V I L L A G E O F W I L M E T T E

1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

TUESDAY, January 29, 2009
7:45 A.M.
SECOND FLOOR TRAINING ROOM OF VILLAGE HALL

Members Present:	Trustee Mari Terman, Chair Trustee Alan Swanson Trustee Karen Spillers
Members Absent:	None
Staff Present:	Brigitte Mayerhofer, P.E., Director of Engineering Services Donna Jakubowski, Director of Public Works Jorge Cruz, P.E., Assistant Director of Engineering Services Scott Hilts, Project Manager Linda Reilley, Engineering Assistant
Guests Present:	President Canning Mark Wagstaff, MWH Americas Tom Rowlett, MWH Americas Paul Moyano, MWH Americas Brenna Mannion, MWH Americas

I. CALL TO ORDER.

Chairperson Terman called the meeting to order at 7:55 a.m. Committee members Terman, Swanson and Spillers were present.

II. SEPARATE SEWER SYSTEM STUDY-- DISCUSSION

Chairperson Terman asked Ms. Mayerhofer to introduce the purpose of the meeting. Ms. Mayerhofer noted that today was the kickoff meeting for the separate sewer system study west of Ridge Road. Village staff and the consultants will spend the better part of the day working through various topics related to the study. By June, the Village will have

direction on what investments should be made in the separate sewer system infrastructure and what their intended benefit will be. Ms. Mayerhofer introduced Mark Wagstaff, MWH Americas, who will be the project manager for the study.

Mr. Wagstaff introduced the members of the consultant team and described their respective roles. He noted the discussion points for the meeting with the Committee are as follows:

I. Brief history and overview of past sewer system studies
II. Schedule and critical milestones
III. Expectation of system performance ("level of service")
IV. Other agency participation (Glenview, MWRDGC)

Mr. Wagstaff noted the study will focus on both the storm and sanitary sewer systems. He suggested they are different systems but interrelated because when there is heavy rain, water enters the sanitary sewer system. He stated that although previous studies had defined projects that range in the several millions of dollars, the purpose of this study is to perform a cost / benefit analysis of various recommendations.

Trustee Terman asked if there was field work involved to verify the condition of the pipe network. Mr. Rowlett noted there may be a small amount of field work, including wanting to understand the physical arrangement between the storm and sanitary systems. He suggested they will work with Village staff to gather information that is missing.

Trustee Swanson asked if the Kenilworth Gardens subdivision was developed in a manner typical of other areas west of Ridge Road. Mr. Rowlett indicated that Kenilworth Gardens (developed in the 1920's) was one of the first separated sewer areas ever built. Although the main lines were adequately separated, the storm and sanitary sewer services were likely laid in the same trench. Mr. Rowlett also noted that this area also has a high water table and eight to ten feet of fill. Chair Terman asked if the fill material posed a stability problem to which Mr. Rowlett indicated the fill creates a natural path for groundwater to travel. He said there has not been evidence of settlement.

Mr. Rowlett continued to say the branch sewers in the Kenilworth Gardens area were determined to be several feet above the mainline sanitary sewers, so the in-line storage project allowed construction of relief sewers that could flow by gravity.

Mr. Rowlett stated that other subdivisions developed later in the century could have construction characteristics that contribute to flooding. He noted the elevations of the sanitary and storm sewers are of particular concern. Trustee Swanson suggested there may be similarities within each neighborhood. He also noted that the Village has performed sewer lining in several areas that still receive infiltration, which suggests the sewer laterals are contributing to the problem.

Trustee Swanson also asked the consultant to look at the Hibbard Road areas because Hibbard Road is a likely candidate for future work. Mr. Rowlett explained to the Committee that after WWII the Harms Road interceptor was built, which changed the path of flow for the west end of the Village. Some of the flow takes a circuitous path to the Harms Road Interceptor. Adding to the challenge is that Wilmette's topography is flat and the sewer system is generally shallow.

Mr. Rowlett further noted that the connection of the Village's sewer system to the Harms Road Interceptor is at the same invert elevation, which can lead to a backflow situation during heavy rain events.

Mr. Rowlett suggested the ultimate solution will probably consist of a public / private partnership as well as a multi-phase approach. The Committee discussed the purpose of flow metering and the fact that it has to rain for the meters to be effective.

Mr. Rowlett continued to say that in the early 1990's Wilmette conducted flow monitoring with meters in the local system as well as upstream and downstream in the MWRDGC (the "District) interceptor system. During a captured 25-year rain event, 30 million gallons of flow disappeared within our system. The theory is that the flow came back through Wilmette's system and cross flowed to the storm sewer.

President Canning asked what role the District has moving forward, to which Mr. Rowlett noted they will be issuing permits for future improvements. He stated the Village already has one of the highest permitted ICAP (Infiltration Inflow Corrective Action Program) rates. The ICAP program is a mandatory program with the District to make sure excessive stormwater is removed from the sanitary sewer system. The ICAP rate is established as the four- hour average flow rate generated by a two-year, one hour storm. The four hours represents an average time of concentration.

Chair Terman asked if this area is in a floodplain. Mr. Rowlett noted that the topography is flat, but not in the floodplain. He also noted there is a very high water table, which contributes to the problem. Trustee Swanson noted that the relief sewer improvements on the combined side east of Ridge Road have proven to be very effective.

Mr. Wagstaff discussed the schedule for the study which is to develop a list of capital priorities by April, in time for the capital improvement program evaluation. He continued to discuss "level of service" for the sewer system, which is a level of protection that the system should be designed for. Trustee Swanson asked if there was a standard design for sewer systems. He noted that the rain events now are very different than the rain events from years ago. Mr. Rowlett agreed and stated there is a greater history of rain events so that the data has changed.

Mr. Rowlett stated that the storm systems are typically designed for a ten-year storm. Detention reservoirs are typically designed for a hundred year rain event. Mr. Moyano suggested that this varies depending on what communities are used to. He suggested that Wilmette may be used to standing water on the street, but very concerned about the number of sewer backups. Trustee Spillers concurred stating that homes are using their basements more and more as living space.

Ms. Mayerhofer asked Mr. Rowlett to confirm that the storm sewer system design ranges from a 3 month to 1 year storm to which he concurred. He recalled that storm sewer overflows do not seem to cause a lot of overland flooding but when the storm system becomes pressurized, it can lead to cross flow into the sanitary sewer. He highly recommended dye testing sewers at the same time they are televised/cleaned to identify cross flow.

Mr. Rowlett provided further details regarding differences in sewer system performance depending on when they were developed and what building codes were applicable at the time.

Trustee Swanson asked what the District's role will be moving forward. Mr. Rowlett noted it will depend on the solution. If the focus is on the Harms Road interceptor improvements, the District may not be receptive to our solution without some negotiation. President Canning suggested that Glenview may also need to be a partner in the solution. Mr. Rowlett noted our local sewer system has three Glenview connections so they will eventually need to be a part of the discussion.

Ms. Mayerhofer stated that she believes the District will be much more willing to work with the Village if we are making a concerted effort to reduce inflow and infiltration. Trustee Swanson concurred indicating this is one of our goals. Mr. Wagstaff stated that MWH is also working with Glenview and the District on various studies and can open the door for future discussions.

Finally, Mr. Wagstaff briefly described the status of the District’s deep tunnel and reservoir plan. Although the McCook reservoir is scheduled to be on line in four to five years, it will have minimal benefit to the Village’s sewer system because we are not constrained by the outlet.

Chair Terman summarized the goal of the study and concluded the discussion by asking what the next step will be. Ms. Mayerhofer said the results of the study will be discussed with the Committee or perhaps the full Village Board as soon as the alternatives are developed.

OTHER BUSINESS.

There was no other business to come before the Committee.

III. AJDOURNMENT.

At 9:00 a.m., Trustee Swanson moved to adjourn the meeting. The motion was seconded by Trustee Swanson. No further discussion occurred on the motion. Voting yes: Chairperson Terman, Trustee Swanson and Trustee Spillers. Voting no: none. **The motion carried**.

The meeting was thereafter adjourned.

Minutes Respectfully Prepared by Brigitte Mayerhofer, P.E., Director of Engineering Services