




Septage and Fats, Oil and Grease Handling Facility, Mandatory Referral, MR2018013

 Katherine E. Nelson, Planner Coordinator, Katherine.Nelson@montgomeryplanning.org, (301) 495-4622
Frederick Vernon Boyd, Master Planner Supervisor, Fred.Boyd@montgomeryplanning.org, 301-495-4654
Richard A. Weaver, Chief, Area 3 Planning, Richard.Weaver@montgomeryplanning.org, (301) 495-4575

description

WSSC Facility

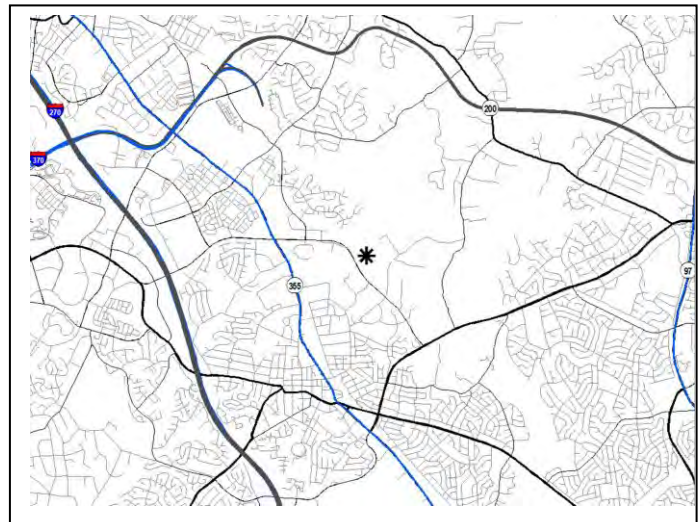
The Washington Suburban Sanitary Commission (WSSC) proposes to construct a Septage and FOG (Fats, Oils, Grease) Discharge Facility at the abandoned Rock Creek WWTP located at 700 East Gude Drive, in Rockville.

Staff Recommendation:

Transmit Comments to WSSC

Master Plan: Upper Rock Creek

- Applicant: WSSC
- Filing Date: April 2, 2018



Summary

Staff recommends approval of the Mandatory Referral with recommendations. This project is located within the Upper Rock Creek Master Plan and in the Gude Drive-Southlawn Lane industrial area. An abandoned Waste Water Treatment Plant will be partially reconstructed and modified to become a Septage and FOG Discharge Facility to treat septage as well as a Fats, Oil and Grease (FOG). This will replace the existing under-sized and outdated facility located on Muddy Branch Road in the City of Gaithersburg.

Recommendations

1. Add landscaping to provide shade over impervious areas.
2. Make efforts to remove property/stream encroachments from adjacent landscape operation.
3. The existing Facility at Muddy Branch should be de-constructed, and the Bank of Muddy Branch restored to a forested condition.

Background

The Washington Suburban Sanitary Commission (WSSC) proposes to reconstruct the abandoned Rock Creek Waste Water Treatment Plant (WWTP) into a Septage and FOG Discharge Facility located at 700 East Gude Drive. Among the facilities and infrastructure provided by WSSC are facilities to receive septage (wastewater) discharges from mobile sources such as septic tank pumping trucks, tour buses and recreational vehicles. These Septage Discharge Facilities provide access to the gravity sewer main system. Septage can be discharged directly into sewers that carry the wastewater to a treatment facility, in this case, the Blue Plains WWTP in Washington, DC. The proposed Septage and FOG



Figure 1: Existing Discharge Facility and Pump Station at Muddy Branch

Discharge Facility will also provide a facility for the receipt, treatment and disposal of used fats, oils and grease from food service establishments.

WSSC currently accepts septage at three sites in its service area. Two are located in Prince George's County. The Montgomery County facility is co-located with the Muddy Branch Wastewater Pumping Station near the intersection of Muddy Branch Road and Conservation Road in the City of Gaithersburg. This existing site is heavily used, but inadequate due to lack of turning space for trucks, absence of stormwater management,

concerns about traffic safety and the inability to pre-treat discharges. In addition, all but a half acre of this 1.78-acre site is within 100 feet of the Muddy Branch mainstem, making it nearly impossible to ensure adequate protection of this important stream. Site constraints prohibit the kinds of improvements that would be necessary to allow continued use of this facility. To address these inadequacies, WSSC evaluated its waste hauler discharge facilities and practices with the participation of the Montgomery County Department of Environmental Protection (MCDEP), DC Water, and the Waste Haulers Advisory Committee. WSSC concluded that the facility at Muddy Branch should be abandoned and a new facility constructed at the abandoned Rock Creek WWTP. This site selection was brought before the Planning Board as an information item on February 18, 2011.

Existing Conditions

The 17.6-acre site is currently an abandoned wastewater treatment plant. The WWTP operated for two years between 1978 and 1980. In 1980 flows from the Rock Creek sewer service area were directed to Blue Plains WWTP. WSSC abandoned this facility after that decision. The site is located in a mixed industrial and commercial area with industrial zoning. The existing facility includes open top tanks, grassy areas, a single floor industrial building and roadways on the site. The Southlawn tributary to Rock Creek runs lengthwise across the site. Thirteen acres are within the buffer of this Use IV stream. The stream valley is deeply incised. This effect has been enhanced by areas of fill, used to level the developed area for the original WWTP.



Figure 2 Existing Abandoned WWTP at Gude Drive

Proposed Improvements/Mandatory Referral Narrative

The proposed location of the Rock Creek - Septage and FOG Discharge Facility will require demolition of five existing sludge tanks. The new facility will consist of:

1. A building to house two discharge stations for treatment of septage discharge from waste haulers and tour buses. Waste haulers and tour buses will be able to pull up on either side of the building to discharge. Pre-treated effluent will be conveyed to an existing sewer on the north side of the site where it will be conveyed by gravity to the Blue Plains WWTP for further treatment.

2. A FOG Discharge Concentrator and holding tanks. FOG discharge will occur in a similar manner to septage discharge. A concentrator with two holding tanks will concentrate solid FOG waste material until it is ready to be transported by truck off-site. The FOG effluent that remains will be discharged into the existing sewer on the north side of the site.

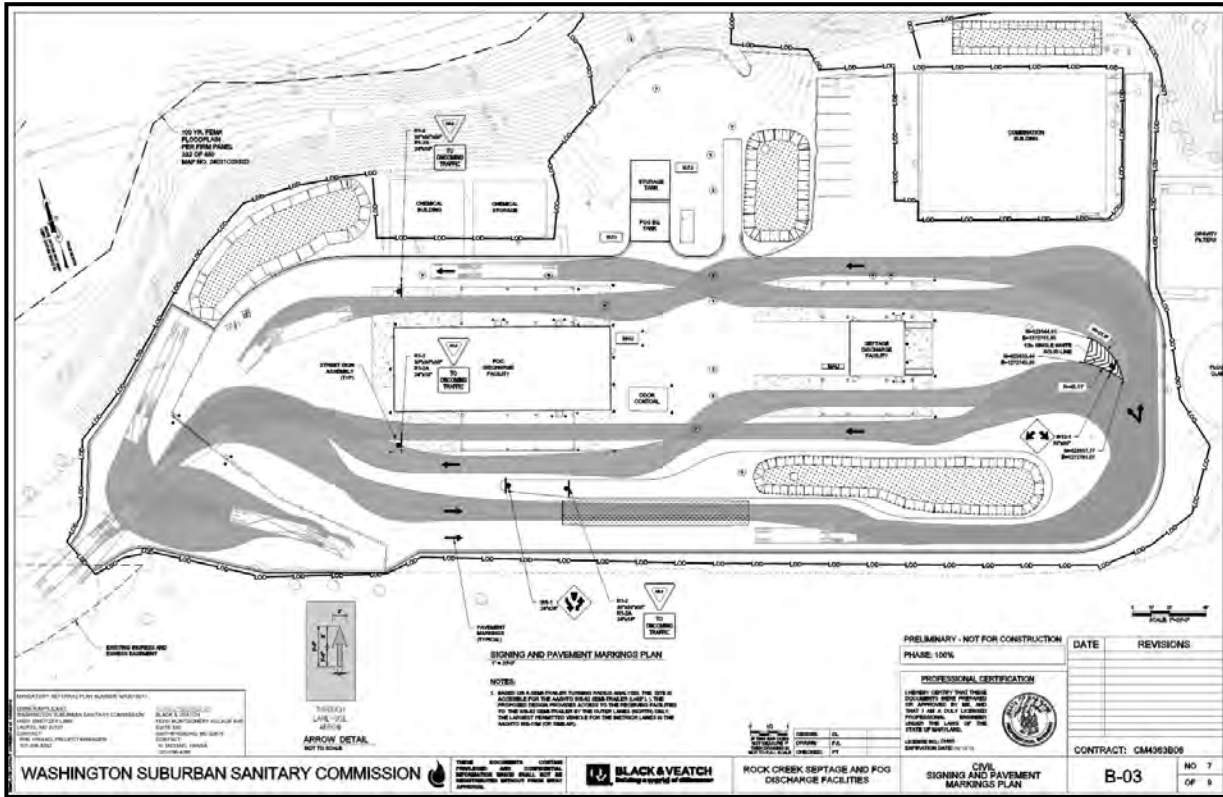


Figure 3 Proposed Septage and FOG Discharge Facility

This is a completely enclosed system that will contain odors and provide for a secure facility. An odor control system will also be provided within the facility. The construction phase will take approximately 18 months beginning in the Spring of 2019.

Environmental Issues

This site has significant environmental constraints. Two perennial tributaries meet on this site. The Southlawn Branch runs nearly the entire west-to-east length of the parcel. This, along with the associated extreme steep slopes leading down to the streams, create a Use IV stream buffer encompassing approximately 72 percent of the site. The existing abandoned WWTP has about 1.2 acres of stream valley buffer encroachment of the 12.6-acre buffer area. Under this proposal, existing structures to remain in use will not be removed from the stream buffer. Approximately 0.25 acres of the existing encroachment area will become stormwater management facilities. In addition to the normal stream buffer, approximately 1.0 acre of forest outside, but adjacent to the normal stream buffer will be permanently protected.

Forest Conservation Plan

Under current law, the Maryland Department of Natural Resources (DNR) reviews and approves forest conservation requirements for WSSC projects. The Forest Conservation Plan (FCP) was approved by the Maryland Department of Natural Resources on September 17, 2017. The FCP proposes to build on the already developed areas of the property. To connect to the existing sewer main, 0.24 acres of forest within the stream valley and one specimen tree will be disturbed. About 7.39 acres of forest will be permanently preserved by a conservation easement held by DNR. The forest conservation easement area excludes a maintenance corridor of approximately 4.4 acres for existing and proposed WSSC sewer mains. Also, there is an encroachment area in the southeast corner of the site that has been excluded from the easement. Efforts should be made to reduce or eliminate this encroachment as it takes place along the banks of a tributary to Rock Creek.

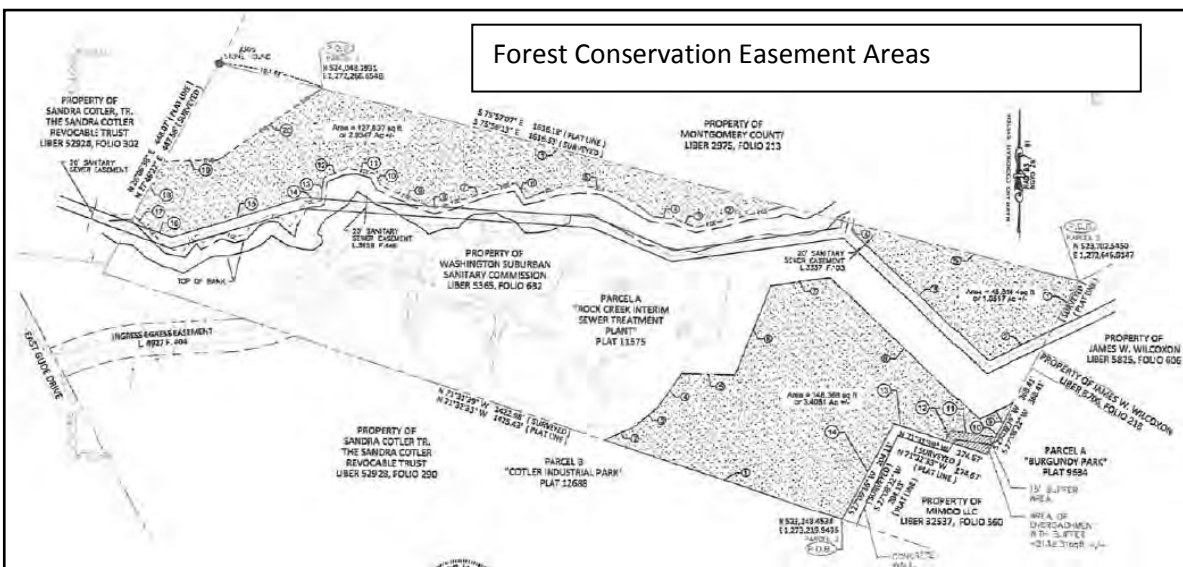


Figure 4 Permanently Protected Forest Areas

The applicant proposes to plant 62 trees in the disturbed forest area and along the steep slopes leading down to the stream valley. Staff also recommends that some plantings take place to provide shade over impervious areas where possible.

Stormwater Management

The existing facility was built without stormwater management facilities. The current impervious level of the site is 9.7 percent of the 17.6-acre site. The proposed development will increase this to 12.3 percent. This site retrofit will include stormwater management for 90 percent of the developed site. The stormwater management plan for this facility was approved by the Maryland Department of Environment on April 24, 2018.

Transportation Issues

The site is land-locked but has a perpetual easement that provides access to East Gude Drive. The facility will operate from 6 AM to 6 PM Monday through Saturday. East Gude Drive, a four-lane divided

highway, is classified as a major highway with a minimum right of way of 150 feet based on the latest Planning Board version of the Master Plan of Highways and Transitways. It serves as a commercial thoroughfare and is designed for the size and weight of the vehicles that will use this facility. WSSC estimates that 20 to 30 vehicles per day would enter the site. The additional traffic generated by these vehicles would not impact the traffic patterns along East Gude Drive. The site provides ample space for waiting vehicles, so there will be no vehicles backed up on East Gude Drive. A preliminary estimate indicates that there will be an additional five to ten trucks per week at the site to remove trash or FOG by-products.

A traffic impact study is not warranted for this project based on the 2017 Montgomery County Local Area Transportation Review Guidelines because the project generates less than 50 total weekday peak hour person trips.

No changes are anticipated in the pedestrian and vehicular circulation pattern outside of the WSSC gate. The facility is not located near residential units, nor is the facility intended as a center of employment that would warrant increased bicycle or pedestrian use. Furthermore, nearly all trips to the site will be arriving by vehicle.

Impacts to Parks

The site borders proposed parkland (former Gude landfill) on the north and west property boundaries. See Figure 6. The proposed park area is currently owned by Montgomery County. There are no plans to improve this property as parkland at this time. The Department of Parks has reviewed the proposed Septage Discharge Facility plans. They have determined that the proposed facility has no impacts to existing or proposed Parks.

Master Plan Consistency



Figure 5 Surrounding Land Use and Zoning Pattern

The 2004 Upper Rock Creek Area Master Plan makes general recommendations for the industrial area along Gude Drive and Southlawn Lane, where the proposed project will be located. This area has had an industrial character for about five decades, and the Plan notes that the Gude-Southlawn area is “the only place in the county with zoning, ownership, and use patterns suitable for a variety of heavy industrial activities.” (p. 33) The recommendations

recognize the long-standing industrial uses in this area by confirming the light and heavy industrial zones applied in this area. As noted above, the proposed facility is will be industrial in character. It is consistent with the 2004 Upper Rock Creek Area Master Plan.

Conclusion

The proposed site modification to accommodate a Septage and FOG Discharge Facility places an industrial use in an area already industrial in character. It will have no impact on residential neighborhoods. It has a state-approved forest conservation plan. It meets the intent of the Upper Rock Creek Master Plan and will have no negative impact on the existing transportation network. Staff recommends approval of this project with recommendations to be transmitted to the WSSC.