



STORMWATER MANAGEMENT COMMISSION

MEMORANDUM

October 30, 2003

TO: Proposed WDO Changes/TRM Update

FROM: Regulatory Staff

RE: Effects of drain tiles on Depressional BFEs for Proposed Developments

This memorandum summarizes the policy on existing drain tiles located through a depressional/wetland area within the limits of a proposed development. The following criteria are taken into consideration when determining the existing and with-project Base Flood Elevation (BFE) for the depressional area/wetland. The goal of this memorandum is to protect the integrity of the wetland while accurately defining the depressional storage volume in the ultimate end condition.

1. The existing drain tile can be included in the rating curve for the depression for the modeling for the existing conditions BFE [see 1) d) of Existing Depressional BFE Determinations memo (dated 1/26/07)].
2. With reference to drain tiles currently on-site:
 - a. Drain tiles entering the development site shall be intercepted and connected to the site's stormwater system.
 - b. Drain tiles exiting/draining a wetland/depression needs to be replaced with an appropriate stormwater management system.
3. For cases as described in 2.b. above, we assume that the undisturbed existing tiles/areas will fail. Therefore, we require an open surface connection (catch basin type preferred) for the depression. We require a restrictor emulating the existing drain tile (with a minimum of 4" opening) to be placed in the next downstream structure. The open surface connection shall be placed at an elevation as described in the following options. The option selected will be site-specific and should most closely simulate the existing hydrologic conditions.
 - a. The elevation equivalent to the 2-year, 24-hour storm event; or
 - b. The elevation at the wetland boundary above the existing drain tile; or
 - c. At a maximum elevation of 0.5' above the existing open surface water elevation; or
 - d. At a maximum elevation of 2.0' above the lowest grade within the wetland boundary.

4. The volume of storage below the open surface connection is not practically available for storage in the with-project conditions due to eventual drain tile failure.
5. The with-project condition BFE analysis should model the proposed replacement catch basin and storm sewer in its rating curve. All storage required per WDO must exist on site.
6. SMC will issue a General Permit (forthcoming) to allow minor impacts for these features for Isolated Waters of Lake County (IWLC) impacts associated with the installation of the catch basin/storm sewer line,
7. The applicant shall obtain a Corps permit for Waters of the U.S (WOUS) impacts associated with the installation of the catch basin/storm sewer line, If no other WOUS impacts are proposed on the site, this activity will likely be a regional permit issued by the Corps.

END MEMO.