CITY APPROVAL OF THE CONSTRUCTION SITE PLANS DOES NOT MEAN THAT ANY BUILDING CAN BE CONSTRUCTED ON THE LOTS WITHOUT MEETING THE BUILDING SETBACKS AS REQUIRED BY THE ZONNING CODE.

ALL PROPOSED UTILITIES AND/OR UTILITY RELOCATIONS SHALL BE LOCATED UNDERGROUND.

IF MATERIALS SUCH AS TREES, ORGANIC DEBRIS, RUBBLE, FOUNDATIONS AND OTHER DELETERIOUS MATERIAL ARE NOT TO BE REUSED, THEY SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IF THE MATERIALS LISTED PREVIOUSLY ARE REUSED, A LETTER FROM A SOILS ENGINNER MUST CLARIFY AMOUNT, LOCATION, DEPTH ETC AND BE APPROVED WITH THE CONSTRUCTION PLANS. 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.

NO SLOPES SHALL EXCEED 3 (HORIZONTAL): 1 (VERTICAL).

ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWERS, PROPOSED ROADS AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% 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. 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.

DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH AN ENGINEER'S SOIL REPORTS PRIOR TO AND DURING SITE SOIL TESTING. THE SOILS REPORT WILL BE REQUIRED TO CONTAIN THE FOLLOWING INFORMATION ON SOIL TEST CURVES (PROCTOR REPORTS) FOR PROJECTS WITHIN THE CITY:

MAXIMUM DRY DENSITY.
OPTIMIM MOISTURE CONTENT.
MAXIMUM AND MINIMUM ALLOWABLE MOISTURE CONTENT.
CURVE MUST BE PLOTTED TO SHOW DENSITY FROM A MINIMUM OF 90% AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPECTION TEST" (A.S.T.M.-D-1157) OR FROM A MINIMUM OF 95% AS DETERMINED BY THE "STANDARD PROCTOR TEST AASHTO T-99, METHOD C" (A.S.T.M.-D-698). PROCTOR TYPE MUST BE DESIGNATED ON THE DOCUMENT.
SPECIFIC GRAVITY.
NATURAL MOISTURE CONTENET.
LIQUID LIMIT.
PLASTIC LIMIT.

THE PERMITTEE SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE PERMITTEE 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 THE CLEARING OPERATIONS AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE CITY OF O'FALLON AND AS NECESSARY BY MODOT. THE PERMITTEE'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE CITY OF O'FALLON AND AS REQUIRED BY MODOT MAY AT THEIR OPTION DIRECT THE PERMITTEE 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 SILTS OR MUD IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE CITY OF O'FALLON AND AS REQUIRED BY MODOT.

ALL EROSION CONTROL SYSTEMS ARE INSPECTED AND CORRECTED WEEKLY, ESPECIALLY WITHIN 48 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE. ANY SILT OR DEBRIS LEAVING THE SITE AND AFFECTING PUBLIC RIGHTS-OF-WAYS OR STORM WATER DRAINAGE FACILITIES SHALL BE CLEANED UP WITHIN 24 HOURS AFTER THE END OF THE STORM.

ANY EXISTING WELLS AND/OR SPRINGS WHICH MAY EXIST ON THE PROPERTY MUST BE SEALED IN A MANNER ACCEPTABLE TO THE CITY OF O'FALLON CONSTRUCTION INSPECTION DEPARTMENT AND FOLLOWING MISSOURI DEPARTMENT OF NATURAL RESOURCES STANDARDS AND SPECIFICATIONS.

ALL PAVING TO BE IN ACCORDANCE WITH ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCES.

SIDEWALKS, CURB RAMPS AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENTLY APPROVED AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES ALONG WITH THE REQUIRED GRADES, SIGNAGE, SPECIFICATIONS AND CONSTRUCTION MATERIALS. IF ANY CONFLICT OCCURS BETWEEN THE ABOVE INFORMATION AND THE PLANS, THE ADAAG GUIDELINES SHALL BE FOLLOWED AND THE CONTRACTOR, PRIOR TO ANY CONSTRUCTION, SHALL NOTIFY THE PROJECT ENGINEER.

ALL INSTALLATIONS AND CONSTRUCTION SHALL CONFORM TO THE APPROVED ENGINEERING DRAWINGS. HOWEVER, IF THE DEVELOPER CHOOSES TO MAKE MINOR MODIFICATIONS IN DESIGN AND/OR SPECIFICATIONS DURING CONSTRUCTION, HE/SHE SHALL MAKE SUCH CHANGES AT HIS/HER OWN RISK, WITHOUT ANY ASSURANCE THAT THE CITY ENGINEER WILL APPROVE THE COMPLETED INSTALLATION OR CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO NOTIFY THE CITY ENGINEER OF ANY CHANGES FROM THE APPROVED DRAWINGS. THE DEVELOPER MAY BE REQUIRED TO CORRECT THE INSTALLED IMPROVEMENTS SO AS TO CONFORM TO THE APPROVED ENGINEERING DRAWINGS. THE DEVELOPER MAY REQUEST A LETTER FROM THE CONSTRUCTION INSPECTION DIVISION REGARDING ANY FIELD CHANGES APPROVED BY THE CITY INSPECTORS.

TRAFFIC CONTROL IS TO BE PER MODOT OR MUTCD WHICHEVER IS MORE STRINGENT.

ALL TRAFFIC SIGNALS, STREET SIGNS, SIGN POST, 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).

LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION.

CONNECTIONS AT ALL SANITARY OR STORM STRUCTURES TO BE MADE WITH A-LOCK JOINT OR EQUAL.

BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF SANITARY OR STORM SEWER STRUCTURES. PRE-CAST CONCRETE STRUCTURES ARE TO BE USED UNLESS OTHERWISE APPROVED BY THE CITY.

ALL CONCRETE PIPES WILL BE INSTALLED WITH O-RING RUBBER TYPE GASKETS.

HDPE PIPE IS TO BE N-12WT OR EQUAL AND TO MEET ASTM F1417 WATER TIGHT FIELD TEST.

RIP-RAP SHOWN AT FLARED ENDS WILL BE EVALUATED IN THE FIELD BY THE ENGINEER, CONTRACTOR AND CITY INSPECTOR AFTER INSTALLATION FOR EFFECTIVENESS AND FIELD MODIFIED, IF NECESSARY, TO REDUCE EROSION ON AND OFF-SITE.

PROVIDE A MARKING ON THE STORM SEWER INLETS. THE CITY WILL ALLOW THE FOLLOWING MARKERS AND ADHESIVE PROCEDURES ONLY AS SHOWN IN THE TABLE BELOW OR APPROVED EQUAL. "PEEL AND STICK" ADHESIVE PADS WILL NOT BE ALLOWED.

MANUFACTURER	SIZE	ADHESIVE	STYLE	MESSAGE (PART #)	WEBSITE
ACP INTERNATIONAL	3 7/8"	EPOXY CAP	CRYSTAL	NO DUMPING DRAINS TO WATERWAYS (SD-W-CC)	WWW.ACPINTERNATIONAL.COM
DAS MANUFACTURING INC.	4"	EPOXY	STANDARD STYLE	NO DUMPING DRAINS TO STREAM (#SDS)	WWW.DASMANUFACTURING.COM

A 5/8" TRASH BAR SHALL BE CENTERED WITHIN THE OPENING(S) OF ALL CURB INLETS AND AREA INLETS.

ALL IDENTIFICATION OR DIRECTIONAL SIGN(S) MUST HAVE THE LOCATIONS AND SIZES APPROVED AND PERMITTED SEPARATELY THROUGH THE PLANNING AND DEVELOPMENT DIVISION.

NO GRADED AREAS ARE TO REMAIN BARE FOR OVER 14 DAYS WITHOUT BEING SEEDED AND MULCHED.

ALL PROPOSED FENCING REQUIRES A SEPARATE PERMIT FROM THE PLANNING & DEVELOPMENT DIVISION

Utility Contacts

Sanitary Sewers

City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
Contact: 636-281-2858

Water

City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
Contact: 636-281-2858

Storm Sewer

City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
636-281-2858

Electric

Ameren UE
200 Callahan Road
Wentzville, MO. 63385
636-639-8312

Gas

Laclede Gas Company
6400 Graham Road
St. Louis, MO. 63134
314-522-2297

Telephone

Century Tel
1151 Century Tel Dr.
Wentzville, MO. 63385
636-332-7261

Fire District

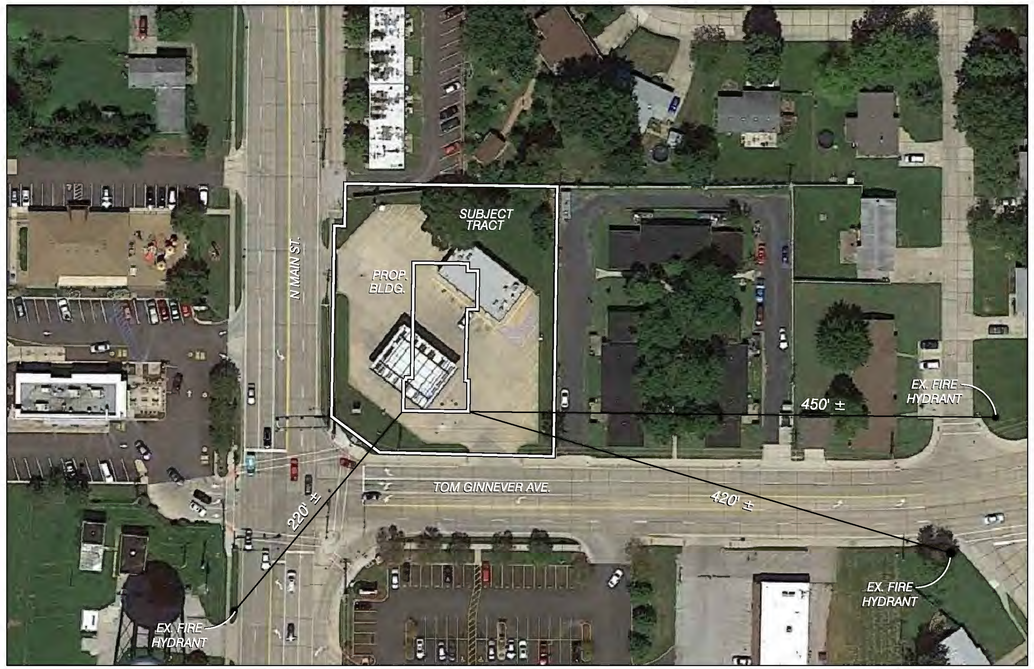
O'Fallon Fire Protection District
119 E. Elm St.
O'Fallon, MO. 63366
636-272-3493

Structural Fill Requirements		
Material Type	USCS Classification	Acceptable Uses
Low Volume Change Material [1,2]	CL CL-CH (40LL<60 & PI<20)	All locations 1. Similar to MoDOT Type 1 or 5 crushed limestone aggregate, limestone screenings, or granular material such as sand, gravel or crushed stone containing at least 15% low plasticity fines. 2. Low plasticity cohesive soil or granular soil having at least 15% low plasticity fines.
Lean Clay and Clayey Sand	CL & SC (LL<40)	All locations
Lean to Fat Clay	CL-CH (40<LL<50)	18 inches below slabs on grade unless PI<20
Fat Clay	CH (LL≥50)	18 inches below slabs on grade
Soil Fill Lift Thickness	• 9 inches or less when using heavy self-propelled compaction equipment • 6 inches or less when using hand guided or light self-propelled equipment	
Compaction Requirements [1]	• 95% of standard Proctor dry density (ASTM D-698) for new structural fill placed at 6 feet of thickness or less. 1. We recommend engineered fill be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.	

Structural Fill Requirements	
Compaction Moisture Content Requirements	Cohesive: • Optimum moisture content to 4% above the standard Proctor optimum moisture content for new structural fill Granular: • Workable moisture content. Shall not pump when proofrolled

THE COMPACTION DENSITY FOR PAVEMENT BASE SHOULD BE 95% OF MODIFIED PROCTOR COMPACTION.

STRUCTURAL FILL REQUIREMENTS CHART TAKEN FROM CROCKETT GEOTECHNICAL REPORT DATED JANUARY 14, 2016. PLEASE REFER TO LATEST GEOTECH REPORT FOR ADDITIONAL INFORMATION. DOERING ENGINEERING TAKE NO RESPONSIBILITY FOR THIS INFORMATION ON THE PLANS.



AERIAL FOR ADJOINING STREETS AND AND HYDRANT LOCATIONS

N.T.S.

Revised	Comment
2/17/16	1ST SUB TO CITY
2/23/16	REV. PER CITY CHECK LIST
4/7/16	REV. PER CITY COMMENTS
5/12/16	REV. PER CITY COMMENTS
6/13/16	REV. PER CITY COMMENTS
7/7/16	REV. PER SEWER CONTRACTOR
10/3/16	3/4 ENTRANCE TO TOM GINNEVER

Engineered By:
DOERING ENGINEERING Inc.
CIVIL ENGINEERING • PLANNING • SURVEYING ©
Missouri Office
5000 Griffin Rd.
St. Louis, Missouri 63129
Telephone: (314) 487-8813
Fax: (314) 845-1716

Seal

STATE OF MISSOURI
MARK A. DOERING
10/3/16
PE-23059
PROFESSIONAL ENGINEER

MARK A. DOERING
CIVIL ENGINEER E-23059
10/3/16
MO. EXPIRATION DATE:
DECEMBER 31 2014
IL. EXPIRATION DATE:
DECEMBER 31 2013
MO. CORPORATE
LICENSE NO. 001347
IL. CORPORATE
LICENSE NO. 184.003035

PLAZA TIRE
1000 N MAIN ST.
O'FALLON, MO 63366
NOTES

Date: 2/17/16 ©
Project Number: 15030
File Name: 15030CD
Drawn By: JAB
Check By: MAD
Sheet
C3