SUBDIVISION PETITION REVIEW REPORT

Petition Number:	SUB 15-04
Petitioner:	James G. Rolwes Rolwes Construction, Inc. PO Box 454 Ballwin, MO 63022 314-280-7558
Agent:	James R. Piper Jr. St. Charles Engineering 801 S. Fifth St. St. Charles, MO 63301 636-947-0607
Project Name:	Ries Road Estates
Requested Action:	Subdivision Approval
Petition Date:	11/20/15
Review Date:	12/1/15
Code Section:	Article II, Sec. 25-26;
Location:	420 Ries Rd.
Existing Land Use/Zoning:	Single Family / R-3
Surrounding Land Use/Zoning:	North – Single Family/ R- 3 South - Single Family / R-3 West - Single Family / R-3 East – Single Family / R-3
Plan Designation:	Low Density Residential

Project Description:

The petitioner proposes to subdivide this property into two lots. The existing house and assorted out buildings will be torn down and new houses will be built on the new lots. The parcel being subdivided is slightly more than one acre in size (43,751 sq. ft.) in area. This parcel is on the west side of Ries Rd. approximately 450' south of the

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Valley Manor Dr. intersection.

The site is almost a perfect rectangle with the narrow side fronting on Ries Rd. for a distance of 165.01'. The site runs 265.25' westwardly from Ries Rd. along both its north and south lines. The western line is 164.98' long.

The site is abutted on the south, west and north by developed lots of the Ballwin Valley Manor Subdivision. Across Ries Rd. to the east, the site adjoins the fully developed Hollybrook North Subdivision. All of the adjoining subdivisions were developed in accordance with the zoning presently in place on those and this property.

The site slopes predominantly downward from east to west. There are no drainage ways on the site. All runoff is via sheet flow. Runoff from the portion of the site west and north of the existing house flows generally to the west. The front yard area flows to the south. All runoff leaving the site eventually enters the Ballwin Valley Manor subdivision underground drainage system. That pipe system flows to a detention basin in the subdivision that discharges into a tributary of Fishpot Creek. This unnamed tributary flows under Ries Rd. just north of Big Bend Rd. and then under Big Bend Rd. just east of Ries Rd. where it leaves the city limits. This tributary enters the main channel east of Sulphur Springs Rd. south of Big Bend behind Tree Top Subdivision. Fishpot Creek ultimately flows into the Meramec River near downtown Valley Park.

The high point of the site is at 594' in the front yard of the present house in what is proposed to be lot 2. The low point of the site is at the extreme southwest corner of the proposed lot 2 with an elevation of 574'. The total elevation change on the site is therefore approximately 20'.

Zoning Ordinance Provisions/ R-3 District (Article V):

- 1. Section 2. Use Regulations: The proposed single family detached dwelling use is allowed by right in the R-3 District.
- 2. Section 3. Height Regulations: The height limit in the R-3 District is 35' or three stories. Although no structure height information has been provided, it is unlikely that this will be a problem in a single-family residential district and this is reviewed at the time of building permit issuance.
- 3. Section 4. Area Regulations: This proposal appears to meet all minimum dimensional requirements of the R-3 District.

Subdivision Ordinance Requirements (Chapter 25)

1. Section 25-26. Plat submission: This section requires the submission of a preliminary plat for consideration. A preliminary plat is required to show specific Page 2, 3/1/2016, 8:48 AM

information which is beyond what is commonly required for a simple record plat. A preliminary plat has been submitted.

- 2. Section 25-28. Sidewalks: This section requires surety for and the construction of a 5' wide concrete sidewalk along the Ries Rd. frontage of the site. There is already a sidewalk in place along this portion of Ries Rd. so no construction or surety is required.
- 3. Section 25-29 and 25-29.5. Streetlights: This section requires surety for and the installation of streetlights along the Ries Rd. frontage of the site. Streetlights are already in place along Ries Rd. No new lights and therefore no surety are necessary to accommodate this subdivision.

4. Section 25-30. Deed Restrictions and Plant contents:

- (a) This subsection requires the submittal of existing deed restrictions that are recorded and in place for this property. No deed restrictions have been submitted or are known to exist for this property.
- (b) This subsection enumerates the minimum information that is to be provided on submitted preliminary plats.
 - (1) All boundary lines and distances have been provided as required by this subsection. The plan shows that this property extends into the right-of-way to a point approximately ½ way through the sidewalk. The 1997 improvement plans for Ries Rd. show that right-of-way was acquired to build the sidewalk. The right-of-way is approximately at the back of the sidewalk. This needs to be researched and resolved.
 - (2) New streets and alleys are to be shown, but no new facilities are proposed.
 - (3) Ries Rd. is already illuminated so no new street light fixtures are required.
 - (4) The overhead electric and sanitary sewer locations have been shown, but no information on the location of the nearest water line has been provided as is required by this subsection.
 - (5) A proposed 20' wide dedication strip is shown along the Ries Rd. frontage. It has not been clearly hachured as is required by this subsection.
 - (6) The lines of adjoining lands and street have been show as required by this subsection.
 - (7) A lot identification system has been provided as required by this subsection.

- (8) Proposed front and rear building setback lines and utility easements have been shown. The 8' side yard setbacks are not labeled but they are shown.
- (9) The subdivision name, legal description compass points, scale etc. have been provided as required by this subsection.
- (10) All submitted preliminary subdivision plats are required to provide stormwater control information in accordance with the requirements of Article III, Division 2, Section 25-72. This subsection references the stormwater design criteria of Chapter 11, Sections 11-345 to 11-36.

The stormwater analysis for this site has determined that there will be no increase in stormwater runoff from this site. As a result, the subdivision does not have to provide any stormwater detention per MSD's standards. The stormwater analysis and any detention are however still subject to Ballwin's regulations for the design of such facilities.

Because the existing house, the out buildings and extensive impervious pavement will all be removed to facilitate the construction of the two new houses, the post development runoff has been computed to actually be slightly less than the runoff that is occurring today. This is because the engineer utilized the MSD standard for computing post-development site runoff which gives credit for existing impervious conditions. Using the MSD system, he computed a .02 cfs differential runoff resulting from this development proposal.

Ballwin's methodology for making these computations is different. Ballwin's system does not give credit for existing imperviousness. The differential runoff is computed based upon the runoff from the post development site as it compares to the site in an undeveloped (greenfield) state. Additionally, Ballwin's methodology uses the 25 years criteria storm instead of MSD's 15 year storm criteria. The differential runoff from the development per Ballwin's computation methodology is 2.43 cfs. Ballwin's criteria were developed to correct existing excess stormwater discharge issues from previously developed sites in conjunction with the redevelopment of existing sites. It brings development into compliance with contemporary standards for stormwater control rather than allowing existing problems to be institutionalized within the design of a new development's system as happens under the MSD approach.

Given the small amount of differential stormwater discharge from this site resulting from this proposed subdivision under Ballwin's computation

methodology, conventional stormwater detention facilities with basins and outfall structures are not recommended. Small scale facilities of this nature generally do not work well. They clog easily and require a great deal of maintenance to keep them operating properly. Previously Ballwin would probably have waived the requirement for detention given the small amount of differential runoff from this development, but rain garden technology which is far easier to maintain offers an ideal approach to detention and water quality for small sites like this. I recommend that the petitioner provide rain gardens of sufficient size to accommodate the runoff from this two lot subdivision and that the rain gardens be submitted to MSD for review and approval prior to the initiation of construction or the recording of a record plat.

The proposed drainage map utilizes the MSD methodology to compute postdevelopment runoff. It shows that the runoff to the north, west and south will be reduced from present levels following development, but it also shows that runoff toward Ries Rd. will experience over a threefold increase.

The underlying principal of Ballwin retaining the review of stormwater differential discharge from sites that fall below MSD's two cfs threshold is to be sure that runoff from these small development is not negatively impacting adjoining properties. This plan proposes to add enough additional water to the Ries Rd. drainage system that it could negatively impact its function and capacity. It also appears to be breaking watersheds. This grading needs to be reevaluated and modified to keep runoff entering Ries Rd. at or below the predevelopment level.

- (11) The area in square feet of each lot has been shown as required by this subsection.
- 5. Section 25-31 25-103: This petition appears to address all other issues of these subsections or they do not apply to this petition at this time.
- 6. Sections 25-121 through 25-125: These sections provide for the dedication of public open space or private recreational facilities in subdivisions or for the payment of a fee in lieu of such dedication. There is no provision in the subdivision plan to dedicate parkland or recreational space, nor is there sufficient land, so the payment of a fee in lieu of such dedication is required. This fee is estimated to be approximately \$4,300/lot. Because this plan has two new houses, the dedication applies to both lots.
- 7. **Section 25-126:** This section of the subdivision ordinance stipulates that natural features such as trees, hilltops, brooks, views, artificial and natural lakes and ponds and wooded areas are to be preserved. This site is presently developed with one

single family residential structure and a scattering of out buildings. A cluster of large trees in the rear of lot #2, a smaller cluster in the rear of lot #1 and the existing vegetation along the south, west and north property lines in the rear yard areas will be preserved. It is recommended that these undisturbed areas be protected by construction fencing at a distance of 20' beyond the drip line during demolition and construction.

Planning and Engineering Concerns:

- 1. A Ballwin grading permit is required prior to any grading, mining, filling or clearing work. In order to obtain a grading permit a detailed grading plan must be provided. The plan must show all siltation control measures and all quantities of material removed, relocated or brought onto the site. The origin/destination of any material transported to or from the site must be identified. The means of transportation, routes followed and the size of the anticipated loads must also be provided. Documentation of permission from other jurisdictions may be required if size and/or quantity of materials being transported are judged to present a damage potential to roadways or a nuisance or hazard to the traveling public.
- 2. Private and public roadways must be maintained in a clean, safe and passable condition at all times during construction and development. Failure of the developer to do so may lead to the establishment of a stop work situation until the problem is completely and permanently corrected. Escrow funds may be used to effectuate any needed cleanup and/or a lien may be placed upon the property to secure repayment of cleanup costs incurred by Ballwin. Additionally, if such problems are recurrent, a manning of the wash-down location may be required. Any stop work orders will remain in effect until developer demonstrates that the wash down is in place and operational on a permanent basis.
- 3. This site is over 1 acre so a Missouri Department of Natural Resources land use permit will be required. This is not a serious issue for Board and Commission review at this time. Submission of this permit/waiver is a requirement prior to the issuance of a grading or a subdivision permit.

Thomas H. Aiken, AICP Assistant City Administrator/City Planner

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