

August 15, 2023

Tony Manfre, Superintendent
S. Windsor Water Pollution Control Authority
1540 Sullivan Avenue
South Windsor, CT 06074

**Re: W.P.C.A. Application Narrative
Proposed Retail & Pre-Order Pick Up Window
#1014 Sullivan Ave., South Windsor, CT
CMG ID 2021-010**

Dear Members of the Authority,

On behalf of MEGL (Applicant), CMG is writing you this letter to provide a summary of the proposed sewer impacts as it relates to the proposed site improvements located at 1014 Sullivan Avenue in South Windsor, CT (“the Site”).

MEGL is looking to construct a commercial development on a vacant parcel located at 1014 Sullivan Avenue. The proposal includes a 2,520 s.f. commercial building, a pick-up lane, landscaping, paved parking spaces, and associated utilities. The proposal will consist of a small, fast-food restaurant of approximately 1,260 square feet with a pick-up window for pre-ordered meals, and a second retail space of approximately the same size. Water and sewer utilities connections are proposed to the existing mains located within the Sullivan Avenue right-of-way.

Due to the applicant’s proposal of two (2) separate retail spaces, separate meters are proposed for each unit. A proposed 2,000-gallon grease trap is proposed within the front parking area to handle kitchen flows from the proposed fast-food restaurant space. A sewer connection from the retail space to the grease trap is also proposed in the case that the retail establishment becomes a restaurant in the future. The sizing calculations for the grease trap and estimated daily flows calculations for the proposed development are below:

Grease Trap Sizing Calculations:

The proposed restaurant is estimated to have a maximum of 20 seats. To be conservative and account for potential future expansion and possible, CMG is estimating a total of 40 seats for the proposed development.

40 seats x 20 gpd/ seat = 800 gpd for 24 hr. holding time

Expected Average Daily Flow Calculations:

Retail Establishment = 0.1 gpd per SF gross area
1,260 s.f. x 0.1 gpd/ s.f. = 126 gpd, Assume 200 gpd

Restaurant = 30 gpd per seat

$$20 \text{ Seats} \times 30 \text{ gpd/ seat} = 600 \text{ gpd}$$

$$\text{Average Daily Flow} = 200 \text{ gpd} + 600 \text{ gpd} = \underline{800 \text{ gpd}}$$

Expected Peak Sewer Flow (Rate):

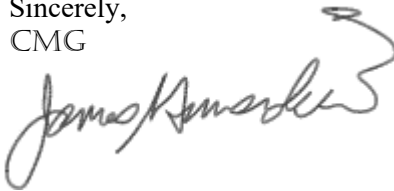
$$\text{Peak Sewer Flow} = \text{Average Daily Flow} \times 7 = 800 \text{ gpd} \times 7 = \underline{5,600 \text{ gpd}}$$

CMG is providing the enclosed Site Plan Set entitled, "Proposed Retail & Pre-Order Pick Up Window – #1000, #1006, & #1014 Sullivan Avenue" detailing the proposed site improvements.

Please contact James Bernardino, P.E. or myself with any questions or concerns at (774) 241-0901.

Thank you.

Sincerely,
CMG



James Bernardino, P.E.
Principal Civil Engineer



Robert Lussier, E.I.T.
Project Engineer II

Attachment