

JACOB TAWIL, being duly sworn, deposes and says:

1. I am the duly appointed Commissioner of Public Works of the City of Middletown, having held that position since January 31, 2005, and I make this Affidavit in Response to the Petition and Complaint.

2. I am a licensed professional engineer in the State of New York.

3. A preliminary meeting was held in City Hall in October, 2009 in which I advised District representatives that there had been sewer blockages in the existing sewer line. I understand the District believes this meeting was actually held in October, 2008, but whether the meeting was held in October, 2008 or October, 2009 is relatively unimportant, because there is no dispute that the District waited until December, 2009 to submit design plans, specifications and engineering report, which did not propose any work in the existing sewer line located between the school property and Elm Street.

4. Plans and engineering reports, including design calculations of water and sewage requirements, were not provided by the District to the City until December 22, 2009. It is critically important to note that without this information it was impossible to evaluate the impact of construction of the new school upon the City's sewer and water systems.

5. The resolution of subdivision approval voted by the Common Council on February 17, 2009 conditions the approval upon "[f]ield approvals by the Commissioner of Public Works." Field approvals could not have possibly been granted until at the earliest receipt of the plans and reports that were sent to the City in December, 2009; field approval review could not possibly have started with the paucity of information provided to the City

in late 2008, early 2009.

6. The City received plans on December 22, 2009, but they were not stamped by a New York State licensed professional engineer, an omission which justifies the City in denying water and sewer service. Despite the lack of the required stamp, I proceeded to review the plans and provide the District with recommendations and requirements, including some crucial revisions in the Water Distribution Plans – this contradicts Superintendent Eastwood’s repeated public claims that the Commissioner did not timely review the water and sewer plans. But it was not until July 16, 2010, *the date of the Petition and supporting papers which commenced this action*, did the City receive correctly stamped water plans containing my requested revisions.

7. In its December, 2009 and June 15, 2010 disclosures, the District advised the City that the new school, based upon a projection of 1,200 students, would need approximately 20,000 gallons per day of both water and sewer; this District calculation (presented in Petitioner’s Exhibit 11, the Pickard report) did not account for the fact that the District has publicly stated that over 1,325 students and staff will be at the new school. The District presently uses about 60,000 gallons of water per month at the Chorley School, 80% of which is assumed to be discharged into the City sewer system; using the District engineer’s projection of 19,200 gallons per day (at 1,200 rather than the more realistic 1,325 persons) would result in an average monthly discharge of 400,000 gallons of sewage, which is *eight times* the present flow into the City line.

8. In Petitioner’s Exhibit 11, the Pickard report, revised as of June 15, 2010, the District engineer refers to “the capacity of the City’s downstream sanitary sewer between

the school's property line and the trunk sewer at Cantrell Avenue has been questioned by the City...". However, the sewer line actually being questioned by the City is from the school's property line to *Elm Street*, which is approximately 3,300 feet, compared to Pickard's referenced approximately 800 feet. The 800 foot section of pipe referred to and evaluated by Pickard was questioned by the City in terms of blockages and the need for cleaning, and removing root intrusions, as reported by City Sewer Department. It was *not* questioned by the City in terms of its hydraulic carrying capacity because, as to my knowledge, no sewer manhole overflows were reported or observed within that 800 feet section of sewer pipe.

9. The entire new sewer line will run about 3,300 linear feet; from the school property to Cantrell Avenue is about 800 feet; from Cantrell to Liberty Street is another 1,050 feet, and from Liberty to Elm Street is another 1,450 feet.

10. In Petitioner's Exhibit 11, Pickard further states that "A 6-inch diameter sewer service will have capacity which will be at least ten times the design flow". Pickard appears to be using the *peak daily sewage flow* plus factors for wet weather and ground water infiltration, as the "*design flow*". In my opinion, when designing sewer lines for small institutions, such as this school, where the sewage flow will be concentrated over a few hours of the day such as recesses and meal breaks, as a minimum, the *peak hourly*, *not the peak daily flow* of sewage plus factors for Inflow/Infiltration should be used in designing/sizing the sewer line.

11. The Sewer System Evaluation System, dated January 2004, was required by the DEC and was an extraordinary measure not ordinarily undertaken by municipalities the

size of Middletown because, among other things, its expense, in this instance over \$200,000.00. In Petitioner's Exhibit 11, Pickard, in his "Downstream Sewer Analysis" of the existing 8-inch sewer line from the school property line to Cantrell Ave, stated "The peak wet weather infiltration unit rate was calculated from the data presented in the Sewer System Evaluation Survey for the City of Middletown prepared by Clark Patterson Associates, Dated January 2004." Based on this factor and the peak day flows, he concluded that "the existing 8-inch diameter collection main is adequate to handle the peak design flows from the school and homes with a very high amount of groundwater infiltration". Again, this section of the sewer collection system was not even questioned by the City for its sewage flow carrying capacity. Furthermore, Pickard used the 2004 SSES wet weather factor in his sewer pipe evaluation calculations, which in my opinion is not adequate. The values presented in the SSES represent "a snap shot in time", (which are the sewer flows, groundwater and wet weather conditions as well as inflow conditions (Inflow/Infiltration)) *only at the time of the study*. The Inflow/Infiltration values presented in the SSES, are by no means an average or worst case scenario to be used in the analysis of the existing sewer pipe to prove that it has adequate capacity.

12. In Petitioner's Exhibit 11, Pickard states that "The average and peak sewage flows from the new school will in fact be only twice that from the existing school, since the sewage flows are in proportion to the student population figures". This "twice" figure is clearly inconsistent with the figures presented in Pickard's own engineering report. The new school sewage flows, based on Pickard's own figures, will be *eight times* higher than the existing school's flows based on the water meter readings.

13. In Petitioner's Exhibit 11, Pickard *acknowledges* that "The downstream sewer capacity analysis was made on the basis of the sewer being in normal operating condition, i.e. no flow restrictions from poorly maintained pipe or manholes". This *disclaimer*, in my opinion, should render Pickard's analysis of the existing downstream sewer system as *not relevant* to the pipe's existing field condition and its sewage flow carrying capacity. Pickard should have had access to the repeated verbal and written concerns issued by the City regarding the manhole overflows and their impact upon residential basements and streams. Yet Pickard appears to have ignored these concerns, and did not even attempt to approach the City to question the issues raised. Since March, 2010, I have been attempting through District representatives without success to meet with Pickard. An e-mail from me to District personnel, dated March 17, 2010, requesting such a meeting, is annexed hereto as Exhibit E.

14. The present sewer line servicing the Chorley site is today at capacity – defined as sewage flow and additional hydraulic loading resulting from Inflow/Infiltration. During certain wet weather and groundwater conditions, existing manholes get surcharged and sometimes overflow raw sewage above ground, some of which ends up in the adjacent stream – this surcharge/overflow condition also causes sewage to back up into residential basements in low lying areas. But for the construction of the new school, the City would not have to replace the line at this point in time. However, the expansion of the school's capacity mandates a significant upgrade of the line, to safeguard against the increased sewage loading being spilled above ground and into the stream, during severe Inflow/Infiltration events; it appears that much, if not all, of the present line may have to be

replaced. Detailed engineering evaluation of the existing sewer line may have to be performed to find most economical repair/replacement alternatives.

15. After reviewing the District's sewer plans, in a meeting held on March 26, 2010, I advised District representatives that based on the Pickard engineering report and the proposed increase in student/staff population (with consequent increased sewage flow), there would be an increase in the hydraulic loading on the existing sewer line, which would cause more sewage overflows during some wet weather events. I also advised the District representatives that such an increase in the hydraulic loading on this sewer line would likely trigger Department of Environmental Conservation enforcement action. I also advised the District representatives that a new sewer line should be constructed, and that the District should contribute to the cost similar to what the City has required of private developers.

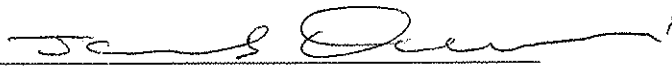
16. In April, 2006, six Middletown developers agreed to contribute \$500,000 for a new sewer line because there was a single manhole in the existing line experiencing sewage overflow on occasion. This necessitated a new line to carry the Inflow/Infiltration excess flow, preventing future manhole sewer overflows. This contribution will benefit the entire area, not just the six developers.

17. Another Middletown developer, Sutton Hill II, recently contributed \$50,000 for a traffic study and improvement of the County Routes 78/108 intersection, a contribution which will benefit the entire area, not just the developer.

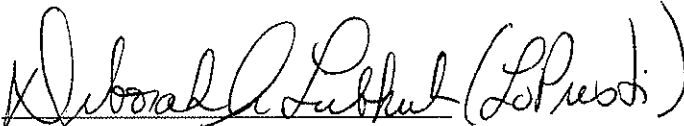
18. I attended the June 30th meeting in Albany, and I recall Mr. Szuberla advising that it is against SED policy to allow school districts to build their own on-site sewage

treatment systems, when a municipal sewer system is nearby. Mr. Szuberla further explained that SED has indeed paid a municipality for contribution towards a municipal wastewater treatment plant, in order to permit a new school to connect its sewer line to the municipal system, and avoid building its own onsite sewage treatment system.

WHEREFORE, it is respectfully requested that the Petition and Complaint be dismissed, and that this Court grant such other and further relief as may be deemed just and necessary.


JACOB TAWIL

Sworn to before me this
23rd day of August, 2010


NOTARY PUBLIC



DEBORAH A. LUBKERT
Notary Public
State of New York
#01LU6020001
Qualified in Orange County
Commission Exp. February 22, 2011

----- Forwarded Message -----

From: J Tawil <jtawil14@yahoo.com>
To: Tim Bonaparte <tbonaparte@appelosborne.com>
Cc: Thomas Scott <tscott@ecsdm.org>
Sent: Wed, March 17, 2010 9:24:24 PM
Subject: Re: Middletown New Elementary - Utility Review

Tim,

FYI: We have met with Tom Scott, few weeks ago, to discuss our concerns about the proposed Water and Sewer Lines for the new School. Our most pressing issues are the condition of the existing sewer lines you'll be connecting to, the history of its required on going maintenance/plugging, and its ability to handle the increased hydraulic loading due to increased students count. Tom is trying to arrange for a meeting with the design engineer.

Regards

Jacob

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 Please consider the environment before printing this email.

Exhibit E