Stormwater Drainage Report Supplemental Summary

I. Summary

The following presents a revised supplemental summary (originally prepared March 10, 2009) to the drainage report for North Street Condominiums originally submitted November 11, 2008 and revised February 19, 2009. The revision is based on the test pits conducted within the proposed stormwater BMPs on March 9th and 10th, 2009 to confirm soil and groundwater conditions (see attached plans TP1 and TP2). Based upon these findings the proposed infiltration trench does not have adequate separation to groundwater and has been modified and raised to create a minimum 1 foot separation from groundwater. The system is designed as a Snow Melt Trench which will infiltrate and direct snowmelt away from the adjacent property lines. The system has been designed with an overflow catch basin that will clean and discharge excess snowmelt into the proposed drainage infrastructure. This modified system will not be included in the recharge calculations as it does not meet the 2 feet of separation from groundwater (see revised recharge calculations revised 3/10/09) and any mention of the infiltration trench within the stormwater report and appendices revised February 19, 2009 should be disregarded for this reason. The test pits also revealed adequate groundwater separation from the bottom of the proposed rain garden (see SK1 and SK2) which allows infiltration to occur within this system. Please see the revised MADEP Stormwater Standard 3 Summary below and attached recharge calculations for further information.

Standard 3 - Recharge to Groundwater

The proposed site has designed to recharge groundwater to the maximum extent practicable in proposed conditions. The entire site consists of hydrologic group "C" soils and there is very high groundwater throughout most of the site (see Appendix B for test pit logs). The soil conditions caused limitations for infiltration on many areas of the site because the required 2 feet separation from groundwater could not be met. Wherever feasible, infiltration has been proposed and approximately 42.4% of the new impervious area will be directed to an infiltration system. The rain garden located between units 19 and 20/21 has been designed to infiltrate the impervious areas located within subcatchment P-2 and all of the new unit's roofs are connected to a shallow dry well system designed to recharge roof runoff into the ground. Due to restrictions of the site terrain and soil conditions, not all of the impervious area could be directed to an infiltration system, therefore all 9 of the infiltration systems are oversized to maximize the amount of infiltration on site. They are designed to hold at least twice the required recharge volume and still drawdown within 72 hours in order to meet Standard 3 to the maximum extent practicable (see Appendix D for recharge calculations).