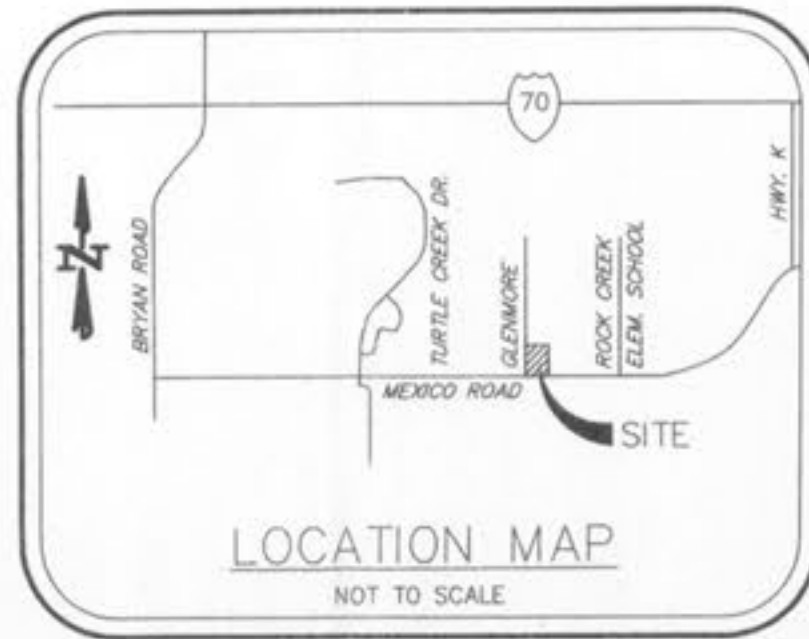
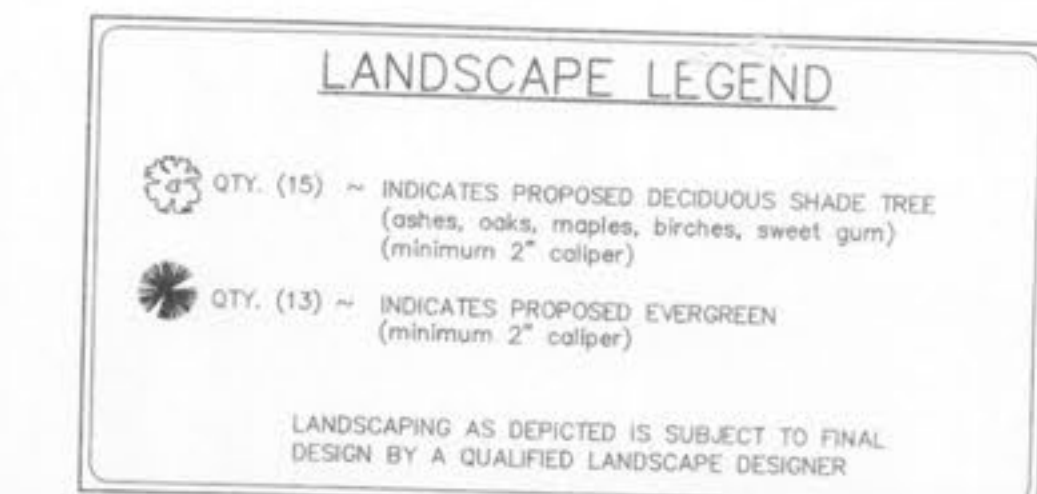


STANDARD SYMBOLS & ABBREVIATIONS

TREE OR BUSH	
LIGHT POLE	
SANITARY SEWER & MANHOLE	
STORM SEWER & INLET	
MAILBOX	
ELECTRIC LINE	
GAS LINE	
WATER LINE	
TELEPHONE LINE	
CABLE TV LINE	
OVERHEAD WIRE	
UTILITY POLE	
UTILITY POLE W/ DOWN GUY	
FIRE HYDRANT	
WATER VALVE	
WATER METER	
GAS VALVE	
ROAD SIGN	
TELEPHONE PEDESTAL	
FENCE	



**A SET OF CONSTRUCTION PLANS FOR
~A MEDICAL OFFICE~
A TRACT OF LAND BEING PART OF THE NORTHEAST QUARTER
OF SECTION 31 TOWNSHIP 47 NORTH, RANGE 3 EAST
OF THE FIFTH PRINCIPAL MERIDIAN
ST. CHARLES COUNTY, MISSOURI**



58
MEDICAL OFFICE

PRINCIPLES & 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 (a designed head wall or toe wall may be 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 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. The design to be approved by the Designated Official. Temporary siltation control measures (structural) 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 reestablished in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible during the next seeding 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 according to the City Engineer's recommendations. All finished grades (areas not to be disturbed by future improvement) in excess of 20% 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 rip rap or concrete or other suitable materials as approved by the City Engineer. 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 with the approval of the City Engineer.
- 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 subdivision trustees or in the case of a site plan by the property owner. Permanent vegetation should be left intact. Variances will include designed stream bank erosion control measures and shall be approved by the City Engineer, FEMA and U.S. Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as flood plains and wetlands.
- All lots shall be seeded and mulched at the minimum rates defined in Appendix A or 88 before an occupancy permit shall be issued except that a temporary occupancy permit may be issued by the Building Department in cases of undue hardship because of unfavorable ground conditions.

**VEGETATIVE ESTABLISHMENT
For Urban Development Sites
APPENDIX A**

- Seeding Rates:
- Permanent:
- Tall Fescue - 30 lbs./ac.
 - Smooth Brome - 20 lbs./ac.
 - Combined Fescue - 15 lbs./ac. and Brome - 10 lbs./ac.
- Temporary:
- Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1,000 square foot)
 - Oats - 120 lbs./ac. (2.75 lbs. per 1,000 square foot)
- Seeding Periods:
- Fescue or Brome - March 1 to June 1
 - Wheat or Rye - August 1 to October 1
 - Oats - March 15 to September 15
- Mulch Rates:
- 100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)
- Fertilizer Rates:
- Nitrogen 30 lbs./ac.
 - Phosphate 30 lbs./ac.
 - Potassium 30 lbs./ac.
 - Lime 600 lbs./ac. ENM*
- * ENM = effective neutralizing material as per State evaluation of quarried rock.

O'FALLON 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 filled 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 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. 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 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.
- No area shall be cleared without the permission of the Project Engineer.
- 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 pre-construction conditions.
- All construction and materials shall conform to the current construction standards of the City of O'Fallon.
- Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.
- No slopes shall exceed 3(Horizontal) : 1(Vertical).
- 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 (feasible 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 MODOOT. 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 MODOOT 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 MODOOT.
- Erosion control systems shall not be limited to what is shown on the plan. Whatever means necessary shall be taken to prevent siltation and erosion from entering natural streams and adjacent roadways, properties and ditches.
- All building mounted lights shall be pointed downward and fully screened to prevent light from spilling over onto adjacent properties.
- All ground and roof HVAC mechanical units to be screened from public view.
- The 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 ordinances.
- All sidewalks, curb ramps, ramps 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. Ensure at least one 8' wide designating street names shall be on the opposite side of the street from traffic control signs.
- All new utility line shall be located underground.
- All erosion control systems shall be inspected and necessary corrections shall be made within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- All graded areas that are to remain bare for over 2 weeks shall be seeded and mulched per DNR requirements.
- Rip-rap shown at flood ends will be evaluated in the field after installation for effectiveness and field modified if necessary to reduce erosion on and off-site.
- Marking to be provided on storm sewer inlets. The City will allow the following markers and adhesive procedures only as shown in the table below. "Peel and Stick" adhesive pods will not be allowed.

O'FALLON NOTES (CONTINUED)

- Developer must supply City Construction Inspectors with soil reports prior to or during site 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-1517) or from a minimum of 100% as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698). Proctor type must be designated on document.
 - Curve must have at least 5 density points with moisture content and sample locations listed on document.
 - 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.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed for the site and disposed in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only if permitted from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.
- HOPE pipe is to be N-12WT or equal and to meet ASTM F1417 water tight field test.
- If there are any physical changes to MoDOT's right of way, such as grading or entrance modification, MoDOT requests the opportunity to review the plans, there may be improvements to the roadway required to support the proposed development within MoDOT's Access Management Guidelines.
- Connections at all sanitary or storm structure to be made with A-lock joint or equal.
- All sanitary laterals and sanitary mains crossing under pavement must have the proper rock backfill and to required compaction.
- Traffic Control is to be per MODOOT or MUTCD whichever is most stringent.

ESTIMATED CONSTRUCTION & GRADING SCHEDULE

-GRADING	9/26/08 - 9/27/08
-INSTALL EROSION CONTROL	9/26/08
-UTILITY CONSTRUCTION	9/30/08 - 10/30/08
-BUILDING CONSTRUCTION	10/10/08 - 12/10/08
-PAVEMENT CONSTRUCTION	11/26/08 - 12/10/08
-FINISH GRADING, SEED AND MULCH	12/10/08 - 12/16/08

NOTE: DATES MAY VARY DUE TO INCLEMENT WEATHER.

A PERIOD OF ONE (1) YEAR FROM THE DATE OF THE PLANNING DEPARTMENT'S APPROVAL OF THE SITE PLAN IS PERMITTED, ANY COMPLETION DATE LONGER THAN ONE (1) YEAR PERIOD, OR AN EXTENSION OF THE TIME THEREOF, MUST BE REQUESTED IN WRITING BY THE DESIGN CONSULTANT AND APPROVED BY BOTH THE DIRECTOR OF PLANNING AND THE CITY ENGINEER.

NOTE: TEMPORARY VEGETATION TO BE IN PLACE DURING THE WINTER UNTIL THE TIME PERMANENT SEEDING AND MULCH CAN BE COMPLETED.

GRADING QUANTITIES:

3,179 C.Y. CUT (INCLUDES SUBGRADE)
946 C.Y. FILL (INCLUDES 8% SHRINKAGE)
2,233 EXCESS

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

U.S.G.S. BENCHMARK

REFERENCE BENCHMARK (USGS): ELEV. 542.80
THE STATION IS A USCG&S BRASS VERTICAL MARK DISC STAMPED "F 149 1935" SET IN A 6 INCH SQUARE CONCRETE MONUMENT, PROJECTING ABOUT 2.5 INCHES ABOVE THE GROUND SURFACE. THE STATION IS LOCATED IN THE NORTHEAST ANGLE OF A RAILROAD CROSSING AT NORTH MAIN STREET, SOUTH END OF THE ENTRANCE TO THE CITY OF O'FALLON MUNICIPAL CENTRE. IT IS 48.5 FEET NORTH OF THE CENTER OF THE TRACKS; 2.4 FEET EAST OF A GUY POLE; 9.3 FEET EAST OF THE EAST EDGE OF SIDEWALK AND 5.7 FEET EAST OF THE PLASTIC BURIED CABLE MARKER AND PEDESTAL.

SITE BENCHMARK: ELEV. 492.90
CHISELED CROSS ON CONCRETE CURB ALONG THE NORTH LINE OF MEXICO ROAD. SAID CROSS APPROXIMATELY 11.6' SOUTH OF SOUTHEAST CORNER OF SUBJECT PROPERTY.

SHEET INDEX:

SHEET 1	COVER SHEET
SHEET 2	DEMOLITION SHEET
SHEET 3	SITE PLAN
SHEET 4	GRADING PLAN / SWPPP
SHEET 5	PRE-DRAINAGE AREA MAP
SHEET 6	POST DRAINAGE AREA MAP
SHEET 7	STORM SEWER PROFILES
SHEET 8	CONSTRUCTION DETAILS

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 back-filling operations.
- 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.
- A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and sitting up existing downstream storm drainage system.
- Any existing trash and debris currently on this property must be removed and disposed of off-site.
- Soft soil in the bottom and banks of any existing or former pond sites or tributaries 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.
- 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 unusable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly discing 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 roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- 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 rejection 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 in accordance with the specifications given below. 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.
- 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 siltation control devices shall be inspected by the contractor after any rain of 1/2" or more with any appreciable accumulation of mud to be removed and siltation measures repaired where necessary.
- No slope shall be steeper than 3(Horizontal):1(Vertical). All slopes shall be sodded or seeded and mulched.
- Any contaminated soil encountered during excavation shall be hauled and placed as directed by the owners environmental engineering representative.
- The location of and details for all siltation control devices (silt fences and sediment basins) must follow the "St. Charles County Soil and Water Conservation District Erosion and Sediment Control" guidelines.

DEVELOPMENT NOTES

- Area of Tract: 0.91 Acres (39,623 sq.ft.)
Disturbed Area = 0.99 Acres
- Previous Zoning: R-1B (St. Charles County)
Current Zoning: C-2 (City of O'Fallon)
- Proposed Use: Medical Office
- Area of Building: 7,990 sq.ft.
- The required height and building setbacks are as follows:
Minimum Front Yard: 25 feet
Minimum Side Yard: 25 feet
Minimum Rear Yard: 10' (20' Bufferyard if adjacent to residential)
Maximum Height of Building: Not to exceed 50'
- Site is served by:
City of O'Fallon Sewer 636-281-2858
AmerenUE Company 1-800-35-ASKUE
Laclede Gas Company 636-846-8537
Public Water District #2 636-281-2858
Century Tel Telephone Company 636-332-7392
O'Fallon Fire Department 636-272-3493
- According to the Flood Insurance Rate Map of St. Charles County, Unincorporated Areas (Community panel number 290315 0237 E dated August 2, 1996), this property is within zone X. Zone X is defined as an area outside the 500 year flood plain.
- Parking Required:
Total building area = 7990 sq.ft.
1 space per 200 sq.ft. of floor area (Medical Office)
7990 sq.ft./200 = 39.95 ~ 40 spaces required
40 spaces provided (including 2 handicapped spaces)
- Bicycle parking: 1 space per 15 parking spaces (4 minimum)
40 / 15 = 2.67
4 bicycle parking spaces provided
- Site Coverage Calculations:
Building = 7,990 sq.ft. = 20.29%
Pavement = 20,548.45 sq.ft. = 51.83%
Green Space = 11,101.15 sq.ft. = 27.88%
- All site lighting shown is for presentation only and exact locations will depend on a lighting layout by a qualified lighting consultant. Prior to Construction Site Plan approval, a photometric lighting plan in accordance with the City's Exterior Lighting Standards shall be submitted for review and approval.
- All new utilities shall be located underground.
- Landscape Required:
Interior Landscape Requirement: Not less than 6% of the interior of parking lot shall be landscaped.
40 spaces x 27sq.ft. = 10,800 x .06 = 648sq.ft. required, 1,059sq.ft. provided
- Street Requirements:
1 tree every 40' of frontage = 397.75 / 40 = 9.95 ~ 10
10 Required
10 Provided
- Open Space Landscape Requirements:
11,101.15 S.F. / 3,000 S.F. = 3.70 ~ 4 Trees
Total Trees Required: 4
Total Trees Provided: 4
- Bufferyard Requirements:
2 plant units per 100 of property line required
1 plant unit = 30 plants
1 tree = 10 plants
2 x 30 / 10 = 6 trees per 100' required
208.71 / 100 x 6 = 12.52 ~ 13 trees required
13 Trees Provided
- Tree preservation: Where building permit is requested, a minimum of 15 trees per acre shall be retained. If these trees cannot be retained, they shall be replaced with trees of like or similar kind having a minimum diameter of 2" and a height of 8'
0.91ac. x 15 trees/ac = 13.65 ~ 14 trees required to be replaced
28 trees replaced
- No slope shall be steeper than 3:1.
- All handicap ramps, signs, symbols and striping to comply with A.D.A. Standards.
- Differential Stormwater Runoff Calculations:
Pre-Developed: (0.78 ac @ 3.30) + (0.13 ac @ 6.08) = 3.36 cfs
Post-Developed: (0.27 ac @ 3.30) + (0.64 ac @ 6.08) = 4.78 cfs
The development of this site as proposed is increasing the runoff by 1.42 cfs. No detention is proposed for this site.
- A Contribution of \$1,000 per acre to the storm water fund will be required in lieu of detention being provided.
- All proposed fencing requires a separate permit through the planning division.
- All signage is reviewed and approved under a separate permit.
- All construction methods and practices to conform with OSHA Standards.
- This site shall be compliance with Phase II Illicit Storm water discharge guidelines per Ordinance 5082.
- Owner: Dr. Akgun Ince
2536 Town and Country Lane
St. Louis, MO 63131
- All HVAC and mechanical units on site shall be properly screened as required by City Code. Ground mounted HVAC and mechanical units shall be screened by fencing, vegetation, or some other means (approved by the Planning and Zoning Commission) that has a minimum height that is at least as tall as the tallest unit being screened.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- All sidewalks, curb ramps, ramps 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.
- The location and methods for all siltation control devices (silt fences and sedimentation basins) shall follow "St. Charles County Soil and Water Conservation District Erosion and Sediment Control" guidelines.
- Estimated Sanitary flow from this site: 1,300 G.P.D.
- Sanitary sewer to be reviewed and approved on a separate set of plans. Occupancy will not be granted until the sanitary system is operational.
- Rain garden in parking lot island to be planted with native plants as found at www.GrowNative.org.

CITY OF O'FALLON
COMMUNITY DEVELOPMENT DEPARTMENT
ACCEPTED FOR CONSTRUCTION
DATE: 12-9-08
BY: [Signature]
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN
Rev. Water Stone

PREPARED FOR: DR. AKGUN INCE
2536 TOWN AND COUNTRY LANE
ST. LOUIS, MISSOURI 63131

DISCLAIMER OF RESPONSIBILITY
I hereby certify that the documents intended to be authorized by my seal are limited to the sheet, and I do not assume any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used in any part or parts of the architecture or engineering project or survey.



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REVISIONS

09-26-08	City Comments
10-21-08	City Comments
11-13-08	City Comments
11-20-08	PWS02 Comments



221 Point West Blvd.
St. Charles, MO 63301
636-928-5592
FAX 928-1718

07-22-08
DATE
08-14-272
PROJECT NUMBER
1 OF 8
SHEET OF
14272CON.dwg
FILE NAME
KLW
DRAWN
SAS CLH
DESIGNED CHECKED



**CALL BEFORE
YOU DIG!**
1-800-DIG-RITE
AND
MoDOT
(314) 340-4100

Manufacturer	Size	Adhesive	Style	Message (Part #)	Website
ACP International	3 7/8"	Epoxy	Crystal Cap	No Dumping Drains To Waterways (SD-W-C)	www.acpinternational.com
DAS	4"	Epoxy	Standard	No Dumping Drains To Stream (SDS)	www.dasmanufacturing.com



Backlot 884

Blvd Inspector
RECEIVED DEC - 9 2008