

# Engineer's Report for Sanitary Sewer & Potable Water Service

to:

## Cosmopolitan at Somerset Town Center

Block(s): 385

Lot(s): 2.07

Township of Franklin

Somerset County, New Jersey

### Prepared By:

Menlo Engineering Associates, Inc

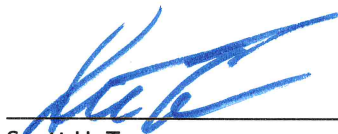
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### Under the Immediate Supervision of:



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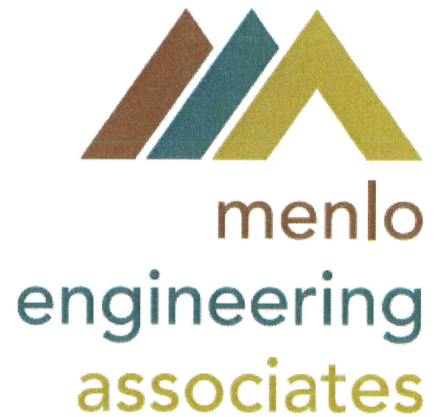
Scott H. Turner

NJ PE# 43811

ST/MAD/hc

MEA # 2021.019

Dated: August 16, 2021



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## INTRODUCTION

This report is being prepared in association with an application to Township of Franklin for the purpose of illustrating the impact on existing sanitary sewer and potable water facilities associated with the development of Lot 2.07 in Block 385, consisting of approximately 27.42 acres. The site is bounded by Easton Avenue to the north, John F. Kennedy Boulevard to the west, Seeley's Brook to the east and The Park at Franklin apartment complex to the south. The proposed development consists of the development of the southwesterly portion of the lot. Said development consist of the removal of an existing 1-story masonry building and the construction of a 4-story apartment building and its corresponding improvements to the adjacent parking areas.

## EXISTING & PROPOSED SEWER FACILITIES

The existing 1-story masonry building consist of 107,600 SF of retail space. The existing retail building is serviced by multiple sanitary laterals that ultimately discharge into the existing sanitary sewer system onsite. The existing sanitary sewer network is to continue as existing.

Based on the NJDEP standards listed at N.J.A.C. 7:14A-23.3, Projected Flow Criteria, the project will generate an increase of approximately 29,665 gallons per day of domestic effluent as illustrated in the following table:

Establishment Type	Number of Measurement Units		Gallons per Day per Unit		Projected Flow (G.P.D.)
<b>4-Story Apartment Building</b>					
1 Bedroom Apartment	69 units		150	=	10,350
2 Bedroom Apartment	123 units	X	225	=	27,675
3 Bedroom Apartment	8 units		300	=	2,400
<b>Total proposed</b>				=	<b>40,425</b>
<b>Existing Retail</b>	107,600 SF	X	0.100	=	-10,760
<b>TOTAL FLOW INCREASE</b>				=	<b>29,665</b>

Because the proposed treatment works will increase the discharge by more than 8,000 gallons per day, an NJDEP Treatment Works Approval is required.

All water works will be constructed in accordance with Township of Franklin standards and New Jersey Department of Environmental Protection Bureau of Safe Drinking Water Rules and Regulations.

**EXISTING & PROPOSED WATER FACILITIES**

The existing 1-story masonry building consist of 107,600 SF of retail space. The existing retail building is serviced by an existing water main that loops around the site. The proposed building will be serviced by the existing water mains onsite.

Based on the NJDEP standards listed at N.J.A.C. 7:10-12.6 and RSIS N.J.A.C. 5:21 Table 5.1, Water volume requirements, the project will generate an increase of approximately 18,515 gallons per day of domestic water flow as illustrated in the following table:

<b>Establishment Type</b>	<b>Number of Measurement Units</b>		<b>Gallons per Day per Unit</b>		<b>Projected Flow (G.P.D.)</b>
<b>4-Story Apartment Building</b>					
1 Bedroom Apartment	69 units		120	=	8,280
2 Bedroom Apartment	123 units	X	175	=	21,525
3 Bedroom Apartment	8 units		270	=	2,160
<b>Total proposed</b>				=	<b>31,965</b>
<b>Existing Retail</b>	107,600 SF	X	0.125	=	-13,450
<b>TOTAL FLOW INCREASE</b>				=	<b>18,515</b>

Because the proposed water facilities will generate more than 6,000 gallons per day, a Water Main Extension approval from the NJDEP Bureau of Safe Drinking Water is required.

All water works will be constructed in accordance with the Township of Franklin standards and New Jersey Department of Environmental Protection Bureau of Safe Drinking Water Rules and Regulations.