



AGENDA

for the

CITY OF WILDWOOD'S

SITE PLAN SUBCOMMITTEE OF THE PLANNING AND ZONING COMMISSION

City Hall Community Room - [16860 Main Street](#)

September 6, 2016 - Tuesday

5:30 P.M. to 6:20 P.M.

- I. Welcome To Attendees And Roll Call Of Commission Members
- II. Review Tonight's Agenda/Questions Or Comments
- III. P.Z. 12 & 13-15 Villages At Brightleaf
Review and discussion of the Site Development Plan (SDP) and related items; R-3 10,000 square foot Residence District (Town Center "Neighborhood General District" and "Neighborhood Edge District"), with a Planned Residential Development Overlay District (PRD); north side of State Route 100, east of State Route 109 (**Ward Five**)

Documents:

[III. THE VILLAGES AT BRIGHTLEAF.PDF](#)

1. Overview Of Plan And Related Items By Department Of Planning Staff
 2. Presentation By Petitioner/Petitioner's Representation
 3. Comments And Questions By Subcommittee Members
 4. Consensus On Recommendation
- IV. Public Comment
 - V. Other Matters

VI. Closing Remarks And Adjournment

Note: The Site Plan Subcommittee of the Planning and Zoning 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.

GENERAL NOTES:

- THIS SITE IS IN THE FOLLOWING DISTRICTS AND UTILITY SERVICE AREAS:
WARD EIGHT
METRO WEST FIRE PROTECTION DISTRICT
ST. LOUIS COUNTY POLICE DEPARTMENT - CITY OF WILDWOOD (6TH) PRECINCT
ROCKWOOD R-8 SCHOOL DISTRICT
METROPOLITAN ST. LOUIS SEWER DISTRICT
AMEREN MISSOURI
AT&T
LACLEDE GAS COMPANY
MISSOURI AMERICAN WATER COMPANY
CHARTER CABLE SERVICES
- 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.
- STORMWATER SYSTEM DESIGN SHALL BE PURSUANT TO THE CITY OF WILDWOOD AND METROPOLITAN ST. LOUIS SEWER DISTRICT REQUIREMENTS AND SHALL DISCHARGE AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.
- THE LOCATION OF STORM AND SANITARY SEWER IMPROVEMENTS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS SHALL BE DETERMINED BY FIELD CONDITIONS AND SHALL BE INDICATED ON THE IMPROVEMENT PLANS.
- ALL GRADING AND DRAINAGE SHALL BE PER CITY OF WILDWOOD, MODOT AND METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARDS. SOURCE OF TOPOGRAPHY - AERIAL PHOTOGRAPHY BY SURDEX DATED 3/11/2015.
- NO SLOPES SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL), UNLESS JUSTIFIED BY GEOTECHNICAL REPORT WHICH MUST BE ACCEPTED/APPROVED BY THE CITY OF WILDWOOD.
- ALL PROPOSED UTILITIES WILL BE LOCATED UNDERGROUND WITHIN THIS SITE.
- NO PLANTS, TREES, SIGNS, ETC. GREATER THAN 36" IN HEIGHT SHALL BE PLACED WITHIN THE SIGHT DISTANCE TRIANGLE AT INTERSECTIONS AND MEDIANS AS TO RESTRICT SIGHT DISTANCE.
- MAXIMUM HEIGHT OF STREET LIGHTING FIXTURES SHALL BE 16 FEET AND SHALL BE IN COMPLIANCE WITH THE CITY OF WILDWOOD CODE REQUIREMENTS.
- STREET TREES AND SITE LANDSCAPING SHALL BE AS REQUIRED BY THE CITY OF WILDWOOD. SEE REQUIRED LANDSCAPE PLAN
- THE NEAREST MAJOR INTERSECTION IS HIGHWAY 100 AND STATE ROUTE 109 APPROXIMATELY 200 FEET TO THE SOUTHWEST.
- THE FRONT FACADES MUST BE 1.5 FEET ABOVE GRADE AT FRONTAGE LINES.
- ENTRANCES, STREET INTERSECTIONS, CUL-DE-SACS SHALL BE CONSTRUCTED TO CITY OF WILDWOOD AND MODOT STANDARDS.
- ALL EXISTING WATER FEATURES LOCATED ON THIS SITE WHICH WILL BE DISTURBED SHALL BE DEWATERED IN COMPLIANCE WITH THE CITY OF WILDWOOD GRADING CODE.

DEVELOPMENT NOTES:

- LOCATOR NUMBERS: 23V330041, 23V330050, 23V340327, 23V310064, 23V330022, 23V330021, 23V330208, 23V330215, 23V330233, 23V160917
- SITE ADDRESS: 2344 EATHERTON RD WILDWOOD, MO. 63011
- CURRENT OWNERS:
WILLIAM JONES JR
2531 TAYLOR RD
MERVAL VAL INC.
2567 TAYLOR RD
WILLIAM JONES JR
16602 OVERLOOK HILLS DR
OVERLOOK HILLS LLC
16618 OVERLOOK HILLS DR
MERVAL VAL INC.
16721 MANCHESTER RD
- EXISTING ZONING: R-3 10,000 SQUARE FOOT RESIDENCE DISTRICT (TOWN CENTER "NEIGHBORHOOD GENERAL DISTRICT" AND "NEIGHBORHOOD EDGE DISTRICT"), WITH A PLANNED RESIDENTIAL DEVELOPMENT OVERLAY DISTRICT (PRD), ORDINANCE #2145
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL
- GROSS AREA OF SITE: 78.82 ACRES
LESS RIGHT-OF-WAY: <11.72> ACRES
NET AREA: 67.10 ACRES
- DENSITY = 87.10 AC X 43,560 SF/AC = 3,794,256 SF / 67.10 AC = 56,546 SF/AC
10,000 SQ.FT. = 292 LOTS ALLOWABLE
- NUMBER OF LOTS PROPOSED: 192
- PARKING REQUIREMENTS:
2 EA. X 102 LOTS = 384 SPACES PROVIDED
384 SPACES + 7 GUEST SPACES
- COMMON GROUND = 19.80 AC
PUBLIC OPEN SPACE = 7.70 AC
TOTAL SPACE = 27.50 AC

PROPERTY DESCRIPTION:

A tract of land located in Section 1, Township 44 North, Range 3 East, City of Wildwood, St. Louis County, Missouri and being more particularly described as follows:

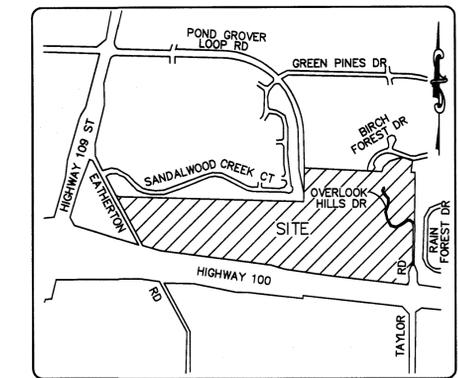
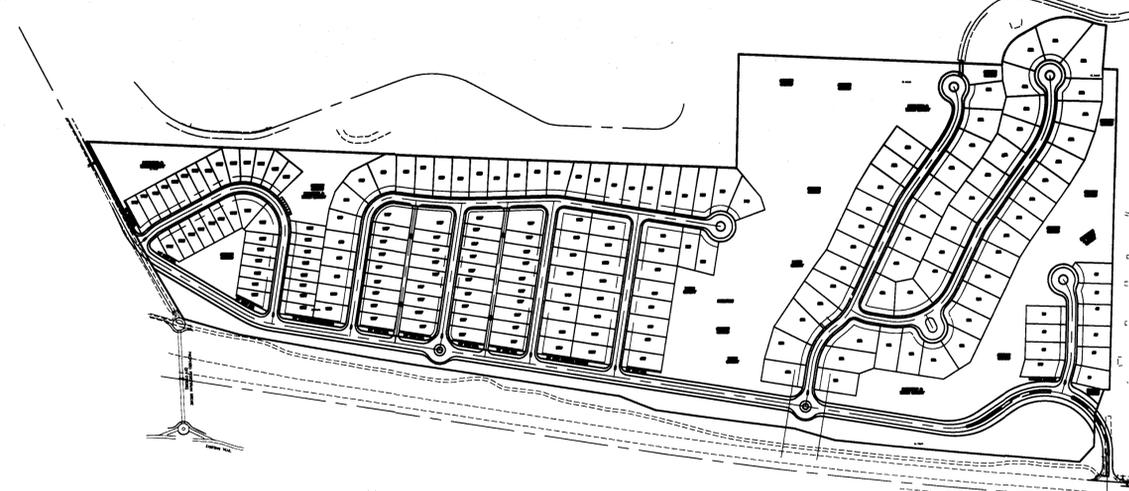
Beginning at the intersection of the north-south centerline of above said Section 1 and the east-west centerline of the Northeast Quarter of said Section 1, said intersection being the southwest corner of Evergreen Section 2 Plat 1; a subdivision according to the plat thereof recorded in Plat Book 260 Page 67 of the St. Louis County, Missouri Records; thence along the south line of said Evergreen Section 2 Plat 1 and its prolongation, being the south line of Evergreen Plat 4, a subdivision according to the plat thereof recorded in Plat Book 226 Page 95 of said records, South 87°39'31" East, 335.26 feet to a point being the southeast corner of Lot 409 of said Evergreen Plat 4; thence leaving said south line and along the southeast line of Lots 407 through 409 of said Evergreen Plat 4; the following courses, distances and curves: along a curve to the right being non-tangential to the previous course, with a radius of 125.00 feet and whose chord bears North 31°51'57" East, 123.24 feet, an arc distance of 128.87 feet to a point of tangency; North 81°24'00" East, 79.93 feet to a point of curvature, and along a curve to the right with a radius of 200.00 feet, whose chord bears North 84°28'30" East, 156.56 feet, an arc distance of 160.86 feet to a point on the south right-of-way line of Birch Forest Drive (50 feet wide); thence leaving said southeast line and along said south right-of-way line, South 72°31'00" East, 38.21' to a point of curvature; thence continuing along said south right-of-way line, along a curve to the left with a radius of 200.00 feet and whose chord bears South 78°50'00" East, 44.01 feet, an arc distance of 44.10 feet to the northwest corner of Lot 406 of said Evergreen Plat 4; thence leaving said south line and along the west line of said Lot 406, South 04°51'00" West, 153.26 feet to a point on said east-west centerline, said point also being the southwest corner of said Lot 406; thence along said east-west centerline, said line also being the south line of said Lot 406, South 87°39'31" East, 51.98' to a point on the north-south centerline of the Northeast Quarter of said Section 1, said point also being the northwest corner of Evergreen Plat 3; a subdivision according to the plat thereof recorded in Plat Book 204 Page 71 of said records; thence leaving said south line and along said north-south centerline of the Northeast Quarter of Section 1, said line also being the west line of said Evergreen Plat 3; the west line of Evergreen Plat 2; a subdivision according to the plat thereof recorded in Plat Book 190 Page 89 of said records, South 01°54'37" West, 1128.77 feet to a point in the centerline of Taylor Road (Width Varies); thence leaving said north-south centerline, North 88°25'23" West, 20.00 feet to the west right-of-way line of said Taylor Road; thence along said west right-of-way line the following courses and distances: South 20°04'41" West, 94.87 feet; South 01°54'37" West, 113.11 feet; and South 43°21'00" West, 75.00 feet to a point in the north right-of-way line of State Highway 109; thence leaving said west right-of-way line and along the west line of said south right-of-way line of State Highway 109 the following courses, distances and curves: North 85°02'20" West, 461.64 feet to a point of curvature; along a curve to the right with a radius of 17,063.74 feet, whose chord bears North 84°21'00" West, 410.34 feet, an arc distance of 410.35 feet; North 73°52'26" West, 150.88 feet; along a curve to the right being non-tangential to the previous course with a radius of 17,038.74 feet, whose chord bears North 82°19'40" West, 495.52 feet, an arc distance of 495.64 feet; North 88°37'23" West, 137.03 feet; North 81°02'40" West, 865.00 feet; North 79°33'55" West, 500.10 feet; and North 74°04'56" West, 204.59' to a point in the east right-of-way line of Eatherton Road (40' Wide); thence leaving said south right-of-way line and along said east right-of-way line of Eatherton Road, North 30°49'19" West, 225.43 feet; thence continuing along said east right-of-way line, North 28°03'19" West, 483.01 feet to a point on the south line of Sandalwood Creek Condominiums Phase One-A; according to the plat thereof recorded in Plat Book 240 Page 6 of said records; thence leaving said east right-of-way line and along said south line and its prolongation, South 87°33'57" East, 1,534.33 feet to the southwest corner of Hunters Run; a subdivision according to the plat thereof recorded in Plat Book 320 Page 25 of said records; thence leaving said south line and along the south line of said Hunters Run, South 87°41'40" East, 771.44 feet to a point on said north-south centerline of Section 1; thence leaving said south line and along said north-south centerline, North 01°21'37" East, 399.14 feet to the Point of Beginning and contains 3,433,413 square feet, or 78,820 acres more or less, according to calculations performed by The Sterling Company during the month of March, 2016.

The Villages at Bright Leaf

A Tract Of Land Located In
Sections 1 & 2, Township 44 North, Range 3 East,
City Of Wildwood,
St. Louis County, Missouri

SITE DEVELOPMENT PLAN

R-3 10,000 Square Foot Residence District
(Town Center "Neighborhood General District" and "Neighborhood Edge District"),
With A Planned Residential Development Overlay District (PRD), Ordinance #2145

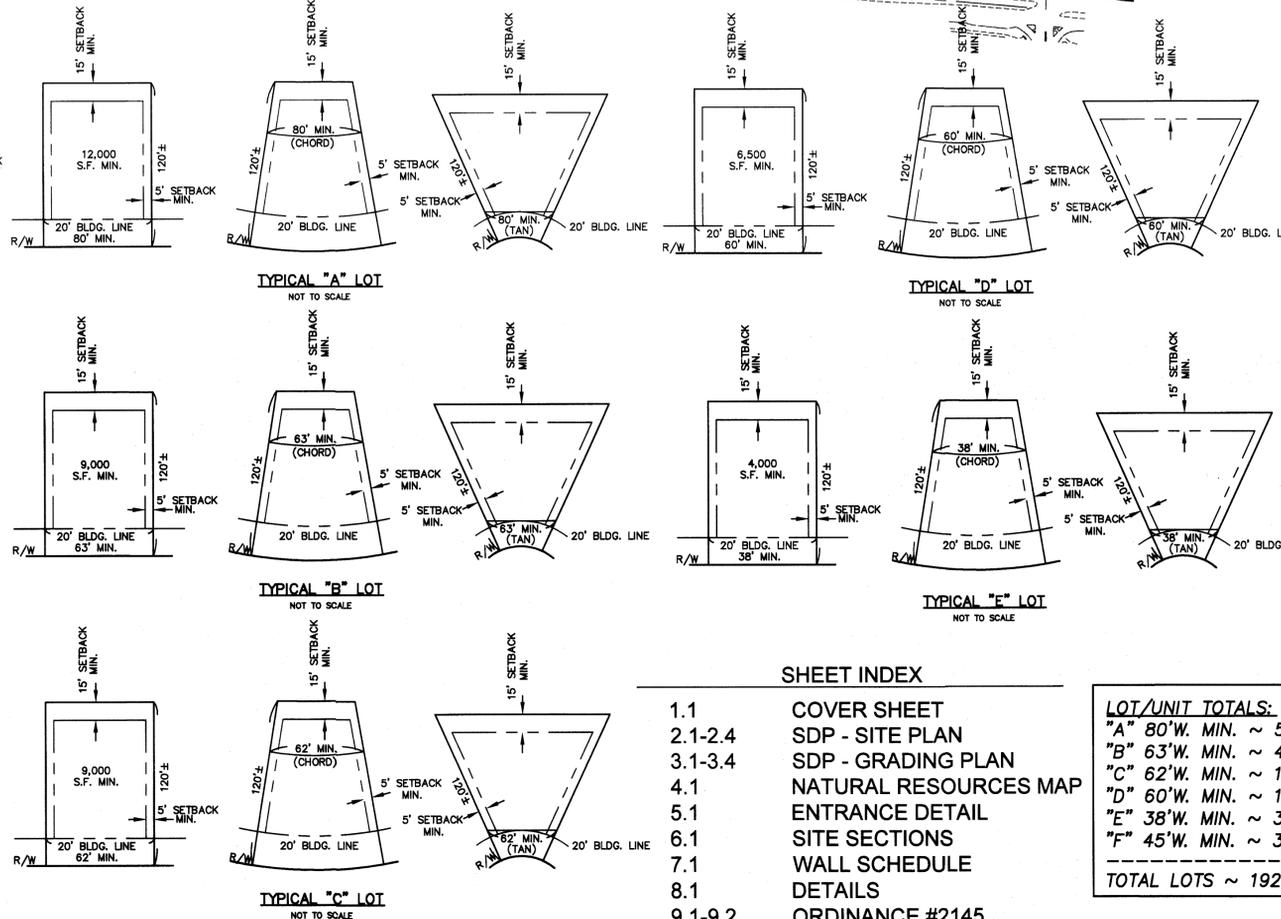


LEGEND

EXISTING	LEGEND	PROPOSED
542	CONTOURS	(542)
X536	SPOT ELEVATIONS	536.0
---	CENTER LINE	---
---	BUILDINGS, ETC.	---
---	TREE LINE	---
X	FENCE	X
---	STORM SEWERS	---
---	SANITARY SEWERS	---
CA	CATCH BASIN	CA
AI	AREA INLET	AI
GI	GRATED INLET	GI
SM	STORM MANHOLE	SM
FM	SANITARY MANHOLE	FM
FE	FLARED END SECTION	FE
CO	CLEANOUT	CO
---	LATERAL CONNECTION	---
---	UTILITY OR POWER POLE	---
---	FIRE HYDRANT	---
---	TEST HOLE	---
---	PAVEMENT	---
---	GAS MAIN & SIZE	(2" G)
---	WATER MAIN & SIZE	(6" W)
T	TELEPHONE	(T)
E	ELECTRIC (U) UNDERGROUND	(E)
OWW	ELECTRIC (O) OVERHEAD	(OWW)
FL	FLOW LINE	FL
TBR	TO BE REMOVED	TBR
TC	TOP OF CURB	(TC)
---	SWALE	---
---	LIGHT STANDARD	---
---	STREET SIGN	---
---	PARKING STALLS	---
---	YARD LIGHT	---

FLOOD NOTE:
ACCORDING TO THE FLOOD INSURANCE RATE MAP OF SAINT LOUIS COUNTY, MISSOURI, AND UNINCORPORATED AREAS (COMMUNITY PANEL NUMBER 29189C0260K DATED FEBRUARY 4, 2015), THIS PROPERTY LIES ENTIRELY OUTSIDE THE 500-YEAR FLOODPLAIN.

KEY MAP
SCALE: 1"=300'



SHEET INDEX

1.1	COVER SHEET
2.1-2.4	SDP - SITE PLAN
3.1-3.4	SDP - GRADING PLAN
4.1	NATURAL RESOURCES MAP
5.1	ENTRANCE DETAIL
6.1	SITE SECTIONS
7.1	WALL SCHEDULE
8.1	DETAILS
9.1-9.2	ORDINANCE #2145

LOT/UNIT TOTALS:

"A" 80'W. MIN.	~ 53 LOTS
"B" 63'W. MIN.	~ 40 LOTS
"C" 62'W. MIN.	~ 10 LOTS
"D" 60'W. MIN.	~ 14 LOTS
"E" 38'W. MIN.	~ 37 LOTS
"F" 45'W. MIN.	~ 38 LOTS
TOTAL LOTS ~ 192	

GEOTECHNICAL ENGINEER'S STATEMENT:

THESE PLANS HAVE BEEN REVIEWED BY JACOBI GEOTECHNICAL ENGINEERING, INC. FOR THEIR COMPLIANCE REGARDING GEOTECHNICAL RECOMMENDATIONS RELATIVE TO SITE DEVELOPMENT. BASED ON THIS REVIEW AND AVAILABLE SUBSURFACE INFORMATION, IT IS OUR OPINION THAT THE SITE MAY BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, GOOD CONSTRUCTION PRACTICES, AND THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT PREPARED BY JACOBI GEOTECHNICAL ENGINEERING, INC.

WE HAVE NOT PREPARED ANY PART OF THESE PLANS AND MY SEAL ON THESE PLANS IS INTENDED ONLY TO CONFIRM MY PERSONAL REVIEW AND APPROVAL TO THE SITE GRADING PLAN AS IT RELATES TO THE STABILITY OF EARTH SLOPES.

JACOBI GEOTECHNICAL ENGINEERING, INC. MUST BE INVOLVED DURING THE CONSTRUCTION PHASE OF THIS PROJECT IN ORDER TO DETERMINE IF SUBSURFACE CONDITIONS ARE AS ANTICIPATED FROM THE FIELD EXPLORATION DATA, THAT OUR RECOMMENDATIONS RELATIVE TO SITE GRADING ARE IMPLEMENTED, AND THAT OTHER GEOTECHNICAL ASPECTS OF SITE DEVELOPMENT ARE PERFORMED IN ACCORDANCE WITH THESE PLANS.

JACOBI GEOTECHNICAL ENGINEERING, INC.

SURVEYOR'S CERTIFICATION:

THIS IS TO CERTIFY THAT WE HAVE, DURING THE MONTH OF MARCH, 2016, AT THE REQUEST OF FISCHER & FRICHEL CUSTOM HOMES, LLC AND CONSORT HOMES, LLC, PREPARED A SITE DEVELOPMENT PLAN OF "THE VILLAGES AT BRIGHTLEAF", A TRACT OF LAND LOCATED IN SECTIONS 1 & 2, TOWNSHIP 44 NORTH, RANGE 3 EAST, CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI. THIS PLAN IS NOT A SURVEY AND DOES NOT MEET THE "MISSOURI MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS" IN EFFECT AT THE DATE OF THIS PLAN.

THE STERLING COMPANY

CITY OF WILDWOOD
DEPT. OF PLANNING & PERMITS

AUG 19 2016

MSD Base Map 23-V
MSD P #
Highway & Traffic #

DATE: 08/19/2016
MICHAEL G. BOERDING
License No. E-28643
Civil Engineer

Job Number
14-04-138

Date
Aug. 19, 2016

Designed: MF Sheet
Drawn: SL 1.1
Checked: SL SDP

REVISIONS

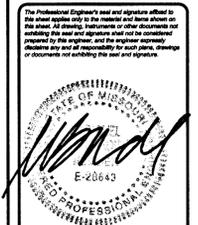
NO.	DATE	DESCRIPTION
1	3-22-2016	INITIAL SUBMITTAL
2	6-6-2016	REVISED PER CITY COMMENTS
3	6-14-2016	DEVELOPER REVISIONS
4	8-19-2016	DEVELOPER REVISIONS

Fischer & FricHEL Custom Homes, LLC
and Consort Homes, LLC
16640 CHESTERFIELD GROVE ROAD, SUITE 130
CHESTERFIELD, MISSOURI 63005
Ph. 636-770-7300

THE STERLING COMPANY
ENGINEERS & SURVEYORS
5065 New Baumgartner Road
St. Louis, Missouri 63129
Ph. 314-487-0440 Fax 314-487-8944
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Corporate Certificate of Authority #001348

The Villages at Brightleaf
Wildwood, Missouri

SITE DEVELOPMENT PLAN

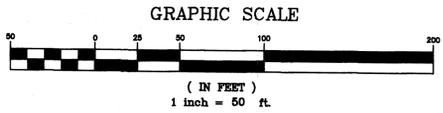
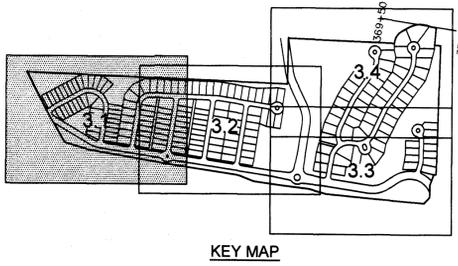
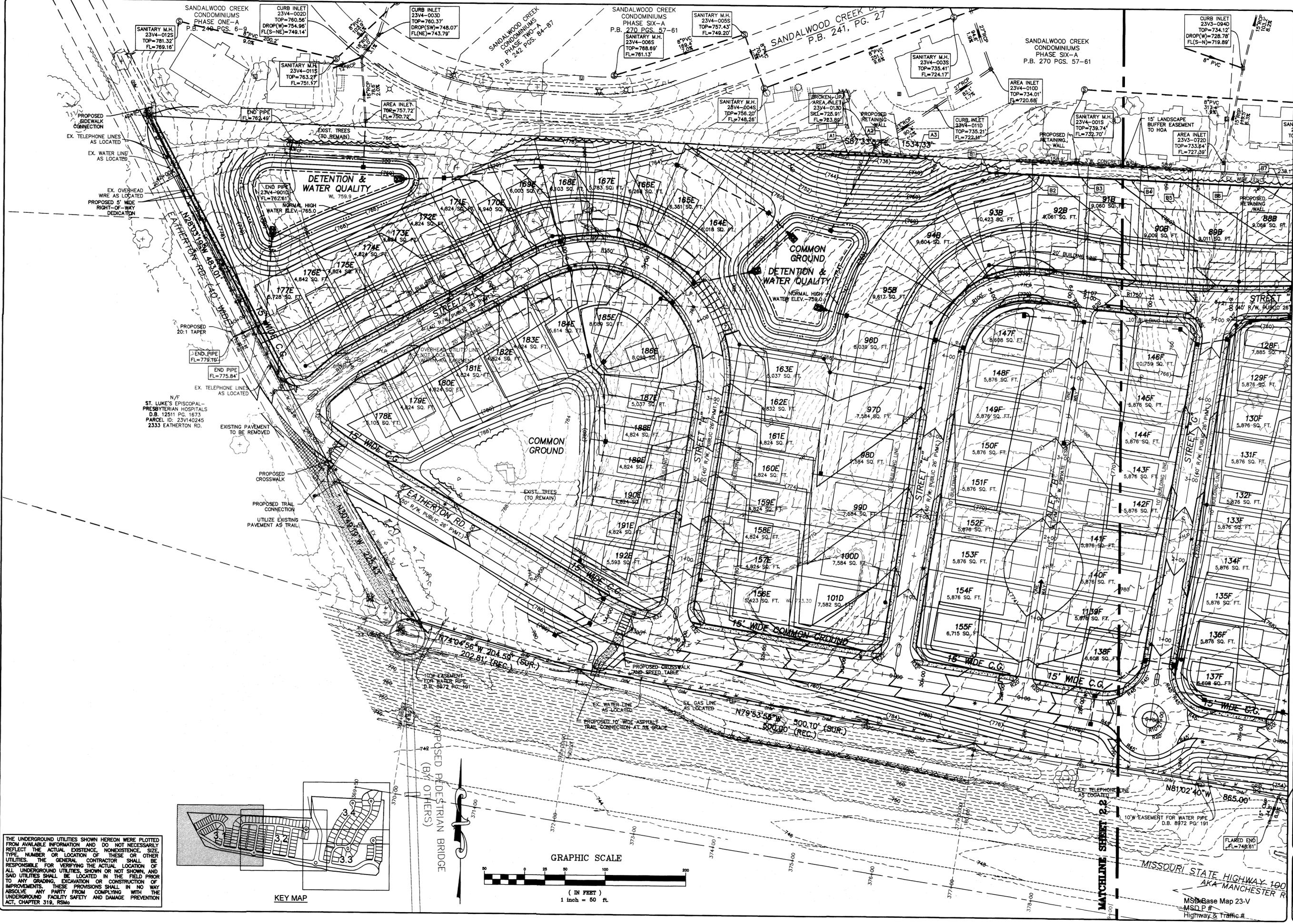


DATE: 08/19/2016
MICHAEL G. BOERDING
License No. E-28643
Civil Engineer

Job Number
14-04-138

Date
Aug. 19, 2016

Designed: MF Sheet
Drawn: SL 1.1
Checked: SL SDP



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.

Drawing name: V11404138 Jones Property Development/Site Development/Plan14188SDP.dwg, Plotted on: Aug 18, 2016 - 11:02am, Plotted by: hmbur

ISSUE	REMARKS/DATE
1	3-22-2016 INITIAL SUBMITTAL
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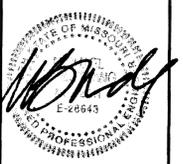
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The Villages at Brightleaf
 WILKWOOD, MISSOURI
 SITE DEVELOPMENT PLAN
 GRADING PLAN

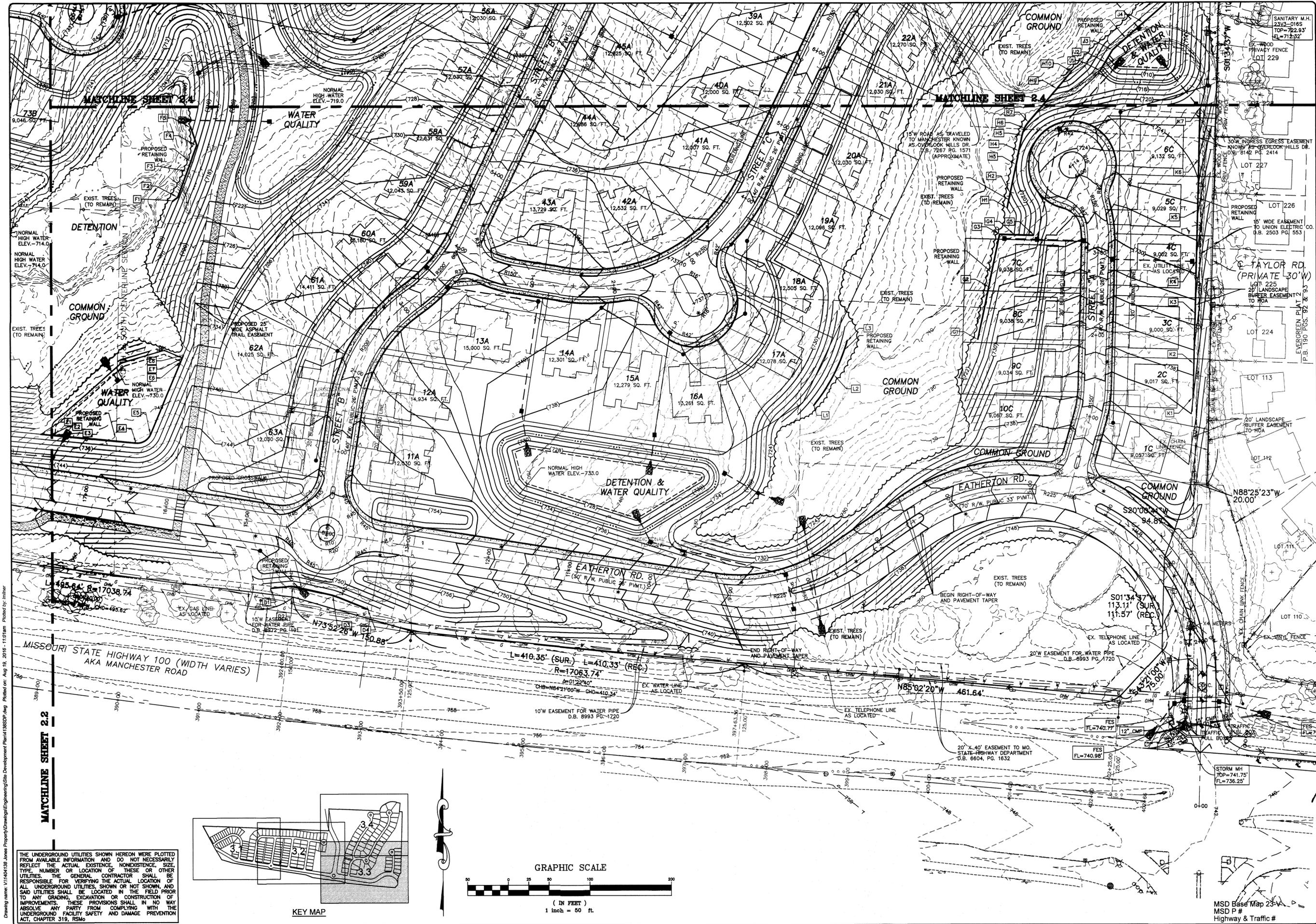
The Professional Engineer's seal and signature affirm that the design complies with the Missouri State Board of Engineering and Surveying rules and regulations. The seal and signature shall not be considered valid unless the design complies with the Missouri State Board of Engineering and Surveying rules and regulations. The Professional Engineer's seal and signature shall not be considered valid unless the design complies with the Missouri State Board of Engineering and Surveying rules and regulations.

Date: 08/19/2016
 MICHAEL G. BOERDING
 License No. E-28643
 Civil Engineer

Job Number: **14-04-138**
 Date: **Aug. 19, 2016**
 Designed: MF Sheet
 Drawn: SL **2.1**
 Checked: SL SDP

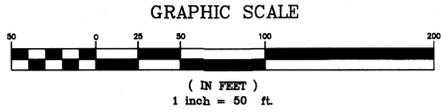
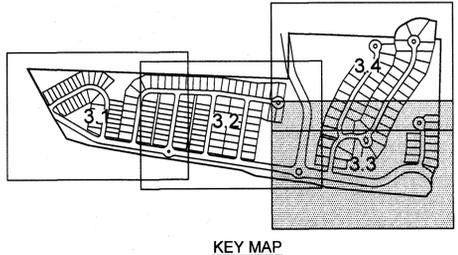


MSD Base Map 23-V
 MSD P.#
 Highway & Traffic #



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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.

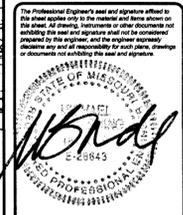


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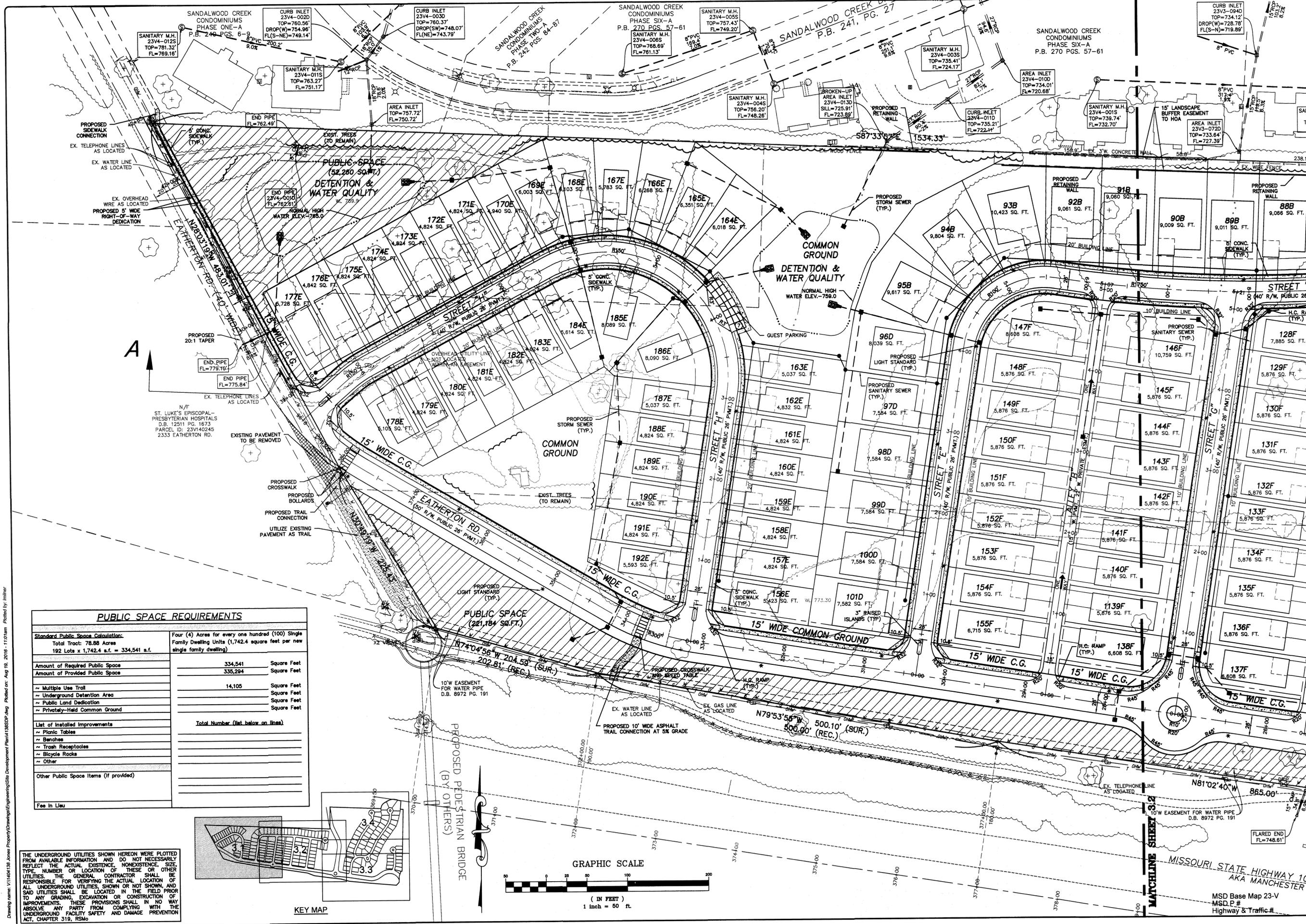
The Villages at Brightleaf
 Wildwood, Missouri
SITE DEVELOPMENT PLAN
GRADING PLAN



Date: 08/19/2016
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 License No. E-28643
 Civil Engineer

Job Number: **14-04-138**
 Date: **Aug. 19, 2016**
 Designed: MF Sheet: **2.3**
 Drawn: SL
 Checked: SL SDP

MSD Base Map 23-A
 MSD P #
 Highway & Traffic #



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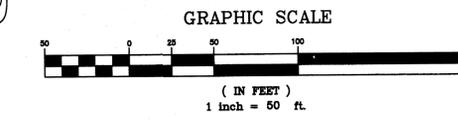
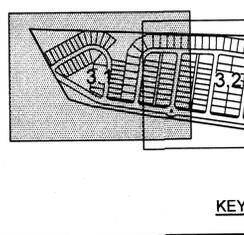
The Villages at Brightleaf
 Willwood, Missouri
 SITE DEVELOPMENT PLAN
 SITE PLAN

The Professional Engineer's seal and signature shall be in the upper right corner of the initial set of these drawings. All drawings, instruments or other documents not exhibiting the seal and signature shall not be considered approved by the engineer, and the engineer assumes no responsibility for any errors or omissions on drawings or documents not exhibiting the seal and signature.

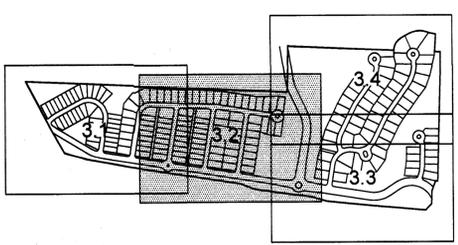
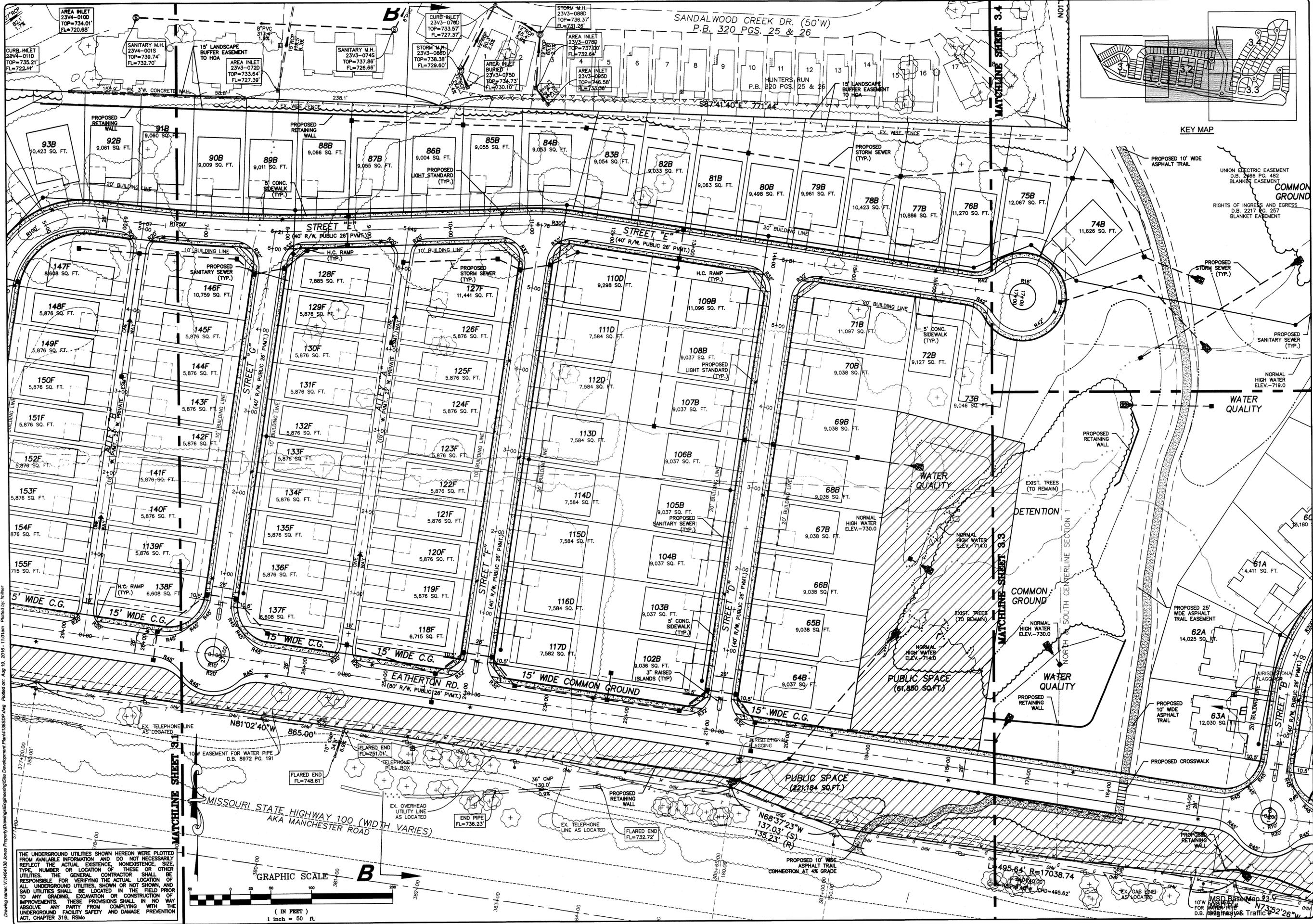
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 Checked: SL
 Sheet: 3.1
 SDP

PUBLIC SPACE REQUIREMENTS	
Standard Public Space Calculation:	
Total Tract: 78.88 Acres	Four (4) Acres for every one hundred (100) Single Family Dwelling Units (1,742.4 square feet per new single family dwelling)
192 Lots x 1,742.4 s.f. = 334,541 s.f.	
Amount of Required Public Space	334,541 Square Feet
Amount of Provided Public Space	335,294 Square Feet
~ Multiple Use Trail	14,105 Square Feet
~ Underground Detention Area	Square Feet
~ Public Land Dedication	Square Feet
~ Privately-Held Common Ground	Square Feet
List of Installed Improvements	Total Number (list below on lines)
~ Picnic Tables	
~ Benches	
~ Trash Receptacles	
~ Bicycle Racks	
~ Other	
Other Public Space Items (if provided)	
Fee In Lieu	



Drawing name: Y:\1404138 Jones Property\Drawings\Site Development\Plan\1404138 SDP.rvt
 Plotted on: Aug 19, 2016 - 11:07am
 Plotted by: Imharr

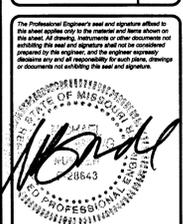


ISSUE	REVISIONS	DATE	BY
1	3-22-2016	INITIAL SUBMITTAL	
2	6-4-2016	REVISED PER CITY COMMENTS	
3	6-14-2016	DEVELOPER REVISIONS	
4	8-19-2016	DEVELOPER REVISIONS	

Fischer & Frichtel Custom Homes, LLC
 and Consort Homes, LLC
 16640 CHESTERFIELD GROVE ROAD, SUITE 130
 CHESTERFIELD, MISSOURI 63005
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THE STERLING CO
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 5655 New Baumgartner Road
 Chesterfield, MO 63017
 Ph: 314-872-6440 Fax: 314-872-8944
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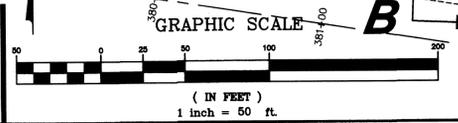
The Villages at Brightleaf
 Wildwood, Missouri
 SITE DEVELOPMENT PLAN
 SITE PLAN



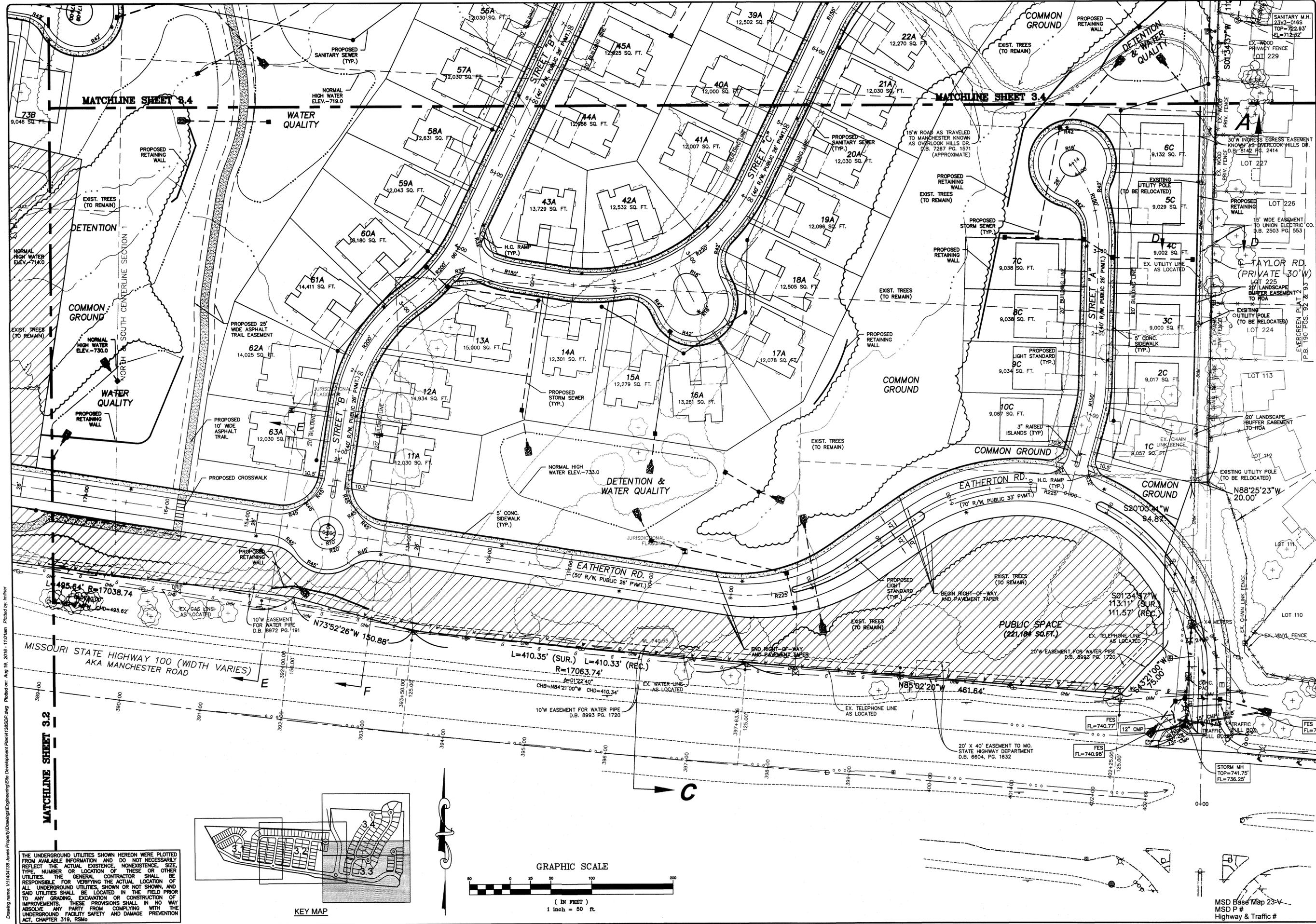
Date: 08/19/2016
 MICHAEL G. BOERING
 License No. E-28843
 Civil Engineer

Job Number: 14-04-138
 Date: Aug. 19, 2016
 Designed: MF Sheet
 Drawn: SL 3.2
 Checked: SL SDP

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.

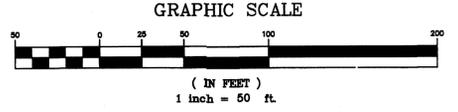
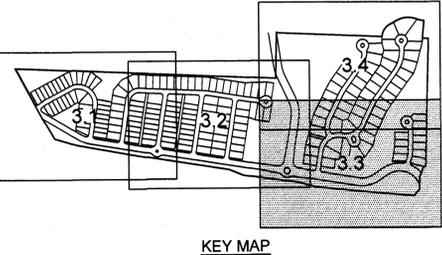


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Drawing name: V:\1404138 - Jones Property\Drawings\Engineering\Site Development\Plan\1404138.DWG, Plotted on: Aug 19, 2016 - 11:01am, Plotted by: jmhiner

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



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1	3-22-2016, INITIAL SUBMITTAL
2	5-6-2016, REVISED PER CITY COMMENTS
3	6-16-2016, DEVELOPER REVISIONS
4	8-19-2016, DEVELOPER REVISIONS

Fischer & Fritchel Custom Homes, LLC
 and **Consort Homes, LLC**
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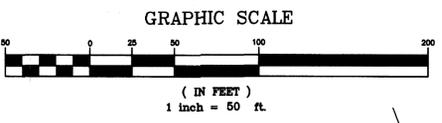
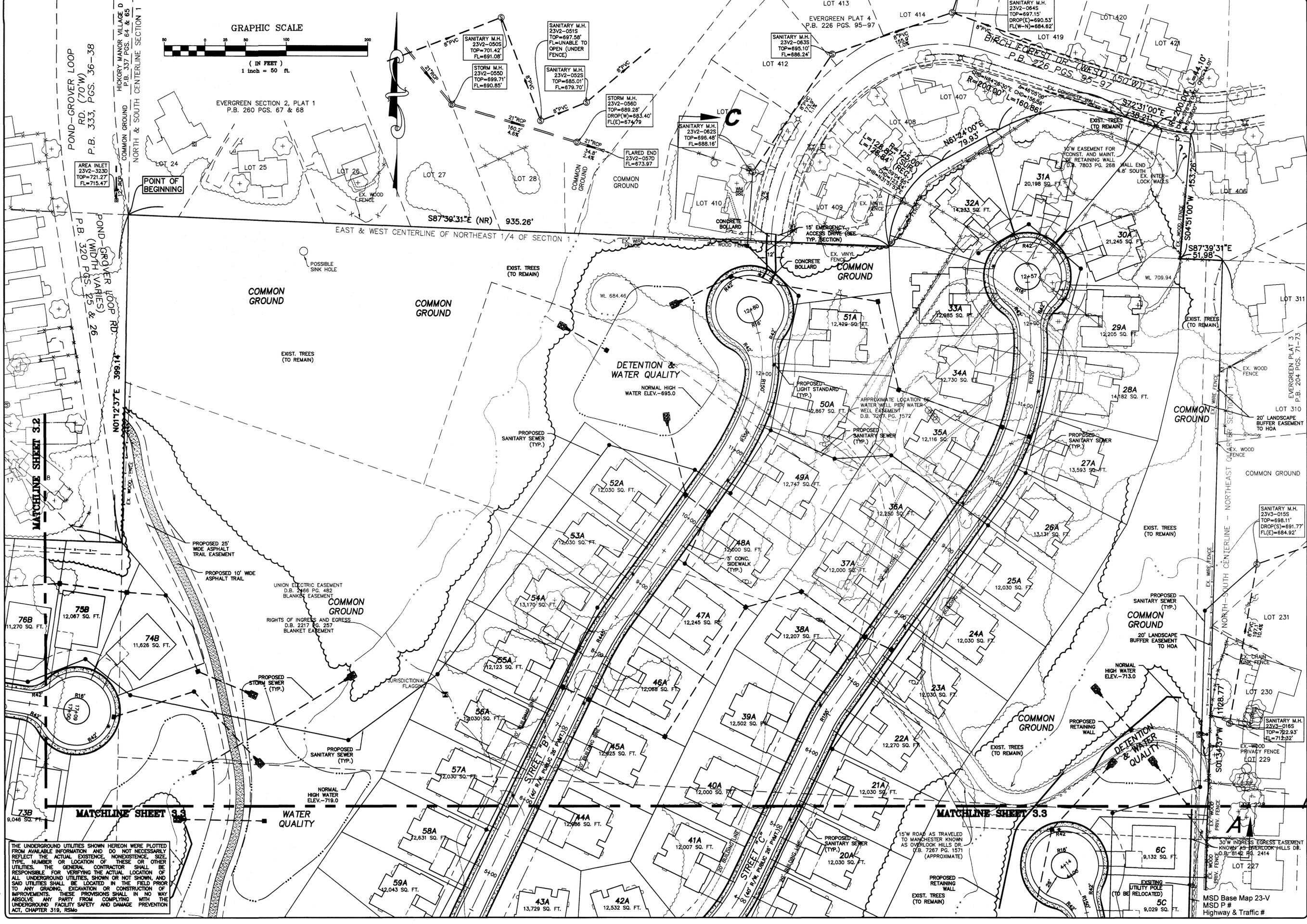
The Villages at Brightleaf
 Wildwood, Missouri
 SITE DEVELOPMENT PLAN
 SITE PLAN

The Professional Engineer's seal and signature affixed to this sheet apply only to the original and there shown on this sheet. All drawings, instruments and other documents prepared by the engineer and signed and not be considered valid unless they are accompanied by the engineer's seal and signature. The engineer assumes no responsibility for any errors, omissions or inaccuracies in this drawing or any other drawings or documents prepared by the engineer and signed and not be considered valid unless they are accompanied by the engineer's seal and signature.

Date: 08/19/2016
 MICHAEL G. BOERDING
 License No. E-28643
 Civil Engineer

Job Number
14-04-138
 Date
Aug. 19, 2016
 Designed MF Sheet
 Drawn: SL **3.3**
 Checked: SL SDP

MSD Base Map 23-V
 MSD P #
 Highway & Traffic #



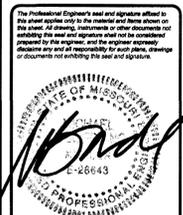
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4	8-19-2016, DEVELOPER REVISIONS

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 Ph. 636-770-7300

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 Corporate Certificate of Authority #001348

The Villages at Brightleaf
 Willow, Missouri
 SITE DEVELOPMENT PLAN
 SITE PLAN



Date: 08/19/2016
 MICHAEL G. BOERDING
 License No. E-28643
 Civil Engineer

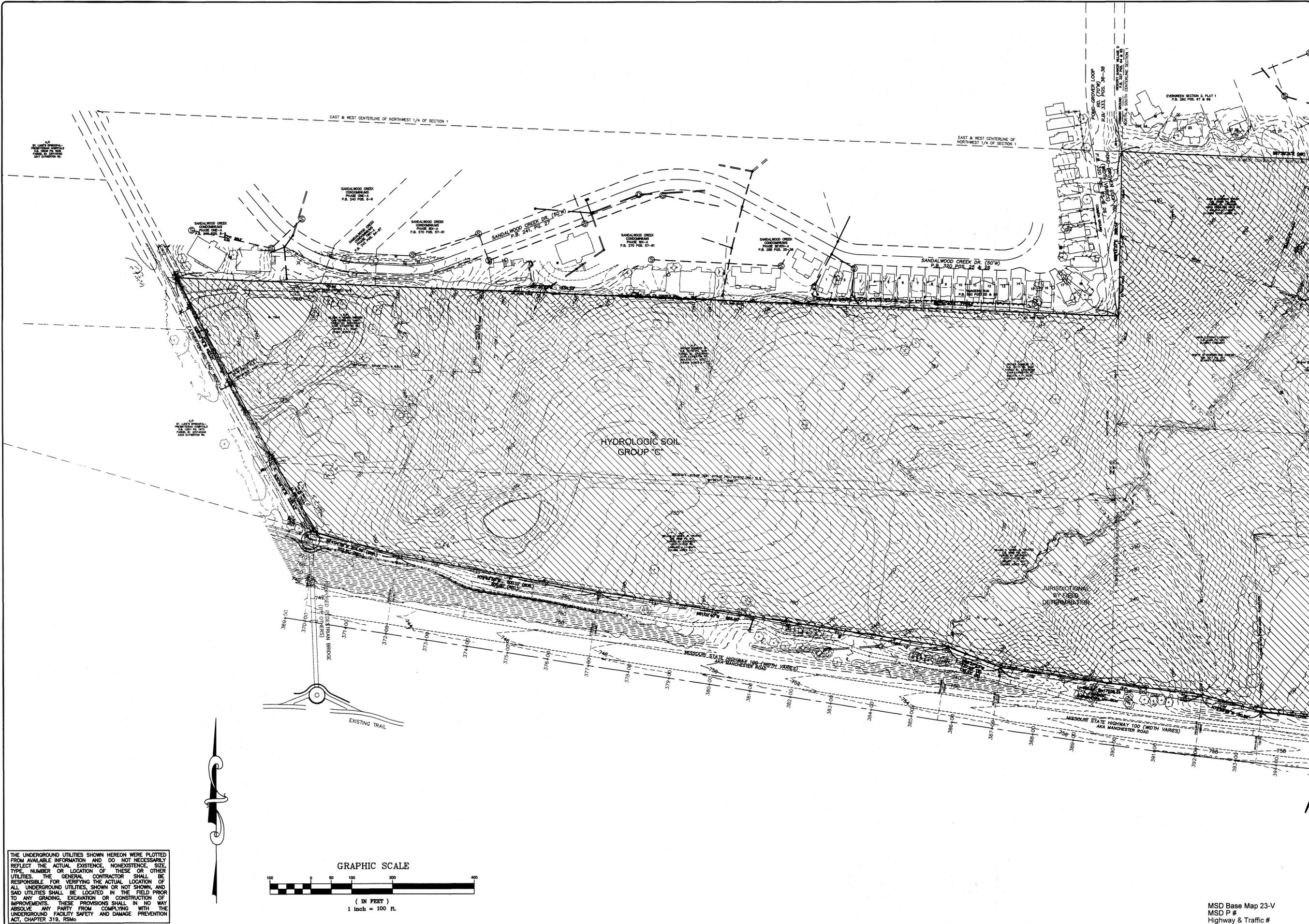
Job Number
14-04-138

Date
Aug. 19, 2016

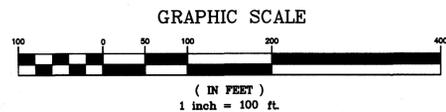
Designed: MF Sheet
 Drawn: SL **3.4**
 Checked: SL SDP

MSD Base Map 23-V
 MSD P #
 Highway & Traffic #

Drawing name: V:\1404138 Jones Property\Drawings\Engineering\Sites Development\Plan\138SDP.dwg Plotted on: Aug 19, 2016 - 11:01am Plotted by: imlmer



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



MSD Base Map 23-V
MSD P #
Highway & Traffic #

ISSUE	REMARKS/DATE
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and Conson Homes, LLC
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The Villages at Brightleaf
Wildwood, Missouri
SITE DEVELOPMENT PLAN
NATURAL RESOURCES MAP

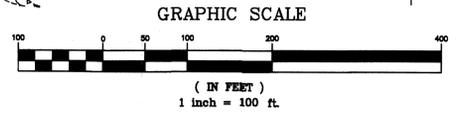
The Professional Engineer's seal and signature shall be on this sheet and apply only to the material and items shown on this sheet. All grading, placement or other documents not including the seal and signature are not to be considered part of this project. The Engineer shall be responsible for the accuracy of the information and documents not including the seal and signature.

Date: 08/19/2016
MICHAEL G. BOERDING
License No. E-28643
Civil Engineer

Job Number
14-04-138
Date
Aug. 19, 2016
Designed: MF Sheet
Drawn: SL 4.1
Checked: SL SDP



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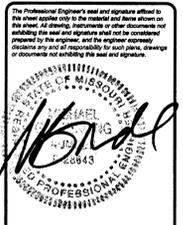


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The Villages at Brightleaf
 Wixom, Missouri
 SITE DEVELOPMENT PLAN
 NATURAL RESOURCES MAP



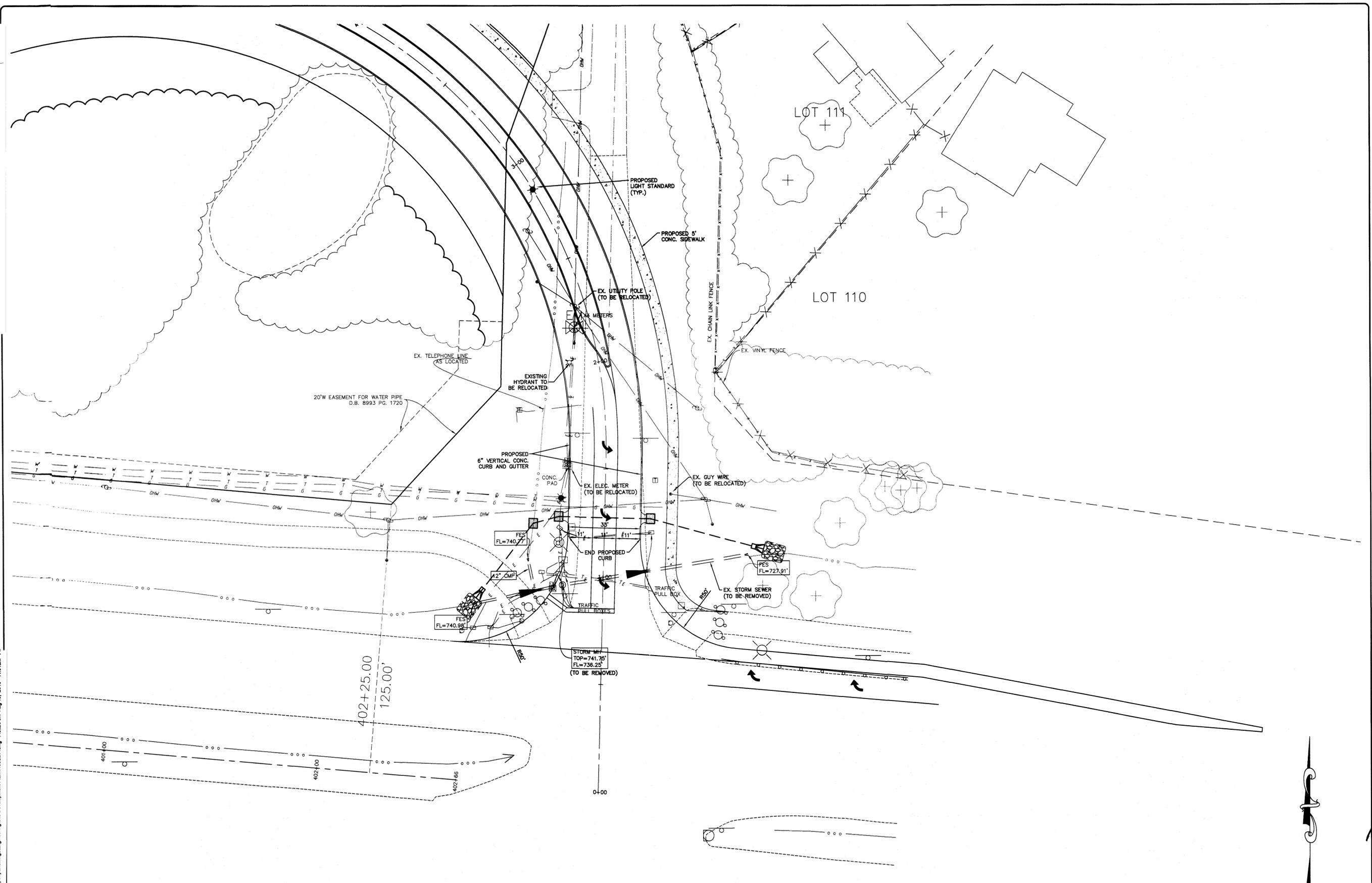
Date: 08/19/2016
 MICHAEL G. BOERDING
 License No. E-28643
 Civil Engineer

Job Number: 14-04-138
 Date: Aug. 19, 2016
 Designed: MF Sheet
 Drawn: SL 4.2
 Checked: SL SDP

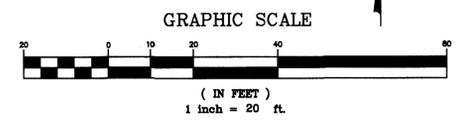
MSD Base Map 23-V
 MSD P #
 Highway & Traffic #

Drawing name: V:\1404138 Jones Property Drawings\Engineering\Site Development\Plan\14SDDP.dwg Plotted on: Aug 19, 2016, 11:01am Plotted by: jmlm

Drawing name: V:\1404-138 Jones Property Drawings\Engineering\Site Development\Plan\1983DP.dwg Plotted on: Aug 19, 2016 - 11:01am Plotted by: rmlr



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MSD Base Map 23-V
MSD P #
Highway & Traffic #

ISSUE	REMARKS/DATE
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St. Louis, MO 63112
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Corporate Certificate of Authority #001348

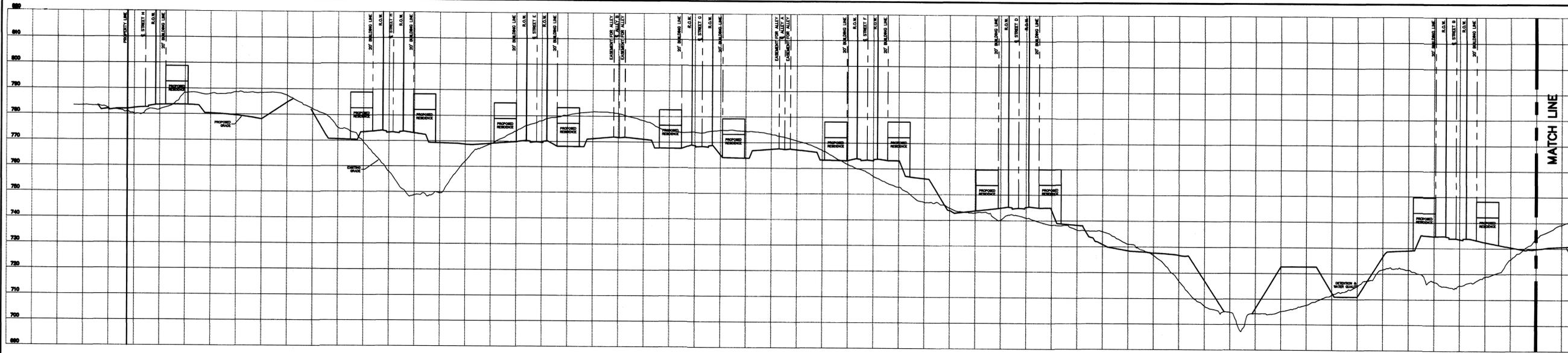
The Villages at Brightleaf
Wilderwood, Missouri
SITE DEVELOPMENT PLAN
ENTRANCE DETAIL



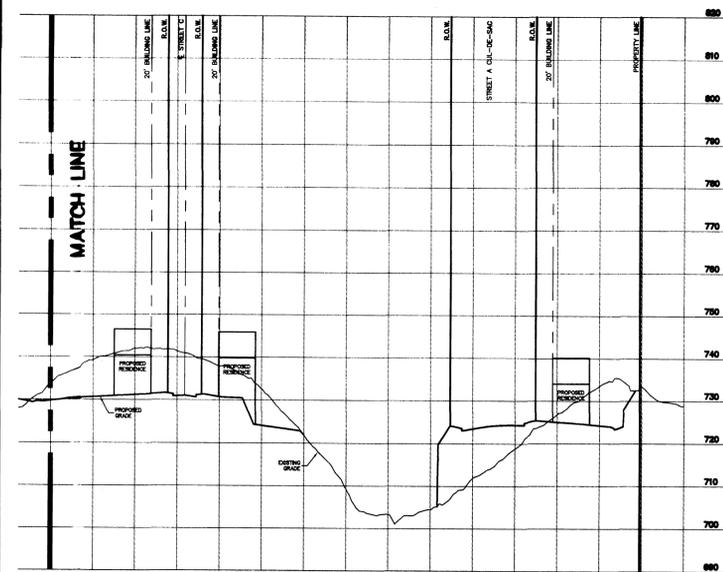
Date: 08/19/2016
MICHAEL G. BOERDING
License No. E-28643
Civil Engineer

Job Number:
14-04-138
Date:
Aug. 19, 2016
Designed: MF
Drawn: SL
Checked: SL
Sheet:
5.1
SDP

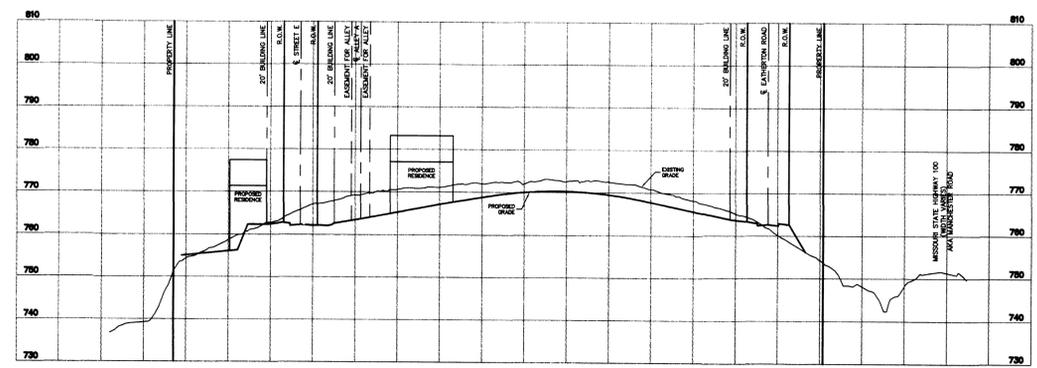
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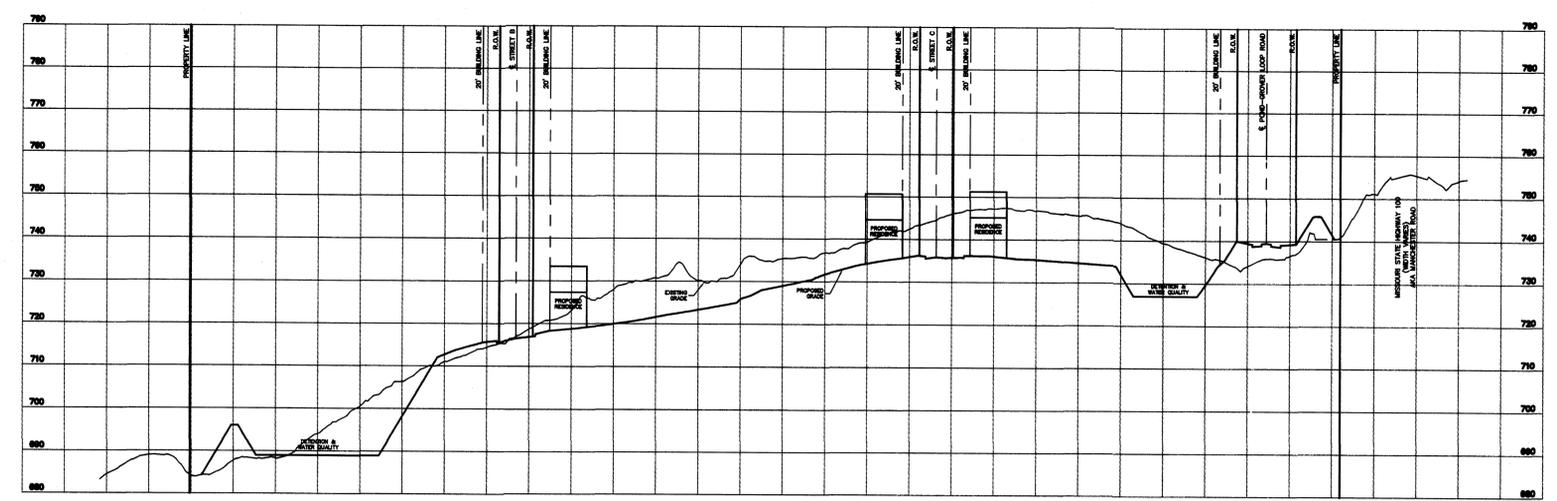
SECTION A-A



SECTION A-A
CONTINUED



SECTION B-B



Drawing name: V:\404138 Jones Property Drawings\Engineering\Site Development\Plan\138SDP.dwg Plotted on: Aug 19, 2016 - 11:00am Plotted by: imbur

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
A1	734.0	734.0	0.0			
				2.0	43.6	87
A2	734.0	730.0	4.0			
				2.0	42.6	85
A3	734.0	734.0	0.0			
TOTALS						86 172

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
B1	749.6	749.0	0.6			
				1.3	48	60
B2	755.4	753.5	1.9			
				4.1	66.7	270
B3	761.0	754.8	6.2			
				5.8	62.2	361
B4	759.5	754.1	5.4			
				8.4	62.2	526
B5	758.1	746.6	11.5			
				16.6	62.2	1033
B6	756.8	735.1	21.7			
				16.6	62.2	1033
B7	755.6	744.1	11.5			
				7.1	62.2	439
B8	754.5	751.9	2.6			
				1.4	20.7	29
B9	754.1	753.9	0.2			
TOTALS						446 3749

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
C1	736.1	736.0	0.1			
				0.5	30.5	15
C2	734.0	733.1	0.9			
				3.1	90.3	284
C3	730.0	724.6	5.4			
				6.7	50.8	340
C4	729.2	721.2	8.0			
				7.2	15.4	111
C5	728.0	721.6	6.4			
				4.6	31	144
C6	726.0	723.1	2.9			
				1.4	18.8	27
C7	725.0	725.0	0.0			
TOTALS						237 922

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
D1	744.0	744.0	0.0			
				1.9	26.8	50
D2	744.0	740.3	3.7			
				3.9	50.8	196
D3	744.0	740.0	4.0			
				2.1	45.9	94
D4	744.0	743.9	0.1			
TOTALS						124 339

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
E1	732.0	732.0	0.0			
				1.0	13.2	13
E2	732.0	730.0	2.0			
				2.8	4.5	12
E3	732.0	728.5	3.5			
				3.5	74.1	259
E4	732.0	728.5	3.5			
				3.5	23.3	82
E5	732.0	728.5	3.5			
				3.5	96.2	337
E6	732.0	728.5	3.5			
				2.8	4.8	13
E7	732.0	730.0	2.0			
				1.0	3.2	3
E8	732.0	732.0	0.0			
TOTALS						219 720

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
F1	708.3	707.4	0.9			
				1.6	7.9	13
F2	709.7	707.4	2.3			
				3.7	33.2	121
F3	709.7	704.7	5.0			
				4.8	33.6	160
F4	709.7	705.2	4.5			
				2.3	22.7	51
F5	704.8	704.8	0.0			
TOTALS						97 344

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
G1	722.3	722.0	0.3			
				2.8	7.9	22
G2	722.3	717.0	5.3			
				8.6	33.2	286
G3	723.0	711.1	11.9			
				10.4	33.6	348
G4	722.8	714.0	8.8			
				4.9	22.7	111
G5	723.0	722.0	1.0			
TOTALS						97 767

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
H1	712.0	711.3	0.7			
				3.5	19.3	68
H2	716.0	709.7	6.3			
				9.8	34.9	342
H3	720.0	706.7	13.3			
				13.9	17.1	238
H4	720.0	705.5	14.5			
				14.3	10.1	144
H5	718.7	704.6	14.1			
				14.0	9.7	136
H6	717.6	703.7	13.9			
				13.8	9	124
H7	717.0	703.3	13.7			
				12.5	30.8	383
H8	714.0	702.8	11.2			
				9.0	22.9	205
H9	710.0	703.3	6.7			
				4.0	27.3	108
H10	706.0	704.8	1.2			
TOTALS						181 1748

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
J1	714.0	713.9	0.1			
				2.1	12.2	25
J2	714.0	710.0	4.0			
				5.5	17.4	96
J3	714.0	707.0	7.0			
				7.0	50.5	354
J4	714.0	707.0	7.0			
				6.3	51	319
J5	714.0	708.5	5.5			
				4.8	5.6	27
J6	714.0	710.0	4.0			
				2.0	11.9	24
J7	714.0	714.0	0.0			
TOTALS						149 843

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
K1	740.0	739.5	0.5			
				1.1	41.7	46
K2	738.8	737.1	1.7			
				2.7	62.2	171
K3	736.8	733.0	3.8			
				4.5	62.2	283
K4	734.5	729.2	5.3			
				5.3	62.2	333
K5	731.8	726.4	5.4			
				4.8	62.2	302
K6	728.3	724.0	4.3			
				2.2	62.2	137
K7	724.0	723.9	0.1			
TOTALS						353 1271

ID Point	Top Wall Elevation	Bottom Wall Elevation	Wall Height (ft)	Average Wall Height (ft)	Length (ft)	Area (sff)
L1	718.0	718.0	0.0			
				1.4	44.5	62
L2	718.0	715.2	2.8			
				1.5	44.7	67
L3	718.0	717.8	0.2			
TOTALS						89 129

ISSUE	REMARKS/DATE
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 www.sterling-eng-sur.com
 Corporate Certificate of Authority #01348

The Villages at Brightleaf
 Willow, Missouri
 SITE DEVELOPMENT PLAN
 WALL SCHEDULE

This Professional Engineer's seal and signature are valid only for the work specified on this seal. It is the responsibility of the engineer to ensure that the work is done in accordance with the applicable laws and regulations. The engineer is not responsible for the accuracy of the information provided to him or her. The engineer is not responsible for the accuracy of the information provided to him or her.

MGB

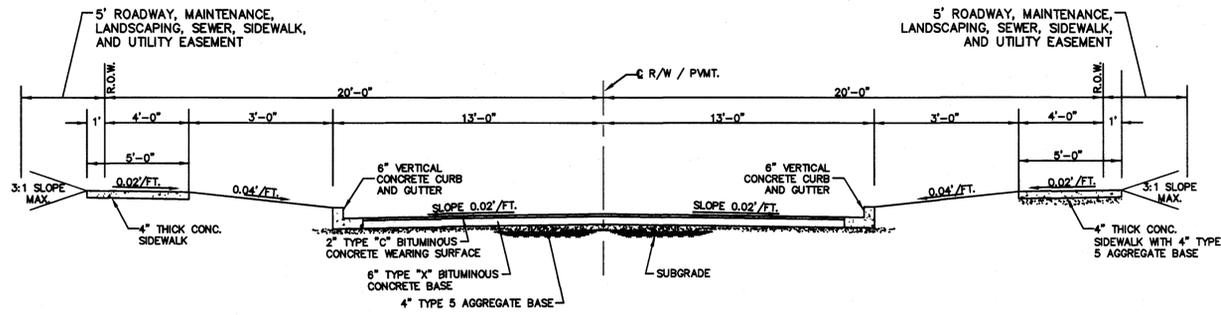
Date: 08/19/2016
 MICHAEL G. BOERDING
 License No. E-28643
 Civil Engineer

Job Number
14-04-138

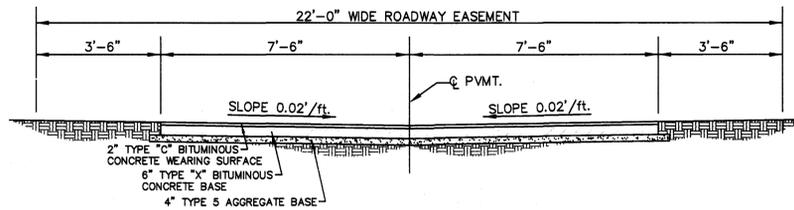
Date
Aug. 19, 2016

Designed: MF Sheet
 Drawn: SL **7.1**
 Checked: SL SDP

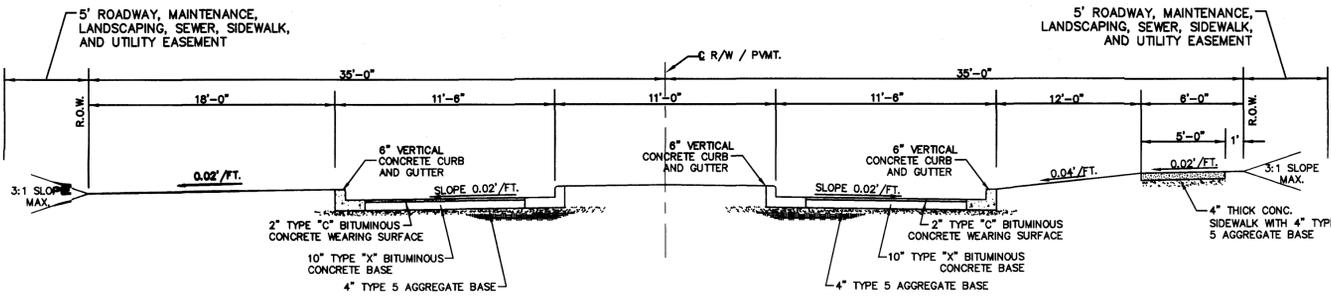
MSD Base Map 23-V
 MSD P #
 Highway & Traffic #



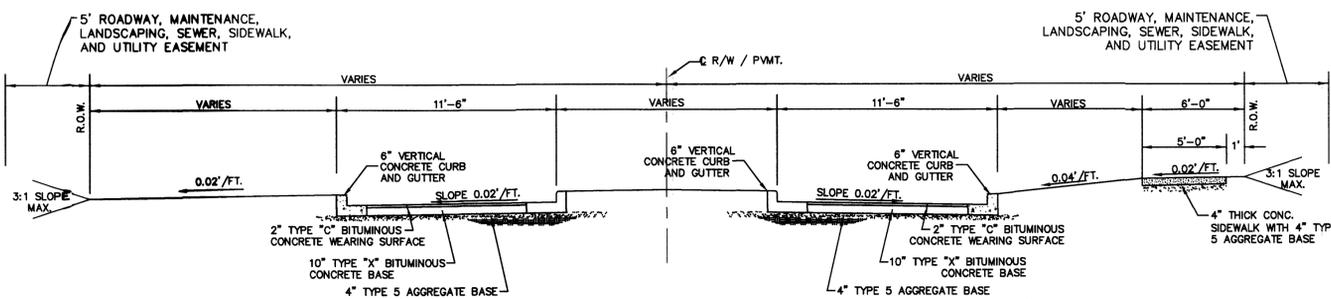
TYPICAL PVMT. SECTION
(26' PAVEMENT / 40' R.O.W.)
N.T.S.



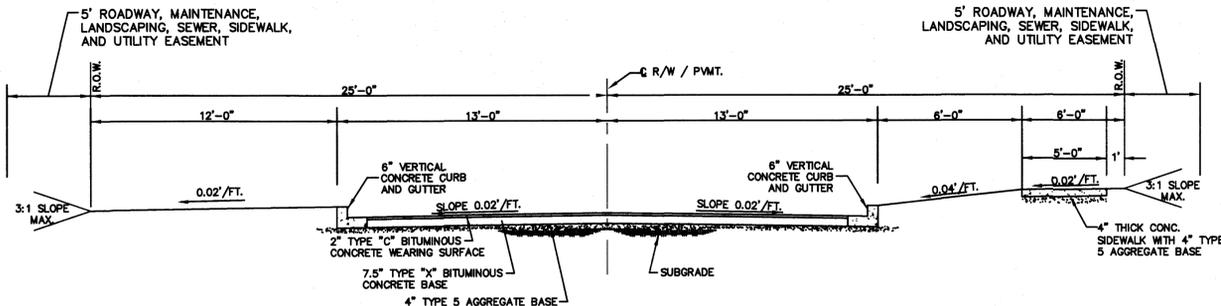
TYPICAL ALLEY PAVEMENT SECTION
(15' PAVEMENT / 22' ROADWAY EASEMENT)



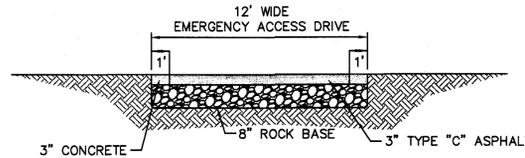
"EATHERTON ROAD"
STA. 0+00.00 TO STA. 7+48.75
TYPICAL PVMT. SECTION
(70' R.O.W.)
N.T.S.



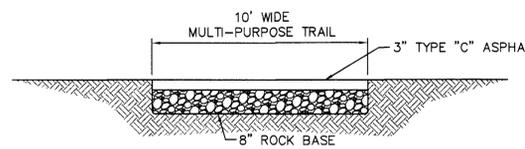
"EATHERTON ROAD"
STA. 7+48.75 TO STA. 9+16.42
TYPICAL PVMT. SECTION (TAPER)
(VARIABLE R.O.W.)
N.T.S.



"EATHERTON ROAD"
STA. 9+16.42 TO STA. 42+85.00
TYPICAL PVMT. SECTION
(26' PAVEMENT / 50' R.O.W.)
N.T.S.



12 ft. EMERGENCY ACCESS DRIVE
N.T.S.



MULTI-PURPOSE TRAIL
N.T.S.

Approval Drawing
Light Std: F144-L-P440-2-MOD-4PA-12

Diffuser Type: Clear
Optical System: Segmented reflector type III.
Luminaire Housing: The whole luminaire is made of cast aluminum. Top is fully hinged for easy access to lamp and ballast.
Ballast: MH high power factor mounted on removable plate. A quick disconnect wiring system allows for fast easy ballast maintenance.
Voltage: - 120V (MH)
Socket: - Medium (4KV)
Option: Decorative Chimney
Pole: Extruded 4" OD aluminum with 0.125" wall thickness.
Base Cover: Two-piece square cast aluminum.
Anchor Bolts: 4 galvanized 19mm (3/4") x 609 mm (24") long. A bolt circle template is supplied by HCI.
Bolt Circle: 8-1/2"
Finish: Electrostatically applied, thermoset polyester powder-coat finish.
Colour: RAL 9011 (Black-Texture)

Lighting & Pole Supplier
Brian Brader
Simply Bright Ideas, Inc.
Office: (314) 718-1888
Brian@SimplyBrightIdeas.com

Date: SEP 4 2015 **Drawing No:** 15892-V7
Model: F144-L-P440-2-MOD-4PA-12-RAL-9011-TXT
Project: Wildwood Residential - MO
Rev: 02/10
Please Note: Fabrication will not begin until this drawing is approved, signed and returned to HCI.

HCI
1200 Fenster Drive, Mississauga, Ontario, Canada L4W 1A4
www.hcilighting.com

LIGHT DETAIL TO BE USED ON LIGHTS SHOWN ON POND-GROVER LOOP ROAD ONLY. ALL OTHER LIGHTS SHOWN WILL BE DECORATIVE STREET LIGHTS FROM LIST PROVIDED BY AMEREN UE.

Approval Drawing
PoleStd: P430-2-4PA-11

Street Sign: The street sign frame shall be a one-piece aluminum casting with a solid backing and a 1" thick border. The sign frame shall clamp around the pole secured with four 3/8" hex head bolts.
Traffic Sign: The traffic sign frame shall be a one-piece aluminum casting with a solid backing and a 1" thick border. The traffic sign shall be octagonal and clamp around the pole secured with four 3/8" hex head bolts.
Pole: Extruded aluminum, thickness 0.125".
Base Cover: Two-piece cast aluminum attached to shaft by 4 S.S. set screws.
Anchor bolts: 4 galvanized 19mm (3/4") x 610 mm (24") long. A bolt circle template is supplied by HCI.
Anchor Circle: 10"
Finish: Electrostatically applied thermoset polyester powder coat finish.
Color: RAL 9011 (Black)

Lighting & Pole Supplier
Brian Brader
Simply Bright Ideas, Inc.
Office: (314) 718-1888
Brian@SimplyBrightIdeas.com

Date: DEC 09 2013 **Drawing No:** 13703-V1
Model: P430-2-4PA-11-RAL9011-STREETSIGN
Project: WILDWOOD STREET
Rev: SBL MO
Please Note: Fabrication will not begin until this drawing is approved, signed and returned to HCI.

HCI
1200 Fenster Drive, Mississauga, Ontario, Canada L4W 1A4
www.hcilighting.com

ISSUE	REMARKS/DATE
1	3-22-2016 INITIAL SUBMITTAL
2	6-6-2016 REVISED PER CITY COMMENTS
3	6-14-2016 DEVELOPER REVISIONS
4	8-19-2016 DEVELOPER REVISIONS

Fischer & Frichtel Custom Homes, LLC
and Consort Homes, LLC
16640 CHESTERFIELD GROVE ROAD, SUITE 130
CHESTERFIELD, MISSOURI 63005
Ph. 636-770-7300

THE STERLING CO.
ENGINEERS & SURVEYORS
5055 New Baumgartner Road
St. Louis, Missouri 63129
Ph. 314-487-0440 Fax 314-487-8944
www.sterling-eng-sur.com
Corporate Certificate of Authority #001348

The Villages at Brightleaf
Wildwood, Missouri
SITE DEVELOPMENT PLAN
DETAILS

The Professional Engineer's seal and signature shall be on this sheet and apply only to the material and items shown on this sheet. All drawings, instruments or other documents not attached to this drawing, and the engineer's seal and signature on any other drawings, instruments or documents not attached to this sheet and not shown on this sheet shall be void.

Michael G. Boerding
Professional Engineer
No. E-28643

Date: 08/19/2016
MICHAEL G. BOERDING
License No. E-28643
Civil Engineer

Job Number
14-04-138

Date
Aug. 19, 2016

Designed: MF Sheet
Drawn: SL **8.1**
Checked: SL **SDP**

MSD Base Map 23-V
MSD P #
Highway & Traffic #

Drawing name: V1440138_ Jones PropertyDevelopmentPlan1885752.dwg Plotted on: Aug 10, 2016, 11:00am Plotted by: lmitler

- 5. The areas of existing vegetation within the P.R.D. Overlay District boundaries identified as to be retained shall be marked on the site prior to the commencement of any disturbance in accordance with the City of Wildwood's Ordinance 410. These areas shall be indicated on the Site Development Plan submitted to the City of Wildwood for Planning and Zoning Commission review and approval. Existing mature tree canopy shall be preserved in accordance with the requirements of City of Wildwood's Ordinance 410 Tree Preservation and Restoration Code.
- 6. Landscaping with the defined common ground areas shall comply with Ordinance 410 Tree Preservation and Restoration Code requirements and accompanying Tree Manual. The Planning and Zoning Commission, on the Site Development Plan, shall approve the planting pattern. Amenities, such as benches, signs, and walking paths shall be installed in the open space area of the residential development by the developer of these one hundred ninety-four (194) eighty-seven (87) dwelling units.
- 7. The location of all utility easements for proposed service to this development shall be as approved by the Planning and Zoning Commission on the Site Development Plan. All utilities installed to serve this site shall be placed underground, including any existing overhead lines located on the subject property.
- 8. A Landscape Architect shall sign and submit all plans for review and approval for this mixed-use development.

- 9. Signs for this P.R.D. Overlay District shall be erected in accordance with the Town Center Plan Architectural Guidelines and Section 415.410 Sign Regulations of the City of Wildwood Zoning Ordinance for the R-3, 10,000 square foot Residential District.
- 10. The location of all signage shall be as approved on the Site Development Plan by the Planning and Zoning Commission. Signage not located on common ground must be erected within an easement.

- 11. The location of all lighting standards shall be as approved on the Site Development Plan. No on-site illumination source shall exceed sixteen (16) feet in height or be so situated that light is cast directly on adjoining properties. Illumination levels for all lighting shall comply with the provisions of the City of Wildwood's Zoning Code, Section 415.450 "Outdoor Lighting Requirements." A Lighting Study shall be submitted in conjunction with the Site Development Plan indicating compliance to these requirements. The Planning and Zoning Commission shall approve the location, design, and appearance of all light standards and fixtures as part of the Site Development Plan review process.

- 12. The design, color, material, and location of all garden and screen walls or fences, if planned or required, shall be consistent with the requirements of the Town Center Plan's Architectural Guidelines and be shown on the Site Development Plan for review and action by the Planning and Zoning Commission and the Architectural Review Board.

- 13. The developer of this residential subdivision shall provide to the City Improvement Plans indicating construction details relative to public and private infrastructure associated with its development. Said plans will be used to calculate escrow requirements for these identified improvements.

- 14. The developer shall provide verification from the Metropolitan St. Louis Sewer District that public sewer service has been provided to this site. Verification shall be in a form acceptable to the City of Wildwood.

- 15. The developer shall provide verification from the Missouri American Water Company that service to this subdivision can be provided at acceptable levels relative to the density of the project and not cause service issues to other households served by the same.

- 16. GENERAL DEVELOPMENT CONDITIONS
- 17. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.
- 18. A grading permit is required prior to any grading on the site. Interim stormwater drainage control in the form of siltation control measures is required.
- 19. A copy of the most recently approved Site Development Plan for this P.R.D. Overlay District development shall be prominently displayed at all times in all sales offices for this development.
- 20. The petitioner shall be responsible for obtaining all necessary permits from the Department of Natural Resources Clean Water Commission as they relate to the development of this tract of land.
- 21. If cut and fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual, such as Rye or Sudan Grasses, shall be utilized to retard erosion.
- 22. Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by issuing City of Wildwood Departments or Commissions.
- 23. The Zoning Enforcement Officer of the City of Wildwood, Missouri, shall enforce the conditions of this ordinance in accord with Site Development Plans approved by the Planning and Zoning Commission and the Department of Planning.
- 24. Any other applicable zoning, subdivision, or other regulations or requirements of the City, whether in effect at the adoption of this ordinance or as may be hereinafter adopted, shall further apply to the development of this property as authorized by this Planned Residential Development Overlay District

- 25. Improvements associated with public infrastructure, such as roadways, sidewalks, and access points, shall comply with general design principles that will provide for safe and efficient movement of traffic in and around these sites and improve overall circulation in the area. These improvements shall be reviewed and approved by the Department of Public Works.
- 26. Hours of construction and grading activity shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. No development (grading and construction) activity shall be authorized on Sundays.
- 27. All retaining walls exceeding three (3) feet in height per section or crossing individual property lines shall be constructed of an appropriate interlocking concrete block system. Walls crossing property lines shall be located in a maintenance easement. The design, color, material, and location of all walls shall be consistent with the requirements of the Town Center Plan's Architectural Guidelines and be shown on the Site Development Plan for review and action by the Planning and Zoning Commission.
- 28. The location of all utility easements for proposed service to this development shall be as approved by the Planning and Zoning Commission on the Site Development Plan. All utilities installed to serve this site shall be placed underground, including any existing overhead lines located on the subject property.
- 29. No portion of any lot that is to be located within the proposed eight (8) lot-out-lot area shall be located within the proposed eight (8) lot-out-lot area. The proposed eight (8) lot-out-lot area shall be located within the proposed eight (8) lot-out-lot area. The proposed eight (8) lot-out-lot area shall be located within the proposed eight (8) lot-out-lot area. The proposed eight (8) lot-out-lot area shall be located within the proposed eight (8) lot-out-lot area.

5. TRAFFIC GENERATION ASSESSMENT FEE

The developer shall contribute to the East Area Traffic Generation Assessment Trust Fund established by Section 140.310 of the City of Wildwood's Revised Code. This assessment must be paid in full at the time of the first Zoning Authorization for any building or structure or when the individual licenses of building permits for the authorized lots are approved. This contribution shall not exceed the amount established by multiplying the number of proposed parking spaces by the following rate:

Type of Development	Required Contribution
Single Family Dwelling (detached)	\$1,055.10/Parking Space

(Section 419.280 of the City of Wildwood Zoning Code defines a parking space.)

If type of development proposed differ than those listed, rates shall be provided by the Department of Public Works.

As this development is located within a Trust Fund area established by the City of Wildwood, any portion of the traffic generation assessment contribution, which remains, following completion of roadway improvements required by the development shall be retained in the appropriate trust fund.

Ordinance, except as may be provided by law. Nothing herein shall be deemed a waiver of any subdivision, zoning or other development regulation of the City whether by implication or reference.

1. This zoning approval is conditioned on compliance with the Zoning Code, Subdivision Code, and all applicable laws of the City. Such additional regulations are supplemental to the requirements herein and no modification of any applicable regulations shall result from this Planned Residential Development Overlay District ordinance, except where this ordinance has expressly modified such regulations by reference to the applicable provision authorizing such modification.

- 18. PUBLIC SPACE REQUIREMENTS
- 19. Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.410 and 415.270 of the City of Wildwood's Zoning Ordinance. The City Council accepts the findings of the Public Space Study adopted therein and determines the compliance with the Public Space Ordinance provisions will address the impact of this specific development on public space needs in a manner and amount that is equal to less than an amount that is roughly proportional to the actual or anticipated impact. The installation of required public space improvements shall be as required by the applicable ordinances, but shall be completed prior to issuance of any occupancy (temporary or final) permit authorized by this ordinance. Unless otherwise approved pursuant to the procedures set forth in the Public Space Ordinance, the public space attributable to this development, based upon the number of authorized dwelling units at a rate of 12.144 square feet per new single family dwelling. The provision of public space shall substantially comply with the Preliminary Development Plan submitted in conjunction at the public meeting on November 3, 2015.

Editor's Note: Changes to the report from its October 3, 2015 version to the November 3, 2015 are with a single strike-through line. Previous changes contained by the members at their October 3, 2015 Planning and Zoning Commission meeting are indicated by blue lines. No modifications have been made to the latter of the recommendation, since the Planning and Zoning Commission took action upon it on November 16, 2015, accepting Condition 1(A). This condition was recommended for a change, as part of the motion and vote on the revised letter of recommendation which apply, rather for a lack of majority. Changes to the latter of the recommendation, which were approved by the City Council and authorized for inclusion in the proposed Bill, are indicated in brown, bolded type. Blue, bolded type reflects changes from the January 19, 2016 City Council meeting.

Section Three: This ordinance shall be in full force and effect on and after its passage and approval. This Bill was passed and approved this 25 day of August, 2015, by the Council of the City of Wildwood, Missouri after having been read by title, or in full, two (2) times prior to its passage.

[Signature]
President Officer

[Signature]
Timothy Woolfher, Mayor

ATTEST:

[Signature]
City Clerk

[Signature]
Liz Weiss, City Clerk

The amount of this required contribution, if not submitted by January 1, 2016, 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 City of Wildwood Department of Public Works.

The Planning and Zoning Commission is recommending these fees be credited to the developer for the purposes of assisting with completion of required improvements within the right-of-way of the Pond-Cover Loop Road, if constructed. Additionally, credits may also be considered toward the construction of the Eatherton Road extension through the subject site, but would be solely based upon the difference in cost of a residential type street, of the same dimensions, versus this arterial type roadway. Credits would only be considered for these credits in the sole discretion of the City Council.

6. VERIFICATIONS PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN

Prior to approval of the Site Development Plan, the developer shall provide the following:

- 1. Submit to the Planning and Zoning Commission an engineering plan approved by the City of Wildwood Department of Public Works and the Metropolitan St. Louis Sewer District showing that adequate handling of the stormwater drainage of the site is provided.
- 2. The developer is required to provide adequate stormwater systems in accordance with the City of Wildwood and the Metropolitan St. Louis Sewer District standards.
- 3. All stormwater shall be discharged at an adequate natural discharge point. Stormholes are not adequate points of natural discharge and may not be disturbed.
- 4. Retention/detention of differential runoff of stormwater shall be required. Stormwater management shall be provided in permanent retention/detention facilities, such as ponds or other acceptable alternatives. These retention/detention facilities shall be completed and in operation prior to the issuance of building permits for an approved dwelling unit, except display lots.
- 5. All proposed retention/detention facilities and related stormwater improvements shall be located in a common ground area and insure **perennial maintenance** to the Homeowners Association to be created at the time of **planting of this development, unless otherwise accepted by the Metropolitan St. Louis Sewer District.**
- 6. The developer of this site shall be solely responsible to provide the necessary measures, as part of the Site Development Plan/Improvement Plan process, to implement "best management practices" for stormwater management and the construction of related facilities. Minimally, these practices/facilities should include rain gardens, vegetative swales, and other options to substantially reduce the amount of stormwater leaving the subject site.
- 7. The developer shall provide adequate detention and/or hydrologic calculations for review and approval of all stormwater that will encroach on City of Wildwood/Missouri Department of Transportation (MoDOT) rights-of-way.
- 8. A bond or letter of credit will be required by the City of Wildwood to cover any downstream damage to abutting or adjacent properties, common ground areas, or drainageways caused by the developers' use of this subject site (land disturbance/grading/construction activities, etc.), which shall be used for the restoration of damaged areas to their pre-development condition, if the developers fail to meet their responsibilities in this regard. The amount of the bond and

the establishment of the process for creating an accurate baseline condition for the existing downstream facilities shall be at the discretion of the City of Wildwood Department of Public Works, in conjunction with input from the petitioner's engineer.

- 9. Provide a Geotechnical Report covering development and grading required by improvements involved with this site, as directed by the Department of Public Works. Said report shall verify the adaptability of grading and improvements with soil and geologic conditions which are susceptible to rapid erosion, landslides, and/or creep. A statement of compliance with this study, signed by the Geotechnical Engineer preparing the report, shall be included on all Site Development Plans. The development and construction plans shall be designed to conform to the requirements and conditions of the Geotechnical Report. The Geotechnical Engineer shall be required to sign and seal all plans with a certification the proposed construction will be completed in accordance with the grading and soils requirements and conditions contained in the report.

- 10. Submit a Stormwater Pollution Prevention Plan, as part of the Site Development Plan review process, indicating compliance to all Federal, State, and local requirements regarding the management of stormwater runoff to prevent siltation and erosion, while preserving water quality, both upon the site and on downstream properties.

- 11. Provide a revised and final copy of the Natural Resource Protection Plan indicating all areas of the site, which are to be designated as protected and not to be disturbed. This revised and final copy of this map shall be reviewed and signed by a qualified soil scientist, who completed the analysis, and a statement indicating compliance with all the requirements of Section 100-230 of the City of Wildwood's Subdivision and Development Regulations.

- 12. The developer shall provide to the Planning and Zoning Commission, as part of the Site Development Plan submission, a Phase I Environmental Assessment Report of the property, which indicates its current condition relative to its past utilization by other owners. Determination regarding any required mitigation shall be identified and completed, prior to the approval of the Record Plat and before the occupancy of any residential unit, all being in accordance with State and federal standards and guidelines, as set forth by the United States Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR), for any determined contamination exceeding a residential cleanup standard/guideline, with the cost borne for such by the developer and not the City of Wildwood.

- 13. The developer shall provide a floodplain/waterways study to the Department of Public Works indicating compliance to the requirements of the City of Wildwood, the U.S. Army Corp of Engineers, and the Federal Emergency Management Agency (FEMA) regarding disturbance or development in

the protected waterways and floodplain areas. This study shall minimally provide information relating to disturbance of any protected area and be reviewed and acted upon by the Department of Public Works, as part of the Site Development Plan submission process.

- 14. RECORDING
- 15. VERIFICATION PRIOR TO PERMITS

Notification to Department of Planning

- 16. Subsequent to approval of the Site Development Plan and prior to issuance of any grading, foundation, or building permit, all approvals from the Department of Public Works (Wildwood), the Missouri Department of Transportation, the Metro West Fire Protection District, the Missouri Department of Natural Resources, and the Metropolitan St. Louis Sewer District must be received by the Department of Planning.

- 17. Prior to the issuance of a foundation or building permit for any lot, which adjoins the common ground area and/or detention basin, written certification from a Professional Engineer which verifies these areas are graded in accordance with the approved plans, must be received by the Department of Planning.

- 18. Improvements to State Route 100 and Eatherton Road must be completed prior to the issuance of building permits in excess of ten (10) percent of the units. Any delays in utility company relocation and adjustments will not constitute a cause to allow occupancy prior to completion of roadway improvements.

- 19. Record a proper subdivision of the property and comply with all other applicable Subdivision and Development Regulations sections affecting the development of land, except as otherwise specified by this ordinance.

- 20. With the filing of the record plat establishing separate lots, the developer shall record an approved Indenture, which defines the necessary assessments and specific trustee obligations in accord with provisions of Section 415.470 and 415.530 of the City of Wildwood Zoning Code.

- 21. All improvement and landscaping costs shall be submitted to the City of Wildwood through the standard subdivision escrow procedures.

ISSUE	REMARKS/DATE
1	3-22-2016, INITIAL SUBMITTAL
2	5-6-2016, REVISED PER CITY COMMENTS
3	6-14-2016, DEVELOPER REVISIONS
4	8-19-2016, DEVELOPER REVISIONS

Fischer & Frichtel Custom Homes, LLC
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 Corporate Certificate of Authority #001348

The Villages at Brightleaf
 Wildwood, Missouri
 SITE DEVELOPMENT PLAN
 ORDINANCE #2145

The Professional Engineer's seal and signature offered to this sheet. All drawings, instruments or other documents not prepared by this engineer, and the engineer's signature thereon are not responsible for the accuracy of such drawings or documents not embodying the seal and signature.

[Signature]
 PROFESSIONAL ENGINEER
 MISSOURI
 No. 228643

Date: 08/19/2016
 MICHAEL G. BOERDING
 License No. E-28643
 Civil Engineer

Job Number	14-04-138
Date	Aug. 19, 2016
Designed: MF	Sheet 9.2
Drawn: SL	
Checked: SL	SDP

MSD Base Map 23-V
 MSD P #
 Highway & Traffic #

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI THAT AUTHORIZES THE CHANGE IN THE ZONING OF NINE (9) PROPERTIES THAT TOTAL 78.7 ACRES OF AREA FROM THE NU NON-URBAN RESIDENCE DISTRICT, THE R-3 10,000 SQUARE FOOT RESIDENCE DISTRICT, THE R-4 7,500 SQUARE FOOT RESIDENCE DISTRICT, AND THE R-6 AND R-6A 4,500 SQUARE FOOT RESIDENCE DISTRICT, WITH A PLANNED ENVIRONMENT UNIT (PEU) AND A PLANNED RESIDENTIAL DEVELOPMENT OVERLAY DISTRICT (PRD), TO THE R-3 10,000 SQUARE FOOT RESIDENCE DISTRICT (TOWN CENTER "NEIGHBORHOOD GENERAL DISTRICT" AND "NEIGHBORHOOD EDGE DISTRICT"), WITH A PLANNED RESIDENTIAL DEVELOPMENT OVERLAY DISTRICT (PRD), WHICH ARE ALL LOCATED ON THE NORTHWEST CORNER OF TAYLOR ROAD AND STATE ROUTE 100, WHICH WILL ALLOW THIS SITE'S USE FOR ONE HUNDRED NINETY-FOUR (194), SINGLE FAMILY DETACHED DWELLINGS ON INDIVIDUAL LOTS, WITH PUBLIC SPACE AND COMMON GROUND. (Ward Five)

WHEREAS, the Town Center Plan allows development proposals that are uniquely limited to this area, given their allowable densities, intensities, designs, and other characteristics that are consistent with the tenets of 'New Urbanism;' and

WHEREAS, over the years, many projects have been approved and developed in Town Center for commercial purposes, but only a limited number of residential developments have been completed, with many of the larger parcels of ground located within its boundaries not having that same level of interest; and

WHEREAS, this proposed site is the largest undeveloped property in the Town Center Area and designated for a mix of residential uses, including single family detached types on individual lots, which represents the current proposal that has been submitted and considered by the Planning and Zoning Commission and the City Council; and

WHEREAS, the proposal includes the development of a minimum of five (5) villages, with a varying number of lots and dwellings, which will total the one hundred ninety-four (194) authorized homesites and will be designed and developed consistent with many of the tenets of the Neighborhood Design Standards and Architectural Guidelines of the Town Center Plan; and

WHEREAS, the Planning and Zoning Commission was presented this proposal at a July 2015 public hearing, where many issues and other considerations were identified via the petitioners' presentation, its members' questions, and comments from nearby residents; and

WHEREAS, after this public hearing, the Planning and Zoning Commission considered those identified issues, considerations, questions, and comments, specifically relating to this proposal and particularly the construction of the Pond-Grover Loop Road, the extension of the Birch Forest Drive (a stub street), and the front-facing garages and suggested further review was warranted; and

WHEREAS, a Work Session was held by the Planning and Zoning Commission to further discuss these matters and seek resolutions to them, within the confines of the standards and requirements of the Town Center Plan; and

WHEREAS, after this Work Session, refinements were made to the design concept for this large Town Center Area site, which included revised designs of the some of the residential units relative to the proximity of the garage doors to the fronting streets, increases in public space areas, inclusion of sound mitigation efforts along State Route 100, alterations to the street network to improve safety, function, and calm traffic, and a modification to the design of a cul-de-sac and other lots to increase the bufferyard distance between them and abutting residential lots located in surrounding subdivisions; and

WHEREAS, with this direction from the Planning and Zoning Commission, the petitioner did revise the plan, but concerns lingered regarding the Pond-Grover Loop Road, Birch Forest Drive, and the front-facing garages, which led to another design that did not include the inclusion of any street extensions, i.e. Pond-Grover Loop Road and Birch Forest Drive; and

WHEREAS, this revised plan was reviewed by the Planning and Zoning Commission and it could not reach a majority vote on this project and the associated rezoning of the property and application of the special procedures permit (Planned Residential Development Overlay District); and

WHEREAS, the Planning and Zoning Commission deadlock, with a vote of 5 to 5, which meant the proposal failed for a lack of majority; and

WHEREAS, the Letter of Recommendation from the Planning and Zoning Commission was forwarded to City Council on December 14, 2015, where it conducted another public hearing on this matter, and heard from those individuals in attendance regarding this proposal; and

WHEREAS, at the conclusion of the public hearing, the City Council noted its concerns with the roadway issues and sought an appropriate solution, if possible, which was offered as the following: not connect Birch Forest Drive for all vehicular traffic, but rather design it to accommodate emergency access only, along with pedestrian and bicycle facilities, while requiring the dedication of the necessary and prescribed amount of right-of-way for the Pond-Grover Loop Road, along with requiring the developers to provide an escrow in the amount sufficient to accommodate its construction in the future, but not at this time, thereby allowing further consideration of it by the community; and

WHEREAS, with this direction for design changes to the roadway plan and other conditions, the City Council authorized the preparation of legislation in this regard for presentation on January 11, 2016, along with noting the project, notwithstanding the roadway components described above, was a positive for the Town Center Area and would address a difficult property that had been the subject of many discussions, since the update of the Town Center Plan during the years of 2008 to 2012; and

WHEREAS, the City Council, through its established authority under Chapter 89 of Missouri Revised Statutes and the Wildwood Charter, believes this action is consistent with good planning practice and will protect the public's health, safety, and general welfare by improving the conditions at this site with its redevelopment under a new owner.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI, AS FOLLOWS:

Section One. The City of Wildwood Zoning Ordinances and Official Zoning District Maps, which are made a part hereof, are hereby, are hereby amended to reflect the change in zoning from the NU Non-Urban Residence District, the R-3 10,000 square foot Residence District, the R-4 7,500 square foot Residence District, and the R-6 and R-6A 4,500 square Residence District, with a Planned Environment Unit (PEU) and a Planned Residential Development Overlay District (PRD), to the R-3 10,000 square foot Residence District, with a Planned Residential Development Overlay District (PRD), as set forth in this ordinance, for the following described land:

A TRACT OF LAND BEING PART OF SECTION 1, TOWNSHIP 44 NORTH, RANGE 3 EAST IN ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTH AND SOUTH CENTERLINE OF SECTION 1 AND BEING THE SOUTHWEST CORNER OF EVERGREEN SECTION 2, PLAT 1, A SUBDIVISION AS RECORDED IN PLAT BOOK 260, PAGES 67 AND 68 OF THE ST. LOUIS COUNTY RECORDS; THENCE LEAVING SAID CENTERLINE AND ALONG THE SOUTH LINE OF SAID EVERGREEN SECTION 2, SOUTH 87°39'31" EAST, 935.26 FEET TO A POINT BEING THE SOUTHEAST CORNER OF LOT 409 OF EVERGREEN PLAT 4, A SUBDIVISION AS RECORDED IN PLAT BOOK 226, PAGES 95-97 OF SAID COUNTY RECORDS; THENCE LEAVING SAID SOUTH LINE AND ALONG AN ARC TO THE RIGHT HAVING A RADIUS OF 125.00 FEET, A CENTRAL ANGLE OF 59°04'05", AN ARC LENGTH OF 128.87 FEET, THE CHORD OF WHICH BEARS NORTH 31°51'57" EAST, 123.24 FEET TO A POINT; THENCE NORTH 61°24'00" EAST, 79.93 FEET TO A POINT; THENCE ALONG AN ARC TO THE RIGHT HAVING A RADIUS OF 200.00 FEET, A CENTRAL ANGLE OF 46°05'00", AN ARC LENGTH OF 160.86 FEET, THE CHORD OF WHICH BEARS NORTH 84°26'30" EAST, 156.56 FEET TO A POINT IN THE SOUTH RIGHT-OF-WAY OF BIRCH FOREST DRIVE (50' WIDE); THENCE ALONG THE SOUTHERN EDGE OF SAID RIGHT-OF-WAY SOUTH 72°31'00" EAST, 38.21 FEET TO A POINT; THENCE ALONG AN ARC TO THE LEFT HAVING A RADIUS OF 200.00 FEET, A CENTRAL ANGLE OF 12°38'00", AN ARC

LENGTH OF 44.10 FEET, THE CHORD OF WHICH BEARS SOUTH 78°50'00" EAST, 44.01 FEET TO A POINT BEING THE NORTHWEST CORNER OF LOT 406 OF SAID EVERGREEN PLAT 4; THENCE LEAVING SAID RIGHT-OF-WAY AND ALONG THE WEST LINE OF SAID LOT 406, SOUTH 04°51'00" WEST, 153.26 FEET TO THE SOUTHWEST CORNER OF SAID LOT 406, SAID POINT BEING IN THE SOUTH LINE OF SAID EVERGREEN PLAT 4; THENCE ALONG SAID SOUTH LINE SOUTH 87°39'31" EAST, 51.98 FEET TO A FOUND AXLE, SAID POINT BEING THE NORTHWEST CORNER OF EVERGREEN PLAT 3, A SUBDIVISION AS RECORDED IN PLAT BOOK 204, PAGES 71-73 OF SAID COUNTY RECORDS, FROM WHICH POINT A STONE BEARS SOUTH 01°34'37" WEST, 98.54 FEET SAID POINT ALSO BEING IN THE WEST LINE OF THE EAST HALF OF THE NORTHEAST QUARTER OF SECTION 1; THENCE ALONG THE WEST LINE OF THE EAST HALF OF THE NORTHEAST QUARTER, SOUTH 01°34'37" WEST, 1,128.77 FEET TO A POINT, SAID POINT BEING LOCATED ALONG THE WESTERN LINE OF LOT 112 OF EVERGREEN PLAT 1, A SUBDIVISION AS RECORDED IN PLAT BOOK 190, PAGE 89 OF SAID COUNTY RECORDS, SAID POINT BEING LOCATED ON THE CENTERLINE OF TAYLOR ROAD (30 FEET WIDE), THENCE LEAVING SAID CENTERLINE AND PROCEEDING NORTH 88°25'23"W, 20.00 FEET TO A POINT; THENCE SOUTH 20°00'41" WEST, 94.87 FEET; SOUTH 01°34'37" WEST, 113.11 FEET; SOUTH 43°21'00" WEST, 75.00 FEET TO A POINT BEING ON THE NORTH LINE OF MISSOURI STATE HIGHWAY 100 (ALSO KNOWN AS MANCHESTER ROAD); THENCE WITH SAID NORTH LINE NORTH 85°02'20" WEST, 461.64 FEET; ALONG AN ARC TO THE RIGHT HAVING A RADIUS OF 17,063.74 FEET, A CENTRAL ANGLE OF 01°22'40", AN ARC LENGTH OF 410.35 FEET, THE CHORD OF WHICH BEARS NORTH 84°21'00" WEST, 410.34 FEET TO A POINT; THENCE NORTH 73°52'26" WEST, 150.88 FEET; ALONG AN ARC TO THE RIGHT HAVING A RADIUS OF 17,038.74 FEET, A CENTRAL ANGLE OF 01°40'00", AN ARC LENGTH OF 495.64 FEET, THE CHORD OF WHICH BEARS NORTH 82°19'40" WEST, 495.62 FEET TO A POINT; THENCE NORTH 68°37'23" WEST, 137.03 FEET; NORTH 81°02'40" WEST, 865.00 FEET; NORTH 79°53'55" WEST, 500.10 FEET; NORTH 73°28'36" WEST, 230.48 FEET TO A POINT IN THE EAST RIGHT-OF-WAY LINE OF EATHERTON ROAD (40' WIDE); THENCE ALONG LAST SAID RIGHT-OF-WAY NORTH 27°33'18" WEST, 688.50 FEET TO A POINT BEING THE SOUTHWEST CORNER OF A 15 FOOT DEDICATION STRIP AS PER EASEMENT PLAT FOR SANDALWOOD CREEK PHASE 1, AS RECORDED IN PLAT BOOK 234, PAGE 33, AND AMENDED IN PLAT BOOK 243, PAGE 3 OF SAID COUNTY RECORDS, FROM WHICH POINT A CONCRETE MONUMENT BEARS SOUTH 87°37'57" EAST, A DISTANCE OF 17.32 FEET; THENCE ALONG THE SOUTH LINE OF SANDALWOOD CREEK CONDOMINIUMS PHASE ONE-A, (PLAT BOOK 234, PAGE 6), SANDALWOOD CREEK CONDOMINIUMS PHASE TWO-A (PLAT BOOK 242, PAGES 84-87), SANDALWOOD CREEK CONDOMINIUMS PHASE SIX-A, (PLAT BOOK 270, PAGES 57-61), AND SANDALWOOD CREEK CONDOMINIUMS PHASE SEVEN-A, (PLAT BOOK 285, PAGES 35-38) OF ST. LOUIS COUNTY RECORDS, SOUTH 87°33'57" EAST, 1,534.38 FEET TO A POINT BEING THE SOUTHEAST CORNER OF SAID SANDALWOOD CREEK CONDOMINIUMS PHASE SEVEN-A, AND ALSO BEING THE SOUTHWEST CORNER OF HUNTERS RUN, A SUBDIVISION AS RECORDED IN PLAT BOOK 320, PAGES 25-26 OF SAID COUNTY RECORDS; THENCE ALONG THE SOUTH LINE OF SAID HUNTERS RUN SOUTH 87°41'40" EAST, 771.44 FEET TO A POINT IN THE AFOREMENTIONED NORTH AND SOUTH CENTERLINE OF SECTION 1, SAID POINT ALSO BEING THE SOUTHEAST CORNER OF SAID HUNTERS RUN; THENCE ALONG SAID CENTERLINE AND EAST LINE OF SAID HUNTERS RUN NORTH 01°12'37" EAST, 399.14 FEET TO THE NORTHEAST CORNER OF SAID HUNTERS RUN AND THE POINT OF BEGINNING AND CONTAINING 3,436,441 SQUARE FEET MORE OR LESS (78.8898 ACRES MORE OR LESS.)

Section Two. The zoning authority and approval embodied in this ordinance is granted subject to compliance with the Subdivision and Development Regulations, Zoning Code, and all other City of Wildwood ordinances, rules, and regulations and the conditions of this ordinance, except as, may be modified herein, upon the requirement the development and approved Site Development Plan are carried out in accordance with the recommendation forwarded to the City Council by the Planning and Zoning Commission within the communication dated December 7, 2015, which is incorporated herein by reference as if fully set forth in this ordinance. The zoning authority granted herein is further subject to the following conditions:

1. PERMITTED USES

- a. This Planned Residential Development (P.R.D.) Overlay District shall authorize the maximum development of ~~one hundred ninety-four (194) eighty-seven (87)~~ detached single family dwellings on individual lots, with common ground and public space, and all permitted accessory structures normally found in conjunction with the primary use of each property. If the Homeowners Association should want to construct an in-ground swimming pool and related cabana, such is allowed within the boundaries of this Planned Residential Development Overlay District (PRD), but must be located in subdivision-owned common ground.

¹ These requests were advertised for 194 units; therefore, a greater number cannot be considered, unless a new public hearing is held.

2. LOT SIZES, DEPTHS, AND BUILDING REQUIREMENTS

- a. Each detached dwelling unit shall be located on an individual lot of record that meets the following requirements, per its location within the six (6) defined villages:
 - i. Village A – Eighty (80) foot minimum lot width and lot size of 12,000 square feet.
 - ii. Village B – Sixty-three (63) foot minimum lot width and lot size of 9,000 square feet.
 - iii. Village C – Sixty-two (62) foot minimum lot width and lot size of 9,000 square feet. ~~excepting four (4) lots, which shall have direct frontage onto the Pond Grover Loop Road, with on-site turnaround capabilities provided on each of them. These four (4) lots shall have a minimum width of seventy (70) feet, a front yard setback distance of thirty five (35) feet, and a depth no less than one hundred sixty (160) feet.~~
 - iv. Village D – Sixty (60) foot minimum lot width and lot size of 6,500 square feet.
 - v. Village E – Thirty-eight (38) foot minimum lot width and lot size of 4,000 square feet.
 - vi. Village F - Rear-Entry Garage Lots – Forty-five (45) foot minimum lot width and lots size of 5,400 square feet.
 - vii. Properties located within a cul-de-sac shall be as approved by the Planning and Zoning Commission on the Site Development Plan. These widths shall be measured at the front building line.
- b. All detached single family dwellings shall have a minimum finish floor elevation of their front porches of **eighteen (18) inches** in height above the adjoining sidewalk grade. All dwelling units shall have a front porch, which must extend across **at least thirty percent (30%)** of the façade's elevation facing the frontage line, at a minimum depth of no less than six (6) feet. No building facade shall show more than four (4) corners to the frontage line or as approved by the Architectural Review Board on the required elevations.
- c. No building and/or structure shall be more than two (2) stories above final grade, as measured from the front building line on any individual lot.
- d. Direct residential drive access shall be allowed for up to ~~one hundred fifty-three (153)~~ **one hundred fifty-seven (157) fifty-three (153)** of the single family detached units within this development from the system of internal streets, but the garage door(s) on each unit must be a minimum of ~~seven point five (7.5)~~ **seven point five (7.5)** feet behind an imaginary line formed by an extension of the front elevation of the dwelling (including the front porch) parallel to the lot's frontage, excepting those units in Villages A, C, and E. **Units in two (2) of these villages shall be as reviewed and acted upon by the Planning and Zoning Commission on the Site Development Plan (Villages A and C). Garage door(s) associated with any unit located within Village E shall be a minimum of six (6) feet behind an imaginary line formed by an extension of the front elevation of the dwelling (including the front porch) parallel to the lot's frontage.** Individual garage doors shall not be greater than ~~twenty (20) feet~~ **twenty (20) feet** in width and must be ~~carriage types~~ **carriage types**, including windows, and incorporate other architectural treatments, as determined by the City's Architectural Review Board to be appropriate, to lessen their prominence within the visual corridor formed by these interior streets within the development, unless a suitable alternative design is provided for these openings. **The developer shall provide a minimum of two (2) options that incorporate these requirements to the Planning and Zoning Commission for its consideration, as part of the Site Development Plan review and action process, regarding the front of the garages that further reduces their prominence from the abutting street view. Architectural type shingle selections shall be required on all residential units of a minimum thirty (30) year standard.**

- e. The New Urbanism lots that are part of this Planned Residential Development Overlay District boundary shall be accessed by service lanes (alleys) that comply in their construction with the Street Specifications of the Town Center Plan. These service drives shall provide access to rear loaded garages that must be provided, as part of any single-family detached dwelling, for a minimum of thirty-seven (37) ~~thirty three (33)~~ of the allowable one hundred ninety-four (194) ~~eighty seven (87)~~ lots. These lots do not need to incorporate the garage offset distance noted in Condition 2(d.) of this Ordinance.
- f. The first story, interior clear height for all single family dwellings shall be not less than **nine (9) feet**.
- g. Detached single family dwelling units, which face the frontage line, but also places the side of the building along another right-of-way, shall be designed to incorporate the elements of the front facade along that portion of the structure **(in its entirety)**. The placement and design of these units shall be approved by the Planning and Zoning Commission on the Site Development Plan and the elevations of these units by the Architectural Review Board.
- h. The proposed architectural design, character, and style of all buildings and dwelling units shall adhere to the City of Wildwood's Town Center Architectural Guidelines, Neighborhood Design Standards, and any other applicable requirements of the Town Center Plan, **excepting no vinyl siding shall be allowed on any dwelling unit within the boundaries of this Planned Residential Development Overlay District (PRD). All materials used on any facade of a residential unit shall be fiber cement siding and backer board.** Approval of the required design shall be by the Architectural Review Board. Minimally, all buildings shall maintain a consistent theme throughout the boundaries of this Planned Residential Development Overlay District in terms of material, color, and style.
- i. The overall area of this Planned Residential Development Overlay District (PRD) shall be no less than 78.7 acres in total.

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the P.R.D. Overlay District approval by the City Council, and prior to any site disturbance, the developer shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the developer, time intervals may be extended once by the Planning and Zoning Commission in accord with requirements of Section 420.060 of the City of Wildwood Zoning Ordinance. Said Site Development Plan shall include, but not be limited to, the following information:

- a. Outboundary plat and legal description of the property.
- b. A general numbered lot plan with setback lines from all streets and roadways on and adjacent to the property. A typical lot diagram, indicating all site design information such as, but not limited to, right-of-way width, improvement dimensions and locations, setbacks, and building placement.
- c. The location and size of all parking areas, pavement widths, and right-of-way dedications of all internal roadway improvements and drives.
- d. A general plan indicating setback lines along the perimeter of the subject tract of land and surrounding property lines and related improvements within four hundred (400) feet of this site's boundaries.

- e. Location of all roadways adjacent to the property, including required roadway right-of-way dedication and pavement widening with existing and proposed improvements, and general location, size, right-of-way, and pavement width of all interior drives.
- f. The location and size of all freestanding signs, lighting, fences, sidewalks, and other above ground structures, except retaining walls less than two (2) feet in height per section.
- g. Existing and proposed contours at vertical intervals of not more than two (2) feet.
- h. General location of sanitary sewer facilities.
- i. Parking and density calculations.
- j. Conceptual location and size of common ground areas.
- k. A typical section of the proposed road indicating the placement and design of required streetscape improvements.
- l. A Landscape Plan including, but not limited to, the location, size, and general type of plant materials to be used in accord with the City of Wildwood's Ordinance 410 and accompanying Tree Manual.
- m. An inventory of the percent of tree canopy or individual trees to be retained on the site.
- n. Location of all existing and proposed easements.
- o. All other information not mentioned above, but required on a preliminary plat in accord with Section 420.060 of the City of Wildwood Subdivision and Development Regulations.

If the Planning and Zoning Commission determines, through its standard review processes, the Site Development Plan cannot be acted upon due to non-compliance to the site-specific ordinance, the Zoning Ordinance, or other land use regulations applicable to this type of subdivision, as interpreted by it, then the rezoning of the subject site and the application of the Planned Residential Development Overlay District shall not remain effective thereafter and the City must initiate the revocation process described in the Zoning Ordinance for this type of circumstance.

4. **SITE DEVELOPMENT PLAN DESIGN CRITERIA**

The above Site Development Plan shall adhere to the following specific design criteria:

Build-To Lines - Residential

- a. Any building or structure, other than boundary and/or retaining walls, fences, detention facilities, and/or light standards, shall adhere to the following build-to lines, as specified in the Town Center Plan's Neighborhood Design Standards:
 - (1) ~~Twenty (20)~~ feet from any right-of-way line, except any unit served by a rear entry garage, which shall have a **build-to distance of ten (10) feet** (see Condition 2(a.)).
 - (2) ~~Five (5) feet~~ for any side yard property line and ten (10) feet for side yard areas that abut the perimeter of the Planned Residential Development Overlay District.
 - (3) ~~Fifteen (15) feet from any rear yard property line~~ and thirty (30) feet for rear yard areas that abut the perimeter of the Planned Residential Development Overlay District.
 - (4) ~~Five (5) feet from any rear yard property line~~ for any unit served by a rear entry garage.

Parking Setbacks - Residential

- b. All parking stalls or loading spaces, excluding points of ingress or egress for the detached dwelling units, shall be located behind the front elevation of the dwelling a minimum of ~~twenty-five (25)~~

feet. Driveway widths serving these required parking spaces, specifically between the edge of the public right-of-way and the front building line, shall be as approved by the Planning and Zoning Commission on the Site Development Plan, but be minimized in their respective distances to the greatest extent possible.

Access and Roadway Improvements

- c. **State Route 100** - Dedicate the required amount of right-of-way and/or easements along this property's State Route 100 frontage to the Missouri Department of Transportation (MoDOT) for public roadway purposes and, **subject to Subsection 4(d.)**, construct within this area the extension of the Pond-Grover Loop Road, all necessary intersection modifications and upgrades, and other improvements required therein. Improvements to State Route 100 shall conform to the requirements of the Missouri Department of Transportation (MoDOT) and the City of Wildwood's Street Specifications of the Town Center Plan, as directed and approved by the State of Missouri and the City of Wildwood's Department of Public Works. All streetscape requirements (street trees, lights, signs, waste receptacles, benches, and other items consisting of approved materials) shall be installed by the developer, as specified by the City of Wildwood's Town Center Plan within the right-of-way of State Route 100 and directed by the Department of Public Works.

- d. **Pond-Grover Loop Road** – **Subject to the conditions that follow in this Subsection [4 (d.)], petitioners/developer shall construct the Pond-Grover Loop Extension, as shown on the approved Preliminary Plan; deviations in modifications to the location and design of the extension from what is shown on the plan may be approved by the Directors of the Departments of Planning and Public Works, so long as the purpose of the extension, as contemplated by the Town Center Plan, is fulfilled satisfied; the final location, design and specifications of the plan extension shall be shown on the applicable plat of the subdivision, as approved by City Council.**
 - i. **The extension shall be constructed pursuant to applicable City standards;**
 - ii. **The cost of constructing the extension shall be determined by petitioners/developer, subject to approval review and acceptance by the Directors of Planning and Public Works, prior to approval of the applicable plat;**
 - iii. **Upon acceptance approval of the cost by the Directors of Planning and Public Works, and prior to approval of the applicable plat, the petitioners/developer and the City shall execute an agreement that provides for the following:**
 1. **The dedication of right-of-way to the City for the extension, pursuant to the applicable plat, and such other instruments, as may be reasonably required by the City;**
 2. **A Letter of Credit, in the amount of the cost, issued to the City, as beneficiary, shall be obtained by petitioners/developer from a financial institution and with terms and conditions and an outside expiration date (including any renewal terms) that are acceptable to the Directors of Planning and Parks and the City Attorney and in accord with the terms and conditions of this Subsection [4(d.)] for the purpose of securing the performance of the construction of the extension; and the Letter of Credit shall be issued and delivered to the City, prior to approval of the applicable plat;**
 3. **Commencement of construction of the extension within ninety (90) days after a Notice to Proceed is issued by the Directors of Planning and Public Works to petitioners/developer and petitioners/developer shall proceed and complete the extension in accordance with a schedule approved by the Directors of Planning and Public Works;**

4. If Notice to Proceed is not issued by the second first anniversary date of the approval of the applicable plat or if the City issues a notice to petitioners/developers stating the extension should not be constructed, petitioners/developer's obligation to construct the extension shall terminate, the Letter of Credit shall terminate, and the dedication shall be released/reconveyed to the petitioners/developers, or their successor(s), in title; the area on the plan set aside for the extension shall, in the event of such release and reconveyance, be converted to common ground, with trail(s) and associated public easements for them, as approved by the Director of Planning and Parks; and
 5. The City shall execute and record such instruments and documents, as may be reasonably necessary to effect the foregoing terminations and release/reconveyance.
- e. ~~Establish a minimum seventy (70) foot wide public right of way dedication to the City of Wildwood and construct the Pond Grover Loop Road Extension through the site that provides a total of two (2), eleven (11) foot wide lanes (not inclusive of the concrete vertical curb and gutter), a minimum ten (10) foot wide grass median, and a five (5) foot wide sidewalk on east side of this internal roadway, and a ten (10) foot wide multiple use trail on its west side, all of which adhere to the Town Center Plan's Street Specifications and the Streetscape Design Requirements, as directed by the Department of Public Works and approved by the Planning and Zoning Commission on the Site Development Plan. Tree lawn areas and all stormwater management facilities shall be the developer's responsibility to provide and construct as well. Along with this dedication of seventy (70) feet of right of way, the developer shall provide a five (5) foot wide roadway, maintenance, landscaping, sewer, sidewalk, and utility easement along both sides of this public dedication area. All streetscape requirements (street trees, lights, signs, waste receptacles, benches, and other items consisting of approved materials) shall be installed by the developer, as specified by the City of Wildwood's Town Center Plan within the right of way of Pond Grover Loop Road and directed by the Department of Public Works.~~
- i. ~~The developer is also responsible for the construction of a roundabout at a location approved by the Planning and Zoning Commission on the Site Development Plan. This roundabout shall be designed, engineered, and constructed in accordance with the Town Center Plans Street Specifications and Streetscape Requirements. The Departments of Public Works and Planning shall direct determinations in this regard, along with final action by the Planning and Zoning Commission.~~
- e. **Internal Streets** - Complete the necessary dedication of land area within this subject site for public right-of-way purposes associated with the internal network of streets. These dedications for public rights-of-way shall be used for the construction by the developer of a network of internal residential streets for service to the authorized lots. These dedications shall be a minimum of forty (40) feet in width to accommodate the construction of two (2) lanes of asphalt roadway, with concrete curb and gutter, and five (5) foot wide sidewalks, including a three (3) foot tree lawn area, which all adhere to the Town Center Plan's Street Specifications and the Streetscape Design Requirements, as directed by the Department of Public Works and approved by the Planning and Zoning Commission on the Site Development Plan. The construction of these improvements is the sole responsibility of the developer(s) of this project. Along with this dedication of these rights-of-way areas, the developer shall provide a five (5) foot wide roadway, maintenance, landscaping, sewer, sidewalk, and utility easement along both sides of this public dedication area. All streetscape requirements (street trees, lights, signs, waste receptacles, benches, and other items consisting of approved materials) shall be

installed by the developer, as specified by the City of Wildwood's Town Center Plan within the rights-of-way of these unnamed streets and directed by the Department of Public Works.

- f. **Eatherton Road Extension** - Dedicate the required amount of right-of-way and/or easements within the boundaries of this property to the City of Wildwood for the construction of the Eatherton Road Extension for public roadway purposes, which include a minimum driving surface of two (2) lanes that total twenty-six (26) feet in width, a five (5) foot wide sidewalk on both sides of this driving surface, and street trees and lights, including a minimum seven (7) foot wide tree lawn area for these improvements. A roundabout, and related channelization islands and other improvements as set forth therein, is required within the Eatherton Road Extension right-of-way area and the developer is responsible for its construction. Improvements to Eatherton Road shall conform to all of the requirements of the City of Wildwood's Street Specifications of the Town Center Plan, as directed and approved by the City of Wildwood's Department of Public Works. All streetscape requirements (street trees, lights, signs, waste receptacles, benches, and other items consisting of approved materials) shall be installed by the developer, as specified by the City of Wildwood's Town Center Plan within the right-of-way of Eatherton Road and directed by the Department of Public Works.
- g. **Birch Forest Drive** – ~~The trail/emergency extension of extend Birch Forest Drive, from its current terminus into the subject site, shall be limited to a design that accommodates only emergency and pedestrian/bicyclist access. The construction and of this trail/emergency extension shall adhere to established and accepted design, engineering, and material standards and specifications, which would allow for emergency vehicles only, pedestrians, and bicyclists to access across it, while blocking any other vehicle by a system of bollards (or acceptable alternative), to be selected in terms of their types and placements, as directed by the Town Center Plan's Street Specifications and the Streetscape Design Requirements Department of Public Works and the Metro West Fire Protection District, all needing final action by the Planning and Zoning Commission on the Site Development Plan. Safety Components determined necessary for the design and construction/reconstruction of this alternative, trail/emergency/pedestrian/bicyclist any stub-street extension shall be indicated on the Site Development Plan and reviewed and acted upon thereafter by the Planning and Zoning Commission.~~
- h. **Service Lanes (alleys)** - Complete the necessary dedication of land area within this subject site for private access purposes. These dedications for private purposes shall be used for the construction by the developer of a system of lanes/alleys for service to the authorized lots. These dedications shall be a minimum of twenty-two (22) feet in width to accommodate the construction of a lane/alley, which all adhere to the Town Center Plan's Street Specifications and the Streetscape Design Requirements, as directed by the Department of Public Works and approved by the Planning and Zoning Commission on the Site Development Plan.
- i. Any planned traffic island/cul-de-sac shall be designed and constructed by the developer of this residential subdivision in accordance with City of Wildwood standards, and as directed by the Department of Public Works. The Planning and Zoning Commission, on the Site Development Plan, shall approve the final design of this traffic calming improvement.

Miscellaneous Roadway Requirements

- j. Installation of landscaping and ornamental entrance monument or identification signage, if proposed, shall be reviewed by the Department of Public Works for sight distance considerations and approved prior to its installation or construction.
- k. If required sight distance cannot be provided at the access location, acquisition of right-of-way, reconstruction of pavement, including correction to vertical alignment and other off-site improvements, may be required to provide the required sight distance as directed by the Department of Public Works.
- l. **Construction access shall be from State Route 100 during the development of this site, not via Birch Forest Drive and/or Eatherton Road.**
- m. Sidewalks shall be required on all public and private streets (parking lot aisles) and provide for a continuous and logical layout of this pedestrian network. Design and construction requirements for all sidewalks within the entire development shall be as established in the Street Specifications and Streetscape Elements of the Town Center Plan. Approval of their location, design, and material shall be by the Planning and Zoning Commission, as part of the Site Development Plan review process.
- n. The developer is advised that utility companies will require compensation for relocation of their utility facilities within public road right-of-way. Utility relocation cost shall not be considered as an allowable credit against the petitioner's Traffic Generation Assessment contributions. 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 roadway improvements.
- o. All internal streets, access drives, or lanes, whether public or private, shall comply with the Streetscape Requirements of the Town Center Plan in terms of improvements, such as drive lane widths, sidewalks, stormwater drainage facilities, garden walls, street trees and lights, and pedestrian furniture. If certain streets, drives, or lanes are to be private, an easement shall be provided to the City granting public use of them for pedestrian and vehicular purposes. These easements shall be granted at the time of the Record Plat approval by the City Council.

Parking Requirements - Residential

- p. Parking spaces shall be provided as required by the Town Center Plan's Neighborhood Design Standards and Section 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood Zoning Ordinance for the R-3 10,000 square foot Residence District.

Landscape Requirements - Specific

- q. Landscaping shall adhere to all requirements of Ordinance 410 and its accompanying Tree Manual, including the submittal of a Tree Preservation Plan in conjunction with the Site Development Plan.
- r. All streets, roads, and lanes shall be appropriately landscaped as required by the Streetscape Design Requirements of the Town Center Plan and approved by the Planning and Zoning Commission on the Site Development Plan.

- s. The areas of existing vegetation within the P.R.D. Overlay District boundaries identified as to be retained shall be marked on the site prior to the commencement of any disturbance in accord with the City of Wildwood's Ordinance 410. These areas shall be indicated on the Site Development Plan submitted to the City of Wildwood for Planning and Zoning Commission review and approval. Existing mature tree canopy shall be preserved in accordance with the requirements of City of Wildwood's Ordinance 410 Tree Preservation and Restoration Code.
- t. Landscaping within the defined common ground areas shall comply with Ordinance 410 Tree Preservation and Restoration Code requirements and accompanying Tree Manual. The Planning and Zoning Commission, on the Site Development Plan, shall approve the planting pattern. Amenities, such as benches, lights, and walking paths shall be installed in the open space area of the residential development by the developer of these one hundred ninety-four (194) ~~eighty-seven (87)~~ dwelling units.
- u. The developer shall provide a minimum twenty (20) foot wide, landscape buffer strip, within a perpetual easement dedicated to the Homeowners Association for its maintenance and care, along the entire eastern boundary of the site, where existing woodlands are not preserved, for plantings, as reviewed and acted upon by the Planning and Zoning Commission.
- v. A Landscape Architect shall sign and submit all plans for review and approval for this mixed-use development.

Signs - Residential

- w. Signs for this P.R.D. Overlay District shall be erected in accordance with the Town Center Plan Architectural Guidelines and Section 415.410 Sign Regulations of the City of Wildwood Zoning Ordinance for the R-3 10,000 square foot Residence District.
- x. The location of all signage shall be as approved on the Site Development Plan by the Planning and Zoning Commission. Signage not located on common ground must be erected within an easement.

Lighting Requirements

- y. The location of all lighting standards shall be as approved on the Site Development Plan. No on-site illumination source shall exceed sixteen (16) feet in height or be so situated that light is cast directly on adjoining properties. Illumination levels for all lighting shall comply with the provisions of the City of Wildwood's Zoning Code, Section 415.450 "Outdoor Lighting Requirements." A Lighting Study shall be submitted in conjunction with the Site Development Plan indicating compliance to these requirements. The Planning and Zoning Commission shall approve the location, design, and appearance of all light standards and fixtures as part of the Site Development Plan review process.

Miscellaneous Conditions

- z. The design, color, material, and location of all garden and screen walls or fences, if planned or required, shall be consistent with the requirements of the Town Center Plan's Architectural Guidelines and be shown on the Site Development Plan for review and action by the Planning and Zoning Commission and the Architectural Review Board.

- aa. Improvements associated with public infrastructure, such as roadways, sidewalks, and access points, shall comply with general design principles that will provide for safe and efficient movement of traffic in and around these sites and improve overall circulation in the area. These improvements shall be reviewed and approved by the Department of Public Works.
- bb. Hours of construction and grading activity shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. No development (grading and construction) activity shall be authorized on Sundays.
- cc. All retaining walls exceeding three (3) feet in height per section or crossing individual property lines shall be constructed of an appropriate inter-locking concrete block system. Walls crossing property lines shall be located in a maintenance easement. The design, color, material, and location of all walls shall be consistent with the requirements of the Town Center Plan's Architectural Guidelines and be shown on the Site Development Plan for review and action by the Planning and Zoning Commission.
- dd. The location of all utility easements for proposed service to this development shall be as approved by the Planning and Zoning Commission on the Site Development Plan. All utilities installed to serve this site shall be placed underground, including any existing overhead lines located on the subject property.
- ee. ~~No portion of any lot that is to be located within the proposed eight (8) lot cul-de-sac solely served by Pond Grover Loop Road shall extend closer than thirty (30) feet to the abutting Planned Residential Development Overlay District (PRD) boundary to their north. This buffer area shall be protected from all land disturbance activities. Additionally, the common boundary between this site and the Sandalwood Creek and Hunters Run Subdivisions shall be separated by a minimum ten (10) foot buffer area that is common ground. This area shall also be protected from all land disturbance activities.~~

5. TRAFFIC GENERATION ASSESSMENT FEE

The developer shall contribute to the East Area Traffic Generation Assessment Trust Fund established by Section 140.210 of the City of Wildwood's Revised Codes. This assessment must be paid in full at the time of the first Zoning Authorization for any building or structure or when the individual issuances of building permits for the authorized lots are approved. This contribution shall not exceed the amount established by multiplying the number of **provided** parking spaces by the following rate:

Type of Development	Required Contribution
Single Family Dwelling (detached)	\$1,055.10/Parking Space

(Section 415.280 of the City of Wildwood Zoning Code defines a parking space.)

If type of development proposed differ than those listed, rates shall be provided by the Department of Public Works.

As this development is located within a Trust Fund area established by the City of Wildwood, any portion of the traffic generation assessment contribution, which remains, following completion of roadway improvements required by the development shall be retained in the appropriate trust fund.

The amount of this required contribution, if not submitted by January 1, 2016, 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 City of Wildwood Department of Public Works.

The Planning and Zoning Commission is recommending these fees be credited to the developer for the purposes of assisting with completion of required improvements within the right-of-way of the Pond-Grover Loop Road, **if constructed. Additionally, credits may also be considered toward the construction of the Eatherton Road extension through the subject site, but would be solely based upon the difference in cost of a residential type street, of the same dimensions, versus this arterial type roadway. Credits would only be considered for the Eatherton Road Extension, if Pond-Grover Loop Road were not to be constructed.** The granting of these credits is at the sole discretion of the City Council.

6. VERIFICATIONS PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN

Prior to approval of the Site Development Plan, the developer shall provide the following:

Stormwater Improvements

- a. Submit to the Planning and Zoning Commission an engineering plan approved by the City of Wildwood Department of Public Works and the Metropolitan St. Louis Sewer District showing that adequate handling of the stormwater drainage of the site is provided.
 1. The developer is required to provide adequate stormwater systems in accordance with the City of Wildwood and the Metropolitan St. Louis Sewer District standards.
 2. All stormwater shall be discharged at an adequate natural discharge point. Sinkholes are not adequate points of natural discharge and may not be disturbed.
 3. Retention/detention of differential runoff of stormwater shall be required. Stormwater management shall be provided in permanent retention/detention facilities, such as ponds or other acceptable alternatives. These retention/detention facilities shall be completed and in operation prior to the issuance of building permits for an approved dwelling unit, except display lots.
 4. All proposed retention/detention facilities and related stormwater improvements shall be located in a common ground area and insure perpetual maintenance to the Homeowners Association to be created at the time of platting of this development, unless otherwise accepted by the Metropolitan St. Louis Sewer District.
 5. The developer of this site shall be solely responsible to provide the necessary mechanisms, as part of the Site Development Plan/Improvement Plan process, to implement "best management practices" for stormwater management and the construction of related facilities. Minimally, these practices/facilities should include rain gardens, vegetative swales, and other options to substantially reduce the amount of stormwater leaving the subject site.
 6. The developer shall provide adequate detention and/or hydrologic calculations for review and approval of all stormwater that will encroach on City of Wildwood/Missouri Department of Transportation (MoDOT) rights-of-way.
 7. A bond or letter of credit will be required by the City of Wildwood to cover any downstream damage to abutting or adjacent properties, common ground areas, or drainageways caused by the developers' use of this subject site (land/disturbance/grading/construction activities, etc.), which shall be used for the restoration of damaged areas to their pre-development condition, if the developers fail to meet their responsibilities in this regard. The amount of this bond and

the establishment of the process for creating an accurate baseline condition for the existing downstream facilities shall be at the discretion of the City of Wildwood Department of Public Works, in conjunction with input from the petitioner's engineer.

Geotechnical Report

- b. Provide a Geotechnical Report covering development and grading required by improvements involved with this site, as directed by the Department of Public Works. Said report shall verify the adaptability of grading and improvements with soil and geologic conditions which are susceptible to rapid erosion, landslide, and/or creep. A statement of compliance with this study, signed by the Geotechnical Engineer preparing the report, shall be included on all Site Development Plans. The development and construction plans shall be designed to conform to the requirements and conditions of the Geotechnical Report. The Geotechnical Engineer shall be required to sign and seal all plans with a certification the proposed construction will be completed in accordance with the grading and soils requirements and conditions contained in the report.

Stormwater Pollution Prevention Plan

- c. Submit a Stormwater Pollution Prevention Plan, as part of the Site Development Plan review process, indicating compliance to all Federal, State, and local requirements regarding the management of stormwater runoff to prevent siltation and erosion, while preserving water quality, both upon the site and on downstream properties.

Natural Resource Protection Plan

- d. Provide a revised and final copy of the Natural Resource Protection Plan indicating all areas of the site, which are to be designated as protected and not developable. This revised and final copy of this map shall be reviewed and signed by a qualified soil scientist, who completed the analysis, and a statement indicating compliance with all the requirements of Section 1005.200 of the City of Wildwood's Subdivision and Development Regulations.

Environmental Assessment – Phase One

- e. The developer shall provide to the Planning and Zoning Commission, as part of the Site Development Plan submittal package, a Phase I Environmental Assessment Report of the property, which indicates its current condition relative to its past utilization by other owners. Determination regarding any required remediation shall be identified and completed, prior to the approval of the Record Plat and before the occupancy of any residential unit, all being in accordance with State and federal standards and guidelines, as set forth by the United States Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR), for any determined contaminant exceeding a residential cleanup standard/guideline, with the cost borne for such by the developer and not the City of Wildwood.

Floodplain Study and Plans/Wetlands Study

- f. The developer shall provide a floodplain/wetlands study to the Department of Public Works indicating compliance to the requirements of the City of Wildwood, the U.S. Army Corp of Engineers, and the Federal Emergency Management Agency (FEMA) regarding disturbance or development in

the protected waterways and floodplain areas. This study shall minimally provide information relating to disturbance of any protected area and be reviewed and acted upon by the Department of Public Works, as part of the Site Development Plan submittal process.

7. RECORDING

Within ninety (90) days of approval of the Site Development Plan by the Planning and Zoning Commission, the approved plan shall be recorded with the St. Louis County Recorder of Deeds.

8. VERIFICATION PRIOR TO PERMITS

Notification to Department of Planning

- a. Subsequent to approval of the Site Development Plan and prior to issuance of any grading, foundation, or building permit, all approvals from the Department of Public Works (Wildwood), the Missouri Department of Transportation, the Metro West Fire Protection District, the Missouri Department of Natural Resources, and the Metropolitan St. Louis Sewer District must be received by the Department of Planning.
- b. Prior to the issuance of a foundation or building permit for any lot, which adjoins the common ground area and/or detention, basin, written certification from a Professional Engineer which verifies these areas are graded in accordance with the approved plans, must be received by the Department of Planning.

Roadway Improvements

- c. Improvements to State Route 100 and Eatherton Road must be completed prior to the issuance of building permits in excess of ten (10) percent of the units. Any delays in utility company relocation and adjustments will not constitute a cause to allow occupancy prior to completion of roadway improvements.

Land Subdivision

- d. Record a proper subdivision of the property and comply with all other applicable Subdivision and Development Regulations sections affecting the development of land, except as otherwise specified by this ordinance.

Indentures

- e. With the filing of the record plat establishing separate lots, the developer shall record an approved indenture, which defines the necessary assessments and specific trustee obligations in accord with provisions of Section 415.470 and 415.510 of the City of Wildwood Zoning Code.

Escrow Requirements

- f. All improvement and landscaping costs shall be submitted to the City of Wildwood through the standard subdivision escrow procedures.

Improvement Plans

- g. The developer of this residential subdivision shall provide to the City Improvement Plans indicating construction details relative to public and private infrastructure associated with its development. Said plans will be used to calculate escrow requirements for these identified improvements.

Sanitary Sewage System

- h. The developer shall provide verification from the Metropolitan St. Louis Sewer District that public sewer service has been provided to this site. Verification shall be in a form acceptable to the City of Wildwood.

Potable Water Service

- i. The developer shall provide verification from the Missouri American Water Company that service to this subdivision can be provided at acceptable levels relative to the density of the project and not cause service issues to other households served by the same.

9. GENERAL DEVELOPMENT CONDITIONS

- a. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.
- b. A grading permit is required prior to any grading on the site. Interim stormwater drainage control in the form of siltation control measures is required.
- c. A copy of the most recently approved Site Development Plan for this P.R.D. Overlay District development shall be prominently displayed at all times in all sales offices for this development.
- d. The petitioner shall be responsible for obtaining all necessary permits from the Department of Natural Resources Clean Water Commission as they relate to the development of this tract of land.
- e. If cut and fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual, such as Rye or Sudan Grasses, shall be utilized to retard erosion.
- f. Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by issuing City of Wildwood Departments or Commissions.
- g. The Zoning Enforcement Officer of the City of Wildwood, Missouri, shall enforce the conditions of this ordinance in accord with Site Development Plans approved by the Planning and Zoning Commission and the Department of Planning.
- h. Any other applicable zoning, subdivision, or other regulations or requirements of the City, whether in effect at the adoption of this ordinance or as may be hereinafter adopted, shall further apply to the development of this property as authorized by this Planned Residential Development Overlay District

Ordinance, except as may be provided by law. Nothing herein shall be deemed a waiver of any subdivision, zoning or other development regulation of the City whether by implication or reference.

- i. This zoning approval is conditioned on compliance with the Zoning Code, Subdivision Code, and all applicable laws of the City. Such additional regulations are supplemental to the requirements herein and no modification of any applicable regulations shall result from this Planned Residential Development Overlay District ordinance, except where this ordinance has expressly modified such regulations by reference to the applicable provision authorizing such modification.

10. PUBLIC SPACE REQUIREMENTS

- a. Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 and 415.270 of the City of Wildwood's Zoning Ordinance. The City Council accepts the findings of the Public Space Study adopted therein and determines the compliance with the Public Space Ordinance provisions will address the impact of this specific development on public space needs in a manner and amount that is equal to less than an amount that is roughly proportional to the actual or anticipated impact. The installation of required public space improvements shall be as required by the applicable ordinances, but shall be completed prior to issuance of any occupancy (temporary or final) permit authorized by this ordinance. Unless otherwise approved pursuant to the procedures set forth in the Public Space Ordinance, the public space attributable to this development, **based upon the number of authorized dwelling units at a rate of 1,742.4 square feet per new single family dwelling**. The provision of public space shall substantially comply with the Preliminary Development Plan submitted in conjunction at the public meeting on November 2, 2015.

Editor's Note: Changes to the report from its October 5, 2015 version to the November 2, 2015 are with a single strike-through line. Previous changes considered by the members at their October 5, 2015 Planning and Zoning Commission meeting are indicated by blue-type. **No modifications have been made to the Letter of Recommendation, since the Planning and Zoning Commission took action upon it on November 16, 2015, excepting Condition 2(d.). This condition was recommended for a change, as part of the motion and vote on the overall Letter of Recommendation, which, again, failed for a lack of majority. Changes to the Letter of Recommendation, which were supported by the City Council and authorize for inclusion in the proposed Bill, are indicated in brown, bolded type.** Blue, bolded type reflects changes from the January 11, 2016 City Council meeting.

Section Three. This ordinance shall be in full force and effect on and after its passage and approval.

This Bill was passed and approved this 25 day of January 4, 2016, by the Council of the City of Wildwood, Missouri after having been read by title, or in full, two (2) times prior to its passage.

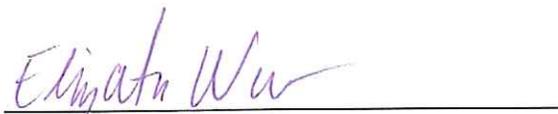


Presiding Officer

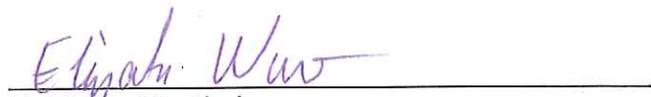


Timothy Woerther, Mayor

ATTEST:



City Clerk



Liz Wejss, City Clerk

THE **STERLING** CO.
ENGINEERS & SURVEYORS

June 6, 2016

Joe Vujnich, Director
City of Wildwood
Department of Planning and Parks
16860 Main Street
Wildwood, Missouri 63040

Re: Villages at Bright Leaf
Site Development Plan Package
TSC Job No: 14-04-138



Dear Mr. Vujnich:

Enclosed are three full sets of revised Site Development Plans for the Villages at Bright Leaf. Plans have been revised per your comment letter dated April 26, 2016, as outlined below:

1. The Cover Sheet has been revised per according to the City of Wildwood markup.
2. General Note #14 has been added to address compliance with the City's Grading Code in the dewatering of existing features.
3. Street Intersections and roundabouts have been dimensioned as requested. "Autoturn" analysis were provided to the City several weeks ago.
4. Splitter Islands have been shown at all intersections with Pond Grover Loop Road and Eatherton Road. These islands need to be 3" raised island to allow vehicular traffic to maneuver about them. "Autoturn" analysis have been provided for these intersections as well.
5. Normal high water elevations have been provided for the 100 year storm event. Water Quality will be provided as Forebays and Bioretention Basins which meet MSD requirement with final design.
6. A Tree Preservation Plan has been provided with this submittal prepared by Loomis Associates.
7. All proposed streets have been labeled as 'Public' and the width of right-of-way has been indicated.
8. All proposed alleys have been labeled as 'Private' and the width of the easement has been indicated.
9. The dedication strip along the properties frontage with Eatherton Road has been labeled as 5' wide. Dimensions have been provided for the width of the roadway in this area. One-half of a 26' pavement section will be constructed.
10. Eatherton Road along the properties western boundary has been dimensioned.
11. The sidewalk along Eatherton Road has been extend to the north to connect into the existing sidewalk.
12. The plan shows existing pavement removal and a proposed trail connection across from the western most intersection of Street H. The existing pavement shall be used as a trail connection.
13. Proposed grading has been revised in the location of Lots 165E and 166E.
14. The proposed number of on-street parking spaces near Lot 188E have been shown.
15. There are existing easements in Sandlewood Creek Condominiums for the connection of storm sewers.
16. A pedestrian crossing located on a speed table has been shown near the terminus of Street H which extends to the existing multi-use trail.

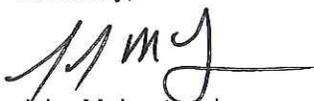
The Sterling Company

5055 New Baumgartner Road, St. Louis Missouri 63129
314-487-0440 Fax 314-487-8944

17. The design of the crosswalks at Eatherton Road and the roundabout have been redesigned as requested.
18. All proposed streets have been labeled as 'Public' and the width of right-of-way has been indicated.
19. A 5' wide sidewalk has been shown for the entire length of new Eatherton Road. This was previously agreed upon with the City.
20. The trail design has been revised from the roundabout to the existing multi-use trail.
21. A cross section has been provided for the eastern boundary line adjoining Evergreen Subdivision.
22. Pre conversation with the City, the emergency access at Birch Forest Drive has been modified to 12', 10' asphalt with 1' concrete shoulders.
23. The extent of the grading on this SDP has been revised.
24. A copy of the geotechnical report has been included with this submittal. The Stormwater Pollution Prevention Plan (SWPPP) is being completed and will be submitted shortly. No floodplain and/or wetlands are on the site.
25. A Tree Stand Delineation, a Tree Protection Plan, and a Landscape Plan has been prepared by Loomis Associates and has been provided with this submittal.
26. Per discussions with the City, the streets have been shown on the Grading Plan sheets and the Site Plan Sheets.
27. Comment Letter and/or Conceptual Approvals from all governing agencies are forthcoming.
28. Cross sections of the planned berms between State Route 100 and Village B have been provided on the Site Section Sheet.
29. Top and toe elevations have been provided, in table form, on the wall schedule sheet.
30. It has been noted that all pedestrian crossing will be in compliance with ADA. Final design of these intersection will show the compliance.
31. 4" Type 5 Aggregate Base has been provided under all sidewalks. See typical pavement sections.
32. Pond Grover Loop Road has been revised to 10" Type X Bituminous Pavement.
33. Eatherton Road has been revised to 7.5" Type X Bituminous Pavement and the typical pavement section has been revised to 6" Type X Bituminous Pavement.
34. It has been noted that streetscape components must be meet.
35. The configuration of Street A Cul-de-sac and lots have been redesigned, therefore light from vehicles will not shine onto the existing lots in Evergreen Subdivision.
36. The Public Space table has been completed. Per previous conversations with Joe Vujnich no additional Public Space amenities are necessary.
37. Sidewalks have been extended into and around all cul-de-sac bulbs.
38. This has been noted by the developer.
39. This has been noted by the developer.

Please review and contact me with any questions or additional comments. Thank you for your time and consideration. We look forward to working with you to complete this project.

Sincerely,



John M. Luetkenhaus
Project Manager

cc: Fischer & Frichtel Custom Homes, LLC
Consort Homes, LLC
Josh Foster
George Gower
Mike Boerding

The Sterling Company

5055 New Baumgartner Road, St. Louis Missouri 63129
314-487-0440 Fax 314-487-8944



WILDWOOD

April 26, 2016

Mike Falkner
Sterling Engineering Company
5055 New Baumgartner Road
St. Louis, Missouri 63129

Re: City's First Review of the Site Development Plan Package for the Villages at Bright Leaf

Dear Mr. Falkner:

The Department of Planning and the Department of Public Works have completed their respective reviews of the Site Development Plan package for the Villages of Bright Leaf Project, which is located on State Route 100, at Taylor Road. This review compared the submitted items to the site-specific ordinance approved for the project, the Zoning Ordinance of the City, the Town Center Plan, and the design criteria for the development of property within Wildwood. This review indicated a number of items that need to be addressed or additional information that must be provided in the next revision. These items and information include the following considerations:

1. Please note that a number of the items on the Cover Sheet need to be updated and/or changed. A copy of this sheet had been provided for your review and use.
2. Please add a note on the Cover Sheet that indicates compliance with the City's Grading Code in the dewatering of existing water features that are located on the site.
3. Please note that all of the street intersections and roundabout areas need to be dimensioned with the required radii, tapers, and other necessary dimensions to determine compliance with Town Center specifications. Provide an "autoturn" analysis of truck turning and through movements for all roundabouts.
4. Please add a splitter island in the center of each proposed street intersection to better direct vehicles into the appropriate lane(s) and create an area for planting and other landscaping and allow pedestrians to cross. As an example, the installation of these islands is needed at Eatherton Road and proposed Street "H." Also, please elevate the splitter island for truck/bus usage.
5. Please add the appropriate description of the stormwater features to include the normal high water elevation under the defined storm events. Additionally, please describe how each of these features meet the requirements of "best management practices."
6. Please provide the overall amount of existing woodlands to be preserved on the total area of the site and, if less than the code required thirty (30%) percent, please explain how the shortfall will be addressed with the placement of street trees and other plantings of a creditable type(s).

27. Please provide comment letters or approval (conceptual) from the following service providers: Metropolitan St. Louis Sewer District (MSD), Missouri Department of Transportation (MoDOT), US Army Corps of Engineers, Metro West Fire Protection District, and Rockwood School District.
28. Please provide a cross-section detail of the planned berms between State Route 100 and the new dwellings located in Village B.
29. Please provide the top and toe of walls' elevations, where they are indicated on the plan.
30. Please evaluate all pedestrian crossing locations for ADA compliance, both at mid-block crosswalks and at intersections.
31. Please add four (4) inch Type 5 Aggregate Base under all sidewalks.
32. Please revise Pond-Grover Loop Road pavement to be ten (10) inch Type X Bituminous Pavement.
33. Please revise Eatherton Road pavement to be 7.5 inch Type X Bituminous Pavement and revise the typical pavement section to reflect six (6) inch Type X Bituminous Pavement.
34. Please be advised the streetscape components must be met in their entirety on all streets that are part of this development, including street trees, lights, signs, and other amenities.
35. Please incorporate a screen of some type at the end of the cul-de-sac island (Street "A") to address the lights from vehicles shining into the existing lots located in the existing Evergreen Subdivision.
36. Please complete the public space table on Sheet 3.1.
37. Please extend all proposed sidewalks into and around the cul-de-sac bulbs throughout the development area.
38. Please note the Department is attempting to schedule the review of the lot widths in each of the planned villages to correspond the plan to the site-specific ordinance, previously approved by the City Council.
39. Please be advise the citizens' committee is meeting on the disposition of the loop road at this time and expecting a new traffic analysis in May for the study and discussion.

Once these revisions and other items have been addressed, please submit three (3) full-size copies of the Site Development Plan package to the Department of Planning/Department of Public Works for further review. Please be advised other comments may follow this second review cycle. If you should have any questions or comments in regards to these review comments prepared for this submittal, please feel free to contact the Department of Planning or the Department of Public Works at (636) 458-0440. Thank you for your anticipated cooperation in this matter.

Respectfully submitted,

CITY OF WILDWOOD



Joe Vujnich, Director
Department of Planning

Cc: The Honorable James R. Bowlin, Mayor
Ryan S. Thomas, P.E., City Administrator
Rob Golterman, City Attorney
Rick Brown, P.E. and P.T.O.E., Director of Public Works

GENERAL NOTES:

1. THIS SITE IS IN THE FOLLOWING DISTRICTS AND UTILITY SERVICE AREAS:
WARD EIGHT
METRO WEST FIRE PROTECTION DISTRICT
ST. LOUIS COUNTY POLICE DEPARTMENT - CITY OF WILDWOOD (8TH) PRECINCT
ROCKWOOD R-6 SCHOOL DISTRICT
METROPOLITAN ST. LOUIS SEWER DISTRICT
AMEREN MISSOURI
AT&T
LAQUELLE GAS COMPANY
MISSOURI AMERICAN WATER COMPANY
CHARTER CABLE SERVICES
2. 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.
3. STORMWATER SYSTEM DESIGN SHALL BE PURSUANT TO THE CITY OF WILDWOOD AND METROPOLITAN ST. LOUIS SEWER DISTRICT REQUIREMENTS AND SHALL DISCHARGE AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.
4. THE LOCATION OF STORM AND SANITARY SEWER IMPROVEMENTS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS SHALL BE DETERMINED BY FIELD CONDITIONS AND SHALL BE INDICATED ON THE IMPROVEMENT PLANS.
5. ALL GRADING AND DRAINAGE SHALL BE PER CITY OF WILDWOOD AND METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARDS. SOURCE OF TOPOGRAPHY - MSP ORTHOTOP.
6. NO SLOPES SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL), UNLESS JUSTIFIED BY GEOTECHNICAL REPORT WHICH MUST BE ~~ACCEPTED/APPROVED~~ BY THE CITY OF WILDWOOD.
7. ALL PROPOSED UTILITIES WILL BE LOCATED UNDERGROUND WITHIN THIS SITE.
8. NO PLANTS, TREES, SIGNS, ETC. GREATER THAN 36" IN HEIGHT SHALL BE PLACED WITHIN THE SIGHT DISTANCE TRIANGLE AT INTERSECTIONS AND MEDIANS AS TO RESTRICT SIGHT DISTANCE.
9. MAXIMUM HEIGHT OF STREET LIGHTING FIXTURES SHALL BE 18 FEET AND SHALL BE IN COMPLIANCE WITH THE CITY OF WILDWOOD CODE REQUIREMENT PROVIDE STREET LIGHTING PLAN (SEE REQUIRED LANDSCAPE PLAN)
10. STREET TREES AND SITE LANDSCAPING SHALL BE AS REQUIRED BY THE CITY OF WILDWOOD
11. THE NEAREST MAJOR INTERSECTION IS HIGHWAY 100 AND STATE ROUTE 109 APPROXIMATELY 200 FEET TO THE SOUTHWEST.
12. THE FRONT FACADES MUST BE 1.5 FEET ABOVE GRADE AT FRONTAGE LINES.
13. ENTRANCES, STREET INTERSECTIONS, CUL-DE-SACS SHALL BE CONSTRUCTED TO CITY OF WILDWOOD STANDARDS AND MOBIL STANDARDS

DEVELOPMENT NOTES:

1. LOCATOR NUMBERS: 23V230041, 23V230050, 23V240327, 23V310064, 23V330022, 23V330031, 23V330209, 23V330215, 23V330233, 23V610917

2. SITE ADDRESS: 2344 EATHERTON RD
WILDWOOD, MO. 63011

3. CURRENT OWNERS: WILLIAM JONES
2350 EATHERTON RD

GOEBLER GROVER
2344 EATHERTON RD

LEDA VAL - INV

WILLIAM JONES JR
2351 TAYLOR RD

HERA VAL INC
2367 TAYLOR RD

WILLIAM JONES JR

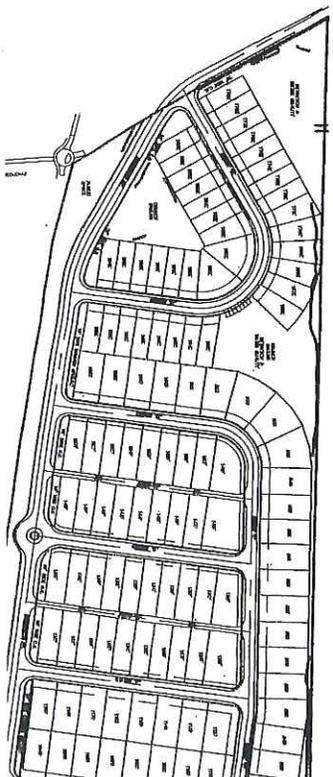
MoDet

The Villages

A Tract Of Land
Sections 1 & 2, Township
City Of
St. Louis Cor

SITE DEVELOPMENT

R-3 10,000 Square Feet
(Town Center "Neighborhood General District")
With A Planned Residential Development





WILDWOOD

June 19, 2015

Fischer & Frichtel Custom Homes, LLC and Consort Homes, LLC
ATTN: Roger Cox
16640 Chesterfield Grove Road
Suite 130
Chesterfield, Missouri 63005

Re: **P.Z. 12-15 Villages at Bright Leaf**; a request for a rezoning to the R-4 7,500 square foot Residence District, with a Planned Residential Development Overlay District (PRD), for a requested one hundred ninety-four (194) lot subdivision on seventy-eight (78) acres that is located on the north side of State Route 100, east of State Route 109.

Dear Mr. Cox:

The Department of Planning, in conjunction with the Department of Public Works, has completed its initial review of your application for a rezoning to the R-4 7,500 square foot Residence District, with a Planned Residential Development Overlay District (PRD), at the above-referenced location. This review centered on the plan's compliance with the applicable sections of the City's Zoning Ordinance, the Town Center Plan, and related requirements and design criteria of the City of Wildwood. In this comparison, a number of preliminary items were identified that must be addressed. Please be aware these items will be discussed, as part of the public hearing before the City's Planning and Zoning Commission scheduled for July 20, 2015. These items are as follows:

Additional Information/Requirements:

1. Please be aware the Department of Planning will be recommending the property be rezoned to the R-3 10,000 square foot Residence District, with a Planned Residential Development Overlay District (PRD). This zoning district designation can still accommodate your requested number of lots and the Department has not in the past supported a zoning district more intense than necessary.
2. Please provide preliminary comments from the following agencies:
 - a. Metro West Fire Protection District
 - b. Missouri Department of Transportation (MoDOT)
 - c. Metropolitan St. Louis Sewer District (MSD)
 - d. Rockwood School District
3. Please provide a Noise Study to determine if sound walls will be necessary along the MoDOT right-of-way – State Route 100.
4. Please be advised the Department is to meet with the Area Engineer of MoDOT to discuss another potential access point onto State Route 100 from this site. This discussion is to determine, if such an access point, is justified, given the size of the project.

CC: The Honorable Timothy Woerther, Mayor
Council Members Dave Bertolino and Debra Smith McCutchen, Ward Five
Ryan S. Thomas, P.E., City Administrator
Rob Golterman, City Attorney
Kathy Arnett, Senior Planner I
Terri Gaston, Planner – Subdivisions and Escrows

Kathy Arnett

From: Chris DeGuentz <CDeGuentz@fandfhomes.com>
Sent: Tuesday, July 14, 2015 3:52 PM
To: Joe Vujnich; Kathy Arnett
Subject: Fwd: The Villages at Bright Leaf

Attached is the metro west review letter for bright

Chris DeGuentz
314.220.7799

Begin forwarded message:

From: Larry Green <LGreen@sterling-eng-sur.com>
Date: July 1, 2015 at 11:32:06 AM CDT
To: Mike Falkner <mfalkner@sterling-eng-sur.com>
Cc: Mike Boerding <MBoerding@sterling-eng-sur.com>, George Gower <GGower@sterling-eng-sur.com>, "Chris DeGuentz (CDeGuentz@fandfhomes.com)" <CDeGuentz@fandfhomes.com>, "Roger Cox (rcox@consort-homes.com)" <rcox@consort-homes.com>
Subject: The Villages at Bright Leaf

From: Dave Phipps [<mailto:daveph@metrowest-fire.org>]
Sent: Wednesday, July 01, 2015 11:26 AM
To: Larry Green
Subject: RE: The Villages at Bright Leaf

Larry,

The bureau of fire Prevention has reviewed The Villages at Bright Leaf. The following are our comments:

1. Fire flow is 1500 GPM at 20 PSI
2. Fire hydrant spacing is 600 feet apart
3. For Fire and EMS access Pond Grover Loop Rd. must be complete from HWY 109 to HWY 100
4. All streets that are less than 26 feet in width must restrict parking on one side
5. All turning radius must comply with the fire district requirements

David E. Phipps
Fire Marshal
Metro West Fire Protection District
(636) 821-5806

From: Larry Green [<mailto:LGreen@sterling-eng-sur.com>]
Sent: Wednesday, June 24, 2015 1:23 PM
To: Dave Phipps
Cc: Mike Falkner; Mike Boerding; George Gower; Chris DeGuentz (CDeGuentz@fandfhomes.com); Roger Cox (rcox@thejonesconashville.com)
Subject: The Villages at Bright Leaf

Dear Chief Phipps,

This letter is submitted to you on behalf of Fischer & Frichtel Custom Homes, LLC, and Consort Homes, LLC.

Attached please find a cover letter, Google Earth link, locator map, and a Site Development Plan for this project.

This site is located along Eatherton Road near Highway 100 and Highway 109 in the City of Wildwood, Mo.

The Site Development Plan is for your review and comment.

If you have any questions or comments, please do not hesitate to call.

Thank you,

Larry Green
Draftsman

The Sterling Company

5055 New Baumgartner Road
St. Louis, Missouri 63129
Phone: 314 487-0440 Ext. 1210
Fax: 314 487-8944

Please Visit our Website www.sterling-eng-sur.com

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HERLACHER ANGLETON ASSOCIATES, LLC
ENVIRONMENTAL ENGINEERING SERVICES

A Report Prepared for

Roger Cox
Consort Homes, LLC
16640 Chesterfield Grove Rd., Suite 130
Chesterfield, MO 63005

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Overlook Hills Development
16602, 16618 Overlook Hills Dr.; 2344, 2530 Eatherton Rd.; 2531, 2555, 2567 Taylor Rd.;
16721 Manchester
St. Louis County, MO

Prepared by

Herlacher Angleton Associates, LLC
7626 Briarwood Lane
Barnhart, MO 63012

June 4, 2015

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- APPENDIX A** Photographic Log
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-

1 SUMMARY

The following study was conducted in compliance with the guidelines contained in ASTM E1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process". This standard complies with Section 40 (EPA) of the Code of Federal Regulations (CFR) Part 312 "Standards and Practices for All Appropriate Inquiries" and CERCLA, 42 U.S.C. §9601(35)(B). This report presents the findings of the Phase I ESA conducted for Overlook Hills Development, located at 16602, 16618 Overlook Hills Dr.; 2344, 2530 Eatherton Rd.; 2531, 2555, 2567 Taylor Rd.; and 16721 Manchester, St. Louis County, Missouri. This Phase I ESA is not intended as a compliance audit nor does it review applicable health and safety standards. This Phase I ESA was authorized by Mr. Roger Cox of Consort Homes, LLC.

The following written report and attachments detail the findings of the Phase I Environmental Site Assessment activities and file reviews.

This assessment has identified the following:

- The subject property consists of eight contiguous parcels occupying 69.81 acres. There are four residences on the property. The property consists of wooded areas and pastured divided roughly 60% to 40%.
- The subject site appears to have been used for residential and agricultural purposes since as far back as 1903.
- The subject property is located in a mixed-use commercial-residential area.
- A review of publicly available, practically reviewable documentation, interviews with knowledgeable individuals, and visual site reconnaissance, did **not** identify recognized environmental conditions for the subject site.

2 INTRODUCTION

This Phase I ESA has been prepared by Herlacher Angleton Associates, LLC (HAA) for the sole use of Consort Homes, LLC. This Phase I ESA has been prepared for the property known as the Overlook Hills Development, located at 16602, 16618 Overlook Hills Dr.; 2344, 2530 Eatherton Rd.; 2531, 2555, 2567 Taylor Rd.; and 16721 Manchester Rd., in West St. Louis County Missouri. The subject property is located on the north side of Highway 100 across from the Wildwood City complex in St. Louis County Missouri. Refer to Figures 1 through 4 and the photographic log in Appendix A for additional details.

2.1 Purpose

The purpose of the ESA was the identification of *recognized environmental conditions* resulting from current or former operations that have occurred on the site. *Recognized environmental conditions* include the presence, or likely presence, of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment or under conditions that pose a material threat of a future release to the environment.

The term *recognized environmental conditions* is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This report is made pursuant to an inquiry into the prior ownership and uses of the property consistent with good commercial/non-commercial and customary practices appropriate to a commercial purchaser or developer of real estate property to evaluate whether there has been a release or threatened release of hazardous material¹ on or near the property pursuant to the requirements and direction of the federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Innocent Landowner Defense. This assessment does not include an assessment of other types of hazards in the study area nor was it intended to be a compliance audit of the property. This report is complete only as an entire document and no section is intended to be used separately.

¹ "Hazardous material" means any substance, waste, or material determined by any local, state, or federal governmental authority to be capable of posing a risk of injury to health, safety and property, including, but not limited to, all substances, wastes and materials designated, defined or listed as hazardous, extremely hazardous or toxic pursuant to the Clean Water Act, 33 USC Sec. 1251, et. seq.; Resource Conservation and Recovery Act, 42 USC Sec. 6901 et. seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 USC Sec. 9601, et. seq.; the United States Department of Transportation Hazardous Material Table, 49 CFR Part 172; regulations of the Environmental Protection Agency, 40 CFR Part 302; or such substances, materials and wastes that are regulated under any applicable local, state or federal law, and including any asbestos, petroleum and any petroleum fractions, or polychlorinated biphenyl.

2.2 Scope of Services

This Phase I ESA includes documentation of past activities which may have environmentally impacted the subject property. HAA's scope of services and methodology included the following activities:

- HAA's reconnaissance of the subject property was conducted on April 22, 2015 by James G. Foley, CHMM, to evaluate present conditions at the subject property and a limited evaluation of the adjoining properties;
- Interviews with persons familiar with the subject property history;
- A search of available and appropriate local, state and federal environmental regulatory agency records for documented environmental incidents or investigations conducted on or around the target property and within the study area (defined as the surrounding area located within a 1.0 mile radius of the property boundaries);
- A review of published topographic, geologic and hydrogeologic information related to the property and the surrounding area;
- Historical records review, as necessary and based on *reasonably ascertainable records*, in order to help identify the likelihood of past uses that may have led to *recognized environmental conditions* in connection with the property. This is to include all "obvious" uses of the property back to the property's obvious first developed use or back to 1940 whichever is earlier.
- A "limited" investigation into the historical use of the immediately adjoining and (or adjacent properties) reviewing only as many sources as necessary to evaluate possible environmental impact to the subject site.
- Presentation of the results of the ESA in a report format.

2.3 Significant Assumptions

Herlacher Angleton Associates (HAA) assumes that the information provided by vendors used to provide government database information, the property owner, and those interviewed to acquire information for this ESA is true and accurate.

2.4 Limitations and Exceptions

The investigative efforts of the Phase I ESA are *not exhaustive*, and the findings do not purport to be representative of future conditions or events. The findings are necessarily limited by the scope of the subject property visual inspection, information provided by those individuals contacted to give details of the property's prior usage, and research into *practically reviewable* public records. We cannot assume responsibility for conditions that could not be discovered within these limits.

HAA's evaluation is based on information gathered from local, state, and federal agencies, information provided by Consort Homes, LLC, available historical data, interviews with individuals knowledgeable about the subject property and transaction screen questionnaires completed by the current property owner's representatives.

The inspector drove and walked the property during the site inspection. Portions of the site were covered with dense vegetation limiting sight distance and making some areas of the site inaccessible. Our findings are limited by these conditions.

Limited by *the reasonably ascertainable* historical records available at the time of this ESA, HAA was only able to research historical records (Aerial Photos) back to 1953. Therefore, we cannot specifically comment about usage prior to that time. The historical records used to research prior usage - aerial photos, Sanborn maps, directories, topographical maps, etc. were not available for all of the years since the development of the subject site. While we believe that the sources used provide a reasonably accurate representation of the historic use of the subject site, other usages may have occurred during time-frames for which records could not be acquired within the scope of this ESA.

There exists a possibility that, while using the proper application of the methodologies, conditions may exist on the subject property that could not be determined within the scope of this assessment, or which were not reasonably identifiable from the available information. It is HAA's belief that the information obtained from the record review and the interviews concerning the site are reliable. HAA does not warrant or guarantee that the information provided by these sources is accurate or complete.

2.5 Special Terms and Conditions

No special terms or conditions were specified for this Phase I ESA.

2.6 Reliance

This report was prepared for the sole use of Consort Homes, LLC, the only intended beneficiaries of HAA's work. No other private parties should rely on the information contained herein without prior written consent of HAA. No warranties or representations, expressed or implied in this report, are made to any such third parties.

2.7 Subject Property Description

The following information was obtained during a site inspection of the subject property and a review of pertinent records on the St. Louis County Web Site. Photographs depicting property conditions at the time of HAA's assessment are presented in the Photographic Log (Appendix A) of this report. The site inspection was performed on April 22, 2015. Roger Cox and Mary Caye Jones accompanied Mr. Foley during the site inspection.

2.7.1 Location and Legal Description

The subject properties are physically located at 16602, 16618 Overlook Hills Dr.; 2344, 2530 Eatherton Rd.; 2531, 2555, 2567 Taylor Rd.; and 16721 Manchester Rd. in west St. Louis County MO on the north side of Hwy 100 between Taylor Rd. on the East and Eatherton Rd. on the West. The legal descriptions are included in Appendix F. The subject properties are identified by St. Louis County Locator Numbers 23V330031, 23V330215, 23V230050, 23V230041, 23V240327, 23V330022, 23V310064, and 23V330233 respectively. The property is depicted on a Vicinity Map and a Location Map that are presented as Figures 1 and Figure 2, respectively. A Site Plan is presented as Figure 3.

2.7.2 Subject Property and Vicinity General Characteristics

The subject property is located in a mixed-use commercial-retail/residential area. The location of the subject property and the surrounding road pattern is shown on Figure 1 and Figure 2, Vicinity and Location maps. The subject property features are shown on Figure 3, Site Diagram.

2.7.3 Topography

The area topography is characterized by rolling hills with elevation changes of ≈ 80 to 100 feet from ridges to valleys. The site itself slopes slightly to moderately downward to the north. The valleys on the site drain to the north toward a tributary of Caulk's Creek which runs to the north into Chesterfield valley and the Missouri River. Surface elevations on the property range from ≈ 680 ft. MSL in the northeast quadrant to a maximum of ≈ 780 ft. MSL in the southwest quadrant. See Figure 4, the Physical Setting Source Map (USGS, Digital Elevation Model) and the USGS Topo map excerpts in Appendix E for details.

2.7.4 Wetlands

Wetlands are currently an ASTM, non-scope item; therefore, it was not addressed by HAA during the ESA site reconnaissance. However, the National Wetlands Inventory obtained from the government database search indicated that no portion of the subject property is located in a mapped wetland area. (Figure 1, Overview Map).

2.7.5 Geologic - Hydrogeologic Conditions

Soils in the *area* are generally deposits consisting of modified surficial deposits and glacially derived sediments and consist predominantly of Goss and Winfield silty clay loam. Surficial material in the near vicinity of the subject property are unconsolidated sediments, are moderately well drained and consist of silty clay loam, glacial loess, and, in areas near creeks and rivers, alluvium (river deposits).

Groundwater quality varies widely within St. Louis County in general. The most significant factor influencing groundwater quality is depth. The uppermost groundwater-bearing zone is unconfined and located in the unconsolidated sediments above limestone bedrock. This groundwater source has historically been impacted by urban development, is limited, and is not used as a potable water source. Shallow groundwater flow is likely to the north toward the Missouri River. Deeper bedrock water-bearing rock units are contained in Mississippian age rock units of the Ozark Plateaus Aquifer System

(Miller and Appel, 1997). Regional deep groundwater flow is reported to be to the east toward the Mississippi River (Miller and Appel, 1997).

U.S. Geological Survey, "GROUND WATER ATLAS of the UNITED STATES, Kansas, Missouri, and Nebraska" HA 730-D, James A. Miller and Cynthia L. Appel 1997

More soils information is included in Appendix B beginning on page A-4.

2.8 Current Use of the Property

The subject property is a parcel comprised of eight smaller parcels occupying a total of 69.81 acres. Four of the parcels have occupied single-family residences. Most of the property is undeveloped and consists of wooded valleys and pasture on the ridges.

2.8.1 Description of Improvements

Four of the parcels (16618 Overlook Hills Dr., 2344 and 2530 Eatherton Rd., and 2555 Taylor Rd) have occupied single-story, single-family residences and some small out buildings. 16602 Overlook Hills Dr. has the remnants of a demolished single-family residence near the eastern end of the property near Overlook Hills Dr.

2.8.2 Subject Property Utilities

The utilities on the subject site consisted of the following:

- **Water:** Private wells and Missouri American Water Co.
- **Electrical:** Pole mounted transformers owned by Ameren U.E.
- **Wastewater:** Private septic systems/Metro St. Louis Sewer District (MSD)
- **Refuse:** Assorted waste haulers
- **Gas:** Propane tanks/Laclede Gas

2.9 Current Uses of Adjoining Properties

As part of HAA's Phase I ESA, visual reconnaissance (from the subject site) of adjacent properties was conducted. The adjoining/adjacent properties are described by their location with respect to the property. See Figure 3.

- **North** – Single-family residences
- **South** – Bike trail and Highway 100
- **East** – Single family residential
- **West** – Eatherton Rd.

No evidence of an environmental contamination threat to the subject property from the adjoining properties (such as underground storage tanks, vent pipes, above ground storage tanks, drums, obvious soil staining, stressed vegetation, etc.) was observed. No structures or facilities on the adjoining

properties that would imply an historic usage that would negatively impact the subject site were observed during the site inspection.

There were no other conditions visually identified on the surrounding properties that would indicate a *recognized environmental condition* for the subject site.

3 USER PROVIDED INFORMATION

3.1 Title Records

HAA reviewed title commitment documents (Appendix F) provided by Roger Cox of Consort Homes. There is no reference to any environmental liens or deed restrictions contained in the documents provided.

3.2 Environmental Liens/Activity Use Limitations

The client was not aware of any environmental liens or AULs related to the subject site (User Questionnaire – Appendix I).

3.3 Specialized Knowledge

The client did not have any specialized knowledge related to the environmental condition of the subject site (User Questionnaire – Appendix I).

3.4 Commonly Known or Reasonably Ascertainable Information

The client did not indicate knowledge of any commonly known or reasonably ascertainable information related to the environmental condition of the subject site (User Questionnaire – Appendix I).

3.5 Property Valuation Reduction for Environmental Issues

The client indicated that the price offered for the subject site reflected fair market value for the property (User Questionnaire – Appendix I).

3.6 Owner, Property Manager, and Occupant Information

Ownership information is included in Appendix F. Mary Caye Jones of Meramec Valley Bank is the point of contact for the property owners.
199 Clarkson Rd., Ellisville, MO 63011 636-893-1637

3.7 Reason for Performance of Phase I ESA

The performance of the ESA was required for pre-acquisition due diligence.

3.8 Additional User Provided Information

No additional information was provided.

4 RECORDS REVIEW

HAA conducted historical research for the subject property and limited research on the adjoining properties. This research was conducted in order to attempt to identify historic usage that would constitute *recognized environmental conditions* for the subject property.

Reasonably ascertainable public records were researched to develop the history of ownership and usage. The following information was compiled from a combination of interviews, historical aerial photographs, historical topographical maps and upon the visual site inspection by HAA representatives. Record information for the subject site was obtained from the St. Louis County Assessor's Office, St. Louis County Public Library, Metro-West Fire Protection District, USGS historical topographical maps and the City of Wildwood. Interviews were conducted with the current owner's representative, fire department personnel, and city of Wildwood officials.

4.1 Past Ownership of Subject Property

A Chain of Title was not provided by the client as requested in the HAA Proposal for this project. Preparation of a legal Chain of Title was beyond the scope of work for this ESA. Prior records were not readily accessible.

4.2 Past Usage of Subject Property

Prior to the current single-family residential and commercial development in the area, prompted by the construction of Highway 100 beginning in the 1980s, there appears to have been no prior commercial usage. Usage appears to have been undeveloped and agricultural.

4.3 Historical Aerial Photographs

Excerpts from historical aerial photographs of the subject property from the years 1953, 1958, 1965, 1971, 1974, 1986, 1990, 1996, 2005, 2006, 2007, 2009, 2010, and 2012 were obtained and reviewed by HAA and are included as Appendix C.

- The 1986 aerial photo shows Highway 100 and the initial development of the single-family residential subdivision north of the subject site and the subdivision to the east of the subject site. Subsequent photos show the progressive development of the surrounding land in all directions from the subject site
- Nothing in the aerial photos indicates any prior commercial development of the subject site.

4.4 Sanborn Fire Insurance Maps

Sanborn® Fire Insurance Maps are maps that were produced for insurance companies beginning around 1900 for use in determining fire insurance ratings based on property usage, building construction materials and location of underground storage tanks, fire hydrants, etc. These maps were periodically updated and are useful for developing the history of use of a property. Historical Sanborn® maps were not available for the subject property. A copy of the No Coverage Letter is contained in Appendix D.

4.5 Historical Use Information on Adjoining Properties

As part of the conduct of the Phase I ESA, *limited* research into the historic use of adjacent properties was conducted. Based upon the aerial photographs, the *historical* use of surrounding properties appears to have been exclusively single-family residential and agricultural prior to 1980s. Based on the information reviewed by HAA, the historical use of the adjoining properties does not appear to indicate an environmental threat to the subject site.

4.6 Review of Regulatory Agency Records

The information presented in this section is based on a review of State and Federal government environmental agency data. The data was compiled by Environmental Data Resources, Inc. (EDR) and acquired by HAA for review. The data comes from publicly available State and Federal agency files that contain information about sites that have been identified as having underground storage tanks (USTs), as hazardous waste generators, as having reported violations of environmental regulations, as having releases of hazardous substances, etc.

The database search was performed for the subject property and surrounding area. The database search included the following USEPA databases: National Priorities List (NPL), CERCLIS List (Superfund), Emergency Response Notification System (ERNS), Resource Conservation and Recovery Information System (RCRIS), Corrective Action Report (CORRACTS), Biennial Reporting System (BRS), Superfund Consent Decrees, Facility Index System (FINDS), Hazardous Materials Information Reporting System (HMIRS), Material Licensing Tracking System (MLTS), PCB Activity Database System (PADS), RCRA Administrative Action Tracking System (RAATS), Record of Decision (ROD), Toxic Release Inventory System (TRIS), and Toxic Substances Control Act (TSCA). The database search also included the following State databases: State Hazardous Waste Sites, Leaking Underground Storage Tanks (LUST), Underground Storage Tanks (UST), Aboveground Storage Tanks (AST), Solid Waste Landfill List, and the Hazardous Waste Resource Recovery Facilities (RRC). A copy of the EDR database search report is contained in Appendix B.

The subject site is not listed in any of the environmental agency databases in the EDR report. None of the sites listed are located in such proximity to the subject site that any impact to the subject site would be likely.

4.6.1 Orphan Sites

Due to poor or inadequate address information, the database provider could not map 7 sites listed in the environmental agency database report. The addresses provided for these orphan sites were reviewed to determine their proximity to the subject property. Although limited and not conclusive (based upon the available information), a review of these sites did not reveal any known or suspected environmental threats to the subject property from these remaining “orphan” sites.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

HAA conducted a site inspection of the subject site on April 22, 2015. The inspector walked through all buildings and around the acreage. Dense vegetation growth on the subject site prevented the observation of some areas on the subject site. During the site inspection, HAA conducted an interview with Ms. Jones, the owner's representative.

5.2 Special Information

No special concerns were expressed by the sources used. No environmental hazards affecting the subject property were specifically identified during an interview with the representative of the current owner of the subject property or in responses to questions in transaction screen questionnaires completed by the owners' representatives (Appendix I).

5.3 Environmental Permits/Licenses/Registrations

There were no public records obtained that indicate the subject property has had any environmental permits or is under consideration as a potential abandoned hazardous waste site.

5.4 Chemical Use and Storage

During the site inspection, some chemical storage was observed. Small quantities of common janitorial and household chemical products and vehicle/equipment maintenance products were observed in some of the buildings (Photos 5, 15, and 19).

There was no evidence of mishandling, improper storage or improper disposal of these chemicals. None of the chemicals appear to present a high risk of release to the environment.

5.5 Dipping, Washing and Coating Operations

None were observed.

5.6 Storage Tanks and Drums

Aboveground storage tanks (ASTs), used to store heating oil, were observed in the basements of the residences (Photos 7, 11 and 16). An additional heating oil AST was observed behind the structure at 2555 Taylor Rd. (Photo 11). No evidence of significant leakage from these ASTs was observed.

A copper pipe running from underground to a pressure regulator behind the house at 16618 OHD (Photo 6) implies the presence of an underground propane storage tank (UST), though no other evidence of an UST was observed. In any case, propane would not be a source of residual contamination.

Drums

Several drums used as trash burn barrels were observed on the site. These are not likely a source of significant residual contamination.

At two locations on the western portion of 16602 OHD, there were culverts made of several 55 gallon drums welded together (Photos 28, 29). These would not likely a source of significant residual contamination.

5.7 Unlabeled/Unidentified Containers with Contents

None were observed.

5.8 Polychlorinated Biphenyls (PCBs)

PCBs are usually associated with transformers, older electrical equipment (fluorescent light ballasts, capacitors, etc.), caulking, older hydraulic oils or machine oils. Although the use of PCBs has been discontinued, PCBs may still be contained in the above mentioned items that are still in use. These materials should be assessed at the time of removal/replacement and handled accordingly if found to be PCB containing.

There were pole-mounted electrical transformers observed on the property (see Figure 3 and photos 7 & 12). They appeared to be in good condition with no indication of leakage; hence, there is little chance for PCB contamination from this source. This equipment should be presumed to be PCB containing unless documented otherwise by testing. Ameren UE should be contacted in the event of a leak or spill of coolant from this equipment.

5.9 Odors

No strong, pungent or noxious odors were observed during the site inspection.

5.10 Interior Observations

5.10.1 Heating/Cooling Systems

Heating systems were electric or oil-fired. Air conditioning was electric.

5.10.2 Stains/Corrosion

Some minor stains were observed beneath 2 of the ASTs. These stains were not indicative of a significant quantity leak.

5.10.3 Drains/Sumps

There was no evidence observed of dumping of chemical products or oil into any of the interior floor drains observed in the buildings during the site inspection.

5.11 Exterior Observations

5.11.1 Exterior Drains

None were observed.

5.11.2 Sumps

There were no sumps observed during the site inspection within the approximate property boundaries.

5.11.3 Pits/Ponds/Lagoons/ Pools of Liquid

Three ponds were observed on the site – on the west side of 2350 Eatherton, near the west end of 2531 Taylor, and in the northeast corner of 2567 Taylor. There is a marshy area in the southwest corner of 2567 Taylor. No evidence of a petroleum/chemical sheen was observed on the surface of these bodies of water.

5.11.4 Stained Soil or Pavement

There was no evidence observed, at the time of inspection, of significant spills having occurred recently on this site.

5.11.5 Stressed Vegetation

No stressed vegetation indicating the dumping of hazardous chemicals on the site was observed at the time of inspection.

5.11.6 Miscellaneous/Solid Waste Generation

Currently, waste generation associated with this site's usage is normal household solid waste.

5.11.7 Waste Water

Waste water is discharged to on-site septic systems.

5.11.8 Wells

Private wells are present on some of the properties.

5.11.9 Septic Systems

Private septic systems are present on the properties.

5.11.10 Dumping

There are several areas where discarded household items, building materials, equipment, appliances, empty drums, etc. have been dumped (Photos 20-27, 30). Past residents appear to be the source. None of the materials observed appear to be a source of significant residual contamination for the property.

No evidence of unauthorized dumping was observed on the site at the time of inspection.

6.0 INTERVIEWS WITH KNOWLEDGEABLE INDIVIDUALS

6.1 Owner/Owner's Representative

Transaction screen questionnaires (TSQs) were submitted to the property owners' representatives. Copies of the completed TSQs are included in Appendix I. According to the responses to the questions contained in the questionnaires, there are wells, septic systems and heating fuel ASTs on the sites. No reference to items or issues that would constitute *recognized environmental conditions* for the subject properties were noted.

6.2 Site Manager

See 6.1 above.

6.3 Occupants/Tenants

The available tenants of the properties had no detailed information about the historical usage of the properties.

6.4 Local Government Officials

6.4.1 Fire Department Records

HAA contacted the Metro West Fire Protection District (MWFPD) to find out if the department had any records or recollections of incidents on or around the subject site that could be a source of residual environmental contamination. HAA spoke with Fire Marshal Dave Phipps. Marshal Phipps told HAA that he had no records or recollections of incidents on or around the subject site that could be a source of residual environmental contamination (Appendix H).

6.4.2 Other Officials

County Health Department

The subject site is located in St. Louis County. HAA contacted the St. Louis County Health Department, Environmental Section, to see if they kept any records of incidents having a potential to be a source of residual environmental contamination.

HAA was referred to John Hassis, Manager of Solid Waste Division. Mr. Hassis stated that with the exception of asbestos issues, the County does not have responsibility or authority for hazardous materials. Incidents involving hazardous materials are referred to the Missouri Department of Natural Resources (MDNR). MDNR records are included in the EDR database report discussed in Section 5.6 and included in Appendix B.

City of Wildwood

The City of Wildwood was contacted to inquire about any records of incidents or complaints on or around the subject site having a potential to be a source of residual environmental contamination. HAA was provided with copies of complaints filed in the area. The complaints dealt with yard and structure maintenance and would not be a source of residual environmental contamination.

6.5 Other Knowledgeable Individuals

None were identified.

7.0 EVALUATION

7.1 Findings

This Phase I Environmental Site Assessment has been performed in conformance with the scope and limitations of ASTM Practice E 1527-13. This assessment has identified the following:

- A review of publicly available, practically reviewable documentation, interviews with knowledgeable individuals, and visual site reconnaissance, did **not** identify recognized environmental conditions for the subject site.

7.2 Opinions and Recommendations

Based on the observations made during the site inspection and the documentation reviewed to determine historic usage, no *recognized environmental conditions* were identified associated with the subject site.

Based on the findings of this ESA, HAA provides the following recommendations:

- This report, and its Attachments and or Appendices, should be read in their entirety to fully understand the environmental condition for the subject site.
- Wells should be properly abandoned in compliance with the Missouri Department of Natural Resources (MDNR) Wellhead Protection Section rules.
- Septic systems should be abandoned in compliance with Missouri Department of Health rules.
- Prior to demolition of any of the buildings, an inspection should be conducted by a Missouri licensed asbestos inspector.

7.3 Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527 of the properties listed in this report and further described in Appendix F of this report. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.

7.4 Data Gaps/Deviations from Standard

HAA has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-13 on the Overlook Hills Development, St. Louis County Locator Numbers 23V330031, 23V330215, 23V230050, 23V230041, 23V240327, 23V330022, 23V310064, and 23V330233.

The historical records used to research prior usage - aerial photos, Sanborn maps, directories, topographical maps, etc. were not available for all of the years since the development of the subject site. While we believe that the sources used provide a reasonably accurate representation of the historic use of the subject site, other usages may have occurred during time-frames for which records could not be acquired within the scope of this ESA.

7.5 References

American Society for the Testing of Materials (ASTM), 2013. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13*.

Environmental Data Resources, Inc. (EDR), 2015. The EDR Radius Map with GeoCheck® March 19, 2015

Environmental Data Resources, Inc. (EDR), Sanborn® Map Collection

Environmental Data Resources, Inc. (EDR) City Directory Abstract March 19, 2015

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package March 19, 2015

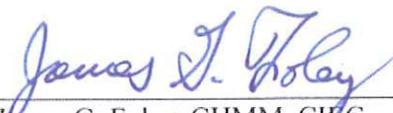
United States Geological Survey (USGS), Eureka *Quadrangle Missouri, 7.5 Minute Series Topographic Map*, 1:24,000 scale and Digital Model Elevation.

St. Louis Public Library	314-241-2288
St. Louis County Public Library	314-993-3300
St. Louis County Mapping/Planning Office	314-615-2520
St. Louis County Assessor's Office	314-615-2555
St. Louis County Recorder of Deeds Office	314-615-2500
Metro West Fire Protection District	636-458-2100

7.6 Signature and Certification of Preparers

I, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312 § 312.10 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting for the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Herlacher Angleton Associates (HAA)


James G. Foley, CHMM, CIEC

Associate Scientist

June 4, 2015

Date

8.0 NON-SCOPE ISSUES

8.1 Asbestos Containing Materials (ACM)

Asbestos Containing Materials are currently an ASTM, non-scope item. Therefore, ACM is not specifically addressed as part of the normal scope of this ESA. Given the age of the structures, ACM could be contained in some of the building or finishing materials. An asbestos survey, including sample collection and analysis would be required to assess the presence of asbestos in the facility.

8.2 Lead Based Paint (LBP)

Lead based paint is also an ASTM, non-scope item. Therefore, it is also not specifically addressed as part of the normal scope of this ESA. Given the age of the structure, LBP could be present on some of the surfaces of the building. A leaded paint survey, including sample collection and analysis would be required to assess the presence of lead paint in the facility.

**Exploration of Subsurface Conditions
and
Foundation Recommendations**

**JONES PROPERTY – OVERLOOK DRIVE
WILDWOOD, MISSOURI**

April 2015

**Consort Homes
Developer**

**The Sterling Company
Civil Engineer**

JGE #15016.1

**JACOBI GEOTECHNICAL ENGINEERING, INC.
798 Hoff Road
O'Fallon, Missouri 63366-1920
636-978-7112**



April 30, 2015

Mr. Roger Cox
Consort Homes, LLC
16640 Chesterfield Grove Rd Ste 130
Chesterfield MO 63005-1417

RE: Geotechnical Exploration
Jones Property - Overlook Drive
Wildwood, Missouri
JGE #15016.1

Dear Roger:

Enclosed is our report, **Exploration of Subsurface Conditions and Foundation Recommendations - Jones Property - Overlook Drive - Wildwood, Missouri**, dated April 2015.

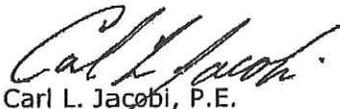
We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please call.

Very truly yours,

Jacobi Geotechnical Engineering, Inc.



Matt Schultz
Staff Engineer



Carl L. Jacobi, P.E.
Principal

Distribution: Mr. Roger Cox - Original and 1 copy (email)
Mr. Mike Falkner, The Sterling Company - 1 copy (email)

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**Exploration of Subsurface Conditions
and
Foundation Recommendations**

**JONES PROPERTY – OVERLOOK DRIVE
WILDWOOD, MISSOURI**

1.0 INTRODUCTION

At the request of Mr. Roger Cox of Consort Homes, Jacobi Geotechnical Engineering, Inc. (JGE) conducted a subsurface exploration for a planned residential development. The purpose of our exploration was to characterize and evaluate the subsurface conditions to provide recommendations for foundations and to address other geotechnical aspects of the proposed project.

2.0 PROJECT AND SITE DESCRIPTION

The site is a tract of nine parcels with a combined total of about 79 acres for residential development. The site is located on the north side of Highway 100 and east side of Highway 109 in Wildwood, Missouri. The Location Plan, Figure 1, shows the site relative to the surrounding roads.

Based on the preliminary development plans prepared by The Sterling Company, we understand the development will consist of about 191 residential lots. The access will be from Highway 100. We expect the proposed residences will have full basements.

The site has wooded hillsides and overgrown fields. Several existing homes are located on the northeast and west areas. The existing topography and proposed lot layout are shown on the Site Plan, Figure 2.

3.0 FIELD EXPLORATION

The field exploration consisted of drilling ten borings (B-1 through B-10) at the approximate locations shown on the Site Plan. JGE personnel established the locations in the field by aligning existing site features. Approximate boring elevations were determined from the topographic contours on a plan by The Sterling Company.

Continuous-flight augers powered by a CME-750 drill rig were used to advance the borings to auger refusal or a predetermined depth of 20 feet. Standard penetration tests were performed at 5-foot intervals throughout the soil overburden. The standard penetration test provides a guide to soil strength and a disturbed sample for laboratory testing. The boreholes were backfilled with auger cuttings at the conclusion of drilling.

4.0 LABORATORY TESTING

In our laboratory, the samples were examined and described by a geotechnical engineer using manual-visual methods. Moisture contents were determined for each sample. Atterberg limits tests were performed on two samples from the borings to determine plasticity characteristics.

The nature and thickness of the soils encountered and the results of the field sampling and laboratory testing are shown on the Boring Logs in the Appendix. Our Boring Log Legend and Nomenclature sheet, included at the front of the Appendix, can be used to interpret the logs.

5.0 SUBSURFACE CONDITIONS

Presented herein is the general description of the soils encountered. Detailed information regarding the soil types and interpretive soil stratigraphy is presented on the Boring Logs.

The topsoil is generally 3 to 6 inches thick. Moderately plastic silty clay was encountered under the topsoil or from the surface, to depths of about 6 to 8 feet in most of the borings. This zone was lower plastic than the underlying high plastic clay or gravelly clays. B-4, B-6, B-7, and B-9 contained high plastic clay with some chert or rock fragments. Clayey gravel was found in B-2, B-3, B-5, B-8, B-9, and B-10. Fill was detected in B-7 to a depth of 2 feet.

The soils are generally medium-stiff to hard in consistency with the clay soils frequently containing rock fragments or gravel. Weathered rock was found in some of the deeper soils in all borings. These soils may contain ledges, large gravel, or boulders, as indicated by "N" values that were many times greater than 30.

Moisture contents of the soils are generally moderate, but the amount of rock reduced many of the percentages reported for the samples.

Auger refusal was encountered in B-2, B-3, B-8, and B-9 at depths of 13 to 16 feet. The other borings terminated at 20.0 feet, but drilling through the weathered rock was difficult and many cutting teeth were broken. The Boring Summary, Table 1, shows the depths to refusal and weathered rock.

Refusal is a designation applied to any material that cannot be further penetrated by the drilling auger without extensive effort, and is usually indicative of a very hard or very dense material, such as boulders or bedrock. Published information describes the bedrock as Mississippian age, the Burlington-Keokuk formation, which contains limestone and chert.

Groundwater was not encountered in any of the borings. However, groundwater levels may not establish themselves in a drilled boring even after several days. Groundwater is subject to seasonal and climatic variations and may be present at different depths at a future date.

6.0 MAJOR GEOTECHNICAL CONCERNS AND RECOMMENDATIONS

Two major geotechnical issues were encountered during our exploration. These issues are not unusual or insurmountable, but will add to the construction cost of the project.

6.1 Shallow Rock

Refusal occurred at depths of 13 to 16 feet in four borings but weathered rock was encountered within 7 to 13 feet of the surface in most borings. Excavation with backhoes or trackhoes in narrow trenches may be difficult in some of the weathered rock and clayey gravel soils. Excavating this material with large bulldozers with rippers should be possible but a contingency fund should be established for rock excavation.

6.2 High Plastic Clay

High plastic clay soils were encountered in the borings at depths that may impact proposed construction. High plastic clay soils have the potential for volume change with changes in the soil moisture content. The volume change can lead to slab-on-grade movement and cracking, and in severe cases, movement and cracking of foundations and walls.

To reduce heave- or settlement-related problems, we recommend that high plastic clay within 18 to 24 inches of the floor slab subgrade and foundation subgrades be removed. Any overexcavation should extend at least two feet beyond the outside building wall footing edges if suitable soil or crushed limestone is to be used as the replacement material. The base of the slab and foundation excavations must not be allowed to desiccate prior to replacement fill or concrete placement.

The overexcavation should be backfilled with properly compacted, non-expansive fill materials such as low plastic soil, lime stabilized clay, or minus gradation crushed limestone. Lean concrete (3-sack mix) may also be used as the replacement material beneath foundations and, if used, the excavation for the concrete can be the same width as the planned footings.

The suggested method of treatment for high plastic clay is based on generally accepted standards in the local engineering community. Swell pressures and volume change potential greater than can be remediated by the suggested method may exist. Consequently, the builder should recognize that there is an inherent risk that floor slab and foundation damage may occur, even after remedial treatment of the subgrade soil.

7.0 SITE DEVELOPMENT RECOMMENDATIONS

The following sections present recommendations for the construction phase of the project.

7.1 Cut and Fill Slopes

Generally, cut and fill slopes should be no steeper than 3 horizontal to 1 vertical (3h:1v). Properly compacted fill slopes and cut slopes of less than 20 feet in height should be stable at this inclination. JGE should evaluate the stability of proposed slopes steeper than 3h:1v or greater than 20 feet in height.

7.2 Detention Basin Design Considerations

The upstream and downstream slopes of the dams should be made no steeper than 1 vertical to 3 horizontal for slope stability considerations. We recommend that the width of the crest of the dam be made as appropriate to provide access for maintenance. Cut slopes should also be 1 vertical to 3 horizontal.

Rock bedding should not be used for the outlet piping of the storm water detention basins. The outlet pipes should be placed on a subgrade shaped to fit the pipe barrel and the backfill materials should be properly compacted cohesive soils. JGE should observe the backfilling procedures and test the compaction for compliance with project specifications.

Where rock or weathered rock is exposed in cut, a minimum 2-foot thick soil cap should be provided to reduce uncontrolled seepage into the bedrock for wet basins.

7.3 Siltation Control

Some of the upper soils at this site are somewhat silty and susceptible to erosion. Appropriate erosion control measures, such as proper site contouring during general grading and the installation of siltation fences or the placement of staked straw bales, should be used during construction to keep eroded materials on site.

7.4 Site Preparation

The existing residences and outbuildings, including any below-grade components, must be properly demolished and the debris removed from the site. Existing foundation walls and associated backfill must be removed entirely along with footings and below-grade utilities, including any septic fields. Where the removal creates excavations below the final proposed grade, the excavations should be brought to final grade with engineered fill in the manner specified later in this report. Masonry rubble generated by the demolition greater than 3 inches in maximum dimension should be removed from the site, or buried in areas of the site that are not sensitive to settlement if permitted by the local municipality.

The planned cut and fill areas should be stripped of surface vegetation. The subgrade in all areas to receive fill should then be scarified, proofrolled and compacted to a minimum dry density of 90 percent of the modified Proctor maximum dry density (ASTM D 1557) under the observation of JGE. Soft spots and areas where the recommended compaction cannot be achieved should be undercut and replaced with compacted, non-expansive cohesive soil fill or crushed stone.

7.5 Fill Materials and Compaction

Low plastic, cohesive soil having a liquid limit less than 45 and a plastic index less than 20 or crushed limestone should ideally be used as fill and backfill below floor slabs, foundations, and against walls, unless the high plastic soils are to be remediated later for each residence, but low plastic soils are not abundant.

Soil fill should be placed in 8-inch loose lifts and compacted to a minimum dry density of 90 percent of the material's modified Proctor maximum dry density (ASTM D 1557). Well-graded granular fill should be compacted to the same criterion. Field density tests should be performed on each lift of fill to check that proper compaction is being achieved.

7.6 Excavation Bracing Requirements

The United States Department of Labor, Occupational Safety and Health Administration (OSHA) issued "Construction Standards for Excavations, 29 CFR, Part 1926, Subpart P" to provide for the safety of workers entering trenches or excavations. This document should be consulted for safe and legal excavations.

8.0 RESIDENTIAL CONSTRUCTION CONSIDERATIONS AND RECOMMENDATIONS

The following sections detail recommendations for the residential foundation design. These recommendations assume the grading has been performed in general accordance with the recommendations provided in this report.

8.1 Shallow Foundations

Shallow foundations bearing in firm, low plastic, natural soil or suitably compacted structural fill are appropriate for support of the proposed houses. Shallow foundations can be designed for net allowable bearing pressures of 2,000 pounds per square foot (psf) for

isolated column footings and continuous wall footings. Continuous wall footings should be at least 20 inches wide and isolated column footings should have a minimum dimension of 24 inches. Exterior footings and foundations in unheated portions of buildings should be provided with at least 30 inches of soil cover for frost protection. Interior footings in heated parts of buildings can be located at nominal depths below the finish floor.

8.2 Seismic Design Considerations

In our professional opinion, based on the soil borings and the anticipated depth to rock, the site fits the International Building Code for Site Class "C," based on the soil profile. The proposed buildings can be designed for this or more stringent soil types. We recommend the structural engineer determine the Seismic Design Category.

8.3 Floor Slabs

The floor slabs should be supported on a layer of crushed stone. This will help distribute concentrated loads and equalize moisture conditions beneath the slabs. If a polyethylene moisture barrier is placed atop the crushed stone and beneath the floors, careful attention to curing of the concrete slabs should be followed or excessive shrinkage cracking and "curling" can occur. We suggest the applicable recommendations provided in the American Concrete Institute (ACI) Standards be followed for curing the concrete floor slabs.

The floor slabs should not be structurally connected to the foundation walls and column pads. Isolation joints should be used where the slabs meet a wall or column. We also suggest that joints be placed in the floor slabs on no more than 15-foot intervals and located in such a manner that each floor slab section is rectangular. Such joints permit slight movements of the independent elements and help prevent random cracking that might otherwise be caused by restraint of shrinkage, slight rotations, heave, or settlement.

8.4 Basement Walls

The basement walls should be designed to withstand lateral earth pressures caused by the weight of the backfill and any surcharge loads. The equivalent fluid unit weights tabulated on the following page can be used to compute the recommended lateral earth pressures for design of the walls. Values for granular material should only be used if the granular backfill extends from the wall a lateral distance of at least one-half the wall height. We recommend against using high plastic and medium plastic clays as wall backfill, as the clays may swell upon wetting, which could result in excessive lateral pressures. The walls should be designed to resist an additional uniform lateral load of one-half of any surface loads above the walls. This table assumes that positive foundation and backfill drainage is provided to prevent buildup of hydrostatic pressure.

Table 1. Recommended Lateral Earth Pressures

Backfill Type	Equivalent Fluid Unit Weights	
	Fixed-Headed Walls (pcf)	Free-Headed Walls (pcf)
Cohesive Soil	60	50
Granular Material (1-inch minus)	48	30

A fixed-headed wall is a wall connected to floor joists or beams that prevent deflection of the top after backfilling. A free-headed wall is designed to deflect at the top and remain fixed at the base, such as a retaining wall.

The maximum toe pressure for the walls should not exceed 2,000 psf. The walls can be designed with a coefficient of friction between the base of the concrete footing and the subgrade soil of 0.3. A passive soil resistance modeled by an equivalent fluid unit weight of 200 pounds per cubic foot may be used for soil against the face of the exterior base or a key below the base of the walls. The upper 30 inches of soil should not be included in passive pressure calculations in frost susceptible areas.

Drains should consist of 4-inch diameter, perforated plastic pipe laid with the holes down and surrounded with a select filter material consisting of 0.5- to 1-inch clean crushed stone. This stone should be isolated from the surrounding soil with a layer of synthetic filter material such as Mirafi 140N or similar. Where practical, drains should drain by gravity to daylight or storm sewers (if allowed by the utility company).

8.5 Retaining Walls

If modular block retaining walls are used, they typically utilize mechanically stabilized earth (MSE) as the backfill. Foundations and configurations of MSE walls will be designed by others. The geosynthetic reinforcement type and placement should be designed for internal and global stability. Soil parameters, backfill materials, and required compaction should be assumed or specified by the designer. Global stability should be checked for all MSE walls having slopes above or below the wall.

8.6 Foundation Excavations

We should observe the foundation excavations to verify that the foundations will bear on competent materials. Each footing should bear in firm, low plastic, natural soil or properly compacted, non-expansive fill. Overdeepened footing excavations may be backfilled with lean concrete (3-sack mix) up to the design base of the footing elevations.

The base of all excavations should be clean, relatively dry, and free of loose soil or uncompacted fill. The excavations should be protected from extreme temperatures, precipitation, and construction disturbances. To reduce the possibility of desiccation or saturation of the foundation soils, we recommend the concrete be placed as soon as possible after the excavation is made.

Disturbance of the soils in footing and floor slab excavations should be avoided. The potential for such disturbance will increase during wetter portions of the year. Footing subgrade materials that have been excessively disturbed should be overdeepened to firm, undisturbed soil and replaced with properly compacted, non-expansive fill. Excessively disturbed soils beneath the floor slabs should be removed and replaced with additional granular material.

8.7 Site Drainage and Final Grading

Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of the structures and beneath the slabs. All grades should be sloped away from the structures, and roof and surface drainage should be collected and discharged such that water is not permitted to infiltrate the foundation backfill.

9.0 CONSTRUCTION MONITORING PROGRAM

The following are highlights of a construction monitoring program. These services are intended to assess our design assumptions; and to provide construction quality assurance by comparing and documenting procedures and test results with plans, specifications, and good engineering practice. In this endeavor, JGE should:

- Review project plans and construction specifications to assess the interpretation of this report
- Observe site preparation, including proofrolling the subgrade
- Verify the suitability of potential fill materials
- Monitor placement of structural fill and backfill
- Observe problem foundation excavations and the floor slab subgrade to assess the impact of any high plastic soils and to recommend remedial measures, if necessary
- Provide testing services during pavement construction

10.0 LIMITATIONS

The recommendations provided herein are based on the information obtained at ten specific boring locations within the project area and regionally accepted practice. JGE should be contacted if conditions encountered are not consistent with those described.

In addition, we should be provided with a set of final development plans, as soon as they are available for review, to determine the applicability of our recommendations. Construction specifications also merit our review to assess the interpretation of this report. Failure to provide these documents for review may nullify some or all of the recommendations provided herein.

**TABLE 1
BORING SUMMARY**

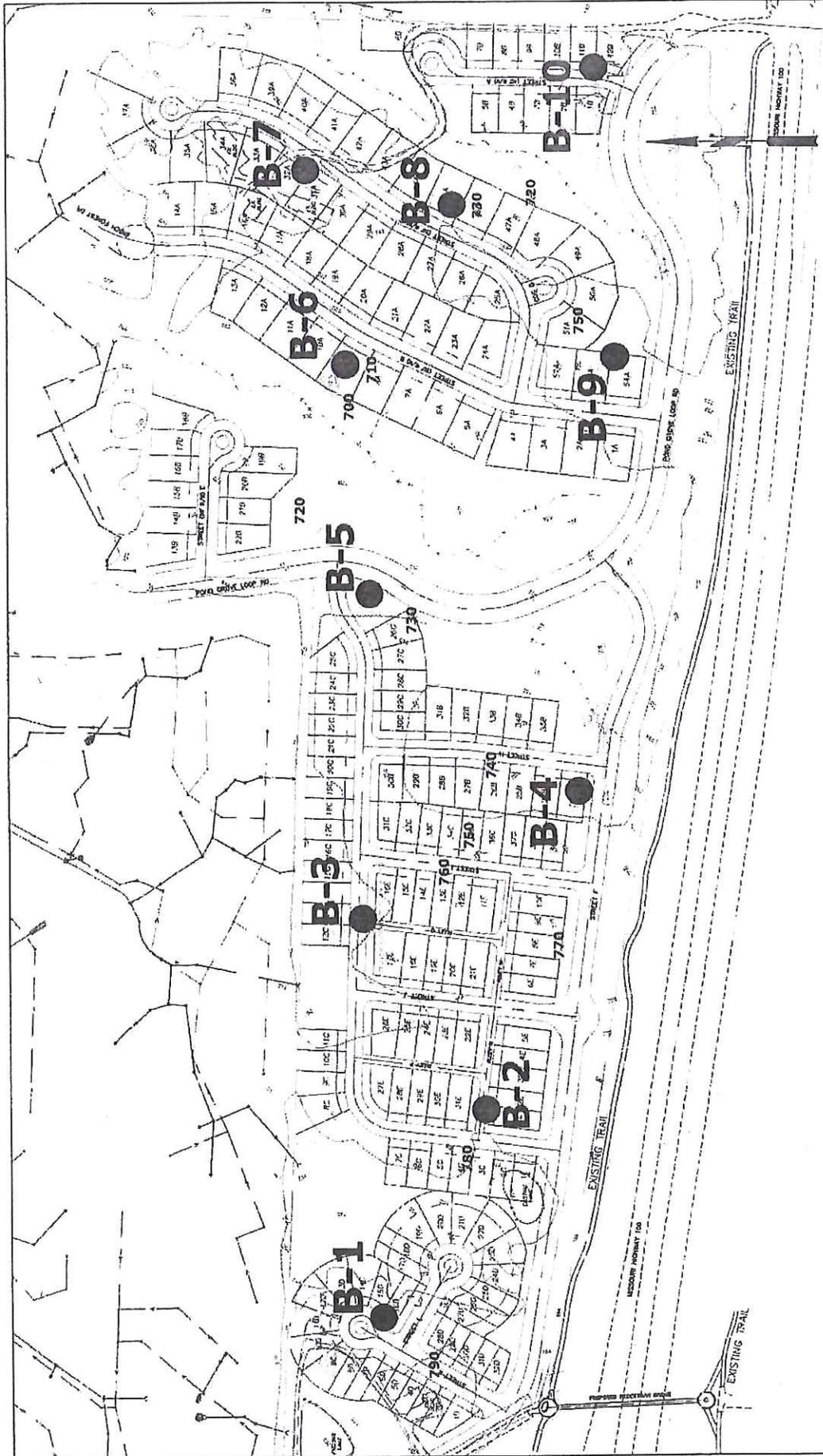
**Jones Property - Overlook Drive
Wildwood, Missouri**

JGE #15016

Number	Termination or Refusal Depth (ft)	Refusal ?	Depth to Weathered Rock*	Ground Surface Elevation	Elevation at Weathered Rock	Elevation at Refusal	Bottom Elevation
B-1	20.0	N	8.0	782	774.0	N/A	762
B-2	13.0	Y	12.5	784	771.5	771	771
B-3	16.0	Y	12.0	766	754.0	750	750
B-4	20.0	N	7.0	746	739.0	N/A	726
B-5	20.0	N	19.0	722	703.0	N/A	702
B-6	20.0	N	12.5	706	693.5	N/A	686
B-7	20.0	N	12	732	720.0	N/A	712
B-8	16.0	Y	12	734	722.0	718	718
B-9	13.0	Y	12.5	752	739.5	739	739
B-10	20.0	N	12	744	732.0	N/A	724

GROUND SURFACE ELEVATIONS ESTIMATED FROM PRELIMINARY DEVELOPMENT PLANS BY THE STERLING COMPANY

*Some soils above the weathered rock descriptions may contain large amounts of rock fragments.



No Scale

JACOBI GEOTECHNICAL
ENGINEERING, INC.
SITE PLAN

Jones Property - Overlook Drive
Wildwood, Missouri

April 2015
Figure 2

Site Plan based on plan by The Sterling Company

15016

APPENDIX

JACOBI GEOTECHNICAL ENGINEERING, INC.

BORING LOG LEGEND AND NOMENCLATURE

Depth - Depth below ground surface, in feet.

Elevation - Referenced to msl, city, or site datum, in feet.

Type No. - Sample type and number designated by the following:

SS - Split spoon; disturbed sample from standard penetration test. Obtained by driving 2-inch O. D. split-spoon sampler. Blow counts for three 6-inch increments reported (ASTM D 1586). N-value is the sum of the second and third blow counts.

ST - Shelby tube sampler; undisturbed, obtained by pushing 3-inch-diameter, thin walled tube sampler (ASTM D 1587).

CS - Continuous sampler; undisturbed, obtained by split barrel sampler during auger advancement.

AS - Auger samples; disturbed, obtained from auger cuttings or wash water return.

NX - Nx rock core sample; nominal 2-inch-diameter, obtained by diamond core bit sampler, percent recovery and RQD reported (ASTM D 2113). **Note:** RQD indicates the ratio of the total length of segments greater than 4 inches to the total length drilled.

SV - Shear vane test; obtained by pushing a 2-inch-diameter vane then torquing, shear strength in existing and remolded states reported (ASTM D 2573).

Recovery - Reported in inches as a ratio of the length of sample recovered to the total length pushed, driven, or cored.

Blows per 6 inches - The number of blows per 6 inches of sampler penetration when driven by a 140-pound hammer 30 inches (ASTM D 1586). **Note:** To avoid damaging the equipment driving is limited to 50 blows per 6-inch increment.

USCS - Unified Soil Classification System; designates letter symbols for soil types (ASTM D 2487 & D 2488).

Soil Description - Describes soil according to the Unified Soil Classification System (ASTM D 2488 & D 2488), indicates constituents and characteristics. Solid lines between descriptions indicate approximate change between soil types and the transition may be gradual.



Water level - Ground water detected by drillers at the time of drilling.

Laboratory Test Results

Moisture % - Moisture content expressed as a percentage of the dry unit weight (ASTM D 2216).

Liquid Limit and Plastic Limit - Index tests performed for classifying fine-grained components of soils (ASTM D 4318).

Dry Density - Obtained from Shelby tube or continuous samplers, reported in pounds per cubic foot (pcf).

Shear Strength - Results reported in kips per square foot (ksf) determined by Unconfined Compression Test unless preceded by PP or TV.

Unconfined Compression Test - Shear strength obtained from Shelby tube or continuous samplers (ASTM D 2166).

PP - Penetrometer - Approximates shear strength of unconfined compressive test.

TV - Torvane - Miniature vane used in determining approximate shear strength.

JACOBI GEOTECHNICAL ENGINEERING, INC
BORING LOG NO. B-1

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 782+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 inch CFA

HOLE DEPTH (ft): 20.0

DRILL DATE: 4-11-15

Depth	Elevation	Type No.	Recovery (in./ft.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	782				CL/CH	4 in. Topsoil Brown and gray, lean to fat, SILTY CLAY						0
5	777	SS 1		12-9-22	CL	Brown, lean, SILTY CLAY, with chert fragments	24					5
					CL	Brown, lean, SILTY CLAY, with sand and gravel						
10	772	SS 2		50/2		WEATHERED ROCK, with brown clay seams	3					10
15	767	SS 3		50/2			8					15
20	762	SS 4		50/2		Boring terminated at 20.0 feet	9					20
25	757											25
30	752											30
35	747											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC BORING LOG NO. B-2

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 784+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 inch CFA

HOLE DEPTH (ft): 13.0

DRILL DATE: 4-9-15

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	784				CL/CH	6 in. Topsoil Brown and gray, lean to fat, SILTY CLAY						0
5	779	SS 1		4-7-10	GC	Brown and red, fat, CLAYEY GRAVEL	23					5
10	774	SS 2		25-17-10			24					10
15	769					WEATHERED ROCK Auger refusal at 13.0 feet						15
20	764											20
25	759											25
30	754											30
35	749											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC
BORING LOG NO. B-3

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 766+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 Inch CFA

HOLE DEPTH (ft): 16.0

DRILL DATE: 4-9-15

Depth	Elevation	Type No.	Recovery (in./ft.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	766				CL/CH	4 in. Topsoil Brown and gray, lean to fat, SILTY CLAY						0
5	761	SS 1		5-8-9	GC	Red and gray, fat, CLAYEY GRAVEL	27	47	20			5
10	756	SS 2		10-8-13		WEATHERED ROCK, with tan clay seams	23					10
15	751	SS 3		50/2		Auger refusal at 16.0 feet	11					15
20	746											20
25	741											25
30	736											30
35	731											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC BORING LOG NO. B-4

PROJECT NAME: Jones Property - Overlook Drive			PROJECT NO. 15016
LOCATION: Wildwood, Missouri			GROUND EL.: 746+/-
DRILLER: Midwest Drilling Inc.	DRILL: CME-750	METHOD: 4 Inch CFA	HOLE DEPTH (ft): 20.0
DRILL DATE: 4-11-15			

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	746				CL/CH	3 in. Topsoil						0
					CL	Brown and gray, lean to fat, SILTY CLAY						
5	741	SS 1		50/4		Brown, lean, SILTY CLAY, with chert fragments	9					5
						8 in. CHERT BOULDER						
						WEATHERED ROCK						
10	736	SS 2		50/3			10					10
15	731	SS 3		50/2			9					15
					GC	Reddish brown, fat, CLAYEY GRAVEL						
20	726	SS 4		12-15-17		Boring terminated at 20.0 feet	11					20
25	721											25
30	716											30
35	711											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC
BORING LOG NO. B-5

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 722+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 Inch CFA

HOLE DEPTH (ft): 20.0

DRILL DATE: 4-11-15

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	722					6 in. Topsoil						0
					CL/CH	Brown and gray, lean to fat, SILTY CLAY						
					GC	Brown, fat, CLAYEY GRAVEL						
5	717	SS 1		28-50/3			16					5
10	712	SS 2		14-21-31			19					10
15	707	SS 3		27-19-23			18					15
20	702	SS 4		37-50/2		Heavier rock fragments						20
						WEATHERED ROCK	12					
						Boring terminated at 20.0 feet						
25	697											25
30	692											30
35	687											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC BORING LOG NO. B-6

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 706+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 Inch CFA

HOLE DEPTH (ft): 20.0

DRILL DATE: 4-13-15

Depth	Elevation	Type No.	Recovery (ft./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	706				CL/CH	Brown, lean to fat, SILTY CLAY						0
5	701	SS 1		22-50/4		ROCK FRAGMENTS	8					5
					CH	Red and gray, fat, CLAY						
10	696	SS 2		7-8-11			19					10
					CH	Brown, fat, CLAY, and WEATHERED ROCK						
15	691	SS 3		12-17-41			17					15
20	686	SS 4		10-15-21		Boring terminated at 20.0 feet	13					20
25	681											25
30	676											30
35	671											35

Remarks:

**JACOBI GEOTECHNICAL ENGINEERING, INC
BORING LOG NO. B-7**

PROJECT NAME: Jones Property - Overlook Drive			PROJECT NO. 15016
LOCATION: Wildwood, Missouri			GROUND EL.: 732+/-
DRILLER: Midwest Drilling Inc.	DRILL: CME-750	METHOD: 4 inch CFA	HOLE DEPTH (ft): 20.0
DRILL DATE: 4-22-15			

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	732				CL	FILL: Brown, lean, SILTY CLAY, with rock fragments						0
					CL/CH	Brown, lean to fat, SILTY CLAY						
5	727	SS 1		3-4-4			26	49	21			5
					CH	Reddish brown, fat, CLAY, with chert fragments						
10	722	SS 2		22-50/5			13					10
						WEATHERED ROCK						
15	717	SS 3		50/3			13					15
20	712	SS 4		50/2		Boring terminated at 20.0 feet	15					20
25	707											25
30	702											30
35	697											35

Remarks:

**JACOBI GEOTECHNICAL ENGINEERING, INC
BORING LOG NO. B-8**

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 734+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 inch CFA

HOLE DEPTH (ft): 16.0

DRILL DATE: 4-11-15

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	734				CL/CH	4 in. Topsoil Brown, lean to fat, SILTY CLAY						0
5	729	SS 1		4-7-11	GC	Brown and reddish brown, fat, CLAYEY GRAVEL	20					5
10	724	SS 2		50/4			9					10
15	719	SS 3		50/2		WEATHERED ROCK, with gray clay seams and chert fragments	14					15
20	714					Auger refusal at 16.0 feet						20
25	709											25
30	704											30
35	699											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC BORING LOG NO. B-9

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 752+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 inch CFA

HOLE DEPTH (ft): 13.0

DRILL DATE: 4-11-15

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	752				CL/CH	4 in. Topsoil Brown and gray, lean to fat, SILTY CLAY						0
5	747	SS 1		6-15-18	CH	Brown, fat, CLAY, with rock fragments	20					5
10	742	SS 2		15-21-32	GC	Brown, fat, CLAYEY GRAVEL	16					10
15	737					SOLID ROCK Auger refusal at 13.0 feet						15
20	732											20
25	727											25
30	722											30
35	717											35

Remarks:

JACOBI GEOTECHNICAL ENGINEERING, INC BORING LOG NO. B-10

PROJECT NAME: Jones Property - Overlook Drive

PROJECT NO. 15016

LOCATION: Wildwood, Missouri

GROUND EL.: 744+/-

DRILLER: Midwest Drilling Inc.

DRILL: CME-750

METHOD: 4 inch CFA

HOLE DEPTH (ft): 20.0

DRILL DATE: 4-22-15

Depth	Elevation	Type No.	Recovery (in./in.)	Pocket Penetrometer (tsf)	USCS	Soil Description	Moisture (%)	Liquid Limit	Plastic Limit	Dry Density (pcf)	Shear Strength (ksf)	Depth
0	744				CL/CH	4 in. Topsoil Brown and gray, lean to fat, SILTY CLAY						0
5	739	SS 1		4-5-6			25					5
10	734	SS 2		8-9-15	GC	Red and gray, fat, CLAYEY GRAVEL	27					10
15	729	SS 3		50/4		WEATHERED ROCK, with brown clay seams	7					15
20	724	SS 4		50/2		Boring terminated at 20.0 feet	6					20
25	719											25
30	714											30
35	709											35

Remarks: