

DRESDNER ROBIN

ENGINEERING REPORT

669 BERGEN AVENUE

BLOCK 14801, LOTS 24

CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DRESDNER ROBIN PROJECT No. 00718-006

PREPARED FOR

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1.0 INTRODUCTION

This report should be reviewed in conjunction with a certain set of drawings titled "*Preliminary and Final Site Plan for St. Peter's University School of Business Expansion., Block 14801, Lot 24, City of Jersey City, County of Hudson, New Jersey*" prepared by Dresdner Robin. This report has been prepared to demonstrate that the proposed site improvements meet the criteria of the following standards:

- Article VI "*Stormwater Control*" of Chapter 345 "*Zoning*" from the Code of the City of Jersey City.
- New Jersey Residential Site Improvement Standards (NJ.A.C. 5:21) and,
- The Standards for Soil Erosion and Sediment Control In New Jersey.

All elevations cited in this report are referenced to North American Vertical Datum 1988

2.0 EXISTING CONDITIONS

The project is located on Block 14801, Lot 24 in the City of Jersey City, Hudson County, New Jersey and is approximately 3.21 acres (Ac); The site consists of existing multistory academic buildings, walkways, courtyards, landscaped areas, service areas etc. for the University. The area of the proposed building expansion is limited to approximately 1,550 sf and is in the southeast corner of the site. The property is bound by John F. Kennedy Boulevard to the east, Montgomery Street to the south and the ex. University to the north and west. The area for proposed business school expansion currently consists of a depressed courtyard with stairs, paving, tables and chairs, walls and fences as some landscaped areas.

The property is in the University District per the Jersey City Zoning Map and bound by the requirements of the zone as stated in the Jersey City Land Development Ordinance.

The property is outside of the limits of the 100-year flood hazard-area (Zone AE) for Hudson River in accordance with Flood Insurance Rate Map No. 34017C0102E (revised preliminary December 20, 2013). The New Jersey Department of Environmental Protection (NJDEP) NJ-GeoWeb website records the property within the Metropolitan Planning Area (PA1) and approximated centroid coordinates of N 690,217 feet, E 610,758 feet (New Jersey State Plan 1983).

For over 13 years, the buildings, sidewalks, courtyards and services areas have covered over 83% of the site (impervious lot coverage), with the remaining 17% being pervious vegetated area.



Figure 1: 2012 Conditions (Courtesy GoogleEarth)

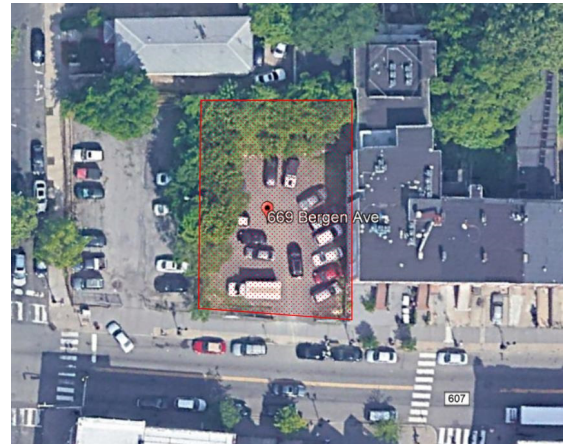


Figure 2: 2018 Conditions (Courtesy GoogleEarth)

The property generally slopes from the east to west (Kennedy Boulevard towards West Side Avenue). The 1,550 +/- sf project area is approximately 5-6 feet lower than the adjacent sidewalk grades along both the Kennedy Boulevard and Montgomery Street. The depressed courtyard is bound by brick masonry walls with decorative wrought iron fence to the east and south. It is accessed by a set of stairs located in the southwest corner of the site and through the lower level of the existing building school.

Existing water, sewer, gas, electric and telecom services are provided within the Kennedy Boulevard and Montgomery Street rights-of-way. The existing business school discharges both sanitary and storm sewers via an 8-inch pipe connecting to the existing 18-inch vitrified clay pipe in Montgomery Street.

3.0 PROPOSED CONDITIONS

3.1.1 Project Description

The Applicant is proposing to construct a 2-story expansion of the existing Dineen Hall School of Business. The proposed expansion will extend the current building footprint south approximately 28.5 feet to the southerly property line. The building expansion is comprised of a lower level lobby (1,100 sf), and a second-floor multi-purpose room (856 sf.) An entry/exit will be provided at the western end of the Montgomery Street frontage, inline with existing concrete stairs that are remaining. Access into the expansion will also be provided through the existing building.

3.1.2 Stormwater Analysis Applicability

In accordance with the municipal land use ordinance and the New Jersey Residential Site Improvement Standards (N.J.A.C. 5:21) and the New Jersey DEP Stormwater Management Rules (N.J.A.C. 7:8), the project is not considered a "major development" because the improvements will ultimately not disturb more than one quarter acre of land. As a result, attenuation of stormwater runoff will not be provided. Stormwater runoff from the roof

of the building expansion will be collected in roof drains and routed internally and tie into the existing stormwater lateral.

3.1.3 Groundwater Recharge

The cited regulations specify minimum design and performance standards for groundwater recharge; however, in accordance with the New Jersey Stormwater Management Rules at N.J.A.C. 7:8-5.4(a)2.ii., the groundwater recharge requirement does not apply to project within the "urban redevelopment area", which includes the Metropolitan Planning Area as defined by the Stormwater Management Rules.

3.1.4 Water Quality

The cited regulations specify "major developments" that create at least 0.25 acres of new or additional impervious surface must include stormwater management measures to reduce the post-constructed load of total suspended solids (TSS) in stormwater runoff generated from the water quality storm by 80% of the **anticipated load** [emphasis added] from the development site. This project is not a "major development" in accordance with the cited regulations. Furthermore, according to the Stormwater Management Rule Frequently Asked Questions section on the NJDEP website, the Department states in Response 7.5:

"Clean roof runoff and runoff from lawns, walkways, patios or decks do not have to be treated for TSS removal."

Because of the Department Response 7.5, we infer the areas which would contribute to the **anticipated load** will be from clean runoff from roofs, walkways/patios and landscaped areas; As a result, stormwater quality treatment is not provided for the project.

3.1.5 Water Quantity

The project does not meet the requirements of a "major development". As such, water quantity reductions is not required and therefore not be provided.

3.1.6 Stormwater Conveyance System

The stormwater conveyance system from the existing building and courtyard area is proposed to be reuse as part of the building expansion. No new storm lateral is being proposed. The existing 8-inch sewer lateral will be video inspected and cleaned in accordance with JCMUA regulations, and a copy of the video inspection will be provided to the JCMUA.

3.2 Sanitary Sewer System

The JCMUA maintains an 18-inch diameter vitrified clay combined sewer in Montgomery Street. Flow within the sewer is conveyed to the Passaic Valley Sewerage Commission (PVSC) treatment plant for treatment and discharge.

The proposed building addition will contain 50 new school seats and therefore will create approximately 500 gallons per day of new sanitary flow per the JCMUA Regulations. The existing 5-inch diameter building sanitary sewer lateral is proposed to remain. No new laterals or sewer connections are proposed.

3.3 Water Supply

The proposed building expansion is not proposing a new water service and will utilize the existing water lateral. From the 50 proposed new school seats, a domestic water demand of approximately 500 gallons per day is anticipated per the guidance at N.J.A.C. 7:10-12.6.

4.0 CONCLUSION

This report has been prepared as required by the municipality and demonstrates the proposed development will meet the objectives of minimizing impacts to environmentally-sensitive areas, stormwater quality, stormwater quantity and flood-related matters at the source by land management and source control whenever possible.

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DRAWINGS

(BOUND SEPARATELY)