

ENGINEER'S REPORT FOR SANITARY SEWER

for

PROPOSED WAREHOUSES

Prepared for:

HCI DP Land Acquisition LLC

Block 14, Lot 1
4000 Bordentown Avenue
Borough of Sayreville
Middlesex County, New Jersey

Prepared by

BOHLER //

NJ Certification of Authorization No. 24GA28161700

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I. Project Definition:

The project proposes an 8" PVC main used to collect the discharge from the two warehouse buildings. The proposed main will connect to the existing on site sanitary sewer infrastructure. Each building will connect to the proposed sanitary sewer main via lateral connections, and the junction structures along the approximate 1,203 LF sanitary main will be manholes.

The proposed utility layout is depicted on the enclosed Utilities Plan as prepared by Tung-To Lam, Bohler, LLC, dated May 9, 2025, last revised August 14, 2026.

II. System Design:

The proposed lateral will consist of Schedule 40 PVC with elastomeric ring rubber gaskets, as required. Pipe joints will be designed and constructed in accordance with the manufacturer's specifications. The pipes will have an approximate ground cover of 4 feet and will be installed with dense-graded aggregate base course (DGABC), and a clean stone bedding from 6-inches below the pipe invert to 12-inches above the top of the pipe. Prior to completion of backfilling, sanitary line marking tape shall be placed along the entire length of the excavation, 2 feet below grade above the top of the main and proposed lateral. Trenches will be back filled with select fill, excavated material, compacted in lifts to 95% compaction.

The system will be constructed as shown on the Site Plan documents. As depicted, the proposed sewer mains shall be installed to provide the required separation from potable water lines and appurtenances as specified in NJAC 7:10-11:10 (e) 5 (10' horizontal and 18" vertical separation, where the water main is over the sewer main). Where such separation is not possible, the proposed sanitary sewer line will be encased in concrete for a distance of 10' on each side of the crossing.

Estimated Demand in accordance with NJAC 7:14A-23.3(a)

Proposed:

Use	Unit	Calculation	GPD
Warehouse	842,577 SF/ 5,000= 169 Employees*	169 Employees x 25 GPD/Employee x 3 shifts	12,675
Office	15,553 SF	15,553 SF x 0.1 GPD/SF	1,555

Existing Average Flow: 14,230 GPD

Proposed:

Use	Unit	Calculation	GPD
Warehouse	702,066 SF/ 5,000= 140 Employees*	140 Employees x 25 GPD/Employee x 3 shifts	10,500
Office	12,434 SF	12,434 SF x 0.1 GPD/SF	1,244

Proposed Average Flow: 11,744 GPD

*Employees are estimated to be 5,000 sf/employee per Borough parking requirements

As the existing average flow is lower than the proposed average flow, there are no anticipated impacts to the downstream system capacity.