

GENERAL NOTES:

- Applicant/Owner: Highland Homes, 6311 Bartmer Industrial Drive, St. Louis, MO 63130. (314) 863-2845 (P), (314) 863-1160 (F).
- Site is located in and served by: Electric: Ameren UE; Gas: LoCade Gas Company; Sanitary: City of O'Fallon; Telephone: Century Tel; Water: City of O'Fallon; School District: Fort Zumwalt; Fire District: O'Fallon.
- Present Zoning/Proposed Zoning: R-3 Garden Apartment District, C-2 General Business District.
- Zoning Requirements: R-3 Garden Apartment District, Multi-family dwelling. Site Area: 16.125 acres. Minimum Lot Area: one (1) acre. Lot Area: Two thousand five hundred (2,500) square feet per dwelling unit. In no case shall the total number of units per acre exceed fifteen (15). Lot width (measured at building line): Seventy (70) feet. Lot Coverage: Maximum forty (40%) percent.
- Setbacks: Front Yard: Thirty (30) feet; Side Yard: Twenty (20) feet; Rear Yard: Thirty-five (35) feet. Accessory structures shall meet the same yard requirements. Height Requirements: Three (3) story buildings occupied for residential purposes shall provide main entry at the mid levels that no occupant shall be required to traverse more than one (1) story of stairs. Distance between grouped buildings: Front to Front: Fifty (50) feet; Front to Back: Fifty (50) feet; Back to Back: Fifty (50) feet; Side to Side: Twenty (20) feet; Front to Side: Thirty-five (35) feet; Back to side: Thirty-five (35) feet; Corner to Corner: Fifteen (15) feet.
- C-2, General Business District. Site Area: Minimum Lot Area: five (5) acres, unless it abuts existing commercial or industrial zoning. Lot width (measured at building line): Twenty-five (25) feet. Lot Coverage: No Limit. Setbacks: Front Yard: Twenty-five (25) feet; Side Yard: Zero (0) feet; Rear Yard: No rear yard setback unless the rear line abuts lots zoned residential or office, then Ten (10) feet shall be provided. Height Requirements: No building or structure shall exceed fifty (50) feet.
- Sidewalk, curb, ramp and accessible parking spaces shall be constructed in accordance with the current approved "Americans with Disabilities Act Accessible 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 apply. The Project Engineer shall be notified by the contractor prior to any construction.
- 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 and/or construction of improvements.
- According to the Flood Insurance Rate Map, FIRM, of St. Charles County, Missouri, Map Panel Number 29183C0240 E and 29183C0237 E both dated August 2, 1996 this tract is not located within the 100 year flood plain.
- The owner/developer agrees that the preliminary plan is subject to change pending future prelin plan submittals and reviews. The owner/developer understands that this is a preliminary plan and items such as right of way, easements, utility locations, grading, etc. are susceptible to change pending site improvement plan review and approval.
- All utilities on site must be located underground.
- All HVAC mechanical units shall be screened. Rooftop units shall be screened by a parapet wall that extends around the entire perimeter of the building, the parapet wall shall be at least as tall as the tallest unit mounted on the roof. Ground mounted HVAC and mechanical units shall be screened by fencing and/or vegetation that has a minimum height of at least as tall as the tallest unit.
- Garbage Dumpsters shall be screened.
- Sanitary Flows: Currently 90 Mobile homes have sanitary connections to the City of O'Fallon Sewers and One Laundry Mat. Current Flow Rates: Trailer Parks 300 Gallons per day per trailer space; Laundry Mat 400 Gallons per day per machine; 90 Trailers • 300 GPD + 16 Washing Machines • 400 GPD = 33,400 GPD Currently.
- Proposed Site: Residential Units 300 Gallons per day per unit; Shopping Center per area of floor space 0.20 GPD; 228 Residential Units • 300 + 64,300 SqFt • 0.20 = 81,260 GPD. Only 103 Residential Units can be built until new Sewage plant is on line.
- Fire protection for site shall be reviewed and approved by the O'Fallon Fire Protection District.
- Separate Condo Plat will be submitted at a later date for Each building.
- Area of Tract: Total Area: 19,757 acres; Area Zoned R-3: 16.125 acres; Area Zoned C-2: 3.632 acres.
- Storm water detention shall be handled with a dry basin at the south end of the property sized to handle the 100 year storm event for both the Commercial and Residential lots.
- Phase 2 Illicit Storm Water discharge guidelines per Ordinance 5082 shall be shown on the Improvement plans. These measures will include the use of Sand filters, Bioswales, and/or Mechanical cleaners.
- All streets shall be private and constructed to the City of O'Fallon standards.
- This site will address the Soil and Water Conservation Service Comments with the Improvement plan set.
- Per Ordinance Public Sanitary sewers and Water Service will be extended to this project.
- This plan complies with the City of O'Fallon Comprehensive Plan.
- Tree Protection and Preservation shall be met on this plan.
- Landscape shall be provided to meet or exceed the City of O'Fallon Tree Preservation Ordinance and Landscaping and screening regulations.
- Gates shall be provided at the entrance to the residential site per City Code. Knock boxes shall be located at gates.
- Connection to Veterans Memorial Parkway to be reviewed and approved by MoDOT.
- Photometric Lighting plans in accordance with the City's Exterior Lighting Standards shall be submitted for review and approval for all exterior lighting with the improvement plans.
- Inside of covered parking shall be lighted.
- Prior to issuance of building permits for more than 30% of the total units, building permits for all recreational amenities shall be pulled. Prior to the issuance of building permits for 40% of the total units, all recreational amenities shall be open for use.
- All existing improvements for the trailer park are to be removed.
- Existing easements for the trailer park are to be vacated.
- Existing drainage ditch along Veterans Memorial Drive will be cleared and revegetated.

SITE NOTES

- Number of units: 16,125 Acres • 15 units per acre = 241.8 Units Allowed; 228 Units Proposed.
- Residential site coverage: Total Area: 16.125 Acres; Building: 1,965 Acres (12.2%); Pool: 0.208 Acres (1.3%); Sidewalks: 0.711 Acres (4.4%); Parking: 4.544 Acres (28.2%); Street: 0.838 Acres (5.2%); Green Space 7,859 Acres (48.7%).
- Parking Requirements: Residential Lot: Off street parking: One and one-half (1.5) spaces required per one bedroom dwelling unit, plus one (1) additional space for each additional bedroom. One (1) parking space per dwelling unit is required to be covered. One (1) space required per 10 units for pool amenity covered. Parking Required: 24 One Bedroom Units = 24 • 1.5 = 36 Parking Spaces Required; 204 Two Bedroom Units = 204 • 2.5 = 510 Parking Spaces Required; 546 Total Parking Spaces Required including 273 Parking spaces required to be covered. Parking Provided: 276 Covered Parking Spaces Provided. Pool Parking: 228 Units / 10 = 23 parking spaces required; 23 parking spaces provided.
- Commercial Lots: Parking Required: Office Space: 1 parking space per 300 SqFt; Speculative Retail: 5.5 Parking spaces per 1,000 SqFt. 25,000 / 300 + 25,000 • 5.5/1000 = 220 spaces; Parking Provided: 220 spaces.
- Tree Removal Ordinance: Total number of trees on-site: 208; Total Number to be removed: 140; Percentage of trees retained: 33%.
- Amenities provided: Pool and Pool House; Sidewalks Throughout Development.
- Bicycle parking requirements: One (1) Bicycle Space per every 15 Car Parking Spaces; Three (3) story building - 82 Car Parking Spaces required; 86 / 15 = 5.7 - 6 Bicycle Spaces Provided; Two (2) story Buildings - 56 Car Parking Spaces Required; 56 / 15 = 3.9 - 4 Bicycle Parking Spaces Provided; Pool - 8 Bicycle Parking Spaces Provided.

SITE BENCHMARK: ELEV=624.62
EXISTING FIRE HYDRANT LOCATED 61 FEET EAST OF NORTH WEST CORNER OF SITE
USGS BENCHMARK: SC-54: ELEV=558.07
THE STATION IS A MISSOURI DNR GRS ALUMINUM DISK STAMPED "SC-54 2000", AND IS SET IN A 12 INCH DIAMETER CONCRETE MONUMENT FLUSH WITH THE GROUND. THE STATION IS LOCATED ABOUT 3 MILES WEST OF O'FALLON ON THE SOUTH SIDE OF WEST TERRA ROAD AT AN AMEREN UE SUBSTATION. IT IS 21 FEET EAST OF THE GRAVEL ENTRANCE TO THE SUBSTATION AND 4.0 FEET EAST OF A CARSONITE WINNS POST.

THIS PROPERTY IS SERVICED BY THE FOLLOWING UTILITIES COMPANIES:
CITY OF O'FALLON WATER & SEWER: 636-281-2858; 1-800-552-7583
AMEREN UE: 1-800-887-4173
ST. CHARLES GAS COMPANY: 1-800-201-4099
CENTURYTEL TELEPHONE COMPANY: 636-272-3483
CITY OF O'FALLON FIRE PROTECTION DISTRICT: 636-272-6820
FORT ZUMWALT SCHOOL DISTRICT: 636-272-6820

ACCORDING TO FIRM FLOOD INSURANCE RATE MAP 29183C0237 E DATED AUGUST 2, 1996, THIS SITE IS IN ZONE X. THIS SITE IS NOT WITHIN THE 100-YEAR FLOODPLAIN.

TREE PRESERVATION CALCULATIONS

Total number of trees on site 208
Total number of trees to be removed 140
Percentage of trees remaining 33%

LEGEND

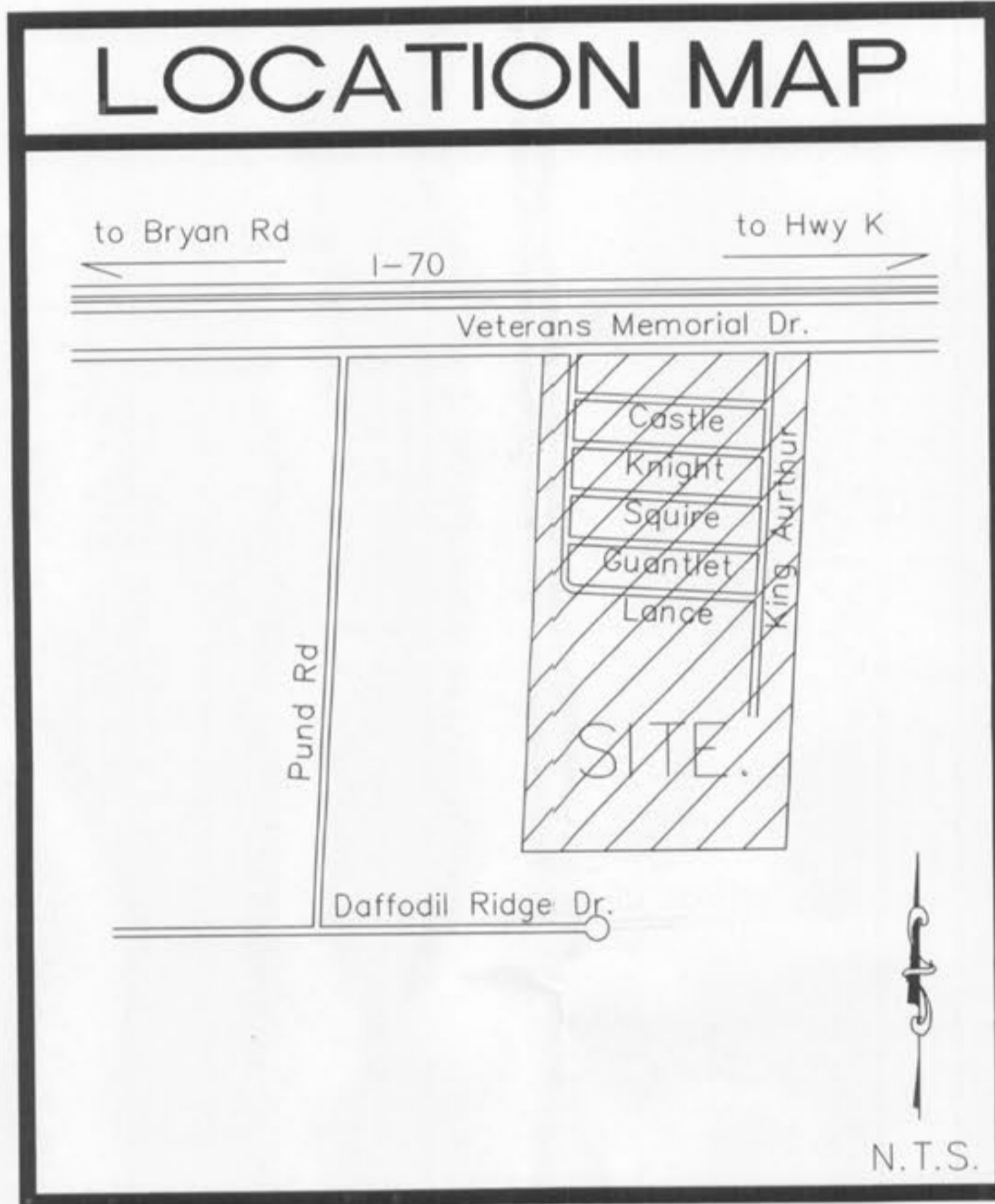
CO	CLEAN OUT	T.B.R.	TO BE REMOVED
T.B.R.	TO BE REMOVED & RELOCATED	T.B.P.	TO BE PROTECTED
T.B.A.	TO BE ABANDONED	T.C.	TOP OF CURB
B.C.	BASE OF CURB	T.W.	TOP OF WALL
TYP.	TYPICAL	U.N.O.	UNLESS NOTED OTHERWISE
U.I.P.	USE IN PLACE	---	EXISTING CONTOUR
---	PROPOSED CONTOUR	---	TREE LINE
---	SAN. SEWER (EXISTING)	---	SAN. SEWER (PROPOSED)
---	SAN. SEWER (PROPOSED)	---	STORM DRAIN (EXISTING)
---	STORM DRAIN (EXISTING)	---	STORM DRAIN (PROPOSED)
---	PHONE BOX	---	IRON PIPE
---	IRON PIPE	---	WATER LINE
---	WATER LINE	---	HYDRANT
---	HYDRANT	---	CONCRETE PAVEMENT
---	CONCRETE PAVEMENT	---	PLACED RIP-RAP W/UNDERLAIN FABRIC
---	PLACED RIP-RAP W/UNDERLAIN FABRIC	---	GENERAL SURFACE DRAINAGE
N.T.S.	NOT TO SCALE	ROW	RIGHT-OF-WAY
T.B.C.	TOP BACK CURB	D.I.P.	DUCTILE IRON PIPE
D.N.D.	DO NOT DISTURB	T.P.	TOP OF PAVEMENT

SHEET INDEX

- IG-1. TITLE SHEET
- IG-2. GRADING PLAN
- IG-3. POSTDEVELOPED DRAINAGE
- IG-4. PREDEVELOPED DRAINAGE/ DETAILS
- IG-5. ADJOINERS

The Contractor shall assume complete responsibility for controlling all sitation 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 the 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 silt. 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 shall be removed immediately. Any depositing of silt or mud or in new or existing storm sewers or ditches 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.

REVISED GRADING PLANS FOR KING ARTHUR'S HIGHLAND TERRACE A TRACT OF LAND BEING PART OF U.S. SURVEY 55, TOWNSHIP 47 NORTH, RANGE 3 EAST CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI



GRADING NOTES

- No area shall be cleared without permission of the developer.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and City/County and State roads will be adequately protected.
- Soil preparation and re-vegetation shall be performed according to Appendix A of the Model Sediment and Erosion Control Regulations for Urban Development.
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations.
- Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The unsuitable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly dried prior to the placement of any fill. The Soils Engineer shall approve the discing operation.
- Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory rollers or high speed impact type drum rollers acceptable to the Soils Engineer. The rollers shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- The developer must supply the City construction inspectors with soil reports prior to or during soil testing. The soil report will be required to contain the following information on soil test curves (Proctor Reports) for projects within the City:
 - Maximum dry density
 - Optimum moisture content
 - Maximum and minimum allowable moisture content
 - Curve must be plotted to show density from a minimum of 95% Compaction and above as determined by the Modified AASHTO T-180 Compaction Test (A.S.T.M.-D-1157) or from a minimum of 100% as determined by the Standard Proctor Test AASHTO T-99, Method C (A.S.T.M.-D698). Proctor type must be designated on document.
 - Curve must have at least 5 density points with moisture content and sample locations listed.
 - Specific Gravity
 - Natural Moisture Content
 - Liquid Limit
 - Plastic Limit
- Be advised that if this information is not provided to the City's Construction Inspector the City will not allow grading or construction activities to proceed on any project site.
- The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.
- The Soils Engineer shall notify the Contractor of rejections of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
- All Areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 90 percent of the maximum density as determined by the Modified AASHTO T-180 Compaction Test (ASTM-D1557). Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
- Traffic control is to be per MODOT or MUTCD whichever is most stringent.
- The surface of the fill shall be finished so that it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.
- All cut and fill slopes should be a maximum of 3:1 slope (3:1) after grading.
- All fill placed under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 95% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 100% of maximum density as determined by 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. Note that 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 the 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.
- Soft soil in the bottom and banks of any existing or former pond site should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
- Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced immediately by contractor.
- When grading operations are completed or suspended for more than fourteen (14) days, permanent grass must be established at sufficient density to provide erosion control on the site. Between permanent grass seeding periods, temporary cover shall be provided according to the Designated Official's recommendation. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations. All finished grades (areas not to be disturbed by improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1000 square feet when seeded.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.
- The total yardage of this project is based on a 15% ± shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions (types and moisture content), weather conditions, and the percentage of compaction actually achieved at the time of the year grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact St. Charles Engineering and Surveying, Inc. prior to completion of the grading.
- The vertical grading tolerance shall be plus or minus 0.2 feet for all rough grading.
- The Contractor shall prevent all storm/surface water, mud or construction debris from entering the sanitary sewer system.
- All low places shall be graded to provide drainage with temporary ditches.
- The City of O'Fallon shall also be contacted for utility located under its maintenance responsibility. This may include water, sanitary, storm, and traffic locates.
- Grading shall not be started or continued on soils having more than 2-inches of frost. When such conditions exist, the surface must be thoroughly broken and mixed with non-frozen material to the satisfaction of the engineer. No frozen soils will be added to any fill areas.
- Construction hours on this project will be during the following times:
 - October 1 - May 31: 7:00 am to 7:00 pm Monday - Sunday
 - June 1 - September 30: 6:00 am to 8:00 pm Monday - Friday; 7:00 am to 8:00 pm Saturday & Sunday
- The most stringent of the above requirements shall apply.

Call BEFORE you DIG TOLL FREE 1-800-344-7483 MISSOURI ONE-CALL SYSTEM, INC.

MoDOT UTILITIES (314) 340-4100

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DEVELOPER
HIGHLAND HOMES
6311 BARTMER INDUSTRIAL DR
St. LOUIS, MO 63130
314-863-2845

10/29/07

ENGINEERS AUTHENTICATION
The responsibility for the 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 the project and specifically excludes revisions after this date unless reauthenticated.

KARL ANTHONY SCHENK
REGISTERED PROFESSIONAL ENGINEER
NO. 2003015019

DATE: 11-7-07

CITY OF O'FALLON
COMMUNITY DEVELOPMENT DEPARTMENT
ACCEPTED FOR CONSTRUCTION

ORDER NO.	07-0059-01
DATE	09/19/07
IG-1	1\070059 - Highland Terrace.dwg\070059-CIVIL.dwg

COVER SHEET
KING ARTHUR'S HIGHLAND TERRACE
INTERIM GRADING PLAN

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448

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