

MEMO

TO: Kevin Franke

FROM: Mark Taber

RE: WMSC Stormwater Management Design - FEIS

DATE: July 3, 2014

The WMSC Draft Environmental Impact Statement included a Stormwater Management Plan for the project in order to mitigate potential impacts associated with stormwater runoff. The Management Plan was composed of grading and drainage plans, preliminary construction details of the management components, and a Stormwater Management Design Report that included an analysis of existing and proposed conditions, a description of the design process and methodology used to perform the stormwater analysis, a stormwater model and supporting data and calculations. This information demonstrated that the stormwater management plan for the WMSC met specific water quality and quantity objectives, and could be developed in accordance with the NYSDEC Stormwater Management Design Manual and the Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its sources.

Subsequent to the completion of the Draft Environmental Impact Statement, the stormwater analysis was updated to address comments made by NYSDEC and NYCDEP. In September of 2013 an updated Stormwater Management Design Report was provided to NYSDEC. This update included the elimination of nine (9) buildings, (resulting in a total of 278 residential units in 161 buildings), and a more detailed analysis of existing conditions.

In January 2014 additional information was provided to the WIG, NYSDEC and NYCDEP which included a summary of results from an updated HydroCAD Model analysis using modified covertypes and time of concentration values. Also included was an alternate analysis of the model using local precipitation frequency values in addition to the typical Type II rainfall data required by DEC and DEP. This updated analysis was based on the 278 units/161 buildings referenced above. The conclusion of the summary was that (a) the modified covertypes and Tc values had an insignificant impact on the model and the stormwater management design and (b) using the local precipitation data suggested by the WIG (Donald Lake) in lieu of the required NYSDEC and NYCDEP rainfall data results in a significant reduction of pre and post development rates and volumes. The specific HydroCAD data supporting this summary, as well as additional data supporting the project RRv calculations further demonstrating the project's

ability to meet NYSDEC RRv requirements was provided to WIG, NYSDEC and NYCDEP in May, 2014.

After May 2014, the project underwent another series of adjustments and reductions in development. Specifically, an additional 15 buildings and their associated parking areas were removed, an access road was removed and the footprint of the East Base Lodge was reduced. This results in a total reduction of 24 buildings and 65 residential units since the DEIS. Design adjustments were also made to minimize disturbance, further incorporate shared driveways and reduce potential impacts to steep slopes and riparian buffers. These project reductions and design adjustments were made within the context of the proposed stormwater management infrastructure so that no significant adjustments to the stormwater design or model were necessary to accommodate the project design changes (reductions). The reduction of project development since the DEIS results in a corresponding reduction of proposed impervious area from 33.4 acres, to 26.57 acres.

Based on the significant project reductions made to date including a significant reduction of impervious area, the stormwater management measures proposed in the DEIS remain adequate to serve the current project design. All information submitted to date has demonstrated that the project can meet regulatory stormwater management requirements, and as such any potential impacts related to stormwater runoff can be adequately mitigated. The proposed reduction in development will likely decrease anticipated post development flow rates and volumes, potentially decreasing the size of stormwater management devices and disturbance associated with them.

Adjustments to the grading and drainage plans and site details relating to stormwater management will be made for the future site plan review process with the Town of Windham and for the stormwater permit application reviews with NYSDEC and NYCDEP. Some of the specific adjustments that will be made to the plans will be based on comments on the DEIS, which are reflected in the responses to comments provided in the FEIS.