



**KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION
SUBDIVISION REPORT - CONCEPT**

▶ **FILE #:** 5-SE-16-C **AGENDA ITEM #:** 8
POSTPONEMENT(S): 5/12/2016-10/13/2016 **AGENDA DATE:** 11/10/2016

▶ **SUBDIVISION:** BENTLEY FIELDS (FKA: BENTLEY ESTATES)

▶ **APPLICANT/DEVELOPER:** AKP PROPERTIES, LLC
OWNER(S): AKP Properties, LLC

TAX IDENTIFICATION: 120 A A 002 [View map on KGIS](#)

JURISDICTION: City Council District 2

STREET ADDRESS: 430 Broome Rd

▶ **LOCATION:** East side of Broome Rd., south of Chadwick Dr.

SECTOR PLAN: Northwest City

GROWTH POLICY PLAN: Urban Growth Area (Inside City Limits)

WATERSHED: Ten Mile Creek

▶ **APPROXIMATE ACREAGE:** 11.67 acres

▶ **ZONING:** R-1E (Low Density Exclusive Residential)

▶ **EXISTING LAND USE:** Residence and vacant land

▶ **PROPOSED USE:** Detached Residential Subdivision

SURROUNDING LAND USE AND ZONING: North: Residences / R-1E (Low Density Exclusive Residential)
South: Mars Hill Cemetery and residences / R-1E (Low Density Exclusive Residential)
East: Residences / R-1E (Low Density Exclusive Residential)
West: Residences / RP-1 (Planned Residential) & R-2 (General Residential)

▶ **NUMBER OF LOTS:** 31

SURVEYOR/ENGINEER: Ideal Engineering Solutions, Inc

ACCESSIBILITY: Access is via Broome Rd., a major collector street with a 18' pavement width within a 40' - 50' right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:** None

STAFF RECOMMENDATION:

▶ **APPROVE the concept plan subject to 11 conditions.**

1. Connection to sanitary sewer and meeting any other relevant requirements of the Knox County Health Department.
2. Provision of street names which are consistent with the Uniform Street Naming and Addressing System within Knox County (City Ord. 0-280-90).
3. Installation of sidewalks on at least one side of both Roads A & B. Sidewalks shall meet all applicable requirements of the Americans with Disabilities Act (ADA) and the Knoxville Department of Engineering. A bond shall be provided to the Knoxville Department of Engineering by the developer in an amount sufficient to guarantee the installation of the sidewalks.
4. The closed contour/sinkhole and the 50' setback around the feature shall be shown on the final plat. Building construction within the 50' setback may be permitted if a geotechnical study prepared by a registered

engineer states that building within the 50' sinkhole buffer is acceptable and the study is approved by the Knoxville Department of Engineering. The geotechnical study must be completed and submitted to the Knoxville Department of Engineering prior to submission of the final plat for any lots that do not have a building area outside of the 50' setback area. Building construction is not permitted within the hatched contour area of the sinkhole or required drainage easement. Engineered footings may be required for any structures within the 50' sinkhole buffer.

5. Based on the recommendations from the report submitted by Cultural Resource Analysts, Inc. and dated October 31, 2016 (copy enclosed in MPC package), Staff recommends the following: a) A 25' buffer be established along the north and east side of the cemetery fence line for Mars Hill Cemetery. The portion of the buffer that is outside of the cemetery parcel shall be included in a common area parcel for this subdivision. The common area would also include at a minimum, a 25' wide access strip/easement for the cemetery out to the public right-of-way of Road A. A paved driveway to the cemetery parcel shall be installed meeting the requirements of the Knoxville Department of Engineering. b) Following design plan approval and prior to the submission of the final plat to the Planning Commission for review, conducting a preliminary site grading/stripping of the property under the supervision of an archaeologist to assure that any unmarked graves on the site are left undisturbed. The preliminary site grading/stripping investigation area shall include the proposed right-of-way for Road A and all of proposed Lots 2 and 3 (See attached Concept Plan Exhibit A). The timing and details of the preliminary site grading/stripping is subject to the approval of the Knoxville Department of Engineering and MPC staff. c) Submitting a follow-up report on the results of the preliminary site grading/stripping from the archaeologists to MPC staff for review and approval prior to any further site alteration. If any grave sites are discovered, MPC staff will determine if any expansion of the preliminary grading/stripping area is needed, what modifications to the concept plan will be required, and if the concept plan will have to be resubmitted to the Planning Commission for approval.
6. The design of the deceleration lane is subject to the review and approval by the Knoxville Department of Engineering during the design plan stage of the subdivision.
7. Working with the Knoxville Department of Engineering at the design plan stage of the subdivision on the possible addition of street lighting along Broome Rd. at the proposed subdivision entrance.
8. Meeting all applicable requirements of the Knoxville Department of Engineering.
9. Placing a note on the final plat that all lots will have access only to the internal street system except for the lot created for the existing home site that currently has direct access to Broome Rd.
10. Prior to final plat approval establish a homeowners association for the purpose of assessing and collecting fees for the maintenance of the commonly held assets including the common area, access to the cemetery and the stormwater system.
11. A final plat application based on this concept plan will not be accepted for review by the MPC until certification of design plan approval has been submitted to the MPC staff.

With the conditions noted, this plan meets the requirements for approval of a concept plan in the R-1E (Low Density Exclusive Residential) District.

COMMENTS:

The applicant is proposing to subdivide this 11.67 acre tract into 31 detached residential lots and common area at a density of 2.66 du/ac. This property which is zoned R-1E (Low Density Exclusive Residential) is located on the east side of Broome Rd. just south of Chadwick Dr. The R-1E zoning district has a minimum lot size requirement of 7,500 square feet with no minimum lot width requirement. The proposed lots range in size from 8,340 to 17,786 square feet. Thirteen of the proposed lots will be over 10,000 square feet in size.

The proposed subdivision will be served by a public street with access out to Broome Rd. The applicant is proposing a deceleration lane on Broome Rd. at the proposed entrance. The design of the deceleration lane is subject to review and approval by the Knoxville Department of Engineering. To help improve visibility at the proposed subdivision entrance at night, staff is recommending that the applicant work with the Knoxville Department of Engineering on the possible approval of street lighting along Broome Rd. at the proposed subdivision entrance. The project engineer has certified on the concept plan that 300' of sight distance is available in both directions along Broome Rd. at the proposed subdivision entrance. The site is located within the parental responsibility zone. Staff is recommending a condition that sidewalks be included on at least one side of both Roads A and B.

A closed contour/sinkhole exists at the northwest corner of the site adjacent to Broome Rd. Building construction within the designated 50' setback around the sinkhole may be permitted if a geotechnical study prepared by a registered engineer states that building within the 50' sinkhole buffer is acceptable and the study is approved by the Knoxville Department of Engineering. The geotechnical study must be completed and submitted to the Knoxville Department of Engineering prior to submission of the final plat for any lots that do not have a building area outside of the 50' setback area.

The proposed subdivision adjoins an existing cemetery (Mars Hill Cemetery) and historic site that is located at the southwest corner of the site. Concern has been raised about the impact this proposed subdivision will have on the cemetery and historic site and possible unmarked grave sites that may be located outside the boundary of the cemetery. The applicant had hired a consultant, Cultural Resource Analysts, Inc. (CRA), to evaluate the extent of the cemetery and a copy of their report is enclosed in the MPC package (See "Update" comments below). Based on the recommendations from the report, staff has recommended a condition that would provide a buffer around the cemetery, provide public access to the site and provide protection for any unmarked graves that may be located on the property.

UPDATE:

On Thursday, October 20, 2016, staff from CRA conducted a Ground-Penetrating Radar (GPR) Survey for an area of approximately 0.41 acres on the north and east side of the Mars Hill Cemetery property. The new study area is located on the north side of the previous study area. A report on their findings, dated October 31, 2016, is included in the MPC Agenda Package. There were no indications of any unmarked graves within the new study area. The recommendations from the new study are incorporated in MPC staff's recommended condition #5.

ESTIMATED TRAFFIC IMPACT: 353 (average daily vehicle trips)

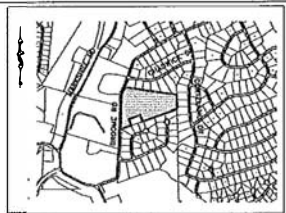
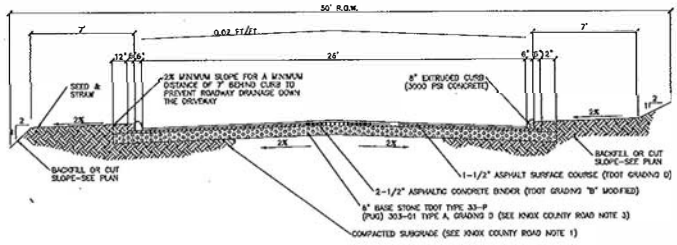
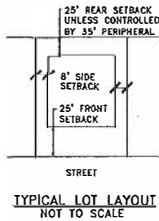
Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate 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: 13 (public and private school children, ages 5-18 years)

Schools affected by this proposal: West Hills Elementary, Bearden Middle, and Bearden High.

- School-age population (ages 5–18) is estimated by MPC using data from a variety of sources.
- While most children will attend public schools, the estimate includes population that may be home-schooled, attend private schools at various stages of enrollment, or drop out of the public system.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. 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.
- School capacities are subject to change by Knox County Schools through building additions, curriculum or scheduling changes, or amendments to attendance zone boundaries.

MPC'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.



- GENERAL NOTES:**
- CONTRACTOR TO VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. LOCATION OF UTILITIES IS BASED ON THE BEST AVAILABLE INFORMATION. CALL TENNESSEE 811 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION ACTIVITIES FOR UTILITIES LOCATION.
 - CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH GOVA REQUIREMENTS FOR SLOPE STABILITY, SHORING, AND SLOPE CORRECTION. BARRY CONSULTING.
 - BACK FILL MUST BE PLACED AND COMPACTED TO 95% OF STANDARD PROCTOR PRIOR TO UTILITY INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADES AND ADJUSTING PRIOR TO CONSTRUCTION. REMOVE ANY DISCREPANCIES OR INCONSISTENCIES TO DEAL ENGINEERING SOLUTIONS, INC.
 - TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH MANUAL ON UTILITY LOCATIONS, LATEST EDITION.
 - THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE MANUAL ON UTILITY LOCATIONS IN CONSTRUCTION ISSUED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC.
 - LOCATION OF EXISTING STRUCTURES AND ADJUSTMENT OF EXISTING UTILITIES TO BE PERMITTED AND COORDINATED WITH THE CITY OF KNOXVILLE.

- PROPERTY NOTES:**
- TOTAL AREA = 11,878 ACRES
 - MAP C-13 PARCEL 02
 - DEVELOPMENT ZONING: R-1
 - ADJACENT LOTS: 31
 - 10' WIDE AND UTILITY EASEMENT NEAR EXTERIOR AND ROAD FRONTAGE LOT LINES, 5' SIDE SPACE OF ALL INTERIOR LOT LINES. CREEP UNDER FENCED ZERO LOT USE.
 - ALL LOTS TO HAVE VEGEABLE BARRIERS TO ADJACENT STREETS ONLY.
- SETBACKS:**
- FRONT: 25 FT.
SIDE: 25 FT. SIDE STORY HOME 8 FT., TWO STORY HOME 12 FT.
REAR: 25 FT.
- UTILITIES:**
- WATER: KNOXVILLE UTILITIES BOARD
SEWER: KNOXVILLE UTILITIES BOARD
ELECTRIC: KNOXVILLE UTILITIES BOARD
NATURAL GAS: KNOXVILLE UTILITIES BOARD
CABLE TV: PRIVATE PAID
TELEPHONE: AT&T
- LEGEND:**
- PROPOSED DRAINAGE LINE
— PROPOSED CATCH BASIN
- EXISTING HOME
□ EXISTING HOME
- VARiances RECORDED:
NONE

THE POSTED SPEED LIMIT FOR BROOME ROAD IS 30 MPH

SIGHT DISTANCE IS VERIFIED TO BE 300+ FEET IN EACH DIRECTION ON BROOME ROAD



SCALE IN FEET
0 50 100

SHEET ONE

CONCEPT PLAN 5-3E-16C

**BENTLEY FIELDS
KNOXVILLE, TENNESSEE**

Prepared For:
AKP Properties, LLC
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Knoxville, Tennessee 37922
(865) 389-7361

Planning Agency:
Knoxville-Knox County MPC
400 Main Street, Suite 403
Knoxville, Tennessee 37902
(865) 215-2500



IDEAL ENGINEERING SOLUTIONS INCORPORATED
Ideal Engineering Solutions, Inc.
325 Wooded Lane
Knoxville, Tennessee 37922
(865) 755-3575

Concept Plan Exhibit A

CERTIFICATION OF CONCEPT PLAN
I HEREBY CERTIFY THAT I AM AN ENGINEER, LICENSED UNDER THE LAWS OF THE STATE OF TENNESSEE. I FURTHER CERTIFY THESE PLANS AND ACCOMPANYING DRAWINGS, DOCUMENTS AND STATEMENTS CONFORM TO ALL APPLICABLE PROVISIONS OF THE KNOXVILLE-KNOX COUNTY SUBDIVISION REGULATIONS EXCEPT AS HAS BEEN ITEMIZED AND DESCRIBED IN A REPORT FILED WITH THE METROPOLITAN PLANNING COMMISSION.

D. Campbell PE 22540

5-SE-16-C
Revised: 8/9/2016

NOTES:
CONTRACTOR IS RESPONSIBLE FOR ALL TECHNICAL SHEET. Contractor shall show and know all open and lawfully as required by State and Federal Laws and Local Ordinances. It conforms with recommendations set forth in AGC Manual of Accident Prevention in Construction, as printed this, property, or work to avoid excessive site site in unsafe manner.
GOVA DATA SHALL BE AMENDED BY