

# WATER ENGINEER'S REPORT

## 66 State Street Apartment Conversion

### 66 State Street

CITY OF ALBANY  
COUNTY OF ALBANY  
STATE OF NEW YORK

**Applicant:**  
**Redburn Development, Inc.**

Prepared by:

**Hershberg & Hershberg**  
**Consulting Engineers and Land Surveyors**

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May 18, 2021

## **INTRODUCTION:**

Hershberg & Hershberg, Consulting Engineers and Land Surveyors, were retained by Redburn Development, Inc, (hereinafter the “Applicant”) to review water usage of the proposed 66 State Street Apartment Conversion. This report is 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 Parcel #76.42-3-6 known as No. 66 State Street with a site area of 10,261 SF or 0.24 Acres.



Fig. No. 1 - Aerial Photo of Site

## **DESCRIPTION OF INTENDED SITE DEVELOPMENT AND USE**

Under the current application the Applicant is proposing to convert floors 2 through 4 from office space to 27 apartments which would have 36 bedrooms. The 10,261 first floor would be used for commercial space with the potential for a 1,000 SF coffee shop.

## **POTABLE WATER USE**

To establish the water use on the site from previous use a 10 year history of water bills was reviewed. Prior to 2013, when the building became vacant, the peak usage was approximately 1,300 GPD, For the site, as proposed, , the *New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 5, 2014)* is used to compute the Average Daily Flow. Based upon 50 GPD per bed (Method 3 Water Usage Data Hydraulic Loading Rates)<sup>1</sup> based upon the computation below from 132 apartments at 16-30 Sheridan Avenue by the same developer.

Computation of Average Water Use at 16-30 Sheridan Avenue  
Data from bill from City of Albany Department of Water & Water Supply

<u>Period</u>		<u>Water Used (CF)</u>
3/4/20 to 7/1/20		97,100
		97,100
Total Days	118	
Daily Use (CF)		822.88
Daily Use (Gallons)		6,163
Usage in GPD per Apt (132)		46.69
For Report Value (GPD)		50

Fig. No. 1 – Establishing per Bedroom Use

<sup>1</sup> *New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 5, 2014), Pg. B-16*

In addition to the residential usage, the 1,000 SF for a potential coffee shop would be primarily for takeout but an allowance of 10 seats at 35 GPD<sup>2</sup> per seat and the balance of the first floor (9,261 SF) at 0.1 G/SF/Day<sup>3</sup>. The potable water usage is computed as 2,726 GPD as shown below:

Water Use Calculations  
66 State Street

<u>Use</u>	<u>Unit</u>	<u>Value</u>	<u>Usage Per Unit per day(GPD)</u> <u>See Notes 1-3</u>	<u>Daily Use (GPD)</u>
Apartments- Note 1	Bed	50	36	1800
Coffee Shop - Note 2	Seats	35	10	350
Retail/Commercial- Note 3	SF	0.1	9261	926.1
<b>TOTAL ESTIMATED WATER USE</b>				<b>2726</b>
<b>NET ESTIMATED WATER USE</b>				<b>2726</b>
Average Daily Water Use Increase in GPM		<b>1.89</b>		
Peak Water Use Increase in GPM		<b>3.79</b>		
Average Daily Water Use Increase in GPD		<b>2726</b>		
Peak Daily Water Use Increase in GPD		<b>5452</b>		

- 1) Source: New York State Design Standards for Intermediate Sized Wastewater Treatment Systems  
NYSDEC March 5, 2014 Method 3 (Page B-16)
- 2) Ibid, Table B-3, Page B-19
- 3) Ibid., Table B-3, Page 20

Fig. No. 2 – Potable Water Usage`

**WATER SYSTEM**

The total water treated in 2019 at the Feura Bush Water Filtration Plant was 6,473,227,216 gallons. The daily water production averaged 17,734,869 gallons, with maximum daily production of 22,272,288 gallons. The capacity of this treatment plant is 32,000,000 GPD. The 2,726 GPD average daily flow

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<sup>2</sup> Ibid., Page B-19  
<sup>3</sup> Ibid., Page B-20

from 66 State Street represents an insignificant portion of (0.015%) of the average daily water production.

The Albany Water Board maintains water service to this site by way of a 16 inch main in State Street constructed in 1898 to which the 6 inch service is connected in 1916 as shown in an excerpt from Sheet 107 of the Water Atlas which reproduced below.

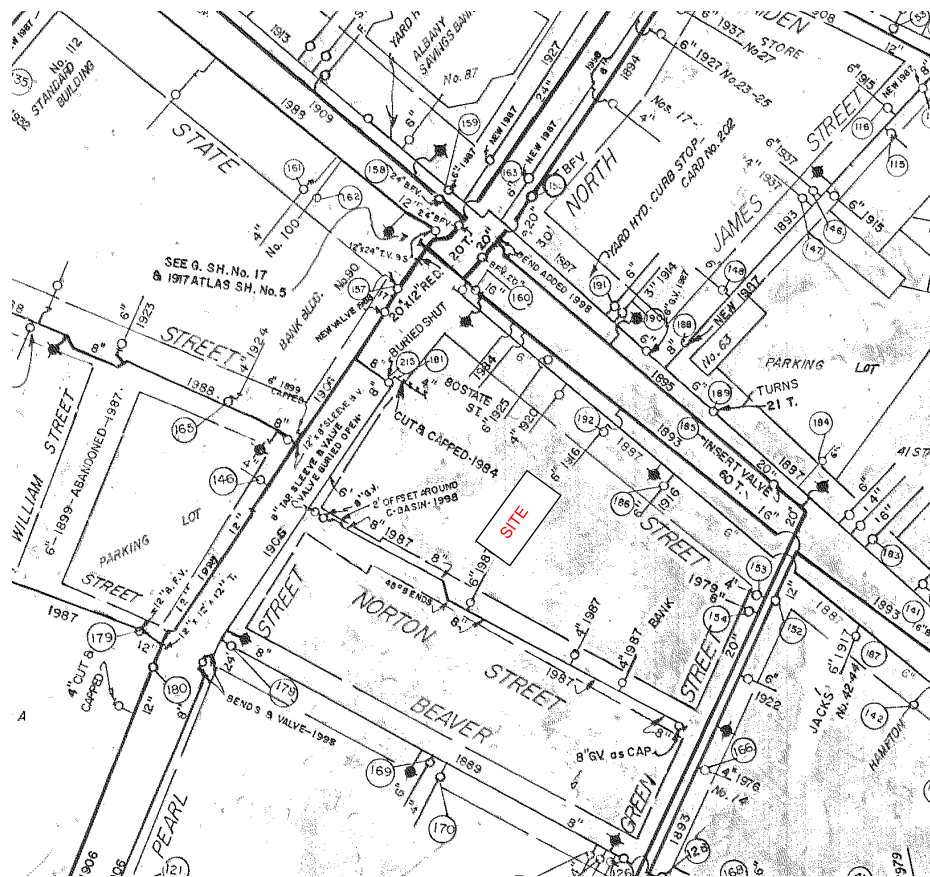


Fig. No. 3 – Portion of Water Atlas Sheet 107

The potable water service is provided utilizing a 1½ water line shown below.



Fig. No. 4 – Existing potable water connection

#### FIRE PROTECTION

There is a hydrant located near the intersection of State Street and South Pearl Street. A second hydrant is approximately 100 feet east of the site along State Street. Both are on the same side of State Street as the site. The 6" service supplies the fire protection system. See photo below.



Fig. No. 4 – Existing potable water connection

A fire protection system will be designed for the converted floors 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.



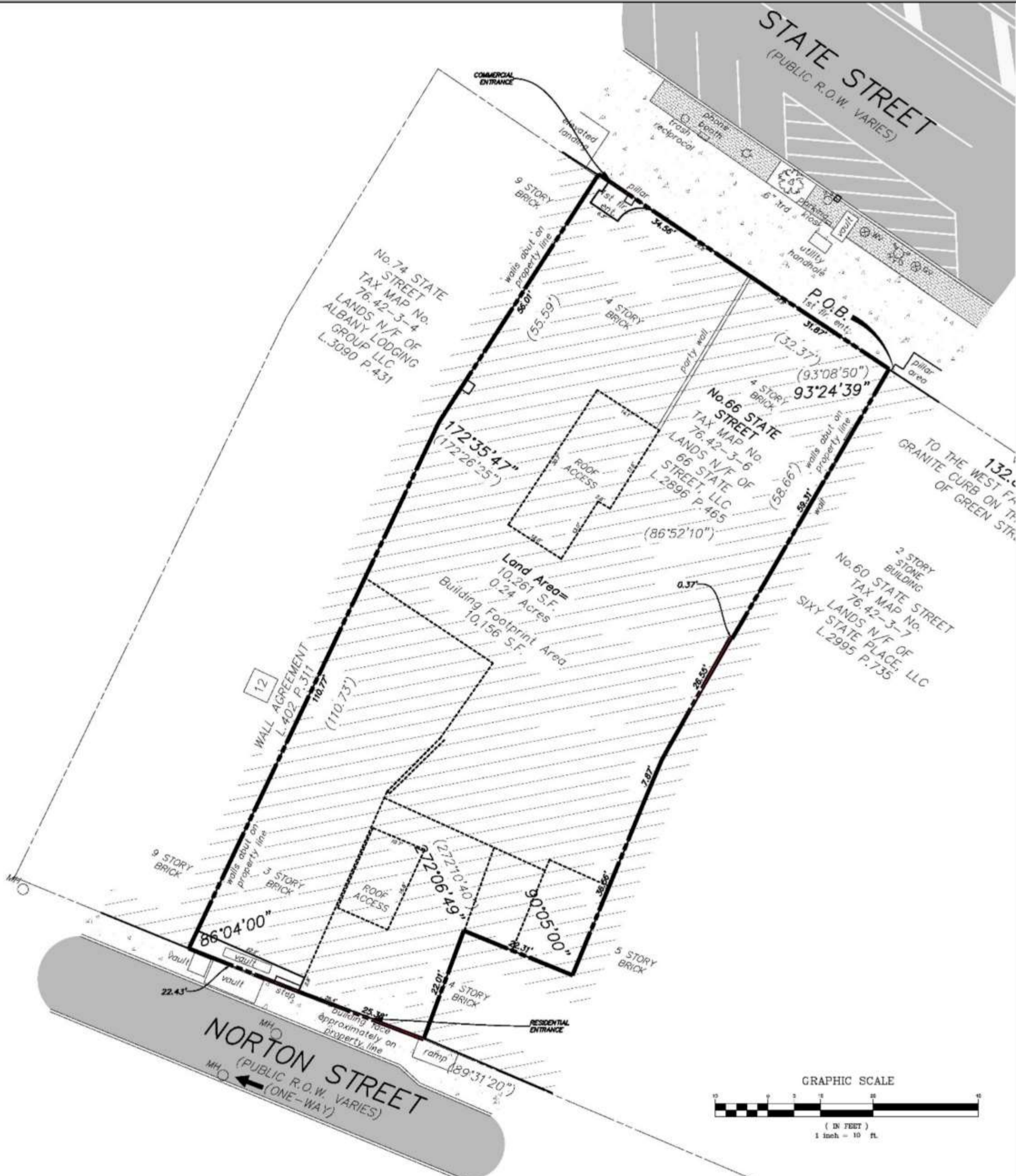
Prepared by:

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

DRH/dan/er20210171water.docx

**APPENDIX A**  
**EXISTING CONDITIONS/ SITE PLAN**





**LEGEND**

ROCK	RIGHT OF WAY	MHO	MANHOLE
NO.	NUMBER	---	SEW
P.O.B.	POINT OF BEGINNING	→	TRAFFIC FLOW
S.F.	SQUARE FEET	+	ACCESS AREA
N/F	NOV OR FORMERLY	+	WATER SHUT OFF
(55.59)	MEASURED	+	WATER VALVE
56.01'	NORTH	+	HYDRANT
N	NORTH	+	GAS VALVE
S	SOUTH	+	LIGHT POLE
E	EAST	+	CONCRETE
W	WEST	+	PAVEMENT
L	LEAK	+	PAVED CONCRETE
P	PAGE	+	



MAP NOT TO SCALE

**GENERAL NOTES**

- UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209-2, OF THE NEW YORK STATE EDUCATION LAW.
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- SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT SURVEYED OR EXAMINED OR CONSIDERED AS PART OF THIS SURVEY.
- ABSTRACT OF TITLE PROVIDED BY SCIOCHETTI ABBOTT TABER, P.L.L.C. D/B/A AAA TITLE AGENCY, TITLE No. 210827, EFFECTIVE DATE MARCH 16, 2021.
- BUILDING CONTAINS WASTE AND RECYCLABLES; SEE ARCHITECTURAL PLANS FOR BUILDING INTERIOR.

**PARKING TABLE**

NO PARKING ON SUBJECT PARCEL.  
METERED PARKING MONDAY THROUGH FRIDAY  
IN FRONT OF PARCEL ON STATE STREET.

**RENOVATION NOTE**

1. UPPER FLOORS TO BE RENOVATED INTO 27  
MARKET-RATE APARTMENTS. MINOR IMPROVEMENTS TO  
EXISTING LOWER LEVEL COMMERCIAL SPACE. NO SITE  
IMPROVEMENTS PLANNED.

**ZONING INFORMATION**

MU-DT MIXED USE DOWNTOWN DISTRICT

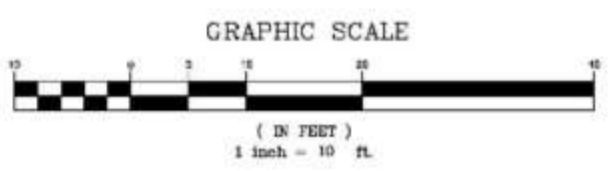
MIN. FRONT YARD	10 FEET
MIN. SIDE YARD	0 FEET
MIN. REAR YARD	0 FEET
MAX. BUILDING HEIGHT	N/A
MAX. LOT COVERAGE	100%

ZONING INFORMATION ADOPTED FROM: CITY  
OF ALBANY USGO - DATED APRIL 2017.

SETBACK LINES DEPICT CURRENT ZONING REGULATIONS  
AND DO NOT NECESSARILY CORRESPOND WITH REGULATIONS  
WHEN SUBJECT PARCEL WAS DEVELOPED.

**FLOOD NOTE:** By graphic plotting only, this property is in Zone(s) \_\_\_\_\_ of the Flood Insurance Rate Map, Community Panel No. \_\_\_\_\_ which bears an effective date of \_\_\_\_\_ and is not in a Special Flood Hazard Area. By telephone call dated 4/26/2022, to the National Flood Insurance Program (800-638-6620) we have learned this community does/does not currently participate in the program. No field surveying was performed to determine this zone and an elevation certificate may be needed to verify this determination or apply for a variance from the Federal Emergency Management Agency.

ZONE: "X" AREA OF MINIMAL FLOOD HAZARD



FOR MUNICIPAL APPROVAL ONLY-NOT INTENDED FOR CONSTRUCTION

ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ILLEGAL.

18 Locust Street  
Albany, New York 12203

STATE OF NEW YORK  
FRANCIS G. MCCLOSKEY  
LICENSE NO. 048441  
LAND SURVEYOR

DATE	
REVISIONS	

**SITE PLAN FOR  
NO. 66 STATE STREET  
CITY OF ALBANY, COUNTY OF ALBANY, STATE OF NEW YORK**

DATE: 05/11/22  
SCALE: P=20'  
SCALE: P=20'  
SCALE: P=20'

C1 OF 1