# Priority List for Ardsley Flood Risk Management Project

Items referenced from the United States Army Corps of Engineers 2010 Periodic Inspection Report

# Unacceptable Deficiencies: Immediate Impact on System Performance

1. The flap gate on undocumented 8-inch drain line is stuck open. Repair immediately.
2. Recommend complete removal of the Old Ashford Avenue Bridge and restoration of the underlying floodwalls. Coordinate removal with the party responsible for repairing the road abutment. Bridge has Gaps that exist between the arched superstructure of Old Ashford Avenue Bridge deck and the top of the floodwall. If bridge removal is not promptly addressed, the full depth of the voids beneath old Ashford Avenue Bridge should be determined then filled with masonry and sealed with hydraulic cement.
3. Animal burrows exist next to floodwall. Eliminate all burrowing animals from the project and completely fill in their burrows.
4. The trash rack for outlet structure #3 has debris, remove debris.
5. A thorough video inspection required for all of the culverts. Clean and video inspect all culverts. (DEC will perform video inspection)
6. Addeyman Square adjacent to Old Ashford Avenue Bridge

* Sinkhole at Addeyman Square needs video inspection to evaluate conduit. Need to determine cause of sinkhole and rehab plan.
* The inlets to a pair of HDPE pipes beneath Old Ashford Avenue Bridge are undetermined; need to confirm if drainage originates from downspouts from adjacent buildings.

1. Vegetation growth, debris and sediment obstructs water flow through the Ardsley Flood Control Project. Maintain vegetation in accordance with USACE guidelines and remove excessive vegetation and sediment in accordance with USACE guidelines.

* Vegetation is growing along both sides of concrete channel and along the riprap embankment.
* Vegetation and trees greater than 2-inch diameter are growing against the floodwall. Hand removal maybe required.
* Maintain vegetation in ponding areas and interceptor ditches. Remove all debris and tree limbs noted in the channel.

1. Sink holes exist above 30 inch interior drainage culvert leading from drop inlet #3 to #4. Excavate voids and sinkholes adjacent to these structures and repair the problem that is creating them.
2. Spalling and cracking of concrete surface and horizontal joint at top of wall. Stones falling from Saw Mill River Rd. abutment at the NYCDEP blow-off tunnel. Repair all concrete in accordance with USACE guidelines.
3. No documentation for why the non-structural as-built flood proofing was not present or available on structures #2 and 4. A dialog with the current owners is prudent.

# Minimally Acceptable Deficiencies: Immediate impact on System Performance

1. Sediments are building in front of the flap gates. Flap gates not properly lubricated. Maintain all flap gates in accordance with USACE guidelines.
2. Sediments are building up in the drainage structures. Sluice gates not properly lubricated. Maintain all sluice gates in accordance with USACE guidelines.
3. Vegetation is overgrowing ponding area # 2. Ponding area #2 may have a water table that is too high for grasses. The public sponsor should determine whether to re-establish a grass cover or provide an alternative to grasses for the Corps to review.

# Minimally Acceptable Deficiencies: Future impact on System Performance

1. The public sponsor does not have an Emergency Action Plan nor do they maintain a supply of flood fighting materials. A written specific flood response plan and a solid understanding of how to operate, maintain, and staff the system during a flood. Was an early warning system installed and connected to the Ardsley Police Department?
2. There are no flood-fighting supplies. The public sponsor needs to acquire and maintain a supply of flood fighting materials.
3. Sediment and debris are accumulating in channel downstream of the old Ashford Avenue Bridge. Remove shoals between project segments in accordance with USACE guidelines.
4. Heavy vegetation growth found on the riprap-protected slopes on the right bank of the Saw Mill River opposite of the floodwalls, remove vegetation growing on the embankments in accordance with USACE guidelines.
5. Recent survey information is unavailable. Either remove encroachments if inappropriate or documented as acceptable. Verify and monument the limits of the project easements in the field. (DEC will perform Project Survey)

* Investigate the installation of pedestrian bridge. The abutments of the new pedestrian bridge may interfere with the flow in the Flood Damage Reduction Channel. Channel encroachments are not on the as-built plans.
* Investigate a small drainage pipe on the right bank of interceptor ditch #1.
* Investigate utility pole and chain-link fence immediately adjacent to floodwall.

1. Repair scour hole at bottom of concrete channel immediately downstream of the old Ashford Avenue Bridge. Repair the damaged concrete in accordance with USACE guidelines.
2. The sponsor should redesign and replace the walkway along the channel south of Ardsley Square.