



VIII. B.

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Planning Commission Staff Report

Subject: Zoning Map Amendment Vote Report

Meeting Date: August 26, 2013

From: John Boyer, Senior Planner

Location: 17015 Church Rd.

Petition: **P.Z. 02-2013 Arbors at Kehrs Mill (17015 Church Rd.)**

Proposal Summary

McBride and Son Homes, on behalf of JHB Properties, Inc. has submitted a request for a zoning map amendment to rezone a parcel for a proposed 44 lot single-family residential development. The subject parcel consists of 58.149 acres and is currently under consideration for a zoning map amendment to E-1 Acre District. The purpose of rezoning to E-1 Acre District is to establish the density for the overall development which will carry forward with the PUD (Planned Unit Development) request.

While two applications are up for City review, a separate vote is required for each application. P.Z. 01-2013 will establish the proposed project's density first, and then the applicant is requesting consideration for a change of zoning to PUD. The applicant is seeking a PUD in order to obtain flexibility with development requirements. This is discussed in more detail later in this report.

This report reviews the proposed PUD rezoning, subsequent Preliminary Plan and the proposed Attachment A which identifies development conditions for the proposed development.

Site History

The subject property was originally zoned NU Non-Urban District. In 1998 the property was rezoned from the original NU District designation to LLR District via Ordinance Number 1472. Associated with this development, no single family units were proposed or allowed, instead, the permitted uses were only schools and the cultivation of crops. In 2006, Ordinance Number 2322 approved the rezoning of 40.6 acres of the subject site to E-1 Estate One Acre District and E-2 Estate Two Acre District. This ordinance also approved the density for a proposed development known as Tuscan Reserve for 36 single family lots. This is the current ordinance authority for the site. Currently the



Figure 2: Site Location



Figure 3: Site Photo from Strecker Rd.



Figure 4: Site Photo from Church Rd.



Figure 5: Intersection of Kehrs Mill and Strecker



Figure 6: West of Site from Church Rd.

Issues

The Planning Commission, with input from the public, identified issues at the May 29, 2013 Public Hearing on this petition. Issues identified included proposed lot sizes of the development and access issues off Church Rd. On July 22, 2013, an Issues Meeting was held which discussed both these items and those items were addressed. All issues from the public hearing have been resolved and no additional issues were introduced at the Issues Meeting.

Comprehensive Plan Analysis

The subject site is located within Ward 4 of the City of Chesterfield. The City of Chesterfield Land Use Plan indicates this parcel is within the Residential Single Family area, specifically within the one-acre density section as shown in below Figure 7. Proposed uses and density associated with the PUD of 0.75 units per acre is within 1 unit per acre area compliant with the Land Use Plan. This subject site is not located in any sub-area identified by the Comprehensive Plan; therefore no additional development guidelines are required.

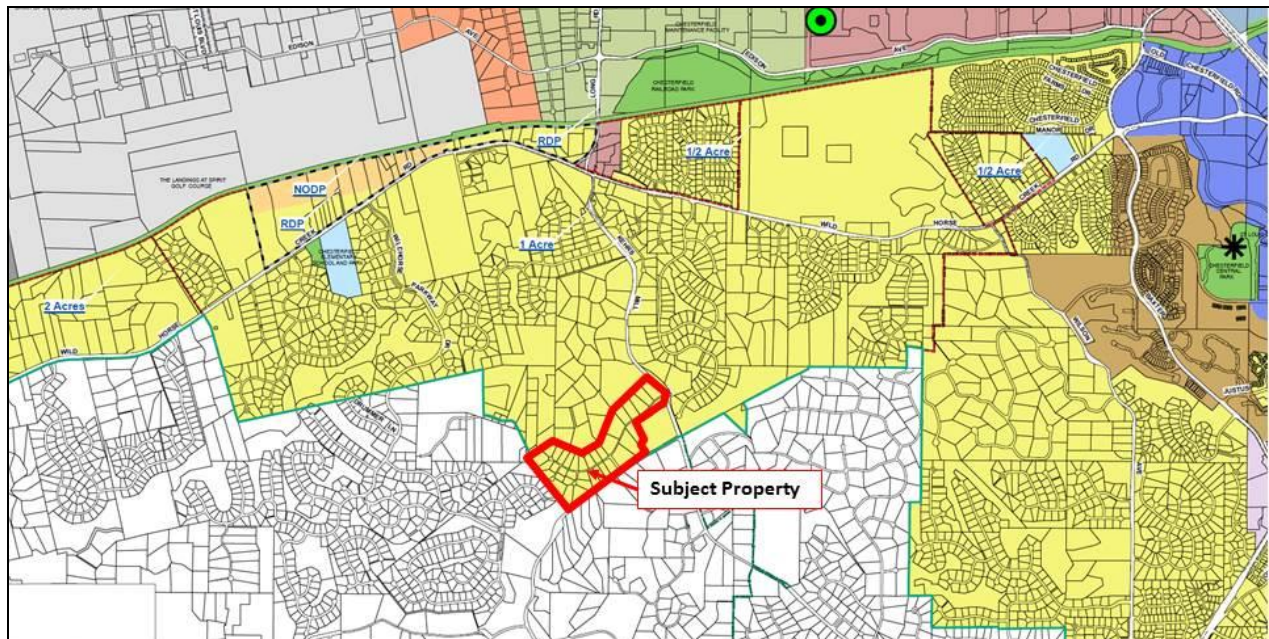


Figure 7: Land Use Plan

Analysis

The purpose of the PUD Planned Unit Development District is to encourage flexibility in development standards that will result in exceptional design, character and quality of new developments. The PUD also encourages the preservation of natural and scenic features as well as open space.

The applicant is seeking to negotiate minimum lot size within the PUD in order to preserve additional open space while not increasing overall density permitted at this location by the rezoning request of E-1 via P.Z. 01-2013. The ability to develop with the smaller lots sizes while not increasing density permitted within the requested E-1 district would enable the preservation of additional open space and limit required grading.

The following are additional items which represent a summary of key features of the Preliminary Plan;

- 44 lots are proposed on the submitted plan
 - Min lot size of 22,000 sqft.
 - Average lot size of 30,926 sqft.
 - Max lot size of 3.99 acres
- Density of 0.75 units per acre or 44 units in 58 acres.
 - The E-1 district if approved associated with P.Z. 01-2013 would allow 1 unit per acre development.
 - As submitted, the developer's intent is not to build at full allowed density.
- As submitted, the combination of proposed density and number of lots would allow for 34% of the site or 20.2 acres to be reserved as Common Open Space. The Tree Manual requires 30%. Total common ground for the site is 20.5 acres or 35.6% of the site.
- Landscape buffers, are identified along the property boundaries with some being extensive. A minimum of 30 feet is required by the PUD. The Preliminary Plan indicates this is achieved by both Common Ground/Common Open Space and landscape easements. Some of the buffers proposed exceed the 30 foot buffer requirement. A 50 foot buffer has been proposed along the northern boundary with the McKenna Pacland Lake/Pacland Place development.
- Two access points to the site; 1) from Kehrs Mill Rd. to the east and 2) from Church Rd. to the west.
- 40 foot dedication from center line of Church Road for future road improvements.

Associated with this proposed development, design features from the previously approved Tuscan Reserve have been incorporated into the new Attachment A. This includes, the fifty (50) foot landscape buffer along the majority of the northern boundary with McKenna Pacland Lake/Pacland Place subdivisions. As a point of reference, the minimum landscape buffer required under PUD design requirements is thirty (30) foot. By exceeding this buffer requirement, the applicants are substantially complying with the previously approved development plan. While a fifty (50) foot buffer is proposed, the Common Open Space and imposed rear yard setbacks in some of these areas as shown on the preliminary plan, provide additional buffering to the required landscape buffer along the northern boundary. For instance, a hundred (100) foot wide Common Open Space area extends along proposed lots #30-39. In addition, a one hundred and twenty five (125) foot structure setback is being imposed along proposed Lot #40. Additional Common Open Space, which provides extensive buffering, extends east along the northern boundary line towards Kehrs Mill Road.

It is important to note, that Common Open Space is different from Common Ground. Common Ground are areas found within residential developments which are maintained by the home owner's association. While residential dwelling units are not constructed here, common ground can consist of other structures such as tennis courts, a club house, etc . In addition, areas of common ground do not guarantee tree preservation.

With a PUD request, a minimum of 30% Common Open Space is required. Common Open space are areas which are deed restricted, which are not and cannot in the future be developed and no structures are permitted. This requirement was established with

the PUD by the City of Chesterfield in order to ensure a certain amount of tree preservation and green space preservation on a site in addition to reducing the amount of grading and land disturbance that would otherwise occur.

Another design feature associated with this PUD request that largely mimics the previously approved development plan is compliance with a private subdivision indenture associated with the McKenna Pacland Lake/Pacland Place subdivisions. The private indentures require that 12 acres of land found within this subject site, maintain lot sizes which do not fall below 3 acres in size. This area of the preliminary plan includes two proposed lots shown as Lot 8 and Lot 40 and the storm water area to the south. Again, this is not a City requirement, but is meant to comply with those private subdivision indentures and agreements. Private agreements encumber the private property owners and are not required development features by the City of Chesterfield. The City of Chesterfield does not enforce private agreements between land owners; we simply call this area to your attention in case you have any questions regarding the large lot sizes in the center of this proposed development.

Request

Staff has reviewed the requested zoning map amendment by the applicant as it pertains to the PUD request. The requested zoning map amendment from E-1 Acre District to a PUD District meets all requirements of the City of Chesterfield and is in compliance with the City of Chesterfield Land Use Plan. Staff requests action on P.Z. 02-2013 Arbors at Kehrs Mill.

Respectfully submitted,



John Boyer, Senior Planner

Attachments

1. 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 PUD District shall be:
 - a. Dwellings, Single Family Detached.

B. DENSITY REQUIREMENTS

1. The total number of single family residential units shall not exceed forty-four (44) units.

C. DEVELOPMENT STANDARDS

1. Minimum lot size for this development shall be 22,000 sf.

Unless specifically identified on the Preliminary Plan attached hereto and marked as Exhibit B; structure setbacks shall be as follows. No building or structure, other than: a freestanding project identification sign, light standards, or flag poles will be located within the following setbacks:

- a) twenty-five (25) feet from the front yard
 - b) ten (10) feet from the side yard
 - c) twenty-five (25) foot from the rear yard
2. Maximum height of all structures shall be fifty (50) feet.

D. PARKING AND LOADING REQUIREMENTS

1. Parking and loading spaces for this development will be as required in the City of Chesterfield Code.
2. No construction related parking shall be permitted within the Kehrs Mill Road, Strecker Road, or Church Road rights-of-way.
3. Temporary construction parking on non-paved surfaces shall be prohibited to limit mud from construction activities being tracked onto the pavement causing hazardous roadway and driving conditions.

E. LANDSCAPE AND TREE REQUIREMENTS

1. The developer shall adhere to the Landscape and Tree Preservation Requirements of the City of Chesterfield Code.
2. A thirty (30) foot Landscape Buffer shall be required around the entire perimeter of the PUD except as identified on the Preliminary Plan attached hereto and marked as Exhibit B.
3. Landscaping Easements are established as a protected area for vegetative landscaping only. Structures of any size, whether temporary or permanent, are not permitted within landscape easements. Landscaping as approved by the City of Chesterfield during site plan review is required to be maintained and preserved indefinitely by the resident or a Home Owners Association. Failure to maintain or preserve landscape easements may result in inspection and issuance of fines by the City of Chesterfield. This language shall be included on all plans, plats, ordinances, subdivision indentures and other appropriate (written) documents for this development.
4. A minimum of 34% Common Open Space shall be required for this PUD.

F. SIGN REQUIREMENTS

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

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 adhere to the Architectural Review Standards of the City of Chesterfield Code.

I. ACCESS/ACCESS MANAGEMENT

1. Access to this development from Kehrs Mill Road shall be restricted to one bi-directional entrance located to provide adequate sight distance and constructed to St. Louis County standards as direct by the Saint Louis County Department of Highways and Traffic and the City of Chesterfield.

2. Access to this development from Church Road shall be by no more than one (1) street approach as directed by the City of Chesterfield.
3. No lot shall be allowed direct access to Kehrs Mill Road, Strecker Road, or Church Road.
4. 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 St. Louis County Department of Highways and Traffic.

J. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. 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 and the Missouri Department of Transportation. No gate installation will be permitted on public right-of-way.
2. 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.
3. Provide a five (5) foot sidewalk, conforming to ADA standards, along the improved Kehrs Mill Road and provide any additional right of way along the entire frontage of the site as directed by the St. Louis County Department of Highways and Traffic and City of Chesterfield.
4. Improve Church Road along the entire frontage of the site to City of Chesterfield standards, including pavement, required tapers, storm drainage facilities, and sidewalk as directed by the City of Chesterfield. Improvements shall be wholly contained within the City of Chesterfield limits as directed by the City of Chesterfield. Improvements along Church Road from Strecker Road to the development entrance shall be completed prior to the issuance of building permits exceeding 60% of the approved dwelling units. A cash escrow may be provided in lieu of constructing the required improvements for the portion of Church Road from the entrance to the development to the northwest corner of the subdivision. Delays due to utility relocation and/or adjustment, for which the Developer is responsible monetarily, shall not constitute a cause to issue permits in excess of 60%.
5. Obtain approvals from the City of Chesterfield, St. Louis County Department of Highways and Traffic, and the City of Wildwood for locations of proposed curb cuts, areas of new dedication, and roadway improvements.

K. TRAFFIC STUDY

1. Provide a traffic study as directed by the City of Chesterfield and/or 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. POWER OF REVIEW

Either Councilmember of the Ward where a development is proposed or the Mayor may request that the plan for a development be reviewed and approved by the entire City Council. This request must be made no later than twenty-four (24) hours after Planning Commission review. The City Council will then take appropriate action relative to the proposal. The plan for a development, for purposes of this section, may include the site development plan, site development section plan, site development concept plan, landscape plan, lighting plans, architectural elevations, sign package or any amendment thereto.

M. STORM WATER

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 channel protection measures are to be provided in each watershed as required by the City of Chesterfield. The storm water management facilities shall be operational prior to paving of any driveways or parking areas in non-residential development or issuance of building permits exceeding sixty percent (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(s).
3. Emergency overflow drainage ways to accommodate runoff from the 100-year storm event shall be provided for all storm sewers, as directed by the City of Chesterfield. Emergency overflow drainage ways to accommodate a breach of the upstream reservoir shall be assessed as directed by the Metropolitan St. Louis Sewer District.
4. Offsite storm water shall be picked up and piped to an adequate natural discharge point. Such bypass systems must be adequately designed
5. The lowest opening of all structures shall be set at least two (2) feet higher than the one hundred (100) year high water elevation in detention/retention

- facilities. All structures shall be set at least 30 feet horizontally from the limits of the one hundred (100) year high water.
6. Locations of site features such as lakes and detention ponds must be approved by the City of Chesterfield and the Metropolitan Saint Louis Sewer District.
 7. Provide all necessary storm water and detention calculations to the City of Wildwood.

N. SANITARY SEWER

1. Provide public sewer service for this site in accordance with the Metropolitan St. Louis Sewer District.

O. GEOTECHNICAL REPORT

1. Prior to Site Development Plan approval, 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 Services. 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 development in, or alteration of, the floodplain is proposed, the Developer shall submit a Floodplain Study and Floodplain Development Permit/Application to the City of Chesterfield and the City of Wildwood for approval. As approved by the City of Chesterfield, The Floodplain Study must be approved prior to the approval of the Site Development Plan. The Floodplain Development Permit must be approved prior to the approval of a grading permit or improvement 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. Elevation Certificates will be required for any structures within the Special Flood Hazard Area or the Supplemental Protection Area. All new roads within and adjacent to this site shall be constructed at least one (1) foot above the base flood elevation of the Special Flood Hazard Area. Improvements to existing roadways shall be required as necessary to provide

- at least one access route to each lot that is at least one (1) foot above the base flood elevation. Consult Chapter 14 of the City Code for specific requirements.
3. Road improvements and right-of-way dedication shall be completed prior to the issuance of an occupancy permit. If development phasing is anticipated, the developer shall complete road improvements, right-of-way dedication, and access requirements for each phase of development as directed by the Saint Louis County Department of Highways and Traffic. As previously noted, the delays due to utility relocation and adjustments will not constitute a cause to allow occupancy prior to completion of road improvements.
 4. A twenty-foot Ingress/Egress Easement exists on-site which may be used at any time by the owners of 1514 Pacland Place, a lot to the north in the McKenna Pacland Place Subdivision. Said easement is shown on the Preliminary Plan attached hereto and marked as Exhibit B. .

II. TIME PERIOD FOR SUBMITTAL SITE DEVELOPMENT PLANS

- A. 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 eighteen (18) months of the date of approval of the change of zoning by the City.
- B. Failure to comply with these submittal requirements will result in the expiration of the change of zoning and will require a new public hearing.
- C. 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.
- D. Where due cause is shown by the developer, this time interval for plan submittal may be extended through appeal to and approval by the Planning Commission.

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 PLAN SUBMITTAL REQUIREMENTS

The Site Development Plan shall include, but not be limited 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. Outboundary plat and legal description of property.
3. Density calculations.
4. Parking calculations. Including calculation for all off street parking spaces, required and proposed, and the number, size and location for handicap designed.
5. Provide openspace percentage for overall development including separate percentage for each lot on the plan.
6. Provide Floor Area Ratio (F.A.R.).
7. A note indicating all utilities will be installed underground.
8. A note indicating signage approval is separate process.
9. Depict the location of all buildings, size, including height and distance from adjacent property lines, and proposed use.
10. Specific structure and parking setbacks along all roadways and property lines.
11. Indicate location of all existing and proposed freestanding monument signs.
12. Zoning district lines, subdivision name, lot number, dimensions, and area, and zoning of adjacent parcels where different than site.
13. Floodplain boundaries.
14. 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, significant natural features, such as wooded areas and rock formations, and other karst features that are to remain or be removed.
15. 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.

16. Indicate the location of the proposed storm sewers, detention basins, sanitary sewers and connection(s) to the existing systems.
17. 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.
18. Address trees and landscaping in accordance with the City of Chesterfield Code.
19. Comply with all preliminary plat requirements of the City of Chesterfield Subdivision Regulations per the City of Chesterfield Code.
20. 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.
21. Provide comments/approvals from the appropriate Fire District, Monarch Levee District, Spirit of St. Louis Airport, Metropolitan St. Louis Sewer District (MSD) and the St. Louis County Department of Highways and Traffic.
22. Compliance with Sky Exposure Plane.
23. Compliance with the current Metropolitan Sewer District Site Guidance as adopted by the City of Chesterfield.

V. TRUST FUND CONTRIBUTION

A. ROADS

The developer shall be required to contribute to the Traffic Generation Assessment (TGA) to the Eatherton – Kehrs Mill Road Trust Fund (Trust Fund No. 552). Traffic generation assessment contributions shall be deposited with St. Louis County prior to the issuance of building permits. If development phasing is anticipated, the developer shall provide the traffic generation assessment contribution prior to issuance of building permits for each phase of development.

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 based on the following:

<u>Type of Development</u>	<u>Required Contribution</u>
Single Family	\$1,025.36/Parking Space

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

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

Credits for roadway improvements required will be awarded as directed by St. Louis County Highways and Traffic. Any portion of the roadway improvement contribution that remains, following completion of road improvements required by the development, shall be retained in the appropriate Trust Fund. Credits for roadway improvements will be as approved by the City of Chesterfield and/or St. Louis County Department of Highways and Traffic.

Allowable credits for required roadway improvements will be awarded as directed by the Saint Louis County Department of Highways and Traffic and the City of Chesterfield. Sidewalk construction and utility relocation, among other items, are not considered allowable credits.

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

The amount of the required contribution, if not approved for construction by January 1, 2014, 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 Saint Louis County Department of Highways and Traffic.

B. SANITARY SEWER

1. Caulks Creek surcharge of \$2,750 per acre shall apply to this area. On this basis of 58.15 acres, the total fee is \$159,912.50. There are no other sub-district/recoupment fees associated with this site.

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.

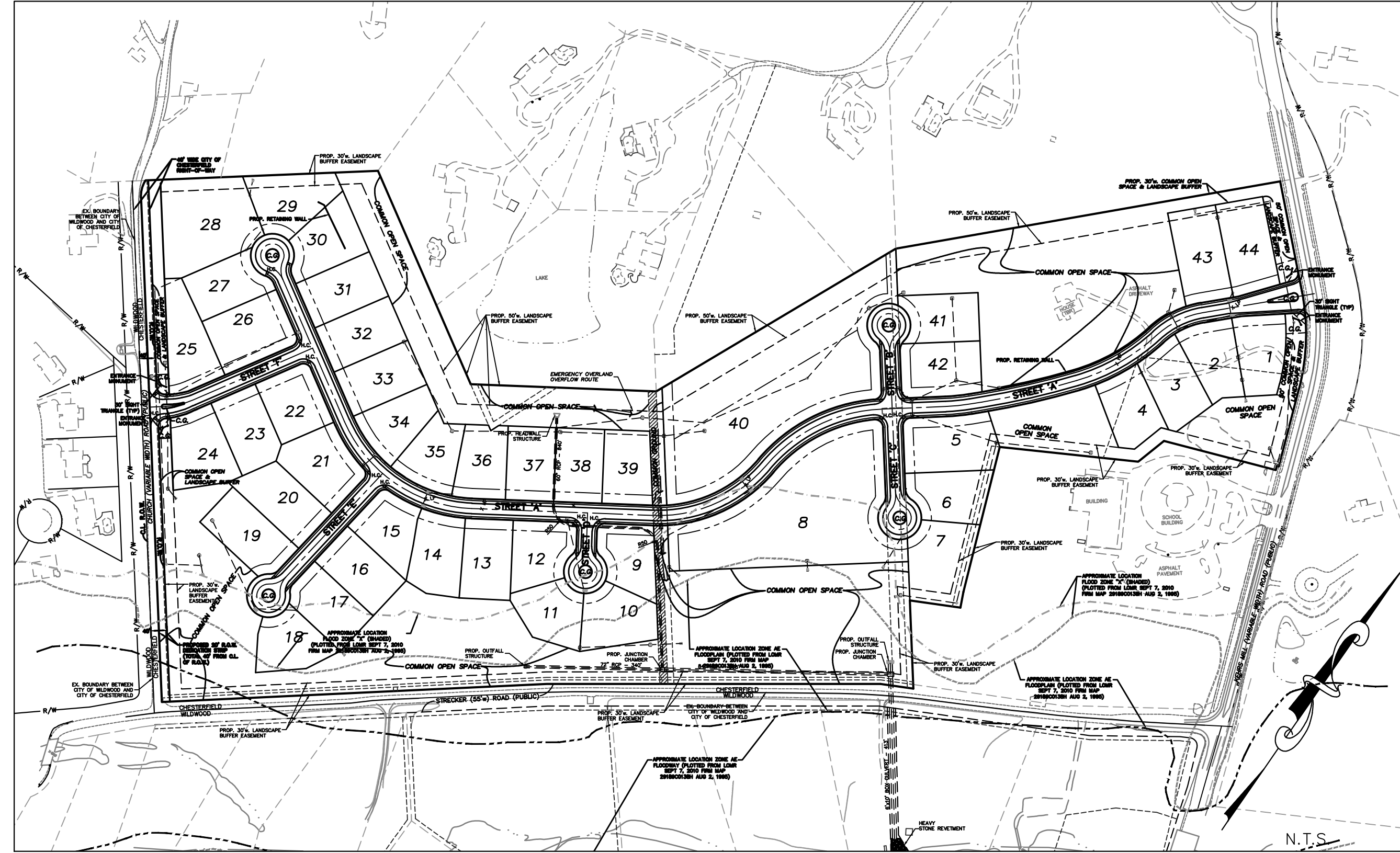
VII. ENFORCEMENT

- 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.

Arbors at Kehrs Mill

A TRACT OF LAND BEING ADJUSTED LOT 8 OF "ST. MARY'S/McGEE BOUNDARY ADJUSTMENT PLAT (P.B. 342, PG. 7)
PART OF LOT 'D' OF "McKENNA PACLAND LAKE" (P.B. 187, PG. 70)
AND PART OF FRACTIONAL SECTION 18 AND U.S. SURVEYS 124 AND 886
TOWNSHIP 45 NORTH, RANGES 3 AND 4 EAST OF THE FIFTH PRINCIPAL MERIDIAN
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

PRELIMINARY DEVELOPMENT PLAN



PROJECT ZIP CODE: 63005

SHEET INDEX

- 1.1 COVER SHEET
- 2.1 PRELIMINARY PLAN

SURVEYORS CERTIFICATION

THIS IS TO CERTIFY THAT WE HAVE, DURING THE MONTH OF JANUARY, 2013, AT THE REQUEST OF ARBORS AT KEHRS MILL LLC, PREPARED A PRELIMINARY DEVELOPMENT PLAN OF "ARBORS AT KEHRS MILL", A TRACT OF LAND BEING ADJUSTED LOT 8 OF "ST. MARY'S/McGEE BOUNDARY ADJUSTMENT PLAT (P.B. 342, PG. 7) PART OF LOT 'D' OF "McKENNA PACLAND LAKE" (P.B. 187, PG. 70) AND PART OF FRACTIONAL SECTION 18 AND U.S. SURVEYS 124 AND 886, TOWNSHIP 45 NORTH, RANGES 3 AND 4 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI. THIS PLAN IS NOT A SURVEY AND DOES NOT MEET THE "MISSOURI MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS" (10 CSR 30-2 AND 4 CSR 30-16 EFFECTIVE DATE DECEMBER 30, 1994).

THE STERLING COMPANY

George J. Gower - Vice President
M.O. Reg. L.S. - #2336

MSD Base Map - 19U
MSD P #
Highway & Traffic #

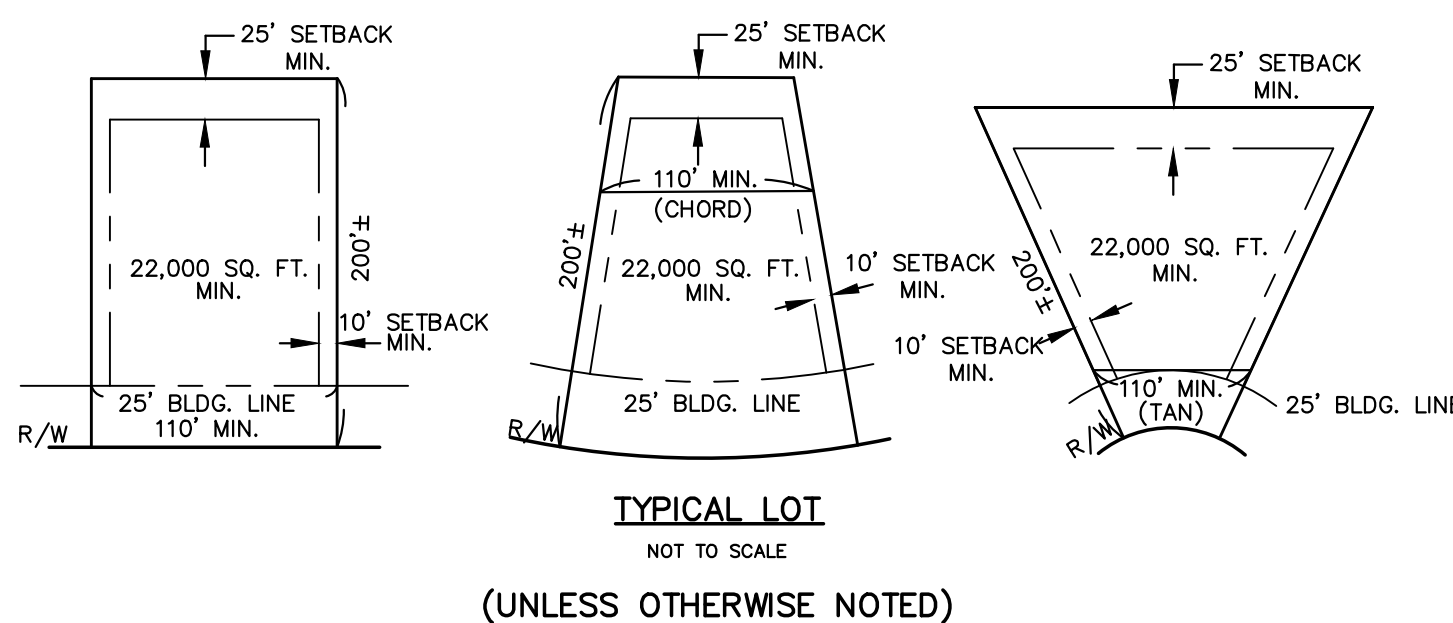
GENERAL NOTES:

- THIS SITE IS IN THE FOLLOWING SERVICE DISTRICTS:
METROPOLITAN ST. LOUIS SEWER DISTRICT
MONARCH FIRE PROTECTION DISTRICT
ROCKWOOD R-6 SCHOOL DISTRICT
MISSOURI AMERICAN WATER COMPANY
AMEREN UE
AT&T
LAEGLE GAS COMPANY
CHARTER COMMUNICATIONS
- THIS SITE PLAN WILL MEET ALL CITY OF CHESTERFIELD REQUIREMENTS.
- SANITARY SEWER CONSTRUCTION AND CONNECTIONS SHALL BE AS APPROVED BY THE METROPOLITAN ST. LOUIS SEWER DISTRICT AND IN ACCORDANCE WITH THE STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES.
- STORM WATER SYSTEM SHALL BE DESIGNED PURSUANT TO THE CITY OF CHESTERFIELD AND METROPOLITAN ST. LOUIS SEWER DISTRICT REQUIREMENTS AND DISCHARGE AT AN ADEQUATE NATURAL DISCHARGE POINT.
- ALL NATURAL WATERCOURSES AND WETLANDS SHALL BE BUFFERED AS REQUIRED UNDER CHAPTER 12 OF THE CITY OF CHESTERFIELD MUNICIPAL CODE.
- NO SLOPES SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL), UNLESS JUSTIFIED BY GEOTECHNICAL REPORT WHICH HAS BEEN ACCEPTED/APPROVED BY THE CITY OF CHESTERFIELD. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SLOPES IN EXCESS OF 3:1. STEEP SLOPES ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY OF CHESTERFIELD. REVIEW OF THE PROPOSED STEEP SLOPE WILL BE CONCURRENT WITH THE REVIEW OF THE GRADING PERMIT OR IMPROVEMENT PLANS FOR THE PROJECT.
- THE LOCATION OF STORM SEWER IMPROVEMENTS ARE APPROXIMATE ONLY. ACTUAL LOCATION SHALL BE DETERMINED BY FIELD CONDITIONS AND SHALL BE INDICATED ON THE IMPROVEMENT PLANS.
- GRADING SHALL BE PER CITY OF CHESTERFIELD STANDARDS. SOURCE OF TOPOGRAPHY MSD ORTHOTOPO.
- STREET TREES AND STREET LIGHTS (UNLESS OTHERWISE DEPICTED) SHALL BE PER CITY OF CHESTERFIELD STANDARDS.
- NEAREST MAJOR INTERSECTION IS WILDHORSE CREEK ROAD AND KEHRS MILL ROAD.
- ALL SIDEWALKS SHALL BE CONSTRUCTED TO ADA AND THE CITY OF CHESTERFIELD STANDARDS.
- EXISTING OWNERS: CATHOLIC CEMETERIES OF THE ARCHDIOCESE
17015 CHURCH
CHESTERFIELD, MO 63005-4319
- SITE TO CONFORM TO THE CITY OF CHESTERFIELD TREE REQUIREMENTS.
- MAXIMUM HEIGHT OF THE RESIDENCES WILL NOT EXCEED 50 FEET.
- SITE PLAN WILL MEET ALL CITY REQUIREMENTS.
- LANDSCAPE EASEMENTS ARE ESTABLISHED AS A PROTECTED AREA FOR VEGETATIVE LANDSCAPING ONLY. STRUCTURES OF ANY SIZE, WHETHER TEMPORARY OR PERMANENT, ARE NOT PERMITTED WITHIN LANDSCAPE EASEMENTS. LANDSCAPING AS APPROVED BY THE CITY OF CHESTERFIELD DURING SITE PLAN REVIEW IS REQUIRED TO BE MAINTAINED AND PRESERVED INDEFINITELY BY THE RESIDENT OR A HOME OWNERS ASSOCIATION. FAILURE TO MAINTAIN OR PRESERVE LANDSCAPE EASEMENTS MAY RESULT IN INSPECTION AND ISSUANCE OF FINES BY THE CITY OF CHESTERFIELD. THIS LANGUAGE SHALL BE INCLUDED ON ALL PLANS, PLATS, ORDINANCES, SUBDIVISION INDENTURES, AND OTHER APPROPRIATE (WRITTEN) DOCUMENTS FOR THIS DEVELOPMENT.

SITE INFORMATION

LOCATOR NUMBERS: 19U420248
EXISTING ZONING: E-1, E-2 AND LLR
PROPOSED ZONING: P.U.D. - PLANNED UNIT DEVELOPMENT
GROSS AREA OF SITE: 58.15 ACRES
DENSITY CALCULATIONS: $58.15 \text{ AC} \times 43,560 \text{ SQ.FT./AC.} = 2,533,044 \text{ SQ.FT.}$
 $(43,560 \text{ SQ.FT./LOT}) = 58 \text{ LOTS ALLOWED}$
AVERAGE LOT SIZE: 30,926 S.F.
MAXIMUM NUMBER OF UNITS ALLOWED: 58
NUMBER OF UNITS PROPOSED: 44
LOT DEVELOPMENT REQUIREMENTS:
FRONT YARD SETBACK 25'
SIDE YARD SETBACK 10'
REAR YARD SETBACK 25'
MIN. LOTS SIZE 22,000 SQ. FT.
** LOTS 5, 6 & 7 WILL BE 30' REAR YARD SETBACK AND LOT 40 WILL HAVE A 125' REAR YARD SETBACK

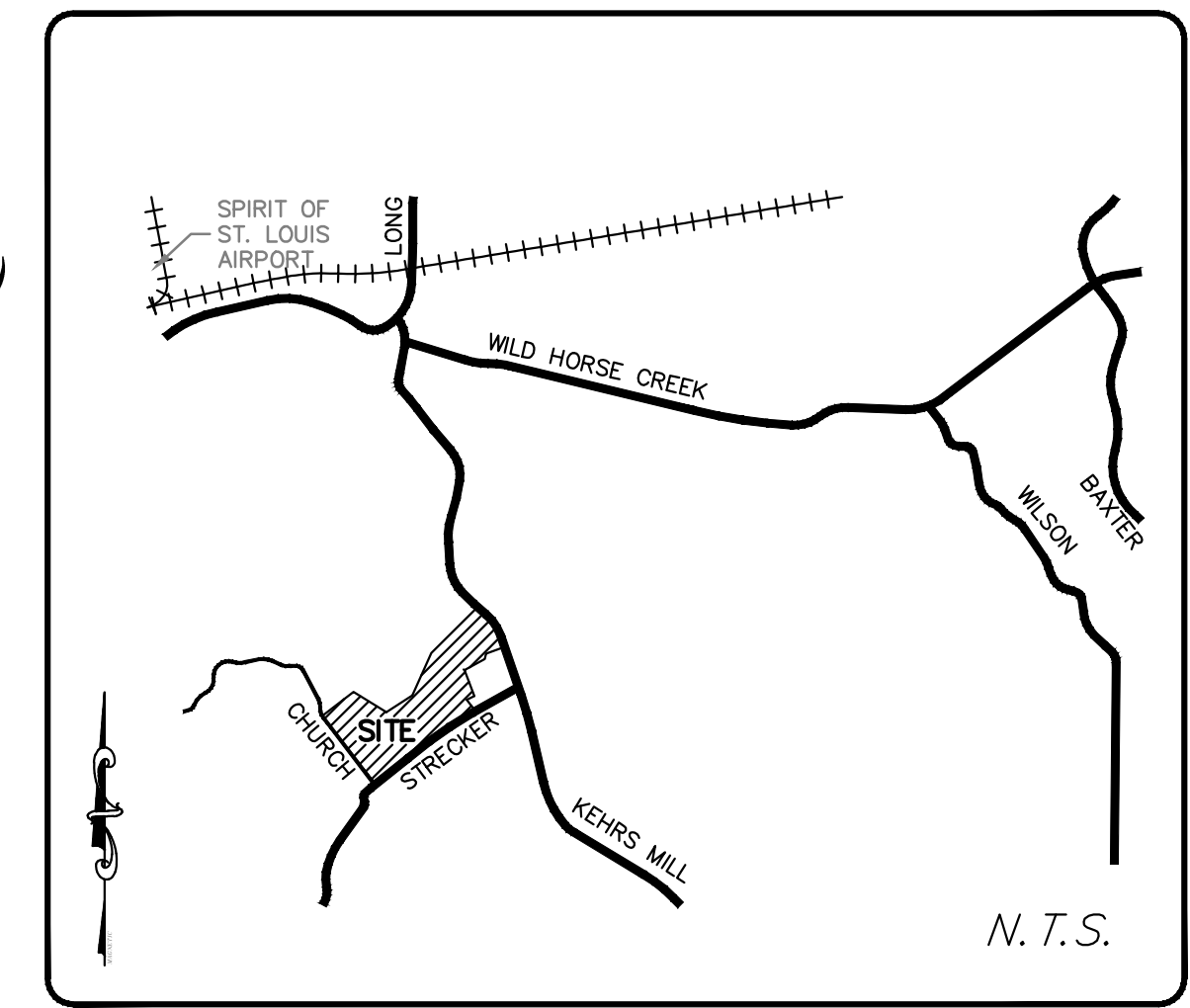
NUMBER OF PARKING SPACES: TWO PER UNIT = 88 SPACES.
PROPOSED STREETS SHALL BE PUBLIC AND BUILT TO THE CITY OF CHESTERFIELD STANDARDS.
STREET AREA = 4.7 ACRES
COMMON OPEN SPACE = 20.0 ACRES WHICH EQUALS 34% OF THE SITE.
COMMON GROUND = 0.53 ACRES WHICH EQUALS 0.9% OF THE SITE.
TOTAL COMMON GROUND = 20.5 ACRES WHICH EQUALS 35.6% OF THE SITE.
FLOOD MAP: FIRM NO. 29189C0138H DATED 08-02-95



LEGAL DESCRIPTION

A TRACT OF LAND BEING PART OF LOTS 1 AND 2 OF THE SUBDIVISION IN PARTITION OF THE SCHUIZE ESTATE AS MADE BY COMMISSIONERS IN MARCH IN THE ST. LOUIS LAND COURT CASE NO. 3, MARCH TERM 1860, A CERTIFIED COPY OF WHICH IS RECORDED IN BOOK 253 PAGE 48 OF THE ST. LOUIS CITY RECORDS; BEING ADJUSTED LOT 8 OF "ST. MARY'S/McGEE BOUNDARY ADJUSTMENT PLAT", AS SHOWN IN PLAT BOOK 342 PAGE 7 OF THE ST. LOUIS COUNTY RECORDS; BEING PART OF LOT D OF "McKENNA PACLAND LAKE", A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 187 PAGE 70 OF THE ST. LOUIS COUNTY RECORDS AND SHOWN ON "BOUNDARY ADJUSTMENT PLAT AND EASEMENT PLAT OF LOT D OF McKENNA PACLAND LAKE AND U.S. SURVEY 124 AND FRACTIONAL SECTION 18, TOWNSHIP 45 NORTH - RANGE 4 EAST" AS RECORDED IN PLAT BOOK 202 PAGE 4 OF THE ST. LOUIS COUNTY RECORDS; LYING PARTLY IN U.S. SURVEY 124, TOWNSHIP 45 NORTH - RANGE 3 EAST AND TOWNSHIP 45 NORTH - RANGE 4 EAST, IN U.S. SURVEY 886 AND FRACTIONAL SECTION 18, TOWNSHIP 45 NORTH - RANGE 4 EAST, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT THE INTERSECTION OF THE NORTHWEST LINE OF U.S. SURVEY 124 WITH THE RANGE LINE BETWEEN TOWNSHIP 45 NORTH - RANGE 3 EAST AND TOWNSHIP 45 NORTH - RANGE 4 EAST; SAID POINT BEING ALSO THE SOUTHWEST CORNER OF LOT C OF AFORESAID "McKENNA PACLAND LAKE"; THENCE SOUTHEASTWARDLY ALONG THE SOUTHWEST LINE OF LOTS C AND D OF "McKENNA PACLAND LAKE" SOUTH 58 DEGREES 11 MINUTES 10 SECONDS EAST 579.24 FEET TO THE MOST SOUTHWESTERN POINT ON THE NEW PARCEL LINE SHOWN ON THE "BOUNDARY ADJUSTMENT PLAT AND EASEMENT PLAT OF LOT D OF McKENNA PACLAND LAKE AND U.S. SURVEY 124 AND FRACTIONAL SECTION 18, TOWNSHIP 45 NORTH - RANGE 4 EAST"; THENCE NORTHEASTWARDLY ALONG SAID LAST MENTIONED LINE NORTH 57 DEGREES 28 MINUTES 02 SECONDS EAST 461.85 FEET TO THE MOST WESTERN CORNER OF ADJUSTED LOT 8 OF AFORESAID "ST. MARY'S/McGEE BOUNDARY ADJUSTMENT PLAT"; THENCE NORTHWARDLY ALONG THE WEST LINE OF SAID ADJUSTED LOT 8 NORTH 24 DEGREES 29 MINUTES 17 SECONDS EAST 694.09 FEET TO THE MOST SOUTHERN CORNER OF PROPERTY NOW OR FORMERLY OF ROBERT J. LIEBE, JR., TRUSTEE AND LINDA LIEBE, TRUSTEE, AS DESCRIBED IN DEED RECORDED IN BOOK 10265 PAGE 921 OF THE ST. LOUIS COUNTY RECORDS; THENCE NORTHEASTWARDLY ALONG THE SOUTHWEST LINE OF SAID LIEBE PROPERTY NORTH 45 DEGREES 20 MINUTES 59 SECONDS EAST 970.85 FEET TO A POINT IN THE SOUTHWEST LINE OF KEHRS MILL ROAD, AS WIDENED; SAID POINT BEING ALSO THE MOST WESTERN CORNER OF PARCEL NO. 5 CONVEYED TO ST. LOUIS COUNTY BY DEED RECORDED IN BOOK 11262 PAGE 2349 OF THE ST. LOUIS COUNTY RECORDS; THENCE IN A SOUTHEASTWARDLY DIRECTION ALONG THE RIGHT-OF-WAY LINE OF KEHRS MILL ROAD THE FOLLOWING COURSES AND DISTANCES: SOUTH 45 DEGREES 53 MINUTES 28 SECONDS EAST 279.30 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS SOUTH 44 DEGREES 08 MINUTES 32 SECONDS WEST 545.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 245.05 FEET AND SOUTH 20 DEGREES 07 MINUTES 44 SECONDS EAST 199.08 FEET TO A POINT IN THE NORTH LINE OF A PARCEL DESCRIBED IN DEED TO ST. LOUIS COUNTY BY DEED RECORDED IN BOOK 10125 PAGE 1744 AND RE-RECORDED IN BOOK 10337 PAGE 2047 OF THE ST. LOUIS COUNTY RECORDS; THENCE CONTINUING ALONG THE KEHRS MILL ROAD RIGHT-OF-WAY AND SAID WIDENED PARCEL SOUTH 69 DEGREES 52 MINUTES 16 SECONDS WEST 5.00 FEET AND SOUTH 20 DEGREES 07 MINUTES 44 SECONDS EAST 10.67 FEET TO THE NORTHEAST CORNER OF A PARCEL CONVEYED TO ST. LOUIS COUNTY BY DEED RECORDED IN BOOK 12356 PAGE 298 OF THE ST. LOUIS COUNTY RECORDS; THENCE WESTWARDLY ALONG THE NORTH LINE OF SAID LAST MENTIONED PARCEL SOUTH 69 DEGREES 52 MINUTES 16 SECONDS WEST 6.00 FEET TO THE NORTHWEST CORNER THEREOF; THENCE LEAVING SAID RIGHT-OF-WAY LINE SOUTH 69 DEGREES 52 MINUTES 16 SECONDS WEST 281.67 FEET TO A POINT; THENCE SOUTH 16 DEGREES 24 MINUTES 48 SECONDS WEST 82.37 FEET TO A POINT; THENCE SOUTH 61 DEGREES 22 MINUTES 34 SECONDS WEST 346.47 FEET TO A POINT; THENCE SOUTH 20 DEGREES 40 MINUTES 02 SECONDS EAST 371.99 FEET TO A POINT; THENCE SOUTH 24 DEGREES 10 MINUTES 02 SECONDS EAST 40.00 FEET TO A POINT; THENCE SOUTH 63 DEGREES 20 MINUTES 14 SECONDS WEST 127.09 FEET TO A POINT IN THE NORTHEAST LINE OF AFORESAID ADJUSTED LOT 8 OF "ST. MARY'S/McGEE BOUNDARY ADJUSTMENT PLAT"; THENCE SOUTHEASTWARDLY ALONG SAID NORTHEAST LINE SOUTH 37 DEGREES 00 MINUTES 22 SECONDS EAST 219.46 FEET TO A POINT IN THE NORTHWEST LINE OF STRECKER ROAD, VARYING WIDTH; THENCE SOUTHWESTWARDLY ALONG SAID NORTHWEST LINE THE FOLLOWING COURSES AND DISTANCES: SOUTH 63 DEGREES 20 MINUTES 17 SECONDS WEST 82.74 FEET, SOUTH 55 DEGREES 16 MINUTES 49 SECONDS WEST 830.16 FEET AND SOUTH 52 DEGREES 35 MINUTES 48 SECONDS WEST 958.92 FEET TO ITS INTERSECTION WITH THE NORTHEAST LINE OF CHURCH ROAD, VARYING WIDTH; THENCE NORTHWESTWARDLY ALONG SAID NORTHWEST LINE THE FOLLOWING COURSES AND DISTANCES: NORTH 37 DEGREES 05 MINUTES 15 SECONDS WEST 1,256.58 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 52 DEGREES 54 MINUTES 45 SECONDS EAST 75.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 42.07 FEET AND NORTH 04 DEGREES 56 MINUTES 46 SECONDS WEST 2.90 FEET TO A POINT IN THE AFORESAID NORTHWEST LINE OF U.S. SURVEY 124; THENCE NORTHEASTWARDLY ALONG SAID NORTHWEST LINE OF U.S. SURVEY 124, BEING ALSO ALONG THE SOUTHWEST LINES OF PROPERTY NOW OR FORMERLY OF ROBERT THOMSON AND WIFE AS DESCRIBED IN DEED RECORDED IN BOOK 4106 PAGE 239 OF THE ST. LOUIS COUNTY RECORDS AND PROPERTY NOW OR FORMERLY CLIFFORD FRAZIER AND WIFE BY DEED RECORDED IN BOOK 5933 PAGE 179 OF THE ST. LOUIS COUNTY RECORDS, NORTH 52 DEGREES 55 MINUTES 10 SECONDS EAST 578.94 FEET TO THE POINT OF BEGINNING. THE ABOVE TRACT OF LAND NOW KNOWN AS LOT 1 OF ST. MARY'S INSTITUTE LOT SPLIT PLAT, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 355 PAGES 437 AND 438 OF THE ST. LOUIS COUNTY RECORDS.



LOCATION MAP

N.T.S.

LEGEND

EXISTING		PROPOSED
5/4"	CONTOURS	(-4.1)
25%	SPOT ELEVATIONS	433.0
---	CENTER LINE	---
---	BUILDINGS, ETC.	---
---	TREE LINE	---
x	FENCE	---
---	STORM SEWERS	---
---	SANITARY SEWERS	---
---	CATCH BASIN	---
---	AREA INLET	---
---	GRATED INLET	---
---	STORM MANHOLE	---
---	SANITARY MANHOLE	---
---	FLARED END SECTION	---
---	CLEANOUT	---
---	LATERAL CONNECTION	---
---	UTILITY OR POWER POLE	---
---	FIRE HYDRANT	---
---	TEST HOLE	---
---	PAVEMENT	---
---	GAS MAIN & SIZE	---
---	WATER MAIN & SIZE	---
---	TELEPHONE	---
---	ELECTRIC (U) UNDERGROUND	---
---	ELECTRIC (O) OVERHEAD	---
---	FLOW LINE	---
---	TO BE REMOVED	---
---	TOP OF CURB	---
---	SWALE	---
---	LIGHT STANDARD	---
---	STREET SIGN	---
---	PARKING STALLS	---
---	YARD LIGHT	---
---	COMMON REFUSAL	---
---	NO REFUSAL	---

ISSUE	REMARKS/DATE
1	18/13/13-CITY OF CHESTERFIELD COMMENTS
2	7/8/13-CITY OF CHESTERFIELD COMMENTS
3	8/13/13-CITY COMMENTS

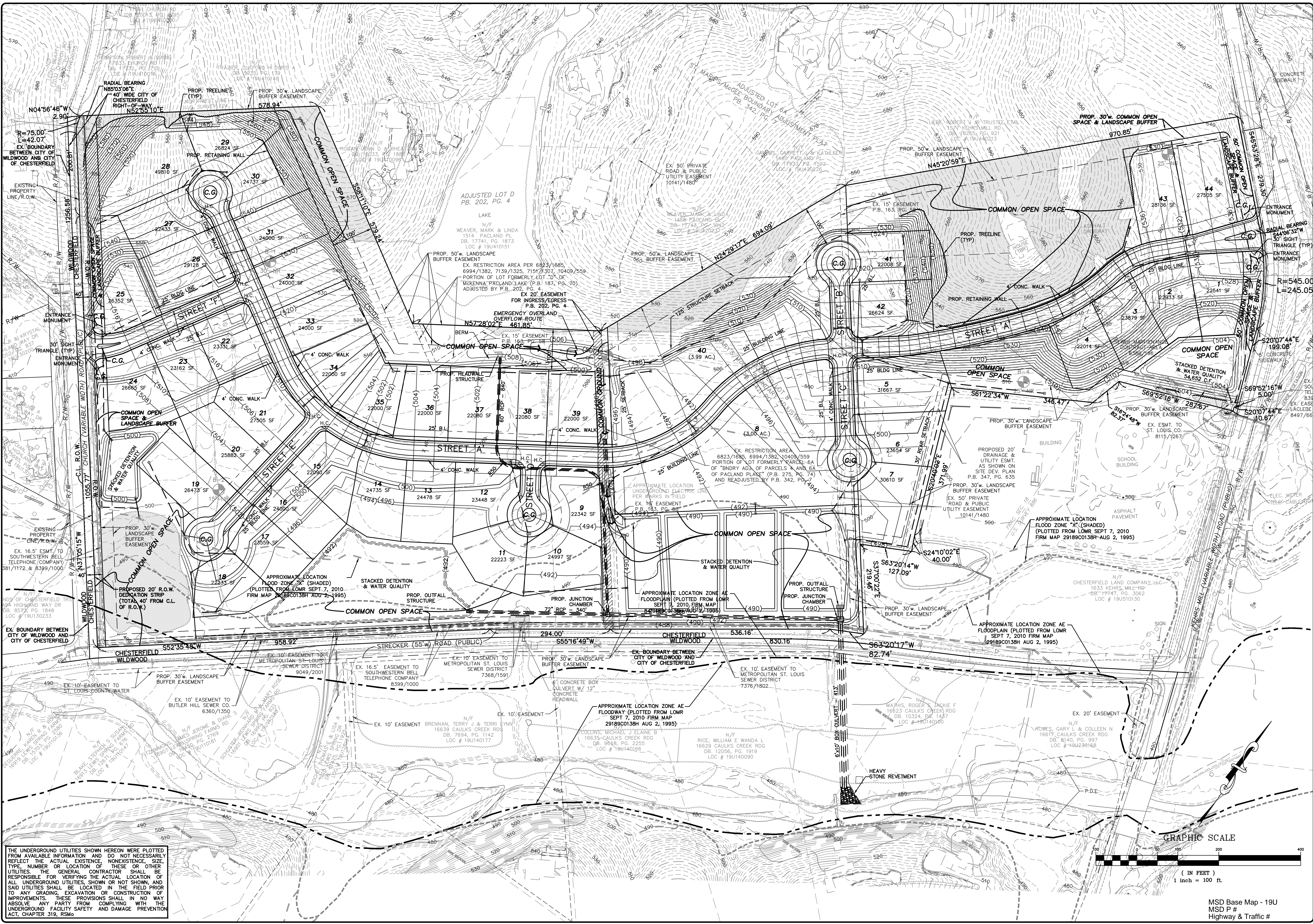
Arbors at Kehrs Mill LLC
5091 New Baumgarner Road
St. Louis, Missouri 63129
Ph. (314) 487-6717

THE STERLING COMPANY
ENGINEERS & SURVEYORS
5052 New Baumgarner Road
St. Louis, Missouri 63129
Ph. 314-487-0440 Fax 314-487-8944
www.sterling-eng-survey.com
Corporate Certificate of Authority #001348

Arbors at Kehrs Mill
Chesterfield, Missouri
COVER SHEET

Date: 8/13/2013
MICHAEL G. BOERDING
License No. MO E-28643
Civil Engineer

Job Number
12-06-154
Date
08-20-13
Designed: MF Sheet
Drawn: LG 1.1
Checked: PRE



THE UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMo.

ISSUE	REMARKS/DATE
1	8/13/2013 CITY OF CHESTERFIELD COMMENTS
2	7/8/13/2013 CITY OF CHESTERFIELD COMMENTS
3	8/13/13 CITY COMMENTS

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Arbors at Kehrs Mill
 Chesterfield, Missouri
PRELIMINARY PLAN

This Professional Engineer's seal and signature shall not be applied to any drawings or specifications unless the engineer has personally examined the drawings and specifications and is satisfied that they conform to the requirements of the contract and the applicable laws and regulations. The engineer shall not be responsible for any errors or omissions on the drawings or specifications unless the engineer has personally examined the drawings and specifications and is satisfied that they conform to the requirements of the contract and the applicable laws and regulations.

Date: 8/13/2013
 MICHAEL G. BOERDING
 License No. MO E-28643
 Civil Engineer

Job Number: 12-06-154
 Date: 08-20-13
 Designed: MF Sheet
 Drawn: LG 2.1
 Checked: PRE

MSD Base Map - 19U
 MSD P #
 Highway & Traffic #

"ARBORS AT KEHRS MILL"

A TRACT OF LAND LYING PARTLY IN U.S. SURVEY 124, TOWNSHIP 45 NORTH - RANGE 3 EAST, AND TOWNSHIP 45 NORTH - RANGE 4 EAST, IN U.S. SURVEY 886 AND FRACTIONAL SECTION 18, TOWNSHIP 45 NORTH - RANGE 5 EAST, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

"Upland Forest" areas (Sample Points 1 & 2):

1. Acreage: 19.5 ac (+/-) total
2. Forest Type: "Upland Forest" - typical mature woods
3. Species: Oaks, primarily black and white oak plus other oak varieties, are the dominant tree species, with a much smaller number of hickory (snagbark and pignut). Other species include some persimmon, dogwood, and a few redbud, with an occasional sugar maple or black walnut.
4. Density: 112 trees per acre (based upon average of typical sample plots)
5. Average Diameter: 12.8" DBH average (based upon average of 2 - 50' x 50' typical sample areas)
6. Ave. overstory DBH: 16.2" DBH average (based upon 372 total DBH inches divided by 23 trees total from 2 sample points)
7. Dominant species: Approx. 80% of stand is oak
8. Understory: Sample Point # 1: Understory trees include dogwood, redbud and some pau-pau, with an occasional cherry or sassafras. Shrubs include cornus and virginia creeper, with occasional areas of raspberry and multiflora rose. Groundcovers include large areas of May apple and ferns, and scattered areas of poison ivy, lichens and mosses, with other shade-tolerant herbaceous plants and wildflowers. Sample Point # 2: All understory growth has been removed and areas under existing trees are now maintained in a park-like setting with mowed lawn areas.
9. Apparent health: Generally good, except that many of the larger older trees along top of ridges have some deadwood and broken crowns.

Sample Points:

Sample Point	size/type	distance	size/type	distance	size/type	distance
S.P. 1	8' oak	12'	20' oak	60'	18' oak	10'
	18' oak	18'	4' dogwood	5'	18' oak	50'
	18' oak	18'	20' oak	50'	20' oak	40'
	12' oak	42'	15' oak	30'	14' oak	50'
	10' oak	25'	18' oak	55'		
S.P. 2	14' oak	10'	15' oak	27'	18' oak	10'
	12' oak	15'	20' oak	30'	18' oak	35'
	18' oak	15'	22' oak	20'	22' oak	30'

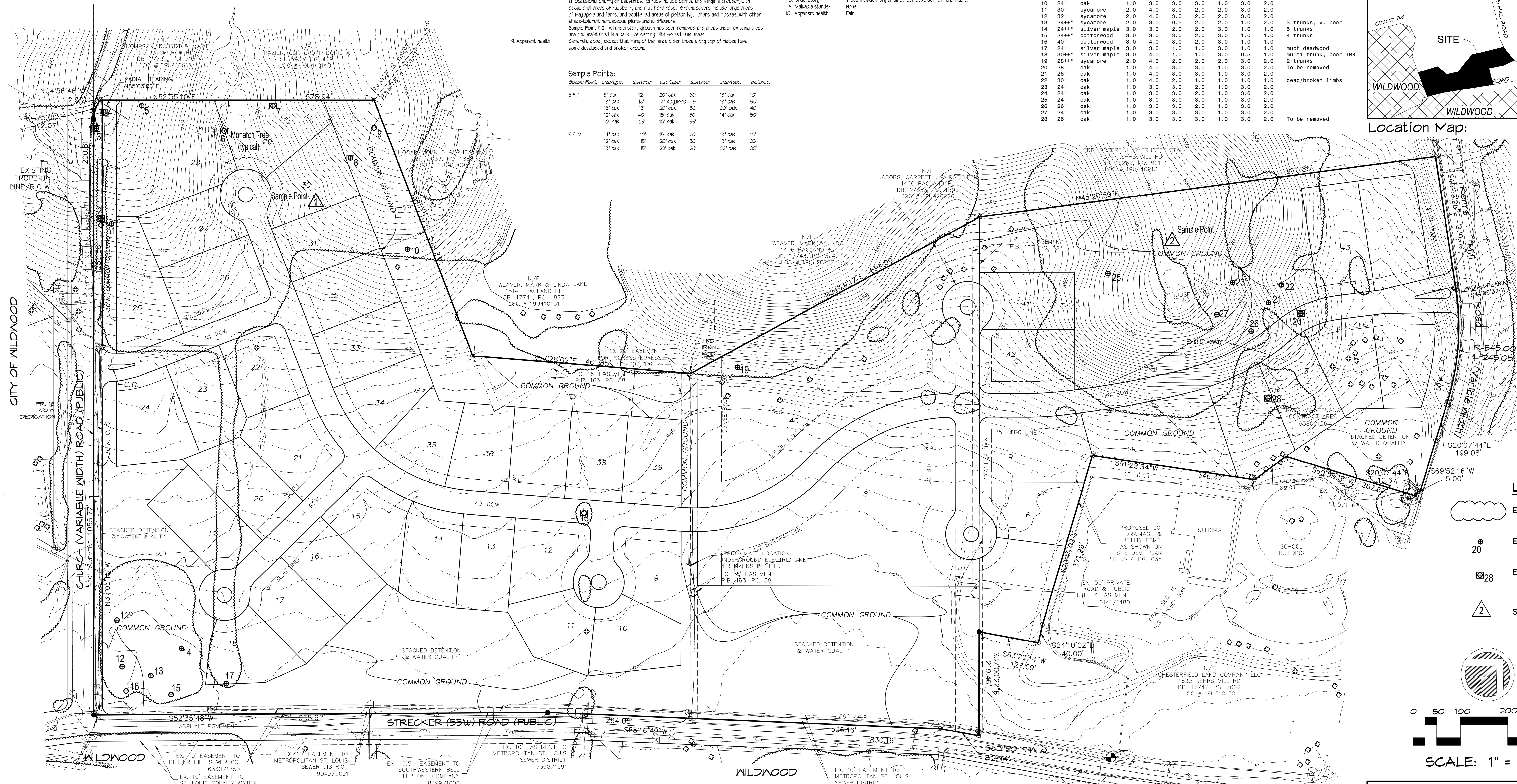
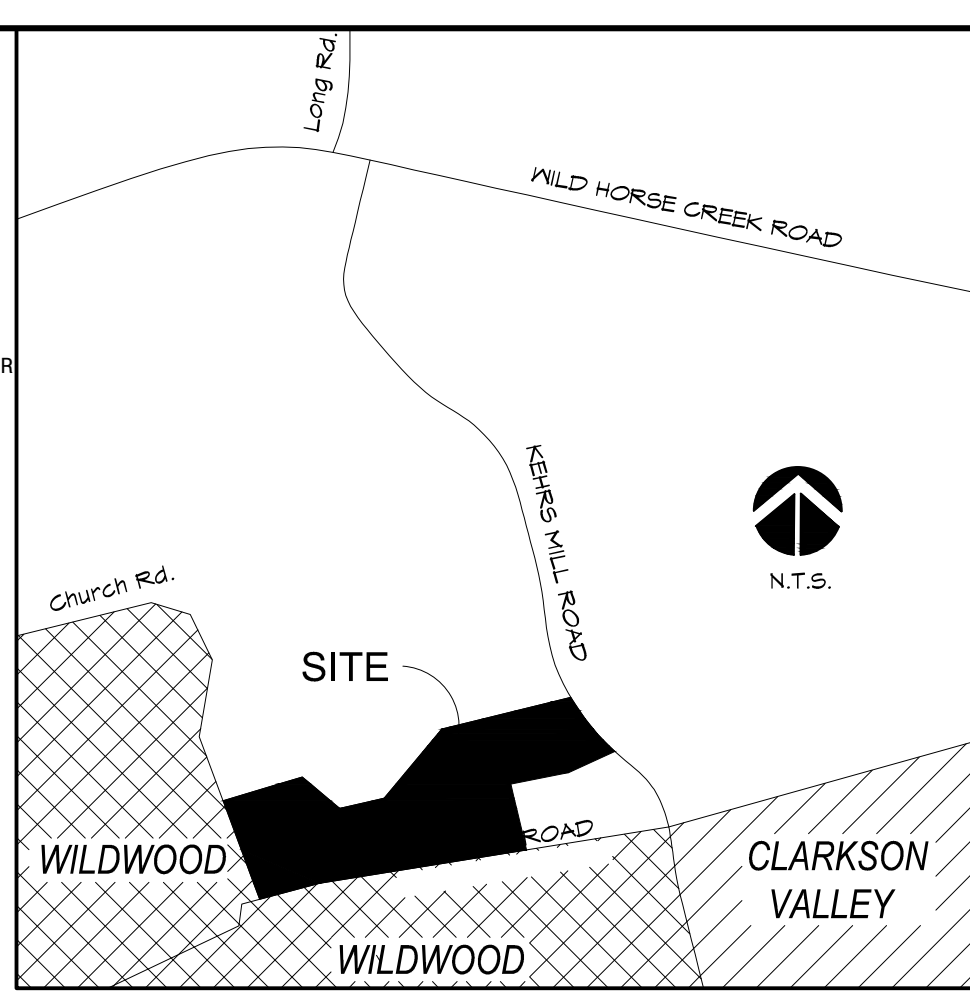
"Bottomland Forest" area (NE corner of Church & Strecker)

- Note: No Formal Sample Point in this area but evaluation as follows.
1. Acreage: 1.7 ac (+/-) total
 2. Forest Type: "Bottomland Forest" - generally the woods area in flood plain and along drainage ways
 3. Species: silver maple appears to be the dominant tree species, followed closely by cottonwood and boxelder. Other common species include sycamore, ash and elm. There is also a group of birch.
 4. Density: Estimated at about 50 trees per acre (generally more sparse than normal due to the nature of the area - previous cropland and pasture)
 5. Average Diameter: Not calculated - this area is not typical forest area.
 6. Ave. overstory DBH: Not calculated - this area is not typical forest area.
 7. Dominant species: Approx. 30% of stand is silver maple, with 25% being cottonwood.
 8. Understory: Trees include many small caliper boxelder, elm and maple.
 9. Valuable stands: None
 10. Apparent health: Fair

Monarch Trees

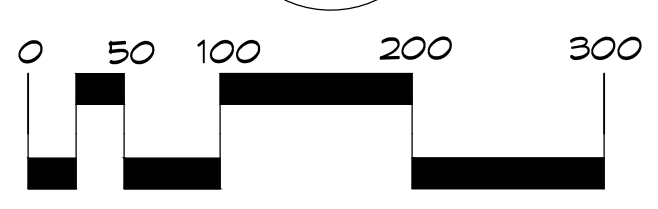
1 = Poor, 2 = Fair, 3 = Good, 4 = Excellent

No.	DBH	Type	Adapt.	DBH	Health	Canopy	Roots	Value	Other	Comments
1	28"	oak	1.0	4.0	3.0	3.0	1.0	3.0	2.0	To be removed
2	24"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	To be removed
3	24"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	To be removed
4	24"	oak	1.0	3.0	0.5	0.5	1.0	1.0	1.0	1/2 dead, crown v. poor TBR
5	28"	oak	1.0	4.0	3.0	2.0	1.0	2.0	2.0	
6	24"	oak	1.0	3.0	3.0	2.5	1.0	3.0	2.0	To be removed
7	28"	oak	1.0	4.0	3.0	3.0	1.0	3.0	2.0	To be removed
8	24"	oak	1.0	3.0	3.0	2.0	1.0	2.0	2.0	To be removed
9	24"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	
10	24"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	
11	30"	sycamore	2.0	4.0	2.0	2.0	3.0	1.0	1.0	
12	32"	sycamore	2.0	4.0	3.0	2.0	3.0	2.0	3.0	
13	24"	sycamore	2.0	3.0	0.5	2.0	2.0	1.0	2.0	3 trunks, v. poor
14	24"	silver maple	3.0	3.0	2.0	2.0	3.0	1.0	1.0	5 trunks
15	24"	cottonwood	3.0	3.0	3.0	2.0	3.0	1.0	1.0	4 trunks
16	40"	cottonwood	3.0	4.0	3.0	2.0	3.0	1.0	1.0	
17	24"	silver maple	3.0	3.0	1.0	1.0	3.0	1.0	1.0	much deadwood
18	30"	silver maple	3.0	4.0	1.0	1.0	3.0	0.5	1.0	multi-trunk, poor TBR
19	28"	sycamore	2.0	4.0	2.0	2.0	3.0	2.0	3.0	2 trunks
20	28"	oak	1.0	4.0	3.0	3.0	1.0	3.0	2.0	To be removed
21	28"	oak	1.0	4.0	3.0	3.0	1.0	3.0	2.0	
22	30"	oak	1.0	4.0	2.0	1.0	1.0	1.0	1.0	
23	24"	oak	1.0	3.0	3.0	2.0	1.0	3.0	2.0	dead/broken limbs
24	24"	oak	1.0	3.0	3.0	2.0	1.0	3.0	2.0	
25	24"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	
26	28"	oak	1.0	3.0	3.0	2.0	1.0	3.0	2.0	
27	24"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	
28	26"	oak	1.0	3.0	3.0	3.0	1.0	3.0	2.0	To be removed



LEGEND:

- Existing tree or tree mass
- Existing Monarch Tree
- Existing Monarch Tree (To Be Removed)
- Sample Point



Woodlands Area Calculations:

1. Size of Tract: 58.15 acres (+/-)
 2. Development Proposed: 44 detached single family lots
 3. Existing tree canopy: 15.2 acres (+/-)
 4. Trees required to be retained: 4.6 acres (30% of existing tree canopy)
- ** Note: calculations are subject to final engineering design being performed. Final plans may show more or less trees being saved. As a minimum, there shall be at least 30% of the existing trees retained.
5. Base information: Outboundary, topographic and floodplain information is from available records, as provided by the Sterling Company and Stock & Associates.

Tree Stand Delineation Notes:

1. TSD study method: The Aerial Photography BAF 10 Study method of preparing the Tree Stand Delineation was used.
2. Aerial photo: Provided by the Searborn Map Company, Inc., job no. 06-132K, exposure no. G02-30-38, March 2004, scale 1" = 200'
3. Flood Plain: Flood plain is present along the Strecker Road frontage of the site, per FIRM Flood Insurance Rate Map, map number 2918C019A, with effective date of 8-25-95.
4. There were 2 Sample Points recorded, as shown on Plan and as described above.
5. Other observations:
 - a. Most of site is open and has been used as farmland (pasture and/or crops).
 - b. As site has been cleared for farming, trees are generally at the perimeter of flat, open areas in low/drainage areas, and on slope areas (areas not suitable to farm).

Arborist/Forester: **Bruce Vawter**
 Forestry Consultant Services
 9321 Manorok Drive
 St. Louis, Missouri 63126
 314/849-2753
 Certified Arborist: # MN-0469A
 Certified Forester: # 2501

Prepared For:
ARBORS AT KEHRS MILL, L.L.C.
 5091 New Baumgartner Road
 St. Louis, Missouri 63129
 Phone: 314-487-6717

Arbors at Kehrs Mill

Tree Stand Delineation

HALL + ASSOCIATES, L.L.C.
 LAND PLANNING
 LANDSCAPE ARCHITECTURE

424 SOUTH CLAY AVENUE, ST. LOUIS, MO 63122 314.966.5577

Drawn by: JRH	Checked by:	Project Number: 13002	Sheet Number: 1 OF 1
Date: 6-17-13			
Revisions: 6-21-13			