

SEWER 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:

Hershberg & Hershberg
Consulting Engineers and Land Surveyors

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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 sewage generation 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.

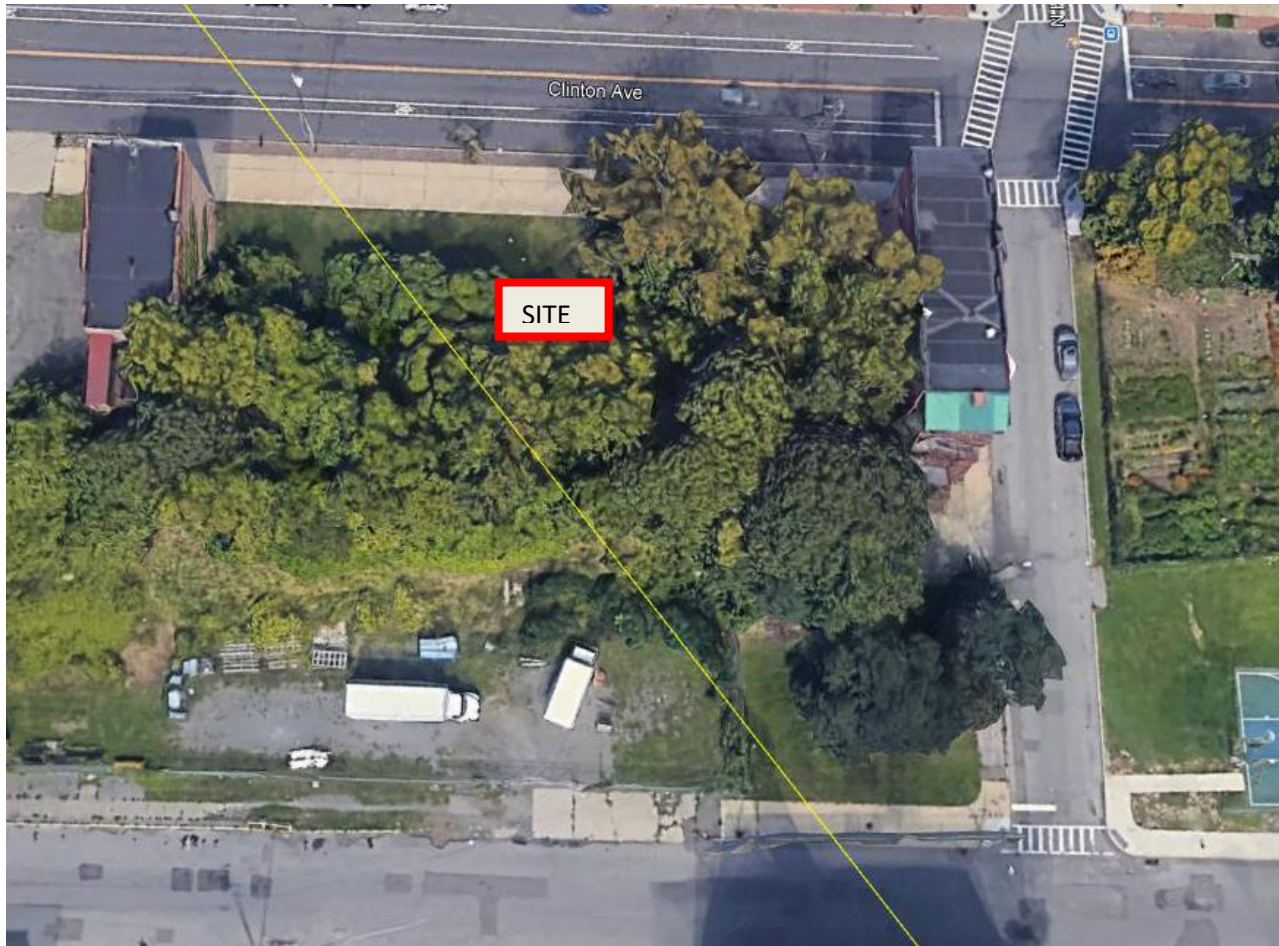


Fig. No. 1 - Aerial Photo of Site

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.

SEWAGE GENERATION

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 sewage flow of 1.92 GPM or 0.0043 CFS. A peak flow estimated for the building at 450% of average flow would be 0.0193 CFS.

Sewer Generation
104 Clinton Avenue

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

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 – Sewage Generation`

SEWER SYSTEM

The building will have a separate 6” SDR26 PVC pipe connection to a 27” VP combined sewer in Orange Street. See Appendix A. The lateral will be run at 15% and have a capacity of 2.60 CFS. The peak flow from the building would be only .007415% of the pipe capacity of the lateral. The 27” VP sewer runs from there easterly on Orange Street at an average grade of 3.0% and a flowing full capacity 41.16 CFS. The building utilizes only .0469% of pipe capacity. See Appendix B. The pipe then runs easterly

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

to a regulation chamber at Orange Street and Montgomery Street which allows dry weather flow and some storm flows to discharge to the Albany Interceptor Sewer which run to the Albany County South Wastewater Treatment Plant. When flows exceed the set flows in the regulation chamber excess combined sewer is directed to the Hudson River. The total flow from the building will have a de minimis impact on the dry weather flow.

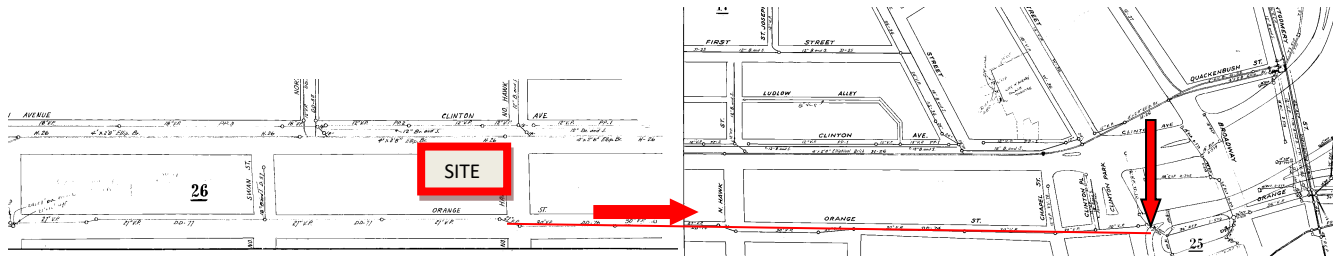


Fig. No. 3 – Portion of Sewer Atlas Sheets 016 & 017

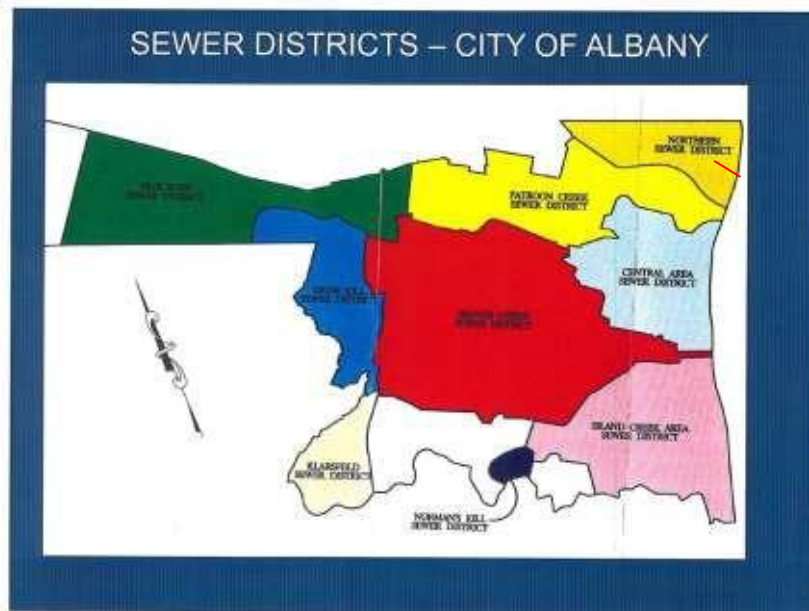


Fig. No. 4 – Sewer Districts

SEWER ENGINEER'S REPORT

ENGINEER'S OPINION

The project is within the Central Combined Sewer District. The building will have no deleterious impact on any adjoining or downstream properties.



Prepared by:

A handwritten signature in black ink, appearing to read "D. Hershberg", written over a horizontal line.

HERSHBERG & HERSHBERG
Daniel R. Hershberg, P.E. & L.S.

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APPENDIX A

**UTILITIES PLAN (SHEET C-3)
AS SEWER CONNECTION PERMIT PLAN**

APPENDIX B

PIPE CAPACITY ANALYSIS

