

ENGINEERING CONSISTENCY MEETING

OCTOBER 6TH, 2005

MEETING MINUTES

Attendees:

Stephanie DeAscanis
Doug Hokuf
Eric Laramore
Stacy McNatt
Hap Ryan

Purpose:

The purpose of the engineering consistency meetings is to promote consistency among the engineering staff in the application of the County Code and Departmental Policies. During the meetings, current regulatory issues will be discussed. When a consensus is achieved, the decision will be documented. The goal is to clearly communicate Departmental positions to the professional engineering community by providing a copy of the meeting minutes on the County's Engineering internet page. It is the intent of the Engineering Section to apply the decision uniformly; however, due to the uniqueness of each land development application all plans shall be reviewed on a case by case basis.

Items Discussed:

Old Business:

1. Sharing Sanitary Sewer Easements with Drainage Easements

Question: Can a sanitary sewer pipe run parallel with and underneath a drainage swale/bioswale?

Discussion: The engineering section discussed this matter with the Department of Special Services and the following answer is provided.

After correspondence with Rob Magnotti and John Ziemann of Special Services in regard to overlapping sewer and drainage easements the following was determined: An overlapping easement may exist, however should be considered on a case by case basis and reviewed by both the Department of Land Use and Department of Special Services. The following criteria shall apply: the notes on the record plan should specifically indicate that the drainage easement must be privately maintained and the sewer easement must be dedicated to New Castle County. Also, no sewer line/manhole shall exist in within the drainage swale.

Conclusion: An overlapping easement may exist, however will be considered on a case by case basis and reviewed by both the Department of Land Use and Department of Special Services. The following criteria shall apply: the notes on the record plan should specifically indicate that the drainage easement must be privately maintained and the sewer easement must be dedicated to New Castle County. Also, no sewer pipe/manhole shall exist in within the drainage swale or side slopes.

2. Reinforced Concrete Outlet Barrels (RCP) for Stormwater Facilities

Question: What are the cradle and/or bedding requirements for reinforced concrete outlet barrels for stormwater facilities?

Discussion: The engineering section deferred the matter to DNREC and received the following answer:

“The cradle for RCP is intended to run the entire length of the pipe. This requires the pipe to be supported on wooden blocks or some other means while the cradle is poured. The spec calls for at least the lower half of the anti-seep collar to be poured along with the cradle. Some contractors elect to form the upper half and pour everything at once, but in either case, the steel reinforcing must be tied into the lower half of the collar. We have a good series of photos from a DelDOT installation that we use in the CCR course if that would help.”

Conclusion: Be advised that all RCP outlet pipes shall adhere to this standard.

3. Requirement for the permanent pool in wet pond to provide volume for ½ inch runoff from the contributing drainage area.

Question: Should the permanent pool in wet pond be designed to provide volume for ½ inch runoff from the contributing drainage area since the practice of extended detention is used to meet water quality requirements?

Discussion: The engineering section deferred the matter to DNREC and received the following answer:

“The permanent pool volume equivalent to 1/2" runoff from the contributing area was contained in the Regulations themselves until the most recent revision. That particular language was removed in the revisions. However, in order to maintain consistency for wet ponds designed under previous criteria, we still recommend this for determining the normal pool volume. The only difference is that the extended detention volume is now based on the 2.0" rainfall event (up to a max. 1.0" of runoff) rather than the old design criteria of 1/2" of runoff. If the wet pool volume is less than 1/2" runoff, it may not meet the minimum performance goals we have established for wet ponds.”

Conclusion: Although this requirement has been removed from the State Stormwater Regulations it is still required through Chapter 12 of the New Castle County Code (i.e., the Drainage Code). As stated in the answer from DNREC, this standard has been used to ensure the permanent pool in wet ponds is designed consistently and meet the minimum performance goals for wet pond designs. All wet ponds designed in New Castle County shall continue to meet this standard.

4. **DelDOT Specifications for HDPE Pipe**

Question: What are the current DelDOT specifications for HDPE Pipe?

Answer: (Received info from Advanced Drainage Systems Inc.)

“DelDOT has just finalized its specification for Corrugated HDPE pipe for use in storm drainage applications. Although Pond Code 378 allows the use of HDPE pipe for non-embankment ponds, it does not contain detailed specifications for it. The DelDOT material and installation specifications are consistent with those of the manufacturers. The major “sticking point” that prevented earlier release of this specification was the performance specification. DelDOT has decided to rely on a video inspection to ensure the installation is adequate. If any deflection is noted in the video, it shall be considered more than 5% and, thus, not within specifications. The contractor then has the option of follow-up testing with a “go/no go” mandrel. If the installation fails this test, it will have to be replaced. As most of you know, it is the Department’s goal to develop a stand-alone update to Pond Code 378 for urban stormwater management ponds. However, this will probably not be completed until sometime in 2006. In the interim, we recommend incorporating this specification into your plan approval and construction review process.”

Conclusion:

New Business:

1. Access easements and maintenance easements on record plan?
2. Plan requirements for septic systems and field location?
3. Article 10 requirements on Cockeysville Formation and subsidence in context of building permit applications?