## **Boylston Road Development**

(8809, 8813, & 8819-R1 Boylston Road)

High Point City Council Meeting - November 16, 2015



#### Meets Land Use Plan Goals, Objectives, and Policies

"Meets low density (defined as 5 or less homes per gross acre) residential guidelines; only constructing 3.48 homes per acre"

"Ensures that development respects the natural environment"

"Provides a wide range of housing opportunities for families of all income levels"

"Ensures that all required public services and facilities are sequenced to meet demands of development"

"Promotes an urban growth pattern that occurs in an orderly fashion and conserves land resources of the city and its planning area"

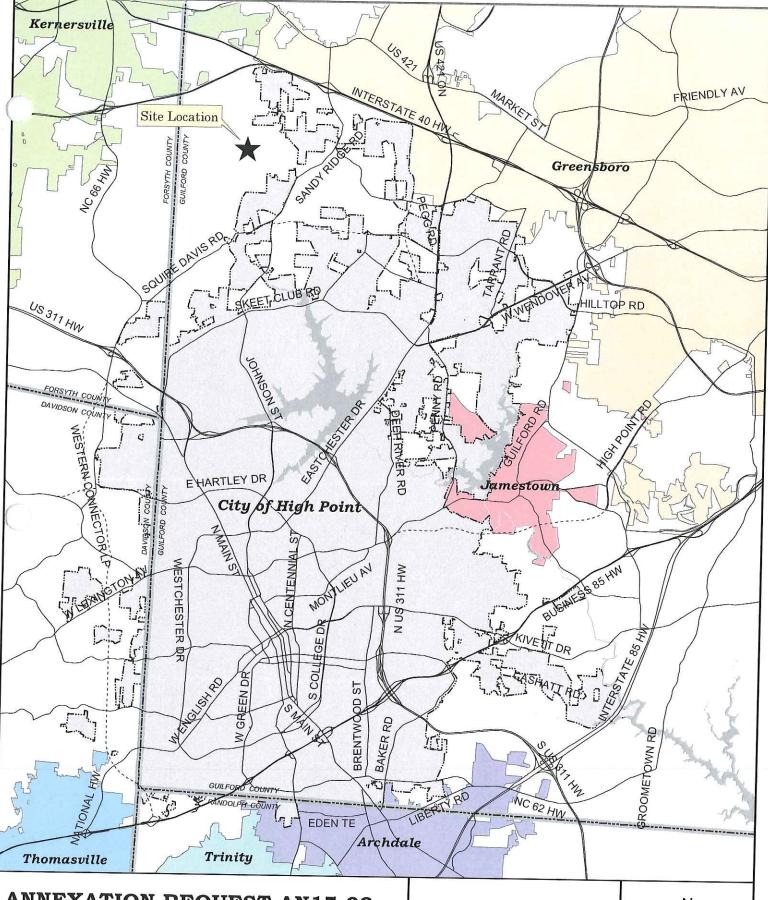
"Protects and preserves environmentally sensitive locations including designated open space and watershed critical areas from inappropriate development"

"Maintains an appropriate balance between the size, location, and density of new development and the availability and demands upon the public services and facilities required to serve this development"



# Revised Conditions for Zoning Case 15-16 November 16, 2015

Concerns	Revised Conditions
Traffic: Inconvenience of more traffic, impact on roads that were not designed for this amount of traffic, and deterioration of roads from heavy construction vehicles; specifically on Sweetmeadow Road and Quail Meadow Lane. Commissioners and Neighbors requested construction traffic be limited to Boylston Road entrance due to concerns that heavy construction vehicles may damage Sweetmeadow Road and Quail Meadow Lane.	REVISED CONDITION: Construction Entrance: Construction Entrance and construction traffic to be restricted to utilizing the Boylston Road Access Point to the site.
<u>Density of Development:</u> Commissioners and Neighbors expressed concern that the density of the proposed development is too high and inconsistent with the character of the Guilford county properties is the surrounding area.	REVISED CONDITION: Reduced total number of homes from 450 homes to 400 homes. This is less than 3.5 homes per gross acre.
Within Tract F of PUD-PRD, City Staff recommend that twin homes and townhomes should face the internal street, provide a higher perimeter setback, and limit townhome building sizes to four homes per townhome building.	REVISED CONDITION: Twin homes and townhomes will face the internal street, provide a higher perimeter rear setback of 50 feet, and be limited to four homes per structure.
Location of stub street: Residents dissatisfied with leaving the location of the western stub street undetermined.	REVISED CONDITION: One public street stub shall be provided to either the northern or western boundary of Tract E, the location will be determined and approved by the Technical Review Committee (TRC) in the future, at the time of Preliminary Plat approval for Tract E.



#### **ANNEXATION REQUEST AN15-08**

Applicant: Maxine Wallace Heirs and Bessie Idol Area: 114.18 acres (approximate) Planning & Development Department

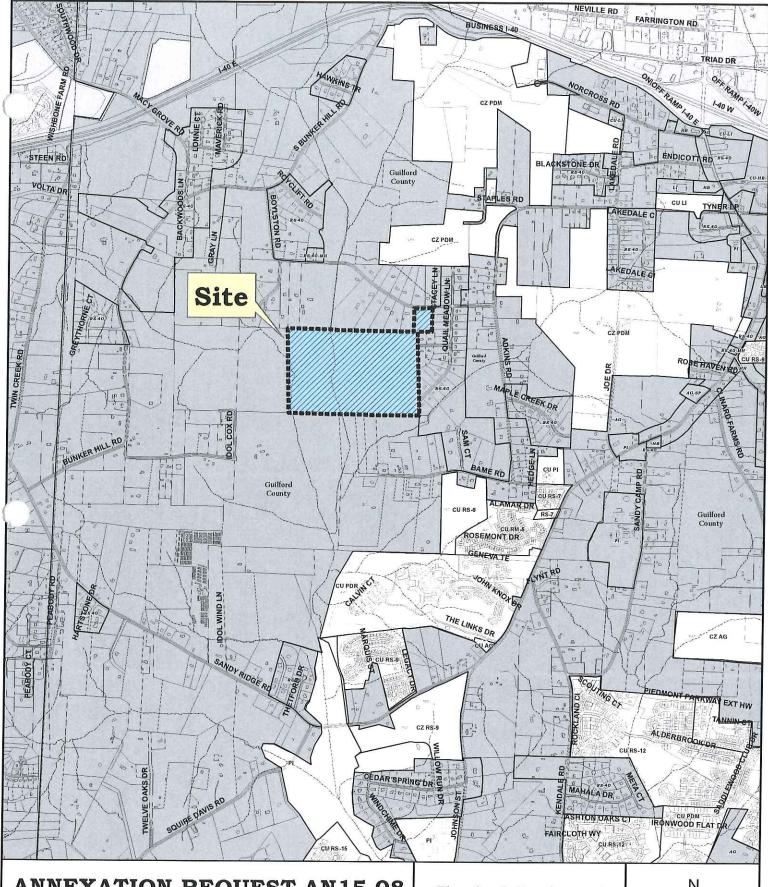
City of High Point

Date: September 15, 2015



Scale: 1"=8,500'

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#### **ANNEXATION REQUEST AN 15-08**

oplicant: Maxine Wallace Heirs and Bessie Idol \_rea: 114.18 acres

**Existing Zoning Boundary** Subject Property Boundary Planning & Development Department

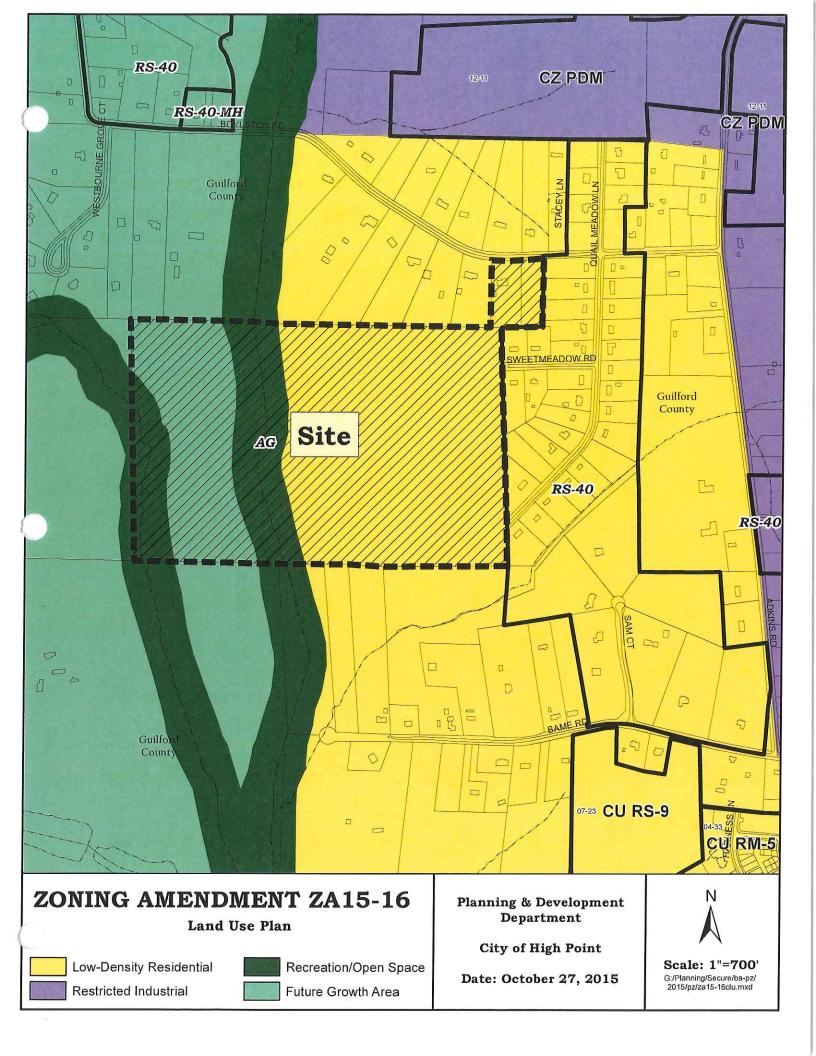
City of High Point

Date: November 11, 2015



Scale: 1"=2000'

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AERSAL MAP

Map Scale 1 inch = 608 feet 5/28/2015

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Guilford County, NC

# TRANSPORTATION IMPACT ANALYSIS Prepared for Keystone Homes

Project Number: 15-055

8/21/15

# Boylston Road Development High Point, NC



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### Transportation Impact Analysis

## Boylston Road Development High Point, NC

# Prepared for Keystone Homes August 21, 2015

Analysis by: Dionne C. Brown, P.E.

Drafting/Graphics by: Dionne C. Brown, P.E.

Reviewed by: <u>Frank Amenya, P.E., PTOE</u>
<u>F. Royal Hinshaw, P.E.</u>

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Sealed by: Dionne C. Brown, P.E.



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# Boylston Road Development – Transportation Impact Analysis Prepared for Keystone Homes August 21, 2015

#### **Executive Summary**

The proposed Boylston Road Development is located along the southern side of Boylston Road between the intersections of Quailmeadow Lane and Bunker Hill Road in High Point, North Carolina. As currently planned, this development will consist of 270 single family detached homes and 180 townhomes. Figure 1, in the report, presents the sketch plan. Access to the site will available from Boylston Road, Quailmeadow Land and Sweetmeadow Road.

DAVENPORT was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic. The following intersections were included in the study:

- Sandy Ridge Road at Norcross Road
- Sandy Ridge Road at Endicott Road
- Sandy Ridge Road at Bame Road
- Boylston Road at Adkins Road
- Boylston Road at Quailmeadow Lane
- Boylston Road at Bunker Hill Road
- Quailmeadow Lane at Sweeetmeadow Road
- Boylston Road at Site Access

The above-mentioned intersections were analyzed for the following scenarios:

- 2015 Existing Conditions
- 2020 Future No Build Conditions
- 2020 Future Build-Out Conditions
- 2020 Future Build-Out with Improvements (as necessary)

The build-out analysis year for this project was assumed to be 2020. The AM (7-9 am) and PM (4-6 pm) peaks were studied.

The City of High Point and the North Carolina Department of Transportation (NCDOT) were contacted to obtain background information and to ascertain the elements to be covered in this Transportation Impact Analysis (TIA). Information regarding the property was provided by Keystone Homes.



#### Level of Service Results

The results of the study are discussed by intersection below:

#### Sandy Ridge Road at Norcross Road

This unsignalized intersection currently operates at LOS C in the AM and PM peaks. In 2020 future no build conditions, the analysis indicates LOS E in the AM peak and LOS D in the PM peak. With the addition of site traffic, this intersection is projected to operate at LOS F in the AM and PM peaks. This is typical for a minor street to experience LOS E/F during peak hours due to the lack of gaps to allow turning movements onto the major roadway. This intersection's geometry will be modified during the construction of TIP U-4758 which will make this a right-in/ right-out. The TIP I-5712 could also modify this intersection; therefore, no improvements are recommended for this intersection.

#### Sandy Ridge Road at Endicott Road

This unsignalized intersection currently operates at LOS C in the AM and PM peaks. In 2020 future no build conditions, the analysis indicates LOS D in the AM peak and LOS C in the PM peak. With the addition of site traffic, this intersection is projected to operate at LOS F in the AM peak and LOS D in the PM peak. This is typical for a minor street to experience LOS E/F during peak hours due to the lack of gaps to allow turning movements onto the major roadway. This intersection's geometry will be modified during the construction of TIP U-4758 which will realign with Piedmont Triad Farmers Market's access. Therefore, no improvements are recommended for this intersection.

#### Sandy Ridge Road at Bame Road

This unsignalized intersection currently operates at LOS B in the AM peak and LOS C in the PM peak. In 2020 future no build conditions, the analysis indicates LOS C in the AM and PM peaks. With the addition of site traffic, this intersection is projected to operate at LOS C in the AM peak and LOS D in the PM peak. No improvements are recommended for this intersection.

#### Boylston Road at Adkins Road

This unsignalized intersection currently operates at LOS A in the AM and PM peaks. In 2020 future no build conditions, the analysis indicates LOS A in the AM and PM peaks. With the addition of site traffic, this intersection is projected to operate at LOS B in the AM and PM peaks. No improvements are recommended for this intersection.

#### Boylston Road at Quailmeadow Lane

This unsignalized intersection currently operates at LOS A in the AM and PM peaks. In 2020 future no build conditions, the analysis indicates LOS A in the AM peak and LOS B in the PM peak. With the addition of site traffic, this intersection is projected to operate



at LOS B in the AM peak and LOS C in the PM peak. <u>No improvements are recommended for this intersection.</u>

#### Boylston Road at Bunker Hill Road

This unsignalized intersection currently operates at LOS A in the AM and PM peaks. In 2020 future no build conditions, the analysis indicates LOS A in the AM and PM peaks. With the addition of site traffic, this intersection is projected to operate at LOS A in the AM peak and LOS B in the PM peak. No improvements are recommended for this intersection.

#### Quailmeadow Lane at Sweetmeadow Road

This unsignalized intersection currently operates at LOS A in the AM and PM peaks. In 2020 future no build conditions, the analysis indicates LOS A in the AM and PM peaks. With the addition of site traffic, this intersection is projected to operate at LOS A in the AM and PM peaks. No improvements are recommended for this intersection.

#### **Boylston Road at Site Access 1**

This unsignalized intersection is expected to operate at LOS A in the AM and PM peaks in future 2020 build conditions. Based on the NCDOT "Policy on Street and Driveway Access" guidelines, the westbound left turn volumes warrant a turn lane; therefore, it is recommended to provide a 100 foot storage lane with appropriate taper.

The recommended improvements at the study intersections are illustrated in Figure 9 in the report.



#### Level of Service Summary

Table A presents the summary of the level of service analysis.

Table A - Level of Service Summary					
AM Peak	2015 Existing	2020 Future No Build	2020 Build	2020 Build with Improvements	
Sandy Ridge Road at Norcross Road	C (21.2) EB Approach	E (35.7) EB Approach	F (76.1) EB Approach		
Sandy Ridge Road at Endicott Road	C (19.2) EB Approach	D (30.3) EB Approach	F (53.2) EB Approach		
Sandy Ridge Road at Bame Road	B (14.1) EB Approach	C (18.4) EB Approach	C (17.8) EB Approach		
Boylston Road at Adkins Road	A (9.0) EB Approach	A (9.0) EB Approach	B (11.1) EB Approach		
Boylston Road at Quailmeadow Lane	A (9.2) SB Approach	A (9.3) SB Approach	B (12.6) SB Approach		
Boylston Road at Bunker Hill Road	A (9.4) WB Approach	A (9.5) WB Approach	A (9.6) WB Approach		
Quailmeadow Lane at Sweetmeadow Road	A (8.6) EB Approach	A (8.6) EB Approach	A (9.2) EB Approach		
Boylston Road at Site Access			A (9.6) NB Approach	A (9.6) NB Approach	
PM Peak	2015 Existing	2020 Future No Build	2020 Build	2020 Build with Improvements	
Sandy Ridge Road at Norcross Road	C (19.4) EB Approach	D (32.7) EB Approach	F (52.3) EB Approach		
Sandy Ridge Road at Endicott Road	C (17.5) EB Approach	C (24.1) EB Approach	D (33.3) EB Approach		
Sandy Ridge Road at Bame Road	C (15.2) EB Approach	C (20.8) EB Approach	D (26.2) EB Approach		
Boylston Road at Adkins Road	A (9.3) EB Approach	A (9.4) EB Approach	B (13.2) EB Approach		
SEE ET 19 10 10 10 10 10 10 10 10 10 10 10 10 10	A (9.9)	B (10.1)	C (16.6) SB Approach		
Boylston Road at Quailmeadow Lane	SB Approach	SB Approach	35 Approach		
Boylston Road at Quailmeadow Lane  Boylston Road at Bunker Hill Road	SB Approach A (9.8) WB Approach	A (9.9) WB Approach	B (10.2) WB Approach		
	A (9.8)	A (9.9)	B (10.2)		



#### **Summary and Conclusion**

The proposed Boylston Road Development is located along the southern side of Boylston Road between the intersections of Quailmeadow Lane and Bunker Hill Road in High Point, North Carolina. As currently planned, this development will consist of 270 single family detached homes and 180 townhomes. Access to the site will available from Boylston Road, Quailmeadow Land and Sweetmeadow Road.

The trip generation indicates that based on the current site plan the proposed project is projected to generate a net total of 3,692 trips per day, 282 AM peak hour trips and 354 PM peak hour trips.

Table B summarizes the recommended improvements for the 2020 future build scenario. Improvements are shown in Figure 9 in the report.

In conclusion, this analysis has been conducted based on NCDOT and City of High Point guidelines and has determined the potential traffic impacts of this development. With the build-out of the site, the analysis indicates there will be adequate capacity to accommodate future traffic. Note that the site accesses should to be designed according to NCDOT standards as appropriate.

Table B - Recommended Improvement Summary		
Boylston Road at Site Access	<ul> <li>Provide westbound left turn lane with 100 feet of storage and appropriate taper</li> </ul>	
All other intersections	No improvements recommended	