Fletcher Allen Health Care Inpatient Building Project

Summary Narrative of Stormwater and Erosion Prevention and Sediment Control
Additional Information for the Conservation Board
August 15, 2014

I. Overview

Fletcher Allen Health Care (Fletcher Allen) is proposing an approximately 208,000 square foot (sq. ft.) inpatient building project (the Project) to be located next to the Emergency Department on the west side of its Medical Center Campus. The Project will consist of approximately 128 inpatient replacement beds to be hosted in single rooms with connections to the McClure Building and the West Pavilion of the Ambulatory Care Center. The Project will require a small boundary line adjustment with the University of Vermont.

Fletcher Allen submitted a Final Site Plan application to the City Planning and Zoning Office on June 30, 2014. As part of the City permitting review, the project needs to be reviewed by the Conservation Board. The outcome of the Conservation Board review will be a recommendation to the Development Review Board regarding the project's effect on environmental quality and the environment.

II. Conservation Board Review

On August 4, 2014, Fletcher Allen met with the Conservation Board to review the Inpatient Building Project final site plan submittal. Specifically, we presented information regarding the site and landscape design along with the proposed stormwater design and erosion prevention and sediment control (EPSC) measures to be used.

The Conservation Board tabled the hearing and requested additional information on the stormwater design and EPSC measure from Fletcher Allen for review at their next meeting on August 25th. The requested additional information includes the stormwater hydraulic model data, specifics of the stormwater design including the forebay expansion at the North Campus stormwater facility, erosion control details and information, and a letter from Megan Moir, Department of Public Works regarding her review and approval process. This summary narrative outlines and briefly describes the additional information Fletcher Allen is submitting to the Conservation Board to address the proposed stormwater design and EPSC measures.

III. Additional Information on Stormwater Design and EPSC Measures

State Permitting Requirements

We have now clarified with the Agency of Natural Resources (ANR) the process that they will use for permitting the Inpatient Building project. In the next month, Fletcher Allen will apply to renew its existing State stormwater permit as an individual permit and will include the new impervious for the new impatient bed facility. UVM will be co-applicant because UVM owns the North Campus pond. Fletcher Allen will have to ensure that there is no net increase of sediment discharge to Centennial Brook.

Stormwater Design

The project causes a small increase in impervious area from 19.02 acres to 19.71 acres. Stormwater management will be accomplished using two approaches. One approach will be connecting to the existing collection system that conveys runoff to the North Campus stormwater facility. The North Campus facility provides treatment to portions of both the UVM and Fletcher Allen campuses. This facility is designed to fully treat all UVM and Fletcher Allen impervious areas, in accordance with the State of Vermont's Stormwater Management Manual requirements. Secondly, some on-site green strormwater design features (rain gardens) are included. See Attachment 5 for Planting Plan and rain garden locations.

In order to determine the needed stormwater treatment methods, Krebs and Lansing Consulting Engineers, Inc. prepared an updated hydraulic model for the Project for one and ten year storm events. See Attachment 2: Conservation Board package including hydraulic model data and results along with the North Campus watershed plan. The results of the hydraulic model indicate the need for expanding the forebay for the North Campus Stormwater Facility to handle the stormwater volume. See Attachments 3 and 4: Preliminary Design Plans and details for the forebay expansion.

Based on the sediment calculations, the total sediment that needs to be offset is 123 lbs. There will be no net increase in sediment load to Centennial Brook from this project. The source for sediment offsets include participating in an offsite sediment offset project at Jaycee Park.

Erosion Prevention and Sediment Control (EPSC)

For erosion prevention and sediment control, the project will meet the best practices to prevent and / or minimize erosion during construction following the State EPSC manuals and guidelines. Currently, Fletcher Allen has hired a construction manager that is working on a detailed logistics / phasing plan. Due to the size of the project as well as constructing the building over an active Emergency Department, there are a series of complex steps the contractor will have to undertake in order to construct the project while maintaining access to the Emergency Department. The anticipated temporary and permanent EPSC details that will be employed on the site have been included on the updated erosion control detail sheet in Attachment 7.

Once the logistics plan is completed and signed off on, a detailed Erosion Prevention and Sediment Control (EPSC) Plan set will be developed and submitted to the State Agency of Natural Resources as part of their construction general permit program (CGP). This plan will take into account the phases / steps that will be required for construction and reflect the measures that will be applied as part of each phase of the project. Megan Moir, the City's Stormwater Program Manager, will be consulted with as part of this plan development as well as receiving copies of the final plan. Attachment 8 contains correspondence from Ms. Moir regarding the proposed Inpatient Building project.