

January 17, 2025

RE: PRSUBD20243308 Whispering Woods 3rd Plat

3<sup>rd</sup> Plat Construction Plans

To Whom It May Concern:

We offer the following responses to the city comments:

## Street & Storm Plans

1. The plans for Pryor Rd. Improvements to be constructed by the City will need to be coordinated with these plans.

The entrance into the development has been coordinated with the Pryor Road improvements. We received copies of the plans from John Zimmerman with Transystems and have been coordinating with Nikia Chapman-Feiberger in Public Works.

- A LOMR-F appears warranted for this site. Previous work on the first phase of Whispering Woods included this requirement, and many of the lots adjacent to the stream were filled in the corners to remove the lot from the floodplain, and went through the LOMR-F process. Correction required.
   Once the grading is completed a LOMR-F will be obtained for the lots within boundary of the current floodplain.
- It is possible a no-rise shall be required depending on the lot corners in Whispering Woods 1<sup>st</sup> Plat being at the base flood elevation. In other words, no encroachment will be allowed onto adjacent properties from an increase in the base flood elevation caused by fill, unless inundation easement or other appropriate legal instrument is recorded. Informational comment.
   Please see the provided Hydraulic Report. The proposed improvement will not increase the base flood elevations.
- 4. On all asphaltic concrete sections, KCMMB mix is required. Correction required. KCMMB mix has been specified within the roadway section details.
- Typical asphaltic concrete subgrade sections are outdated. New standards for residential local are 6 inch aggregate over geogrid rather than 10 inch. New standards for residential collector are 7.5 inches aggregate over geogrid rather than 12 inches. Correction not necessarily required but wanted to make you aware of the downgrade in design criteria.
   Typical sections have been revised to reflect the new standards for roadway construction in Lee's

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6. All storm lines shall include the HGL for the design storm on the profile view. The design storm shall be called-out, and if the pipe cannot manage the 100 year event without surcharging, a suitable overflow route shall be established on the plans and identified on the plans for the amount the underground system is unable to manage the pipe. Correction required.
HGL has been added to each plan and profile view.



7. In graphic form on the profile view, show how all storm pipes shall be installed after the fill is placed a minimum of 18 inches above the grade of the pipe. Let me know if you need examples from other plans. Correction required.

A hatch and a note have been added to the plan and profile sheets explaining how pipes are to be installed after 18" of fill is placed above the finished grade of the pipe.

- 8. *The 15 inch storm line is entering a pipe below the crown of the receiving pipe. Correction required.* **The storm line has been revised to enter the receiving pipe with matching crown elevations.**
- 9. Signage plan was missing. Correction required. Signage plan has been included with street and storm plans.
- 10. Street names are required on all sheets. Correction required. Street names have been added to each sheet.
- 11. Typical section views are incorrect in terms of street names. Go through the plans and add the correct street names to the appropriate section view. For this project, 26<sup>th</sup> St. is a residential collector, and all other are residential local. Correction required.
   Roadway plan and profile views have been revised.
- Storm lid detail is outdated. See the new standard detail on the website, and ensure it is included in the revised plans. Correction required.
   Storm lid detail has been revised to reflect the current detail.
- 13. Sheet 11: The distance between the truncated domes on ramp 8 exceed 5.00 feet to back of curb. Maximum is 5.00 feet. Correction required.
  The truncated domes have been moved to within 5' of the back of curb.
- 14. General Comment: Type B curb ramps are no longer allowed under the PROWAG as a multidirectional ramp. A new design is required which separates each pedestrian route across each intersection. Single direction paths using Type A ramps are unaffected by this new ruling. Corrections required.
   Curb ramps have been redesigned to allow for separate routes across each intersection.
- 15. All street cross pipes beneath collector streets (i.e., 26<sup>th</sup> St.) shall be either RCP or CPP. Correction required. Cross pipes beneath streets have been changed to RCP.
- 16. Rip rap shall be called-out with dimensions such as width, length, taper, depth, and geofabric in addition to the D50 sizing. Calling out a square yardage of rip rap with D50 of 6 inches is insufficient detail. Correction required.
  Where rip rap is called-out, dimensions and depth have been added along with D50 size and square vardage.
- 17. Will all lots within Whispering Woods 3<sup>rd</sup> Plat be outside the limits of the floodplain after obtaining the LOMR-F? That was a condition of approval of the preliminary plan. All lots shall be outside the limits of the 100 year floodplain. A LOMR-F appears to be warranted.
  Yes, after obtaining the LOMR-F each lot will be out of the floodplain.
- 18. Itemized and sealed cost estimate required prior to formal approval. Informational comment. Itemized and sealed cost estimates will be included with this resubmittal.
- 19. Floodplain Development Permit required prior to formal approval. Informational comment. A floodplain development permit application has been submitted.



- 20. LOMR-F required prior to formal approval. Informational comment. The LOMR-F cannot be obtained until after the grading has been completed. Is formal approval to imply final plat approval?
- Sidewalk at the south end of Fern Ct. should be shown "emptying" straight into the cul-de-sac bulb, along with an ADA-accessible detail. In other words, there should be no curvature around the cul-de-sac bulb, but rather, the sidewalk will terminate and direct pedestrian traffic into the cul-de-sac bulb with an ADA-accessible ramp. Correction required.
   The sidewalk at the south end of Fern Ct. has been revised to empty into the cul-de-sac bulb.

# Water Main Plans

- Pipe cannot be curved less than 1200 feet radius. Otherwise, the pipe integrity is jeopardized. Provide the location and magnitude of fittings required to ensure the radius of curvature is not less than 1200 feet. Correction required.
   Alignment has been revised to have only fittings and curves of 1200 foot radius or greater.
- Sheet 4: Sta 10+00 install four (4) gate valves at the cross. Correction required.
   Four gate valves have been called out on each side of the cross.
- 3. Sheet 4: Sta 12+21: Install one (1) value on the south side of the tee. Corrections required. One value has been called out on the south side of the tee.
- Sheet 5: Extend water line B and move the hydrant to the next property line to ensure there is sufficient room to provide service connection without crossing extended property line. Correction required.
   Waterline B has been extended to the next property line.
- 5. *An MDNR construction permit shall be required prior to formal approval. Informational comment.* **An MDNR construction permit will be acquired.**
- 6. Itemized cost estimate required prior to formal approval. Informational comment. Cost estimate will be provided with the resubmittal.

### Sanitary Sewer Plans

- Manhole frame and lid is shown in the incorrect location within the pavement. Either lane can be used, but the center of the lid should be positioned in the middle of the driving lane to avoid wheel interference. Correction required.
   Each manhole has been moved to the center of a drive lane.
- City standard detail for the above-referenced placement of sanitary sewer manholes in pavement was missing. Provide this detail in the revised plans. Correction required. Manhole pavement boxout detail has been added to the plans.
- Existing sanitary sewer manhole labeled as A-0 should be relabeled as City manhole number #51-001. Correction required.
   Manhole A-0 is a proposed manhole. City manhole 51-001 has been labeled downstream of MH A-0.



- 4. Use the City standard detail SAN-7 for pipe encasement beneath the creek rather than your standard detail. Correction required. City standard detail SAN-7 has been added to the plans.
- 5. Epoxy-coated ductile iron pipe is required beneath the creek from manhole to manhole. Correction required. Epoxy coated ductile iron will be specified for the section of pipe that crosses the stream.
- 6. Insufficient fall at manhole B3. Skew requires 0.50 feet minimum fall. Correction required. The manhole has been revised to show 0.5 feet of fall.
- 7. Same comment for B2. Correction required. Manhole has been revised.
- 8. Segment A-2 to A-1: The fifteen (15) foot easement is insufficient. Sewer is as deep as 20-21' deep. Easement shall be a minimum of forty (40) feet wide. Correction required. Easement has been revised to 40' instead of 15'.
- 9. The above easement shall be an exclusive sanitary sewer easement. Show on plans and plat. Correction required. Plans have been revised to show an exclusive sanitary easement.
- 10. See Design and Construction Manual for minimum slopes based on upstream lot numbers. There is insufficient slope for the sanitary sewer line throughout the entire design. Many of these segments are subject to a 1.00% slope requirement based on lot numbers upstream. Correction required. The slopes have been revised to meet the minimums with 1% used with 15 or few connections and 0.8% used with 16 – 30 connections. The section of pipe from manhole A-0 to A-1 is at 0.6%, this is required due to the creek crossing and due to the shallow depth of the existing sanitary sewer main.
- 11. Is manhole A-1 a shallow manhole? If so, a shallow manhole detail is warranted. Correction required is applicable. Shallow manhole detail has been added to plans.
- 12. MDNR construction permit is required prior to formal approval. Informational comment. MDNR construction permit will be acquired.

# Grading

1. A CLOMR-F appears warranted for this project similar to what was required for previous phases of this project. Even though it may be possible within the context of our Floodplain Development Ordinance to fill within the floodplain adjacent to the floodway, a rise of 1.00 feet or less is possible due to the fill by definition of a floodway, and it is possible the 100 year floodplain limits may encroach-upon adjacent properties in Whispering Woods Phase 1 and 2. It appears the previous phase of the project has corner elevations very close to the base flood elevation, and it will be necessary to show any new fill brought into the floodplain limits will not cause an encroachment of the 100 year floodplain on adjacent properties. Correction required. The provide hydraulic report shows there is no rise in the floodway from the proposed improvements.

An application for a CLOM-F has been submitted.



- A floodplain development permit shall be obtained from the City Floodplain Administrator prior to any work within the floodplain. The floodplain permit application shall include all plans and studies necessary for the City Floodplain Administrator to make a decision. Correction required.
   Floodplain development permit application has been submitted.
- 3. Sheet 8: The detention basin/sedimentation pond shown in the northeast portion of the project does not make sense when shown superimposed upon the stream. What is the plan for diverting the stream at this location? As shown, it appears to hit the backside of the dam which does not appear to be a good design. Correction required.

The detention basin/sedimentation pond has been revised.

- Have you obtained any documentation from USACE concerning the stream described in the above comment? The stream in question is located in the northeast portion of the project, within the limits of the temporary sediment basin. Correction required.
   The basin has been revised to avoid any impact to streams.
- 5. All temporary sediment basins should be lined with turf reinforcement mat. Correction required. A call-out for turf reinforcement map and hatching have been added to the plans.
- All skimmers used on the project shall include a site-specific design rather than a generic standard detail. Sizing of the skimmer, etc. is required. Correction required.
   Skimmer size has been added to sheet 12.
- 7. Elevation callouts are required on key contours shown on the grading plan. Correction required. Contour elevations have been added to the grading plan.
- Elevation callouts are required on the temporary sediment basins, including grading, top of dam, bottom of basin, slope of basin bottom, emergency spillway, etc. Correction required.
   Elevation callouts for both temporary sediment basins are included in the details on sheet 12 with the sediment basin calculations. Top of basin, bottom of basin, and spillway elevation are shown on sheet 8.
- 9. *Sheet 6: Graphical scale is incorrect. Correction required.* **Scale has been corrected.**
- 10. Sheet 5: 100 year floodplain is called-out but does not appear to accurate based on what I am seeing. Correction required.
  Please refer to the provided Hydraulic Report. With the restoration of the historic channel and current analysis of the existing channel the report shows the flood elevations for the 100 year storm event. Sheet 5 outlines the limits of the 100 year storm event with the construction of the box culvert and information on the low water crossing.
- 11. Itemized and sealed cost estimate required prior to formal approval. Informational comment. Itemized and sealed cost estimate will be included with plans.



#### Box Culvert & Stream Restoration Plans

- The box culvert shall provide a low-flow channel. Corrections required.
   Weir wall have been added to the inflow side of the box culver for the outer boxes to channel low flow runoff to the center box.
- The "Hydraulic Report" dated Dec. 6, 2024 never makes clear the objectives of the report. Provide objectives of the report. Correction required.
   The hydraulic report covers the hydraulic analysis from the construction of the proposed roadway culvert over Mouse Creek, relocation of Mouse Creek channel to the historical stream alignment and placement of fill for the development.
- 3. I am assuming there is no overtopping of the road during the 100 year event? Informational comment. No, the roadway would not overtop during the 100-year event. The 100-year flood elevation is 957.95 on the north side of the proposed culvert. The low point of the roadway is 961.97.
- 4. Is a USACE permit required? Informational comment. Yes, and A USACE permit has been obtained. A copy is included with this letter.
- 5. *Report discussed an* 8x10 *triple box culvert, but the plans show an* 8x8. *Reconcile the sizing.* **The Stormwater Management Plan has been revised to say 8x8.**
- 6. Water main is shown beneath box culvert. Water main shall be relocated above the box culvert rather than beneath. Correction required.
  The water main shown beneath the box culvert is an existing water main.
- Design shall meet HL-93 loading, and report shall be submitted for inclusion in the City's annual bridge inspection.
   Proposed box culvert details are per MoDOT standard details 703.87A. Per MoDOT standard detail 703.87A the concrete triple box culverts details meet strength and serviceability requirements for the design vehicular live load HL-93.
- Floodplain Development Permit shall be obtained prior to any work within the floodplain. Informational comment.
   Floodplain Development Permit Application has been submitted.
- 9. LOMR-F required. Informational comment. The LOMR-F cannot be obtained until after the grading has been completed.
- 10. Cost estimate required prior to formal approval. Informational comment. A cost estimate has been included in the resubmittal.

# <u>Final Plat</u>

1. Addresses need to be added to each lot and tract. Please use previously uploaded addressing plan. Addresses added to final plat.



- 2. Sidewalks do not appear to have been added. Please add to legend as well. Sidewalks have been added.
- 3. Either eliminate lot line between larger Tract D & Tract D between Lots 58 & 59, or establish Tract E. **Tract E has been established.**
- Please add the below names to existing signature blocks:
  William A. Baird, Mayor
  Cynda A. Rader, Secretary
  George M. Binger, III P.E., City Engineer
  Trisha Fowler Arcuri, City Clerk
  (Leave Planning Director name blank, interim position may be filled by time of Final Plat approval)
  The corresponding names have been added to the signature blocks.
- 5. A minimum 40 foot wide sanitary sewer easement (i.e., exclusive to sanitary only) is required between lots 58 and 57. The following language provided by the City Law Dept. is as follows: "A permanent and exclusive easement is hereby granted to the City of Lee's Summit to patrol, alter, conduct surveys, construct, erect, inspect, install, maintain, operate, rebuild, reconstruct, relocate, remove, renew, repair and replace sewer pipe lines, manholes, and appurtenances thereto, including the right and privilege at any time and from time to time to enter upon, over, under, through, across, in, and upon those areas outlined or designated upon this plat at "Sanitary Sewer Easement" or within any street or thoroughfare dedicated to the public use on this plat. Grantor, its successors and assigns, shall not obstruct or interfere with Grantee's use and enjoyment of the easement granted hereunder by any means, including, without limitation, obstructing or interfering with the operation, maintenance, or access to such pipe lines, manholes, and appurtenances thereto, by erecting, or causing or allowing to be erected, any building, structure, or other improvements on said easement. Grantor, its successors and assigns, to the fullest extent allowed by law, including, without limitation, section 527.188, RSMo., hereby waives any right to request vacation of the easements herein granted. All easements shall, at all times, be deemed to be and shall be a continuing covenant running with the land and shall be binding upon the successors and assigns of the Grantor." Correction required. A 40 foot wide sanitary sewer easement has been added.
- Tracts are shown, but no dedication language is provided. Corrections required. Dedication language has been provided.
- Plat does not coordinate with the CIP project on Pryor Rd. Coordinate with Public Works on the Pryor Rd. CIP project and make appropriate corrections. Correction required. The Plat has been coordinated with the CIP project on Pryor Rd.
- 8. Stream Buffer Easement Language was missing. Here is the approved language to place on the plat: "In the areas designated as "Stream Buffer Easement" there is hereby granted to the City an easement for the purpose of prohibiting any development of any kind and prohibiting the erection, construction, placement or maintenance of any structures upon such land, as the term "structure" shall be defined in the City's Unified Development Ordinance in Chapter 33 of the City Code of Ordinances, and prohibiting any change in the grade and elevation of such land, and prohibiting the alteration of the natural course and flow of the water in the stream, and prohibiting the damming or stoppage of the water in the stream, and to require the owners of such land to keep and maintain such land in its natural vegetative state and to tend, maintain and mow such land as required by the City's Property Maintenance Code in Chapter 16 of the City Code of Ordinances, which easement shall constitute a servitude upon the land so encumbered and which shall run with the land in



perpetuity and be binding upon the land owners, their successors and assigns and all other parties claiming under them, and shall remain in full force and effect forever. A waiver or modification to this Stream Buffer Easement, or a release of this Stream Buffer Easement, may be granted by the City Engineer on behalf of the City as to any or all areas so designated on this Plat, which waiver, modification or release shall be recorded in the land records for Jackson County."

Stream Buffer Easement language has been added.

9. Floodplain note shall be revised as appropriate for the new LOMR-F for this phase of the project. The language shown is for the 1st plat, and the particular LOMR-F case number does not apply in this instance. Correction required.
The meters have been excited to been blocks for the LOMP. F information exception for the language for the LOMP.

The notes have been revised to leave blanks for the LOMR-F information once it is received from FEMA.

10. Tract D appears to have an extended detention basin, and therefore the detention basin language shall be shown on the dedication language. The approved language is as follows: "All storm water conveyance, retention, or detention facilities to be located on common property shall be owned and maintained by the {property owners' association, homeowners' association, as appropriate} in accordance with the standards set forth in the covenants, conditions, and restrictions. These stormwater detention facilities shall be inspected by the {property owners' association, homeowners association, as appropriate} on the frequency specified in the current City of Lee's Summit Design and Construction Manual, to assure that all inlet and outlet structures are fully-functional, the detention basin has full storage capacity and all landscaping, vegetation and structural improvements are being maintained in accordance with the current City of Lee's Summit Property Maintenance Code."

Storm Drainage Easement language has been added.

- 26th terrace is listed as 50' ROW, but both ends show 60 ft. Please change The ROW has been updated to reflect 50'.
- 12. The ITB on Fern Cir has the wrong DIR, should be SW for the curve **The ITB has been updated to reflect SW.**
- Mark radius at corner of lot 78 and corner of lot 80
   The radius has been added to the corner of Lot 78 and 80.
- 14. Please mark lot dimensions inside the lot they belong to: Lots 78 and 80 (currently in lot 79) Lot dimensions have been updated.
- Please mark bearing on street ROW near coord 16 and 17 (dim 51.20 and 50.47)
   The bearing has been added.
- 16. Bearing missing on lot 58, Tract B, D, lot 59, and a small part of lot 60. Is it 02-45-31? **The bearings have been added.**
- 17. Please make sure all bearings and distances are clear; the flood overlay obscures some information. The Plat has been updated to address the flood overlay obscurities.
- 18. Please mark distance on north line of tract C and the radius along the north line of tract D **The bearing and distances have been added.**



19. There are TWO tracts named "D" Tract E has been established.

If you have any additional questions or comment do not hesitate to contact me.

Thank you, SNYDER & ASSOCIATES, INC.

Shawn Duke, PE Project Manager/Engineer