
**Board of Adjustment
October 9, 2018
Staff Report**

Application Summary –

A request by Clark Jones (attorney), on behalf of Horizon Steel Buildings, LLC (owner), to grant a stormwater variance which is not permitted to be granted by the director per Chapter 12A, Article V of the Code of Ordinances of the City of Columbia, to waive on-site stormwater detention and to modify compliance with the stormwater quality requirements of the City's Stormwater Management and Water Quality Manual, on property addressed as 4421, 4431-4433 Ria Street and 1505 McKee Street.

Site Characteristics

The subject property consists of two platted R-2 lots in Renaissance Meadows Plat 1 and an adjacent un-platted property zoned R-2 to the north. Two properties have an existing single family dwelling and one property has an existing duplex. The 0.84 acre site is located at the northwest corner of Ria Street and McKee Street in Columbia, Missouri. The site is surrounded by existing residential development consisting of both single family homes and duplexes. The property owner is proposing to subdivide lots 11 and 12 of Renaissance Meadows Plat 1 and one un-platted 0.35 acre property to the north into four lots as shown in Figure 1 and construct a duplex on lot 12A of the new subdivision.

Relief Sought and Purpose

The applicant is seeking an exemption from storm water quantity and quality control requirements as outlined in Section 12A, Article V of the City of Columbia Code of Ordinances. Additionally, the applicant has requested that the covenant only apply to the two lots where stormwater quality treatment will be placed and not on the entire subdivision.

The applicant indicates that the nature of this development and the physical site constraints create a hardship and unreasonable burden. Additionally, the applicant is providing some storm water treatment for the added impervious area of a residential dwelling.

Variance Analysis –

Summary and Impacts –

The applicant is seeking a variance from the City of Columbia Code of Ordinances Section 12A, Article V, 12A-85 through 12A-88 and 12A-90 through 12A-91 regarding Stormwater Management. The findings and purpose ordinances state that land development increases impervious surfaces resulting in increased storm water runoff, flooding, erosion and sediment transport and deposition. The regulations in Article V reasonably reduce the harm caused by land development projects by establishing minimum stormwater management requirements

and controls to reduce storm water runoff rates and volumes and minimize the impacts of development. The stormwater management plan for all development must comply with the City of Columbia's current Stormwater Management and Water Quality Manual. This manual requires stormwater runoff volume detention and water quality treatment based on general performance standards for the stormwater management plan related to controlling certain peak flow rates, recharging groundwater by promoting infiltration and removing suspended solids from runoff.

The applicant has requested a variance to be exempt from stormwater detention and to provide stormwater quality for only the impact of the additional lot and its impervious area. The requested variance indicates that site constraints and impracticality of providing stormwater management constitute a hardship. Per the ordinances, because the existing lots are being subdivided, this site qualifies as development and not redevelopment and is not subject to any of the exemptions of Section 12A-87. The requirement for development is to provide detention from a predevelopment condition and to provide water quality for the entire subdivision area.

Section 12A-91(b) states: *The director is authorized to allow alternate and equivalent best management practices when using the level of service method outlined in the Water Quality Manual. The director shall consider alternate designs of best management practices when it is fully demonstrated that the alternate designs are equal to or better than designs contained in the Water Quality Manual.*

The Director denied the variance request since the applicant is seeking exemption from stormwater practices and did not provide an alternate that is equal to or better than what is required.

Compliance with Variance Criteria -

Variances in Section 12A of the City of Columbia Code of Ordinances are governed by 12A-110. The applicant must address in detail *"compliance with subsections (b)(1)–(4) and (c) of this section; shall include all evidence and support that no adverse downstream impacts exist; and shall list all reasonable mitigation measures."*

The applicant has provided additional information to the application in a letter dated September 27, 2018. In this additional information, the applicant addresses all items in subsections of 12A-110(b)(1)-(4).

For Section 12A-110(b)(1) the applicant provides evidence for a burden or hardship for installation of a surface detention system based on physical site constraints. Subsurface (underground) detention was not discussed and is not typical for R-2 developments. The applicant has not provided explicit information on the site design required to meet all water quality requirements. The applicant is providing water quality treatment for only the increased impervious area and a portion of the existing impervious area.

For Section 12A-110(b)(2) Staff agrees that there are no known critical downstream locations at this time. Additionally, once constructed, this development would not have any noticeable negative impact to flow, water quality or channel erosion downstream of the property. Lots 12A and 12B are adjoining the proposed storm

water improvements and will have noticeable physical site impacts with regard to extension of the storm pipe and construction of the bioswale, but those lots are part of the development. Other properties adjoining the development will not have noticeable negative impacts. Staff agrees that capturing runoff prior to the sidewalk and the curb will be a safety improvement with regard to reducing icing and slipping hazards on the sidewalk.

For Section 12A-110(b)(3) the applicant states “The owner is only requesting a relief from detention requirements and will still provide provisions for a BMP which will treat the developed site to the level of service required by the stormwater manual.” This statement is not accurate. For all developments, water quality treatment BMPs (Best Management Practices) must be provided to treat the entire development not only the “new lot” or additional impervious area. In this case, all four lots would be considered the development requiring water quality treatment. The owner will only be providing treatment for the newly developed lot and part of an adjoining lot. Therefore, the owner is requesting relief from the detention requirement and a modification to the water quality requirement. In the application, the owner is claiming that providing a water quality treatment for existing buildings that are to remain in place is a hardship. Therefore, in the owner’s opinion it should be more similar to redevelopment where the entire water quality treatment is not required. This development does not meet the strict definition for redevelopment in the Chapter 12A definitions; therefore water quality treatment for the entire site is required. Whether the “degree of variance is the minimum necessary” relates to back to Section 12A-110(b)(1).

For Section 12A-110(b)(4) staff agrees that the public health, safety and welfare of the public will not be diminished by granting this variance.

At least one of the conditions in Section 12A-110(c) must be met. The applicant addresses that in the letter with additional information dated September 27, 2018, specifically item (c), that the minimum onsite requirements are not feasible because of the physical characteristics of the site. Based on the setbacks and on-site detention requirements, the applicant has shown in their report, C100, that they would be unable to construct a duplex and surface detention on the site, since both cannot exist in the same footprint. There is no specific statement about total require water quality treatment not being feasible due to site constraints.

Additionally in Section 12A-110(c):

The board may not vary the stormwater management requirements of Article V if the variance would result in any of the following impacts in the downstream waterway:

(1) Deterioration of existing culverts, bridges, dams or other structures; (2) Degradation of biological functions or habitat; (3) Accelerated stream bank or stream bed erosion or siltation; (4) Increased threat of flood damage.

The owner’s engineer has stated that the increase in stormwater runoff for a 25 year design storm is approximately 0.24 cfs (cubic feet per second). This is a very minor amount of runoff that will not impact existing storm structures, downstream habitat, stream banks or beds or increase flooding.

Finally, Section 12A-110 states(c):

If a variance granted by the board will likely result in a lower level of stormwater control, the board shall impose reasonable mitigation measures including, but not limited to, the following:

(1) The purchase and donation of privately owned lands or the grant of an easement to be dedicated for preservation or reforestation. These lands must be adjacent to a stream corridor in order to provide permanent buffer areas to protect water quality and aquatic habitat. (2) The construction of a stormwater management facility or other drainage improvements on previously developed property, whether public or private, which currently lacks stormwater management facilities, designed and constructed in accordance with the standards and purposes of this chapter and the city's Stormwater Management and Water Quality Manual. (3) At the petitioner's request, monetary contributions to fund stormwater related studies and projects including regional wetland delineation studies, stream monitoring studies, hydrologic studies, stream assessment studies, including stream monitoring studies for water quality and macroinvertebrates, stream flow monitoring, threatened and endangered species studies and stream restoration projects. The monetary contribution shall be in accordance with a schedule established by the director and shall be based on the cubic feet of storage required but not provided for the stormwater management of the property in question.

The owner or their representatives have not provided any proposed mitigation measures at this time. Granting this variance would technically result in a lower level of stormwater control and reasonable mitigation measures are required by ordinance.

Each of the required items in Section 12A-110 has been addressed with the exception of the proposed mitigation measures. The implication of statements in the application is that since three of the lots are already developed prior to this subdivision, water quality treatment for those lots is a hardship and should not be required. The applicant has shown a hardship with regard to surface detention. There are a number of judgment statements in the variance language that are reserved for the board. Staff has pointed out where the applicant's statements vary from the requirements and where statements are accurate. A very strict interpretation of the ordinance may find that the applicant has not provided exactly or enough information. Looking at the request overall, should the applicant provide mitigation measures in addition to what is proposed for water quality treatment, it is a reasonable variance from a stormwater management perspective. Although the entire site will not be treated, the water quality treatment that is being provided will provide both some detention and all the water quality treatment necessary for the increased impervious area proposed with this development.

Recommendation Action –

If the Board determines that the requirements of Sections 12A-110 (b) and (c) have been adequately met, then they should approve this variance.