



A SET OF AS-BUILT PLANS FOR LOT 2 OF PERUQUE CROSSING

A TRACT OF LAND IN U.S. SURVEY 54, AND FRACTIONAL SECTION 26, TOWNSHIP 47 NORTH, RANGE 2 EAST OF THE FIFTH PRINCIPAL MERIDIAN ST. CHARLES COUNTY, MISSOURI

STANDARD SYMBOLS & ABBREVIATIONS	
TREE OR BRUSH	○
LIGHT POLE	○
SANITARY SEWER & MANHOLE	—○—
STORM SEWER & INLET	—○—
MAILBOX	—○—
ELECTRIC LINE	—E—
GAS LINE	—G—
WATER LINE	—W—
TELEPHONE LINE	—T—
CABLE TV LINE	—CATV—
OVERHEAD WIRE	—OHW—
UTILITY POLE	○
UTILITY POLE W/ DOWN GUY	○
FIRE HYDRANT	—○—
WATER VALVE	—○—
WATER METER	—○—
GAS VALVE	—○—
ROAD SIGN	—○—
TELEPHONE PEDESTAL	—○—
FENCE	—x—

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 filled places under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 95% of the maximum density as determined by the Modified A.A.S.H.T.O. T-180 Compaction Test, or 100% of maximum density as determined by the standard Proctor Test A.A.S.H.T.O. 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 Ofallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of Ofallon.
- No area shall be cleared without the permission of the Project Engineer.
- The City of Ofallon shall be notified 48 hours prior to construction for coordination and inspection.
- All existing site improvements to remain that are 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 Ofallon.
- 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 (H) : 1(V).
- 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, silted 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 Ofallon 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 Ofallon and/or MODOT may at their option direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silts 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 Ofallon and/or MODOT.

GENERAL NOTES (CON'T)

- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of Ofallon 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 handicap access aisle is provided and curb ramps do not project into handicap access aisle.
- Brick shall not be used in the construction of storm or sanitary sewer structures.
- The Contractor shall ensure all storm and sanitary sewer joint shall be gasketed O-Ring Type.
- Lighting values will be reviewed on the 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.
- All sign locations and sizes must be approved separately through the Planning Division.
- All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by the City of Ofallon and MODOT). Sign 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.
- 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.

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

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 there from, 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 silt 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. Trees, organic debris, rubble, foundations and other detritious material shall be removed from the site and disposed in compliance with applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit 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.
- 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 sequence of operation in the fill areas will be fill, compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those of which satisfactory dry densities can be obtained.
- 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.
- Any contaminated soil encountered during excavation shall be hauled and placed as directed by the owners environmental engineering representative.
- Per City Ordinance 5082, long term post construction BMP's shall be utilized to control storm water runoff. These shall include having seeds soddied, keeping gutter buddies in place until vegetation is established, installing inlet filters, and having seeding and mulch installed as soon as possible to promote rapid vegetative growth. Any bare spots found will be reseeded as needed.

PRINCIPLES & STANDARDS:

- All excavations, grading, or filling shall have a finished grade not to exceed a 2.5:1 slope (40 %). 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, silted 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 as 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 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 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 sodded 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 feet)
Oats	120 lbs./ac. (2.75 lbs. per 1,000 square feet)
Seeding Periods:	
Fescue or Brome	March 1 to June 1
Wheat or Rye	August 1 to October 1
Oats	March 15 to November 1
	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.	

SHEET INDEX

- 1 - COVER SHEET
- 2 - SITE PLAN/PROFILES

SEWER MEASUREMENTS

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS.

ALL PUBLIC SEWERS ARE DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:



GRADING QUANTITIES:

- 894 C.Y. CUT (INCLUDES SUBGRADES)
- 395 C.Y. FILL (INCLUDES 15% SHRINKAGE)
- 499 C.Y. HEAVY

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

REFERENCE BENCHMARK

R.M. #45-ELEV=528.16 (U.S.G.S. datum)
Chiseled square on the Southeast wingwall of the Lake St. Louis Blvd Bridge over the spillway of Lake St. Louis.



CALL BEFORE YOU DIG!
1-800-DIG-RITE

DEVELOPMENT NOTES:

- Area of Tract: 0.509 Acres
- Existing Zoning: C-2 (City of Ofallon)
- Proposed Use: Office Building
- Setbacks: 25' Front, 0' Side, 0' Rear, 50' Maximum Building Height
- Current Owner & Developer of Property: SCOTT SHOOKLEY, 501 FIRST CAPITOL DRIVE, ST. CHARLES, MO 63301, 636-946-9753
Current Owner under contract: CYRUS DEVELOPMENT, 701 N. FIFTH STREET, ST. CHARLES, MO 63301, (636) 947-0099
- Site is served by:
AmeriEUE 1-800-55-ASKUE
Loatde Gas Company 314-658-5417
Public Water District No. 2 636-561-3737
Century Telephone Company 636-332-7318
City of Ofallon Storm Sewer and Traffic Locates 636-240-2000
City of Ofallon Sewer 636-272-6818
Lake St. Louis Fire Protection District 636-561-9200
- No Flood Plain exists on this site per F.I.R.M. #29183 C 0220, dated March 17, 2003.
- Topographic information is per Walker and Associates on USGS datum.
- Boundary information is per Bax Engineering Survey during June 2001.
- Parking Requirements:
General Office Parking:
1 space per 300 sq. ft. of floor area.
3,800 sq. ft. / 300 = 12.67-13
Spaces required = 13
Spaces provided = 23 (including 1 handicap space)
- Bicycle Rack Requirements:
1 space per 15 spaces of parking.
23 / 15 = 1.53
Spaces required = 2 minimum
Spaces provided = 3
- Landscape requirements:
1 tree per 40' of street frontage
144.56' / 40' = 3.6 trees required
4 trees provided
Not less than 6% of the interior of the parking lot shall be landscaped.
23 spaces x 270 sq. ft. = 6,210 sq. ft. = 372.60 sq. ft.
Required = 372.60 sq. ft.
Interior landscaping provided = 373 sq. ft.
- Site Calculations: 22,152 sq. ft. lot
Building area: 3,800 sq. ft. = 17.15%
Landscape area: 10,646 sq. ft. = 48.06%
Pavement area: 7,706 sq. ft. = 34.79%
- Detention provided for this lot with overall development.
- Estimated sewage gallons per day for this site is 330 g.p.d.
- Site lighting to be addressed during construction plan review. Plans to be done by a qualified lighting designer and submitted to the city for review of photometrics in compliance with city ordinances.
- Siltation Control shall follow St. Charles County Soil and Water Conservation District Erosion and Sediment Control Guidelines.
- Roof drains to spill onto grade in splash blocks and be directed to storm structures via drainage ditches shown.
- Sanitary lateral to be 6" PVC at 2.00% minimum slope.
- All utilities to be located underground.
- This site to comply with Phase II Illicit Storm Water discharge guidelines per Ordinance 5082.
- All construction materials and methods shall conform to the latest OSHA Standards.
- No trees being removed from this site. No proposed trees needed to meet tree preservation requirement.

DEMEIN CONSTRUCTION
 P.O. BOX 338
 WENTZVILLE, MISSOURI 63385
 636-332-5500
 PREPARED FOR:
 LOT 2 OF PERUQUE CROSSING

DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authorized by my seal are limited to the sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

REVISIONS	
10-25-07	CITY COMMENTS
11-15-07	CITY COMMENTS
05-01-08	MOVE ENTRANCE
05-29-08	CITY COMMENTS

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 636-928-5552
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05/11/09
 DATE
 00-11282R
 PROJECT NUMBER
 1 OF 2
 SHEET OF
 11282R.SB.DWG
 FILE NAME
 JLH
 DRAWN
 SWR DJB
 DESIGNED CHECKED

