

CASE SUMMARY

APPLICATION TYPE: SUBDIVISION
CONCEPT PLAN



File Number: 12-SE-21-C Related File Number:
Application Filed: 10/28/2021 Date of Revision:
Applicant: STEVE MADDOX

PROPERTY INFORMATION

General Location: West side of Everett Road, north side of El Camino Lane, south side of Buttermilk Road
Other Parcel Info.:
Tax ID Number: 141 028, 02802, 02805, 02806, OTHER: 033 & 03304 **Jurisdiction:** County
Size of Tract: 166 acres
Accessibility: Access is via El Camino Ln., a local street with 22ft of pavement width within the Interstate 40/75 right-of-way; and via Everett Rd., a minor arterial street with 21ft of pavement width within 50ft of right-of-way.

GENERAL LAND USE INFORMATION

Existing Land Use: Vacant land
Surrounding Land Use: North: Single family and rural residential, landscape business -- A (Agricultural), CA (General Business)
South: Interstate 40/75, Watt Road interchange -- A (Agricultural), CB (Business and Manufacturing)
East: Vacant land, truck & highway oriented commercial uses -- CB (Business and Manufacturing)
West: Vacant land, Commercial -- CB (Business and Manufacturing), A (Agricultural), Loudon County zoning (unknown)
Proposed Use: Commercial (undefined) **Density:**
Sector Plan: Northwest County **Sector Plan Designation:**
Growth Policy Plan: Planned Growth Area
Neighborhood Context:

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

Street: 13115 & 0 El Camino Lane, 0 Everett Road, 13206 & 0 Buttermilk Rd.
Location:
Proposed Street Name:
Department-Utility Report:
Reason:

ZONING INFORMATION (where applicable)

Current Zoning: CB (Business and Manufacturing) & RB (General Residential)
Former Zoning:
Requested Zoning:
Previous Requests:
Extension of Zone:
History of Zoning:

PLAN INFORMATION (where applicable)

Current Plan Category:

Requested Plan Category:

SUBDIVISION INFORMATION (where applicable)

Subdivision Name: Prosperity Crossing

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

Variances Requested: VARIANCES:

- 1) Reduce the minimum vertical curve from K=25 to K=16 on Road 'A' at STA 11+00.
- 2) Reduce the minimum curb radii at an intersection from 75 ft to 25 ft for all intersections.
- 3) Reduce the minimum vertical curve from K=25 to K=19 on Road 'C' at STA 78+75. (Requested by applicant)
- 4) Reduce the minimum vertical curve from K=25 to K=20 on Road 'C' at STA 78+75. (Recommended by staff)

ALTERNATIVE DESIGN STANDARDS APPROVED BY KNOX COUNTY ENGINEERING AND PUBLIC WORKS:

- 1) Increase the maximum intersection grade from 1% to 2%.

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 variances 1, 2, & 4 on the recommendations of the Knox County Department of Engineering and Public Works and because the site conditions restrict compliance with the Subdivision Regulations and will not create a traffic hazard, and Deny variance #3.

Approve the Concept Plan for the construction and platting of the roads only, subject to 8 conditions.

Staff Recomm. (Full):

- 1. Connection to sanitary sewer and meeting any other relevant requirements of the utility provider.
- 2. Provision of street names that are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord. 91-1-102).
- 3. Certifying sight distance at all intersections with review and approval by Knox County Engineering and Public Works during the design plan phase.
- 4. Road 'A' shall not connect to Everett Road until it is widened as part of a public improvement project or the property owner submits a transportation impact study and implements the recommended improvements.
- 5. If a final plat for the internal road right-of-ways is submitted before the Planning Commission has reviewed and approved a concept plan for the lots, including a transportation impact study, the following note must be added to the plat: "No access shall be provided to the internal roads until a concept plan for the lots has been submitted and approved by the Planning Commission. A transportation impact study must be submitted with the concept plan application and all recommended improvements to the internal roads and external roads must be implemented by the property owner unless otherwise agreed upon by Knox County Engineering and Public Works and/or the Tennessee Department of Transportation."
- 6. Obtaining approval from Loudon County for the extension of Road 'B' and Road 'C' into their jurisdiction. If the Loudon County portions of these roads are not installed at the same time as the portions in Knox County, a temporary turnaround shall be provided as required by Knox County Engineering and Public Works and Knox County Fire Prevention Bureau.
- 7. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
- 8. Submitting to Planning staff prior to final plat review by the Planning Commission or Planning staff, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations.

Comments: VARIANCES

- 1. Reduce the minimum vertical curve from K=25 to K=16 on Road 'A' at STA 11+00.
 - a) The standard minimum K value for this sag vertical curve is 25 because Road 'A' is being designed as a collector street (Section 3.04.1.4.b.2). If these were both local streets, the minimum K value is 15.

- b) The reduced K value should not impact the ability of El Camino Lane to be expanded in the future because there is additional right-of-way width available on the opposite (south) side of the road. This was demonstrated in the concept plan approved in 2011 (12-SB-11-C).
 - c) The reduced K value will help reduce the amount of grading required within the HP (Hillside Protection) area.
2. Reduce the minimum curb radii at an intersection from 75 ft to 25 ft for all intersections.
 - a) The minimum intersection radius is 75 ft for property lines and curbs in commercial and industrial zones and the Knox County Engineering and Public Works department can reduce the radius to 50 ft as an alternative design standard. A reduction for either of these less than 50 ft requires a variance. The intersection radius for a typical local street, such as a residential subdivision, is 25 ft.
 - b) The subdivision regulations require larger radii in commercial developments as a default because it is typically required to accommodate the turning radius of larger vehicles, such as delivery trucks, so they don't have a tire go over the curb which could damage the curb and create ruts on shoulder of the road. The design of the road system, including lane widths and turn lanes, can also impact whether larger curb radii are needed.
 - c) Knox County Engineering and Public Works is in agreement with the requested 25 ft intersection radii for this proposal.
 3. Reduce the minimum vertical curve from K=25 to K=19 on Road 'C' at STA 78+75. (Requested by the applicant)
 - a) Staff's recommendation to deny this variance is based on the proposed degree of reduction (K=19). Variance #4 below is for a slightly lower reduction (K=20) at the same location that staff is recommending for approval.
 4. Reduce the minimum vertical curve from K=25 to K=20 on Road 'C' at STA 78+75. (Recommended by staff)
 - a) This sag vertical curve on Road 'C' is required to have a minimum K value of 25 because Road 'A' is being designed as a collector street (Section 3.04.I.4.b.2). If these were both local streets, the minimum K value is 15.
 - b) Knox County Engineering and Public Works is recommending that the vertical curve be flatted slightly so it has a K value of 20.
 - c) The reduced K value will help reduce the amount of grading required within the HP (Hillside Protection) area.

ALTERNATIVE DESIGN STANDARD REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL

1. Increase the maximum intersection grade from 1% to 2% for all intersections except for those with a crosswalk that must meet ADA standards.
 - a) The Subdivision Regulations allow Knox County Engineering and Public Works to approve an intersection grade up to 3% when a pedestrian crossing is not proposed. It is anticipated that a sidewalk will either be on one or both sides of Road 'A', so a crosswalk could be at each intersection. An ADA accessible crosswalk can have a cross slope of up to 2% but they are usually designed closer to 1%.
 - b) All intersections with a crosswalk must be designed and constructed to meet ADA standards.

The purpose of this concept plan is to establish a public road network and begin site grading for the future subdivision of this commercial property into lots. If approved, this concept plan will only allow the applicant to seek permits for grading and construction of the road network, not subdivide the property into new lots and/or obtain building permits or establish new uses that access the new internal road network without further approvals. When the concept plan is submitted for the creation of lots, a transportation impact study must be provided and road improvements may be required to both the new internal roads and external roads, dependent on the proposed mix of uses, projected daily vehicle trips, and anticipated vehicle types.

The subdivision regulation road design standards are primarily for roads classified as local, such as typical residential streets and other streets with lower traffic volumes and limited turn movements. The main road through this commercial property, Road 'A', will be a collector with 3-lanes and a 60-ft right-of-way. The subdivision regulations defer to the road design standards of the applicable jurisdiction for collector and arterial streets. Knox County uses the applicable TDOT road design standard and Knox County Engineering and Public Works is in agreement that Road 'A' meets TDOT's standards for a 3-lane collector. Road 'B' and Road 'C' are designed as local streets and only need to meet the standards in the subdivision regulations.

PREVIOUS CONCEPT PLAN APPROVALS

Concept plans have been approved for this property in 2006, 2007, and 2011, however, they have expired. A transportation impact study (TIS) was submitted at that time and had recommendations for

the design of internal roads, widening of existing roads, and a new traffic signal at the Watt Road and El Camino Lane intersection. These improvements included widening N. Watt Road to 8 lanes (including turn lanes) between the interchange and El Camino Lane, widening El Camino Lane to 4-5 lanes (including turn lanes), and widening and realigning portions of Everett Road to the Road 'A' intersection. Similar improvements may be necessary depending on the mix of uses in the development.

ZONING

The property is zoned CB (Business and Manufacturing) and RB (General Residential). The RB zoning is located on the north side of the site with frontage on Buttermilk Road and is approximately 25 acres of the 166 acre development. Most uses in the CB and RB zones do not require Planning Commission approval, so the only review by the Planning Commission may be a concept plan. The current application does not propose any uses for the site.

WATT ROAD INTERCHANGE

TDOT is studying the I-40/75 corridor from N. Campbell Station Road to the I-40/75 junction. This study includes developing options for improvements to the Watt Road interchange. This study is not far enough along to have a preferred option. The design of the interchange could have an impact on access to El Camino Lane and its intersection with N. Watt Road. TDOT has not allocated funding for these improvements and currently does not have a timeline for when construction will begin.

Action: Approved **Meeting Date:** 12/9/2021

Details of Action: VARIANCES:

- 1) Reduce the minimum vertical curve from K=25 to K=16 on Road 'A' at STA 11+00.
- 2) Reduce the minimum curb radii at an intersection from 75 ft to 25 ft for all intersections.
- 3) DENIED -- Reduce the minimum vertical curve from K=25 to K=19 on Road 'C' at STA 78+75. (Requested by applicant)
- 4) Reduce the minimum vertical curve from K=25 to K=20 on Road 'C' at STA 78+75. (Recommended by staff)

ALTERNATIVE DESIGN STANDARDS APPROVED BY KNOX COUNTY ENGINEERING AND PUBLIC WORKS:

- 1) Increase the maximum intersection grade from 1% to 2%.

Summary of Action: Approve variances 1, 2, & 4 on the recommendations of the Knox County Department of Engineering and Public Works and because the site conditions restrict compliance with the Subdivision Regulations and will not create a traffic hazard, and Deny variance #3.

Approve the Concept Plan for the construction and platting of the roads only, subject to 8 conditions.

Date of Approval: 12/9/2021 **Date of Denial:** **Postponements:**

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

LEGISLATIVE ACTION AND DISPOSITION

Legislative Body: Knox County Chancery Court

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:**