Muddy River Flood Damage Reduction Project Phase 2 Construction Activities Next 90 Days October 2021

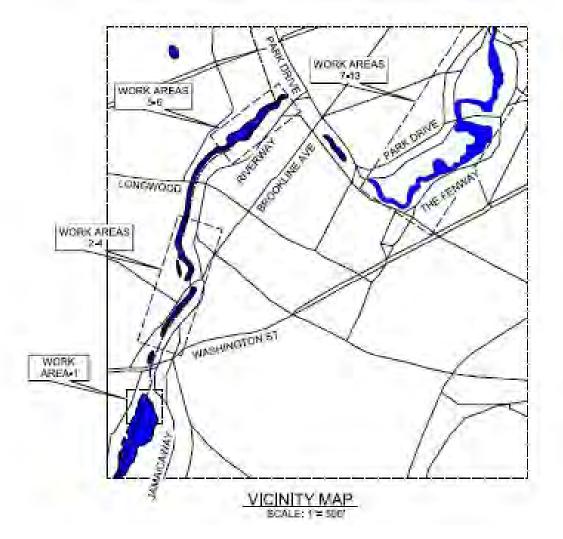
General: The Muddy River Flood Damage Reduction Phase 2 Construction Project is located in the footprint generally between Leverett Pond to Boylston Street in Boston and Brookline. The major project components involve dredging 1 to 8' of sediment for flow conveyance in the Back Bay Fens and the Riverway sections of the Muddy River. It also includes excavation of the sandbar and island at Leverett Pond. Work also includes the removal of *phragmites* from the wetland and riparian areas which affect flow conveyance. After removal of river sediments and *phragmites*, preservation and restoration of the historic park shoreline in construction areas will consist of planting emergent wetland plants and restoring riparian vegetation in upland areas by planting trees and shrubs. This Notice is intended to identify the general construction activities that will be performed in the next 90 days. A figure that shows a typical flood control channel and the proposed improvements is at the end of this report.

October 2021 through December 2021 Period:

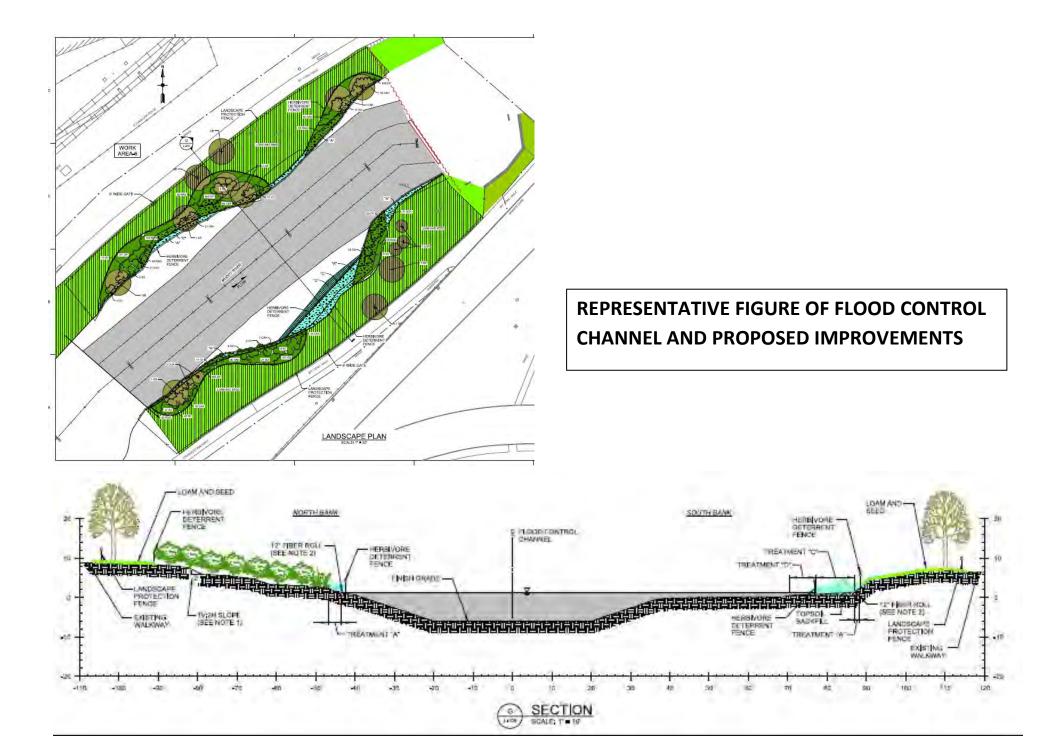
- Since the award of the construction contract and issuance of the Notice to Proceed over 18 months ago, the contractor has been actively dredging the sediment from the river and properly disposing of the material at disposal facilities. Utilization of two crews has maximized productivity of dredged sediments.
- Dredging of the Muddy River is divided into 12 work areas as shown in the Vicinity Map, with 6 work areas upstream of the Riverway and 6 work areas downstream of Ave. Louis Pasteur. At this time, the contractor continues dredging in Work Area #10.
- Work Area #2 section of river at Brookline Avenue and the Riverway near Beth Israel Deaconess Hospital the contractor completed dredging this section mid-February 2021. Surveying was done in February to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Rain and remnants of hurricane impacts affected progress of work. In addition, discovery of a collapsed drain line in the work area which requires repair ultimately deferred the planting of Work Area #2 to the Spring 2022 planting window as the best course of action.
- Work Area #3 section of river at Brookline Avenue, the Riverway, and Netherlands Road near Beth Israel Deaconess Hospital the contractor completed dredging this section late-March 2021. Surveying was done in May to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction began late September. Trees and upland planting will begin later this week and continue after Columbus Day and all planting, seeding, and path restoration will be completed by October. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- Work Area #4 section of river immediately downstream of Work Area #3, across Netherlands Road the contractor completed dredging this section early April 2021. Surveying was done late May to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction began mid-September. Upland planting began last week and will continue with more planting and tree plantings later this week and continue after Columbus Day and all planting, seeding, and path restoration will be completed by October. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- Work Area #1 Leverett Pond Additional sampling has been completed and resultant test results have been reviewed. A revised dredge footprint was engineered to address the recent information received. The contractor began dredging in Work Area #1 early May and completed dredging at the end of June. Surveying was done in mid-July to confirm new flood risk management cross sections. Since that time, materials and equipment in this area have been relocated to other active work areas. Planting and restoration of Work Area #1 have been deferred to Spring 2022 to coincide with the Spring planting window as we focus our planting efforts to Work Areas #3-#4 and #7-#9.

- Work Area #7 section of river immediately downstream of Avenue Louis Pasteur the contractor completed dredging this section at the end of December 2020. Surveying was done in early January to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction began early September. All upland plants have been planted. Trees will be delivered this week and will be planted by Columbus Day and all planting, seeding, and path restoration will be completed by October. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- Work Area #8 section of river immediately downstream of Work Area #7 the contractor completed dredging this section before the end of February 2021. Surveying was done in late February to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. All upland plants have been planted. Trees will be delivered this week and will be planted by Columbus Day and all planting, seeding, and path restoration will be completed by October. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- Work Area #9 section of river immediately downstream of Work Area #8 the contractor completed dredging this section mid-April 2021. Surveying was done in late June to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. All upland plants have been planted. Trees will be delivered this week and will be planted by Columbus Day and all planting, seeding, and path restoration will be completed by October. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- Work Area #10 section of river immediately downstream of Work Area #9 which ends at Agassiz Road dredging began in late April 2021 and will continue for several months and work will continue into next year in this work area. Work Area #10 has the largest quantity of dredged sediment to be removed at about 35,000cy. As planned, the dredge equipment (amphibious excavator) from Work Area #1 was mobilized to Work Area #10 in mid-July to supplement the dredging efforts. As we approach the narrower part of the Work Area #10 towards the Agassiz Road Bridge, the 2nd amphibious excavator will no longer be required. The plan is to divert this equipment and crew either back upstream to dredge Work Areas #5 and #6 or downstream to dredge Work Areas #11 and #12 mid- to late-November. Planting and restoration of Work Area #10 will begin once dredging is complete expected to be Spring 2022.
- Work Area #13 Boston Fire Department Building in the vicinity of the Fenway and Agassiz Road Construction of the new floodwall around the BFD building began with the demolition of the existing security fence and its footing in early May. That led to the excavation for the new wall subbase and foundation. As part of the foundation, helical piles began to be installed late May starting at the north section of the wall and was halted shortly after rounding the corner of the FD Building. This allowed for the excavation of the underground pump station which was set in place mid-June. Helical pile installation was completed at the end of June. Since that time, formwork, rebar, and concrete placement took place for both the wall foundation and the wall. Pump station pumps and electrical work will begin mid-October. The start of granite veneer installation was impacted due to supplier, which is still being addressed.
- Work Areas #11 and #12 Victory Gardens Area Temporary construction fence installation at the Victory Gardens began mid-January to allow for the construction of processing bins of the Central Processing Facility on the left bank of Work Area #11, to supplement the already constructed bins on the right bank near the Duck House. This was required due to the increase of daily dredged material production, necessitating additional bins to store the dredged sediment while it is dewatered and stabilized before the processed sediment is loaded and transported to the final disposal facility. These work areas will continue to see periodic activity as dredged material storage is required. However, dredging in the section of the river in these areas will likely begin much later this year or early in 2022.
- Work Areas #5 and #6 section of river by Short Street Bridge to Back Bay Yard near the intersection of Park Drive and Riverway dredging in the section of the river in these areas will likely begin much later this year or early in 2022. Site preparation and staging may take place late November should the 2nd amphibious excavator is mobilized to dredge this area.
- At the end of this notice we have included some pictures that show the construction progress at Work Areas #3, #4, and #7-#10. We thought folks would be interested in seeing the work occurring behind the fence.

• If you any questions, require additional information or would like to be added to the Project Contact List, please email the project mailbox at <u>MuddyRiver@usace.army.mil</u>

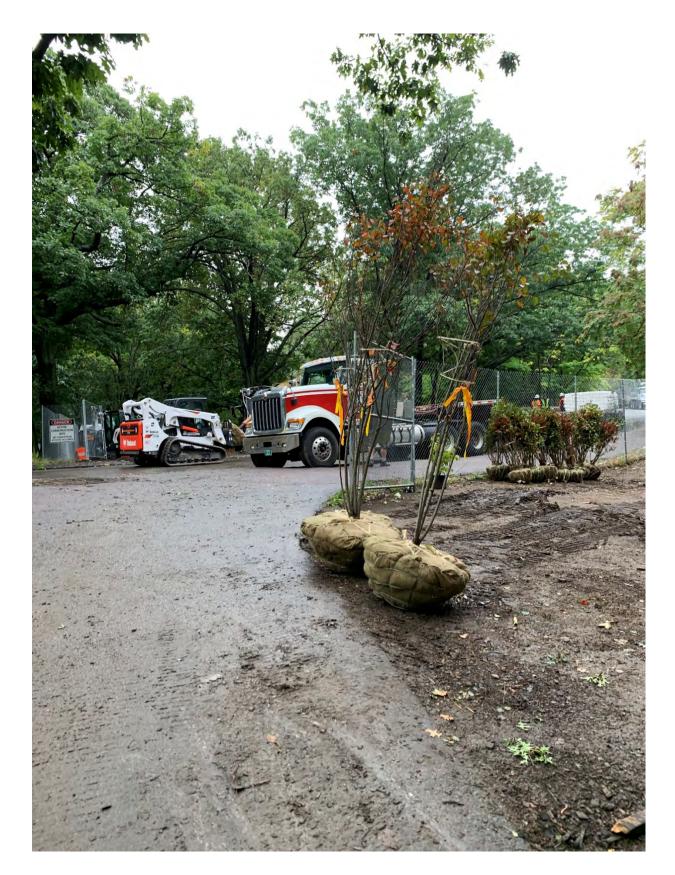


EXTENTS OF PROJECT WORK AREA FOR PHASE 2 CONSTRUCTION

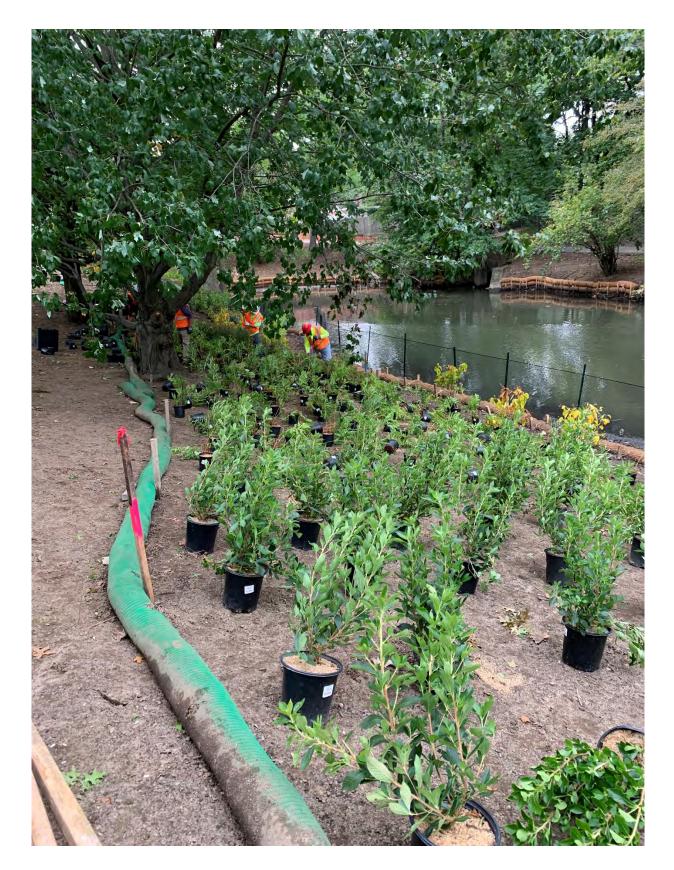




Work Area #3 – section of river at Brookline Avenue, the Riverway, and Netherlands Road – near Beth Israel Deaconess Hospital – view of graded bank on the near side and across the river is the constructed wetland shelf with coir log. Also installed is the temporary herbivore deterrent fence.



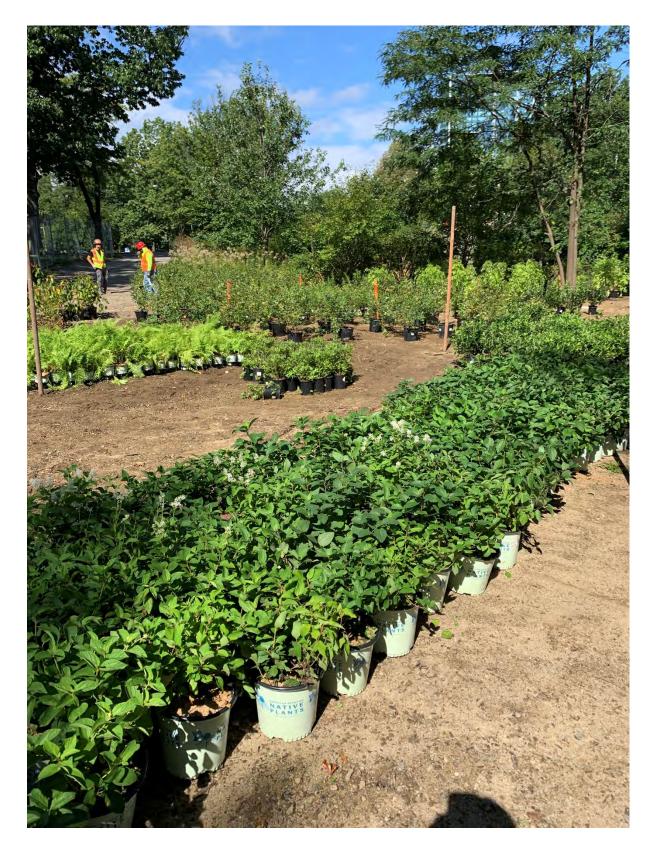
Work Area #4 – section of river immediately downstream of Work Area #3, across Netherlands Road – tree and shrub delivered to the site ready for planting.



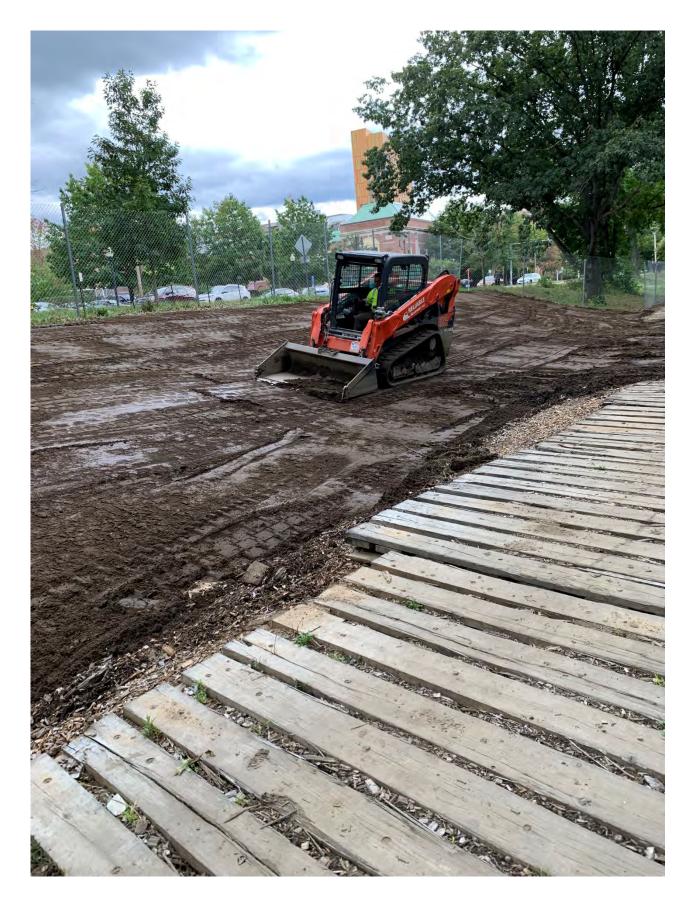
Work Area #4 – section of river immediately downstream of Work Area #3, across Netherlands Road – landscapers installing plants on the graded bank which are laid out by the landscape architect.



Work Area #4 – section of river immediately downstream of Work Area #3, across Netherlands Road – installed plantings. Two-year guarantee and maintenance period will begin shortly after provisional acceptance.



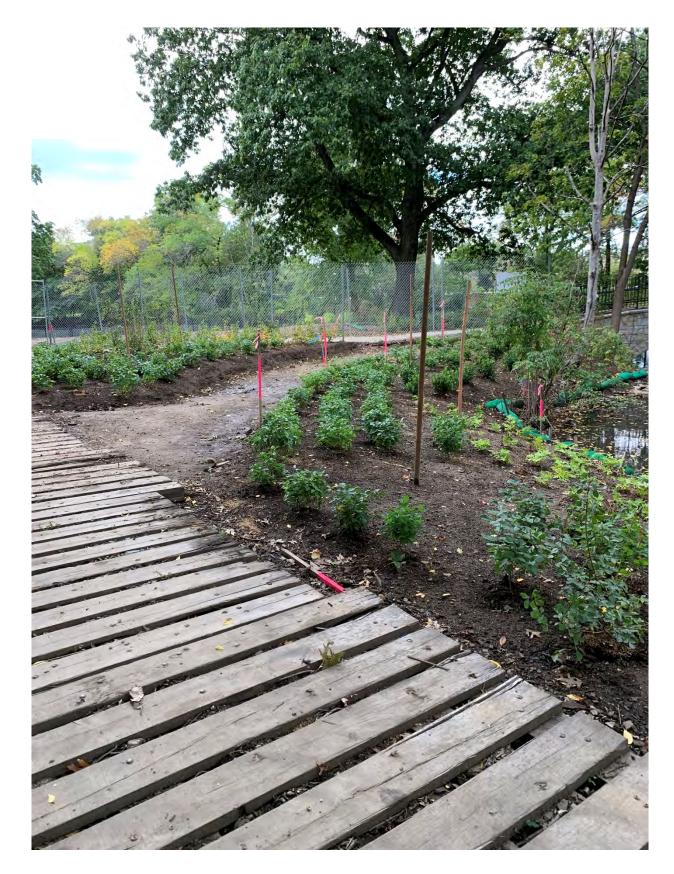
Work Area #7 – section of river immediately downstream of Avenue Louis Pasteur – shrub delivery. Note the pole which designates the new tree location.



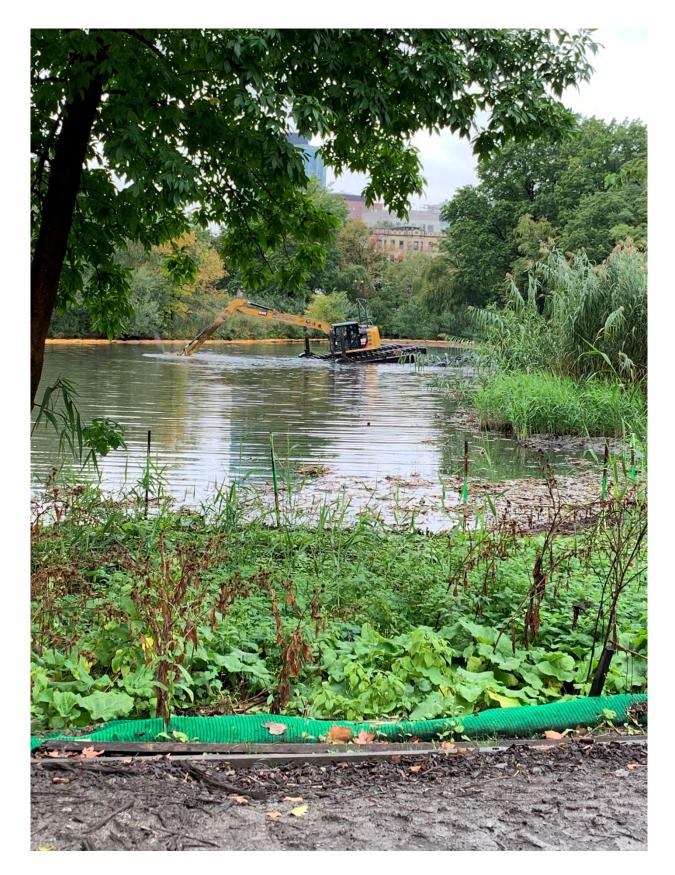
Work Area #8 – section of river downstream of Work Area #7 which is immediately downstream of Avenue Louis Pasteur – grading of the storage and staging area for restoration. Seed will be put down shortly.



Work Area #9 – section of river immediately downstream of Work Area #8 – constructed wetland shelves A (pickerel weed emergent plants) and B (wetland seed mix). Note the layers of temporary herbivore deterrent fence and temporary in-channel carp deterrent fence to allow for plant establishing during the two-year guarantee period.



Work Area #9 – section of river immediately downstream of Work Area #8 – constructed shrub beds for restoration and the existing stonedust pathway which will also be restored. Note the long pole which designates the new tree location.



Work Area #10 – section of river immediately downstream of Work Area #9 which ends at Agassiz Road – amphibious excavator dredging the sediment from the river.