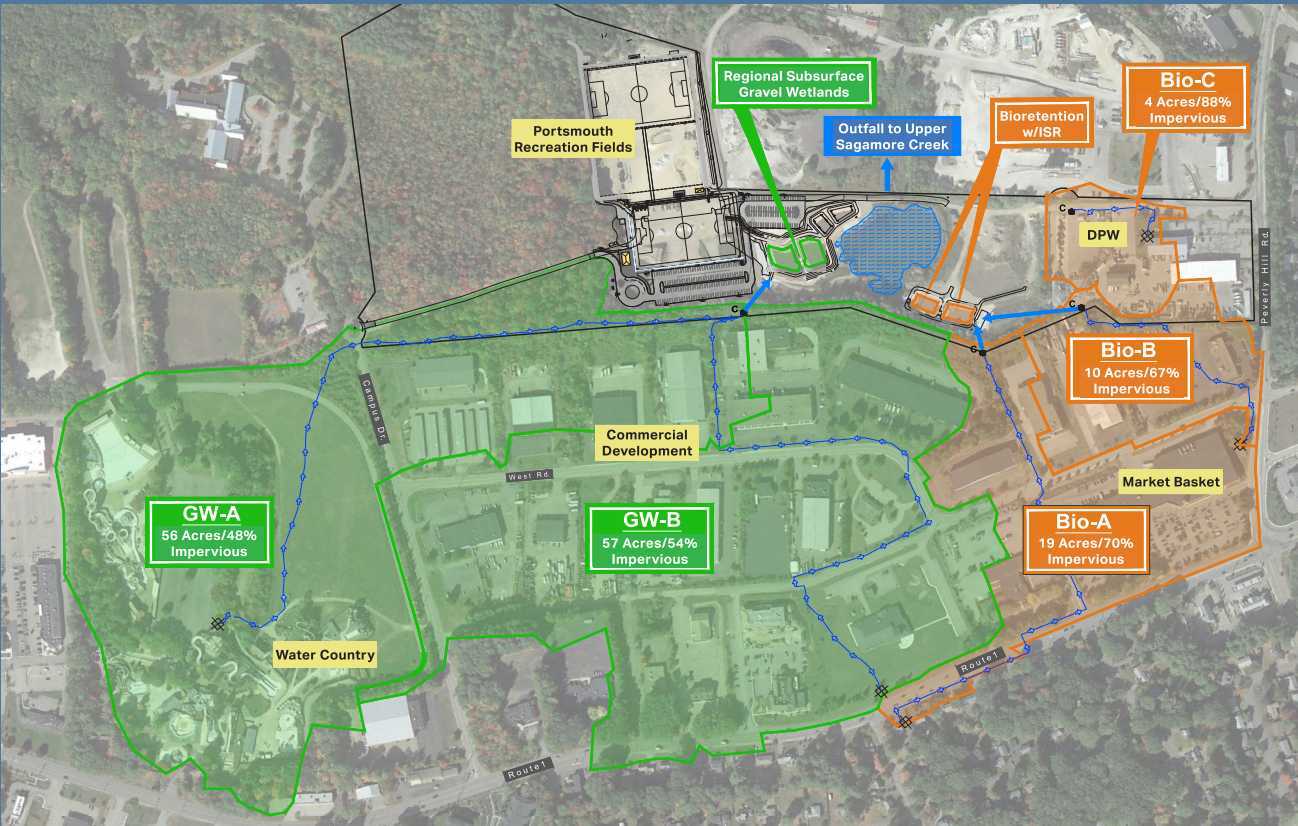


Portsmouth Regional Stormwater Treatment Project



CMA Engineers worked closely with the City of Portsmouth, NH, to develop an innovative regional stormwater treatment project that included two significant regional stormwater BMP's: a Subsurface Gravel Wetland; and a Bioretention Basin with Internal Storage Reservoir. These facilities were designed on a parcel just upstream from upper Sagamore Creek, a tidal water body with documented contamination, and downstream from large urbanized commercial areas. The scale and scope of the state-of-the-practice stormwater treatment facilities for existing large, urbanized watersheds is unprecedented in NH.

The facilities are unique because of their size, management of different stormwater flow conditions, and the innovative techniques used for treatment. Pre and post construction stormwater sampling and analysis will provide the City and the engineering community with a unique opportunity to evaluate the effectiveness of these large BMP facilities and improve the design of future stormwater treatment facilities.



Subsurface Gravel Wetlands



Bioretention w/ISR



Title: Portsmouth Regional Stormwater Treatment Project
Owner: The City of Portsmouth, NH
Design Engineers: CMA Engineers, Inc. | Portsmouth, NH
Contractor: Quirk Construction Corporation, Georgetown, MA

