CITY OF CHESTERFIELD
PLANNING AND ZONING COMMITTEE MEETING
THURSDAY, MAY 10, 2007
CONFERENCE ROOM 101
5:30 P.M.

I. APPROVAL OF MEETING SUMMARY

A. Approval of the April 19, 2007 Planning and Zoning Committee Meeting Summary

II. OLD BUSINESS

A. **P.Z. 5-2005 Winter Wheat Place (Dollar Building Company):** A request for a change of zoning from "NU" Non-Urban District to E-One Acre for a 4.0 acre tract of land located on Winter Wheat Road, 3000 feet southeast of the intersection of Wild Horse Creek Road and Long Road. (18U220092)

III. NEW BUSINESS

A. **Draft Ordinance Pertaining to Residential Real Estate Open House Signs**

B. **P.Z. 28-2006 Chesterfield Neighborhood Office Park (17655 and 17659 Wild Horse Creek Road):** A request for a change of zoning from "NU" Non-Urban to "PC" Planned Commercial District with a "WH" Wild Horse Creek Road Overlay for 8.04 acre tract of land located north of Wild Horse Creek Road and west of Long Road.

C. **P.Z. 12-2007 City of Chesterfield (Tree Manual):** A request to repeal City of Chesterfield Ordinance 2335 and replace it with a new ordinance that revises the procedures and requirements for Tree Protection Sureties, Escrows and Landscape Installation Bonds.

IV. PENDING PROJECTS/DEPARTMENTAL UPDATE

V. ADJOURNMENT

Note: The Planning and Zoning Committee will consider and act upon the matters listed above, and such other matters as may be presented at the meeting and determined to be appropriate for discussion at that time.

Notice is hereby given that the Planning and Zoning Committee may also hold a closed meeting for the purpose of dealing with matters relating to one or more of the following: legal actions, causes of action, litigation or privileged communications between the City's representatives and its attorneys (RSMo 610.021(1) 1994; lease, purchase or sale of real estate (RSMo 610.021(2) 1994; hiring, firing, disciplining or promoting employees with employee groups (RSMo 610.021(3) 1994; bidding specification (RSMo 610.021(11) 1994; and/or proprietary technological materials (RSMo 610.021(15) 1994

I. A.

MEMORANDUM

TO: Michael G. Herring, City Administrator

FROM: Mike Geisel, Acting Director of Planning

SUBJECT: Planning & Zoning Committee Meeting Summary
April 19, 2007

A meeting of the Planning and Zoning Committee of the Chesterfield City Council was held on Thursday, April 19, 2007 in Conference Room 101.

In attendance were: **Chair Connie Fults** (Ward IV)**; Councilmember Jane Durrell** (Ward I); **Councilmember Bruce Geiger** (Ward II); and **Councilmember Dan Hurt** (Ward III).

Also in attendance were Councilmember Lee Erickson (Ward II); Councilmember Mike Casey (Ward III); Maurice L. Hirsch, Jr., Planning Commission Chair; Mike Geisel, Acting Director of Planning; Aimee Nassif, Senior Planner; Charles Campo, Project Planner; Jennifer Yackley, Project Planner; and Mary Ann Madden, Planning Assistant.

Chair Fults called the meeting to order at 5:30 p.m.

I. APPROVAL OF MEETING SUMMARY

A. Approval of the March 22, 2007 Planning and Zoning Committee Meeting Summary

Councilmember Geiger made a motion to approve the Meeting Summary of March 22, 2007. The motion was seconded by Councilmember Durrell and **passed by a voice vote of 3 to 0.** (Councilmember Hurt was not present for the vote.)

II. OLD BUSINESS - None

III. NEW BUSINESS

Chair Fults complimented the Staff on the new format being used for the Staff Reports. Planning Chair Hirsch stated that the Planning Commission also appreciates the improved format.

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A. St. John's Mercy Sign Package: A request to approve a Sign Package for the St. John's Mercy Rehabilitation Hospital, at 14561 North Outer Forty Rd. A 6.048-acre "PC" Planned Commercial District located south of Conway Road, approximately 900 feet east of Still House Creek Road.

Staff Report

Mr. Charles Campo, Project Planner, stated that the Ordinance for St. John's Mercy Rehabilitation Hospital requires all sign packages to be approved by the City Council. The Planning Commission approved the sign package on March 26, 2007 by a vote of 9 to 0.

The sign package includes two signs – a wall sign on the front elevation and a monument sign. The square footage of both signs is within the allowed size; the monument sign is heavily landscaped as required by the Ordinance.

Planning Commission Report

Planning Chair Hirsch stated that the Planning Commission had discussions regarding the scale of the wall sign and how it was calculated with respect to the articulation of the building. The Commission agreed with the size and placement of both signs.

DISCUSSION

Sign Illumination

Councilmember Hurt pointed out that there are no internally illuminated signs along this section of Highway 40. He noted that such signs are not prohibited, but the City has chosen not to allow them in some areas. He stated that he has no concerns with the size and location of the signs, but he does not support the fluorescent illumination of the signs.

Chair Fults stated that there are some signs in this area lit with a spotlight. Councilmember Hurt indicated that he does not have an issue with signs being lit by a spotlight because the illumination is going towards the building and not going outward.

Councilmember Durrell stated she does not have a problem with internal lighting but expressed concern that this could set a precedent for this type of lighting along Highway 40.

Mr. Mike Geisel, Acting Director of Planning, stated that there are fluorescent lighted signs throughout the City but not along this section of the highway. The provision in the Chesterfield Code for lighting states that there can be no exposed neon or exposed fluorescent tubes.

Councilmember Geiger stated he finds the building sign acceptable but has concerns about the proposed internal lighting of the monument sign.

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Mr. Charles Campo, Project Planner, advised the Committee that the lighting for the wall sign was LED, not fluorescent.

Mr. Ryan Hodges and Mr. Jason Hebert, representing the Petitioner, addressed the Committee with respect to lighting the monument sign with spotlights as opposed to the back illumination. It was noted that there is a detention basin directly in front of the building, which could make it difficult to use spotlights. They felt it may be possible to set a spotlight on a pedestal but wanted to keep the lighting as unobtrusive as possible.

Councilmember Hurt made a motion to amend the St. John's Mercy Sign Package by removing the internal illumination from both signs and to forward it to City Council with a recommendation to approve as amended. The motion was seconded by Councilmember Geiger and **was tied by a voice vote of 2 to 2**. (Chair Fults and Councilmember Durrell voted "no".)

Chair Fults noted that St. John's Mercy Sign Package would go forward to Council with no recommendation.

Councilmember Hurt encouraged Councilmembers Geiger and Erickson to talk to their Ward II residents about the lighting of these signs before the next Council meeting.

Note: This is a Sign Package, which requires approval by City Council. A voice vote will be needed at the May 7, 2007 City Council Meeting.

[Please see the attached report, prepared by Mike Geisel, Acting Director of Planning, for additional information on St. John's Mercy Sign Package.]

B. P.Z. 16-2006 Conway Point Office Building (Nelson McBride Development): A request for a change of zoning from an "R-3" Residence District to a "PC" Planned Commercial District for a 1.1 acre tract of land located at 15310 Conway Road, at the southwest corner of Chesterfield Parkway and Conway Road.

Staff Report

Ms. Jennifer Yackley, Project Planner, stated that the Petitioner had requested the following two amendments from the Planning Commission:

- A reduction in the open space from the 45% requirement to 37%.
- A reduction in the parking space requirement from 4 spaces/1,000 square feet of gross floor area to either 3.3 spaces/1,000 square feet of gross floor area or 4 spaces/1,000 square feet of usable/leasable space as defined by BOMA.

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The Planning Commission did not make any motions on the two requested amendments. The Petitioner is requesting that the Planning & Zoning Committee consider the two proposed amendments.

Planning Commission Report

Planning Chair Hirsch stated that he specifically asked the Commission for any motions on the requested amendments, but no motion was made for either amendment.

The Commission felt that the requested zoning is appropriate for the site and that the Attachment A, as written, is appropriate for the site. There was some discussion regarding traffic and all questions were answered concerning ingress and egress.

It was also pointed out to the Commission that the Plan being presented does not meet all the requirements of the Attachment A. However, the Commission only voted on the rezoning – not the Plan. Any Site Plan will have to meet the requirements of the Attachment A. He further advised that Staff has commented that a plan, which does not conform to the requirements of the Attachment A, would not be forwarded to the Planning Commission.

Councilmember Hurt stated that he concurs with the Planning Commission with regard to not approving the requested amendments.

DISCUSSION

Third-Story Mezzanine/Building Height

Councilmember Hurt expressed concern that the proposed third story for this building could produce a "canyon effect" along Highway 40. Planning Chair Hirsch stated that this site is a "hole" and the building will be set down. The Commission did not raise any issues with the proposed third-story mezzanine.

Councilmember Geiger expressed concern about the height of the building. He noted that the top of the building is 62 feet above the grade of Conway Road, which is unacceptable to him. He stated that the subject site is an important corner for the City and he feels that a two-story building is more appropriate for the site. He does not want the site to have a "crammed" feeling.

Ms. Yackley stated that the Attachment A does not have a height limitation. The Attachment A states that the building must adhere to the City code.

Mr. Geisel pointed out that the City code in a "PC" District allows a maximum height of 75 feet. If the Committee wants to add a height requirement, it may do so. Mr. Geisel further stated that when a building goes over 30 feet in height, setbacks have to be increased by one foot for every additional two feet in height. He noted that the proposed plan does not have enough parking, so if the building is taller, the floor plan is necessarily smaller in order to accommodate the more restrictive setbacks. At the present time, the proposed plan does not meet City requirements with respect to parking, setbacks, and landscaping.

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Councilmember Geiger asked if the height of the building would be restricted if none of the requirements were amended. Mr. Geisel stated that the building will be restricted economically. The net result of having the sky plane, the parking requirements, and the open space requirements will economically restrict the height of the building. He noted that because underground parking is very costly, the parking requirements can only be met by reducing the gross square footage of the building. Density can only be increased by providing additional parking, which must occur within the structure footprint and is, therefore, very costly. If the Committee chooses to impose a height limitation, Mr. Geisel suggested that it be referenced to Conway Road and not just a height above grade. Ms. Yackley stated Staff has looked into the issue of referencing the height, and felt that an existing utility marker on the road could be used as the reference point.

Councilmember Durrell stated that she did not have any problem with a three-story building for this site.

Zoning for the Site

Councilmembers Geiger, Durrell and Hurt felt that the requested zoning of "PC" is appropriate for the site.

Pathway on the Parkway

Councilmember Erickson stated that the Pathway on the Parkway does not extend across the bridge in this area, which is a concern to him. He asked how the Pathway would be affected once the subject site is re-graded.

Mr. Geisel stated that there is an easement being provided along Chesterfield Parkway for the Pathway. However, the overpass structure does not have any provisions for pedestrians, and a separate structure would be required.

Variance Requests

Councilmember Durrell expressed concern that the Petitioner is asking for variances to the open space, setback, and parking requirements. She felt that requesting three variances is asking for too much. It was pointed out to her, that at this time, the Committee is only being asked to approve the rezoning – not the building.

Councilmember Durrell felt that some leniency should be given to the Petitioner considering the small size of the property.

Left-Hand Turn

Councilmember Durrell felt that the possibility of a left-hand turn onto Conway Road would be beneficial.

Mr. Geisel stated that there is inadequate spacing between the Conway Road intersection and the ramp coming off the Highway. The signal on Conway Road is a County signal; the State signal is at the ramp coming off the Highway. The

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County will not allow a left-turn here. Mr. Geisel felt a left-turn would be dangerous and strongly cautioned the Committee against allowing such a turn.

Petitioner's Presentation

Mr. Randy Johnston, Architect for the Petitioner, stated that the City's Comprehensive Land Use Plan indicates that the urban core is to be the area of highest density in the City. He noted that open space in Chesterfield Valley is 30% while open space in the subject area is 45%. He felt that a true urban core has much less open space and much higher density with respect to the floor area ratio.

The Petitioner's desire is to create a gateway to the City but to include a profiled roof on the building to relate to the neighboring residences. When a profiled roof is used – such as a gabled roof – it increases the height of the roof. Some municipalities allow construction to go from the eave line to the ridge line. The middle point of that is considered the effective visual height of the building. With this type of calculation, the building would be about 50 feet above Conway Road as opposed to 65 feet. The Petitioner's desire was to have a building that had a commercial feel to it, but he also wanted it to relate architecturally to the residential area.

Regarding a possible left-hand turn, Mr. Johnston stated that MoDOT has indicated that they do not like the long, sweeping right-turn off of the Highway. One MoDOT employee felt that changing the geometry of the island and making a right-turn onto Chesterfield Parkway would give enough stacking room to make it workable.

Mr. Johnston noted that the small size of the property makes it very challenging to make a building pro-forma work.

Councilmember Geiger indicated that he and Councilmember Erickson would meet with Mr. Johnston before the next Council meeting to better understand what type of building is being proposed – especially with respect to the height.

Councilmember Hurt stated he may be willing to give up a little on the setback, open space, and parking requirements to keep the building height lower.

Access/Access Management

Councilmember Hurt complimented the Staff on the language used in the Attachment A with respect to the defeasible entrance.

Acquiring Property to the West of the Site

Mr. Johnston stated that the Petitioner has attempted to purchase the property to the west of the site but has not been successful.

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Acquiring Right-of-Way Property
Mr. Johnston stated that the Petitioner has made offers to both St. Louis County and MoDOT to acquire about 50 feet of their right-of-way. If acquired, the parking and open space issues are resolved with constructing a three-story building.

Mr. Geisel stated that if this property is acquired, it complicates the matter in that the rezoning is only for the parcel as it exists today. The newly-acquired parcel would not be included in the rezoning. Accordingly, if additional property is purchased and included in the site plan, the revised site may have to return to both the Planning Commission and the Planning & Zoning Committee.

Councilmember Hurt made a motion to forward P.Z. 16-2006 Conway Point Office Building (Nelson McBride Development) to City Council with a recommendation to approve with the understanding that Council will include an amendment for height restriction in the Attachment A. The motion was seconded by Councilmember Geiger and **passed by a voice vote of 4 to 0**.

> **Note: One bill, as recommended by the Planning Commission, will be needed for the May 7, 2007 City Council Meeting. See Bill #**

[Please see the attached report, prepared by Mike Geisel, Acting Director of Planning, for additional information on P.Z. 16-2006 Conway Point Office Building (Nelson McBride Development).]

C. P.Z. 03-2007 Chesterfield Retail Center: A request for a change of zoning from an "M3" Planned Industrial District to a "PC" Planned Commercial District for an approximately 2.045 acres of land located at 17670 and 17680 Chesterfield Airport Road east of the intersection of Chesterfield Airport Road and Chesterfield Industrial Boulevard.

Staff Report
Ms. Yackley stated that the rezoning request was approved by the Planning Commission by a vote of 8 to 0. The following two modifications were made to the Attachment A:

- Drive-thru facilities are prohibited for any of the permitted uses.
- A typographical error was corrected changing the open space requirement to 40% vs. 45%.

Planning Commission Report
Planning Chair Hirsch stated that the issue of drive-thru facilities was site-specific. The Commission felt that the site was too constricted to have any drive-thru facilities. The Petitioner was agreeable to eliminating drive-thru facilities.

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DISCUSSION

Access

Mr. Geisel stated that the presented Plan was revised because the Fire Department wanted access to Chesterfield Airport Road for emergency vehicles. Staff did not feel access should be permitted to Chesterfield Airport Road and instructed the Petitioner to revise their Plan to have access from Chesterfield Industrial Boulevard. The existing Attachment A does not permit any access – even emergency access – to Chesterfield Airport Road. Mr. Geisel encouraged the Committee to prohibit access to Chesterfield Airport Road.

Councilmember Hurt concurred with the proposed access.

Mr. Geisel pointed out that the Site Plan does not meet the required criteria because of the access drive. The building may have to be shortened on the east side to allow the fire trucks to get around it.

If the City were to grant emergency access to Chesterfield Airport Road, the Fire District agreed to restrict it with an emergency access gate.

Cross Access

Mr. Geisel stated that the subject site is sandwiched between Regions Bank and the Chamber of Commerce offices. There is a driveway adjacent to the Regions Bank off of Chesterfield Industrial Boulevard that serves both parcels. This is the cross access that exists to access the subject parcel.

There is no cross access to the south or east. There is a major drainage channel that exists on the east and there is an existing site on the south.

Councilmember Hurt made a motion to amend the Attachment A to include cross access to the south parcel at the direction of the City. The motion was seconded by Councilmember Geiger and **passed by a voice vote of 4 to 0.**

Zoning for the Site

Councilmember Hurt felt that "PC" zoning is inappropriate since the site is surrounded by "PI" zoning. He asked which uses would be eliminated under "PI" zoning. Ms. Yackley stated the following uses would not be allowed under "PI":

- Barber shops and beauty salons
- Bookstores
- Dry cleaning drop-off and pick-up stations

Ms. Aimee Nassif, Senior Planner, stated that "PI" Districts do not have any special performance standards. The "PC" requirements for open space, parking, height, and setbacks would not pertain to "PI" zoning. Councilmember Hurt stated that the City would be able to dictate the requirements under "PI".

Chair Fults did not feel it would be beneficial to lose all the performance standards under the "PC" zoning. She noted that other "PC" zoning is right down

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the street from the subject site. Councilmember Hurt felt this would be "chipping away" at the "PI" zoning in the area.

Planning Chair Hirsch stated that the Comprehensive Plan allows both "PC" and "PI" zoning throughout this entire area. The Planning Commission had no issue with the site being zoned "PC".

The architect for the Petitioner stated that the owner purchased the property for the specific use of a beauty salon.

Councilmember Hurt stated that the City's growth has always been dependent upon a good mix of zoning. He expressed concern that "PC" zoning is increasing in relation to "PI" zoning. He felt that too much "PC" zoning will eventually result in vacancies in the City because of too much competition and not enough "PI" to support it.

Chair Fults stated that as one heads towards the Airport, there is nothing but "PI" zoning.

Councilmember Durrell felt the "PC" zoning would be supported by the employees working in the "PI" Districts.

If the site was zoned "PI", Councilmember Hurt asked whether a Conditional Use Permit procedure would allow a beauty salon on the subject site. Ms. Nassif replied that the Conditional Use Permit procedure does not allow a beauty salon as a permitted use.

Parking
The site requires 66 parking spaces and the Petitioner is requesting 87 spaces, which calculates to 5.5 spaces/1000 sq. ft. of gross floor area.

Councilmember Geiger asked why there is excess parking on the site. The Architect for the site felt that the use of beauty salon would need this much parking.

Mr. Geisel pointed out that when MSD implements its storm water impervious charge, it may encourage petitioners to reduce the number of parking spaces. MSD charges will be based upon total impervious area.

Councilmember Geiger made a motion to forward P.Z. 03-2007 Chesterfield Retail Center, as amended, to City Council with a recommendation to approve with the stipulation that there be a proviso questioning the over-parking of the site,. The motion was seconded by Councilmember Durrell and **passed by a voice vote of 3 to 1**. (Councilmember Hurt voted "no" noting that he feels "PI" District is the appropriate zoning for this site.)

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Note: One bill, as recommended by the Planning Commission, will be needed for the May 7, 2007 City Council Meeting. See Bill #

[Please see the attached report, prepared by Mike Geisel, Acting Director of Planning, for additional information on P.Z. 03-2007 Chesterfield Retail Center.]

D. P.Z. 08-2007 Chesterfield Valley Power Sports (17501 N. Outer 40 Road): A request for an amendment to City of Chesterfield Ordinance 1372 to allow for a two-story building in this "C-8" Planned Commercial District. (17U510051)

Staff Report

Ms. Aimee Nassif, Senior Planner, stated the Ordinance Amendment request is to allow for the construction of a two-story building. The existing Ordinance limits the building height to one-story.

The Public Hearing was held on March 12, 2007, which raised the issue of outdoor display of some equipment. As a result, the Ordinance was amended to allow outdoor display of no more than six vehicles. The Planning Commission approved the Ordinance Amendment by a vote of 9 to 0.

Planning Commission Report

Planning Chair Hirsch reported that the Commission asked that the Attachment A reference the building sides as east, west, north and south to avoid confusion of what is considered the front and back of the building. He noted that the front of the building is on the north side with the back of the building on the south side. The vehicles are being displayed on the south side of the building.

The Planning Commission also had some discussion about the paved area on the south side of the building. This area is not a sidewalk – it was included as a staging area to display the vehicles.

The Commission also discussed circulation of the site with respect to large trucks. The Commission was satisfied with the responses received.

DISCUSSION

Outdoor Display

Chair Fults noted that the Petitioner had indicated by letter that he would only display new or current-year models outside and she requested that this be part of the motion to approve.

Councilmember Durrell asked where the display vehicles would be stored at night. The Petitioner replied that they would be taken inside. It was noted that

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the garage doors shown on the building picture are on the north side facing the levee.

Building Height

Councilmember Hurt expressed reservations about raising the building height. If the proposed building is no higher than the neighboring Outdoor Storage building, he stated he would not object to the proposed second story.

Planning Chair Hirsch stated that the building is set back 50 feet from the North Outer Road and even further from Highway 40.

Councilmember Hurt asked Mr. Geisel to check the height requirements in the Ordinance for the Outdoor Storage building.

Councilmember Geiger made a motion to amend the Attachment A to permit only new or current-year models for outdoor display, and to forward P.Z. 08-2007 Chesterfield Valley Power Sports (17501 N. Outer 40 Road) to City Council with a recommendation to approve. The motion was seconded by Councilmember Durrell and **passed by a voice vote of 4 to 0**.

Note: One bill, as recommended by the Planning Commission, will be needed for the May 7, 2007 City Council Meeting. See Bill #

[Please see the attached report, prepared by Mike Geisel, Acting Director of Planning, for additional information on P.Z. 08-2007 Chesterfield Valley Power Sports (17501 N. Outer 40 Road).]

E. P.Z. 09-2007 City of Chesterfield (Beckemeier Property): A request for a change of zoning from "NU" Non-Urban District to "PS" Park and Scenic for two (2) parcels located on the north side of Olive Boulevard, directly west of the Mansions at Spyglass Summit Subdivision. Total area to be rezoned: 48.748 acres 14401 and 14415 Olive Boulevard (16R220194 and 16R220206)

DISCUSSION

Plans for the Site

Mr. Geisel stated that he has received plans for the parking lot and it is not in the housing area. The plans show a paved lot of nine parking spaces over the existing roadway.

The trails proposed at this time by the Department of Conservation rim the bluff line; they do not go to the bottom of the bluff.

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Two Council Readings
Councilmember Durrell suggested two readings on this petition at the next City Council meeting. After discussion, the Committee agreed not to have two readings at the next Council meeting.

Councilmember Hurt made a motion to forward P.Z. 09-2007 City of Chesterfield (Beckemeier Property) to City Council with a recommendation to approve. The motion was seconded by Councilmember Durrell and **passed by a voice vote of 4 to 0**.

Note: One bill, as recommended by the Planning Commission, will be needed for the May 7, 2007 City Council Meeting. See Bill #

[Please see the attached report, prepared by Mike Geisel, Acting Director of Planning, for additional information on P.Z. 09-2007 City of Chesterfield (Beckemeier Property).]

F. Selection of Officers and Committee Assignments

The following Officers and Committee Assignments were agreed upon:

- Planning Commission Liaison – Connie Fults
- Vice Chair of Planning & Zoning Committee – Dan Hurt
- Landmarks Preservation Commission – Jane Durrell
- Board of Adjustment – Bruce Geiger

IV. PENDING PROJECTS/DEPARTMENTAL UPDATE

V. ADJOURNMENT

The meeting adjourned at 6:55 p.m.

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II. A.

City of Chesterfield

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

May 1, 2007

Planning and Zoning Committee
City of Chesterfield
690 Chesterfield Pkwy W
Chesterfield, MO 63017

RE: **P.Z. 5-2005 Winter Wheat Place (Dollar Building Company):** a request for a change of zoning from "NU" Non-Urban District to E-One Acre for a 4.0 acre tract of land located on Winter Wheat Road, 3000 feet southeast of the intersection of Wild Horse Creek Road and Long Road. (18U220092)

Dear Planning and Zoning Committee:

At its April 16, 2007 meeting, the City Council referred the above-referenced petition to the Planning and Zoning Committee for discussion.

This item was previously reviewed by the Planning Commission and recommended for approval at their January 22, 2007 session by a vote of 6 to 1.

The Planning and Zoning Committee reviewed P.Z. 5-2005 on March 3, 2007. According to the official meeting summary, the Committee took the following action:

> **"Based on the fact that the subject petition is not in character with the majority of the surrounding neighborhoods, Councilmember Flachsbart made a motion to deny P.Z. 5-2005 Winter Wheat Place (Dollar Building Company) with a recommendation that the Petitioner consider LLR zoning. The motion was seconded by Councilmember Hurt and passed by a voice vote of 4 to 0."**

Attached please find a draft Attachment A for an "E-Two Acre" District.

Respectfully Submitted,

Annissa McCaskill-Clay

Annissa G. McCaskill-Clay, AICP
Assistant Director of Planning

Cc: Michael G. Herring, City Administrator
Robert Heggie, City Attorney
Michael O. Geisel, Acting Director of Planning
Jeff Paskiewicz, Civil Engineer

ATTACHMENT A

In keeping with the following Comprehensive Plan policies, these conditions have been developed:

- 1.2 Adherance to the Plan
- 2.1 Quality Residential Development
- 2.1.1 Conservation of Existing Quality of Life
- 2.1.3 Encourage Preservation of Existing Residential Neighborhoods
- 2.1.4 Compatible In-Fill Residential Construction
- 7.2.9 Access Management
- 8.2.2 Underground Electric Service
- 8.3 Stormwater Management

I. SPECIFIC CRITERIA

A. Information to be shown on the Site Development Concept Plan shall be limited to those conditions specified in Section A, General Criteria-Concept Plan. Site Development Plans and Site Development Section Plans shall adhere to specific design criteria.

B. Definitions

1. **Site Development Concept Plan is a conceptual plan for development in a planned district being done in phases. A concept plan provides an overall picture of a development that is being divided into sections to be developed in phases.**

2. **A Site Development Section Plan is a plan for development for sections of the overall concept plan.**

3. **Site Development Plan is a plan for development in planned districts that is being done in one phase.**

C. PERMITTED USES

1. The use allowed this "E-Two Acre" District shall be:

   a. Single Family detached homes

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2. The above uses in the E Two Acre District shall be restricted as follows:
   a. The average lot size shall be 2 acres.
   b. The minimum lot size shall be no less than one (1) acre (43,560 square feet). .

D. LOT SIZE, HEIGHT, BUILDING AND PARKING STRUCTURE REQUIREMENTS

1. HEIGHT

   a. The maximum height of the detached single family homes shall be fifty (50) feet.

E. STRUCTURE SETBACKS

1. STRUCTURE SETBACKS

   No building or structure, other than a freestanding subdivision monument sign, boundary and retaining walls, light standards, flag poles or fences will be located within the following setbacks:

   a. Seventy-five feet from the northern boundary (N0°55'22"W) of the "E-Two Acre" District.

   b. The Site Development Plan shall provide clearing lines for each lot which shall in total meet the 39% preserved woodland as set out in G.1.

2. LOT CRITERIA

   In addition to the above-referenced requirements, no building or structures other than boundary and retaining walls, light standards, flag poles or fences, the following lot criteria shall apply:

   a. Front yard: Twenty-five (25) feet from the Winter Wheat Road easement on the western boundary of the "E-Two Acre" District.

   b. Side yard: Twenty (20) feet from the side property line.

      i. A minimum of forty (40) feet must be maintained between structures.

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c. Rear yard setback: Twenty-five (25) feet from the rear property line. .

F PARKING REQUIREMENTS

1. Construction Parking

   a. Provide adequate off-street stabilized parking area(s) for construction employees and a washdown station for construction vehicles entering and leaving the site in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.

   b. No construction related parking shall be permitted within the Winter Wheat Drive roadway easement.

G. LANDSCAPE AND TREE REQUIREMENTS

1. A minimum of 39% of the existing tree cover shall be maintained.

2. The development of the subject site shall adhere to the requirements of the City of Chesterfield Tree Manual.

3. Driveways and parking in the proposed development shall be located in such a way that Tree #3, Tree#7 and Tree #9 and their root systems are not disturbed or destroyed.

4. Provide tree protection techniques such as fencing and possible branch pruning toward new house, and root pruning or others as directed by the City of Chesterfield in order to preserve Tree #22 or Tree #24 as shown on the Preliminary Tree Stand Delineation.

H. SIGN REQUIREMENTS

1. Ornamental Entrance Monument construction, if proposed, shall be reviewed by the City of Chesterfield for sight distance considerations prior to installation or construction.

2. No advertising signs, temporary signs, portable signs, off site signs, or attention getting devices shall be permitted in this development.

3. Signs shall be permitted in accordance with the regulations of the City of Chesterfield Code.

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I. ACCESS/ACCESS MANAGEMENT

1. Provide a fifty (50) foot wide private roadway easement or other appropriate legal instrument(s) guaranteeing permanent access to the adjacent properties that currently utilized Winter Wheat Road for access.

J. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. Provide all temporary and permanent easements or other legal instruments necessary to provide for the future improvements to Cripple Creek Road and Winter Wheat Road.

2. Provide engineering plans, profiles and cross-sections to construct future improvements to Winter Wheat Road along the entire frontage of the site to provide a 24 foot wide pavement, and storm drainage facilities, as directed by the Department of Public Works. The existing pavement shall be cored to verify that it meets City Standards. If it is determined that the existing pavement section does not meet City standards, the existing pavement will have to be brought up to City standards, as directed by the Department of Public Works. This work may include adding an asphalt overlay or may involve the complete reconstruction of the road.

K.. POWER OF REVIEW

Either Councilmember of the Ward where a development is proposed, or the Mayor, may request that the site plan be reviewed and approved by the entire City Council. This request must be made no later than twenty-four (24) hours before posting the agenda for the next City Council meeting after Planning Commission review and approval of the site plan. The City Council will then take appropriate action relative to the proposal.

L. STORMWATER AND SANITARY SEWER

1. Provide public sewer service for the site, including sanitary force main, gravity lines and/or regional pump stations, as directed by the City of Chesterfield and the Metropolitan St. Louis Sewer District.

DRAFT

2. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point or an adequate piped system.

3. Detention/retention and other storm water quantity and quality management measures may be required and if deemed necessary, are to be provided in each watershed as required by the City of Chesterfield. The storm water quantity management facilities, related to flood and channel protection, shall be operational prior to paving of any driveways or parking areas in non-residential developments or issuance of building permits exceeding sixty (60%) of the approved dwelling units in each plat, watershed or phase of residential developments. The location and types of storm water management facilities shall be identified on the Site Development Plan.

M. ROADWAY IMPROVEMENTS AND CURB CUTS.

Obtain approval from the City of Chesterfield Department of Public Works for the locations of proposed curb cuts, areas of new dedication, and roadway improvements.

N. MISCELLANEOUS

1. All utilities will be installed underground. The development of this parcel will coordinate the installation of all utilities in conjunction with the construction of any roadway on site.

II. TIME PERIOD FOR SUBMITTAL OF SITE DEVELOPMENT PLANS AND SITE DEVELOPMENT CONCEPT PLANS

A. The developer shall submit a Site Development Plan within eighteen (18) months of City Council approval of the Preliminary Development Plan. This requirement shall be accomplished prior to issuance of building permits.

B. Failure to comply with these submittal requirements will result in the expiration of the preliminary development plan and will require a new public hearing.

C. The submission of Amended Site Development Plans by sections of this project to the Planning Commission shall be permitted if this option is utilized.

D. Where due cause is shown by the developer, this time interval for plan submittal may be extended through appeal to and approval by the Planning Commission.

DRAFT

III. COMMENCEMENT OF CONSTRUCTION

A. Substantial construction shall commence within two (2) years of approval of the site development concept plan or site development plan, unless otherwise authorized by ordinance. Substantial construction means final grading for roadways necessary for first approved plat or phase of construction and commencement of installation of sanitary storm sewers.

B. Where due cause is shown by the developer, the Commission may extend the period to commence construction for not more than one additional year.

IV. TRUST FUND CONTRIBUTION

A. The developer will contribute to the Eatherton-Kehrs Mill Road Trust Fund as directed. This contribution will not exceed an amount established by multiplying the ordinance required parking spaces by the following rate schedule:

Type of Development	Required Contribution
S.F. Dwelling	$879.10/parking space

(Parking spaces as required by the City of Chesterfield Code.)

If types of development differ from those listed, the Department of Highways and Traffic will provide rates.

Credits for roadway improvements will be as approved by the City of Chesterfield and/or St. Louis County Department of Highways and Traffic.

If this development is located within a trust fund area, any portion of the traffic generation assessment contribution which remains following completion of road improvements required by the development will be retained in the appropriate trust fund.

The amount of this required contribution, if not submitted by January 1, 2006 will be adjusted on that date and on the first day of January in each succeeding year thereafter in accordance with the construction cost index as determined by the St. Louis County Department of Highways and Traffic.

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V. RECORDING

Within sixty (60) days of approval of any development plan by the City of Chesterfield, the approved Plan will be recorded with the St. Louis County Recorder of Deeds. Failure to do so will result in the expiration of approval of said plan and require re-approval of a plan by the Planning Commission.

VI. VERIFICATION PRIOR TO IMPROVEMENT PLAN APPROVAL

Prior to improvement plan approval, the developer will provide the following:

1. Comments/approvals from the appropriate Fire District, Spirit of St. Louis Airport, and the Metropolitan St. Louis Sewer District.

2. Copies of recorded easements for off-site work, including book and page information, will be provided.

VII. GENERAL DEVELOPMENT CONDITIONS

All streets within this development shall be private and remain private forever. Private street signage, in conformance with Section 1005.180 of the Subdivision Ordinance, shall be posted within 30 days of the placement of the adjacent street pavement.

VIII. ENFORCEMENT

1. The City of Chesterfield, Missouri will enforce the conditions of this ordinance in accordance with the Site Development Plan approved by the City of Chesterfield and the terms of this Attachment A.

2. Failure to comply with any or all the conditions of this ordinance will be adequate cause for revocation of permits by issuing Departments and Commissions.

3. Non-compliance with the specific requirements and conditions set forth in this Ordinance and its attached conditions or other Ordinances of the City of Chesterfield shall constitute an ordinance violation, subject, but not limited to, the penalty provisions as set forth in the City of Chesterfield Code.

4. Waiver of Notice of Violation per the City of Chesterfield Code.

5. This document shall be read as a whole and any inconsistency to be integrated to carry out the overall intent of this Attachment A.

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III. A.

BILL NO. _____ **ORDINANCE NO. _____**

AN ORDINANCE PERTAINING TO RESIDENTIAL REAL ESTATE OPEN HOUSE SIGNS; ESTABLISHING RULES FOR THE REGULATION AND PLACEMENT OF RESIDENTIAL REAL ESTATE OPEN HOUSE SIGNS WITHIN THE CITY OF CHESTERFIELD, MISSOURI.

WHEREAS, the City Council of the City of Chesterfield had previously prohibited residential real estate open house signs except for those located on the property to be sold; and

WHEREAS, the presence of residential real estate open house signs may be disruptive and lead to visual clutter within they City; and

WHEREAS, the residential real estate open house signs can, if limited in their scope and placement, help direct customers to homes for sale; and

WHEREAS, placing certain limits and regulations upon residential real estate open house signs is in the best interest of the community.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. **Definitions**. For purposes of this Ordinance the following definitions shall apply:

"Residential Real Estate Open House Sign" shall mean a temporary sign that solely indicates that residential property, or portion thereof, is for sale or lease and provides directions to the property and "open house" information.

Section 2. **Residential Real Estate "Open House" Signs on Public Streets**.

(a) Residential Real Estate Open House Signs may be placed in accordance with the restrictions on signs set forth in this section.

(b) All Residential Real Estate Open House Signs are subject to the following conditions:

1. Size. The total face area of the signs shall not exceed three (3) square feet in size.

2. Height. The vertical distance measured from ground level to the highest point of such sign or sign structure or other support shall not exceed three (3) feet.

3. Local address. Signs shall only advertise a residence in the City of Chesterfield.

4. Limit. No more than six (6) signs per property for sale or lease shall be posted.

5. Type. Signs shall be mounted either on stakes placed in the ground or with an A-frame support of sufficient weight so that the sign remains upright when mounted. Signs and any supporting structures shall be maintained in good condition at all times and shall be constructed out of quality materials normally used in professional signage.

6. Location. No sign shall be placed, used or maintained in the following manners:

   (1) on trees, traffic signs or utility poles, nor be placed in such a manner as to obstruct the view of any official public sign.

   (2) if the location obstructs the safe and convenient use by the public of any street, sidewalk, or curbside parkway area.

   (3) in any roadway area or center median area.

   (4) at any location whereby the clear space for the passageway of pedestrians is reduced to a width that violates the American with Disabilities Act.

   (5) on streets undergoing construction, nor on streets with special events.

   (6) within five (5) feet of any of the following: driveway; traffic signal; traffic sign; designated bus stop sign; bus bench or any other bench on the sidewalk.

Section 3. Residential Real Estate Open House Signs shall only be displayed during the "open house" and shall not be displayed earlier than 8:00 a.m. and must be removed no later than dusk or 6:00 p.m., whichever is earlier.

Section 4. Identification Required. Every person who places or maintains a Residential Real Estate Open House Sign on the streets of the City of Chesterfield shall have his or her name, address, and telephone number affixed to the sign.

Section 5. Any sign installed, placed or deposited in violation of the provisions of this Ordinance may be summarily removed by the City.

Section 6. This Ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____day of _____, 2007.

_____
MAYOR

ATTEST:

_____
CITY CLERK

First Reading held on _____

III. B.

City of Chesterfield

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

April 25, 2007

Planning and Zoning Committee
City of Chesterfield
690 Chesterfield Pkwy W
Chesterfield, MO 63017

RE: **P.Z. 28-2006 Chesterfield Neighborhood Office Park (17655 and 17659 Wild Horse Creek Road):** A request for a change of zoning from "NU" Non-Urban to "PC" Planned Commercial District with a "WH" Wild Horse Creek Road Overlay for 8.04 acre tract of land located north of Wild Horse Creek Road and west of Long Road.

Dear Planning and Zoning Committee:

At the April 24, 2007 City of Chesterfield Planning Commission meeting, a recommendation for approval of the above-referenced matter was approved by a vote of 8-1.

The Attachment A for this rezoning was approved with revisions made to include provisions for phantom parking, roadway improvements, building square footage and a modification in the parking requirement.

Attached please find a copy of the Department report and Attachment A as approved by the Planning Commission.

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Respectfully submitted,

Aimee E. Nassif
Senior Planner of Zoning Administration

Cc: Michael G. Herring, City Administrator
Rob Heggie, City Attorney
Michael O. Geisel, Director of Public Works / City Engineer/Acting Director of Planning

VIII. A.

City of Chesterfield

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Planning Commission Staff Report

Meeting Date: April 11, 2007

From: Aimee Nassif, Senior Planner of Zoning Administration

Subject: Rezoning Vote Report

Location: 17655 and 17659 Wild Horse Creek Road

Petition: P.Z. 28-2006 Chesterfield Neighborhood Office Park

Proposal Summary

Rodney Henry has submitted an application for a change of zoning from "NU" Non Urban to a "PC" Planned Commercial District with the "WH" Overlay per the regulations of the City of Chesterfield Zoning Ordinance Section 1003.140 and Section 1003.110. The site is located north of Wild Horse Creek Road and west of Long Road in the area known as the "bowtie" area.

In addition, the petitioner is also requesting consideration of a reduction in the parking requirements for the site. The "WH" Overlay District regulations require a maximum of nine (9) parking spaces. The Petitioner is requesting modification to allow for 188 parking spaces.

Staff Recommendation

The Attachment A for this request meets all of the development requirements of the City of Chesterfield and therefore, Staff recommends approval of the change of zoning from "NU" Non-Urban District to a "PC" Planned Commercial District.

Section 1003.110 allows for the parking requirement to be modified when the Petitioner has demonstrated good architecture and urban planning. A separate two-thirds vote (6) of the Planning Commission would be required.

Zoning Analysis
A preliminary plan accompanies all rezoning requests when the change of zoning is to a Planned District. When a vote is taken on a rezoning request, the vote is to approve the change of zoning with an Attachment A written by Staff.

The vote is not to approve the accompanying preliminary plan which is provided for informational purposes only.

While preparing the Attachment A for this development, Staff reviewed the conditions established in the Comprehensive Plan and Zoning Ordinance. The Attachment A requires that this development will adhere to the requirements of both.

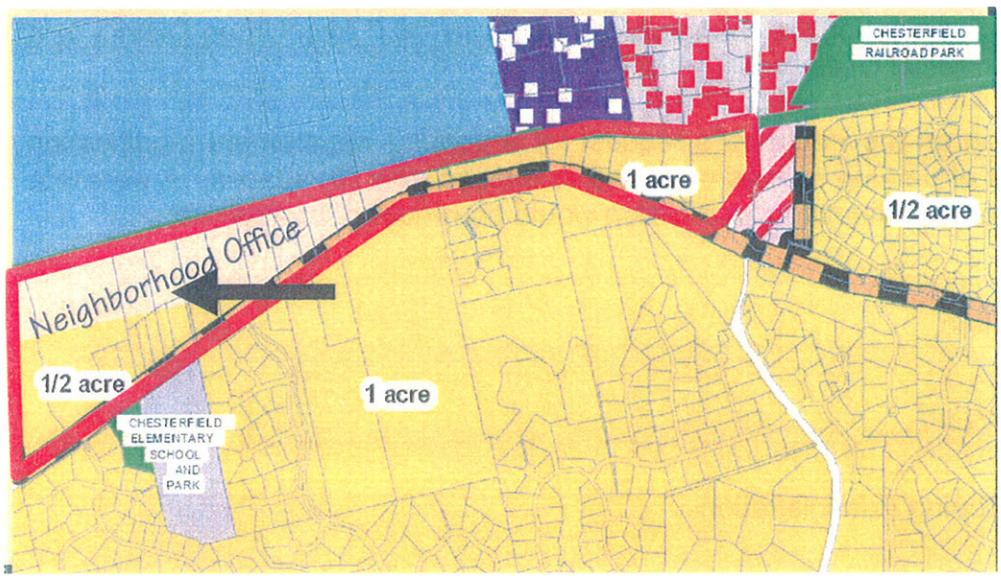
Surrounding Land Use and Zoning
The land use and zoning for the properties surrounding this parcel are as follows:

North: The property to the north is Spirit of St. Louis Airport and is zoned "M-3" Planned Industrial District.
South: The property to the south is the Wild Horse Child Care Center and is zoned "E-Half" Estate Half Acre District.
East: The property to the east is zoned "NU" Non-Urban District.
West: The property to the west is zoned "NU" Non-Urban District.

Looking north, across subject site.

Comprehensive Plan Analysis

The subject site is located within Ward 4 of the City of Chesterfield. The Comprehensive Plan designates this area as being a part of the Wild Horse Creek Road Overlay District. This district allocated this area as being Neighborhood Office with a "PC" Planned Commercial District.



Site Area History

The site is currently zoned "NU" Non-Urban. A previous request was submitted for rezoning for this site to "PC" Planned Commercial in 2004. That request known as, P.Z. 13-2004 Vision Ventures was denied by City Council on September 7, 2005.

Issues

A public hearing was held on this request on December 11, 2006. At that time there were 4 speakers in favor of this matter and 1 speaker in opposition. Since that time, all issues have been addressed with the exception of the request for parking modification.

The subject site is located within the Wild Horse Creek Road Sub Area. This sub area requires that each development contain a maximum of nine (9) parking spaces. The Petitioner is requesting a modification to this requirement to permit additional parking spaces.

The Wild Horse Creek Road Sub Area Ordinance states that modifications to this requirement will be granted for good architecture and urban planning. Said modification requires a two-thirds vote of the Planning Commission.

For your consideration of this modification, the Petitioner has submitted an Alternative Preliminary Plan. This plan has been included in your packet for your review.

Request

Staff recommends approval of the change of zoning from "NU" Non-Urban District to a "PC" Planned Commercial District with a "WH" Overlay.

Staff requests action on the Petitioner's request for a parking requirement modification to allow for amount of parking spaces permitted to exceed nine (9) spaces. A separate two-thirds vote (6) of the Planning Commission would be required for approval.

Respectfully submitted,

Aimee Nassif
Senior Planner of Zoning Administration

Attachments

1. Attachment A
2. Letter from Petitioner
3. Preliminary Plan
4. Alternative Preliminary Plan

PRINCIPALS
PAUL K. BOYER, P.E.
BRANDON A. HARP, P.E.

CIVIL ENGINEERING DESIGN CONSULTANTS, INC.
11402 GRAVOIS ROAD • SUITE 100 • SAINT LOUIS • MISSOURI 63126
314.729.1400 • FAX 314.729.1404 • E-MAIL INFO@CEDC.NET • WWW.CEDC.NET

RECEIVED
APR 11 2007
PLANNING
DEPARTMENT

April 11, 2007

Ms. Aimee Nassif
City of Chesterfield
Department of Planning
690 Chesterfield Parkway West
Chesterfield, Missouri 63017-0670

RE: <u>P.Z. 28-2006 Chesterfield Neighborhood Office Park (17655 and 17659 Wild Horse Creek Road):</u> A request for a change of zoning from "NU" Non-Urban to "PC" Planned Commercial District with a "WH" Wild Horse Creek Road Overlay for 8.04 acre tract of land located north of Wild Horse Creek Road and west of Long Road.
(CEDC Project No. 0554)

Dear Ms. Nassif:

The current plan dated 01-30-07 addresses all issues and concerns expressed by staff and the commission. Should the current plan be unsatisfactory, we have proposed an alternate plan. The Alternate Preliminary Development Plan dated 04-04-07, that we are proposing is an alternate to the plan currently being considered by the Commission. The comparisons of the two plans are as follows:

	Current Plan dated (01-30-07)	Alternate Plan (04-04-07)
1. Building S.F	48,000	40,000
2. Open Space	58%	65%
3. F.A.R.	0.15	0.13
4. Parking Spaces	188	158

In addition, the alternate plan has delineated the parking along the south property line to be phantom parking. This parking is not planned for immediate development, but will only be constructed if required by future users of the property.

Finally, the proposal of the alternate plan is based on the premise that half of the required east-west public road development along our site frontage will be financed by others.

Please call should you have any questions or require additional information.

Sincerely,
Civil Engineering Design Consultants, Inc.

Brandon A. Harp, P.E.
Principal

ATTACHMENT A

All provisions of the City of Chesterfield City Code, including both the Planned Commercial "PC" District and Wild Horse "WH" Overlay District requirements, shall apply to this development except as specifically modified herein.

I. SPECIFIC CRITERIA

A. Information to be shown on the Site Development Concept Plan shall adhere to conditions specified under General Criteria-Concept Plan. Site Development Plans and Site Development Section Plans shall adhere to specific design criteria.

B. PERMITTED USES

1. The uses allowed in this "PC" District with "WH" Overlay shall be:

   a. Professional, business, government or institutional office;
   b. Medical and dental office, excluding surgical centers;
   c. Parks, parkways, and playgrounds, public or private not-for-profit;
   d. Forest and wildlife reservations including conservation projects.

C. FLOOR AREA, HEIGHT, BUILDING AND PARKING STRUCTURE REQUIREMENTS

1. BUILDING REQUIREMENTS

   a. A minimum of fifty seven percent (57%) openspace is required for this development.

   b. There shall be a maximum of four (4) buildings on this site. The maximum square footage shall not exceed 48,000 square feet.

   c. Floor Area Ratio: F.A.R. is the gross floor area of all buildings on a lot divided by the total lot area. This square footage does not include any structured or surface parking. Planning Commission may request two (2) calculations: one (1) calculation for those areas above grade and another that includes building area below grade.

      This development shall have a maximum F.A.R. of (.15)

D. SETBACKS

1. STRUCTURE SETBACKS

   No building, structure or retaining wall (over six feet in height), other than: a freestanding project identification sign, light standards, flag poles or fences will be located within the following setbacks:

   a. Eighty (80) feet from the right-of-way of the east west roadway system on the southern boundary of the PC District.

   b. One hundred and fifteen (115) feet from the northern boundary of the PC District.

   c. Thirty (30) feet from the eastern and western property lines of the PC District. The structure overhangs shall maintain a setback of twenty five (25) feet.

2. PARKING SETBACKS

   No parking stall, loading space, internal driveway, or roadway, except points of ingress and egress, will be located within the following setbacks:

   a. Twenty (20) feet from the right-of-way of the east west roadway system.

   b. Thirty (30) feet from the eastern and western property lines of the PC District.

   c. One hundred and ten (110) feet from the northern boundary of the PC District.

E. PARKING AND LOADING REQUIREMENTS

1. Parking and loading spaces for this development will be as required in the City of Chesterfield Code.

2. Construction Parking

   a. The streets surrounding this development and any street used for construction access thereto shall be cleaned throughout the day. The developer shall keep the road clear of mud and debris at all times.

b. Provide adequate off-street stabilized parking area(s) for construction employees and a washdown station for construction vehicles entering and leaving the site in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.

3. Parking lots shall not be used as streets.

4. No parking shall be permitted along the future loop road and the developer shall post signs accordingly. The parking restriction and requirement for signage shall be indicated on the Site Development Plan and improvement plans. Signage shall be posted within thirty (30) days of the placement of the street pavement.

F. LANDSCAPE AND TREE REQUIREMENTS

1. The developer shall adhere to the Tree Manual of the City of Chesterfield Code.

2. Landscaping, if proposed in the right-of-way, shall be reviewed by the City of Chesterfield, and/or the St. Louis County Department of Highways and Traffic, or any other applicable agency.

G. SIGN REQUIREMENTS

1. Sign package submittal materials shall be required for this development. All sign packages shall be reviewed and approved by the City of Chesterfield Planning Commission.

2. Ornamental Entrance Monument construction, if proposed, shall be reviewed by the City of Chesterfield, and/or the St. Louis County Department of Highways and Traffic, for sight distance considerations prior to installation or construction.

H. LIGHT REQUIREMENTS

1. Provide a lighting plan and cut sheet in accordance with the City of Chesterfield Code.

I. ARCHITECTURAL

1. The developer shall submit architectural elevations, including but not limited to, colored renderings and building materials. Architectural information is to be reviewed by the Architectural Review Board and the Planning Commission.

2. Building facades should be articulated by using color, arrangement or change in materials to emphasize the facade elements. The planes of the exterior walls may be varied in height, depth or direction. Extremely long facades shall be designed with sufficient building articulation and landscaping to avoid a monotonous or overpowering appearance.

3. Trash enclosures: The location and elevation of any trash enclosures will be as approved by the Planning Commission on the Site Development Plan. All exterior trash areas will be enclosed with a six (6) foot high sight-proof enclosure complimented by adequate landscaping approved by the Planning Commission on the Site Development Plan. The material will be as approved by the Planning Commission in conjunction with the Site Development Plan.

4. Mechanical equipment will be adequately screened by roofing or other material as approved by the Planning Commission.

J. ACCESS/ACCESS MANAGEMENT

1. A maximum of two drive entrances shall be permitted along the north side of the East/West connector roadway. Access to the drive entrances shall be designed to support a Single Unit Truck radius of 42 feet at a minimum.

K. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. Provide a minimum of a 40 foot right of way, with 10 foot minimum roadway improvement, maintenance, utility, drainage and sidewalk easements on both sides from the eastern to the western property lines of this development. The intersection of the right of way at the eastern property line shall be a minimum of 440 feet north of the Wild Horse Creek Road right of way. The right of way and easements shall also be placed along the western property line as directed by the City of Chesterfield's Department of Public Works. In addition, the right of way and roadway easements shall also coincide with the adjacent developments access on the east and west sides of this site in accordance with the roadway concept plan. The centerline radius shall be a minimum of 275 feet. Construct a minimum of twenty six foot pavement with seven foot shoulders on both sides and appurtenant storm drainage facilities as required by the City of Chesterfield Department of Public Works. Additional pavement widening to support a center turn lane may be required by the Department of Public Works.

2. Stub street signage, in conformance with Section 1005.180 of the Subdivision Ordinance, shall be posted within 30 days of the street pavement being placed.

3. All roadway and related improvements shall be constructed prior to 50% of the building permits within the development being issued.

4. Install street trees and street lights along both sides of the future loop road as directed by the City of Chesterfield.

5. A special cash escrow may be required prior to improvement plan approval for the extension of the public street to the east and west property lines as needed.

6. Provide a five (5) foot wide sidewalk, conforming to ADA standards, along the future loop road as directed by the City of Chesterfield.

7. Ingress and egress must conform to MoDOT's Access Management Guidelines and must be reviewed and approved by MoDOT. Any improvements within MoDOT's right-of-way will require permit. The entrance geometrics and drainage design shall be in accordance with MoDOT standards.

8. The petitioner shall provide adequate detention and/or hydraulic calculations for review and approval of all storm water that will encroach on MoDOT right-of-way.

9. All drainage detention storage facilities shall be placed outside fo the standard governmental agency planning and zoning setbacks, or 15 feet from the new or exiting right-of-way line, whichever is greater.

L. TRAFFIC STUDY

1. Provide a traffic study as directed by the City of Chesterfield and/or the Missouri Department of Transportation. The scope of the study shall include internal and external circulation and may be limited to site specific impacts, such as the need for additional lanes, entrance configuration, geometrics, sight distance, traffic signal modifications or other improvements required, as long as the density of the proposed development falls within the parameters of the City's traffic model. Should the density be other than the density assumed in the model, regional issues shall be addressed as directed by the City of Chesterfield.

M. RECREATIONAL EASEMENT

1. An easement, for recreational and trail purposes, shall be provided for this site as directed by the City of Chesterfield. The easement is anticipated to be located along the east parcel line.

N. POWER OF REVIEW

The Mayor or a Councilmember of the Ward in which a development is proposed may request that the site plan be reviewed and approved by the entire City Council. This request must be made no later than 24 hours before posting the agenda for the next City Council meeting after Planning Commission review and approval of the site plan. The City Council will then take appropriate action relative to the proposal.

O. STORMWATER AND FLOODPLAIN

1. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point or an adequate piped system.

2. Storm sewers discharging to the northwest along the long slope shall be extended to the toe of the slope unless; extraordinary measures are taken to protect the slope from erosion in the long term, as approved by the City of Chesterfield, Department of Public Works.

3. The adequacy of the existing downstream conditions shall be verified and upgraded if necessary as directed by the City of Chesterfield Department of Public Works. Be advised, for this specific development, the downstream channels and structures must be analyzed using the MSD standard 100-year, 20 minute storm.

4. Grading and storm water systems shall be designed so as to collect all surface water from all disturbed areas along the north portion of the development, parallel and adjacent to the top of the slope draining to the north, and convey that surface water to an adequate discharge point where extraordinary measures will be employed to dissipate energy, attenuate flows, and protect slopes from degradation. No storm water shall be allowed to flow from an area which has been graded, to the undisturbed slope.

5. Stormwater shall be controlled as required by the Chesterfield Valley Master Facility Plan.

Q. GEOTECHNICAL REPORT.

1. Provide a geotechnical report, prepared by a registered professional engineer licensed to practice in the State of Missouri, as directed by the Department of Public Works. The report shall verify the suitability of grading and proposed improvements with soil and geologic conditions and address the existence of any potential sinkhole, ponds, dams, septic fields, etc., and recommendations for treatment. A statement of compliance, signed and sealed by the geotechnical engineer preparing the report, shall be included on all Site Development Plans and Improvement Plans.

R. MISCELLANEOUS

1. All utilities will be installed underground. The development of this parcel will coordinate the installation of all utilities in conjunction with the construction of any roadway on site.

2. The hours of operation shall be from 6:00 am to 9:00 pm Monday thru Friday.

3. This project s in the Caulks Creek Surcharge area and is subject to a surcharge of $2750.00 per acre.

S. SPIRIT OF ST. LOUIS AIRPORT

1. Prior to the approval of any site development plan, the developer shall provide, at the direction of the Spirit of St. Louis Airport, an avigation easement or other appropriate legal instrument or agreements to fully remise and release any right or cause of action which they, their successors and assigns may now have or which they may have in the future against the St. Louis County, its assessors and assigns, due to such noise, vibrations, fumes, dust, fuel particles and all other effects that may be caused or may have been caused by the operation of aircraft landing at or taking off from, or operating at or on Spirit of St. Louis Airport.

2. The developer shall provide the following notes on the Site Development Plan:

   a. The avigation easement will be recorded along with the Site Development Plan. In addition, the avigation easement will be referenced on the record plat and individual plot plans.

b. The developer shall disclose to prospective home owners that this site is in close proximity to the Spirit of St. Louis Airport and is subject to occasional over flights. This note is intended to be a noise disclosure statement to any prospective home owners.

II. TIME PERIOD FOR SUBMITTAL OF SITE DEVELOPMENT CONCEPT PLANS AND SITE DEVELOPMENT PLANS

A. The developer shall submit a concept plan within eighteen (18) months of City Council approval of the change of zoning.

B. In lieu of submitting a Site Development Concept Plan and Site Development Section Plans, the petitioner may submit a Site Development Plan for the entire development within 18 months of the date of approval of the change of zoning by the City.

C. Failure to comply with these submittal requirements will result in the expiration of the change of zoning and will require a new public hearing.

D. Said Plan shall be submitted in accordance with the combined requirements for Site Development Section and Concept Plans. The submission of Amended Site Development Plans by sections of this project to the Planning Commission shall be permitted if this option is utilized.

E. Where due cause is shown by the developer, this time interval for plan submittal may be extended through appeal to and approval by the Planning Commission.

III. COMMENCEMENT OF CONSTRUCTION

A. Substantial construction shall commence within two (2) years of approval of the site development concept plan or site development plan, unless otherwise authorized by ordinance. Substantial construction means final grading for roadways necessary for first approved plat or phase of construction and commencement of installation of sanitary storm sewers.

B. Where due cause is shown by the developer, the Commission may extend the period to commence construction for not more than one additional year.

IV. GENERAL CRITERIA

A. SITE DEVELOPMENT CONCEPT PLAN SUBMITTAL REQUIREMENTS

The Site Development Concept Plan shall include, but not be limited to, the following:

1. Outboundary plat and legal description of the property.

2. Location of all roadways adjacent to the property and general location, size, and pavement widths of all interior roadways.

3. General design of the development including unit types (i.e., single-family detached, single-family attached, garden apartment), number of each unit type proposed, location of units, minimum and maximum size of single-family lots, approximate size of multiple-family structures, and location and size of common areas and recreation facilities.

4. Location and size of any commercial uses, types of uses proposed and general parking layout.

5. Zoning district lines and floodplain boundaries.

6. Density calculations.

7. Provide a conceptual landscape plan in accordance with the City of Chesterfield Code.

8. Provide a lighting plan in accordance with the City of Chesterfield Code.

B. SITE DEVELOPMENT SECTION PLAN SUBMITTAL REQUIREMENTS

The Site Development Section Plan shall adhere to the above criteria and to the following:

1. Location map, north arrow, and plan scale. The scale shall be no greater than one (1) inch equals one hundred (100) feet.

2. Parking calculations. Including calculation for all off street parking spaces, required and proposed, and the number, size and location for handicap designed.

3. Provide open space percentage for overall development including separate percentage for each lot on the plan.

4. Provide Floor Area Ratio (F.A.R.).

5. A note indicating all utilities will be installed underground.

6. A note indicating signage approval is separate process.

7. Depict the location of all buildings, size, including height and distance from adjacent property lines and proposed use.

8. Specific structure and parking setbacks along all roadways and property lines.

9. Indicate location of all existing and proposed freestanding monument signs

10. Zoning district lines, subdivision name, lot number, dimensions, and area, and zoning of adjacent parcels where different than site.

11. Floodplain boundaries.

12. Depict existing and proposed improvements within 150 feet of the site as directed. Improvements include, but are not limited to, roadways, driveways and walkways adjacent to and across the street from the site, and significant natural features, such as wooded areas and rock formations, that are to remain or be removed.

13. Depict all existing and proposed easements and rights-of-way within 150 feet of the site and all existing or proposed off-site easements and rights-of-way required for proposed improvements.

14. Indicate the location of the proposed storm sewers, detention basins, sanitary sewers and connection(s) to the existing systems.

15. Depict existing and proposed contours at intervals of not more than one (1) foot, and extending 150 feet beyond the limits of the site as directed.

16. Address trees and landscaping in accordance with the City of Chesterfield Code.

17. Comply with all preliminary plat requirements of the City of Chesterfield Subdivision Regulations per the City of Chesterfield Code.

18. Signed and sealed in conformance with the State of Missouri Department of Economic Development, Division of Professional Registration, Missouri Board for Architects, Professional Engineers and Land Surveyors requirements.

19. Provide comments/approvals from the appropriate Fire District, the Metropolitan St. Louis Sewer District, Monarch Levee District, Spirit of St. Louis Airport and the Missouri Department of Transportation.

20. Compliance with Sky Exposure Plane.

V. TRUST FUND CONTRIBUTION

A. The developer will contribute a Traffic Generation Assesment (TGA) to the Eatherton-Kehrs Mill Road Trust Fund (Trust Fund No. 552). This contribution will not exceed an amount established by multiplying the ordinance required parking spaces by the following rate schedule:

Type of Development	Required Contribution
Medical Office	$1611.66/Parking Space
General Office	$537.19/Parking Space
Loading Space	$2637.29/Loading Space

(Parking spaces as required by the City of Chesterfield Code.)

If types of development differ from those listed, the Department of Highways and Traffic will provide rates.

Allowable credits for roadway improvements will be awarded as directed by the City of Chesterfield and/or St. Louis County Department of Highways and Traffic.

As this development is located within a trust fund area established by St. Louis County, any portion of the traffic generation assessment contribution which remains following completion of road improvements required by the development will be retained in the appropriate trust fund.

The amount of this required contribution, if not approved for construction by January 1, 2007 shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accordance with the construction cost index as determined by the St. Louis County Department of Highways and Traffic.

VI. RECORDING

Within sixty (60) days of approval of any development plan by the City of Chesterfield, the approved Plan will be recorded with the St. Louis County Recorder of Deeds. Failure to do so will result in the expiration of approval of said plan and require re-approval of a plan by the Planning Commission.

VII. VERIFICATION PRIOR TO SPECIAL USE PERMIT ISSUANCE

Prior to any Special Use Permit being issued by St. Louis County Department of Highways and Traffic, a special cash escrow must be established with this Department to guarantee completion of the required roadway improvements.

VIII. VERIFICATION PRIOR TO FOUNDATION OR BUILDING PERMITS

A. Prior to the issuance of foundation or building permits, all approvals from all applicable agencies and the Department of Public Works, as applicable, must be received by the City of Chesterfield Department of Planning.

B. Prior to issuance of foundation or building permits, all approvals from the City of Chesterfield, the Missouri Department of Transportation (Department of Highways and Traffic and the Metropolitan St. Louis Sewer District must be received by the St. Louis County Department of Public Works.

IX. ENFORCEMENT

A. The City of Chesterfield, Missouri will enforce the conditions of this ordinance in accordance with the Plan approved by the City of Chesterfield and the terms of this Attachment A.

B. Failure to comply with any or all the conditions of this ordinance will be adequate cause for revocation of approvals/permits by reviewing Departments and Commissions.

C. Non-compliance with the specific requirements and conditions set forth in this Ordinance and its attached conditions or other Ordinances of the City of Chesterfield shall constitute an ordinance violation, subject, but not limited to, the penalty provisions as set forth in the City of Chesterfield Code.

D. Waiver of Notice of Violation per the City of Chesterfield Code.

E. This document shall be read as a whole and any inconsistency to be integrated to carry out the overall intent of this Attachment A.

PRELIMINARY DEVELOPMENT PLAN

A TRACT OF LAND BEING PART OF LOTS 2 & 3 OF MARY SCHAEFFER ESTATE SUBDIVISION IN US SURVEY 122, TOWNSHIP 45 NORTH, RANGE 3 EAST, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

LEGEND

EXISTING CONTOURS	433	TO BE REMOVED & RELOCATED	T.B.R.& R.
PROPOSED CONTOURS	433	TO BE USED IN PLACE	U.I.P.
EXISTING STORM SEWER		TO BE ABANDONED	T.B.A.
PROPOSED STORM SEWER		BACK OF CURB	B.C.
EXISTING SANITARY SEWER		FACE OF CURB	F.C.
PROPOSED SANITARY SEWER		WATER MAIN	W
RIGHT-OF-WAY		GAS MAIN	G
EASEMENT		UNDERGROUND TELEPHONE	T
IDN/TOPLINE		OVERHEAD WIRE	O/H
EXISTING TREE		UNDERGROUND ELECTRIC	E
EXISTING SPOT ELEVATION	x 433.29	FIRE HYDRANT	
PROPOSED SPOT ELEVATION	x 433.29	POWER POLE	
SWALE/DRAINAGE PATH		WATER VALVE	
TO BE REMOVED	T.B.R.		

SYMBOLS

WV WATER VALVE
WM WATER MANHOLE
TMH TELEPHONE MANHOLE
BRUSH & SHRUB LINE
TREE & SIZE
MTC BUSH & SIZE
BOLLARD
SIGN
ELECTRIC YARD LIGHT
BORING LOCATION
MB MAIL BOX
EB ELECTRIC BOX
PP POWER POLE
PPW-O POWER POLE & GUY
CCO CLEAN OUT
GVA GAS VALVE
GMA GAS METER
GD-A GAS DRIP
(R) REMOVE

ABBREVIATIONS

N NORTH
S SOUTH
E EAST
W WEST
CONC CONCRETE
ASPH ASPHALT
BK BACK BOOK
SB SIDE BOOK
PG PAGE
SQ FT SQUARE FEET
AC ACRES
ELEV ELEVATION
FF FINISH FLOOR
PVC POLYVINYL CHLORIDE PIPE
RCP REINFORCED CONCRETE PIPE
STM STORM
BFP BACK FLOWS
SAN SANITARY
(R) REMOVE

SECTION A-A

(n.t.s.)

LOCATION MAP

NOT TO SCALE

PROPERTY DATA

OWNER	= VISION VENTURES, L.L.C.
ADDRESS	= 17655 WILD HORSE CREEK ROAD
LOCATOR NO.	= 18V510005
ACREAGE	= 8.04 ACRES
EXISTING ZONING	= NU
PROPOSED ZONING	= PC (NEIGHBORHOOD OFFICE DEVELOPMENT OVERLAY)
FIRE DISTRICT	= MONARCH FIRE PROTECTION DISTRICT
SCHOOL DISTRICT	= ROCKWOOD
SEWER DISTRICT	= METRO: ST. LOUIS SEWER DISTRICT
WATER SHED	= MISSOURI RIVER
FEMA MAP	= 29189C0120K
ELECTRIC COMPANY	= AMEREN/UE
GAS COMPANY	= LACLEDE GAS COMPANY
PHONE COMPANY	= SOUTHWESTERN BELL TELEPHONE
WATER COMPANY	= MISSOURI AMERICAN WATER COMPANY

GENERAL NOTES

1.) ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS AND FIELD DATA UNLESS OTHERWISE NOTED OR MARKED. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. THE CONTRACTOR SHALL BE ON RECORD WITH THE MISSOURI ONE CALL SYSTEM.

2.) ALL ELEVATIONS ARE BASED ON M.S.D. BENCHMARK

3.) BOUNDARY AND TOPOGRAPHIC SURVEY BY MARLER SURVEYING CO.

4.) ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS OF THE DIRECTOR OF PUBLIC WORKS FOR THE CITY OF CHESTERFIELD.

5.) ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL FENCES AND/OR SODDING AND MULCHING AS REQUIRED BY THE CITY OF CHESTERFIELD.

6.) PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE CITY FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE BEGINNING OF WORK.

7.) GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING. ADDITIONAL SILTATION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY THE CITY OF CHESTERFIELD.

8.) ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIAL FREE FROM BROKEN MASONRY, ROCK FROZEN EARTH, TURBIDAL ORGANIC MATERIAL AND DEBRIS.

9.) GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.

10.) PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS.

11.) GRADING & STORM WATER PER M.S.D. STANDARD SPECIFICATIONS AND THE CITY OF CHESTERFIELD STANDARDS.

12.) DRIVE ENTRANCES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CHESTERFIELD & ST. LOUIS COUNTY.

13.) SEEDING, SODDING, MULCHING AND PLANTINGS FOR ALL DISTURBED AREAS SHALL BE SPECIFIED ON THE LANDSCAPE PLAN.

14.) SIDEWALKS ALONG THE ACCESSIBLE ROUTE SHALL NOT HAVE A SLOPE EXCEEDING 1"V:20"H. SLOPES GREATER THAN 1"V:20"H MUST BE DESIGNED AS A RAMP.

15.) SIDEWALKS, CURB RAMPS, RAMPS AND ACCESSIBLE PARKING AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) AND THE CITY REQUIRED GRADES, CONSTRUCTION MATERIALS SPECIFICATIONS AND DRAWINGS. IF ANY CONFLICT OCCURS BETWEEN THE ADAAG GUIDELINES AND THE PROGRAMMATIC PLANS, THE ADAAG GUIDELINES SHALL TAKE PRECEDENCE. BEFORE THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER PRIOR TO ANY CONSTRUCTION.

16.) BY GRAPHIC PLOTTING ONLY, THIS PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLAIN AS SHOWN ON THE FLOOD INSURANCE RATE MAP FINAL NUMBER 29189C0120 F AND COMMUNITY NUMBER 290896 (CITY OF CHESTERFIELD) WHICH BEARS AN EFFECTIVE DATE OF AUGUST 2, 1995 (REVISED TO REFLECT LOMAR DATED APRIL 17, 2006). THE PROPERTY LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE 500 YEAR FLOOD PLAIN).

17.) NO ON-SITE ILLUMINATION SOURCE SHALL BE SO SITUATED THAT LIGHT IS CAST DIRECTLY ON ADJOINING PROPERTIES OR PUBLIC ROADWAYS. ILLUMINATION LEVELS SHALL COMPLY WITH THE PROVISIONS OF SECTION 1003.020 STREET AND PARKING AREA LIGHTING OF THE CITY OF CHESTERFIELD SUBDIVISION ORDINANCE.

18.) APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SIGNAGE. SIGN APPROVAL IS A SEPARATE PROCESS.

19.) ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND

20.) ROOF TOP EQUIPMENT SHALL BE SCREENED

21.) PARKING CALCULATIONS

PARKING REQUIRED PER THE P.C. ORDINANCE

PLANNED COMMERCIAL: 4.0 per 1000 g.s.f. = $\frac{40,000}{1,000} \times 4.0$ = 160 STALLS

PARKING PROVIDED

F.W.S*	= 150 STALLS
A.D.A.	= 8 STALLS
	TOTAL = 158 STALLS*

*THE PARKING PROVIDED MEETS THE REQUIREMENTS PER THE BELOW USES: GENERAL OFFICE AT 3.33/1000 = 20,000 S.F. X 3.33 = 66 SPACES MEDICAL OFFICE AT 4.5/1000 = 20,000 S.F. X 4.5 = 90 SPACES (CALCULATIONS DO NOT INCLUDED THE PHANTOM PARKING SHOWN)

17.) DENSITY CALCULATIONS

Gymnasium

$\frac{325,890 \text{ s.f.}}{325,890 \text{ s.f. total site*}} \times 100 = 65\%$

F.A.R.

$\frac{43,000 \text{ s.f. bldg.}}{327,890 \text{ s.f. total site*}} = 0.13$

*327,890 S.F. = 330,470 s.f. total site-R/W DEDICATION TO CITY

NOTE:

CIVIL ENGINEERING DESIGN CONSULTANTS, INC. AND THE UNDERSIGNED ENGINEER HAVE PREPARED THE PLAN AND DESIGN FOR THE IMPROVEMENTS TO BE INSTALLED IN THE IMPROVEMENTS SHOWN ON THIS PLAN AND ALL OTHER DRAWINGS, WHICH THE UNDERSIGNED ENGINEER'S SEAL APPEARS. THE CONSTRUCTION MANUALS, PROCEDURES & MATERIALS ARE THE SOLE RESPONSIBILITY OF THE OWNER AND CONTRACTOR. CIVIL ENGINEERING DESIGN CONSULTANTS, INC. HAS NO RESPONSIBILITY TO VERIFY FINAL CONSTRUCTION OF THE PLAN UNLESS THE ENGINEER HAS SPECIFICALLY ENGAGED AND AUTHORIZED TO DO SO BY THE OWNER OR CONTRACTOR.

UTILITY NOTE:

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS OR OBTAINED INFORMATION AND, THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE FIELD PROPERTY AND REPAIRS, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

NOTE TO CONTRACTOR

CONTRACTOR/SUBCONTRACTOR SHALL INVESTIGATE, ASCERTAIN AND CONFORM TO ANY AND ALL PERMIT REQUIREMENTS OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MSD AND/OR REGULATORY AGENCIES WITH REGARDS TO MAKING CONSISTENT TO COMPANIES ORDERINGS OF THEIR FACILITIES, WORKING WITHIN THEIR RIGHT-OF-WAY OR EASEMENTS; REPAIRING AND ASSOCIATED MINIMUM DAMAGES AND/OR SPECIAL BACKFILL REQUIREMENTS. SUCH INVESTIGATION TO INCLUDE BUT NOT LIMITED TO THE MAKING OF NECESSARY APPLICATIONS AND PAYMENTS OF ALL REQUIRED FEES.

THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS OR PROFILES ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR/SUBCONTRACTOR TO VERIFY THE ACTUAL LOCATIONS, INTERFERENCE CLEARANCES AND THE EXISTENCE OF ANY FACILITIES NOT SHOWN HEREON, AS PART OF THE INVESTIGATION IN THE PARAGRAPH ABOVE.

PROJECT BENCHMARK

BENCHMARK

MSD BENCHMARK 12-17F: ELEV. 489.06' = "STANDARD ALUMINUM DISK" STAMPED SL-30, THIS DISK IS SET AT THE NORTHWEST CORNER OF CHESTERFIELD AIRPORT ROAD AND CAPRICE DRIVE.

SITE BENCHMARK

ELEV. 575.75' = TOP OF SPINDLE IN ASPHALT DRIVE NEAR THE SOUTHEASTERN CORNER OF THE SUBJECT PARCELS.

LEGAL DESCRIPTION

LOT 3:

A TRACT OF LAND BEING PART OF LOTS 2 & 3 OF MARY SCHAEFFER ESTATE SUBDIVISION, A SUBDIVISION ACCORDING TO THE PLAT THEREOF, IN US SURVEY 122, TOWNSHIP 45 NORTH, RANGE 3 EAST, ST. LOUIS COUNTY, MISSOURI, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND ¾" IRON PIPE BEING ON THE WESTERN LINE OF LOT 2 AT THE SOUTHERN RIGHT OF WAY LINE OF THE MISSOURI ISLAND RAILROAD (100' R); THENCE EASTWARDLY ALONG THE SAID RAILROAD RIGHT OF WAY, NORTH 75 DEGREES 24 MINUTES 00 SECONDS EAST A DISTANCE OF 1,000.00 FEET TO A 1/2" X 18" REBAR WITH CAP STAMPED "MARLER L.S. 347-D" (TYPICAL); THENCE CONTINUE ALONG SAID RAILROAD RIGHT OF WAY ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 1,949.93 FEET, AND AN ARC LENGTH OF 20.00 FEET AND A DELTA OF 00 DEGREES 34 MINUTES 00 SECONDS TO A SET REBAR, SAID POINT BEING ON THE EASTERN LINE OF A PARCEL DESCRIBED AS BEING LOT 1 OF LOT 3; THENCE SOUTH 13 DEGREES 36 MINUTES 00 SECONDS EAST A DISTANCE OF 40.48 FEET TO A SET REBAR; THENCE LEAVING SAID EAST LINE, SOUTH 77 DEGREES 24 MINUTES 00 SECONDS WEST A DISTANCE OF 1,000.00 FEET TO A SET REBAR; THENCE SOUTH 12 DEGREES 36 MINUTES 00 SECONDS EAST A DISTANCE OF 10.00 FEET TO A SET REBAR; THENCE SOUTH 77 DEGREES 24 MINUTES 00 SECONDS WEST A DISTANCE OF 20.00 FEET TO A SET REBAR; THENCE NORTH 12 DEGREES 36 MINUTES 00 SECONDS WEST A DISTANCE OF 10.00 FEET TO A SET REBAR; THENCE SOUTH 77 DEGREES 24 MINUTES 00 SECONDS WEST A DISTANCE OF 136.90 FEET TO A SET REBAR, SAID REBAR BEING ON THE WESTERN LOT LINE OF AFORESAID LOT 2; THENCE ALONG SAID WESTERN LINE OF LOT 2, NORTH 12 DEGREES 36 MINUTES 00 SECONDS WEST A DISTANCE OF 718.48 FEET, MORE OR LESS, TO THE POINT OF BEGINNING, CONTAINING ONE HUNDRED EIGHT AND ONE HUNDRED FORTY-FOUR HUNDREDTHS (108.144) ACRES AS SURVEYED BY MARLER SURVEYING COMPANY INC. DURING THE MONTH OF AUGUST 2005.

PREPARED FOR:

VISION VENTURES, L.L.C.
RODNEY HENRY
1402 NORWOOD HILLS DRIVE
O'FALLON, MISSOURI 63366
PHONE: 636-299-8272

SURVEYOR'S CERTIFICATION

This is to certify that the Plat is a correct representation of all existing and proposed land divisions.
Marler Surveying Company
By Marty L. Marler

Marty L. Marler, R.L.S.

PREPARED BY:

CIVIL ENGINEERING DESIGN CONSULTANTS, INC.
11402 BRAVOIS ROAD SUITE 100 SAINT LOUIS MISSOURI 63126
314.729.1400 FAX 314.729.1404 INFO@CEDC.NET WWW.CEDC.NET

HANDICAP PARKING SIGN

TYPICAL PARKING STALLS (n.t.s.)

HANDICAP SIGN (n.t.s.)

LIGHTING STANDARD ELEVATION (n.t.s.)

CIVIL ENGINEERING DESIGN CONSULTANTS, INC.
11402 BRAVOIS ROAD SUITE 100
ST. LOUIS, MO 63126
314.729.1400 FAX 314.729.1404
INFO@CEDC.NET WWW.CEDC.NET

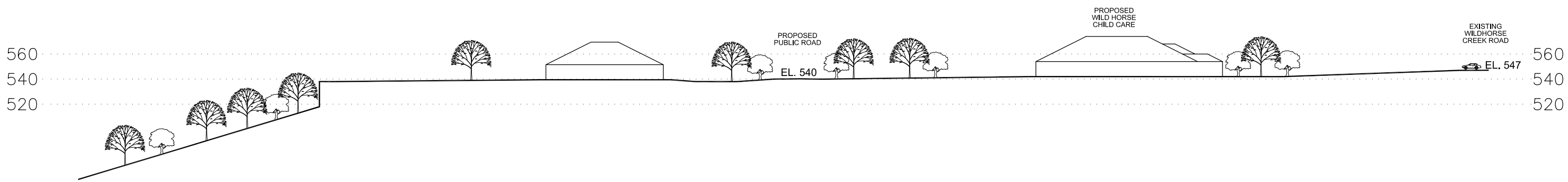
Preliminary Development Plan
Chesterfield Neighborhood Office Park
17655 Wildhorse Creek Road
Chesterfield, Missouri 63005

Proj. # 0554	
No. Description	Date
City Submittal	11-14-06
rev. per Monarch	01-23-07
City resubmittal	01-30-07
City resubmittal	04-04-07

ALTERNATE PRELIMINARY DEVELOPMENT PLAN

DRAWING NO.

C1



PREPARED BY:
CIVIL ENGINEERING
DESIGN CONSULTANTS, INC.
1403 GRAVOIS ROAD SUITE 100 SAINT LOUIS, MISSOURI 63126
314.729.1400 FAX 314.729.1404 INFO@DESC.NET WWW.DESC.NET

City of Chesterfield

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

III.C.

May 10, 2007

Planning and Zoning Committee
City of Chesterfield
690 Chesterfield Pkwy W
Chesterfield, MO 63017

RE: **P.Z. 12-2007 City of Chesterfield (Tree Manual):** A request to repeal City of Chesterfield Ordinance 2335 and replace it with a new ordinance that revises the procedures and requirements for Tree Protection Sureties, Escrows and Landscape Installation Bonds.

Dear Planning and Zoning Committee:

At the April 23, 2007 City of Chesterfield Planning Commission meeting, a recommendation for approval of the above-referenced matter was approved by a vote of 9-0.

After the approval of Planning Commission, Staff determined that the additional method of calculating the amount for a Tree Protection Surety or Escrow was not sufficient in encouraging additional tree preservation above the required 30% of existing tree canopy. Therefore, Staff recommends the following change to Section XIV. The red illustrates the approved change by Planning Commission and the blue indicated the additional language by Staff.

Section XVI Surety and Escrow Procedures (Page 21)

The amount of the surety or cash escrow shall be in the amount of ~~$20,000 for each acre contained in the tree preservation area. The amount may be pro-rated for any tree preservation area less than one (1) acre.~~ **$10,000 per 100 lineal feet, or portion thereof, of wooded canopy perimeter to be preserved adjacent to any proposed clearing, grading, or other disturbance; or $20,000 per acre to be preserved whichever is less. When the $20,000 per acre calculation method is used and the developer is protecting more than the required 30% of existing tree canopy, the amount of the surety or cash escrow shall not exceed the cost of protecting the required 30% of existing tree canopy.**

Please see the attached memo that outlines the proposed changes as well as a copy of the Planning Commission report and Tree Manual as approved by the Planning Commission.

Respectfully submitted,

Jarvis Myers
Project Planner

Respectfully submitted,

Mara M. Perry
Senior Planner of
Plan Review

Cc: Rob Heggie, City Attorney
Michael G. Herring, City Administrator
Michael Geisel, Acting Director of Planning

Attachments:
Planning Commission Vote Report
Tree Manual

City of Chesterfield

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

VIII.D.

Planning Commission Staff Report

Meeting Date: April 23, 2007

From: Jarvis Myers, Project Planner

Subject: Ordinance Amendment Vote Report

Petition: P.Z. 12-2007 Tree Manual (Ordinance Amendment)

Proposal Summary

The City of Chesterfield has submitted a request to amend City of Chesterfield Ordinance 2335 to change the procedures and requirements for Tree Protection Sureties, Escrows and Landscape Installation Bonds.

Amendment 1:
Section XIII F. Landscape Proposals (Page 20)

Prior to the signing of any mylar ~~for recording at St. Louis County,~~ **for a record plat or approval of any Municipal Zoning Authorization other then for a display house**, a landscape bond shall be posted. The requirements for landscape installation and landscape maintenance bonds in the City of Chesterfield are set forth in Table 5. **Alternatively landscape installation surety may be included in the subdivision escrow, as approved by the Director of Planning.**

Amendment 2:
Section XIV Surety and Escrow Procedures (Page 20)

Prior to the signing of any ~~mylar to be recorded at St. Louis County~~ **grading permit or improvement plan approval**, a surety or cash escrow shall be posted to account for trees that die, or are damaged beyond repair, as a result of grading or construction damage.

Amendment 3:
Section XVI Surety and Escrow Procedures (Page 21)

The amount of the surety or cash escrow shall be in the amount of ~~$20,000 for each acre contained in the tree preservation area. The amount may be pro-rated for any tree preservation area less than one (1) acre.~~ **$10,000 per 100 lineal feet, or portion thereof, of wooded canopy perimeter to be preserved adjacent to any proposed clearing, grading, or other disturbance; or $20,000 per acre to be preserved which ever is less.**

Respectfully submitted,

Jarvis Myers
Project Planner

Respectfully submitted,

Aimee Nassif
Senior Planner of Zoning Administration

City of Chesterfield

DEPARTMENT OF PLANNING

TREE MANUAL

690 CHESTERFIELD PKWY W • CHESTERFIELD, MO 63017-0760
PHONE: 636-537-4000 • FAX: 636-537-4798 • WWW.CHESTERFIELD.MO.US

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APPENDIX A CITY OF CHESTERFIELD RECOMMENDED TREE LIST

APPENDIX B SAMPLE TREE STAND DELINEATION MAP

I. INTRODUCTION.

The purpose of this section is to provide a detailed guide for the preservation and planting of trees within the City of Chesterfield. Tree preservation and planting in the City of Chesterfield represents an ongoing effort to maintain the character and benefits derived from trees. Whether trees exist as a natural occurrence of native tree species or as planted trees around older developments, their protection can only be assured when developers utilize tree protection measures. By selecting the trees that will be preserved before the final stages of planned development, tree protection design standards can be created and included prior to the early stages of development of the site. Planting of new trees should be used to supplement a site's landscaping, not replace it.

II. APPLICABILITY.

A. The terms and provisions of the City of Chesterfield Tree Manual shall apply to all vacant or undeveloped land and all property to be redeveloped including additions and alterations.

B. The Tree Stand Delineation and Tree Preservation provisions of the City of Chesterfield Tree Manual shall apply to all vacant or undeveloped land and all property to be redeveloped including additions and alterations with 5,000 or more square feet of wooded area or any site that contains a monarch tree.

C. Single Residential Lots of less than one (1) acre that have been subdivided for more than two (2) years, are exempt from the provisions of this Tree Manual.

III. DEFINITIONS.

The following list of definitions has been developed to clarify the usage of specific terminology.

1. **Afforestation**. The conversion of open land into forest through tree planting.

2. **Buffer Strip**. A strip of land with natural or planted vegetation intended to separate and partially obstruct the view of two adjacent land uses or properties from one another.

3. **Caliper**. The diameter of the trunk of a tree as measured at six (6) inches above natural grade.

4. **Canopy Tree**. Deciduous trees that have a minimum height of thirty (30) feet at maturity.

5. **City's Tree Specialist**. A Tree Specialist retained by the City to review tree protection and preservation issues at the City's request.

6. **Critical Root Zone (CRZ)**. The critical root zone is defined by a circle around the tree with one (1) foot of radius for each one (1) inch of trunk diameter at D.B.H.

7. **Diameter at Breast Height. (DBH)** The size of the trunk of a tree, in inches of diameter, measured at "breast height" four-and-one-half (4.5) feet above the original soil or natural grade. If a tree forks or separates into two or more trunks below 4.5 feet, then the trunk is measured at its narrowest point below the fork.

8. **Disturb**. Shall include the intentional, unintentional or negligent removal, destruction, or killing of any tree, or causing the loss of the tree canopy coverage or critical root zone of individual trees or group of trees.

9. **Do Not Disturb Zone**. An area within which all existing vegetation shall be preserved for the purpose of retaining the natural character of the area and providing screening from adjacent uses on public or private street. Protective fencing is to be provided along the edge of this area.

10. **Drip line**. The location on the ground which is just below the outer extent of the tree branches.

11. **Grading**. Clearing, excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

12. **Grove**. A group of trees similar in species or size and significant enough to be given special attention. See also Monarch Tree Stands.

13. **Limit of Disturbance**. A line that identifies the location on the ground where fencing will be installed to protect the trees from clearing, grading, soil filling, storage of materials, parking of vehicles, utility installation or other construction activity of any kind.

14. **Monarch Tree**. A tree in fair or better condition, with a life expectancy of more than fifteen (15) years, and equals or exceeds the following diameter sizes:

    1. Hardwoods (oak, hickory, maple, ash, etc.) - 24" DBH
    2. Softwoods (pine, spruce, fir, including bald cypress, etc)-20" DBH

    A lesser-sized tree can be considered a Monarch Tree if:

    1. It is a rare or unusual species, or
    2. It is of exceptional quality, or
    3. It has historical significance, or
    4. It will be specifically used by the developer as a focal point in a project or landscape.

15. **Monarch Tree Stand** A contiguous grouping of at least eight trees which has been determined to be of high value or comprised of Monarch Trees. Determination is based on the following criteria:

    1. A relatively mature even aged stand of trees, or
    2. A stand of trees with a purity of species composition, or
    3. A stand of trees which are rare or unusual in nature, or
    4. A stand of trees with historical significance, or
    5. A stand of trees with exceptional aesthetic quality or size that is a principle feature of a site.

16. **Ornamental Tree**. A small highly visual tree species that can attain a mature height of 20-35 feet.

17. **Openspace**. Areas consisting of pervious surfaces. They may include all water ponds, grassy, treed, landscaped, floral, sod, and other pervious surfaces.

18. **Public Tree**. Any tree located on City owned or controlled property including parks, street right-of-ways, parkways, public facilities, etc.

19. **Sight Distance Triangle**. The triangular area of a corner lot bound by the property lines and a line connecting the two (2) points on the property lines thirty (30) feet from the point of intersection of the projected property lines.

20. **Street Tree**. Any tree that is currently located or proposed for planting as part of the row of trees required along streets and highways.

21. **Tree Canopy**. The upper portion of a tree or trees made up of branches and leaves.

22. **Tree Canopy Coverage**. The area in square feet of a tree's spread. Existing tree canopy is determined by measuring the ground's surface area that is covered by the branch spread of a single tree or clump or grove of trees. When trees are relatively close together, but the branches are not touching, the general area covered by this group can be used to determine the area of tree canopy coverage.

23. **Tree Specialist**. A person who meets one of the following criteria:

    1. Arborist – a person who is a full-time owner or employee of a commercial tree service with at least five (5) years of field experience.
    2. Certified Arborist – a person certified through the International Society of Arboriculture.
    3. Forester –a person with a degree in forestry and at least five (5) years of field experience.
    4. Certified Forester– a person certified through the Society of American Foresters.

    If a person reviewing a submittal does not meet the five (5) years experience criteria, then a certified supervisor, with at least five (5) years experience, shall sign off on the work completed by his/her employee.

24. **Tree Topping**. Drastic removal or cutting back of large branches in mature trees, leaving large open wounds which subject the tree to disease and decay, and encourage weak, superficial, and hazardous growth

25. **Ultimate Tree Canopy**. Ultimate tree canopy is determined by assigning the following area values for planted trees, and the tree sizes may be used in combination to attain the necessary density for tree planting.
    1. Large tree - 400 sq. ft.
    2. Medium tree - 300 sq. ft.
    3. Small tree - 200 sq. ft.

26. **Understory Tree**. Understory trees shall be deciduous trees that have a maximum height of less than thirty (30) feet at maturity.

27. **Wooded Area**. 5,000 sq. ft. or more of tree canopy coverage and where the tree canopy is primarily comprised of trees equal to or larger than five (5) inches in DBH. The 5,000 sq. ft. may be in a single grouping or comprised of several single trees or groupings of scattered trees in old yards or old fields, as well as land with thick tree cover or forested lands. The 5,000 sq. ft. need not be contiguous.

IV. OVERVIEW OF SUBMITTAL PROCESS.

City of Chesterfield Development Phase	Plan Submittal*	Entity Review	Decision Making Authority
Rezoning	Tree Stand Delineation	Staff Review, City's Tree Specialist to review site at the request of the Department of Planning.	Planning Commission to approve plans and make recommendations for trees to be preserved
Preliminary Plan/ Site Development Concept Plan	Tree Stand Delineation, Tree Preservation Plan, Conceptual Landscape Plan	Staff Review	Planning Commission
Site Development Plan	Tree Stand Delineation, Tree Preservation Plan, Landscape Plan	Staff Review	Planning Commission
Site Development Section Plan	Tree Stand Delineation, Tree Preservation Plan, Landscape Plan	Staff Review	Planning Commission
Subdivision Plan	Tree Stand Delineation, Tree Preservation Plan, Landscape Plan	Staff Review	Planning Commission
Municipal Zoning Approval^	Tree Stand Delineation, Tree Preservation Plan	Staff Review	City Staff
Grading Permit	Approved Tree Preservation Plan with no modifications from approved TPP plan	Staff Review, City's Tree Specialist to review Tree Protection measures prior to approval of permit	City Staff – If no modifications from approved TPP
Grading Permit	Approved Tree Preservation Plan with modifications from approved TPP plan	Staff Review, City's Tree Specialist to review Tree Protection measures prior to approval of permit	City Staff- if modifications less than 10% reduction in preserved canopy
Grading Permit	Tree Preservation Plan with modifications from approved TPP plan	Staff Review, City's Tree Specialist to review Tree Protection measures prior to approval of permit	Planning Commission Review- if modifications more than 10% reduction in preserved canopy; or if new reduction total is greater than 70% removal of existing canopy; or when removing a monarch tree previously shown as preserved.
Bond Release	No plan submittal required	City's Tree Specialist to review trees approved to be preserved are saved	City Staff Review

* The Tree Stand Delineation and Tree Preservation provisions of the City of Chesterfield Tree Manual shall apply to all vacant or undeveloped land and all property to be redeveloped including additions and alterations with 5,000 or more square feet of wooded area or any site that contains a monarch tree.

^ Single residential lots of less than 1 acre that have been subdivided for more than two years are <u>not</u> required to submit any of these items.

V. PROTECTION OF PUBLIC OR PRIVATE TREES.

A. It is unlawful for any person to attach any sign, advertisement, notice, fence or any other man made object to any tree in the public right-of-way, park, or any other City property. Exception: temporary devices used for normal installation or maintenance of planted trees or as permitted by the City of Chesterfield.

B. It is unlawful for any person to damage, cut down, destroy, top or injure any tree, shrub or plant. This provision shall not apply to any ordinary care and maintenance or removal of hazardous trees or tree parts by a governmental entity or its designee authorized to exercise jurisdiction over the right-of-way, park, other infrastructure, public property, or to provide regular road maintenance.

C. The Director of Planning has the authority to order the removal of trees or shrubs on private property which may endanger life, health, safety, or property of the public. The Director of Public Works has the authority to order the removal and disposal of trees or shrubs within the City of Chesterfield right-of-way or other public property.

1. Removal shall be done by said owners at their own expense within sixty (60) days after the date of notice served.

2. Disposal of trees with communicable diseases shall be performed in a manner which prevents the spread of disease.

3. In the event owners fail to comply with such provisions, the City shall have the authority to remove such trees and charge the costs of removal as well as any costs for fees to record or release any lien as a special assessment represented by a special tax bill against the real property affected, and shall be filed by the City Clerk and deemed a personal debt against the property owner and shall remain a lien on the property until paid.

D. The Director of Public Works may authorize the removal of street trees for public or private construction projects on a case by case basis.

VI. TREE STAND DELINEATION (TSD).

The purpose of a TSD is to provide a general accounting of existing vegetation so that a conceptual design of the proposed development can be done.

A. TREE STAND DELINEATION (TSD) CRITERIA.

1. Detailed description and location of individual trees and groups of trees including specific size and estimated number of trees within a natural area.
2. Identification of existing roads, building footprints, parking lots, stormwater structures and utilities.
3. Signed by a tree specialist.

4. For trees larger than 5” DBH, either BAF-10 study or ocular estimate method may be utilized.
5. As directed by the City of Chesterfield, submit a site plan with a tree stand delineation overlay. An overlay is defined as a transparent sheet containing the proposed TSD linework which will be superimposed over the proposed site plan.
6. The City’s Tree Specialist may be asked to verify the tree information, including tree locations in the field, shown on the TSD at the request of Planning Commission or the Department of Planning.

VII. TREE PRESERVATION PLAN (TPP).

A TPP is a plan based upon information provided by a tree specialist that delineates areas where trees are to be saved and details the measures to be taken to ensure protection and survivability of trees to be saved, prior to and during construction, and also complies with guidelines which are listed in this Manual.

A. TREE PRESERVATION PLAN CRITERIA.

1. A minimum 30% of any wooded canopy shall be maintained as wooded area without disturbing the roots of trees in the protected wooded area.
2. The developer should save tree groupings within wooded areas to maintain the trees’ structural integrity and natural aesthetics.
3. The developer shall not include any trees or wooded area in easements, building areas, or rights-of-way as "preserved" or "protected" to satisfy the canopy coverage requirements.

B. TREE PRESERVATION PLAN REQUIREMENTS.

The following is a list of all items and information that must be included in the TPP.

1. Provide detailed description and location of individual and groups of trees to be preserved and the proposed protection measures.
2. Plan must be at the same scale as the Site Development Plan or grading plan.
3. Signed and sealed by a Missouri Landscape Architect.
4. Table listing the following:
   i. Total site area
   ii. Existing tree canopy, in square feet
   iii. Tree canopy coverage proposed for removal, in square feet
   iv. Tree canopy coverage provided for preservation, in square feet
5. Existing and proposed contours.
6. Location of existing tree canopy.
7. Locations of all improvements with proposed utilities as shown on the Site Development Plan, including building areas, easements, or rights-of-way.
8. Limit of Disturbance Line.
9. General or conceptual locations of all sediment control devices and structures.

10. The location, type, size, and proposed removal or preservation, of all Monarch Trees as shown on the Tree Stand Delineation and the critical root zone for those trees within fifty feet (50') of the limit of disturbance.
11. Tree protection notes shall include the following language:
    i. Clearing limits shall be rough staked or marked by the Developer's surveyor in order to facilitate location for trenching and fencing installation.
    ii. No clearing or grading shall begin in areas where tree treatment and preservation measures have not been completed.
    iii. Protective devices with details (aeration systems, retaining walls, etc.).
    iv. Early maintenance schedule (i.e. pruning, injection fertilizing, etc.).
    v. Name of tree specialist and company.

VIII. CONSTRUCTION STANDARDS FOR FIELD PRACTICE.

A. Protective fencing shall be installed along the Limit of Disturbance Line to prevent damage to the roots, trunk, and tops of protected trees. This protective fence shall protect the tree and its roots from clearing, grading, soil filling, storage of materials, parking of vehicles, utility installation or other construction activity of any kind.

B. Signs designating required tree protection areas shall be posted along the Limit of Disturbance Line.

C. Root Pruning or trenching shall occur when roots, within the critical root zone of a protected tree, will be damaged as a result of nearby excavation or the addition of fill over the root system.

D. Trenches are not permitted inside the drip line of a tree's canopy.

E. Sediment and Erosion Control Structures must be used to keep eroded soil from covering roots of protected trees. Siltation screens, etc., are appropriate.

F. Tunneling may be required when utilities are to run through a tree's critical root zone. Tunneling is required for permitted work within a tree's canopy coverage. Tunneling must adhere to the requirements set forth in Table 1.

TABLE 1: TUNNELING STANDARDS	
Tree Diameter (DBH)	*Tunnel Distance from trunk of tree measured in all directions*
Less than six inches (6")	**3'**
6-9"	**5'**
10-14"	**10'**
15-19"	**12'**
Over 19"	**15'**

IX. PRESERVATION REQUIREMENTS ON CONSTRUCTION SITE.

A. TREE PROTECTIVE MEASURES AND PROTECTED AREAS.

1. No plant material shall be removed or planted in a Do Not Disturb Zone without approval from the City of Chesterfield. The location of Do Not Disturb Zones shall be determined during the establishment of the site specific ordinance or as established on the approved Tree Preservation Plan.
2. The Developer shall not disturb the critical root zone area of any tree to be preserved.
3. A tree specialist shall be named and employed by the Developer. Said tree specialist should be available for on-site inspections as directed by the City of Chesterfield.
4. During the erection, altering, or repairing of any building structure, street, sidewalk, underground pipe or utility, the contractor shall place guards, fences, or barriers to prevent injury to the trees.

B. Prior to the issuance of any occupancy permits, should any preserved tree die or be damaged beyond repair as a result of grading or construction damage the developer will pay a fine to the City equal to the value of the trees that die or are damaged beyond repair as certified and determined by the City's Tree Specialist. Said cost shall include the cost of appraisal incurred by the City of Chesterfield. The City will withhold occupancy permits and/or any other required permits until the fine is paid. Tree values shall be based on procedures in "Guide for Plant Appraisal", latest edition, published by the International Society of Arboriculture. Monies collected from fines will be placed in the Tree Preservation Account according to Section XV of this Tree Manual.

C. Should any tree die, or be damaged beyond repair, as a result of grading or construction within a two (2) year period after cessation of grading or completion of the required improvements which ever is less the Developer shall be responsible

for replacing the tree. Failure to replace shall constitute default and the City of Chesterfield shall be entitled to proceed against the surety or the cash escrow.

D. Refer to Section XIV for Surety and Escrow Procedures.

X. SPECIAL CONDITIONS.

The Department of Planning, upon written application by the Developer for consideration of special conditions, may consider granting special conditions modifying the requirements of this Tree Manual with the procedures and limitations as set forth below. Modifications will require that a minimum of 30% of the wooded canopy on the tract must be preserved or be replanted with acceptable tree species. Special conditions may be granted in whole, or in modified form with conditions or denied by the Department of Planning, after consideration of the requisites presented.

A. Qualifying Projects.

1. Property for which:
   i. an ordinance, detailing development requirements, has been in existence as a result either by the City of Chesterfield or St. Louis County (prior to the City's incorporation), and;
   ii. a valid Site Development Concept Plan, Site Development Plan, Site Development Section Plan or a Final Development Plan has been approved prior to the adoption of the original Tree Ordinance Number 1345 enacted on November 17, 1997; or

2. Property zoned commercial or industrial which will allow for clearing of the lot for the development of the square footage as previously approved by the current ordinance in place by the City of Chesterfield or the St. Louis County on the date of the adoption of the original Tree Ordinance number 1345 enacted on November 17,1997; or

3. Property for which a tree specialist determines that the applicant is unable to provide tree preservation in accordance with this manual due to highly unique and severe circumstance such as extremely poor quality of trees, extreme topography, unusual lot shape, or other similar condition.

B. Application for Special Conditions.

The information to be submitted as a part of the application for special conditions shall include, but not be limited to the following:

1. A Tree Stand Delineation with an overlay of the existing conditions.

2. An engineering plan and/or drawings which depicts and describes that development of the structures as proposed or authorized is impracticable because of the unique character of the site which is not generally applicable to other sites.

3. A statement certified by a tree specialist that development cannot preserve the existing trees because of species or condition, but a minimum 30% of the original wooded canopy will be replanted to permanent tree cover.

4. Each applicant seeking mitigation or a variance from the terms and conditions of this Tree Manual shall pay, as a fee to offset the cost of administration, an amount equal to the value of each tree that is removed from the required minimum 30% tree preservation area. The value of each tree is to be determined by the tree specialist.

5. A reforestation bond shall be posted to cover mitigation cost.

C. Refer to Section XIV for Surety and Escrow Procedures.

XI. MITIGATION PLAN.

The purpose of a Mitigation Application is to deter removal of trees. If the applicant/owner has established special conditions in accordance with Section X, then mitigation in accordance with an approved mitigation plan as authorized by the Department of Planning shall include the following:

A. Selective clearing and supplemental planting shall be displayed on an overlay plan.

B. An on site afforestation plan using larger or smaller stock; the number of trees will depend on the species selected and the ultimate tree canopy; based on tree sizes noted in the list of trees in Appendix A of this manual.
   1. 400 sq. ft. for large trees
   2. 300 sq. ft. for medium trees
   3. 200 sq. ft. for small trees

   Planting must achieve a minimum of 30% of the area of original tree canopy coverage.

C. Applicants submitting mitigation plans must utilize a mix of trees that vary in species, size, growth rate, and life span and consists of no more than 20% of one category.

D. Where site constraints or other factors prevent replacement on or off site, the developer shall make a cash contribution to the Tree Preservation Account, according to Section XV of this manual, in an amount equal to the cost of replacing the trees which are not able to be preserved. Said costs shall include labor and plant material.

XII. PLANT SELECTIONS.

A. All trees shall be selected from the Recommended Tree List in the City of Chesterfield's Tree Manual.

B. All trees within five (5) feet of existing or proposed rights-of-way or public sidewalks shall be taken from the Street Tree category in the Recommended Tree List in the City of Chesterfield's Tree Manual.

C. A variety of trees from the Recommended Tree List must be utilized so that there is a mix of tree species, growth rate, and tree size.

D. A minimum of thirty percent (30%) of the trees must be of a species with a slow or medium growth rate.

E. For projects in which more than fifty (50) trees will be installed, a variety of tree species within each category of deciduous, evergreen, and ornamental trees must be utilized. Each category shall provide a minimum of twenty (20%) of the total trees to be planted. For projects that require only street trees, each category of deciduous and ornamental shall provide a minimum of twenty (20%) of the total trees to be planted.

XIII. LANDSCAPE PROPOSALS.

Landscape plans must be submitted to the Director of Planning in conjunction with a proposed development or redevelopment. A Conceptual Landscape Plan shall be submitted with the Site Development Concept Plans. A Conceptual Landscape Plan indicates the proposed landscaping along arterial and collector roadways. The City of Chesterfield requires the use of a mix of trees that vary in species, size, growth rate, and life span to promote the enhancement of the community.

A. LANDSCAPE PLAN REQUIREMENTS.

The information to be submitted as a part of the landscape plan shall include but not be limited to the following:

1. A map prepared to a scale not greater than one (1) inch equals one hundred (100) feet.

2. The landscape plan shall be of the same size and scale as the applicable site plan(s) submitted to the City.

3. A plan produced by a Missouri Landscape Architect, whose name and seal are attached.

4. Trees shall be selected from the Recommended Tree List included in Appendix A.

5. All proposed trees shall be a minimum caliper of 2.5 inches.

6. Tree locations, species, and numbers which shall be identified on the scaled drawing.

7. Elevations and plan views of proposed landscaping as requested by the City of Chesterfield.

8. A map legend identifying the symbols for the various types of trees.

9. Protection measures must be employed around all trees required to be retained.

10. List the percent of openspace in relation to total area.

11. A summary table for all plant materials listing Common and Scientific name and variety, Deciduous, Evergreen or Ornamental, Quantity, Maturity, Height and Caliper.

B. LANDSCAPE BUFFERS, SETBACKS, BERMS, OR WALLS

1. Landscape buffers are required per the criteria set forth in Table 2 below. Landscape buffers shall contain a combination of deciduous trees, evergreen trees, and shrubs and should enhance and preserve native vegetation.

TABLE 2: LANDSCAPE BUFFER REQUIREMENTS	
TYPE OF SUBDIVISION *	**LANDSCAPE BUFFER REQUIRED**
When a Residential Subdivision Abuts a Residential Subdivision	Minimum 20 foot wide buffer strip, 10 feet of which may be satisfied by landscaping on the abutting property if provided.
When a Residential Subdivision Abuts a Non-Residential Subdivision	Minimum 30 foot wide buffer strip.
When a Non-Residential Subdivision Abuts a Residential Subdivision	Minimum landscaped buffer strip 30 feet in width. Up to 10 feet may be satisfied by landscaping on the abutting property.
When a Residential Subdivision Abuts a non-subdivision street	Minimum of 30 foot wide buffer strip.
For all property zoned as an "E" District	Minimum of 30 foot wide buffer strip. The buffer strip shall not be counted towards minimum lot size.
Development along collector or arterial roadway	Minimum of 30 foot wide buffer strip.

* For the purpose of this section, if the abutting property is zoned NU Non-Urban, the Comprehensive Plan is to be consulted to determine if the abutting property should be considered residential or nonresidential

2. Landscaped berms, walls or fences are required to screen automobile headlights from areas zoned residential or non-urban.

3. Flexible residential landscape buffer requirements may be granted in cases where it can be demonstrated that the proposed landscape buffer encourages a creative design solution to the issue of buffering adjacent land uses.

4. For all districts, landscape buffers must be outside of the right-of-way dedication.

5. For all districts, no plantings are allowed within drainage swales or ditches.

6. For all districts, entrance islands and cul-de-sacs shall be landscaped as directed by the City of Chesterfield.

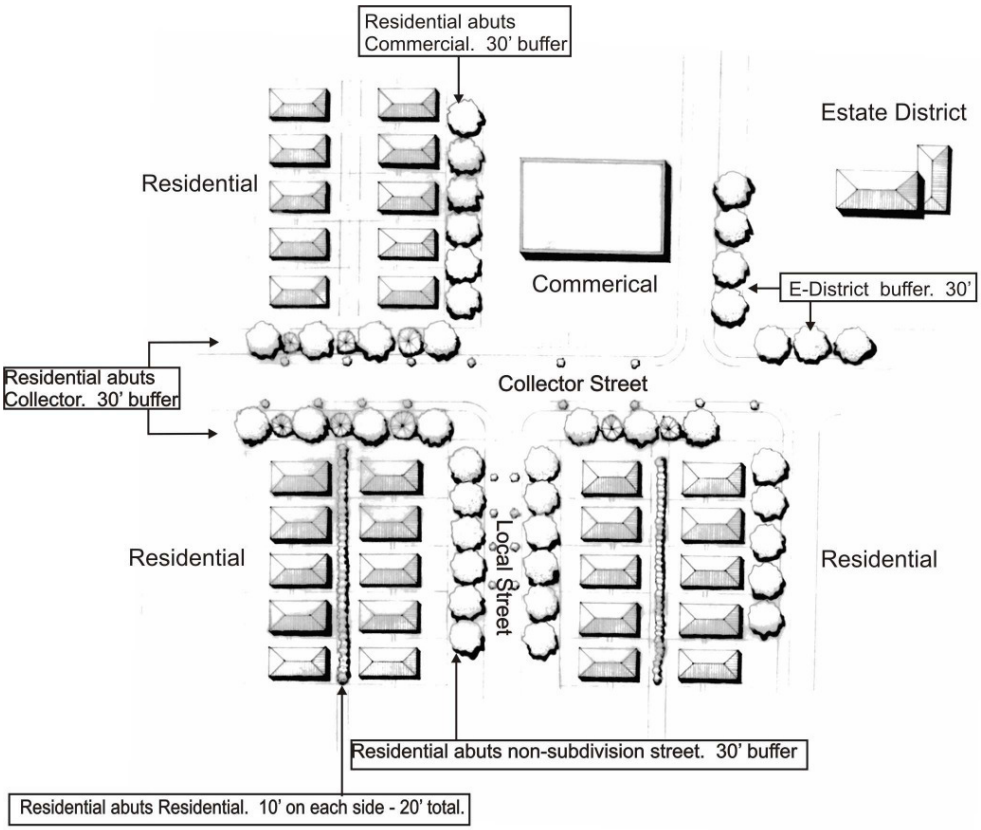

Figure 1: Buffer Requirements

C. LANDSCAPING FOR PARKING LOTS AND TREE ISLANDS.

1. Tree Islands:

   i. Landscaped islands shall be placed at the ends of parking aisles and within aisles.

ii. Islands shall have plantings consisting of ground covers such as shrubs, ivy, flowers, and grasses.

iii. Tree Islands shall be landscaped in accordance with Table 3 below:

TABLE 3: LANDSCAPE REQUIREMENTS FOR TREE ISLANDS	
Type of Island	**Landscaping Required**
Single Island	One deciduous tree required. Minimum landscape width of six (6) feet.
Single Island at end of single row of parking	A minimum area of one-hundred (100) square feet placed at the ends of a single row of parking. Two (2) deciduous trees are required that do not block required line of sight for vehicles.
Double Island	Two (2) deciduous trees are required per double landscaped island.
Double Island at end of double row of parking	There shall be a double island of two-hundred-ten (210) square feet placed at the ends of a double row of parking. Two (2) deciduous trees are required that do not block required line of sight for vehicles.

2. Parking Lots:
   i. No parking space shall be further than fifty (50) feet from a tree.

   ii. All vehicular areas should have minimum fifteen (15) feet landscape setback from existing or proposed rights-of-way lines.

   iii. Parking islands are not required to have a tree in instances where the adjacent parking spaces are within fifty (50) feet of a tree in other areas of the development.

   iv. Trees planted in parking islands at no time shall block the required sight lines for motorist.

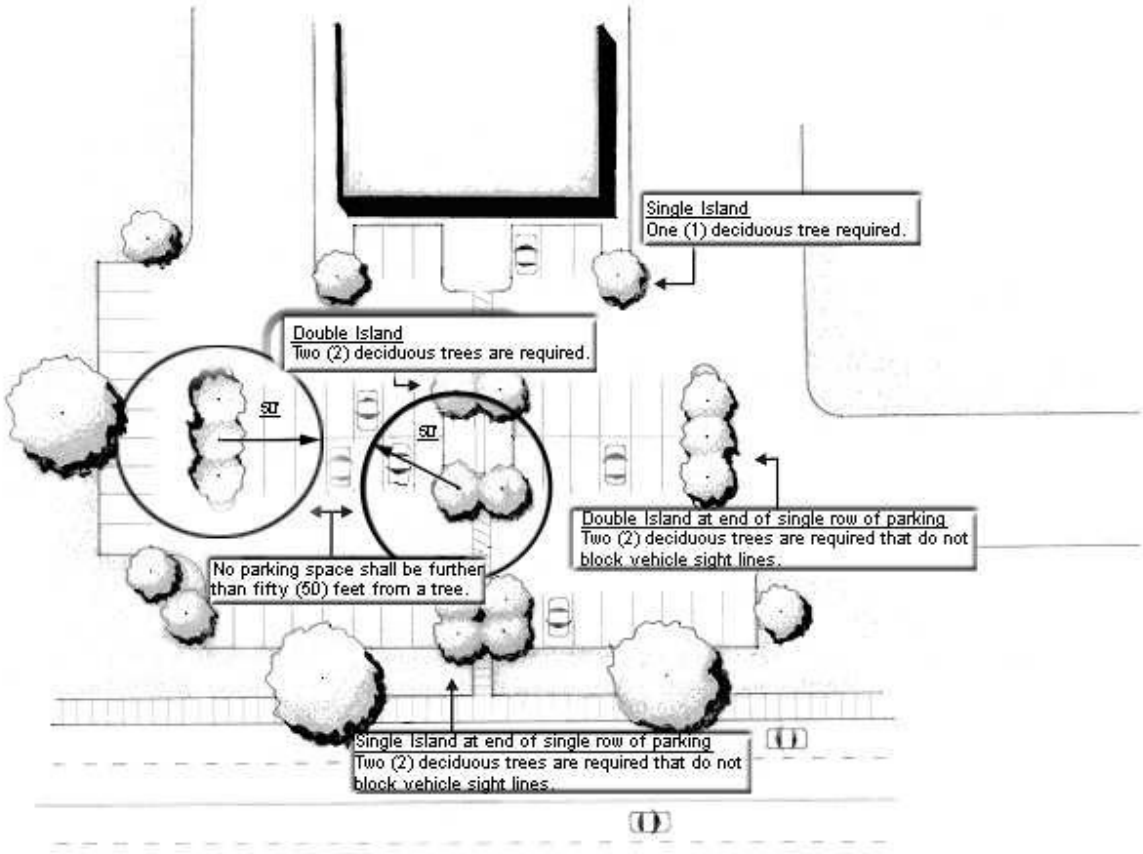

Figure 2: Typical Parking Lot Planting

D. STREET TREES, SHRUBS AND PLANTINGS.

1. The use of street trees and shrubs in landscaping for residential and non-residential subdivisions shall adhere to the requirements set forth by Table 4. Acceptable street trees for residential and non-residential subdivisions are approved by Council policy and are listed in Appendix A.

2. The Director of Planning may require that street trees be provided for all public streets within and adjacent to any proposed development where insufficient street trees presently exist. Proper approvals and permits must be obtained from the applicable agency. Planting locations will be guided by specifications found herein.

TABLE 4: STREET TREE PLACEMENT FOR RESIDENTIAL AND NON-RESIDENTIAL SUBDIVISIONS	
	PLACEMENT
Tree Frontage Requirement	A minimum of one (1) street tree for every forty (40) feet of lot frontage for single family subdivisions and fifty (50) feet of street frontage for multi-family subdivisions, including common land, and non-residential subdivisions.
Tree Size	Street trees shall be at least two and one-half (2 ½) inches in caliper.
Tree Species Utilized	A maximum of twenty (20) percent of one species may be utilized for street trees.
Location of tree to right-of-way	Street trees shall be located within a street right-of-way unless so approved by variance.
Location of tree to curb	Street trees shall not be planted closer than three (3) feet to any curb.
Location of tree to street lights	Street trees shall not be placed within twenty-five (25) feet of street lights.
Location of tree to street inlets or manholes.	Street trees shall not be planted within ten (10) feet of street inlets or manholes.

3. For all districts, landscaped entrance islands shall not block required lines of sight.

4. For all districts, no tree, shrub or planting shall be placed within the sight distance triangle or the area of adjacent right of way bounded by the street pavement and the extension of the sight distance triangle.*

5. Shrubs at mature size shall not extend over pavement or sidewalks. Trees shall be placed such that they can be trimmed to provide a minimum clearance of ten (10) feet over City-maintained sidewalks. Trees shall not obstruct the view of street signage.*

*These requirements apply to shrubs and plantings that at mature height exceed three (3) feet above the elevation of the adjacent pavement or sidewalk and trees that at mature height have bottom branches less than seven (7) feet above the adjacent pavement.

E. INSTALLATION AND MAINTENANCE.

1. Consideration must be given to year round appearance.

2. All landscaped areas, including islands, shall be provided with mechanical, in-ground irrigation system.

3. All landscaped areas should be curbed or protected by parking stops. Consideration should be given to access for mowing equipment.

4. Burlap and twine shall be removed from at least top one third of the root ball before backfilling.

5. Mulch may be used instead of grass or in combination with grass. When mulch is used, it shall completely cover the root ball with a maximum of 2-4 inches of mulch.

F. LANDSCAPE BONDS.

Prior to the signing of any mylar for a record plat or approval of any Municipal Zoning Authorization other than for a display house, a landscape bond shall be posted. The requirements for landscape installation and landscape maintenance bonds in the City of Chesterfield are set forth in Table 5. Alternatively landscape installation surety may be included in the subdivision escrow, as approved by the Director of Planning.

TABLE 5: LANDSCAPE BOND REQUIREMENTS	
Type of Landscape Bond	**Requirements**
Landscape Installation Bond	When the estimated materials costs for new landscaping shown on the site development plan exceeds one thousand ($1,000) dollars, as determined by a plant nursery, the petitioner shall furnish a two (2) year bond or escrow sufficient in amount to guarantee the installation of said landscaping.
Landscape Maintenance Bond	Upon release of the Landscape Installation Bond, a two (2) year Landscape Maintenance Bond is required.

G. SPECIAL STUDIES.

When deemed appropriate due to the nature of the existing vegetation on the site, the Planning Commission may require the developer to provide a landscape or forestry study by an Independent Urban Forester or a Missouri Landscape Architect.

XIV. SURETY AND ESCROW PROCEDURES.

A. Prior to the issuance of any grading permit or improvement plan approval, a surety or cash escrow shall be posted to account for trees that die, or are damaged beyond repair, as a result of grading or construction damage. The surety or cash escrow will remain for:

1. Two (2) years after the issuance of the cessation of grading or completion of the required improvements whichever is later.

B. The amount of the surety or cash escrow shall be in the amount of $10,000 per 100 lineal feet, or portion thereof, of wooded canopy perimeter to be preserved adjacent to any proposed clearing, grading, or other disturbance; or $20,000 per acre to be preserved which ever is less.

C. The number of replacement trees is determined by matching the total caliper inches of trees to be planted with the total DBH inches of the trees that were lost.

D. A Landscape Plan shall be developed for the replacement trees according to specifications shown in this Tree Manual.

E. Failure to replace trees shall constitute default and the City of Chesterfield shall be entitled to proceed against the surety or cash escrow. Monies collected from fines will be placed in the Tree Preservation Account according to Section XV of this Tree Manual.

XV. TREE PRESERVATION ACCOUNT.

There is hereby established a "Tree Preservation Account" which shall be held as a separate account from the City's general fund. The monies paid as a result of fines or payments under the mitigation provisions of this ordinance or monies paid into this account pursuant to any other term of this ordinance, shall be used only for tree plantings on public property in the City of Chesterfield.

XVI. APPEAL.

A. Decisions of the Director of Planning regarding the application of this ordinance may be appealed to the Board of Adjustment in accordance with applicable procedures as established by the Board of Adjustment.

B. Decisions of the Director of Public Works regarding the application of this ordinance may be appealed to the Public Works Board of Variance in accordance with the applicable procedures as established by the Department of Public Works.

XVII. ADMINISTRATION AND ENFORCEMENT.

Administration and enforcement of the provisions of this manual shall be in accordance with the Zoning Ordinance of the City of Chesterfield Section 1003.200 which is adopted herein by reference. Subject to the exceptions noted in this manual, any person, firm, organization, society, association or corporation, or any agent or representative thereof who violates any section of this Tree Manual is subject to the penalties shown in Section XVIII. The removal of each tree in violation of this ordinance shall constitute a separate punishable offense. Violations occurring in the right of way shall be subject to the penalties as described in Chapter 26 of the City of Chesterfield Municipal Code.

XVIII. PENALTY FOR VIOLATION.

A. A violation of this section shall be a municipal violation and, in addition to any fines or other requirements of this manual, punishable by a fine of not less than five ($5) dollars and not more than one thousand dollars ($1,000) or by imprisonment for a period not to exceed three (3) months or by both fine and imprisonment. Each occurrence, location, and failure to conform to the requirements of this ordinance shall constitute a separate offense, and each and every day that such violation shall continue shall be an additional violation with each violation being punishable by a separate fine and/or imprisonment.

B. In addition to the penalties herein above and authorized and established, the City Attorney shall take such other actions at law or in equity, as may be required to halt, terminate, remove or otherwise eliminate any violations of this section.

C. The City of Chesterfield shall withhold occupancy permits until the fine is paid.

APPENDIX A *City of Chesterfield Recommended Tree List*

Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size class*
Abies concolor	**Fir, White (Concolor)**		**x**		**x**		**45+**	**Slow/Med (Large)**
Acer ginnala	**Maple, Amur**		**x**			**x**	**20-25**	**Med (Small)**
Acer platanoides	**Maple, Norway**	**x**		**x**			**45+**	**Med (Large)**
Acer platanoides 'Columnare'	**Maple, Norway, Columnar**		**x**	**x**			**45+**	**Med (Large)**
***Acer rubrum* Varieties**	**Maple, Red and Varieties**	**x**	**x**	**x**			**45+**	**Fast (Large)**
Acer saccharinum	**Maple, Silver**			**x**			**45+**	**Fast (Large)**
***Acer saccharum* Varieties**	**Maple, Sugar and Varieties**	**x**	**x**				**45+**	**Slow/Med (Large)**
Acer tataricum	**Maple, Tatarian**		**x**	**x**			**15-25**	**Med (Small)**
***Acer x freemanii* 'Jeffersred'**	**Maple, Hybrid, Autumn Blaze**		**x**	**x**			**45+**	**Med/Fast (Large)**
***Acer x freemanii* 'Scarsen'**	**Maple, Scarlet Sentinel**		**x**	**x**			**45+**	**Fast (Large)**
Aesculus glabra	**Buckeye, Ohio**		**x**	**x**		**x**	**25-35**	**Slow (Medium)**
Aesculus hippocastanum	**Horsechestnut**			**x**		**x**	**30-45**	**Med (Medium)**
Aesculus pavia	**Buckeye, Red**		**x**			**x**	**20-30**	**Slow (Slow)**
Alnus glutinosa	**Alder, European**	**x**		**x**			**45+**	**Med/Fast (Large)**

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Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size class*
Amelanchier arborea	**Serviceberry, Downy**		**x**			**x**	**25-30**	**Slow/Med (Medium)**
***Amelanchier laevis* 'Cumulus'**	**Serviceberry, Cumulus**		**x**			**x**	**25-30**	**Slow/Med (Medium)**
***Amelanchier x grandiflora* 'Robin Hill'**	**Serviceberry, Robin Hill**		**x**			**x**	**25-30**	**Slow/Med (Medium)**
Carpinus betulus	**Hornbeam, European**	**x**	**x**	**x**			**35-40**	**Slow/Med (Medium)**
Carpinus caroliniana	**Hornbeam, American**	**x**	**x**			**x**	**20-35**	**Med (Small)**
Carya illinoensis	**Pecan**			**x**			**45+**	**Med/Fast (Large)**
Carya laciniosa	**Hickory, Shellbark**			**x**			**45+**	**Slow/Med (Large)**
Carya ovata	**Hickory, Shagbark**			**x**			**45+**	**Slow (Large)**
Catalpa speciosa	**Catalpa, Northern**			**x**			**45+**	**Fast (Large)**
Celtis laevigata	**Sugarberry**	**x**		**x**			**45+**	**Fast (Large)**
***Celtis occidentalis* Varieties**	**Hackberry, and Varieties**	**x**		**x**			**45+**	**Med/Fast (Large)**
Cercidiphyllum japonicum	**Katsura**		**x**			**x**	**45+**	**Med/Fast (Large)**
Cercis canadensis	**Redbud, Eastern**		**x**	**x**		**x**	**25-30**	**Fast (Medium)**
Cladrastis kentukea	**Yellowwood**	**x**					**30-50**	**Slow/Med (Large)**

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Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size class*
Cornus florida	**Dogwood, Flowering**		**x**				**15-25**	**Slow/Med (Small)**
Crataegus crus-galli	**Hawthorn, Cockspur**		**x**			**x**	**15-20**	**Med (Small)**
***Crataegus laevigata* 'Superba'**	**Hawthorn, Crimson Cloud**	**x**	**x**	**x**		**x**	**15-20**	**Med (Small)**
Crataegus phaenopyrum	**Hawthorn, Washington**		**x**			**x**	**20-30**	**Med (Small)**
Crataegus virdis	**Hawthorn, Green**			**x**		**x**	**25-30**	**Med (Small)**
***Crataegus virdis* 'Winter King'**	**Hawthorn, Winter King**		**x**	**x**		**x**	**25-30**	**Med (Small)**
Eucommia ulmoides	**Rubbertree, Hardy**	**x**	**x**				**45+**	**Med (Large)**
Fagus grandifolia	**Beech, American**	**x**		**x**			**45+**	**Slow/Med (Large)**
Fagus sylvatica	**Beech, European**			**x**			**45+**	**Slow/Med (Large)**
***Fraxinus Americana* Varieties**	**Ash, White and Varieties**	**x**	**x**				**45+**	**Med/Fast (Large)**
Ginkgo biloba-Male	**Ginkgo (male)**	**x**	**x**				**45+**	**Slow/Med (Large)**
***Gleditsia triacanthos inermis*-Thornless, Podless Varieties**	**Honeylocust-Varieties that are Thornless and Podless**	**x**	**x**	**x**			**45+**	**Fast (Large)**
Gymnocladus dioicus	**Kentucky Coffeetree**		**x**				**45+**	**Med/Fast (Large)**
Halesia carolina	**Silverbell**		**x**	**x**		**x**	**20-30**	**Slow (Medium)**

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Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size Class*
Ilex decidua	Holly, Deciduous		x	x		x	45+	Slow (Large)
Ilex opaca	Holly, American			x	x		45+	Slow (Large)
Juniiperus virginiana	Redcedar, Eastern		x	x	x		30-40	Med (Medium)
Juniperus chinensis	Juniper, Chinese		x		x		20-30	Slow/Med (Small)
Koelreuteria paniculata	Goldenrain Tree	x	x				25-40	Med/Fast (Medium)
Liquidambar styraciflua	Sweetgum			x			45+	Fast (Large)
Liriodendron tulipifera	Tuliptree			x			45+	Fast (Large)
Magnolia acuminata	Cucumbertree		x				45+	Slow/Med (Large)
Magnolia grandiflora	Magnolia, Southern			x		x	45+	Med (Large)
Magnolia virginiana	Magnolia, Sweetbay		x	x		x	15-25	Med (Small)
Magnolia x soulangiana	Magnolia, Saucer		x	x		x	20-30	Slow/Med (Medium)
Ostrya virginiana	Hophornbeam	x	x				30-40	Slow/Med (Medium)
Oxydendron arboreum	Sourwood, (Sorrel Tree)		x	x			20-30	Slow/Med (Medium)
Picea glauca	Spruce, White		x	x	x		30-40	Med (Medium)
Picea pungens	Spruce, Colorado Blue		x	x	x		30-40	Med (Medium)

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Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size Class*
Pinus densiflora	**Pine, Japanese Red**		**x**		**x**		**45+**	**Med (Large)**
Pinus flexilis	**Pine, Limber**		**x**		**x**		**30-40**	**Med (Large)**
Pinus resinosa	**Pine, Red**			**x**	**x**		**45+**	**Med (Large)**
Pinus strobus	**Pine, Eastern White**		**x**	**x**	**x**		**45+**	**Fast (Large)**
Pinus thunbergiana	**Pine, Japanese Black**		**x**	**x**	**x**		**45+**	**Med (Large)**
Platanus occidentalis	**Sycamore**			**x**			**45+**	**Fast (Large)**
Platanus x acerifolia	**Planetree, London**	**x**		**x**			**45+**	**Fast (Large)**
Platycladus orientalis	**Arborvitae, Oriental**		**x**		**x**	**x**	**30-40**	**Slow (Medium)**
Prunus cerasifera	**Plum, Purple-leaf**		**x**			**x**	**15-25**	**Med (Small)**
***Prunus sargentii* 'Columnaris'**	**Cherry, Sargent, Columnar**		**x**			**x**	**30-40**	**Med (Medium)**
Prunus serrulata	**Cherry, Flowering, Japanese**		**x**			**x**	**25-35**	**Med (Medium)**
***Pyrus calleryana* 'Chanticleer'**	**Pear, Callery, Chanticleer**			**x**		**x**	**15-25**	**Med (Small)**
***Pyrus calleryana* 'Redspire'**	**Pear, Callery, Redspire**		**x**			**x**	**35-45**	**Med (Medium)**
Quercus acutissima	**Oak, Sawtooth**	**x**		**x**			**45+**	**Med (Large)**
Quercus alba	**Oak, White**			**x**			**45+**	**Med (Large)**
Quercus bicolor	**Oak, Swamp White**	**x**		**x**			**45+**	**Med (Large)**

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Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size Class*
Quercus coccinea	Oak, Scarlet	x		x			45+	Med/Fast (Large)
Quercus falcata var.pagodafolia	Oak, Cherrybark			x			45+	Med (Large)
Quercus imbricaria	Oak, Shingle	x		x			45+	Med (Large)
Quercus macrocarpa	Oak, Bur			x			45+	Slow/Med (Large)
Quercus michauxii	Oak, Swamp Chestnut	x		x			45+	Med (Large)
Quercus muehlenbergii	Oak, Chinkapin	x		x			45+	Med (Large)
Quercus robur	Oak, English,	x		x			45+	Med (Large)
Quercus rubra	Oak, Northern Red	x	x				45+	Med/Fast (Large)
Quercus stellata	Oak, Post			x			45+	Slow (Large)
Quercus velutina	Oak, Black			x			45+	Med (Large)
Quercus shumardii	Oak, Shumard	x		x			45+	Med/Fast (Large)
Quersus prinus	Oak, Chestnut			x			45+	Med (Large)
Salix nigra	Willow, Black			x			30-40	Fast (Medium)
Sassafras albidum	Sassafras			x			30-40	Med (Medium)
Sophora japonica	Pagodatree, Japanese			x		x	45+	Med (Large)

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Scientific Name	*Common Name*	*Street Tree**	*Parking Lot or Island*	*Valley Sites*	*Evergreen*	*Ornamental*	*Mature Height feet*	*Growth Rate and Size Class*
Syringa reticulata	**Lilac, Japanese Tree**		**x**			**x**	**25-30**	**Med (Small)**
Taxodium distichum	**Baldcypress**			**x**			**45+**	**Med (Large)**
Tilia americana	**Basswood, American (Linden)**	**x**		**x**			**45+**	**Med/Fast (Large)**
***Tilia cordata* Varieties**	**Linden, Littleleaf and Varieties**	**x**	**x**				**45+**	**Slow/Med (Large)**
Tsuga canadensis	**Hemlock, Canadian**		**x**	**x**	**x**		**45+**	**Slow/Med (Large)**
***Ulmus americana* Varieties**	**Elm, American and Varieties**	**x**		**x**			**60-80**	**Med/Fast (Large)**
Ulmus parvifolia	**Elm, Chinese (Lacebark)**	**x**		**x**			**45+**	**Med/Fast (Large)`**
***Zelkova serrata* Varieties**	**Zelkova and Varieties**	**x**		**x**			**45+**	**Fast (Large)**

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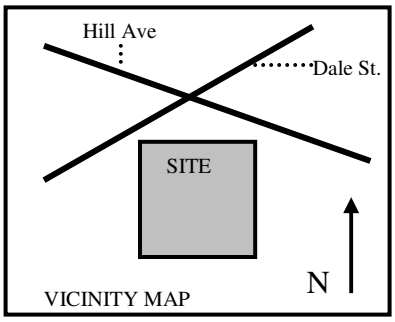
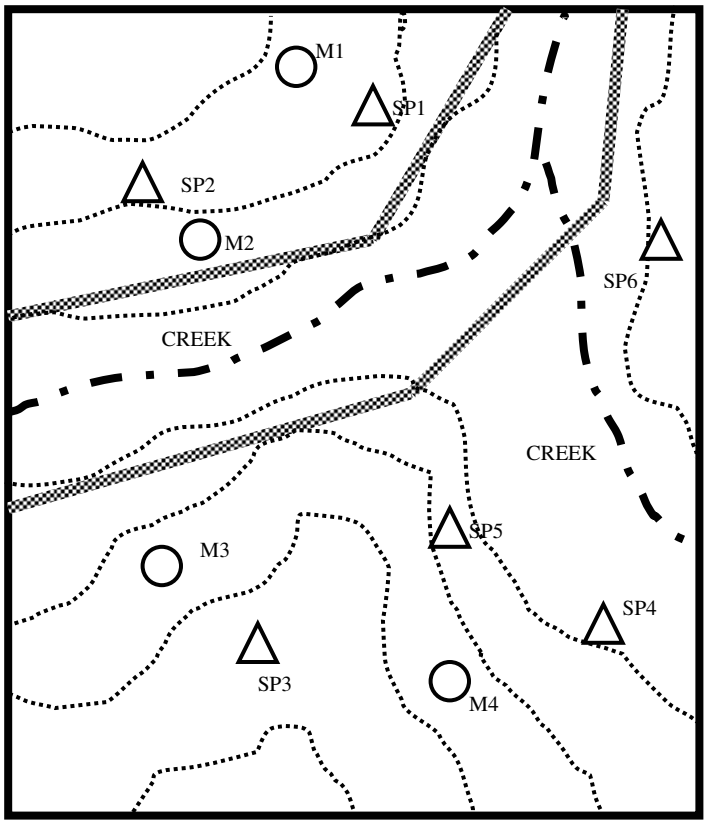
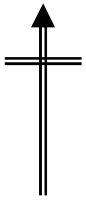
APPENDIX B

SAMPLE TREE STAND DELINEATION MAP

Aerial Photography/BAF 10 Method

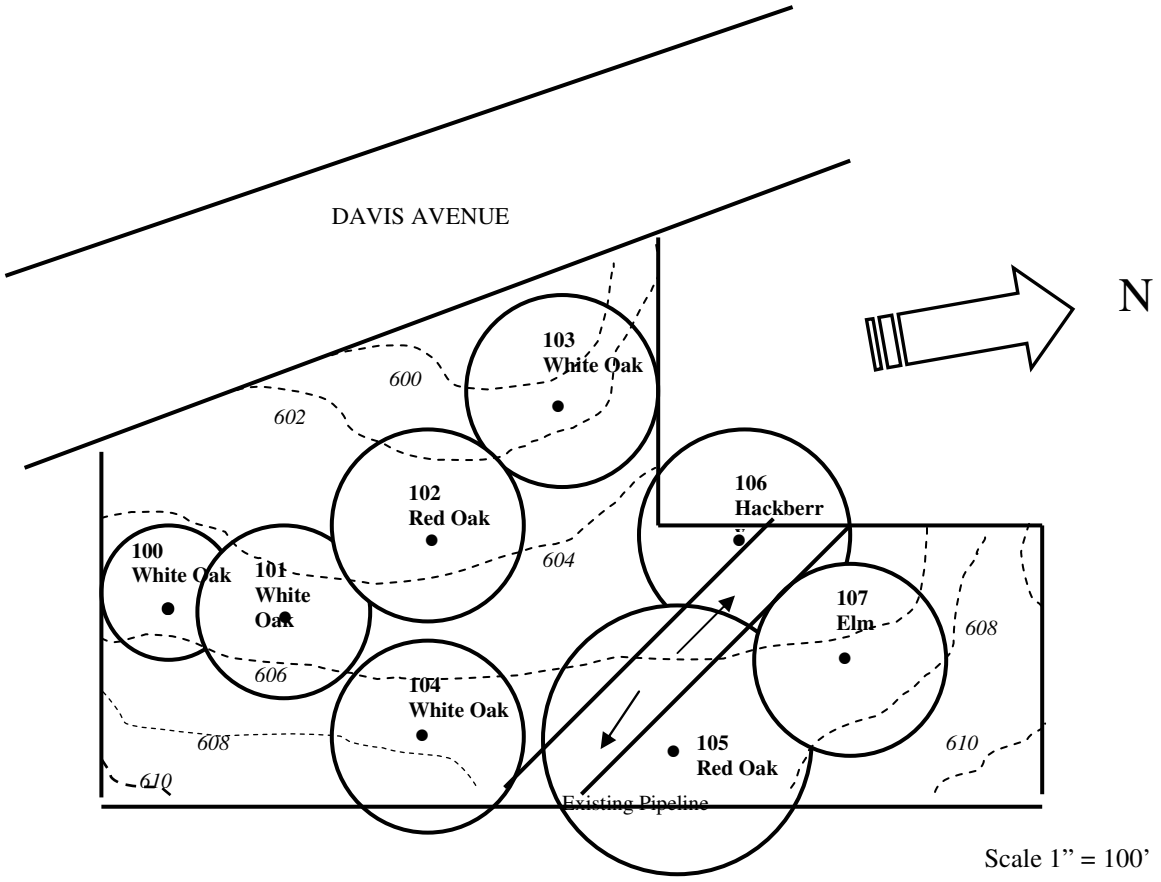






SCALE 1” = 200’

SAMPLE TREE STAND DELINEATION MAP

Ocular Estimate Method

RATING CHART