

Celebrating over 50 years of service

April 9, 2014

Mr. Chris Round
 The Chazen Companies
 547 River Street
 Troy, NY 12180

Re: (V) Ellenville Water System Improvements Project
 Nevele Redevelopment – Municipal Water Supply

File: 924.063.001

Dear Mr. Round:

Barton & Loguidice, D.P.C. (B&L) was retained by the Village of Ellenville to complete an engineering assessment of their water distribution system. The findings of the evaluation were presented in an Engineering Report entitled, “Village Water System Improvements Project, Facilities Plan”, dated January 2008, revised August 2012, and evaluated the condition of the existing wells, storage tanks and overall distribution system.

The Village has a total permitted capacity and operating capacity of 1.71 mgd and 0.75 mgd respectively with the largest well out of service. A summary of the Village’s water sources is provided below.

SOURCE WATER CAPACITY SUMMARY			
Site	Source	Permitted Capacity	Operating Capacity*
North Gully WTP	Surface Water	0.52 mgd	0 mgd
Fallsview Well	Groundwater	0.72 mgd	0.66 mgd
Harris Well No. 1	Groundwater	0.28 mgd	0 mgd
Harris Well No. 2**	Groundwater	0.88 mgd	0.61 mgd
Center Street Well	Groundwater	0.19 mgd	0.09 mgd
TOTAL		1.71 mgd**	0.75 mgd**

* - Per Village’s Water Department

** - Per NYSDOH, with multiple sources of both Surface Water and Groundwater, the overall capacity rating shall be determined assuming the largest permitted source supply is out of service. The largest permitted source is Harris Well No. 2.

According to the 2013 Water Billing Reports provided by the Village, the total amount of water billed for the year was 96,471,154 gallons (264,305 gpd) and the annual water produced estimated as 193,000,000 gallons (529,000 gpd). The Village has estimated that the system has 50% unaccounted for water due to numerous watermain breaks throughout the year. The 3 month summer average billed to customers was recorded as 0.299 mgd.



Mr. Round
The Chazen Companies
April 9, 2014
Page 2



It is our understanding that anticipated domestic water supply demand of the redevelopment of the Nevele Resort and Casino project is estimated at approximately 162,000 gpd or 0.162 mgd. The total water demand required of the system would be 0.691 mgd. As noted in the table above, the total operating capacity of the Village's existing system with the largest permitted source out of service is 0.75 mgd.

Existing Average Day Demand	0.529	mgd
Nevele Resort Demand	<u>0.162</u>	mgd
Total	0.691	< 0.75 mgd

The Village is currently proceeding forward with several construction projects to improve its distribution system and water sources, which will be constructed in the Summer/Fall of 2014. Improvements are proposed at the Fallsview well site to replace the vertical turbine well pumps, which will increase the capacity of the pumps to the permitted capacity. The Village is also beginning hydrogeological investigations to locate a new groundwater well in the Village to increase the available source capacity serving the system. Once these improvements are completed, the Village will be able to serve the Nevele Redevelopment project and its residents even further.

If you have any additional questions on the revisions discussed herein or the proposed project, please do not hesitate to contact our office.

Very truly yours,

BARTON & LOGUIDICE, D.P.C.

Jason A. Ballard, P.E., LEED AP
Managing Engineer

EAU/ojf

CC: Joe Stoeckeler, Jr, Village Manager

