GENERAL NOTES AND SPECIFICATIONS:

- 1. THE CONTRACTOR SHALL NOTIFY THE CITY OF O'FALLON DIRECTOR OF PUBLIC WORKS (636.379.5558), AND O'FALLON WATER AND SEWER (636.281.2858) A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING WORK. FAILURE TO MAKE NOTIFICATIONS SHALL RESULT IN IMMEDIATE STOP OF WORK.
- THE CONTRACTOR SHALL NOTIFY MISSOURI ONE CALL SYSTEM, INC. (MOCS) AT (800) DIG-RITE A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING UNDERGROUND CONSTRUCTION. THE EXACT LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE NOT GUARANTEED BY THE ENGINEER NOR IS THERE ANY GUARANTEE THAT UTILITIES NOT SHOWN DO NOT EXIST. CONTRACTOR IS RESPONSIBLE FOR PRESERVATION, MAINTENANCE, REPAIR AND REPLACEMENT OF ALL UTILITIES ENCOUNTERED BY HIM/HER DURING THE COURSE OF THE WORK. THERE WILL BE NO EXTRA PAYMENT TO THE CONTRACTOR FOR ANY CHANGES LEVIED BY A UTILITY COMPANY OF WHATEVER NATURE.

AFTER UTILITIES ARE LOCATED BY MOCS, THE CONTRACTOR SHALL FIELD LOCATE THE EXISTING UTILITIES ON HIGHWAY K AND MEXICO LOOP ROAD EAST AND CONTACT THE CONSTRUCTION PROJECT MANAGER PRIOR TO COMMENCING CONSTRUCTION.

- ALL WORK SHALL CONFORM TO THE CITY OF O'FALLON RULES, REGULATIONS, CODES AND ORDINANCES, AND DEVELOPMENT REQUIREMENTS AS THEY MAY APPLY, AND SHALL TAKE PRECEDENCE OVER ANY SPECIFICATION BELOW.
- 4. ALL ELEVATIONS ARE TO U.S.G.S. DATUM
- PRIOR TO BEGINNING NEW WORK, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITY LINES AND STRUCTURES TO BE CONNECTED TO PROPOSED WORK. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES, AND ELEVATIONS BEFORE PROCEEDING WITH WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEARING AND GRUBBING, AND FOR THE REMOVAL OF ANY EXISTING BURIED STRUCTURES THAT MAY BE PRESENT.
- THE CONTRACTOR IS RESPONSIBLE FOR EXCESS EXCAVATED MATERIAL AND SOIL SPOILS, WHICH ARE TO BE REMOVED FROM THE SITE AND DISPOSED OF IN LAWFUL LOCATIONS AT THE CONTRACTORS EXPENSE.
- ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS OF THE UTILITY OWNER AND TO THE SATISFACTION OF THE UTILITY OWNER AND THE CITY OF O'FALLON.
- 10. ANY AREA OUTSIDE THE PROPERTY LINE DISTURBED BY THE GENERAL CONTRACTOR OR ITS SUBCONTRACTORS SHALL BE RETURNED TO THE STATE IT WAS FOUND PRIOR TO NEW CONSTRUCTION.
- 11. ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT ARE TO BE ADJUSTED (UP TO 8 INCHES TOTAL ADJUSTMENT ALLOWED) OR RECONSTRUCTED BY THE CONTRACTOR TO THE UTILITY OWNER'S SATISFACTION. ADJUSTMENTS OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. A TOTAL OF NO MORE THAN 8 INCHES AND NO LESS THAN 4 INCHES OF ADJUSTING RINGS SHALL BE PROVIDED AT ALL UTILITY STRUCTURES.
- 12. LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL NEED TO BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
- 13. ALL PROPOSED FENCING REQUIRES A SEPARATE PERMIT THROUGH THE PLANNING DIVISION.
- 14. ALL SIGN LOCATIONS AND SIZES MUST BE APPROVED SEPARATELY THROUGH THE PLANNING DIVISION. SIGN LOCATIONS ARE SHOWN ON SITE PLAN.
- 15. 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 CITY AND MODOT). SIGNS DESIGNATING STREET NAME SHALL BE ON THE OPPOSITE SIDE OF THE STREET FROM TRAFFIC CONTROL SIGNS.
- 16. ALL UTILITIES WILL BE LOCATED UNDERGROUND.
- 17. NO SLOPES SHALL BE STEEPER THAN 3 (HORIZONTAL) TO 1 (VERTICAL).
- 18. ALL MANHOLES, CATCH BASINS, VALVE VAULTS, AND INLETS SHALL BE CONSTRUCTED OF PRECAST CONCRETE BARREL AND CONE SECTIONS CONFORMING TO ASTM C-478. ALL STRUCTURES SHOWN HAVE AN INTEGRAL BOTTOM WITH CAST HOLES FOR PIPE INSTALLATION. SANITARY AND STORM MANHOLES SHALL HAVE FLEXIBLE RUBBER BOOT PIPE CONNECTIONS FOR SEALING PIPE TO MANHOLE. NO MORE THAN TWO CONCRETE ADJUSTING RINGS SHALL BE USED ON ANY STRUCTURE. ADJUSTING RINGS AND FRAME SHALL BE SET ON "EASY STIX" MASTIC. SANITARY MANHOLES SHALL HAVE A "CRETEX" OR EQUAL CHIMNEY SEAL. FRAMES AND LIDS AND GRATES SHALL BE OF THE STYLE SHOWN ON THE PLANS. IN SANITARY AND STORM SEWER MANHOLES, PIPE SHALL BE LAID TO THE MANHOLE. FLOW LINE SHALL BE PRECAST INTO THE MANHOLE BOTTOMS. INLETS SHALL HAVE A SLOPED BOTTOM. THE ANGULAR SPACE BETWEEN PIPES AND WALLS SHALL BE SEALED WITH NON-SHRINK GROUT.

- 19. WHENEVER A SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY AND WATERMAINS SHALL BE MAINTAINED, UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18 INCH VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18 INCH VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CAN NOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN STANDARDS.
- 20. THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS.
- 21. THE CONTRACTOR IS CONSIDERED TO BE IN CONTROL OF THE WORK AND HAS SOLE RESPONSIBILITY FOR SELECTING MANPOWER, TOOLS AND METHODS OF WORK. THE CONTRACTOR ALSO HAS SOLE RESPONSIBILITY FOR PROTECTING WORKMEN AND THE PUBLIC AGAINST ALL HAZARDS TO LIFE AND PROPERTY WHICH MAY BE CAUSED BY THIS WORK. BY ACCEPTING THE CONTRACT OF WHICH THIS PLAN IS A PART, THE CONTRACTOR STIPULATES THAT THEY ARE FULLY AWARE OF ALL FEDERAL, STATE, AND LOCAL TITLES, CODES, ORDINANCES, AND STATUTES GOVERNING THE CONDUCT OF THEIR WORK AND THAT THEY WILL EMPLOY SUCH WORKMEN AND METHODS OF OPERATION AS MAY BE REQUIRED BY SUCH TITLES, CODES, ORDINANCES, AND STATUTES. THE FACT THAT THE OWNER ENGINEER, ARCHITECT, GOVERNMENTAL OR QUASI-GOVERNMENTAL AGENCY MAY VISIT THE WORKSITE FROM TIME TO TIME TO DETERMINE PROGRESS OR QUALITY OF WORK SHALL NOT SERVE TO PLACE ANY RESPONSIBILITY OR LIABILITY OF ANY KIND UPON THEM FOR THE CONTRACTOR'S FAILURE TO MAINTAIN A SAFE WORKPLACE. FURTHERMORE, IF THE ENGINEER HAS AN INSPECTOR ON THE JOB, IT IS HEREBY STIPULATED THAT THE INSPECTOR HAS NO RESPONSIBILITY WHATSOEVER FOR THE CONTRACTOR'S OPERATIONS. THE INSPECTORS ONLY RESPONSIBILITY IS TO VERIFY THAT WORK IS BEING PLACED IN THE PROPER LOCATION AND THAT SPECIFIED MATERIALS ARE BEING USED. THE CONTRACTOR IS PROHIBITED FROM REQUESTING ANYTHING OF THE INSPECTOR, EXCEPT INTERPRETATION OF PLANS AND APPROVAL OF MATERIAL SUBSTITUTIONS. THE CONTRACTOR ALSO STIPULATES THAT THEY WILL FULLY INDEMNIFY THE OWNER, ENGINEER, ARCHITECT, GOVERNMENTAL AND QUASI-GOVERNMENTAL AGENCIES AGAINST ALL CLAIMS OF WHATEVER NATURE THAT MAY BE BROUGHT AGAINST THEM AS THE RESULT OF PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE. SUCH INDEMNIFICATION SHALL INCLUDE FULL COST OF DEFENSE INCLUDING ATTORNEY AND EXPERT WITNESS FEES AND THE COST OF ALL JUDGMENTS WHICH MAY BE ENTERED AGAINST THEM, EITHER SINGLY OR SEVERALLY.

STORM SEWER:

- 22. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF SANITARY OR STORM SEWER STRUCTURES.
- 23. ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER, 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.
- 24. ALL DOWNSPOUTS AND FLOOR DRAINS SHALL DISCHARGE TO THE STORM SEWER.
- 25. EXCEPT WHERE DESIGNATED ELSEWHERE ON THE PLANS, STORM SEWER OF 12-INCH AND 15-INCH DIAMETER PIPE SHALL BE RCP PIPE (AASHTO M-206 & ASTM C76) WITH FLEXIBLE ELASTOMETRIC (O-RING) GASKETS (ASTM D-366).

ALL HDPE PIPE IS TO BE N-12WT. INSTALLATION OF ALL HDPE COMPONENTS SHALL BE IN ACCORDANCE WITH ASTM F1417. DUCTILE IRON PIPE SHALL CONFORM TO ANSI A-21.51 AND A-21.11 OR AWWA C-151-76 CLASS 52 AND AWWA C-111 AND AWWA C-110 FITTINGS.

- 26. STORM SEWER LIDS SHALL BE LABELED EITHER "NO DUMPING. DRAINS TO WATERWAYS" USING ACP INTERNATIONAL # SD-W-CC (3%") OR LABELED "NO DUMPING DRAINS TO STREAM" USING DAS MANUFACTURING, INC. # SDS. (4")
- 27. FOR STORM SEWER LESS THAN 36", SLOPE SHALL BE AT LEAST 1%.

WATERMAIN:

- 28. NEW WATERMAIN VALVES, INCLUDING PRESSURE TAP VALVES, ADJACENT TO AN EXISTING WATERMAIN, AND EXISTING WATERMAIN VALVES SHALL ONLY BE OPERATED BY THE CITY OF O'FALLON PUBLIC WORKS ADMINISTRATION PERSONNEL WITH A 48-HOUR NOTICE (MONDAY THROUGH FRIDAY).
- 29. INSTALLATION AND RECONNECTION OF WATER SERVICES SHALL BE IN CONFORMANCE WITH THE ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCES.

DUCTILE IRON WATER MAIN (DIP) SHALL CONFORM TO ANSI A21.51, CLASS 52 WITH ANSI A21 11 JOINTS. CEMENT LINING SHALL CONFORM TO AWWA C-104. EACH JOINT FITTING SHALL HAVE A MINIMUM OF 6 (SIX) "SAC-NUTS". "MEGA-LUG" BRAND OR APPROVED EQUAL RETAINERS SHOULD BE USED AT ALL MECHANICAL JOINTS, PIPE SHALL BE COMPLETELY WRAPPED IN POLYETHYLENE SLEEVE.

2-INCH AND SMALLER SERVICE SHALL BE TYPE K COPPER IN CONFORMANCE WITH ASTM B-88-83 AND C800. ALL WATER MAIN SERVICES AND APPURTENANCES SHALL BE CLEANED AND DISINFECTED AND PRESSURE TESTED PRIOR TO BEING PUT INTO OPERATION IN ACCORDANCE WITH THE CITY OF O'FALLON REQUIREMENTS.

- 30. WATERMAINS AND LOT SERVICES SHALL HAVE A MINIMUM OF 42" OF COVER.
- 31. ALL BENDS IN THE WATERMAIN OF 10 DEGREES OR GREATER AND ALL TEES SHALL BE THRUST PROTECTED.
- 32. GATE VALVES SHALL CONFORM TO AWWA C-500, OPEN LEFT WITH NATIONAL STANDARD OPERATING NUT. VALVES SHALL BE RESILIENT WEDGE OR SEAT TYPE WITH STAINLESS STEEL BOLTS. UNLESS OTHERWISE SHOWN ON THE PLANS, VALVES SHALL BE INSTALLED IN A VALVE VAULT OF THE SIZE SHOWN ON THE PLANS.
- 33. FIRE HYDRANTS SHALL BE 'MUELLER EAST JORDAN 5BR' AND PAINTED FIRE ENGINE RED. BOTTOM FLANGE OF HYDRANT SHALL BE SET FLUSH WITH GRADE (GRADE RING ELEVATION), AND THE DISTANCE FROM CENTER OF STEAMER PORT TO FINISH GRADE SHALL BE BETWEEN 18 AND 24 INCHES. HYDRANT SHALL BE EQUIPPED WITH 2 FOOT SPACER FLANGE TO FLANGE BETWEEN AUXILIARY VALVE AND HYDRANT FLANGE. FIRE HYDRANTS SHALL BE INSTALLED AS SHOWN ON PLANS.

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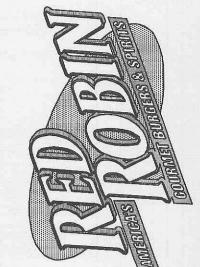
- 34. STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY TO MEET THE CITY OF O'FALLON, ST. CHARLES COUNTY, AND MODOT STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP
- 35. ALL PAVING TO BE IN ACCORDANCE WITH ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCES.
- 36. CURB RAMPS, RAMP, AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED AMERICAN DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE.
- 37. ALL PAVEMENT SECTIONS WITHIN THE RIGHT OF WAY SHALL BE 7" P.C.C. PAVEMENT ON A COMPACTED 4" ROCK BASE. CURB REMOVAL TO NEAREST JOINT OR STRUCTURE. SIDEWALK REPLACED TO NEAREST JOINT.
 - 38. SELECT BACKFILL SHALL BE USED BENEATH ALL EXISTING AND PROPOSED PAVED AREAS. SELECTED BACKFILL SHALL EXTEND A MINIMUM OF 5 FEET BEYOND THE EDGE OF PAVED AREAS. SELECT BACKFILL SHALL BE -CA -6 GRANULAR MATERIAL PLACED IN 8-INCH LIFTS AND COMPACTED WITH MECHANICAL TAMPERS. Course aggregate

EROSION CONTROL:

- 39. SILTATION AND EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH "ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL" GUIDELINES.
- 40. 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 (POSSIBLE METHODS OF CONTROL ARE DETAILED ON 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 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 OWNER AND/OR THE CITY OF O'FALLON AND/OR MoDOT.
 - ALL EROSION CONTROL SYSTEMS ARE INSPECTED AND NECESSARY CORRECTIONS MADE WITHIN 24 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE.

AS A MINIMUM REQUIREMENT, ALL LIDS AND GRATES SHALL BE COVERED WITH EITHER STRAW BALES OR FILTER FABRIC WHERE EARTH GRADING IS BEING DONE. SEDIMENT SHALL BE INTERCEPTED AT ALL PROPERTY LINES BY INSTALLING A LINE OF STRAW BALES STAKED TO THE GROUND, A FILTER FABRIC FENCE, AN INTERCEPTOR DIKE, OR BY ANOTHER APPROVED FUNCTIONAL METHOD. GRADED AREAS THAT ARE TO REMAIN BARE FOR 2 WEEKS OR MORE MUST BE SEEDED AND MULCHED.

41. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. AT THE END OF EACH DAY, THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS OR AS REQUIRED BY THE CITY OF O'FALLON.



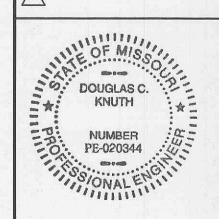
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HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PR PARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, LATING TO LANDSCAPE SITE, AN

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