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Environmental · Civil · Subdivision/Site Work · Building Codes

Type II Gravity Interceptor

For

Casa Amigos II

1515 NYS Route 9, Town of Wappinger, NY 12590

September 22, 2025

#### 1.0 Purpose

The purpose of this report is to provide the necessary information for the grease trap required for the proposed Casa Amigos II Restaurant (formerly the Odyssey Diner).

#### 2.0 Background

Located in both the Town of Wappinger and the Village of Wappingers Falls, this parcel houses a building which at one time was a Pizza Hut restaurant and then the Odyssey Diner. However, the building has been vacant for some time. This project proposes to convert the Odyssey Diner into a Mexican Restaurant; Casa Amigos II Diner. Currently there is a water main running through the site from the northwest portion at Old Route 9 in the Village of Wappingers to the existing building which is located in the Town of Wappinger. The existing water service line is 1" diameter copper. The intent of this report is to propose a grease trap design.

The Odyssey Diner was a 24-hr operation and Casa Amigos II is intending to have the following hours of operation:

Sunday- Thursday, 11:00 am - 10:00 pm (11 hours) Friday - Saturday, 11:00 am - 11:00 pm (12 hours)

Essentially the hours of operation for Casa Amigos II are half of that of the Odyssey Diner.

### 3.0 Grease Trap Design

The proposed restaurant is to house 182 seats (138 regular/bar and 44 seasonal) for patrons. The restaurant is to be operational 12 hours per day. The existing Grease Interceptor Tank is a 2,000-Gallon, precast concrete Type-II Grease interceptor was designed by Michael J. Aiello, P.E., PLLC on December 17, 2015 and approved by the Dutchess County Department of Health on December 28, 2015.

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For buildings with an unknown equipment layout but known discharge pipe size, Table D-1 is recommended. Based on standard engineering calculations using half full pipe gravity flow, with a ½" pitch per foot (2 percent slope) and a Manning's n of 0.012, the maximum flow rate and the interceptor volume is given in nominal increments. The Table D-1 method assumes the design flow would be conveyed through a half-full pipe with gravity flow. This method is recommended for newly designed facilities with known FOG-laden sewer outlet pipe size, but unknown equipment layout.

<u>Table D-1: Gravity (Type II) Grease Interceptor Sizing Based on</u>
Grease-Laden Building Sewer Pipe Flowing Half Full

Grease Interceptor Inlet Pipe	Flow	Nominal Interceptor Volume (Gallons)
Size (inches)	(GPM)	(based on 30-minute settling time)
2"	10	500
3"	30	1,000
4"	65	2,000
5"	115	3,500
6"	188	6,000

The existing discharge pipe from the existing facility is a four (4") SDR-35 PVC pipe. Therefore, based upon Table D-1 above, the required Interceptor Tank is 2,000-gallons and that is what is currently installed on-site. There are no proposed changes to the existing infrastructure (all pipe sizes/types are remaining as is).

Should there be any questions or additional information needed, please do not hesitate to contact this Office.

Respectfully submitted

Jeffrey A. Econom, P. Consulting Engineer

PROFE

JAE:me Attachment

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