

Muddy River Flood Risk Management & Environmental Restoration Project  
Phase 1 Construction Activities Next 90 Days  
September 2015

General: The Muddy River Flood Risk Management (FRM) & Environmental Restoration Phase 1 Construction Project is located in the footprint generally between the Riverway downstream to Avenue Louis Pasteur. The major project components involve the installation of a 10-foot by 24-foot box culvert under the Riverway roadway, the installation of 10-foot by 24-foot box culvert under the Brookline Avenue roadway, daylighting of the area between the Riverway and Brookline Avenue, and daylighting of the area between Brookline Avenue and Avenue Louis Pasteur. Daylighting is the removal of existing twin 72" culverts and excavation of the area to return the waterway to a natural state. This Notice is intended to identify the general construction activities that will be performed in the next 90 days. A figure that shows the existing conditions and the proposed improvements is at the end of this report.

**September 2015 through November 2015 Period:**

- In order to continue work on the project, a traffic shift will occur mid October in the intersection of Park Drive and Riverway. This shift will allow the construction of the new left turn onto Park Drive North coming from Riverway. Specific details of this traffic shift will be posted as a Press Release weeks prior to the move.
- The contractor completed the installation of the Flow Restriction Control Structure (FRCS) upstream of the existing Riverway Intake Structure at the Phase 1 Construction project limits. The FRCS is necessary to control the increased flow that may now be passed through the new precast concrete culverts at Riverway and Brookline Avenue. However, these increased flows are not able to be passed downstream of Avenue Louis Pasteur to the Charles River until the dredging is completed under Phase 2 work. As part of this recent work, the contractor installed a sheetpile cofferdam, which temporarily connects to the FRCS and bisects the river, in anticipation of the sediment removal/bank restoration activities in the upcoming months.
- In the Riverway Culvert work area, since the precast culverts were installed mid August, the precast headwall has been installed and the southeast (downstream right) wingwall has been formed and placed. The precast culverts have been waterproofed and backfilled. Site work, such as curbs, sidewalks, ramps, and paving, to put traffic over the culverts will take place in September in order to implement the next traffic shift in mid October.
- A new activity that will begin in the next few weeks is the relocation of a portion of the existing 24" sewer line in the former Sears Parking Lot. The majority of the new sewer line will be installed before the end of this year; with the completion and connection to the existing system expected in early 2016, once the existing twin 72" culverts are abandoned.
- A continuing activity in the next couple of months, in the area around the former Sears Parking Lot (Park Drive Island, near Brookline Avenue), is the installation of conduits and foundations for the end condition roadway lighting and traffic signals and construction of end state island and walkways. In addition, once the permanent utilities are energized and active in Brookline Avenue, the temporary utilities will be disconnected, which will allow the "daylighting" of the former Sears Parking Lot. Activities related to the daylighting, such as removing the top 4' of the parking lot and driving steel sheetpile for the river diversion, will begin late this month. Active excavation to construct the southside (right side, looking downstream) of the new river channel will take place in the next few months. Excavation to construct the northside will take place early 2016 once the existing twin 72" culverts are abandoned and the river is flowing through the new culverts and the southside of the constructed river.
- In early to mid November, the Jug Handle roadway will be removed permanently from service, once the new left turn onto Park Drive North coming from Riverway is constructed and open to vehicular traffic. Closing the Jug Handle roadway will allow the daylighting of this portion of the work area which continues the daylighted portion of the waterway at the former Sears Parking Lot, now connected by the new Brookline Avenue culvert. This

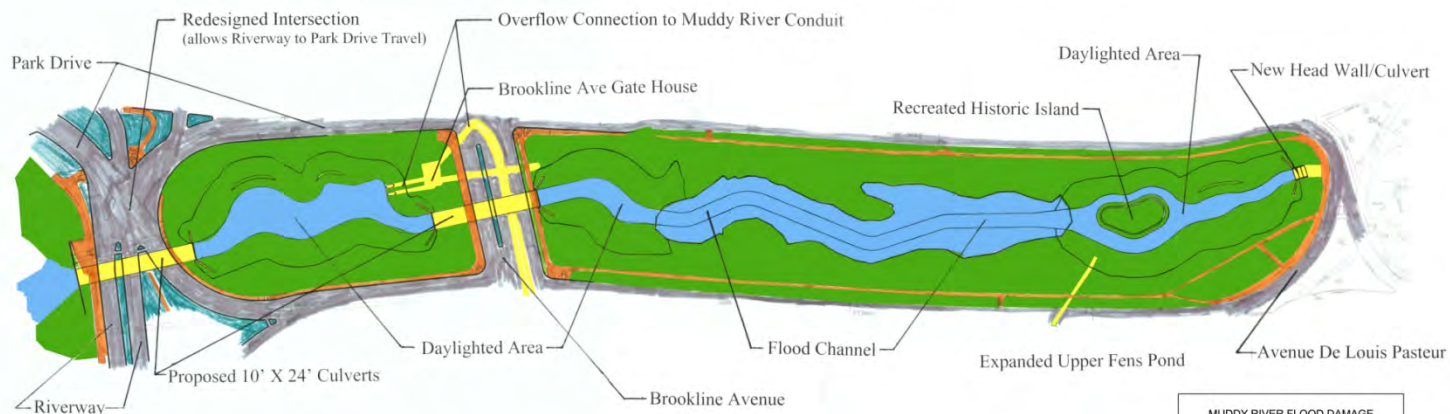
daylighted portion of the Jug Handle will feed directly to the Upper Fens Pond as a natural waterway. Advanced notice of the Jug Handle roadway removal will be posted as a Press Release, as well as advanced posted signage, weeks prior to the move.

- Since the active diversion of the river began in mid-April, the removal of the sediment in the river bottom to construct the new flood risk management channel; and the bank restoration/stabilization on both sides of the channel with stone protection in the Upper Fens Pond has been completed. Geocells have been installed on the upland part of the channel and bank construction is complete. Plantings will begin in mid September and be complete by mid October, during the Fall planting season.
- Upstream of Avenue Louis Pasteur (ALP), the steel sheeting support of excavation (SOE) has been installed and excavation from within the SOE completed. All the pipe piles were installed before Labor Day; and rebar and formwork will begin for the pile caps and invert slabs mid September. Precast culvert sections may be installed early October, with the forming and placement of both wing walls mid October. Once the extension piece of precast concrete culvert is in place, then the section of existing culvert between the Upper Fens Pond and Avenue Louis Pasteur will be removed and the river “daylighted” to continue the flood risk management channel and the recreation of the historic Olmstead island. Daylighting and the construction of the historic island will take place late Fall through early Winter.
- Downstream of Avenue Louis Pasteur, the contractor has removed the sediment from the outlet and inside of the existing culvert to construct the new flood risk management channel. The articulated concrete blocks (ACB) for scour protection have been installed; and stone protection and geocells for bank stabilization at this downstream end of Phase 1 Construction is completed. Plantings will begin in mid September and be complete by mid October, during the Fall planting season.
- At the end of this notice we have included some pictures that show the construction progress in the Riverway Intake Structure; Riverway Culvert; the Upper Fens Pond; and Avenue Louis Pasteur work areas. We thought folks would be interested in seeing the work occurring behind the fence.
- If you have any questions, require additional information or would like to be added to the Project Contact List, please email the project mailbox at [MuddyRiver@usace.army.mil](mailto:MuddyRiver@usace.army.mil)



TRAFFIC MANAGEMENT PLAN DURING SECOND PHASE OF RIVERWAY CULVERT INSTALLATION AND THE CREATION OF THE NEW WALKWAY AT PARK DRIVE ISLAND

## Muddy River Flood Damage Reduction & Environmental Restoration Project



Proposed Phase 1 Improvements

MUDDY RIVER FLOOD DAMAGE  
REDUCTION AND ENVIRONMENTAL  
RESTORATION PROJECT  
(PHASE 1)  
BOSTON AND BROOKLINE, MASSACHUSETTS



Existing Phase 1 Conditions

MUDDY RIVER FLOOD DAMAGE  
REDUCTION AND ENVIRONMENTAL  
RESTORATION PROJECT  
EXISTING CONDITIONS  
BOSTON AND BROOKLINE, MASSACHUSETTS





Upstream limits of Phase 1 Construction – line of steel sheeting installed as the Flow Restriction Control Structure (FRCS). Note the two weir opening in the sheeting to allow continuous flow over the structure; constructed walkway for maintenance of this structure; and scour protection of the FRCS with stone – early September 2015.





Granite veneer installation and pointing on the upstream headwall of the new Riverway culvert – early September 2015.





Site work (curb, sidewalk, grading, ramps) at the Park Drive Island – new permanent sidewalk will be open after the next traffic shift in mid October – early September 2015.





Waterproofing of the new precast concrete Riverway Culvert and rebar at the southeast wingwall – mid August 2015.



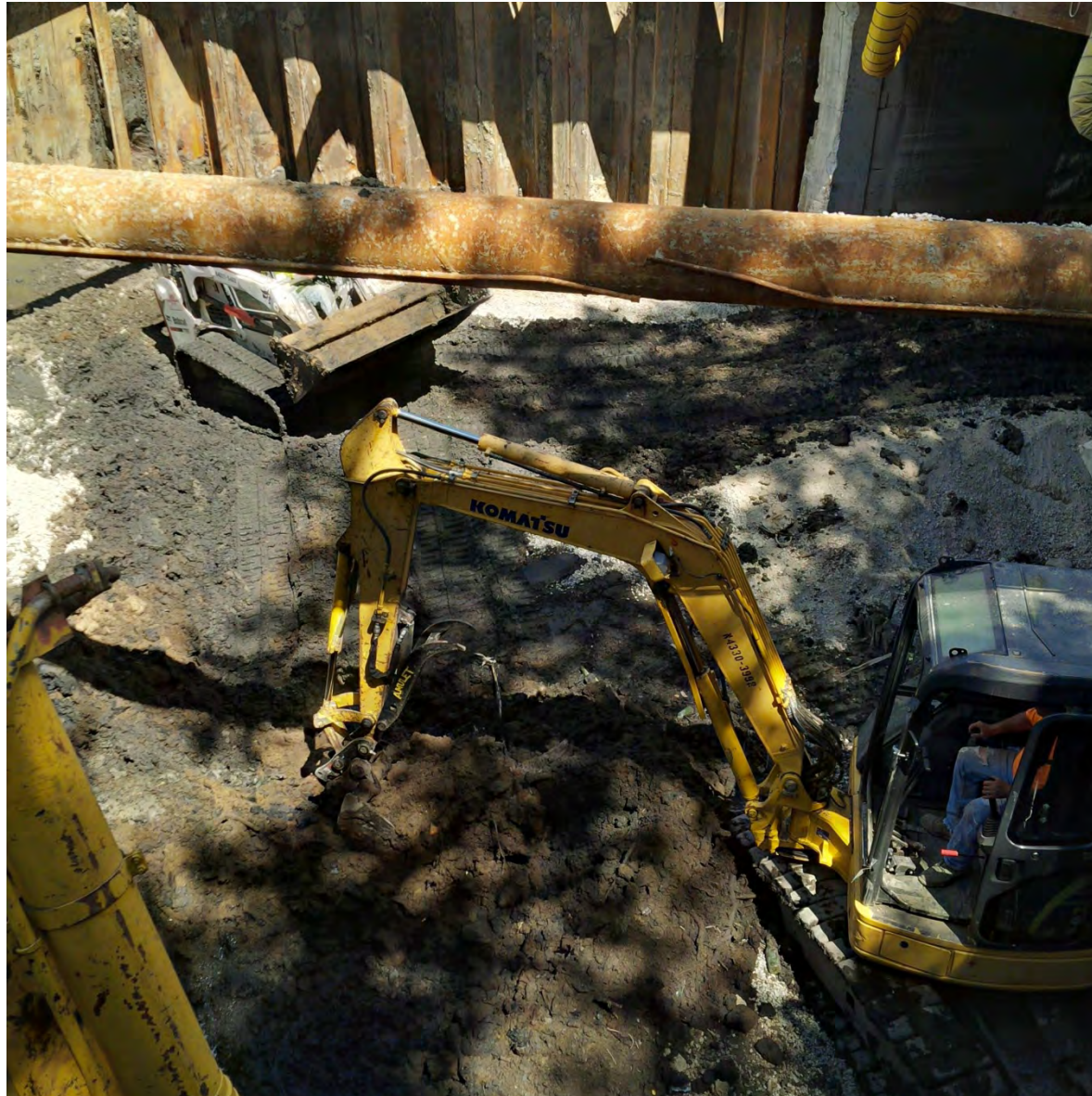


Downstream precast concrete headwall connected to the precast concrete Riverway culvert section. Note also the placed southeast concrete wingwall – late August 2015.



New Riverway precast concrete culvert is almost completely backfilled to grade. Note the backside of the downstream headwall – late August 2015.





Sediment removal operation from inside the existing Avenue Louis Pasteur culvert. Approximately 3' of accumulated sediment was removed from inside the culvert – mid August 2015.



Completed sediment removal from inside the existing Avenue Louis Pasteur culvert revealed an existing timber flooring – late August 2015.





Installed pipe piles which will support the new upstream precast culvert sections that will be connected to the existing Avenue Louis Pasteur culvert – early September 2015.





Downstream of Existing Avenue Louis Pasteur – sediment removed from inside the culvert; and installation of the articulated concrete blocks (ACB) has begun – late August 2015.





Downstream of Existing Avenue Louis Pasteur – ACB's installed for channel bottom scour protection; stone protection and turf reinforced mattress installed for bank stabilization/restoration; and loam placed ready for plantings to complete this area of work – early September 2015.