Agenda Report

Subject: **Stormwater Update – May 15, 2012**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: May 10, 2012

Joint Meeting with Illinois DNR, Illinois EPA, and US Army Corps of Engineers to Review Stormwater Tunnel Project. On May 10, Manager Bahan, Dan Veriotti from Baird Associates (the Village's coastal engineering consultant), Thomas Burke from Christopher B. Burke Engineering, and I met with staff from the Illinois Department of Natural Resources, the US Army Corps of Engineers, and the Illinois EPA (attendance by phone) to review several preliminary designs prepared by Baird Associates for the discharge structure to Lake Michigan from the proposed Willow Road Stormwater Tunnel. It was important to have this meeting at this time as part of the detailed feasibility analysis of the proposed tunnel project, in order to determine whether any of the preliminary outfall designs would be considered objectionable to the regulatory agencies.

At the meeting, the overall concept of the tunnel project was reviewed, and the detailed preliminary designs were presented to obtain comments. Five preliminary designs prepared by Baird Associates were reviewed – 2 involved discharges at the water's edge, 2 involved water-level discharges approximately 140 to 180 feet offshore, and one design involved a below-water discharge. Based on feedback obtained at the meeting, none of the proposed designs raised concerns to the point that permitting would be considered doubtful, although the submerged design was the least preferred of the alternatives presented.

Comments from the Department of Natural Resources focused on developing an evaluation and methodology of the volume of water that would be diverted from the Skokie River watershed to the Lake Michigan watershed, for purposes of maintaining and evaluating the Lake Michigan water diversion accounting, as well as assuring that the project would not result in a net loss of natural sand transport, which could lead to beach accretion or erosion.

The US Army Corps of Engineers permitting authority for the project is limited to the construction work at Lake Michigan, considered waters of the United States. The Corps of Engineers comments relate to the physical impact of the proposed construction on Lake Michigan, including safety, public access, and aesthetics, and actions taken to mitigate those impacts. The Corps indicated that the options that created fewer disturbances to the Lake would be easier to mitigate than the options that extend further into the Lake. An additional specific recommendation from the Corps was to review the project with the US Fish and Wildlife Service to verify that there are no Threatened or Endangered Species, or Species of Concern, affected by the project. This follow-up will take place in the near future.

The Illinois EPA remains focused primarily on water quality, and indicated that there would be little difference between the proposed options other than those raised by the Army Corps of Engineers. Follow-up information from the EPA indicated that in addition to the joint permitting for the Lake Michigan discharge, their permitting process would review the overall project as a modification to the Village's existing Municipal Separate Storm Sewer System permit with the EPA.

These comments will be considered, along with other factors including cost, long-term maintenance, and public acceptance of alternatives, to select the preferred discharge method for the stormwater tunnel. Based on the summary of these comments, staff and the Village's consultants believe that permitting for this project remains a feasible undertaking.

The next steps in the feasibility analysis for the tunnel project include selecting a preferred alternative for the discharge structure, obtaining a further cost estimate from a tunneling contractor based on these schematic designs, and presenting this information to the Village Council to determine if the tunnel project should remain the Village's preferred alternative for addressing stormwater flooding in three western Winnetka watersheds.

Recommendation:
Informational Report.