WATER ENGINEER'S REPORT

104 Clinton Avenue Apartments

104 Clinton Avenue

CITY OF ALBANY
COUNTY OF ALBANY
STATE OF NEW YORK

Applicant: Rehabilitation Support Services, Inc,

Prepared by:

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April 23, 2018
Revised May 21, 2018

INTRODUCTION:

Hershberg & Hershberg, Consulting Engineers and Land Surveyors, were retained by Rehabilitation Support Services, Inc. (hereinafter the "Applicant") with an address of 5172 Western Avenue, Altamont, NY 12009 as site engineer for the construction of a development plan to be known as 104 Clinton Avenue Apartments located at 104 Clinton Avenue (currently 102-124 Clinton Avenue which will be consolidated. This report is to review water usage for the consideration of the Department of Water & Water Supply and the City of Albany Planning Board.

DESCRIPTION OF EXISTING SITE:

PARCEL AREA

The existing parcel is Tax Map Parcels #65.82-3-1 through 65.82-3-10 inclusive listed as No. 102 -- 124 Clinton Avenue shown in photo below with a site area of 18,094 SF or 0.42 Acres. A Lot Consolidation Application is being filed along with the Development Review Application. The proposed parcel will be known as No. 104 Clinton Avenue.

Fig. No. 1 - Aerial Photo of Site

DESCRIPTION OF INTENDED SITE DEVELOPMENT AND USE

Under the current applications the Applicant is proposing to construct a 20 units of apartments with approximately 24 beds. Also a staff of up to 9 individuals will be on site. The Applicant also plans a parking lot with 7 spaces including 1 handicapped space. The building is three stories with a basement.

POTABLE WATER USE

To establish the water use for the site as previously occupied prior to the demolition of dwellings would not be appropriate since the site has not been at full occupancy for a number of years. Based upon the *New York State Design Standards for*

Intermediate Sized Wastewater Treatment Systems (March 5, 2014)[1] the Average Daily Flow should be based upon 110 GPD per bed (Method 1 Typical Per- Unit Hydraulic Loading Rates) and 15 GPD per employee: There will be 24 beds in the buildings and 9 employees. Therefore, the building will use an estimated 2775 GPD or an average flow of 1.92 GPM. A peak flow estimated for the building at 400% of average flow would be 7.71 GPM.

Water Usage
104 Clinton Avenue

	Unit	Value	Water Use Per Unit per day(GPD) See Note 1	Water Use (GPD)
Residential	Beds	24	110	2640
Employees	Person	9	15	135
	TOTAL			2775

1) Source: New York State Design Standards for Intermediate Sized Wastewater Treatment Works, NYSDEC,March 5, 2014

2) Sewage Generation is equivalent to potable water use

Fig. No. 2 – Potable Water Usage`

WATER SYSTEM

The total water treated in 2016 at the Feura Bush Water Filtration Plant was 6,668,938,544 gallons. The daily water production averaged 18,275,788 gallons, with maximum daily production of 24,202,080 gallons. The capacity of this treatment plant is 32,000,000 GPD. The 2,775 GPD peak flow after construction of the building represents an insignificant portion of 0.015% of the average daily water production.

[1] Page B-18, *New York State Design Standards for Intermediate Sized Wastewater Treatment Systems* (March 5, 2014)

The Albany Water Board maintains water service to this site by way of a 8 inch main on the south side of Clinton Avenue constructed in 1929. A 6 inch service from this main in the sidewalk of Clinton Avenue will serve the building. It will split inside the building for provide both potable water and for fire protection. An excerpt from Sheet 116 of the Water Atlas is reproduced below.

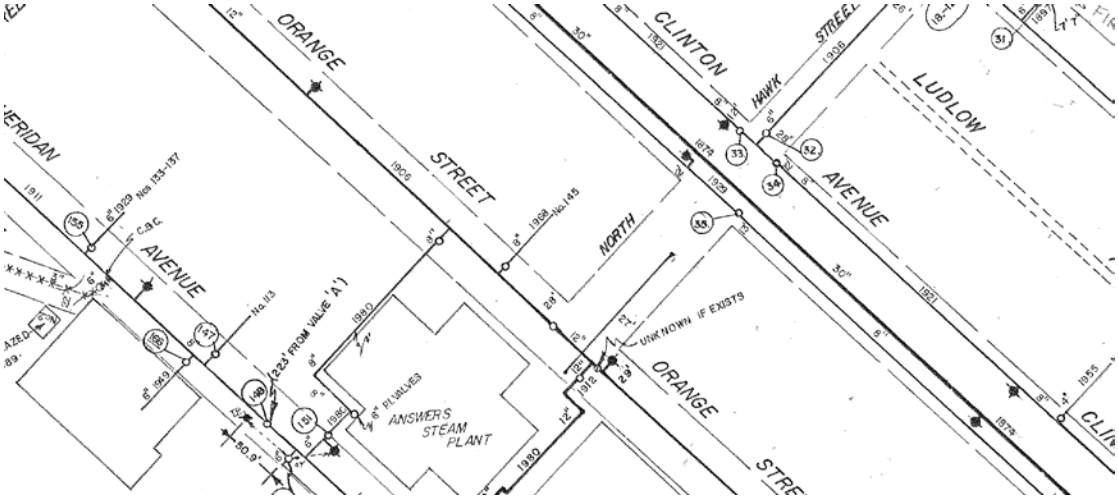

Fig. No. 3 – Portion of Water Atlas Sheet 116

POTABLE WATER SERVICE

A new water service is proposed to connect to the 6 inch service. Water meter detail and backflow preventor detail will be provided with the plumbing plans prior to applying for a water connection permit.

FIRE PROTECTION

There is a hydrant located on the southwesterly corner of Clinton Avenue and North Hawk which is suitable to provide water service. A fire hydrant test was taken at Clinton Avenue and Lark Street which is approximately 50 foot higher elevation than the site. That showed a static pressure of 62 psi.

The static pressure at the site will in all probability be between 75 and 80 psi. A fire protection system will be designed for the building and will be reviewed with fire officials and the Department of Water & Water Supply.

CONCLUSION:

It is the Engineer's opinion that this project can be served by existing public water system with no negative impact on the existing system.

Prepared by:

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APPENDIX A

UTILITY PLAN (SHEET C-3)

APPENDIX B

MEP PLANS & DESIGN CALCULATIONS