

**CITY OF CHESTERFIELD
PLANNING COMMISSION MEETING
MONDAY - APRIL 23, 2007
7:00 PM**

AGENDA

I. ROLL CALL

II. INVOCATION

III. PLEDGE OF ALLEGIANCE

IV. PUBLIC HEARINGS

- A. P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospital):** A request to amend Conditional Use Permit Number 561 to add hospital as a permitted use for an approximately 10.751 acre tract of land located at 14701 Olive Boulevard, east of the intersection of Ladue Road and Olive Boulevard. (17R530197)

The public may speak on this item tonight.

- B. 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.

The public may speak on this item tonight.

- C. P.Z. 16-2007 Valley Gates Subdivision (16845 N. Outer 40 Road):** A request for an amendment to City of Chesterfield Ordinance 2154 to allow for a change to the parking and building setbacks, building height and number of permitted buildings for a 7.698 acre tract of land zoned "PC" Planned Commercial located north of North Outer Forty and east of Boone's Crossing at 16845 North Outer Forty Road. (17T520073)

The public may speak on this item tonight.

V. APPROVAL OF MEETING MINUTES

- A. Approval of April 9, 2007 Planning Commission Minutes**

VI. PUBLIC COMMENT

VII. SITE PLANS, BUILDING ELEVATIONS AND SIGNS

- A. **Paddington Hill:** Amended Record Plat for a 7.8 acre site zoned "R-3" Residence District with a Planned Environment Unit

The Planning Commission may vote on this item tonight.

- B. **Somerset, Plat 1a, Lot 5 (1267 Somerset Drive):** A Residential Addition on an existing home zoned "R-2" Residence District and a "PEU" Planned Environmental Unit located at 1267 Somerset Field Drive in the Somerset Subdivision.

The Planning Commission may vote on this item tonight.

VIII. OLD BUSINESS

- A. **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 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. (18V510095 & 18V510040)

The Planning Commission may vote on this item tonight.

- B. **P.Z. 02-2007 The Estates at Upper Kehrs Mill (Miceli Construction):** A request for a change of zoning from "NU" Non-Urban to "E" One Acre District for a 10.2 acre tract of land located on the eastern side of Kehrs Mill Road, 4,100 feet south of its intersection with Wild Horse Creek Road. (19U530062, 19U530392)

Staff will discuss issues with the Planning Commission.

- C. **P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospital):** A request to amend Conditional Use Permit Number 561 to add hospital as a permitted use for an approximately 10.751 acre tract of land located at 14701 Olive Boulevard, east of the intersection of Ladue Road and Olive Boulevard. (17R530197)

The Planning Commission may vote on this item tonight.

- D. **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.

The Planning Commission may vote on this item tonight.

- E. **P.Z. 14-2007a Wilson Bluffs (SMS Group, L.L.C.):** A request for a change of zoning from “NU” Non-Urban District to “E-Half Acre” Estate District for a 3.28 acre tract of land located on the west side of Wilson road, directly north of Wilson Manors II Subdivision.

Staff will discuss issues with the Planning Commission.

- F. **P.Z. 16-2007 Valley Gates Subdivision (16845 N. Outer 40 Road):** A request for an amendment to City of Chesterfield Ordinance 2154 to allow for a change to the parking and building setbacks, building height and number of permitted buildings for a 7.698 acre tract of land zoned “PC” Planned Commercial located north of North Outer Forty and east of Boone’s Crossing at 16845 North Outer Forty Road. (17T520073)

Staff will discuss issues with the Planning Commission.

IX. NEW BUSINESS

X. COMMITTEE REPORTS

XI. ADJOURNMENT

Note: The Planning Commission 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.



**IV. A.
VIII. C.**

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 23, 2007

From: Annissa G. McCaskill-Clay, Assistant Director of Planning

Subject: Amendment to St. Louis County Conditional Use Permit #561 for the addition of "Hospital" as a use.

Location: 14701 Olive Boulevard (17R530197)

Petition: P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospital)

Proposal Summary

St. Luke's Episcopal Presbyterian Hospitals, the owner of Surrey Place, has submitted an application the above-referenced amendment to St. Louis County Conditional Use Permit #561 per the regulations of Section 1003.181 Conditional Use Permit Procedure (CUP) of the City of Chesterfield Zoning Ordinance. The subject site is located on the north side of Olive Boulevard, approximately .25 miles east of intersection of Olive and Ladue Roads and is zoned "R1A" Residence District.

The petitioner's request is for the addition of "Hospital" as a use for this site. Conditional Use Permit #561 currently authorizes a nursing home and associated self-care units and recreation facilities for residents who are at least 55 years of age.

Staff Recommendation

Staff recommends approval of the requested amendment for the addition of "Hospital" as a use for the subject site. A new Conditional Use Permit will be generated for this petition to replace the previous one written by St. Louis County.

Zoning Analysis

Section 1003.181 states: "It is hereby declared that certain land uses and developments present unique problems with respect to their proper location and relationship to other land uses. Therefore, analysis and judgment of the consequences of each development and use is necessary to preserve and to promote the public health, safety, and general welfare. Such land uses and developments are identified in each particular zoning district under conditional land use and development permits issued by the Commission."

The procedure for review/approval of a conditional use permit is set forth in Section 1003.181 of the Zoning Ordinance as follows:

- A public hearing is held at which time, unless further discussion is deemed necessary by the Commission, a vote is taken on the requested conditional use.
- If the Planning Commission votes to approve a conditional use, the Commission may impose conditions related to the requested conditional use as necessary.
- The Planning Commission, via Staff, files a report with the City Council granting or denying the application and stating the reasons therefore.
- Unless the City Council exercises its power of review or a protest is duly filed with the City Clerk, the Conditional Use Permit (C.U.P.) will become effective after 15 days of the City Council's receipt of the Planning Commission's report granting the application.
- If the Commission votes to deny a conditional use, the City Council may still exercise its power of review or the applicant may file an appeal within 15 days of the Planning Commission decision.

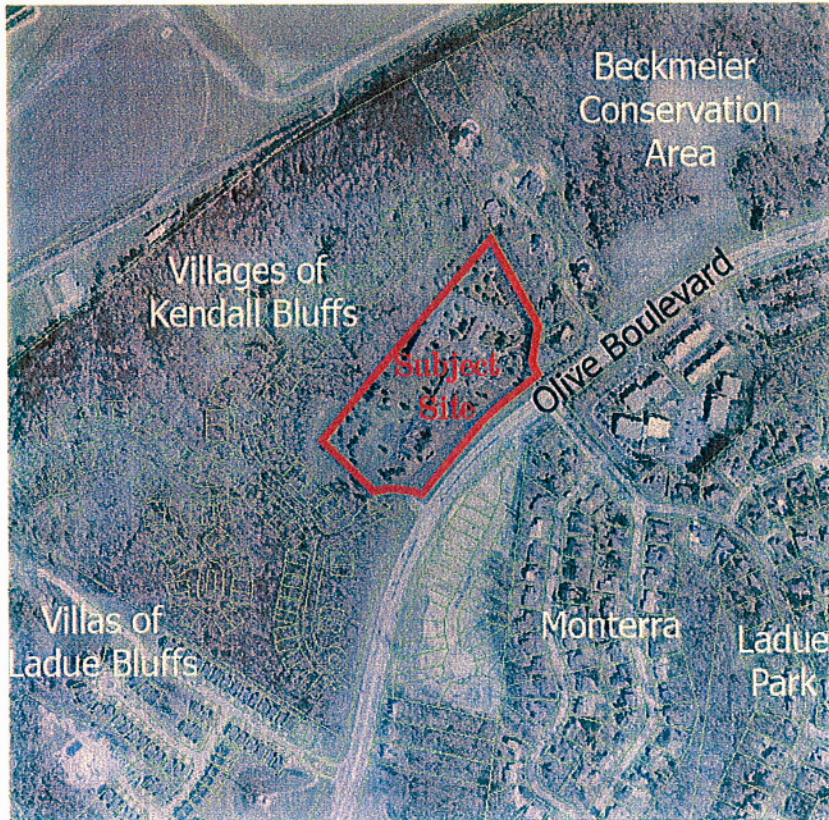
A preliminary plan accompanies all conditional use permit requests. When a vote is taken on the conditional use request, the vote is to approve the use(s), not to approve the accompanying preliminary plan which is provided for informational purposes only.

A Site Development Plan, if applicable, is required subsequent to the approval of a conditional use permit for review and approval by the City of Chesterfield.

Surrounding Land Use and Zoning

The land use and zoning for the properties surrounding this parcel are as follows:

- North and West: The property to the north is the Villages of Kendall Bluffs and is zoned "R1A" Planned Environment Unit (PEU).
- South: To the south of the subject site is Olive Boulevard. Beyond Olive is the "R2" with a Planned Environmental Unit-zoned Brunhaven Subdivision.
- East: To the east of Surrey Place is the "R1" Residence District-zoned Old Riverwoods Subdivision.



Looking north across Olive Boulevard at the existing development

Comprehensive Plan Analysis

The subject site is located within Ward 1 of the City of Chesterfield. The Comprehensive Plan calls for this area to be single family residential. This subject site is not located in any sub-area identified by the Comprehensive Plan; therefore there are no additional development guidelines for this site.

Site Area History

In 1987, St. Louis County zoned the subject site "R1A" Residence District and also issued Conditional Use Permit #561 authorizing a "nursing home and associated self-care units and recreation facilities for the elderly." A portion of the original "R1A" Residence District is currently being developed with a Planned Environment Unit (PEU) as the Villages at Kendall Bluffs.

Request

Staff recommends repeal of St. Louis County Conditional Use Permit #561 and approval of City of Chesterfield Conditional Use Permit #25 for the "R1A" Residence District-zoned Surrey Place.

Respectfully submitted,



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

Attachments

1. Draft City of Chesterfield Conditional Use Permit #25
2. Preliminary Plan

CITY OF CHESTERFIELD
CONDITIONAL USE PERMIT # 25

Petition: P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospitals)

Public Hearing Date: April 23, 2007

Site Location: The north side of Olive Boulevard, approximately .25 miles east of intersection of Olive and Ladue Roads

Acreage for CUP: 10.751

Underlying Zoning District: "R1A" Residence District

The following Conditional Uses shall be allowed in this development:

1. Hospital. As proposed, this use is to be a specialized, limited use facility that will provide general physical rehabilitative and medical services, including nursing, clinical and therapeutic services.
 - i. The hospital use associated with this C.U.P. development shall have no more than 35 beds.
2. Nursing home with associated self-care units and recreational facilities for the elderly.
 - i. Nursing facilities and self-care units shall be contained in not more than two (2) buildings.
 - ii. There shall be no more than 100 self-care units associated with this C.U.P. development. The full care nursing facility shall have no more than 140 beds.

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified below:

1. Self-care units shall be contained in a single building not more than three (3) building levels in height, excluding basement and cellar areas, underground parking and rooftop mechanical equipment.

2. All other building shall not exceed two (2) building levels in height, exclusive of basement and cellar areas, underground parking and rooftop mechanical equipment.
3. The buildings authorized via this C.U.P shall be of architectural style and building materials as approved by the Planning Commission on building elevations submitted in conjunction with the Site Development Plan.
4. Required parking for proposed uses shall dictate the actual developable square footage.
5. No direct access to Olive Boulevard shall be allowed. Access to Olive Boulevard shall be via Kendall Bluff Drive.
6. Provide a cross access easement guaranteeing permanent access from this site to the abutting properties to the west (Villages at Kendall Bluff) and northeast as directed by the City of Chesterfield.
7. Structure Setbacks:
No building or structure, other than boundary walls, retaining walls, signs, light standards, flag poles or fences, shall be located within the following setbacks:
 - a. One hundred (100) feet of the right of way of Olive Boulevard
 - b. Fifty (Ten (10) feet from northeastern limits of this C.U.P.
 - c. Sixty (60 feet from the northern property boundary (N42°06'40"E)
 - d. One hundred ninety (190) feet from the western property boundary (N44°58'18"W)
 - e. Ninety (90) feet from the eastern property boundary (S26°46'00"E)
 - f. Distance between buildings shall be as approved by the Department of Planning and the Planning Commission on appropriate development plan.
8. No outdoor parking stall or internal roadway, except points of ingress and egress, shall be located within the following setbacks:
 - a. Twenty-five (25) feet of the right-of-way of Olive Street Road.
 - b. Twenty-five (25) feet of the northeast boundary of this C.U.P.

- c. Sixty (60 feet from the northern property boundary (N42°06'40"E)
 - d. One hundred twenty (120) feet from the western property boundary (N44°58'18"W)
9. Provide a 5 foot wide sidewalk, conforming to ADA standards, along the Olive Boulevard frontage of the site. The sidewalk may be located within State right-of-way, if permitted by the Missouri Department of Transportation, or within a 6 foot wide sidewalk, maintenance and utility easement.

Property Description

A tract of land being part of Lot 2 of the Subdivision of Moss Hunton's Land according to the plat thereof as recorded in Surveyors Record Book 2, page 21 of the St. Louis County Records, being located in U.S. Surveys 120 and 206, Township 45 North, Range 4 East of the Fifth Principal Meridian, City of Chesterfield, St. Louis County, Missouri.

**NOTICE OF PUBLIC HEARING
CITY OF CHESTERFIELD
PLANNING COMMISSION**

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Chesterfield will hold Public Hearings on April 23, 2007, at 7:00 p.m. in the Council Chambers at the City Hall, 690 Chesterfield Parkway West, Chesterfield, Missouri 63017.

Said hearings will be as follows:

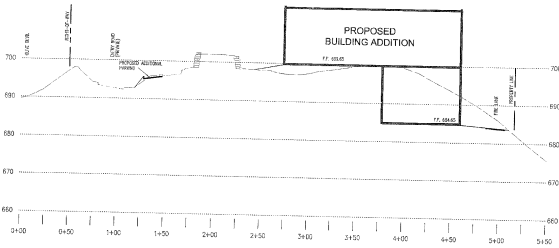
P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospital): a request to amend Conditional Use Permit Number 561 to add hospital as a permitted use for an approximately 10.751 acre tract of land located at 14701 Olive Boulevard, east of the intersection of Ladue Road and Olive Boulevard. (17R530197)

Anyone interested in the proceedings will be given an opportunity to be heard. Copies of the request are available for review in the Department of Planning at the Chesterfield City Hall, 690 Chesterfield Parkway West during weekdays between the hours of 8:30 a.m. and 4:30 p.m.

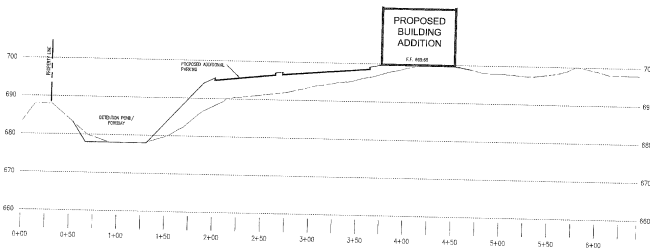
CITY OF CHESTERFIELD
Maurice L. Hirsch, Chair
Chesterfield Planning Commission



PRELIMINARY DEVELOPMENT PLAN
 A TRACT OF LAND BEING PART OF LOT 2 OF THE SUBDIVISION OF MOSS HUNTON'S LAND
 AS RECORDED IN SURVEYOR'S RECORD BOOK 2, PAGE 21
 LOCATED IN U.S. SURVEYS 120, 121 AND 206, TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE 5TH PRINCIPAL MERIDIAN
 CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI





SECTION A-A
 SCALE: 1"=40' HORIZONTAL
 1"=10' VERTICAL



SECTION B-B
 SCALE: 1"=40' HORIZONTAL
 1"=10' VERTICAL

PREPARED FOR
 ST. LOUIS CHILDREN'S HOSPITAL - PRESBYTERIAN HOSPITAL
 ATTN: MR. DON WELLS
 230 SOUTH WOODS HILL ROAD
 CHESTERFIELD, MO 63017
 PHONE: (314) 266-6222

M.S.D. No. _____		PRELIMINARY DEVELOPMENT PLAN	
3421 Main St. - 12-R		SURREY PLACE - REHABILITATION ADDITION	
April 11, 2007			
		297 Chesterfield Business Parkway St. Louis, MO 63085 PH: (314) 208-9833 FAX: (314) 208-9833 e-mail: gws@stockandassociates.com Web: www.stockandassociates.com	
DESIGNED BY: GEORGE W. STOCK - E-28116	CHECKED BY: J.E.F.	DATE: 02/09/07	PROJECT NO.: 206-3989
		SCALE: 1"=40' HORIZONTAL	SHEET NO.: 2 of 2

IV. B

NOTICE OF PUBLIC HEARING CITY OF CHESTERFIELD PLANNING COMMISSION

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Chesterfield will hold a Public Hearing on April 23, 2007 at 7:00 p.m., in the City Council Chambers at the City Hall, 690 Chesterfield Parkway West, Chesterfield, Missouri 63017.

Said hearing will be as follows:

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.

Anyone interested in the proceedings will be given an opportunity to be heard. Copies of the request are available for review in the Department of Planning at Chesterfield City Hall, 690 Chesterfield Parkway West, during weekdays between the hours of 8:30 a.m. and 4:30 p.m. If you need additional information on this project, please contact Mr. Jarvis Myers, Project Planner, Department of Planning at (636) 537-4741, or at jmyers@chesterfield.mo.us.

CITY OF CHESTERFIELD

Maurice L. Hirsch, Jr., Chair
Chesterfield Planning Commission

**NOTICE OF PUBLIC HEARING
CITY OF CHESTERFIELD
PLANNING COMMISSION**

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Chesterfield will hold Public Hearings on April 23, 2007 at 7:00 p.m. in the City Council Chambers at Chesterfield City Hall, 690 Chesterfield Parkway West, Chesterfield, Missouri 63017. Said Hearings will be as follows:

P.Z. 16-2007 Valley Gates Subdivision (16845 N. Outer 40 Road): a request for an amendment to City of Chesterfield Ordinance 2154 to allow for a change to the parking and building setbacks, building height and number of permitted buildings for a 7.698 acre tract of land zoned "PC" Planned Commercial located north of North Outer Forty and east of Boone's Crossing at 16845 North Outer Forty Road. (17T520073)



Anyone interested in the proceedings will be given an opportunity to be heard. Copies of the request are available for review from the Department of Planning at Chesterfield City Hall, 690 Chesterfield Parkway West, weekdays between the hours of 8:30 a.m. and 4:30 p.m. If you should need additional information about this project, please contact Ms. Aimee Nassif, Senior Planner of Zoning Administration by telephone at 636-537-4745 or by email at anassif@chesterfield.mo.us.

CITY OF CHESTERFIELD

Maurice Hirsch, Chair,
Chesterfield Planning Commission

For information about this and other projects under review by the Department of Planning, please visit "Planning Projects" at www.Chesterfield.mo.us.

Legal Description

A tract of land in part of Lots 6 and 7 of the James Long Estate, according to the plat attached to deed recorded in Book 445 page 354 of the records of City (former County) of St. Louis in U.S. Survey 2031, Township 45 North, Range 4 East, St. Louis County, Missouri.

V.A.

**PLANNING COMMISSION
OF THE CITY OF CHESTERFIELD
AT CHESTERFIELD CITY HALL
APRIL 9, 2007**

The meeting was called to order at 7:04 p.m.

I. PRESENT

Mr. David Asmus
Mr. Fred Broemmer
Ms. Wendy Geckeler
Dr. Lynn O'Connor
Ms. Lu Perantoni
Mr. Gene Schenberg
Ms. Victoria Sherman
Chairman Maurice L. Hirsch, Jr.

ABSENT

Mr. David Banks

Mayor John Nations
City Attorney Rob Heggie
Mr. Michael Herring, City Administrator
Mr. Mike Geisel, Acting Director of Planning
Ms. Annissa McCaskill-Clay, Assistant Director of Planning
Ms. Jennifer Yackley, Project Planner
Ms. Mary Ann Madden, Planning Assistant

II. INVOCATION: Commissioner Schenberg

III. PLEDGE OF ALLEGIANCE – All

Chair Hirsch acknowledged the attendance of Councilmember Bruce Geiger, Ward II; Councilmember-Elect Lee Erickson, Ward II; Councilmember Mike Casey, Ward III; Councilmember Connie Fults, Ward IV; and City Administrator Mike Herring.

IV. PUBLIC HEARINGS – Commissioner Sherman read the “Opening Comments” for the Public Hearing.

- A. P.Z. 11-2007 J&T Holdings (612 Cepi):** A request for a change of zoning from an “M3” Planned Industrial District to a “PC” Planned Commercial District for an approximately 0.38 acre tract of land located at 612 Cepi Drive south of the intersection of Chesterfield Airport Road and Cepi Drive.

Project Planner Jennifer Yackley gave a PowerPoint presentation showing photographs of the site and surrounding area. Ms. Yackley stated the following:

- The Petitioner is requesting the following three uses:
 - (e) Associated work and storage areas required by a business, firm or service to carry on business operations.
 - (x) Medical and dental offices.
 - (z) Offices or office buildings.
- The site has an existing building on it. The rezoning would allow the requested permitted uses. The existing zoning does not allow “Medical and dental offices” or “Offices or office buildings”.
- The Land Use Plan designates the site as “Service Business Park”, which allows for low-density and mid-density office, as well as low-intensity industrial, warehousing, and distributing. The requested uses are consistent with the Land Use Plan.
- Departmental Issues:
 - Parking: The Petitioner will be asked to maintain either shared parking or cross access agreements with the two buildings on the site.
 - Open Space: The Petitioner has not yet indicated what the open space is for the site. Staff will include this in its issues letter to the Petitioner.

Commissioner Broemmer asked when Public Hearing signs are removed from posted sites. Ms. Annissa McCaskill-Clay, Assistant Director of Planning, replied that the Public Hearing signs are kept up during the entire process – through Public Hearing, Planning & Zoning Committee, and City Council. This procedure gives the citizens notice that the property is the subject of a zoning request. Once the petition has gone through City Council, the signs are removed.

PETITIONER’S PRESENTATION:

1. Mr. Alan Agathen, 130 S. Bemiston, Clayton, MO stated the following:
 - Mr. Hawley owns the property at 612-614 Cepi Drive, which is about 8/10 of an acre.
 - The site has two existing buildings. The building nearest the street was constructed about 1984-1985. The building at the back of the site was constructed about 18 months ago and is used by Mr. Hawley for offices.
 - Approximately six months ago, J&T Holdings signed a contract to sell the front part of the property, including the front building, to a podiatrist for

medical offices. The contract is contingent upon satisfaction of all the Chesterfield zoning requirements.

- The current zoning does not permit medical offices.
- There is currently a re-subdivision petition before the City, which would divide the property in half. Each parcel would be approximately 4/10 of an acre.
- No changes would be done to the physical layout of the property – no changes in the configuration of the landscaping, buildings, or parking.
- There is a cross-parking easement agreement between the two parties.
- As part of the re-subdivision, a few modifications are required, which included the installation of a second hydrant and a second sewage runoff. These modifications are currently underway.

Responding to questions from the Commission, Mr. Agathen stated the following:

- **Regarding rezoning of the site:** The rezoning would be for only the front parcel of the site; the remaining parcel would keep the current “M3” zoning.
- **Regarding parking:** With the cross-parking easement, there is sufficient parking for “medical use”.
- **Regarding provisions for accessing the buildings from the parking lots:** Mr. Tom Hawley, owner of the 612-614 Cepi Drive property, stated that there is a patio in between the two buildings. The patio attaches, mid-section, to the two parking lots, which leads to a rear entrance to 612 Cepi. The property itself is small, so the shared parking does not present a distance problem for visitors to the buildings.

SPEAKERS IN FAVOR: None

SPEAKERS IN OPPOSITION: None

SPEAKERS – NEUTRAL: None

REBUTTAL: None

ISSUES:

1. Parking – cross access agreement or shared parking agreement
2. Open space
3. Discrepancy on the rezoning of the site. The legal description and plan show the entire parcel under the rezoning request vs. just the front parcel.

Commissioner Sherman read the Closing Comments for the Public Hearing.

V. APPROVAL OF MEETING MINUTES

Commissioner Perantoni made a motion to approve the minutes of the **March 26, 2007 Planning Commission Meeting**. The motion was seconded by Commissioner Schenberg and **passed by a voice vote of 8 to 0**.

VI. PUBLIC COMMENT

RE: P.Z. 16-2006 Conway Point Office Building (Nelson McBride Development)

Petitioner:

1. Mr. Randy Johnston, 14323 South Outer 40 Drive, Chesterfield, MO stated the following:
 - The site is currently zoned "R3" Single-Family Residential and they are requesting a "PC" Planned Commercial District zoning, which is consistent with the City's Land Use Plan.
 - They are working with Staff to resolve outstanding issues before the Site Plan stage.
 - They are working on a parallel tract with MoDOT and St. Louis County to purchase an additional 50 feet of the right-of-way. If the additional property is purchased, it will resolve all the outstanding site issues. If the additional property is not attained, a variance will be needed for the site.

Responding to questions from the Commission, Mr. Johnston stated the following:

- **Regarding how visitors would be educated to alternative acceptable routes to the site:** Speaker noted that the tenant is a long-time Chesterfield tenant and is moving across Highway 40 to the subject site. This tenant does not feel there will be a problem with vehicular navigation issues to the site. With respect to the concerns raised, the Petitioner is advancing suggestions made by a MoDOT official, who felt the problem could be corrected by changing the geometry of two islands and one signalized intersection.
- **Regarding the percentage of regular visitors vs. new visitors to the site with respect to finding a safe route to the property:** Currently, the majority of the vehicular traffic is generated by employees with not a lot of clients visiting the buildings. He noted that it is difficult to estimate how this may change over the next ten years.
- **Regarding whether the legal description for the rezoning makes provisions for the potential land purchase:** Speaker indicated that it does not – they would have to amend the Site Plan and legal description at that time. They are hoping to attain the additional property from MoDOT, which would correct all the issues.

2. Mr. Jeremy Brummond, Attorney for the Petitioner, 500 North Broadway, Ste. 2000, St. Louis, MO stated the following:
 - They are focused on the rezoning at this time.
 - The Petitioner is very dedicated to working with the City to make a workable project that completely complies with the Attachment A and the City's zoning ordinances.

3. Mr. Robert McBride, representing Nelson-McBride Development Company, 2135 Schuetz Road, St. Louis, MO stated the following:
 - The property directly west to the subject site is still zoned "Residential", which raises the issue of buffering. That property is currently on the market and Speaker feels it will be developed commercially. He has a letter from the owner of this property stating that they do not feel the buffer is necessary because the property will eventually be commercial.
 - The subject site comes directly off Highway 40 into the City. They want to beautify the site; they want to construct a building that will be attractive and a gateway to the City.
 - The tenants of the proposed building are also investors in the building. Two of the three tenants are long-time Chesterfield tenants. They are aware of the left-hand turn issue and it is not a problem to them.
 - Speaker noted that until the property is rezoned, they can not go forward with trying to attain the additional property from MoDOT.

Commissioner O'Connor referred to the Petitioner's written response to the Staff's issues letter. She noted that the Petitioner has requested that the Planning Commission reduce the required open space of this site to align with the open space requirements for sites in the Chesterfield Valley area along Interstate 64. Commissioner O'Connor stated that she does not view this site in a similar way as the properties in the Valley because the subject site abuts residential properties along Conway, i.e. the retirement center and the condos. Mr. McBride responded that commercial sites are between the subject site and any other residential site.

Commissioner Geckeler pointed out that there are 51 trees on the subject property and noted that the plans show all of the trees being removed. Mr. McBride stated that their arborist has indicated that none of the trees are worth keeping. They plan to re-plant new trees, in a similar amount, which will be substantially better trees than what is now there.

Commissioner Geckeler stated that the Planning Commission is bound by the fact that the site abuts residential zoning. Mr. McBride said it was his understanding that buffering requirements can be amended by City Council.

RE: P.Z. 03-2007 Chesterfield Retail Center

Petitioner:

1. Mr. Tim Short, 4671 Highway 2, Wentzville, MO stated that he was available for questions.

Commissioner Perantoni referred to the traffic circulation on the site and expressed concern about having drive-thru lanes for the following uses:

- d. Dry cleaning drop-off and pick-up stations.
- e. Financial institutions
- h. Restaurants, fast food

Mr. Short stated that the owner does not object to removing drive-thru lanes for the above uses but would like to maintain the uses. Mr. Short further stated that they are agreeable to not having any drive-thru facilities for any of the permitted uses.

Commissioner Geckeler asked the Petitioner to consider using evergreen trees as buffering along Chesterfield Airport Road.

VII. SITE PLANS, BUILDING ELEVATIONS AND SIGNS

- A. **Arthur Bierbrauer House (16630 Chesterfield Airport Road)**
Amended Site Development Plan: An Amended Site Development Plan and request for freestanding business sign for a 0.21 acre parcel zoned "PC" Planned Commercial District, with Landmark and Preservation Area (LPA) located on the south side of Chesterfield Airport Road and east of Baxter Road.

Commissioner Asmus, representing the Site Plan Committee, made a motion to approve the Amended Site Development Plan and freestanding business sign. The motion was seconded by Commissioner Broemmer and **passed** by a voice vote of 8 to 0.

- B. **Edward Schmidt House (16626 Chesterfield Airport Road)**
Amended Site Development Plan: An Amended Site Development Plan for a 0.22 acre parcel zoned "PC" Planned Commercial District, with Landmark and Preservation Area (LPA) located on the south side of Chesterfield Airport Road and east of Baxter Road.

Commissioner Asmus, representing the Site Plan Committee, made a motion to approve the Amended Site Development Plan. The motion was seconded by Commissioner Schenberg and **passed** by a voice vote of 8 to 0.

VIII. OLD BUSINESS

- A. **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.

Project Planner Jennifer Yackley stated that Staff recommends the change of zoning with the Attachment A as written. The Petitioner is asking the Planning Commission to consider two modifications:

- **Open Space Reduction**: Attachment A requires 45% open space; the Petitioner is requesting 37% open space. Staff recommends against the open space reduction.
- **Parking Reduction**: Attachment A requires 4 spaces/1,000 sq. ft. of floor area; the Petitioner is requesting either 3.3 spaces/1,000 sq. ft. of floor area, or 4 spaces/1,000 sq. ft. of rentable/usable space as defined by BOMA codes. Staff recommends against the parking reduction.

The Preliminary Plan does not meet the following requirements:

- Thirty-foot landscape buffer for commercial next to residential. The Petitioner has indicated they are willing to work with Staff on this issue during the Site Plan stage.
- Parking space setback based on the height of the building.
- Fifteen-foot landscaped setback for vehicular areas.

Chair Hirsch stated that the Planning Commission is considering the zoning request only at this time – not the Preliminary Plan.

Chair Hirsch asked if there were any motions to grant a reduction in the open space requirement. No motion was made.

Chair Hirsch asked if there were any motions to grant a reduction in the parking space calculations. No motion was made.

Commissioner Sherman made a motion to approve P.Z. 16-2006 Conway Point Office Building (Nelson McBride Development) with the following amendment to Section I.J.2 of the Attachment A with respect to sidewalks:

Provide a ~~four (4)~~ **five (5)** foot wide sidewalk along Conway Road.

The motion was seconded by Commissioner Geckeler.

Upon roll call, the vote was as follows:

Aye: Commissioner Sherman, Commissioner Asmus,
Commissioner Broemmer, Commissioner Geckeler,
Commissioner O'Connor, Commissioner Perantoni,
Commissioner Schenberg, Chairman Hirsch

Nay: None

The motion passed by a vote of 8 to 0.

- B. 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.

Project Planner Jennifer Yackley stated that Staff recommends the change in zoning and recommends the following typographical correction to Section I.B.1.a. of the Attachment A regarding open space:

A minimum of ~~forty five percent (45%)~~ **forty percent (40%)** open space is required for this development.

Commissioner Schenberg made a motion to approve P.Z. 03-2007 Chesterfield Retail Center with the following amendments to the Attachment A:

Section I.B.1.a.

A minimum of ~~forty five percent (45%)~~ **forty percent (40%)** open space is required for this development.

Section I.A.

2. The above uses in the "PC" District shall be restricted as follows:

- a. Drive-thru facilities for any of the above permitted uses shall be prohibited.**

The motion was seconded by Commissioner Perantoni.

Upon roll call, the vote was as follows:

Aye: Commissioner Asmus, Commissioner Broemmer,
Commissioner Geckeler, Commissioner O'Connor,
Commissioner Perantoni, Commissioner Schenberg,
Commissioner Sherman, Chairman Hirsch

Nay: None

The motion passed by a vote of 8 to 0.

IX. NEW BUSINESS

A. Proposed Amendments to the By-Laws of the Planning Commission

Commissioner Sherman made a motion to hold the Proposed Amendments to the By-Laws and to refer them to the Committee of the Whole for review. The motion was seconded by Commissioner Broemmer and **passed by a voice vote of 8 to 0.**

X. COMMITTEE REPORTS - None

XI. ADJOURNMENT

The meeting adjourned at 7:50 p.m.

David Banks, Secretary



WILA

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

April 17, 2007

Planning Commission
City of Chesterfield
690 Chesterfield Parkway West
Chesterfield, MO 63017

The Planning Commission agenda for **April 23, 2007** will include the following item for your consideration:

Paddington Hill: Amended Record Plat for a 7.8 acre site zoned "R-3" Residence District with a Planned Environment Unit (PEU).

Dear Planning Commission:

Greater Missouri Builders, owners of the above-referenced development have submitted for your review an Amended Record Plat for Paddington Hill.

BACKGROUND

1. On June 7, 2004, the City of Chesterfield adopted Ordinances 2100 and 2101, which rezoned the subject site from "NU" Non-Urban to "R3" Residence District and established a Planned Environment Unit (PEU).
2. On November 22, 2004, the City of Chesterfield approved the Site Development Plan for the site.
3. On May 1, 2006, the original record plat for the site was approved by the City of Chesterfield via Ordinance 2266.
4. The originally approved Record Plat is being vacated and this record plat will replace it. An Amended Site Development Plan has been administratively approved which includes the following:
 - a. Reconfiguration of multiple lot lines to ensure building will be located within the side yard setbacks.

Paddington Hill Amended Record Plat
April 17, 2007
Page 2 of 2

- b. Reconfiguration of the common ground and the shape of one lot on the site.
- c. A variance to Subdivision Ordinance Section 1005.150 for a reduction in the minimum width for lots less than 7,500 square feet was approved by the Department of Planning.

The approved Record Plat will be vacated prior to approval of this Amended Record Plat by the City Council.

PURPOSE

The purpose of the record plat is to subdivide the 7.8 acre tract into 27 lots for single-family attached residential use. The subdivision is to retain the name Paddington Hill.

DEPARTMENTAL INPUT

The submittal was reviewed for compliance with all City of Chesterfield ordinances. The Department of Planning requests approval of the Amended Record Plat conditional on the approval by City Council of the Vacation of Subdivision.

Respectfully submitted,



Annissa McCaskill-Clay, AICP
Assistant Director of Planning

Cc: City Administrator
City Attorney
Department of Public Works

Attachments: Amended Record Plat



VII.B

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

April 18, 2007

Planning Commission
City of Chesterfield
690 Chesterfield Parkway West
Chesterfield, MO 63017

The Planning Commission agenda for **April 23, 2007** will include the following item for your consideration:

Somerset, Plat 1a, Lot 5 (1267 Somerset Drive): A Residential Addition on an existing home zoned “R-2” Residence District and a “PEU” Planned Environmental Unit located at 1267 Somerset Field Drive in the Somerset Subdivision.

Dear Planning Commission:

Michael and Terri Seider have submitted for your review, a request for an addition to a residential structure to exceed 500 square feet.

BACKGROUND INFORMATION

1. The property is a part of the Somerset subdivision, an existing residential subdivision.
2. The Petitioner has submitted a letter included in your packet for additional information concerning the consideration of the request.
3. The current home is 2 stories and approximately 30’ in height from finished grade. The home consists of approximately 2,600 sf of living space.
4. The existing home has a Brick Veneer front elevation with siding on the side and rear elevations.

CITY OF CHESTERFIELD PROCEDURE

1. Section 1003.126B “Residential Additions” states that any addition greater than five hundred (500) square feet shall be approved by the City of Chesterfield Planning Commission. This section also states the following:

“Residential additions, including the height of all additions, shall be harmonious and compatible with the existing residential dwellings.”

2. If the addition request is approved, the building of this structure will be reviewed for approval by the Departments of Planning and Public Works and then forwarded to St. Louis County for permits and inspections.
3. If the addition request is not approved, the Petitioner may apply for a variance before the Board of Adjustment. If approved, the building of this structure will be reviewed for approval by the Departments of Planning and Public Works and then forwarded to St. Louis County for permits and inspections.

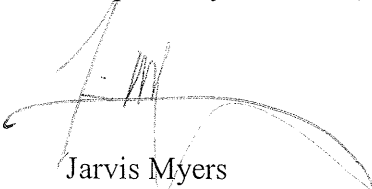
SUBMITTAL INFORMATION

1. The item for consideration before the Planning Commission is for the residential addition to exceed 500 square feet.
2. The addition proposed meets all other ordinance and setback requirements.
3. The addition is approximately 1,144 sf of usable space which does not include the deck. The deck addition is 200 sf.
4. The addition is two stories; however, it does not exceed the current height of the home.
5. The materials being used match the current residence. The front portion of the addition, which is visible from the street will match with a Brick Veneer front elevation and siding on the rear and side elevations.

DEPARTMENTAL INPUT


The submittal was reviewed for compliance with all City of Chesterfield ordinances. The Department of Planning requests approval of the Residential Addition.

Respectfully submitted,



Jarvis Myers
Project Planner

Respectfully submitted,



Mara M. Perry, AICP
Senior Planner of Plan Review

Cc: City Administrator
City Attorney
Department of Public Works

Attachments:
Plans and elevations of the residential addition
Letter from the Homeowner

April 3, 2007

City of Chesterfield
Department of Planning
690 Chesterfield Parkway West
Chesterfield, MO 63017-0760

To: Planning Commission

Attached please find my application and three sets of 11" by 17" drawings of a proposed house expansion we are completing. I would like to summarize the details of the project in this letter, for your review on the April 23 meeting.

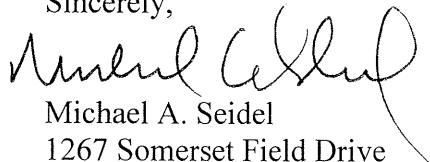
Our expansion consists of a new Hearth Room addition on the North side of our existing home. This 560 SF addition will have an exterior façade of brick on the front that matches the existing house brick. The side and rear elevation will be of Hardi-Board type material, similar to the material currently on the house. The asphalt roof shingles will match the existing shingles.

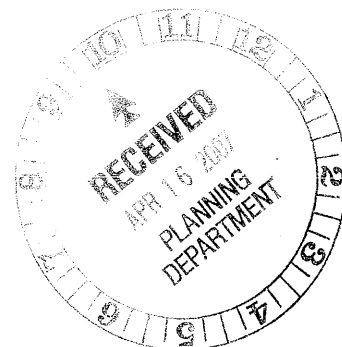
As you can see from the site plan, the proposed expansion is well within the building line limits for our lot.

Adjacent neighbors and the Subdivision Architectural review board from the subdivision have been notified by mail, three weeks before the review meeting date of the 23rd, and made aware of the project and the review meeting date should they have any concern or comment.

Since this is a relatively simple construction project relative to what you typically see at P&Z review, prompt review and approval on the 23rd of this expansion is requested, so I can continue on with the permit process with St. Louis County and begin construction during the spring. Thank you in advance for your consideration. If you have any questions, I can be reached at 314-220-5135.

Sincerely,


Michael A. Seidel
1267 Somerset Field Drive
Chesterfield, MO 63005



April 2, 2007

Dear Neighbor,

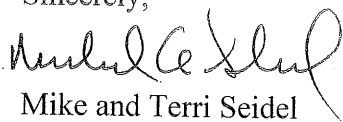
We are currently under permit application for an expansion to our house. We are adding a Hearth room to the North side of our house, behind the driveway and adjacent to the existing kitchen.

Chesterfield Planning and Zoning has requested that we contact adjacent neighbors to inform them of this expansion, so that you can comment or attend the P&Z meeting if you so desire. This home addition will be permitted and approved by St. Louis County Inspectors; however, a Municipal Zoning Approval is required by the City of Chesterfield on all expansions greater than 500 ft.

Our project falls within the pre-established building lines for the subdivision, and the expansion will be constructed of materials identical in type to the original building construction. All front facing facades will be of brick veneer to match the existing house, and the side and rear elevations will be Hardi-Board type material, similar to that which exists on the house now. Roofing will match existing asphalt shingle roof.

I believe the design we have created compliments the balance of the house, and when completed, will look as if it had been constructed with the original building. Most certainly, this addition adds value to the overall neighborhood by significantly increasing the investment in our property. Should you have any questions or concerns, please contact Terri or myself, or, feel free to attend the Public work session at City Hall. We intend to submit our application for review on the April 23rd session.

Sincerely,



Mike and Terri Seidel
1267 Somerset Field Drive
636-532-6938

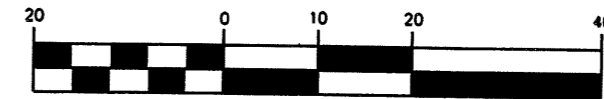
Cc: Somerset Board of Trustees – Architectural Review board – with drawings

LOT 5 OF SOMERSET PLAT ONE-A

A TRACT OF LAND IN U.S. SURVEY 125,
TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE 5TH PRINCIPAL MERIDIAN
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

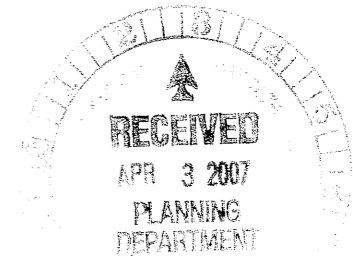
PB.324, PG.46

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

INSTALLATION OF SILTATION CONTROL MEASURES IS REQUIRED. PERMIT HOLDER IS RESPONSIBLE FOR PREVENTING MATERIAL FROM DISTURBED AREAS BEING DEPOSITED ONTO ADJOINING PROPERTIES.



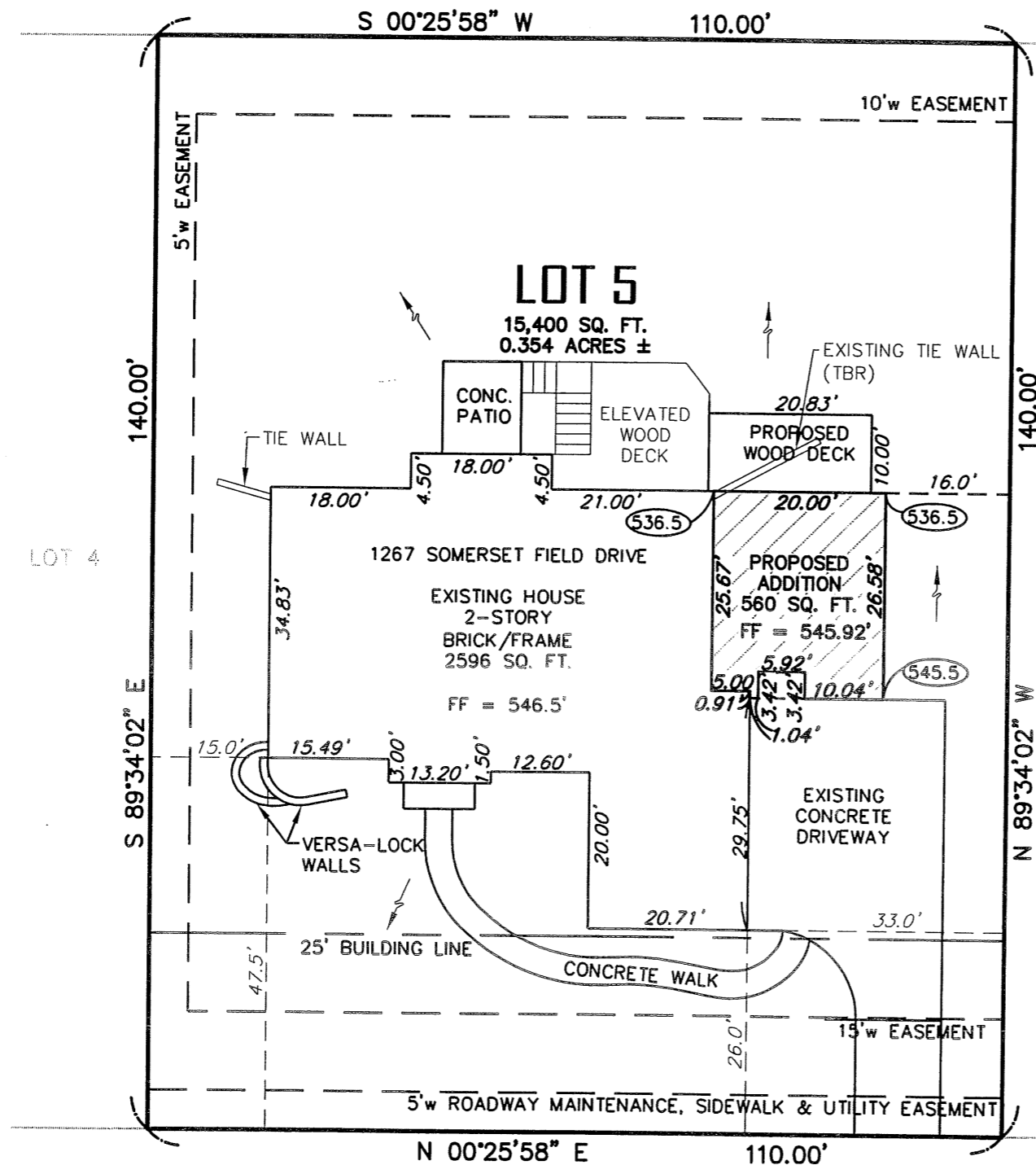
MUST MAINTAIN EXISTING DRAINAGE DIRECTIONS AND PATTERNS

NOTE:
CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AROUND BUILDING WILL POSITIVELY DRAIN PRIOR TO INSTALLING FOOTINGS.

- (670.2) INDICATES PROPOSED GRADES
- INDICATES PROPOSED DRAINAGE FLOW

GEORGE MICHAEL STOCK
NUMBER E-25715
Y.M. Stock 4/3/07

PLOT PLAN



SOMERSET FIELD (40'w) DRIVE

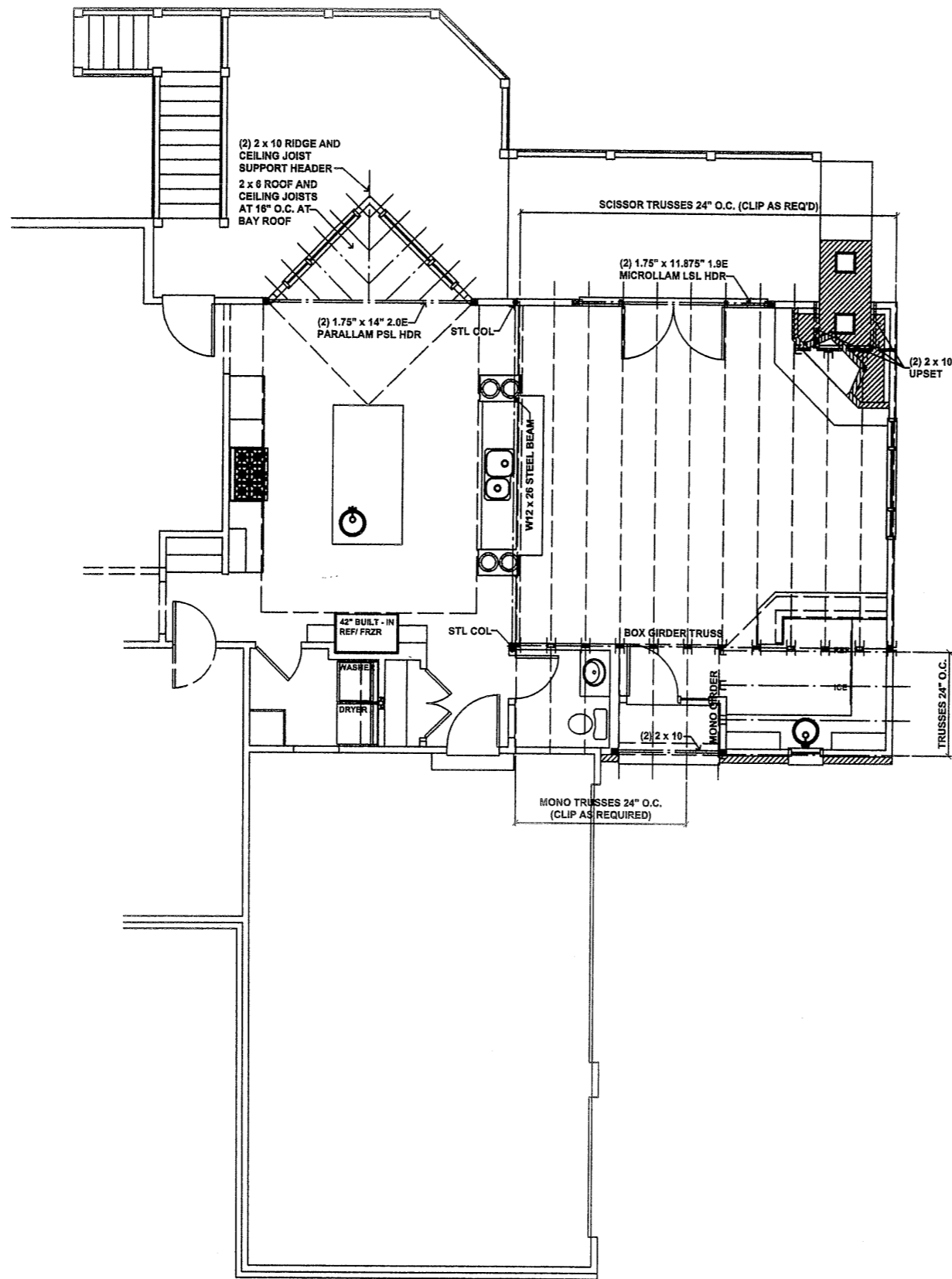
PREPARED FOR:
MICHAEL A. SEIDEL
1357 SOMERSET FIELD DRIVE
CHESTERFIELD, MO 63005

STOCK & ASSOCIATES
Consulting Engineers, Inc.

257 Chesterfield Business Parkway
St. Louis, MO 63005
PH. (636) 530-9100
FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

DRAWN BY: V.L.W.	DATE: 4/3/07	CHECKED BY: D.M.E.	DATE: 4/3/07	JOB NUMBER: 207-4058	SHEET: 1 of 1
---------------------	-----------------	-----------------------	-----------------	-------------------------	------------------

DRAWING FILE: C:\DRAWING\2074058\SURVEY\Plot Plan.dwg LAYOUT: Model PLOTTED BY: virginia.winters



TYPICAL EXTERIOR WOOD NOTE:
 ALL WOOD EXPOSED TO THE ELEMENTS IS TO BE TREATED. ALL METAL HANGERS, NAILS, WASHERS, FASTENERS, ETC. SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL (DO NOT MIX MATERIALS)

TYPICAL WINDOW HEADER NOTE:
 ALL WINDOW AND DOOR HEADERS IN EXTERIOR WALLS TO BE (2) 2 X 10'S - TYPICAL UNLESS NOTED OTHERWISE. ALL HEADERS TO EXTEND COMPLETELY OVER THE BRACED WALL PANELS NEAREST TO THEM ON BOTH SIDES AS NOTED ON PLANS.

BEARING POST NOTE:
 ALL GIRDER TRUSSES AND LOAD BEARING WOOD MEMBERS TO HAVE MINIMUM (3) STUD COLUMN AT EACH END TO FOUNDATION OR STEEL BEAM BEARING - TYPICAL UNLESS NOTED OTHERWISE.

SUBSTITUTION NOTE:
 (2) 1.75" WIDE TIMBERSTRAND, MICROLLAM OR PARALLAM MEMBERS MAY BE REPLACED BY A SINGLE 3.5" WIDE MEMBER OF THE SAME DESIGNATION. A SINGLE 3.5" WIDE MEMBER MAY BE REPLACED BY A DOUBLE 1.75" WIDE MEMBER OF THE SAME DESIGNATION.

ROOF TRUSS LAYOUT NOTES:

1. THIS ROOF TRUSS LAYOUT IS FOR DESIGN INTENT ONLY. FIELD VERIFY ALL INFORMATION WITH MISSOURI REGISTERED TRUSS ENGINEER'S FINAL LAYOUT DRAWINGS AND INSTALL PER TRUSS ENGINEER'S DIRECTION.
2. TRUSS ENGINEER IS RESPONSIBLE FOR SUBMITTING TO THE ARCHITECT ANY REVISIONS TO THE ROOF STRUCTURE AS DRAWN. TRUSS ENGINEER IS TO PROVIDE ADEQUATE INFORMATION TO ARCHITECT FOR UPDATING THE ARCHITECTURAL PLANS TO MATCH THE FINAL TRUSS LAYOUT PLANS.
3. TRUSS ENGINEER IS TO SUBMIT ONE SEALED SET OF FINAL TRUSS DRAWINGS TO THE ARCHITECT FOR RECORD PURPOSES.

EXTERIOR WALL SHEATHING NOTE:
 PROVIDE 1/2" THICK EXTERIOR GRADE OSB OR PLYWOOD SHEATHING OVER ALL EXTERIOR WALLS OF STRUCTURE - SEE WALL SECTIONS AND IRC DETAILS AND OTHER INFORMATION ON DETAIL SHEETS AND NOTE SHEETS FOR MORE INFORMATION.

1
A-3 **ROOF FRAMING PLAN**
 SCALE: 1/4" = 1'-0"



Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

AN ADDITION / RENOVATION PROJECT TITLED THE:
SEIDEL RESIDENCE
 1267 SOMERSET FIELD DRIVE
 CHESTERFIELD, MO 63005

revisions:

no.	date	description

architect seal:
 date: March 9, 2007
 drawn by: DJS / JLM

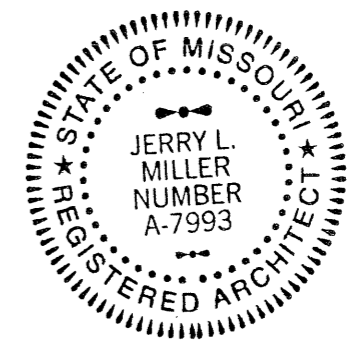
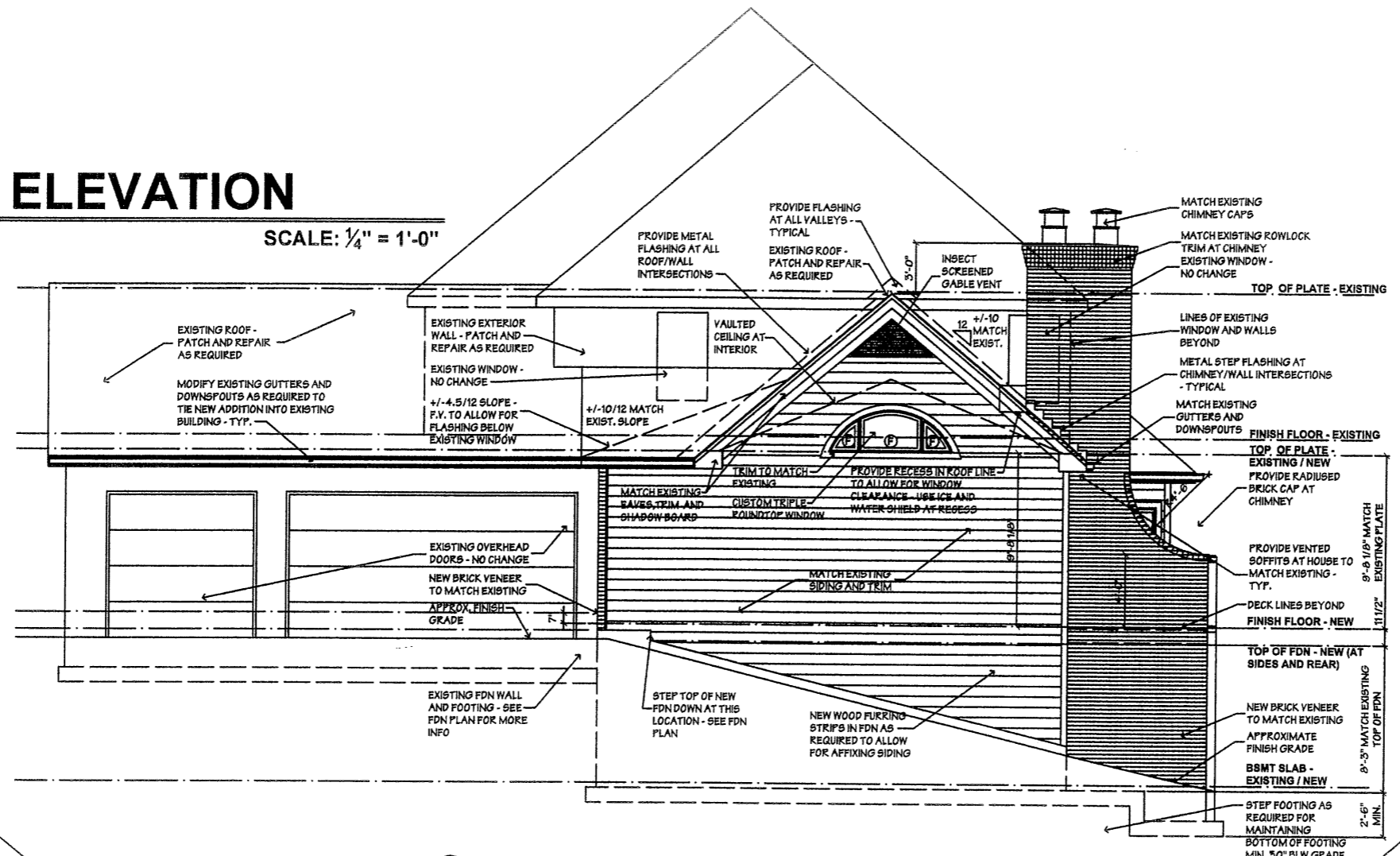
sheet no:
A-3
 project number: 07006

1 **RIGHT SIDE ELEVATION**
A-4 PARTIAL

SCALE: 1/4" = 1'-0"

- WINDOW / DOOR SYMBOL SCHEDULE**
 (E) EGRESS REQUIREMENTS APPLY
 (F) FIXED UNIT
 (T) TEMPERED GLASS REQUIRED
 (P) PASSIVE DOOR UNIT
 (A) ACTIVE DOOR UNIT

EXTERIOR WOOD NOTE:
 ALL WOOD EXPOSED TO THE ELEMENTS TO BE ACQ TREATED. ALL NAILS, BOLTS, WASHERS, FASTENERS, HANGERS, ETC. TO BE HOT DIPPED GALVANIZED.

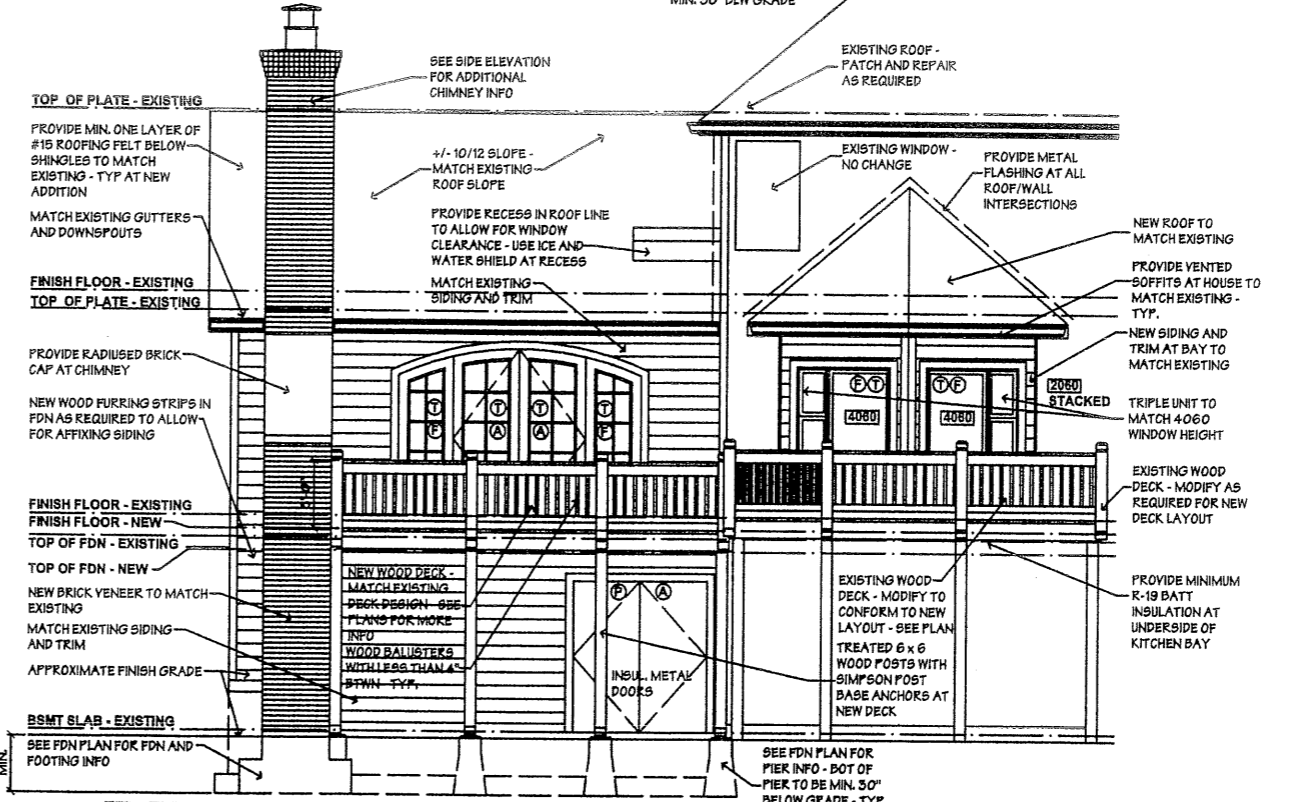
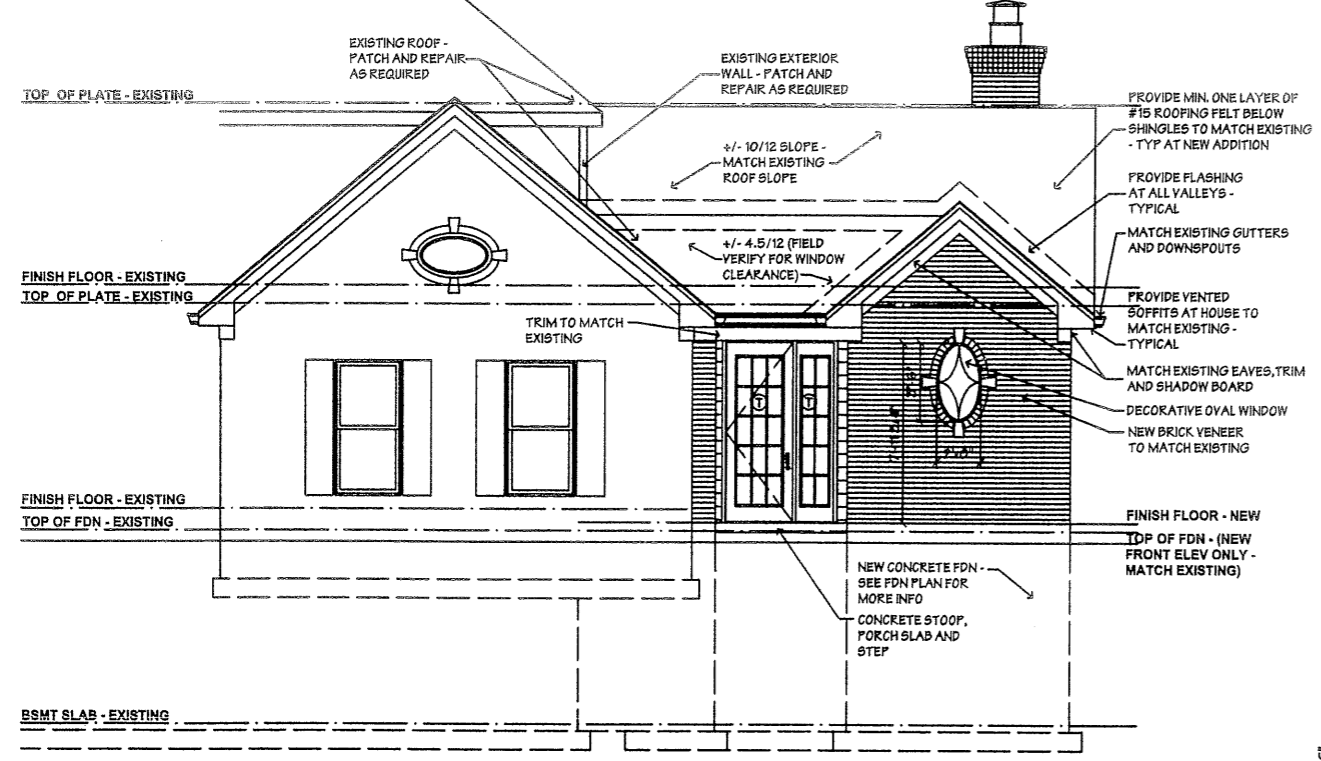


schaub design group, inc.

architects
interiors
planners

Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

AN ADDITION / RENOVATION PROJECT TITLED THE:
SEIDEL RESIDENCE
 1267 SOMERSET FIELD DRIVE
 CHESTERFIELD, MO 63005



2 **FRONT ELEVATION**
A-4 PARTIAL

SCALE: 1/4" = 1'-0"

3 **REAR ELEVATION**
A-4 PARTIAL

SCALE: 1/4" = 1'-0"

revisions:

no.	date	description

date: March 9, 2007
 drawn by: DJS / JLM

sheet no:
A-4
 project number: 07008

Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

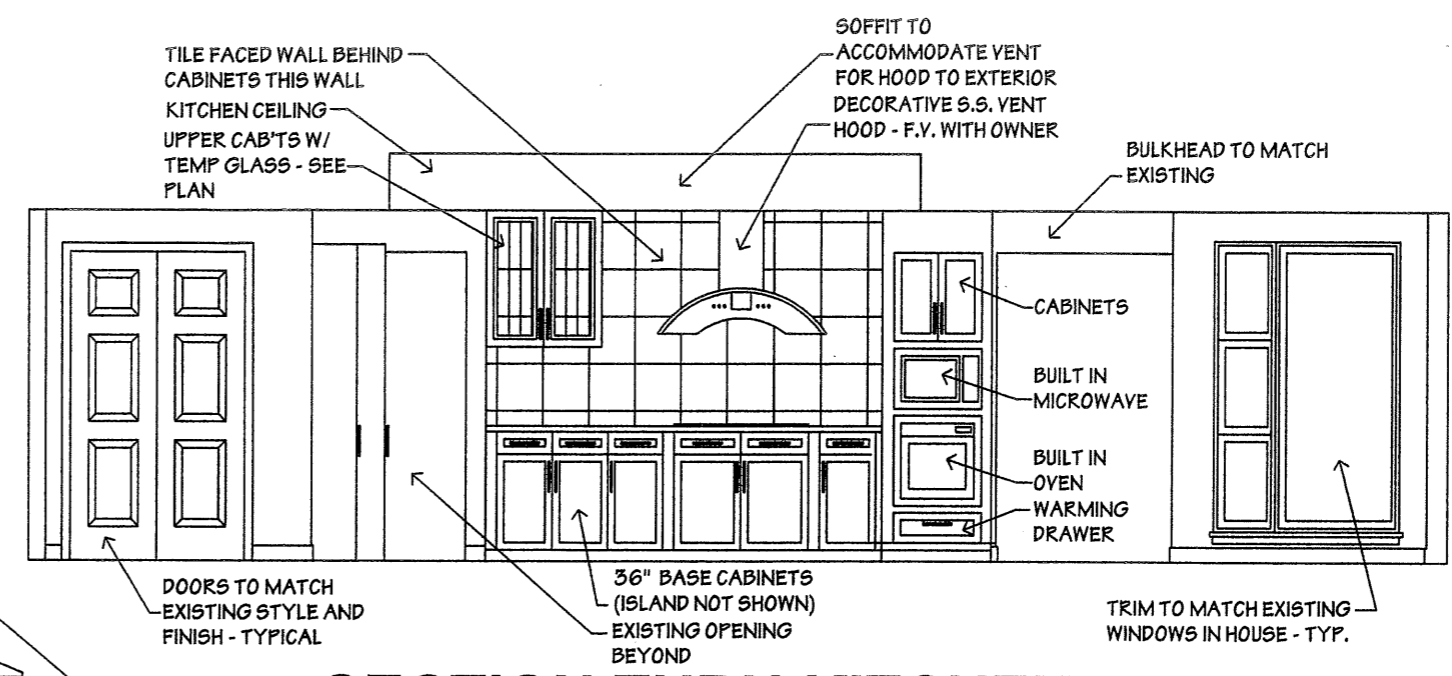
AN ADDITION / RENOVATION PROJECT TITLED THE:
SEIDEL RESIDENCE
 1267 SOMERSET FIELD DRIVE
 CHESTERFIELD, MO 63005

revisions:

no.	date	description

date: March 9, 2007
 drawn by: DJS / JLM

sheet no:
A-5
 project number: 07006



SECTION THRU KITCHEN

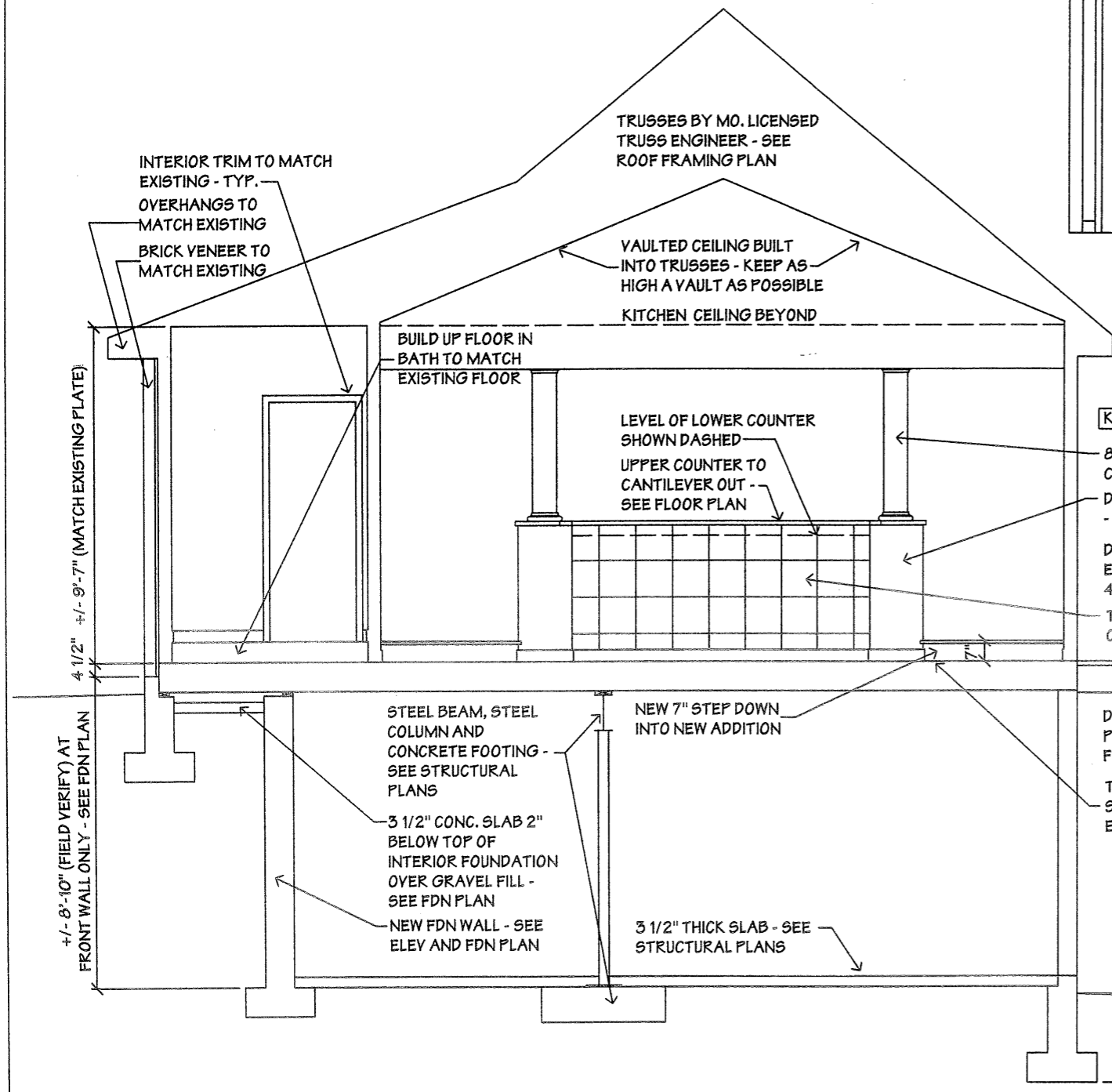
SCALE: 1/2" = 1'-0"

2
A-5

KITCHEN BAY NOT SHOWN
 8" DIAMETER STRAIGHT COLUMNS (FOUR TOTAL)
 DRYWALL FACED COLUMN BASES - TYPICAL
 DECK RAILING TO MATCH EXISTING - PROVIDE LESS THAN 4" BETWEEN BALUSTERS - TYP.
 TILE FACED WALL BELOW COUNTER CANTILEVER

DECK FRAMING - SEE FDN PLAN AND FIRST FLOOR FRAMING PLAN
 TOP OF NEW SUBFLOOR 7" BELOW EXISTING SUBFLOOR

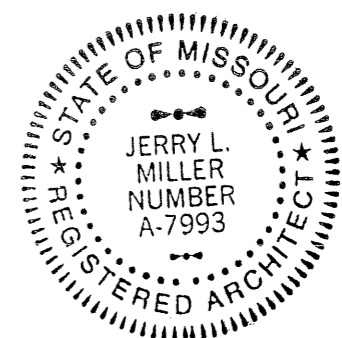
2'-6" MIN. TYP.

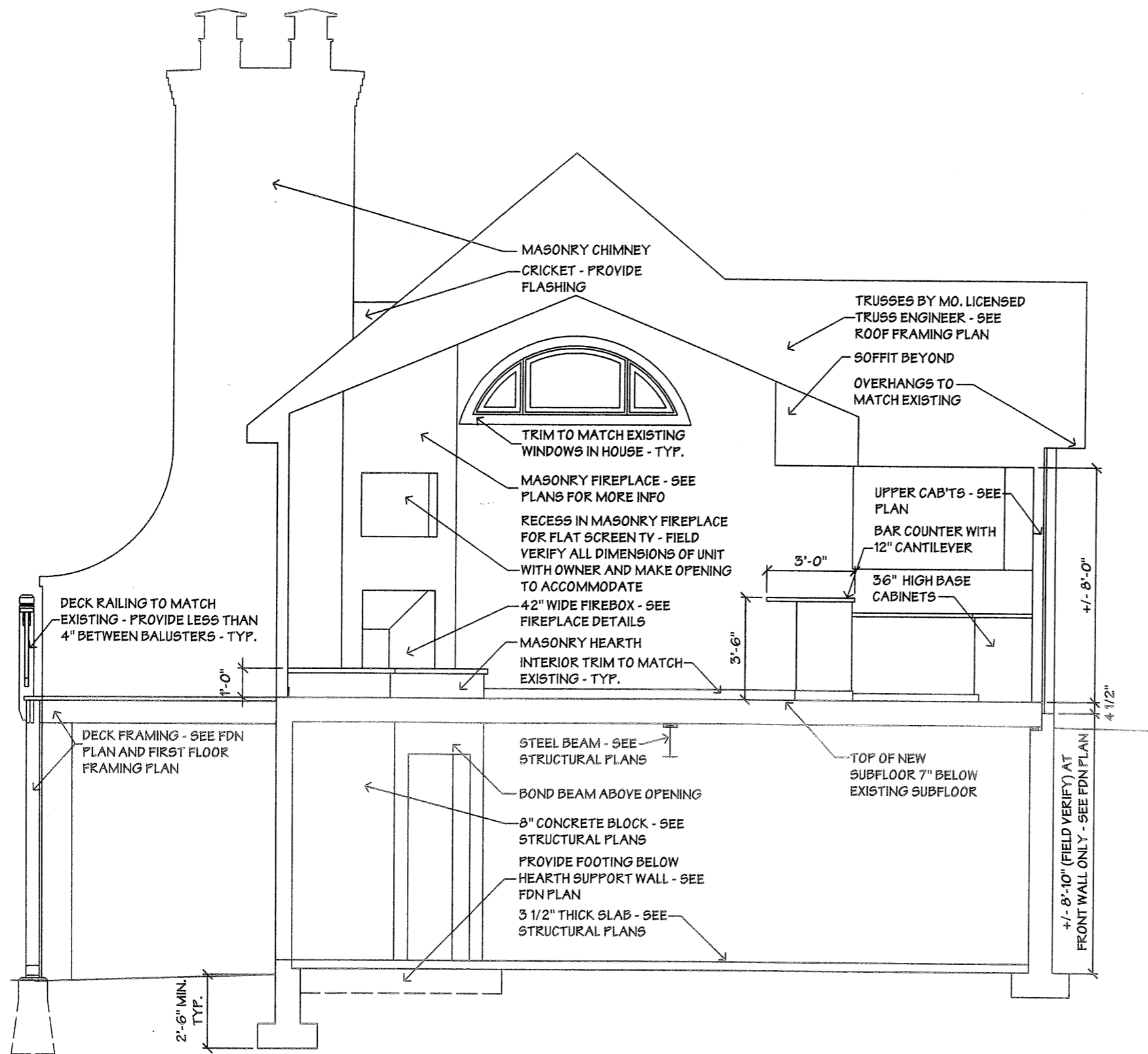


SECTION LOOKING INTO KITCHEN

SCALE: 1/2" = 1'-0"

1
A-5





schaub design group, inc.

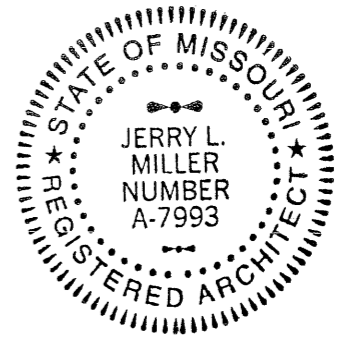
architects
interiors
planners

Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

AN ADDITION / RENOVATION PROJECT TITLED THE:
SEIDEL RESIDENCE
1267 SOMERSET FIELD DRIVE
CHESTERFIELD, MO 63005

revisions:

no.	date	description



date: March 9, 2007
drawn by: DJS / JLM

sheet no:
A-6
project number: 07006

1
A-6

SECTION THRU HEARTH ROOM

SCALE: 1/2" = 1'-0"

NOTIFY THE ARCHITECT IN EVENTS OF DISCREPANCIES, OMISSIONS, AND / OR CONFLICTS IN THE DRAWINGS OR SPECIFICATIONS. THE CONTRACTOR IS NOT AUTHORIZED TO SCALE THE DRAWINGS. ALL QUESTIONS IN REFERENCE TO CONTRACT DOCUMENTS SHOULD BE IMMEDIATELY DIRECTED TO THE ARCHITECT.

Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

AN ADDITION / RENOVATION PROJECT TITLED THE:

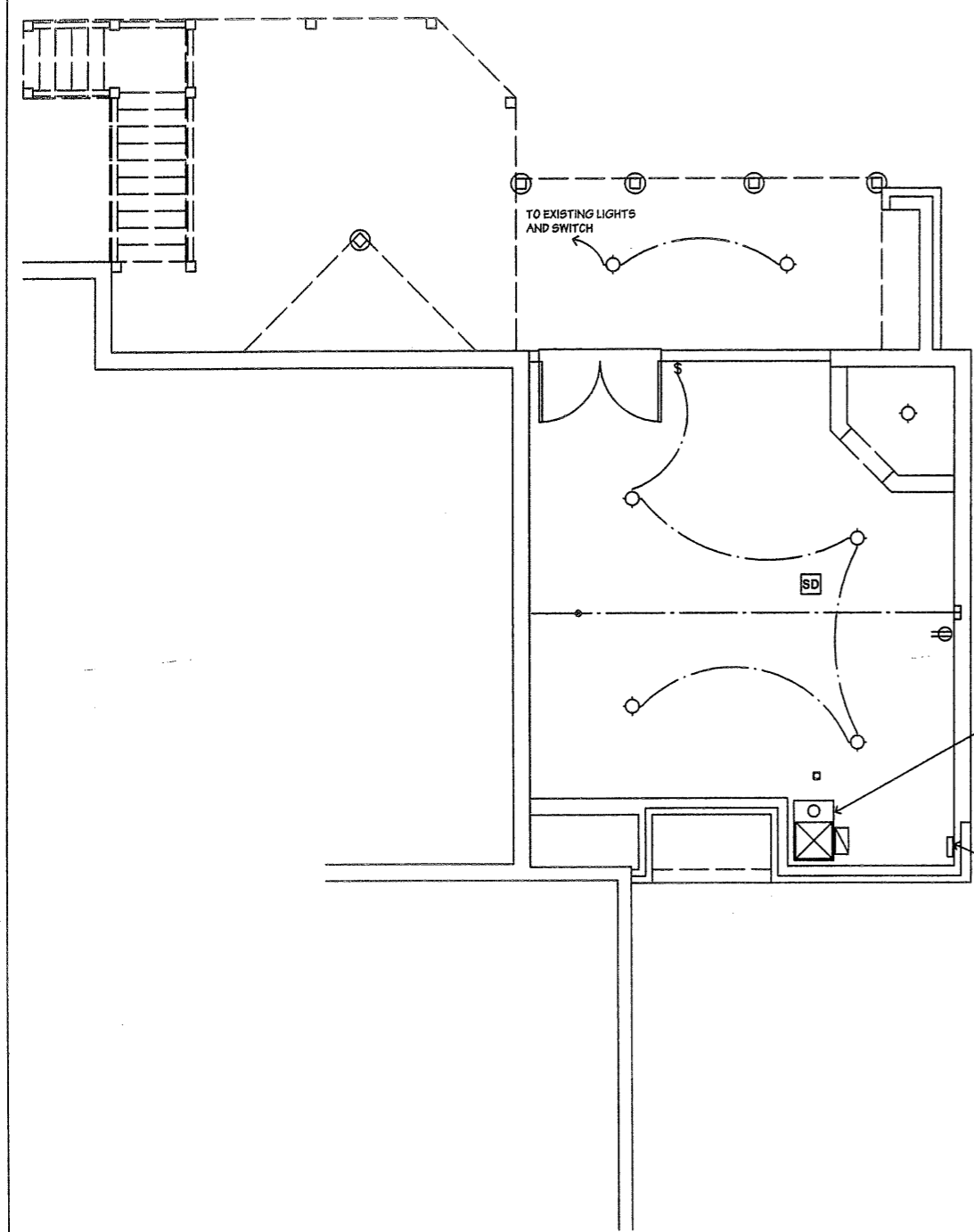
SEIDEL RESIDENCE
1267 SOMERSET FIELD DRIVE
CHESTERFIELD, MO 63005

revisions:

no.	date	description

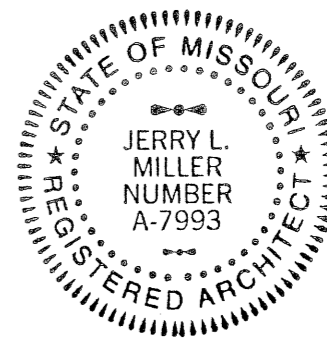
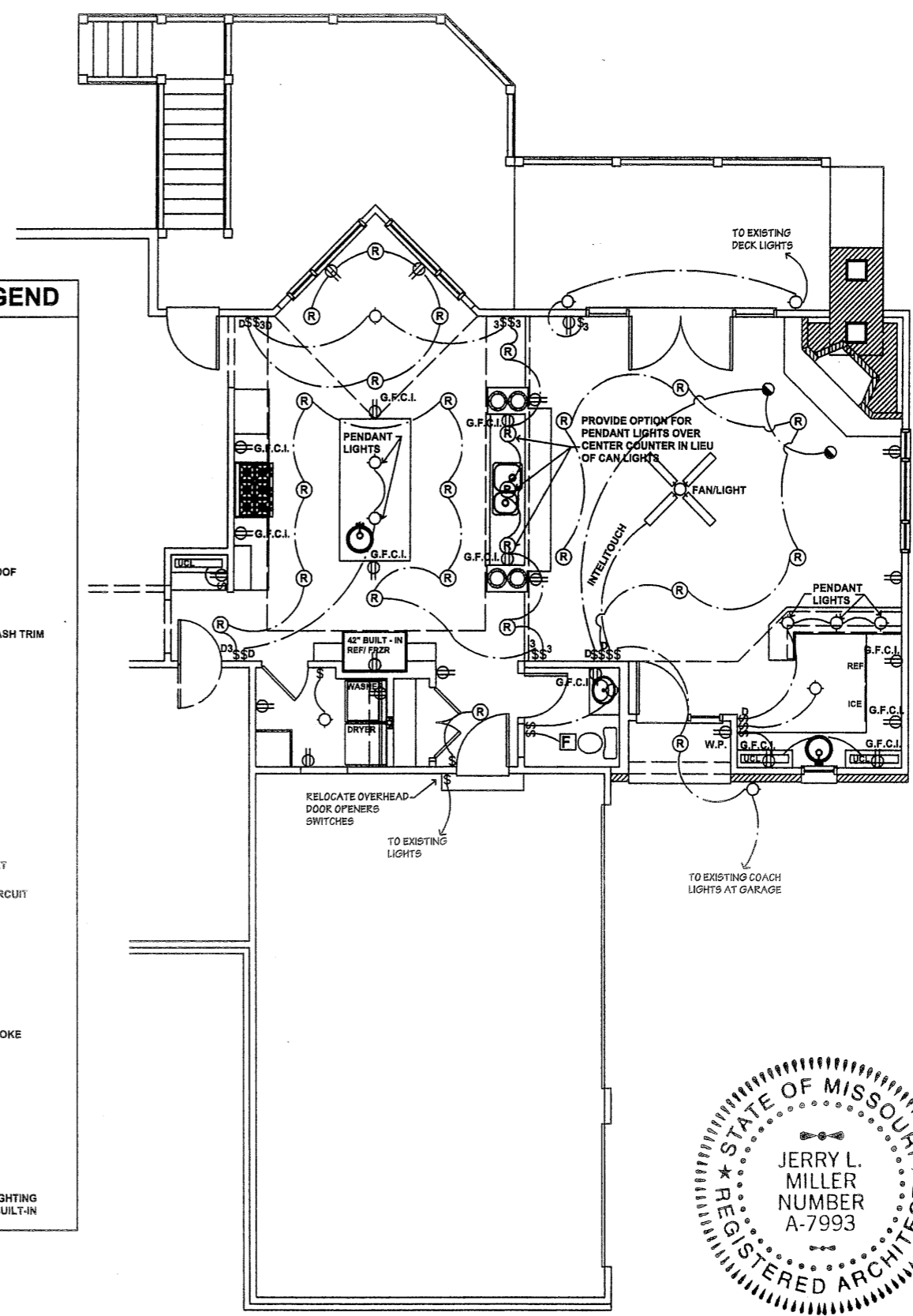
date: March 9, 2007
drawn by: DJS / JLM

sheet no:
E-1
project number: 07008



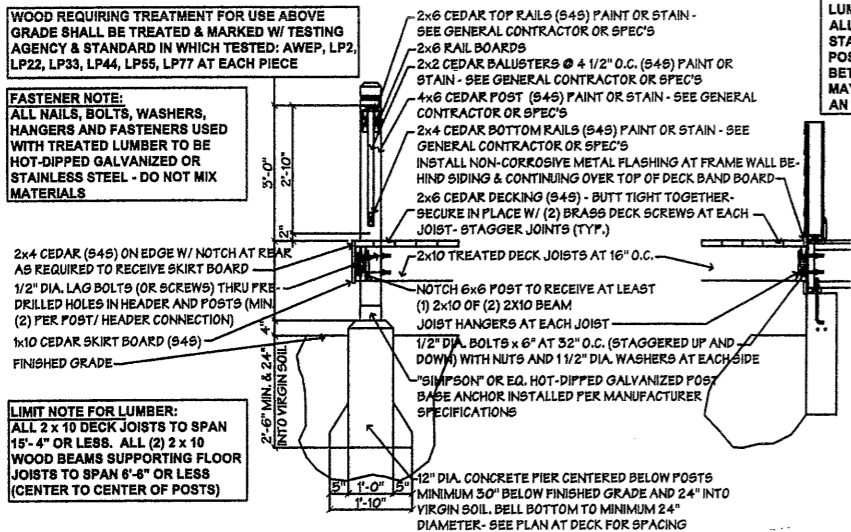
ELECTRICAL SYMBOL LEGEND

⚡	SINGLE POLE SWITCH
⚡ 3	THREE-WAY SWITCH
⚡ 4	FOUR-WAY SWITCH
⚡ I.S.	ILLUMINATED SWITCH
⚡ D.M.	DIMMER SWITCH
⊙	CEILING OR WALL MOUNTED LIGHT
⊙ P.C.	LIGHT FIXTURE W/ PULL SWITCH
⊙	WALL SCONCES
⊙	FLOOD LIGHT FIXTURE
⊙ (R)	RECESSED CAN FIXTURE- VAPOR PROOF
⊙ (R)	RECESSED CAN FIXTURE
⊙ (R)	RECESSED CAN FIXTURE W/ WALL WASH TRIM
⊙	UNDER-CABINET FIXTURE
⊙	CEILING FAN W/ LIGHT KIT
⊙	CEILING FAN ONLY
⊙	DUPLEX RECEPTACLE
⊙ G.F.C.I.	DUPLEX RECEPTACLE- GROUND FAULT CIRCUIT INTERRUPT PROTECTED
⊙ A.F.C.I.	DUPLEX RECEPTACLE- ARC FAULT CIRCUIT INTERRUPT PROTECTED
⊙ W.P.	WEATHERPROOF G.F.C.I. DUPLEX RECEPTACLE
⊙ 220	220 VOLT RECEPTACLE
⊙	DUPLEX RECEPTACLE- SPLIT WIRED
⊙	DUPLEX FLOOR RECEPTACLE IN APPROVED BOX
⊙ SD	A.C. POWERED INTERCONNECTED SMOKE DETECTOR WITH BATTERY BACKUP
⊙ F	EXHAUST FAN- VENT TO EXTERIOR
⊙ FL	EXHAUST FAN- VENT TO EXTERIOR W/ LIGHT COMBINATION
⊙ D.O.	OUTLET FOR DOOR OPENER
⊙ P	PHONE JACK
⊙ C	CAT 5 COMPUTER TERMINAL
⊙ J	JUNCTION BOX FOR FUTURE TASK LIGHTING INSTALLATION AT CABINETRY &/OR BUILT-IN



1 LOWER LEVEL ELEC PLAN
SCALE: 1/4" = 1'-0"

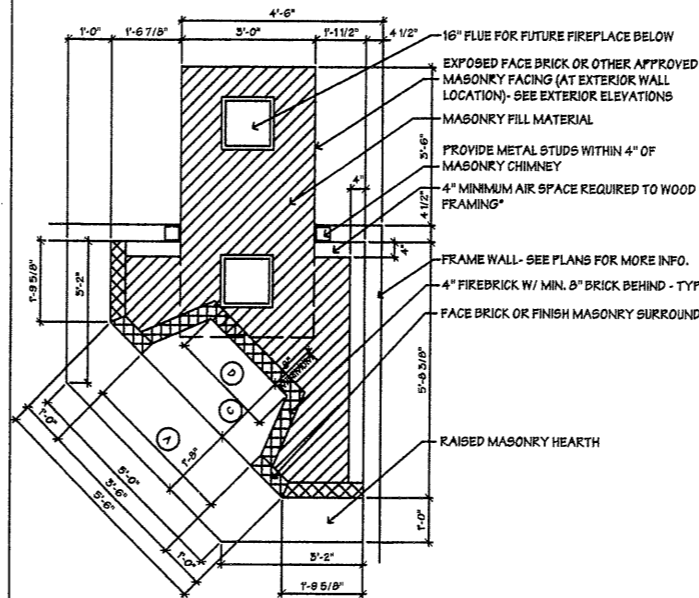
2 FIRST FLOOR ELEC PLAN
SCALE: 1/4" = 1'-0"



SCALE: 1/2" = 1'-0"

1 TYPICAL EXTERIOR DECK SECTION

AIR SPACE CLEARANCE TO COMBUSTIBLES (I.e. FRAMING, SHEATHING, ETC.) FROM THE EXTERIOR SURFACE OF THE FIREPLACE WALLS SHALL BE MINIMUM OF 4" AND FOR THE SMOKE CHAMBER WALLS AND CHIMNEYS SHALL BE MINIMUM OF 2". SUBSTITUTING ADDITIONAL MASONRY THICKNESS AT AN APPROVED MASONRY THICKNESS RATIO FOR EACH INCH OF AIRSPACE IS NOT PERMITTED. FIRESTOPPING IS REQUIRED AT ALL CEILING LINES AND ATTIC SPACES BY USE OF 1/2" THICK TYPE "X" GYPSUM BOARD OR 22 GAUGE METAL. USE OF PLYWOOD AS A FIRESTOP MATERIAL IS NOT PERMITTED. METAL STUDS OR FIRE-TREATED WOOD STUDS MAY COME IN DIRECT CONTACT WITH FIREPLACE WALLS.

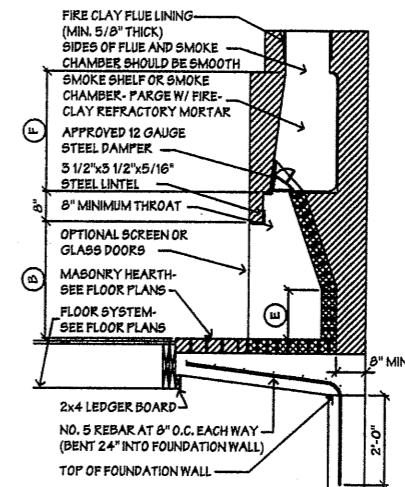


SCALE: 1/2" = 1'-0"

5 MASONRY FIREPLACE PLAN

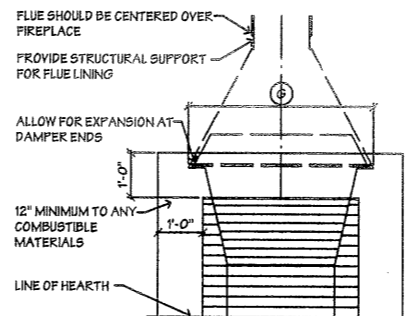
TYPICAL FIREPLACE DIMENSIONS (IN INCHES)

WIDTH	HEIGHT	DEPTH	BACK WIDTH	VERTICAL RACK	SMOKE CHAMBER	DAMPER WIDTH	FLUE SIZE
A	B	C	D	E	F	G	H
42	52	20	28	14	52	50	16"x16"



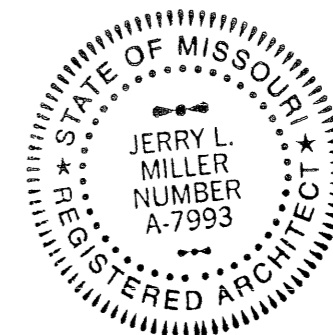
SCALE: 1/2" = 1'-0"

6 MASONRY FIREPLACE SECTION



SCALE: 1/2" = 1'-0"

9 MASONRY FIREPLACE ELEVATION



schaub design group, inc.
 architects
 interiors
 planners

Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

AN ADDITION / RENOVATION PROJECT TITLED THE:
SEIDEL RESIDENCE
 1267 SOMERSET FIELD DRIVE
 CHESTERFIELD, MO 63005

revisions:

no.	date	description
1	3-27-07	add masonry fireplace information

architect seal:
 date: March 9, 2007
 drawn by: DJS / JLM

sheet no:
D-2
 project number: 07006

10

11

12

13

GENERAL NOTES

DIVISION 1 GENERAL REQUIREMENTS

- DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS.
- ALL SQUARE FOOTAGE ON PLANS IS APPROXIMATE.
- AVAILABILITY OF DOCUMENTS:
CONSTRUCTION DOCUMENTS MAY BE OBTAINED FOR THE PURPOSE OF BIDDING FROM THE OFFICE OF SCHaub DESIGN GROUP, INC. AT 1046 NORTH HARRISON AVENUE, KENWOOD, MISSOURI 63122. PRINTING COSTS WILL BE THE RESPONSIBILITY OF THE ARCHITECT.
- PRODUCT SUBSTITUTIONS:
WHERE DOCUMENTS SPECULATE A PARTICULAR PRODUCT, SUBSTITUTIONS WILL BE CONSIDERED BY SCHaub DESIGN GROUP, INC. WHEN SUBMITTED IN WRITING ALONG WITH COMPLETE DATA SUBSTANTIATING COMPLIANCE OF SUBSTITUTION WITH THE CONTRACT DOCUMENTS.
- MEETINGS:
PRIOR TO BEGINNING ANY CONSTRUCTION, THE GENERAL CONTRACTOR SHALL REVIEW ALL ELEVATION RESTRICTIONS AND SITE CONDITIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY ERRORS OR INCONSISTENCIES. THE BEGINNING OF WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.
- REVIEW OF CONSTRUCTION DOCUMENTS:
PRIOR TO BEGINNING ANY CONSTRUCTION, THE GENERAL CONTRACTOR SHALL REVIEW ALL PLANS AND DETAILS AND NOTIFY THE ARCHITECT OF ANY ERRORS OR INCONSISTENCIES. BEGINNING WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.
- TRUSS DESIGN:
ALL TRUSSES SHALL BE DESIGNED AND BUILT BY A MISSOURI REGISTERED TRUSS ENGINEER. ALL TRUSSES SHALL COMPLY WITH APFD-NS-91 AND TP1-95 OR ANY MORE CURRENT CODES WHICH HAVE REPLACED THEM AS INDIVIDUAL JURISDICTIONS REQUIRE. SEE TRUSS NOTES UNDER DIVISION 6 FOR MORE INFORMATION ABOUT DESIGN AND SUBMITTALS.
- PERMITS:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS FROM THE FIRE DEPARTMENT, CITY ENGINEERS, CITY REVIEW BOARD, SUBDIVISION REVIEW BOARD, ETC. FOR THE PROJECT UNLESS OTHERWISE NOTIFIED IN WRITING BY THE ARCHITECT.
- DISCLAIMERS:
REMAINING WALL DESIGN:
RETAINING WALL DESIGN AND CONSTRUCTION DOCUMENT PREPARATION ARE BY OTHERS AND NOT A PART OF THIS SET OF CONSTRUCTION DOCUMENTS. RETAINING WALL DOCUMENTATION SHALL BE PROVIDED BY A MISSOURI REGISTERED ENGINEER. THE ENGINEER SHALL BE EMPLOYED AND PAID BY THE OWNER.
- WINDOW MANUFACTURER:
THE GENERAL CONTRACTOR AND WINDOW MANUFACTURER SHALL VERIFY THE SIZE, FIT, OPTIONS AND GREEN COMPLIANCE OF ALL WINDOWS PRIOR TO MANUFACTURING AND NOTIFY THE ARCHITECT OF ANY ERRORS OR INCONSISTENCIES. ORDERING WINDOWS WITHOUT VERIFICATION OF ALL INFORMATION PERTAINING TO THE WINDOWS MEANS THE GENERAL CONTRACTOR IS WILLING TO ACCEPT ALL RESPONSIBILITY.
- ARCHITECTURAL PLANS:
THESE ARCHITECTURAL DRAWINGS CONVEY DESIGN CONCEPT. THE CONTRACTOR REMAINS RESPONSIBLE FOR DETAILS AND ACCURACY. FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FOR FABRICATION PROCESSES, FOR TECHNIQUES OF ASSEMBLY, FOR OBTAINING ALL NECESSARY INSURANCE, FOR OBTAINING ALL REQUIRED PERMITS AND REVIEWS AND FOR PERFORMING THE WORK IN A SAFE AND ORDERLY MANNER.
- ARCHITECTURAL PLANS:
ON-SITE INDIVIDUAL SANITARY SEWAGE DISPOSAL SYSTEMS DISCLAIMER: SCHAUB DESIGN GROUP IS NOT RESPONSIBLE FOR DRAWINGS, TESTS, CALCULATIONS OR PERMITS FOR THESE SYSTEMS. SEE DIVISION 15 SHEET.

DIVISION 2 SITEWORK

- SUBSOIL INVESTIGATION:
SCHAUB DESIGN GROUP, INC. HAS NOT HAD ANY SUBSURFACE INVESTIGATION WORK PERFORMED ON THIS PROJECT (UNLESS OTHERWISE NOTED IN WRITING). IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO DETERMINE THE SUBSOIL CHARACTERISTICS OF THE SOIL AT THE BUILDING SITE. SOIL BEARING CAPACITY HAS BEEN ASSUMED AT 2,000 POUNDS PER SQUARE FOOT. THE SOIL AT THE BUILDING SITE MUST SUPPORT THIS LOAD AS A MINIMUM. WHEN IN DOUBT OF SOIL BEARING CAPACITY, THE GENERAL CONTRACTOR SHALL EMPLOY A PROFESSIONAL SOILS ENGINEER TO DETERMINE SOIL CHARACTERISTICS. IF INADEQUATE BEARING CAPACITY IS VERIFIED, THE ARCHITECT SHALL BE NOTIFIED IN WRITING OF THE ENGINEER'S FINDINGS BEFORE ANY FURTHER WORK IS PERFORMED. PAYMENT OF FEES FOR SOIL SURFACE INVESTIGATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- SILTATION AND EROSION CONTROL MEASURES MUST BE PROVIDED TO PREVENT SILTATION/EROSION FROM LEAVING THE CONSTRUCTION SITE.
- HAND TRAIL EXCAVATIONS: CORRECT OVER-EXCAVATIONS WITH COURSE FILTER AGGREGATE.
- INSTALL ALL DRAIN TILES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PLACE PIPE WITH PERFORATIONS FACING DOWN ON A MINIMUM OF 6 INCH DEEP BED OF COURSE FILTER AGGREGATE. INSTALL GROUND AGGREGATE AT SIDES, OVER JOINT COVERS AND TOP OF PIPE. PROVIDE TOP COVER COMPACTED THICKNESS OF 8 INCHES.
- BASEMENT FOUNDATION WALL DAMP PROOFING SHALL BE INSTALLED FROM THE TOP OF THE FOOTING TO ABOVE GRADE LEVEL USING AN APPROVED BITUMINOUS MATERIAL. SEE DIVISION 7 FOR ADDITIONAL INFORMATION.
- THE BUMP PUMP SHALL DISCHARGE ON OWNER'S PROPERTY AT LEAST TEN FEET AWAY FROM A PROPERTY LINE.
- BACKFILL SHALL BE FREE OF DEBRIS AND LARGE ROCKS.
- SLOPE GRADE AWAY FROM BUILDING A MINIMUM DISTANCE OF TEN FEET OR TO A BRALE WITH A MINIMUM DROP OF 60 INCHES. ADDITIONAL VERTICAL UNITS MAY BE REQUIRED TO ACCOUNT FOR SETTLEMENT OF THE BACKFILL AT THE IMMEDIATE PERIMETER OF THE FOUNDATION.
- FINISH GRADES AT BUILDING SHALL BE A MINIMUM OF 8 INCHES BELOW TOP OF FOUNDATION FOR BRICK VENEER AND 6 INCHES BELOW TOP OF FOUNDATION FOR FULL MASONRY WALLS.
- PROVIDE CONCRETE SPLASH BLOCKS AT ALL DOWNSPOUTS NOT DESIGNATED AS BEING ATTACHED TO A DRAIN TILE. DOWNSPOUTS NOT CONNECTED TO A DRAIN TILE SHALL DIRECT WATER AWAY FROM THE FOUNDATION SO AS TO PREVENT EROSION.
- DOWNSPOUTS, BASEMENT AREA WYDRAIN OR FOUNDATION DRAIN TILES ARE NOT TO BE CONNECTED TO A SANITARY SEWER, (EXCEPT IN THE CITY LIMITS OF ST. LOUIS CITY WHERE THEY SHALL BE CONNECTED TO A COMBINATION SEWER).
- VERIFY EXACT PLACEMENT OF ANY DRIVEWAYS, WALK AND PATIOS WITH SITE PLAN PROVIDED BY CIVIL ENGINEER AS PER INSTRUCTIONS UNDER DIVISION 1 ASPHALT DRIVEWAYS SHALL BE MINIMUM 2 INCHES THICK ASPHALT OVER 6 INCHES COMPACTED GRANULAR FILL. CONCRETE DRIVEWAYS SHALL CONSIST OF 4 INCH THICK CONCRETE WITH 6% W1.4 W4.4 WELDED WIRE MESH OVER MINIMUM 4 INCHES COMPACTED GRAVEL FILL. PROVIDE EXPANSION JOISTS AS PER LOCAL CODE REQUIREMENTS.
- SEE DIVISION 7, THERMAL AND MOISTURE PROTECTION FOR ANY OTHER APPLICABLE INFORMATION.

DIVISION 3 CONCRETE

- CONCRETE MINIMUM COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS:
 - A. 2,500 PSI COMPRESSIVE STRENGTH MIN. AT 28 DAYS IN BASEMENT SLABS.
 - B. 3,000 PSI COMPRESSIVE STRENGTH MIN. AT 28 DAYS IN BASEMENT FOUNDATIONS WALLS AND FOOTINGS.
 - C. 3,500 PSI COMPRESSIVE STRENGTH MIN. AT 28 DAYS IN ALL EXPOSED FLOOR SURFACES INCLUDING GARAGE AND CARPORT SLABS, PORCHES, WALKS PATIO STEPS AND DRIVEWAYS.
 - D. NOTE: ALL CONCRETE WORK SUBJECT TO FREEZING AND THAWING SHALL BE AIR ENTRAINED.
- FOOTINGS:
ALL FOOTINGS SHALL REST ON VIRGIN SOIL OR APPROVED COMPACTED FILL (1,500 PSF MINIMUM SOIL BEARING CAPACITY VERIFIED BY A CERTIFIED MISSOURI PROFESSIONAL ENGINEER UNDER SEPARATE CONTRACT PLAN FOR THE GENERAL CONTRACTOR OR OWNER) AND BE A MINIMUM OF 30 INCHES BELOW FINISH GRADE. UNLESS NOTED OTHERWISE, ALL FOOTINGS ARE TO BE POSITIONED IN THE MIDDLE OF THE FOUNDATION WALL.
- PIERS:
PIERS SHALL EXTEND A MINIMUM OF 24 INCHES INTO UNDISTURBED SOIL AND AT LEAST 30 INCHES BELOW FINISH GRADE.
- ANCHOR BOLTS:
1/2 INCH DIAMETER ANCHOR BOLTS PLACED AT A MAXIMUM OF 48 INCHES ON CENTER, SET MINIMUM 6 INCHES INTO CONCRETE REQUIRED FOR ANCHORING OF 9/16 PLATE AROUND THE ENTIRE FOUNDATION WITH NUTS AND 1/2 INCH DIAMETER WASHERS. PROVIDE A MINIMUM OF TWO ANCHOR BOLTS PER PLATE SECTION REGARDLESS OF LENGTH AND WITHIN 4 TO 12 INCHES OF THE END OF EACH SECTION OF PLATE. 9/16 PLATE ARE TO BE ON FIRECRACK LAB SEALER AND INSTALLED LEVEL. SEE SHEAR PANEL DETAILS ON DETAIL SHEETS AND PLAN PLAN FOR ADDITIONAL PLACEMENT AND SIZING INFORMATION.
- ANCHOR BOLTS SHALL BE HOT DIPPED GALV. OR STAINLESS STEEL AND SHALL BE CLEAN, FREE OF LOOSE SCALE, DIRT OR OTHER FOREIGN COATINGS. MATERIALS SHALL BE GALV. BOLTS, NUTS AND WASHERS SHALL NOT BE MIXED. LE NOT DIPPED GALVANIZED BOLTS ARE TO HAVE ONLY HOT DIPPED GALVANIZED WASHERS AND NUTS USED WITH THEM. STAINLESS STEEL ANCHOR BOLTS ARE NOT ALLOWED.
- DOWELS:
WHERE NEW CONCRETE IS DOWELED TO EXISTING WORK, DRILL HOLES IN EXISTING CONCRETE, INSERT STEEL DOWELS AND PACK WITH EPOXY ADHESIVE.
- CONCRETE FLOOR SLABS:
BASEMENT CONCRETE FLOOR SLABS SHALL BE A MINIMUM OF 3 1/2 INCHES THICK WITH 6% W1.4 W4.4 WELDED WIRE MESH REINFORCEMENT OVER AN APPROVED 6-INCH POLYETHYLENE VAPOUR BARRIER WITH JOINT LAPPED 6 INCHES MINIMUM THEN SEALED OVER 4 INCHES MINIMUM GRANULAR FILL. PROVIDE 1/2 INCH EXPANSION JOINT MATERIAL BETWEEN FLOOR SLAB AND FOUNDATION WALL.
- REINFORCEMENT:
BASEMENT WALLS AND FLOORS SHALL BE TREATED TO PROVIDE RESISTANCE TO THE INFILTRATION OF WATER AND SHALL BE REINFORCED TO WITHSTAND WATER PRESSURE AS REQUIRED.
- SEE FOUNDATION PLAN AND SHEET D-1 FOR REINFORCING REQUIREMENTS.
- ALL FOUNDATIONS SHALL BE KEPT TO THE FOOTING. SEE DETAIL SHEETS.
- FORCH HAUNCHES REQUIRE REINFORCING. SEE DETAIL SHEETS.
- REFER TO FOUNDATION PLAN AND DETAIL SHEETS FOR FOUNDATION WALL THICKNESS AND HEIGHT.
- JOINT EXPANSION:
PLACE JOINT FILLER AT PERIMETER OF THE FLOOR SLAB, PENETRATIONS, ISOLATION JOINTS AND AS INDICATED ON THE PLANS.
- CONCRETE PLACEMENT:
CONCRETE SHALL BE PLACED AND VIBRATED TO A MINIMUM OF 12 INCHES BELOW FINISH GRADE. REINFORCING SHALL BE INSTALLED BEFORE PLACING CONCRETE. IMMEDIATELY AFTER PLACEMENT, PROTECT CONCRETE FROM PREMATURE DRYING AND FREEZING TEMPERATURES.
- FLOOR SLAB:
BASEMENT FLOOR ELEVATION MUST BE ABOVE THE 100 YEAR FLOOR PLAIN LEVEL. BASEMENT WINDOW SILLS MUST BE A MINIMUM OF 24 INCHES ABOVE THE FLOOR PLAIN LEVEL. (ST. LOUIS COUNTY REQUIREMENT)
- CRAWLSPACE ACCESS:
A 16 INCH X 24 INCH MINIMUM ACCESS OPENING IS REQUIRED FOR ALL CRAWLSPACES.
- FILL BELOW CONCRETE:
ALL VOID UNDER BASEMENT, GARAGE, PORCH OR EXTERIOR STAIR CONCRETE SLABS SHALL BE FILLED WITH GRANULAR FILL.
- GARAGE SLAB SLOPE:
THE FLOOR OF THE GARAGE SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TOWARD THE MAIN VEHICLE ENTRY DOOR.

DIVISION 4 MASONRY

- BRICK VENEER REINFORCEMENT:
BRICK VENEER AND MASONRY WALLS SHALL HAVE NON-CORROSIVE CORRUGATED METAL TIE (MINIMUM 2 GA. X 17 1/8 INCH WIDE) AT 24 INCHES ON CENTER VERTICALLY AND HORIZONTALLY (MAXIMUM) AND SHALL NOT SUPPORT MORE THAN 2.67 SQUARE FEET OF WALL AREA. PROVIDE A ONE INCH MINIMUM AIR SPACE BETWEEN BRICK AND SHEATHING AT BRICK VENEER CONDITION.
- COMPOSITE MASONRY WALL SHALL HAVE NON-CORROSIVE METAL LADDER TIE REINFORCEMENT AT 16 INCHES ON CENTER HORIZONTALLY.
- BRICK VENEER ANCHORS:
BRICK VENEER ANCHORS AROUND OPENINGS LARGER THAN 16 INCHES IN EITHER DIRECTION SHALL BE SPACED A MAXIMUM OF 56 INCHES O.C. MAXIMUM AROUND THE PERIMETER OF AND WITHIN 12 INCHES OF THE OPENING.
- WEEP HOLES:
WEEP HOLES SHALL BE INSTALLED MINIMUM 3/16 INCH IN DIAMETER AND MINIMUM 32 INCHES APART. SEE DETAILS AT SHEET D-1.
- BRICK VENEER WALLS TO HAVE 1/4 INCH DIAMETER WEEP HOLES SPACED LESS THAN 24 INCHES APART. (CITY OF CREVE COEUR REQUIREMENT ONLY)
- MAXIMUM HEIGHT:
MAXIMUM HEIGHT ABOVE FOUNDATION FOR BRICK IS THIRTY FEET AT THE EAVE AND THIRTY EIGHT FEET AT GABLE ENDS FOR ONE AND TWO STORY STRUCTURES. (ST. LOUIS COUNTY REQUIREMENT)
- SEE DIVISION 7 FOR ADDITIONAL INFORMATION ABOUT THE WEATHER-RESISTANT MEMBRANE TO BE INSTALLED BEHIND BRICK/STONE VENEER.
- MASONRY FIREPLACE FOUNDATIONS:
FOUNDATIONS FOR MASONRY FIREPLACE SHALL BE OF NON-COMBUSTIBLE MATERIALS. THE FOUNDATION SHALL BE A MINIMUM OF 12 INCHES IN THICKNESS AND EXTEND 8 INCHES BEYOND EACH SIDE OF THE CHIMNEY. THE HEARTH AND HEARTH EXTENSION SHALL BE MASONRY OR CONCRETE.
- MASONRY FIREPLACE FIREBOX:
MINIMUM DEPTH OF MASONRY FIREBOX TO BE 20 INCHES. THE THROAT SHALL NOT BE LESS THAN 8 INCHES FROM THE FIRE PLACE OPENING. THE THROAT OPENING SHALL NOT BE LESS THAN 4 INCHES IN DEPTH. THE CROSS SECTIONAL AREA OF THE PASSAGEWAY ABOVE THE FIREBOX, INCLUDING THE THROAT, DAMPER AND SMOKE CHAMBER, SHALL NOT BE LESS THAN THE CROSS SECTIONAL AREA OF THE PASSAGEWAY ABOVE THE FIREBOX, INCLUDING THE THROAT, DAMPER AND SMOKE CHAMBER, SHALL NOT BE LESS THAN THE CROSS SECTIONAL AREA OF THE PASSAGEWAY ABOVE THE FIREBOX. THE THROAT SHALL BE DETERMINED PER SECTION R002.02.

- MASONRY FIREPLACE WALLS:
MASONRY FIREPLACE WALLS TO HAVE A MINIMUM THICKNESS OF 8 INCHES OF CONCRETE OR MASONRY INCLUDING 2 INCHES OF FIREBRICK OR 10 INCHES OF UNLINED SOLID MASONRY OR CONCRETE.
- MASONRY FIREPLACE CLEARANCE TO COMBUSTIBLES:
CLEARANCE TO COMBUSTIBLES (FRAMING/HEATING, ETC.) FROM THE EXTERIOR SURFACE OF THE FIREPLACE WALLS SHALL BE 4 INCHES MINIMUM FROM THE BACK OF THE FIREPLACE, 2 INCHES FROM THE FRONT AND SIDE OF THE MASONRY FIREPLACE, AND 2 INCHES MINIMUM FOR THE SMOKE CHAMBER WALLS AND CHIMNEYS.
- EXCEPTIONS:
 - A. EXPOSED COMBUSTIBLE TRIM, EDGES OF HEATING AND SIDING, AND DRYWALL MAY BE PLACED AGAINST THE MASONRY FIREPLACE SIDE WALL AND HEARTH EXTENSIONS PROVIDED THE COMBUSTIBLE EDGE IS A MINIMUM 12 INCHES FROM THE FIREBOX LINING OR FLOOR LINING. ALL WOOD WALL, FLOOR AND ROOF FRAMING MEMBERS SHALL MAINTAIN THE MINIMUM CLEARANCES.
 - B. COMBUSTIBLE MANTLE OR TRIM MAY BE PLACED DIRECTLY ON THE MASONRY FIREPLACE FRONT SURROUNDING THE FIREPLACE OPENING PROVIDED THE MATERIAL IS NOT WITHIN 6 INCHES OF THE FIREPLACE OPENING. COMBUSTIBLE MATERIALS WITHIN 12 INCHES OF THE FIREPLACE OPENING SHALL NOT PROJECT MORE THAN 1/8 INCH FOR EACH 1 INCH DISTANCE FROM THE OPENING.
 - C. CHIMNEYS LOCATED OUTSIDE THE EXTERIOR WALLS OF THE BUILDING WITH A 1 INCH CLEARANCE TO COMBUSTIBLE MATERIALS COMPLETELY AROUND THE PERIMETER OF THE CHIMNEY, MAY HAVE A 1 INCH CLEARANCE TO COMBUSTIBLES WHEN PASSING THROUGH THE ROOF OR CORNICE.
 - D. MASONRY CHIMNEYS EQUIPPED WITH A LISTED AND LABELED LINER UNDER UL 777-89 THAT IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, MASONRY CHIMNEYS LISTED AND LABELED FOR USE IN CONTACT WITH COMBUSTIBLES IN ACCORDANCE WITH UL 127-89 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND PERMITTED TO HAVE COMBUSTIBLE MATERIALS IN CONTACT WITH THE EXTERIOR SURFACE.
- THROAT AND SMOKE CHAMBER:
THE WALLS OF THE THROAT AND SMOKE CHAMBER SHALL BE A MINIMUM OF 8 INCHES OF CONCRETE OR SOLID MASONRY OR A TOTAL THICKNESS OF 8 INCHES IF LINED WITH 2 INCHES OF BRICK OR PLASTER.
- MASONRY FIREPLACE DAMPER:
A FIREBOX METAL FIREPLACE DAMPER IS REQUIRED TO BE LOCATED A MINIMUM OF 8 INCHES ABOVE THE FIREPLACE OPENING.
- HEARTH SIZES:
SOLID FUEL WITH 6 BF OF OPENING OR MORE - 20 INCH MINIMUM AND 12 INCHES EACH SIDE. SOLID FUEL WITH LESS THAN 6 BF OF OPENING - 16 INCH MINIMUM AND 8 INCHES EACH SIDE. GAS FIRED - PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- CHIMNEYS:
CHIMNEYS (MASONRY AND METAL) SHALL EXTEND AT LEAST 36 INCHES ABOVE THE ROOF PENETRATION AND SHALL BE 24 INCHES HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10 FEET HORIZONTALLY.
- GAS LOGS:
GAS FIREPLACES, GAS LOGS, AND GAS ROOM HEATERS SHALL BE INSTALLED IN ACCORDANCE WITH CHAPTER 24 OF THE IRC MANUAL. COMBUSTION AIR SHALL BE PROVIDED IN ACCORDANCE WITH SECTION G2407.
- EXTERIOR AIR SUPPLY:
FACTORY BUILT OR MASONRY FIREPLACES SHALL BE EQUIPPED WITH AN EXTERIOR AIR SUPPLY TO ASSURE PROPER FUEL COMBUSTION. THE AIR DUCT SERVING THE EXTERIOR AIR INTAKE AND THE EXTERIOR AIR OUTLET SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR BOTH THE FACTORY BUILT AND THE MASONRY FIREPLACE. THE CROSS SECTIONAL AREA OF THE PASSAGEWAY SHALL BE A MINIMUM OF 6 SQUARE INCHES BUT NOT MORE THAN 56 SQUARE INCHES UNLESS OTHERWISE NOTED IN THE INSTALLATION INSTRUCTIONS. THE HOLES SHALL BE INSTALLED WITHIN 24 INCHES OF THE PERIMETER SCREEN OF 1/4 INCH MESH) MAY DRAW AIR FROM A NATURALLY VENTILATED CRAWLSPACE OR ATTIC. THE EXTERIOR AIR OUTLET MAY BE LOCATED IN THE BACK OR SIDE OF THE FIREPLACE CHAMBER OR WITHIN 24 INCHES OF THE FIREBOX OPENING OR NEAR THE ROOF. THE EXTERIOR AIR OUTLET SHALL BE CLOSEABLE AND DESIGNED TO PREVENT BURSTING MATERIAL FROM DROPPING INTO A CONCEALED COMBUSTIBLE SPACE. EXTERIOR AIR INTAKE SHALL BE INSTALLED BELOW THE LEVEL OF THE BASE OF THE FIREBOX WHEN THE EXTERIOR AIR INLET IS INSTALLED INSIDE THE FIREPLACE CHAMBER.

DIVISION 5 METALS

- STRUCTURAL STEEL SHEETS, PLATES, BARS, AND SIMILAR ITEMS SHALL BE DOMESTIC STEEL CONFORMING TO ASTM A36, UNLESS NOTED OTHERWISE.
- STEEL PIPE COLUMNS SHALL CONFORM TO ASTM A513.
- ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
- NUTS, BOLTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED OR CONFORM TO ASTM A526. THEY SHALL ALSO BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL WHERE NOTED ON THE PLANS. DO NOT MIX MATERIALS IN ASSEMBLIES.
- COLUMN BASES AND BEARING PLATES ARE TO BE ALIGNED LEVEL AND TRUE THEN CLAMPED AND UNDER BASE PLATES WITH APPROVED NON BURSTING CORNER.
- REINFORCEMENT:
FIREPLACE DAMPER IS TO BE A MINIMUM OF 12 GAUGE METAL.

DIVISION 6 WOOD AND PLASTIC

- ALL FRAMING SHALL BE IN ACCORDANCE WITH THE NATIONAL FOREST PRODUCTS MANUAL FOR HOUSE FRAMING AND THE 2003 INTERNATIONAL RESIDENTIAL CODE.
- PLACE HORIZONTAL FRAMING MEMBERS CROWN SIDE UP.
- ERECT WOOD FRAMING MEMBERS LEVEL AND PLUMB.
- LUMBER MATERIALS:
ALL STRUCTURAL MATERIAL INCLUDING BEAMS, JOISTS, RAFTERS, NON-STRUCTURAL LIGHT FRAMING AND SHEATHING SHALL BE ALL TO BE CONSTRUCTED OF SOUTHERN YELLOW PINE WITH A GRADE NO. 2 OR BETTER. MOISTURE CONTENT OF WOOD USED SHALL NOT EXCEED 19 PERCENT. ALL BILT PLATES AND ANY WOOD THAT MAY BE EXPLOYED TO MOISTURE TO THE REQUIREMENTS SET UNLESS NOTED OTHERWISE. FINISH JOINT MATERIAL IS NOT ALLOWED IN ANY LOAD BEARING CONDITIONS. WALLS OVER NINE FEET IN HEIGHT OR IN ANY EXTERIOR WALLS UNLESS OF THE SAME SPECIES AND GRADE AND LABELED INDICATING COMPLIANCE WITH ALL JOINT, JOINED OR EDGE-GLUED GRADING RULES.
- SHEATHING MATERIALS:
 - A. FLYWOOD WALL SHEATHING: APA RATED, 1/2 INCH THICK, 4 FOOT X 8 FOOT SHEETS
 - B. 1/2 THICK OSB WALL SHEATHING
- ALL BEARING POSTS SHALL RUN OR BE BLOCED CONTINUOUSLY FROM THE POINT OF BEARING TO THE TOP OF THE FOUNDATION OR STEEL BEAM. PROVIDE ADEQUATE NUMBER OF WOOD STUDS TO ACHIEVE PROPER BEARING BELOW WOOD BEAM AND AS DIRECTED ON THE PLANS. VERTICAL BLOCING IS TO MATCH COMPLETE SIZE OF POST. HORIZONTAL WOOD BLOCING SUPPORTING STRUCTURAL POSTS IS NOT ALLOWED
- SECURE ALL WOOD SHEATHING WITH ENDS STAGGERED, OVER FIRM BEARING.
- WOOD SHEATHING MATERIALS:
 - A. ROOF SHEATHING: APA STRUCTURAL 1, EXTERIOR GRADE CDX 1/2 INCH THICK
 - B. WALL SHEATHING: APA STRUCTURAL 1, EXTERIOR GRADE C-D AROUND ENTIRE EXTERIOR SIDE OF STRUCTURE
 - C. FLOOR SHEATHING: APA STRUCTURAL 1, EXTERIOR GRADE C-D, 5/8 INCH THICK

- SECURE DECKING PERPENDICULAR TO FRAMING MEMBERS, WITH ENDS STAGGERED OVER FIRM BEARING. ON SLOPING SURFACES, LAY DECKING WITH TONGUE UPWARD.
- JOIN AND INSTALL GUE LAMINATED STRUCTURAL UNITS AS PER MANUFACTURER'S INSTRUCTIONS.
- TRUSSES:
ALL TRUSS BEARING IS TO BE ASSUMED AT EXTERIOR WALLS UNLESS NOTED OTHERWISE ON THE PLANS. TRUSSES ARE TO BE DESIGNED ACCORDINGLY. TRUSS MANUFACTURER IS RESPONSIBLE TO NOTIFY SCHAUB DESIGN GROUP, INC. OF ANY VARIATION FROM THE ORIGINAL TRUSS LAYOUT AND FOR PLAN COORDINATION.
- TRUSS MANUFACTURER SHALL PROVIDE SCHAUB DESIGN GROUP, INC. WITH (1) COPY OF THE TRUSS DESIGN FOR REVIEW / COMMENT AND COORDINATION WITH THE PLANS. TRUSS ENGINEER IS RESPONSIBLE FOR SUBMITTING TO THE ARCHITECT FOR COMMENT ANY DEVIATION FROM THE ARCHITECT'S ORIGINAL DESIGN. REVIEW BY SCHAUB DESIGN GROUP, INC. IS A PRECAUTIONARY MEASURE ONLY AND SHALL NOT RELIEVE THE ENGINEER AND FABRICATOR OF THEIR RESPONSIBILITY FOR CORRECTNESS OF FIELD MEASUREMENTS, ACTUAL TRUSS DESIGNS, MATERIALS, SIZES, FINAL DIMENSIONS AND DETAILS. THIS REVIEW IS FOR GENERAL CONFORMANCE OF THE DESIGN CONTACT RELATING TO INFORMATION GIVEN ON CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND ERECTION PROCESS AND INSTALLATION. CORRECTIONS AND/OR COMMENTS MADE ON SHOP DRAWINGS SHALL BE VERIFIED AND ALL DISCREPANCIES REPORTED TO THE ARCHITECT IN WRITING.
- ROOF FRAMING DESIGN CRITERIA:
ALL ROOF FRAMING SHALL BE DESIGNED TO SUPPORT THE FOLLOWING MINIMUMS:

TOP CHORD OF TRUSSES OR ROOF RAFTERS:	SNOW LOAD 20 LB PER SQUARE FOOT DEAD LOAD; USE ACTUAL DEAD LOAD. (NOTE: DEAD LOAD MUST INCLUDE TWO LAYERS OF ROOFING MEMBRANE)
CEILING JOISTS OR BOTTOM CHORD OF TRUSSES:	USE LIVE LOAD OF 20 LB PER SQUARE FOOT ON THE BOTTOM CHORD OF TRUSSES WHEN THERE IS ATTIC STORAGE. WHEN THERE IS NO ATTIC STORAGE, USE 10 LB OF LIVE LOAD PER SQUARE FOOT. DEAD LOAD; USE ACTUAL DEAD LOAD.
- NOTE: THE LIVE LOAD DESIGN ON THE CEILING JOIST OR BOTTOM CHORD OF A TRUSS SHALL NOT BE REQUIRED IF ALL THE FOLLOWING CONDITIONS ARE ADHERED TO:
 - A. ATTIC WITH DRYWALL CEILING BELOW THAT IS ACCEPTED ONLY BY A 22 INCH X 30 INCH BUTTLE OPENING WITHOUT A FULL-DEPTH BRAY.
 - B. WARNING SIGNS ATTACHED TO THE TRUSSES ON EACH SIDE OF THE BUTTLE OPENING AT LEAST 56 INCHES ABOVE THE BOTTOM CHORD AND AT LEAST 6 INCHES OF THE EDGE OF THE OPENING. THE SIGN SHALL BE CONSTRUCTED OF METAL OR OTHER APPROVED DURABLE MATERIALS SUITABLE FOR THE LOCATION AND SHALL BE 48 SQUARE INCHES IN AREA WITH 3/4 INCH HIGH (MIN) LETTERS ON A CONTRASTING BACKGROUND THAT READS "WARNING-TRUSSES NOT DESIGNED FOR ATTIC STORAGE".
 - C. ATTIC AREA OVER GARAGE AREAS WITH DRYWALL CEILING SHALL ALSO BE PROVIDED WITH A HORIZONTAL RAILING ATTACHED TO THE TRUSSES ON EACH SIDE OF THE BUTTLE OPENING AND AT LEAST 24 INCHES AND NOT MORE THAN 36 INCHES ABOVE THE BOTTOM CHORD. THE RAILING IS INTENDED TO BE AN OBSTRUCTION TO BABY CAREGIVER FOR STORAGE AND SHALL BE CONSTRUCTED OF EITHER 1x4, 2x4, 2x4, OR 3x8 INCH 6 INCH PLYWOOD. IT MAY BE SHIP OR FIELD APPLIED.
- WHERE TRUSSES OR RAFTERS ARE SPACED 24 INCHES O.C., ROOF PANELS SHALL BE A MINIMUM OF 15/32 INCH THICK SHEATHING WITHOUT EDGE SUPPORT.
- WHERE TRUSSES OR RAFTERS ARE SPACED 24 INCHES O.C., ROOF PANELS SHALL BE A MINIMUM OF 15/32 INCH THICK SHEATHING WITHOUT EDGE SUPPORT.
- TRUSS NAILING / ANCHORING:
TRUSSES SHALL BE NAILED TO THE TOP PLATE OF THE WALL WITH (3) 16d NAILS TOE NAILS WITH OUT SPLITTING THE END OF THE TRUSS.
- EXCEPTION: THE DOWN ANCHORS (SIMPSON H-11TB OR EQUAL) SHALL BE USED TO KENFOLD ALL ROOF TRUSS AND RAFTER CONNECTIONS WHERE THEY MEET BEARING WALLS IN THE (3) 16d NAILS REQUIRED BY THE MANUFACTURER (SIMPSON TC24 OR TC28 TRUSS CONNECTOR SHALL BE USED AT THE CONNECTION OF SIBERON TRUSSES TO THE TOP PLATE TO ALLOW FOR HORIZONTAL MOVEMENT DURING CONSTRUCTION. NAILS INTO THE TRUSS ARE NOT FULLY SET TO ALLOW MOVEMENT OF THE TRUSS AT THE WALL HEAD. (ALLOWED IN ST. LOUIS COUNTY)
- FLOOR MEMBER DESIGN CRITERIA:
ALL ENGINEERED FLOOR TRUSS BY STEMS (T.J., P.C.L, ETC.) ARE DESIGNED WITH 40 PBF LIVE LOAD AND 16 PSF DEAD LOAD UNLESS NOTED OTHERWISE.
- ALL DIMENSIONAL FLOOR JOIST MEMBERS ARE DESIGNED TO HAVE A MINIMUM LOADING OF 40 PBF LIVE LOAD AND 16 PSF DEAD LOAD UNLESS NOTED OTHERWISE.
- CUTTING, NOTCHING, BORING:
CUTTING, NOTCHING AND/OR BORING HOLES ON WOOD BEAMS, JOIST, RAFTERS, PLATES AND STUDS SHALL NOT EXCEED THE LIMITATIONS NOTED IN SECTIONS R502.2.1, R502.2.2, R502.2, R502.2.1, R502.2.1 AND R502.2.7 OF THE 2003 INTERNATIONAL RESIDENTIAL CODE.
 - A. SECTION R502.2.1 AND R502.2.1 SOLID LUMBER JOISTS:
NOTCHES IN SOLID LUMBER JOISTS, RAFTERS, AND BEAMS SHALL NOT EXCEED ONE-SIXTH OF THE DEPTH OF THE MEMBER. SHALL NOT BE LONGER THAN ONE-THIRD OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED IN THE MIDDLE ONE-THIRD OF THE SPAN. NOTCH DEPTH AT THE ENDS OF THE MEMBER SHALL NOT EXCEED ONE-FOURTH OF THE DEPTH OF THE MEMBER. THE TENSIION SIDE OF MEMBER FOUR INCHES OR GREATER NOMINAL THICKNESS SHALL NOT BE NOTCHED EXCEPT AT THE ENDS OF THE MEMBERS. THE DIAMETER OF THE HOLES IN JOISTS SHALL NOT EXCEED ONE-THIRD OF THE DEPTH OF THE MEMBER. HOLES SHALL NOT BE CLOSER THAN TWO INCHES TO THE TOP OR BOTTOM OF THE MEMBER, OR TO ANY OTHER HOLE LOCATED IN THE MEMBER. WHERE THE MEMBER IS ALSO NOTCHED, THE HOLE SHALL NOT BE CLOSER THAN TWO INCHES TO THE NOTCH.
 - EXCEPTION: NOTCHES ON CANTILEVERED PORTIONS OF RAFTERS ARE PERMITTED PROVIDED THE DIMENSION OF THE REMAINING PORTION OF THE RAFTER IS NOT LESS THAN FOUR INCH NOMINAL AND THE LENGTH OF THE CANTILEVER DOES NOT EXCEED 24 INCHES.
 - B. SECTION R502.2.2 AND R502.2.3 ENGINEERED WOOD PRODUCTS:
CUTS, NOTCHES AND HOLES BORED IN TRUSSES, LAMINATED VENEER LUMBER, GLUE LAMINATED MEMBERS, OR JOISTS ARE NOT PERMITTED UNLESS THE EFFECTS OF SUCH PENETRATIONS ARE SPECIFICALLY CONSIDERED IN THE DESIGN OF THE MEMBER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY INFORMATION FROM THE MANUFACTURER. NOTCHES, CUTS, BORING OR HOLES IN THE ENGINEERED MATERIAL ARE NON-STRUCTURE TO THE STRUCTURAL INTEGRITY OF THAT MEMBER.)
 - C. SECTION R502.2 NOTCHING AND BORING (STUDS):
ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH EXCEEDING 25 PERCENT OF THE STUD IN NONBEARING PARTITIONS MAY BE NOTCHED TO A DEPTH TO EXCEED 40 PERCENT OF A SINGLE STUD WIDTH. ANY STUD MAY BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS GREATER THAN 1/4 INCH. THE DEPTH OF THE STUD WITH THE HOLE SHALL NOT EXCEED 3/8" TO THE EDGE OF THE STUD AND THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH.
- EXCEPTIONS:
 - A STUD MAY BE BORED TO A DIAMETER NOT EXCEEDING 60 PERCENT OF ITS WIDTH, PROVIDED THAT SUCH STUDS LOCATED IN EXTERIOR WALLS OR BEARING PARTITIONS ARE DOUBLED AND THAT NOT MORE THAN TWO SUCHESSIVE STUDS ARE BORED.
 - APPROVED STUD SHIMS MAY BE USED WHEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
- WINDOW WELLS:
 - A. WINDOW WELLS SERVING A BASEMENT EMERGENCY ESCAPE AND RESCUE SHALL BE A MINIMUM OF NINE SQUARE FEET HORIZONTAL AREA WITH A MINIMUM HORIZONTAL PROJECTION OF 36 INCHES. THE WINDOW WELL SHALL ALSO BE LARGE ENOUGH TO ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.
 - B. WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES SHALL HAVE A PERMANENT LADDER OR STEPS. THE LADDER, IF APPLICABLE, SHALL BE AT LEAST 12 INCHES WIDE, PROJECT A MINIMUM OF 6 INCHES FROM THE WALL AND HAVE RUNGS SPACED NOT MORE THAN 18 INCHES ON CENTER. VERTICALLY FOR THE FULL VERTICAL DEPTH OF THE WINDOW WELL.
 - C. A 56 INCH HIGH GUARD WITH NO OPENINGS GREATER THAN 4 INCHES IS TO SEPARATE A PATH, DRIVE, OR WALKING SURFACE WITHIN 24 INCHES OF THE HIGH SIDE OF A WINDOW WELL GREATER THAN 48 INCHES IN VERTICAL DEPTH. WINDOW WELLS ADJACENT TO A PATIO OR DECK SHALL BE PROTECTED WITH THIS GUARD. IF THE VERTICAL DEPTH OF THE WELL EXCEEDS 30 INCHES, WINDOW WELLS SHALL BE REPLACED IN LOCATION THAT DO NOT REQUIRE A GUARD COMPLETELY AROUND THE WELL.
 - D. SEE DIVISION 16 FOR INFORMATION ON DRAINAGE OF WELL.

- SECTION R602.6.1 DRILLING AND NOTCHING OF TOP PLATE:
WHEN FIRING OR CUTWORK IS PLACED IN OR PARTLY IN AN EXTERIOR WALL, NECESSITATING CUTTING, DRILLING OR NOTCHING OF THE TOP PLATE, MORE THAN 50 PERCENT OF ITS WIDTH, A GALVANIZED METAL TIE NOT LESS THAN 0.054 INCHES THICK (16 GA.) AND 1/2 INCHES WIDE SHALL BE FASTENED TO EACH PLATE ACROSS AND TO EACH EDGE OF THE OPENING WITH NOT LESS THAN (2) 16d NAILS AT EACH SIDE OR EQUIVALENT.
EXCEPTION: WHEN THE ENTIRE SIDE OF THE WALL WITH THE NOTCH OR CUT IS COVERED BY WOOD STRUCTURAL PANEL SHEATHING.
- STAIRWAYS:
THE MINIMUM CLEAR STAIRWAY WIDTH IS 36 INCHES.
- THE MINIMUM HEADROOM CLEAR HEIGHT OF STAIRWAYS IS EIGHTY INCHES MEASURED VERTICALLY FROM THE TREAD NOSING AND FROM THE FLOOR SURFACE OF A LANDING OR PLATFORM.
- STAIRS SHALL HAVE A MINIMUM OF (3) X 12 STRUNGERS SUPPORTING THE ASSEMBLY. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
- ON ALL INTERIOR AND EXTERIOR STAIRS, THE MAXIMUM RISER HEIGHT SHALL BE 7 3/4 INCHES AND THE MINIMUM TREAD WIDTH SHALL BE 10 INCHES PLUS A ONE INCH NOSING.
- EXCEPTION: MAXIMUM RISER HEIGHT IS ALLOWED TO BE 8 1/4 INCHES AND THE MINIMUM TREAD DEPTH (MEASURED HORIZONTALLY FROM TREAD NOSE TO TREAD NOSE) IS ALLOWED TO BE 9 INCHES. A 14 INCH TREAD NOSING IS REQUIRED ON STAIRWAYS WITH SOLID RISERS UNLESS THE TREAD DEPTH IS 11 INCHES. (THIS EXCEPTION MAY ONLY BE USED IN ST. LOUIS COUNTY AND AS ALLOWED BY THE PLAN)
- STAIR WINDERS MUST HAVE 10 INCH MINIMUM TREAD DEPTH AT A POINT NOT MORE THAN 12 INCHES FROM THE NARROW END AND BE AT LEAST 6 INCHES IN DEPTH AT THE NARROW END. (THIS EXCEPTION MAY ONLY BE USED IN ST. LOUIS COUNTY AND AS ALLOWED BY THE PLAN)
- EXCEPTION: STAIR WINDERS ARE ALLOWED TO HAVE 8" MINIMUM TREAD DEPTH AT A POINT NOT MORE THAN 12" FROM THE NARROW END AND BE AT LEAST 6" IN DEPTH AT THE NARROW END. (THIS EXCEPTION MAY ONLY BE USED IN ST. LOUIS COUNTY AND AS ALLOWED BY THE PLAN)
- RISERS MUST BE SOLID OR HAVE A TOE BOARD OR OTHER APPROVED GUARD METHOD WHICH LIMITS THE RISER OPENING TO LESS THAN 4 INCHES MAXIMUM. OPEN RISERS WITHOUT A TOE BOARD OR APPROVED GUARD ARE PROHIBITED.
EXCEPTION: THE OPENING BETWEEN ADJACENT TREADS IS NOT LIMITED ON STAIRS WITH A TOTAL RISE OF 30 INCHES OR LESS.
- HANDRAILS:
HANDRAILS SHALL BE 34 TO 38 INCHES ABOVE THE NOSING UNLESS OTHERWISE NOTED. EACH STAIR IS TO HAVE AT LEAST ONE CONTINUOUS HANDRAIL.
- HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS.
- HANDRAILS AND OTHER PROJECTIONS BELOW THE HANDRAIL SHALL NOT PROJECT MORE THAN 1/2 INCHES INTO REQUIRED STAIRWAY WIDTH.
- HANDRAILS SHALL MEET EITHER:
 - A. CIRCULAR CROSS SECTION WITH THE MINIMUM DIAMETER OF 1 1/4 INCHES, BUT NOT TO EXCEED 2 INCHES
 - B. OTHER SHAPE'S HAVING A MAXIMUM ALLOWED HORIZONTAL WIDTH OF 1 1/4 INCHES, MAXIMUM SQUARE PERIMETER DIMENSION OF 6 1/4 INCHES AND A MINIMUM 1 INCH CROSS-SECTIONAL DIMENSION.
- GUARDS:
GUARDS ALONG OPEN-SIDED STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES SHALL BE A MINIMUM OF 34 INCHES HEIGHT ABOVE THE LEADING EDGE OF THE TREAD AND MINIMUM OF 36 INCHES HEIGHT AT THE STAIR LANDINGS. MINIMUM 36 INCH HIGH GUARDS SHALL BE PROVIDED ALONG BALCONIES, AREAWAYS, MEZZANINES AND OPEN BIRD WALKING SURFACES WHERE THE DIFFERENCE IN FLOOR LEVELS IS MORE THAN 30 INCHES.
- OPEN GUARDS SHALL HAVE INTERMEDIATE VERTICAL BALUSTERS SPACED LESS THAN 4 INCHES APART.
EXCEPTION: OPENINGS ON THE SIDE(S) OF A STAIR SHALL HAVE BALUSTERS SPACED LESS THAN 4 3/8 INCHES APART.
- ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFIT PROTECTED ON THE ENCLOSED SPACE WITH 1/2 INCH GYPSUM BOARD.
- FRAMING SUBCONTRACTOR NOTE:
FAILURE TO FOLLOW THESE GUIDELINES FOR NOTCHING OR BORING MAY RESULT IN THE FAILING OF A JOBS INSPECTION. REMEDIES FOR DAMAGED MEMBERS INCLUDING CALCULATIONS, DRAWINGS AND / OR PROFESSIONAL LETTER WRITING ARE NOT INCLUDED IN THE CONTRACT RESPONSIBILITIES OF SCHAUB DESIGN GROUP, INC. FEES TO PERFORM SUCH WORK AND/OR THE HIRING OF A STRUCTURAL ENGINEER WILL BE CHARGED TO THE GENERAL CONTRACTOR/SUBCONTRACTOR.
- NAILING / FASTENING:
NAILING AND FASTENING OF THE FLOOR, ROOF/CEILING, WALL AND ROOF SHEATHING AND GYPSUM CONSTRUCTION SHALL BE IN ACCORDANCE WITH TABLE 602.3 OF THE 2003 INTERNATIONAL BUILDING CODE. THE SCHEDULE IS ATTACHED.
- SEE NAILING FASTENER SCHEDULE FOR STRUCTURAL MEMBERS (FROM TABLE 602.3 OF THE INTERNATIONAL BUILDING CODE. THE SCHEDULE IS ATTACHED).
- ALL SILL PLATES TO BE LEVEL AND ARE TO HAVE 6d NAIL BEARING WITH APPROVED SHIM MATERIALS AND METHODS.
- ATTIC ACCESS:
A 22 INCH X 30 INCH MINIMUM ACCESS OPENING IS REQUIRED FOR ATTIC AREAS WHICH EXCEED 30 SQUARE FEET AND HAVE A CLEAR HEIGHT OF OVER 36 INCHES. THE ACCESS SHALL BE INSTALLED IN A HALLWAY OR OTHER ACCESSIBLE LOCATION. 30 INCH MINIMUM HEADROOM IS REQUIRED AT SOME POINT VERTICALLY ABOVE THE ACCESS OPENING.
- FIREBLOCKING:
 - A. TOP AND BOTTOM OF ALL CONVENTIONAL, DOUBLE STUD, FURRED SPACES (INCLUDING FINISH BEARING WALLS), AND STAGGERED STUD FRAMED WALLS ARE TO BE FIREBLOCKED VERTICALLY AT THE CEILING AND FLOOR LEVELS AND HORIZONTALLY AT INTERFACES NOT EXCEEDING TEN FEET.
 - B. FIREBLOCKING IS REQUIRED AT ALL SOFFITS AND DROPPED CEILING.
 - C. FIREBLOCKING IS REQUIRED BETWEEN STAIRWAYS AND CHIMNEYS AT THE TOP AND BOTTOM OF THE STAIRWAYS AND AT ALL INTERFACES BETWEEN STAIRS. STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SPACE WITH 1/2 INCH GYPSUM BOARD.
 - D. FIREBLOCKING IS REQUIRED AROUND VENT, PIPE, AND DUCT PENETRATIONS OF CEILING AND FLOORS.
- WINDOW WELLS:
 - A. WINDOW WELLS SERVING A BASEMENT EMERGENCY ESCAPE AND RESCUE SHALL BE A MINIMUM OF NINE SQUARE FEET HORIZONTAL AREA WITH A MINIMUM HORIZONTAL PROJECTION OF 36 INCHES. THE WINDOW WELL SHALL ALSO BE LARGE ENOUGH TO ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.
 - B. WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES SHALL HAVE A PERMANENT LADDER OR STEPS. THE LADDER, IF APPLICABLE, SHALL BE AT LEAST 12 INCHES WIDE, PROJECT A MINIMUM OF 6 INCHES FROM THE WALL AND HAVE RUNGS SPACED NOT MORE THAN 18 INCHES ON CENTER. VERTICALLY FOR THE FULL VERTICAL DEPTH OF THE WINDOW WELL.
 - C. A 56 INCH HIGH GUARD WITH NO OPENINGS GREATER THAN 4 INCHES IS TO SEPARATE A PATH, DRIVE, OR WALKING SURFACE WITHIN 24 INCHES OF THE HIGH SIDE OF A WINDOW WELL GREATER THAN 48 INCHES IN VERTICAL DEPTH. WINDOW WELLS ADJACENT TO A PATIO OR DECK SHALL BE PROTECTED WITH THIS GUARD. IF THE VERTICAL DEPTH OF THE WELL EXCEEDS 30 INCHES, WINDOW WELLS SHALL BE REPLACED IN LOCATION THAT DO NOT REQUIRE A GUARD COMPLETELY AROUND THE WELL.
 - D. SEE DIVISION 16 FOR INFORMATION ON DRAINAGE OF WELL.

- FOUNDATION CRAWLSPACES:
FOUNDATION CRAWLSPACES TO HAVE MINIMUM CLEAR HEIGHT OF 18 INCHES TO LOWEST PROJECTING MEMBER.
- NON-MASONRY CHIMNEY LOCATED WITHIN THE EXTERIOR WALL OF A BUILDING SHALL HAVE A MINIMUM AIRSPACE CLEARANCE TO COMBUSTIBLES OF 2 INCHES.
- GUTTERS AND DOWNSPOUTS REQUIRED ON ROOF OVERHANGS LESS THAN 36 INCHES. (ST. LOUIS COUNTY REQUIREMENT)
- PROVIDE BRIDGING ON ALL DIMENSIONAL LUMBER JOIST JOISTS AS NOTED ON PLANS. FOR ENGINEERED FLOOR JOISTS, INSTALL BRIDGING AS REQUIRED BY MANUFACTURER'S GUIDELINES.
- TYPICAL HEADERS:
ALL HEADERS ABOVE OPENINGS IN EXTERIOR WALLS AND LOAD BEARING INTERIOR PARTITIONS SHALL BE A MINIMUM OF TWO X 12 UNLESS NOTED OTHERWISE.
- WOOD STUD WALL FRAMING:
ALL WOOD STUD WALL FRAMING TWELVE FOOT OR LESS IN HEIGHT SHALL HAVE CONTINUOUS BALLOON FRAMING FROM THE SOLE/SILL OR THE TOP PLATE. THE TOP PLATE SHALL BE LOCATED AT THE CEILING OF HEIGHT AND BE SECURED TO THE PERPENDICULAR ROOF/CEILING OR FLOOR FRAMING IN ACCORDANCE WITH THE FOLLOWING:

CONVENTIONAL WOOD (6TICK-BUILT) ROOF:	EACH CEILING JOIST SHALL BE SECURED TO THE TOP PLATE WITH (3) 24 TOE NAILS. EACH RAFTER SHALL BE SECURED TO THE TOP PLATE WITH (3) 16d TOE NAILS.
WOOD ROOF TRUSSES:	EACH TRUSS SHALL BE SECURED TO THE TOP PLATE WITH (3) 16d TOE NAILS.
WOOD FLOOR JOISTS/ TRUSSES:	EACH FLOOR JOIST OR TRUSS SHALL BE SECURED TO THE TOP PLATE WITH (3) 24 TOE NAILS.

A BALLOON FRAMED WALL 12 FEET OR LESS IN HEIGHT CONSTRUCTED PARALLEL TO THE ROOF, CEILING OR FLOOR FRAMING WHERE THE TOP PLATE OF THE WALL IS LOCATED AT THE CEILING OR HIGHER SHALL BE ATTACHED TO THE PARALLEL FLOOR, CEILING OR FLOOR FRAMING WITH 16d NAILS AT 6 INCHES O.C.

IN THE SITUATION WHERE A WALL IS NOT BALLOON FRAMED FROM FLOOR TO CEILING LINE SIMILAR TO THE S

GENERAL NOTES

9. WEATHER-RESISTANT SHEATHING PAPER (ASPHALT SATURATED FELT 14# PER SQUARE OTHERWIS KNOWN AS TYPE I FELT, TYVEK, TYMOR OR OTHER APPROVED WEATHER RESISTANT MATERIAL) SHALL BE INSTALLED UNDER CERTAIN TYPES OF SIDING AND BRICK (NOT OVER) AS NOTED IN TABLE 7.5 OF THE INTERNATIONAL RESIDENTIAL CODE.
- EXCEPTIONS:
- A. FOR MASONRY VENEER, A WEATHER RESISTANT MEMBRANE IS NOT REQUIRED OVER WATER-RESISTANT SHEATHING MATERIALS WHEN A ONE INCH AIR SPACE IS PROVIDED BETWEEN THE VENEER AND THE SHEATHING. WHEN THE ONE INCH AIR SPACE IS FILLED WITH MOIST AIR, A WEATHER-RESISTANT MEMBRANE IS REQUIRED OVER THE SHEATHING.
 - B. VINYL OR HORIZONTAL ALUMINUM SIDING
10. INSULATION:
- A. BATT OR BLANKET INSULATION INCLUDING THE VAPOR RETARDER, BREATHER PAPER OR OTHER COVERINGS SHALL NOT BE LEFT EXPOSED IN UNFINISHED BASEMENTS UNLESS THE MATERIAL HAS A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPMENT RATING OF 450 OR LESS. FLAME SPREAD AND SMOKE DEVELOPMENT LIMITATIONS DO NOT APPLY TO FACINGS THAT ARE INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR, OR WALL FINISH.
11. ALL FOAM PLASTIC INSULATION SHALL BE SEPARATED FROM THE INTERIOR OF THE BUILDING BY A THERMAL BARRIER OF 1/2 INCH GYPSUM WALLBOARD. ALL FOAM PLASTICS SHALL HAVE A FLAME SPREAD RATING OF 75 OR LESS AND A SMOKE DEVELOPMENT RATING OF 450 OR LESS.
- EXCEPTION: FOAM PLASTIC WITHIN AN ATTIC OR CRAWLSPACE MAY BE PROTECTED BY 1/2 INCH THICK MINERAL FIBER INSULATION 1/4 INCH THICK WOOD STRUCTURAL PANEL, 5/8 INCH THICK PARTICLEBOARD OR HARDBOARD, 3/8 INCH GYPSUM WALL BOARD OR CORRUGATED CORRUGATED STEEL HAVING A BARE METAL THICKNESS OF 0.018 INCH INSTEAD OF THE THERMAL BARRIER.
12. VENTILATION:
- A. ATTIC AND ENCLOSED RAFTER SPACE VENTILATION (NET FREE) AREA IS TO BE AT LEAST 1/150 OF THE AREA SERVED. TWO REMOVE VENTS REQUIRED FOR EACH ATTIC SPACE (MINIMUM).
 - EXCEPTION: REQUIRED VENTILATION AREA MAY BE REDUCED TO 1/200 WHERE A VAPOR RETARDER OR MEMBRANE IS NOT EXCEEDING ONE PERM IS PROVIDED ON THE CONDITIONED SIDE OF THE INSULATION, IF THE GABLE OR RIDGE VENTS ARE LOCATED ON THE UPPER 1/3 OF THE ATTIC OR ENCLOSED RAFTER SPACE AND PROVIDE 50 TO 80 PERCENT OF THE REQUIRED VENT AREA WITH THE BALANCE OF THE REQUIRED VENT AREA IS SUPPLIED BY EAVE OR CORNICE VENTS.
13. A ONE INCH CLEARANCE BETWEEN THE TOP OF THE INSULATION AND THE BOTTOM OF THE ROOF SHEATHING IS REQUIRED WHEN VENTILATION IS PROVIDED BY EAVE OR CORNICE VENTS.
14. FOUNDATION CRAWLSPACES ARE TO HAVE A MINIMUM CLEAR HEIGHT OF AT LEAST 18 INCHES AND SHALL BE PROVIDED WITH VENT OPENINGS LOCATED WITHIN THREE FEET OF EACH CORNER. THE TOTAL VENT AREA SHALL BE AT LEAST 1/150 OF THE AREA SERVED.
- EXCEPTIONS:
- A. WHEN AN APPROVED VAPOR BARRIER IS PROVIDED OVER THE SURFACE OF THE GROUND, THE REQUIRED VENT AREA MAY BE REDUCED TO TEN PERCENT OF THE ABOVE AND THE VENTS MAY HAVE OPERABLE LOUVERS.
 - B. CLEAR HEIGHT MAY BE REDUCED WHEN PRESERVATIVELY TREATED OR NATURALLY DURABLE WOOD IS USED FOR THE FRAMING AND SUBFLOOR.
16. BEE DIVISION IS FOR ALTERNATE MECHANICAL MEANS OF VENTING CRAWLSPACES, UNFINISHED BASEMENT AND UTILITY AREAS.
16. UNFINISHED BASEMENTS AND UTILITY ROOMS REQUIRE NATURAL VENTILATION (NET OPENABLE AREA) AT THE RATIO OF ONE PERCENT OF THE SQUARE FOOTAGE FLOOR AREA SERVED.
17. CAULKING AND SEALANTS:
- EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, BETWEEN WALL AND FOUNDATION, BETWEEN WALL AND ROOF, BETWEEN WALL PANELS, AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOORS, AND ALL OTHER OPENINGS IN THE EXTERIOR BUILDING ENVELOPE SHALL BE SEALED IN AN APPROPRIATE MANNER. ALL JOINTS IN WALLS AND FLOORS SHALL BE WATER TIGHT.
18. ALL SURFACES TO RECEIVE SEALANTS SHALL BE VERIFIED TO BE CLEAN, FREE OF LOOSE AGGREGATE, OIL, GREASE, TAR, WATER PROOFING AGENTS, DUST, DIRT OR GRIT. UPON COMPLETION OF SURFACE PREPARATION, CONDUCT A TEST FOR ADHESION BEFORE PROCEEDING WITH SEALANT APPLICATION.
19. SKYLIGHTS:
- SINGLE LIGHT AND MULTIPLE LIGHT SHALL CONSIST OF ONE OF THE FOLLOWING:
- A. LAMINATED GLASS WITH 0.015 INCH POLYETHYLENE INTERLAYER FOR GLASS PANELS 16 SF OR LESS IN AREA AND LOCATED SUCH THAT THE HIGHEST POINT OF GLASS IS NOT MORE THAN 12 FEET ABOVE WALKING SURFACE, OR
 - B. LAMINATED GLASS WITH 0.030 INCH POLYETHYLENE INTERLAYER FOR GLASS PANELS GREATER THAN 16 SF IN AREA OR GREATER THAN 8 FEET ABOVE WALKING SURFACE WHEN LOCATED MORE THAN 12 FEET ABOVE WALKING SURFACE, OR
 - C. WIKED GLASS (ONLY IF APPROVED OR CALLED OUT ON THE PLANS BY THE ARCHITECT), OR
 - D. HEAT STRENGTHENED GLASS, OR
 - E. FULLY TEMPERED GLASS, OR
20. SCREENS SHALL BE INSTALLED BELOW SLOPED GLAZING WHICH CONTAINS HEAT STRENGTHENED GLASS, FULLY TEMPERED GLASS OR WIKED GLASS AS THE BOTTOM LAYER. SCREENS SHALL NOT BE MORE THAN 4 INCH BELOW THE GLASS, NOT LESS THAN 1/2 GAUGE, NOT LARGER THAN ONE INCH BY ONE INCH MESH AND SHALL BE DESIGNED TO SUPPORT TWICE THE WEIGHT OF THE GLASS. EXCEPTIONS (SCREENS ARE NOT REQUIRED IF GLAZING):
1. HAS NOT WALKING SURFACE BELOW IT, OR
 2. IS FULLY TEMPERED GLASS, A MAXIMUM OF 3/16 INCH THICK, A MAXIMUM OF 16 SF AND A MAXIMUM OF 12 FEET ABOVE THE WALKING SURFACE, OR
 3. IS FULLY TEMPERED GLASS, A MAXIMUM OF 10 FEET ABOVE THE WALKING SURFACE, AND IS 30 DEGREES OR LESS FROM VERTICAL.
21. SKYLIGHTS INSTALLED IN ROOMS WITH SLOPES OF LESS THAN 3 IN 12 MUST BE MOUNTED ON CURBS AT LEAST FOUR INCHES ABOVE THE ROOF SURFACE.
22. SKYLIGHTS SHALL BE DOUBLE GLAZED.
23. GROUND WATER REQUIREMENTS:
- AN EVALUATION OF THE SOIL FOR THE PRESENCE OF GROUND WATER IS REQUIRED. IF NO GROUND WATER PRESENCE IS DETECTED:
- A. PROVIDE DRAIN TILE OR PERFORATED PIPE AROUND THE PERIMETER OF THE OUTSIDE OF THE FOUNDATION OR INSIDE THE FOUNDATION WALL UNDER THE SLAB WITH DRAIN DISCHARGE TO THE BUMP.
 - B. AN APPROVED FILTER FABRIC SHALL BE PLACED OVER THE TOP OF THE JOINT PIPE PERFORATIONS. THE TILE/PIPE SHALL BE PLACED ON 2 INCH MINIMUM GRAVEL OR CRUSHED STONE AND HAVE 6 INCH MINIMUM COVER.
 - C. PROVIDE BUMP 1/2 INCH DIAMETER X 18 INCH DEEP MINIMUM WITH FITTED COVER CONNECTED TO THE FOUNDATION DRAIN PIPE. A BUMP PUMP SHALL BE PROVIDED IF BASEMENT IS FINISHED OR PARTIALLY FINISHED WITH PUMP DISCHARGE BY APPROVED METHODS.
 - D. PROVIDE DRAIN PROOFING OF FLOOR SLAB BY INSTALLING 6 MIL POLYETHYLENE FLM BELOW SLAB WITH JOINTS LAPPED 6 INCHES AND SEALED.
 - E. WALLS ARE TO BE DAMP PROOFED WITH BITUMINOUS SFRAY FROM FOOTING TO GRADE. PROVIDE A MINIMUM 3 LB PER SQ. YD. OF ACTIC LMODIFIED CEMENT. 1/8 INCH COAT OF SURFACE COAT OF POLYMER CEMENT, OR BY ANY OF THE MATERIALS LIST IN THE "GROUND WATER PRESENT" SECTION.

- IF GROUND WATER PRESENCE IS DETECTED:
- A. PROVIDE A DRAIN TILE OR PERFORATED PIPE OR OTHER APPROVED FOUNDATION DRAINAGE SYSTEM BOTH INSIDE AND OUTSIDE THE FOUNDATION.
 - B. DRAINAGE SYSTEM SHALL DISCHARGE TO AN APPROVED SUMP (5 INCHES IN DIAMETER X 18 INCHES DEEP MINIMUM) WITH FITTED COVER AND HAVING A BUMP PUMP THAT DISCHARGES INTO AN APPROVED DISPOSAL SYSTEM.
 - C. PROVIDE WATERPROOFING MEMBRANE UNDER FLOOR SLAB (MINIMUM OF 6 MIL POLYETHYLENE CHLORIDE OR POLYETHYLENE) WITH JOINTS LAPPED A MINIMUM OF 6 INCHES AND SEALED.
 - D. FOUNDATION TO BE WATERPROOFED WITH TWO FLAT HOT MAPPED FELTS, 6 MIL PVC, 40 MIL POLYMER MODIFIED ASPHALT, OR 6 MIL POLYETHYLENE. JOINTS TO BE LAPPED AND SEALED PER MANUFACTURER'S INSTALLATION INSTRUCTION.
 - E. WATERPROOFING IS TO BE APPLIED FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE.
 - F. ALL JOINTS IN WALLS AND FLOORS TO BE WATER TIGHT.
24. BUMP PUMP DISCHARGE SHALL BE PIPED TO A STORM DRAIN OR TO AN APPROVED WATER COURSE. DISCHARGE TO OR WITHIN TEN FEET OF A SIDEWALK, DRIVEWAY, STREET OR PROPERTY LINE IS PROHIBITED. CREATING A NUISANCE AND ADJOINING PROPERTY DUE TO WATER DISCHARGE IS ALSO PROHIBITED.
25. DOWNSPUT DISCHARGE SHALL BE DIRECTED AWAY FROM THE FOUNDATION. SEE DIVISION 2 NOTES 10 AND 11 FOR MORE INFORMATION.

ENERGY CONSERVATION

1. DESIGN REQUIREMENTS BY THE ACCEPTED PRACTICE METHOD (R-VALUES INDICATED MUST BE OBTAINED BY THE INSULATION MATERIAL USED, NOT BY THE TOTAL SUM OF THE ASSEMBLY).
2. ROOF CEILING MINIMUM R-30
3. WOOD FRAME WALL AND BAND JOIST MINIMUM R-13
4. FLOOR OVER UNHEATED CRAWLSPACE MINIMUM R-19
5. UNFINISHED BASEMENT FOUNDATION WALL * MINIMUM R-5 (SEE EXCEPTION)
- EXCEPTION: UNFINISHED BASEMENTS MAY HAVE UP TO A MAXIMUM OF 20 PERCENT OF THE TOTAL BASEMENT WALL AREA EXPOSED ABOVE THE OUTSIDE FINISHED GRADE/GROUND LEVEL AS UNINSULATED CONCRETE FOUNDATION WALLS. THE FOUNDATION WALL AREA ABOVE THE OUTSIDE GRADE/GROUND LEVEL THAT MAY BE UNINSULATED IS LIMITED TO A MAXIMUM OF 20 PERCENT OF THE TOTAL WALL HEIGHT OF ALL WALLS (INCLUDING INSULATED EXTERIOR FRAME WALLS FOR WALK-OUT BASEMENTS AND WALLS COMMON TO BOTH BASEMENT AND ATTACHED GARAGES) TIMES THE PERIMETER OF THESE BASEMENT WALLS. UNFINISHED AREAS OF THE BASEMENT FOUNDATION WALL INSULATION SHALL EXTEND DOWN TO THE BASEMENT FLOOR SLAB OR TO A MINIMUM OF 24 INCHES BELOW OUTSIDE FINISHED GRADE WHEN THE FLOOR IS ABOVE THE FLOOR SLAB ELEVATION.
- * THE INSULATION SHALL BE ALONG THE PERIMETER OF THE FOUNDATION WALL DOWNWARD FROM THE SLAB A MINIMUM DISTANCE OF 24 INCHES OR HORIZONTAL UNDER THE SLAB FOR A MINIMUM OF 24 INCHES. GLASS INSULATION BELOW ARE CONSIDERED HEATED SLABS.
6. SLAB ON GRADE FLOORS MINIMUM R-6.2 (HEATED) MINIMUM R-4.2 (UNHEATED)
7. METAL DOORS, EXCEPT OVERHEAD GARAGE DOORS, SHALL BE INSULATED.
8. SKYLIGHTS SHALL BE DOUBLE GLAZED.
9. MECHANICAL DUCTWORK LOCATED IN UNHEATED CRAWL AND ATTIC SPACES SHALL BE INSULATED TO A MINIMUM OF R-6.5.
6. WINDOWS FOR NATURAL VENTILATION OF UNFINISHED BASEMENTS MAY BE SINGLE GLAZED. ALL OTHER WINDOWS SHALL BE DOUBLE GLAZED WITH 1/2 INCH MINIMUM CLEAR GLASS (OVERALL THICKNESS) AND A MAXIMUM U-VALUE OF 0.51

DIVISION 8 DOORS AND WINDOWS

1. SEE ELEVATION SHEETS FOR WINDOW MANUFACTURER AND OTHER RELEVANT INFORMATION.
2. GLAZING INSTALLED IN THE FOLLOWING LOCATIONS SHALL BE TESTED AND LABELED IN ACCORDANCE WITH CPSC 16 CFR PART 1201 STANDARD AS A TYPE 1 OR 2 CATEGORY:
- A. GLAZING IN DOORS AND ANY PORTION OF A BUILDING WALL OR FENCE INCLUDING BATHTUBS, SHOWERS, HOT TUBS, WHIRLPOOLS, SAUNAS, STEAMS, SPAS, INDOOR OR OUTDOOR POOLS WHICH IS LOCATED 60 INCHES OR LESS, MEASURED HORIZONTALLY, FROM THE WATER'S EDGE AND LESS THAN 60 INCHES VERTICALLY ABOVE A STANDING SURFACE.
 - B. ANY GLAZING MATERIAL ADJACENT TO A DOOR IF THE NEAREST VERTICAL EDGE OF THE GLAZING MATERIAL IS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND IF THE BOTTOM EDGE OF THE GLAZING MATERIAL IS LESS THAN 60 INCHES ABOVE THE FLOOR.
- EXCEPTIONS:
1. WHERE THERE IS AN INTERVENING WALL OR BARRIER TO PREVENT A PERSON FROM GETTING IN THE GLAZING WHILE APPROACHING THE DOOR.
 2. GLAZING ADJACENT TO A DOOR SERVING AS A CLOSET OR STORAGE AREA 36 INCHES OR LESS IN DEPTH.
 3. DECORATIVE GLASS
3. SAFETY GLAZING:
- SAFETY GLAZING IS REQUIRED FOR FIXED OR OPERABLE PANELS THAT MEET THE FOLLOWING CRITERIA:
- A. INDIVIDUAL PANE IS GREATER THAN NINE SQUARE FEET
 - B. BOTTOM EDGE IS LESS THAN 18 INCHES ABOVE THE FLOOR
 - C. TOP EDGE IS MORE THAN 36 INCHES ABOVE THE FINISH FLOOR
 - D. A WALKING SURFACE IS WITHIN 36 INCHES HORIZONTALLY
- EXCEPTIONS:
1. DECORATIVE GLASS
 2. 1/2 INCH PROTECTIVE BAR IS PLACED 34 TO 58 INCHES ABOVE THE WALKING SURFACE. THE BAR SHALL BE CAPABLE OF WITHSTANDING A FIFTY POUND PER LINEAL FOOT LOAD WITHOUT CONTACTING THE GLASS.
4. ALL DOORS (WITH THE EXCEPTION OF DECORATIVE GLASS)
5. GLAZING IN HAND OR GUARD RAILS
6. GLAZING ADJACENT TO STAIRWAYS, LANDINGS, AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF THE WALKING SURFACE AND LESS THAN 60 INCHES ABOVE THE TREAD NOBING. - AND - GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE TREAD NOBING.
- EXCEPTION: THE GLAZING IS PROTECTED BY A GUARDRAIL OR A HANDRAIL INCLUDING BALUSTERS OR IN-FILL PANELS COMPLYING WITH THE PROVISIONS OF SECTION 1012 AND 1017.7 OF THE 2003 INTERNATIONAL BUILDING CODE AND THE GLAZING IS LOCATED MORE THAN 18 INCHES HORIZONTALLY FROM THIS GUARD OR HANDRAIL.
7. SAFETY GLAZING IS TO BE PROVIDED ABOVE AND BEYOND THESE RULES IF CALLED OUT ON THE PLANS. ALL BID AS TO INCLUDE THESE TEMPERED PANES, UNLESS CLEARED BY THE ARCHITECT IN WRITING PRIOR TO THE BID SUBMISSION.
8. LIGHT REQUIREMENTS:
- GLASS AREA IN HABITABLE ROOMS SHALL NOT BE LESS THAN 8 PERCENT OF THE FLOOR AREA SERVED. ONE HALF OF THIS AREA MUST BE AVAILABLE TO UNOBSTRUCTED VENTILATION WITH SCREENS INCLUDED.

- EGRESS REQUIREMENTS:
- ALL BASEMENTS WITH A HABITABLE AREA, BASEMENTS WITH A BATHROOM OR TOILET IN PLUMBING FOR A FUTURE BATHROOM, AND EACH BEDROOM MUST HAVE ONE WINDOW FOR EMERGENCY ESCAPE MEETING ALL THE FOLLOWING MINIMUMS:
- A. MAXIMUM HEIGHT TO BOTTOM OF CLEAR OPENING OF 44 INCHES
 - B. MINIMUM CLEAR OPENING WIDTH OF 20 INCHES
 - C. MINIMUM NET CLEAR OPENING HEIGHT OF 24 INCHES
 - D. MINIMUM CLEAR OPENING AREA OF 5.7 SQUARE FEET AT WINDOWS ABOVE GRADE AND 5.0 SQUARE FEET MINIMUM FEET AT WINDOWS AT GRADE. (THE NET CLEAR OPENING DIMENSION SHALL BE OBTAINED BY THE NOMINAL OPERATION OF THE WINDOW FROM THE INSIDE.)
10. RATED DOOR: DOOR BETWEEN GARAGE AND HOUSE SHALL BE A 1 3/4 INCH SOLID CORE WOOD OR HONEYCOMB METAL DOOR. DOOR SET SHALL BE AT LEAST 4 INCHES ABOVE GARAGE FLOOR.
11. ALLOWABLE WIDTHS: MINIMUM SIDE ENTRY DOOR TO HAVE 32 INCHES MINIMUM CLEAR WIDTH (36 INCH DOOR SLAB). MINIMUM WIDTH SHALL BE PROVIDED BY A SINGLE LEAF IN DOUBLE LEAF DOORS. (BT. LOUIS CO. COUNTY REQUIREMENT)
12. MINIMUM CLEAR WIDTH OF AN INTERIOR EGRESS DOOR FOR BATHROOMS AND HABITABLE SPACES (THOSE USED FOR LIVING, SLEEPING, EATING OR COOKING) IS 28 INCHES (50 INCH DOOR SLAB). (BT. LOUIS CO. COUNTY REQUIREMENT)
13. MINIMUM CLEAR WIDTH OF DOORS TO OR FROM STAIRWAYS WITHIN THE DWELLING UNIT IS 29 3/4 INCHES (52 INCH DOOR SLAB). (BT. LOUIS CO. COUNTY REQUIREMENT)
14. ALLOWABLE WIDTHS: LOCKS WITH THUMB TURNS ON THE INSIDE ARE PERMITTED. INSIDE KEY OPERATION IS PERMITTED PROVIDED THE KEY CANNOT BE REMOVED FROM THE LOCK WHEN LOCKED FROM THE INSIDE.

DIVISION 9 FINISHES

1. INTERIOR FINISH MATERIALS SHALL NOT HAVE A FLAME SPREAD RATING EXCEEDING 200 OR A SMOKE DEVELOPMENT INDEX EXCEEDING 450.
2. DRYWALL INSTALLATION: DRYWALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE GYPSUM ASSOCIATION RECOMMENDED PRACTICE FOR THICKNESS, AND TAPING ON CORRECT STUD BRACING UNLESS SUPERSEDED BY LOCAL GOVERNING AGENCIES. FASTENERS FOR GYPSUM BOARD INSTALLATION ARE CALLED OUT ON THE FINISH SCHEDULES FOR STRUCTURAL MEMBERS ON THESE NOTE SHEETS.
3. FIRE RATED DRYWALL: ALL FIRE RATED DRYWALL ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE TO THE SPECIFICATIONS OF THE APPROVED TESTING AGENCY.
4. ATTACHED GARAGES WITH OR WITHOUT A HABITABLE SPACE ABOVE SHALL HAVE 5/8 INCH TYPE "X" OR 1/2 INCH TYPE "XX" GYPSUM BOARD ON BOTH SIDES OF THE WALL SEPARATING THE GARAGE FROM THE HOUSE. THE GYP BOARD IS TO CONTINUE TO THE UNDERSIDE OF THE ROOF SHEATHING. THE GARAGE CEILING IS TO BE COVERED WITH ONE LAYER OF 5/8 INCH TYPE "X" OR ONE LAYER OF 1/2 INCH TYPE "XX" GYPSUM BOARD. SOFFT DOWN AND AROUND ANY MECHANICAL DUCTWORK OR PROVIDE FIRE DAMPERS AT ANY PENETRATIONS OF RATED ASSEMBLIES. ALL BEARING WALLS, BEAMS AND COLUMNS SUPPORTING SUCH SEPARATION ASSEMBLIES TO BE PROTECTED BY ONE LAYER OF 5/8 INCH TYPE "X" OR ONE LAYER OF 1/2 INCH TYPE "XX" GYPSUM BOARD. AREAS ABOVE A GARAGE SPACE DEFINED BY CODE AS HABITABLE CHANGE THIS REQUIREMENT TO TWO LAYERS OF 5/8 INCH TYPE "X" DRYWALL AT THE GARAGE CEILING AND OVER ALL STRUCTURAL COMPONENTS.
5. WATER RESISTANT GYPSUM BOARD: WATER RESISTANT GYPSUM BOARD USED AS A BASE FOR TILES OR WALL PANELS IN BATHTUBS AND SHOWER COMPARTMENTS SHALL NOT BE APPLIED OVER A VAPOR BARRIER. WATER RESISTANT GYPSUM BOARDING BOARD SHALL BE PERMITTED TO BE USED ON CEILINGS WHERE FRAMING SPACING DOES NOT EXCEED 16 INCHES ON CENTER FOR 1/2 INCH THICK OR 18 INCHES FOR 5/8 INCH THICK GYPSUM BOARD.
6. CEILING SUSPENDED BELOW WOOD JOISTS OR ATTACHED DIRECTLY TO WOOD FLOOR TRUSSES SHALL BE DRAFT STOPPED AT 1000 SQUARE FOOT INTERVALS AND PARALLEL TO MAIN FRAMING MEMBERS.
7. SOFFITS AND DROPPED CEILINGS: ALL SOFFITS AND DROPPED CEILING SHALL BE FIRE STOPPED IN ACCORDANCE WITH DIVISION 6.
8. VAPOR BARRIER: IN ALL FRAMED WALLS, FLOORS, AND ROOF/CEILINGS COMPRISING ELEMENTS OF THE BUILDING THERMAL ENVELOPE, A VAPOR RETARDER SHALL BE INSTALLED ON THE WARM-IN WINTER SIDE OF THE INSULATION, ALSO SEE DIVISION 7.
- EXCEPTION: A VAPOR RETARDER SHALL NOT BE INSTALLED UNDER WATER-RESISTANT GYPSUM BOARD IN SHOWER OR BATHTUB COMPARTMENTS.
9. SHOWERS AND BATHTUB/SHOWER ENCLOSURES SHALL HAVE WALLS CONSTRUCTED OF SMOOTH, NON-CORRODIVE, NON-ABSORBENT AND WATERPROOF MATERIALS TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE ROOF FLOOR LEVEL.
10. SHOWER FLOOR SURFACES TO BE SMOOTH, NON-CORRODIVE, NON-ABSORBENT AND WATERPROOF MATERIALS.
11. PAINT (STAIN): ALL PAINTS SHALL BE MANUFACTURED BY FOKER, MARI, BENJAMIN MOORE, BRAD-DIGAN, SHERWIN WILLIAMS OR EQUAL AS APPROVED BY OWNER. VERIFY ALL COLOR SELECTIONS WITH OWNER. ALL INTERIOR BUILT-IN CUSTOM CABINETSRY MILLWORK NOT FULLY FINISHED SHALL ALSO BE PAINTED BY THE PAINTER BID.
- INTERIOR DOORS AND WOODWORK (PAINTED) ARE TO BE PAINTED WITH A MAXIMUM OF ONE PRIME COAT AND TWO FINISH COATS OF OIL BASED SEMI GLOSS ENAMEL. ALL DOORS AND MILLWORK SHALL BE SANDED SMOOTH BEFORE PAINTING.
- INTERIOR DOORS AND MILLWORK (STAINED) ALL DOORS AND MILLWORK SHALL BE SANDED SMOOTH BEFORE STAINING. STAINING SEALER IS TO BE APPLIED TO ALL WOOD BEFORE BEING STAINED IN A COLOR SELECTED BY THE OWNER. BATH POLYURETHANE SEALER SHALL BE APPLIED AFTER STAINING. WOODWORK SHALL THEN BE REASSEMBLED, FACED, AND FINISHED WITH FINISH POLYURETHANE. THE STAINING JOB WILL NOT BE CONSIDERED COMPLETE WHEN THERE IS NOTICABLE FILM BUILD ACROSS THE WOOD. NO GRAYN SHALL PROTRUDE. ALL FINISH NAILS SHALL BE SET AND FILLED WITH A FILLER COLORED TO MATCH THE CHOSEN STAIN COLOR.
- INTERIOR GYPSUM BOARD GYPSUM BOARD IS TO BE SFRAYED OR ROLLED WITH ACRYLIC LATEX. USE ONE COAT FOR THE PAINTS IN 420 DRYWALL SEALER AND TWO COATS MINIMUM OF "VINYL SHEED" OR EQUAL. IF DRYWALL IS SFRAYED, SACK ROLL THE SECOND SFRAYED COAT. (BASE BID - UNLESS A FINISH SCHEDULE IS PROVIDED)
- INTERIOR WALL MOUNTED GRILLS THE PAINTER SHALL SPRAY THE INSIDE OF ALL STUD SPACES BEHIND WALL MOUNTED RETURN AIR GRILLS TO MATCH WALL COLOR SO THAT THE STUDS MAY NOT BE SEEN.
- STEEL BEAMS AND COLUMNS ARE TO BE FACTORY PRIME AND FIELD PAINTED WITH ONE COAT OF ENAMEL.
- EXTERIOR MAN AND GARAGE DOORS ARE TO BE PAINTED WITH TWO COATS OF ACRYLIC SEMI-GLOSS. ANY EXPOSED WOOD ON THE EXTERIOR OF THE HOUSE SHALL BE PRIME AND BACK PRIMED BEFORE INSTALLATION. AFTER INSTALLATION, EXPOSED WOOD IS TO BE PAINTED WITH TWO COATS OF ACRYLIC SEMI-GLOSS PAINT.
- EXTERIOR PAINTING AND CAULKING PAINT AND CAULK ALL EXTERIOR WOODWORK JOINTS, METALS, SHUTTERS, LOUVERS AND EQUIPMENT BOXES. DO NOT PAINT PREFINISHED MATERIALS. USE ONE COAT PRIMER UNDER TWO COATS OF SEMI-GLOSS ENAMEL ON EXTERIOR METAL SURFACES AFTER CLEANING OFF ANY RUST AND / OR DIRT.

DIVISION 12 FURNISHINGS

1. CABINETS: CABINET SUPPLIER SHALL MEASURE AREA OF WORK AFTER ROUGH FRAMING TO ENSURE EXACT FIT OF CABINETS.
2. BEGINNING OF FABRICATION, CONSTRUCTION AND INSTALLATION OF CABINETSRY AND COUNTERTOPS MEANS ACCEPTANCE OF EXISTING CONDITIONS.
3. TRIM, MOLDINGS, BUILT-IN CASEWORK: ALL TRIM, MOLDINGS, BUILT-IN CASEWORK ETC. NOT SPECIFIED ON PLANS ARE TO BE CONSIDERED DESIGN IN NATURE AND TO BE REFERRED WITH THE GENERAL CONTRACTOR AND / OR OWNER PRIOR TO SUBMITTING DDB.

DIVISION 16 MECHANICAL AND PLUMBING

1. ALL HVAC EQUIPMENT AND DUCTWORK SHALL COMPLY WITH THE 1989 INTERNATIONAL MECHANICAL CODE AND AS PER LOCAL CODE REQUIREMENTS.
2. HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF DUCT LAYOUTS AND FOR SIZING THE HEATING AND COOLING UNITS.
3. FLUES: CHIMNEYS AND FLUES (MASONRY AND METAL) SHALL EXTEND A MINIMUM OF 56 INCHES ABOVE THE ROOF AND AT LEAST 24 INCHES HIGHER THAN ANY OTHER PART OF THE BUILDING WITHIN TEN FEET.
4. VIBRATION ISOLATORS: VIBRATION ISOLATORS SHALL BE INSTALLED BETWEEN MECHANICAL EQUIPMENT AND METAL DUCTS. VIBRATION ISOLATORS SHALL BE FABRICATED FROM APPROVED MATERIALS AND SHALL NOT EXCEED 10 FEET IN LENGTH.
5. THERMOSTATS: THERMOSTATS USED FOR HEATING AND COOLING SHALL BE CAPABLE OF BEING SET FROM 55 DEGREES FAHRENHEIT TO 85 DEGREES FAHRENHEIT AND SHALL BE CAPABLE OF OPERATING THE SYSTEM'S HEATING AND COOLING SEQUENCE.
6. MECHANICAL VENTILATION: ENCLOSED ATTIC, RAFTER AND CRAWLSPACE AREA MAY BE VENTILATED BY A MECHANICAL EXHAUST AND SUPPLY AIR SYSTEM OF 02 CFM/80 OF HORIZONTAL AREA. THE VENTILATION SYSTEMS SHALL OPERATE CONTINUOUSLY.
7. IN LIEU OF NATURAL VENTILATION, MECHANICAL VENTILATION OF UNFINISHED BASEMENTS AND UTILITY ROOMS WITH OUTDOOR AIR (NOT REGENERATED AIR) IN ACCORDANCE WITH THE MECHANICAL CODE MAY BE SUBSTITUTED AT A RATE OF 05 CFM/80 OF AREA.
8. APPROVED VENT BY SYSTEMS FOR APPLIANCES SHALL BE SIZED, INSTALLED AND TERMINATED PER MANUFACTURER'S INSTRUCTIONS.
9. COMBUSTION AIR SUPPLY FOR GAS APPLIANCES: GAS APPLIANCES LOCATED IN ROOMS OR SPACES WHOSE VOLUME IS LESS THAN 50 CUBIC FEET (1000 BTU/HOUR INPUT RATING) SHALL HAVE COMBUSTION AND VENTILATION AIR PROVIDED IN ACCORDANCE WITH THE FOLLOWING:
- A. USING INSIDE AIR: ONE SQUARE INCH OF FREE AREA SHALL BE PROVIDED/1000 BTU/HOUR FOR EACH OPENING. OPENINGS SHALL NOT BE LESS THAN 100 SQUARE INCHES OF FREE AREA. ONE OPENING SHALL BE PROVIDED WITHIN 12 INCHES OF THE CEILING AND ONE WITHIN 12 INCHES OF THE FLOOR, NO COMMON DUCTS TO THE PLUMBING MECHANICAL SUBCONTRACTOR IF THE GUIDELINES FOR NOTCHING AND BOLDING IN DIVISION 6 OF THIS SPECIFICATION ARE NOT FOLLOWED. SEE DIVISION 6 FOR MORE INFORMATION.
 - B. USING OUTSIDE AIR: ONE OPENING SHALL BE PROVIDED WITHIN 12 INCHES OF THE CEILING WITH A NET FREE AREA OF ONE SQUARE INCH/5000 BTU/HOUR.
10. APPLIANCE LOCATION: APPLIANCES SHALL NOT BE INSTALLED IN A BEDROOM, BATHROOM OR STORAGE CLOSET.
- EXCEPTIONS:
- A. THE APPLIANCE IS A DIRECT VENT UNIT OBTAINING ALL COMBUSTION AIR DIRECTLY FROM OUTDOOR AIR,
 - B. THE APPLIANCE IS INSTALLED IN A CLOSET THAT IS USED SOLELY FOR APPLIANCE. THE CLOSET DOOR IS SELF-CLOSING, SOLID AND WEATHER BTRIPPED, AND COMBUSTION AIR IS PROVIDED FROM OUTDOORS.
11. MINIMUM CLEARANCE BETWEEN FURNACE/APPLIANCE AND COMBUSTIBLES IS 18 INCHES UNLESS THE LISTED MANUFACTURER INSTALLATION INSTRUCTION ALLOWS AN ALTERNATE CLEARANCE DIMENSION. A MINIMUM OF 30 INCHES OF CLEARANCE IS REQUIRED AT THE FRONT OF THE FURNACE/APPLIANCE FOR SERVICE.
12. SHUT OFFS: EVERY GAS APPLIANCE SHALL HAVE AN INDIVIDUAL SHUT OFF VALVE AND GROUND JOINT UNION. A SEDIMENT TRAP IS REQUIRED AT EACH APPLIANCE OR GROUP OF APPLIANCES.
13. INTERIOR GAS PIPING: INTERIOR GAS PIPING LOCATED OUTSIDE OF THE ROOM OF THE SERVED APPLIANCE SHALL BE LABELED AT INTERVALS OF NO MORE THAN 5 FEET. BLACK IRON PIPE DOES NOT NEED TO BE LABELED.
14. CLEARANCES: FUEL BURNING APPLIANCES (FURNACES AND WATER HEATERS) INSTALLED IN A PRIVATE GARAGE SHALL HAVE A CLEARANCE OF 18 INCHES MINIMUM (OR HIGHER WHERE REQUIRED BY THE MANUFACTURER) BETWEEN FINISHED FLOOR LEVEL AND THE COMBUSTION CHAMBER, AND BE PROTECTED FROM DAMAGE BY PFE BOLLARDS OR OTHER APPROVED METHOD.
15. SUSPENDED FUEL BURNING APPLIANCES: SUSPENDED FUEL BURNING APPLIANCES LOCATED IN PRIVATE GARAGES SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 8 FEET ABOVE THE FLOOR.
16. CLOTHES DRYER EXHAUST: CLOTHES DRYER EXHAUST SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS, AND EXHAUST TO THE EXTERIOR THROUGH SMOOTH, 4 INCH MINIMUM DIAMETER DUCT. THE MAXIMUM DEVELOPED LENGTH OF THE DUCT SHALL BE 35 FEET (OBTAINED BY ADDING 6 FEET FOR EACH 90 DEGREE BEND AND 2.5 FEET FOR EACH 45 DEGREE BEND TO THE LENGTH OF THE STRAIGHT RUN).
- EXCEPTION: THE MAXIMUM DEVELOPED LENGTH MAY BE EXTENDED TO 55 FEET IF CLEARLY LABELED CLEANOUTS ARE PROVIDED IMMEDIATELY AFTER THE SECOND ELOW AND AT LEAST EVERY 15 FEET OF DEVELOPED LENGTH THROUGH THE RAFTERS.
17. BATHROOM VENTILATION: RESIDENTIAL BATHROOMS SHALL EXHAUST 50 CFM MINIMUM TO THE EXTERIOR. IT IS NOT PERMISSIBLE TO DISCHARGE EXHAUST TO THE ATTIC.
- EXCEPTIONS:
- A. HALF BATHS WITHOUT A TUB OR SHOWER MAY EXHAUST TO THE ATTIC.
 - B. HALF BATHS WITHOUT A TUB OR SHOWER MAY SUBSTITUTE A WINDOW WITH OPENABLE AREA OF AT LEAST 4 PERCENT OF THE FLOOR AREA FOR AN EXHAUST SYSTEM.
18. MAKEUP AIR: MAKEUP AIR SHALL BE PROVIDED DURING THE OPERATION OF KITCHEN EXHAUST SYSTEMS OF 600 CFM OR GREATER EXHAUST FLOW. THE AMOUNT OF MAKEUP AIR SHALL BE APPROXIMATELY EQUAL TO THE AMOUNT OF EXHAUST AIR. MAKEUP AIR SHALL BE PROVIDED BY GRAVITY OR MECHANICAL MEANS OR BOTH. FOR MECHANICAL MAKEUP AIR SYSTEM, THE EXHAUST AND MAKEUP AIR SYSTEMS SHALL BE ELECTRICALLY INTERLOCKED TO ENSURE MAKEUP AIR IS PROVIDED WHENEVER THE EXHAUST SYSTEM IS IN OPERATION.
19. PLUMBING CONFORMANCE: ALL PLUMBING SHALL COMPLY WITH THE 1997 UNIFORM PLUMBING CODE AND AS PER LOCAL CODE REQUIREMENTS.
20. PIPING NOTE: NOTE THAT THE WATER SERVICE PIPE AND THE BUILDING SERVICE ARE TO BE A MINIMUM OF 10 FEET APART HORIZONTALLY.

21. WATER SERVICE: THE MINIMUM SIZE OF THE WATER SERVICE PIPING IS ONE INCH UP TO THE FIRST BRANCH. PLASTIC WATER SERVICE PIPING SHALL TEST TO A MINIMUM OF 10 FEET OUTSIDE THE FOUNDATION WALL AND METALLIC PIPING BROUGHT INTO THE BUILDING UP TO THE OUTLET OF THE VALVE OR TO THE TRV OUTLET, WHICHEVER IS FURTHER FROM THE POINT OF ENTRANCE TO THE BUILDING. MINIMUM WATER MAIN PRESSURE MUST BE CONSIDERED WHEN SIZING THE WATER SERVICE PIPING.
22. THE FOLLOWING TABLE IS TO BE USED IN SELECTING WATER SERVICE LINES SERVING SINGLE FAMILY DWELLINGS:
- A. 1" DIAMETER SERVICE LINE UP TO 3 1/2 BATHS
 - B. 1 1/4" DIAMETER SERVICE LINE UP TO 6 BATHS
 - C. 1 1/2" DIAMETER SERVICE LINE MORE THAN 6 BATHS
- THIS POINT INCLUDES: (1) KITCHEN SINK WITH DISHWASHER, (2) LAUNDRY; AND (2) 1/8 INCH EXTERIOR CONTINUOUS USE HOSE BIBBS. ROUGHED-IN FIXTURES SHALL ALSO BE INCLUDED IN THE COUNT.
23. SOLDER: LEAD FREE SOLDER IS REQUIRED ON ALL COPPER WATER SUPPLY PIPING.
24. FLOOR DRAINS: A FLOOR DRAIN IS REQUIRED FOR A WATER HEATER. DRAIN TO BE WITHIN 15 FEET OF THE WATER HEATER AND IN THE SAME ROOM.
25. WINDOW AREAWAY DRAINS: WINDOW AREAWAY DRAINS LESS THAN TEN SQUARE FEET IN AREA SHALL BE SERVED BY A TWO INCH PIPE DRAINED TO DAYLIGHT OR BUMP IT SERVED BY AN APPROPRIATE PUMP INSTALLATION. WINDOW AREA DRAINS TEN SQUARE FEET OR GREATER BUT LESS THAN 100 SQUARE FEET IN AREA SHALL BE SERVED BY A THREE INCH PIPE DRAINED IN THE SAME MANNER. AREWAYS GREATER THAN 100 SQUARE FEET REQUIRE THE DRAIN TO BE SIZED IN ACCORDANCE WITH TABLE 18-3 OF THE PLUMBING CODE. THE PRESENCE OF A COVER OVER THE AREAWAY DOES NOT NEGATE THE NEED FOR A DRAIN.
26. SUMP PUMP: PROVIDE CONTINUOUS DRAINAGE TO SUMP OR "DAYLIGHT" UNDER BASEMENT FLOOR AREA. SUMPS MUST BE 16 INCHES IN DIAMETER AND 18 INCHES IN DEPTH MINIMUM WITH A FITTED COVER. BUMP SHALL DISCHARGE TO A STORM SEWER OR A SWALE AT LEAST 10 FEET FROM A PROPERTY LINE.
27. WELLS AND SEPTIC TANKS: SCHAUB DESIGN GROUP IS NOT RESPONSIBLE FOR DRAWINGS, TESTS, CALCULATIONS OR PERMITS FOR THESE BY OTHERS. DWELLINGS SERVED BY WELLS AND/OR ON-SITE SEWAGE DISPOSAL SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES. FACTORIES APPROVED BY PUBLIC WORKS PLUMBING INSPECTION SECTION A MISOUCI REGISTERED CIVIL ENGINEER MUST CONDUCT A PROTECTION TEST OR SOIL MICROLOGY TEST AND DESIGN A SEWAGE DISPOSAL SYSTEM FOR THE SITE. REFER TO SECT. 10 OF LOUIS COUNTY HANDBOOK REGULATIONS, REGULATIONS AND PROCEDURES. (BT. LOUIS COUNTY REQUIREMENT)
28. PLUMBING / MECHANICAL SUBCONTRACTORS NOTE: THE PLUMBING / MECHANICAL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR ANY NOTICING OR BOLDING OF FLOOR, JOISTS, BEAMS, COLUMNS, BTUDS, ETC. AS MAY BE REQUIRED FOR INSTALLATION OF PLUMBING / MECHANICAL COMPONENTS. REPAIR COSTS, INCLUDING ADDITIONAL ARCHITECTURAL / ENGINEERING FEES MAY BE BACK CHARGED TO THE ELECTRICAL SUBCONTRACTOR IF THE GUIDELINES FOR NOTICING AND BOLDING IN DIVISION 6 OF THIS SPECIFICATION ARE NOT FOLLOWED. SEE DIVISION 6 FOR MORE INFORMATION.

DIVISION 16 ELECTRICAL

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE 1989 NATIONAL ELECTRIC CODE AND CURRENT STANDARDS AND REQUIREMENTS OF LOCAL JURISDICTION.
2. UNDERGROUND WIRING: ALL ELECTRICAL CABLE TELEPHONE AND TELEPHONE DISTRIBUTION LINES PRIMARILY INTENDED FOR THE USE OF BUILDINGS AND STRUCTURES LOCATED WITHIN THE CITY OF CREVE COLELL SHALL BE INSTALLED UNDERGROUND FOR NEW CONSTRUCTION AND MAJOR REHABILITATION. WHEN EXISTING ELECTRIC AND TELEPHONE LINES ARE RELOCATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERGROUNDING. IF EITHER TELEPHONE OR ELECTRICAL ARE AERIAL, CABLE TELEVISIONS MAY BE AERIAL. CABLE SWITCHING ENCLOSURES, PAID MOUNTED TRANSFORMERS AND SERVICE FEEDSTAYS MAY, HOWEVER, BE INSTALLED ABOVE GROUND AND MAY BE INSTALLED AS PART OF THE STREET LIGHTING STANDARDS WHERE RECOMMENDED BY THE PLANNING AND ZONING COMMISSION AND APPROVED BY THE BOARD OF ALDERMEN.
3. GROUNDING: IF THE UNDERGROUND METAL WATER PIPE IS USED AS THE GROUNDING ELECTRODE, THE CONNECTION MUST BE MADE TO THE PIPE WITHIN 5 FEET OF THE POINT OF ENTRANCE TO THE BUILDING. A SUPPLEMENTAL GROUNDING ELECTRODE SHALL BE PROVIDED AS SPECIFIED IN NEC 250-50 OR 250-53.
4. ALUMINUM WIRING IS PROHIBITED FROM THE LOAD SIDE OF SERVICE EQUIPMENT TO ANY OUTLETS.
5. ELECTRIC PANELS:
- A. CIRCUIT BREAKER PANELS SHALL NOT BE INSTALLED IN BATHROOMS OR CLOTHES CLOSETS.
 - B. LIGHTING IS REQUIRED IN THE VICINITY OF THE ELECTRICAL PANEL.
 - C. ELECTRIC PANELS IN NEW CONSTRUCTION SHALL NOT BE INSTALLED IN AREAS WITH LESS THAN 7 1/2 INCHES OF HEADROOM.
 - D. A MINIMUM CLEARANCE OF 36 INCHES DEEP BY 30 INCHES WIDE IS REQUIRED IN FRONT OF ELECTRICAL PANELS, COUNTERTOPS AND CABINETS CANNOT BE INSTALLED UNDER THE ELECTRICAL PANEL.
6. GROUND FAULT INTERRUPTION: PROVIDE A G.F.I. DUPLEX IN THE BASEMENT NEXT TO THE POWER PANEL. GROUND FAULT CIRCUIT INTERRUPTION PROTECTION SHALL BE PROVIDED FOR ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMP RECEPTACLES IN THE FOLLOWING LOCATIONS:
- A. BATHROOMS
 - B. GARAGES, EXCEPT CEILING MOUNTED RECEPTACLE FOR GARAGE DOOR OPENER AND GRADE-LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS.
 - C. OUTDOORS (INCLUDING INSIDE SCREENED ENCLOSURES)
 - D. UNFINISHED BASEMENTS AND CRAWLSPACES EXCEPT FOR LAUNDRY CIRCUIT AND SINGLE RECEPTACLE DEDICATED TO BUMP PUMPS.
 - E. RECEPTACLES INTENDED TO SERVE KITCHEN COUNTER TOP SURFACES.
 - F. RECEPTACLES INTENDED TO SERVE THE COUNTER TOP SURFACES OF A WET BAR THAT ARE LOCATED WITHIN 72 INCHES OF THE OUTSIDE EDGE OF THE WET BAR SINK.
7. ARC FAULT CIRCUIT: ARC-FAULT CIRCUIT INTERRUPTION PROTECTION SHALL BE PROVIDED FOR ALL CIRCUITS SUPPLYING POWER TO BEDROOMS.
8. SPECIAL RECEPTACLES: RECEPTACLE OUTLETS FOR RANGES AND CLOTHES DRYERS MUST BE A-POLE WITH GROUND TYPE.
9. RECEPTACLES SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SHOWER SPACE.
10. LIGHTING IN CLOTHES CLOSETS:
- A. THE USE OF INCANDESCENT FIXTURES WITH OPEN OR PARTIALLY ENCLOSED LAMPS AND THE USE OF PENDANT FIXTURES ARE PROHIBITED. IF THE CEILING OF ITEM "B" BELOW IS NET, SURFACE MOUNTED INCANDESCENT FIXTURES MAY BE USED WITH A GLASS GLOBE TOTALLY ENCLOSED THE LAMP.
 - B. FIXTURES MAY BE LOCATED ONLY WHERE THERE ARE THE FOLLOWING MINIMUM CLEARANCES TO THE NEAREST POINT OF STORAGE SPACE:
 - 1. SURFACE MOUNTED INCANDESCENT FIXTURES - 12 INCH MINIMUM
 - 2. SURFACE MOUNTED FLUORESCENT FIXTURES AND RECESSED FIXTURES - 6 INCH MINIMUM

11. LIGHTING FIXTURES ABOVE BATHTUBS: NO PARTS OF HANGING FIXTURES, TRACK LIGHTING AND CEILING FANS SHALL BE INSTALLED WITHIN 3 FEET HORIZONTALLY OF A BATHTUB, MEASURED FROM THE OUTSIDE EDGE OF THE TUB AND 8 FEET VERTICALLY FROM THE TOP OF THE TUB RIM.
12. RECESSED CAN LIGHTS: RECESSED CAN LIGHTS IN INSULATED CEILING OR ATTIC SHALL BE "IC" TYPE.
13. SMOKE DETECTORS: PROVIDE UL APPROVED SMOKE DETECTORS WITH A.C. POWER AND BATTERY BACKUP (MEETING NFPA 72-99) ON ALL LEVELS IN THE VICINITY OF ALL BEDROOM ENTRANCE DOORS (HALFWAY BETWEEN DOORS TO A MAXIMUM OF 50 FEET APART) AND WITH EACH BEDROOM. LOCATE BEDROOM HALLWAY DETECTOR UPSTAIR THROUGHOUT THE ENTIRE AIR OR G.L.E. FLOOR LEVELS THAT DO NOT CONTAIN BEDROOMS SHALL HAVE THE DETECTOR LOCATED AT THE CEILING NEAR THE STAIRWAY. IN SPLIT LEVEL RESIDENCES A SMOKE DETECTOR INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL. IF THERE IS AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE DETECTOR SHALL BE INSTALLED ON BOTH LEVELS. WHEN MORE THAN ONE DETECTOR IS REQUIRED WITHIN THE DWELLING UNIT, THE DETECTORS SHALL BE INTERCONNECTED SO THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS THROUGHOUT THE DWELLING UNIT. SEE PLANS FOR DETECTOR LOCATIONS. THE INSTALLATION OF ALL SMOKE DETECTORS SHALL MEET NFPA STANDARDS.
14. ELECTRICAL SUBCONTRACTOR NOTE: THE ELECTRICAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY NOTICING OR BOLDING OF FLOOR, JOISTS, BEAMS, COLUMNS, BTUDS, ETC. AS MAY BE REQUIRED FOR INSTALLATION OF ELECTRICAL COMPONENTS. REPAIR COSTS, INCLUDING ADDITIONAL ARCHITECTURAL / ENGINEERING FEES MAY BE BACK CHARGED TO THE ELECTRICAL SUBCONTRACTOR IF THE GUIDELINES FOR NOTICING AND BOLDING IN DIVISION 6 OF THIS SPECIFICATION ARE NOT FOLLOWED. SEE DIVISION 6 FOR MORE INFORMATION.

TABLE R905.2.8.2 VALLEY LINING MATERIAL			
MATERIAL	MINIMUM THICKNESS (INCHES)	GAGE	WEIGHT (POUNDS)
COLD-ROLLED COPPER	0.0216 NOMINAL	---	ASTM B370, 16 OZ PER SQUARE FOOT
LEAD-COATED COPPER	0.0216 NOMINAL	---	ASTM B101, 16 OZ PER SQUARE FOOT
HIGH-YIELD COPPER	0.0162 NOMINAL	---	ASTM B370, 12 OZ PER SQUARE FOOT
LEAD			

GENERAL NOTES

TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING OF FASTENERS
JOIST TO SILL OR GIRDER, TOE NAIL	3 - 8d	---
1" X 6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2 - 8d OR 2 STAPLES, 1 3/4"	---
2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2 - 16d	---
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d	16" O.C.
TOP OR SOLE PLATE TO STUD, END NAIL	2 - 16d	---
STUD TO SOLE PLATE, TOE NAIL	3 - 8d OR 2 - 16d	---
DOUBLE STUDS, FACE NAIL	10d	24" O.C.
DOUBLE TOP PLATES, FACE NAIL	10d	24" O.C.
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS	3 - 16d	16" O.C.
DOUBLE TOP PLATES, MINIMUM 24 INCH OFFSET OF END JOINTS, FACE NAIL IN LAPPED AREA	8 - 16d	---
BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOE NAIL	3 - 8d	---
RIM JOIST TO TOP PLATE, TOE NAIL	8d	8" O.C.
TOP PLATES, LAP AT CORNERS AND INTERSECTIONS, FACE NAIL	2 - 10d	---
BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER	16d	16" O.C. ALONG EACH EDGE
CONTINUED HEADER, TWO PIECES	16d	16" O.C. ALONG EACH EDGE
CEILING JOIST TO PLATE, TOE NAIL	3 - 8d	---
CONTINUOUS HEADER TO STUD, TOE NAIL	4 - 8d	---
CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL	3 - 10d	---
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	3 - 10d	---
RAFTER TO PLATE, TOE NAIL	2 - 16d	---
1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2 - 8d OR 2 STAPLES, 1 3/4"	---
1" X 6" SHEATHING TO EACH BEARING, FACE NAIL	2 - 8d OR 2 STAPLES, 1 3/4"	---
1" X 8" SHEATHING TO EACH BEARING, FACE NAIL	2 - 8d OR 3 STAPLES, 1 3/4"	---
WIDER THAN 1" X 8" SHEATHING TO EACH BEARING, FACE NAIL	3 - 8d OR 4 STAPLES, 1 3/4"	---
BUILT-UP CORNER STUDS	10d	24" O.C.
BUILT-UP GIRDERS AND BEAMS, 2 INCH LUMBER LAYERS	10d	NAIL EACH LAYER AS FOLLOWS: 32" O.C. AT TOP AND BOTTOM AND STAGGERED. TWO NAILS AT ENDS AND AT EACH SPLICE.
2" PLANKS	2 - 16d	AT EACH BEARING
ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS		
TOE NAIL	4 - 16d	---
FACE NAIL	3 - 16d	---
RAFTER TIES TO RAFTERS, FACE	3 - 8d	---

DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER	SPACING OF FASTENERS	
		EDGES (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING, AND PARTICLE BOARD WALL SHEATHING TO FRAMING			
5/16" - 1/2"	8d COMMON NAIL (SUBFLOOR, WALL) 8d COMMON NAIL (ROOF)	6	12
19/32" - 1"	8d COMMON NAIL	6	12
1 1/8" - 1 1/4"	10d COMMON NAIL OR 8d DEFORMED NAIL	6	12
OTHER WALL SHEATHING			
1/2" REGULAR CELLULOSIC FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE 16 GA., 1 1/2" LONG	3	6
1/2" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE 16 GA., 1 1/2" LONG	3	6
25/32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE 16 GA., 1 3/4" LONG	3	6
1/2" GYPSUM SHEATHING	1 1/2" GALVANIZED ROOFING NAIL; 8d COMMON NAIL; STAPLE GALVANIZED, 1 1/2" LONG; 1 1/4" SCREWS, TYPE W OR S	4	8
5/8" GYPSUM SHEATHING	1 3/4" GALVANIZED ROOFING NAIL; 8d COMMON NAIL; STAPLE GALVANIZED, 1 5/8" LONG; 1 5/8" SCREWS, TYPE W OR S	4	8
WALL STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING			
3/4" AND LESS	8d DEFORMED NAIL OR 8d COMMON NAIL	6	12
7/8" - 1"	8d COMMON NAIL OR 8d DEFORMED NAIL	6	12
1 1/8" - 1 1/4"	10d COMMON NAIL OR 8d DEFORMED NAIL	6	12

TAKEN FROM THE 2003 INTERNATIONAL RESIDENTIAL CODE BOOK, PAGES 112 AND 113

- A. ALL NAILS ARE SMOOTH - COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 90 KSI (551 MPa) FOR SHANK DIAMETER OF 0.192 INCH (20d COMMON NAIL), 90 KSI (620 MPa) FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 KSI (689 MPa) FOR SHANK DIAMETERS OF 0.142 INCH OR LESS.
- B. STAPLES ARE 16 GAUGE WIRE AND HAVE A MINIMUM 7/16 INCH ON DIAMETER CROWN WIDTH.
- C. NAILS SHALL BE SPACED AT NO MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER.
- D. FOUR FOOT BY 8 FOOT OR 4 FOOT BY 9 FOOT PANELS SHALL BE APPLIED VERTICALLY.

schaub design group, inc.

architects
interiors
planners

Copyright 2007 by Schaub Design Group, Inc. All rights reserved. These documents may not be reproduced or sold in part or whole in any way without the written consent of Schaub Design Group, Inc.

AN ADDITION / RENOVATION PROJECT TITLED THE:

SEIDEL RESIDENCE
1267 SOMERSET FIELD DRIVE
CHESTERFIELD, MO 63005

revisions:

no.	date	description



architect name: **JERRY L. MILLER**
date: **March 9, 2007**
drawn by: **DJS / JLM**

sheet no:
N-3
project number: 07006



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.

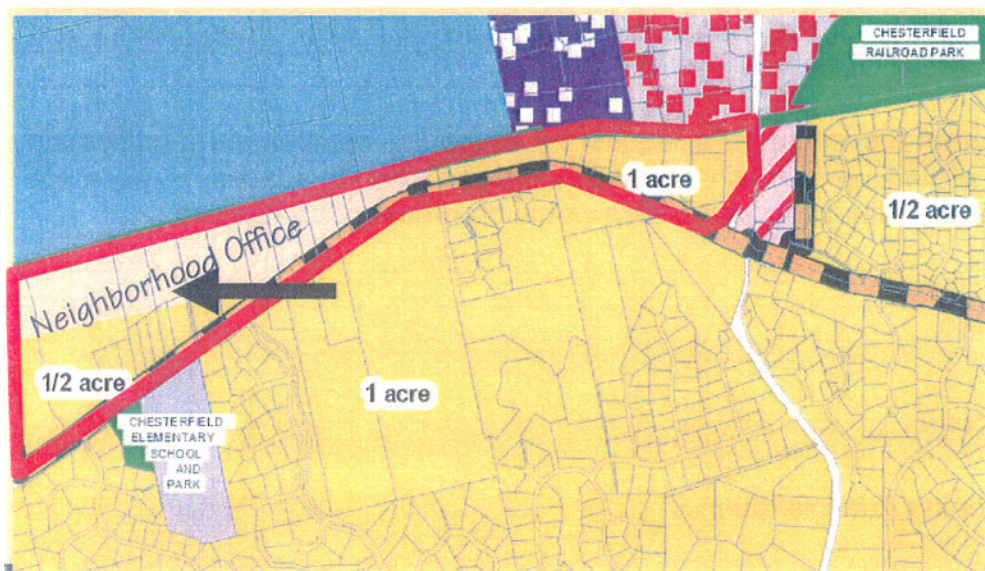




Looking north, across subject site.

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

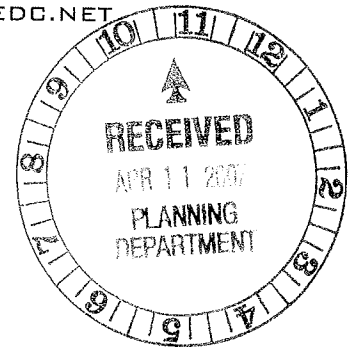
1. Attachment A
2. Letter from Petitioner
3. Preliminary Plan
4. Alternative Preliminary Plan

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

April 11, 2007

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



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.
(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:

	<u>Current Plan dated (01-30-07)</u>	<u>Alternate Plan (04-04-07)</u>
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 of 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 is 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 aviation 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 aviation easement will be recorded along with the Site Development Plan. In addition, the aviation 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 Assessment (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:

<u>Type of Development</u>	<u>Required Contribution</u>
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.

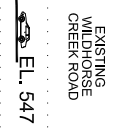
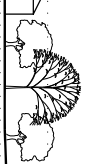
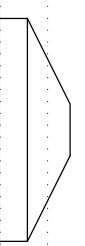
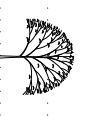
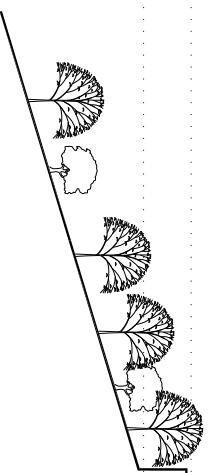
VIII. VERIFICATION PRIOR TO FOUNDATION OR BUILDING PERMITS

- 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.

560
540
520



560
540
520

PROPOSED
PUBLIC ROAD
EL. 540

PROPOSED
WILD HORSE
CHILD CAME

EXISTING
WILD HORSE
CREEK ROAD
EL. 547

PREPARED BY:
**CIVIL ENGINEERING
DESIGN CONSULTANTS, INC.**
1100 S. WILSON AVENUE, SUITE 200, DENVER, CO 80202
TEL: 303.733.1100 FAX: 303.733.1101
WWW.CEDCI.COM





VIII. B.

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

Planning Commission Staff Report

Subject: Rezoning Issues Report

Meeting Date: April 17, 2007

From: Annissa G. McCaskill-Clay, Assistant Director of Planning

Location: 1576 Kehrs Mill Road/1600 Kehrs Mill Road
(19U530062/19U530392)

Petition: P.Z. 02- 2007 The Estates at Upper Kehrs Mill (Micelli Construction

Proposal Summary

Micelli Construction has submitted an application for a change of zoning from "NU" Non-Urban to "E" One Acre District, per the regulations of City of Chesterfield Zoning Ordinance Section 1003.107 (Estates Districts). The location of the site is on the eastern side of Kehrs Mill Road, 4,100 feet south of its intersection with Wild Horse Creek Road

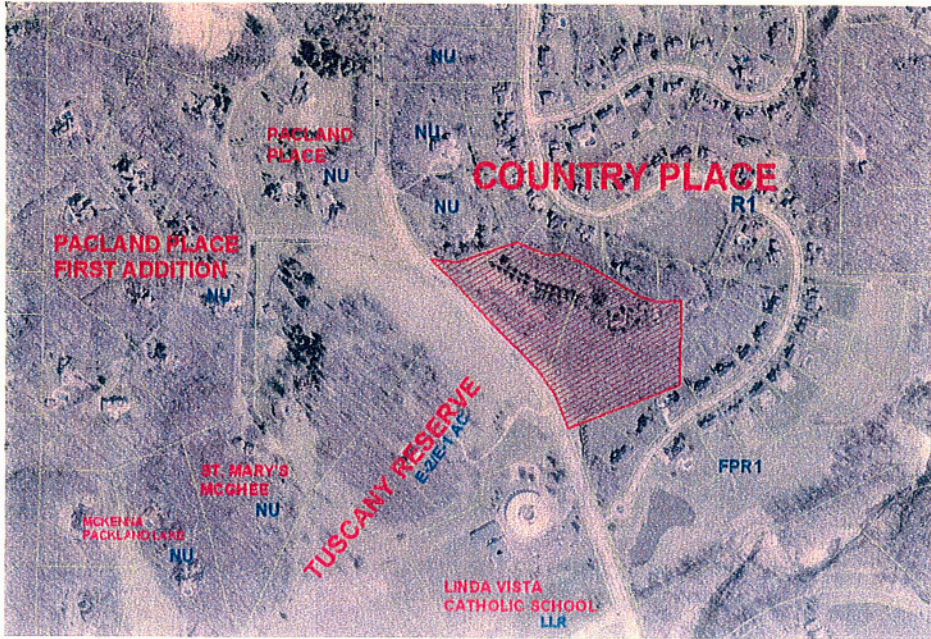
Development Process

Change of zoning requests to an Estate District is regulated under the requirements of Section 1003.107 of the City of Chesterfield Zoning Ordinance. The City of Chesterfield Zoning Ordinance requires only the following items be shown on a preliminary plan:

1. Existing and proposed contours.
2. Proposed uses.
3. Location of tree masses.
4. Cross section of the site.
5. Proposed ingress and egress.
6. Sanitation and drainage facilities.
7. Legal description.

Area Land Use

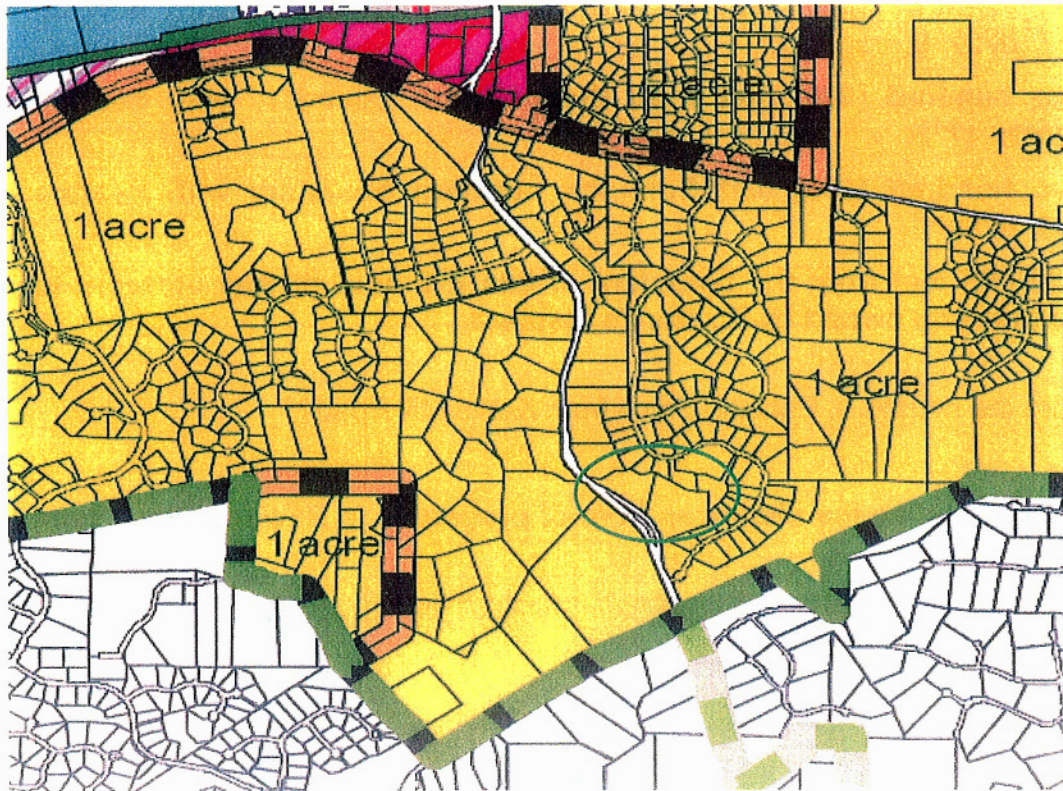
The subject sites are located at 1576 Kerhs Mill Road and 1600 Kerhs Mill Road.



Area map of the sites surrounding the subject site.



Subject site shown on Land Use Map. Single family residential with a one acre density is shown as the appropriate use for this site.



Issues

A Public Hearing was held March 12, 2007. At that time several issues were identified. Those issues along with the Petitioner's responses are attached. Below are the issues that remain open as well as those to which Staff was asked to respond:

1. Provide the setback requirements for Tuscany Reserve.

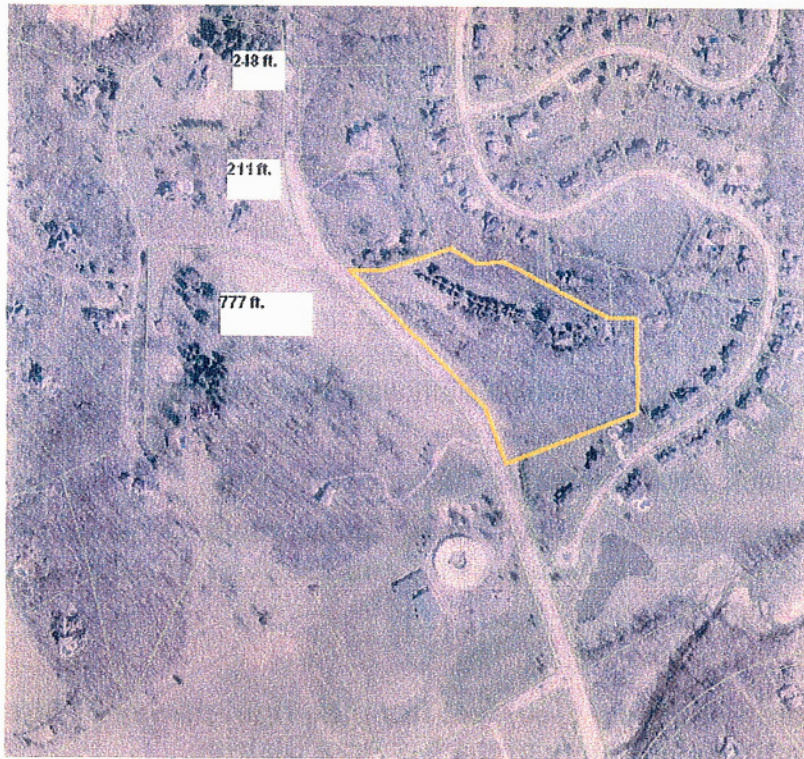
Tuscany Reserve was approved via City of Chesterfield Ordinance 2322. The development was zoned to E-1 Acre District and E-2 Acre District. The setbacks established are as follows:

- One hundred and sixty (160) feet from the right-of-way of Strecker Road on the southern boundary of the E-1 Acre District.
- One hundred and ten (110) feet from the right-of-way of Kehrs Mill Road on the eastern boundary of the E-2 Acre District.
- Forty (40) feet from the right-of-way of Church Road on the western boundary of the E-1 Acre District.

- Eighty (80) feet from the northern boundary with bearing N52°55'10"E.
- One hundred and forty (140) feet from the northern boundary with bearing S58°11'10"E.
- Two hundred (200) feet from the northern boundary with bearing N57°28'02"E.
- Two hundred (200) feet from the northern boundary with bearing N24°29'17"E.
- Two hundred (200) feet from the northern boundary with bearing N45°20'59"E.
- Fifty (50) feet from the boundary of this E-2 Acre district adjacent to the property owned by St. Mary's Institute.

2. How far are the houses in Pacland Place from Kehrs Mill Road?

The aerial below provides the distances from of properties in Pacland Place from Kehrs Mill Road.



3. Approval by the Fire Protection District.

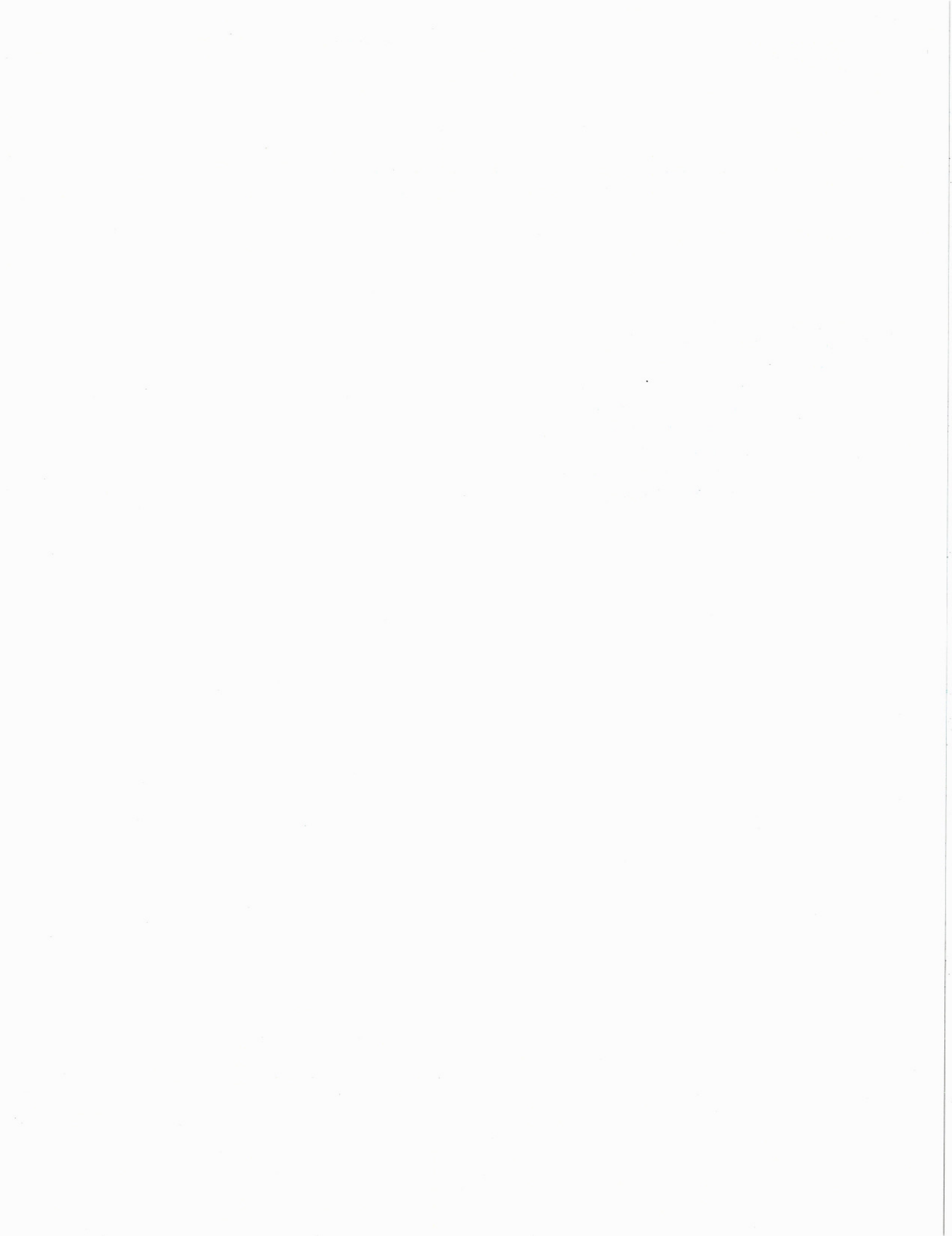
Request

Staff is requesting that additional issues be identified at this time. A copy of the Draft Attachment A and the revised Preliminary Plan is attached for your review.

Respectfully submitted,

Annissa McCaskill-Clay, AICP
Assistant Director of Planning
Attachments

1. Petitioner's Response.
2. Draft Attachment A
3. Preliminary Plan
4. Existing Tributary Exhibit
5. Proposed Tributary Exhibit



April 4, 2007

Mrs. Annissa G. McCaskill-Clay, AICP
Assistant Director of Planning
City of Chesterfield
690 Chesterfield Parkway W
Chesterfield, MO 63017-0760

Re: P.Z. 2-2007 The Estates at Upper Kehrs Mill (Miceli Construction)
Volz Project No. 8628-0

Dear Mrs. McCaskill-Clay:

Below is the response to your "issues" letter dated March 20, 2007, resulting from the Public Hearing held on March 8, 2007. Our responses are in *italic*.

1. Retention of the trees, particularly in the northeastern and northwestern portions of the site, with respect to erosion concerns and how neighboring properties may be affected.

The original plan was intended to show that the plan met the 30% tree retention requirement of the City. This was done because we do not currently have an accurate topographic survey of the site. In reality many of the trees along the north line will be preserved. The plan has been amended to give a more realistic depiction of the trees that can be saved on the site.

2. Storm water on the site, particularly how it will be handled and the direction in which water will be directed.

We have enclosed a Drainage Map, which depicts the area and direction of drainage leaving the site. It is important to note that the proposed drainage area to the north is less than exists today. In addition the drainage to the south will be routed through the proposed detention basin near Kehrs Mill Road. In effect, less water will be leaving the site along the entire perimeter of this project. And finally, The Metropolitan St. Louis Sewer District and the city's requirements will be met.

3. The proposed steepness of the grades in the development.

There are no proposed grades that will exceed 3:1. There are some existing grades that are slightly greater than 3:1, but these are in wooded areas and will not be disturbed.

4. The impact of the proposed development on the existing lakes in the Country Place Subdivision, as well as the maintenance of the site after development with respect to these lakes. Will the proposed development have any portion of responsibility in the event of any damage to the lakes?

Mrs. Annissa G. McCaskill-Clay, AICP
Assistant Director of Planning
City of Chesterfield
April 4, 2007
Page 2

Any impact to the adjacent property is a great concern of ours. With the permission of "Country Place", we would like to do a preconstruction survey of the existing lakes. In addition, BMP's and extensive erosion control measures will be implemented to protect these lakes. If damage to these lakes occurs as a result of this site development, Miceli Construction will repair this damage.

5. Consider whether E-Two zoning is appropriate for the site vs. E-One zoning.

E-One Zoning is appropriate for this site and is consistent with both the City Comprehensive Plan and the surrounding area. Minor adjustments were made to the lots so that six out of eight are now larger than one acre.

6. The appropriateness of the lot sizes proposed for the development.

As stated above, six out of eight lots exceed one acre in size. The remaining two lots average 0.8 acres and exceeds the adjacent lots in "Country Place" by 20%.

7. Possible erosion of the site due to development.

The very latest BMP's and the city's SWPPP requirements will be used to prevent erosion from this site that would harm any downstream property owners.

8. Possible Letter of Credit in the amount of \$2 million, above and beyond any sureties or bonds currently required by the City to address erosion and tree removal.

We do not feel a letter of credit is appropriate, but even more, we do not feel a letter of credit is necessary. This site has many existing safe guards in place to insure proper drainage and erosion control including: the requirement of Escrows, the ability of the city to issue Stop Work Orders, the requirement of the City, DNR, and EPA of a Stormwater Pollution Prevention Plan (SWPPP), the need for a NPDES permit from DNR, the need for a 404 permit or waiver from the Corp of Engineers, the developers willingness to As-Built the existing lakes, and bonds to guaranty tree preservation. All of the above agencies have enforcement authority.

9. Should field inlets be placed on the site immediately, or placed at the direction of the City at some future time?

It is premature in the development process to determine where inlets are needed. Inlets should be placed at the direction of the Civil Engineer, City Engineer and MSD.

Mrs. Annissa G. McCaskill-Clay, AICP
Assistant Director of Planning
City of Chesterfield
April 4, 2007
Page 3

10. Should the setback from Kehrs Mill Road reflect/be similar to those created for Tuscany Reserve?

As we understand it, the goal of this issue is to protect the "Visual Integrity" of Kehrs Mill Road as you travel past our site. We believe our plan accomplishes this. The entrance area of Tuscany Reserve is much lower than Kehrs Mill Road. In fact a driver heading south will likely be looking into the second story windows of any new homes. In contrast, "Upper Kehrs Mill" is significantly higher than Kehrs Mill Road. That same driver will have an existing tree mass to protect his view in addition to the required tree buffer along the road. A driver headed north has even more "Visual Protection". A car at our south property line will be over 50 feet lower than the first floor of our homes. As you reach a point perpendicular to lot 8, our first floor is still 20 feet higher than a car. Anyone traveling along Kehrs Mill Road will see a landscaped hillside as they look towards "Upper Kehrs Mill" thus providing visually protected.

11. Provide the setback requirements for Tuscany Reserve.

Staff has said they will provide this information.

12. How far are the houses in Pacland Place from Kehrs Mill Road?

Staff has said they will provide this information.

13. There was discussion regarding run-off from the cul-de-sac and Lot 3. Could the cul-de-sac be brought a little further to the south? It was noted that this would reduce the size of Lot 5 and possibly save more trees beyond the cul-de-sac on the northeast side.

It is not feasible to push the cul-de-sac to the south without creating significant grading issues. The street is currently on top of the ridge in the same location as the existing drive. As we noted earlier, the drainage area to the north will be less than exists today and additional trees will be preserved along the north property line. What we can do is to direct all the stormwater collected in the street inlets to the detention basin near Kehrs Mill Road. That will minimize the stormwater flowing to the north.

14. Twenty-foot side yard setbacks on the northeast corner where it is contiguous to Country Place.

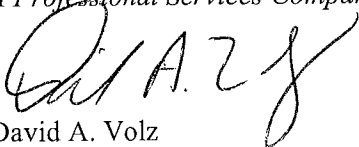
We would propose a 25-foot perimeter setback adjacent to the Country Place Subdivision.

Mrs. Annissa G. McCaskill-Clay, AICP
Assistant Director of Planning
City of Chesterfield
April 4, 2007
Page 4

As requested, enclosed are three (3) copies of the plan for your review in order to be placed on the Planning Commission agenda. If you need any additional information please do not hesitate to contact me at 314-581-6219 or Mr. Mike Miceli at 636-537-1171.

Sincerely,

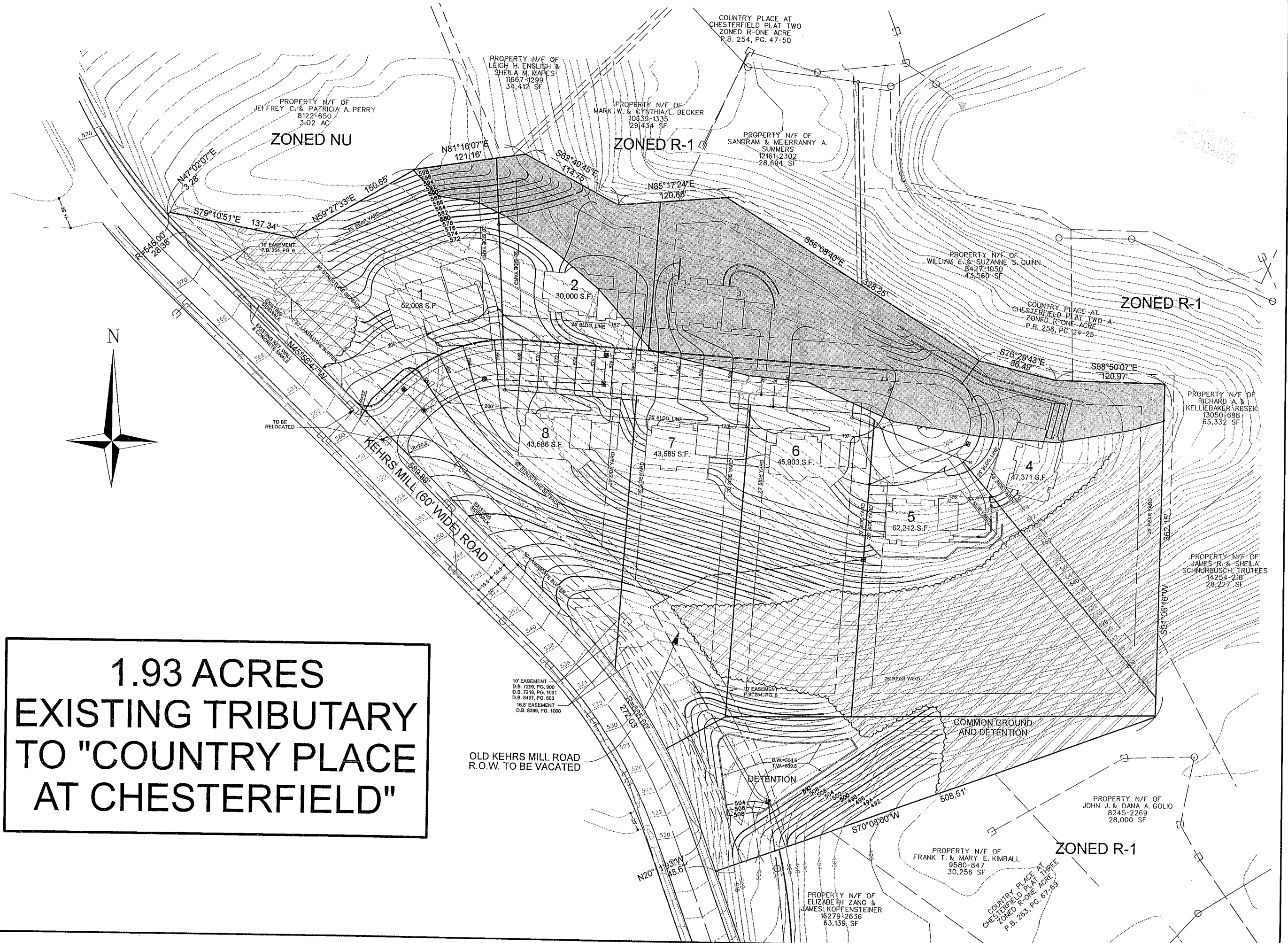
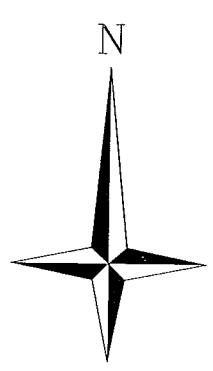
Volz Incorporated
A Professional Services Company


David A. Volz

Enclosure

Cc: Mr. Mike Miceli

**1.93 ACRES
EXISTING TRIBUTARY
TO "COUNTRY PLACE
AT CHESTERFIELD"**



OLD KEHRS MILL ROAD
R.O.W. TO BE VACATED

17' EASEMENT
D.B. 7208, PG. 600
D.B. 7219, PG. 1931
D.B. 8497, PG. 663
18.5' EASEMENT
D.B. 8399, PG. 1000

DETENTION

COMMON GROUND
AND DETENTION

PROPERTY N/F OF
JOHN J. & DANA A. GOLIO
8245-2269
28,000 SF

PROPERTY N/F OF
FRANK T. & MARY E. KIMBALL
9580-847
30,256 SF

PROPERTY N/F OF
ELIZABETH ZANG &
JAMES KOPFENSTEINER
16279-2636
63,139 SF

COUNTRY PLACE AT
CHESTERFIELD PLAT THREE
ZONED R-ONE ACRE
P.B. 263, PG. 61-69

PROPERTY N/F OF
JEFFREY C. & PATRICIA A. PERRY
8122-650
3,02 AC

ZONED NU

PROPERTY N/F OF
LEIGH H. ENGLISH &
SHEILA M. MAPES
11667-1299
34,412 SF

PROPERTY N/F OF
MARK W. & CYNTHIA L. BECKER
10639-1335
29,434 SF

ZONED R-1

COUNTRY PLACE AT
CHESTERFIELD PLAT TWO
ZONED R-ONE ACRE
R.B. 254, PG. 47-50

PROPERTY N/F OF
SANDRAM & MEIERRANNY A.
SUMMERS
12161-2302
28,864 SF

PROPERTY N/F OF
WILLIAM E. & SUZANNE S. QUINN
8427-1050
43,560 SF

ZONED R-1

COUNTRY PLACE AT
CHESTERFIELD PLAT TWO-A
ZONED R-ONE ACRE
P.B. 256, PG. 24-25

PROPERTY N/F OF
RICHARD A. &
KELIEBAKER RESEK
13050-698
55,332 SF

PROPERTY N/F OF
JAMES R. & SHEILA
SCHMURBUSCH, TRUSTEES
14254-236
78,227 SF

ZONED R-1

PROPERTY N/F OF
JOHN J. & DANA A. GOLIO
8245-2269
28,000 SF

PROPERTY N/F OF
FRANK T. & MARY E. KIMBALL
9580-847
30,256 SF

PROPERTY N/F OF
ELIZABETH ZANG &
JAMES KOPFENSTEINER
16279-2636
63,139 SF

COUNTRY PLACE AT
CHESTERFIELD PLAT THREE
ZONED R-ONE ACRE
P.B. 263, PG. 61-69

PROPERTY N/F OF
JEFFREY C. & PATRICIA A. PERRY
8122-650
3,02 AC

ZONED NU

PROPERTY N/F OF
LEIGH H. ENGLISH &
SHEILA M. MAPES
11667-1299
34,412 SF

PROPERTY N/F OF
MARK W. & CYNTHIA L. BECKER
10639-1335
29,434 SF

ZONED R-1

COUNTRY PLACE AT
CHESTERFIELD PLAT TWO
ZONED R-ONE ACRE
R.B. 254, PG. 47-50

PROPERTY N/F OF
SANDRAM & MEIERRANNY A.
SUMMERS
12161-2302
28,864 SF

PROPERTY N/F OF
WILLIAM E. & SUZANNE S. QUINN
8427-1050
43,560 SF

ZONED R-1

COUNTRY PLACE AT
CHESTERFIELD PLAT TWO-A
ZONED R-ONE ACRE
P.B. 256, PG. 24-25

PROPERTY N/F OF
RICHARD A. &
KELIEBAKER RESEK
13050-698
55,332 SF

PROPERTY N/F OF
JAMES R. & SHEILA
SCHMURBUSCH, TRUSTEES
14254-236
78,227 SF

ZONED R-1

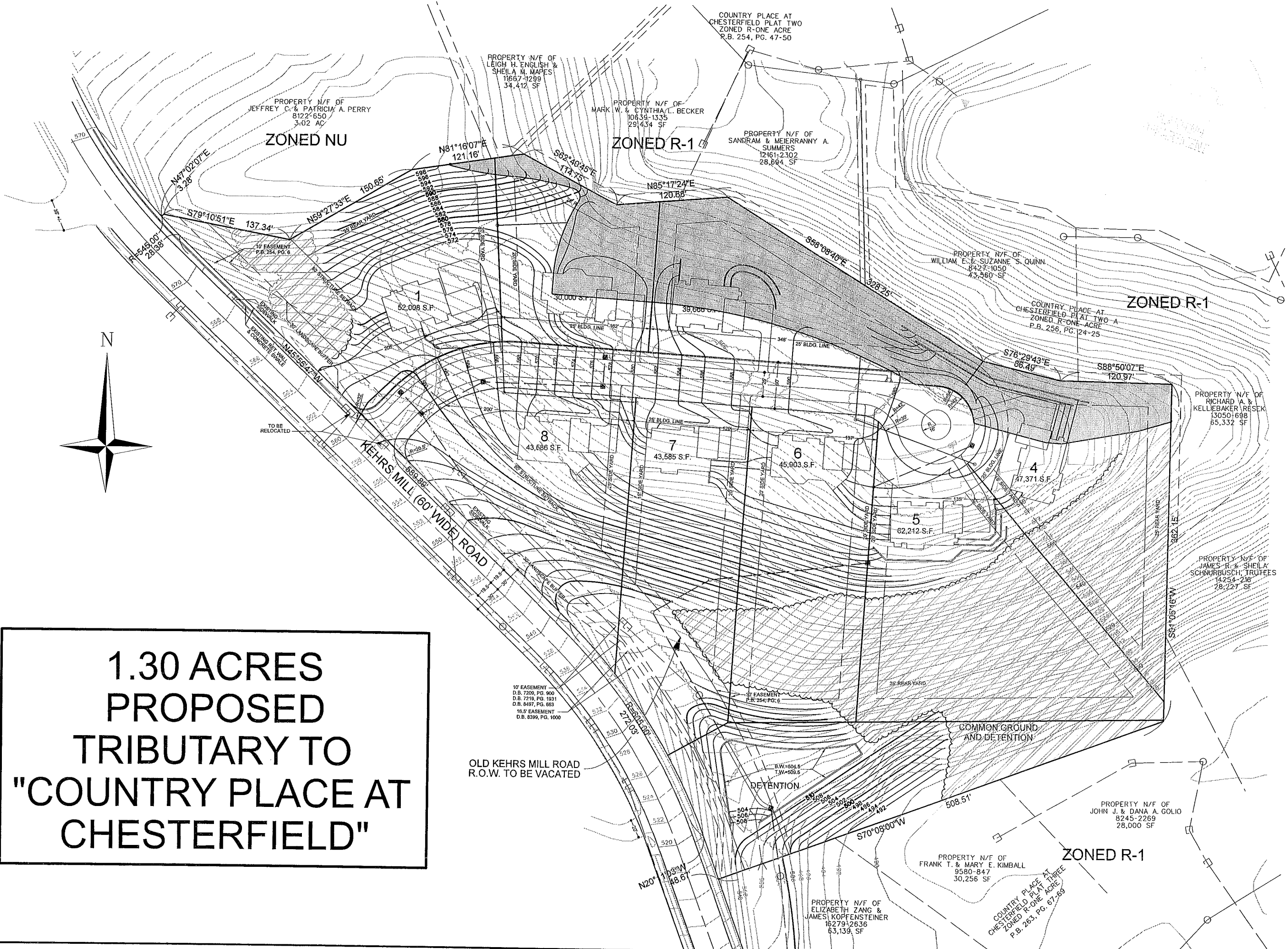
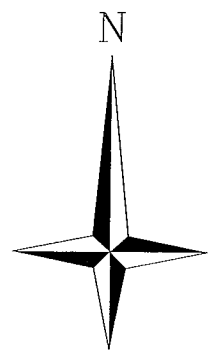
PROPERTY N/F OF
JOHN J. & DANA A. GOLIO
8245-2269
28,000 SF

PROPERTY N/F OF
FRANK T. & MARY E. KIMBALL
9580-847
30,256 SF

PROPERTY N/F OF
ELIZABETH ZANG &
JAMES KOPFENSTEINER
16279-2636
63,139 SF

COUNTRY PLACE AT
CHESTERFIELD PLAT THREE
ZONED R-ONE ACRE
P.B. 263, PG. 61-69

**1.30 ACRES
PROPOSED
TRIBUTARY TO
"COUNTRY PLACE AT
CHESTERFIELD"**



OLD KEHRS MILL ROAD
R.O.W. TO BE VACATED

10' EASEMENT
D.B. 7209, PG. 900
D.B. 7219, PG. 1931
D.B. 8497, PG. 663
15' EASEMENT
D.B. 8399, PG. 1000

10' EASEMENT
P.B. 254, PG. 6

PROPERTY N/F OF
FRANK T. & MARY E. KIMBALL
9580-847
30,256 SF

PROPERTY N/F OF
ELIZABETH ZANG &
JAMES KOFFENSTEINER
16279-2636
63,139 SF

COUNTRY PLACE AT
CHESTERFIELD PLAT THREE
ZONED R-ONE ACRE
P.B. 263, PG. 67-69

ATTACHMENT A

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified herein.

Comprehensive Plan Policies

- 2.1 Quality Residential Development
- 2.1.1 Conservation of Existing Quality of Life
- 2.1.4 Compatible In-Fill Residential Construction
- 2.1.5 Provide Buffer for Existing Residential Development -
- 2.1.6 Reinforce Existing Residential Development Pattern -
- 2.1.11 Restrict Access of Individual Homes on Arterial Streets -

I. SPECIFIC CRITERIA

A. PERMITTED USES

1. The uses allowed in this "E-One Acre" District shall be:
 - a. Single family detached residences.
2. The above uses in the "E-One Acre District shall be restricted as follows:
 - a. Development within this District shall maintain a density of one (1) acre).
 - b. The minimum lot size shall be no less than 22,000 square feet.

B. HEIGHT

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

C. 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. Eighty (80) feet from the right of way of Kehrs Mill Road.
- b. Twenty-five feet from the all other perimeter boundaries..

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 internal road.
- b. Side yard: Twenty (20) feet from the side property line.
 - i. This side yard setback may be reduced up to five feet if the side yard setback on the adjacent property
 - ii. A minimum of forty (40) feet must be maintained between structures.
- c. Rear yard setback: Twenty-five (25) feet from the rear property line. .

D. 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.

E. LANDSCAPE AND TREE REQUIREMENTS

1. The developer shall adhere to the Tree Manual of the City of Chesterfield Code.
2. A minimum of 40% of the tree mass shall be maintained.

F. SIGN REQUIREMENTS

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

G. LIGHT REQUIREMENTS

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

H. ARCHITECTURAL

1. 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.

I. ACCESS/ACCESS MANAGEMENT

1. Access to Kehrs Mill Road shall be limited to one street approach. The street approach shall be as close to the north property line as practical and adequate sight distance shall be provided, as directed by the Department of Public Works and St. Louis County Department of Highways and Traffic.
2. If required sight distance cannot be provided at the access locations, acquisition of right-of-way, reconstruction of pavement including correction to the vertical alignment and other off-site improvements may be required to provide adequate sight distance

as directed by the Saint Louis County Department of Highways and Traffic

J. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. Improve Kehrs Mill to one half of a sixty (60) foot right-of-way and a thirty nine (39) foot pavement including all storm drainage facilities as directed by the Saint Louis County Department of Highways and Traffic.
2. Provide a sidewalk conforming to Saint Louis County ADA standards adjacent to Kehrs Mill Road , as directed by the Saint Louis County Department of Highways and Traffic and the City of Chesterfield.
3. Any request to install a gate at the entrance to this development must be approved by the City of Chesterfield and the St. Louis County Department of Highways and Traffic. No gate installation will be permitted on public right of way.
4. If a gate is installed on a street in this development, the streets within the development or that portion of the development that is gated shall be private and remain private forever.
5. All roadway and related improvements in each plat or phase of the development shall be constructed prior to 60% occupancy of that plat or phase.

K. TRAFFIC STUDY (if applicable)

1. Provide a traffic study as directed by the City of Chesterfield and/or the St. Louis County Highways and Traffic. 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.
2. Provide a sight distance evaluation report, as required by the City of Chesterfield and/or St. Louis County Highways and Traffic for the proposed entrance onto Kehrs Mill Road. If adequate sight

distance cannot be provided at the access location, acquisition of right of way, reconstruction of pavement, including correction to the vertical alignment, and/or other off-site improvements shall be required, as directed by the City of Chesterfield and/or the Missouri Department of Transportation.

L. 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.

M. STORMWATER

1. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point or connected to an adequate piped system.
2. Detention/retention and other storm water quantity and quality management measures 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 development or issuance of building permits exceeding sixty (60%) of 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.
3. Detention may be required for the entire project such that the release rates will not exceed the allowable release rates for the post developed peak flow of the 2-year and 100-year, 24 hour storm event. Stormwater must be discharged at an adequate discharge point. Wetland mitigation will not be allowable within the detention basin area

N. SANITARY SEWER

1. Treatment for water quality and channel protection, in accordance with MSD regulations dated February 2006, may be required..
2. This project is in the Caulks Creek Surcharge area and is subject to a surcharge of \$2,750 per acre.

O. GEOTECHNICAL REPORT.

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

P. 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 developer is advised that utility companies will require compensation for relocation of their facilities with public road right-of-way. The developer should also be aware of extensive delays in utility company relocation and adjustments. Such delays will not constitute a cause to allow occupancy prior to completion of road improvements.
3. Prior to Special Use Permit issuance by the Saint Louis County Department of Highways and Traffic, a special cash escrow or a special escrow supported by an Irrevocable Letter of Credit, must be established with the Saint Louis County Department of Highways and Traffic to guarantee completion of the required roadway improvements.
4. As this development is not subject to traffic generation assessment, the roadway improvements required herein represent the developer's road improvement obligation. These improvements will not exceed an amount established by multiplying the ordinance-required parking spaces by the following applicable rates:

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

1. The developer shall submit a concept plan within 18 months of City Council approval of the change of zoning.

2. 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.
3. Failure to comply with these submittal requirements will result in the expiration of the change of zoning and will require a new public hearing.
4. 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.
5. 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.
- 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, Site Development Section Plan, Site Development Plans.**
 1. Any site development plan shall show all information required on a sketch plan as required in the City of Chesterfield Code.
 2. Include a conceptual landscape plan in accordance with the City of Chesterfield Code to indicate proposed landscaping along arterial and collector roadways.
 3. Include a lighting plan in accordance with the City of Chesterfield Code to indicate proposed lighting along arterial collector roadways.

4. Provide comments/approvals from the appropriate Fire District, the Metropolitan St. Louis Sewer District, and the St. Louis County Department of Highways and Traffic.

V. RECORDING

Within 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. ENFORCEMENT

- A. 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.
- 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.



**IV. A.
VIII. C.**

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 23, 2007

From: Annissa G. McCaskill-Clay, Assistant Director of Planning

Subject: Amendment to St. Louis County Conditional Use Permit #561 for the addition of "Hospital" as a use.

Location: 14701 Olive Boulevard (17R530197)

Petition: P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospital)

Proposal Summary

St. Luke's Episcopal Presbyterian Hospitals, the owner of Surrey Place, has submitted an application the above-referenced amendment to St. Louis County Conditional Use Permit #561 per the regulations of Section 1003.181 Conditional Use Permit Procedure (CUP) of the City of Chesterfield Zoning Ordinance. The subject site is located on the north side of Olive Boulevard, approximately .25 miles east of intersection of Olive and Ladue Roads and is zoned "R1A" Residence District.

The petitioner's request is for the addition of "Hospital" as a use for this site. Conditional Use Permit #561 currently authorizes a nursing home and associated self-care units and recreation facilities for residents who are at least 55 years of age.

Staff Recommendation

Staff recommends approval of the requested amendment for the addition of "Hospital" as a use for the subject site. A new Conditional Use Permit will be generated for this petition to replace the previous one written by St. Louis County.

Zoning Analysis

Section 1003.181 states: "It is hereby declared that certain land uses and developments present unique problems with respect to their proper location and relationship to other land uses. Therefore, analysis and judgment of the consequences of each development and use is necessary to preserve and to promote the public health, safety, and general welfare. Such land uses and developments are identified in each particular zoning district under conditional land use and development permits issued by the Commission."

The procedure for review/approval of a conditional use permit is set forth in Section 1003.181 of the Zoning Ordinance as follows:

- A public hearing is held at which time, unless further discussion is deemed necessary by the Commission, a vote is taken on the requested conditional use.
- If the Planning Commission votes to approve a conditional use, the Commission may impose conditions related to the requested conditional use as necessary.
- The Planning Commission, via Staff, files a report with the City Council granting or denying the application and stating the reasons therefore.
- Unless the City Council exercises its power of review or a protest is duly filed with the City Clerk, the Conditional Use Permit (C.U.P.) will become effective after 15 days of the City Council's receipt of the Planning Commission's report granting the application.
- If the Commission votes to deny a conditional use, the City Council may still exercise its power of review or the applicant may file an appeal within 15 days of the Planning Commission decision.

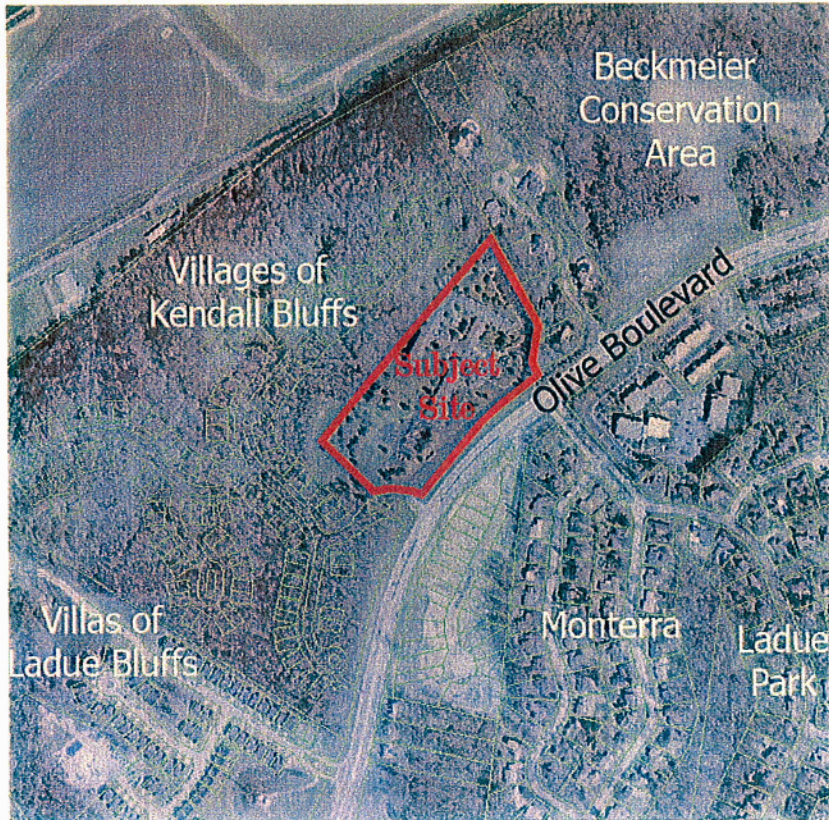
A preliminary plan accompanies all conditional use permit requests. When a vote is taken on the conditional use request, the vote is to approve the use(s), not to approve the accompanying preliminary plan which is provided for informational purposes only.

A Site Development Plan, if applicable, is required subsequent to the approval of a conditional use permit for review and approval by the City of Chesterfield.

Surrounding Land Use and Zoning

The land use and zoning for the properties surrounding this parcel are as follows:

- North and West: The property to the north is the Villages of Kendall Bluffs and is zoned "R1A" Planned Environment Unit (PEU).
- South: To the south of the subject site is Olive Boulevard. Beyond Olive is the "R2" with a Planned Environmental Unit-zoned Brunhaven Subdivision.
- East: To the east of Surrey Place is the "R1" Residence District-zoned Old Riverwoods Subdivision.



Looking north across Olive Boulevard at the existing development

Comprehensive Plan Analysis

The subject site is located within Ward 1 of the City of Chesterfield. The Comprehensive Plan calls for this area to be single family residential. This subject site is not located in any sub-area identified by the Comprehensive Plan; therefore there are no additional development guidelines for this site.

Site Area History

In 1987, St. Louis County zoned the subject site "R1A" Residence District and also issued Conditional Use Permit #561 authorizing a "nursing home and associated self-care units and recreation facilities for the elderly." A portion of the original "R1A" Residence District is currently being developed with a Planned Environment Unit (PEU) as the Villages at Kendall Bluffs.

Request

Staff recommends repeal of St. Louis County Conditional Use Permit #561 and approval of City of Chesterfield Conditional Use Permit #25 for the "R1A" Residence District-zoned Surrey Place.

Respectfully submitted,



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

Attachments

1. Draft City of Chesterfield Conditional Use Permit #25
2. Preliminary Plan

CITY OF CHESTERFIELD
CONDITIONAL USE PERMIT # 25

Petition: P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospitals)

Public Hearing Date: April 23, 2007

Site Location: The north side of Olive Boulevard, approximately .25 miles east of intersection of Olive and Ladue Roads

Acreage for CUP: 10.751

Underlying Zoning District: "R1A" Residence District

The following Conditional Uses shall be allowed in this development:

1. Hospital. As proposed, this use is to be a specialized, limited use facility that will provide general physical rehabilitative and medical services, including nursing, clinical and therapeutic services.
 - i. The hospital use associated with this C.U.P. development shall have no more than 35 beds.
2. Nursing home with associated self-care units and recreational facilities for the elderly.
 - i. Nursing facilities and self-care units shall be contained in not more than two (2) buildings.
 - ii. There shall be no more than 100 self-care units associated with this C.U.P. development. The full care nursing facility shall have no more than 140 beds.

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified below:

1. Self-care units shall be contained in a single building not more than three (3) building levels in height, excluding basement and cellar areas, underground parking and rooftop mechanical equipment.

2. All other building shall not exceed two (2) building levels in height, exclusive of basement and cellar areas, underground parking and rooftop mechanical equipment.
3. The buildings authorized via this C.U.P shall be of architectural style and building materials as approved by the Planning Commission on building elevations submitted in conjunction with the Site Development Plan.
4. Required parking for proposed uses shall dictate the actual developable square footage.
5. No direct access to Olive Boulevard shall be allowed. Access to Olive Boulevard shall be via Kendall Bluff Drive.
6. Provide a cross access easement guaranteeing permanent access from this site to the abutting properties to the west (Villages at Kendall Bluff) and northeast as directed by the City of Chesterfield.
7. Structure Setbacks:
No building or structure, other than boundary walls, retaining walls, signs, light standards, flag poles or fences, shall be located within the following setbacks:
 - a. One hundred (100) feet of the right of way of Olive Boulevard
 - b. Fifty (Ten (10) feet from northeastern limits of this C.U.P.
 - c. Sixty (60 feet from the northern property boundary (N42°06'40"E)
 - d. One hundred ninety (190) feet from the western property boundary (N44°58'18"W)
 - e. Ninety (90) feet from the eastern property boundary (S26°46'00"E)
 - f. Distance between buildings shall be as approved by the Department of Planning and the Planning Commission on appropriate development plan.
8. No outdoor parking stall or internal roadway, except points of ingress and egress, shall be located within the following setbacks:
 - a. Twenty-five (25) feet of the right-of-way of Olive Street Road.
 - b. Twenty-five (25) feet of the northeast boundary of this C.U.P.

- c. Sixty (60 feet from the northern property boundary (N42°06'40"E)
 - d. One hundred twenty (120) feet from the western property boundary (N44°58'18"W)
9. Provide a 5 foot wide sidewalk, conforming to ADA standards, along the Olive Boulevard frontage of the site. The sidewalk may be located within State right-of-way, if permitted by the Missouri Department of Transportation, or within a 6 foot wide sidewalk, maintenance and utility easement.

Property Description

A tract of land being part of Lot 2 of the Subdivision of Moss Hunton's Land according to the plat thereof as recorded in Surveyors Record Book 2, page 21 of the St. Louis County Records, being located in U.S. Surveys 120 and 206, Township 45 North, Range 4 East of the Fifth Principal Meridian, City of Chesterfield, St. Louis County, Missouri.

**NOTICE OF PUBLIC HEARING
CITY OF CHESTERFIELD
PLANNING COMMISSION**

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Chesterfield will hold Public Hearings on April 23, 2007, at 7:00 p.m. in the Council Chambers at the City Hall, 690 Chesterfield Parkway West, Chesterfield, Missouri 63017.

Said hearings will be as follows:

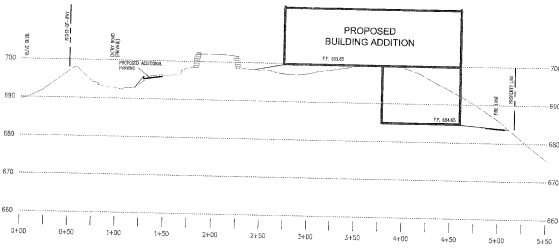
P.Z. 10-2007 Surrey Place (St. Luke's Episcopal Presbyterian Hospital): a request to amend Conditional Use Permit Number 561 to add hospital as a permitted use for an approximately 10.751 acre tract of land located at 14701 Olive Boulevard, east of the intersection of Ladue Road and Olive Boulevard. (17R530197)

Anyone interested in the proceedings will be given an opportunity to be heard. Copies of the request are available for review in the Department of Planning at the Chesterfield City Hall, 690 Chesterfield Parkway West during weekdays between the hours of 8:30 a.m. and 4:30 p.m.

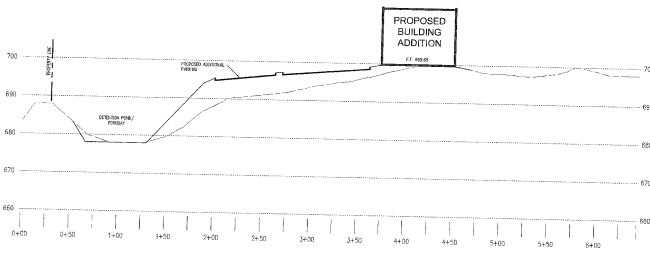
CITY OF CHESTERFIELD
Maurice L. Hirsch, Chair
Chesterfield Planning Commission



PRELIMINARY DEVELOPMENT PLAN
 A TRACT OF LAND BEING PART OF LOT 2 OF THE SUBDIVISION OF MOSS HUNTON'S LAND
 AS RECORDED IN SURVEYOR'S RECORD BOOK 2, PAGE 21
 LOCATED IN U.S. SURVEYS 120, 121 AND 206, TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE 5TH PRINCIPAL MERIDIAN
 CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI





SECTION A-A
 SCALE: 1"=40' HORIZONTAL
 1"=10' VERTICAL



SECTION B-B
 SCALE: 1"=40' HORIZONTAL
 1"=10' VERTICAL

PREPARED FOR
 ST. LOUIS CHILDREN'S HOSPITAL-PRESBYTERIAN HOSPITAL
 ATTN: MR. DON WELLS
 230 SOUTH WOODS HILL ROAD
 CHESTERFIELD, MO 63017
 PHONE: (314) 266-6227

M.S.D. No. _____		PRELIMINARY DEVELOPMENT PLAN	
3421 Main St. - 12-R		SURREY PLACE - REHABILITATION ADDITION	
April 11, 2007			
		297 Chesterfield Business Parkway St. Louis, MO 63085 PH: (636) 308-3833 FAX: (636) 308-3838 e-mail: gws@stockandassociates.com Web: www.stockandassociates.com	
DESIGNED BY: GEORGE W. STOCK - E-28116	CHECKED BY: J.E.F.	DATE: 02/09/07	PROJECT NO.: 206-3989
		DATE: 02/09/07	SCALE: 2 of 2



VIII.D.

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 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 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.**

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)**

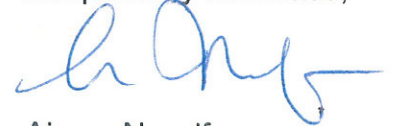
The amount of the surety or cash escrow shall be in the amount of \$20,000 for each acre contained in the tree preservation area. The amount may be pro-rated for any tree preservation area less than one (1) acre. **\$10,000 per 100 lineal feet, or portion thereof, of wooded canopy perimeter to be preserved 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



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

TABLE OF CONTENTS

I.	INTRODUCTION.....	3
II.	APPLICABILITY.....	3
III.	DEFINITIONS.....	3
IV.	OVERVIEW OF SUBMITTAL PROCESS.....	7
V.	PROTECTION OF PUBLIC OR PRIVATE TREES.....	8
VI.	TREE STAND DELINEATION (TSD).....	8
VII.	TREE PRESERVATION PLAN (TPP).....	9
VIII.	CONSTRUCTION STANDARDS FOR FIELD PRACTICE.....	10
IX.	PRESERVATION REQUIRMENTS	
	ON CONSTRUCTION SITE.....	11
X.	SPECIAL CONDITIONS.....	12
XI.	MITIGATION PLAN.....	13
XII.	PLANT SELECTIONS.....	14
XIII.	LANDSCAPE PROPOSALS.....	14
XIV.	SURETY AND ESCROW PROCEDURES.....	20
XV.	TREE PRESERVATION ACCOUNT.....	21
XVI.	APPEAL.....	21
XVII.	ADMINISTRATION AND ENFORCEMENT.....	21
XVIII.	PENALTY FOR VIOLATION.....	22

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 not 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	
<i>Tree Diameter (DBH)</i>	<i>Tunnel Distance from trunk of tree measured in all directions</i>
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.

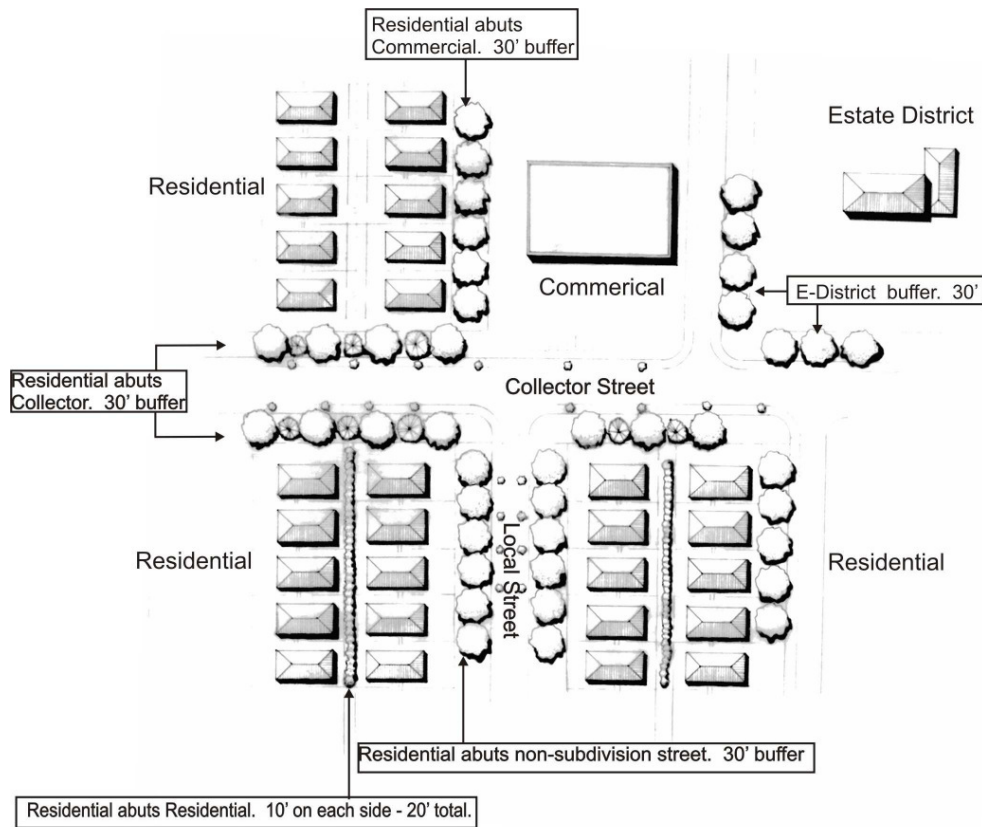


Figure 1: Buffer Requirements

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.

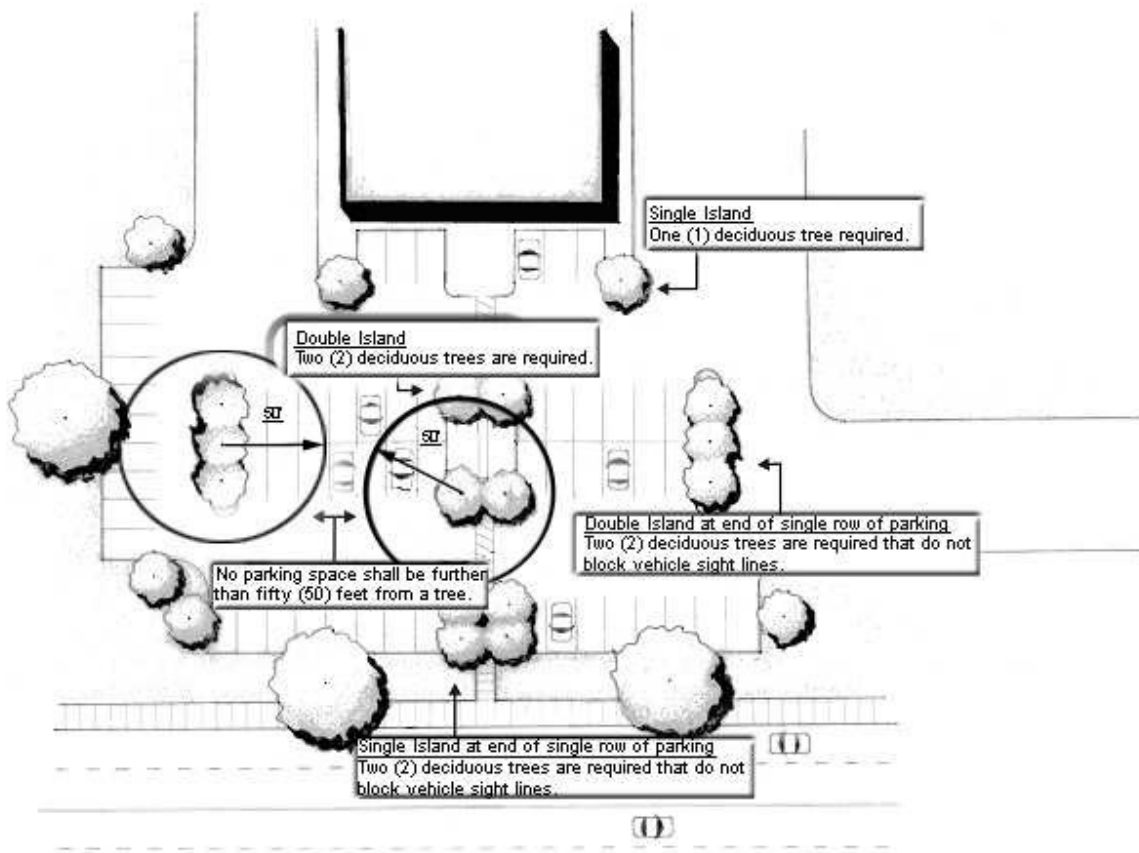


Figure 2: Typical Parking Lot Planting

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*

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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee of City Council and the City Council and can be amended from time to time.

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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee and the City Council and can be amended from time to time.

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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee and the City Council and can be amended from time to time.

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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee and the City Council and can be amended from time to time.

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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee and the City Council and can be amended from time to time.

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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee and the City Council and can be amended from time to time.

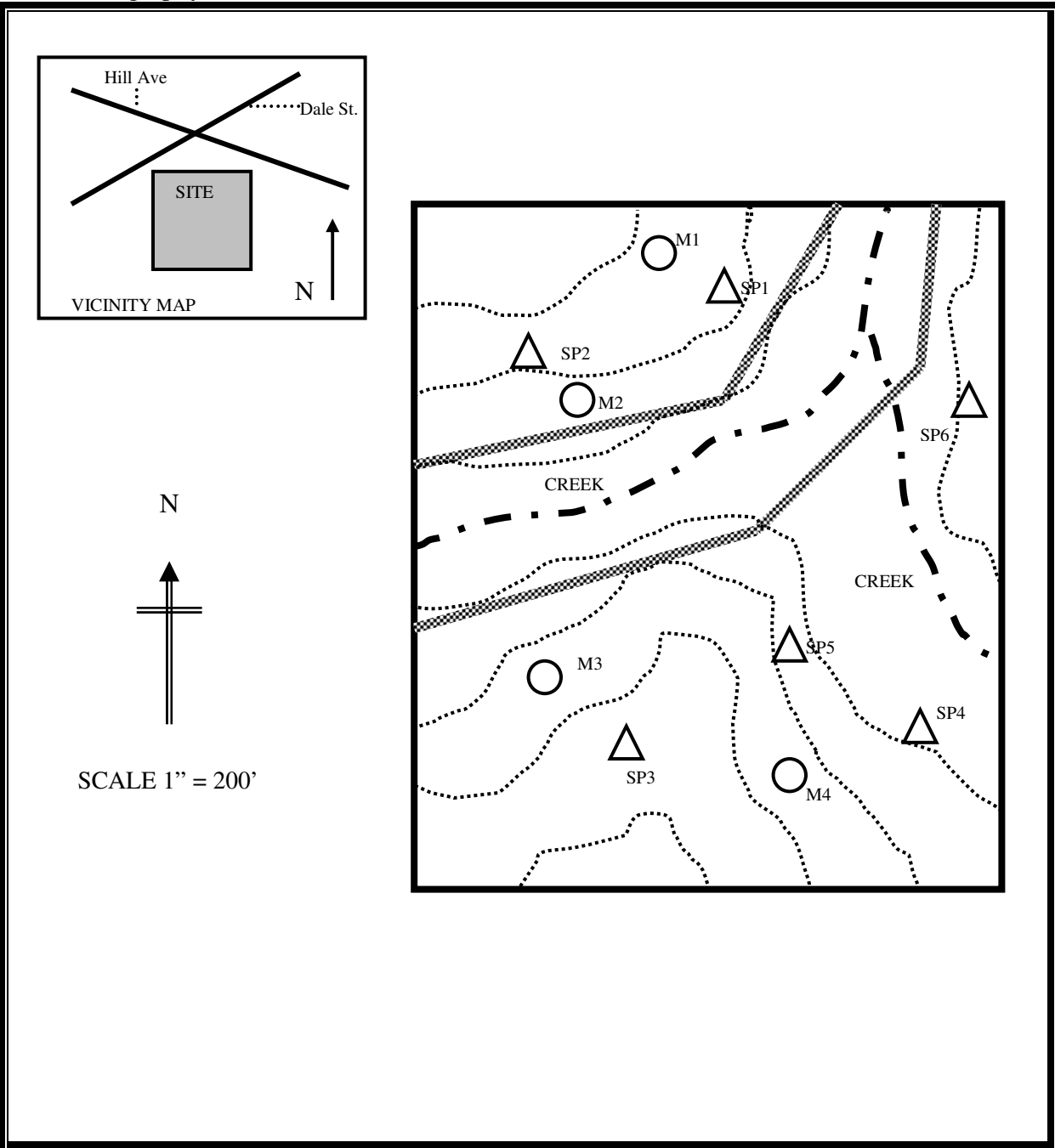
Scientific Name	Common Name	Street Tree*	Parking Lot or Island	Valley Sites	Evergreen	Ornamental	Mature Height feet	Growth Rate and Size Class
<i>Syringa reticulata</i>	Lilac, Japanese Tree		x			x	25-30	Med (Small)
<i>Taxodium distichum</i>	Baldcypress			x			45+	Med (Large)
<i>Tilia americana</i>	Basswood,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

*Street tree information included for informational purposes only. Street trees are approved by the Public Works/Parks Committee and the City Council and can be amended from time to time.

APPENDIX B

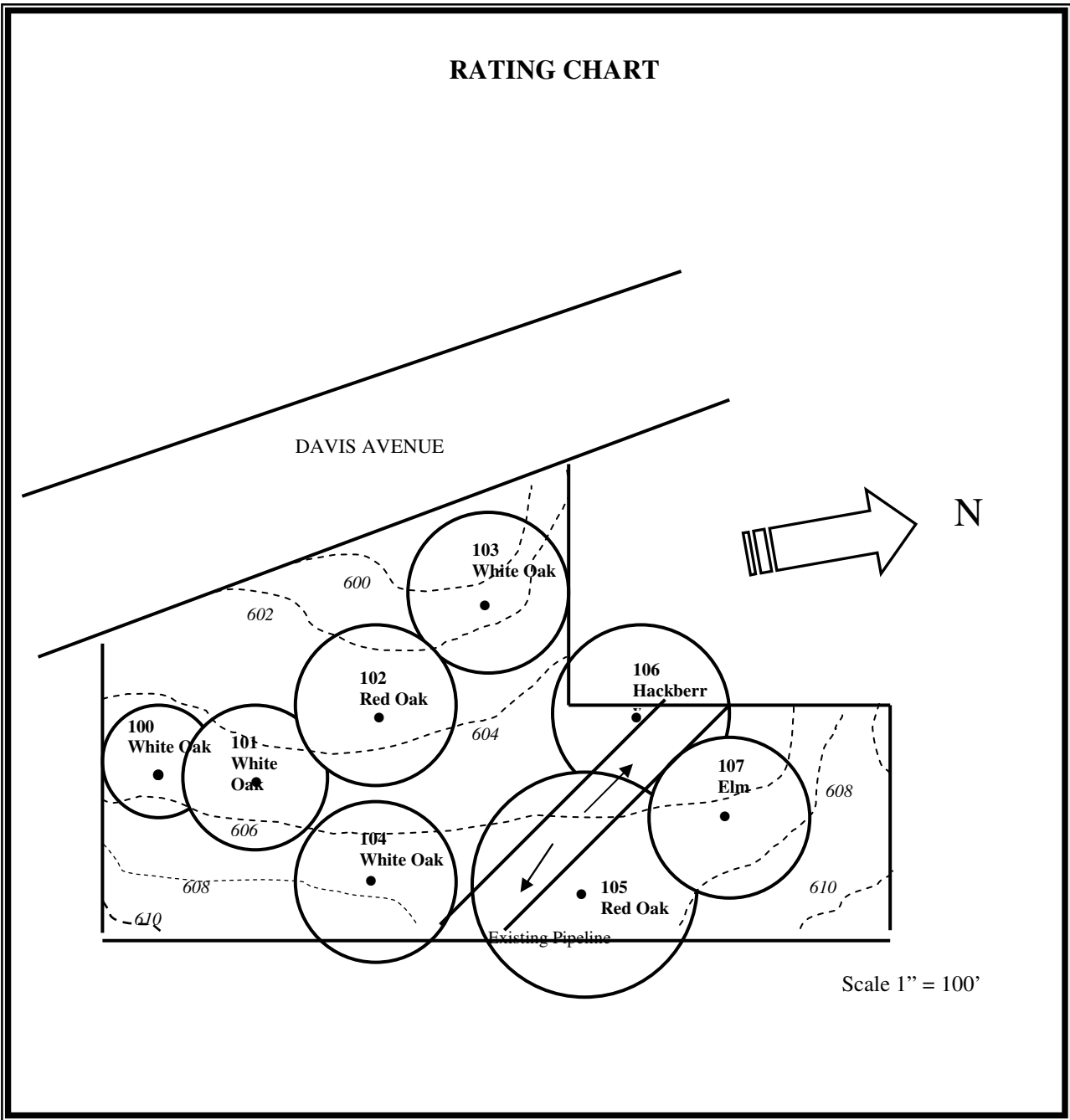
SAMPLE TREE STAND DELINEATION MAP

Aerial Photography/BAF 10 Method



SAMPLE TREE STAND DELINEATION MAP

Ocular Estimate Method





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

Planning Commission Staff Report

Subject: Rezoning Issues Report

Meeting Date: April 23, 2007

From: Annissa G. McCaskill-Clay, Assistant Director of Planning

Location: 1707 Wilson Road

Petition: P.Z. 14-2007a Wilson Bluffs (SMS Group, L.L.C.):

Proposal Summary

Sean Sortor of SMS Group, LLC., has submitted an application for a change of zoning from "NU" Non-Urban to "E Half Acre" District, per the regulations of City of Chesterfield Zoning Ordinance Section 1003.107 (Estates Districts). The location of the site is on the west side of Wilson road, directly north of Wilson Manors II Subdivision.

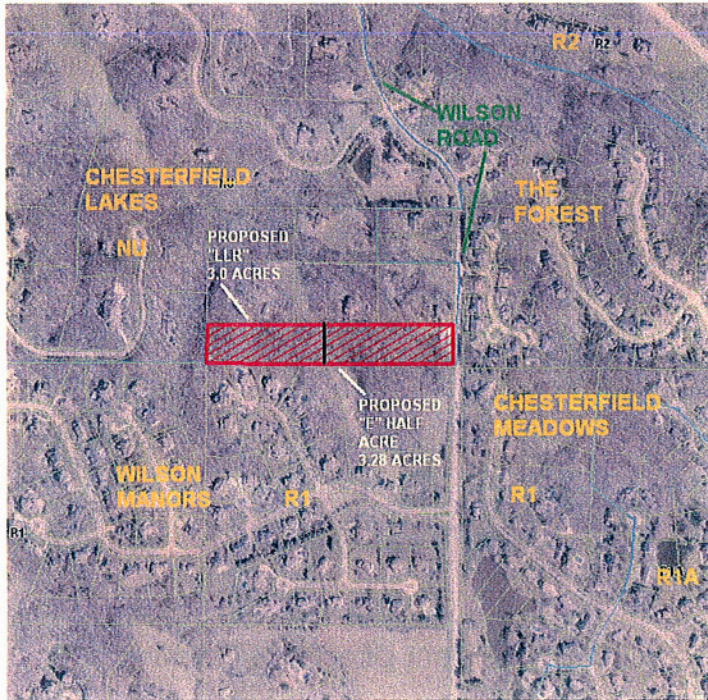
Development Process

Change of zoning requests to an Estate District is regulated under the requirements of Section 1003.107 of the City of Chesterfield Zoning Ordinance. The City of Chesterfield Zoning Ordinance requires only the following items be shown on a preliminary plan:

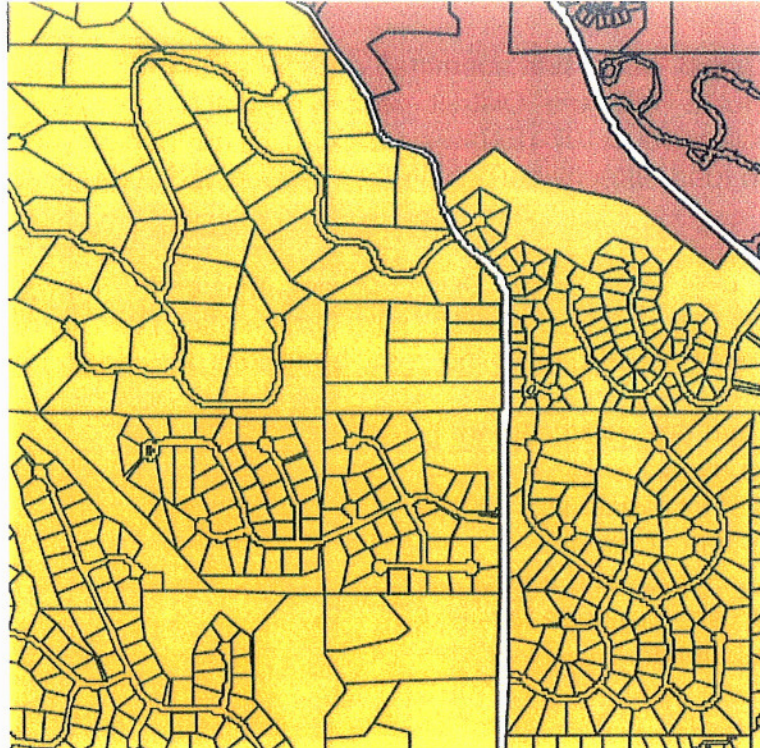
1. Existing and proposed contours.
2. Proposed uses.
3. Location of tree masses.
4. Cross section of the site.
5. Proposed ingress and egress.
6. Sanitation and drainage facilities.
7. Legal description.

Area Land Use

The subject site is located at 1707 Wilson Road. The following area map also shows sites surrounding the subject parcel.



Subject site shown on Land Use Map. Single family residential is shown as the appropriate use for this site. There is no recommendation for density for this area.



Issues

A Public Hearing was held March 26, 2007. At that time several issues were identified. Those issues along with the Petitioner's responses are attached. Please note, the Petitioner has agreed to amend his initial request from "E Half Acre" District to an "E One Acre" District. Below are the issues that remain open as well as those to which Staff was asked to respond:

1. What is the effect of the proposed development on lakes in the Chesterfield Lakes subdivision? Should soundings be required to establish a baseline? Should a bond in the amount of \$1 million be required to protect the lakes?

Staff Response: Public Works has advised that a Lake Protection Bond will be required as part of any Grading Permit affecting the tributary area to the lake located on 1665 and 1661 Wilson Road. The bond will serve to protect the downstream lake from being negatively impacted by development on the subject site. The developer will be required to perform preconstruction and post-construction surveys of these facilities and determine any changed condition. Preconstruction surveys will be performed prior to any clearing, grading, demolition or other construction related to the proposed development. Post-construction surveys will be performed within twelve (12) months of the completion of the proposed development or two (2) years from the start of the development, whichever is greater. The developer will bear the responsibility of returning affected facilities to their preconstruction condition within 3 months of the post-construction survey.

Request

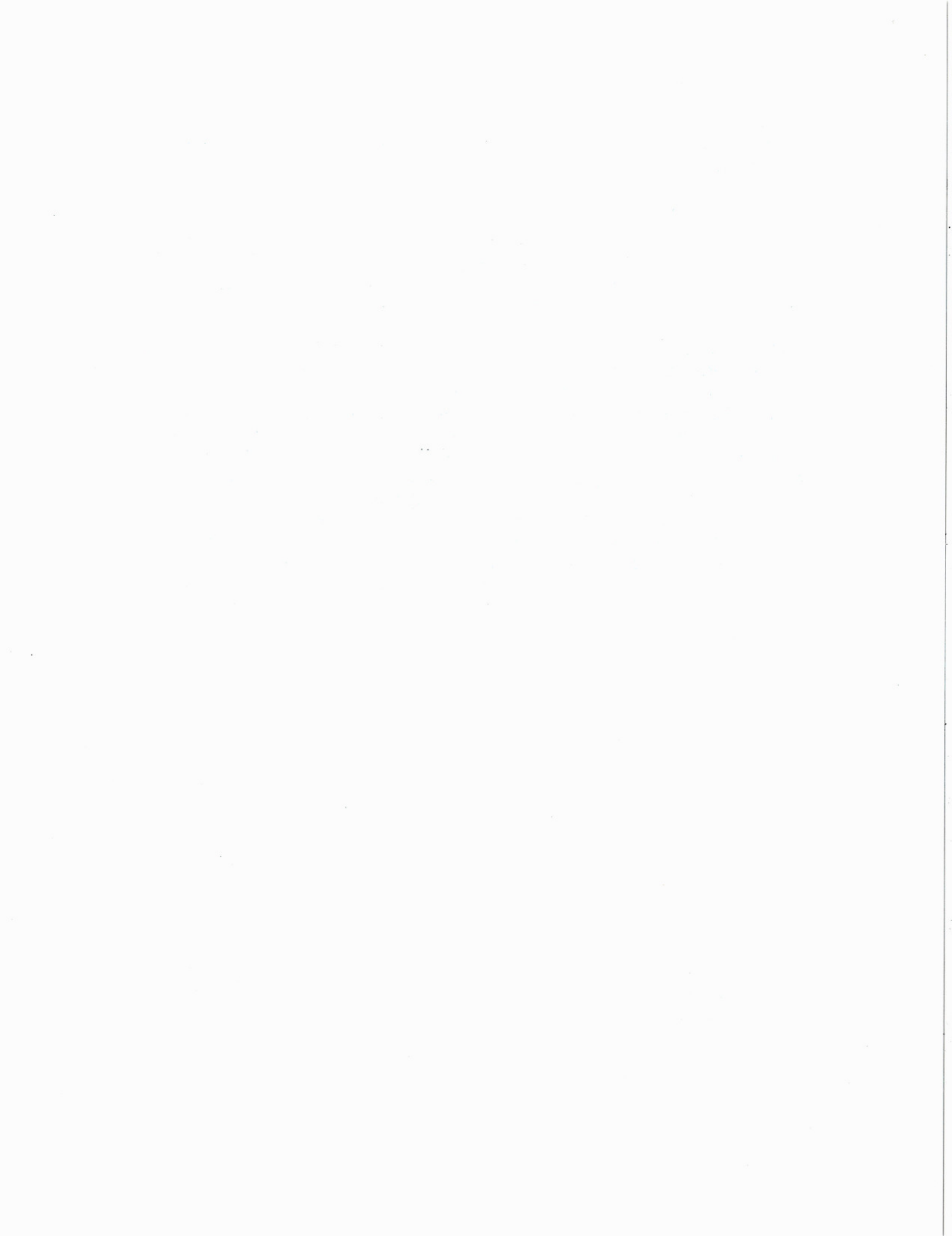
Staff is requesting that additional issues be identified at this time. As a result of the Petitioner's amended request for "E One Acre" District zoning and his ability to remain within the regulation of Section 1003.107 (Estates Districts) of the Zoning Ordinance, no Attachment A has been prepared.

Respectfully submitted,



Annissa McCaskill-Clay, AICP
Assistant Director of Planning
Attachments

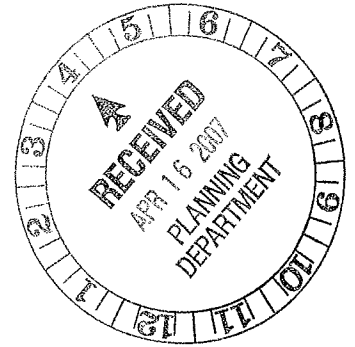
1. Petitioner's Response.
2. Preliminary Plan



SMS Group LLC
Sean Sortor
15543 Country Ridge Dr
Chesterfield, MO 63017
April 4, 2007

04-13-2007 09:53:00

Planning Commission
c/o Annessa McCaskill-Clay
690 Chesterfield Parkway W
Chesterfield, MO 63016-0760



Dear Planning Commission:

Thank you for the opportunity to present my request for re-zoning on 3/26/2007 in which I am requesting a change in the current NU zoning to an E district zoning. There has been an amendment to that original zoning request (to follow) as well as answers to the issues brought forth from that meeting.

I am asking that we amend the initial rezoning request of E-1/2 Acre to E-1 Acre. After further discussions with the Planning Department and my Engineer, it was determined that the zoning regulations had not been interpreted accurately and under the current zoning regulations of the E-1 Acre District we can accomplish the plan originally set forth. There should not be a need for variances with regard to the zoning.

As for the issues that were presented at the 3/26/2007 meeting, I have responded below to the best of my ability. The questions that were asked are numbered with the response following.

1. *What is the effect of the proposed development on lakes in Chesterfield Lakes subdivisions? Should soundings be required? A million dollar bond be required?*

Ans: This will be further addressed at site plan review. I am not sure as to which drainage area they are referring to, but I believe we will not be disturbing any drainage areas that will affect the lakes in Chesterfield Lakes. I have been made aware of the potential for a Lake Protection Bond and what that entails.

2. *Setting a precedence of E-1/2 Acre zoning, specifically for the rear portion.*

Ans: I will no longer be requesting E-1/2 Acre but amending to E-1 Acre.

3. *Are half acre lot sizes appropriate?*

Ans: I will no longer be requesting E-1/2 Acre but amending to E-1 Acre.

4. *The possibility of providing some reduction in buffer for lot size purposes.*

Ans: I will no longer need to request a variance in buffer's at E-1 Acre.

5. *Alteration of ruggedness of the site, specifically the difficulty of developing the site. What would it take to develop the site, taking into consideration the integrity of the trees on the site?*

Ans: This will be further addressed at site plan review. I have been advised of the Tree Manual and the ordinances it carries. I am going to take the trees in to consideration when looking at the development process for this property. Part of the allure for me in purchasing this property was the privacy and the wooded appeal that this property will provide for my own home. I will try and remove as few trees as is possible, but with any development there will be a certain number of trees that will have to come down due to improvements to the land. The actual details will be laid out in the site plan.

6. *Access to both the front and rear portions of the site.*

Ans: This will be further addressed at site plan review. I will have access to the front portion of the property from Wilson Rd, meeting the guidelines of the city's access ordinances with respect to entrance and curb cut distances. The existing driveway to the north will be closed off and a new private drive will be created on the south side of the property.

7. *Limitation to single-family detached dwellings on the site.*

Ans: This will be further addressed at site plan review. I will be following the E-District building requirements which state that only single family detached homes can be built on this property. I have not proposed anything to the contrary.

8. *How close would the houses be on the site from one another?*

Ans: This will be further addressed at site plan review. We will exceed the minimum distances required by the E-District building setbacks. I have not laid out the final building pads yet but based on a rough guess in distances the two homes will be well over 200' from one another.

9. *Since detention is not required, how will runoff be prevented considering the amount of extensive grading that will be necessary?*

Planning Commission

April 5, 2007

Page 3

Ans: This will be further addressed at site plan review. There will not be extensive grading based on our concept drawings. Water will be detoured into the existing runoff areas in a manner consistent with what is taking place now today. We do not perceive a major change in runoff due to this development but it will be addressed when site plans are completed.

I hope that I have answered the issues that were brought forth in a satisfactory manner. Again as previously noted I want to apologize that I was not on the same page as far as the zoning ordinances and I want to thank you for your time and patience with me on this matter. Ultimately I am looking to enjoy a new home in Chesterfield in a wonderfully private and wooded area. I will be more than happy to answer any additional questions that are asked of me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sean Sortor', with a stylized flourish extending to the right.

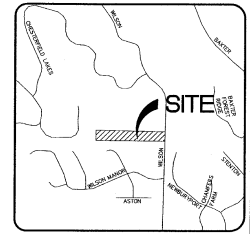
Sean Sortor

WILSON BLUFFS

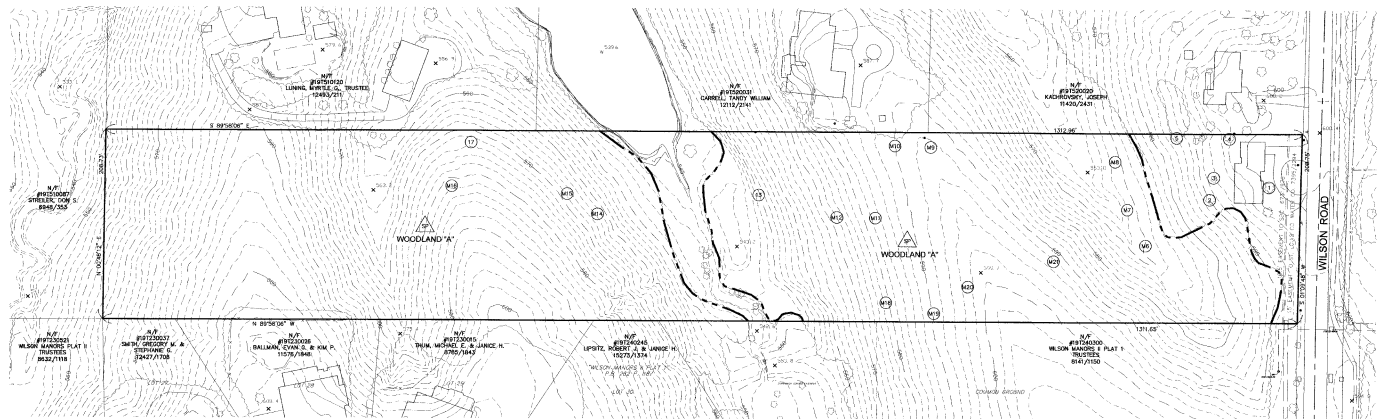
A TRACT OF LAND LOCATED IN THE SOUTH PART OF THE
SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16,
TOWNSHIP 45 NORTH, RANGE 4 EAST
ST. LOUIS COUNTY, CITY OF CHESTERFIELD, MO

PROJECT DATA

SITE ADDRESS: 1707 WILSON AVENUE
LOCATOR NUMBER(S): 19100003
OWNER: SEAN SCORTOR (UNDER CONTRACT)
SQUARE FEET: 63,900
DEVELOPMENT: 100% LARGO LOT RESIDENTIAL
PROPOSED ZONING: R-10 - 10 YEAR WALK AHEAD
PROPOSED USE: SINGLE FAMILY RESIDENTIAL
PROPOSED LOT: SINGLE FAMILY RESIDENTIAL
SCHOOL DISTRICT: WILSON
SP CODE: R-10
UTILITY: MISSOURI-AMERICAN WATER COMPANY
LEICHTENFELDER JEWEL DISTRICT
LAND USE DISTRICT: RESIDENTIAL
FIRE DISTRICT: AMERISERVE
MOORHEAD



LOCATION MAP



TREE #	SPECIES	DBH (INCHES)	HEALTH	CANOPY	ROOTS	VALUE TO SITE	COMMENTS
1	MUNGA	1	POOR	POOR	POOR	FAIR	HAZARD
2	SUGAR MAPLE	23	GOOD	GOOD	GOOD	FAIR	
3	MUNGA	12	FAIR	FAIR	FAIR	FAIR	
4	SHERMAN ELM	18	FAIR	FAIR	FAIR	FAIR	
5	REDWOOD	12	FAIR	FAIR	FAIR	FAIR	
6	WHITE OAK	24	GOOD	GOOD	GOOD	FAIR	MONARCH
7	WHITE OAK	25	GOOD	GOOD	GOOD	FAIR	MONARCH
8	WHITE OAK	23	GOOD	GOOD	GOOD	FAIR	MONARCH
9	WHITE OAK	28	FAIR	FAIR	FAIR	FAIR	MONARCH/FORZED
10	WHITE OAK	25	GOOD	GOOD	GOOD	FAIR	MONARCH
11	WHITE OAK	24	FAIR	FAIR	FAIR	FAIR	MONARCH
12	RED OAK	30	FAIR	FAIR	FAIR	FAIR	MONARCH
13	WHITE OAK	26	POOR	POOR	POOR	FAIR	HAZARD
14	WHITE OAK	30	GOOD	GOOD	GOOD	FAIR	MONARCH/PILAZARE
15	RED OAK	24	GOOD	GOOD	GOOD	FAIR	MONARCH
16	WHITE OAK	24	FAIR	FAIR	FAIR	FAIR	MONARCH
17	WHITE OAK	26	N/A	N/A	N/A	FAIR	
18	WHITE OAK	25	FAIR	FAIR	FAIR	FAIR	MONARCH
19	WHITE OAK	24	GOOD	GOOD	GOOD	FAIR	MONARCH
20	RED OAK	27	FAIR	FAIR	FAIR	FAIR	MONARCH
21	WHITE OAK	24	FAIR	FAIR	FAIR	FAIR	MONARCH

MANY OF THE LARGE TREES ON THIS SITE (24\"/>

WOODLAND	FOREST TYPE	AREA (SQ. FT.)	DOMINANT AND CO-DOMINANT SPECIES	DENSITY (TREES/ACRE)	AVERAGE DIAMETER	AVERAGE OVERSTORY DIAMETER	FREQUENCY OF OCCURRENCE FOR DOMINANT SPECIES	UNDERSTORY SPECIES
A	NATURAL WOODLAND	238,227.83	WHITE OAK AND RED OAK	50		15	SITE	DOGWOOD & HONEYSUCKLE
5 AND 100'S YARD TREES		2,000.00						
TOTAL WOODLAND		240,227.83						

TOTAL SITE AREA: 5.28 ACRES
TOTAL WOODLAND AREA: 241,227.83 SQ. FT.

THE WOODLAND ON THE PROPERTY IS MATURE OAK FOREST WITH DOGWOODS AND INVASIVE HONEYSUCKLE IN THE UNDERSTORY. WHITE OAK DOMINATES THE OVERSTORY.

THERE ARE NO STATE CHAMPION OR RARE TREES ON THE SITE. THE LETTER "M" AFTER A TREE NUMBER ON THE MAP INDICATES THAT IT IS CONSIDERED A MONARCH TREE. MONARCH TREES ARE FIELD LOCATED WITHIN THE EXISTING WOODLAND. THEIR LOCATIONS ARE NOT SURVEYED AND DO NOT REPRESENT AN EXACT POSITION.

THE FLOOD MAP PANEL = 29188C0139H

LEGEND

- (15) INDIVIDUAL TREE
- (M) MONARCH TREE
- △ SAMPLE PLOT LOCATION
- WOODLAND DELINEATION

TREE STAND DELINEATION PREPARED BY:
SKIP KINCAD & ASSOCIATES
THE SPECIALIST MERRITH MAHOY (CERTIFIED ARBORIST MW-4223)



SEAN SCORTOR
13430 CLAYTON RD.
1650 N. WILSON RD.
ST. LOUIS, MO 63112
P: 314-652-2884
C: 314-652-2884

Seam Scortor
13430 Clayton Rd.
1650 N. Wilson Rd.
St. Louis, MO 63112
P: 314-652-2884
C: 314-652-2884

Vance Engineering, Inc.
1650 N. Wilson Rd.
St. Louis, MO 63112
P: 314-427-1800
F: 314-427-1801

WILSON BLUFFS
TREE STAND DELINEATION

REVISED

06076

DATE MAP MADE

01/31/07

1

COPYRIGHT 2007



VIII. F.

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

Planning Commission Staff Report

Subject: Rezoning Issues Report

Meeting Date: April 23, 2007

From: Aimee Nassif, Senior Planner of Zoning Administration

Location: 16845 North Outer Forty Road

Petition: P.Z. 16-2007 Valley Gates Subdivision

Proposal Summary

George Stock, on behalf of Summit Outer Forty Investors, has submitted an application for an ordinance amendment to allow for a change in the building height requirement and to allow for additional buildings on the site. The current ordinance, Ordinance Number 2154 requires a maximum height of two stories and permits only two (2) buildings to be developed. The Petitioner is requesting a maximum height for buildings to be three (3) stories and to allow for an increased number of buildings to be built on site.

Development Process

Ordinance Amendment requests to any planned district are regulated under the requirements of Section 1003.178 of the City of Chesterfield Zoning Ordinance. The City of Chesterfield Zoning Ordinance requires only the following items be shown on a preliminary plan:

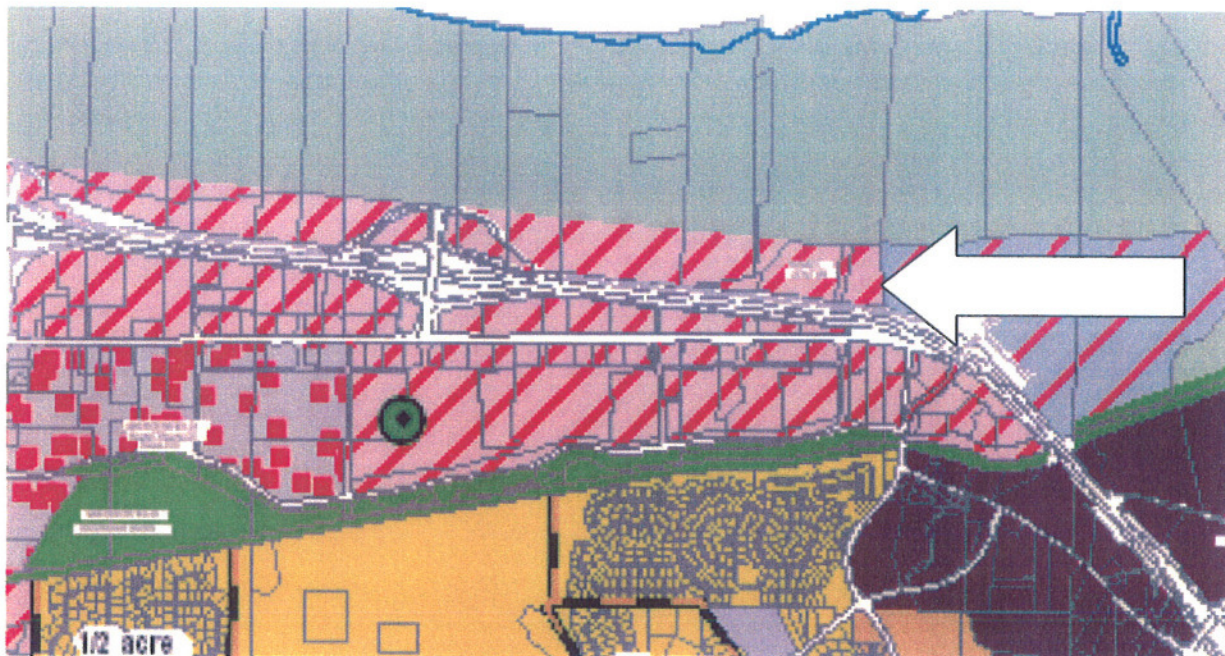
1. Conceptual location of buildings.
2. Existing and proposed contours.
3. Proposed uses.
4. Location of tree masses.
5. Cross section of the site.
6. Proposed ingress and egress.
7. Sanitation and drainage facilities.
8. Legal description.

Area Land Use

The subject site is located at 16845 North Outer Forty Road.



Subject site shown on Land Use Map. Mixed commercial use is shown as the appropriate use for this site.



Issues

Staff has reviewed this request with the requirements in both the City of Chesterfield Comprehensive Plan and Zoning Ordinance. The only outstanding issue at this time is the City of Chesterfield is still awaiting comments from the Missouri Department of Transportation.

Request

Staff is requesting that additional issues be identified at this time. Agency comments have not been received so a final Attachment A for vote is not yet available.

Respectfully submitted,



Aimee Nassif
Senior Planner of Zoning Administration
Attachments

1. Draft Attachment A
2. Preliminary Plan

ATTACHMENT A

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified herein.

I. SPECIFIC CRITERIA

A. PERMITTED USES

1. The uses allowed in this "PC" District shall be:
 - a. Arenas and stadiums.
 - b. Associated work and storage areas required by a business, firm, or service to carry on business operations.
 - c. Auditoriums, churches, clubs, lodges, meeting rooms, libraries, reading rooms, theaters, or any other facility for public assembly.
 - d. Child care centers, nursery schools, and day nurseries.
 - e. Colleges and universities.
 - f. Financial institutions.
 - g. Hospitals.
 - h. Hotels and motels.
 - i. Medical and dental offices.
 - j. Offices or office buildings.
 - k. Recreational facilities, indoor and illuminated outdoor facilities, including swimming pools, golf courses, golf practice driving ranges, tennis courts, and gymnasiums, and indoor theaters, including drive-in theaters.
 - l. Research facilities, professional and scientific laboratories, including photographic processing laboratories used in conjunction therewith.
 - m. Restaurants, fast food. (No drive-thru)
 - n. Restaurants, sit down.

- o. Schools for business, professional or technical training, but not including outdoor areas for driving or heavy equipment training.
- p. Stores, shops, markets, service facilities, and automatic vending facilities in which goods or services of any kind, including indoor sale of motor vehicles, are being offered for sale or hire to the general public on the premises.

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

1. HEIGHT

- a. The maximum height of retail buildings, exclusive of roof screening, shall not exceed two (2) stories.
- b. The maximum height of all other buildings, exclusive of roof screening, shall not exceed three (3) stories.

2. BUILDING REQUIREMENTS

- a. A minimum of forty percent (40%) openspace is required for this development.

C. SETBACKS

1. STRUCTURE SETBACKS

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

- a. One hundred and twenty feet (120) from the new right-of-way of North Outer Forty.
- b. Nineteen (19) feet from the eastern boundary of the "PC" District.
- c. Twenty five (25) feet from the western boundary of the "PC" District.
- d. Two hundred (200) feet from the northern boundary of the "PC" District.

2. PARKING SETBACKS

- a. No parking stall, loading space, internal driveway, or roadway, except points of ingress or egress, will be located within the following setbacks:
 - i. Thirty (30) feet from the right-of-way of North Outer Forty Road.
 - ii. Nineteen (19) feet from the eastern boundary of this development.
 - iii. Twenty five (25) feet from the western boundary of the "PC" District.
 - iv. One hundred seventy (170) feet from the northern boundary of the "PC" District.
 - v. Ten (10) feet from internal property lines, with the exception of shared driveways.
 - vi. Fifteen (15) feet from the principal internal street.

D. 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.

E. LANDSCAPE AND TREE REQUIREMENTS

1. The developer shall adhere to the Tree Manual of the City of Chesterfield Code.
2. Since landscaping is not permitted in the underseepage berm area, landscape provisions for said area, including but not exclusive to landscaped parking islands and perimeter landscaping requirements will not be required to adhere to the Tree Manual. Landscaping plans will include additional landscaping provisions in the front portion of the building area which will buffer the lack of landscaping in the rear of the property. The landscape features may include but not be limited to water features, brick planters and outdoor artwork.

F. SIGN REQUIREMENTS

1. 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.
2. Signs shall be permitted in accordance with the regulations of the City of Chesterfield Code.

G. LIGHT REQUIREMENTS

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

H. 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, material, 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.

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

I. ACCESS/ACCESS MANAGEMENT

1. Provide cross access easements or other appropriate legal instruments guaranteeing permanent access to adjacent properties as directed by the City of Chesterfield.
2. Direct access to the North Outer Forty Road shall be as approved by MoDOT and the City of Chesterfield.
3. The centerline of the single entrance onto the North Outer Forty Road shall be located no closer than two hundred and twenty (220) feet from the western property line, or as directed by the City of Chesterfield and MoDOT.

J. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. Provide any additional right-of-way and pavement widening to the North Outer Forty Road as required by MoDOT.
2. Provide a five (5) foot wide sidewalk, conforming to ADA standards, parallel to North Outer Forty Road per the Valley Guidelines of the Comprehensive Plan and a four (4) foot wide sidewalk conforming to ADA standards along both sides of all interior roadways, as directed by the City of Chesterfield. The sidewalks shall be privately maintained; therefore, no public easements shall be required.
3. Provide a 40 foot right of way with minimum of 10 foot roadway improvement, maintenance, utility and sewer easements on both sides for all interior roadways. Minimum roadway sections shall provide a 26 foot travel way with 7 foot shoulders on both side and appurtenant storm drainage facilities as directed by the Department of Public Works.

K. TRAFFIC STUDY

1. Provide a traffic study as directed by the City of Chesterfield and/or the St. Louis County Department of Highways and Traffic. 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.

L. MONARCH-CHESTERFIELD LEVEE DISTRICT

1. The developer shall dedicate an underseepage berm easement adjacent to the existing levee, as directed by the Monarch Chesterfield Levee District and the City of Chesterfield's Department of Public Works.
2. Prior to approval of any grading permit or improvement plans for development, an underseepage study may be required for review/approval as directed by the Monarch Chesterfield Levee District, the US Army Corps of Engineers and the City of Chesterfield's Department of Public Works.
3. No improvements or use that would alter, diminish, damage or interfere with the performance of the Monarch Chesterfield Levee including seepage berm is permitted.
4. Any drainage structures or systems, including or not limited to under drains, installed for the relief of hydrostatic head or seepage water shall be designed, construed, operated, and maintained to prevent infiltration of soil/ground loss.
5. Trees, vegetation and landscaping which have roots which extend more than six (6) inches in depth below the ground are not permitted in the Permanent Underseepage Berm Easement. Buildings and other structures are also not permitted within this easement.

M. RECREATIONAL EASEMENT

1. An easement, for recreational and trail purposes shall be provided for this site as directed by the Monarch Chesterfield Levee District and the City of Chesterfield's Department of Public Works. The easement is anticipated to be located on the crest of the levee.

N. POWER OF REVIEW

1. 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

1. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point or connected to an adequate piped system.
2. Detention/retention and other storm water quantity and quality management measures 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 development or issuance of building permits exceeding sixty (60%) of 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.
3. Due to the inherent nature of development, the specific size, location, and configuration of the stormwater infrastructure are conceptual in nature. The exact location, size, and type of each segment of stormwater infrastructure are to be reviewed and approved in conjunction with the development of specific sites. It is expected that developers will submit alternate plans, propose alternative geometry, size, and type for these infrastructure improvements, along with supporting hydraulic computations. The Public Works Department will review said proposals for functional equivalence. Functional equivalence is said to be achieved when, as determined by the Director of Public Works, the alternate proposal provides the same hydraulic function, connectivity, and system wide

benefits without adversely affecting water surface profiles at other locations or adjacent properties.

4. The Chesterfield Valley Master Storm Water Plan indicates that the drainage shall be directed to the east to a future pump station, via a 30 foot wide flat bottom ditch with 4:1 side slopes, and a double 8' x 4' driveway culvert. Please be advised that the petitioner shall coordinate improvements with the adjacent parcel owners. In addition, in the event that the ultimate permanent improvements cannot be constructed at the time of development, the site shall be designed in such a manner as to allow the ultimate construction of the master plan at a future date, and interim drainage facilities shall be provided. The interim facilities may include a temporary pump station as necessary to provide the required positive drainage. Interim facilities shall be removed promptly at such time as the permanent stormwater improvements can be constructed as required. The petitioner will be required to provide a special cash escrow to the City for the cost of constructing the master plan drainage ditch along their property in the event that the ditch is not constructed at the time of development. No building permits for the development will be issued until the City has received the special cash escrow. The special cash escrow shall include all work associated with constructing the master plan drainage facility, or reconfiguring the interim improvement. This shall include, but is not limited to, grading, siltation control, revegetation, and removal of driveway entrances, removal of driveway culverts, the construction of culverts and the reconstruction of driveway entrances.
5. The maintenance of the required stormwater/ditch system shall be the responsibility of the property owner(s).
6. Stormwater drainage improvements shall be operational prior to the paving of any driveways or parking lots. Roadway and related improvements shall be constructed prior to 60% occupancy of the retail portion of the site.
7. If any development in, or alteration of, the floodplain is proposed, the developer shall submit a Floodplain Development Permit/Application to the City of Chesterfield Department of Public Works for approval. Be advised that in conjunction with any site alteration the developer will be required to demonstrate that there will be no adverse effect on other properties located within the Chesterfield Valley. The Floodplain Development Permit/Application must be approved by the City of Chesterfield Department of Public Works prior to the approval of the Improvement Plans or Grading Plans. If any change in the location of the Special Flood Hazard Area is proposed, the Developer shall be required to obtain a Letter of Map Revision

(LOMR) from the Federal Emergency Management Agency. The LOMR must be issued by FEMA prior to the final release of any escrow held by the City of Chesterfield for improvements in the development.

8. If any building is proposed to be located in an existing, or proposed, Special Flood Hazard Area the building shall be clearly labeled as being located in the Floodplain on the Approved Site Development Plan and Improvement Plan. The lowest Reference Level (floor), as defined by FEMA, shall be constructed a minimum of one (1) foot above the base flood elevation unless a LOMR has been issued by FEMA prior to construction. The minimum elevation for the Reference Level for each building shall also be noted on the approved Site Development Plan and Improvement Plan.

P. SANITARY SEWER

1. Hydraulic calculations of downstream sewers will be required by the Metropolitan St. Louis Sewer District and the City of Chesterfield. Downstream sanitary reaches may need to be replaced or upgraded, as directed by the Metropolitan St. Louis Sewer District and the City of Chesterfield.

Q. GEOTECHNICAL REPORT.

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. If any work is proposed in, near or above the natural watercourse through this site, a hydrologic/hydraulic study evaluation the impacts of the proposed work shall be provided as directed by the City of Chesterfield's Department of Public Works. Said study shall

evaluate impacts on the entire length of stream, and any maintenance requirements. Appropriate permits and approvals from other agencies shall also be provided.

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

- A. The developer shall submit a concept plan within 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.
- 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, Site Development Section Plan, Site Development Plans.**

1. Any site development plan shall show all information required on a sketch plan as required in the City of Chesterfield Code.
2. Include a conceptual landscape plan in accordance with the City of Chesterfield Code to indicate proposed landscaping along arterial and collector roadways.
3. Include a lighting plan in accordance with the City of Chesterfield Code to indicate proposed lighting along arterial collector roadways.
4. Provide comments/approvals from the appropriate Fire District, the Metropolitan St. Louis Sewer District, the St. Louis County Department of Highways and Traffic, Monarch Levee District, Spirit of St. Louis Airport and the Missouri Department of Transportation.

V. CHESTERFIELD VALLEY TRUST FUND

The Developer shall contribute to the Chesterfield Valley Trust Fund.

A. Roads

The roadway improvement contribution is based on land and building use. The roadway contributions are necessary to help defray the cost of engineering, right-of-way acquisition, and major roadway construction in accordance with the Chesterfield Valley Road Improvement Plan on file with the St. Louis County Department of Highways and Traffic. The amount of the developer's contribution to this fund shall be computed on the following basis:

<u>Type of Development Contribution</u>	<u>Required</u>
Commercial	\$1.80/SF

If the types of development proposed differ from those listed, rates shall be provided by the St. Louis County Department of Highway and Traffic.

Credits for roadway improvements required in condition will be awarded as directed by the St. Louis County Highways and Traffic. Any portion of the roadway improvement contribution which remains, following completion of road improvements required by the development shall be retained in the trust fund.

The roadway improvement contribution shall be deposited with the St. Louis County Department of Highways and Traffic. The deposit shall be made prior to the issuance of a Special Use Permit (S.U.P.) by St. Louis County Highways and Traffic. Funds shall be payable to the Treasurer, St. Louis County.

B. Water Main

The primary water line contribution is based on gross acreage of the development land area. The contribution shall be a sum of \$568.82 per acre for the total area as approved on the Site Development Plan to be used solely to help defray the cost of constructing the primary water line serving the Chesterfield Valley area.

The primary water line contributions shall be deposited with the St. Louis County Department of Highways and Traffic. The deposit shall be made prior to approval of the Site Development Plan unless otherwise directed by the St. Louis County Department of Highway and Traffic. Funds shall be payable to the Treasurer, St. Louis County.

C. Stormwater

The stormwater contribution is based on gross acreage of the development land area. These funds are necessary to help defray the cost of engineering and construction improvements for the collection and disposal of stormwater from the Chesterfield Valley in accordance with the Master Plan on file with and jointly approved by St. Louis County and the Metropolitan St. Louis Sewer District. The amount of the stormwater contribution will be computed on the basis of \$1,804.75 per acre for the total area as approved on the Site Development Plan.

The stormwater contributions to the Trust Fund shall be deposited with the St. Louis County Department of Highways and Traffic. The deposit shall be made prior to the issuance of a Special Use Permit (S.U.P.) by St. Louis County Department of Highways and Traffic. Funds shall be payable to the Treasurer, St. Louis County.

D. Sanitary Sewer

The sanitary sewer contribution is collected as the Caulks Creek impact fee and is subject to a surcharge of \$2,750/acre. The sanitary sewer contributions within Chesterfield Valley area shall be deposited with the Metropolitan Sewer District as required by the District.

The amount of this required contribution for the roadway, stormwater and primary waterline improvements, if not submitted by January 1, 2005 shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accord with the construction cost index as determined by the St. Louis County Departments of Highway and Traffic.

Except as otherwise noted, trust fund contributions shall be deposited with St. Louis County in the form of a cash escrow prior to the issuance of building permits

VII. RECORDING

Within 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.

VIII. 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.

