fgma

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MISSOURI CERTIFICATE OF
AUTHORITY #000311

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FGM ARCHITECTS
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CIVIL
THE CLAYTON ENGINEERING COMPANY, INC.
2268 WELSCH INDUSTRIAL CT.
ST. LOUIS, MO 63146
314.692.8888 (O) 314.692.8688(F)
MO STATE CERTIFICATE OF AUTHORITY
PROF. ENG. NO. 000067 & PROF. SURVEYING NO. 000014

STRUCTURAL
ASDG, LLC
1009 LINCOLN HIGHWAY
FAIRVIEW HEIGHTS, IL 62208
618.628.0887 (O) 618.628.0889(F)
IL STATE CERTIFICATE OF AUTHORITY
No. 184-003843

M,E,P
BRIC PARTNERSHIP, LLC
100 EAST WASHINGTON, SUITE 220
BELLEVILLE, IL 62220
618.277.5200 (O) 618.277.5227(F)
IL STATE CERTIFICATE OF AUTHORITY
No. 184-003476

Erik J. Staley - Professional Engineer (PE-2006000132)

ERIK J. STALEY, PE
ENGINEER NO. 2006000132
DATE 08/25/2021

Drawing bodies (labels)

RAILROAD CROSSING / STREET NAME SIGNS
BOLT BOTH SIGNS TO POST USING TWO BOLTS
Street Name
LOGO
9"

CASE 1 — Intersection of an Arterial Street with a Minor/Collector Street, Use Two (2) sets of signs.
Traffic Control Sign w/ Street ID Sign — ARTERIAL

CASE 2 — Intersection of Minor Streets with Minor streets, install on one side of intersection only, unless streets change names, then install on both sides.

CASE 3 — Intersection with "T" intersection.

CASE 4

STOP (sign post detail)
2"X2" 14 GAUGE SQUARE SIGN POST, PAINTED BLACK.
7/16"Ø HOLES, 1" O.C., ON FOUR SIDES, ON FULL LENGTH OF POST
ALL TRAFFIC CONTROL SIGNS SHALL HAVE THE BACK SIDES PAINTED BLACK. INCLUDES STOP SIGNS, SPEED LIMIT SIGNS, YIELD SIGNS, NO PARKING SIGNS, ETC.
2-1/4" X 2-1/4" X 3', 14 GAUGE SQUARE SIGN BASE, PAINTED BLACK.
INSTALL TWO 1-3/4" X 2" X 2-1/4" CORNER BOLT W/ HEX NUT
EX. GROUND

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI
ARTERIAL SIGNS

CROSS SECTION FLAT SIGN BLADE (ARTERIAL)
ELEVATION VIEW FLAT SIGN BLADE
Street Name
BLACK VINYL "CITY" LOGO BY SUPPLIER MEET/EXCEED ASTM D-4956 SPEC TYPE 1 CLASS A
LETTERS: 6" Arterial
LOGO 7"Ø

CROSS SECTION EXTRUDED SIGN BLADE (COLLECTOR/MINOR)
ELEVATION VIEW EXTRUDED SIGN BLADE
LOGO: 4" Collector and Minor
Street Name
LETTERS: 4" Collector and Minor
ALUMINUM BLADE, TWO-SIDED WHITE

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI
SIGNS, DETAILS AND LOCATIONS

GENERAL NOTES (sign specifications, multiple small-print paragraphs)

Section A-A / Underdrain Detail / Profile
Portland Concrete Pavement
Porous Back Fill See Detail
Storm Sewer Per. M.S.D.Detail
5" Type 1 or Type 5 Aggregate Sub base
Compacted Crushed Limestone & Screenings
Porous Back Fill Fabric Rap
4" Perf. Drain Tile.
Note: At connections of 4" perforated pipe to sewer structure use an approved water stop gasket.

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI
CLASS A UNDERDRAINS

NO DUMPING — CITY OF O'FALLON - MISSOURI — DRAINS TO STREAM
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT UNLESS SPECIFIED ON PURCHASE ORDER
WEIGHT: 85 LBS.
NEENAH FOUNDRY
NF-4580-272
4580 COVER
Public inlets only.
Also available at East Jordan foundry

* The City of O'Fallon must be provided with a symbol/medallion for review and approval prior to installation. Contact the City if any information is needed.

Size	Style	Adhesive	Message (Part #)
3 7/8" TO 4"	Crystal Cap or Standard Style	Epoxy	No Dumping Drains to Waterway

City will also allow the precast inlet stone with a similar message as an approved alternate to the marker.

4 inch circle marker "No Dumping Drains to Waterway" Marker shall be Readable from the street
PLAN VIEW OF CURB INLET
PLAN VIEW OF AREA INLET
CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI
STORM DRAIN MARKER LOCATION
Public or Private inlets

* All inlets shall have 5/8" trash bar centered with the opening(s).

Ductile Iron Pipe installation shall follow the Ductile Iron Research Association (DIPRA) guide line.
The Installation of PVC Pipe shall follow the Uni-Bell PVC Pipe Association Handbook of PVC Design and Construction.

Call Before you DIG
Dial 811 or TOLL FREE
1-800-344-7483
mo1call.com
MISSOURI ONE-CALL SYSTEM INC.

DETAIL "C" — HORIZONTAL THRUST BLOCKING (FROM PWSD#2)
TEES AND TAPPING SLEEVE
PLUGS
BENDS
TYPICAL SECTION
RELEVANT PIPE SIZE
2"x4"x8" CONCRETE BLOCK
4"x8"x16" CONCRETE BLOCK

THRUST BLOCK DIMENSIONS - INCHES

PIPE DIA.	ALL FTGS. A	ALL FTGS. B	TEE PLUG TAPPING C	TEE PLUG TAPPING H	90 DEGREE BEND C	90 DEGREE BEND H	45 DEGREE BEND C	45 DEGREE BEND H	22-1/2 BEND C	22-1/2 BEND H	11-1/4 BEND C	11-1/4 BEND H
4	14	4	24	12	26	15	18	12	12	12	12	12
6	16	6	24	18	36	24	30	18	24	12	12	12
8	20	8	36	30	42	36	36	24	24	18	18	12
10	20	10	48	66	36	36	28	24	18	18		
12	24	12	68	36	82	42	54	36	40	24	28	18

NOTE
FOR FITTINGS LARGER THAN 12", SPECIAL RESTRAINT DESIGNS ARE REQUIRED.

DETAIL "D" — GATE VALVE DETAIL (FROM PWSD#2)
Buffalo box is an acceptable product to use. Tyler 562-S and 564-S are acceptable products.
FINISH GRADE
M.J. VALVE
LOCATOR WIRE TAPED TO TOP OF PIPE
2"x4"x8" CONCRETE BLOCK
4"x8"x16" CONCRETE BLOCK
DRILL OR CUT AN OPENING FOR LOCATOR WIRE. LOCATION SHOULD NOT COME IN CONTACT WITH LID.
UNDISTURBED EARTH AT BOTTOM OF TRENCH

DETAIL "A" PAGE 1 OF 2 — TYPICAL TRENCH SECTION FOR PVC PIPE (FROM PWSD#2)
TRENCH WIDTH
UNDISTURBED EARTH
GRANULAR OR EARTH BACKFILL (SEE SPECIFICATION FOR REQUIREMENTS)
WARNING TAPE
TRACER WIRE
PVC
GRANULAR FILL (¾" MINUS)
MAX = 6'-0", MIN = 3'-6"
NOTES
1) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

DETAIL "A" PAGE 2 OF 2 — TYPICAL TRENCH SECTION FOR DUCTILE IRON PIPE (FROM PWSD#2)
TRENCH WIDTH
UNDISTURBED EARTH
GRANULAR OR EARTH BACKFILL (SEE SPECIFICATION FOR REQUIREMENTS)
WARNING TAPE
TRACER WIRE
DIP
EARTH TRENCH BOTTOM WHERE SUITABLE FOR BEDDING
ADDITIONAL EXCAVATION & BACKFILL FOR ROCK OR OTHER UNSUITABLE MATERIAL
GRANULAR FILL (¾" MINUS)
NOTES
1) POLYWRAP REQUIRED FOR DUCTILE IRON PIPE.
2) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

TYPICAL WATER AND SEWER SEPARATION
NOT TO SCALE
SANITARY SEWER
WATER MAIN
10' MIN. BETWEEN SANITARY SEWER AND WATER MAIN
18" MIN. FROM TOP OF SANITARY SEWER TO BOTTOM OF WATER MAIN
HORIZONTAL DISTANCE
VERTICAL DISTANCE

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI
WATER AND SEWER SEPARATION DETAIL

Title Block

O'FALLON, MO MOTOMART
NEW CONVENIENCE CENTER
AND CARWASH
FKG OIL COMPANY

CONSTRUCTION DETAILS 5

the clayton engineering company, inc.
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Mo. Cert. of Authority - Prof. Engineering #000067 & Prof. Surveying #000014
Il. Dept. Financial & Prof. Reg. Prof. Design & Engineering Corp. #184 000879

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ISSUANCE		
NO	DATE	DESCRIPTION
1.	08/25/21	CITY SUBMITTAL
2.	09/22/21	2nd CITY SUBMITTAL
3.	10/06/21	3rd CITY SUBMITTAL
4.	11/22/21	4th CITY SUBMITTAL (BID SET)

Project Number: 20350
PLOTTED: 11/22/2021 10:03 AM BY: ERIK STALEY
F.B. 1447
Designed: EJS / RFK
Drawn: EJS / RFK
FILE:G:\20xxx\20350_MOTOHWDD\Plans\MotoMart Hwy DD_SitePlan02.dwg

SHEET NO.
C6.4

JOB NO. 21-3133.01
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