CASE SUMMARY

APPLICATION TYPE: SUBDIVISION

CONCEPT PLAN

Planning
KNOXVILLE | KNOX COUNTY

File Number:	7-SB-24-C	**Related File Number:**	7-D-24-DP
Application Filed:	5/28/2024	**Date of Revision:**	
Applicant:	CONNOR P. KELLY		

PROPERTY INFORMATION

General Location: West side of Maynardville Pike, southeast of Gray Road

Other Parcel Info.:

Tax ID Number: 29 001 **Jurisdiction:** County

Size of Tract: 58.47 acres

Accessibility: Access is via Maynardville Pike, a four-lane major arterial and center turn lane with 58 ft of pavement width within a right-of-right that varies in width from 340-545 ft.

GENERAL LAND USE INFORMATION

Existing Land Use: Agriculture/Forestry/Vacant Land

Surrounding Land Use: North: Agriculture/forestry/vacant land, single family residential - A (Agricultural)
South: Agriculture/forestry/vacant land - A (Agricultural)
East: Rural residential, agriculture/forestry/vacant land - A (Agricultural), F (Floodway)
West: Single family residential, agriculture/forestry/vacant land - A (Agricultural), RA (Low Density Residential)

Proposed Use: **Density:** 2.59 du/ac

Planning Sector: North County **Plan Designation:** RC (Rural Conservation), SP (Stream Protection), HP (Hillsi

Growth Policy Plan: Planned Growth Area

Neighborhood Context:

ADDRESS/RIGHT-OF-WAY INFORMATION (where applicable)

Street: 7933 MAYNARDVILLE PIKE

Location:

Proposed Street Name:

Department-Utility Report:

Reason:

ZONING INFORMATION (where applicable)

Current Zoning: PR (Planned Residential) < 2.6 du/ac, F (Floodway)

Former Zoning:

Requested Zoning:

Previous Requests:

Extension of Zone:

History of Zoning:

PLAN INFORMATION (where applicable)

Current Plan Category: N/A (Outside of city limits)

Requested Plan Category:

SUBDIVISION INFORMATION (where applicable)

Subdivision Name: Maynardville Pike Subdivision

No. of Lots Proposed: 150 **No. of Lots Approved:** 0

Variances Requested: VARIANCES
1) Reduce the minimum intersection separation along Maynardville Pike, between the centerlines of Road 'A' and Tell Mynatt Road, from 400 ft to 175 ft.
2) Reduce the minimum vertical curve K value on Road 'A' at STA 62+69.22 from 25 to 15.

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL
1) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 100 ft at curve C1.
2) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 200 ft at curve C2.
3) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 200 ft at curve C4.
4) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 200 ft at curve C5.
5) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 200 ft at curve C6.
6) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 200 ft at curve C7.
7) Reduce the minimum horizontal curve radius on Road 'A' from 250 ft to 200 ft at curve C8.

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL (PLANNING COMMISSION APPROVAL NOT REQUIRED)
1. Reduce the minimum pavement width for a public road from 26 ft to 22 ft on Road 'A' from STA 0+00 to 7+00.
2. Increase the maximum intersection grade from 1 percent to 3 percent on Road 'A' at Maynardville Pike.
3. Increase the maximum intersection grade from 1 percent to 3 percent on Road 'B' at Road 'A'

S/D Name Change:

OTHER INFORMATION (where applicable)

Other Bus./Ord. Amend.:

PLANNING COMMISSION ACTION AND DISPOSITION

Planner In Charge: Mike Reynolds

Staff Recomm. (Abbr.): Approve the requested variance to reduce the minimum intersection spacing along Maynardville Pike, between the centerlines of Road 'A' and Tell Mynatt Road, from 400 ft to 175 ft.
A. The site's steep topography on the Maynardville Pike frontage of the property limits options for access placement.
B. Mill Branch stream is between the site and Maynardville Pike. Moving the access point will require constructing a new stream crossing.
C. The granting of the variation will not be detrimental to public safety, health, or welfare because, according to the Maynardville Pike Subdivision Transportation Impact Study, these offset intersections will not have any conflicting movements, will have low turning movements from each, and vehicle queues are not expected to impact operations at either intersection.

Approve the requested variance to reduce the minimum vertical curve K value on Road 'A' at STA 62+69.22 from 25 to 15.
A. Due to the topographic conditions on the subject site, the reduced k value will allow the future connection to the adjacent property to follow better the shape and slope of the existing site conditions.
B. The existing topographic conditions of the site were not created by any person having an interest in the property.
C. The granting of the variation will not be detrimental to public safety, health, or welfare because this segment of Road 'A' will function similarly to a non-continuous leg of T intersection, which allows a k value of 15 at the intersection.

Approve the alternative design standards based on the justification provided by the applicant and recommendations of the Knox County Department of Engineering and Public Works.

Approve the Concept Plan subject to 12 conditions.

Staff Recomm. (Full): 1) Connection to sanitary sewer and meeting other relevant utility provider requirements.
2) Provision of street names consistent with the Uniform Street Naming and Addressing System within

Knox County (County Ord. 91-1-102).
3) Implementing the recommendations of the Maynardville Pike Subdivision Transportation Impact Study (TIS) by AJAX Engineering, 5/15/2024, as revised and approved by Planning, Knox County Engineering and Public Works, and the Tennessee Department of Transportation (TDOT) staff (see Exhibit B). A Memorandum of Understanding with Knox County Engineering and Public Works for completing off-site improvements may be required per Chapter 54, Article V of the Knox County Code (Ord. O-23-4-102).
4) Providing sight distance easements through the horizontal curve radius less than 250 ft per the requirements of Knox County Engineering and Public Works during the design plan phase. Any driveways that cannot be located outside the sight distance easement must have a 20 ft depth outside the sight distance easement.
5) Providing a sidewalk on one side of Road 'A' per the requirements of the Knox County Sidewalk Ordinance (Chapter 54, Article IV of the Knox County Code).
6) Providing an engineer report of the culvert over the Mill Branch stream per the requirements of Knox County Engineering and Public Works during the design plan phase. It is the property owner's responsibility to bring any structural deficiencies of the culvert into compliance with Knox County's standards for public streets.
7) Submitting a geotechnical report of the closed contour on the site to be reviewed and approved by Knox County Engineering and Public Works during the design plan phase. If it is not a sinkhole, the certification to be provided by Knox County Engineering and Public Works must be placed on the final plat. If it is a sinkhole, the area shown as a closed contour must be shown on the final plat with a 50-ft buffer as required by Section 3.06.B. of the Subdivision Regulations. If any building construction is proposed within the 50-ft buffer area around the designated sinkholes/depressions (including the depressions), a geotechnical report must be prepared by a registered engineer to determine soil stability and that report must be submitted to the Knox County Department of Engineering and Public Works for consideration. Any construction in these areas is subject to approval by the County following a review of the report. Engineered footings must be designed for these areas. For those lots that do not have a building site outside of the 50-ft buffer, approval by Knox County will be required prior to final plat approval. The sinkholes/depressions and 50-ft buffer shall be designated on the final plat even if they are approved to be filled. Lots that do not have buildable areas outside the sinkholes/depressions shall be combined with other lots to establish a buildable area.
8) Providing the right-of-way stub-out at the western terminus of Road 'A' and notification of future connection per section 3.04.C.2 of the Subdivision Regulations. The curb radii and pavement shall be installed as shown in the concept plan.
9) Access to the detention pond located behind Lot 102 must be approved by Knox County Engineering and Public Works during the design plan phase.
10) Meeting all applicable requirements of the Knox County Zoning Ordinance, including but not limited to the driveway corner clearance spacing requirements of Article 3, Section 3.51.02.C. of the Knox County Zoning Ordinance.
11) Meeting all applicable requirements of the Knox County Department of Engineering and Public Works and TDOT.
12) Before certification of the final plat for the subdivision, establish a property owners association or other legal entity responsible for maintaining common facilities, such as common areas, amenities, private roads, and/or stormwater drainage systems Concept Plan conditions

Comments:

This proposal is for a 150-lot detached residential subdivision on 57.83 acres at a density of 2.59 du/ac. In February 2024 (1-C-24-RZ), the property was rezoned from A (Agricultural) and F (Floodway) to PR (Planned Residential) up to 2.6 du/ac and F (Floodway). A single access is provided to Maynardville Pike.

VARIANCES
The Maynardville Pike Subdivision Transportation Impact Study (TIS) evaluated the impact of the proposed Road 'A' intersection being closer than 400 ft to the nearest intersection, Tell Mynatt Road. The study determined that these offset intersections will not have any conflicting movements, will have low turning movements from each, and vehicle queues are not expected to impact operations at either intersection.

The request for a reduced vertical curve k value is appropriate at this location because the intersection will function similarly to a T intersection. If the right-of-way stub-out is connected to and Road 'A' is extended to the adjacent site, there is little need for vehicles to continue straight through this intersection in a northeast/southwest direction.

ALTERNATIVE DESIGN STANDARDS
The applicant is requesting several reductions to the minimum horizontal curve radius and maximum intersection grades. The increase of the intersection grade to 3 percent is consistent with the maximum allowed to be approved by Knox County Engineering and Public Works when there is no crosswalk. This does not impact the intersection's functionality or safety.

There are six requests to reduce the minimum horizontal curve radius from 250 ft to 200 ft, and one

request for a 100 ft radius. The 100 ft radius and four of the 200 ft radii are in the portion of Road 'A' between Maynardville Pike and the first intersection of the subdivision. This is due to the topography of the site. The reduced horizontal curves will allow less grading into the HP (Hillside Protection) area. Sight distance easements are required through these curves per the requirement of Knox County Engineering and Public Works during the design plan phase. The reduced horizontal curves act as traffic calming, which is needed because of the long, uninterrupted downhill section of Road 'A'.

TRANSPORTATION IMPACT STUDY (TIS)
The TIS studied the impact of the proposed subdivision, as well as a separate multi-family (apartment) development on an adjacent property that was part of the same rezoning application (1-D-24-RZ). They are being considered a common development from a traffic impact standpoint. The TIS concludes that turn lanes are not warranted for the Ebenezer Road Subdivision; however, lengthening the northbound Ebenezer Road right turn lane at the Kingston Pike intersection is warranted, and a southbound left turn lane on Ebenezer Road at the apartment driveway is warranted (Exhibit B). The applicant and the developer of the apartment complex are responsible for funding the improvements at the intersection of Ebenezer Road and Kingston Pike. The developer of the apartment complex is responsible for the turn lane on Ebenezer Road at their driveway.

ROAD CONNECTIVITY
The proposed subdivision has 150 lots using a single entrance, which exceeds the long-standing unwritten design policy requiring a second entrance or a boulevard entrance road when a subdivision has 150 or more lots. The purpose of this policy is to address access for emergency services, but it also has the secondary benefit of increasing connectivity when multiple entrances are established. The boulevard option should only be used when there are no feasible or logical connections that can provide secondary access to an external road, and the boulevard must extend into the subdivision far enough to provide a benefit, such as the first intersection that provides access to a significant portion of the lots, or preferably, a loop road.

A boulevard is not feasible for this subdivision because of the existing narrow stream crossing and grading needed to construct the road in the HP (Hillside Protection) area. A right-of-way stub-out is provided at the first road intersection within the subdivision to the property to the north. This will allow for potential street connections and obtaining secondary access.

Action: Approved with Conditions **Meeting Date:** 7/11/2024

Details of Action:

Summary of Action: Approve the requested variance to reduce the minimum intersection spacing along Maynardville Pike, between the centerlines of Road 'A' and Tell Mynatt Road, from 400 ft to 175 ft.
A. The site's steep topography on the Maynardville Pike frontage of the property limits options for access placement.
B. Mill Branch stream is between the site and Maynardville Pike. Moving the access point will require constructing a new stream crossing.
C. The granting of the variation will not be detrimental to public safety, health, or welfare because, according to the Maynardville Pike Subdivision Transportation Impact Study, these offset intersections will not have any conflicting movements, will have low turning movements from each, and vehicle queues are not expected to impact operations at either intersection.

Approve the requested variance to reduce the minimum vertical curve K value on Road 'A' at STA 62+69.22 from 25 to 15.
A. Due to the topographic conditions on the subject site, the reduced k value will allow the future connection to the adjacent property to follow better the shape and slope of the existing site conditions.
B. The existing topographic conditions of the site were not created by any person having an interest in the property.
C. The granting of the variation will not be detrimental to public safety, health, or welfare because this segment of Road 'A' will function similarly to a non-continuous leg of T intersection, which allows a k value of 15 at the intersection.

Approve the alternative design standards based on the justification provided by the applicant and recommendations of the Knox County Department of Engineering and Public Works.

Approve the Concept Plan subject to 12 conditions.

Date of Approval: 7/11/2024 **Date of Denial:** **Postponements:**

Date of Withdrawal: **Withdrawn prior to publication?:** ☐ **Action Appealed?:**

LEGISLATIVE ACTION AND DISPOSITION

Legislative Body:

Date of Legislative Action:

Date of Legislative Action, Second Reading:

Ordinance Number:

Other Ordinance Number References:

Disposition of Case:

Disposition of Case, Second Reading:

If "Other":

If "Other":

Amendments:

Amendments:

Date of Legislative Appeal:

Effective Date of Ordinance: