



November 10, 2022

Review of Public Hearing Record
Application #C 22-09: 21 Gurley Road

Public Hearing Commenced 9/22/2022, continued to 10/27/2022; hearing closed on 10/27/2022
Exhibits 1 – 20 submitted into the record.

Exhibit 1.f, the initial wetland assessment report provides descriptions of the on-site wetland resources, hydrology and past disturbances to the property for sand and gravel extraction. A perennial stream occurs in the western portion of the site. The channel is described as stable and is bordered by a narrow floodplain (Wetland 1). Wetland 3, the larger central wetland, is forested and occupies a previously excavated area (prior to 1961 aerial photo), with hydrology supported by shallow groundwater discharge. Wetland 2 is a forested wetland fed by shallow groundwater discharge. Wood frog egg masses were detected in this wetland in 2021 and 2022. Identified as not being a viable breeding area because water dries up in wetland by May. Wetland 4/5 in easternmost portion of site contains intermittent stream and forested wetland, and a man-made pond. Wood frog and spotted salamander egg masses were observed in this wetland.

No direct impacts to wetlands or watercourses are proposed. A minimum 50 ft. wide undisturbed vegetated buffer is maintained adjacent to all wetland borders.

Potential in-direct impacts discussed include:

Potential channel erosion due to increased run-off volumes and rates -

Avoidance and minimization of impact proposed by reduction of runoff volume through infiltration and retention of 2-year storm event in basins.

Potential erosion and sedimentation impacts from construction activities – 9.5 acres of disturbance

E&S plan includes perimeter controls, temporary sediment traps, diversion swales, temporary slope stabilization netting and phased construction sequence with a provision for the site to be finished graded and seeded by end of phase 2 of construction.

Potential WQ impacts to receiving wetlands and streams from development –

Applicant provided site drainage/hydrology reports (Ex. 1.e, 9, and 19). Reports state “stormwater treatment design exceeds treatment of the water quality volume required by the State 2004 Stormwater manual”

No discharge released from the 5 stormwater basins in the 2-year storm (3.5” rain event), “this is anticipated to provide “extremely high” levels of pollutant removal based on referenced data from UNH Stormwater Center

Subsequent information provided on estimated infiltration rates for each stormwater basin provided on November 3, 2022 from CLA Engineers indicate drain times for basin #1 - #5 are 2.6, 0.4, 0.8, 3.9 and 1.4 days respectively;

Inspection and maintenance of subsurface infiltrators, basin infiltration rates, and rain garden pretreatment functions need to be included in the final stormwater management report and inspection and maintenance practices. Annual inspection and reporting to the Planning Dept. is proposed by the applicant. Post-construction monitoring of the stormwater basins including slope and substrate stability, vegetative cover, outlet control maintenance and downstream soil stabilization is typically required for a 2-3 year period following completion of the construction to verify basin performance.

Proposed build-out of the construction will be over a period of 5 years. A phased construction sequence has been included in the plans. The clearing, grading and seeding of the entire site is proposed during Phase 2, when the access drive and interior utilities will be constructed. Staff recommends the ESC plan include temporary diversion swales or berms along the @ 700 ft length of slope parallel to the I-95 corridor to break up concentration of sheet flow run-off and direct run-off towards the stabilized temporary sediment traps.

E&S monitoring and inspection reporting may be considered as a condition of plan approval due to the estimated length of construction. At a minimum regular inspection should be required until the Phase 2 graded extent has been demonstrated to be well-vegetated and stable and the temporary sediment traps functioning.

The Commission may require surface water quality monitoring of the on-site stream at locations upstream and downstream of the site development area to monitor concentrations of pollutants, particularly nitrogen, phosphorus, bacteria and zinc and demonstrate effectiveness of stormwater treatment system.

Respectfully,

Maureen FitzGerald
Environmental Planner

