

PRINCIPLES & STANDARDS:

All excavations, grading, or filling shall have a finished grade not to exceed a 5.1 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

2. 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.

4. 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.

5. 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 that 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.

6. 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.

7. 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. on the plan. Whatever means necessary shall be taken to Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as flood plains and wetlands.

8. 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./oc.

Combined Fescue @ 15 lbs./ac. and Brome @ 10 lbs./ac.

Wheat or Rye - 150 lbs./ac. (3.5 lbs. per square foot) - 120 lbs./ac. (2.75 lbs. per square foot) Oats

March 1 to June 1

Fescue or Brome -

August 1 to October 1 March 15 to November 1 Wheat or Rye -Oats March 15 to September 15

100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)

Fertilizer Rates:

30 lbs./gc Nitrogen Phosphate Potossium

30 lbs./ac. 30 lbs./qc. 600 lbs./oc. ENM* Lime

* ENM = effective neutralizing material as per State evaluation of guarried rock.

The developer shall comply with current Tree Preservation Ordinance Number 1689 and provide landscaping as set forth in Article 23 of the City of O'Fallon zoning ordinances.

20% of existing trees or 15 trees per acre shall remain whichever is greater.

20% of Existing Tree Masses = 0.02 Ac. Existing Tree Masses = 0.11 Ac.

Existing Tree Mass to Remain = 0.02 Ac.

No proposed trees needed to meet requirement.

INDICATES PROPOSED EVERGREEN SHRUB (mugho pines, yews, junipers)

LANDSCAPE LEGEND

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

A SET OF AS-BUILT PLANS FOR A COOL SPRINGS CENTER LOT 2A A TRACT OF LAND IN FRACTIONAL SECTION 21.

TOWNSHIP 47 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN ST. CHARLES COUNTY, MISSOURI

O'FALLON NOTES

1. 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

2. 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 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. The moisture content of the soil in the 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.

3. No area shall be cleared without the permission of the Project Engineer.

4. The City of O'Fallon shall be notified 48 hours prior to construction for coordination

5. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre-construction conditions.

6. All construction and materials shall conform to the current construction standards of

7. Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.

8. No slopes shall exceed 3(Horizontal): 1(Vertical).

9. 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 sitation including, but not limited to, staked straw bales and/or sitation 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 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 O'Fallon and/or MODOT.

10. Erosion control systems shall not be limited to what is shown prevent siltation and erosion from entering natural streams and adjacent roadways, properties and ditches,

11. All building mounted lights shall be pointed downward and fully screened to prevent light from spilling over onto adjacent properties.

12. All rooftop mechanical units are shown screened by parapet wall and ground mounted

13. The Developer must supply City Construction Inspectors with soil reports prior to or during site soil testing.

14. All paying to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.

15. 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 5' wide handicap access aisle is provided and curb ramps do not project into handicap access aisles.

16. Brick shall not be used in the construction of storm or sanitary sewer structures.

17. The Contractor shall ensure all storm and sanitary sewer joint shall be gasketed O-Ring Type.

18. 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.

19. All proposed fencing requires a separate permit through the Planning Division.

20. All sign locations and sizes must be approved separately through the Planning Division

ESTIMATED GRADING & CONSTRUCTION SCHEDULE

7/1/08 - 7/3/08 -CLEARING 7/7/08 -INSTALL EROSION CONTROL 7/8/08 - 7/11/08 -GRADING 7/14/08 - 10/17/08 -BUILDING CONSTRUCTION 7/14/08 - 9/19/08 -UTILITY CONSTRUCTION -PAVEMENT CONSTRUCTION 9/22/08 - 10/17/08

-FINISH GRADING, SEED AND MULCH 10/20/08 - 10/24/08 NOTE: DATES MAY VARY DUE TO INCLEMENT WEATHER.

GRADING QUANTITIES:

1,952 C.Y. FILL (INCLUDES 8% SHRINKAGE) 3,100 C.Y. CUT (INCLUDES SUBGRADES)

1,148 C.Y. HEAVY

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

O'FALLON NOTES (CONTINUED)

21. 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 O'Fallon and MoDOT). Sign designating street names shall be

22. All new utility lines shall be located underground.

on the opposite side of the street from traffic control signs.

23. 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.

24. All graded areas that are to remain bare for over 2 weeks shall be seeded and mulched per DNR requirements.

25. Rip-rap shown at flared ends will be evaluated in the field after installation for effectiveness and field modificied if necessary to reduce erosion on and off-site.

26. 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"

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

27. 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 sail test curves (Proctor reports) for projects within the City.

. Maximum dry density Optimum moisture content

. Maximum and minimum allowable moisture content 4. Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Modified AASHTO T-180 Compaction Test" (A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Proctor Test ASSHTO T-99, Method C" (A.S.T.M.-D-698). Proctor type must be designated on document.

5. Curve must have at least 5 density points with moisture content and sample locations listed on document

Specific gravity. . Natural moisture content.

8. Liquid limit. 9. 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.

28. Trees, organic debris, rubble, foundations and other deletrious 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 be 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.

29. HDPE pipe is to be N-12WT or equal and to meet ASTM F1417 water tight field

30. If there are any physical changes to MoDat'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.

31. Traffic control to be per MoDot or MUTCD whichever is most stringent.

32. All requirements of Planning and Zoning Commission

33. Connections at all sanitary or storm structures to be made with A-lock joint or

34. There is adequate capacity of the offsite storm sewer system.

35. Water mains have a minimum of 42" of cover.



U.S.G.S. BENCHMARK

REFERENCE BENCHMARK (USGS): RM69 ELEV. 456.02 CHISELED SQUARE ON TOP OF THE WINGWALL IN THE NORTHEAST CORNER OF OLD HIGHWAY 79 BRIDGE OVER BELLEAU CREEK. SITE BENCHMARK: ELEV. 492.90 FOUND OLD STONE AT THE NORTHWEST CORNER

OF LOT 7 OF "COOL SPRINGS INDUSTRIAL PARK"

GRADING NOTES:

1. 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.

2. 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

3. The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.

4. All areas shall be allowed to drain. All low points shall be provided with temporary

5. 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

6. Any existing trash and debris currently on this property must be removed and

7. 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

8. 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 disced prior to the placement of any fill. The Soils Engineer shall

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.

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

11. The Sails 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

12. 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 Solls Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.

13. 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

14. No slope shall be steeper than 3(Horizontal):1(Vertical). All slopes shall be sodded

15. Any contaminated soil encountered during excavation shall be hauled and placed

(silt fences and sediment basins) must follow the "St. Charles County Soil and Water Conservation District Erosion and Sediment Control" guidelines.

controls that protect water quality and control run off to the maximum extent

SHEET INDEX

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

MAJUN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS: ALL PUBLIC SEWERS ABOVE DARREL R. OAKLEY NUMBER LS-2265

and silting up existing downstream storm drainage system.

disposed of off-site.

locations or an storm sewer locations.

approve the discing operation.

10. The Soils Engineer shall observe and test the placement of the fill to verify that

18. Grades for entrances should not exceed 2% at walks, 4% from street, and 10%

COVER SHEET

OF FINAL MEASUREMENT PLANS.

9. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers,

or seeded and mulched.

as directed by the owners environmental engineering representative. 16. The location of and details for all silitation control devices

17. Phase II Storm water guidelines require that this site provide long term postconstruction BMP's such as; low impact design, source controls and treatment

overall. Typically 2% from back of curb through the right of way is desired.

Vet Clinic: Day Care: Site: 30,519.69 Site = 32,670.71 s.f. Building = 4,200 = 14% coverage Building = 7,200 s.f. = 22% coverage Greenspace = 11,078.38 s.f. = 34% coverage | Greenspace = 12,593.69 = 41% coverage 21. The Veterinary Clinic will provide veterinary services only. There will be no grooming.

breeding, boarding or other kenneling services on site, unless the applicant petitions the City for a Conditional Use Permit. 22. Site to comply with NPDES Phase II Storm Water Requirements.

17. Variance BA-V-06-06 was approved for no buffer yard requirement.

23. All construction methods and practices to conform with OSHA Standards. 24. All sign post and bracket arms shall be painted using Carboline Rustbond Penetrating Sealer

SG and Carboline 133 HB paint (or equivalent as approved by City amd MoDOT). Signs

designating street name shall be on the opposite side of the street from traffic control signs 25. All sanitary laterals and sanitary mains crossing under roadways must have the proper rock backfill and to required compaction.

26. Truncated domes for curb ramps shall meet ADA requirements and shall be constructed using red pre cost truncated domes such as those manufactured by Armor Title or approved equal.

2,070 G.P.D.

27. Estimated Sanitary flow from this site:

0

E

0

DISCLAMER OF RESPONSIBILITY
I hereby specify that the documents intended
to be authenticated by my seat are limited to
this sheet, and I hereby disclaim any respon-sibility for all other Drawings, Specifications,
Extimates, Reports or other documents or

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REVISIONS 2/21/09 CITY COMMENTS

221 Point West Blvd. 636-928-5552 FAX 928-1718

DATE 04-13117B PROJECT NUMBER

DESIGNED CHECKED

STANDARD SYMBOLS

& ABBREVIATIONS

-

-E-

-- C--

-w-

-T-

-CATY-

- OHW-

Married .

o WI

TEL PED.

---x---

TREE OR BUSH LIGHT POLE

MAILBOX

GAS LINE

WATER LINE

TELEPHONE LINE

CABLE TV UNE

OVERHEAD WIRE

UTILITY POLE W/ DOWN GUY

UTILITY POLE

FIRE HYDRANT WATER VALVE

WATER METER GAS VALVE

ROAD SIGN

FENCE

Lot 2B - Day Care (Authorized for 104 kids by state of Missouri)

0 feet (6' when abutting residential)

636-272-6818

636-946-0352

636-272-6818

636-332-7318

636-272-3493

636-240-2000

1-800-55-ASKUE

Cool Springs Center, L.L.C.

1023 Cool Springs Ind. Dr.

St. Peters, MO 63376

636-696-0825

636-240-7716

NOTE: The City of O'Fallon shall be contacted for utilities located under it's

X is defined as an area outside the 500 year flood plain.

Vet Clinic: 1 space per 200 s.f. of floor area.

Day Core: 1 space per employee + 1 space per 6 kids

Vet = 4,200 / 200 = 21 spaces required + 4 Bike rack spaces

26 spaces provided (including 2 handicap spaces) + 4 Bike rack spaces

31 spaces provided (including 2 handicap spaces) + 4 Bike rack spaces

No interior parking lot landscaping required if parking area width is less than 65°

15. All sanitary laterals and sanitary mains crossing under pavement must have the proper

16. Lighting plan to be provided by qualified lighting consultant upon construction submittal.

14. Developer will keep all public roadways used to access this site clear of dirt, rock, sediment

Day Care = 13 employees, 104 kids = 13 spaces + 104 kids / 6 = 30.33~31 spaces

The developer will comply with current Tree Preservation Ordinance Number 1689 and provide

landscaping as set forth in Article 23 of the City of O'Fallon Zoning Ordinances. All trees

on this site to be planted after grading of lots 2A and 2B, therefore tree preservation is

Bike rack: 1 space per 15 parking spaces, min. 4 spaces

7. According to the flood insurance rate map of the City of O'Fallon, Missouri,

community panel number 290316 0235 e dated August 2, 1996) this property is

within Zone A and within Zone X. Zone A is defined as an area within the 100

year flood zone, in which base flood elevations have not been determined. Zone

* These Parcels have been removed from Zone A per a LOMR dated April 27, 2006

M.R. Bathe Electric

O'Fallon, Mo. 63366

221 Spencer Road, Suite Q

DEVELOPMENT NOTES

4. The proposed height and lot setbacks are as follows:

Area to be disturbed: 1.51 Acres

3. Proposed Use: Lot 2A - Vet Clinic

Minimum Front Yard:

Minimum Side Yard:

Minimum Rear Yard:

5. Owner of property: Lot 2A

City of O'Fallon Water

AmerenUE Company

Laclede Gas Company

City of O'Fallon Sewer

City of O'Fallon

10. Parking Calculations:

12. Landscaping Calculations:

17 provided

18. Site Coverage:

698.58 / 40 = 17.46

17 street trees required

O'Fallon Fire Department

maintenance and responsibility.

Verizon/Century Telephone Company

8. Topographic information is per Bax Engineering.

required + 4 Bike rack spaces

1 tree per 40 feet of street frontage.

13. Detention is provided off-site to the south

rock backfill and to required compaction.

and other debris during all grading operations.

Boundary information is per Bax Engineering.

6. Site is served by:

2. Existing Zoning

0.75 Acres

1.45 Acres

C-2 General Business District

(City of O'Fallon)

TELEPHONE PEDESTAL

ELECTRIC LINE

SANITARY SEWER & MANHOLE

STORM SEWER & INLET

V

instruments relating to or intended to be us for any part or parts of the architectural or engineering project or survey.



St. Charles, MO 63301

FILE NAME

P & Z #1105.06, #1105.06.01,

PLANNING SURVEYING



