



MEETING MINUTES

MEETING DATE: MAY 19, 2009

MEETING TIME: 2:00 – 3:30

MEETING LOCATION: URBAN DRAINAGE & FLOOD CONTROL DISTRICT

**PROJECT NAME: EAST TOLL GATE CREEK (UPPER) MAJOR DRAINAGEWAY PLANNING
AND FLOOD HAZARD AREA DELINEATION**

ATTENDANCE:

1. Shea Thomas (UDFCD), Monica Bortolini (SEMSWA), Hoanh Tran (Aurora Public Works), Jason Margraf and Ken Cecil (J3 Engineering Consultants)

MINUTES:

1. J3 reviewed the comments and identified four outstanding items for further discussion. The four items and the relative discussion for each are as follows :

- a. Is everyone ok with the Imperviousness values utilized for commercial areas and for “special” designations?

Monica’s review focused on commercial areas to determine appropriateness. A big topic of discussion within SEMSWA is future conditions impervious values. The discussion went back to 85% vs. 95% and what is realistic for this project. Hoanh and Monica feel the lower value is appropriate while Shea & J3 lean towards the higher value. In this case, plastic liners used in landscaped areas increase runoff. Hoanh indicated that Aurora doesn’t allow their use anymore, but it is unclear if they may have been incorporated into Southlands. Monica asked if the impervious values include roads and J3 answered yes. Collectively, the group agreed on 90% to be used for commercial areas. Monica also agreed with the 20% Open Space – Special value.

- b. Is everyone in agreement that the baseline hydrology should not include detention ponds 503 and 504, the ponds at Gun Club Road and Hampden Road, respectively? Those ponds will be included in the Master Plan Report.



In short, yes. The group agrees the ponds should not be included. J3 described the confusion that was introduced by showing the future detention ponds in the SWMM schematic, which were only included as placeholders. J3 will revise the SWMM schematic so that future detention ponds are represented as design points (triangles)

- c. Is everyone comfortable with the Manning's n calculation method for the Transects?

J3 explained the usage of transects in EPA SWMM 5.0., which are nothing more than channel cross sections. In this case, J3 sampled the 2-foot contour interval LIDAR data to create representative transects for each of the six distinct reaches that J3 has defined. J3 also described the use of Equation RO-10 and its use to develop Manning's roughness coefficient. The previous study used two transects within this project reach and neither was a sampled cross section. Therefore, the J3 sampled cross sections (transects) produce more accurate results when using Equation RO-10. Based on the work thus far, J3 is recommending the transects and the transect generated Manning's n values remain in the model and that future calibration be completed using Manning's n values instead of C_p and C_t . The group concurred and Monica and Shea both agreed that this as an ongoing topic of discussion on how best to calibrate models. J3 would like to see actual Manning's n values entered into EPA-SWMM and the introduction of a Manning's coefficient, to be referred to as the J3 Coefficient. This would provide end users with the ability to correctly document reported Manning's n values and use them in future projects.

- d. Is everyone comfortable with utilizing the model that includes the piped infrastructure within the reach? i.e. some of the infrastructure lags the hydrograph versus the previous model, which utilized only transects, i.e., no pipes.

J3 described the inclusion of the pipes and discussed whether or not there should be a comparison between pipes and no pipes. Collectively, the group agreed to keep the pipes and exclude any comparison.