

June 2, 2023

Ron Merritt
915 Whitmore Drive, Suite D.
Rockwall, Texas 75087
(972) 204-7601
Re: River Rock Trails Phase 1A Preliminary Plat, Response #1 Review

Mr. Merritt,

Freese and Nichols, Inc. (FNI) has reviewed the abovementioned response officially accepted by Rockwall County on May 23, 2023, for technical correctness with the County's Subdivision Regulations and other applicable state and federal requirements, and for satisfactory compliance with the County's conditions for disapproval made on May 23, 2023.

General Conditions and Disclaimers

The following conditions are not intended to be resolved or alter the application; instead, they are to inform the Commissioners Court and applicant of disclaimers and future expectations as this project progresses through the development process. FNI recommends that the Commissioners Court specify these conditions in any motion on the application.

1. The comments specified in this letter reflect the level of detail provided in the accepted application. Revisions to the application in pursuit of resolving the conditions of this letter may generate further commentary. In such cases, it is the expectation that the applicant will rectify any additional commentary before receiving approval or approval with conditions.
2. Comments placed on a particular plan sheet do not preclude their applicability to the remainder of the plan set; comments made on any one sheet that affect the details of another are expected to be made consistently throughout the application.
3. A review of the details provided beyond the limitations of this application, such as details that impact future subdivision phases, shall not be construed as approved by any lack of commentary received during this application. Further and continuous review of the site details, including roadway alignment, infrastructure improvements, and lot configuration, shall be reviewed for detailed compliance once formally applied for. Approval of this plan set shall not constitute approval of any future phases.

Technical Deficiencies

FNI recommends that the following comments be included in any motion on the application. The order of commentary is not commensurate with the severity or significance of an individual comment.

Preliminary Plat Sheet(s)

6. Side yard setbacks are not in conformance to Section 5.4.8. of the Subdivision Regulations on both plat sheets.

Applicant Response #1 Comment: We would like to request a variance to Section 5.4.8. specifically related to the sideyard setbacks of corner lots adjacent to the street. We request to reduce the 25' sideyard setback from the property line to 15' sideyard setback with the understanding that driveways will not be allowed on the sideyard of the lot. This reduction allows the homebuilder to construct a minimum of additional 550 square feet home which will increase the taxable value on each of the lots. This will also broaden the homebuyer base to include more families in the community. We do not believe this is an anomaly in the area. As an example, the subdivision building to the south in McLendon-Chisholm is being developed with 10' sideyard setbacks adjacent to the street.

FNI Response #1 Comment: Applications for a Subdivision Waiver must be submitted and acted upon in accordance with Section 6.1 of the County's Subdivision Regulations. This comment remains unresolved on the plan set.

9. Label the location of the required building setbacks on each lot per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations; setbacks are not illustrated along Stone Trail Parkway on either plat sheet, or FM 548. Ensure setbacks are in conformance to Section 5.4.8. of the Subdivision Regulations.

Applicant Response #1 Comment: Stone Trail Parkway is not included in Map 5.2-1 (Rockwall County Thoroughfare Plan) and is requested to have a minimum setback of 25'. This has been added to the subdivision plat as well as the setback for Stone Trail Parkway. Further clarification of the setback is requested to confirm that homeowner fences may be installed within the setbacks.

FNI Response #1 Comment: Applications for a Subdivision Waiver must be submitted and acted upon in accordance with Section 6.1 of the County's Subdivision Regulations. The plan set sufficiently illustrates the required 50-foot setback per Section 2.2.2.C. of the County's Subdivision Regulations. Comment has been sufficiently addressed pending any future Subdivision Waiver request.

11. Provide The name of the adjacent property owner(s) with the corresponding acreage and property deed information per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations. Acreage has not been listed on any adjacent property.

Applicant Response #1 Comment: Acreages have been added.

FNI Response #1 Comment: Documentation for adjacent properties across FM 548 remain deficient.

Provide the name of the adjacent property owner(s) with the corresponding acreage and property deed information per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations.

12. Subdivision containing more than thirty (30) one-family or two-family dwelling units shall have a platted and constructed secondary ingress and egress to a public street per Section 5.2.2.F.2.a. of the Subdivision Regulations.

Applicant Response #1 Comment: The intent of the development is to develop Phase 1A and Phase 1B concurrently. Phase 1B provides the second street connection to FM548 as required by the subdivision regulations.

FNI Response #1 Comment: The second point of ingress and egress has been confirmed on Phase 1B applicant. It is recommended that this comment remain a condition of action taken by the Commissioners Court to prevent development permits until both means have been completed and inspected.

13. All roads shall either be connected at both ends to a dedicated road, or be provided a cul-de-sac per Section 5.2.2.B.4. of the Subdivision Regulations. A cul-de-sac street shall be platted and constructed with a turnaround area with a paved radius of 40 feet and a right-of-way diameter of at least 100 feet per Section 5.2.2.G.1. of the Subdivision Regulations.

Applicant Response #1 Comment: temporary turnaround will be constructed at the end of Cobblestone Way as shown with the temporary access easement on the plat. The engineering plans for this development will include a barricade to be installed directly west of the Stone Trail Parkway and Tuff Trail intersection. The barricade will cut off access to the dead-end section of Stone Trail Parkway thus removing the need of temporary turnaround/cul-de-sac infrastructure.

FNI Response #1 Comment: This comment is in relation to the stub-out of Tuff Trail to the north east. Illustration of the mentioned barricade on the plan set remains deficient per Section 5.2.2.B.4. of the Subdivision Regulations.

14. Per Texas Local Government Code Section 232.001 and Section 1.5.4.A. of the Subdivision Regulations, the owners of any tract of land outside the limits of a municipality that is located within the County must have a plat of the subdivision prepared if the owners divide the tract of land into two parts. There are portions of the existing site that are not within the limits of this subdivision boundary, and are therefore in violation of these code sections.

Applicant Response #1 Comment: We request this be a conditional approval item of the preliminary plat to be resolved prior to the final plat approval.

FNI Response #1 Comment: Per Section 3.2.4.A. of the County's Subdivision Regulations, approval criteria for Preliminary Plats includes conformity with the regulations themselves, including Section 1.5.4.A. There are portions of the existing site that are not within the limits of this subdivision boundary, and are therefore in violation of these code sections. This comment remains unresolved.

15. Dead-end streets are prohibited unless the street is intended to be extended in the future and the dead-end design is only temporary in nature per Section 5.2.2.H.1. of the Subdivision Regulations. Temporary dead-end street turnaround pavement shall have a paved radius of 40 feet and right-of-way diameter of 100 feet, and shall be within the limitations of the plat per Section 5.2.2.H.2. of the Subdivision Regulations. Revise the conditions at the temporary terminus of proposed Pumice Lane and Stone Trail Parkway for compliance.

Applicant Response #1 Comment: A temporary turnaround will be constructed at the end of Cobblestone Way as shown with the temporary access easement on the plat. The engineering plans for this development will include a barricade to be installed directly west of the Stone Trail Pkway and Tuff Trail intersection. The barricade will cut off access to the dead-end section of Stone Trail Pkway thus removing the need of temporary turnaround/cul-de-sac infrastructure.

FNI Response #1 Comment: Illustration of the barricade mentions is deficient on the plan set per Section 5.2.2.B.4. of the Subdivision Regulations.

16. Precede all proposed right-of-way names with a "P.S." per Section 5.2.6.A.4. of the Subdivision Regulations.

Applicant Response #1 Comment: The streets within this development are to be dedicated to River Rock Trails Municipal Utility District No. 1 as public streets and not private streets.

FNI Response #1 Comment: All Local Streets, Collector Streets, and Cul-de-Sacs will be designated as Private Streets and will either be maintained by the property owner, a Homeowners' or Property Owners' Association, or a utility district per Section 5.2.2.C. of the County's Subdivision Regulations. Proposed right-of-way names remain deficient per Section 5.2.6.A.4. of the Subdivision Regulations.

18. Include the gated or private street note per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations.

Applicant Response #1 Comment: The streets within this development are to be dedicated to River Rock Trails Municipal Utility District No. 1 as public streets and not private streets.

FNI Response #1 Comment: All Local Streets, Collector Streets, and Cul-de-Sacs will be designated as Private Streets and will either be maintained by the property owner, a Homeowners' or Property Owners' Association, or a utility district per Section 5.2.2.C. of the County's Subdivision Regulations. The Private Street Note remains deficient per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations.

20. Include the words "Private Street Subdivision" on top of the subdivision name on all plat sheets per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations.

Applicant Response #1 Comment: The streets within this development are to be dedicated to River Rock Trails Municipal Utility District No. 1 as public streets and not private streets.

FNI Response #1 Comment: All Local Streets, Collector Streets, and Cul-de-Sacs will be designated as Private Streets and will either be maintained by the property owner, a Homeowners' or Property Owners' Association, or a utility district per Section 5.2.2.C. of the County's Subdivision Regulations. The title block remains deficient per the Subdivision Plat checklist and Section 2.2.2.C. of the Subdivision Regulations.

Preliminary Water Plan Sheet(s)

21. Proposed Stone Trail Parkway shall utilize the Collector Street (Urban) section specified in Figure 5.2-5 of the Subdivision Regulations. Sidewalks within the parkway shall be permitted despite not being illustrated.

Applicant Response #1 Comment: The street section and title has been revised to reflect the proposed section for Stone Trail Parkway. We request this be a conditional approval item of the preliminary plat to be resolved prior to the final plat approval.

FNI Response #1 Comment: Proposed Stone Trail Parkway's right-of-way section remains deficient in matching the Collector Street (Urban) section specified in Figure 5.2-5 of the Subdivision Regulations. Applications for a Subdivision Waiver must be submitted and acted upon in accordance with Section 6.1 of the County's Subdivision Regulations.

22. Local streets shall utilize the Local Street (Urban) section specified in Figure 5.2-7 of the Subdivision Regulations. Sidewalks within the parkway shall be permitted despite not being illustrated.

Applicant Response #1 Comment: We request this be a conditional approval item of the preliminary plat to be resolved prior to the final plat approval.

FNI Response #1 Comment: Local right-of-way sections remain deficient in matching the Local Street (Urban) section specified in Figure 5.2-7 of the Subdivision Regulations. Applications for a Subdivision Waiver must be submitted and acted upon in accordance with Section 6.1 of the County's Subdivision Regulations.

Preliminary Sanitary Sewer Plan Sheet(s)

23. Offsite improvements required to service this Phase 1A shall be required for installation and dedication within the limitations of this plat to ensure that adequate wastewater is available to serve the proposed development per Section 5.9.1. of the Subdivision Regulations.

Applicant Response #1 Comment: A separate instrument will be prepared and recorded with the County for the offsite sanitary sewer improvements. This is requested to be a conditional approval with resolution prior to the final plat.

FNI Response #1 Comment: Adequate wastewater availability to serve the proposed development cannot be determined per Section 5.9.1. of the Subdivision Regulations through separate instrument process. It is recommended that separate lots and plan sets be established prior to approval of this preliminary plat per Section 5.9.1. of the Subdivision Regulations. The Wastewater Treatment Plant illustrated on the Concept Plan exhibit appears to be on a separate lot—this lot will be required to be platted regardless of separate instrument per Texas Local Government Code Section 232.001 and Section 1.5.4.A. of the Subdivision Regulations.

Existing Drainage Area Sheet(s)

24. Revise symbols within the legend to match the plan details and add the Time of Concentration (TOC) path to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: Legend has been revised. Through experience of past projects picking up large offsite undeveloped areas, we have found that using a slightly higher C value than stated in iSWM, and using a 20 minute TOC, ensures that we are being conservative in the amount of runoff being accounted for in the design of our drainage systems.

25. Specify the citation of runoff coefficients and intensity calculations, as well as the "f" subscript in the Drainage Theory Rational Method formula to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: Section 5.7.1 states the drainage design is to be in accordance with generally accepted engineering standards. Since Rockwall County does not have specified engineering standards, we have chosen to follow the iSWM Technical Manual for the drainage design standards. This manual is widely accepted as the standard practice across cities in the DFW metroplex. The iSWM manual has been cited as our criteria for the runoff coefficients and intensities used.

26. Provide a table showing the TOC calculations, and show TOC paths on the plan sheets to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: A 20 min time of concentration was used to be conservative on the amount of offsite flow we are proposing to accept.

27. Provide pervious and impervious calculations to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: The iSWM manual uses a 0.30 runoff coefficient for 0.65 runoff coefficient for single family residential lots that are approximately 1/8 of an acre. We have prepared an exhibit of a typical lot and how the developed runoff coefficient was derived. See attached.

28. Label the points of interest or analysis to compare pre- and post-development drainage to confirm compliance with Section 5.7.1. of the Subdivision Regulations. Additionally, show where the drainage ultimately reaches. to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: Please clarify the nature of this comment and what additional information needs to be provided. The drainage ultimately reaches the NRCS Lake No. 13.

FNI Response #1 Comment: Commentary on the Existing Drainage Area Sheets is recognized as suitable for resolution during the Construction Plan set review. It is recommended that the Commissioners Court specify that the above commentary be resolved at time of Construction Plan review as a condition with any action taken on this Preliminary Plat.

Proposed Drainage Area Sheet(s)

32. Drainage Areas OS-A1 and OS-A2 drain into FM 548; provide sufficient detail to illustrate no adverse effects are anticipated within FM 548 to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: The drainage design for the areas draining to FM548 are included in the construction plan set for the TxDOT Driveway Permit.

33. A proposed drainage area map has not been included that is used to compare pre- and post-development drainage; provide to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: The existing drainage area map shows our pre development drainage and the proposed drainage area map shows our post development drainage. We request this be a condition of approval to be resolved during final engineering construction set.

35. Specify the citation of runoff coefficients and intensity calculations, as well as the “f” subscript in the Drainage Theory Rational Method formula to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: Section 5.7.1 states the drainage design is to be in accordance with generally accepted engineering standards. Since Rockwall County does not have specified engineering standards, we have chosen to follow the iSWM Technical Manual for the drainage design standards. This manual is widely accepted as the standard practice across cities in the DFW metroplex. The iSWM manual has been cited as our criteria for the runoff coefficients and intensities used.

36. Provide a table showing the TOC calculations, and show TOC paths on the plan sheets to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: We have prepared an exhibit that demonstrates the time it takes for a drop of water to travel from the homeowner’s roof to the first set of curb inlets. The total time was calculated to be 18.81 mins. The iSWM manual uses a 15 min minimum time of concentration for residential developments.

37. Provide pervious and impervious calculations to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: The iSWM manual uses a 0.30 runoff coefficient for 0.65 runoff coefficient for single family residential lots that are approximately 1/8 of an acre. We have prepared an exhibit of a typical lot and how the developed runoff coefficient was derived. See attached.

38. Label the points of interest or analysis to compare pre- and post-development drainage to confirm compliance with Section 5.7.1. of the Subdivision Regulations. Additionally, show where the drainage ultimately reaches. to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: The drainage ultimately reaches the NRCS Lake No. 13. We request this be a condition of approval to be resolved during final engineering construction set.

43. There are no ponds shown that will detain runoff from the site per Section 5.7.8. of the Subdivision Regulations.

Applicant Response #1 Comment: We are currently preparing a Flood Study for this watershed that includes a timing study to determine if detention is required. We request this be a condition of approval to be resolved during final engineering construction set.

44. Provide an additional plan that shows the drainage inlets and conveyance system more clearly to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: Drainage inlets and conveyance systems are shown on the Storm Plan & Profile sheets.

FNI Response #1 Comment: Commentary on the Proposed Drainage Area Sheets is recognized as suitable for resolution during the Construction Plan set review. It is recommended that the Commissioners Court specify that the above commentary be resolved at the time of Construction Plan review as a condition with any action taken on this Preliminary Plat.

Inlet and Drainage Area Calculations Sheet(s)

45. Provide pervious and impervious quantities and calculations from column 5 to prove that the runoff coefficient is the same for all inlets drainage areas to confirm compliance with Section 5.7.1. of the Subdivision Regulations.

Applicant Response #1 Comment: The iSWM manual uses 0.65 runoff coefficient for single family residential lots that are approximately 1/8 of an acre. We have prepared an exhibit of a typical lot and how the developed runoff coefficient was derived. See attached.

46. Provide a calculation table for TOC to confirm compliance with Section 5.7.1. of the Subdivision Regulations, it is highly unlikely that the TOC is 15 minutes for every sub-drainage area. Revise column 7 and the Ultimate Conditions Runoff Calculations once TOCs have been updated.

Applicant Response #1 Comment: We have prepared an exhibit that demonstrates the time it takes for a drop of water to travel from the homeowner's roof to the first set of curb inlets. The total time was calculated to be 18.81 mins. The iSWM manual uses a 15 min minimum time of concentration for residential developments.

49. Provide calculations for the runoff coefficients, TOC, and intensity rates to confirm compliance with Section 5.7.1. of the Subdivision Regulations, it is unlikely that they are the same in every inlet drainage area.

Applicant Response #1 Comment: See above responses regarding the runoff coefficients, TOC and intensity.

50. Runoff is significantly increased in the post-development scenario; specify how this will be remediated in accordance with Section 5.7.9.A.2.a. of the Subdivision Regulations.

Applicant Response #1 Comment: We are currently preparing a Flood Study for this watershed that includes a timing study to determine if detention is required. We request this be a condition of approval to be resolved during final engineering construction set.

FNI Response #1 Comment: Commentary on the Inlet and Drainage Area Calculations Sheets is recognized as suitable for resolution during the Construction Plan set review. It is recommended that the Commissioners Court specify that the above commentary be resolved at the time of Construction Plan review as a condition with any action taken on this Preliminary Plat.

Storm Plan and Profiles Sheets

52. Provide details for the illustrated curved pipe; curved pipe will be reviewed further upon details being supplied to confirm compliance with Section 5.7.1. of the Subdivision Regulations.
Applicant Response #1 Comment: We request this be a condition of approval to be resolved during final engineering construction set.
53. Specify the connection illustrated on Sheet 5.01 to confirm compliance with Section 5.7.1. of the Subdivision Regulations.
Applicant Response #1 Comment: We request this be a condition of approval to be resolved during final engineering construction set.
54. Show the hydraulic grade line (HGL) for the 100yr storm event, at a minimum, to confirm compliance with Section 5.7.1. of the Subdivision Regulations.
Applicant Response #1 Comment: We request this be a condition of approval to be resolved during final engineering construction set.
55. A series of callout-specific technical comments have been recorded on sheets 5.02 through 5.06 of the preliminary Storm Plan and Profile sheets; review the markup locations attached and rectify to confirm compliance with Section 5.7.1. of the Subdivision Regulations.
Applicant Response #1 Comment: We request this be a condition of approval to be resolved during final engineering construction set.

FNI Response #1 Comment: Commentary on the Storm Plan and Profiles Sheets is recognized as suitable for resolution during the Construction Plan set review. It is recommended that the Commissioners Court specify that the above commentary be resolved at the time of Construction Plan review as a condition with any action taken on this Preliminary Plat.

General Environmental Protection Comments

56. Address how the subdivision is designed in a way that promotes the stated objectives of the Rockwall County Open Space Master Plan per Section 1.10. of the Subdivision Regulations.
(<https://www.rockwallcountytexas.com/809/Open-Space-Alliance>)
Applicant Response #1 Comment: We will work with the County of Rockwall and prepare a master open space and trail plan for the overall River Rock Trails development. We request this be a condition of approval to be resolved during final engineering construction set.
FNI Response #1 Comment: It is recommended that this comment remain a condition of action taken by the Commissioners Court to ensure collaboration on a Master Open Space and Trail Plan.


59. Adherence to the Floodplain Management Court Order will be required per Sections 5.8 and 7.9.4. of the Subdivision Regulations prior to approval of the Final Plat and future phases.

Applicant Response #1 Comment: A Flood Study will be submitted prior to Final Plat. We request this be a condition of approval to be resolved during final engineering construction set.

FNI Response #1 Comment: It is recommended that this comment remain a condition of action taken by the Commissioners Court to ensure a Flood Study will be submitted with the Construction Plan set.

If you have any questions regarding the comments, please contact FNI at connor.roberts@freese.com.

Sincerely,



Connor Roberts
FNI Assistant Project Manager

CC:

Frank New, Rockwall County Judge
Charisa Hauser, Environmental Health Chief Assistant
Daniel Harrison, FNI Project Manager

Attachments:

Applicant Response Letter
Revised Plan Sheets