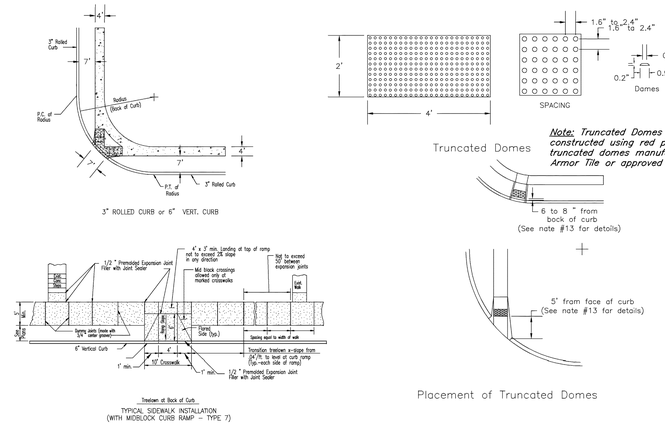
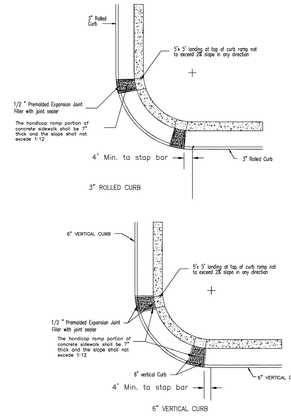


Note: Truncated Domes shall be constructed using red precast truncated domes manufactured by Armor Tile or approved equal.



GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Sidewalks and sidewalk curb ramps shall be constructed in accordance with these details and the current approved "Americans with Disabilities Act Access Ability Guidelines (ADAAG)".
3. Minimum sidewalk width along 6" vertical curb shall be 5 feet. Minimum sidewalk width along 3" rolled curb shall be 4 feet.
4. Maximum sidewalk cross slope 0.02'/ft..
5. All sidewalk sections shall be 6" thick, except where indicated as 7" thick by shaded portions shown on details.
6. Where curb ramp meets pavement, Bullnose will not be permitted.
7. If integral concrete curb is constructed, strike a dummy joint across bottom of ramp at curb line. If concrete curb is doweled-on, block out pavement to provide full depth curb across ramp from outer point of curb taper to outer point of curb taper.
8. For pavement longitudinal and transverse joints and dowel and tie bar requirements and dimensions, refer to the "Pavement Construction Details for Joints and Curbs".
9. For roadway cross slopes, pavement types, and thicknesses, refer to "Standard Typical Sections".
10. The intersection of two sidewalks or the intersection of a sidewalk and a driveway may serve as a wheelchair passing space on sidewalks less than 5 feet wide.
11. All curb ramps shall have a detectable warning complying with "Americans with Disabilities Act Accessibility Guidelines" (ADAAG).
12. All ramps must line up with the corresponding ramp on the other side of the street or intersection.
13. All truncated domes shall run parallel to the road that it's crossing.
14. Truncated warning domes shall not be stamped and will be a ADA approved product.

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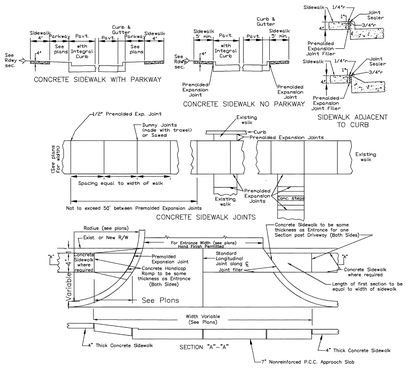
PAVEMENT CONSTRUCTION DETAILS
CONCRETE SIDEWALK AND CURB RAMPS



GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Sidewalk cross slope 0.02'/ft.
3. Sidewalk thickness increases to 6" on each side of Private Driveways and 7" on each side of Commercial Driveways for one section of sidewalk equal in length to the width of the sidewalk. See "Entrance Construction Details".
4. For sidewalk locations on Cul-De-Socs see "Pavement Construction Details".
5. For longitudinal and transverse joints, dowel, and tie bar requirements and dimensions refer to the "Integral Curb Pavement Typical Sections and Details".
6. For roadway cross slopes, pavement types, and thickness, refer to "Standard Typical Section".

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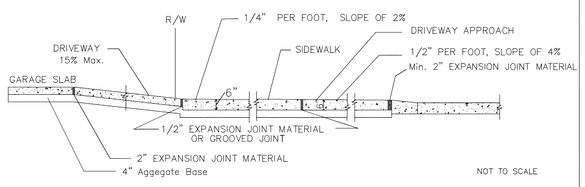
CONCRETE SIDEWALK THROUGH COMMERCAL ENTRANCES



NOTES:

1- All driveway entrances shall be six (6) inches P.C.C. in depth from the curb to the property line.

2- All driveway approaches constructed in conjunction with sidewalk shall give the appearance that the sidewalk is continuous. That portion of the driveway approach that doubles as a sidewalk shall have a one-fourth (1/4) inch per foot cross slope the same as the abutting sidewalk.

3- A two (2) inch expansion joint is required between the street and driveway approach. One (1) additional two (2) inch expansion joint is required between the garage floor and the termination of the driveway.

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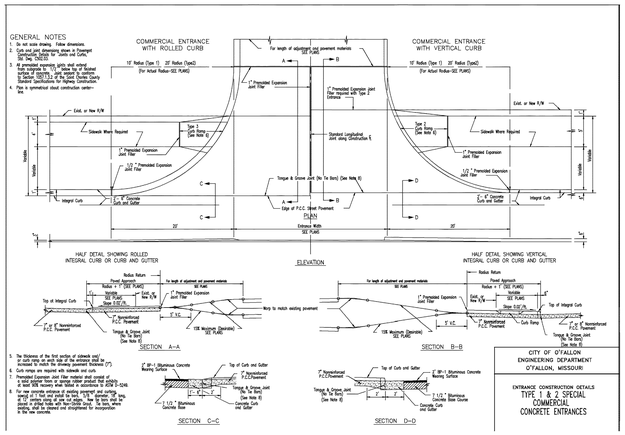
Integral Curb Detail "B" at Driveway

SECTION NO. 505.080



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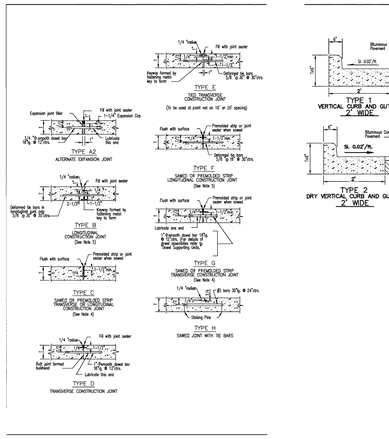
ENTRANCE CONSTRUCTION DETAILS
TYPE 1 & 2 SPECIAL COMMERCIAL CONCRETE ENTRANCES



GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Construction joint and tie bars may be omitted when curb is placed integral with pavement.
3. Thickness of Pavement Adjacent to Curb:

Minimum Concrete Pavement Thickness —	(T)
Concrete Pavement Thickness —	(T)
All Residential Minor and Local Streets	6" 7-1/2"
Collector Streets and Non-Residential Streets	7" 8-1/2"
All Arterial Streets	8" 10"

4. Type "F" transverse joint is required for Arterial and Non-Residential streets. Use Type "C" transverse joint for all others.
5. For Subdivision or Minor Streets having 6" pavement thickness, use Type "E" for tying 30" long bars at pavement edge and dowel for tie bars. Longitudinal joints over 1-1/2" deformed tie bars shall use Type "B" joints and be used for Type "F" longitudinal joint.
6. Refer to Pavement Construction Details for Integral Vertical Curb Concrete Pavement Joints, Integral Rolled Curb and Concrete Pavement Joints, Integral Rolled Curb and Concrete Pavement Joints, Integral Curb and Gutter for joint and tie requirements for different curb configurations. Note that width and length of curb section adjacent to pavement may change the type and number of joint required.
7. All deformed bars for joints and curbs shall be Grade 60 bars conforming to A.S.T.M.A615-64T.
8. Length of the tie bars shall equal the thickness of pavement plus the length of curb, less one inch (1") from edge of curb to bar.
9. Transverse and longitudinal construction joints, in the formed pavements may be made less in depth or inch, if such depth has been approved by the Engineer in charge.
10. The free end of the dowel bar for a length of at least 12" inches shall be coated with an approved bond breaker.
11. All dowel bars 1/2", & 1" Dia. shall be epoxy coated.
12. Expansion joint A-2 from St. Louis County pavement construction details, shall be allowed in addition to Type A and AA expansion joints.

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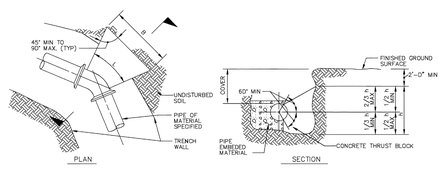
PAVEMENT CONSTRUCTION DETAILS
JOINTS AND CURBS



NOTES:
1. AREA OF BLOCK, A = B×h. BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.
2. B = h = √A", EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/h.
3. MINIMUM BLOCK DIMENSION (B & h) SHALL BE AT LEAST OD OF PIPE OR 1 FOOT FOR PIPE OD 12" OR LESS.
4. THE BOTTOM OF THE BLOCK SHALL EXTEND AT LEAST TO THE BOTTOM OF THE TRENCH IN ALL CASES.
5. L=FITTING LENGTH MINUS CLEARANCE FOR BELLS.
6. DETAIL IS SHOWN FOR CAST IRON PIPE; DETAIL IS SIMILAR FOR OTHER TYPES OF PIPE.
7. DIMENSIONS FOR THRUST BLOCKS FOR FIRE HYDRANT ASSEMBLY ARE SHOWN FIRE HYDRANT ASSEMBLY DETAIL.

SIZE	BEND	THRUST AREA	B	H
16"	11 1/2° 22 1/2°	4 SF	2'	2'
16"	45°	8 SF	2.8'	2.8'

CONCRETE THRUST BLOCKING

NOT TO SCALE

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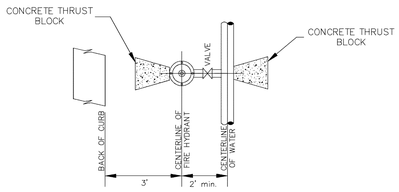
CONCRETE THRUST BLOCKING DETAILS



CONFIGURATION

ALL FIRE HYDRANTS SHALL BE 3' OFF BACK OF CURB
ALL WATER MAINS SHALL BE A MIN. OF 5' OFF BACK OF CURB

TYPICAL WATER MAIN AND FIRE HYDRANT LOCATIONS

NOT TO SCALE

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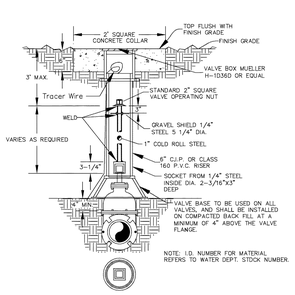
WATER MAIN FIRE HYDRANT DETAIL

Concrete collar will be in accordance will the Concrete collar detail.



WATER VALVE DETAIL

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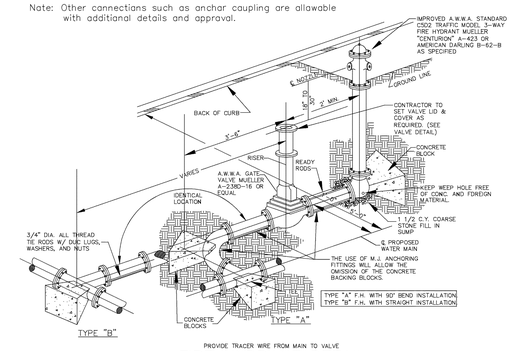
WATER VALVE DETAIL

Note: Other connections such as anchor coupling are allowable with additional details and approval.



PROVIDE TRACER WIRE FROM MAIN TO VALVE

FIRE HYDRANT DETAIL

NOT TO SCALE

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ENGINEERING DEPARTMENT
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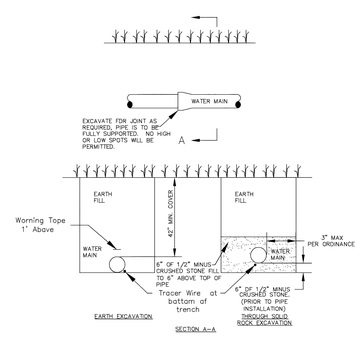
FIRE HYDRANT DETAILS



TYPICAL WATER MAIN INSTALLATION DETAILS

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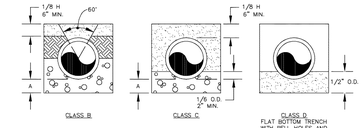
WATER MAIN INSTALLATION DETAIL



LEGEND:
I.D. – NOMINAL PIPE SIZE
O.D. – OUTSIDE DIAMETER OF PIPE
H – COVER ABOVE TOP OF PIPE
A – EMBEDED BELOW PIPE (SEE TABLE)

TAMPED BACK FILL
COMPACTED BACK FILL
A GRANULAR BEDDING

TABLE OF EMBEDED DEPTHS BELOW PIPE

I.D.	A MIN. SOIL	A MIN. ROCK
27" & SMALLER	3"	6"

GRANULAR BEDDING SHALL BE CRUSHED ROCK OR PEA GRAVEL WITH NOT LESS THAN 95% PASSING 1/2" (95% PASSING 3/4" FOR 30" AND LARGER PIPE) AND NOT LESS THAN 95% RETAINED ON A #4. TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL OR VIBRATING.

COMPACTED BACK FILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK, COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. D698, OR GRADED AGGREGATE. GRANULAR BACK FILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF COMPACTED BACK FILL.

TAMPED BACK FILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, HAND PLACED IN UNIFORM LAYERS NOT MORE THAN 8" THICK AND TAMPED AROUND CONDUIT PIPE. GRANULAR BACK FILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF TAMPED BACK FILL.

TRENCH BACK FILL SHALL BE AS REQUIRED IN THE "LAYING AND BACK FILL" SECTION OF THE DETAILED SPECIFICATIONS.

EMBEDED THE TYPE OF EMBEDED TO BE USED SHALL BE AS SPECIFIED IN THE PLANS AND SPECIFICATIONS.

TRACER WIRE REQUIRED ON ALL WATER MAINS

WATER MAIN EMBEDED

NOT TO SCALE

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

WATER MAIN EMBEDED

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O'FALLON JUSTICE CENTER

CONSTRUCTION DOCUMENTS
O'FALLON, MISSOURI

REV	DATE	DESCRIPTION

STATE OF MISSOURI
BRADLEY D. BURTON
NUMBER E-25862
REGISTERED PROFESSIONAL ENGINEER
3/15/16

PROJECT NUMBER
13326.00

DATE
03/15/16
CONSTRUCTION DOCUMENTS

DESIGNED: HTR/JWM/JRH
DRAWN: HTR/JWM/JRH
REVIEWED: HTR/BDB

SHEET TITLE
Construction Details

SHEET NUMBER
C10.0

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Engineering COA# 000132
Architecture COA# 000212
Land Surveying COA# 000059

G:\13326\Civil 3D\Production Drawings\Construction Site Plans\13326C2108.dwg Layout: C10.0 Construction Details -- Plotted Tuesday March 15, 2016, 3:48pm by jheely