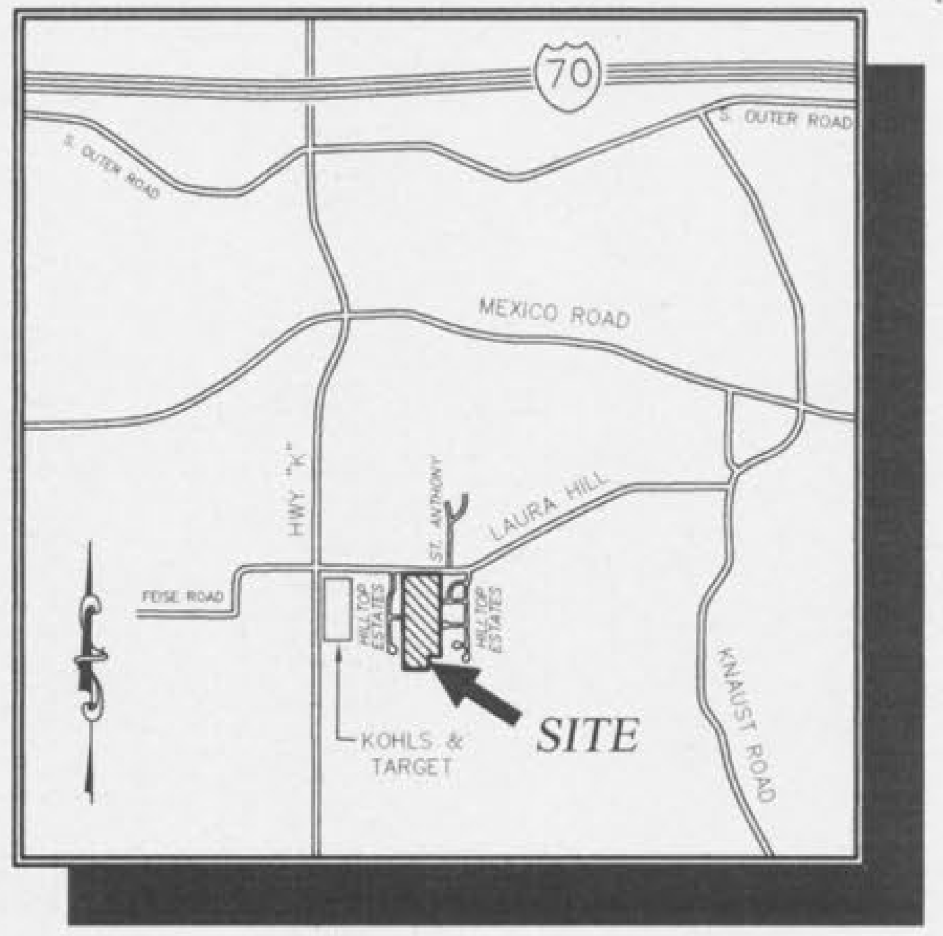
# WHTEGATE VILLAS

## ADDITION

*A TRACT OF LAND BEING PART OF*
*OF THE NORTHWEST ONE QUARTER OF SECTION 4*
*TOWNSHIP 46 NORTH, RANGE 3 EAST*
*ST. CHARLES COUNTY, MISSOURI*

## *IMPROVEMENT PLANS*

### *LOCATION MAP*




## DRAWING INDEX



## LEGEND

| | | | |
|---|---|---|---|
| Sanitary Sewer (Proposed) | Sanitary Structure | R.C.P. | Reinforced Concrete Pipe |
| Sanitary Sewer (Existing) | Storm Structure | C.M.P. | Corrugated Metal Pipe |
| Storm Sewer (Proposed) | Test Hole | C.I.P. | Cast Iron Pipe |
| Storm Sewer (Existing) | Power Pole | P.V.C. | Polyvinyl Chloride |
| Water Line & Size | Light Standard | V.C.P. | Vitrified Clay Pipe |
| Existing water line | Double Water Meter Setting | | |
| Tee & Valve | Single Water Meter Setting | C.O. | Clean Out |
| Hydrant | C.I. Curb Inlet | V.T. | Vent Trap |
| Cap | S.C.I. Skewed Curb Inlet | T.B.R. | To Be Removed |
| 18 Lot or Building Number | D.C.I Double Curb Inlet | T.B.R.&R | To Be Removed & Relocated |
| Existing Fence Line | G.I. Grate Inlet | T.B.P. | To Be Protected |
| Existing Tree Line | A.I. Area Inlet | T.B.A. | To Be Abandoned |
| Street Sign | D.A.I. Double Area Inlet | B.C. | Base Of Curb |
| Existing Contour | C.C. Concrete Collar | T.C. | Top Of Curb |
| Proposed Contour | F.E. Flared End Section | T.W. | Top Of Wall |
| Rip-Rap | E.P. End Pipe | B.W. | Base Of Wall |
| End of Lateral | E.D. Energy Dissipater | (TYP) | Typical |
| Asphalt Pavement | M.H. Manhole | U.N.O. | Unless Noted Otherwise |
| Concrete Pavement | C.P. Concrete Pipe | U.I.P. | Use In Place |
| Proposed Swale | | | |

## SITE DEVELOPMENT NOTES

1. Area of Site = 13.80 Acres.
2. **LOT DATA: 64 UNITS**
3. SETBACKS:
   FRONT YARD = 15'
   SIDE YARD = 6'
   REAR YARD = 20'
4. This tract is served by:
   WATER – P.W.S.D.#2
   ELECTRIC – AMEREN UE
   TELEPHONE – VERIZON
   SEWERS – CITY OF O'FALLON
   GAS – ST. CHARLES GAS CO.
   FIRE PROTECTION – O'FALLON FIRE PROTECTION DISTRICT
   SCHOOL DISTRICT – FORT ZUMWALT SCHOOL DISTRICT
   POST OFFICE – O'FALLON POST OFFICE
5. Driveway locations shall not interfere with the sidewalk handicap ramps
6. All proposed fencing requires a separate permit from the Planning Department.
7. City Approval of the construction site plans does not mean that single family and two family dwelling units can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.
8. Developer must provide City construction inspectors with soil reports prior to or during site soil testing.
9. For sediment and siltation control measures, see previously approved rough grading plans.
10. This site is not within the 100 yr. flood plain as shown on FIRM map panel number 29183C0239E, dated august 2, 1996
11. All existing improvements (excluding outlot) shall be removed.
12. Existing wells and septic systems shall be removed per Soils Engineering requirements.
13. City Approval of the construction site plans does not mean that single family and two family dwelling units can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.
14. For sediment and siltation control measures, see previously approved rough grading plans.
15. Sidewalks, Curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "Americans with disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
16. 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).
17. All sign locations and sizes must be approved separately through the Planning Division.
18. There shall be a 5/8" trash bar on all curb and area inlets.
19. All proposed utilities shall be located underground.
20. Retaining walls are to be maintained by the homeowners association as specified in Section 4D (common elements) of the covenants and restrictions.

## 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 structures.
3. 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.
7. All sanitary manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications 10 CSR–8.120 (7)E.
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.
10. P.W.S.D. # 2 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 areas 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 P.W.S.D.# 2.
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 governing authority.

## 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 size of easements.
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. 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.
10. 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'Fallon.
2. Contractor shall remove all rock base when removing pavements.
3. Sawcuts shall be considered incidental to removals.
4. Contractor shall remove concrete sidewalk at joint nearest the limits of removal.

## STRIPING NOTES

1. 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.
3. 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.

## 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 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 maximum density as determined by 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. 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.
6. 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 <u>not be used</u>
11. When HDPE pipe is used, City of O'Fallon specifications or manufacturers specifications, whichever are more stringent, shall 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 flared 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" trashbar 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 outside 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 Public Water Supply District No. 2 of St. Charles County.
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. P.W.S.D. #2 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.

### TREE PRESERVATION

Existing trees = 5.45 Acres
Trees Removed = 5.24 Acres = 96% of trees removed
16% more trees need to be replaced to acquire the 20% per ordinance.
16% of trees = .872 acres x 15 = 13.08 or 13 trees to be replaced.

PER CITY OF O'FALLON
1(one) tree per unit
+ 1(one) extra tree on corner lots
70 trees required

Total trees PROVIDED = 99 trees

### *PROJECT BENCH MARK*

*BENCHMARK :*

*B.M. (U.S.G.S.) ELEVATION = 462.06*
*CHISELED "□" SQUARE ON NORTH WING WALL @ EAST END OF MEXICO ROAD BRIDGE OVER DARDENNE CREEK.*
*(BASED ON FIRM B.M. RM#727*

*SITE BENCHMARK :*

*ELEVATION = 613.79*
*CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF HILLCREST ESTATES*

RECEIVED
SEP 24 2002
CITY OF O'FALLON, MO

10-3-02
APPROVED
as noted

REVISED SEE FOLLOWING SET →

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WHITEGATE VILLAS
ADDITION
COVER SHEET

Prepared For:
SUMMIT POINTE L.C.
239 FOX HILL ROAD
ST. CHARLES, MO 63301
(636)940-9300

| REVISIONS NO. | DATE | |
|---|---|---|
| 1 | 09–06–02 | REVISED PER CITY OF O'FALLON |
| 2 | 09–23–02 | REVISED PER CITY OF O'FALLON |

ENGINEERS AUTHENTICATION
The responsibility for professional 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 reauthenticated.
PICKETT, RAY & SILVER, INC

STATE OF MISSOURI
HAROLD J. BARTCH
NUMBER E-17751
REGISTERED PROFESSIONAL ENGINEER

| | |
|---|---|
| DRAWN ABK | DATE 07–15–02 |
| CHECKED DWD | DATE 07–15–02 |
| PROJECT # 02041.SUPO.01R | |
| TASK # 2 | FIELD BOOK X |

WHITEGATE VILLAS
COVER SHEET
SHEET 1 OF 22



File