



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

▶ **FILE #:** 5-SM-07-C **AGENDA ITEM #:** 12  
 5-B-07-UR **AGENDA DATE:** 12/13/2007

POSTPONEMENT(S): 5/10/2007-11/8/2007

▶ **SUBDIVISION:** WILLOW CREEK  
 ▶ **APPLICANT/DEVELOPER:** GRAHAM CORPORATION  
 OWNER(S): Graham Corporation

TAX IDENTIFICATION: 29 20, 21 & PART OF 25 & 31.  
 JURISDICTION: County Commission District 7

▶ **LOCATION:** South side Maynardville Pk., west side of Quarry Rd.

SECTOR PLAN: North County  
 GROWTH POLICY PLAN: Planned Growth Area  
 WATERSHED: Beaver Creek

▶ **APPROXIMATE ACREAGE:** 60 acres

▶ **ZONING:** PC (Planned Commercial) & F (Floodway)

▶ **EXISTING LAND USE:** Vacant land

▶ **PROPOSED USE:** Commercial subdivision / shopping center

SURROUNDING LAND USE AND ZONING: This PC (Planned Commercial) zoned site is in a rural residential area that has seen recent urban residential and commercial zoning and development under PR, RA and PC and CA zoning.

▶ **NUMBER OF LOTS:** 12

SURVEYOR/ENGINEER: TH&P, Tysinger, Hampton & Partners

ACCESSIBILITY: Access is via Maynardville Hwy., a major arterial street with a pavement width of 34' within 170' wide right-of-way. Additional access is provided by Quarry Rd., a local street with a pavement width of 20' within a 35' wide right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:** 1. Vertical curve variance from 318.25' to 191' at sta 30+30 of Quarry Rd.

**STAFF RECOMMENDATION:**

▶ **DENY variance 1 because the sight distance at the existing driveways would be negatively impacted**

**APPROVE the concept plan subject to 8 conditions**

1. Connection to sanitary sewer and meeting any other relevant requirements of the Knox County Health Department.
2. Provision of a street name which is consistent with the Uniform Street Naming and Addressing System within Knox County (91-1-102)
3. Meeting all applicable requirements of the Knox County Dept. of Engineering and Public Works
4. The proposed driveway to lot 9 from the main access to Maynardville Hwy. being constructed to permit right

turn in and out only

5. As part of the design plan provide road cross sections for Quarry Rd. and the new connector Rd. All grading for these roads must be done within property controlled by applicant or Knox County. Driveway access to the adjoining properties and sight distance at each these driveways must be maintained
6. All road and access/traffic circulation improvements called for in the traffic impact study must be implemented on a schedule to be determined by the Knox County Dept. of Engineering and Public Works and the Tenn. Dept. of Transportation (TDOT) as part of the design plan review (see attached)
7. Obtaining driveway permits and meeting all other applicable requirements of the Tenn. Dept. of Transportation
8. Provision of a street name(s) which is consistent with the Uniform Street Naming and Addressing System within Knox County (91-1-102)
9. Meeting all applicable requirements and obtaining all required permits from the Tenn. Dept. of environment and Conservation and other appropriate state and federal agencies
10. Prior to certification of the final plat for the subdivision, establishing a property owners association for the purpose of maintaining the storm water drainage system.
11. A final plat based on this concept plan will not be accepted for review by MPC until certification of design plan has been submitted to MPC staff

► **APPROVE the request for up 454,000 square feet of commercial/retail space as shown on the development plan subject to 2 conditions**

1. Meeting all applicable requirements of the Knox County Zoning Ordinance
2. Installing all landscaping, as shown on the development plan, within six months of the issuance of occupancy permits for this project, or posting a bond with the Knox county Dept. of Engineering and Public works to guarantee such installation

With the conditions noted, this plan meets the requirements for approval in the PC zone and the other criteria for approval of a use on review.

**COMMENTS:**

The applicant is proposing a commercial development that will contain over 450,000 square feet of retail space and 9 out parcels for use by restaurants, banks or other retail uses. It is anticipated that two large retailers requiring over 100,000 square feet of space will locate in the development. The site contains over 60 acres and it is located on the south side of Maynardville Hwy. between Old Maynardville Hwy. and Quarry Rd.

As part of this development improvements will be made to Maynardville Hwy. and Quarry Rd. Additionally, a new connector road will be constructed by the developer to create an additional tie between Maynardville Hwy. and Emory Road. These improvements are illustrated on this concept plan. The final design and the timing of the improvements will be determined through the design plan review process and will be coordinated by the Knox county Dept. of engineering and Public Works and the Tenn. Dept. of Transportation.

**EFFECT OF THE PROPOSAL ON THE SUBJECT PROPERTY, SURROUNDING PROPERTY AND THE COMMUNITY AS A WHOLE**

1. The proposed commercial subdivision will have a significant impact on local the transportation system. Improvements to roads in the area are planned that will lessen this impact.
2. Other utilities are in place to serve this site.
3. The development of this site for commercial uses may spur further commercial development in the immediate area.

**CONFORMITY OF THE PROPOSAL TO CRITERIA ESTABLISHED BY THE KNOX COUNTY ZONING ORDINANCE**

1. The proposed commercial subdivision meets the standards for development within a PC Zone and all other requirements of the Zoning Ordinance with the recommended conditions.
2. The proposed commercial development is consistent with the general standards for uses permitted on review:
  - A. The proposed development is consistent with the adopted plans and policies of the General Plan and Sector Plan. The North County Sector Plan proposes this site for general commercial use.
  - B. The use is in harmony with the general purpose and intent of the Zoning Ordinance. The proposed development complies with all the height, bulk and area requirements of the Knox County Zoning Ordinance. The proposed development meets all the requirements of the PC (Planned Residential) District).

- C. The use is compatible with the character of the neighborhood where it is proposed. As previously noted, the proposed development is compatible in use and intensity of development with the surrounding area.
- D. The use will not significantly injure the value of adjacent property.
- E. The use will draw additional non-residential traffic through the area on streets classified as collector or arterial roads. I

#### CONFORMITY OF THE PROPOSAL TO ADOPTED PLANS

1. The North County Sector Plan designates this property for commercial use. The PC zoning proposed for the property allows consideration of the plan as proposed.
2. The site is located within the Planned Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

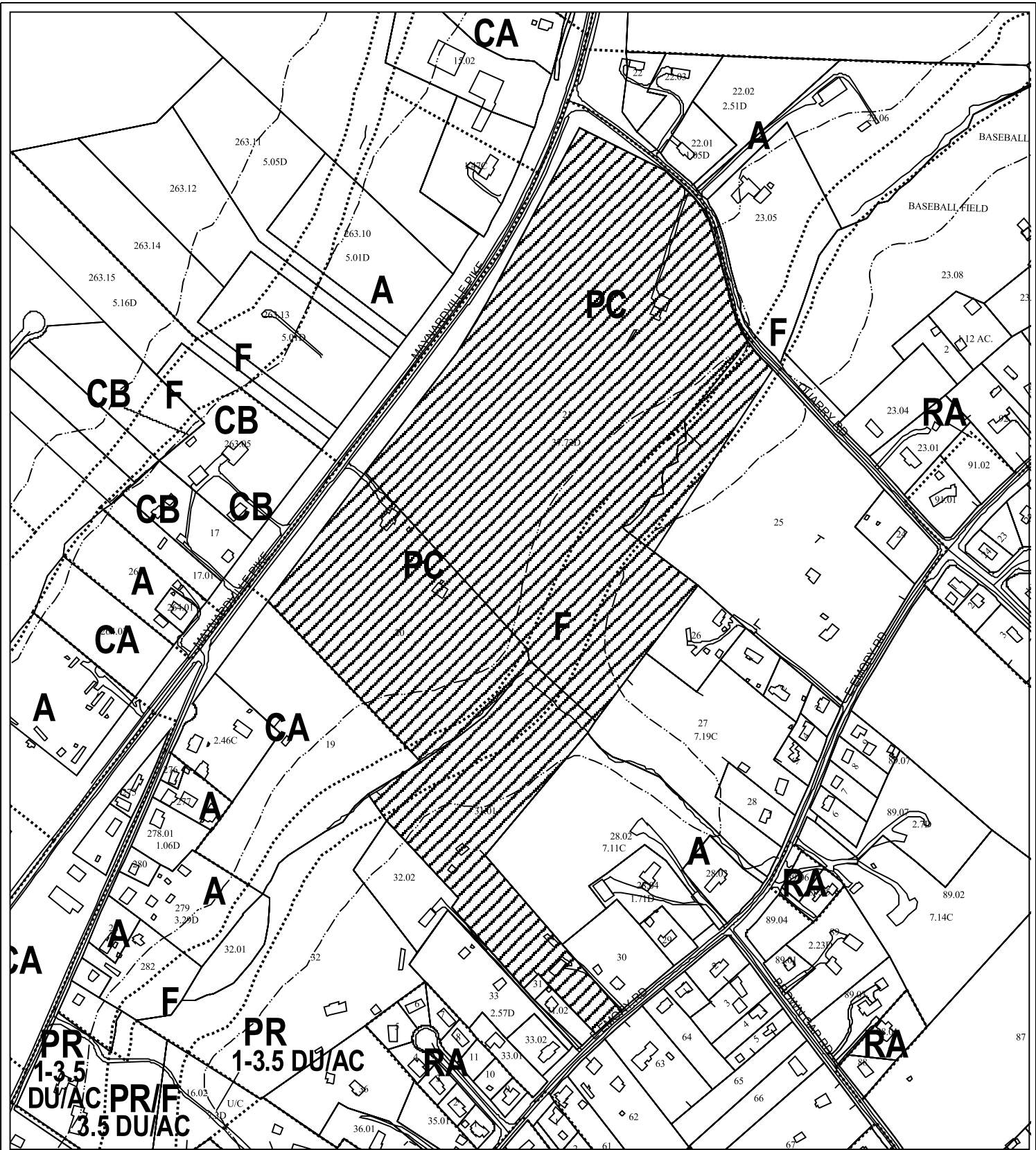
#### ESTIMATED TRAFFIC IMPACT 17790 (average daily vehicle trips)

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: Not applicable.

MPC'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.

MPC's approval or denial of this use on review request is final, unless the action is appealed to the Knox County Board of Zoning Appeals. The date of the Knox County Board of Zoning Appeals hearing will depend on when the appeal application is filed.



5-SM-07-C/5-B-07-UR  
 CONCEPT PLAN/USE ON REVIEW

 Commercial development in PC (Planned Commercial) & F (Floodway)

Original Print Date: 04/26/07 Revised:  
 Metropolitan Planning Commission \* City / County Building \* Knoxville, TN 37902

Petitioner: Willow Creek  
 Graham Corporation

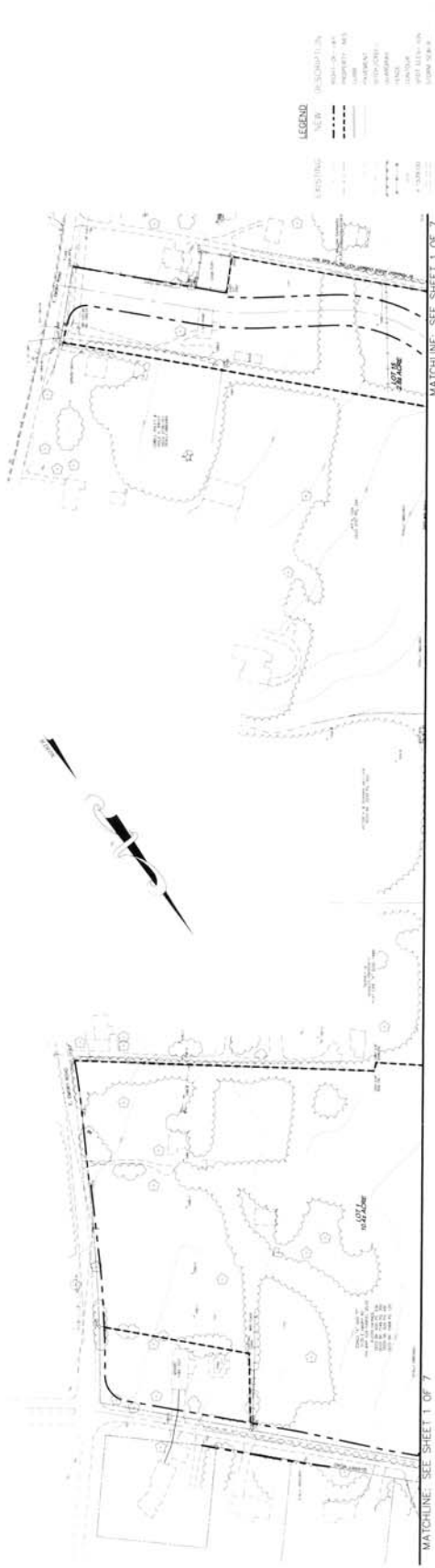
Map No: 29

Jurisdiction: County





<b>W. LOW FORK</b> <b>S. DIVISION</b>		<b>11-21-07</b>												
<b>G. AHAM CORPORATION</b> <b>T. 01 MERCHANTS DR</b> <b>K. OXVILLE, TN 37912</b> <b>K. OX. COUNTY,</b> <b>TN TENNESSEE</b>		<b>CONCEPT SUBDIVISION</b> <b>PLAN</b> <b>FOR</b> <b>WILLOW FORK</b> <b>SUBDIVISION</b>												
<table border="1"> <tr><td>DATE</td><td>11-21-07</td></tr> <tr><td>PROJECT NO.</td><td>0640900C</td></tr> <tr><td>SCALE</td><td>AS SHOWN</td></tr> <tr><td>BY</td><td>WCP</td></tr> <tr><td>CHECKED</td><td>WCP</td></tr> <tr><td>DATE</td><td>11-21-07</td></tr> </table>		DATE	11-21-07	PROJECT NO.	0640900C	SCALE	AS SHOWN	BY	WCP	CHECKED	WCP	DATE	11-21-07	
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**LEGEND**

**EXISTING**

- 1" = 1" (Dotted line)
- 2" = 1" (Dashed line)
- 3" = 1" (Long dashed line)
- 4" = 1" (Short dashed line)
- 5" = 1" (Dash-dot line)
- 6" = 1" (Solid line)
- 7" = 1" (Thick solid line)
- 8" = 1" (Thin solid line)
- 9" = 1" (Thin solid line)
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- 18" = 1" (Thin solid line)
- 19" = 1" (Thin solid line)
- 20" = 1" (Thin solid line)

**NEW**

- 21" = 1" (Dotted line)
- 22" = 1" (Dashed line)
- 23" = 1" (Long dashed line)
- 24" = 1" (Short dashed line)
- 25" = 1" (Dash-dot line)
- 26" = 1" (Solid line)
- 27" = 1" (Thick solid line)
- 28" = 1" (Thin solid line)
- 29" = 1" (Thin solid line)
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- 37" = 1" (Thin solid line)
- 38" = 1" (Thin solid line)
- 39" = 1" (Thin solid line)
- 40" = 1" (Thin solid line)

5-31-07-C  
 5-16-07-UX



NOTICE: THIS PLAN AND THE INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF THE ENGINEER AND ARCHITECT. NO PART OF THIS PLAN OR THE INFORMATION CONTAINED HEREIN IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER AND ARCHITECT.









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## RECOMMENDATIONS

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The analyses conducted and review of the traffic volumes identified the proposed intersection geometry, shown in Figure 10. These geometric improvements and recommendations will be constructed and / or applied as a part of one complete phase that will include the complete construction of the southern development. Furthermore, please find 11"x17" drawings of laneage and striping plans of Maynardville Pike, Quarry Road, and Connector Road in the appendix. We offer the following recommendations:

- Maynardville Pike should be improved with left and right turn lanes adjacent to the development. Ultimately, Maynardville Pike should be improved to a 5-lane section by IDOT for acceptable operation after full buildout.
- Quarry Road should be improved to a 3-lane section road adjacent to the development and the 2-lane section from the development to Emory Road should be improved to Knox County standards.
- Construct proposed Connector Road from Maynardville Pike to Emory Road with a 3-lane section adjacent to the development site and a 2-lane section from the development site to Emory Road. The 3-lane section is necessary where volumes and left-turns would warrant the 3-lane section and the 2-lane section may be used where volumes and left-turns are less due to no developable space.
- Provide three entrance / egress drives to Maynardville Highway (1 signalized and 2 unsignalized). These drives should be added to help alleviate some of the traffic burden from the intersections of Quarry and Maynardville Pike and the Connector Road and Maynardville Pike. The unsignalized drives should be right-in / right-out
- Provide right-turn lanes for non-signalized drives on Maynardville Pike to the southern development.
- Provide right-turn lanes on Quarry Road for proposed development drives.
- Provide right-turn lanes on the proposed Connector Road for proposed development drives.
- Signalize the intersection of Quarry Road with Maynardville Pike.
- Initially provide stop-control for the intersection of Quarry Road with Emory Road; however, serious consideration should be given to signalization as the development reaches full buildout for efficient operation.
- Provide stop-control for the intersection of the proposed Connector Road and Emory Road. However, this intersection should be monitored closely as the development builds out and signalization should be considered if additional warrants are met or if unanticipated capacity problems occur.
- Signalize the intersection of the proposed Connector Road and Maynardville Pike
- Signalize the central development drive intersection with Maynardville Pike
- The three signalized intersections on Maynardville Pike (Connector Road, Middle Entrance, and Quarry Road) should be coordinated.

- Provide for a minimum 150-foot left-turn lane on Emory Road to the proposed Connector Road and provide 250 feet of storage for the left-turn lane on the connector road to Emory Road. These turn lane storage lengths were based on Synchro analysis and engineering judgment.
- Provide for a minimum 150-foot left-turn lane on Emory Road to Quarry Road and provide for a minimum 100-foot left-turn lane on Emory Road to Royal Springs. Also, provide for a minimum 300-foot left-turn lane on Quarry Road to Emory Road. These turn lane storage lengths were based on Synchro analysis and engineering judgment.
- Use a minimum intersection radius of 30-foot for the efficient and safe ingress and egress of the site.
- Provide for a minimum 50-foot throat depth for both driveway access points onto Quarry Road from the development.
- Provide for a minimum 50-foot throat depth for the drive entrance closest to Maynardville Pike onto the Connector Road.
- Provide for a minimum 30-foot throat depth for the drive entrance closest to Emory Road onto the Connector Road.
- The anticipated queues for the signalized central development drive with Maynardville Pike for the AM peak is 90-feet and the anticipated queue for the PM peak hour is 250-feet. It is recommended that dual inbound lanes should be provided for access to the out-lots.
- Access to Maynardville Pike from out-lots should be internal due to the large traffic volumes and possible conflicts.
- Minimize landscaping, using low growing vegetation, and signing at the proposed street accesses to Emory Road and Maynardville Pike and driveway access to the proposed street insuring that safe sight distance is maintained.
- Intersection design should conform to the recommended standards and practices of the American Association of State Highway and Transportation Officials, the Institute of Transportation Engineers, and the Knox County Department of Engineering and Public Works.
- The intersection of Maynardville Pike and Emory Road was found to perform poorly for both the year 2011 background growth scenario and the year 2011 combined traffic scenario. It is apparent that this intersection's service will degrade with only the presence of background traffic. Thus, it is recommended that improvements to this intersection be made as a part of a larger infrastructure and community wide system improvement by TDOT and/or Knox County as discussed previously with the developer contributing financially towards the improvement. One long term potential improvement could include the widening of Emory Road to a section with more through lanes and provide an additional left-turn lane on Emory Road Eastbound to allow for a dual-left. Also, major improvements to the intersection / interchange of Norris Freeway and Maynardville Pike should be evaluated as an overall system improvement to alleviate congestion. Alternative signal phasing plans could also be explored which may require the reconstruction of the intersection to allow for a change from split phasing to quad phasing. Major geometric improvements to the intersection would need to take place before the quad phasing could be implemented to allow for simultaneous left turn movements. As a short term solution the construction of a southbound right turn lane on Maynardville Pike and the construction of a new eastbound left turn lane on Emory Road are recommended. This would allow for a dual left from Emory Road eastbound with some lane striping

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and median reconfiguration and a right turn lane on Maynardville Pike southbound with an extension of the existing shoulder and replacement of guardrail.

