

Thomas Foley
P.E., CCM, DBIA, NAC
Commissioner

**Eric Macfarlane, P.E.**First Deputy Commissioner

Thomas Wynne, P.E. Deputy Commissioner Infrastructure

Joseph Lione, P.E. Associate Commissioiner Coastal Resiliency-Construction

July 27, 2023

East Side Coastal Resiliency Community (ESCR) Community Advisory Group (CAG) C/O Tara Duvivier
Pratt Center for Community Development
200 Willoughby Avenue Brooklyn, NY 11205
VIA EMAIL

Re: Fill-related questions from the May 2023 CAG Meeting

Dear ESCR CAG Members,

Below please find responses to the questions that DDC and HNTB/LiRo received after the May 2023 CAG Meeting related to fill and fill operations for ESCR Project Area 1 in East River Park.

1) What is the settlement rate for the fill, and how is the work being scheduled in consideration of that? At the CAG, Desiree listed several variables that affect fill settlement rate. Can there be a slide listing all those variables? There are concerns that this may not be complete by 2026, and it would be good to get a clearer understanding.

DDC Response: Rate is unknown. Settlement will be monitored and measured until the rate indicates negligible settlement. Environment does not have an impact on the settlement rate. It is the presence of existing layers of soft compressible soils which require the settlement. The wick drains help remove the pore water from soft compressible soils which aids in soil settlement. As the fill is placed, it is compacted in lifts by machinery until the specified compaction density is reached. Time for settlement of the soils has been incorporated into the schedule. This is one of the reasons the contractor prioritized this area, to reduce the risk associated with the unknown settlement period.

# 2) When is the fill targeted to begin?

DDC Response: First delivery of fill was delivered early June via barge. Next deliveries are scheduled for the week of July 31, 2023, continuing throughout the summer and into 2024.



3) Should we assume that under the revised plan, the fill process will begin near Stanton St. and move south?

DDC Response: Fill will be distributed throughout the Phase 1 area in stages. Fill depth varies throughout the site. The deepest fill is towards Houston St. tapering to Montgomery Street.

4) We assume that the Shared Use Path in the Phase 1 area will need to remain open so that Parks and emergency responders will be able to get vehicles into the open north end - is this correct?

DDC Response: Yes, the SUP will be closed to the public and access as required for emergency vehicles and Parks Department vehicles will maintained.

5) How will the fill be retained? Right now there aren't any walls next to the water or next to the Shared Use Path.

DDC Response: Fill will be retained by the raised esplanade and other retaining walls. These structures are currently under construction and where applicable will be in place prior to fill operations.

6) Our understanding is that the Compost Yard will be restored south of the Amphitheater more or less in its original location. How are the plans for this going, and what will the fill look like in that area? How will it slope down to meet Pier 42 but keep the Compost Yard level?

DDC Response: Design for the Compost Yard is underway and will be incorporated into the current design.

7) In the Amphitheater area, do they need to build the Amphitheater structure first and then put the fill around it?

DDC Response: Considering the Amphitheater is a mound with seating ledges plus a stage area, the amphitheater seating will be constructed in conjunction with the placement of the fill. The seating area will be constructed first by embanking the fill and developing the seating ledges. The stage will be constructed second and is near existing grade.

8) Please describe the process for settling; what machinery and techniques are used? How much water or chemicals are being added to the fill in the process?

DDC Response: As mentioned above, settlement will be monitored and measured until the rate indicates negligible settlement. The wick drains help remove the pore water from soft compressible soils which



aids in soil settlement. As the fill is placed it is compacted in lifts by machinery until the specified compaction density is reached. No chemicals are used as part of the settlement or compaction processes. For the type of material being embanked typically the Contractor will use a single smooth drum vibratory roller for compaction (see example photo below).



# 9) Please describe the impacts on the East River, from barging, moving the fill, dewatering, settling, and capping.

DDC Response: No impacts to the East River other than additional boat/barge traffic are anticipated. Currently, no water from construction operations is being discharged into the East River.

#### 10) What are the work hours for the fill process?

DDC Response: There are no restrictions on work hours for fill activities, however, fill activities will primarily be during daytime work hours.

#### 11) Will the fill be covered each night?

DDC Response: Fill materials are not required to be covered overnight in accordance with the specification and NYCDEP requirements. If air quality or stormwater concerns are encountered the contractor will implement SWPPP and dust mitigation measures. Stormwater Pollution Prevention Plan (SWPPP) protective measures prevent soil materials from leaving the site: silt fence, hay bales, watering down, etc.



12) What will happen to the fill when it rains? What weather conditions are most concerning during the fill leveling process? What protective measures will be in place if we get a severe coastal storm during fill/settlement?

DDC Response: The fill material will be managed for Stormwater Pollution Prevention Plan (SWPPP) concerns while being staged for use onsite. SWPPP protective measures prevent soil materials from leaving the site which are already in place include silt fence, hay bales, storm drain protection, etc. SWPPP is part of the National Pollutant Discharge Elimination System (NPDES) regulated by the US Environmental Protection Agency.

13) Once completed, what maintenance of the fill is expected?

DDC Response: No maintenance of the fill is expected. As mentioned above, the fill will be monitored for air quality or stormwater concerns and settlement will continue to be measured. Once the soil has settled, the site will undergo restoration and the park hardscapes and amenities will be constructed.

14) Where is the fill coming from? What percentage is from the NYC Clean Soil Bank? • What percentage is being imported from outside New York? What percent of fill is already on site and being reused?

DDC Response: The fill material is coming from quarries and sources identified by the contractor and accepted by the PM/CM, HNTB-LiRo. The current quarry is a NYSDOT approved quarry which means it meets NYSDOT quarry standards. No soil to date has been identified by the contractor as being sourced from the clean soil bank due to geotechnical and volume requirements.

15) The Gerhels report (<a href="https://rebuildbydesign.org/news-and-events/updates/east-side-coastal-resiliency-independent-review-report-finalized">https://rebuildbydesign.org/news-and-events/updates/east-side-coastal-resiliency-independent-review-report-finalized</a>) estimated 3 barges a day for 3.5 years. Is this accurate? What percentage of the fill will arrive by truck?

DDC Response: The full approach for fill has not been finalized to date. Once it is, more details will be provided. It is assumed that all or most of the fill will arrive by barge.

16) On/around 6/6/23 there was a barge of material being offloaded into the park near the Fireboat House. As shown in the photo below, there is a puff of black exhaust each time the load is lifted. Are there Air Quality monitors there? What is the reading on this

exhaust? Can it be mitigated in some way?

DDC Response: Air monitors are located along the waterfront at the Fire Boat House and Williamsburg Bridge as well as along the FDR and at Delancey Street. PM/CM and the contractor has been and will continue to closely monitor the air quality results during construction activities. To date, barging operations have not been noted to create any additional air quality concerns or alerts.



- 17) In August 2021, DDC reported to the CAG the following "4.0 PROJECT DESIGN MEASURES 4.1 Site Cap and Importation of Fill The project design requires fill material to be imported in order to raise the elevation of ERP an average of 8 feet. The estimated volume is approximately 775,000 cubic yards of material."
  - a) Is this still correct? How much of the 45 acres is being raised 8 feet?
  - b) Is this sampling going to be provided to the CAG? ("Due to the large volume of material required for import, a sampling frequency of one per every 1,000 cubic yards would be conducted by an environmental professional.")

DDC Response: As mentioned above, the fill will be distributed throughout the Phase 1 and eventually Phase 2 areas. The deepest fill is towards Houston St. tapering to Montgomery Street. Fill depth varies throughout the site. The imported material originated as a virgin source and sampling of virgin material is not required per the specification and RAP (Remedial Action Plan) requirements.

- 18) Will there be vibration and noise while the fill is in the compaction process? How will this be mitigated and monitored?
  - a) What impacts on nearby buildings are to be monitored?
  - b) What impacts on nearby residents are typical of fill processes?

DDC Response: As mentioned above, the compaction process is typically completed with single drum vibratory rollers that compact the fill in specified lifts and to a specified density. This type of equipment will not generate noise or vibration above the current equipment onsite. While the PM/CM and the contractor continue to monitor the noise and vibration caused by construction activities, it is not anticipated that the compaction operation will impact nearby buildings with noise or vibration. The contractor installed noise monitors throughout the perimeter of the site in accordance with the specification and the contractor's noise monitoring plan accepted by the PM/CM. To date, the barging operations have not been identified as sources of construction related noise alerts.

Should air quality or stormwater concerns be encountered, the contractor will implement SWPPP and dust mitigation measures as mentioned above.

19) Who is being contracted for the fill process?

DDC Response: IPC and their team of subconsultants are completing the fill process.



## 20) What size are the granules of soil?

DDC Response: See below soil aggregate size chart from quarry:



Plant: Clinton Point Aggregate

Date Created: 11/07/2022 Date Modified: 11/07/2022

Name: 20221107 ESR Fill

Description:

Sieve/Test	Spec	Result	ESR Fill
Bin			
Price		0	0
% Product		0	0
TPH		0	0
% Gate			0
2" (50mm)	100-100		100.0
1 1/2" (37.5mm)	95-100		100.0
1" (25mm)			100.0
3/4" (19mm)			91.4
1/2" (12.5mm)			58.8
3/8" (9.5mm)			46.4
1/4" (6.3mm)			42.2
#4 (4.75mm)	22-66		42.0
#8 (2.36mm)			32.7
#10 (2mm)			29.2
#16 (1.18mm)			17.8
#20 (.85mm)			13.0
#40 (.425mm)			7.3
#50 (.3mm)			5.5
#60 (.25mm)			4.7
#100 (.15mm)			2.8
#200 (75µm)	0-2		1.19

### 21) What is the composition of the fill?

DDC Response: The fill material is a quarry processed material meaning it is a blend of coarse and fine aggregate from the crushing process of the virgin quarry rock.

Thank you again for your questions. Sincerely,

Jeffrey A. Margolies