

# SUBDIVISION REPORT - CONCEPT

► FILE #: 3-SE-25-C AGENDA ITEM #: 49

POSTPONEMENT(S): 3/13/2025 **AGENDA DATE:** 4/10/2025

SUBDIVISION: **ISABEL ESTATES** 

APPLICANT/DEVELOPER: EAGLE BEND DEVELOPMENT, LLC

Eagle Bend Development LLC OWNER(S):

20 K B 068, 070 & 071 TAX IDENTIFICATION: View map on KGIS

JURISDICTION: County Commission District 8

STREET ADDRESS: 0 MOONBEAM LN (0 NIGHT SHADE LN)

► LOCATION: North, east, and south sides of Moonbeam Ln and Night Shade Ln,

north of Tall Shadow Ln

**GROWTH POLICY PLAN:** Planned Growth Area

FIRE DISTRICT: Rural Metro Fire WATERSHED: **Beaver Creek** 

APPROXIMATE ACREAGE: **5.67 acres** 

ZONING: PR (Planned Residential) up to 3 du/ac

EXISTING LAND USE: Agriculture/Forestry/Vacant Land PROPOSED USE: Detached residential subdivision

North: Agriculture/forestry/vacant land - A (Agricultural) South: Agriculture/forestry/vacant land, single family residential (under **USE AND ZONING:** 

construction) - PR (Planned Residential) up to 3 du/ac

East: Agriculture/forestry/vacant land - A (Agricultural), PR (Planned

Residential) up to 3 du/ac

West: Agriculture/forestry/vacant land - PR (Planned Residential) up to 3

du/ac

NUMBER OF LOTS: 24

SURVEYOR/ENGINEER: Robert G. Campbell, PE Robert G. Campbell and Associates

ACCESSIBILITY: Access is via Moonbeam Lane, a local street with 26-ft of pavement width

within a 50-ft right-of-way; and via Night Shade Lane, a local street with 26-ft

of pavement width within a 50-ft right-of-way.

► SUBDIVISION VARIANCES

SURROUNDING LAND

**REQUIRED:** 

None.

#### STAFF RECOMMENDATION:

Approve the modification of condition #3 for the Isabel Estates concept plan (10-SC-21-C) as request by the applicant in condition #1, subject to 2 conditions.

1) As recommended by the Transportation Impact Study and Knox County Engineering and Public Works, a maximum of 66 lots may be platted before the left turn lane on E. Emory Road has been installed by the applicant, or future improvements to E. Emory Road that includes an eastbound left turn lane at the Brackett Road intersection, are complete, or a signed (executed) Memorandum of Understanding between the applicant

FILE #: 3-SE-25-C 4/4/2025 09:03 AM MIKE REYNOLDS AGENDA ITEM #: 49 PAGE #: 49-1 and Knox County, an executed permit has been issued by the Tennessee Department of Transportation, and a notice to proceed has been issued by Knox County.

2) All other aspects of the Isabel Estates concept plan approval (10-SC-21-C) remain unchanged and effective.

#### **COMMENTS:**

This request is to modify condition #3 of the approved concept plan for Isabel Estates (10-SC-21-C / 10-E-21-UR), which restricts the subdivision to 66 platted lots before improvements to the E. Emory Road intersection are complete (see below for the full condition). The subdivision was approved for up to 90 lots. The plat for the first phase of Isabel Estates was recorded in November 2023 with 66 lots. The remaining 24 lots cannot be platted until the turn lane is installed on E. Emory Road.

When Isabel Estates was approved in 2021, Knox County had not yet created the Memorandum of Understanding (MOU) process, where off-site improvements are paid for by the applicant, but the work is implemented by Knox County Engineering and Public Works. The requested modification to condition #3 allows an executed MOU between the applicant and the County as an option for allowing the remaining 24 lots to be platted. With this modification, the lots can be platted once the turn lane construction is ready to start.

See Exhibit B for the recommendations and conclusions of the Isabel Estates Transportation Impact Analysis (Study), by Fulghum MacIndoe & Associates, revised 9/24/2021.

#### Condition #3 – current

As recommended by the Transportation Impact Study and Knox County Engineering and Public Works, a maximum of 66 lots may be platted before the left turn lane on E. Emory Road has been installed by the applicant, or future improvements to E. Emory Road that includes an eastbound left turn lane at the Brackett Road intersection, are complete.

#### Condition #3 - modification

Add to the end, "..., or a signed (executed) Memorandum of Understanding between the applicant and Knox County, an executed permit has been issued by the Tennessee Department of Transportation, and a notice to proceed has been issued by Knox County."

ESTIMATED TRAFFIC IMPACT: A traffic impact study was prepared by the applicant. The findings of that study were used in formulating the recommendations of this staff report.

ESTIMATED STUDENT YIELD: 10 (public school children, grades K-12)

Schools affected by this proposal: Gibbs Elementary, Gibbs Middle, and Gibbs High.

- Potential new school population is estimated using locally-derived data on public school student yield generated by new housing.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Students may request transfers to different zones, and zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.

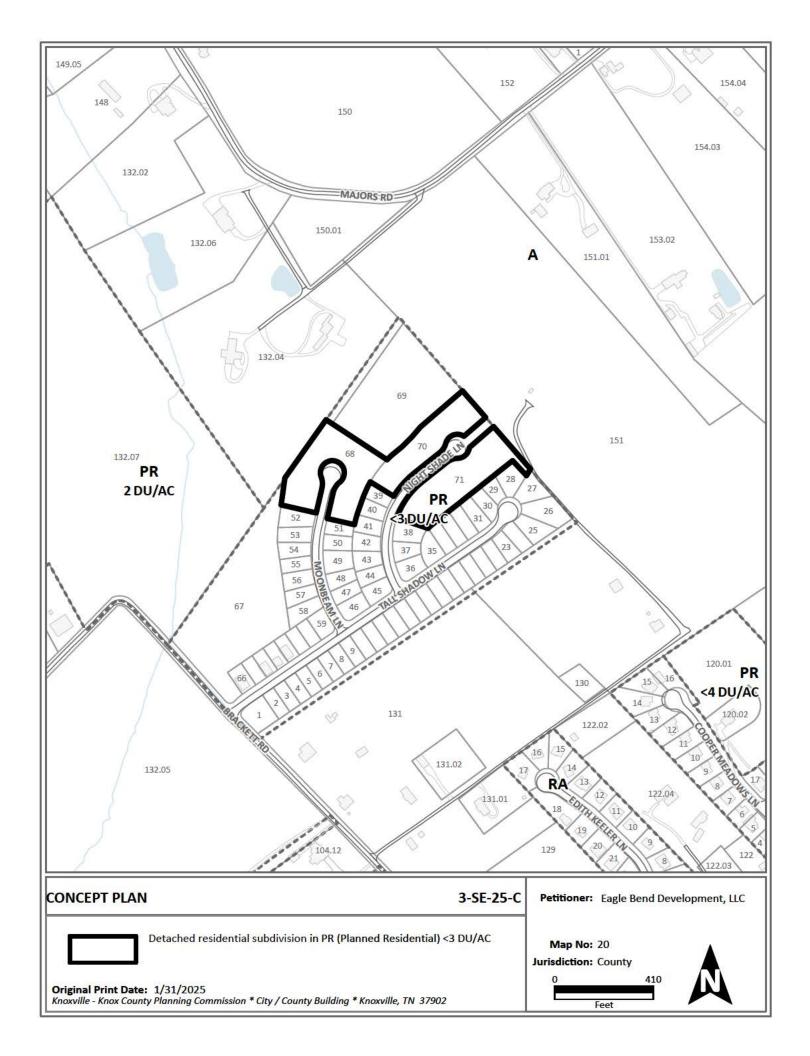
Knoxville-Knox County Planning Commission's approval or denial of this request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court appeal hearing will depend on when the appeal application is filed.

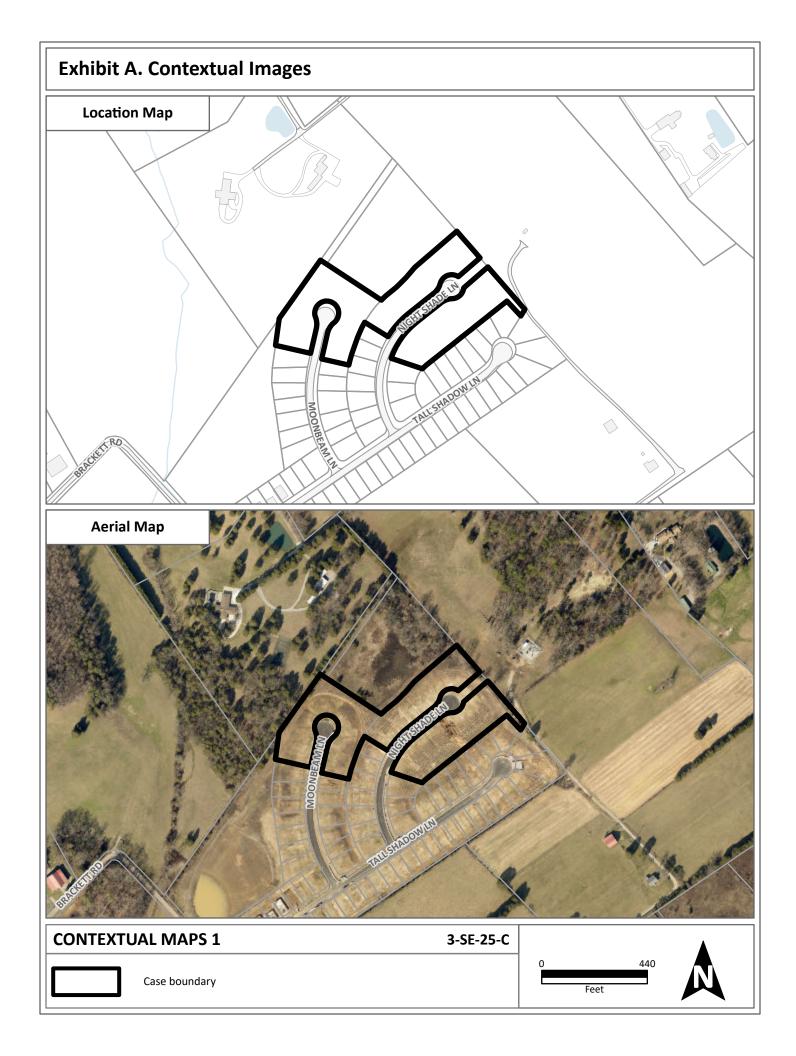
AGENDA ITEM #: 49 FILE #: 3-SE-25-C 4/4/2025 09:03 AM MIKE REYNOLDS PAGE #: 49-2



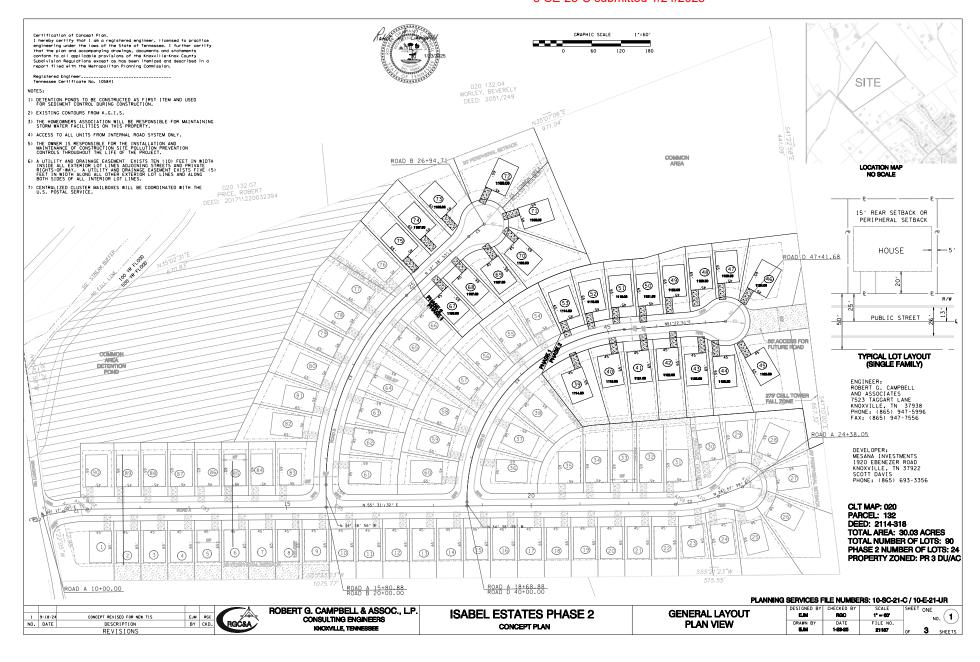
# Request to Postpone · Table · Withdraw

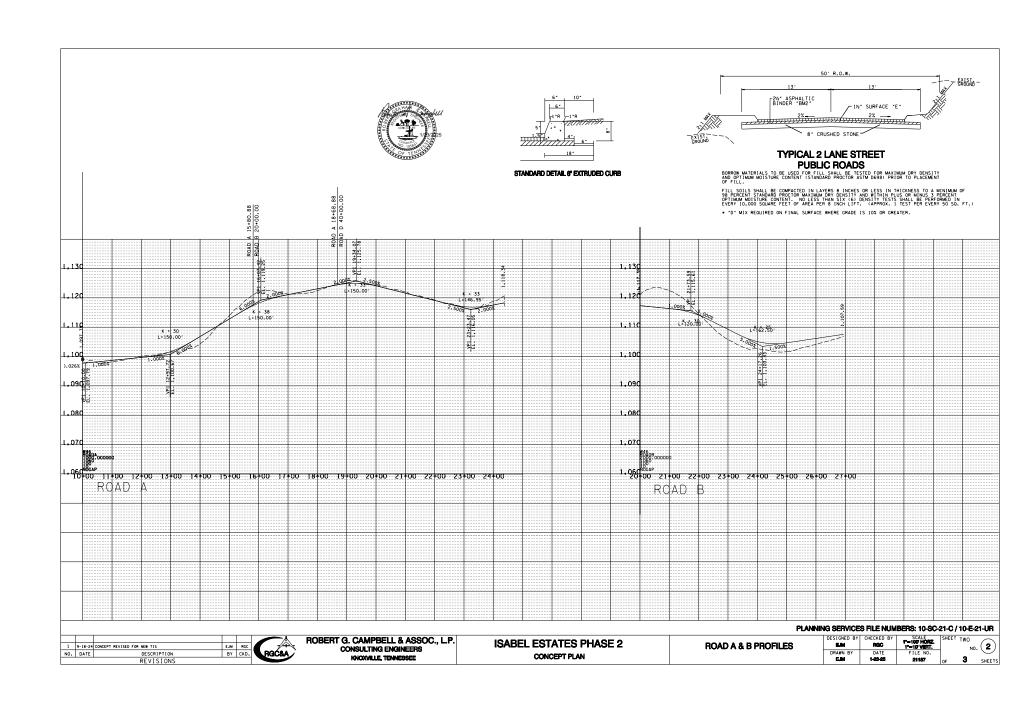
	Applicant Name (as it appears o	n the current Planning Commission agenda)	Date of Request File Number(s)
POSTPONE  POSTPONE: All applications are			File Number(s)
POSTPONE  POSTPONE: All applications are			riie muniber(s)
POSTPONE: All applications are		3-SE-25-C	200000000000000000000000000000000000000
	g Commission meeting. All reque	e request is received in writing and paid for bests must be acted upon by the Planning Con onement. If payment is not received by the c	nmission, except new
SELECT ONE: 30 days 6	60 days 🔲 90 days		
Postpone the above application(s)	until the 4/10/2025	Planning Commiss	on Meeting.
WITHDRAW			
week prior to the Planning Con Applicants are eligible for a refu	nmission meeting. Requests mad und only If a written request for v	ne request is received in writing no later than le after this deadline must be acted on by the withdrawal is received no later than close of oved by the Executive Director or Planning S	e Planning Commission. business 2 business day:
TABLE		*The refund check will be mail	ed to the original payee
no fee to table or untable an ite		operty owner, and/or the owners authorized i	representative.
phone	· · · · · · · · · · · · · · · · · · ·	tt Davis	
Applicant Signature	Pleas	se Print	
(865) 693-3356	swd	l444@gmail.com	
Phone Number	Emai		
STAFF ONLY			
2/1/12	Michael R	Revnolds	<b>&gt;</b> 2 000 000 0
Staff Signature	Please Print	Date Paid	No Fee
Eligible for Fee Refund?	□ No Amount:	CONTRACT STATES	
Approved by:		Date:	
Payee Name	Payee Phone	Payee Address	



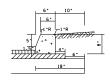


#### 3-SE-25-C submitted 1/24/2025

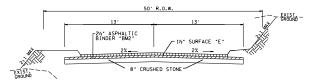










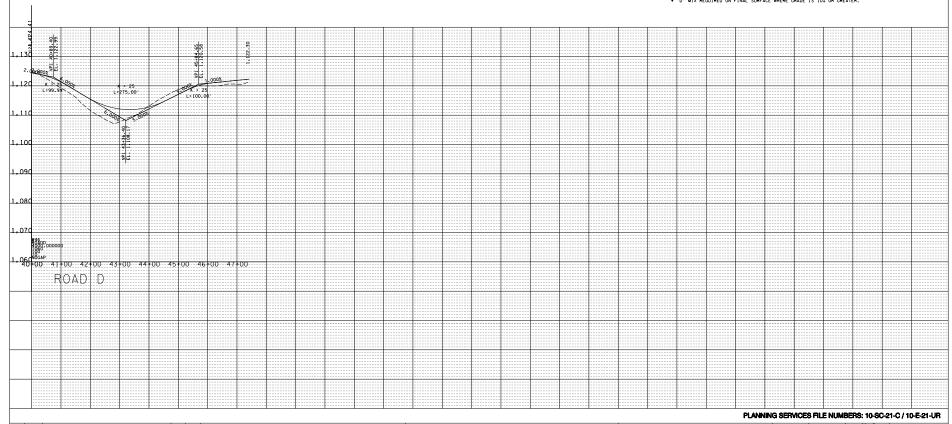


## TYPICAL 2 LANE STREET PUBLIC ROADS

BORROW MATERIALS TO BE USED FOR FILL SHALL BE TESTED FOR MAXIMUM DRY DENSIT AND OPTIMUM MOISTURE CONTENT (STANDARD PROCTOR ASTM D698) PRIOR TO PLACEMEN

FILL SOILS SHALL BE COMPACTED IN LAYERS 8 INCHES OR LESS IN THICKNESS TO A MINIMUM OF 98 PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN PLUS OR MINUS PERCENT OPTIMUM MOISTURE CONTENT. NO LESS THAN SIX (6) DENSITY TESTS SHALL BE PERFORMED IN

• "D" MIX REQUIRED ON FINAL SURFACE WHERE GRADE IS 10% OR GREATER



1	9-18-24	CONCEPT REVISED FOR NEW TIS	EJM	RGC	
NO.	DATE	DESCRIPTION	BY	CKD.	<b>N</b> RG
REVISIONS					

ROBERT G. CAMPBELL & ASSOC., L.P. CONSULTING ENGINEERS INNOVILLE, TENNESSEE

ISABEL ESTATES PHASE 2 CONCEPT PLAN ROAD D PROFILE

DESIGNED BY	RGC	1"=100 HORZ. 1"=10 VEHT.	SHEET	OWT	ıo. (2)
DRAWN BY	DATE	FILE NO.	1		
E,M	1-23-25	21187	OF	3	SHEETS

## **ISABEL ESTATES**

## Transportation Impact Analysis E Emory Road (SR 131) Knoxville, TN

# A Transportation Impact Analysis for the Isabel Estates Subdivision

Submitted to

# **Knoxville - Knox County Planning**

Revised September 23, 2021 August 27, 2021 FMA Project No. 588.012

Submitted By:





3-SE-25-C

[Original concept plan file # 10-SC-21-C / 10-E-21-UR] TIS Revision 1 9/24/2021

#### **6** Turn Lane Warrant Analysis

The intersection of E Emory Road (SR 131) at Brackett Road was evaluated to determine if a westbound right turn lane or an eastbound left turn lane are warranted. The Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy," was used to analyze the information.

A westbound right turn lane is not warranted during either the AM or PM peak hour after the full buildout of the Isabel Estates.

An eastbound left turn lane is warranted during the PM peak hour due to the high volume of existing traffic on E Emory Road (SR 131). During the PM peak hour the through volume on E Emory Road (SR 131) is 600 vehicles per hour which puts the maximum allowed left turns before a warrant is met to between 15 left turns and 20 left turns depending on the assumption for the background growth rate. FMA assumed a conservative 2% growth rate but anything less than 2% would result in an estimated through volume on E Emory Road (SR 131) to be less than 600.

FMA calculated that 44 single family lots will increase the left turns to 15 and 66 single family lots will increase the left turns to 20; therefore, no more than 66 single family homes can be built before a left turn lane will be required at the intersection of E Emory Road (SR 131) at Brackett Road.

The turn lane warrant worksheets and analysis are included in Attachment 8.

#### 7 Conclusions and Recommendations

#### 7.1 E Emory Road (SR 131) @ Brackett Road

The existing, background and full buildout conditions at the unsignalized intersection of E Emory Road (SR 131) at Brackett Road were analyzed using the Highway Capacity Software (HCS7).

The existing and background traffic conditions for the eastbound left turn movement (E Emory Road (SR 131)) operate at a LOS A during both the AM and PM peak hours and the southbound approach (Brackett Road) operates at a LOS C during both the AM and PM peak hours.

After the completion of the Isabel Estates residential development the full buildout traffic conditions for the intersection of E Emory Road (SR 131) at Brackett Road will operate as follows. The eastbound left turn movement (E Emory Road (SR 131)) will

EXHIBIT B
Isabel Estates
Transportation Impact Analysis
September 23, 2021

operate at a LOS A during both the AM and PM peak hours. The southbound approach (Brackett Road) will operate at a LOS C during the AM peak hour and a LOS D during the PM peak hour.

The 95% queue length is defined as the queue length that has only a 5-percent probability of being exceeded during the analysis time period. The 95% queue length is typically used to determine the length of turning lanes in order to minimize the risk of blockage.

The unsignalized intersection capacity analysis shows the full buildout 95% queue length for the southbound approach (Brackett Road) of 1.1 car lengths during both the AM and PM peak hours. The distance between E Emory Road (SR 131) and the first driveway connection on Brackett Road is approximately 70 feet, which will allow up to three cars to queue before blocking the driveway connection. Based on the HCS7 queue analysis the existing storage at the intersection of E Emory Road (SR 131) at Brackett Road is adequate and no improvements to the intersection are necessary in order to accommodate the Isabel Estates residential development.

A westbound right turn lane on E Emory Road (SR 131) is not warranted and an eastbound left turn lane is warranted during the PM peak hour per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy."

FMA recommends that no more than 66 single family lots be built before re-evaluating the warrant for a left turn lane. The need for a left turn lane will be mitigated as long as the TDOT road widening project on E Emory Road (SR 131) remains active and on schedule.

The minimum required sight distance for a road with a posted speed limit of 45 mph is 450 feet in each direction in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020. FMA measured the sight distance at the existing intersection of E Emory Road (SR 131) at Brackett Road in September 2021. At 15 feet from the edge of pavement the existing sight distance is 400 feet eastbound and 450 feet westbound. The inadequate sight distance eastbound is caused by the existing roadway profile.

### 7.2 Brackett Road @ Driveway Connection Road "A"

Brackett Road is not classified by the Major Road Plan; therefore, it is considered a local street. The minimum intersection spacing required on a local street is 125 feet per the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020. The Driveway Connection Road "A" is located approximately 2,210 feet

north of the intersection with E Emory Road (SR 131) and exceeds the typical minimum separation on a local street; therefore, no change is necessary.

The minimum required sight distance for a road with a posted speed limit of 25 mph is 250 feet in each direction in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020. FMA measured the sight distance at the proposed intersection of Brackett Road at Driveway Connection Road "A" in August 2021. At 15 feet from the edge of pavement the sight distance at the proposed intersection is greater than 250 feet northbound and southbound; however, the southbound sight distance is partially blocked due to the existing trees and vegetation located within the right-of-way.

FMA recommends that the sight distance be re-evaluated in the field after the completion of the proposed Isabel Estates residential development to ensure that the sight distance complies with the requirements for Knox County Engineering and Public Works.

Road "A", Road "B", Road "C" and Road "D" will have a width of 26 feet in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020.

Any required sight distance easements for the internal subdivision intersections of Road "A", Road "B", Road "C" and Road "D" should be coordinated with Knox County Engineering and Public Works and included on the final design drawings prior to construction of the subdivision.

#### 7.3 Brackett Road

Per AASHTO "Guidelines for Geometric Design of Low-Volume Roads" Brackett Road is classified as a Rural Minor Access Road with its sole function to provide access to adjacent property. The minimum required roadway width for a minor access road with a 25 mph design speed is 18 feet. All low-volume roads have a maximum average daily traffic volume of 2,000 vehicles per day or less.

The existing width of Brackett Road between E Emory Road and the driveway connection (Road "A") varies between 18 feet and 20 feet and the length of Brackett Road between Bell Road and E Emory Road (SR 131) is 6,540 LF.

) Sign the application digitally (or print, sign, and scan).

Knoxville-Knox County Planning offices

OR email it to applications@knoxplanning.org

**Reset Form** 



**Development Request** 

■ Development Plan ■ Concept P

☐ Planned Development ☐ Final Plat

☐ Use on Review / Special Use☐ Hillside Protection COA

■ Concept Plan

☐ Plan Amendment☐ SP☐ PA

☐ Rezoning

Eagle Bend Development, LLC			Owner	W.		
Applicant Name			Affiliation			
1/24/2025	3/13/2025			File Number(s)		
Date Filed	Meeting Date	(if applicable)				
CORRESPONDENCE All corr	respondence related	f to this application should b	e directed to the approv	ved contact listed below.		
Applicant Property Owner [	☐ Option Holder	☐ Project Surveyor ☐ E	ngineer	/Landscape Architect		
Scott Davis		Eagle Bend	Development, LLC			
Name		Company				
P.O. Box 11315		Knoxville	TN	37939		
Address		City	State	ZIP		
(865) 693-3356						
Phone	Emall					
CURRENT PROPERTY INFO		· ·				
Property Owner Name (If different)	Prope	erty Owner Address	Pro	operty Owner Phone		
Moonbeam Lane / Night Shade L	ane	020K	B068 / 020KB070 /	020KB071		
Property Address		Parcel	ID			
HPUD		HPUD	ia.	N		
Sewer Provider	<del>1 </del>	Water Provider		Septic (Y/N)		

COMMUNITY ENGAGEMENT

Sign and return the Public Notice & Community Engagement form with this application.

Planning strives to provide community members with information about upcoming cases in a variety of ways. In addition to posting public notice signs, our agency encourages applicants to provide information and offer opportunities for dialogue related to their upcoming case(s). We require applicants to acknowledge their role in this process.

DEVELOPMENT REQUEST			
■ Development Plan □ Use on Review / S ■ Residential □ Non-Residential Home Occupation (specify)			Related City Permit Number(s)
Other (specify)			
SUBDIVISION REQUEST			ė.
Proposed Subdivision Name  11 Unit / Phase Number  Combine Parcel	Related Rezoning File Number		
Other (specify)			
☐ Attachments / Additional Requirements			
ZONING REQUEST			
☐ Zoning Change Proposed Zoning			Pending Plat File Number
Plan Amendment Change Proposed Plan	Designation(s)		
Proposed Density (units/acre)	Previous Rezoning Request:	s	The state of the s
Other (specify)			
STAFF USE ONLY			
PLAT TYPE  ☐ Staff Review ☐ Planning Commission		Fee 1	Total
ATTACHMENTS		Fee 2	
☐ Property Owners / Option Holders ☐ Va ☐ Amendment Request (Comprehensive Plan	rlance Request )		
ADDITIONAL REQUIREMENTS  ☐ Use on Review / Special Use (Concept Plan) ☐ Traffic Impact Study ☐ COA Checklist (Hillside Protection)	)	Fee 3	
AUTHORIZATION			
By signing below, I declare under penalty of per 2) The application and all associated materials are holders, each additional individual must sign the	being submitted with his/her/i	ts consent. If there are ac	
Thurs	Scott Davis / Ow		1/24/2025
Applicant Signature	Print Name / Affillat	lon	Date
(865) 693-3356			
Phone Number	Emall		
Tr .	17		
Property Owner Signature	Please Print		Date Pald



# **Public Notice** and Community Engagement

# Sign Posting and Removal

The Administrative Rules and Procedures of the Knoxville-Knox County Planning Commission require a sign to be posted on the property for each application subject to consideration by the Planning Commission.

Planning staff will post the required sign. If a replacement sign(s) is needed, the applicant is responsible for picking up the new sign(s) from Planning and will be charged \$10 for each replacement.

#### Location and Visibility

The sign must be posted on the nearest adjacent/frontage street and in a location clearly visible to vehicles traveling in either direction. If the property has more than one street frontage, the sign should be placed along the street that carries more traffic. Planning staff may recommend a preferred location for the sign to be posted at the time of application.

#### **Timing**

The sign(s) must be posted not less than 12 days prior to the scheduled Planning Commission public hearing and must remain in place until the day after the meeting. In the case of a postponement, the sign can either remain in place or be removed and reposted not less than 12 days prior to the next Planning Commission meeting. The applicant is responsible for removing the sign after the application has been acted upon by the Planning Commission.

# Community Engagement

Planning strives to provide community members with information about upcoming cases in a variety of ways. In addition to posting public notice signs, our agency encourages applicants to provide information and offer opportunities for dialogue related to their upcoming case(s).

Acknowledgement	Have you engaged the
<b>By signing below</b> , you acknowledge that public notice signs must be posted and visible on the property consistent with the guidelines above and between the dates listed below.	surrounding property owners to discuss your request?  Yes No No, but I plan to prior to the Planning Commission meeting
Date to be Removed	
Scott Davis	1-24-2025
Applicant Signature Applicant Name	Date FILE NUMBER