

Subject: Follow-up to 12/9 Meeting

From: Desmond Corley <desmondc@cityofws.org>
Sent: Friday, December 17, 2021 3:47 PM
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Good afternoon,

After the presentation for Item B.1 at last week's meeting (W-3503 – Villas at Grandview), Melynda asked a few questions regarding stormwater that I promised to follow up on. Below is a summary of information I received from Joe Fogarty in the Stormwater Division.

- Whether the City's stormwater ordinance requires management is based on a proposed development's density. Per the ordinance, this site is not required to manage stormwater, and there are no provisions that would allow staff to add conditions of approval related to existing conditions (i.e., ponding). There is also no good way of knowing whether ponding could be completely eliminated through managing stormwater on this site. The presence of the floodplain makes it unlikely that much could be done, since ponding is common in floodplain areas.
- Installing or requiring any kind of stormwater management system at this location would be a challenge because of the site's topography. Because it is flat, draining the system after storm events would be difficult. To avoid "coinciding peaks," where the peak of the main watershed runoff crests at the same time as the peak of the stormwater management outlet system, it is usually best practice to allow the site to drain downstream before the rest of the watershed peaks in that area.
- With regard to the downstream study, the stormwater ordinance requires the following:

Assessment and control of stormwater quantity impacts.

An appropriately qualified professional for the owner must prepare the assessment of stormwater quantity impacts for review by the stormwater director. The assessment of upstream impacts must be provided, at a minimum, for property or properties located immediately upstream and/or adjacent to the proposed development or redevelopment. The stormwater director shall require that the impact assessment be extended for properties further upstream if site-specific conditions may cause an unreasonable impact on those properties further upstream. The assessment of downstream impacts shall be made by evaluating a site's contribution to stormwater runoff to a "suitable downstream point" considering the following guidelines:

- a. A point downstream where the proposed site development or redevelopment represents less than ten percent of the total watershed area draining to that point (ten percent guideline).***
- b. A point downstream where drainage from the development or redevelopment site enters a Federal Emergency Management Agency (FEMA) established floodway.***

- c. ***A point where the stormwater director knows of no existing stormwater problems that the proposed development or redevelopment is likely to exacerbate.***
- d. ***A point where there are no public road crossings or other public infrastructure that may be adversely impacted by an increase in runoff from the proposed development or redevelopment.***

This determination shall not alter any requirements related to stormwater quality management. These guidelines are intended to avoid unreasonable impacts wherever they might occur.

Using one of those criteria for choosing a suitable downstream study point, staff would look to ensure that the proposed development would not increase flow or erosion to that point or have any such impacts – or exacerbate existing impacts – on downstream properties. Considering that this site is adjacent to a floodplain and has a very large watershed draining to it, studies in similar cases usually examine impacts between the point of discharge from the site up to the point where runoff from the development enters the floodplain (option b. above).

Please let me know if you have any further questions about any of the cases before the Board last week and/or heading to the City Council next month. If you would like to follow up directly with Joe or Keith Huff, the Director of Traffic Field Operations (which contains the Stormwater Division), you can contact them at josephf@cityofws.org and keithh1@cityofws.org, respectively.

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