

EXHIBIT H

Environmental Analysis

Domestic Water Demand

The proposed Project will construct approximately 164,485 square feet of new gross floor area. A 4-inch domestic water service will be extended from the water main at 7th Street, NW. The water service will be designed to provide water to the building's fixtures and equipment at a minimum pressure of 35 psig. Maximum pressure will not exceed 80 psig and flow velocity will not exceed 7.5 fps. The building's service main size is anticipated to be 4-inches in diameter, to serve domestic demands. Design flow demand for the building is 175 gpm.

Fire Service Demand

A 6-inch fire service entrance pipe will be extended from the main at 7th-Street, NW based on the sizing requirements of NFPA-13 and NFPA-14 with a velocity of not more than 20 fps. The flow capacity will be based on the supply demand of the most hydraulically remote sprinkler zone plus inside/outside hose stream demands. For standpipe systems, fire service sizing criteria shall be based on the flow demand of the fire pump capacity at 150% percent rating, for testing in compliance with NFPA-25. Piping shall be sized to provide at least 100-psig net positive suction head pressure at the full demand.

Sanitary Sewer Demand

A sanitary waste and vent system will be provided for all domestic fixtures in the building. Plumbing fixtures will be drained by gravity through conventional soil, waste and vent stacks and a sovent stack system, building drains and building sewers to the street sewer. A sump pump located in mechanical room at the lowest level of parking, will lift up the waste from the basement levels and drain it to the main sanitary pipe that is routed under the slab at the first level. All fixtures will be trapped and vented to atmosphere. Vents will be extended through the roof.

The sanitary waste system will be designed to maintain a minimum slope of 1/8" per foot. The sanitary vent system will be designed so that the differential pressure at any point in the building does not exceed the 35 feet water column. The main sanitary pipe discharged from the building will be 8 inch in diameter pipes and will extend to the existing 12" sanitary sewer system at 7th-Street, NW. All design and installation will be

in accordance with the International Plumbing Code and will be coordinated with the D.C. Water.

Stormwater Management

Consistent with the EPA's Municipal Separate Storm Sewer Systems (MS4) program, and DDOE's adoption of the MS4 requirements, the stormwater management system will be designed and constructed in compliance with applicable District of Columbia Stormwater Regulations. The project is considered as a major land disturbing activity so therefore the requirement will be to retain the first 1.2" of rainfall on site or by combining 50% on-site and 50% off-site retention.

Solid Waste Services

Solid waste and recycling materials generated by the Project will be collected by a private trash collection contractor.

Electrical Services

Primary electric service will be derived from the PEPCO grid. PEPCO will provide a transformer vault and distribution transformer to have 120/208V and 265/460V secondary building utilization voltage. The primary system service capacity will be designed to serve the calculated connected load of the facility plus an additional 15% percent for anticipated future loads. PEPCO will provide primary distribution transformer and make terminal at primary side of transformer at a charge to the Owner. PEPCO transformers will be located on the northern portion of the Property, out of public space and within the proposed driveway. Feeders from secondary of PEPCO transformer will be installed through underground ductbank from PEPCO transformer vaults. The feeders will be terminated at 4000A, 120/208V, 3Ph, 4W residential main service entrance rated switchboards, and to 1600A, 265/460V, 3Ph, 4W , House and Retail main entrance rated switchboard with capacities of, with separate amperages of 800A Main (House) and 800A Main (Ground Floor Commercial Tenants). The Riverside Baptist Church shall be provided with a 1200A, 208Y/120V, 3PH, 4W electrical service with feeders that terminate at an interior current transformer cabinet.

All electrical systems will be designed to comply with the D.C. Energy Code. The transformer vault and underground ductbank will be installed in accordance with PEPCO's design guidelines.

Energy Conservation

The Project will be constructed in full compliance with Article 24 (Energy Conservation) of the D.C. Building Code. Conformance to code standards will minimize the amounts of

energy needed for the heat, ventilation, hot water, electrical distribution, and lighting systems contained in the structure. The building will have high efficiency chillers. The HVAC system strategy is to reduce the overall airflow required and thereby the total energy consumed by the building. The ventilation system will employ CO₂ sensors to regulate the outside air brought into the building. Similarly, high efficiency electrical system components will be provided. A daylight control system will be provided to minimize the use of electrical lighting when ambient light is available for illumination. A monitoring system will be provided for utilities for the building.

Erosion Control

Sediment and erosion control will be implemented during excavation and during construction per the District Department of Environment standards and specifications. Tree protection, inlet protection, construction entrance, sump pump and sediment trap are the methods being use for this Project.