

## SUBDIVISION REPORT -CONCEPT/DEVELOPMENT PLAN

FILE #: 6-SB-24-C	AGENDA ITEM #: 2						
6-E-24-DP	AGENDA DATE: 9/12/202						
POSTPONEMENT(S):	6/13/2024, 7/11/2024, 8/8/2024						
SUBDIVISION:	HOROBET ON BOB GRAY ROAD						
APPLICANT/DEVELOPER:	ARCIP HOROBET						
OWNER(S):	Arcip Horobet						
TAX IDENTIFICATION:	118 071 View map on KGI						
JURISDICTION:	County Commission District 3						
STREET ADDRESS:	0 PELLISSIPPI PKWY						
LOCATION:	South side of Bob Gray Rd, west side of Pellissippi Pkwy, northern terminus of Blinken St						
GROWTH POLICY PLAN:	Planned Growth Area						
FIRE DISTRICT:	Rural Metro Fire						
WATERSHED:	Turkey Creek						
• APPROXIMATE ACREAGE:	9.87 acres						
ZONING:	PR(k) (Planned Residential) up to 10 du/ac, TO (Technology Overlay)						
• EXISTING LAND USE:	Agriculture/Forestry/Vacant Land						
PROPOSED USE:	Attached residential subdivision						
SURROUNDING LAND USE AND ZONING:	North: Rural residential - RA (Low Density Residential), TO (Technology Overlay) South: Multifamily residential - PR (Planned Residential) up to 12 du/ac, TO						
	(Technology Overlay) East: Pellissippi Parkway right-of-way West: Single family residential - RA (Low Density Residential), TO (Technology Overlay)						
NUMBER OF LOTS:	94						
SURVEYOR/ENGINEER:	David Harbin Batson, Himes, Norvell and Poe						
	Access is via Dab Onev Dal a marian calle stan structure it with 20.64 of a susmant						
ACCESSIBILITY:	Access is via Bob Gray Rd, a major collector street with 20 ft of pavement width within 48 ft of right-of-way.						
ACCESSIBILITY: SUBDIVISION VARIANCES REQUIRED:							
SUBDIVISION VARIANCES	width within 48 ft of right-of-way. VARIANCES 1. Providing a turnaround other than a cul-de-sac turnaround at the end of Road "A". 2. Vertical curve length reduction from 300 ft to 240 ft, STA 1+0 Road						

1. Increase the intersection grade from 1 to 3% at STA 0+13 to STA 0+55 ROAD "B".

2. Increase the intersection grade from 1 to 2.75% at STA 6+00 to STA 7+89 ROAD "F".

3. Increase the intersection grade from 1 to 2.38% at STA 0+13 to STA 2+66 ROAD "D".

4. Increase the intersection grade from 1 to 2% at STA 0+13 to STA 1+00 ROAD "E".

5. Increase the intersection grade from 1 to 3% at STA 0+10 to STA 1+30 ROAD "F".

6. Decrease the right-of-way width from 50 ft to 40 ft.

ALTERNATIVE DESIGN STANDARD REQUIRING PLANNING COMMISSION APPROVAL

1. Reduce street frontage from 25 ft to 22 ft.

2. Increase the roadway grade from 12% to 15% at STA 1+30 to STA 6+00 ROAD "F".

#### STAFF RECOMMENDATION:

Approve the requested variance to provide a turnaround other than a cul-de-sac at the end of Road A. A. The particular surroundings of this site include a townhouse development to the south with a singular access point that is off of Pellissippi Parkway. The proposed development will be connected to Parkway Heights upon its completion to enable the Pellissippi Parkway access point to be closed. The turnaround would not be required after that fact and is only temporary.

B. The rezoning condition from case 12-F-23-RZ requires a right-of-way stub-out to Parkway Heights. The rezoning condition is unique to this site as a connection point would not normally be required. Since it is, the turnaround space is temporary and would not be required after the connection point is made.

C. The granting of the variance will not be detrimental to public safety, health, or welfare because a turnaround which meets AASHTO standards for roads less than 150 ft has been provided. The road connection to the adjacent subdivision will result in safer access to the Parkway Heights community.

Approve the requested variance to reduce the vertical curve length from 300 ft to 240 ft, STA 1+0 Road "F" (K values from 25 to 20).

A. The steep topography along Bob Gray Road causes a deviation with the vertical curve.

B. The required access from Bob Gray Road causes the roadway to wind through steep topography.C. The granting of the variance will not be detrimental to public safety, health, or welfare because the shortened vertical curve meets AASHTO standards and still allows adequate sight distance.

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

#### Approve the Concept Plan subject to 8 conditions.

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. 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.

4. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.

5. Providing the right-of-way stub-out at the southern terminus of Road A to the end of the property line, which aligns with the right-of-way of the adjoining subdivision Parkway Heights.

6. Implementing the recommendations of the Transportation Impact Study for The Bob Gray Road Subdivision by Ajax Engineering, April 2024. A Memorandum of Understanding (MOU) with Knox County Engineering and Public Works for completing off-site road improvements may be required per Chapter 54, Article V of the Knox County Code (Ord. O-23-4-102).

7. If during design plan approval or construction of the development, it is discovered that unforeseen off-site improvements within the right-of-way are necessary, the developer will either enter an MOU with the County for these improvements or reimburse the County for their direct expenses (if competed by County crews) to make

corrections deemed necessary.

8. Certifying that the required sight distance is available along Bob Gray Rd in both directions at the Road F intersection during the design plan phase.

#### Approve the development plan for up to 85 attached houses on individual lots and a peripheral setback reduction to 25 ft along the eastern property line as shown on the development plan, subject to 3 conditions.

1. Meeting all applicable requirements of the Knox County Zoning Ordinance, including the conditions of the rezoning case 12-F-23-RZ.

2. The maximum height will be 35 ft for attached houses.

3. Obtaining TTCDA approval of the development plans (Case 6-C-24-TOB).

With the conditions noted, this plan meets the requirements for approval in the PR zone and the criteria for approval of a development plan.

#### COMMENTS:

This is a request for an 85-lot subdivision that will be accessed off of Bob Gray Rd, Pellissippi Parkway borders to the east. The proposed subdivision would have public and private streets. The main spine, which is comprised of Road F and part of Road A (as shown on the plan) will be public roads. Road A will end at the shared property line with Parkway Heights, the townhouse subdivision abutting the proposed development to the south. Parkway Heights shows the Blinken Street right-of-way terminating at the shared property line, but the street is not built out the full length of the right-of-way. A temporary turnaround is being proposed until such time as the development is completed, at which point the connection between Road A and Blinken Street will be created. The Subdivision Regulations require all dead-end streets to end with a cul-de-sac, so a variance is being requested for a Road A to terminate with a different design. Since the turnaround is temporary until this road is connected to Blinken Street in the future, a cul-de-sac turnaround would not be required in the long-term.

The right-of-way stub out is a condition of the rezoning (12-F-23-RZ) in recognition of the fact that the Parkway Heights community's only access point is off of Pellissippi Parkway. The Tennessee Department of Transportation (TDOT) has stated they would be in favor of closing the street connection to Pellissippi Parkway upon development of the subject property once a stub-out connection to the adjacent subdivision to the south has been provided as it will improve safety for the residents of Parkway Heights and allow them to access Pellissippi Parkway via the Lovell Road or Dutchtown Road interchanges.

The entrance to the proposed development is on Bob Gray Road, a major collector street. A second variance is being requested to reduce the length of the vertical curve near the entry to the development on Road F (station 1+00) where the topography is steep. Engineering supports this variance request as the reduction will not cause a safety issue. The reduction still allows adequate sight distance and is in line with AASHTO standards.

The front of the property on Bob Gray includes 2.56 acres within the Hillside Protection (HP) Area. The plan proposes to disturb 1.67 acres, which is over the recommended disturbance budget of 1.2 acres as determined by the slope analysis. The steeper slopes on the northern edge of the site are from old driveway cuts, which are considered previously disturbed areas and are therefore exempt from HP standards, and this occurs where the road access traverses the site after entering from Bob Gray Road.

A detailed landscape plan has been provided that meets the rezoning conditions requiring landscape buffers between adjacent properties and the TTCDA Guidelines for required yard trees, landscaping at entrances, and in parking lots.

DEVELOPMENT PLAN ANALYSIS PER ARTICLE 6, SECTION 6.50.06 (APPROVAL OR DENIAL) In the exercise of its administrative judgment, the Planning Commission shall determine if the proposed plan is in harmony with the general purpose and intent of the zoning ordinance and adopted plans.

#### 1) ZONING ORDINANCE

A. The property is zoned PR (k) (Planned Residential) with a density of up to 10 du/ac, subject to 4 conditions. 1) Providing a Type C landscape buffer, 2) providing a 35 ft peripheral boundary along the western and southern property lines, 3) completing a traffic study, and 4) providing a right-of-way stub-out to the Parkway Heights subdivision for a future connection to Blinken Street. This property is within the TO (Technology Overlay) zone and must meet the (Tennessee Technology Corridor Development Authority) TTCDA Guidelines for a development plan approval. Case 6-C-24-TOB is scheduled to be heard September 9, 2024.

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B. The applicant is proposing to subdivide this 9.87-acre tract into 85 lots with attached houses. The development will yield a density of 8.6 du/ac. The PR zone allows attached houses as a permitted use. The administrative procedures for the PR zone require the Planning Commission to approve the development plan before permits can be issued (Knox County Zoning Ordinance Article 5, Section 5.13.15).

C. The Planning Commission has the authority to reduce the 35-ft peripheral setback to 15 ft. The applicant is requesting a 25 ft peripheral boundary along the eastern boundary line along Pellissippi Parkway. D. The height of attached houses shall be determined by the Planning Commission. The elevations provided show the units are 2 stories. The maximum height of all buildings will be 35 ft, which is consistent with the zoning requirements for residences in the area.

#### 2) KNOX COUNTY COMPREHENSIVE PLAN - FUTURE LAND USE MAP

A. The property's land use classification is SMR (Suburban Mixed Residential) on the Future Land Use Map. Attached houses are considered primary uses in the SMR place type. Attached residential such as duplexes, multiplexes, and townhomes should have the scale of a single family home. The attached houses are 2-stories 1,765 sq ft floor area, which meets this criteria.

#### 3) KNOX COMPREHENSIVE PLAN - IMPLEMENTATION POLICIES

A. The proposed right-of-way stub-out to Parkway Heights meets Implementation Policies 11.1 and 12.4 evaluate new residential subdivisions to provide vehicle connections to adjacent subdivisions and better access management.

B. Landscape screening has been added adjacent to subdivisions. This is consistent with Implementation Policy 2.1 to create buffer or transition standards between higher density developments.

#### 4) KNOXVILLE - FARRAGUT - KNOX COUNTY GROWTH POLICY PLAN

A. The property is within the Planned Growth Boundary. The purposes of the Planned Growth Boundary designation are to encourage a reasonably compact pattern of development, promote the expansion of the Knox County economy, offer a wide range of housing choices, and coordinate the actions of the public and private sectors, particularly with regard to the provision of adequate roads, utilities, schools, drainage and other public facilities and services. This development is in alignment with these goals.

#### ESTIMATED TRAFFIC IMPACT: 825 (average daily vehicle trips)

Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate during a 24-hour day (Monday through Friday), with a "trip" counted each time a vehicle enters or exits a proposed development.

ESTIMATED STUDENT YIELD: 5 (public school children, grades K-12)

Schools affected by this proposal: Farragut Primary/Intermediate, Hardin Valley Middle, and Hardin Valley Academy.

· 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 concept plan request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

The Planning Commission's approval or denial of this development plan request is final, unless the action is appealed either to the Board of Zoning Appeals or to a court of competent jurisdiction within thirty (30) days of the decision being appealed (Knox County, Tennessee Code of Ordinances, Appendix A, Zoning, 6.50.08).

## **Request to** Table . \A/ithdraw Doctnono -



Planning		one · lable · v	
KNOXVILLE   KNOX COUNTY	Horobet on Bob Gray		August 1, 2024
	Applicant Name (as it appears on the current F	Planning Commission agenda)	Date of Request
August 8, 2024			File Number(s)
Scheduled Meeting Date	6-5	SB-24-C and 6-E-24-DP	
POSTPONE			
the week prior to the Planning	e eligible for postponement if the request is re Commission meeting. All requests must be a for one 30-day automatic postponement. If p	acted upon by the Planning Comm	nission, except new
SELECT ONE: 🔳 30 days 🗌 6	0 days 🔲 90 days		
Postpone the above application(s)	until the September 12, 2024	Planning Commission	n Meeting.
WITHDRAW			
TABLE	deadline and the request is approved by the f tabling must be acted upon by the Planning C em.	*The refund check will be mailed	to the original payee.
AUTHORIZATION By sig	ning below, I certify I am the property owner,	; and/or the owners authorized re	presentative.
Renderd	Benjamin C. N	Iullins	
Applicant Signature	Please Print		
865-546-9321	bmullins@fms	illp.com	
Phone Number	Email		
STAFF ONLY			
Whitney Warner	Whitney Warner		🛛 No Fee
Staff Signature	Please Print	Date Paid	
Eligible for Fee Refund? 🔲 Yes [	No Amount:		
Approved by:	Dat	e:	

# **Request to** Postpone · Table · Withdraw



Planning	Horobet on Bob Gray	6-28-24	
KNOXVILLE   KNOX COUNTY	Applicant Name (as it appears on the	e current Planning Commission agenda)	Date of Request
July 11, 2024			File Number(s)
cheduled Meeting Date		6-SB-24-C; 6-E-24-DP	
POSTPONE			
the week prior to the Planni	ng Commission meeting. All requests	quest is received in writing and paid for I must be acted upon by the Planning Cor nent. If payment is not received by the o	nmission, except new
SELECT ONE: 🔳 30 days 🛛	60 days 🔲 90 days		
Postpone the above application	(s) until the August 8, 2024	Planning Commiss	ion Meeting.
WITHDRAW			
TABLE	or tabling must be acted upon by the P	d by the Executive Director or Planning S <i>*The refund check will be mai</i> Planning Commission before it can be off	led to the original payee.
		ty owner, and/or the owners authorized	representative.
Rnedal	Benjan	nin C. Mullins	
Applicant Signature	Please P	rint	
865-546-9321	bmulli	ns@fmsllp.com	
Phone Number	Email		
STAFF ONLY			
Staff Signature	Please Print	Date Paid	🛛 No Fee
Eligible for Fee Refund? 🗌 Ye:		Date Faid	
Approved by:		Date:	

# **Request to** Postpone · Table · Withdraw







#### Staff - Slope Analysis Case: 6-SB-24-C

CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	9.8		
Non-Hillside	7.4	N/A	
0-15% Slope	0.17	100%	0.17
15-25% Slope	1.95	50%	0.98
25-40% Slope	0.25	20%	0.05
Greater than 40% Slope	0.01	10%	0.00
Ridgetops			
Hillside Protection (HP) Area	2.4	Recommended disturbance budget within HP Area (acres)	1.20
		Percent of HP Area	50.3%





























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Transportation Impact Study Bob Gray Road Subdivision Knox County, Tennessee



Updated August 2024

Prepared for: Bob Gray Developers, LLC Mr. Arcip Horobet 3105 W Gallaher Ferry Road Knoxville, TN 37932



## **CONCLUSIONS & RECOMMENDATIONS**

The following is an overview of recommendations to minimize the transportation impacts of the Bob Gray Road Subdivision development on the adjacent transportation system while attempting to achieve an acceptable traffic flow and safety level. The recommendations also take into account if Parkway Heights loses its access to Pellissippi Parkway and its trips are routed through the Bob Gray Road Subdivision.



**Lovell Road at Bob Gray Road and Yarnell Road**: The 2027 projected level of service calculations for this intersection resulted in high vehicle delays and poor LOS for the westbound and eastbound approaches of Bob Gray Road and Yarnell Road, particularly in the PM peak hour. The Synchro software was used to optimize the traffic signal phases to combat these poor results.

The signal timing for the projected 2027 PM peak hour volumes was optimized in the Synchro software while keeping the same cycle lengths in the AM and PM peak periods since the intersection is in a coordinated system. This optimization substantially reduced vehicle delays for the westbound and eastbound approaches and reduced the vehicle queue lengths. However, the optimization results in the mainline traffic on Lovell Road having slightly increased vehicle delays and queue lengths in the PM peak hour.

The capacity analysis results of this modified AM and PM signal timing are shown below in Tables 9a and 9b. The capacity analysis results are included in Appendix G. The optimization results are presented for the two scenarios included in the report, one for the Bob Gray Road Subdivision only (plus the Lovell Crossing Development) and the other for the combined residential subdivisions (plus the Lovell Crossing Development).

The results in Tables 9a and 9b show the potential reduction in vehicle delays and queues in the AM and PM peak hours due to software optimization compared to the AM and PM peak hour results (Tables 7a and 8a), leaving the traffic signal timing as-is. The results shown in Tables 9a and 9b are for the Bob Gray Road Subdivision only scenario (plus the Lovell Crossing Development). Green and red in the table denote the changes, showing the decreases and increases, respectively.



#### TABLE 9a

#### 2027 INTERSECTION CAPACITY ANALYSIS RESULTS -PROJECTED TRAFFIC CONDITIONS WITH THE PROJECT - MODIFIED SIGNAL TIMING Bob Gray Road Subdivision Only + Lovell Crossing Development

	TRAFFIC	APPROACH/		AM PEAI	K	PM PEAK		
INTERSECTION	CONTROL	MOVEMENT	LOS <sup>a</sup>	DELAY <sup>b</sup>	CHANGE <sup>c</sup>	LOS <sup>a</sup>	DELAY <sup>b</sup>	CHANGE <sup>c</sup>
				(seconds)	(seconds)		(seconds)	(seconds)
Lovell Road (SB & NB) at		Eastbound		37.3	-4.8	D	51.2	-138.6
Bob Gray Road (WB) and	zed	Westbound	D	38.7	-9.1	D	48.5	-15.0
Yarnell Road (EB)	nali	Northbound	В	15.9	-4.1	С	23.2	5.7
	-	Southbound	С	27.9	-4.8	С	32.4	8.9
		Summary	С	27.6	-5.2	С	33.4	-16.9

Note: All analyses were calculated in Synchro 12 software and reported with HCM 7th Edition methodology

<sup>a</sup> Level of Service , <sup>b</sup> Average Delay (sec/vehicle)

<sup>c</sup> Difference between 2027 Projected Vehicle Delay (Table 7a) versus 2027 Projected Vehicle Delay with Revised Signal Timing (Table 9a, this table)

#### TABLE 9b

#### TURN LANE STORAGE & VEHICLE QUEUE SUMMARY -2027 PROJECTED PEAK HOUR TRAFFIC WITH THE PROJECT - MODIFIED SIGNAL TIMING Bob Gray Road Subdivision Only + Lovell Crossing Development

		SIMTRAFFIC 95 <sup>th</sup> PERCENTILE						
INTERSECTION	APPROACH/	QUEUE LENGTH (ft)						
	MOVEMENT	AM PEAK HOUR	CHANGE <sup>a</sup>	PM PEAK HOUR	CHANGE <sup>a</sup>			
			(feet)		(feet)			
Lovell Road (SB & NB) at	Eastbound Left	214	-2	270	-47			
Bob Gray Road (WB) and	Eastbound Thru	183	9	389	-168			
Yarnell Road (EB)	Eastbound Right	77	-3	171	-429			
	Westbound Left	148	17	233	25			
	Westbound Thru	139	13	321	93			
	Westbound Right	58	0	135	91			
	Northbound Left	111	-5	220	27			
	Northbound Thru	180	-17	359	34			
	Northbound Right	42	-3	117	28			
	Southbound Left	102	-15	233	33			
	Southbound Thru	302	-26	432	36			
	Southbound Thru/Right	257	-22	397	36			

Note: 95<sup>th</sup> percentile queues were calculated in SimTraffic 11 software

<sup>a</sup> Difference between 2027 Projected Vehicle Queue (Table 8a) versus 2027 Projected Vehicle Queue with Modified Signal Timing (Table 9b, this table)

The results in Tables 10a and 10b below show the potential reduction in vehicle delays and queues in the AM and PM peak hours due to software optimization compared to the AM and PM peak hour results (Tables 7b and 8b), leaving the traffic signal timing as-is. These results are for the combined residential subdivisions plus the Lovell Crossing Development scenario. Green and red in the table denote the changes, showing the decreases and increases, respectively.



#### TABLE 10a 2027 INTERSECTION CAPACITY ANALYSIS RESULTS -PROJECTED TRAFFIC CONDITIONS WITH THE PROJECT - MODIFIED SIGNAL TIMING Combined Residential Subdivisions + Lovell Crossing Development

	TRAFFIC	APPROACH/		AM PEAI	K	PM PEAK		
INTERSECTION	CONTROL	MOVEMENT	LOS <sup>a</sup>	DELAY <sup>b</sup>	CHANGE <sup>c</sup>	LOS <sup>a</sup>	DELAY <sup>b</sup>	CHANGE <sup>c</sup>
				(seconds)	(seconds)		(seconds)	(seconds)
Lovell Road (SB & NB) at		Eastbound	D	36.1	-6.5	D	49.6	-163.9
Bob Gray Road (WB) and	zeq	Westbound	D	39.6	-9.3	D	50.3	-22.9
Yarnell Road (EB)	nali	Northbound	В	16.7	-3.8	С	24.5	6.8
	Sign	Southbound	С	28.6	-5.3	С	34.9	11.4
		Summary	С	28.2	-5.7	С	34.9	-20.5

Note: All analyses were calculated in Synchro 12 software and reported with HCM 7th Edition methodology

<sup>a</sup> Level of Service , <sup>b</sup> Average Delay (sec/vehicle)

<sup>c</sup> Difference between 2027 Projected Vehicle Delay (Table 7b) versus 2027 Projected Vehicle Delay with Revised Signal Timing (Table 10a, this table)

# TABLE 10bTURN LANE STORAGE & VEHICLE QUEUE SUMMARY -2027 PROJECTED PEAK HOUR TRAFFIC WITH THE PROJECT - MODIFIED SIGNAL TIMINGCombined Residential Subdivisions + Lovell Crossing Development

		5 <sup>th</sup> PERCENTILE					
INTERSECTION	APPROACH/	QUEUE LENGTH (ft)					
	MOVEMENT	AM PEAK HOUR	CHANGE <sup>a</sup>	PM PEAK HOUR	CHANGE <sup>a</sup>		
			(feet)		(feet)		
Lovell Road (SB & NB) at	Eastbound Left	225	5	275	-55		
Bob Gray Road (WB) and	Eastbound Thru	187	-7	407	-189		
Yarnell Road (EB)	Eastbound Right	80	-20	181	-421		
	Westbound Left	163	13	235	-9		
	Westbound Thru	151	7	280	-66		
	Westbound Right	60	0	80	-94		
	Northbound Left	110	-9	235	49		
	Northbound Thru	181	-27	368	55		
	Northbound Right	42	-3	114	21		
	Southbound Left	81	-38	245	34		
	Southbound Thru	298	-30	439	47		
	Southbound Thru/Right	254	-28	406	57		

Note: 95<sup>th</sup> percentile queues were calculated in SimTraffic 11 software

<sup>a</sup> Difference between 2027 Projected Vehicle Queue (Table 8b) versus 2027 Projected Vehicle Queue with Modified Signal Timing (Table 10b, this table)

Based on these results, Knox County Engineering is recommended to modify the traffic signal timing to reduce the considerable vehicle delays for the westbound and eastbound approaches on Bob Gray Road and Yarnell Road in the existing and projected conditions. The recommended optimization signal timing changes for the green times are shown in Table 11.



#### TABLE 11 TRAFFIC SIGNAL GREEN TIME MODIFICATIONS LOVELL ROAD AT BOB GRAY ROAD AND YARNELL ROAD

		AM PEAK HOUR		
PHASE #	MOVEMENT	EXISTING GREEN TIME	<b>OPTIMIZED GREEN TIME *</b>	CHANGE
		(seconds)	(seconds)	(seconds)
1	Southbound Left	15	11	-4
2	Northbound Thru/Right	42	51	9
3	Eastbound Left	25	21	-4
4	Westbound Thru/Right	18	17	-1
5	Northbound Left	15	15.4	0.4
6	Southbound Thru/Right	42	46.6	4.6
7	Westbound Left	20	15	-5
8	Eastbound Thru/Right	23	23	0
		PM PEAK HOUR		
PHASE #	MOVEMENT	EXISTING GREEN TIME	<b>OPTIMIZED GREEN TIME *</b>	CHANGE
		(seconds)	(seconds)	(seconds)
1	Southbound Left	22	14	-8
2	Northbound Thru/Right	62	61	-1
3	Eastbound Left	18	20	2
4	Westbound Thru/Right	18	25	7
5	Northbound Left	19	17.5	-1.5
6	Southbound Thru/Right	65	57.5	-7.5
7	Westbound Left	18	17	-1
8	Eastbound Thru/Right	18	28	10

\* Optimized output from Synchro 12

A summary of the Lovell Road at Bob Gray Road and Yarnell Road intersection capacity analyses are presented in Table 12. This table provides a side-by-side summary and comparison of the intersection for the 2024 existing conditions, projected conditions in 2027 without the project, the projected conditions in 2027 with the project (with the Bob Gray Road Subdivision, Parkway Heights Townhouses, and Lovell Crossing Development), and the projected conditions in 2027 (with all the developments) with the modified signal timing. As can be seen in Table 12, the optimization provided significant benefits in reducing vehicle delays in the projected 2027 conditions.



#### TABLE 12 INTERSECTION CAPACITY ANALYSIS SUMMARY LOVELL ROAD AT BOB GRAY ROAD AND YARNELL ROAD



APPROACH / PEAK HOUR MOVEMENT	2024 EXISTING		2027 WIT	2027 WITHOUT THE PROJECT		2027 WITH THE PROJECT *			2027 WITH THE PROJECT * (MODIFIED TIMING)			
	LOS <sup>a</sup>	Delay <sup>b</sup>		LOS <sup>a</sup>	Delay <sup>b</sup>		LOS <sup>a</sup>	Delay <sup>b</sup>		LOS <sup>a</sup>	Delay <sup>b</sup>	
AM Peak												
Eastbound	D	41.4		D	41.6		D	42.6		D	36.1	
Westbound	D	47.1		D	47.3		D	48.9		D	39.6	
Northbound	В	17.8		В	19.4		С	20.5		В	16.7	
Southbound	С	26.6		С	30.9		С	33.9		С	28.6	
Summary	С	29.5		С	31.6		С	33.9		С	28.2	
-												
PM Peak												
Eastbound	F	141.0		F	162.9		F	213.5		D	49.6	
Westbound	Е	58.0		E	59.1		Е	73.2		D	50.3	
Northbound	В	15.8		В	17.0		В	17.7		С	24.5	
Southbound	С	20.5		С	22.5		С	23.5		С	34.9	
Summary	D	40.3		D	44.8		Е	55.4		С	34.9	

Note: All analyses were calculated in Synchro 12 software and reported with HCM 7th Edition methodology

<sup>a</sup> Level of Service , <sup>b</sup> Average Delay (sec/vehicle)

\* Includes Bob Gray Road Subdivision, Parkway Heights Townhouses, and Lovell Crossing Development









**Bob Gray Road at the Proposed Entrance**: The 2027 projected level of service calculations for this intersection resulted in average vehicle delays and LOS. Poorer LOS results were calculated for the northbound exiting approach in the PM peak hour.

2a) For the scenario that only includes the Bob Gray Road Subdivision, separate turn lanes on Bob Gray Road at the Proposed Entrance will not be warranted based on the projected peak hour 2027 traffic volumes. For the scenario which includes the Bob Gray Road Subdivision and the diverted trips from the Parkway Heights Townhouses, a separate eastbound right-turn lane and a separate westbound left-turn lane on Bob Gray Road at the Proposed Entrance will be warranted based on the projected PM peak hour 2027 traffic volumes.

Due to the limited development property road frontage along Bob Gray Road, the eastbound right-turn lane would need to be designed and constructed with a minimal lane taper and maximum deceleration length possible within the confines of the property road frontage. Based on the site plan, the horizontal distance between the centerline of the Proposed Entrance and the western property line at Bob Gray Road is 230 feet. The civil site designer would need to coordinate the design of this turn lane with Knox County and include a white right-turn arrow and lane lines on the pavement for this exclusive lane.

A separate westbound left-turn lane is shown to be warranted in this study in the projected 2027 conditions if Parkway Heights loses its road access to Pellissippi Parkway and is diverted through the new Bob Gray Road Subdivision for road access to Bob Gray Road. The Proposed Entrance location on Bob Gray Road will be just west of the overpass bridge on Bob Gray Road over Pellissippi Parkway. Providing a westbound left-turn lane at the Proposed Entrance on Bob Gray Road would necessitate substantial construction costs due to the limited width of the overpass bridge on Bob Gray Road over Pellissippi Parkway. This overpass bridge has a width of approximately 30 feet between barrier faces. This width would not be conducive for three lanes of traffic while providing an adequate safe buffer from the barrier walls. Furthermore, the future greenway referenced earlier stated that this overpass bridge would be the preferred route, which would not be achievable if three lanes for automobile traffic were proposed without widening the overpass bridge.



Furthermore, according to the local trip generation calculations, the entering volumes for the 123 townhouses in the Parkway Heights Townhouses are calculated to be 51 trips in the PM peak hour, which, in combination with the trips from the Bob Gray Road Subdivision, meets the threshold for a westbound left-turn lane. However, the traffic counts determined that 18 vehicles entered the Parkway Heights Townhouses during the PM peak hour, which is substantially less (nearly three times less) than the calculated theoretical value. Thus, due to these realities, a separate westbound left-turn lane on Bob Gray Road is not likely feasible and recommended even if the Parkway Heights Townhouses traffic is diverted. Likewise, due to the probability of over-estimating generated tips, the projected LOS E conditions for the exiting lane at Bob Gray Road are not expected, as shown in Table 7b, and will have much shorter vehicle delays.

2b) Due to the vertical curve on Bob Gray Road to the west and the overpass bridge to the east, it is recommended that advance intersection warning signs be installed on Bob Gray Road to the east and west of the Proposed Entrance. These warning signs should be Side Road Intersection Signs (W2-2r and W2-2l). The signs should be installed in both directions on Bob Gray Road, preferably no less than 450 feet in advance of the Proposed Entrance.



- 2c) It is recommended that a Stop Sign (R1-1) be installed and a 24" white stop bar be applied to the Proposed Entrance approach at Bob Gray Road. The stop bar should be applied a minimum of 4 feet away from the edge of Bob Gray Road and placed at the desired stopping point that maximizes the sight distance.
- 2d) A single exit lane for the Bob Gray Road development entrance will be sufficient. The northbound exiting lane at Bob Gray Road is proposed as a shared left/right turn lane.

The longest vehicle queue in the projected 2027 conditions on this exiting approach is calculated to be 49 feet in the AM peak hour and 48 feet in the PM peak hour for the scenario that only includes the Bob Gray Road Subdivision. These queue lengths are reasonable and translate to just two passenger cars, assuming a length of 25 feet per vehicle. The longest vehicle queue in the projected 2027 conditions on this exiting approach is calculated to be 63 feet in the AM peak hour and 61 feet in the PM peak hour for the worst-case scenario that includes the Bob Gray Road Subdivision and the



diverted trips from the Parkway Heights Townhouses. These queue lengths are reasonable and translate to nearly three passenger cars.

2e) Intersection sight distance at the Proposed Entrance at Bob Gray Road must not be impacted by future landscaping, signage, or existing or future vegetation. Based on a posted speed limit of 40-mph on Bob Gray Road, the required intersection sight distance is 400 feet for exiting left and right-turning vehicles. The existing sight distances at the Proposed Entrance location were estimated visually to be adequate in both directions and were also certified by a land surveyor.





- 3a) A 25-mph Speed Limit (R2-1) sign is recommended to be posted near the beginning of the development entrance off Bob Gray Road. It is also recommended that a "No Outlet" Sign (W14-2a) be posted at the front of the subdivision. This sign can be posted above or below the street name sign.
- 3b) The image below shows the recommended internal road signage for the proposed subdivision.





Dual end-of-roadway object markers (OM4-1) should be installed at the end of the internal roads in the subdivision that end in hammerhead turnarounds. These markers should also be installed at the end of Road "A" if the road is not immediately connected to Blinken Street to the south in the Parkway Heights development. Furthermore, if an immediate road connection is not made to Blinken Street, an additional sign should be posted at the end of Road "A" to follow Knoxville-Knox County Subdivision regulations. This sign is for notification of a possible future street connection. It should state, "NOTICE – This road may be extended and connected to the south – for more info. contact Knox Co. Engineering & Public Works (865) 215-5800".

Stop Signs (R1-1) with 24" white stop bars are recommended to be installed at the internal road locations, as shown in the above image.

- 3c) Sight distance at the new internal intersections must not be impacted by new signage, parked cars, or future landscaping. With a speed limit of 25-mph in the development, the internal intersection sight distance is 250 feet. The required stopping sight distance is 155 feet for a level road grade. The site designer should ensure that internal sight distance lengths are met and account for different proposed road grades.
- 3d) It is recommended that a small strip of the development property be reserved as a potential common area for all Bob Gray Road Subdivision residents to walk or ride their bikes to the east. This strip would allow for a pathway to the future Knox to Oak Ridge Greenway if the greenway is constructed adjacent to the subdivision and on the west side of Pellissippi Parkway.
- 3e) If directed by the local post office, the site designer should include a parking area and a centralized mail delivery center within the development for the subdivision residents.
- 3f) All drainage grates and covers for the residential development must be pedestrian and bicycle-safe.
- 3g) Road "A" will have a long, straight road segment. Straight road segments encourage higher vehicle speeds. Additionally, if Parkway Heights loses its access to Pellissippi Parkway, residents from this other development will increase traffic volumes and may contribute to speeding in the Bob Gray Road Subdivision. It is recommended that the civil site designer consider including traffic calming measures on the internal Road "A",



such as speed humps or tables. Specifics regarding this recommendation should be discussed in the design phase with Knox County Engineering.

- 3h) All road and intersection elements should be designed to AASHTO, TDOT, and Knox County specifications and guidelines to ensure proper transportation operations.
- 3i) If a connection to Odin Street to the south (Parkway Heights Subdivision) is pursued as part of this project or in the future, then the connection of Odin Street to Pellissippi Parkway <u>must</u> be closed.







File No:

The Planning Commission may reduce or otherwise vary the requirements of the Subdivision Regulations when it finds the hardship criteria are met. In granting such variances, the Planning Commission may attach and require whatever conditions it feels are necessary to secure the basic objectives of the varied regulations. Any variance granted by the Planning Commission shall be noted in its official minutes along with the justification for granting the variance (Subdivision Regulations, Section 1.05).

### HARDSHIP CONDITIONS TO BE MET:

- 1 Conditions Required: Where the Planning Commission finds that extraordinary hardships or particular difficulties may result from the strict compliance with these regulations, they may, after written application, grant variations to the regulations, subject to specified conditions, so that substantial justice may be done and the public interest secured, provided that such variations shall not have the effect of nullifying the intent and purpose of these regulations or the comprehensive plan.
- 2 Evidence of Hardship Required: The Planning Commission shall not grant variations to these regulations if the purpose of the variation is solely for financial gain. The Planning Commission shall not grant variations to the Subdivision Regulations unless they make findings based upon the evidence presented to them in each specific case that the following hardships are met:
  - a. Because of the particular surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulations were adhered to.
  - b. The conditions upon which the request for a variation is based is unique to the property for which the variation is sought and is not applicable, generally, to other property, and has not been created by any person having an interest in the property.
  - c. The granting of the variation will not be detrimental to the public safety, health, or welfare, or injurious to other property or improvements in the neighborhood in which the property is located.

By signing this form, I certify that the criteria for a variance have been met for each request, and that any and all requests needed to meet the Subdivision Regulations are requested above or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon appeal and none will be requested.

ud Hail 8-28-24 DAVID +

Knoxville-Knox County Planning | KnoxPlanning.org 400 Main Street, Suite 403 | Knoxville, TN 37902 | 865.215.2500
It is the applicant's responsibility to identify the hardship that would result, as distinguished from a mere inconvenience, if the strict letter of the regulations was adhered to. Each of the variance criteria must be addressed in the comments below with specific facts regarding the unique details of the property and/or project, as applicable.

#### 1. VARIANCE REQUESTED:

End Public Road with the temporary turnaround as shown

Specify the hardship that would result for each of the variance criteria:

A. Pertaining to the particular surroundings, shape, or topographical conditions of the subject property:

At some point the road will be extended to the southern property if cul-de-sac was built, it would need to be removed

B. Pertaining to conditions unique to the property that are not applicable to other property and has not been created by any person having an interest in the property.

Connection to adjoining property areas are a condition of zoning approval

C. Pertaining to the granting of a variance will not be detrimental to public safety, health, or welfare, or injurious to other property or improvements in the neighborhood in which the property is located.

An approved AASHTO turnaround has been proposed

#### To be completed by the City or County Department of Engineering, as applicable:

Engineering supports the variance requested (to be completed during review process): YES  $\times$  NO  $\square$  Engineering Comments:

It is the applicant's responsibility to identify the hardship that would result, as distinguished from a mere inconvenience, if the strict letter of the regulations was adhered to. Each of the variance criteria must be addressed in the comments below with specific facts regarding the unique details of the property and/or project, as applicable.

#### 2. VARIANCE REQUESTED:

Vertical Curve Length from 300" to 240"; STA 1+0 Road "F" (K value from 25 to 20)

Specify the hardship that would result for each of the variance criteria:

A. Pertaining to the particular surroundings, shape, or topographical conditions of the subject property:

Topography, steep condition will not create a traffic hazard

B. Pertaining to conditions unique to the property that are not applicable to other property and has not been created by any person having an interest in the property.

Prepared roadway is coming to a stop condition at Bob Gray Road

C. Pertaining to the granting of a variance will not be detrimental to public safety, health, or welfare, or injurious to other property or improvements in the neighborhood in which the property is located.

Will not create a traffic hazard

#### To be completed by the City or County Department of Engineering, as applicable:

Engineering supports the variance requested (to be completed during review process): YES  $\times$  NO  $\square$ Engineering Comments:



## Alternative Design Standards

The minimum design and performance standards shall apply to all subdivisions unless an alternative design standard is permitted within Article 3 Section 3.01.D, Application of Alternative Design Standards, or Article 4.01.C, Street Standards (within Hillside and Ridgetop Areas).

There are some alternative design standards that require Planning Commission approval, and some that can be approved by the Engineering Departments of the City or County. However, the City or County Engineering Departments, as applicable, will provide review comments on any alternative design proposed. These comments will be provided during the review process.

## Alternative Design Standards Requiring Planning Commission Approval

Section 3.03.B.2 - Street frontage in the PR (Planned Residential) zone, Knox County Section 3.03.E.1.e – Maximum grade of private right-of-way Section 3.03.E.3.a – Pavement width reduction, private rights-of-way serving 6 or more lots Section 3.04.H.2 – Maximum grade, public streets Section 3.04.I.1.b.1 – Horizontal curves, local streets in Knox County

#### Alternative Design Standards Approved by the Engineering Departments of

the City of Knoxville or Knox County

Section 3.03.E.3.a – Right-of-way width reduction, private rights-of-way serving 6 or more lots Section 3.04.A.3.c – Right-of-way dedication, new subdivisions Section 3.04.F.1 – Right-of-way reduction, local streets Section 3.04.G.1 – Pavement width reduction, local streets Section 3.04.H.3 – Intersection grade, all streets Section 3.04.J.2 – Corner radius reduction in agricultural, residential, and office zones Section 3.04.J.3 – Corner radius reduction in commercial and industrial zones Section 3.11.A.2 – Standard utility and drainage easement

By signing this form, I certify that the criteria for a variance have been met for each request, and that any and all requests needed to meet the Subdivision Regulations are requested above or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon appeal and none will be requested.

8/19 DAVID HARBER Printed Name Signature

Knoxville-Knox County Planning | KnoxPlanning.org 400 Main Street, Suite 403 | Knoxville, TN 37902 | 865.215.2500 For each alternative design standard requested, identify how the proposed alternative design either meets the intent of the standard in the Subdivision Regulations or meets an alternative, nationally recognized engineering standard such as The American Association of State Highway and Transportation Officials (AASHTO) or Public Right-of-Way Accessibility Guidelines (PROWAG).

#### 1. ALTERNATIVE DESIGN STANDARD REQUESTED:

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Intersection Roadway Grades from 1.00% +03.00% STA 0 + 13 TO STA 0 +55 ROAD "B" Approval required by: Planning Commission [ Engineering ]

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

#### 2. ALTERNATIVE DESIGN STANDARD REQUESTED: INTERSECTION ROADWAY Grades from 1.00 % to 2.38 % STA 0 +13 to STA 2 +44 ROAD "D" Approval required by: Planning Commission D Engineering R

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

3. ALTERNATIVE DESIGN STANDARD REQUESTED: ROADWAY Grade from 12.00 % +0 15 % STA 1+ 30 +0 STA 6 +00 ROAD IF" Approval required by: Planning Commission Bengineering Q

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

## 4. ALTERNATIVE DESIGN STANDARD REQUESTED: JNHErsection Roadway Grades from 1.00% to 2.00% STA O +13 to STA 1+00 ROAD 4E<sup>11</sup> Approval required by: Planning Commission □ Engineering ☑

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

5. ALTERNATIVE DESIGN STANDARD REQUESTED: Intersection Roadway Grados from 1.00% to 3% STA 0+10 to STA 1+30 "ROAD" F Approval required by: Planning Commission [] Engineering []

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

## 6. ALTERNATIVE DESIGN STANDARD REQUESTED: INTERSECTION ROADWAY GREADES FROM 1.00% to 2.75% STA 6+00 to STA 7+89 ROAD \*F# Approval required by: Planning Commission \_ Engineering 2

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

## 7. ALTERNATIVE DESIGN STANDARD REQUESTED: Right-OF-way width for all Private and public Roads From 50' to 40' Approval required by: Planning Commission Dengineering 2

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

## 8 ALTERNATIVE DESIGN STANDARD REQUESTED: REDUCING LOT FRONTAGE FROM 25' +022.

Approval required by: Planning Commission 🛛 Engineering 🗆

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

## ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission 

Engineering

Engineering supports the alternative design standard requested (to be completed during review process): YES 
NO 
Engineering Comments:



## **Development Request**

#### DEVELOPMENT

✓ Development Plan

Planned Development

Use on Review / Special Use

#### **SUBDIVISION**

✓ Concept Plan 🗌 Final Plat

## ZONING

Plan Amendment

Sector Plan
-------------

		☐ Hillside Protection COA		City OYP / County Comp Plan
Arcip Hor	robet			
Applicant	Name		Affiliation	
4/29/202	4	6/13/2024	6-SB-24-C / 6-E-24-	DP
Date Filed	1	Meeting Date (if applicable)	File Number(s)	
CORRE	SPONDENCE	All correspondence related to this application	should be directed to the appr	oved contact listed below.
David Hai	rbin Batson, Himes, No	rvell and Poe		
Name / Co	ompany			
4334 Pap	ermill Dr. Dr. Knoxville	TN 37909		
Address				
865-588-6	6472 / harbin@bhn-p.c	om		
Phone / E	mail			
CURRE	INT PROPERTY INFO	)		
Arcip Hor	robet	3105 W. Gallaher Ferry Rd Kno	xville TN 37932 865	-607-1167
Owner Na	ame (if different)	Owner Address	Owr	ner Phone / Email
0 PELLISS	ΙΡΡΙ ΡΚΨΥ			
Property /	Address			
118 071			9.87	7 acres
Parcel ID		Part o	f Parcel (Y/N)? Trac	ct Size
West Kno	ox Utility District, First I	Knox Utilit West Knox Utility	/ District	
Sewer Pro	ovider	Water Provider		Septic (Y/N)
STAFF	USE ONLY			
South sid	e of Bob Gray Rd, west	side of Pellissippi Pkwy, northern termin	us of Blinken St	
General L	ocation			
City	Commission District 3	PR(k) (Planned Residential) up to 1 du/ac, T Overlay)	O (Technology Agriculture,	/Forestry/Vacant Land
✔County	District	Zoning District	Existing La	nd Use
			Planned Gr	owth Area
Planning S	Sector Land Use	(City)/Place Type (County)	Growth Po	licy Plan Designation

DEVELOPMENT REQUEST				
✓ Development Plan □ Planned Development □ Use on	Review / Special Use	Related City Permit Number(s)		
Hillside Protection COA     Resider	ntial 🗌 Non-residential			
Home Occupation (specify)				
Other (specify) Attached residential subdivision				
SUBDIVSION REQUEST				
Horobet on Bob Gray Road		Related Rezoning File Number		
Proposed Subdivision Name				
	94			
Unit / Phase Number Split Parcels	Total Number of Lots Created			
Additional Information				
Attachments / Additional Requirements				
ZONING REQUEST				
Zoning     Pending Plat File Number       Change     Proposed Zoning				
Plan       Amendment       Proposed Plan Designation(s)				
9.52 du/ac				
Proposed Density (units/acre) Previous Rezoning Requests				
Additional Information				
STAFF USE ONLY		1		
PLAT TYPE	Fee 1	Total		
Staff Review Planning Commission	\$1,600.00			
ATTACHMENTS				
<ul> <li>Property Owners / Option Holders</li> <li>Variance Request</li> <li>Fee 2</li> <li>Amendment Request (Comprehensive Plan)</li> </ul>				
ADDITIONAL REQUIREMENTS Use on Review / Special Use (Concept Plan)	Fee 3			
Traffic Impact Study				
COA Checklist (Hillside Protection)				
AUTHORIZATION				
I declare under penalty of perjury the foregoing is true and correct: all associated materials are being submitted with his/her/its conservations.		erty, AND 2) the application and		

	Arcip Horobet	4/29/2024
Applicant Signature	Please Print	Date
Phone / Email		
	Arcip Horobet	4/29/2024
Property Owner Signature	Please Print	Date

Planning KNOXVILLE I KNOX COUNTY	<b>Development</b> M Development Plan Planned Development Use on Review / Special Use Hillside Protection COA	<b>t Reque</b> SUBDIVISION Concept Plan Final Plat	<b>St</b> ZONING □ Plan Amendment □ SP □ OYP □ Rezoning
APCIP HORO Applicant Name	BET	Affiliat	ion
4/29/2024 Date Filed	6/13/2024 Meeting Date (if applicable)		File Number(s)
CORRESPONDENCE	All correspondence related to this application sh	nould be directed to the a	pproved contact listed below.
Applicant Property Ow	vner 🔲 Option Holder 🔀 Project Surveyor	🗷 Engineer 🗌 Arch	nitect/Landscape Architect
DAVID HARBIN	n BATSON HIM		L + POE
4334 PAPERMI Address	11 pr Knoxville	TN State	37909 ZIP
865-583-6472 Phone	Email Email	n-p.com	
CURRENT PROPERTY INF	3105 W. GALLAHOZ FO KNOXVIIILE, 70 370	reryep 13z El	05 - 607 - 11 67 Property Owner Phone
Bob Gray Property Address	ED TAX MAP II	8 PARCEL Parcel ID	71
WKUP Sewer Provider	WKUP Water Provider		Septic (Y/N)
STAFF USE ONLY			
General Location		Tract	Şize
City County District	Zoning District	Existing Land Use	
Planning Sector	Sector Plan Land Use Classification	n Grov	vth Policy Plan Designation

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DEVELOPMENT REQUEST			
✓ Development Plan □ Use on Review / Special Use □ Hillside Protection COA ✓ Residential □ Non-Residential Home Occupation (specify)			Permit Number(s)
Other (specify) Attached residential subdivision			
SUBDIVISION REQUEST		0.1.1.10	
Horobet on Bob Gray Road		Related Rezo	oning File Number
Proposed Subdivision Name			
Combino Parcels IA Divide Parcel	au LOHS tal Number of Lots Create	ed	
Other (specify)			
Attachments / Additional Requirements			
ZONING REQUEST			
		Pending I	Plat File Number
Zoning Change     Proposed Zoning	] Zoning Change Proposed Zoning		
Plan Amendment Change			
Proposed Plan Designation(s)			
Proposed Density (units/acre) Previous Rezoning Reque	ests		0.5.
Other (specify)			
STAFF USE ONLY			
PLAT TYPE	Fee 1		Total
Staff Review Planning Commission	1		
ATTACHMENTS	Fee 2		
Property Owners / Option Holders Variance Request	1002		
<ul> <li>Design Plan Certification (Final Plat)</li> <li>Use on Review / Special Use (Concept Plan)</li> </ul>	Fee 3		
Traffic Impact Study			
COA Checklist (Hillside Protection)			
AUTHORIZATION			
I declare under nonality of perjury the foregoing is true and correct:			and an
1) He/she/it is the owner of the property AND 2) The application and all as	ssociated materials are being	submitted with his/h	er/its consent
	TO		
Applicant Signature DAVID HARE	SLLI	Date	
		2	
Phone Number Email	bhn-p.con	1	
My Aut ARCIP HOBE	OBET		
Property Owner Signature Please Print		Date	Paid



# Alternative Design Standards

The minimum design and performance standards shall apply to all subdivisions unless an alternative design standard is permitted within Article 3 Section 3.01.D, Application of Alternative Design Standards, or Article 4.01.C, Street Standards (within Hillside and Ridgetop Areas).

There are some alternative design standards that require Planning Commission approval, and some that can be approved by the Engineering Departments of the City or County. However, the City or County Engineering Departments, as applicable, will provide review comments on any alternative design proposed. These comments will be provided during the review process.

## Alternative Design Standards Requiring Planning Commission Approval

Section 3.03.B.2 - Street frontage in the PR (Planned Residential) zone, Knox County Section 3.03.E.1.e – Maximum grade of private right-of-way Section 3.03.E.3.a – Pavement width reduction, private rights-of-way serving 6 or more lots Section 3.04.H.2 – Maximum grade, public streets Section 3.04.I.1.b.1 – Horizontal curves, local streets in Knox County

#### Alternative Design Standards Approved by the Engineering Departments of

#### the City of Knoxville or Knox County

Section 3.03.E.3.a – Right-of-way width reduction, private rights-of-way serving 6 or more lots
Section 3.04.A.3.c – Right-of-way dedication, new subdivisions
Section 3.04.F.1 – Right-of-way reduction, local streets
Section 3.04.G.1 – Pavement width reduction, local streets
Section 3.04.H.3 – Intersection grade, all streets
Section 3.04.J.2 – Corner radius reduction in agricultural, residential, and office zones
Section 3.04.J.3 – Corner radius reduction in commercial and industrial zones
Section 3.11.A.2 – Standard utility and drainage easement

By signing this form, I certify that the criteria for a variance have been met for each request, and that any and all requests needed to meet the Subdivision Regulations are requested above or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon appeal and none will be requested.

DANID HARBIN

Date

Knoxville-Knox County Planning | KnoxPlanning.org 400 Main Street, Suite 403 | Knoxville, TN 37902 | 865.215.2500 For each alternative design standard requested, identify how the proposed alternative design either meets the intent of the standard in the Subdivision Regulations or meets an alternative, nationally recognized engineering standard such as The American Association of State Highway and Transportation Officials (AASHTO) or Public Right-of-Way Accessibility Guidelines (PROWAG).

## 1. ALTERNATIVE DESIGN STANDARD REQUESTED:

EVADWAY GRADE FROM 12% to 15% FROM STA 0+90 to 4+94 RUAD "A" Approval required by: Planning Commission & Engineering

## 2. ALTERNATIVE DESIGN STANDARD REQUESTED:

ROAD "A" (K VAILLE FROM 25 10 15.5)

Approval required by: Planning Commission 🗷 Engineering 🗆

## 3. ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission 

Engineering

## 4. ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission 

Engineering

## 5. ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission 

Engineering

Engineering supports the alternative design standard requested (to be completed during review process): YES 
NO 
Engineering Comments:



## Alternative Design Standards

The minimum design and performance standards shall apply to all subdivisions unless an alternative design standard is permitted within Article 3 Section 3.01.D, Application of Alternative Design Standards, or Article 4.01.C, Street Standards (within Hillside and Ridgetop Areas).

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#### Alternative Design Standards Requiring Planning Commission Approval

Section 3.03.B.2 - Street frontage in the PR (Planned Residential) zone, Knox County Section 3.03.E.1.e – Maximum grade of private right-of-way Section 3.03.E.3.a – Pavement width reduction, private rights-of-way serving 6 or more lots Section 3.04.H.2 – Maximum grade, public streets Section 3.04.I.1.b.1 – Horizontal curves, local streets in Knox County

#### Alternative Design Standards Approved by the Engineering Departments of

the City of Knoxville or Knox County

Section 3.03.E.3.a – Right-of-way width reduction, private rights-of-way serving 6 or more lots
Section 3.04.A.3.c – Right-of-way dedication, new subdivisions
Section 3.04.F.1 – Right-of-way reduction, local streets
Section 3.04.G.1 – Pavement width reduction, local streets
Section 3.04.H.3 – Intersection grade, all streets
Section 3.04.J.2 – Corner radius reduction in agricultural, residential, and office zones
Section 3.04.J.3 – Corner radius reduction in commercial and industrial zones
Section 3.11.A.2 – Standard utility and drainage easement

By signing this form, I certify that the criteria for a variance have been met for each request, and that any and all requests needed to meet the Subdivision Regulations are requested above or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon

appeal and none will be requested.

DAVID HARBIN

Date

Knoxville-Knox County Planning | KnoxPlanning.org 400 Main Street, Suite 403 | Knoxville, TN 37902 | 865.215.2500 For each alternative design standard requested, identify how the proposed alternative design either meets the intent of the standard in the Subdivision Regulations or meets an alternative, nationally recognized engineering standard such as The American Association of State Highway and Transportation Officials (AASHTO) or Public Right-of-Way Accessibility Guidelines (PROWAG).

## 1. ALTERNATIVE DESIGN STANDARD REQUESTED:

INTERSECTION ROADWAY GRADE -FROM 1.00% +04.32%, STA 0+10 +0 STA 0+90 ROAD "A" Approval required by: Planning Commission D Engineering D

Engineering supports the alternative design standard requested (to be completed during review process): YES NO Engineering Comments:

## 2. ALTERNATIVE DESIGN STANDARD REQUESTED: INTER SECTION RUADWAY GRADE -FROM 1.00 % 40 3.00 % STA, 0+13 +0 STA 0+50 ROAD "B"

Approval required by: Planning Commission 

Engineering

Engineering supports the alternative design standard requested (to be completed during review process): YES 
NO 
Engineering Comments:

3. ALTERNATIVE DESIGN STANDARD REQUESTED: INTERSECTION RUADWAY GRADE -FROM 1.00% to 3.00% STA 1+50 TOSTA Z+12 ROAD "B" Approval required by: Planning Commission D Engineering R

Engineering supports the alternative design standard requested (to be completed during review process): YES 
NO 
Engineering Comments:

## 4. ALTERNATIVE DESIGN STANDARD REQUESTED: INHERSECTION ROADWAY GRADE-FROM 1.00% +03.00% STA 0+13 +0 STA 0+45 RUAD "D"

Approval required by: Planning Commission 

Engineering

## 5. ALTERNATIVE DESIGN STANDARD REQUESTED: Intersection ROADWAY GRAPE FROM 1.00 % +0 2.00 % STA 0+13 +0 STA 2+99 RUAD"E" Approval required by: Planning Commission D Engineering R



## Sign Posting & Removal Requirement

Revised April 2021

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, including the following applications: rezoning, plan amendment, concept plan, use on review/special use, planned development, right-of-way closure, and name change.



The required public notice sign(s) will be provided by Planning to the applicant when an application is submitted. If an application is submitted electronically, 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.

The individual below is responsible for posting and removing the sign(s) provided consistent with the above guidelines and between the dates of:

May 10, 2024	and	June 14, 2024
(applicant or staff to post sign)		(applicant to remove sign)
Applicant Name: Arcip Horobet		Sign posted by Staff
Date: 4/29/2024		
File Number: 6-SB-24-C_6-E-24-DP		Sign posted by Applicant