

HydroQuest

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RE: New Century Film: Project Water Demand

New Century Film has not documented that there is an adequate groundwater supply available to support a public water supply at full buildout (i.e., 3,556-seat theater and music hall, 85-unit hotel, 500-seat restaurant, 2 film studios). Critical hydrogeologic information is neither identified nor provided in the Fellenzer New Century Film report. The applicant's Full Environmental Assessment Form, Part 1 notes that the maximum well pumping capacity is "*To Be Determined*." Page 8 of the report states:

"The property contains three (3) existing wells for potable use. As part of the conditional approval for B1, a public water supply system will be designed and submitted to the Orange County Department of Health for approval." (Emphasis added)

Prudent project site planning and decision making should be predicated on documentation of an adequate public water supply. The State Environmental Quality Review Act (SEQRA) is designed to identify potential adverse environmental impacts prior to final project design and approvals. Part 2 of the Full Environmental Assessment Form is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. One of the many issues identified on this form is 4. Impact on groundwater. Potential project mitigation measures cannot be considered in the absence of empirical data that could, if developed, allow scientific assessment of the viability of the proposed project. Water supply/groundwater and other environmental issues should be addressed in a Draft Environmental Impact Statement (DEIS) following a Positive Declaration of Environmental Significance per SEQRA.

Hydrogeologically, developers of large-scale projects that require substantial water resources should provide detailed assessment of projected water demand supported by empirical aquifer test data and hydrologic analysis. If this information has been developed relative to the safe yield of project wells, it should be evaluated by the NYS Department of Health and should be made available to the public for review. Project advancement in the absence of documentation of the safe yield or capacity of a public water supply would be premature. Evaluation of water supply information (quantity and quality) is an essential component in assessing potential project scale, potential adverse environmental impacts and, ultimately, the success of proposed projects.

Important water supply foundation material has <u>not</u> been presented relative to the proposed expansion on the New Century Film property. Fellenzer Engineering LLP's March 8, 2023 New Century Film, Town of Deerpark, NY report prepared for New Century Film provides limited

information on project water demand. Extending the above Page 8 quote from the Fellenzer report:

"The property contains three (3) existing wells for potable use. As part of the conditional approval for B1, a public water supply system will be designed and submitted to the Orange County Department of Health for approval. A similar system will be developed to handle the rest of the structures on site and will provide the necessary treatment for the anticipated demand."

They calculated project water demand using hydraulic loading rates listed in the NYSDEC Design Standards for Intermediate-Sized Wastewater Treatment Systems (2014). This is the accepted design document in use. Their calculated water demand is 49,785 gallons per day (34.6 gallons per minute).

The Fellenzer Engineering report does not contain any documentation relative to the safe yield of the three wells mentioned, much less any new wells that may be drilled. If there is a well/aquifer test report conducted for previous site approvals, this report should be obtained and reviewed. Part of this review should focus on whether current NYSDOH public water supply testing procedures were adhered to. These include such items as minimum pumping test duration of 72 hours, pumping at a sufficiently high rate reflective of project water supply demand, monitoring water levels in other wells (onsite and offsite) during production well pumping to assess potential aquifer interference, stabilization of groundwater levels during pumping, aquifer recovery, water quality testing to assess potential contaminant influence from a nearby surface water source, and hydrogeologic characterization of aquifer characteristics and performance. If these standard aquifer testing factors have not been fully conducted and characterized for the projected project water demand, the Department of Health may require new hydrogeologic testing. Groundwater availability and potential adverse impacts, along with numerous other Full Environmental Assessment Form, Part 2 issues, are commonly addressed in a Draft Environmental Impact Statement following public scoping and review.

Adequate water supply should be documented prior to project approvals. Detailed aquifer testing and analysis should be conducted if it was not already completed in the past. Such testing and analysis must reflect public water supply demand projected for the full project buildout proposed. Prudent land use planning should be predicated upon rigorous documentation of project water supply availability, followed by consideration of supportable project scale, project site planning, and project review. This is the recipe for successful project decision making and planning.

The proposed New Century Film project, inclusive of the required public water supply (i.e., groundwater), should be reviewed in the context of a major development. Similarly, the environmental issues attendant to such developments must be comprehensively evaluated relative to potential adverse environmental impacts and given the necessary "hard look" required under the State Environmental Quality Review Act (SEQRA).

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