

**GENERAL NOTES**

- 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.
- All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
- 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 approved rubber seal waterstop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures.
- All filled placed under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. The moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
- All trench backfills under paved areas shall be granular backfill, 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 backfills may be earth material (free of large clods or stones). All trench backfills shall be water filled.
- All sanitary sewer 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.
- No area shall be cleared without the permission of the Project Engineer.
- All grades shall be within 0.2 feet, of those shown on the grading plan.
- No slope shall be steeper than 3:1 or as called for in the soils report for the project. All slopes shall be sodded or seeded and mulched.
- All construction and materials used shall conform to current City of O'Fallon standards.
- All P.V.C. sanitary sewer pipe shall have crushed stone bedding, uniformly graded between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 7/10 of the pipe depth above the bottom of the pipe.
- All soils test shall be verified by a Soils Engineer concurrent with the grading and backfilling operations.
- Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and size of easements.
- Streets shall be constructed to the city of O'Fallon standard specifications.
- All sanitary sewer lines and appurtenances will be designed and installed in accordance with the City's regulations and in accordance with acceptable engineering practice.
- All storm sewer pipes, inlets, and appurtenances will be designed and installed in accordance with the City's regulations and in accordance with acceptable engineering practice, and will be based on carefully prepared hydraulic calculations. A detention basin will be provided for the stormwater differential runoff.
- All sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missouri Dept. of Natural Resources specifications 10 CSR-8.120(7)(E).
- All bends on water main are to be made with fittings.
- All storm sewer pipe in the right-of-way shall be reinforced concrete pipe (A.S.T.M. C-76, Class III minimum).
- Storm sewer 18 inch diameter and smaller shall be A.S.T.M. C-14, Class III RCP minimum or ADS, unless other wise shown on the plans.
- Storm sewers 21 inch diameter and larger shall be A.S.T.M. C-76, Class III RCP minimum or ADS, unless other wise shown on the plans.
- The Contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or the City of O'Fallon and/or MoDOT. The contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of all. The owner and/or the City of O'Fallon and/or MoDOT may at their option direct the contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement or in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the owner and/or the City of O'Fallon and/or MoDOT.
- Sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signs. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor shall notify the project engineer prior to any construction.
- Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with city standards.
- All proposed fencing requires a separate permit through the planning division.
- The screening walls around the trash enclosure shall reflect the same level of architectural design as the primary structure.
- All sign locations and sizes must be approved separately through the planning division.
- All sign posts and backs and bracket arms shall be painted black using Corboline Rust and Penetrating Sealer 50 and Corboline 133 HB point (or equivalent as approved by City and MoDOT). Signs designating street name shall be on opposite side of the street from traffic control signs.
- Rip-rap shown at flared ends will be evaluated in the field after installation for effectiveness and field modified if necessary to reduce erosion on and off site.
- Developer must supply city construction inspectors with soil reports prior to or during site soil testing.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the city of O'Fallon.
- Brick shall not be used in the construction of storm sewer structures.
- All rooftop mechanical units shall be screened by parapet wall and all ground mounted units shall be screened with materials and/or landscaping.
- All joints shall be gasketed O-ring type.
- 5/8" diameter trash bar shall be provided for all inlets.
- The screening walls around the trash enclosure shall reflect the same level of architectural design as the primary structure.
- It should be field verified by the developer that the existing sanitary manhole top does not need to be adjusted. If it is determined that the top needs to be adjusted then it is the responsibility of the developer to do so.

**DEVELOPMENT NOTES:**

- CURRENT OWNER: REID TRUST II, JAMES REID, TRUSTEE  
P.O. BOX 190  
O'FALLON, MO. 63366  
636-240-6180
- CURRENT ZONING: I-1, LIGHT INDUSTRIAL  
SETBACKS: FRONT - 30 FT.  
SIDES - 20 FT.  
REAR - 35 FT.
- UTILITIES SERVING SITE:  
SEWER & WATER - ALLIANCE OF O'FALLON  
GAS - ST. CHARLES GAS CO.  
ELECTRIC - AMEREN/UE  
TELEPHONE - CENTURYTEL
- PARKING REQUIREMENTS:  
USAGE - MANUFACTURING  
ONE SPACE PER 1000 SQ. FT. OF FLOOR AREA PLUS ONE SPACE FOR EACH EMPLOYEE  
44,000 SQ. FT. X 1 SPACE/1000 SQ. FT. = 44 SPACES  
10 EMPLOYEES AT MOST AT ONE TIME = 10 SPACES  
TOTAL PARKING REQUIRED = 54 SPACES  
54 SPACES HAVE BEEN PROVIDED INCLUDING 4 HANDICAP SPACES
- LANDSCAPING REQUIREMENTS: ONE TREE FOR EVERY 40 FEET OF STREET FRONTAGE PLUS ONE TREE FOR EVERY 4000 SQ. FT. OF LANDSCAPED OPEN SPACE.  
482 FEET OF STREET FRONTAGE REQUIRES 12 TREES.  
27,000 SQ. FT. OF LANDSCAPED OPEN SPACE REQUIRES 7 TREES.
- PARKING SPACES X 270 SQ. FT./PARKING SPACE X 0.06 = 182.3 SQ. FT.  
182 SQ. FT. OF INTERIOR PARKING LOT LANDSCAPING SHALL BE REQUIRED
- THE TOTAL ACREAGE OF THIS TRACT IS 14.86 ACRES.  
THE LIMITS OF CONSTRUCTION CONTAINS APPROXIMATELY 4.7 ACRES  
WHICH WILL BE USED FOR SITE COVERAGE CALCULATIONS  
BUILDING - 21% (43,908 SQ. FT.)  
ASPHALT & CONCRETE - 28% (58,545 SQ. FT.)  
OPEN SPACE - 49% (102,453 SQ. FT.)
- ALL PROPOSED UTILITIES WILL BE LOCATED UNDERGROUND
- THE DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR DURING SITE SOIL TESTING.
- SIDEWALKS, CURB RAMP, RAMP AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED ADAAG GUIDELINES ALONG WITH THE REQUIRED GRADATIONS, 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 SHALL NOTIFY THE PROJECT ENGINEER PRIOR TO ANY CONSTRUCTION.
- ALL ROOFTOP MECHANICAL UNITS SHALL BE SCREENED BY PARAPET WALLS AND GROUND MOUNTED UNITS SCREENED WITH MATERIALS AND/OR LANDSCAPING.
- LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
- ALL SIGN LOCATIONS AND SIZES WILL BE APPROVED SEPARATELY THROUGH THE PLANNING DIVISION.
- ROOF DRAINS WILL DISCHARGE AT GRADE AT THE BUILDING.
- BACKFLOW PREVENTION WILL BE LOCATED INSIDE OF THE BUILDING. (SEE PLUMBING PLAN)
- ALL INDUSTRIAL OPERATIONS SHALL BE CONDUCTED WITHIN A FULLY ENCLOSED BUILDING.
- ALL STORAGE OF MATERIALS AND EQUIPMENT SHALL BE WITHIN A FULLY ENCLOSED BUILDING OR IN A SIDE OR REAR YARD SO SCREENED BY BERMS, DENSE VEGETATION PLANTINGS, WOODED FENCES, OR BRICK WALLS OR COMBINATIONS OF THESE MATERIALS AT LEAST 8 FEET IN HEIGHT SO THAT SAID MATERIALS AND EQUIPMENT ARE NOT VISIBLE AT EYE LEVEL WITHIN 1000 FEET OF THE PROPERTY LINE.
- THIS USE SHALL MEET PERFORMANCE STANDARDS SET FORTH IN ARTICLE XII OF THE ZONING CODE.
- A PORTION OF THIS PROPERTY IS LOCATED IN SPECIAL FLOOD HAZARD AREA ZONE "A" PER FIRM 281830241 E, DATED AUGUST 2, 1985, AN AREA INUNDATED BY THE 100-YEAR FLOOD, BUT NO BASE FLOOD ELEVATION HAS BEEN DETERMINED.
- ALTHOUGH THE DUSK TO DAWN LIGHTS ON THE 2 POWER POLES ON SITE ARE NOT BEING USED AT THIS TIME, THEY WILL NOT BE REMOVED.
- PRIOR TO CONSTRUCTION, A PHOTOMETRIC SITE PLAN WILL BE SUBMITTED FOR REVIEW AND APPROVAL.
- PRIOR TO CONSTRUCTION, BUILDING ELEVATIONS WILL BE SUBMITTED FOR REVIEW AND APPROVAL.
- NO ADDITIONAL EXTERIOR LIGHTING IS PROPOSED.

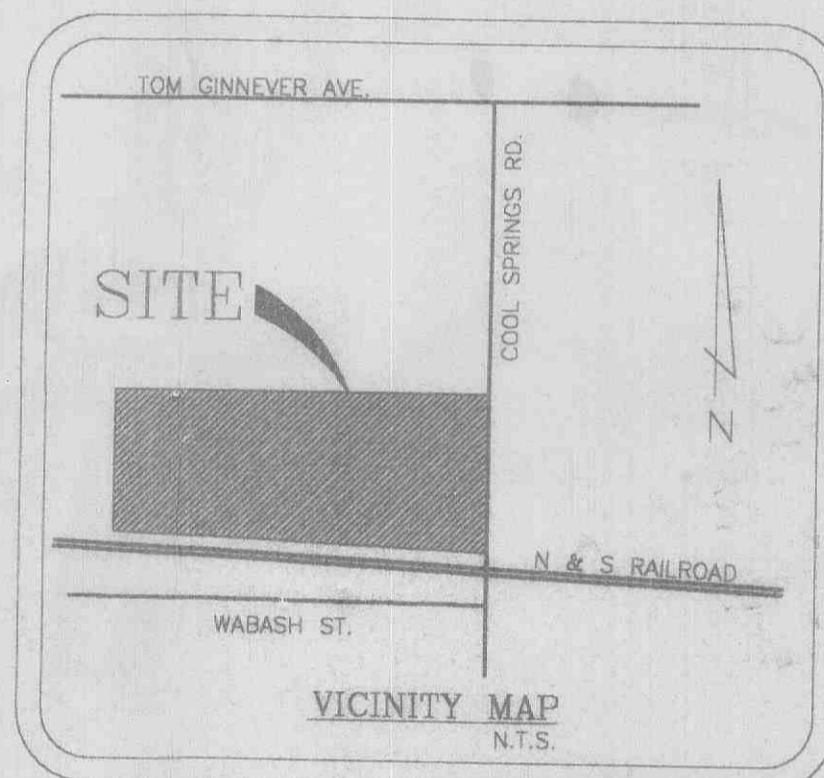
**TREE PRESERVATION CALCUS**

Total Area of trees prior to development - 0.20 Ac  
Area of trees to be removed - 0 Ac  
Percentage of trees Remaining - 100%  
20% required per City Ordinance 230.

**USGS BENCHMARK:**

RM64 478.31 Chiseled square in southeast corner on the upstream side of eastbound Interstate 70 bridge over Belleau Creek

A SET OF CONSTRUCTION PLANS FOR  
"MIDWEST ALLOYS"  
PART OF FRACTIONAL SECTION 22,  
TOWNSHIP 47 NORTH, RANGE 3 EAST,  
ST. CHARLES CO., MO.



SYMBOL	LANDSCAPING PLAN NAME	QUANTITY	SIZE
	RED MAPLE	5	3" CAL
	EASTERN WHITE PINE	8	6 FT.
	BRADFORD PEAR	12	2"-3" CAL
	YEW	14	3 GAL
	GOLDEN VICARY	4	3 GAL
	EMERAL & GOLD EUONYMUS	5	3 GAL

**GRADING NOTES**

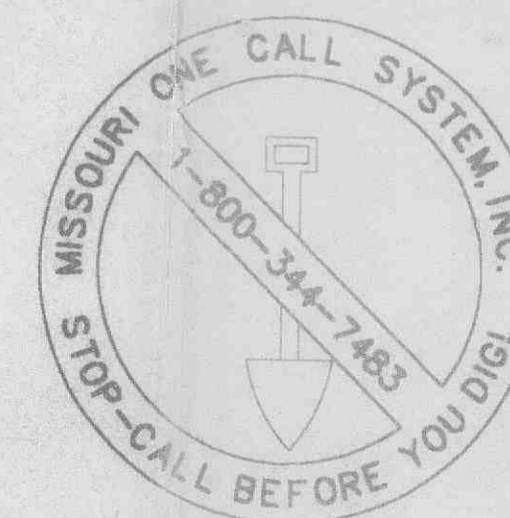
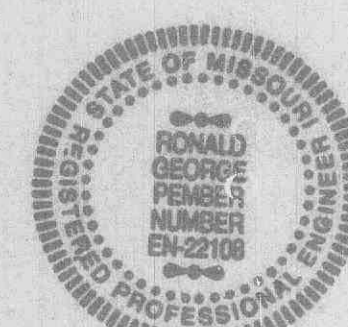
- GAS, WATER AND OTHER UNDERGROUND UTILITIES SHALL NOT CONFLICT WITH THE DEPTH OR HORIZONTAL LOCATION OF EXISTING, PROPOSED SANITARY SEWERS AND STORM SEWERS INCLUDING HOUSE LATERALS.
- UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATION MUST BE CONSIDERED APPROXIMATE 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 GRADING OR CONSTRUCTION OF IMPROVEMENTS.
- ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER, PROPOSED ROADS, AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. ALL FILL PLACED IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- ALL FILLED PLACES IN PAVED STATE, COUNTY, OR CITY ROADS (HIGHWAYS) SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99 (A.S.T.M. D-690) UNLESS OTHERWISE SPECIFIED BY LOCAL GOVERNING AUTHORITY SPECIFICATIONS. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER.
- NO AREA SHALL BE CLEARED WITHOUT PERMISSION OF THE DEVELOPER.
- ALL GRADE SHALL BE WITHIN 0.2 FEET MORE OR LESS OF THOSE SHOWN ON THE GRADING PLAN.
- NO SLOPE SHALL BE GREATER THAN 3:1 AND SHALL BE EITHER SODDED OR SEEDED AND MULCHED. 2:1 SLOPES MAY BE ALLOWED IF APPROVED BY SOILS ENGINEER AND THE CITY OF O'FALLON.
- ALL STREETS MUST MEET THE SPECIFICATIONS AND INSTALLATION REQUIREMENTS OF THE CITY OF O'FALLON, MISSOURI.
- CITY OF O'FALLON SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO CONSTRUCTION OF WATER, SEWER AND STREETS FOR COORDINATION AND INSPECTION.
- THE SOILS ENGINEER SHALL BE EMPLOYED BY THE OWNER. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE SOILS ENGINEER AT LEAST 1 DAY PRIOR TO RESUMPTION OF WORK AFTER ANY SUBSTANTIAL DELAY.
- GRADE ALL LOW PLACES WHETHER ON-SITE OR OFF-SITE TO ALLOW DRAINAGE WITH TEMPORARY OR PERMANENT DITCHES.
- THE SEDIMENT AND EROSION PLAN MUST BE IN PLACE BEFORE GRADING BEGINS.
- ALL EROSION CONTROL SYSTEMS SHALL BE INSPECTED AND NECESSARY CORRECTIONS MADE WITHIN 24 HOURS OF ANY RAIN STORM RESULTING IN 1/2" RAIN OR MORE.

10-24-05  
**APPROVED**

**RECEIVED**  
JUN 2 2 2005  
ENGINEERING DEPARTMENT

**SHEET INDEX:**

- SHEET 1 - COVER SHEET
- SHEET 2 - FLAT PLAN
- SHEET 3 - GRADING PLAN
- SHEET 4 - LANDSCAPING PLAN
- SHEET 5 - PROFILES/DETAILS
- SHEET 6 - DRAINAGE AREA MAP



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DRAWN BY:	DATE: 02/02/05	SHEET 1 OF 6
CHECKED BY: DWJ	DATE:	
REVISIONS BY:	DATE: 05/31/05	