

GRADING NOTES

- A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and backfilling operations. The developer shall also supply the City construction inspector with the soil report(s) prior to or during site soil testing.
- The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied therefrom, all in accordance with the plans and notes as interpreted by the Geotechnical Engineer.
- The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
- All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
- All fill areas, including trench backfills, under buildings, proposed streets and parking areas and/or paved areas, shall be compacted to 90% minimum dry density as determined by the Modified A.A.S.H.T.O. T-100 Compaction Test (A.S.T.M.-D-1557), or 95% maximum density as determined by the Standard Proctor Test, A.A.S.H.T.O. T-99. All fill areas under roads and roadways shall be compacted from the bottom of the fill to 90% minimum density as determined by the Modified A.A.S.H.T.O. T-100 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test, A.A.S.H.T.O. Method "C" (A.S.T.M. T-99). All fill areas shall be verified by a soils engineer concurrent with grading and backfilling operations.
- A sedimentation basin that includes monitored and maintained sediment basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare without being seeded and mulched. Care should be exercised to prevent erosion damaging adjacent property and siting up existing drainage systems. All erosion control systems shall be inspected and necessary corrections made within 24 hours of a rain storm resulting in 1/2 inch of rain or more.
- Debris and demolition material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed off-site.
- All trash and debris on site, either existing or from construction, must be removed and properly disposed of off-site.
- Soft soil in the bottom and banks of any existing or former pond sites or trenches or on any sediment basins or traps should be removed, stockpiled and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed public right-of-way locations or on any storm sewer locations.
- 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 material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly disced prior to placement of any fill. The Soils Engineer shall approve the operation.

LEGEND

CL	CURB INLET	☆	STREET LIGHT
D.C.I.	DOUBLE CURB INLET	—	EXISTING CONTOUR
AL	AREA INLET	—	PROPOSED CONTOUR
M.H.	MANHOLE	—	STREET SIGN
F.E.	FLARED END SECTION	—	NO PARKING SIGN
E.P.	END PIPE	—	WATER VALVE
C.P.	CONCRETE PIPE	—	WATER VALVE
R.C.P.	REINFORCED CONCRETE PIPE	—	BLOW OFF ASSEMBLY
C.M.P.	CORRUGATED METAL PIPE	—	FLOODED ELEVATION OF HOUSE CONNECTION
C.I.P.	CAST IRON PIPE	—	MINIMUM DEPTH OF SEWER MAIN
P.V.C.	POLY VINYL CHLORIDE (PLASTIC)	—	
C.O.	CLEAN OUT	—	
	FIRE HYDRANT	—	
	STORM SEWER	—	
	SANITARY SEWER	—	

LANDSCAPE LEGEND

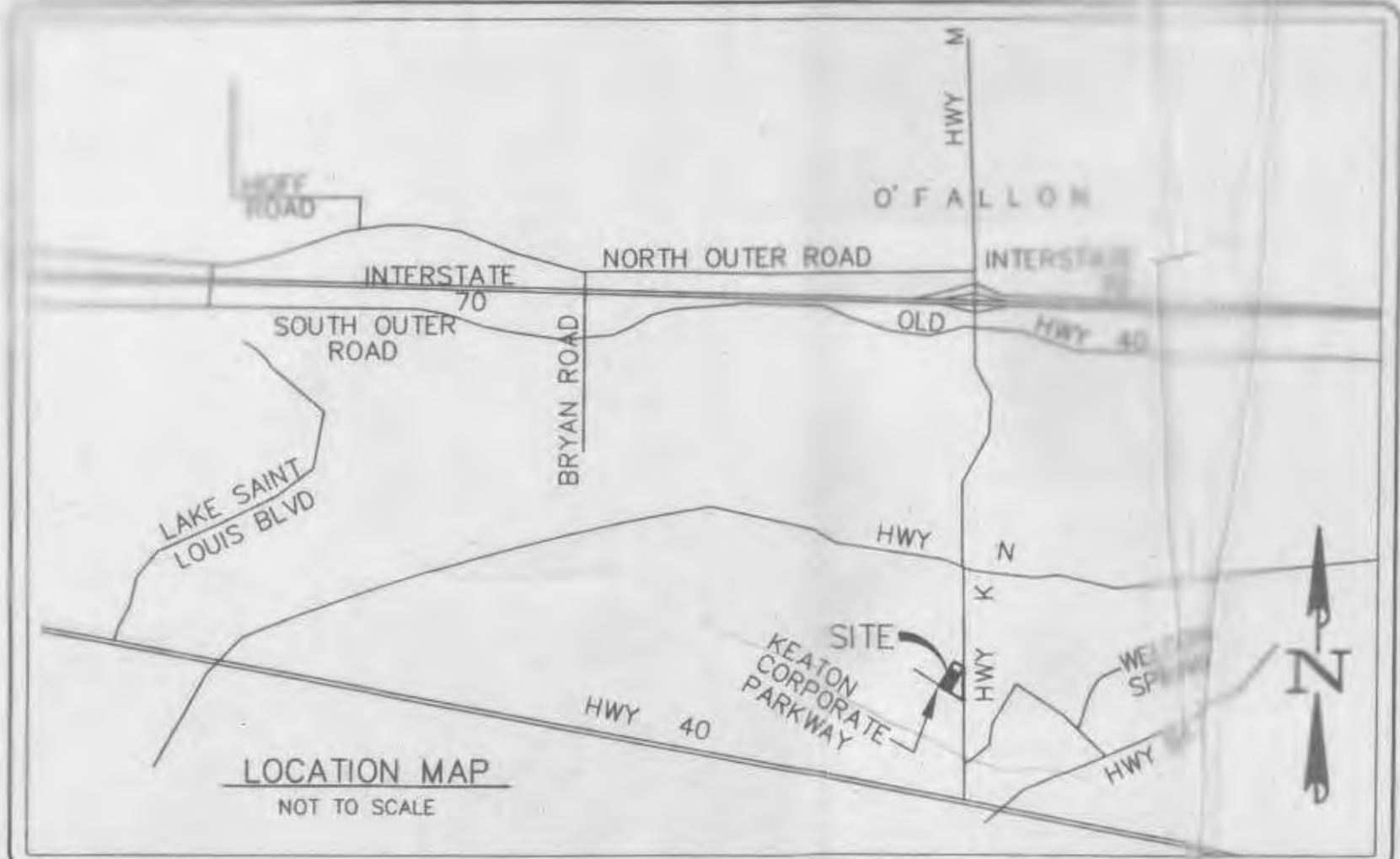
QTY	INDICATES PROPOSED HARDWOOD TREE (oaks, oaks, maples, birches, sweet gums) minimum 2" caliper
21	INDICATES PROPOSED EVERGREEN TREES (pines) minimum 6 ft. height
30	INDICATES EXISTING TREE
83	INDICATES PROPOSED EVERGREEN SHRUBS (mugo pines, yews, junipers, hollies, boxwoods)
50	INDICATES PROPOSED ORNAMENTAL SHRUBS (spiraea, forsythia, barberries, privets, iliacs)

**LANDSCAPING AS DEPICTED IS SUBJECT TO FINAL DESIGN BY A QUALIFIED LANDSCAPE DESIGNER

VEGETATIVE ESTABLISHMENT For Urban Development Sites APPENDIX A

Seeding Rates:	Permanently Wet	100 lbs./Ac.
Topsoil:	100 lbs./Ac.	
Grass Seed:	100 lbs./Ac.	
Compost:	100 lbs./Ac.	
Temporary:	Permanently Wet	100 lbs./Ac.
Mulch Rates:	Permanently Wet	100 lbs./Ac.
Fertilizer Rates:	Permanently Wet	100 lbs./Ac.

A SET OF CONSTRUCTION PLANS FOR "LOT 2 OF KEATON CROSSING" A TRACT OF LAND BEING PART OF LOT 15 OF "JOHN D. COALTERS HOWELL PRARIE TRACT", IN U.S. SURVEY 1669, TOWNSHIP 46 NORTH, RANGE 3 EAST, OF THE FIFTH PRINCIPAL MERIDIAN, ST. CHARLES COUNTY, MISSOURI



GRADING QUANTITY
5,555 cu.yds.
(INCLUDES 15% SHRINKAGE)

The above yardage is an approximation only, NOT FOR BIDDING PURPOSES. Contractors shall verify quantities prior to construction.

It is the intention of the Engineer for the earthwork to balance on-site. The Engineer shall be notified if any difficulties arise in achieving the balance.

DEVELOPMENT NOTES

- Area of Tract: 5.27 Acres
- Existing Zoning: C-2 General Business District
- Proposed Use: Retail Space
- Area of Proposed Buildings: 28,069 sq.ft.
Future Buildings: 16,089 sq.ft.
- The required height and building setbacks are as follows:
Minimum Front Yard: 25 feet
Minimum Side Yard: 0 (10 feet abutting residential or office)
Minimum Rear Yard: 0 (10 feet abutting residential or office)
Maximum Height of Building: 3 stories
- Site is served by:
Duckett Creek Sanitary Sewer District 636-441-1244
AmerenUE Company 636-639-8312
Laclede Gas Company 314-658-5418
Public Water District #2 636-561-3737
Southwestern Bell Telephone Company 636-949-1301
Cottleville Fire Protection District 636-447-6655
- According to the Flood Insurance Rate Map of the City of O'Fallon, (Community Panel number 290316 D430 E dated August 2, 1998) this property lies within zone X. Zone X is defined as an area of minimal flood hazard.
- Parking Required: Total leasable area = 40,190 sq.ft.
5.5 space / 1,000 sq. ft. of leasable area
40,910 sq. ft. / 1,000 sq. ft. = 40.91 x 5.5 = 225
Total Parking Required: 225 spaces
Total Parking Provided: 225 spaces (including 8 handicap spaces)
- Landscape Required:
225 (sp.) x 270 = 60,750 S.F.
60,750 sq. ft. x 0.06 (%) = 3,645
Total Interior Landscape Required: 3,645 S.F.
Total Interior Landscape Provided: 5,109.65 S.F.
58,842.57 S.F. / 3,000 S.F. = 19.61 ~ 20
Total Open Landscape Required: 20 Trees
Total Open Landscape Provided: 20 Trees
665.07 L.F. / 100 L.F. = 6.65 x 2 (units) = 13.3 ~ 14 Units
Total Buffer Landscape Required: 14 Units ~ 42 Trees
Total Buffer Landscape Provided: 14 Units ~ 42 Trees
917.43 L.F. / 40 L.F. = 22.93 ~ 23
Total Street Trees Required: 23 Trees
Total Street Trees Provided: 23 Trees
- The Developer shall comply with current Tree Preservation Ordinance number 1889 and provide landscaping as set forth in Article 25 of the City of O'Fallon Zoning Ordinance.
15 Trees per Acre Cleared: 9.49 Ac. x 15 = 142.35 Trees
TOTAL TREES FOR KEATON CROSSING COMMERCIAL TRACT (Including Outlot 1 under separate ownership):
LOT 2 Requirement = 75 Trees Required
LOT 3 Requirement = 46 Trees Required
LOT 4 Requirement = 21 Trees Required
OUTLOT 1 Requirement = Under separate plan - Please Refer to LANDSCAPE PLAN TO BE PROVIDED WITH DEVELOPMENT OF OUTLOT 1
- Site Coverage Calculations:
Building = 42,920 sq.ft.
Pavement = 122,819.53 sq.ft.
Green Space = 63,952.22 sq.ft.

BENCHMARKS

THE SOUTHWEST CORNER OF THE "SOUTHWEST CORNER" OF THE SOUTHWEST END OF THE "JOHN D. COALTERS HOWELL PRARIE TRACT" IS THE ANCHOR OF U.S. HIGHWAY 40 AND IS LOCATED AT THE INTERSECTION OF U.S. HIGHWAY 40 AND BRYAN ROAD. THE BENCHMARK IS LOCATED AT THE INTERSECTION OF BRYAN ROAD AND INTERSTATE 70.

PRINCIPALS & STANDARDS

- All excavations, grading, or filling shall have a finished grade not to exceed a 3:1 slope (33%). Steeper grades may be approved by the designated official if the excavation is through rock or the excavation or the fill is adequately protected by designed head wall or toe wall (as required), retaining walls that exceed a height of four (4) feet shall require the construction of safety guards as identified in the appropriate section(s) of the adopted BOCA Codes and must be approved by the City Building Department. Permanent safety guards will be constructed in accordance with the appropriate section(s) of the adopted BOCA Codes.
- Sediment and erosion control plans for sites that exceed 20,000 square feet of grading shall provide for sediment or debris basins, silt traps or filters, staked straw bales or other approved measures to remove sediment from run-off waters. Temporary siltation control measures shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- Where natural vegetation is removed during grading, vegetation shall be re-established to such a density as to prevent erosion. Permanent grasses shall be established as soon as possible during the re-planting period after grading has been completed.
- When grading operations are completed or suspended for more than 30 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.

All finished grades (areas not to be disturbed by future improvement) in excess of 2% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.

- Provisions shall be made to accommodate the increased runoff caused by changed soils and surface conditions during and after grading. Unvegetated open channels shall be designed so that gradients result in velocities of 2 fps (feet per second) or less. Open channels with velocities more than 2 fps and less than 5 fps shall be established in permanent vegetation by use of commercial erosion control blankets or lined with rock riprap or concrete or other suitable materials. Detention basins, diversions or other appropriate structures shall be constructed to prevent velocities above 5 fps.
- The adjoining ground to development sites (lots) shall be provided with protection from accelerated and increased surface water, silt from erosion, and any other consequence of erosion. Run-off water from developed areas (parking lots, paved sites and buildings) above the area to be developed shall be directed to diversions, detention basins, concrete gutters and/or underground outlet systems. Sufficiently anchored straw bales may be temporarily substituted.
- Development along natural watercourses shall have residential lot lines, commercial or industrial improvements, parking areas or driveways set back a minimum of 25 feet from the top of the existing stream bank. The watercourse shall be maintained and made the responsibility of the owner or, in the case of a public watercourse, the City of O'Fallon. The watercourse shall be maintained and made the responsibility of the owner or, in the case of a public watercourse, the City of O'Fallon.

PREPARED FOR:
AJ ALYATM
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DECLARATION OF RESPONSIBILITY
I hereby certify that the documents herein are the work of me or under my direct supervision and that I am a duly licensed Professional Engineer in the State of Missouri.



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REVISIONS

8-25-02	CITY COMMENTS
7-11-02	OWNER REVISIONS
8-6-02	CITY COMMENTS



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