# TECHNICAL MEMORANDUM 003 <br> EAST SIDE COASTAL RESILIENCY <br> CEQR No. 15DPR013M <br> ULURP Nos. N190356ZRM and 190357PQM 

April 6, 2022

## A. INTRODUCTION

On December 6, 2019, the New York City Office of Management and Budget (OMB), as the U.S. Department of Housing and Urban Development (HUD)-designated responsible entity and Lead Agency under the National Environmental Policy Act (NEPA), and the New York City Department of Parks \& Recreation (NYC Parks), as Lead Agency under the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR), issued a Joint Record of Decision (ROD), SEQRA, and CEQR Findings Statement for the East Side Coastal Resiliency Project ([ESCR], the proposed project). The City evaluated and reviewed the proposed alternatives' conceptual design against the purpose and need and principal objectives for the project, including providing a reliable flood protection system for the protected area, improving access to and enhancing open space resources along the waterfront, and meeting the HUD funding deadlines for federal spending, along with the goal to minimize potential adverse environmental effects and disruptions to the community. The Flood Protection System with a Raised East River Park Alternative best meets the principal objectives for the project and therefore was selected as the Preferred Alternative. The Joint ROD and Findings Statement documented OMB and NYC Parks findings and decisions to proceed with the Preferred Alternative for the proposed project as described in the Final Environmental Impact Statement (FEIS), which was published on September 13, 2019.

Following issuance of the Joint ROD and Findings Statement, there were minor enhancements in the design of the Preferred Alternative that were assessed in a Technical Memorandum dated October 11, 2019 (Technical Memorandum 001). Subsequent changes in the National Register of Historic Places (NRHP) eligibility status of the East River Park Track House and Tennis Center Comfort Station and the demolition of those structures were assessed in a Technical Memorandum dated December 22, 2021 (Technical Memorandum 002).

This Technical Memorandum (003) examines whether a modification to the construction access and egress to/from East River Park during construction would affect the conclusions of the FEIS, the Joint ROD and Findings Statement, or the subsequent Technical Memoranda. This Technical Memorandum also serves as OMB's NEPA re-evaluation under 24 CFR Section 58.47.

## B. DESCRIPTION OF THE PREFERRED ALTERNATIVE MODIFICATION

A construction program was developed for the purposes of environmental review that served as the basis of the technical analyses presented in the FEIS and identified the range of potential environmental effects that were projected during project construction. That program assumed two vehicular access/egress points to East River Park - from the intersection of Montgomery and South Streets and a potentially new temporary construction truck access/egress into/out of the park using the slip ramps off the northbound FDR Drive near East Houston Street, which would only be accessible during overnight hours, when traffic on the FDR Drive is lowest.

Currently there is a more specific proposal by the Contractor to use the temporary slip ramps along the northbound FDR Drive for both daytime and nighttime operations to facilitate construction access and reduce reliance on the access at Montgomery and South Streets. The locations of these proposed ramps are provided in Figure 1. A traffic study was then conducted to determine the potential traffic effects of these slip ramps. That traffic analysis is included as Attachment A to this Technical Memorandum (Attachment $\mathbf{A}$ ) and the results are summarized below.

## C. ENVIRONMENTAL EFFECTS OF THE PROPOSED MODIFICATION

This section examines whether the proposed modification would affect the conclusions of the FEIS, the Joint ROD and Findings Statement, or the subsequent Technical Memoranda. As the proposed modification to construction vehicle access and egress to/from East River Park would not change the types of construction activities under the Preferred Alternative, there would be no changes to the conclusions for the following construction period analyses-socioeconomic conditions, open space, historic and cultural resources, urban design, natural resources, hazardous materials, water and sewer infrastructure, energy, greenhouse gas, and vibration. An assessment of the technical areas that are potentially affected - transportation, air quality, noise, and public health-is provided below.

## CONSTRUCTION TRANSPORTATION

As stated above, the FEIS assumed two vehicular access/egress points to East River Park- with a principal access via the intersection of Montgomery and South Streets and where necessary, a slip ramp into the park via the northbound FDR Drive near East Houston Street that would only be accessible during overnight hours when traffic on the FDR Drive is lower. The FEIS transportation studies analyzed a daytime scenario during the highest peak hours of construction activity, where trips would be concentrated at the existing access/egress at Montgomery Street to present a more conservative analysis. The proposed modification would modify the utilization of the construction truck access/egress points as described below for Project Area One, which extends from Montgomery Street to approximately East 13th Street. These access and egress locations are presented in the "Temporary Work Zone Roadway" plans that were prepared as part of a separate "FDR Drive Slip Ramp Traffic Study" (see Attachment A). The traffic study also included an assessment of the potential traffic effects on the use of these slip ramps as the primary access and egress point to/from East River Park.

Specifically, the attached FDR Drive Slip Ramp Traffic Study states that a request was made by the contractor "to provide usage of proposed temporary slip ramps along the northbound FDR Drive to access Project Area One during daytime construction operations." Under this request, instead of utilizing the Montgomery Street and South Street intersection access/egress, the construction traffic would utilize new access/egress points from/to the northbound FDR Drive. These access points are proposed to be operational during the daytime and nighttime construction operation hours (if/where applicable). As identified on the plans, construction in Project Area One is to be completed in two phases. Therefore, depending upon the construction phase requirements, the location of these access points will be modified accordingly. Access to the slip ramps will also be managed so that only authorized construction vehicles can access the construction service roads and the ramps are to be closed when not in use. Under the request, access for Phase 1 (which includes the construction of the southern half of East River Park) would begin opposite Cherry Street with a new temporary slip ramp off the Northbound FDR Drive and end by merging into
the existing Northbound FDR Drive on-ramp for Houston Street. Access for Phase 2 (which includes the construction of the northern half of East River Park) would begin opposite Delancey Street with a new temporary slip ramp off the Northbound FDR Drive and end north of East 10th Street with a new temporary slip ramp onto the Northbound FDR Drive. According to the FDR Drive Slip Ramp Traffic Study, "the locations of the entrance and exit ramps were designed to manage construction access most effectively during the two phases of construction." To present a more conservative assessment and show the highest anticipated usage of either Phase 1 or Phase 2 slip ramps by construction trucks, the FDR Drive Slip Ramp Traffic Study used the AM construction peak hour construction truck traffic to assess both Phases 1 and 2 for the traffic screening assessment.
As projected in the FEIS and summarized in the FDR Drive Slip Ramp Traffic Study, there would be a maximum of 23 construction trucks entering and exiting East River Park during the weekday 6:00 to 7:00 AM peak hour, with no provision for, or use of the construction site for construction worker private auto parking. In accordance with the CEQR Technical Manual, each truck has a passenger car equivalent (PCE) of 2 , and the resulting maximum construction-related traffic increments would therefore be 46 PCEs each at the slip ramp access point and egress point during the 6:00 to 7:00 AM peak hour. Since the magnitude of these trips would be below the CEQR Technical Manual Level 1 analysis threshold of 50 peak hour PCEs, additional analyses are not required. Since construction vehicles are commercial vehicles, they would also be required to have special permits to operate on the FDR Drive. Finally, it is concluded that this proposed modification would not affect the conclusions of the FEIS and subsequent environmental reviews with respect to traffic operations during construction.

## CONSTRUCTION AIR QUALITY

The FEIS and subsequent Technical Memoranda concluded that the Preferred Alternative would not result in significant adverse construction air quality effects. Although the construction vehicle utilization of access and egress to/from East River Park is modified under this proposal, the total volume of daily truck traffic would remain unchanged. The proposed use of the northbound FDR Drive slip ramp as the access/egress point to East River Park would provide an air quality benefit since construction vehicles would not be limited to the use of the Montgomery Street and South Street access/egress point and instead would be dispersed with alternate access via the FDR Drive. The proposed modification would also involve the same types of construction activities as previously analyzed and would comply with the same laws, codes, and other rules and regulations. In addition, to minimize air emissions during construction, the contract would commit to the implementation of emissions reduction measures including the use of best available technologies (i.e., diesel particulate filters [DPFs]) and the use of newer and cleaner equipment during construction under the proposed modification. With these measures in place, it is concluded that the proposed modification would not result in any significant adverse air quality impacts during construction. It is also concluded that the proposed modification would not affect the conclusions of the FEIS and subsequent environmental reviews with respect to the analyses of air quality during construction.

## CONSTRUCTION NOISE

The construction noise analysis presented in the FEIS and subsequent Technical Memoranda found that the Preferred Alternative would result in significant adverse noise effects at nearby sensitive receptor locations. The predicted significant adverse construction noise effects would be of limited duration and would be up to the mid-80s dBA during daytime construction and up to
the mid-70s dBA during nighttime construction and were primarily due to construction activities adjacent to the receptors at which they would occur. Although the construction vehicle utilization of access and egress to/from East River Park is modified under this proposal, the locations of work activities would remain unchanged and would not result in a longer duration of construction adjacent to any individual receptor. The proposed use of the northbound FDR Drive slip ramp as the access/egress point to East River Park would generally tend to reduce the intensity of construction noise, since construction vehicles would not be limited to the use of the Montgomery/ South Street access/egress point and instead would be dispersed with alternate access via the FDR Drive. Therefore, it is concluded that the proposed modification would not affect the conclusions of the FEIS and subsequent environmental reviews with respect to construction noise, but may provide a benefit.

## PUBLIC HEALTH

As described above, the proposed modification would not result any additional adverse effects with respect to construction air quality or noise. As described in the FEIS and subsequent environmental reviews, the proposed project would not result in any unmitigated significant adverse effects with respect to air quality, water quality, or hazardous materials, but could potentially result in unmitigated significant adverse construction-period noise effects at receptors in the vicinity of the construction work areas. However, as discussed above under Construction Noise, the revised construction access and egress to/from East River Park would not increase the construction noise effects, nor would it have the potential to result in effects of a greater intensity or duration. Therefore, it is concluded that the proposed modification would not affect the conclusions of the FEIS and subsequent environmental reviews or result in any significant adverse public health effects.

## D. CONCLUSION

It is the conclusion of this Technical Memorandum that the modification to the construction access and egress to/from East River Park during construction operations would not result in any new or different significant adverse effects from those already identified in the FEIS and subsequent


## Attachments

Attachment A - FDR Drive Slip Ramp Traffic Study (GPI, March 30, 2022)


## Attachment A

FDR Drive Slip Ramp Traffic Study

## TECHNICAL MEMORANDUM

To: Vincent Sefershayan
From: Talha Ahmad, P.E., PTOE
Date: March 30, 2022

## Re: GPI Project No. BAB-2021091.00: East Side Coastal Resiliency Provision of Northbound FDR Drive Slip Ramps for Project Area One Construction

This Technical Memorandum has been prepared as an addendum to Chapter 6.9 (ConstructionTransportation) from the approved Final Environmental Impact Statement (FEIS) for the East Side Coastal Resiliency Project Report dated September 2019. The addendum is the result of a request made by the contractor to provide usage of proposed temporary slip ramps along the northbound FDR Drive to access "Project Area One" during daytime construction operations (Note: Project Area One extends from Montgomery Street to approximately $13^{\text {th }}$ Street and is divided into two phases of construction). This request is a deviation from the construction scheme proposed, analyzed, and approved in the above noted FEIS. Thus, this memorandum has been developed to analyze the changes proposed by providing new traffic access during construction and to obtain approval from the OCMC and NYCDOT on this scheme of construction during daytime and nighttime operations (if/where applicable).

## Presently Approved Construction Access:

Chapter 6.9 (Construction-Transportation) of the approved FEIS has analyzed construction traffic access and circulation via the Montgomery Street and South Street intersection as the only access to the "Project Area One" construction site. The traffic analysis represented a conservative scenario and did not include provisions for any access ramps to the construction site from the northbound FDR Drive. The peak hour traffic (workers and truck trips) generated during construction is presented in Tables 6.9-7 and 6.9-10. These tables from the FEIS can be found in Appendix A of this technical memorandum.

## Newly Proposed Northbound FDR Drive Construction Access:

To facilitate construction operations for "Project Area One", new construction access points are being proposed. Instead of utilizing the Montgomery Street and South Street intersection access/egress, the construction traffic is now proposed to utilize new access/egress points via northbound FDR Drive under this addendum for approval. These access points will be operational during the daytime and nighttime construction operation hours (if/where applicable). The location of these access points (entrance ramps and exit ramps) is presented in the Temporary Work Zone Roadway plans, located within Appendix B. As depicted on the plans, construction in Project Area One will be completed in two phases. Phase 1 includes the construction of the southern half of the Park, from Montgomery Street to approximate station 244+00 along the Shared Path (north of the Dance Circle / south of Baseball Field 3), plus approximately 2,000 linear feet of the shared path starting at station $244+00$. Phase 2 includes the construction of the northern half of the Park, from approximate station $244+00$ to the north project limit adjacent to the Con Edison facility (approximate station $276+50$ ). The locations of the entrance and exit ramps were designed to manage construction access most effectively during the two phases of construction. During Phase 1 construction vehicles will enter near Cherry

Street to access the Phase 1 construction site as quickly as possible. Construction vehicles will exit the construction site north of East Houston Street, so the vehicles have a dedicated lane to enter FDR Drive. Requiring vehicles to exit the construction site further north to match the Phase 2 FDR Drive entrance ramp location would require vehicles to drive through an area open to the public during Phase 1 construction, mixing construction vehicles with pedestrians along the shared path. During Phase 2 construction vehicles will enter the construction site just north of the Williamsburg Bridge, to minimize damaging the newly constructed Phase 1 project site. The FDR Drive phase 2 entrance ramp is located north of East $10^{\text {th }}$ Street near the Phase 2 northern construction limits. It is also important to note that special permits will be required by the trucks that will be utilizing these access points on the northbound FDR Drive during construction, since no trucks are presently allowed on this roadway.

## Traffic Screening Assessment:

According to the New York City Environmental Quality Review (CEQR) guidelines, the first step in conducting traffic impact assessment is to perform a traffic screening analysis that determines the magnitude of new traffic that will be generated by the proposed project. For this addendum, it will be the traffic generated under the construction condition, particularly during the peak hours of a typical weekday. The CEQR's twotier traffic screening process is mainly based on determining the overall magnitude of vehicular, subway/rail or bus transit and pedestrian trips that could be generated by the proposed project during the two construction phases. For Level 1 traffic screening, if the proposed project is expected to generate fewer than 50 peak hour vehicle trip ends, less than 200 subway/rail or bus transit trips, or fewer than 200 peak hour pedestrian trips, no further analysis is necessary. The significantly adverse traffic impacts to the project surrounding facilities (roadway, transit, etc.) are generally considered unlikely when these Level 1 traffic screening threshold limits are not crossed. However, if these volume thresholds are surpassed, a detail Level 2 traffic analysis is warranted that requires traffic assignments and further numerical capacity assessments of surrounding facilities for vehicles, transit, and pedestrian analysis, whichever is found applicable.

Thus, Level 1 traffic screening was initially conducted to determine the magnitude of peak hour construction trips that are anticipated during the two construction phases of this project. The proposed entrance ramp and exit ramp volume along the northbound FDR Drive are derived from the previously approved traffic volume tables (Tables 6.9-7 and 6.9-10 in the FEIS). Trip generation and the local street truck routing assignment leading to Project Area One will remain unchanged as previously depicted under the initial FEIS proposal. Construction vehicles will reach Montgomery Street and South Street intersection as previously noted, and from there they will take the FDR Drive north entrance ramp to reach the proposed access points along FDR Drive, as depicted in the Temporary Work Zone Roadway plans. The peak hour truck volumes anticipated on these temporary ramps are presented in Tables 1.

Table - 1
Traffic Volumes on Temporary Ramps Along Northbound FDR Drive at Project Area One Construction

| FDR VOLUME | Off-Ramp* | On-Ramp* |
| :---: | :---: | :---: |
| AM Peak (6 am - 7am) | 23 | 23 |
|  |  |  |
| PM Peak $(3 \mathrm{pm}-4 \mathrm{pm})$ | 2 | 2 |

Note: * The FEIS indicates average truck trips of 60 per day with max up to 147 trucks per day.

As noted in Table 1, the Off-Ramp or the On-Ramp will generate 23 construction vehicles each, during the AM peak hour and 2 construction vehicles each during the PM peak hour. The traffic resulting from construction vehicles utilizing each temporary ramp will be less than 50 Passenger Car Equivalents (PCE's) during peak hours, a threshold that is required to cross under Level 1 screening, and to conduct a detail CEQR Level 2 screening assessment (Note: One truck is assumed to be $=2$ PCE, 23 Trucks X $2=46$ PCE's). Furthermore, throughout a typical weekday, the range of hourly truck trips (temporal distribution) generated by the project during construction will vary between 0 trips to a maximum of 23 trips on each Off-Ramp or the On-Ramp (See Table 6.9-10, Appendix A). Throughout a typical construction weekday Level 1 screening threshold will not be crossed. Therefore, no further traffic assessment is warranted under the CEQR guidelines for environmental review purpose in order to obtain approval on this modified two-phase construction scheme due to the provision of temporary slip ramps along northbound FDR Drive for this project.

## Conclusion:

The traffic assessments conducted under this Technical Memorandum as an addendum to the previously approved FEIS (in particular, Chapter 6.9 Construction-Transportation), indicates there will be no significant traffic impacts resulting from the proposed temporary slip ramps along the northbound FDR Drive to allow access to "Project Area One" during daytime construction operations. The traffic resulting from the proposed construction on these temporary ramps will be about 46 Passenger Car Equivalents (PCE's) during the highest peak hour, which is below the CEQR Technical Manual threshold of Level 1 traffic impact screening. The significantly adverse traffic impacts to the project surrounding roadways are considered unlikely when Level 1 traffic screening threshold limits are not surpassed. Thus, a detailed analysis is not warranted. Furthermore, keeping in view the low peak hour project generated truck volume during construction, the temporary slip ramps (depicted in Appendix B), should be also considered and approved by the owning agencies for both daytime and nighttime operations.

Apart from the above noted traffic analysis and its conclusion, it is important to note that the project sponsors will continue to work with OCMC and the NYCDOT to address any potential traffic operational issues that may emerge before and during the construction operations.

# East Side Coastal Resiliency Provision of Northbound FDR Drive Slip Ramps for Project Area One construction 

Traffic Memorandum

APPENDICES

## APPENDIX A

## TABLES \& FIGURES FROM THE 2019 FEIS USED FOR THIS TRAFFIC ASSESSMENT

Table 6.9-7
Average Number of Daily Workers and Trucks by Year and Quarter Project Area One - The Preferred Alternative ${ }^{1}$

| Year | 2020 |  |  |  | 2021 |  |  |  | 2022 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quarter | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th |  |  |
| Workers/Worker Autos | 27/10 | 173/64 | 250/92 | 250/92 | 250/92 | 250/92 | 250/92 | 250/92 | 250/92 | 250/92 | 230/85 | 230/85 |  |  |
| Trucks | 6 | 34 | 45 | 111 | 111 | 39 | 39 | 147 | 147 | 39 | 39 | 39 |  |  |
| Year | 2023 |  |  |  | 2024 |  |  |  | 2025 |  |  |  |  |  |
| Quarter | 1st | 2nd | 3rd | 4th ${ }^{1}$ | 1st ${ }^{1}$ | 2nd ${ }^{1}$ | 3rd ${ }^{1}$ | 4th ${ }^{1}$ | 1st ${ }^{1}$ | 2nd | 3rd | 4th | Average | Peak |
| Workers/Worker Autos | 230/85 | 183/68 | 160/59 | 12/5 | 12/5 | 12/5 | 12/5 | 12/5 | 12/5 | - | - | - | 216/80 | 250/92 |
| Trucks | 39 | 31 | 27 | 4 | 4 | 4 | 4 | 4 | 4 | - | - | - | 60 | 147 |

Note:
${ }^{1}$ The build year for the proposed project is 2025 . Under the Preferred Alternative, the flood protection, reconstruction of three existing pedestrian bridges, foundations for a new shared-use flyover bridge, and park access features are expected to be completed in 2023, with the superstructure of the shared-use flyover bridge would then be completed in 2025.
Source: AKRF/KSE Joint Venture (JV), November 2018.

Table 6.9-10
Peak Construction Vehicle Trip Projections Project Area One - Preferred Alternative

| Hour | Auto Trips |  |  | Truck Trips |  |  | Total |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Regular Shift |  |  | Regular Shift |  |  | Vehicle Trips |  |  | PCE Trips |  |  |
|  | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total |
| 6 AM-7 AM | 74 | 0 | 74 | 23 | 23 | 46 | 97 | 23 | 120 | 120 | 46 | 166 |
| 7 AM-8 AM | 18 | 0 | 18 | 18 | 18 | 36 | 36 | 18 | 54 | 54 | 36 | 90 |
| 8 AM-9 AM | 0 | 0 | 0 | 18 | 18 | 36 | 18 | 18 | 36 | 36 | 36 | 72 |
| 9 AM-10 AM | 0 | 0 | 0 | 18 | 18 | 36 | 18 | 18 | 36 | 36 | 36 | 72 |
| 10 AM-11 AM | 0 | 0 | 0 | 17 | 17 | 34 | 17 | 17 | 34 | 34 | 34 | 68 |
| 11 AM-12 PM | 0 | 0 | 0 | 17 | 17 | 34 | 17 | 17 | 34 | 34 | 34 | 68 |
| 12 PM-1 PM | 0 | 0 | 0 | 17 | 17 | 34 | 17 | 17 | 34 | 34 | 34 | 68 |
| 1 PM-2 PM | 0 | 0 | 0 | 15 | 15 | 30 | 15 | 15 | 30 | 30 | 30 | 60 |
| 2 PM-3 PM | 0 | 5 | 5 | 2 | 2 | 4 | 2 | 7 | 9 | 4 | 9 | 13 |
| 3 PM-4 PM | 0 | 74 | 74 | 2 | 2 | 4 | 2 | 76 | 78 | 4 | 78 | 82 |
| 4 PM-5 PM | 0 | 13 | 13 | 0 | 0 | 0 | 0 | 13 | 13 | 0 | 13 | 13 |
| Daily Total | 92 | 92 | 184 | 147 | 147 | 294 | 239 | 239 | 478 | 386 | 386 | 772 |

Note: Hourly construction worker and truck trips were derived from an estimated quarterly average number of construction workers and truck deliveries per day, with each truck delivery resulting in two daily trips (arrival and departure).

* This table has been revised for the FEIS.


## APPENDIX B

## TEMPORARY WORK ZONE ROADWAY PLANS <br> (PHASE 1 AND 2)














