

▶ **FILE #:** 12-B-09-UR **AGENDA ITEM #** 46

POSTPONEMENT(S): 12/10/2009 **AGENDA DATE:** 1/14/2010

▶ **APPLICANT:** MCDONALD'S USA, LLC

OWNER(S): HARDIN VALLEY LAND PARTNERS

TAX ID NUMBER: 103 119.06

JURISDICTION: County Commission District 6

▶ **LOCATION:** Southeast side of Hardin Valley Rd., southwest side of Castaic Ln.

▶ **APPX. SIZE OF TRACT:** 1.68 acres

SECTOR PLAN: Northwest County

GROWTH POLICY PLAN: Planned Growth Area

ACCESSIBILITY: Access is via Castaic Ln., a local street with a 32' pavement width within a 70' right-of-way.

UTILITIES: Water Source: West Knox Utility District

Sewer Source: West Knox Utility District

WATERSHED: Beaver Creek

▶ **ZONING:** PC (Planned Commercial) / TO (Technology Overlay)

▶ **EXISTING LAND USE:** Vacant lot

▶ **PROPOSED USE:** McDonald's restaurant

HISTORY OF ZONING: None noted

SURROUNDING LAND USE AND ZONING: North: Vacant land / BP (Business and Technology) / TO (Technology Overlay)

South: Business / PC (Planned Commercial) / TO (Technology Overlay)

East: Convenience store and fast food restaurant / PC (Planned Commercial) / TO (Technology Overlay)

West: Mixed commercial and offices / PC (Planned Commercial) / TO (Technology Overlay)

NEIGHBORHOOD CONTEXT: The site is located near the interchange of Pellissippi Parkway and Hardin Valley Rd. in an area that has a mix of business, institutional and residential uses within the Technology Overlay Corridor.

**STAFF RECOMMENDATION:**

▶ **APPROVE the development plan for a McDonald's fast food restaurant with drive-thru in the PC (Planned Commercial) & TO (Technology Overlay) zoning districts, subject to 10 conditions:**

1. Obtaining approval from the Tennessee Technology Corridor Development Authority (TTCCA) for the proposed development.
2. Obtaining approval from the Knox County Board of Zoning Appeals for any required variances for the proposed parking lot and drive aisles.
3. Meeting all applicable requirements of the Knox County Zoning Ordinance.

4. Installation of the street improvements to Castaic Ln. as recommended in the Traffic Impact Study prepared by Wilbur Smith Associates. Prior to issuance of a grading permit for the site, the applicant shall work with the Knox County Department of Engineering and Public Works on the design, timing and implementation of the recommended street improvements.
5. Providing a traffic control plan for the internal vehicular circulation to the Knox County Department of Engineering and Public Works prior to issuance of a grading permit for the site.
6. Submitting engineered drawings for any new or altered retaining walls to the Knox County Department of Engineering and Public Works for review and approval as a part of the grading and storm water management submittals.
7. Providing a letter from the owner of the retail/office development to the west (CLT #103-11801) authorizing the proposed changes to the driveway and parking lot along the southern property boundary. Documentation must also be provided that the retail/office development still meets the parking requirements with the proposed reduction of four parking spaces.
8. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
9. Connecting the development to sanitary sewer, as well as meeting other applicable requirements of the Knox County Health Department.
10. Installing all landscaping, as shown on the landscape plan, within six months of issuance of occupancy permits for the project, or posting a bond with the Knox County Department of Engineering and Public Works, to guarantee such installation. Landscaping at all intersections shall be installed so as not to interfere with the sight triangles and visibility along public streets.

With the conditions noted above, this request meets the requirements for approval in the PC (Planned Commercial) & TO (Technology Overlay) zoning districts, as well as other criteria for approval of a use on review.

**COMMENTS:**

The applicant is proposing to develop this 1.68 acre site for a McDonald's fast food restaurant with a drive-thru window. The restaurant has a building area of approximately 4,365 square feet. The proposed restaurant will have two access drives from Castaic Ln. with a connection to Hardin Valley Rd., and Valley Vista Rd. through the retail and office center located to the west.

The Traffic Impact Study prepared by Wilbur Smith Associates for the proposed McDonald's includes a recommendation for widening of Castaic Ln. to accommodate two northbound and one southbound lane. The widening should occur from the Hardin Valley Road intersection south to the southern driveway for the McDonald's site. This recommendation is included as a condition of the approval.

The proposed site design includes a proposal to alter the driveway and parking lot along the southern boundary line for the retail/office center located to the west. This revision is needed to allow the grades to work for the McDonald's site

The site is located within the TO (Technology Overlay) zoning district and is subject to review and approval by the Tennessee Technology Corridor Development Authority (TTCDA). The TTCDA will consider this request on January 11, 2010.

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

1. Public water and sewer utilities are available in the area to serve this site.
2. With the recent and proposed improvements to Hardin Valley Rd., and the proposed improvements to Castaic Ln as recommended by the traffic impact study prepared for the restaurant, there will be adequate road capacity to handle the traffic generated by this development.
3. The proposed development is compatible with the scale and intensity of the surrounding development and zoning pattern.

**CONFORMITY OF THE PROPOSAL TO CRITERIA ESTABLISHED BY THE KNOXVILLE ZONING ORDINANCE**

1. With the recommended conditions, the proposal meets all requirements of the PC zoning district as well as the general criteria for approval of a use on review.

2. The proposed commercial development is consistent with the following general standards for uses permitted on review: The proposal is consistent with the adopted plans and policies of the General Plan and Sector Plan. The use is in harmony with the general purpose and intent of the Zoning Ordinance. The use is compatible with the character of the neighborhood where it is proposed. The use will not significantly injure the value of adjacent property. The use will not draw additional traffic through residential areas. No surrounding land uses will pose a hazard or create an unsuitable environment for the proposed use.

#### CONFORMITY OF THE PROPOSAL TO ADOPTED MPC PLANS

1. The Northwest County Sector Plan proposes commercial uses for the site. The proposed use is consistent with the PC (Planned Commercial) zoning district and sector plan designation.
2. The site is located within the Planned Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

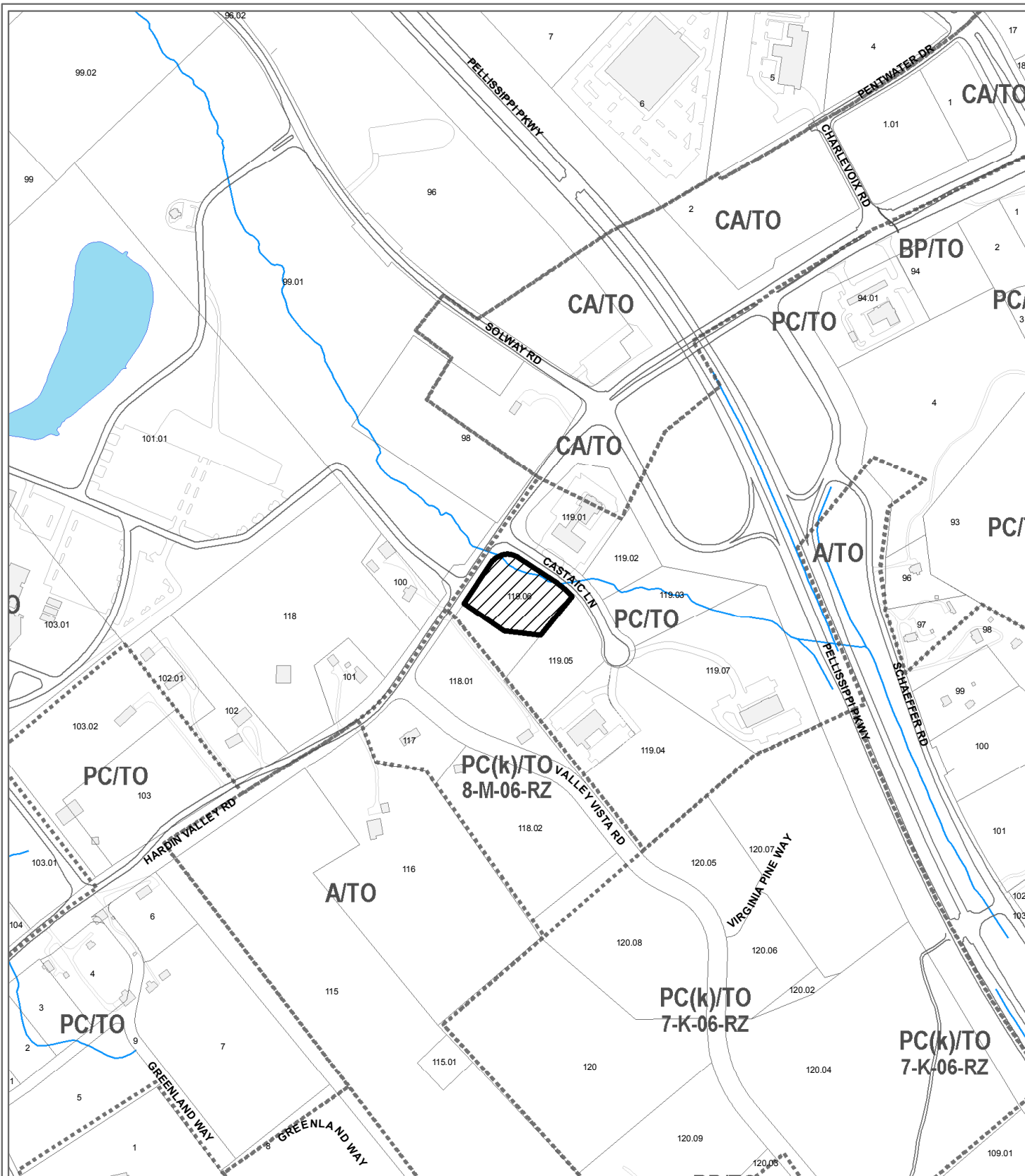
The applicant is proposing to develop this 5.06 acre site as a commercial center with 16,500 square feet of retail shops and 17,250 square feet of office space. The site includes Lots 2 and 3 of the proposed Vista Dei Monte Subdivision that was approved under concept plan review at the Planning Commission's November 9, 2006 meeting (10-SH-06-C/10-W-06-UR). The proposed center will have access from Castaic Ln., Hardin Valley Rd., and Valley Vista Rd., the proposed three lane collector street that will serve the subdivision.

ESTIMATED TRAFFIC IMPACT 2166 (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.

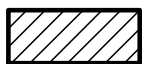
ESTIMATED STUDENT YIELD: Not applicable.

MPC's approval or denial of this 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. Appellants have 30 days to appeal an MPC decision in the County.



**12-B-09-UR  
USE ON REVIEW**

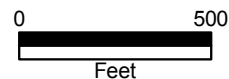
Petitioner: McDonald's USA, LLC



McDonald's restaurant in PC (Planned Commercial) / TO (Technology Overlay)

Original Print Date: 11/19/2009      Revised:  
Metropolitan Planning Commission \* City / County Building \* Knoxville, TN 37902

Map No: 103  
Jurisdiction: County











REVISIONS	DATE	DESCRIPTION
1	12-22-09	ISSUE FOR PERMIT
2	1-23-10	ADJUSTED REVIEW COMMENTS

**McDonald's**  
 505 S. Main Street  
 Columbia, SC 29601  
 (803) 771-8869  
 Fax: (803) 233-3140  
 www.mcdonalds.com

**BRITT PETERS  
 & ASSOCIATES  
 A S C**  
 600 BUILDING AND PLANNING

THIS PLAN AND SPECIFICATIONS ARE THE PROPERTY OF BRITT PETERS & ASSOCIATES, INC. NO PART OF THIS PLAN OR SPECIFICATIONS SHALL BE REPRODUCED, COPIED, 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 BRITT PETERS & ASSOCIATES, INC.

**McDonald's**

**PLAN APPROVAL**

DATE	STATUS	BY
1/23/10	PERMITTED	AS BUILT

**PLAN SCALE: 1"=20'**  
 STREET ADDRESS: 10308 HARDIN VALLEY RD  
 CITY: KNOXVILLE TN  
 COUNTY: KNOX  
 PARCEL NUMBER: 10311906 LOT 3  
 CSD FLENAME: 09240

**GENERAL SITE NOTES**

THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES AND NOT NECESSARILY SHOWN ON THIS PLAN AND ANY OTHER RECORD DRAWING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES.

**LEGEND**

POUR IN PLACE CONCRETE  
 EXISTING CONCRETE  
 EXISTING ASPHALT  
 EXISTING GRAVEL  
 EXISTING GRAVEL DRIVEWAY  
 EXISTING GRAVEL DRIVEWAY

**PARKING INFORMATION**

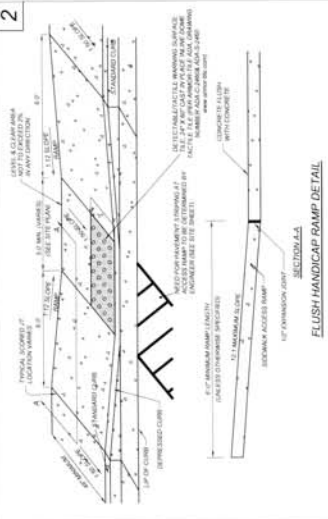
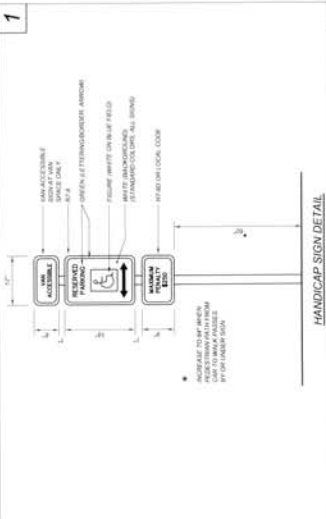
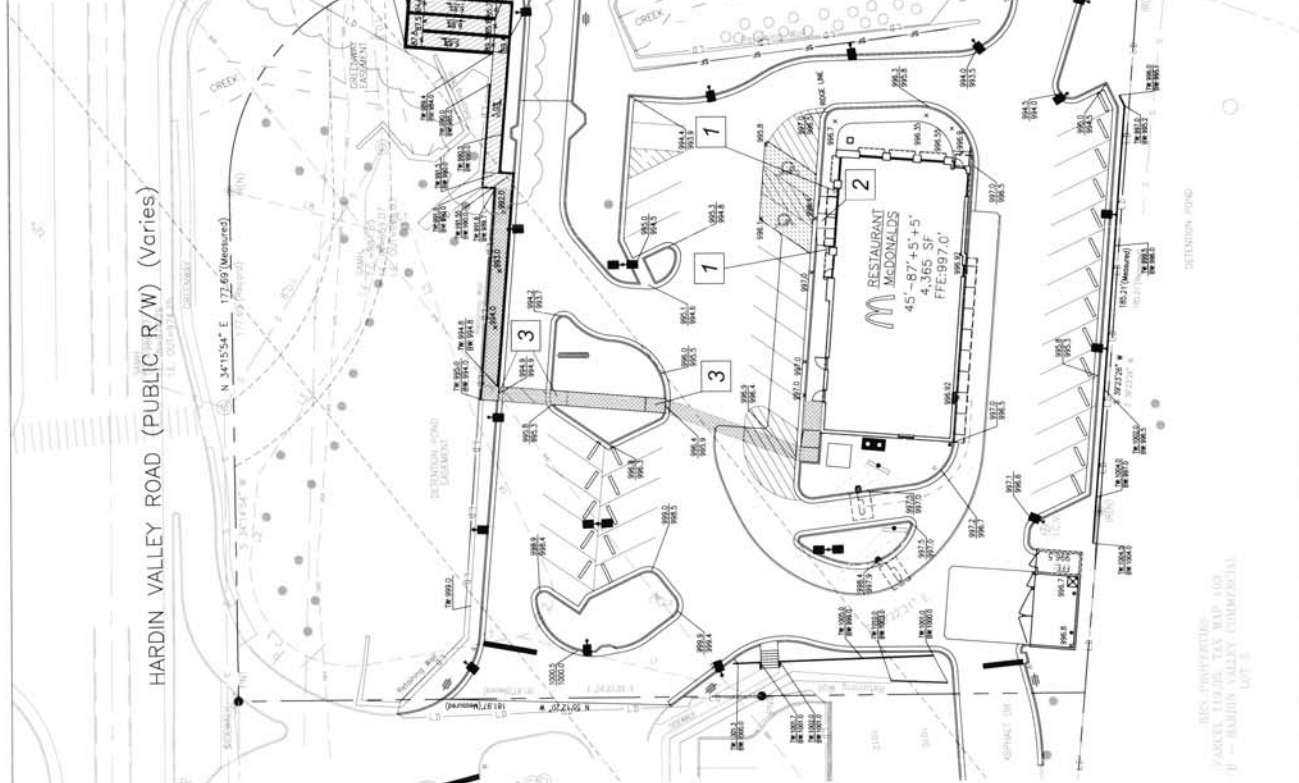
TOTAL SPACES	38
DISABLED SPACES	2
STANDARD SPACES	36

**UTILITY INFORMATION**

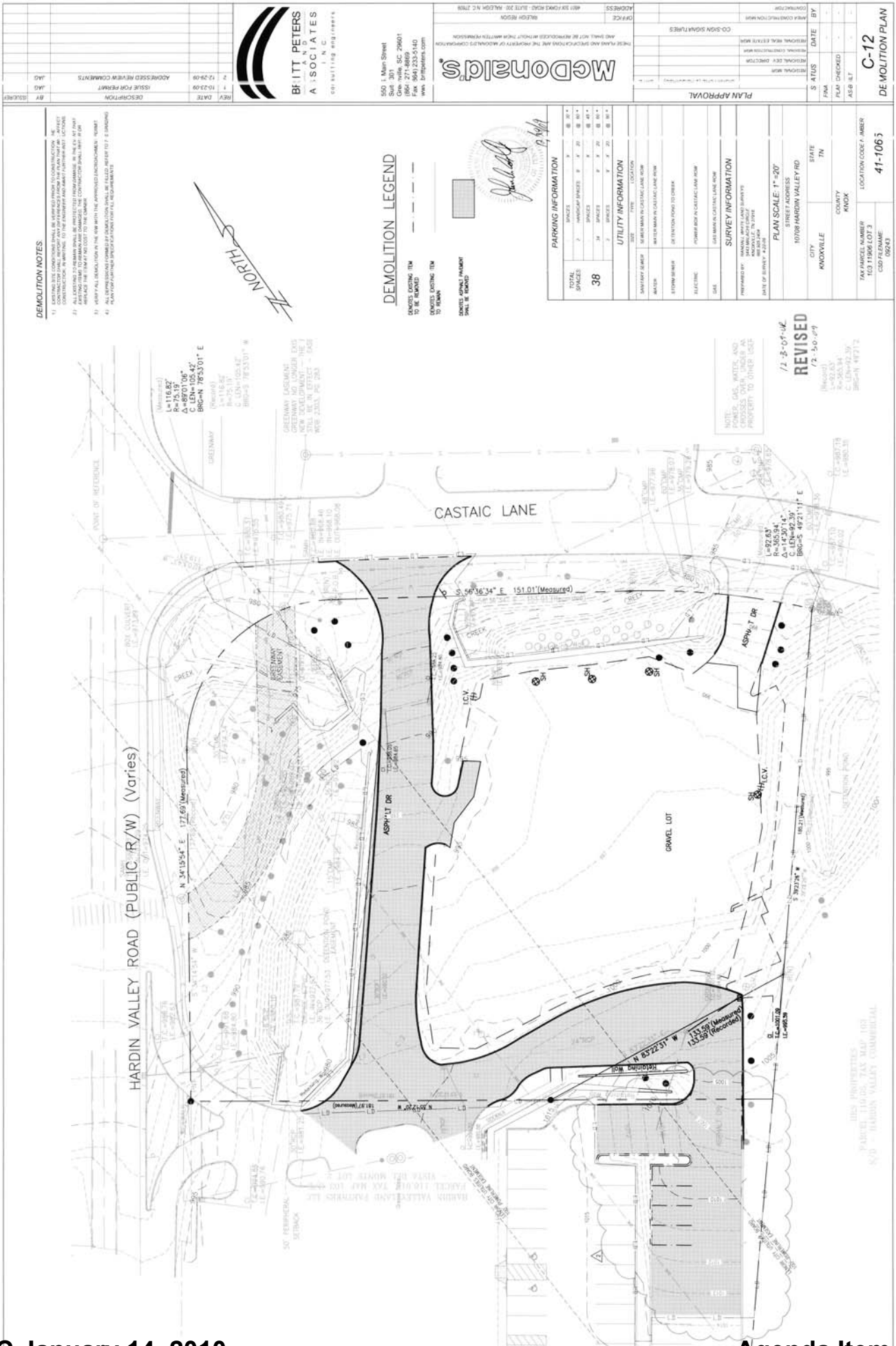
EXISTING UTILITIES: 12" WATER MAIN, 12" SEWER, 12" GAS, 12" ELECTRIC, 12" TELEPHONE, 12" CABLE, 12" FIBER OPTIC, 12" RAINWATER, 12" GROUNDWATER, 12" SURFACE WATER, 12" STORMWATER, 12" SANITARY SEWER, 12" WASTEWATER, 12" INDUSTRIAL WASTE, 12" HAZARDOUS WASTE, 12" RADIOACTIVE WASTE, 12" OTHER WASTE, 12" OTHER UTILITIES.

**SURVEY INFORMATION**

PREPARED BY: BRITT PETERS & ASSOCIATES, INC.  
 DATE OF SURVEY: 12/22/09  
 PLAN SCALE: 1"=20'







**DEMOLITION NOTES:**

1. EXISTING UTILITIES SHALL BE SHOWN FROM RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF KNOXVILLE AND THE STATE OF TENNESSEE.
2. ALL EXISTING STRUCTURES SHALL BE DEMOLISHED IN ACCORDANCE WITH THE CITY OF KNOXVILLE DEMOLITION ORDINANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF KNOXVILLE AND THE STATE OF TENNESSEE.
3. ALL EXISTING UTILITIES SHALL BE DEMOLISHED IN ACCORDANCE WITH THE CITY OF KNOXVILLE DEMOLITION ORDINANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF KNOXVILLE AND THE STATE OF TENNESSEE.
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**DEMOLITION LEGEND**

- EXISTING STRUCTURE TO BE DEMOLISHED
- EXISTING UTILITY TO REMAIN
- EXISTING UTILITY TO BE REMOVED
- EXISTING UTILITY TO BE RELOCATED
- EXISTING UTILITY TO BE DELETED
- EXISTING UTILITY TO BE RELOCATED TO NEW DEPTH
- EXISTING UTILITY TO BE RELOCATED TO NEW LOCATION
- EXISTING UTILITY TO BE RELOCATED TO NEW DEPTH AND LOCATION
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**PARKING INFORMATION**

TYPE	SPACES
TOTAL SPACES	38
STREET SIDE	10
BACKSIDE	28

**UTILITY INFORMATION**

UTILITY	TYPE	LOCATION
WATER	12" DIAMETER	UNDER MAIN CASTAIC LANE ROW
SEWER	12" DIAMETER	UNDER MAIN CASTAIC LANE ROW
GAS	12" DIAMETER	UNDER MAIN CASTAIC LANE ROW
ELECTRIC	4" DIAMETER	UNDER MAIN CASTAIC LANE ROW
TELEPHONE	4" DIAMETER	UNDER MAIN CASTAIC LANE ROW
CABLE	4" DIAMETER	UNDER MAIN CASTAIC LANE ROW

**SURVEY INFORMATION**

PREPARED BY: BENTLEY & ASSOCIATES, INC.  
 DATE OF SURVEY: 12/15/09  
 PLAN SCALE: 1" = 20'  
 STREET ADDRESS: 10708 HARDIN VALLEY RD  
 CITY: KNOXVILLE TN  
 COUNTY: KNOX  
 LOCATION CODE: AMBER  
 LOCATION NUMBER: 41-1065  
 COORDINATE: 09243

**DEWOLITION PLAN**

NO.	DATE	BY
1	12/15/09	JK
2	12/15/09	JK

10708 HARDIN VALLEY RD  
 KNOXVILLE, TN 37918  
 BENTLEY & ASSOCIATES, INC.  
 500 L. MARK STREET  
 SUITE 301  
 KNOXVILLE, TN 37918  
 TEL: 615.582.2901  
 FAX: 615.582.2902  
 WWW.BENTLEYANDASSOCIATES.COM

10708 HARDIN VALLEY RD  
 KNOXVILLE, TN 37918  
 BENTLEY & ASSOCIATES, INC.  
 500 L. MARK STREET  
 SUITE 301  
 KNOXVILLE, TN 37918  
 TEL: 615.582.2901  
 FAX: 615.582.2902  
 WWW.BENTLEYANDASSOCIATES.COM

10708 HARDIN VALLEY RD  
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 500 L. MARK STREET  
 SUITE 301  
 KNOXVILLE, TN 37918  
 TEL: 615.582.2901  
 FAX: 615.582.2902  
 WWW.BENTLEYANDASSOCIATES.COM



**FRONT ELEVATION**

**NON-DRIVE-THRU ELEVATION**

**ROOF TOP UNIT**

**KEY NOTES:**

1. ALL MATERIALS AND FINISHES TO BE AS SHOWN UNLESS NOTED OTHERWISE.
2. ALL WORK TO BE ACCORDING TO THE LATEST EDITIONS OF THE BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
3. ALL WORK TO BE ACCORDING TO THE LATEST EDITIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
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10. ALL WORK TO BE ACCORDING TO THE LATEST EDITIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

**12-B-09-08**  
**REVISED**  
**12-50-09**



**McDonald's Restaurant  
Hardin Valley Road  
KNOX COUNTY, TENNESSEE**

**TRAFFIC IMPACT STUDY**

Prepared for

**Britt, Peters, & Associates  
550 S. Main Street, Suite 301  
Greenville, South Carolina 29601**



Prepared by

**WILBUR SMITH ASSOCIATES  
Alexander Place  
1100 Marion Street, Suite 200  
Knoxville, Tennessee 37921**

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## **INTRODUCTION**

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Wilbur Smith Associates (WSA) is pleased to submit this report to address the traffic impact and access issues related to the proposed McDonald's restaurant and drive-thru to be located at the intersection of Hardin Valley Road and Castaic Lane in Knox County, TN. The basis of this study required the collection of traffic data, generation of anticipated traffic volumes for the proposed site and development of projected traffic volumes for normal growth and from the potential site. Analyses of the resulting traffic projections were conducted to determine the capacity and levels of service for the site accesses and the intersection of Hardin Valley Road at Castaic Lane. This study will evaluate the development's impact and determine if any mitigation measures are necessary to minimize the traffic impact including improved roadway geometrics and traffic control devices.

### **Project Description**

The proposed McDonald's restaurant is to be located in the Vista Del Monte Retail Shoppes, which currently is comprised of Prestige Cleaners, Firehouse Subs, a Salon, an Exercise Facility, and additional retail space. The Vista Del Monte Retail Shoppes are located between Valley Vista Road and Castaic Lane. The proposed project is the construction of a 4,365 SF McDonald's restaurant with a drive-thru having two ordering stations and one pick up window. Two driveway connections on the east side of the parcel are proposed to Castaic Lane. The access on the west side of the parcel connects to the Vista Del Monte Retail Shoppes with a right-in/out driveway to Hardin Valley Road. **Figure 1** displays the proposed site plan.

### **Site Location**

The proposed McDonald's restaurant will be located in west Knox County on Hardin Valley Road to the west of the Pellissippi Parkway and Hardin Valley Road interchange. The site is on the south side of Hardin Valley Road across from the entrance to the Pellissippi State Community College that is on the north side of Hardin Valley Road. **Figure 2** illustrates the site location relative to local and regional access.



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- Improve the northbound left turn LOS to E in the AM peak hour and D in the mid-day and PM peak hour.
  - Improve the northbound right turn LOS to an E in the AM peak hour and a better LOS F in the mid-day and PM peak hour.
  - Reduce the northbound left turn queue to 50 feet in all three peak hours (The left and right turn queues are mixed together in one lane today)
  - Reduce the northbound right turn queue to 75 feet in the AM peak hour, 150 feet in the mid-day peak hour, and 250 feet in the PM peak hour. (The left and right turn queues are mixed together in one lane today)

Because the queue estimates are 95<sup>th</sup> percentile, the 250 foot queue in the PM peak hour would occasionally block the south Wendy's driveway that is 225 feet from the stop bar at Hardin Valley Road.

#### **Site Plan Issues**

A review of the site plan identified some issues that will need to be considered including:

- The delivery truck will have to exit at the north entering driveway on Castaic Lane. The normal McDonald's practice for unloading is for the truck to pull up to the building facing the wrong direction relative to normal traffic flow. Typically, two deliveries per week occur and they are usually during off peak hours.
- Grades are expected to be steep for the two driveways at Castaic Lane, but the slope should be minimized as much as possible. Careful design of the driveway connections to Castaic Lane will need to be undertaken.
- The interface of the west side of the McDonald's site plan with the existing portion of the Vista Del Monte Retail Shoppes will require special treatment.
  - The first issue is the Prestige Cleaners drive thru and how it will work with McDonald's traffic
  - The second issue is assuring that one-way counterclockwise flow in McDonald's is reinforced by traffic control devices
  - Third, the distance between the retaining wall and the drive-thru ordering stations is only 18 2 feet and clearly this area must be one way southbound.

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## RECOMMENDATIONS

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The analyses conducted identified the following recommendations:

- Minimize landscaping, using low growing vegetation, and signing at the proposed street access (Castaic Lane) to insure that safe sight distance is maintained.
- Make the north McDonald's driveway at Castaic Lane one-way entering.
- Allow the south McDonald's driveway at Castaic Lane to operate with two-way traffic.
- Minimize delivery truck access to McDonalds. Plans call for the delivery trucks to make deliveries 2 times per week, usually if not always during off peaks. Because of the constraints of the site plan, the delivery truck will have to exit at the north driveway on Castaic Lane, which is an entrance only under normal operation.
- Grades are expected to be steep for the two driveways at Castaic Lane, but the slope should be minimized as much as possible. Careful design of the driveway connections to Castaic Lane will need to be undertaken.
- Do-Not-Enter signs should be installed to reinforce the one-way westbound (counterclockwise) flow in the McDonald's parking lot near the Prestige Cleaners drive thru.
- A Do-Not-Enter sign should be installed so that traffic coming from the existing Vista Del Monte Retail Shoppes will not travel northbound in the wrong direction near the McDonald's ordering stations.
- Castaic Lane should be widened from its approximately 30 foot wide section to 36 feet to accommodate 2 northbound and 1 southbound lane. The widening should occur from Hardin Valley Road to the south McDonald's driveway. Northbound, a separate left and right turn lane should be provided.
- The 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.

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## CONCLUSION

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The analysis of the proposed McDonald's restaurant suggest that northbound traffic on Castaic Lane will be critical, therefore some mitigation is required as described in the Recommendation section of this report. The construction of another lane on Castaic Lane is preferred instead of installing a traffic signal at its intersection with Hardin Valley Road. Even though a traffic signal at this intersection is warranted, it is too close to the Pellissippi Parkway ramps to function efficiently. If a lane is added to Castaic Lane, a different volume category is used and a signal cannot be justified.