in coordination with NYSHPO and LPC.

Details related to the rationale for the determination are provided in the EIS in Chapter 9, "Cultural Resources."

6.2 SECTION 4(f) DETERMINATION

Section 4(f) of the Department of Transportation Act of 1966 (Section 4(f)) protects publicly owned parks, recreation areas, wildlife and/or waterfowl refuges, and publicly or privately owned significant historic sites.¹⁹ Section 4(f) states that USDOT operating administrations, including FRA, may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the Federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if (a) the agency determines that the use of the property will have a *de minimis* impact; or (b) there is no feasible and prudent avoidance alternative to the use of the land, and the action includes all possible planning to minimize harm to the Section 4(f) property resulting from the use.²⁰

Three Section 4(f) properties were identified in the Study Area and are listed below in **Table 4**.

¹⁹ 49 USC § 303 and 23 § USC 138. FRA's Section 4(f) implementing regulations at 23 CFR Part 774.

²⁰ 23 CFR Part 774.3.

Table 4
Section 4(f) Properties in the Study Area

Map No.	Property Name	Location*	Official(s) with Jurisdiction	Section 4(f) Property Type	Description (Features/ Attributes/ Activities)	Approximate Size
1	High Line	Between Gansevoort and 34th Streets west of Tenth Avenue	NYSHPO NYC Parks	Park and Recreational Resource Historic site	Walkway and landscaped area on elevated former rail line	1.45 miles long, 6.73 acres total Approx. 1.20 acres in Study Area
2	NRT	Bergen Portal Township of North Bergen, Hudson County, New Jersey to the Tenth Avenue Portal in New York City, New York County	NYSHPO	Historic site	Within Study Area: subterranean tubes containing railroad tracks	N/A
3	Hudson River Park	Hudson River waterfront, between roughly Chambers Street and West 59th Street	HRPT	Park and Recreational Resource	Within Study Area: walkway/esplanade, and commercial-use heliport	4 miles long, 550 acres total Approx. 1.18 acres in Study Area

Note: HRPT = Hudson River Park Trust

The Selected Alternative would not result in the permanent incorporation of any land from the Section 4(f) properties in the Study Area.

Construction of the Platform would require approximately 400 caissons to be drilled on either side of the NRT. To avoid the potential for damage to the NRT from vibration produced by caisson drilling, the caissons will be located outside of Amtrak's influence line exclusion zone. Furthermore, the Project Sponsor will implement measures to protect against potential construction-related effects to the NRT, discussed below. Therefore, FRA has determined there will be no impacts to and no use of the NRT as a result of the Selected Alternative.

Construction activities near Hudson River Park would not result in any physical alterations to, occupation, or temporary closures of the park. FRA has determined there will be impacts to and no use of the Hudson River Park as a result of the Selected Alternative.

Construction activities for the Selected Alternative would include temporary underpinning of an approximately 100-foot-long segment of the High Line, where the Tunnel Encasement alignment would cross beneath the High Line that runs along West 30th Street. Underpinning is a process in which structural support is added to protect the structural integrity of the resource during construction of the Tunnel Encasement. The duration of the underpinning construction would be approximately four months, and the underpinning would be in place for an additional 16 months, during excavation and construction of the Tunnel Encasement. Additionally, the predicted worst case construction noise levels at the High Line would exceed nuisance levels, as defined by the *CEQR Technical Manual*, and may interfere with speech while construction equipment is in use. For these reasons, FRA has determined that the Selected Alternative will result in the *de minimis* use of the High Line. FRA's *de minimis* conclusion is made after consideration of the following measures that the Project Sponsor will implement to avoid or minimize adverse effects to the High Line that will result from the Selected Alternative.

The Project Sponsor will develop a CPP for the construction of the Platform and Tunnel Encasement in order to avoid the potential for construction-related effects (including vibration effects) on both the High Line and the NRT and meet the conditions of the 2009 LOR. The CPP will set forth the specific protection and monitoring measures that will be implemented during construction to avoid inadvertent damage to the High Line and the NRT and will be implemented in coordination with the NYSHPO and LPC. The CPP will be required to meet the guidelines set forth in NYCDOB's TPPN #10/88, the Protection for Landmarked Buildings guidance document of the New York Landmarks Preservation Commission, and the National Park Service's Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction.

In addition, the Amended, Modified, and Restated High Line Easement Agreement executed among the Metropolitan Transportation Authority (MTA), Long Island Rail Road (LIRR) Company, City of New York and WRY Tenant LLC, provides for coordination between NYC Parks, Friends of the High Line, and WRY Tenant LLC to allow for the rehabilitation, operation, and maintenance of the High Line for public recreational use side-by-side with the construction, operation, and maintenance of the Platform and the Overbuild development at the Western Rail Yard.²¹ This agreement provides for various easements over the Western Rail Yard for inspections, maintenance, repairs, construction, restoration, or improvements to the High Line. In addition, the High Line Easement Agreement includes a perpetual easement that applies to Amtrak's ownership rights of the Tunnel Encasement. Amtrak's use and operations of the tunnel will not affect the City's ability to inspect and maintain the High Line.

To the extent feasible and practicable to reduce noise and vibration levels, the FRA has provided mitigation and measures to reduce impacts associated with construction of the Selected Alternative. Mitigation measures are detailed in Table 2 and include complying with with noise emission standards of New York City and coordinate as needed.

²¹ The Overbuild development is not part of the Selected Alternative, but is an indirect effect of the Proposed Action.

Additionally, the Project Sponsor will include a specification in construction documents indicating the following: the only allowable construction work hours on the High Line structure and columns for underpinning work (column load transfer) are between 11 PM and 7 AM—when the High Line is not open—unless otherwise approved by NYC Parks and Friends of the High Line.

FRA provided an opportunity for review and comment on the Draft Section 4(f) Evaluation to the U.S. Department of Interior (DOI) and the officials with jurisdiction over the Section 4(f) resources, the NYSHPO and NYC Parks. FRA received concurrence from the DOI regarding the Section 4(f) Evaluation *de minimis* finding in a letter date July 23, 2021, with the requirement of a concurrence letter from NYC Parks (see **Appendix O3** of the FEIS). FRA received concurrence from NYC Parks regarding the Section 4(f) Evaluation *de minimis* finding on September 3, 2021 (see **Appendix O3**). The Project Sponsor will continue to consult with NYC Parks regarding those aspects of the Platform design that relate to the High Line. The Project Sponsor will submit design plans for the Platform to NYC Parks at the preliminary and pre-final design stages. If NYC Parks identifies substantive concerns with maintenance and operation access, the Project Sponsor will continue coordination with NYC Parks to mitigate those concerns.

6.3 ENVIRONMENTAL JUSTICE

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), requires Federal agencies to identify and address disproportionately high and adverse effects of their actions on minority populations and low-income populations (environmental justice communities). Executive Order 12898 also requires Federal agencies to work to ensure greater public participation in the decision-making process. USDOT Updated Environmental Justice Order 5610.2(a), *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, imposes similar obligations on USDOT operating administrations to promote the principles of Executive Order 12898 and incorporate such principles in all programs, policies, and activities, including the NEPA process.

FRA prepared an analysis of the Selected Alternative's effects on environmental justice populations following guidance and methodologies for compliance with Executive Order 12898 established by CEQ, USDOT Updated Environmental Justice Order 5610.2(a), and New York City guidance.

A CEPP for the Selected Alternative will incorporate the proposed project commitments identified as a result of this EIS process, as well as the established commitments being carried forward from prior environmental reviews for actions proposed for this Project. A CPP to avoid inadvertent damage to historic properties will be incorporated into the overarching CEPP for the Preferred Alternative. Noise levels at the High Line would exceed nuisance levels, as defined by the *CEQR Technical Manual*, and may interfere with speech while construction equipment is in use. As such, the Project Sponsor will consult with NYC Parks and Friends of the High Line to determine the necessary steps to protect park users (including any park users from environmental justice populations), such as providing signage alerting park users to the potential for increased noise levels of certain portions of the park where high noise levels are anticipated.

Adverse construction impacts of the Selected Alternative will occur in both environmental justice and non-environmental justice communities. The adverse construction impacts of the Selected Alternative will not be greater or appreciably more adverse in environmental justice communities compared to areas that are not environmental justice communities. Therefore, the Selected Alternative will not result in disproportionately high and adverse effects on environmental justice communities.

Based upon these findings, and with these mitigation measures in place, FRA determines that the Selected Alternative is consistent with requirements of Executive Order 12898.

6.4 COASTAL ZONE MANAGEMENT ACT

The Federal Coastal Zone Management Act (CZMA) of 1972 was established to encourage coastal states to manage development within the states' designated coastal areas, reduce conflicts between coastal developments, and protect resources within the coastal zone. Requirements for Federal approval of coastal zone management programs and grant application procedures for development of the state programs is included in 15 CFR Part 923, Coastal Zone Management Program Development and Approval Regulations, National Oceanic and Atmospheric Administration (NOAA). The Coastal Zone Management Act requires that Federal activities within a state's coastal zone be consistent with that state's coastal zone management plan. New York state and New York City have coastal zone management program, which are administered NYSDOS and NYCDCP, respectively. As discussed in the FEIS, the Selected Alternative will be consistent with each state's coastal zone management policies. Both NYSDOS and NYCDCP have issued coastal zone consistency determinations for the Proposed Action on August 10, 2021, based on information in the DEIS and will issue updated determinations as part of the permitting process (see Appendix L of the FEIS).

6.5 CLEAN AIR ACT

In accordance with 40 CFR Part 93 Subpart B, as an action taken by FRA, the Project is subject to general conformity requirements. General conformity regulations apply to the Selected Alternative because it is located in an area that the U.S. Environmental Protection Agency has designated as under a maintenance plan for attainment of the NAAQS for PM_{2.5} and in serious non-attainment for ozone (O₂). As part of the environmental review process, FRA conducted an analysis of potential emissions from the Project pursuant to 40 CFR Part 93. FRA has determined that Project-generated predicted annual pollutant emissions will be below General Conformity *de minimis* thresholds and that no General Conformity determination is required.

6.6 PERMITS AND APPROVALS

Implementation and construction of the Selected Alternative is subject to a number of Federal, New York State, and local permits and approvals in addition to NEPA. Table 5, "Process, Agency Coordination, and Public Involvement," lists the anticipated permits for the Selected Alternative.

Table 5
Permits and Approvals Required for the Selected Alternative

State of New York
New York State Department of Environmental Conservation
Soil Erosion Control
SPDES General Permit for Stormwater Discharge from Construction Activity
New York State Department of State
Coastal Zone Consistency Determination
Local
New York City Department of City Planning
New York City Department of City Planning Coastal Zone Consistency Determination
Compliance with Environmental Construction Measures per the Restrictive Declaration
New York City Department of Buildings
New Building Permit
New York City Department of Buildings/City of New York Fire Department
Fuel Storage
Fire Protection (Wet System)
City of New York Fire Department
Fire Alarm and Fire Suppression (FM-200)
Life Safety / Egress
Radio
New York City Department of Environmental Protection
Site Connection – for water drainage and runoff
Generators (for emissions)
Tunneling Permit
New York City Department of Parks and Recreation
Proximity to High Line
New York City Department of Transportation
Division of Bridges
Department of Transportation – Sidewalks
Department of Transportation – Underground Vaults if necessary
Department of Transportation – Revocable Consents if necessary
OCMC
Con Edison
Electrical and Gas Service
New York City Mayor's Office of Environmental Remediation
Remedial Investigative Report (RIR)
RAP
Waste Characterization
Noise RAP
LIRR – for Transit areas for compliance with NYS Uniform Fire Prevention and Building Code
Amtrak for proximity to existing structures
Friends of the High Line

7 CONCLUSION

FRA has carefully considered the DEIS, FEIS, and associated technical reports and analysis; the Section 4(f) Determination; the mitigation measures required including commitments made in the RD and LOR; the written comments offered by agencies, stakeholders, and the public on this record; and other supporting documentation including the 2009 SEQRA/CEQR FEIS, and FRA's 2013 and 2014 FONSI for the concrete casing project. Based on this consideration, FRA has determined that the Selected Alternative is the best option for the Western Rail Yard Infrastructure Project and that its approval of the Selected Alternative is in the best interest of the public. FRA has selected this alternative because the alternative 1) best satisfies the purpose and need for the proposed action; and 2) minimizes impacts to the natural and human environment by incorporating mitigation measures.

FRA has further determined that all practicable measures to minimize environmental harm have been adopted as part of the Selected Alternative and that mitigation commitments are outlined in the FEIS and ROD to be implemented by the Project Sponsor.

Changes to the Project will be evaluated in accordance with 23 CFR Sections 771.129 and 771.130, and if required therein, they must be approved in writing before the Project Sponsor may proceed with the change.