



City Engineer
Phone 636.978.6008
Fax 636.898.0923
DPCityEngineer@KehoeEngineering.com

City Hall
2032 Hanley Road
Dardenne Prairie, MO 63368
Phone 636.561.1718
Fax 636.625.0077

April 13, 2018

Timothy J. Meyer, P.E.
Volz Incorporated
10849 Indian Head Inc. Blvd.
St. Louis, Missouri 63132-1166

Subject: P.U.D. Request - Area Plan – 1st Review
Proposed “Liberty Downs” Residential Subdivision
Parcel Id 4-0036-S011-00-0031.2000000
Dardenne Prairie Project No. 971840

Dear Mr. Meyer:

The P.U.D. Request – Area Plan rezoning request, the P.U.D. Area Plan and the Landscape Plan received by the City on April 4, 2018, for consideration by the Dardenne Prairie Planning and Zoning Commission and Board of Aldermen have been reviewed. The rezoning request and plan review fees have been received by the City. From a review of the above, we have determined that the following items need to be addressed:

1. Revise the title of the plan from “Area Plan” to be P.U.D. Area Plan.
2. Provide concept building elevations of proposed residential structures.
3. Provide a copy of the public hearing notice letter mailed to adjacent property owners within 300 feet of the subject tract.
4. Much of the existing topography and existing features of the site are too light and not legible on the provided P.U.D. Area Plan.
5. Identify on the plan where applicable the boundary lines of school districts, fire districts, water districts and municipal limits.
6. The zoning of the Martin property at the northwest side of the site is not identified (St. Charles County, R-1E).
7. Clearly identify all existing conditions in the plan area such as bridges (Post Road) and structures (Hemsath).
8. Clearly identify on the plan all planned use areas clearly labeling the proposed uses and all parcels of lands to be dedicated or reserved for public use or for use in common by property owners in the P.U.D. indicating the plan for dedication or reservation (including proposed streets and any proposed dedication strip(s) along existing roads).
 - a. It is not clear what public right-of-way exists and what right-of-way is proposed at Post Road.
 - i. Clearly identify the existing right-of-way of Post Road.
 - ii. Clearly identify all proposed right-of-way dedication strips along Post Road.
 - iii. It is not clear what is meant by “Proposed Post Road Dedication.”
 - iv. Clearly identify the width of all proposed streets and identify whether the proposed streets will be dedicated as public or private streets.
 - b. It appears that the existing box culvert (size and material not identified) is not completely within the “proposed road dedication.”

Subject: P.U.D. Request - Area Plan – 1st Review
Proposed “Liberty Downs” Residential Subdivision
Parcel Id 4-0036-S011-00-0031.2000000
Dardenne Prairie Project No. 971840

9. Expand Note 5 on Sheet 2 of the plan clarifying all delineated flood zones for the site. Also, please identify the limits of the floodplain and floodway in the plan.
10. Provide sight distance calculations on the plan for the proposed intersection at Post Road.
11. It is not clear on the plan if raised islands are proposed in the cul-de-sac areas.
12. Identify all proposed easements by type on the “typical lot” detail on Sheet 2. Identify the scale of this detail.
13. Revise the proposed zoning in the table on Sheet 2 from “C-3’ – Commercial” to be “C-3, Retail Commercial, P.U.D.”
14. Add a note to indicate that a separate P.U.D. Area Plan shall be provided for the proposed commercial area prior to the development of this portion of the site.
15. Remove Note 13 on Sheet 2. A landscape plan must be a part of the proposed P.U.D. Area Plan and must include the following information:
 - a. A seal from an engineer, land surveyor or architect licensed in the State of Missouri.
 - b. Calculations to identify the total proposed linear feet of roadway in a development and the total number of trees proposed (roadway frontage/40 feet per require street tree = total number of street trees).
 - i. Type/size/location of proposed street trees.
 - c. Calculations to identify the total amount of forest on the site and total amount of proposed forest clearing and the calculated percentage of forest clearing.
 - i. Very recently the City received a land disturbance permit from the current property owner proposing more than 14 acres of forest clearing. The landscape plan provided with the subject P.U.D. Request – Area Plan from the same property owner includes a landscape plan and Tree Protection Plan that identifies less than 0.5 acres of forest clearing.
 - d. Reforestation calculations, plans and details.
16. Identify on the plan what type of detention basins are proposed.
17. Replace the text “proposed deviations needed” in the table on Sheet 2 of the plan with the text “proposed deviations” along with a statement that no deviations other than those listed are included in the P.U.D.
 - a. Remove the proposed deviation of 1,300 square foot minimum dwelling size. This is not available as a deviation from the Municipal Code.
18. Provide an erosion/silt control plan for the site.
19. Remove all references to signs from the plan. Signs are approved by a separate process.
20. Clarify how and when the “25’ landscape buffer” will be installed.
21. The average density of development within the P.U.D. shall remain the same as would be permitted if the area were to be developed conventionally (i.e., 12,000 square feet per lot). Average density is to be calculated as total land area excluding public right-of-way, land to be used as stormwater detention basins and common ground. Common ground may be used in the density calculations if the common ground is developed with acceptable amenities or if the common ground is to be left in its natural state.
 - a. It is not clear what areas of the site are being used in the “basin area bonus” calculations.
 - b. It is not clear what areas of the site are being use in the “improved usable open space” calculations.

Subject: P.U.D. Request - Area Plan – 1st Review
 Proposed “Liberty Downs” Residential Subdivision
 Parcel Id 4-0036-S011-00-0031.2000000
 Dardenne Prairie Project No. 971840

22. The density calculations in the table on Sheet 2 incorrectly include the following areas:
 - a. “Post Road dedication” (identify which portion of the existing right-of-way of Post Road is attributable to the 19.44-acre residential portion of the site).
23. It does not appear that a safe slope will be achieved at the proposed “8’ asphalt trail” between the cul-de-sac and the common ground detention as currently designed.
24. The revise Note 9 on Sheet 2 to indicate that the minimum size for a one-story single-family dwelling is 1,600 square feet.
25. Provide the following commercial data on the plan.
 - a. Estimated total building square footage by land use type.
 - b. Percent building coverage by land use type for business PUDs.
 - c. Total parking by land use type and parking ratio per floor area.
26. Label all three of the proposed streets on the plan.
27. Add the following required data to the plan:
 - a. A breakdown of total gross area by land use type such as town houses, single-family, retail shops, open space, church, school, etc.
 - b. Residential data.
 - i. Estimated total residential units.
 - ii. Average square feet of residential land per each type of residential unit.
 - iii. Breakdown of non-residential land by type of use.
 - iv. Total parking by land use type and parking ratio per dwelling unit.
 - v. Two (2) density charts shall be required: one (1) reflecting residential density per acre exclusive of public right-of-way and other non-residential land uses; and the other shall reflect residential density exclusive of public rights-of-way without consideration of other types of land uses.
28. Clarify the note “Residential 19.4 AC Common Ground 248,699 5.71 AC” on Sheet 2 showing to what portions of the site these number refer.
29. Provide preliminary storm water management calculations for the methods and criteria which have been utilized in preparing the plan. All computations, plans, and specifications must be prepared and sealed by a professional engineer registered in the State of Missouri.
 - a. Concepts that will be considered within the site to handle the quantity of storm water runoff, including the methods for detention or control of increased storm water runoff generated by the development, and how storm water quality will be addressed.
 - b. Provide a general plan showing the extent and nature of the storm water management system planned to serve the site including preliminary calculations indicating the runoff which must be handled by such systems, the methods and criteria which have been utilized in calculating such runoff, and basic information regarding the receiving watercourse into which such system will discharge.
30. Show all required front, side and rear yard setbacks in the residential and commercial portions of the development.
31. Provide evidence that utility service providers have been provided a copy of this concept development plan for their approval.
32. Correct the reference to the TR-55 method on Sheet 2.
33. Label the proposed commercial area on the plan as future development.
34. Reconfigure the following sidewalk ramps:
 - a. Ramps at Post Road should be turned to face each other.
 - b. Ramps/sidewalk should be added at the second cul-de-sac intersection.
 - c. Ramps should be added on the south side of the street across from the cul-de-sacs.

Subject: P.U.D. Request - Area Plan – 1st Review
Proposed “Liberty Downs” Residential Subdivision
Parcel Id 4-0036-S011-00-0031.2000000
Dardenne Prairie Project No. 971840

Provide twenty-three (23) *folded* copies of the proposed revised P.U.D. Area Plan, twenty-three (23) copies of proposed building elevations, and twenty-three (23) copies of the proposed covenants and restrictions with the above items addressed by April 20, 2018, for distribution to the Planning and Zoning Commission and Board of Aldermen.

The subject Rezoning Petition and P.U.D. Request – Area Plan will be considered by the Planning and Zoning Commission at their meeting on May 9, 2018, and by the Board of Aldermen at their meeting on May 16, 2018. Both of these meetings are scheduled to begin at 7:00 pm at the Dardenne Prairie City Hall. All plans, architectural drawings, renderings or other materials or visual aids either submitted to the Commission and/or Board of Aldermen or presented at their meeting shall become the property of the City and part of the permanent record of any approval.

If you have any questions, please feel free to contact me.

Sincerely,
KEHOE ENGINEERING COMPANY, INC.

A handwritten signature in black ink, reading "Luke R. Kehoe". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Luke R. Kehoe, P.E., CFM, LEED AP
City Engineer

cc: David Zucker, Mayor
Kim Clark, City Clerk
Planning and Zoning Commission
Board of Aldermen
Thomas Cummings, Payne Family Homes
Dardenne Tech, LLC, David J. Hemsath Living Trust