CITY OF O'FALLON GENERAL NOTES

- 1. Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.
- 2. No area shall be cleared without the permission of the
- Project Engineer. 3. Easements shall be provided for sanitary sewers. See plan for location and size of easements. This does not apply to house laterals
- 4. Maintenance and upkeep of the common ground area shall be the responsibility of the developer and/or successors.
- 5. A building line shall be established along all Public Rights-Of-Way.
- 6. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match rre-construction conditions.
- 8. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sawer system.
- 9. All construction and materials shall conform to the current construction standards of the City of O'Fallon. Where conflicts exist, the contractor shall notify the Engineer for resolution. 10. All mechanical equipment to be screened from public view.
- 11. Proposed building and site will comply with current Americans with Disabilities Act (ADA) requirements.
- 12. See architectural drawing for all building dimensions, service connections, details, etc.
- 13. All dimensions are to back of curb, unless otherwise noted.
- 14. All construction methods and practices shall conform with current OSHA standards.
- 15. The contractor shall be responsible for installing and maintaining the siltation control as approved by City of O'fallon

SANITARY SEWER NOTES

- 1. All manhole tops built without elevations furnished by the Engineer
- will be the responsibility of the sewer contractor. 2. 8"P.V.C. sanitary sewer pipe shall meet the following standards. A.S.T.M.-D-3034 SDR-35, with wall thickness compression joint A.S.T.M.-D-3212. An appropriate rubber seal water stop as approved by the sewer district shall be installed between P.V.C. pipe and masonry
- All filled places, including trench back fills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90 % maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698).
- 4. All trench back fills under paved areas shall be granular back fill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench back fills may be earth material (free of large clods or stones). All trench back fills shall be water jetted.
- 5. All sanitary house connections have been designed so that the minimum vertical distance from the low point of the basement to the flow line of a sanitary sewer at the corresponding house connection is not less than the diameter of the pipe plus the vertical distance of 2 1/2 feet.
- 6. All P.V.C. sanitary sewer is to be SDR-35 or equal with clean 1/2" to 1" granular stone bedding uniformly graded. This bedding shall extend from 4" below the pipe to the springline of the pipe. Immediate back fill over pipe shall consist of same size "clean" or minus stone from spring line of pipe to 12" above the top of pipe.

- All sanitary manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications
- 8. Brick will not be used in the construction of sanitary sewer manholes. 9. All pipes shall have positive drainage through manholes. No flat base structures are allowed. Structures shall have a 0.2' min. difference in invert elevation unless otherwise approved.
- 10. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- 11. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary or storm sewers, including house laterals.
- 12. The contractor shall prevent all storm, surface water, mud and
- construction debris from entering the existing sanitary sewer system. 13. All sanitary and storm sewer trench back fills shall be water jetted.
- Granular back fill will be used under pavement areas. 14. All existing greas disturbed during construction of the
- sanitary sewer line shall be seeded and mulched to prevent erosion. 15. All sanitary sewer laterals shall be a minimum of 4" in diameter per
- City of O'Fallon. 16. All construction methods and practices shall conform with current
- OSHA standards. 17. Sod or erosion control blankets may be used in disturbed areas
- as directed by engineer. 18. Abandonment of existing septic tanks shall be pump out and
- abandonment shall be done according to specification set out by Metropolitan St. Louis Sewer District (2000) and inspected by

UTILITY NOTES

- 1. Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.
- 2. All filled places, including trench back fills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698).
- 3. All trench back fills under paved areas shall be granular back fill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench back fills may be earth material (free of large clods or stones). All trench back fills shall be water jetted.
- 4. Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and 5. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- 6. Gas, water and other underground utilities shall not conflict with the depth or torizontal location of existing or proposed sanitary or storm sewers, including house laterals. 7. All construction and materials shall conform to the current construction standards of the City of O'Fallon.
- 8. See architectural drawing for all building dimensions, service connections, details, etc.
- 9. All utilities shown are existing, unless otherwise noted. All new utilities shall be located underground. All construction methods and practices shall conform with current OSHA standards.

GRADING NOTES

- 1. All soils tests shall be verified by a Soils Engineer concurrent with the grading and back filling operations.
- 2. All grades shall be within 0.2 feet of those shown on the grading plan. 3. No slope shall be steeper than 3:1. All slopes shall be sodded or seeded and mulched.

DEMOLITION NOTES

- 1. Contractor shall remove and dispose of all asphalt, concrete, rock, building materials, and all other debris at an approved landfill in accordance with all rules and regulations, including Missouri Department of Natural Resources (MDNR), St. Charles County, and the City of O'Follon.
- 2. Contractor shall remove all rock base when removing pavements Sawcuts shall be considered incidental to removals.
- 4. Contractor shall remove concrete sidewalk at joint nearest the limits of removal

STORM SEWER NOTES

- 1. All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. 2. All filled places, including trench back fills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test,"
- (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698). 3. All trench back fills under paved areas shall be granular back fill, and shall be compacted to 90
- as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench back fills may be earth material (free of large clads or stones). All trench back fills shall be water jetted.
- 4. Brick will not be used in the construction of storm sewer manholes. 5. All pipes shall have positive drainage through manholes. No flat base structures are allowed. Structures shall have a 0.2' min, difference in invert elevation unless otherwise approved.
- 5. All construction and materials shall conform to the current construction standards of the City of O'Fallon. 7. All sanitary and storm sewer trench back fills shall be water jetted. Granular back fill will be used under pavement areas.
- 8. Concrete pipe for storm sewers shall be Class III, A.S.T.M. C-76 with a minimum diameter of 12" except in the R.O.W. It shall be 15". 9. The ADS N-12 pipe shall have a smooth interior wall.
- 10. Concrete pipe joints shall be MSD type "A" approved compression-type joints and shall conform to the requirements of the specifications for joins for circular concrete sewer and culvert pipe, using flexible, watertight, rubber-type gaskets (A.S.T.M.-C-443). Band-type gaskets depending entirely on cement for adhesion and resistance to displacement during
- jointing shall not be used 11. When HDPE pipe is used, pipe must meet ADS pro-link ultra joint specifications or equal, per ASHTO M294
- be followed. 12. The use of High Density Polyethylene Corrugated pipe, ADS N-12 or equal will be permitted as an acceptable alternative to reinforced concrete pipe, ADS N-12 HC shall be used for all ADS pipe greater than 36". Pipe shall meet A.S.T.M.-D-2321 and AASHTO M-294-291.
- 13. All flored end sections and inlet structures will be concrete. 14. All storm sewer pipe installed in the Public Right-of-Way shall be reinforced concrete Class III pipe.
- 15. All concrete pipe or ADS N-12 pipe shall be installed with "O-Ring" Rubber type gaskets per M.S.D. standard construction
- specifications or manufacturer. 16. All construction methods and practices shall conform with current OSHA standards.
- 17. Provide a 5/8" trash bar in all inlet openings.

WATER NOTES

- 1. All water lines shall be laid at least 10 feet horizontally, from any sanitary sewer, storm sewer, or manhole. 18" vertical clearance from autside of pipe to outside of pipe shall be maintained wherever water lines must cross sanitary sewers, laterals, or storm drains. The water line shall be laid at such an elevation that the bottom of the water line is above the top of the drain or sewer. A full length of water pipe shall be centered over the sewer line to be crossed so that the joints will be equally distant from the sewer and as remote therefrom as possible. This vertical separation shall be maintained for that portion of the water line located within 10 feet horizontally, of any sewer or drain it crosses.
- 2. All PVC water pipe shall conform to A.S.T.M.-D-2241, SDR 21 Standard Specification for P.V.C. Pressure Pipe, 200 P.S.I.
- working pressure for water, with approved joint. 3. Water lines, valves, sleeved, meters, and fittings shall meet all specifications and installation requirements of the
- 4. All water hydrants and valves shall be ductile iron and installed in accordance with plans and details. All ductile iron pipe for water mains shall conform to A.W.W.A. Specifications C-106 and/or C-108. The ductile iron fittings shall conform to A.W.W.A. Specification C-110. All rubber gasket joints for water ductile iron pressure pipe and fittings shall conform to A.W.W.A. Specification C-111.
- 5. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- 6. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary or storm sewers, including house laterals.
- 7. Any water main in the 1 to 1 sheer plane or under the pavement will require compacted rock backfill.

STRIPING NOTES

- . Existing striping shall be removed as shown on plan and as directed by the Engineer.
- 2. Contractor shall paint all striping. See specification for type of paint, . Striping and pavement markings shall be in accordance with the current edition of the "Manual on Uniform Traffic Control
- Devices" (MUTCD) and current ADA standards. All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 13HB paint (or equivalent as approved by the City).

LANDSCAPING NOTES

- 1. STREET TREES SHALL NOT BE PLANTED CLOSER THAN 3 FEET
- 2. STREET TREES SHALL NOT BE PLACED WITHIN TWENTY-FIVE (25) FEET OF STREET LIGHTS.
- 3. AT STREET INTERSECTIONS, NO STREET TREES SHALL BE PLACED WITHIN THE SIGHT TRIANGLE.
- 4. STREET TREES SHALL NOT BE PLANTED WITHIN TEN (10) FEET OF STREET INLETS, MANHOLES, OR FIRE HYDRANTS.
- 5. AFTER NORMAL WARRANTY PERIODS, TREES SHALL BE MAINTAINED IN GOOD CONDITION BY THE CORRESPONDING HOMEOWNERS ASSOCIATION AS PART OF THE COVENANTS AND RESTRICTIONS OF THE SUBDIVISION, SAID RESTRICTIONS SHALL INCLUDE LANGUAGE APPROVED BY THE CITY TO ALLOW THE CITY TO REMOVE TREES SHOULD PUBLIC SAFETY BE THREATENED.
- 6. STREET TREES MUST BE PLANTED WITHIN ONE (1) YEAR OF ISSUANCE OF THE FINAL OCCUPANCY PERMIT.
- 7. TREES SHALL BE AT LEAST TWO (2) INCHES IN CALIPER AND SHALL BE FROM THE FOLLOWING APPROVED SPECIES:

Approved	Large Trees	(Over 70 ft):
Blackgum	Kentucky Coffeetree	Shumard Oak
Black Ook	Northern Red Oak	Sycamore
Black Walnut	Pecon	Tulip Poplar
Bur Oak	Pin Oak	White Ash
Mople	Scorlet Oak	White Oak
Hackberry	Willow Oak	Swamp White Oak
	Red Oak	

Trees Medium/Small Approved Trees (Less Thon 70 ft.)

Green Ash	Persimmon	River Birch
Red Mulberry	Eastern Redbud	Flowering Dogwood
Amber Maple	Wild Plum	Purple Leaf Plum

SIL

333 Mid Rivers I St. Peters, MO Phone (636) 397 Fax (636) 397-1

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PRO MMI

NO NO ENGINEERS AUTHENTICATION

The responsibility for professiona engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless PICKETT, RAY & SILVER, INC

DRAWN DATE 4-09-03 DWD CHECKED DATE 4-09-03

PROJECT # 01212.SUPO.02R FIELD TASK # BOOK

VILLAS AT CRYSTAL RIDGE SITE NOTES

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