From: McClure, Bach
To: Stormwater2020
Subject: 62-330 Proposed Changes Comments
Date: Friday, March 17, 2023 11:02:26 PM

To Whom It May Concern:

The Brevard County Stormwater Program supports the planned revisions to 62-330 and the related Applicant Handbooks. We agree with FDOT's question about the intent in regards to the unification of the multiple Applicant Handbook Volume II's.

However, we do have a few suggestions and comments regarding Volume II.

1. AH Vol II – 3.3

The rainfall rates referenced in AH Vol II should be tied to the most recent version of Atlas 14 (updated in 2013 for Florida) which is currently available on line at: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=fl
TP40 varies from the current Atlas 14 by various amounts from -2 to +4 inches for the 100 yr-24hr event in Florida. The pdf version is available at: https://www.weather.gov/owp/hdsc_publications

Using outdated rainfall statistics could lead to significant under or over design of stormwater systems resulting in unacceptable losses or unnecessary expenditure of funds. Also, by incorporating hard copies of outside publications the department is locking in outdated information which could undergo significant revisions in the future.

2. Pumped Flood Protection Systems

Stormwater systems using pumps to prevent or reduce flooding behind levees or berms should be required to assume pump failures/shut downs in the event of the 100 year event and flood levels for all return intervals from the backwater system should be the minimum flood level used behind the levee unless the levee is FEMA certified. Many pumped systems are behind agricultural levees without design or construction specifications and are subject to irregular construction methods and materials which may make them prone to abrupt failure during major floods resulting in flooding of properties presumed to be protected.

Also, properties served by an offsite pump should be required to have a perpetual agreement providing for the proposed pumping conditions, cost sharing, maintenance, repair, and replacement of the pump serving the system. Too often agricultural properties served by berms and pumps are subsequently developed as parcels are subdivided resulting in a patchwork of systems with impaired service levels for many of those not directly in control of the pump. Usually the pump owner is not required to operate or maintain the privately owned pump to the level of protection and service the other owners were led to expect.

3. Groundwater Infiltration

Groundwater infiltration systems are being used more frequently. Some systems constructed have resulted in mounded groundwater elevations above the ground elevation on neighboring properties resulting in new wetland areas on formally non-wetland areas or increased runoff due to reduced infiltration. Also, the in ground storage volumes should be limited in calculations to the subject property. Including storage volumes under neighboring properties could resulting in using calculations that use the same storage volume for multiple systems. The end result could be the failure or underperformance of multiple systems.

Thank you for taking this important step forward in protecting and restoring our natural systems.

Sincerely,

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