



MEMORANDUM

To: City of Adelanto – Engineering Dept.

From: Garrett Readler, P.E.

Date: November 18, 2022

RE: Industrial Property Group Development - Rancho Road
Sewer and Water Analysis

The following memo summarizing the water and sewer services for the proposed development by Industrial Property Group located on Rancho Road.

Sewer System:

Currently, the site is not served for sanitary sewer service. The nearest sanitary sewer line is located approximately 2,400 feet west of the site in Rancho Road. Our project proposes to extend sewer service from Rancho Road approximately 2,400 east to service our development. We propose to install a new 12" sewer force main line sloped at 0.41%. This line will have a capacity of 1.78 cfs at 75% full or 1.15 MGD.

The proposed development is a speculative industrial warehouse which tends to have low sewer generation rates. Since we do not know what the end use will be, we have assumed that general domestic waste will be generated by future employees utilizing restrooms, showers, & Kitchen facilities. For the purposes of this analysis, we have assigned a 20 gal/person/day water use for each employee similar to sizing a septic system. We have assumed 306 employees as that is the number of parking stalls provided on-site. This results in a daily flow of 6,120 gpd or 0.0061 MGD. The new 12" sewer line will have plenty of capacity to serve this site and other future developments to the north of this site. Once a user/tenant is established, if any waste generated from the site other than domestic sewer waste is proposed, an Industrial Pretreatment Wastewater Discharge Permit (IPWDP) will be required to be submitted to the city of Adelanto for review and approval.

Water System:

The site currently has not water services stubbed to the property. There is currently a 12" public water main in Rancho Road that extends from Adelanto Road to the east and end just before Emerald Road. The 12" water line will be extended to the eastern end of the property line. Given that this development is a speculative development, and a tenant has not been identified, we are proposing one, two-inch domestic water services at the west end of the building and one single domestic irrigation service. This is a standard service size for this size building/development.

Sincerely,

KIER & WRIGHT

Garrett Readler PE, QSD

PRINCIPAL

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