

**CITY OF OZARK
STANDARD DETAIL
DRAWINGS
FOR
PUBLIC IMPROVEMENTS**



2024 EDITION
CITY OF OZARK, MISSOURI

* Changes from previous edition are noted in red.

TABLE OF CONTENTS

1. FENCING

Fencing Detail	FEN-1
Fencing Detail	FEN-2

2. PEDESTRIAN

5' Sidewalk Detail	PED-1
8' Sidewalk Detail	PED-2
Curb Ramp Type II Detail.....	PED-3
Curb Ramp Type III Detail	PED-4
Curb Ramp Type IV Detail	PED-5
Curb Ramp, Perpendicular for Narrow Sidewalks Detail.....	PED-6
Curb Ramp, Parallel Midblock Detail	PED-7
Curb Ramp, Perpendicular Large Radius Detail	PED-8
Sidewalk Section at Obstruction Detail	PED-9
Extension of Private Drainpipe in Sidewalk Detail.....	PED-10

3. PIPE

Embedment of Pipe Detail	PIPE-1
Bore/Encasement Detail	PIPE-2
Thrust Block Details	PIPE-3
Slope Anchor Detail	PIPE-4
Crossing Detail, Water Over Sewer	PIPE-5
Crossing Detail, Sewer Over Water	PIPE-6
Looping Water Main Detail	PIPE-7
Waterway Crossing Detail	PIPE-8
Large Pipe Crossings Detail	PIPE-8A
Residential Utilities Detail	PIPE-9
Tracer Wire Schematic Detail	PIPE-10

4. SEDIMENT AND EROSION CONTROL

Silt Fence Detail	SEC-1
Silt Sock Detail	SEC-2
Straw Bale Dike Detail	SEC-3
Construction Entrance/Exit Detail	SEC-4
Concrete Washout Detail	SEC-5
Sand Bag Sediment Trap Detail	SEC-6
Diversion of Run-off, Case 1 Detail	SEC-7
Diversion of Runoff, Case 2 Detail	SEC-8
Area Inlet Protection Detail.....	SEC-9
Berm and Outlet Structure Detail	SEC-10
Perforated Riser Pipe Detail	SEC-11
Gravel Filter Dam Detail.....	SEC-12
Temporary Containment Berm Detail	SEC-13
Temporary Sediment Basin Detail.....	SEC-14

Diversion Dikes and Swales Detail	SEC-15
---	--------

5. SANITARY SEWER

Standard Manhole Detail	SEW-1
Standard Outside Drop Manhole Detail	SEW-2
Standard Inside Drop Manhole Detail	SEW-3
Typical Shallow Manholes Detail	SEW-4
New Manhole on Existing Line Detail	SEW-5
Connect to Existing Manhole Detail.....	SEW-6
Type A Manhole Frame and Lid	SEW-7
Type B Manhole Frame and Lid.....	SEW-8
Type C Manhole Frame and Lid.....	SEW-9
Standard Sewer Service Detail	SEW-10
Grease Interceptor Detail	SEW-11
Sampling Manhole Detail.....	SEW-12
Cleanout Ring and Cover Detail.....	SEW-13
Air Relief Air Vacuum Valve	SEW-14

6. STORM DRAINAGE SYSTEM

Curb Inlets Detail	STM-1
Curb Inlet Over Pipe Detail	STM-2
Grated Inlet Detail	STM-3
Top Slab Reinforcement Detail	STM-4
Area Inlet With Apron Detail	STM-5
Open Side Drop Inlet Detail	STM-6
Storm Manhole Detail	STM-7
Standard Junction Box Detail.....	STM-8
Typical Pipe Connections at Junction Structure.....	STM-9
Ring and Cover for Storm Inlet, Storm Manhole and Junction Box	STM-10
Concrete Culvert Cap for Driveway	STM-11
Riprap Detail	STM-12

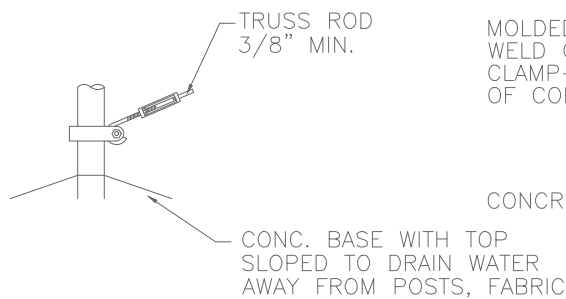
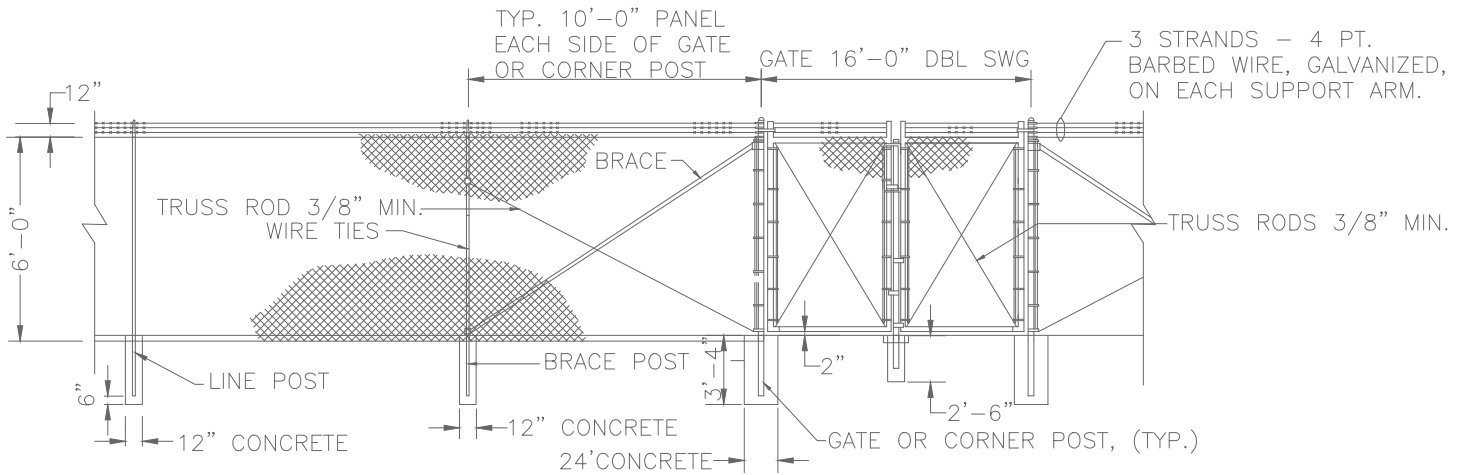
7. STREETS

Typical Pavement Details	STR-1
Pavement with Ditches Details	STR-1A
Standard Curb Details	STR-2
Cul-de-Sac Plan Minimum Standards	STR-3
“Knuckles” Plan Minimum Standards	STR-3A
Temporary Dead Ends Minimum Standards.....	STR-4
“T” Hammerheads Minimum Standards	STR-5
Joint Layout, Concrete Details	STR-6
Concrete Joint Details	STR-7
Asphalt Street Repair	STR-8
Concrete Street Repair Detail	STR-9
Residential Driveway and Sidewalk	STR-10
Commercial Driveway and Sidewalk	STR-11
Added Driveway Detail	STR-12
Mailbox Details	STR-13
Parallel Parking Stalls Details	STR-14

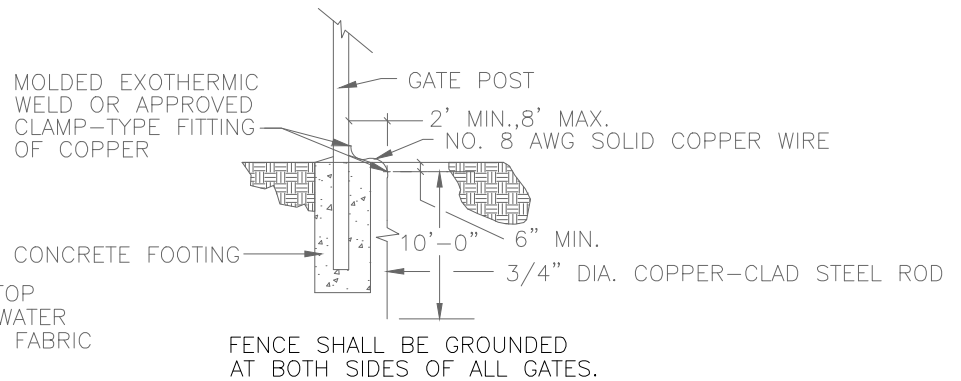
Handicap Zone Striping Details	STR-15
Parking Stall Layout Details	STR-16
Curb Detail “A”	STR-17
Standard Curb/Gutter Detail “B”	STR-18
Asphalt Patching Detail	STR-19

8. WATER

Valve Details	WAT-1
Fire Hydrant Details.....	WAT-2
Corporation Stop Detail	WAT-3
Dual Setter Water Service Detail.....	WAT-4
Single Setter Water Service Detail	WAT-5
5/8” and 1” Meters Detail.....	WAT-6
2” Commercial Meter Detail	WAT-7
3” Plus Commercial Meter Detail.....	WAT-8
Meter Lid for Readers	WAT-9
Dead End Assembly Details	WAT-10
Backflow Prevention Fire Vault Detail	WAT-11

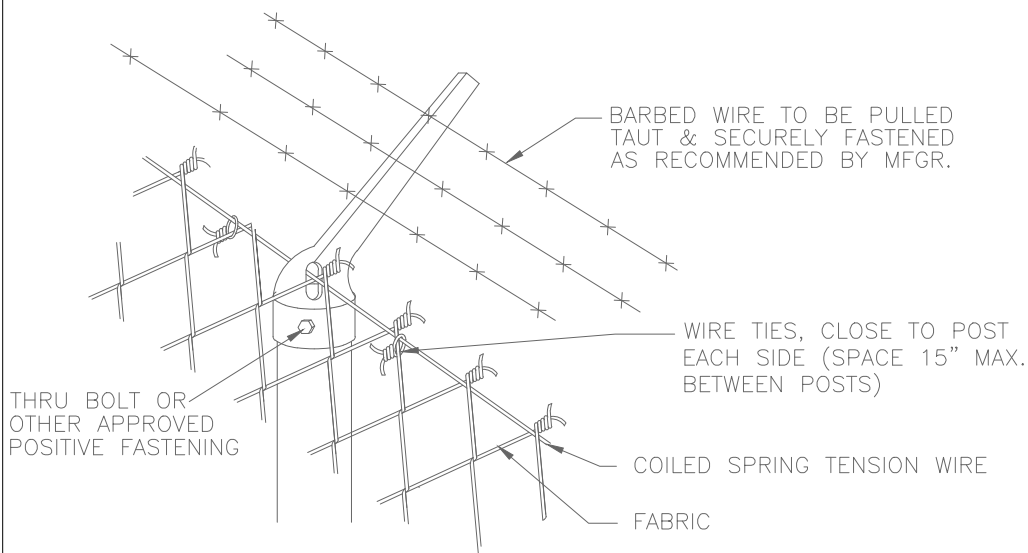


TRUSS ROD & BAND



GROUNDING DETAIL

NOTE:
FABRIC TIES, CLAMPS OR BANDS SHALL COMPLETELY
ENCIRCLE POST OR COLUMN AND ENDS SHALL BE
SECURELY FASTENED TOGETHER.



SUPPORTING ARM FOR
BARBED WIRE

CITY OF OZARK

FENCING
DETAILS

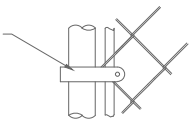
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FEN-1

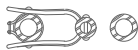
DATE
7-18-05

REVISION
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STRETCHER BAR BAND TO BE 4" MAX. FROM TOP AND BOTTOM AND SPACED 15" O.C. MAX.



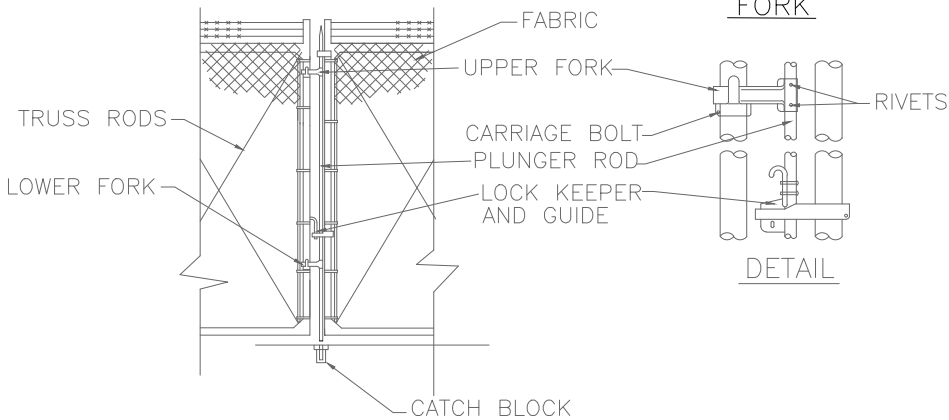
DETAIL OF END OR GATE POST



FORK

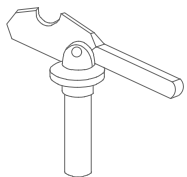


LOCK KEEPER

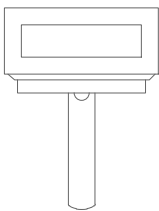


SWING GATE DETAILS

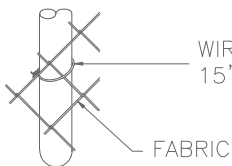
DETAIL



GATE KEEPER



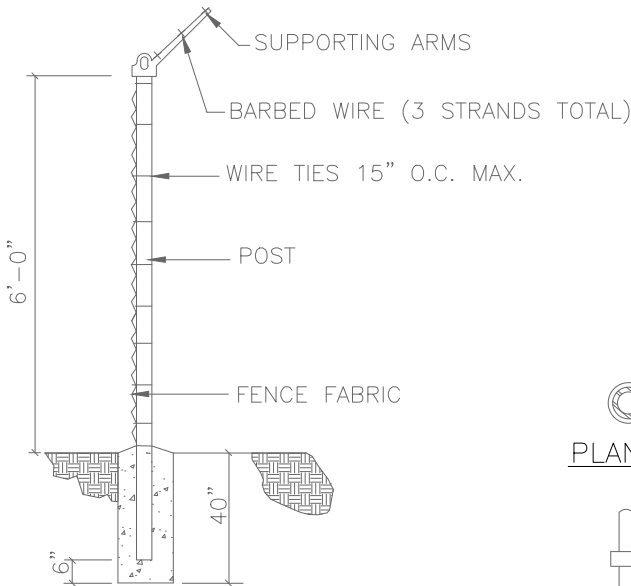
CATCH BLOCK



WIRE TIES
15" O.C. MAX.

FABRIC

WIRE TIES
FOR POSTS



TYPICAL FENCE SECTION

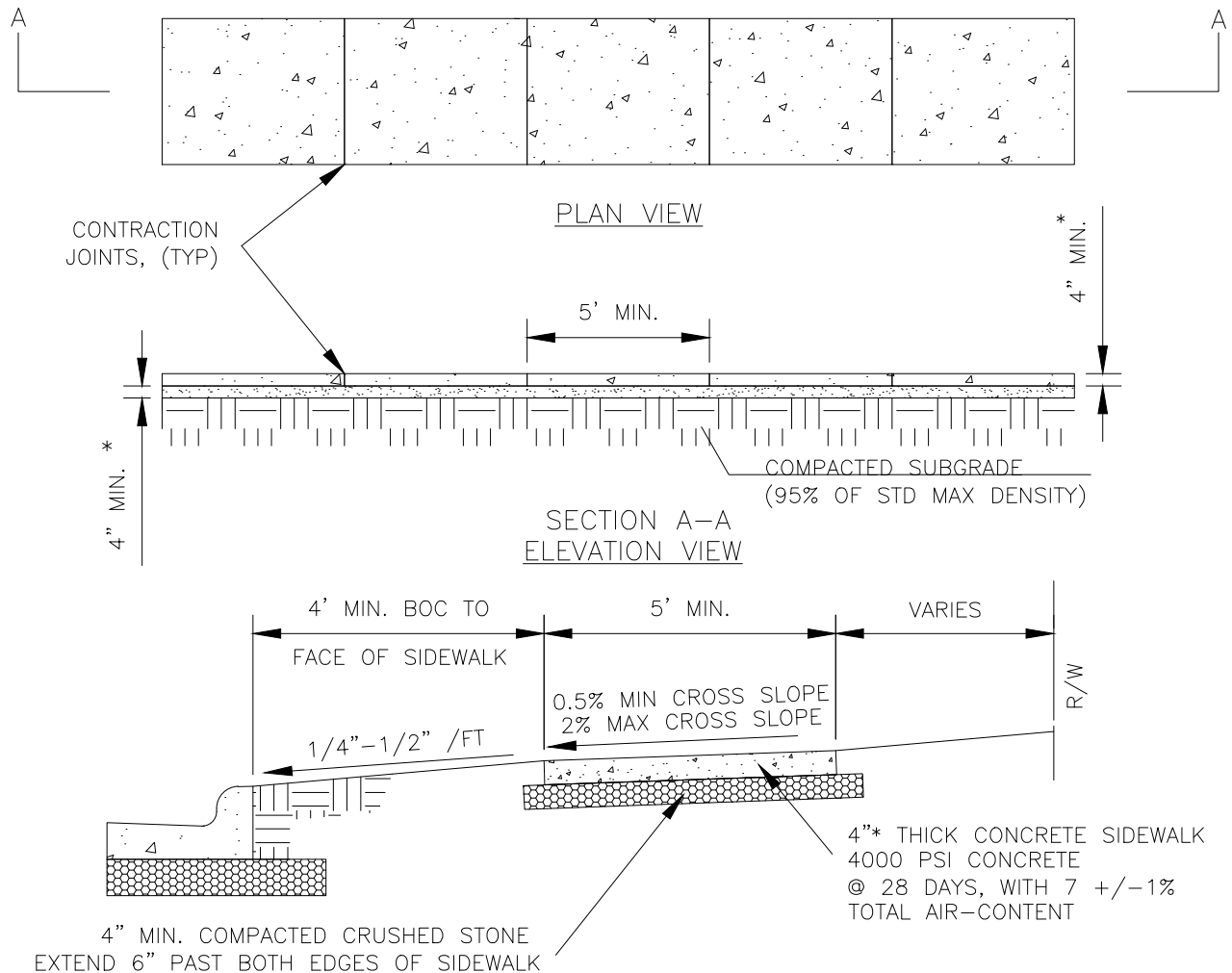


PLAN AT BANDS



BAND FOR WIRE
STRETCHING

FASTENING DETAILS



* 4" THICKNESS SHALL BE CHANGED TO 6" AT DRIVEWAYS

5'** CONCRETE SIDEWALK DETAIL

NOTES:

1. JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE SIDEWALK AND TO THE DEPTHS INDICATED BELOW.
2. THE SIDEWALK SHALL BE MARKED OFF INTO SQUARE STONES BY CONTRACTION JOINTS. CONTRACTION JOINTS SHALL BE ONE EIGHTH (1/8) INCH WIDE BY ONE FOURTH (1/4) OF SECTION THICKNESS AND SHALL BE FORMED BY TOOLING.
3. EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS OTHER STRUCTURES AND SHALL NOT BE SPACED MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID SIDEWALK AND NOT MORE THAN 100 FEET APART ON STRAIGHT RUNS FOR MACHINE LAID SIDEWALKS. EXPANSION JOINTS SHALL BE FORMED BY A THREE-FOURTH, (3/4) INCH THICK PREFORMED JOINT FILLER, EXTENDING THE FULL DEPTH OF THE SLAB, AND SECURED SO THAT THEY ARE NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS.
4. ANY PART OF AN ACCESSIBLE ROUTE WITH A RUNNING SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND SHALL COMPLY WITH THOSE REGULATIONS.
5. **ANY SIDEWALK LOCATED ADJACENT TO THE BACK OF CURB SHALL BE HAVE A MINIMUM WIDTH OF 6'.

CITY OF OZARK

5' SIDEWALK
DETAILS

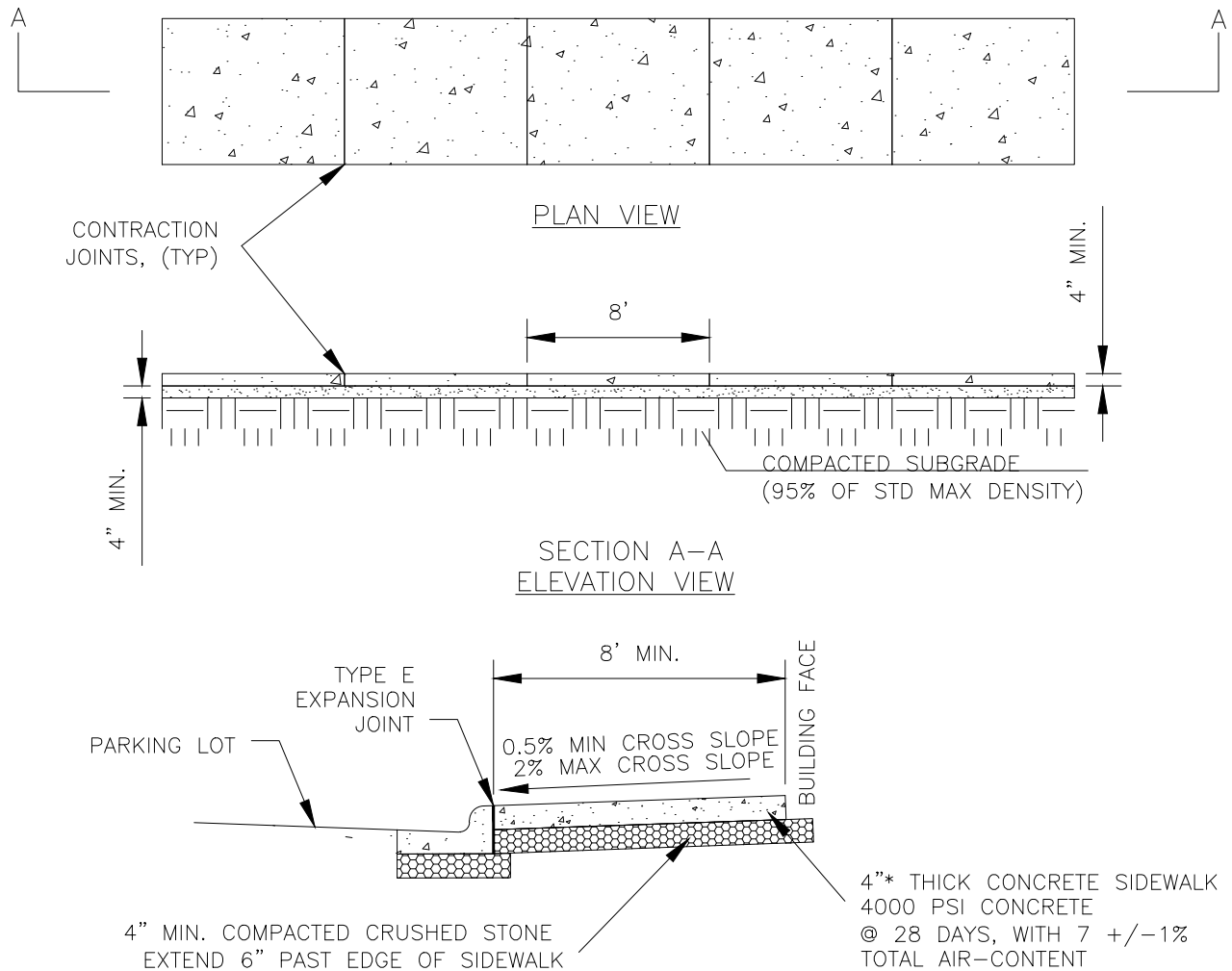
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PED-1

DATE
10-03-2024

REVISION

2



* 4" THICKNESS SHALL BE CHANGED TO 6" AT DRIVEWAYS

8'** CONCRETE SIDEWALK DETAIL

NOTES:

1. JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE SIDEWALK AND TO THE DEPTHS INDICATED BELOW.
2. THE SIDEWALK SHALL BE MARKED OFF INTO SQUARE STONES BY CONTRACTION JOINTS AT 8' INTERVALS. CONTRACTION JOINTS SHALL BE ONE EIGHTH (1/8) INCH WIDE BY ONE FOURTH (1/4) OF SECTION THICKNESS AND SHALL BE FORMED BY TOOLING.
3. EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS OTHER STRUCTURES AND SHALL NOT BE SPACED MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID SIDEWALK AND NOT MORE THAN 100 FEET APART ON STRAIGHT RUNS FOR MACHINE LAID SIDEWALKS. EXPANSION JOINTS SHALL BE FORMED BY A THREE-FOURTH (3/4) INCH THICK PREFORMED JOINT FILLER, EXTENDING THE FULL DEPTH OF THE SLAB, AND SECURED SO THAT THEY ARE NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS.
4. **PUBLIC SIDEWALKS LOCATED ADJACENT TO MULTI-STORE FRONT COMMERCIAL BUILDINGS SHALL BE A MINIMUM OF 8' WIDTH.

CITY OF OZARK

8' SIDEWALK
DETAILS

NTS

PED-2

DATE
10-03-2024

REVISION

3

VARIES

ROW,

5' SIDEWALK

4' MIN.

1:50 MAX.

1:50 MAX.

TOOLED CONTRACTION JOINTS

5' MIN.

1:50 MAX.

1:12 MAX. SLOPE

1:12 MAX. SLOPE

6" - 8"

NONSKID SURFACE SUCH AS HEAVY BROOM FINISH

FACE OF CURB

PROVIDE A 1/4" - 1/2" LIP BEVELED AT 1V:2H SLOPE TO PREVENT WATER FROM ACCUMULATING ON RAMP

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT EXCEED 1:20.

MIN. 24" WIDE STRIP OF SAFETY YELLOW DETECTABLE WARNING WITH NEAR EDGE 6" - 8" FROM FACE OF CURB LINE AND WITH FAR EDGE NO MORE THAN 5' FROM BACK OF CURB

PLAN

REVISION	4
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FACE OF CURB

CURB EDGING

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT EXCEED 1:20.

PROVIDE A 1/4" - 1/2" LIP BEVELED AT 1V:2H MAX SLOPE TO PREVENT WATER FROM ACCUMULATING ON RAMP

MIN. 24" WIDE STRIP OF SAFETY YELLOW DETECTABLE WARNING WITH NEAR EDGE 6" - 8" FROM FACE OF CURB LINE AND WITH FAR EDGE NO MORE THAN 5' FROM BACK OF CURB

1:12 MAX. SLOPE

2% MAX.

5' MIN.

2% MAX.

2% MAX.

5' MIN.

NONSKID SURFACE SUCH AS HEAVY BROOM FINISH

LANDING

PLAN

CITY OF OZARK

CURB RAMP TYPE III

NTS

DATE
10-03-2024

REVISION

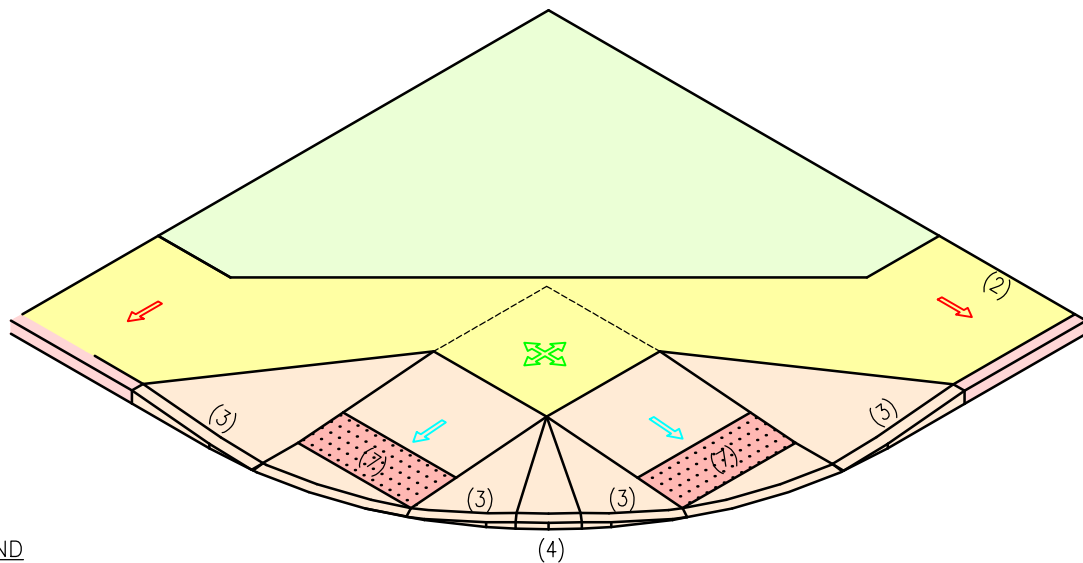
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PED-4



DOME SECTION





LEGEND



1.0% MIN., 2.0% MAX. CROSS SLOPE.



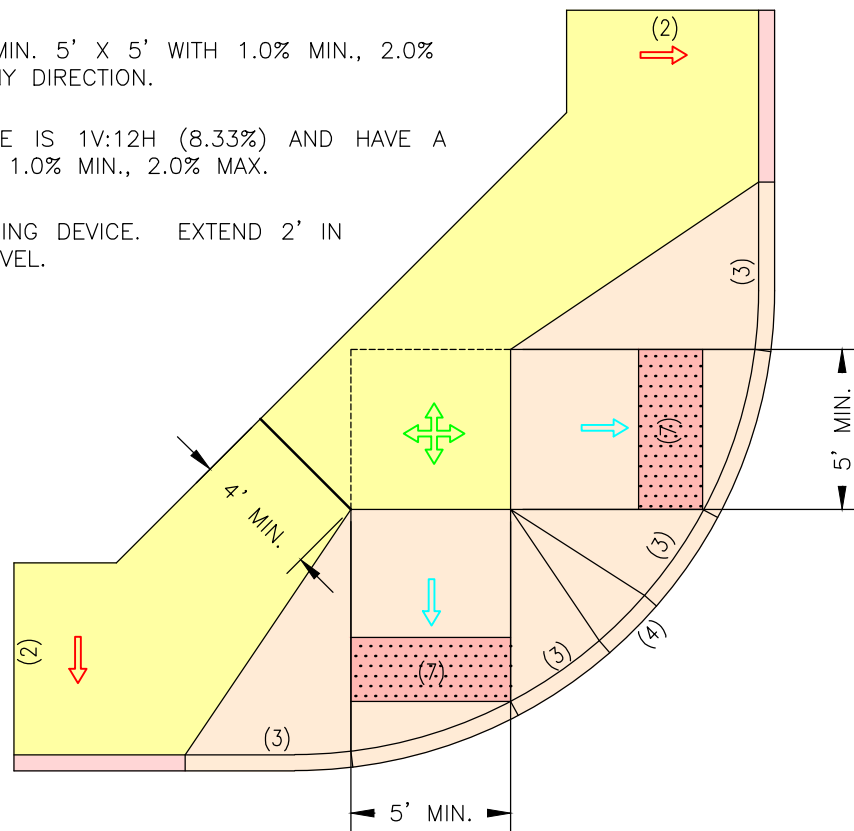
LANDING AREA. MIN. 5' X 5' WITH 1.0% MIN., 2.0% MAX. SLOPE IN ANY DIRECTION.



MAX. RAMP SLOPE IS 1V:12H (8.33%) AND HAVE A CROSS SLOPE OF 1.0% MIN., 2.0% MAX.



DETECTABLE WARNING DEVICE. EXTEND 2' IN DIRECTION OF TRAVEL.



KEYED NOTES

- (1) VARIABLE CURB HEIGHT. CURB MAY BE ELIMINATED IF UNNECESSARY AND APPROVED BY THE ENGINEER
- (2) SEE PLAN SHEETS FOR WIDTH. SIDEWALKS AT CURB SHALL BE A MINIMUM OF 6' WIDE AND SIDEWALKS WITH A TREE LAWN SHALL BE A MINIMUM OF 5', WIDE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- (3) FLARE MAX. SLOPE IS 1V:10H WHEN MEASURED PARALLEL TO CURB LINE.
- (4) CURB HEIGHT BETWEEN THE FLARES MAY RANGE BETWEEN 3" AND 6" AS NECESSARY WITH APPROVAL FROM THE ENGINEER.
- (5) CHAMFER CORNERS AT 45 DEGREE ANGLE.
- (6) 1' WIDE FLARE MAY BE SUBSTITUTED FOR VERTICAL CURB AT THE DISCRETION OF THE ENGINEER FOR NO ADDITION COST.
- (7) DETECTABLE WARNING DEVICES ARE NOT USED ON EVERY CURB RAMP INSTALLED. SEE SITE PLAN FOR LOCATIONS WITH DETECTABLE WARNING DEVICES.

CITY OF OZARK

CURB RAMP, PERPENDICULAR
FOR NARROW SIDEWALKS

DATE
10-03-2024

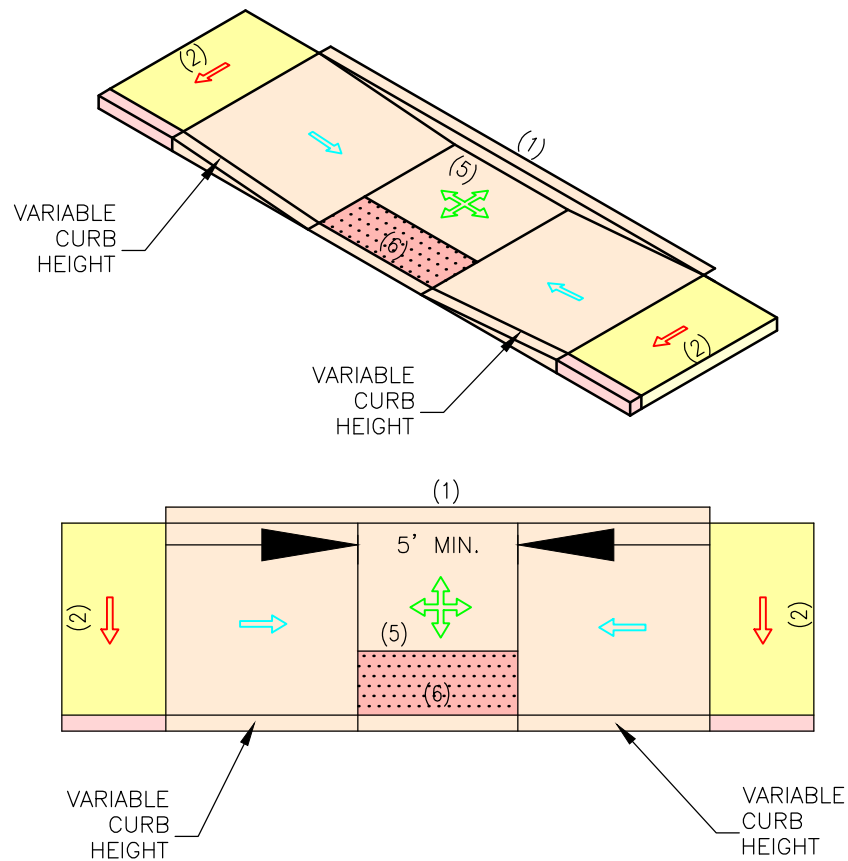
PED-6

REVISION

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LEGEND

- ↔ 1.0% MIN., 2.0% MAX. CROSS SLOPE.
- ↕ LANDING AREA. MIN. 5' X 5' WITH 1.0% MIN., 2.0% MAX. SLOPE IN ANY DIRECTION.
- ↔ MAX. RAMP SLOPE IS 1V:12H (8.33%) AND HAVE A CROSS SLOPE OF 1.0% MIN., 2.0% MAX.
- DETECTABLE WARNING DEVICE. EXTEND 2' IN DIRECTION OF TRAVEL.



KEYED NOTES

- (1) VARIABLE CURB HEIGHT. CURB MAY BE ELIMINATED IF UNNECESSARY AND APPROVED BY THE ENGINEER
- (2) SEE PLAN SHEETS FOR WIDTH. SIDEWALKS AT CURB SHALL BE A MINIMUM OF 6' WIDE AND SIDEWALKS WITH A TREE LAWN SHALL BE A MINIMUM OF 5' WIDE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- (3) FLARE MAX. SLOPE IS 1V:10H WHEN MEASURED PARALLEL TO CURB LINE.
- (4) CURB HEIGHT BETWEEN THE FLARES MAY RANGE BETWEEN 3" AND 6" AS NECESSARY WITH APPROVAL FROM THE ENGINEER.
- (5) CHAMFER CORNERS AT 45 DEGREE ANGLE.
- (6) 1' WIDE FLARE MAY BE SUBSTITUTED FOR VERTICAL CURB AT THE DISCRETION OF THE ENGINEER FOR NO ADDITION COST.
- (7) DETECTABLE WARNING DEVICES ARE NOT USED ON EVERY CURB RAMP INSTALLED. SEE SITE PLAN FOR LOCATIONS WITH DETECTABLE WARNING DEVICES.

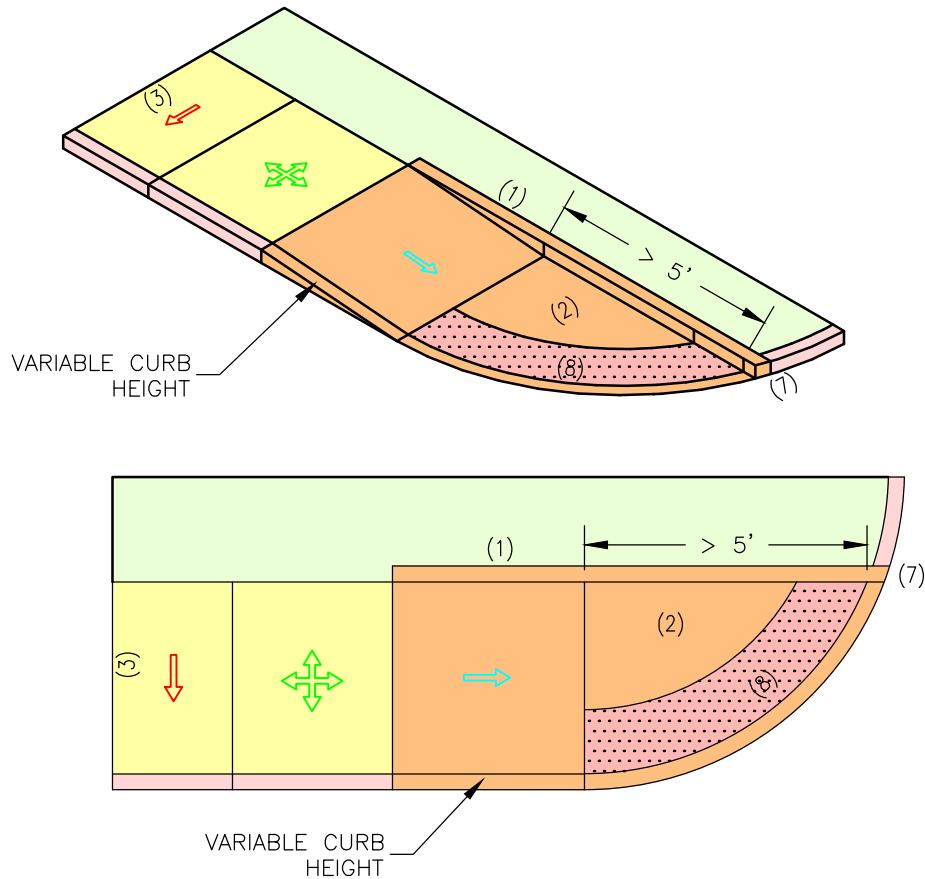
LEGEND

← 1.0% MIN., 2.0% MAX. CROSS SLOPE.

↕ LANDING AREA. MIN. 5' X 5' WITH 1.0% MIN., 2.0% MAX. SLOPE IN ANY DIRECTION.

↔ MAX. RAMP SLOPE IS 1V:12H (8.33%) AND HAVE A CROSS SLOPE OF 1.0% MIN., 2.0% MAX.

DETECTABLE WARNING DEVICE. EXTEND 2' IN DIRECTION OF TRAVEL.



KEYED NOTES

- (1) VARIABLE CURB HEIGHT. CURB MAY BE ELIMINATED IF UNNECESSARY AND APPROVED BY THE ENGINEER
- (2) SEE PLAN SHEETS FOR WIDTH. SIDEWALKS AT CURB SHALL BE A MINIMUM OF 6' WIDE AND SIDEWALKS WITH A TREE LAWN SHALL BE A MINIMUM OF 5' WIDE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- (3) FLARE MAX. SLOPE IS 1V:10H WHEN MEASURED PARALLEL TO CURB LINE.
- (4) CURB HEIGHT BETWEEN THE FLARES MAY RANGE BETWEEN 3" AND 6" AS NECESSARY WITH APPROVAL FROM THE ENGINEER.
- (5) CHAMFER CORNERS AT 45 DEGREE ANGLE.
- (6) 1' WIDE FLARE MAY BE SUBSTITUTED FOR VERTICAL CURB AT THE DISCRETION OF THE ENGINEER FOR NO ADDITION COST.
- (7) DETECTABLE WARNING DEVICES ARE NOT USED ON EVERY CURB RAMP INSTALLED. SEE SITE PLAN FOR LOCATIONS WITH DETECTABLE WARNING DEVICES.

CITY OF OZARK

CURB RAMP, PERPENDICULAR
LARGE RADIUS DETAIL

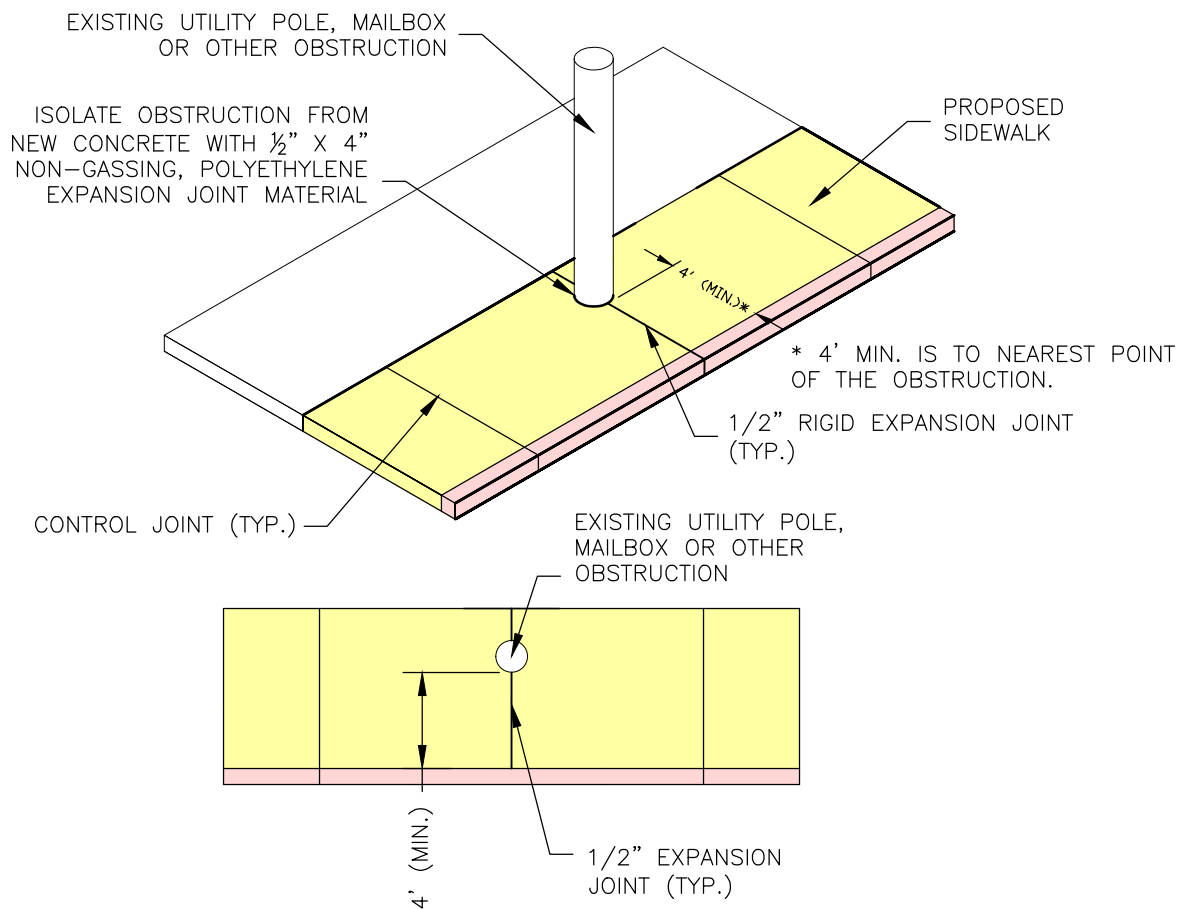
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PED-8

DATE
10-03-2024

REVISION

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NOTE:

1. THERE SHALL BE A 4' MIN. TRAVEL PATH BETWEEN THE BACK OF CURB AND OBSTRUCTION OR THE OBSTRUCTION AND BACK EDGE OF SIDEWALK.
2. FOR MAILBOXES, THE 4' MIN. TRAVEL PATH SHALL BE ON THE BACKSIDE OF THE MAILBOX TO ENSURE ACCESS FOR POSTAL EMPLOYEES.

CITY OF OZARK

SIDEWALK SECTION AT
OBSTRUCTION DETAIL

NTS

PED-9

DATE

10-03-2024

REVISION

0

NOTES:

ALL DOWNSPOUT PIPE UNDER
SIDEWALK SHALL BE 4" SCHEDULE 40
PVC PIPE.

CONTRACTOR SHALL EXTEND EXISTING
DOWNSPOUTS AS NECESSARY TO
PROVIDE ADEQUATE DRAINAGE TO
FLOWLINE OF GUTTER.

CONTRACTOR TO PROVIDE
AN APPROVED WATERTIGHT
CONNECTION FOR EXISTING
DOWNSPOUT TO NEW 4"
PVC PIPE

4" PVC PIPE. PIPE
TO BE INSTALLED
PERPENDICULAR TO
SIDEWALK

TO HOUSE

EXISTING
DOWNSPOUT/SUMP
PUMP

PROPOSED
SIDEWALK

CONTROL
JOINT
(TYP.)

PLAN VIEW

1/2" EXPANSION
JOINT OVER CENTERLINE
OF 4" PVC PIPE

4" PVC PIPE.
FLOWLINE OF PIPE
TO MATCH FLOWLINE
OF GUTTER

ELEVATION VIEW

CITY OF OZARK	EXTENSION OF PRIVATE DRAINPIPE IN SIDEWALK	PED-10	
		DATE 10-03-2024	REVISION 0

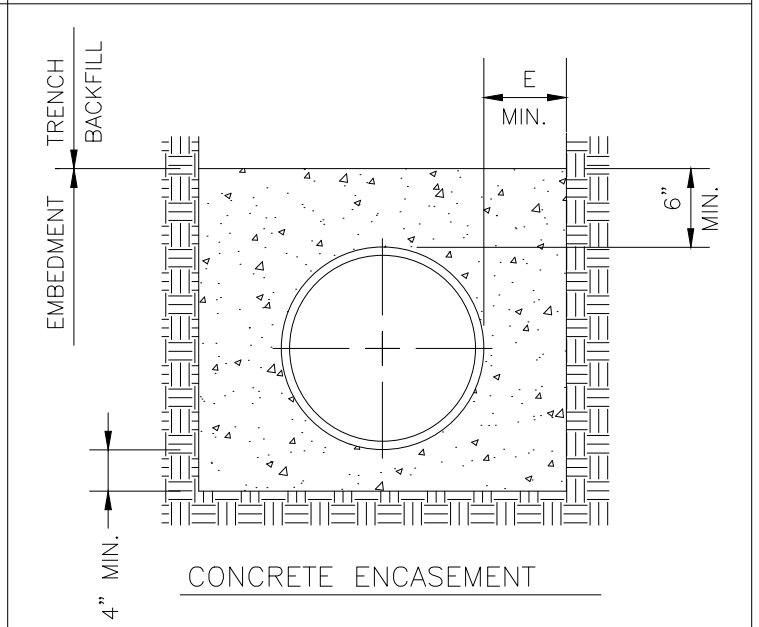
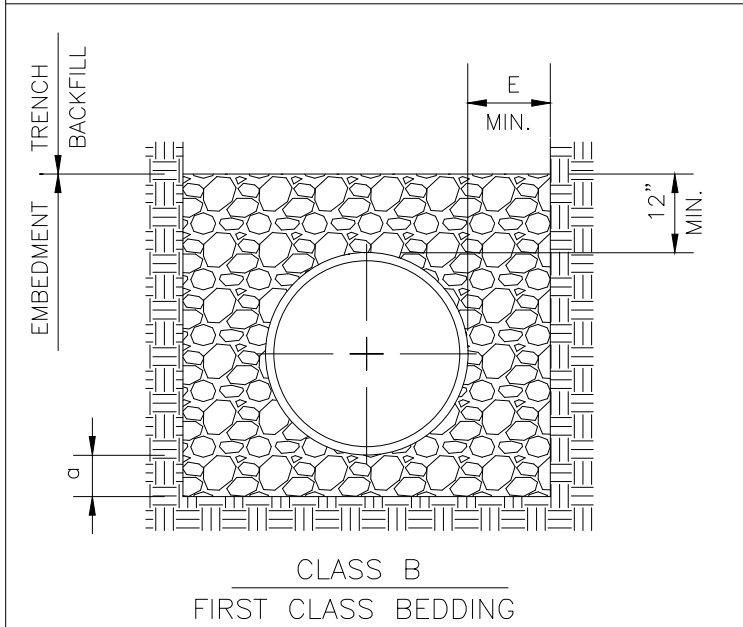
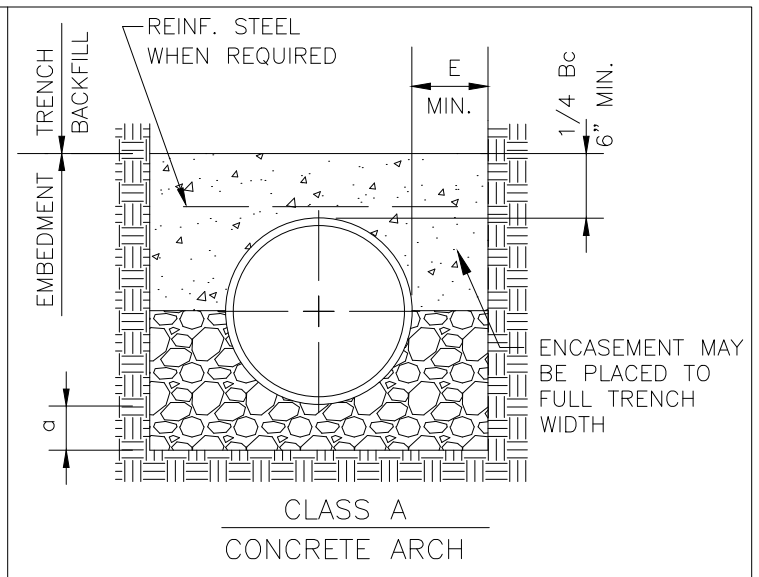
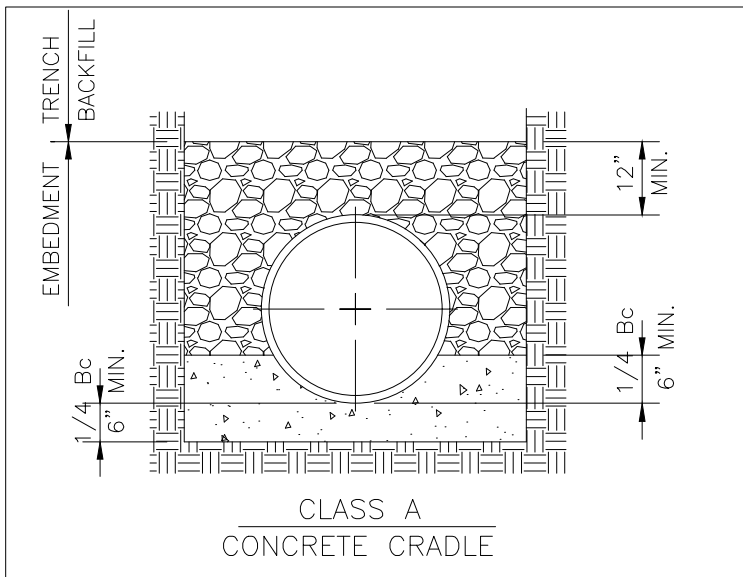


TABLE OF EMBEDMENT DEPTHS BELOW PIPE

SOIL TRENCH		
BEDDING CLASS	PIPE O.D.	a MIN.
A AND B	16" AND SMALLER	4"
A AND B	LARGER THAN 16"	1/4 O.D.

ROCK TRENCH		
BEDDING CLASS	PIPE O.D.	a MIN.
A AND B	24" AND SMALLER	6"
A AND B	LARGER THAN 24"	1/4 O.D.

E = 12" (LESS THAN 27" DIA. PIPE)
 E = ID/2 (27" TO 60" PIPE)
 E = TO BE DETERMINED (LARGER THAN 60" PIPE)

LEGEND

Bc OUTSIDE DIA. OF PIPE
 a EMBEDMENT BELOW PIPE
 GRANULAR EMBEDMENT
 CONCRETE
 UNDISTURBED EARTH

NOTE:

1. ALL UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY OF OZARK PRIOR TO BACKFILLING.
2. EXTEND GRANULAR EMBEDMENT MATERIAL TO THE BASE MATERIAL UNDER IMPROVED SURFACES
3. COMPACT GRANULAR EMBEDMENT IN 6" MAX. LIFTS TO 95% STANDARD PROCTOR DENSITY.
4. COMPACT TRENCH BACKFILL IN 12" MAX. LIFTS TO 85% OF THE MAX. DENSITY FOR UNIMPROVED AREAS AND 95% OF THE MAX. DENSITY FOR IMPROVED AREAS.
5. PROVIDE TRACER WIRE UNDER ALL WATER MAINS AND SERVICES AND ALL SEWERS SERVICES AND FORCE MAINS.
6. PROVIDE APPROPRIATE WARNING TAPE 18" TO 24" BELOW FINISH GRADE AT ALL WATER MAINS AND SEWER MAINS AND ALL SERVICES.

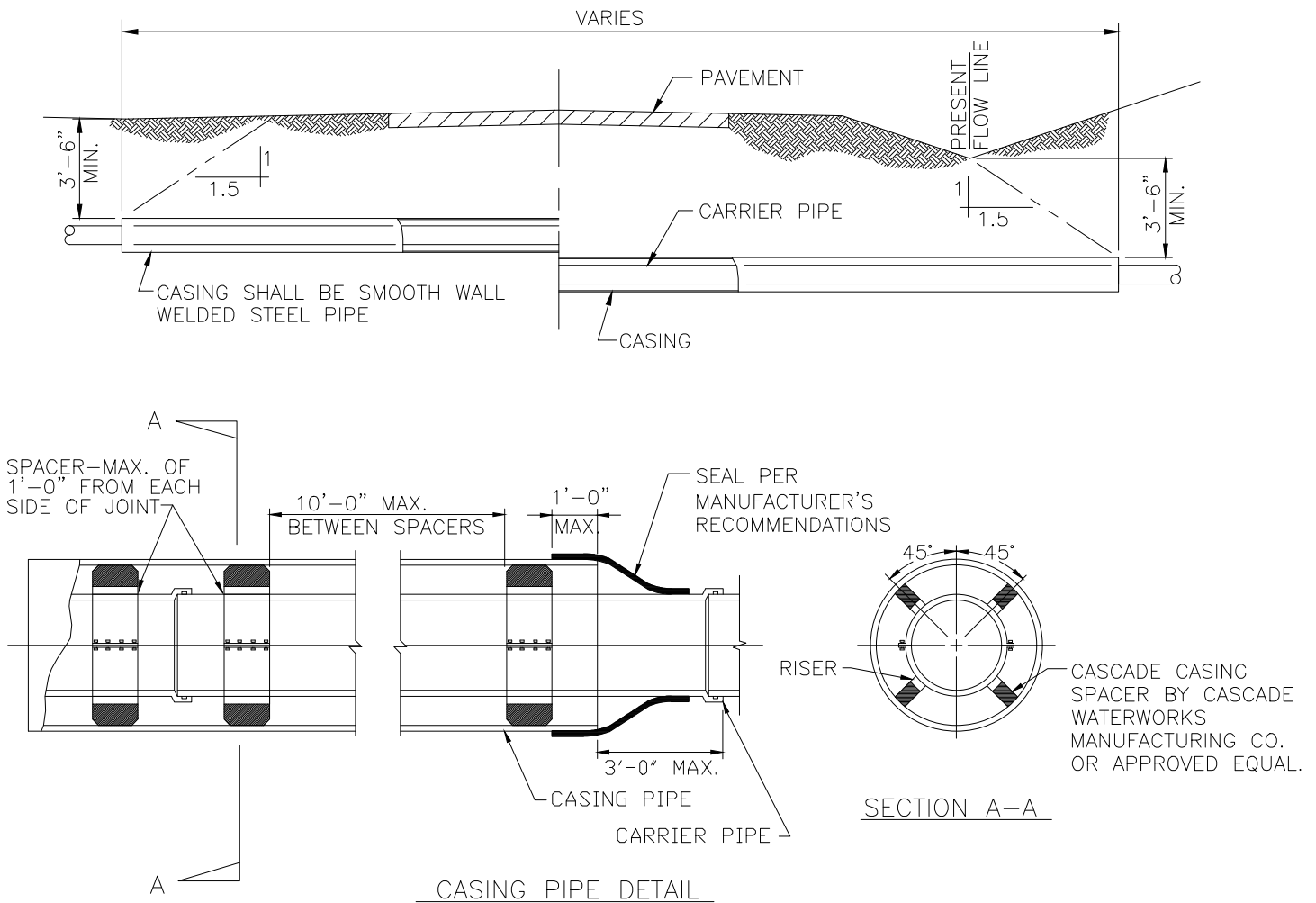
PIPE SIZE (IN)	CITY REQUIRED MIN. RADIUS (FT)
2	90
4	170
6	250
8	325
10	405
12	480

CITY OF OZARK

EMBEDMENT OF PIPE
DETAIL

PIPE-1

DATE **09-01-2023** REVISION 6



DETAIL NOTES:

1. DEPTH OF BORING PIT SHALL BE AS REQUIRED.
2. THE DRILLED HOLE FOR THE CASING PIPE SHALL BE SLIGHTLY UNDERSIZED AND THE PIPE JACKED THROUGH TO ELIMINATE VOIDS BETWEEN PIPE AND HOLE.
3. BOTH ENDS OF CASING WILL BE SEALED AS PER MANUFACTURER'S RECOMMENDATION.
4. #12 AWG COPPER CLAD STEEL TRACER WIRE SHALL BE PROVIDED. THE TRACER WIRE SHALL BE TOTALLY ANNEALED 1055 STEEL, EXTRA HIGH STRENGTH WITH A BREAK LOAD OF 1150 LB AND A 45 MI MINIMUM HDPE COATING.
5. MATERIALS TO BE USED FOR THIS PURPOSE SHALL NOT BE LESS THAN TEN FOOT LENGTHS.
6. ALL JOINT ENDS SHALL BE CUT AT 90 DEGREES TO THE LONGITUDINAL AXIS OF THE PIPE.
7. EACH END SHALL BE BEVELED AND JOINTS SHALL BE BUTT WELDED AROUND THE ENTIRE PERIMETER OF THE PIPE.
8. TWO TRACER WIRES SHALL BE PROVIDED, INSTALLED ON OPPOSITE SIDES OF THE PIPE, WITH ONE WIRE AS BACKUP. TRACER WIRES SHALL BE PULLED THROUGH THE CASING PIPE IN CONJUNCTION WITH THE CARRIER PIPE. TRACER WIRE SPLICES ARE NOT PERMITTED WITHIN THE BORE SECTION.

SMOOTH WALL, WELDED STEEL PIPE WITH A MINIMUM WALL THICKNESS AS FOLLOWS WILL BE PERMITTED:

CASING DIAMETER (INCHES)	MINIMUM WALL THICKNESS
LESS THAN 6	0.250
6, 8, 10, 12, 14, 16	0.250
18, 20, 22	0.250
24, 26	0.281
28, 30, 32, 34	0.312
36, 38, 40, 48	0.344

CITY OF OZARK

BORE/ENCASEMENT
DETAIL

NTS

PIPE-2

DATE

4-27-2020

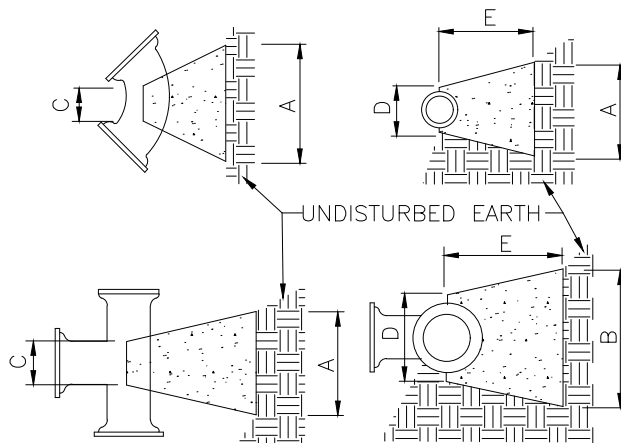
REVISION

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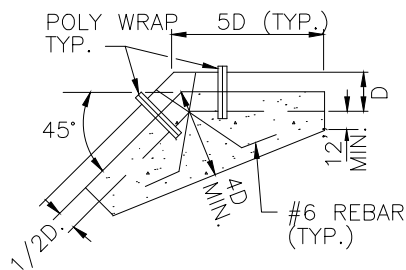
PIPE SIZE	FITTING	DISTANCE IN INCHES				
		A	B	C	D	E
4" AND SMALLER	11.25° & 22.5°	32	28	3	7	14
	45°	32	28	4	7	14
	90°	34	28	6	7	14
	TEE/PLUG	36	28	7	7	14
	11.25° & 22.5°	35	29	4	9	15
6"	45°	36	29	6	9	15
	90°	38	29	7	9	15
	TEE/PLUG	40	29	9	9	15
	11.25° & 22.5°	38	31	5	11	17
	45°	40	31	6	11	17
8"	90°	52	34	9	11	22
	TEE/PLUG	44	31	11	11	17
	11.25° & 22.5°	44	34	7	15	19
	45°	47/59	37	10	15	24
	90°	70/91	38/44	13	15	30/39
10" & 12"	TEE/PLUG	57/71	35/39	15	15	22/28
	11.25° & 22.5°	53	38	7	19	23
	45°	72/85	45	10	19	31/37
	90°	108/129	49/55	18	19	46/56
	TEE/PLUG	88/102	47	19	19	35/41
14" & 16"	11.25° & 22.5°	61	41	9	22	26
	45°	98	50	11	22	44
	90°	142	58	20	22	61
	TEE/PLUG	118	52	22	22	48

NOTES:

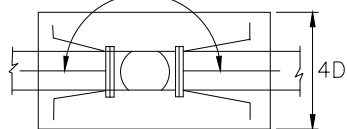
1. THRUST BLOCKS ARE BASED ON A WORKING PRESSURE OF 200 P.S.I., 36" COVER, & 2000 P.S.F. ALLOWABLE SOIL BEARING PRESSURE.
2. FOR PIPE SIZES NOT SHOWN USE DIMENSIONS FOR NEXT LARGER SIZE.
3. CONCRETE SHALL BE POURED AGAINST UNDISTURBED SOIL.
4. ALL THRUST BLOCKS TO BE INSPECTED BY CITY OF OZARK BEFORE BACKFILLING.



CONCRETE THRUST BLOCK DETAIL



MJ FITTING WITH RETAINER GLANDS
REQUIRED FOR ALL VERTICAL BENDS
180 DEG.



NOTE; ALSO PROVIDE MEGALUG RETAINED JOINTS ON BOTH SIDES OF VERTICAL THRUST BLOCK.

VERTICAL BEND THRUST BLOCK DETAIL

CITY OF OZARK

THRUST BLOCK
DETAILS

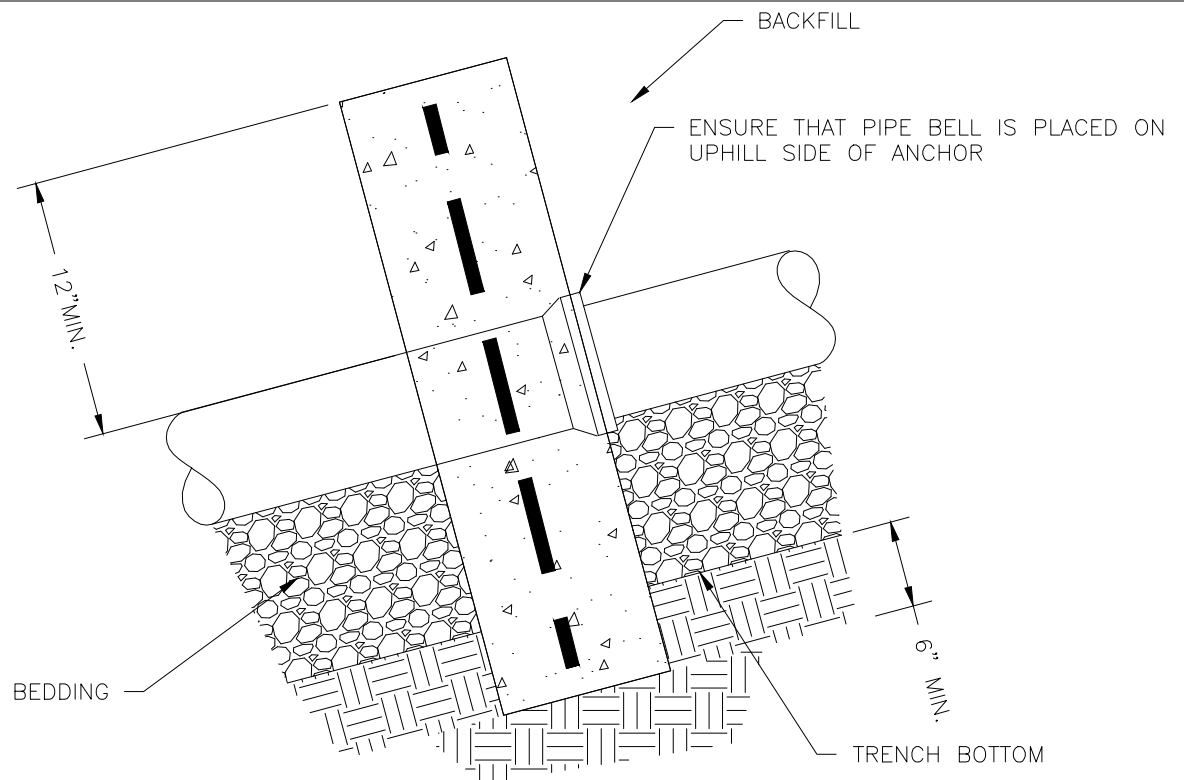
NTS

PIPE-3

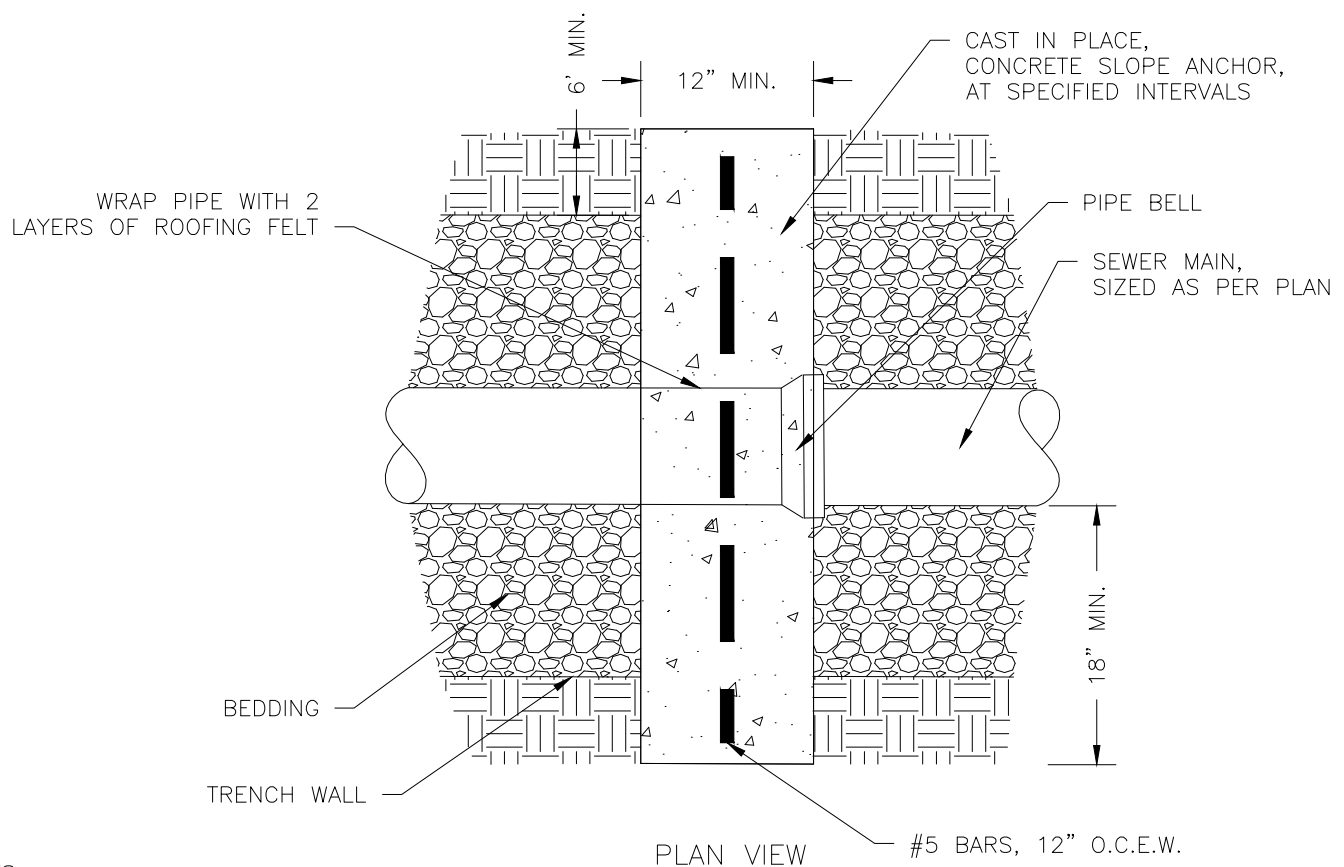
DATE
4-18-2017

REVISION

2



SECTION VIEW



NOTES:

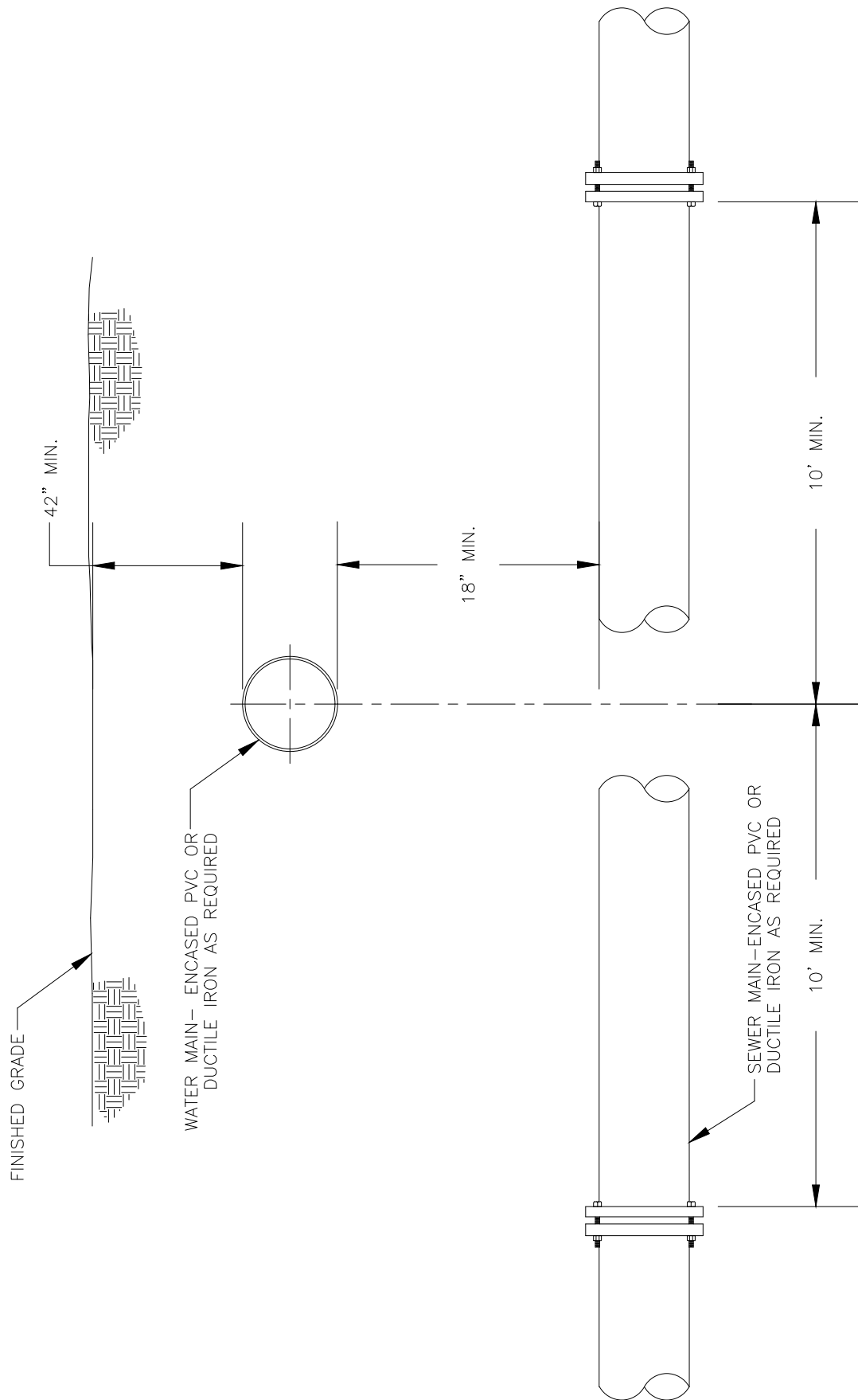
SANITARY SEWERS ON 20% SLOPE OR GREATER SHALL BE ANCHORED WITH CONCRETE SLOPE ANCHORS AS FOLLOWS;
 NOT OVER 36' CENTER-TO-CENTER ON GRADES FROM 20% AND UP TO 35%, AND
 NOT OVER 24' CENTER-TO-CENTER ON GRADES FROM 35% AND UP TO 50%.
 SLOPES SHALL NOT EXCEED 50%.

CITY OF OZARK	SLOPE ANCHOR DETAIL	PIPE-4	
		DATE 12-28-2016	REVISION 0

NTS

NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
2. IN AREAS WHERE THE RECOMMENDED SEPARATIONS CANNOT BE OBTAINED, EITHER THE WATER LINE OR THE SEWER LINE SHALL BE CONSTRUCTED OF MECHANICAL JOINT PIPE OR ENCASED IN A CONTINUOUS CASING.
3. ENCASMENT MAY CONSIST OF A 4" MINIMUM THICKNESS OF CONCRETE AROUND THE ENTIRE CIRCUMFERENCE OF THE PIPE.
4. OTHER ENCASMENT METHODS MAY BE SUBMITTED FOR EVALUATION AND POTENTIAL APPROVAL BY THE DIRECTOR OF PUBLIC WORKS.



CITY OF OZARK

CROSSING DETAIL
WATER OVER SEWER

NTS

PIPE-5

DATE

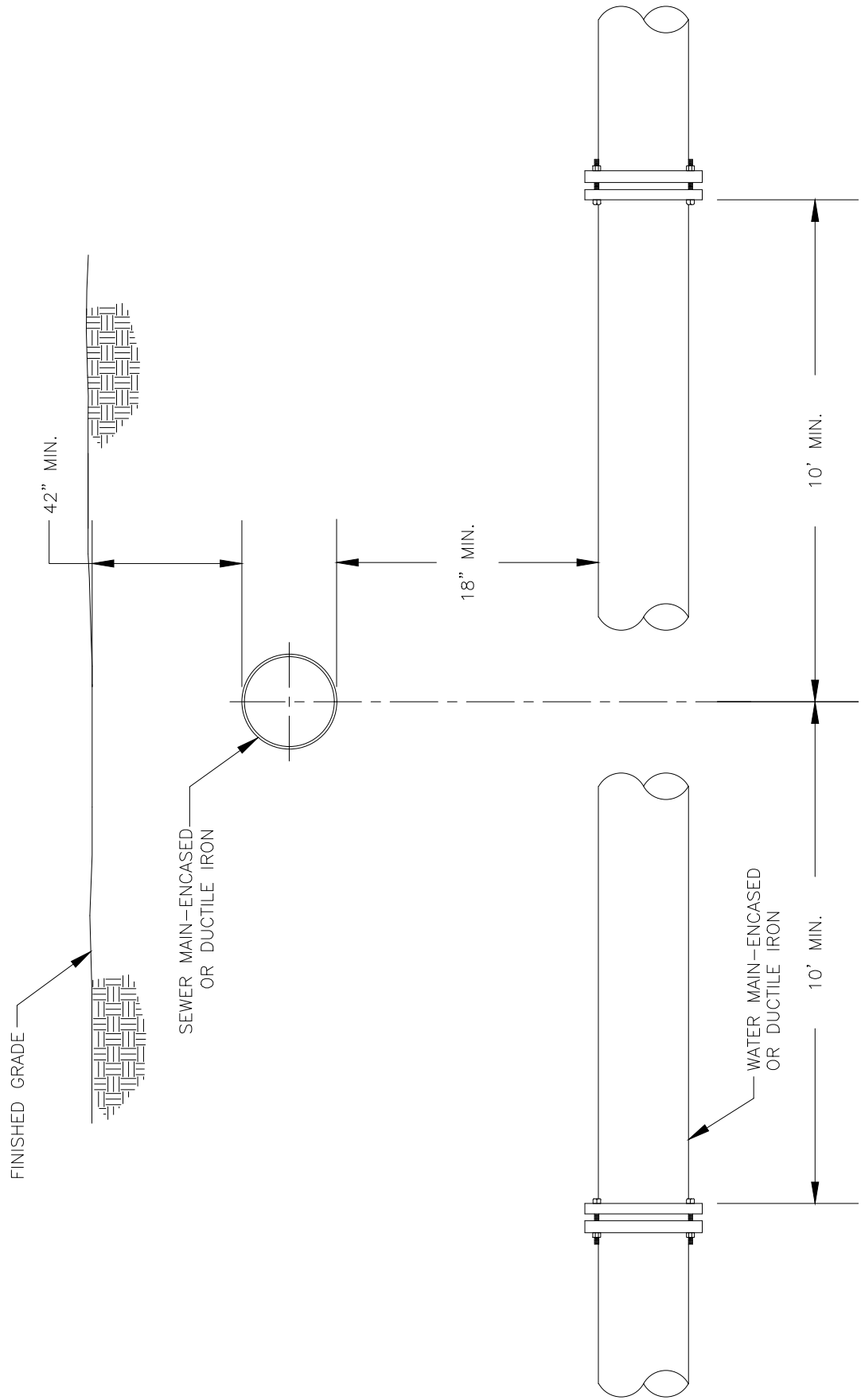
4-15-2020

REVISION

0

NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
2. IN AREAS WHERE THE RECOMMENDED SEPARATIONS CANNOT BE OBTAINED, EITHER THE WATER LINE OR THE SEWER LINE SHALL BE CONSTRUCTED OF MECHANICAL JOINT PIPE OR ENCASED IN A CONTINUOUS CASING.
3. ENCASUREMENT MAY CONSIST OF A 4" MINIMUM THICKNESS OF CONCRETE AROUND THE ENTIRE CIRCUMFERENCE OF THE PIPE.
4. OTHER ENCASUREMENT METHODS MAY BE SUBMITTED FOR EVALUATION AND POTENTIAL APPROVAL BY THE DIRECTOR OF PUBLIC WORKS.



CITY OF OZARK

CROSSING DETAIL
SEWER OVER WATER

NTS

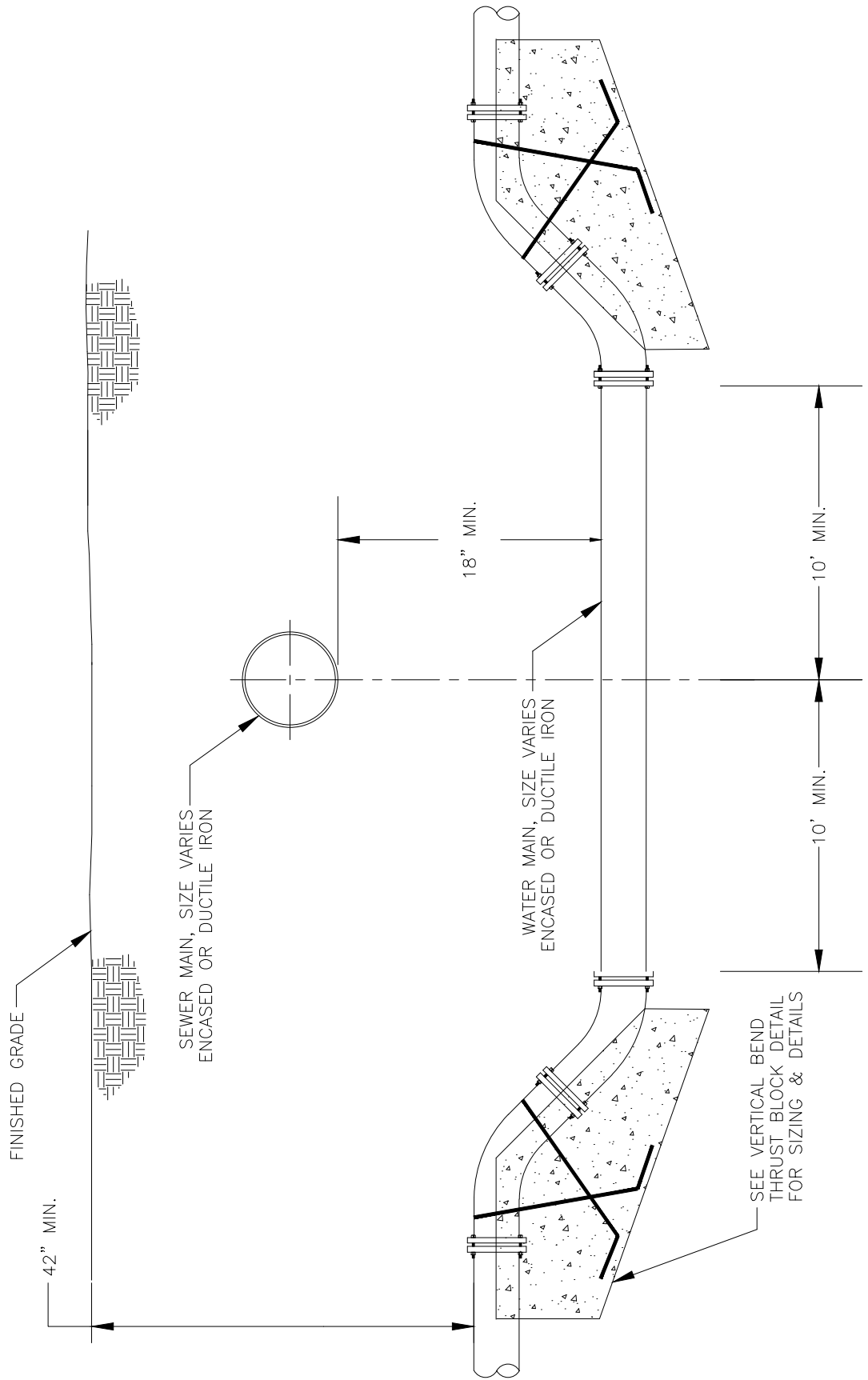
PIPE-6

DATE
4-15-2020

REVISION
0

NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
2. IN AREAS WHERE THE RECOMMENDED SEPARATIONS CANNOT BE OBTAINED, EITHER THE WATER LINE OR THE SEWER LINE SHALL BE CONSTRUCTED OF MECHANICAL JOINT PIPE OR ENCASED IN A CONTINUOUS CASING.
3. ENCASEMENT MAY CONSIST OF A 4" MINIMUM THICKNESS OF CONCRETE AROUND THE ENTIRE CIRCUMFERENCE OF THE PIPE.
4. OTHER ENCASEMENT METHODS MAY BE SUBMITTED FOR EVALUATION AND POTENTIAL APPROVAL BY THE DIRECTOR OF PUBLIC WORKS.



CITY OF OZARK

LOOPING WATER MAIN
DETAIL

NTS

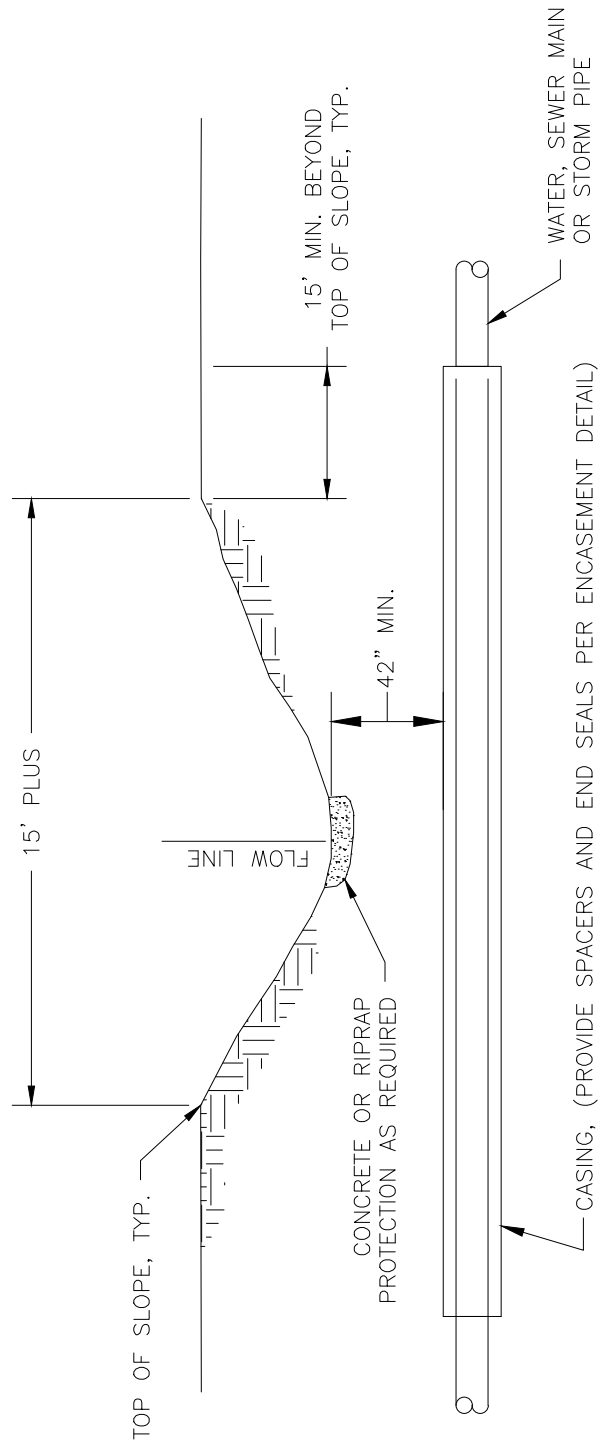
DATE

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REVISION

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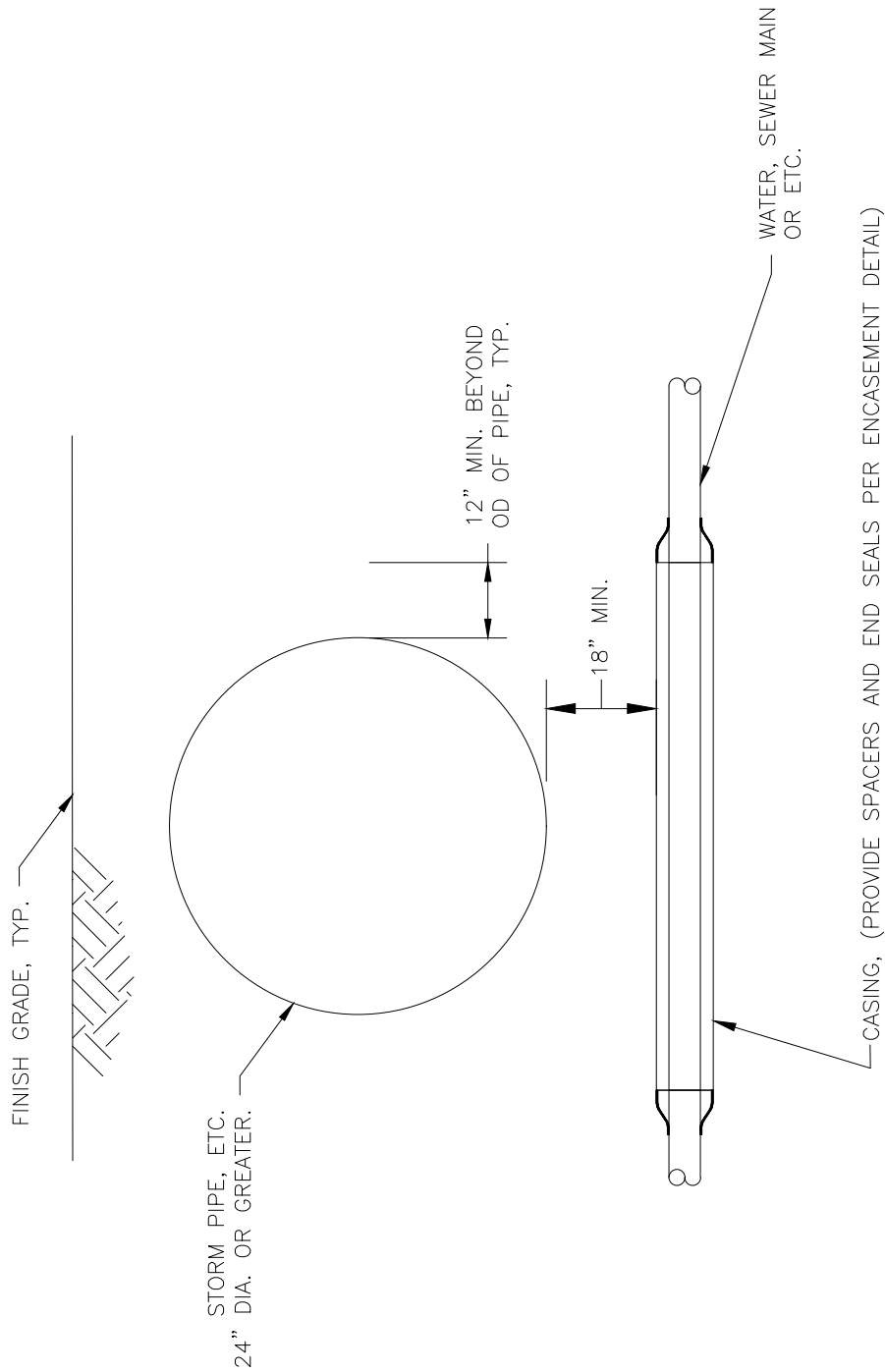
PIPE-7



NOTE;
 WHEN CROSSING WATERWAYS OR WET WEATHER STREAMS THAT EXCEED 15' WIDTH FROM
 TOP OF SLOPE TO TOP OF SLOPE, ALL WATER MAINS, SEWER MAINS OR STORM PIPES
 SHALL BE ENCASED IN AN APPROPRIATE SIZED CASING. THE STREAM CROSSING AT THE
 PIPE LOCATION SHALL BE HARDENED WITH CONCRETE OR RIPRAP PROTECTION AS REQUIRED.

CITY OF OZARK	WATERWAY CROSSINGS DETAIL		PIPE-8	
			DATE 3-20-2017	REVISION 0

NTS



- NOTES
1. WHEN CROSSING UNDER 24" OR LARGER PIPES, ALL WATER MAINS, SEWER MAINS OR ETC. SHALL BE ENCASED IN AN APPROPRIATE SIZED CASING. PROVIDE END SEALS AND SPACERS.
 2. CONCRETE ENCASUREMENT MAY BE PERMITTED ON CASE-BY-CASE BASIS WITH PRIOR APPROVAL FROM THE DIRECTOR OF PUBLIC WORKS, THE CITY INSPECTOR, OR THEIR DESIGNEE.

CITY OF OZARK

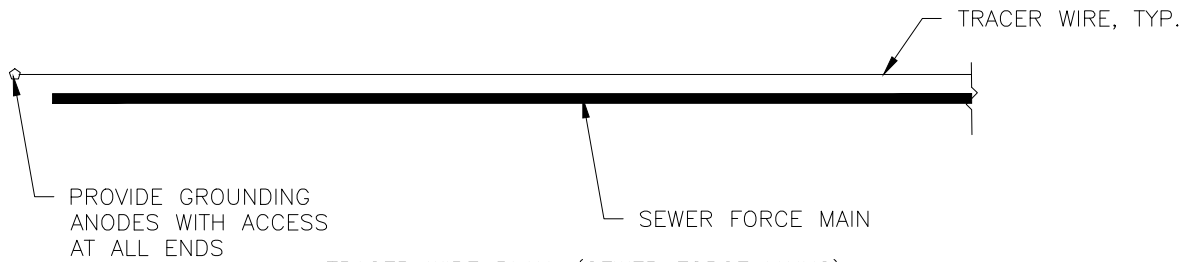
LARGE PIPE CROSSINGS DETAIL

NTS

PIPE-8A

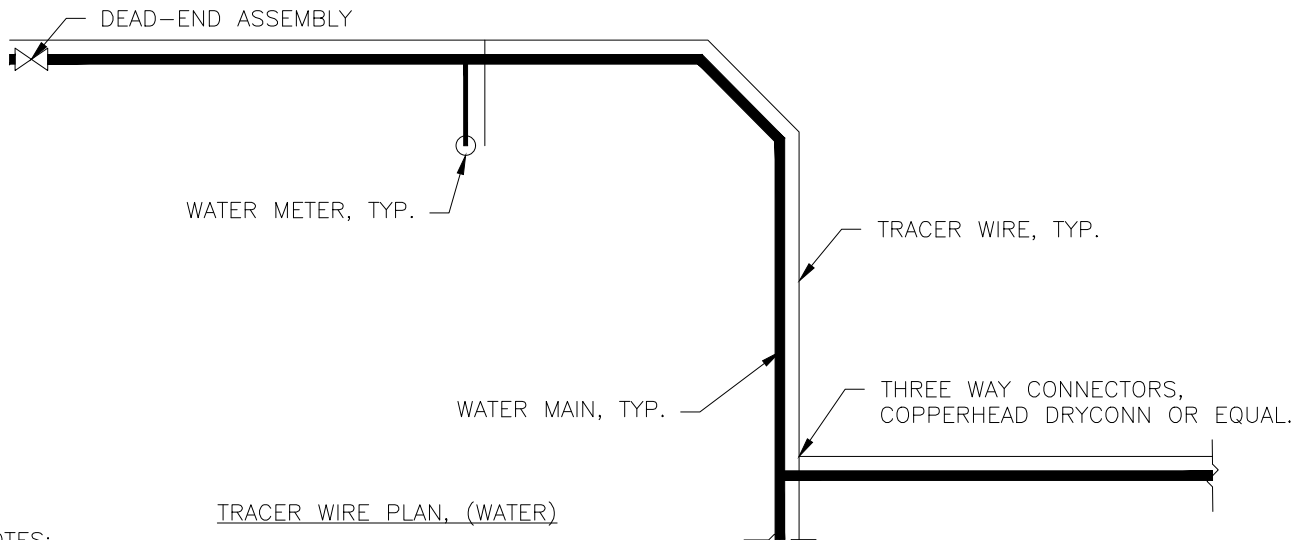
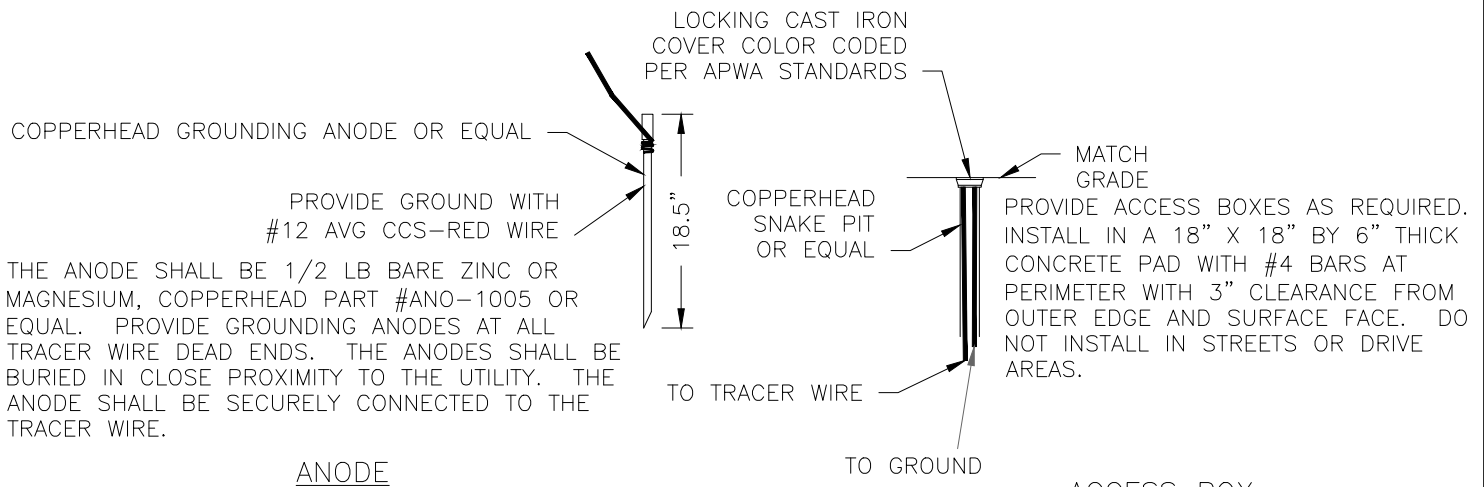
DATE
10-11-2024

REVISION
0



TRACER WIRE PLAN, (SEWER FORCE MAINS)

TRACE WIRE AND DETECTABLE MARKING TAPE. A TRACE WIRE AND DETECTABLE MARKING TAPE SHALL BE INSTALLED THE ENTIRE LENGTH OF ANY FORCE MAIN. TRACER WIRE SHALL BE ACCESSIBLE FROM THE SURFACE AT INTERVALS NOT TO EXCEED 1000- FEET OF DEVELOPED PIPE LENGTH APART, AND ADJACENT TO ALL AIR VALVE VAULTS. TERMINAL/ACCESS BOXES SHALL BE GRADE LEVEL, IN-GROUND TYPE SPECIFICALLY MANUFACTURED FOR SUCH APPLICATIONS. TERMINAL BOXES SHALL BE INSTALLED FLUSH WITH FINISHED GRADE AND CENTERED IN GRADE LEVEL REINFORCED CONCRETE PAD, MINIMUM 18" BY 18" BY 6" THICK, AT LOCATIONS APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR HIS DESIGNEE. IN ADDITION TO TRACE WIRE, A DETECTABLE MARKING TAPE SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES SHALL BE INSTALLED THE ENTIRE LENGTH OF THE FORCE MAIN. MARKING TAPE SHALL BE INSTALLED DIRECTLY OVER FORCE MAIN AT A DEPTH OF 18- TO 24-INCHES BELOW FINISHED GRADE.



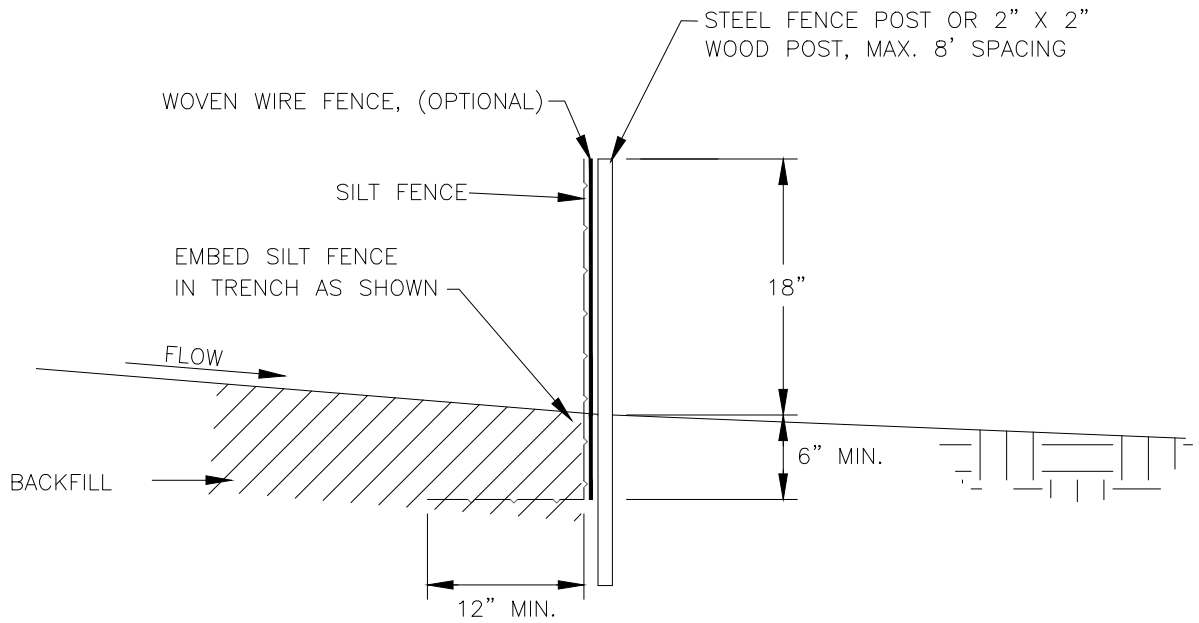
TRACER WIRE PLAN, (WATER)

GENERAL NOTES;

1. TRACER WIRE SHOWN AWAY FROM MAINS ONLY FOR CLARITY.
2. WIRE SHALL BE INSTALLED ON THE BOTTOM SIDE OF ALL WATER AND FORCE MAINS AND WATER AND SEWER SERVICES BELOW THE SPRING LINE.
3. TRACER WIRE SHALL BE #12 AWG COPPER CLAD STEEL, HIGH STRENGTH, TOTALLY ANNEALED 1055 STEEL WITH A BREAK LOAD OF 452 LB AND A 30 MI MINIMUM THICKNESS HDPE COATING.
4. WIRE SHALL BE PROPERLY GROUNDED AT ALL DEAD ENDS/STUBS.
5. PROVIDE TRACER WIRE ACCESS AT ALL WATER VALVES AND METER PITS AND AIR RELIEF VALVES.

CITY OF OZARK	TRACER WIRE SCHEMATIC DETAIL	PIPE-10	
		DATE 5-03-2021	REVISION 2

NTS



NOTES:

1. PLACE SILT FENCE AT DOWNSLOPE LIMIT OF AREA TO BE GRADED.
2. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WOVEN WIRE WHICH IS IN TURN ATTACHED TO THE SUPPORT POSTS.
3. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS REQUIRED.
4. SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS, SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
5. ACCUMULATED SILT/SEDIMENT SHALL BE REMOVE WHEN IT REACHES A DEPTH OF 6" AND DISPOSED OF IN AN APPROVED SPOIL SITE.
6. AT EACH END OF SILT FENCE, TURN FENCE UPSLOPE AND EXTEND UNTIL GROUND SURFACE RISES 18".
7. PRE-FABRICATED SILT FENCE PRODUCTS MAY BE SUBSTITUTED IF APPROVED BY THE CITY OF OZARK.
8. SILT-SOX IS AN APPROVED SUBSTITUTE.

CITY OF OZARK

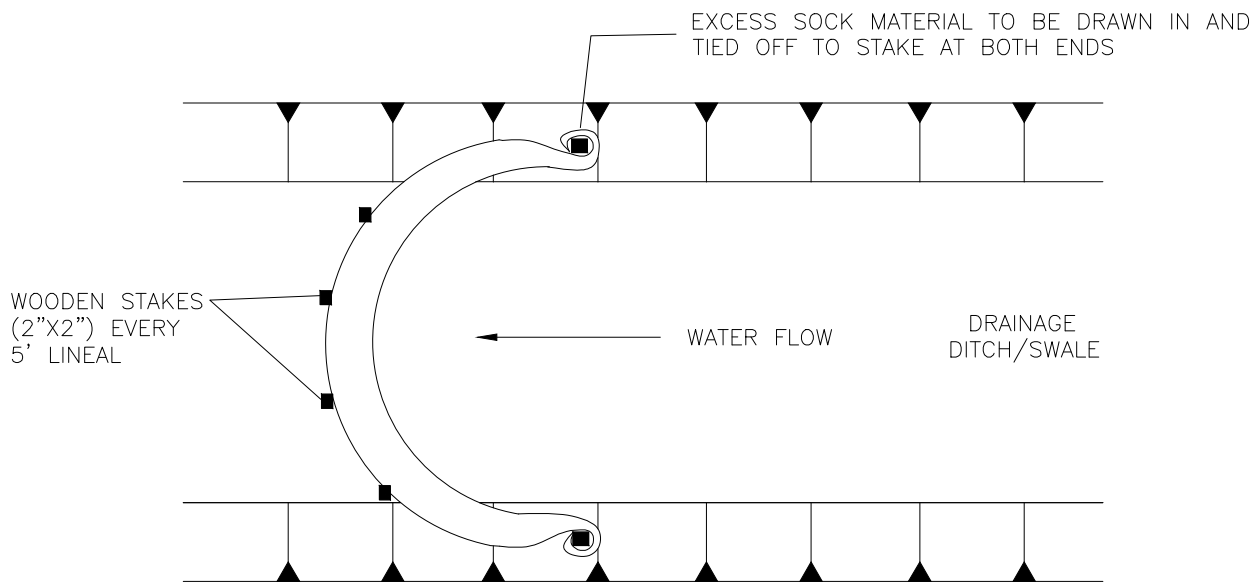
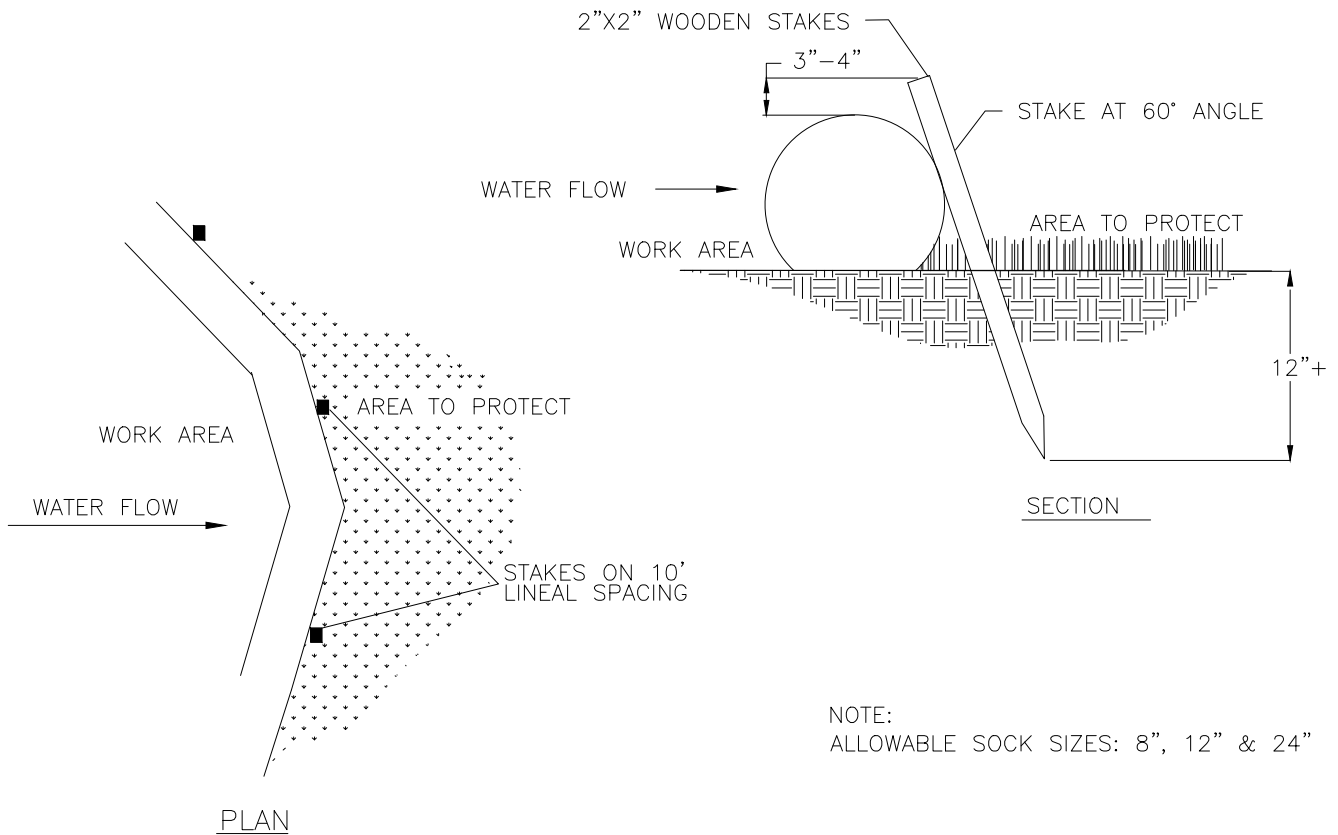
SILT FENCE
DETAIL

NTS

SEC-1

DATE
4-26-07

REVISION
2



DITCH CHECK

NOTES;

1. FOLLOW THE MANUFACTURER'S SPECIFICATIONS.
2. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS REQUIRED.
3. SILT SOCK MAY BE REMOVED WHEN IT HAS SERVED IT'S USEFULNESS, SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
4. ACCUMULATED SILT AND SEDIMENT SHALL BE REMOVE WHEN IT REACHES A DEPTH OF 6" AND DISPOSED OF IN AN APPROVED SPOIL SITE.
5. **SILT SOCK SPACING SHALL BE PER THE CITY'S DESIGN STANDARDS.**

CITY OF OZARK

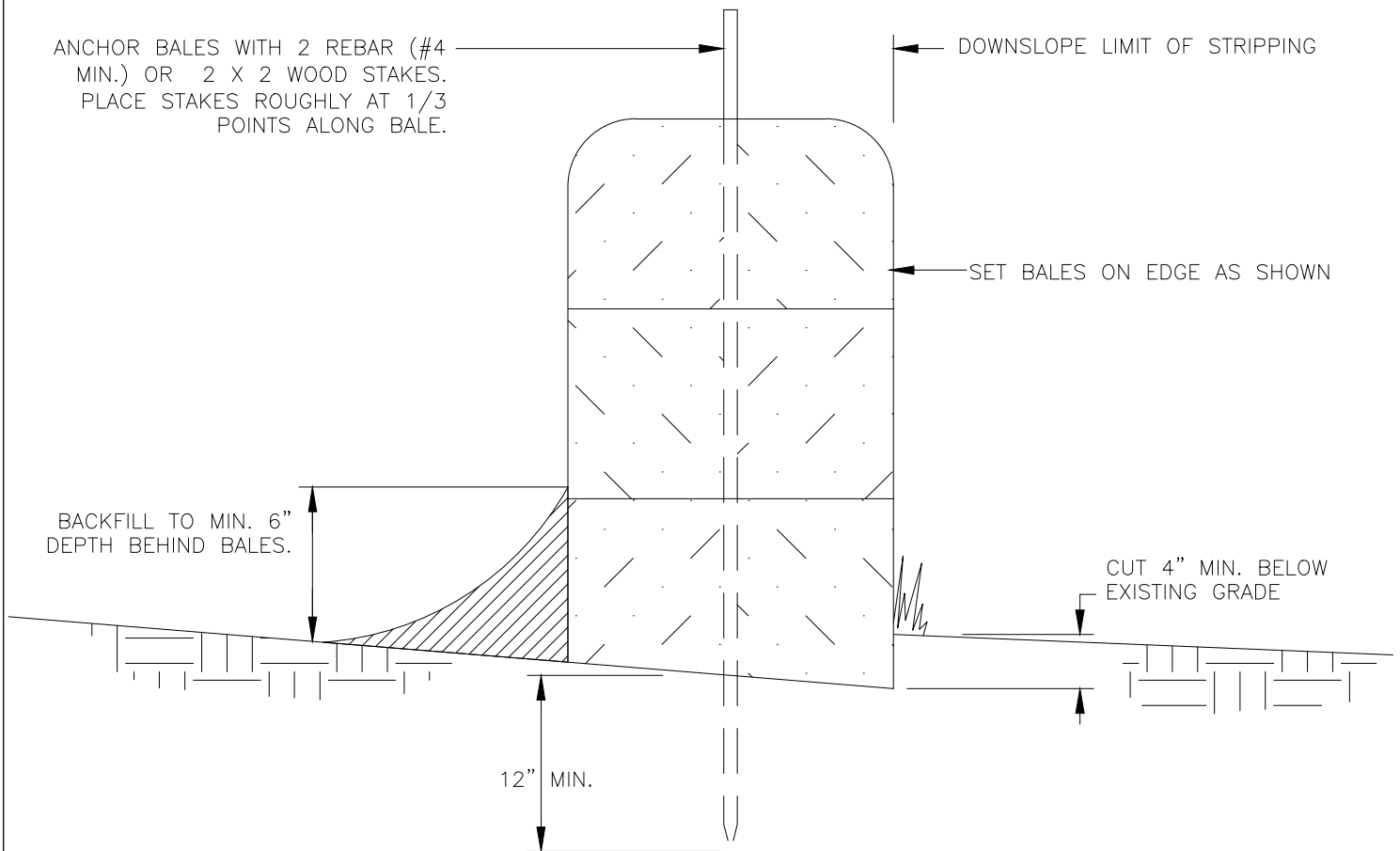
SILT SOCK
DETAIL

NTS

SEC-2

DATE
10-28-2024

REVISION
3



NOTES:

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR INCHES, WHERE POSSIBLE.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS TO NOT BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6" AND DISPOSED OF IN AN APPROVED SITE.
7. AT EACH END OF DIKE, TURN DIKE UPSLOPE AND EXTEND UNTIL GROUND SURFACE RISES 18".

CITY OF OZARK

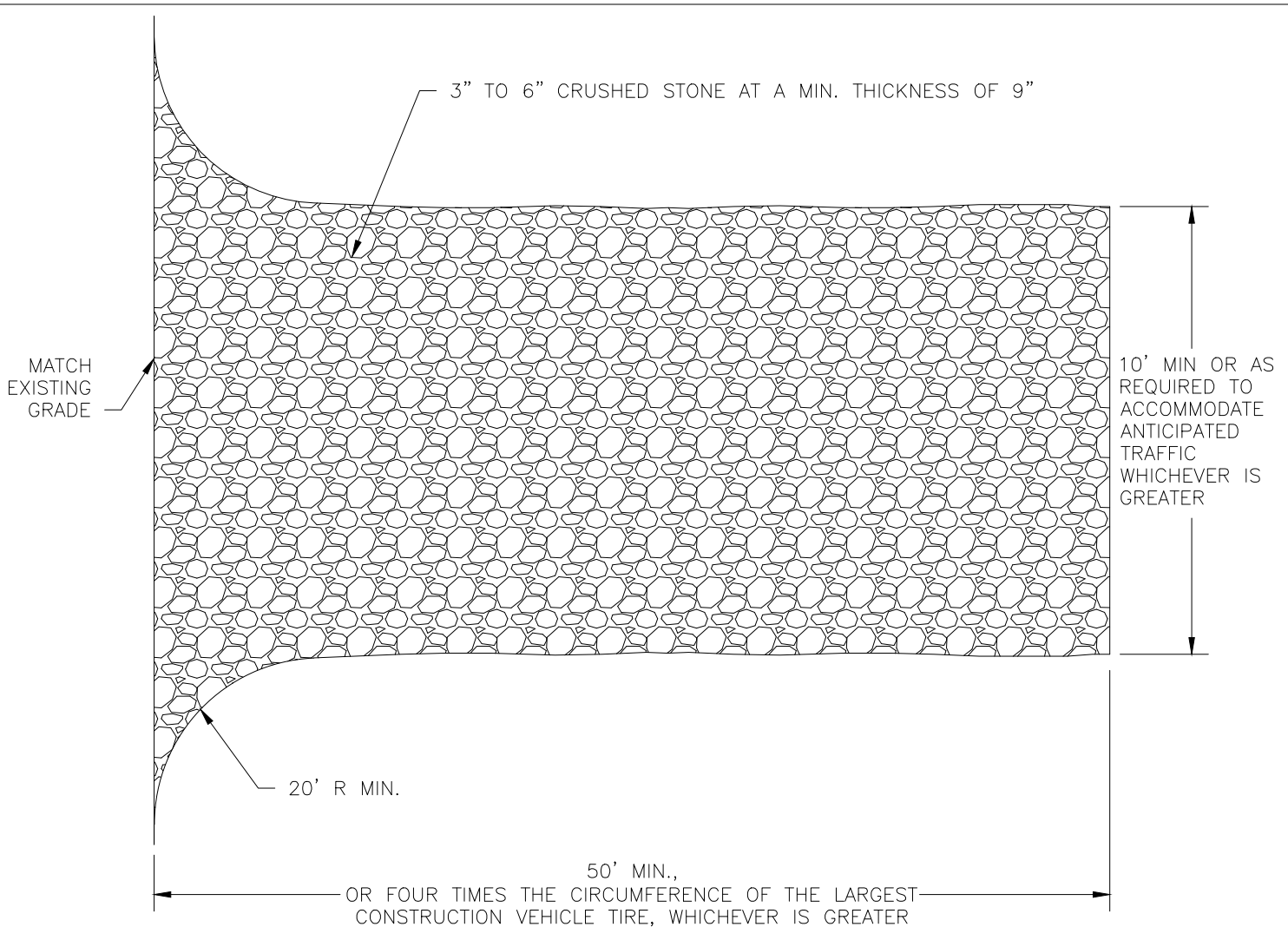
STRAW BALE DIKE
DETAIL

NTS

DATE
7-18-05

REVISION
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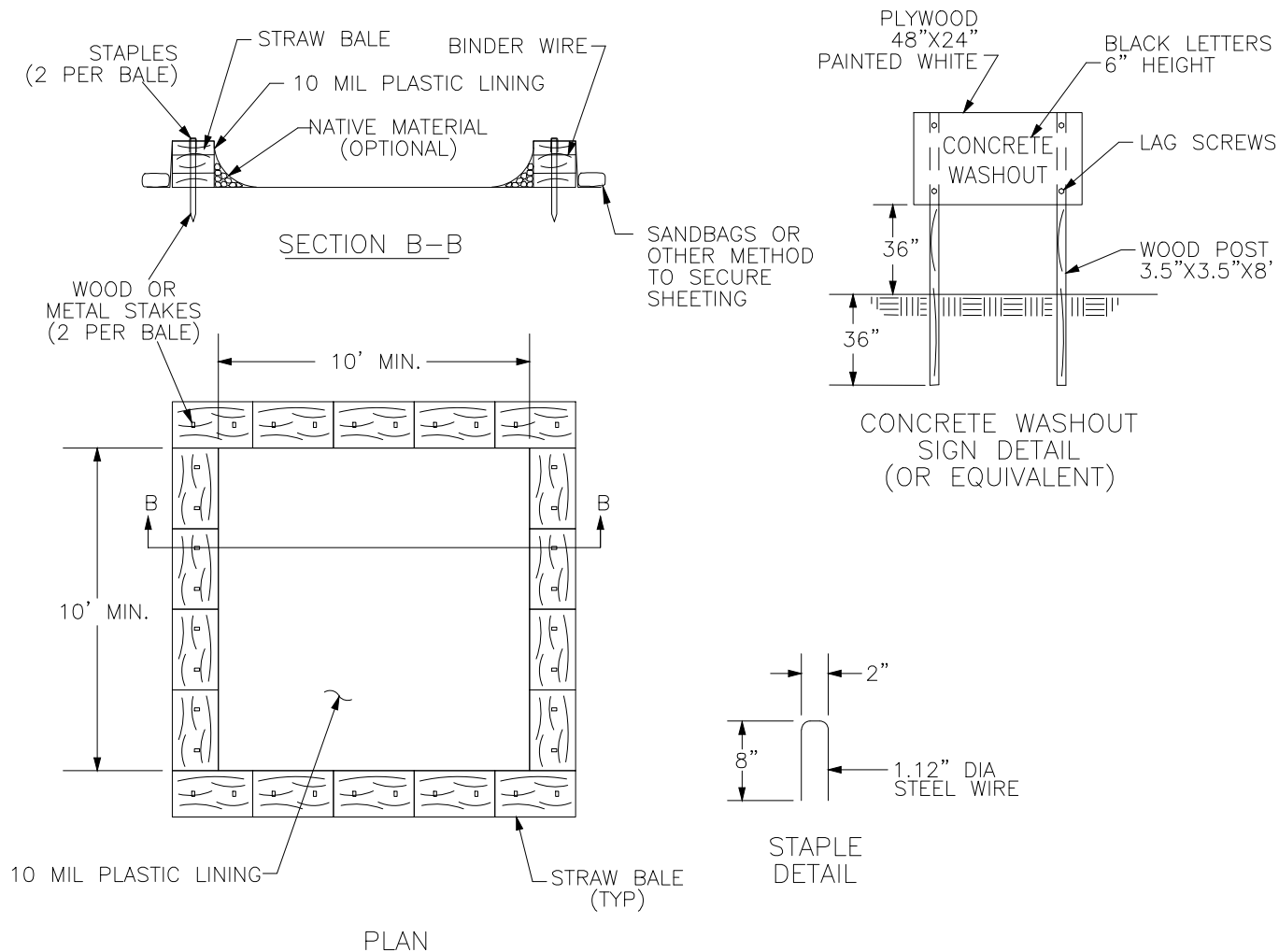
SEC-3



PLAN

NOTES;

1. THE CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION WORK BEING ACCOMPLISHED. AVOID LOCATING ON STEEP SLOPES, AT CURVES ON PUBLIC ROADS OR DOWNHILL OF DISTURBED AREAS. REMOVE ALL VEGETATION AND UNSUITABLE MATERIAL FROM THE FOUNDATION AREA. A GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE FILL AND THE EARTH SURFACE..
2. PROPERLY GRADE EACH CONSTRUCTION ENTRANCE/EXIT TO PREVENT RUNOFF FROM LEAVING THE SITE. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO SEDIMENT CONTROL DEVICE. IF THE SLOPE TOWARD THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6 TO 8 INCH HIGH RIDGE WITH 1/3 SIDE SLOPES TO DIVERT ANY RUNOFF AWAY FROM THE PUBLIC ROAD.
3. INSTALL CULVERT UNDER ENTRANCE IF REQUIRED TO MAINTAIN POSITIVE DRAINAGE.
4. ALL VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ACCESS.
5. THE CONSTRUCTION ENTRANCE/EXIT SHALL BE INSPECTED WEEKLY AND AFTER 1/2" STORM EVENTS.
6. REPLACE ROCK, IF NECESSARY, TO MAINTAIN A CLEAN SURFACE AND REPAIR ANY AREAS THAT HAVE SETTLED.
7. IMMEDIATELY REMOVE ANY MUD OR DEBRIS TRACKED ONTO PAVED SURFACES.
8. REMOVE ALL CONSTRUCTION ENTRANCE/EXIT WHEN VEHICLES AND EQUIPMENT WILL NO LONGER ACCESS UNPAVED AREAS.



NOTES:

1. OTHER CONFIGURATIONS OF CONCRETE WASHOUTS MAY BE SUBMITTED FOR REVIEW AND POSSIBLE APPROVAL.
2. THE CONCRETE WASHOUT MAY BE CONSTRUCTED EITHER ABOVE OR BELOW GRADE.
3. THE LOCATION OF THE CONCRETE WASHOUT SHALL BE SHOWN ON THE EROSION AND CONTROL PLANS.
4. THE REQUIRED SIZE SHALL BE DETERMINED BY THE DESIGN ENGINEER AND INDICATED ON THE DRAWINGS.
5. THE CONCRETE WASHOUT SHALL HAVE SUFFICIENT VOLUME. DISCHARGE WILL NOT BE ACCEPTABLE.
6. THE CONCRETE WASHOUT SHALL BE INSTALLED PRIOR TO ANY CONCRETE DELIVERY TO THE SITE.
7. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE CONCRETE WASHOUT.
8. THE CONCRETE WASHOUT SHALL NOT BE INSTALLED WITHIN 50' OF ANY STREAM, WETLAND, STORM DRAINS OR OTHER SENSITIVE AREAS.
9. THE LINER SHALL BE ONE PIECE WITHOUT SEAMS.
10. THE CONCRETE WASHOUT SHALL BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY AND ADEQUATE HOLDING CAPACITY. THEY SHALL ALSO BE INSPECTED AFTER HEAVY RAINS.
11. ONLY CONCRETE WASHOUT SHALL BE PLACED INTO THE CONCRETE WASHOUTS.
12. THE HARDENED CONCRETE WASTE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO 75% OF THE WASHOUT'S CAPACITY.
13. AFTER COMPLETION OF ALL CONCRETE WORK, THE CONCRETE WASHOUT FACILITY SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF SITE.

CITY OF OZARK

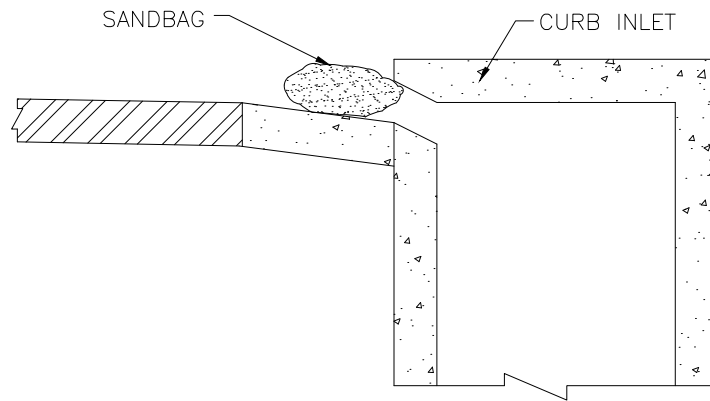
CONCRETE WASH OUT
DETAIL

NTS

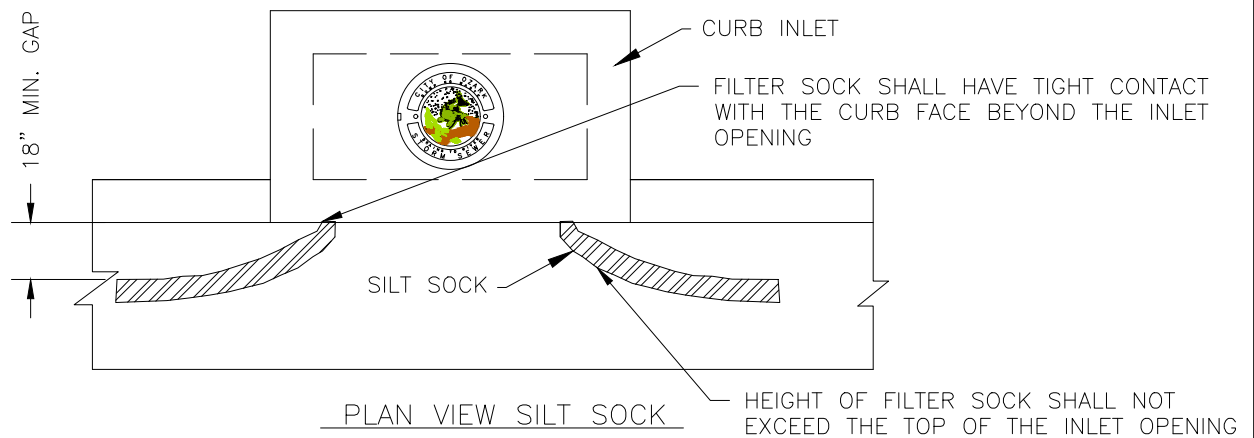
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REVISION
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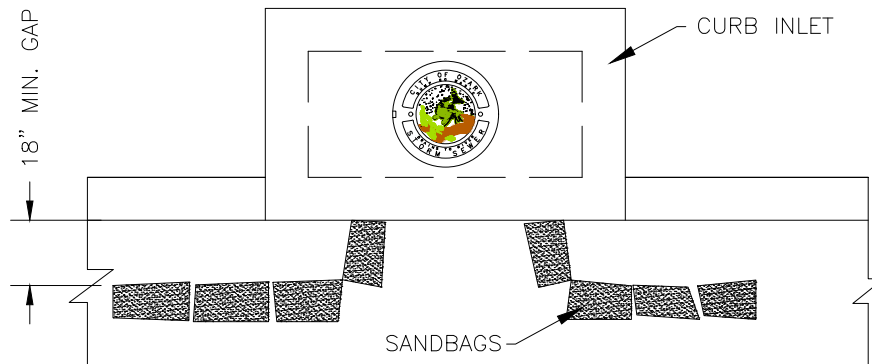
SEC-5



CROSS SECTION



PLAN VIEW SILT SOCK



PLAN VIEW SAND BAGS

NOTES;

1. SANDBAGS FILLED WITH CHAT OR LIMESTONE SAND MAY BE USED IN THE CONFIGURATION SHOWN AS A MEASURE TO CONTROL SILT AND SEDIMENT.
2. THE NUMBER OF SANDBAGS SHALL BE ADJUSTED AS NECESSARY FOR THE EXISTING FLOW/CONDITIONS.
3. THE TOP IF THE SANDBAGS SHALL BE LOWER THAN THE TOP OF CURB.
4. THE SANDBAGS SHALL HAVE TIGHT CONTACT WITH THE CURB FACE.
5. CLEAN UP AND ADEQUATE MAINTENANCE OF SILT/SEDIMENT DEPOSIT SHALL BE PROVIDED DURING THIS PERIOD.
6. SANDBAGS SHALL BE REMOVED AFTER ADJACENT EARTHWORK OPERATION IS COMPLETED AND IT HAS SERVED IT'S USEFULNESS, SO AS NOT TO IMPEDE STORM FLOW OR DRAINAGE.
7. FILTER SOCK MAY ALSO BE PLACED ACROSS THE OPENING OF THE CURB INLET AS A SOLUTION.
8. STRAW BALES ARE NOT PERMITTED.
9. ALL INLETS AND STORM PIPES SHALL BE CLEANED OF SILT AND SEDIMENT PRIOR TO FINAL APPROVAL.

CITY OF OZARK

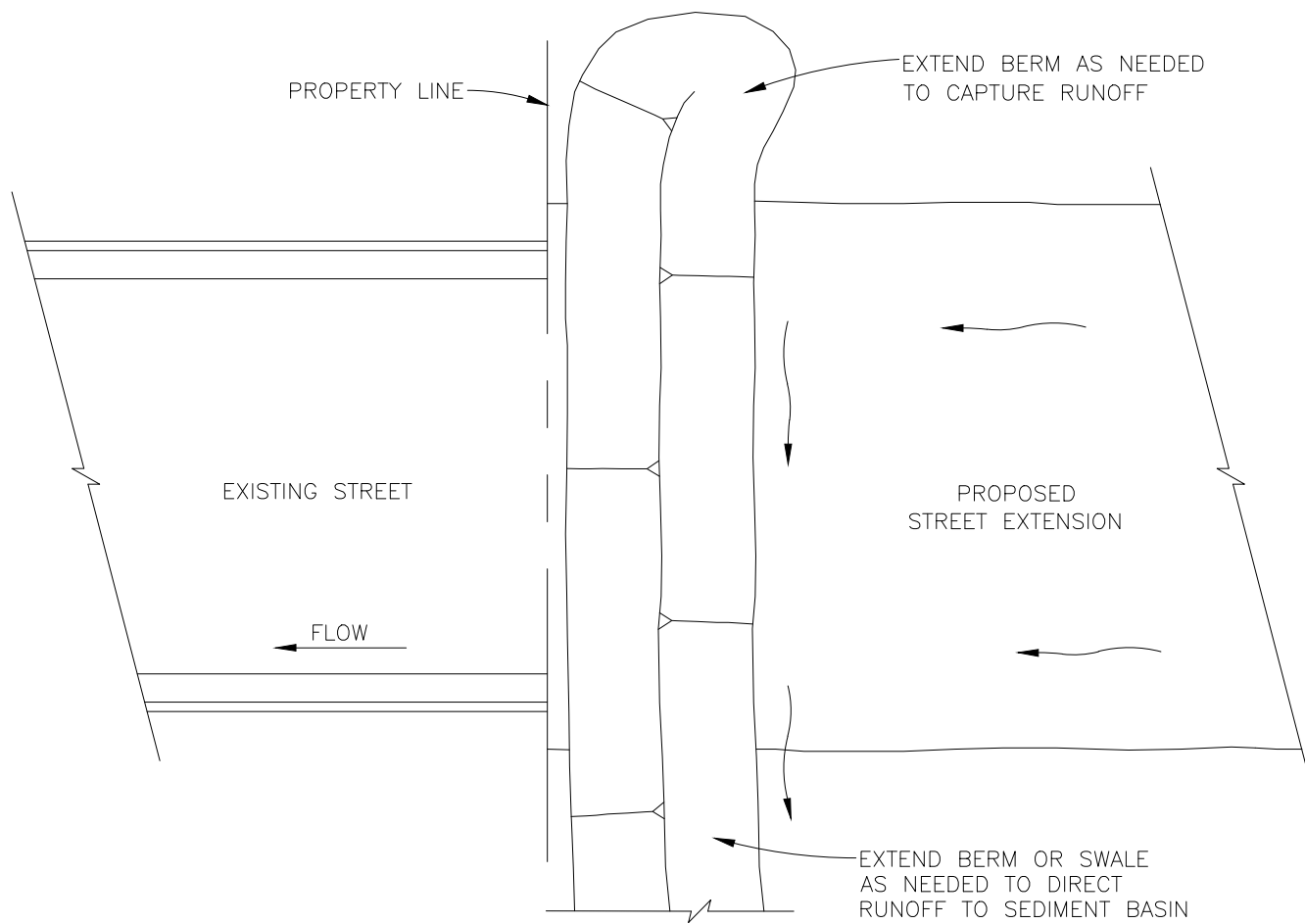
SAND BAG SEDIMENT TRAP
DETAIL

NTS

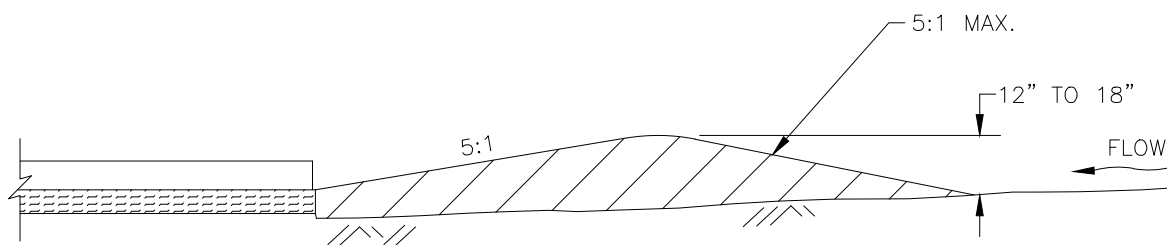
SEC-6

DATE
02-14-2017

REVISION
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PLAN



CROSS-SECTION

CASE 1 - AFTER INITIAL EXCAVATION OF SUBGRADE.

CITY OF OZARK

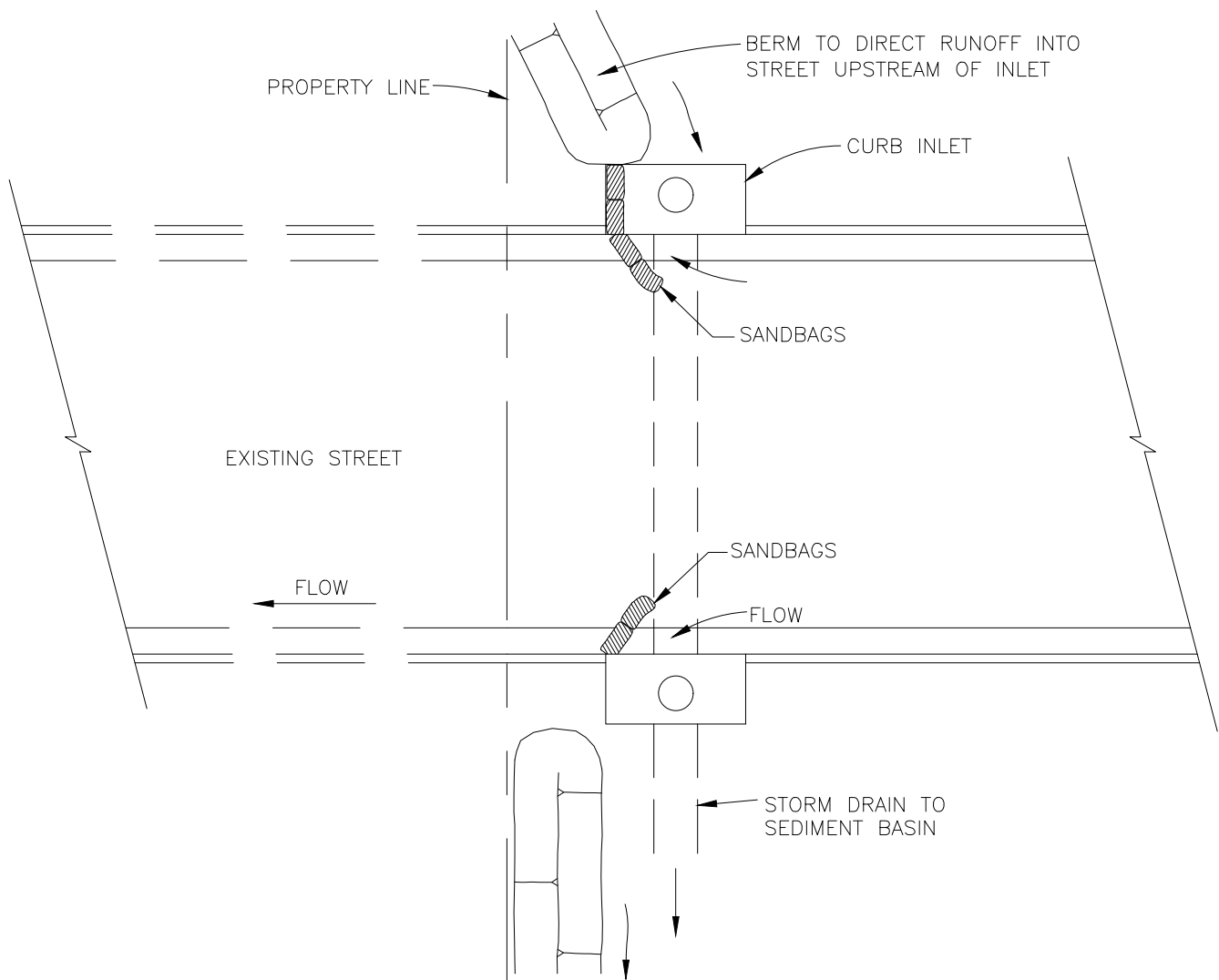
DIVERSION OF RUNOFF, CASE I
DETAIL

NTS

SEC-7

DATE
4-18-06

REVISION
0



PLAN

NOTE: FILL SANDBAGS WITH CHAT OR LIMESTONE SAND

CASE 2 - AFTER PAVEMENT AND INLETS COMPLETED.

CITY OF OZARK

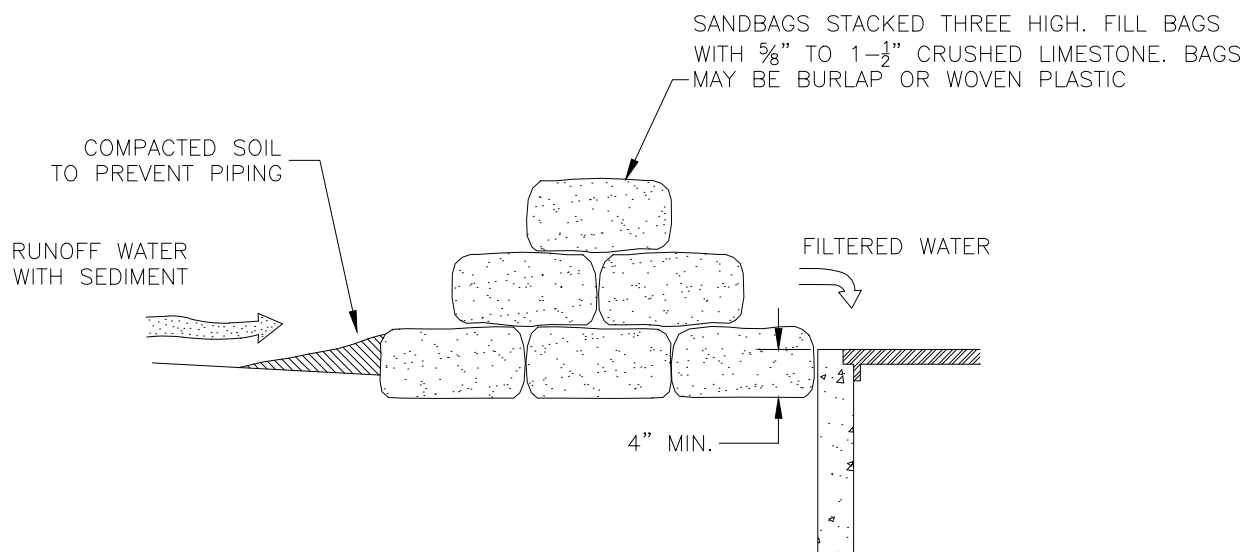
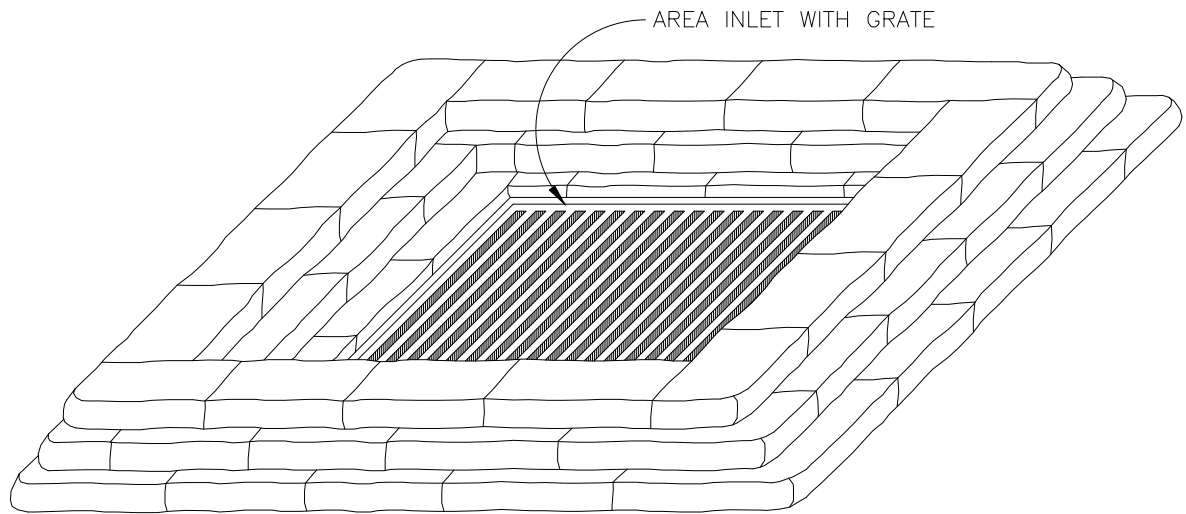
DIVERSION OF RUNOFF, CASE II
DETAIL

NTS

SEC-8

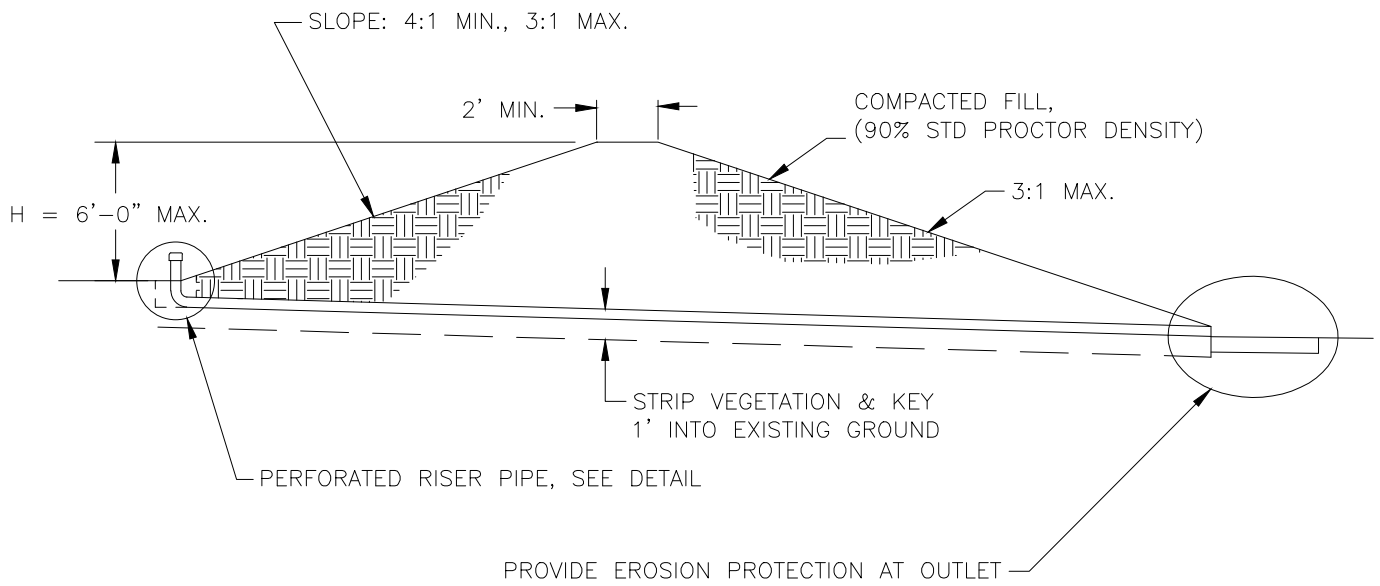
DATE
4-18-06

REVISION
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NOTES:

1. STACKED SANDBAGS MAY BE USED IN PAVED AREAS.
2. OUTSIDE OF PAVED AREAS OR BEFORE PAVEMENT IS PLACED, AREA INLETS CAN BE PROTECTED BY INSTALLING A SUITABLE SEDIMENT CONTROL DEVICE BUT STRAW BALES ARE NOT PERMITTED.
3. ACCUMULATED SEDIMENT MUST BE REMOVED FROM STORM SYSTEM PRIOR TO FINAL APPROVAL.



SECTION A - A

CITY OF OZARK

BERM & OUTLET STRUCTURE
DETAIL

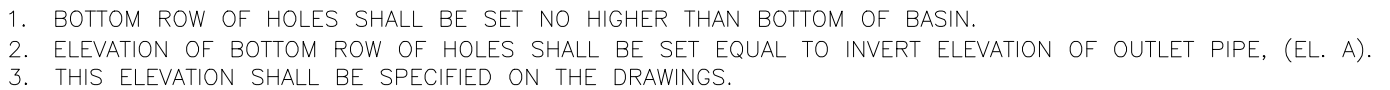
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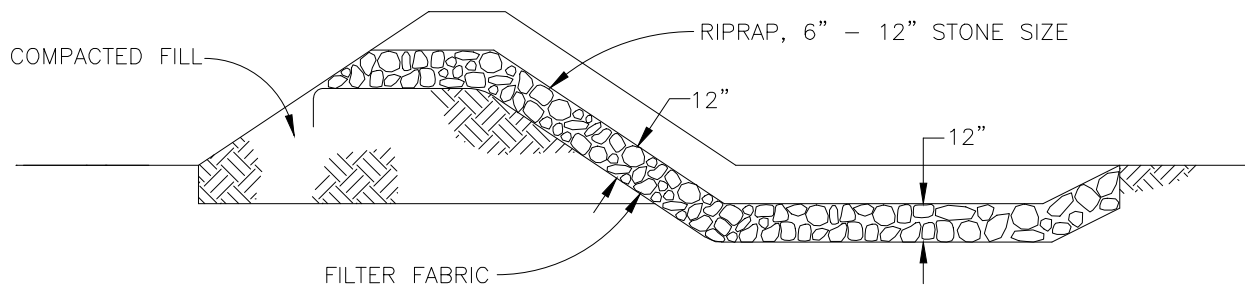
DATE
4-18-06

SEC-10

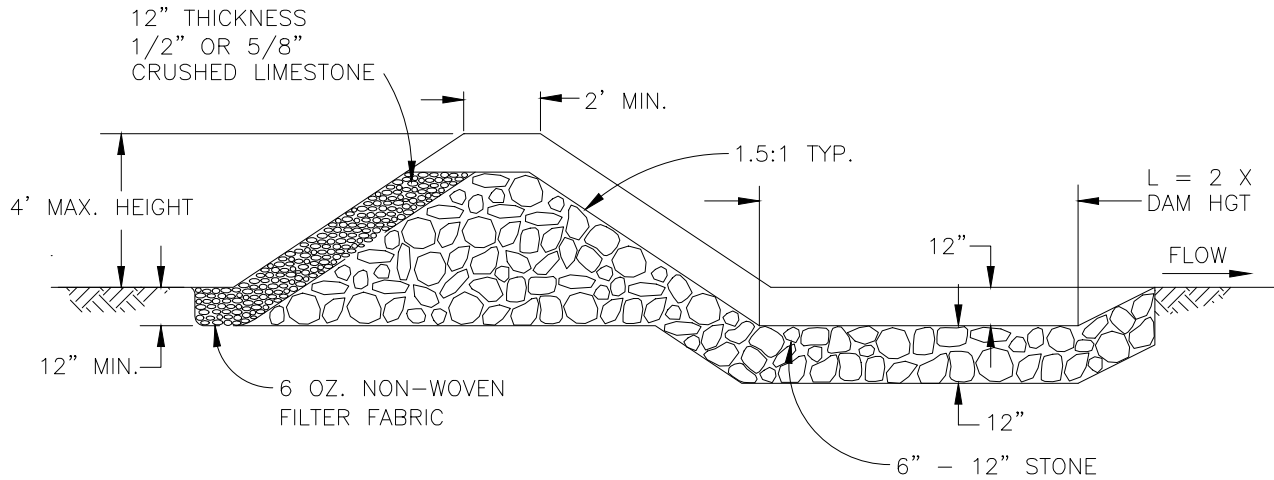
REVISION
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d = HOLE DIAMETER

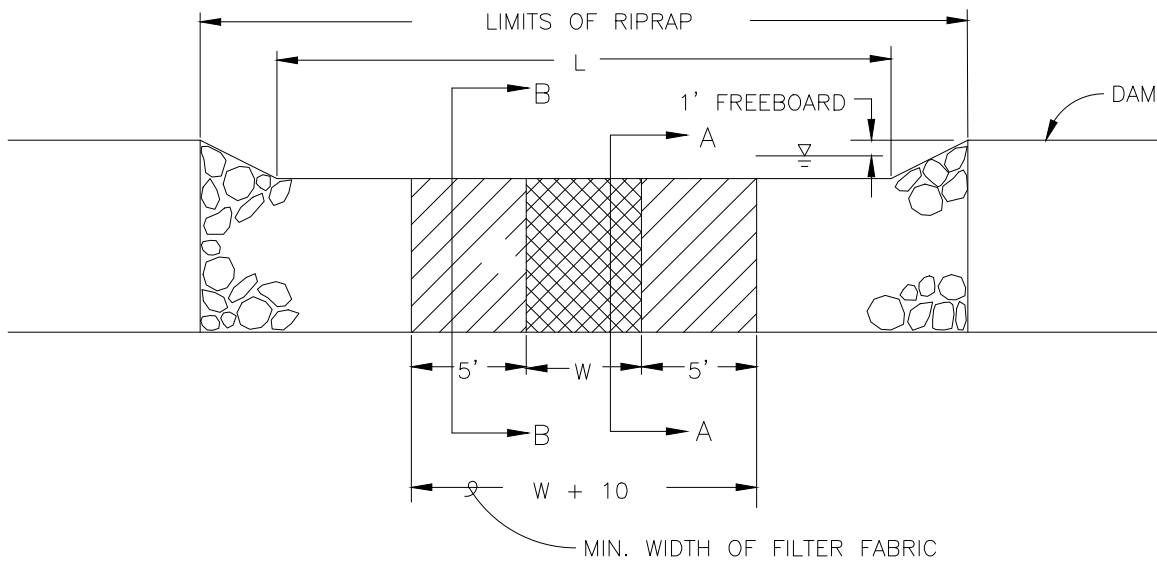




SECTION B - B



SECTION A - A (THRU GRAVEL FILTER)



L = LENGTH REQUIRED TO PASS Q WHILE MAINTAINING 1 FOOT OF FREEBOARD.
WIDTH OF ROCK FILTER AREA W =

CITY OF OZARK

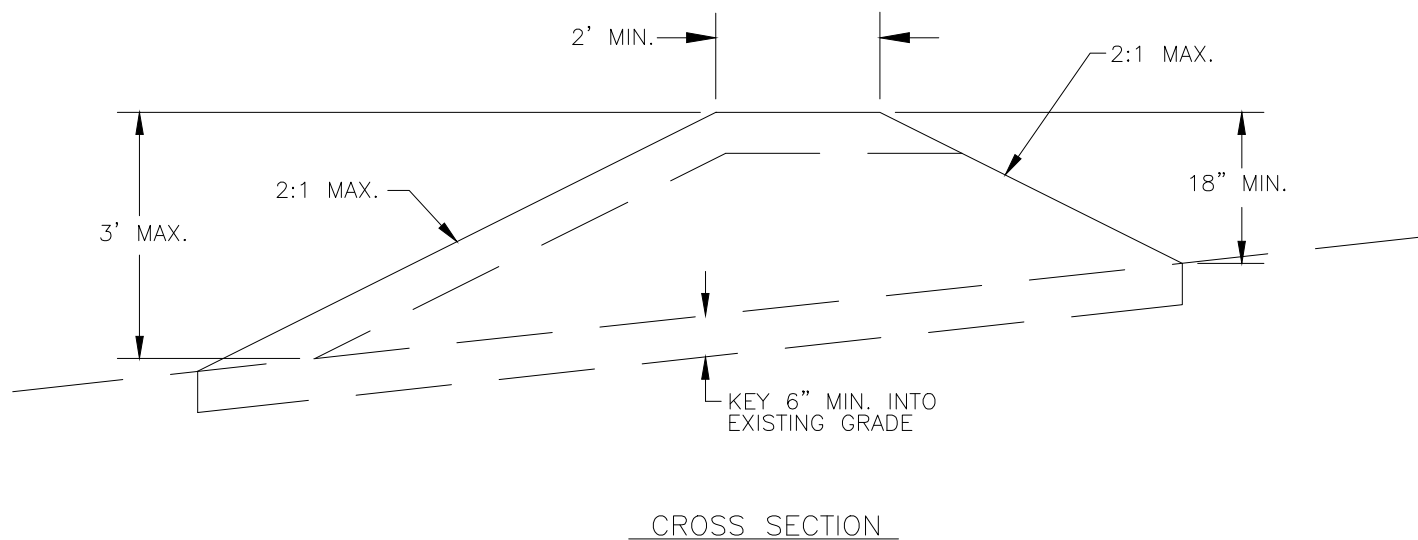
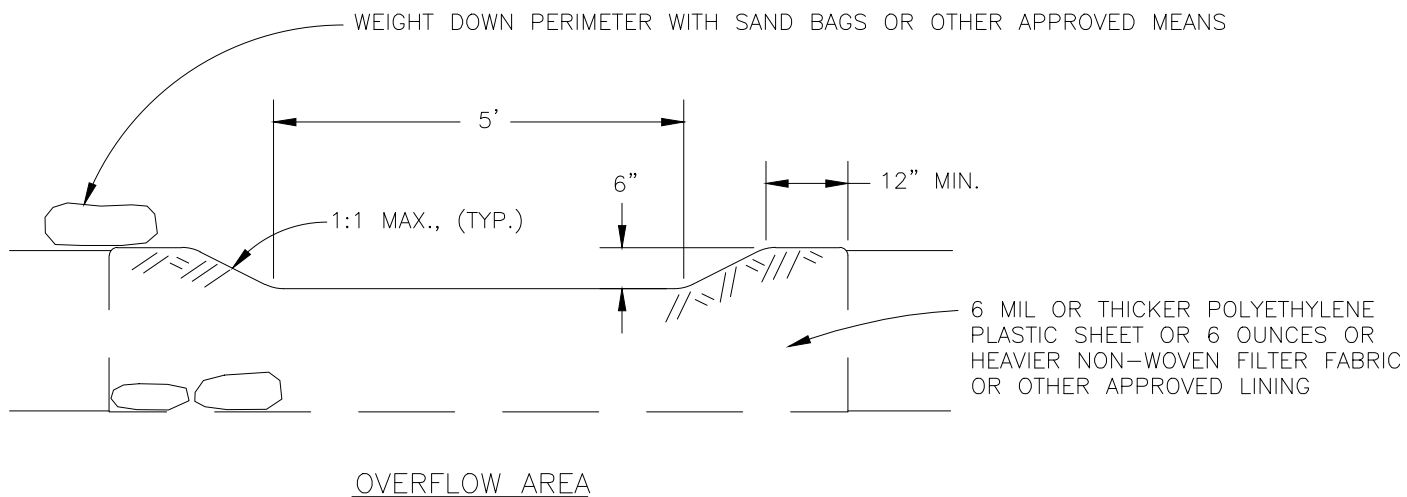
GRAVEL FILTER DAM
DETAIL

NTS

DATE
4-18-06

SEC-12

REVISION
0



NOTES:

1. SOIL IN BERM SHALL BE FIRMLY COMPACTED.
2. AT EACH END OF BERM, TURN BERM UPSLOPE AND EXTEND UNTIL GROUND SURFACE RISES TO THE TOP OF BERM ELEVATION.
3. PROVIDE OVERFLOW AREAS AT 200 FT. MAX. INTERVALS.

CITY OF OZARK

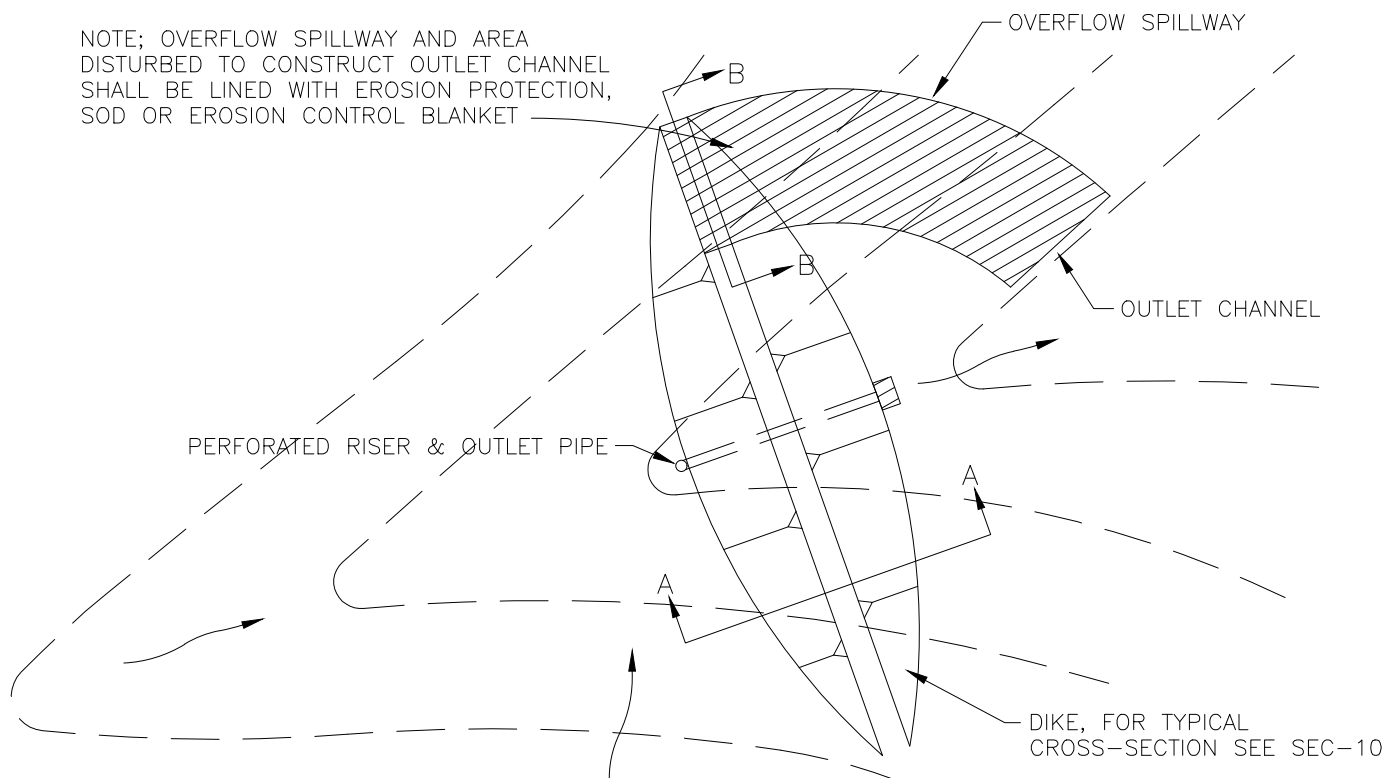
TEMPORARY CONTAINMENT BERM
DETAIL

NTS

SEC-13

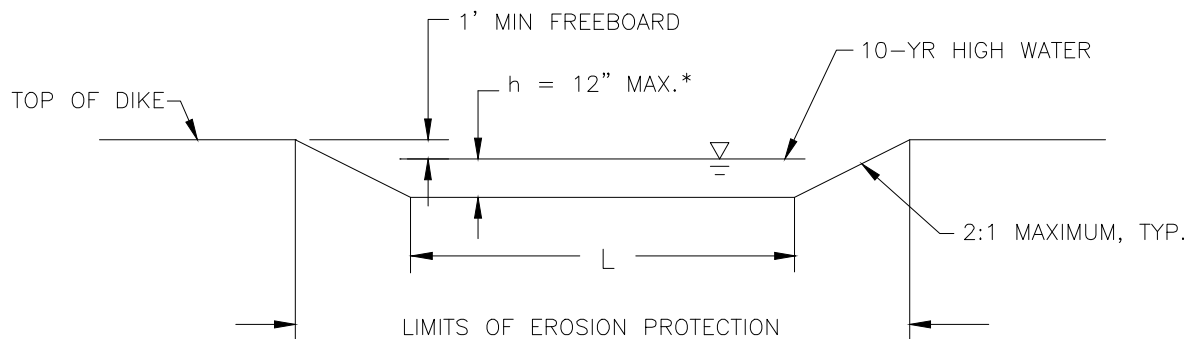
DATE
4-18-06

REVISION
0



TYPICAL COMPONENTS OF TEMPORARY SEDIMENT BASIN PLAN

(PERFORATED RISER PIPE AND OVERFLOW SPILLWAY SHOWN.
GRAVEL FILTER DAM AND EROSION PROTECT OVERFLOW SPILLWAY MAY ALSO BE USED.)



* $h = 6'' \text{ MAX.}$ IF SOD LINING USED

SECTION B -B

TYPICAL OVERFLOW SPILLWAY CROSS-SECTION

CITY OF OZARK

TEMPORARY SEDIMENT BASIN
DETAIL

NTS

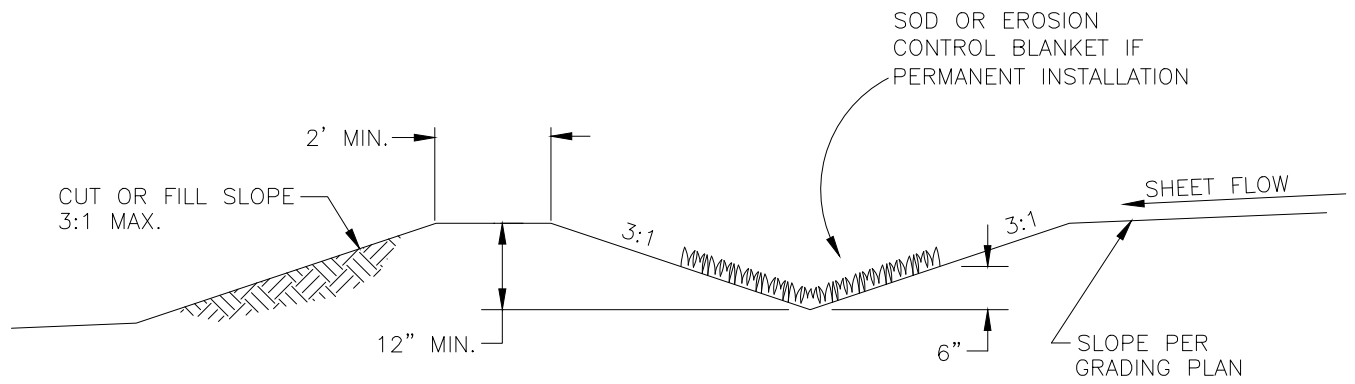
SEC-14

DATE

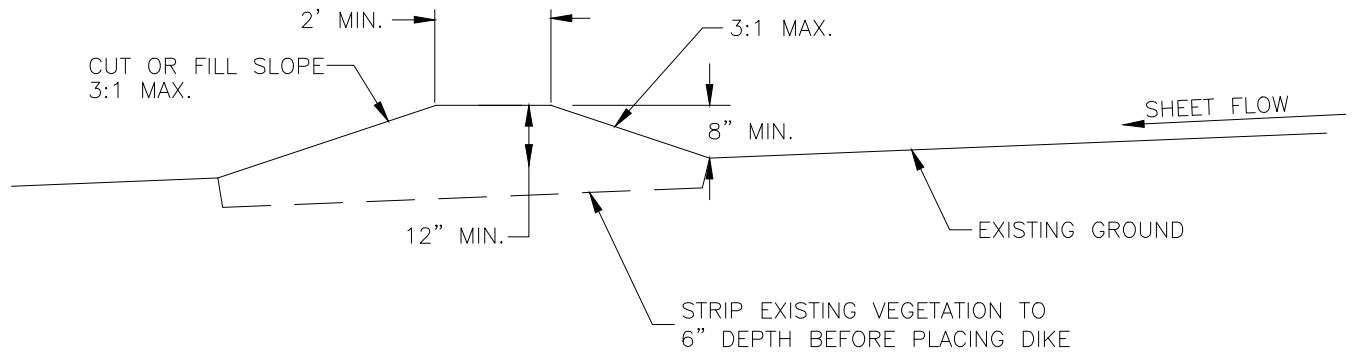
4-18-06

REVISION

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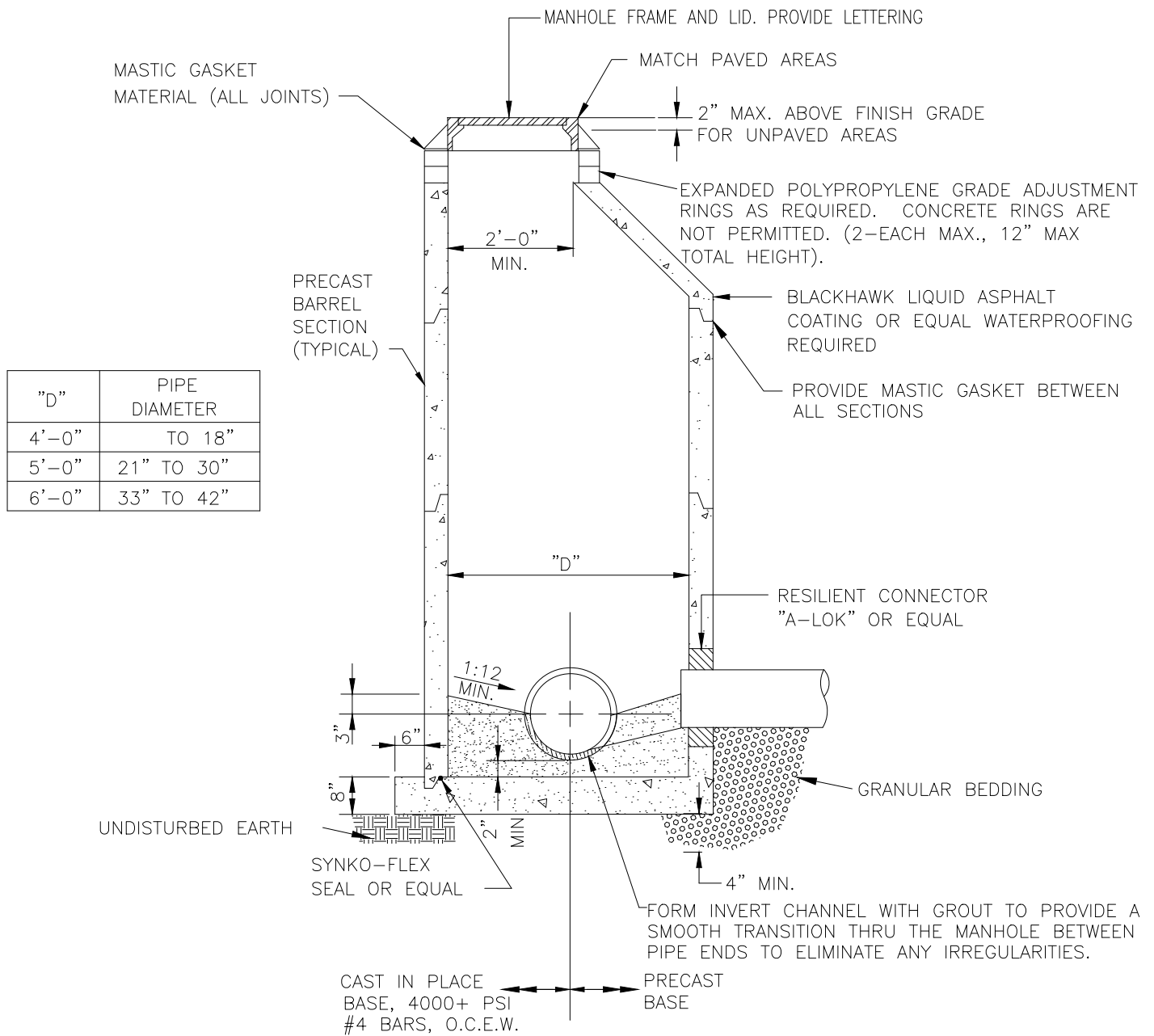
SWALE



DIKE

NOTES;

1. DIKE SHALL BE COMPACTED TO DENSITY EQUAL TO THAT SPECIFIED FOR ADJOINING AREA, (90% STD. PROCTOR DENSITY, MIN.)
2. MIN. 1% GRADE MUST BE PROVIDED FOR SWALE OR ALONG UPSLOPE SIDE OF DIKE FOR PROPER CLEARANCE.



NOTES:

1. ONLY ECCENTRIC MANHOLE CONES ARE PERMITTED UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.
2. PROVIDE BLACKHAWK LIQUID ASPHALT COATING OR EQUAL ON ENTIRE EXTERIOR OF MANHOLE.
3. CIRCULAR PRECAST MANHOLE SECTIONS SHALL BE SEALED WITH MASTIC GASKETS.
4. MANHOLE WALL THICKNESS SHALL BE 1/12 OF THE INSIDE DIAMETER PLUS ONE INCH.
5. PRECAST MANHOLE SECTIONS AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM C 478, EXCEPT AS MODIFIED.
6. DO NOT PROVIDE MANHOLE STEPS.
7. NO GROUTING SHALL BE PERMITTED ON MANHOLES AND RINGS, EXCEPT THE LIFT HOLES MAY BE GROUTED.
8. THE MINIMUM DROP BETWEEN INLET AND OUTLET INVERTS SHALL BE 0.2'.
9. THE MAXIMUM DROP BETWEEN INLET AND OUTLET INVERTS SHALL BE 24".
10. THE MINIMUM ANGLE FOR FLOWLINES WITHIN THE MANHOLE SHALL BE 90 DEGREES

CITY OF OZARK

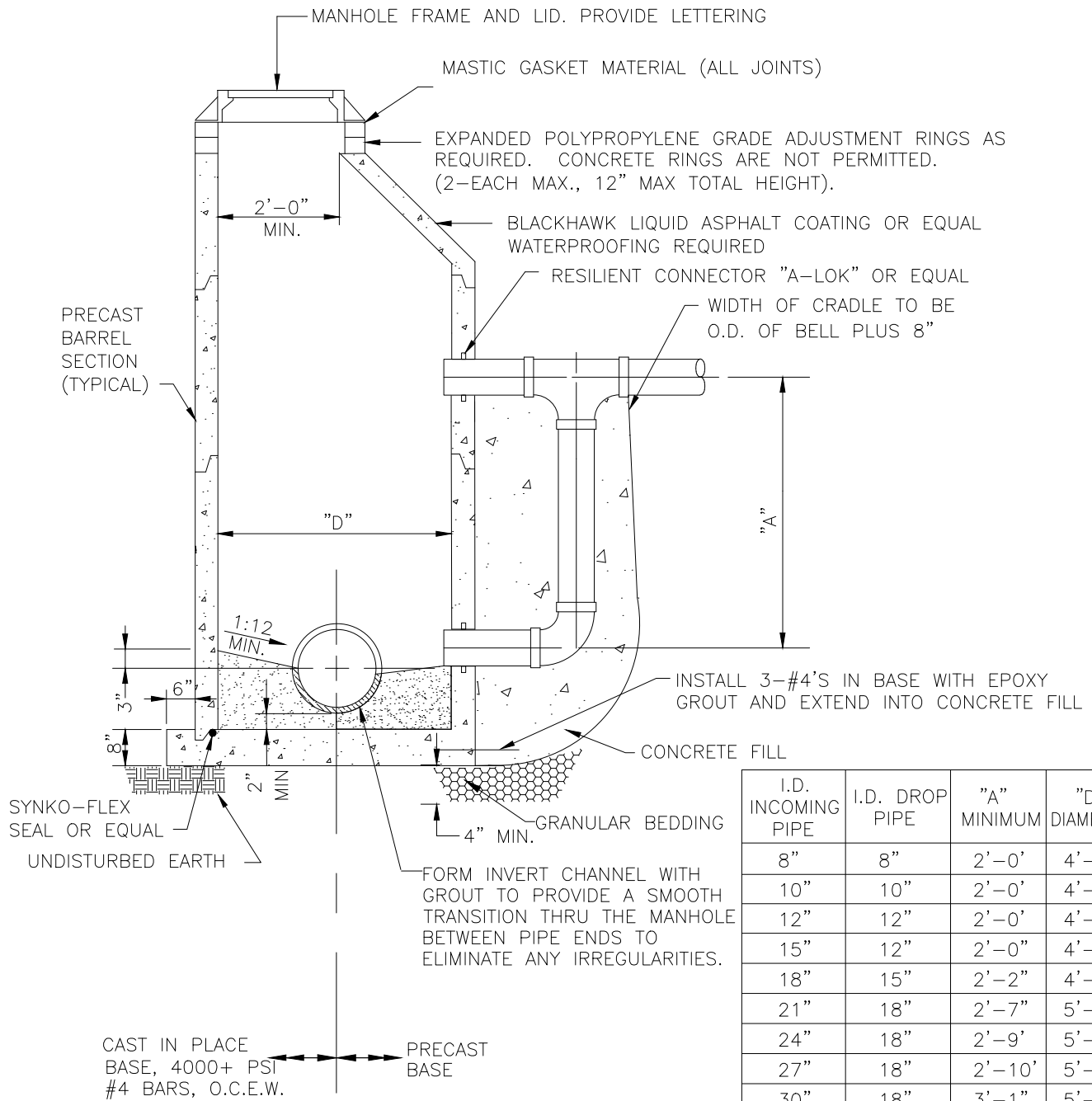
STANDARD MANHOLE DETAIL

NTS

SEW-1

DATE 4-27-2021

REVISION 5



I.D. INCOMING PIPE	I.D. DROP PIPE	"A" MINIMUM	"D" DIAMETER
8"	8"	2'-0"	4'-0"
10"	10"	2'-0"	4'-0"
12"	12"	2'-0"	4'-0"
15"	12"	2'-0"	4'-0"
18"	15"	2'-2"	4'-0"
21"	18"	2'-7"	5'-0"
24"	18"	2'-9"	5'-0"
27"	18"	2'-10"	5'-0"
30"	18"	3'-1"	5'-0"
36"	18"	3'-4"	6'-0"
42"	24"	3'-6"	6'-0"
48"	30"	4'-0"	6'-0"

NOTES:

1. ONLY ECCENTRIC MANHOLE CONES ARE PERMITTED UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.
2. PROVIDE BLACKHAWK LIQUID ASPHALT COATING OR EQUAL ON ENTIRE EXTERIOR OF MANHOLE.
3. CIRCULAR PRECAST MANHOLE SECTIONS SHALL BE SEALED WITH MASTIC GASKETS.
4. MANHOLE WALL THICKNESS SHALL BE 1/12 OF THE INSIDE DIAMETER PLUS ONE INCH.
5. PRECAST MANHOLE SECTIONS AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM C 478, EXCEPT AS MODIFIED.
6. DO NOT PROVIDE MANHOLE STEPS.
7. NO GROUTING SHALL BE PERMITTED ON MANHOLES AND RINGS, EXCEPT THE LIFT HOLES MAY BE GROUTED.
8. DROP CONNECTIONS SHALL NOT ENTER THE MANHOLE AT A SECTION JOINT.
9. THE VERTICAL PIPE AND REQUIRED FITTINGS SHALL BE THE SAME SIZE AS THE INCOMING SEWER PIPE.
10. THE MINIMUM ANGLE FOR FLOWLINES WITHIN THE MANHOLE SHALL BE 90 DEGREES

CITY OF OZARK

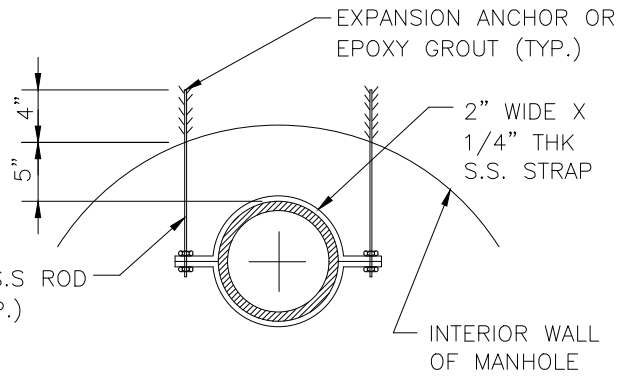
STANDARD OUTSIDE DROP MANHOLE DETAIL

NTS

SEW-2

DATE
4-27-2021

REVISION
4



PIPE SUPPORT DETAIL*
* OR EQUIVALENT DESIGN

MANHOLE FRAME AND LID
PROVIDE LETTERING

MASTIC GASKET MATERIAL
(ALL JOINTS)

EXPANDED POLYPROPYLENE GRADE ADJUSTMENT RINGS AS
REQUIRED. CONCRETE RINGS ARE NOT PERMITTED.
(2-EACH MAX., 12" MAX TOTAL HEIGHT).

BLACKHAWK LIQUID ASPHALT COATING OR EQUAL
WATERPROOFING REQUIRED

8" & 10" ONLY

RESILIENT CONNECTOR "A-LOK" OR EQUAL
9" MIN.

PIPE SUPPORT W/ANCHOR @ 2'-0" MAX. O/C
(SEE DETAIL THIS SHEET)

5' (MIN)

1:12
MIN.
3"
6"
8"
2" MIN

GRANULAR BEDDING

UNDISTURBED
EARTH
SYNKO-FLEX
SEAL OR EQUAL

FORM INVERT CHANNEL WITH GROUT TO PROVIDE A
SMOOTH TRANSITION THRU THE MANHOLE BETWEEN
PIPE ENDS TO ELIMINATE ANY IRREGULARITIES.

CAST IN PLACE
BASE, 4000+ PSI
#4 BARS, O.C.E.W.

PRECAST
BASE

NOTES:

1. ONLY ECCENTRIC MANHOLE CONES ARE PERMITTED UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.
2. PROVIDE BLACKHAWK LIQUID ASPHALT COATING OR EQUAL ON ENTIRE EXTERIOR OF MANHOLE.
3. CIRCULAR PRECAST MANHOLE SECTIONS SHALL BE SEALED WITH MASTIC GASKETS.
4. MANHOLE WALL THICKNESS SHALL BE 1/12 OF THE INSIDE DIAMETER PLUS ONE INCH.
5. PRECAST MANHOLE SECTIONS AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM C 478, EXCEPT AS MODIFIED.
6. DO NOT PROVIDE MANHOLE STEPS.
7. NO GROUTING SHALL BE PERMITTED ON MANHOLES AND RINGS, EXCEPT THE LIFT HOLES MAY BE GROUTED.
8. SEWER PIPES SHALL NOT ENTER THE MANHOLE AT A SECTION JOINT.
9. THE VERTICAL PIPE AND REQUIRED FITTINGS SHALL BE THE SAME SIZE AS THE INCOMING SEWER PIPE.
10. THE MINIMUM ANGLE FOR FLOWLINES WITHIN THE MANHOLE SHALL BE 90 DEGREES

CITY OF OZARK

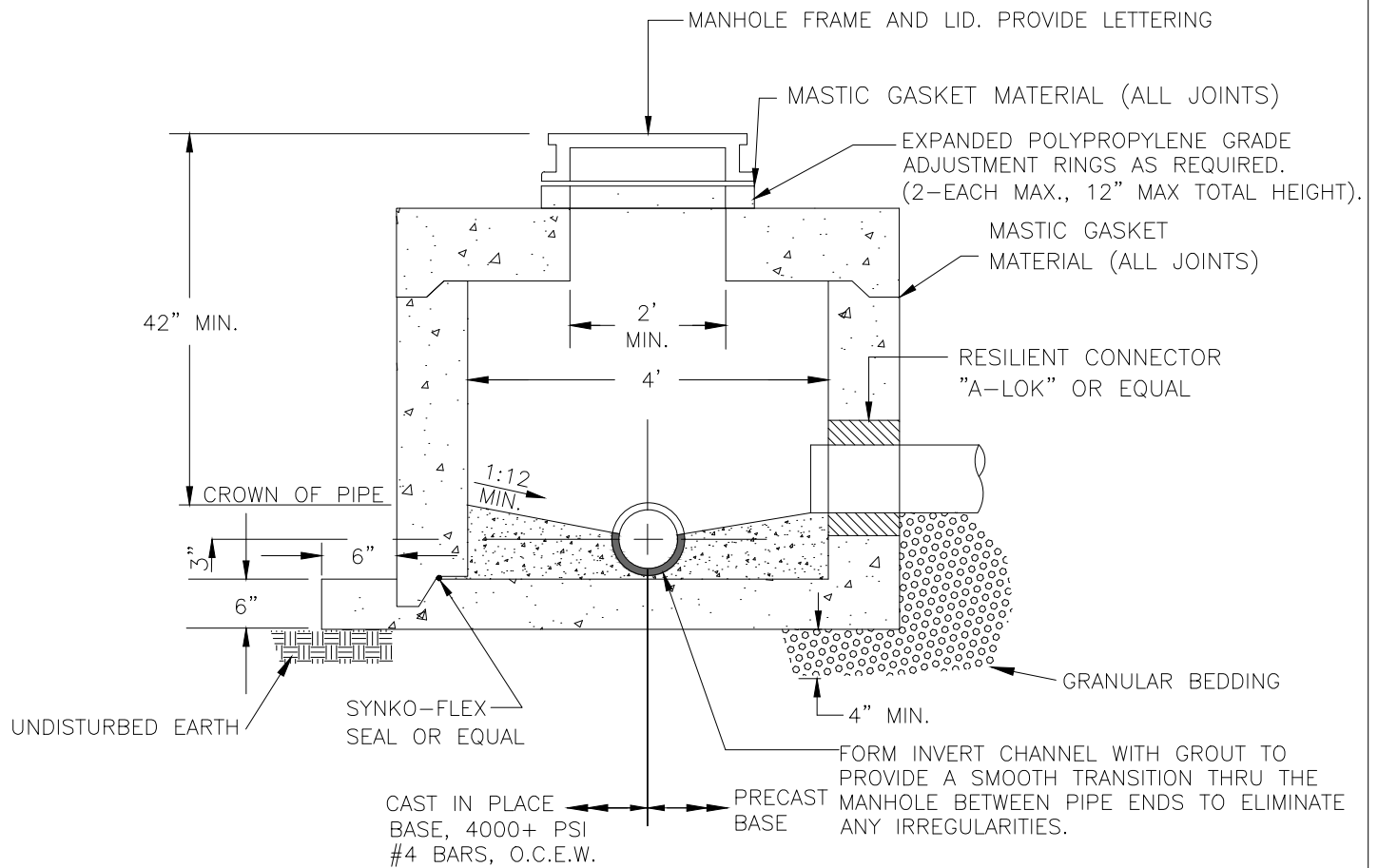
STANDARD INSIDE DROP
MANHOLE DETAIL

NTS

SEW-3

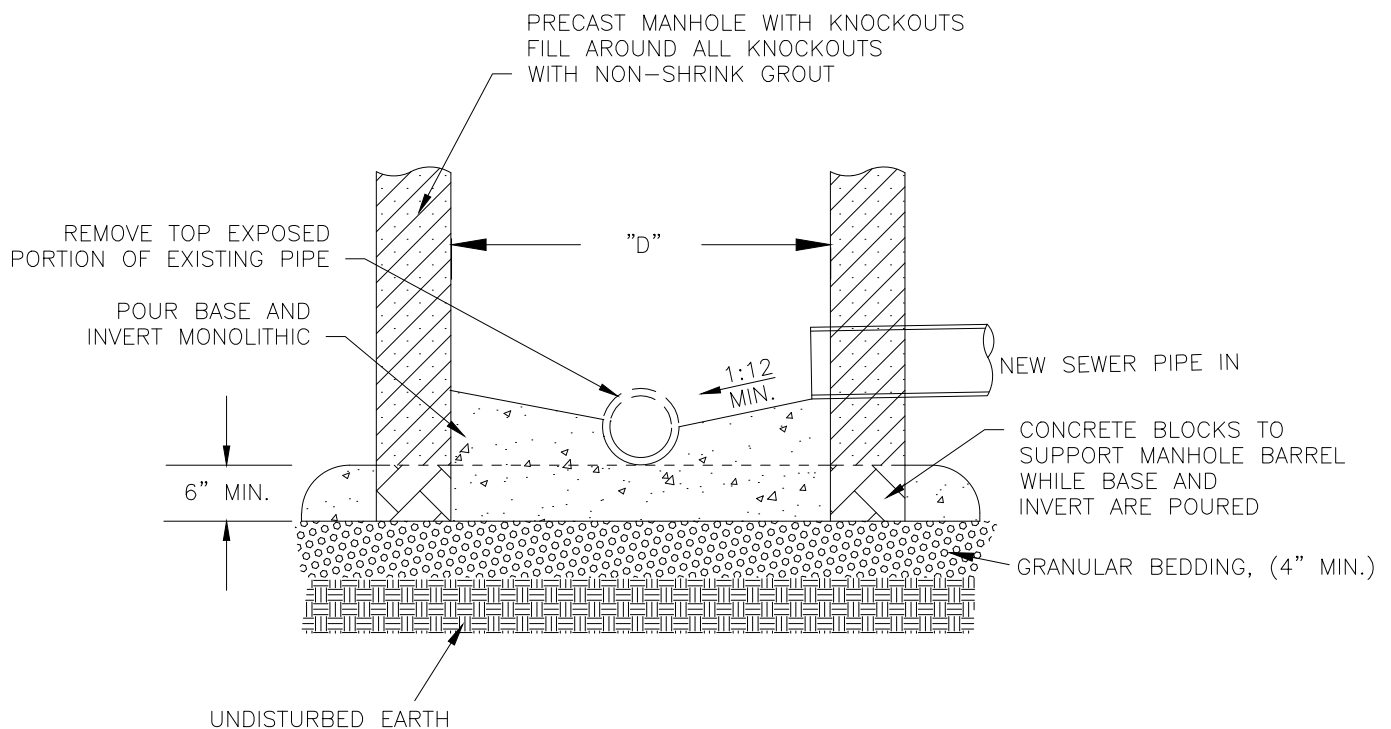
DATE
4-27-2021

REVISION
4



REVISION	3
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"D"	PIPE DIAMETER
4'-0"	TO 18"
5'-0"	21" TO 30"
6'-0"	33" TO 42"



NOTES:

1. MANHOLES SHALL BE TESTED IN ACCORDANCE WITH THE CITY OF OZARK CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.

CITY OF OZARK

NEW MANHOLE ON
EXISTING LINE

NTS

SEW-5

DATE
2-02-09

REVISION
0

CENTERING IN GASKET
IS VERY IMPORTANT

CORE HOLE IN
EXISTING MANHOLE

SEE BELOW

INSERTA-LOK AS MANUFACTURED BY
A-LOK OR APPROVED EQUAL

NOMINAL PIPE O.D.

EXAMPLES:

8"Ø PVC = 10"Ø HOLE
10"Ø PVC = 12"Ø HOLE
12"Ø PVC = 14"Ø HOLE

1. BEVEL PIPE WITH GRINDER
2. THEN LUBE PIPE
3. THEN LUBE INSERTA-LOK
4. THEN CENTER IN GASKET

CITY OF OZARK

CONNECTION TO EXIST MH
DETAIL

NTS

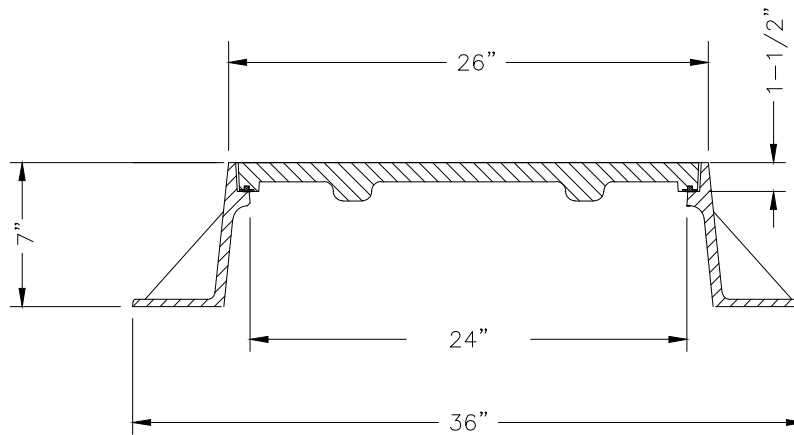
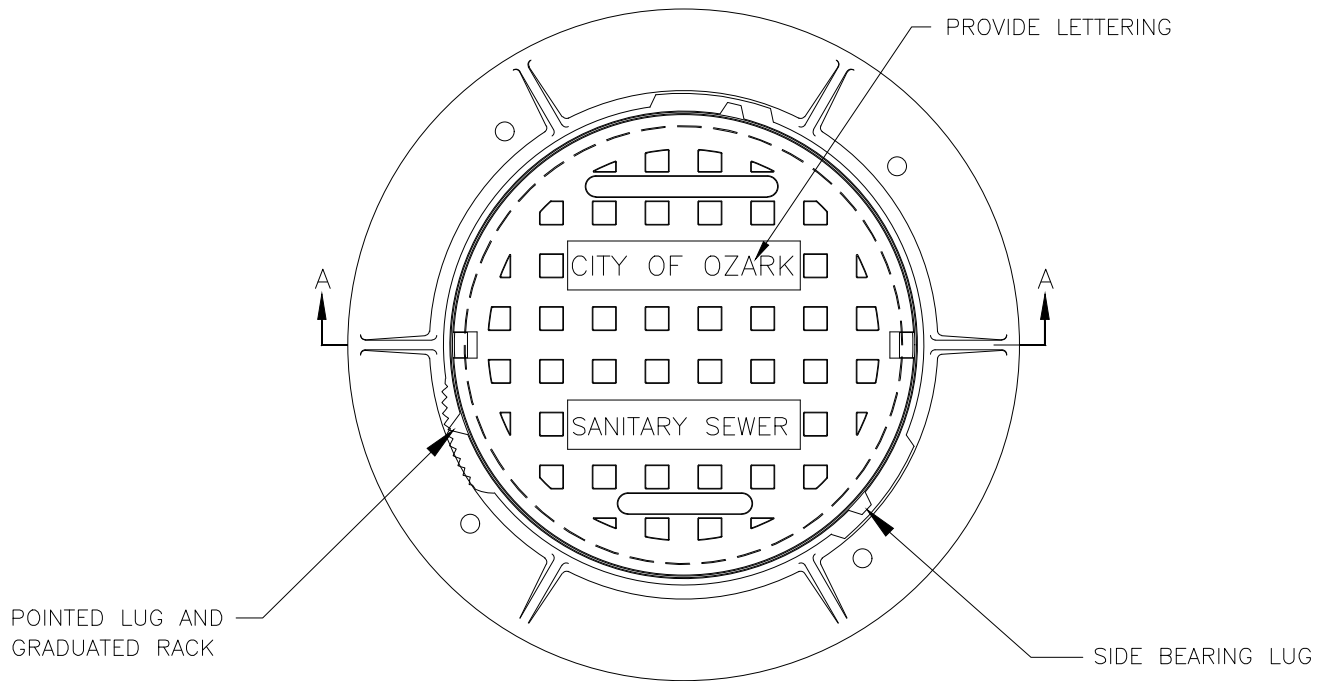
SEW-6

DATE
7-18-05

REVISION
0

NOTES:

1. TYPE A MANHOLE FRAME AND LID IS FOR USE IN TRAFFIC AREAS.
2. PROVIDE NON-ROCKING SELF-SEALING CONCEALED PICKHOLE TYPE LID.
3. PROVIDE DEETER 1247-A OR APPROVAL EQUAL.
4. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.



SECTION A-A

NOTES;

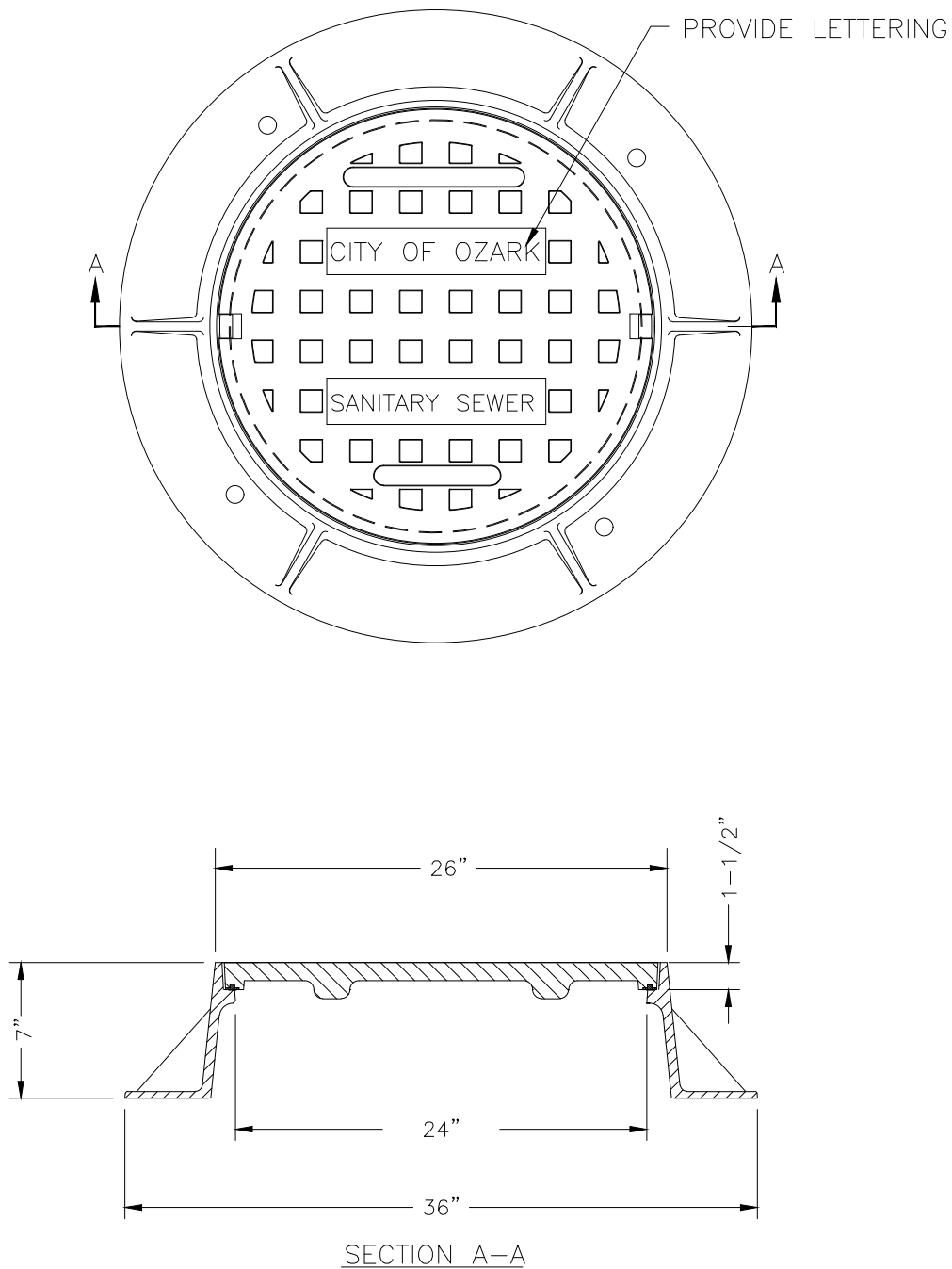
1. COVER AND FRAME SHALL BE CAST GRAY IRON CONFORMING TO THE REQUIREMENTS OF ASTM A 48, CLASS 35B WITH NO PAINT.
2. COVER AND FRAME SHALL CONFORM TO H20/HS20 WHEEL LOAD RATING.
3. CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN AND COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
4. FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
5. FRAMES SHALL BE CIRCULAR, AND THE FLANGE SHALL INCORPORATE 4 EACH 1" DIAMETER BOLT HOLES.

CITY OF OZARK	TYPE A MANHOLE FRAME AND LID	SEW-7	
		DATE 9-01-2017	REVISION 0

NTS

NOTES:

1. TYPE B MANHOLE FRAME AND COVER FOR USE OUTSIDE OF DRIVING SURFACES.
2. PROVIDE SELF-SEALING CONCEALED PICKHOLE TYPE LID, DEETER 1247 OR APPROVED EQUAL.
3. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.



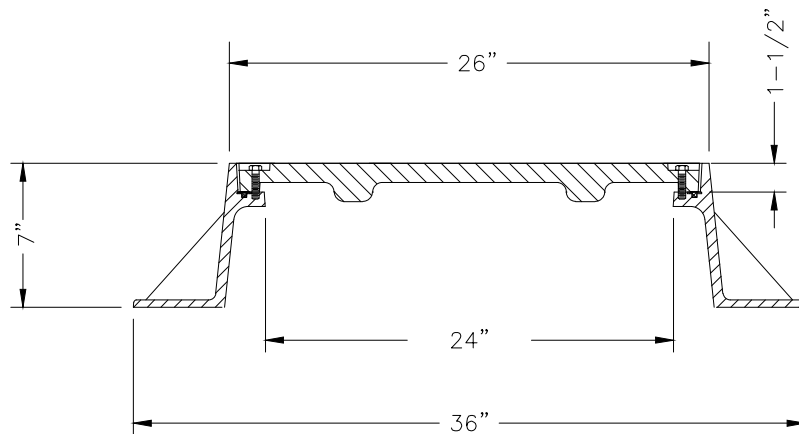
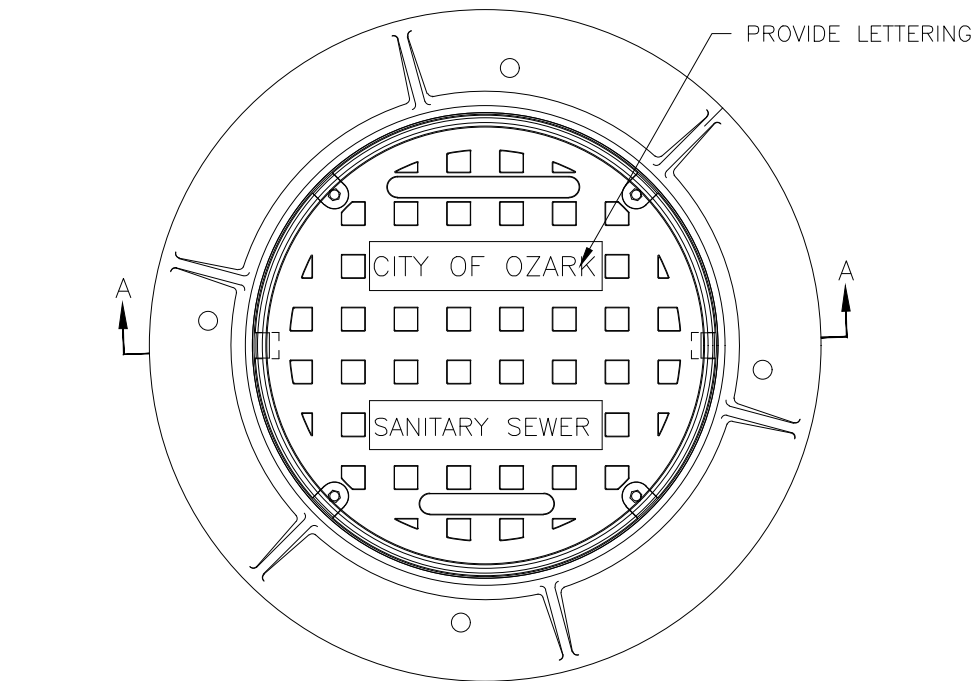
NOTES:

1. COVER AND FRAME SHALL BE CAST GRAY IRON CONFORMING TO THE REQUIREMENTS OF ASTM A 48, CLASS 35B WITH NO PAINT.
2. CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN AND COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
3. FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
4. FRAMES SHALL BE CIRCULAR, AND THE FLANGE SHALL INCORPORATE 4 EACH 1" DIAMETER BOLT HOLES.

CITY OF OZARK	TYPE B MANHOLE FRAME AND LID	SEW-8	
		DATE 9-01-2017	REVISION 1

NTS

MANHOLE COVER AND FRAME
BOLT-DOWN TYPE
DEETER 1247-B OR APPROVED EQUAL



SECTION A-A

NOTES;

1. COVER AND FRAME SHALL BE CAST GRAY IRON CONFORMING TO THE REQUIREMENTS OF ASTM A 48, CLASS 35B WITH NO PAINT.
2. COVER AND FRAME SHALL CONFORM TO, H20/HS20 WHEEL LOAD RATING. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
3. CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN AND COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
4. FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
5. COVERS SHALL HAVE A SELF SEALING GASKET AND SHALL BE FASTENED TO THE FRAME BY A MINIMUM OF FOUR STAINLESS STEEL BOLTS.
6. FRAMES SHALL BE CIRCULAR, AND THE FLANGE SHALL INCORPORATE 4-EACH 1" DIAMETER BOLT HOLES.

CITY OF OZARK

TYPE C MANHOLE
FRAME AND LID

NTS

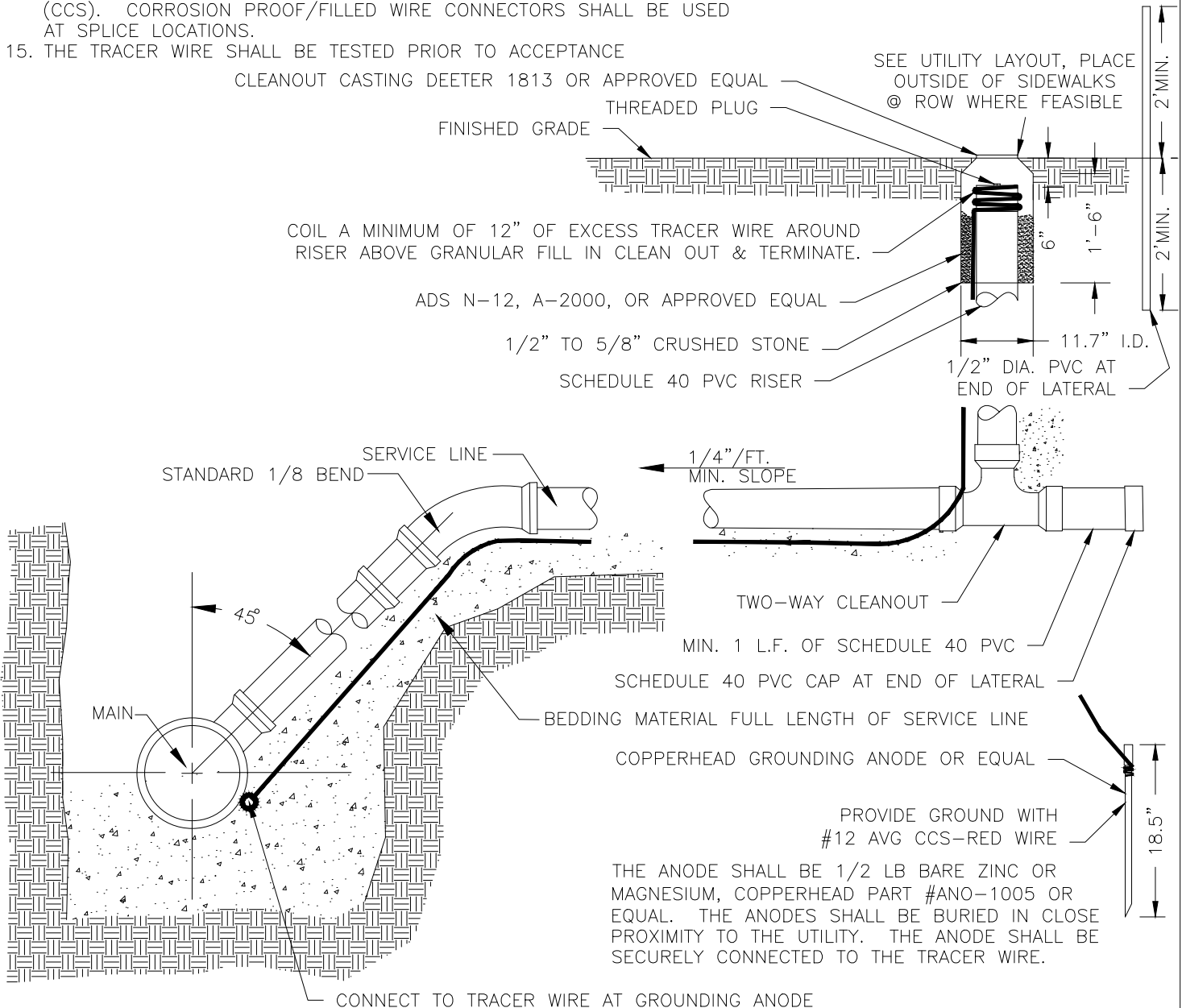
DATE
9-01-2017

REVISION
3

SEW-9

NOTES;

1. STANDARD "Y" OR "T" CONNECTIONS SHALL BE PLACED AT 45 DEGREE ANGLE.
2. SDR-26 HEAVY WALL TEES SHALL BE USED FOR SDR-35 MAINS AND SDR-21 TEES SHALL BE USED FOR SDR-21 MAINS.
3. WHEN A "T" SADDLE IS USED, IT SHALL BE INSTALLED AT A 45 DEGREE ANGLE.
4. SEWER SERVICE CONNECTIONS INSTALLED SUB-SEQUENTIALLY TO THE MAIN SHALL BE ACCOMPLISHED BY SADDLE TYPE FITTINGS. THE FITTINGS SHALL BE SUPPORTED BY FLOWABLE FILL. COMPLETELY ENCASE THE FITTING TO A MINIMUM OF 1' ABOVE THE POINT OF CONNECTION TO THE MAIN.
5. WHEN TAPPING THE MAIN, DO NOT ALLOW BEDDING MATERIAL OR BORED PLUGS TO FALL INTO MAIN.
6. SERVICE LINES SHALL BE SCHEDULE 40 PVC. JOINTS SHALL BE GLUED WITH AN APPROVED ADHESIVE.
7. COORDINATE DEPTH OF SERVICE LINES AS REQUIRED TO SERVICE THE FACILITY AND TO AVOID OTHER UTILITIES.
8. SEWER SERVICES SHALL NOT BE INSTALLED WITHIN 5' OF A MANHOLE EXTERIOR WALL AND SHALL BE SEPARATED BY A 5' MINIMUM SPACING..
9. SEWER SERVICE SHALL BE PROVIDE TO EVERY BUILDABLE PLATED LOT WITHIN A SUBDIVISION.
10. THE MAXIMUM NUMBER OF UNITS TO BE CONNECTED ON A 4" SEWER SERVICE SHALL BE ONE FOR EACH DUPLEX OR SINGLE FAMILY STRUCTURE.
11. SEWER LATERAL SHALL EXTEND TO PROPERTY LINE AS A MINIMUM.
12. THE CLEAN OUT AS SHOWN WILL NOT BE MAINTAINED BY THE CITY OF OZARK.
13. PROVIDE APPROPRIATE WARNING TAPE 18" TO 24" BELOW FINISHED GRADE AT THE SERVICE LINE FROM THE MAIN TO THE CLEAN OUT.
14. TRACER WIRE SHALL BE PROVIDED FOR EVERY SEWER LATERAL AND SHALL BE #12 AWG COPPER CLAD STEEL, (CCS). CORROSION PROOF/FILLED WIRE CONNECTORS SHALL BE USED AT SPLICE LOCATIONS.
15. THE TRACER WIRE SHALL BE TESTED PRIOR TO ACCEPTANCE



CITY OF OZARK

STANDARD SEWER SERVICE
DETAIL

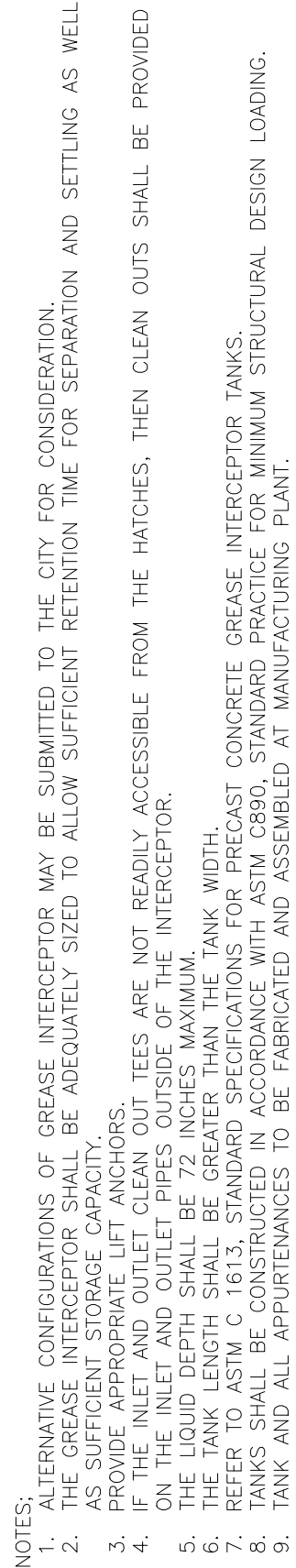
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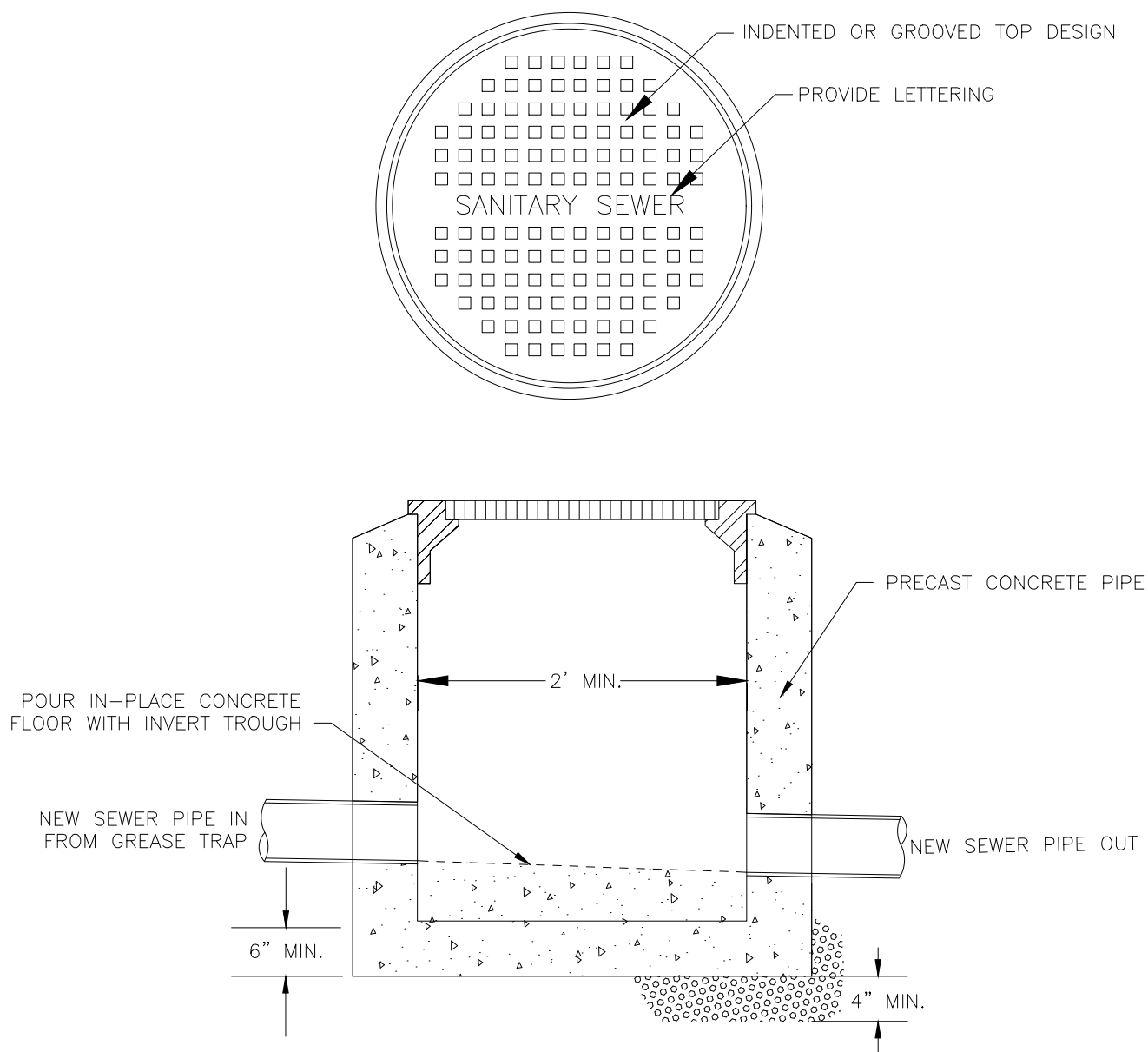
NTS

SEW-10

DATE
4-15-2020

REVISION
5





NOTES:

1. MANHOLES SHALL BE STANDARD REINFORCED CONCRETE PIPE SECTION, 2' MIN. DIA. X 3' MIN. DEPTH.
2. MANHOLE FLOOR SHALL BE POURED IN PLACE CONCRETE.
3. FRAME AND LID SHALL BE NEENAH SLAB TYPE R-5900-E OR APPROVED EQUAL AND SHALL BE TRAFFIC RATED WHEN APPLICABLE.
4. SEALANT SHALL BE APPLIED UNDER ENTIRE PORTION OF THE FRAME AND AT ALL CONCRETE PIPE JOINTS.
5. OPENINGS FOR INFLUENT AND EFFLUENT PIPES TO BE CORED WITHOUT BREAKING.
6. USE "INSERTA-LOK" OR APPROVED EQUAL FOR PIPE CONNECTIONS TO MANHOLE.

CITY OF OZARK

SAMPLING MANHOLE
DETAIL

NTS

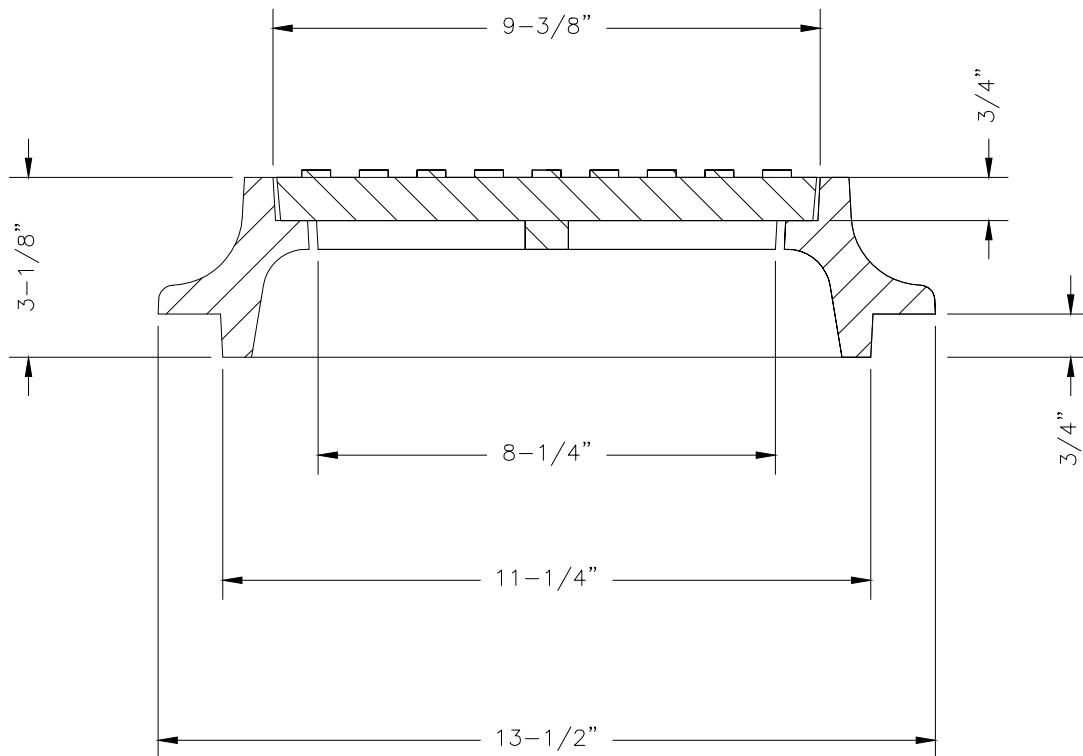
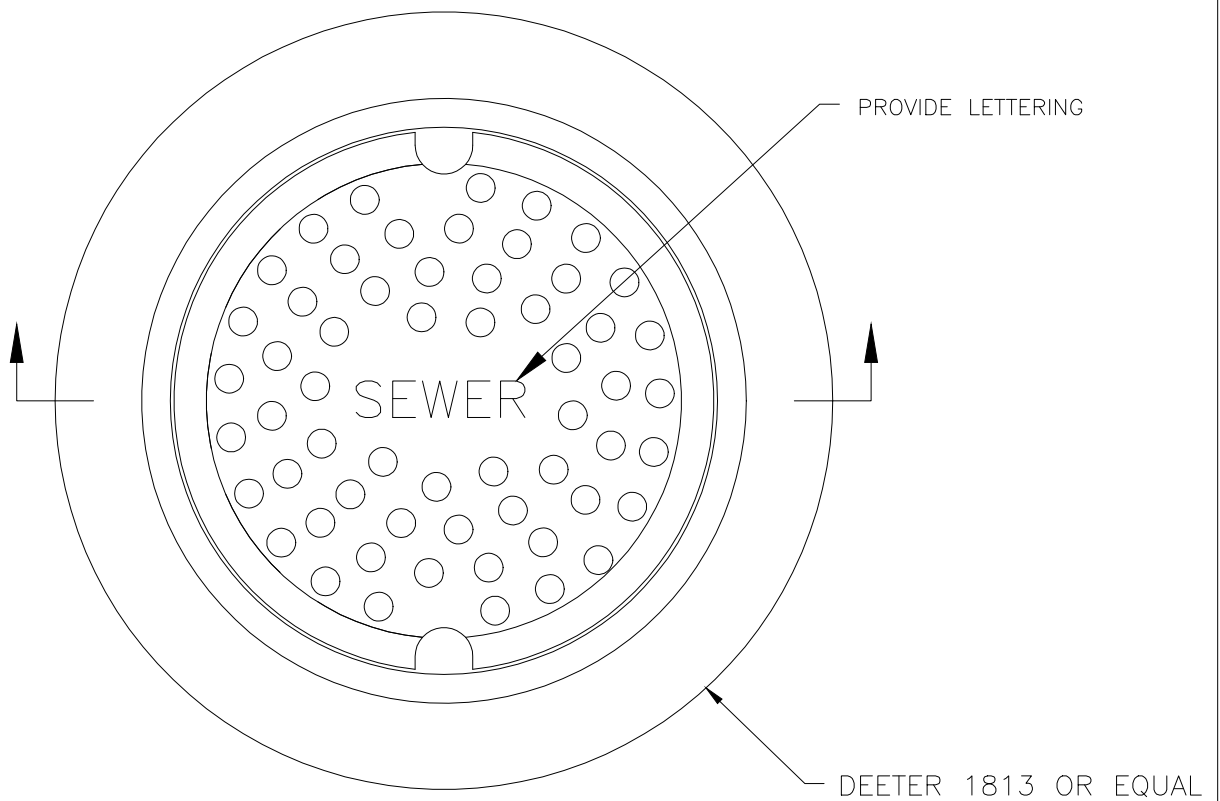
SEW-12

DATE

10-03-2016

REVISION

0



CITY OF OZARK

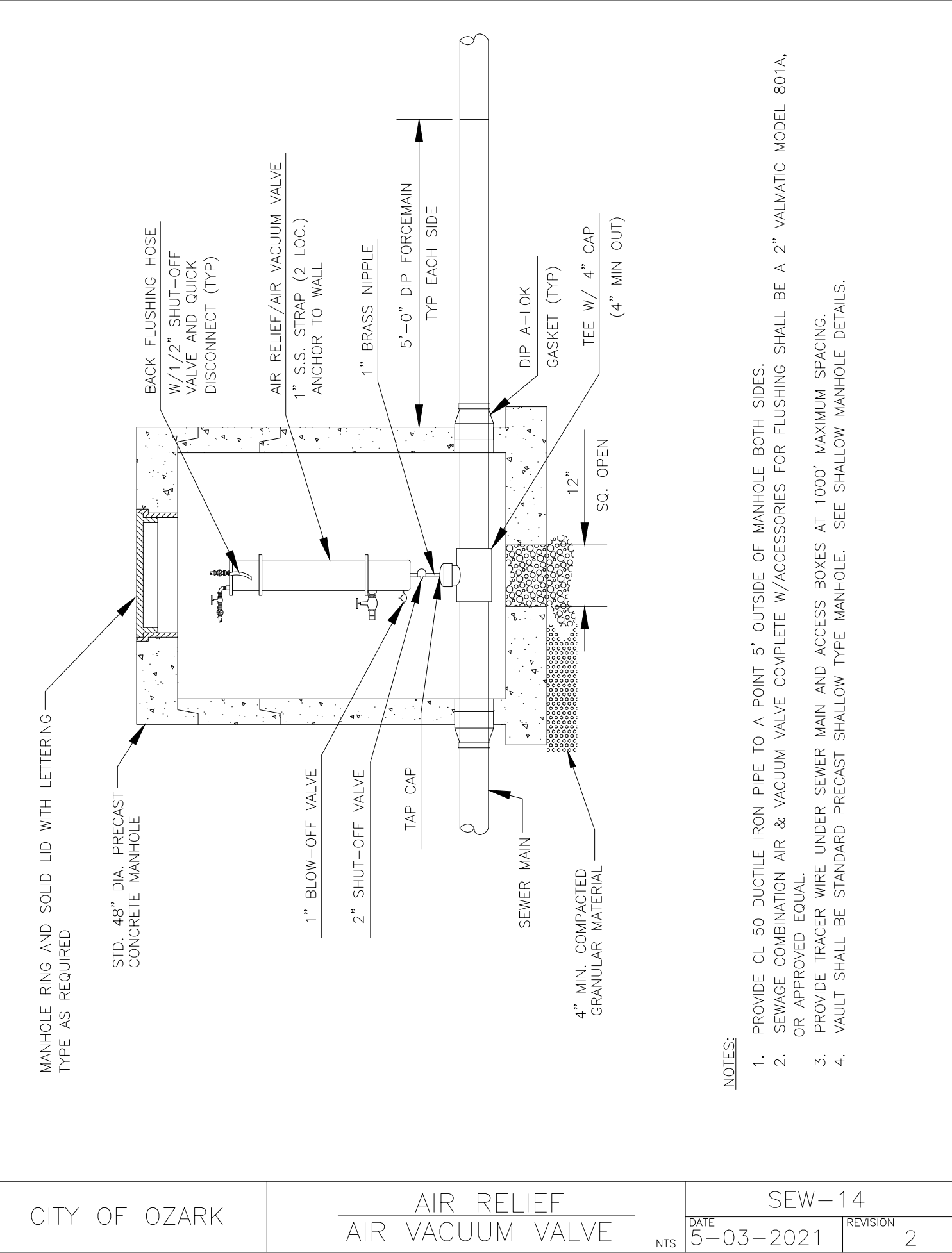
CLEANOUT RING & COVER
DETAIL

NTS

DATE
12-20-2016

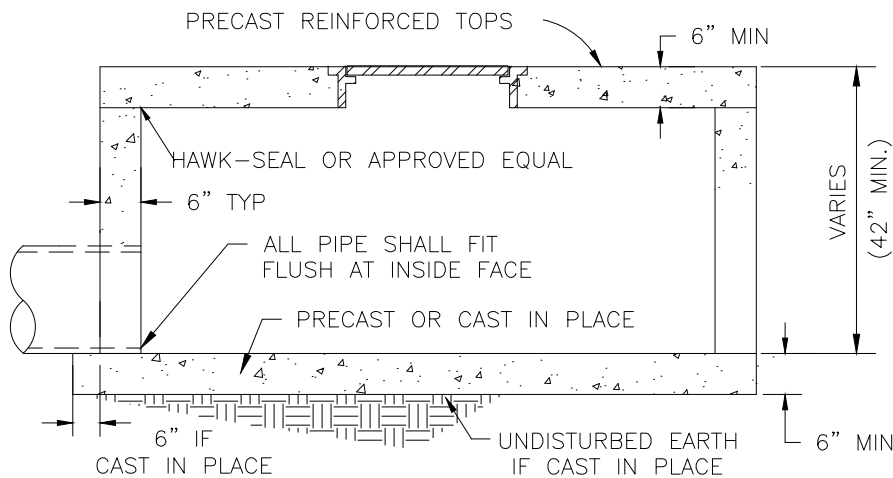
REVISION
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SEW-13

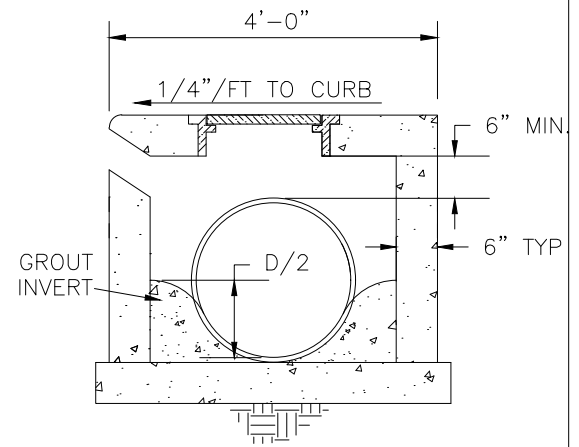


NOTES:

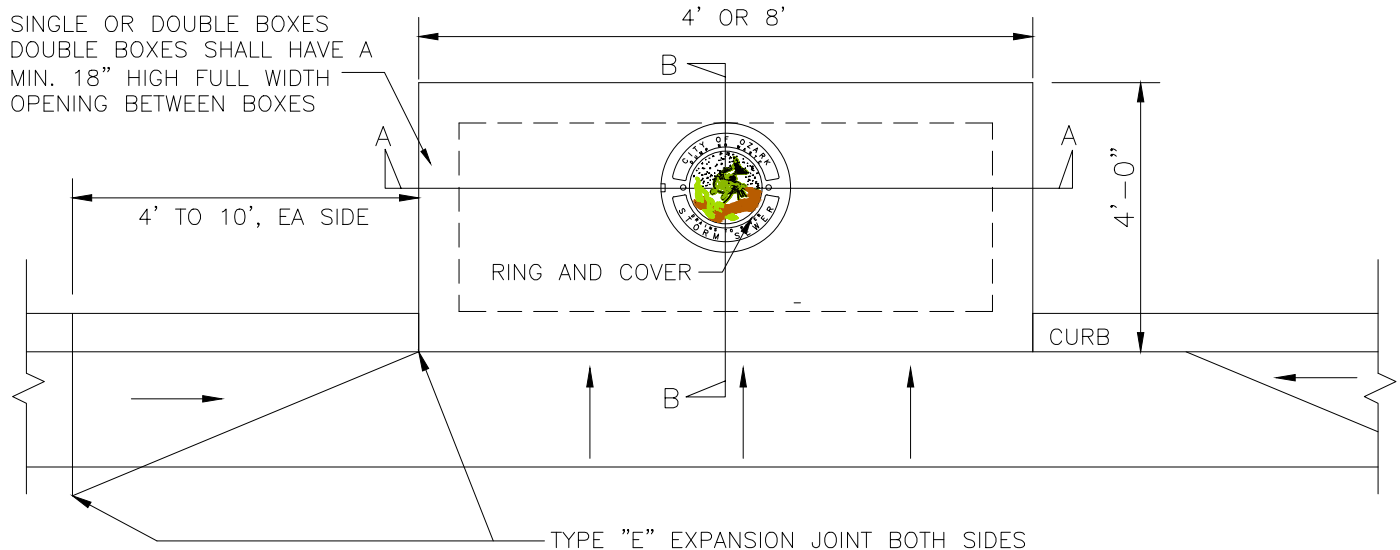
1. PROVIDE CL 50 DUCTILE IRON PIPE TO A POINT 5' OUTSIDE OF MANHOLE BOTH SIDES.
2. SEWAGE COMBINATION AIR & VACUUM VALVE COMPLETE W/ACCESSORIES FOR FLUSHING SHALL BE A 2" VALMATIC MODEL 801A, OR APPROVED EQUAL.
3. PROVIDE TRACER WIRE UNDER SEWER MAIN AND ACCESS BOXES AT 1000' MAXIMUM SPACING.
4. VAULT SHALL BE STANDARD PRECAST SHALLOW TYPE MANHOLE. SEE SHALLOW MANHOLE DETAILS.



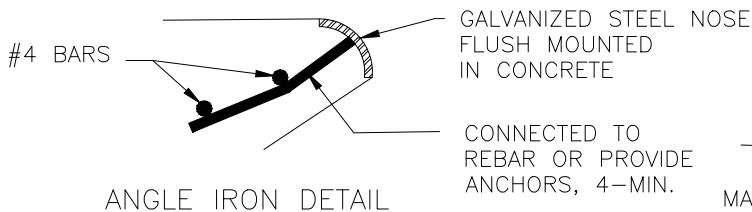
SECTION A-A



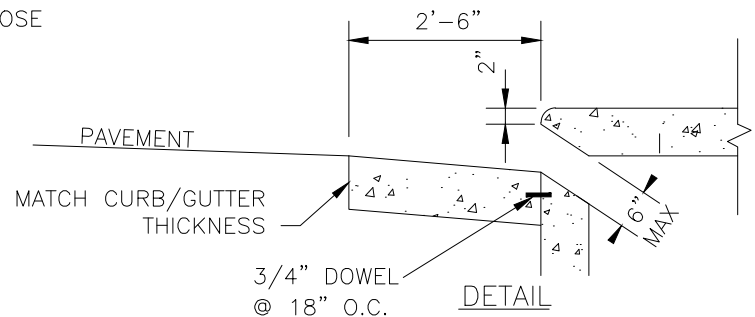
SECTION B-B



PLAN



ANGLE IRON DETAIL



DETAIL

NOTES;

1. THE BOTTOM SLAB SHALL BE CAST IN PLACE CONCRETE ON UNDISTURBED EARTH OR PRECAST CONCRETE ON 4" MINIMUM THICKNESS OF GRANULAR BEDDING.
2. PROVIDE APPROPRIATE FLOW PROFILE THRU BOX INVERT.
3. ALL PIPES SHALL FIT FLUSH AT INSIDE FACE OF INLET.
4. FORM INVERT CHANNEL WITH 4000 PSI, TYPE II PORTLAND CEMENT CONCRETE.
5. PROVIDE #4 BARS @ 10" O.C.E.W. FOR ALL WALLS, (VERT., HORIZ. AND SLAB). SEE TOP SLAB REINFORCEMENT DETAIL.
6. CONCRETE TOP SLAB SHALL BE PINNED TO THE STRUCTURE AT EACH CORNER WITH ONE #4 DEFORMED BAR EXTENDED A MINIMUM OF 6" INTO RISER BELOW.
7. THE TOP AND OPENING SHALL MATCH PROFILE OF ADJACENT CURB LINE.
8. PROVIDE MASTIC GASKET FOR ALL JOINTS.
9. THE MAXIMUM PIPE SIZE FOR THE 4' WALL LENGTH SHALL BE 24".
10. PROVIDE MANHOLE FRAME AND LID WITH SYMBOL AND LETTERING.
11. IF INLET IS NOT RECESSED THEN A PROTECTIVE GALVANIZED STEEL NOSE IS REQUIRED AS SHOWN.

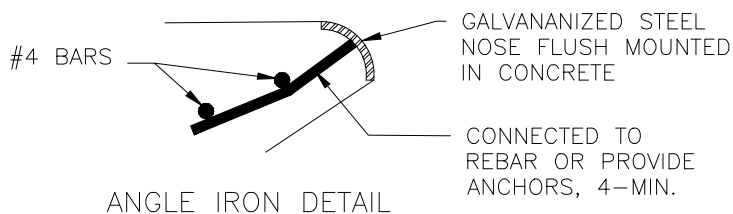
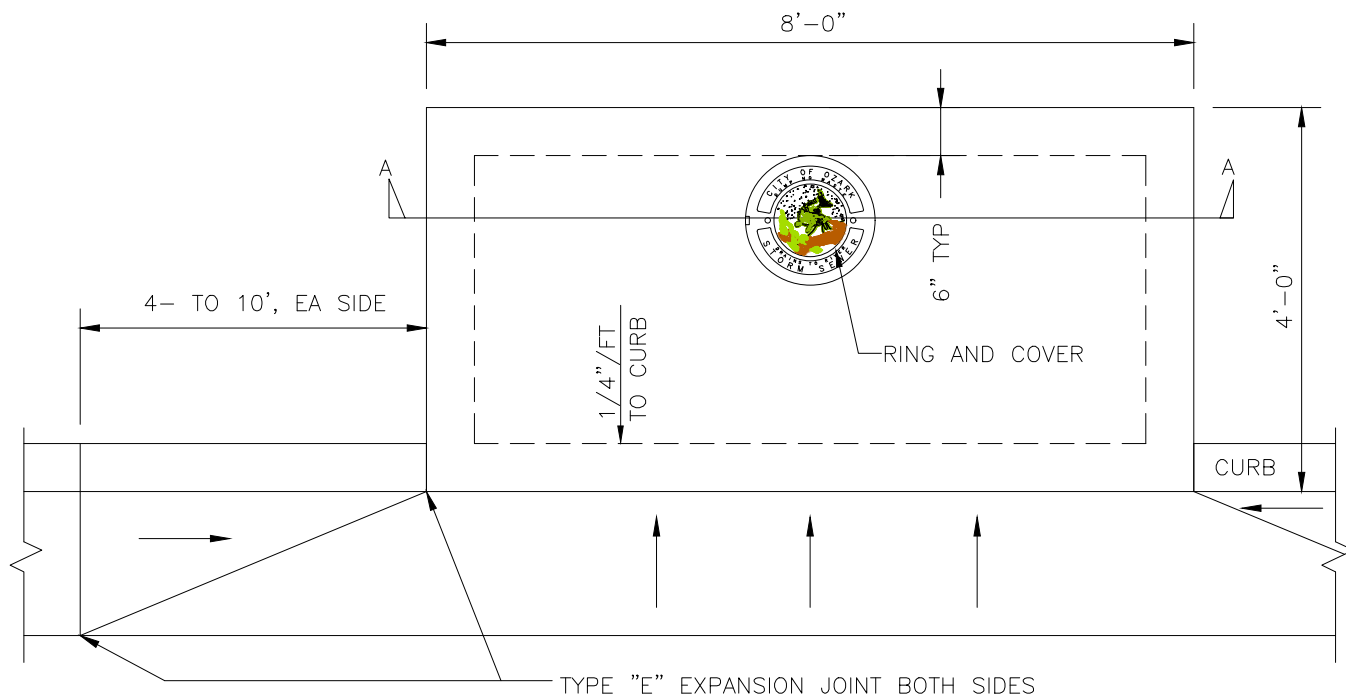
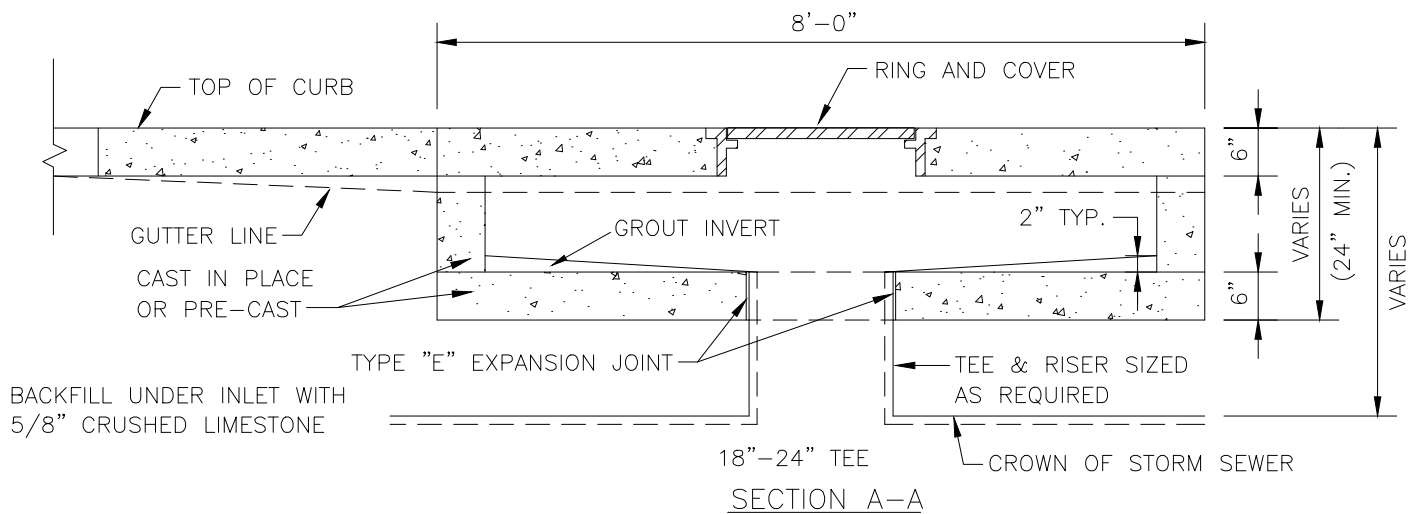
CITY OF OZARK

CURB INLETS
DETAIL

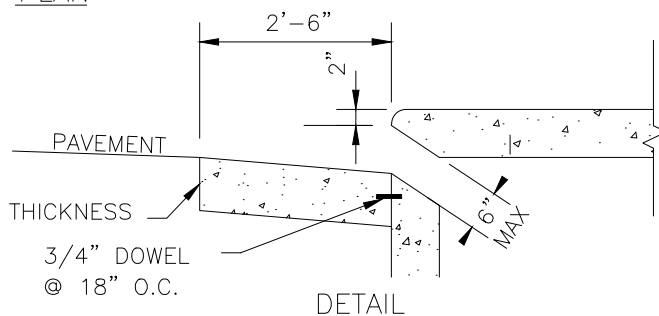
STM-1

DATE
9-01-2017

REVISION
3



PLAN



NOTES;

1. CONCRETE TOP SLAB SHALL BE PINNED TO THE STRUCTURE AT EACH CORNER WITH ONE #4 DEFORMED BAR EXTENDED A MINIMUM OF 6" INTO RISER BELOW.
2. PROVIDE #4 BARS @ 10" O.C.E.W.. FOR ALL WALLS. SEE TOP SLAB REINFORCEMENT DETAILS.
3. THE TOP AND OPENING SHALL MATCH PROFILE OF ADJACENT CURB LINE.
4. PROVIDE MASTIC GASKET FOR ALL JOINTS.
5. PROVIDE MANHOLE FRAME AND LID WITH SYMBOL AND LETTERING.
6. IF INLET IS NOT RECESSED THEN A PROTECTIVE GALVANIZED STEEL NOSE IS REQUIRED AS SHOWN.

CITY OF OZARK

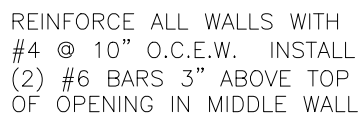
CURB INLET OVER PIPE
DETAIL

NTS

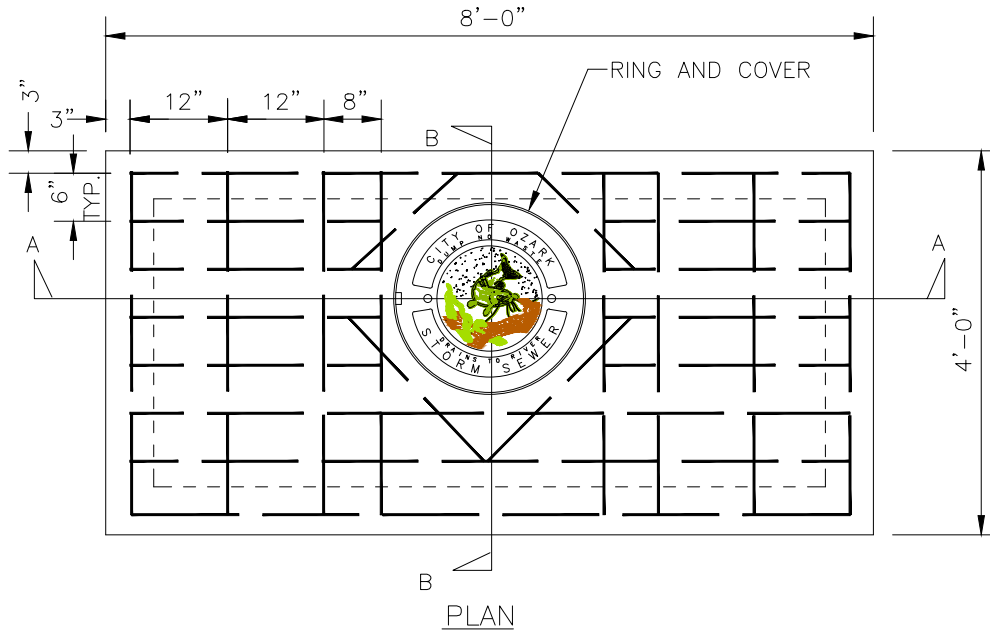
DATE
9-01-2017

REVISION
3

STM-2

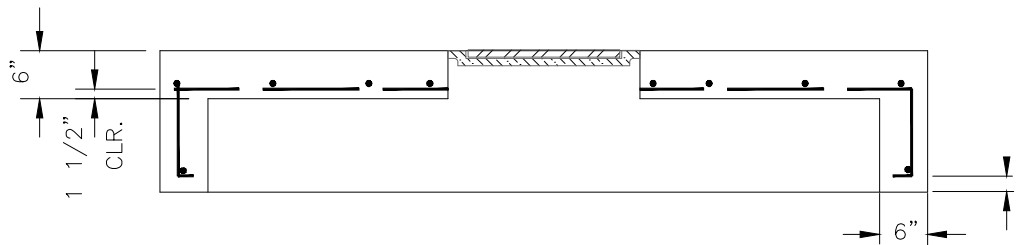


1. THE BOTTOM SLAB SHALL BE CAST IN PLACE CONCRETE ON UNDISTURBED EARTH OR PRECAST CONCRETE ON 4" MINIMUM THICKNESS OF GRANULAR BEDDING.
2. ALL PIPES SHALL FIT FLUSH WITH INSIDE FACE OF INLET.
3. PROVIDE GROUTED INVERT WITH APPROPRIATE FLOW PROFILE THRU BOX INVERT.
4. THE TOP AND OPENING SHALL MATCH PROFILE OF ADJACENT CURB LINE.
5. PROVIDE MASTIC GASKET FOR ALL JOINTS.
6. WHEN USED WITH NON-GRATE INLETS, PLATE THE GRATE INLET DOWNSTREAM.
7. PLACE GRATES SUCH THAT VANES CURVE DOWNWARD IN DIRECTION OF FLOW.
8. PROVIDE MANHOLE FRAME AND LID WITH FISH SYMBOL AND LETTERING.

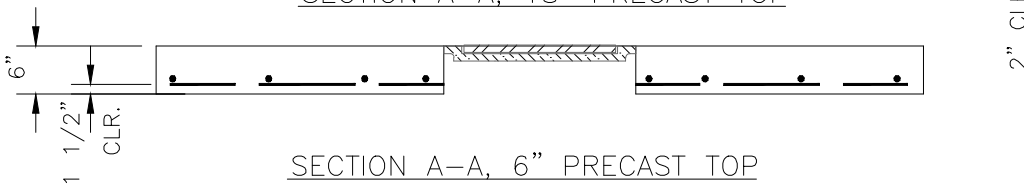


NOTES;

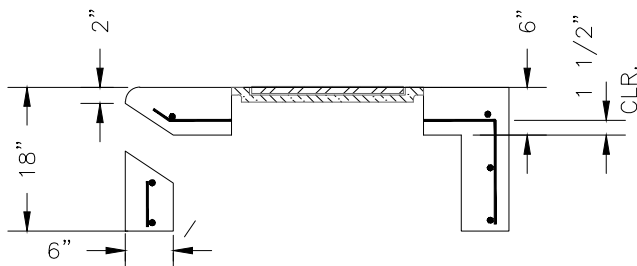
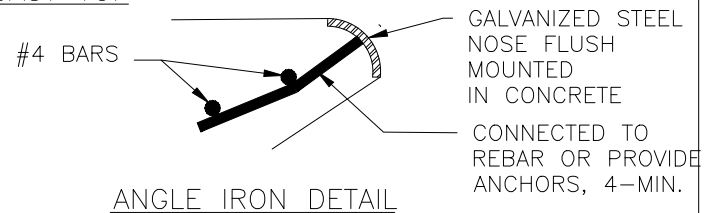
1. USE NO. 4 BARS THROUGHOUT.
2. REINFORCEMENT IS THE SAME IN THE TOP SLAB OF THE 6" AND THE 18" PRECAST TOP.
3. ALL 6" PRECAST TOPS SHALL BE PINNED AT ALL 4 CORNERS WITH #4 DOWELS EXTENDED A MINIMUM OF 6" INTO RISER BELOW..
4. IF INLET IS NOT RECESSED THEN A PROTECTIVE GALVANIZED STEEL NOSE IS REQUIRED AS SHOWN



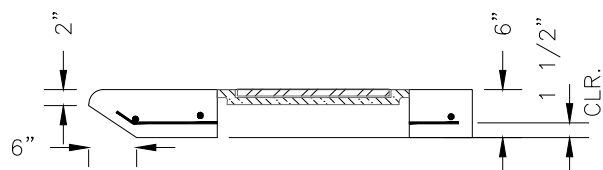
SECTION A-A, 18" PRECAST TOP



SECTION A-A, 6" PRECAST TOP



SECTION B-B 18" PRECAST TOP



SECTION B-B 6" PRECAST TOP

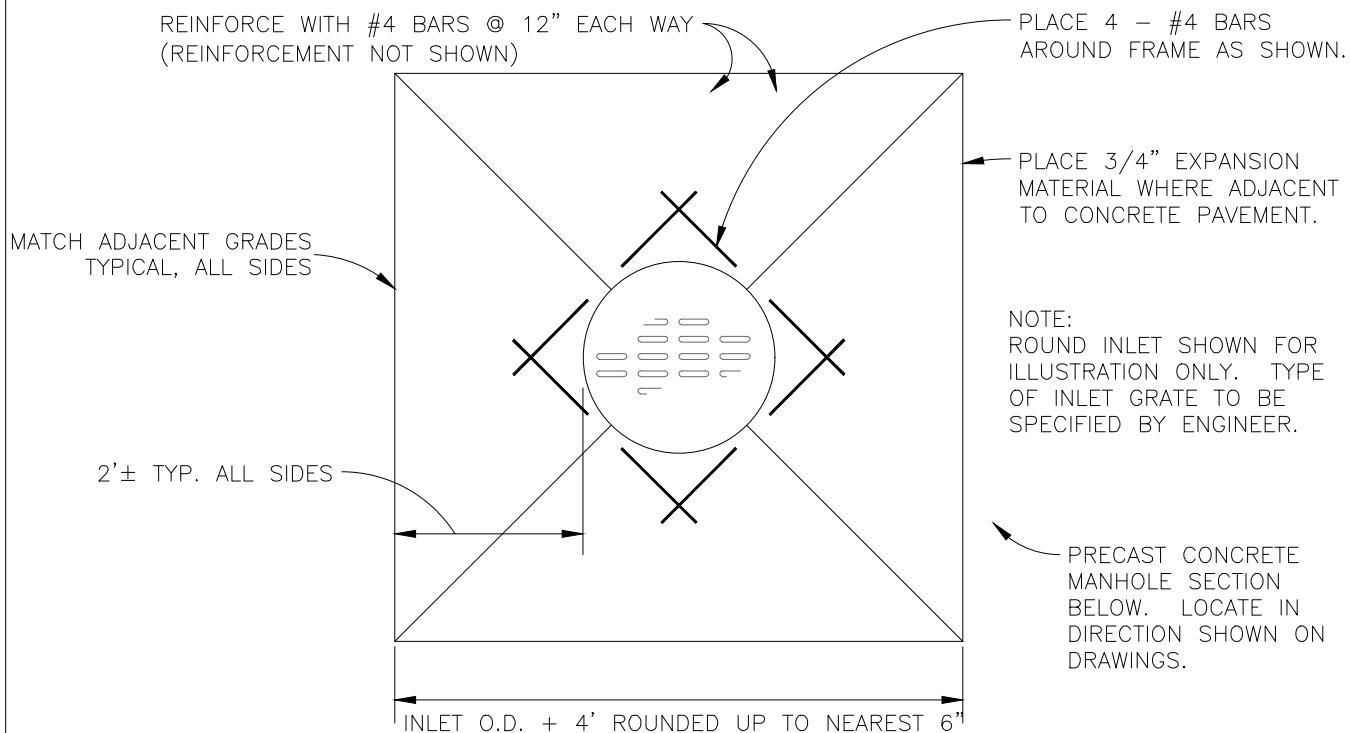
CITY OF OZARK

TOP SLAB
REINFORCEMENT

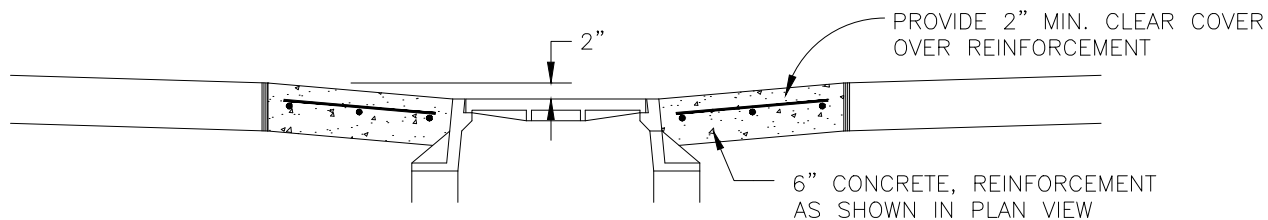
STM-4

DATE
9-01-2017

REVISION
2



PLAN VIEW



SECTION VIEW

NOTES:

1. THIS AREA INLET WILL NOT BE PERMITTED IN PUBLIC STREETS.
2. GRATING SHOULD BE BICYCLE SAFE FROM ALL DIRECTIONS.
3. DIMENSIONS SHALL BE AS SHOWN ON PLANS.

CITY OF OZARK

AREA INLET WITH APRON
DETAIL

NTS

DATE
12-28-2016

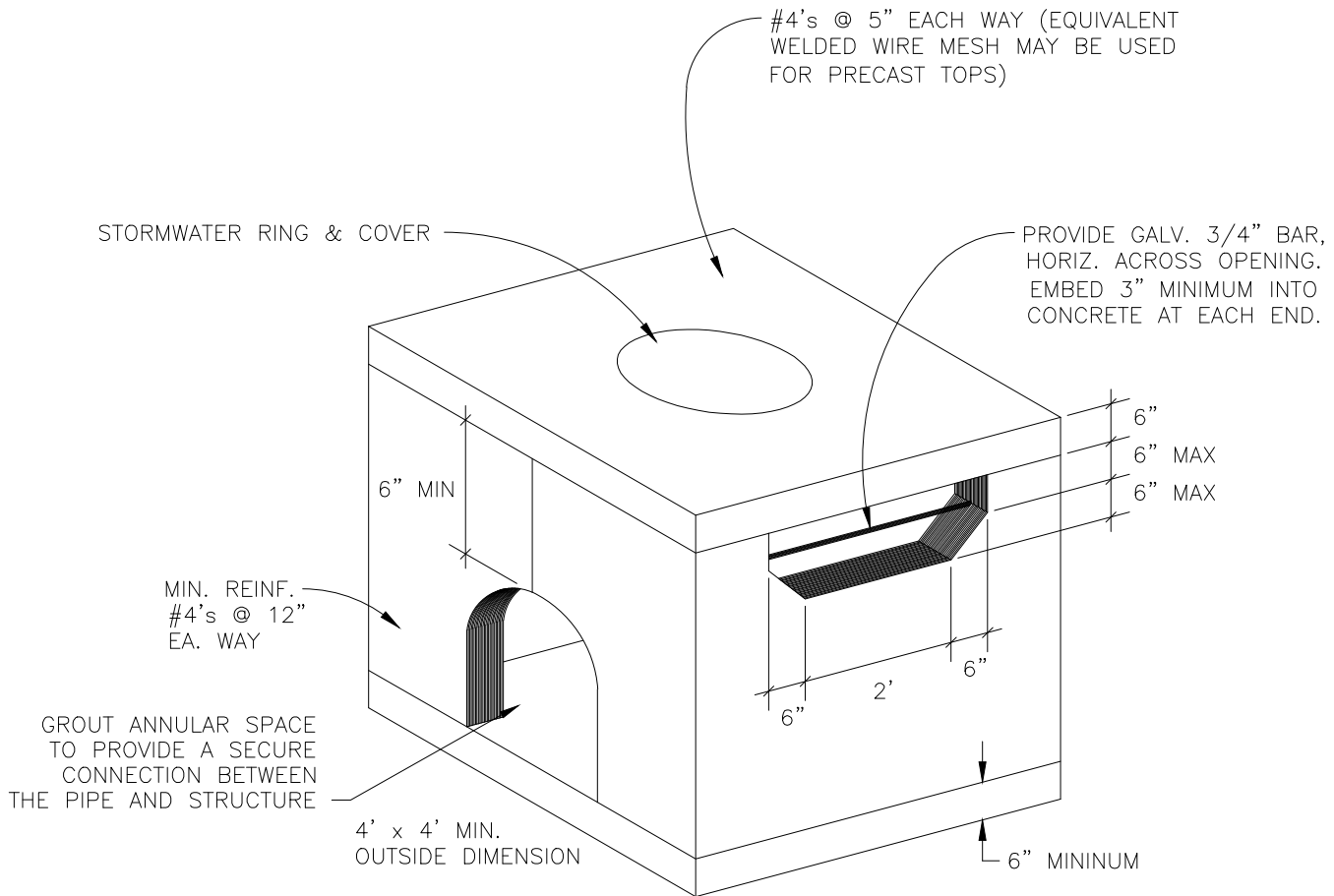
REVISION

1

STM-5

PIPE DIAMETER
15"–24"
27"–42"
48"
54"–66"
>66"

MINIMUM INSIDE DIMENSION OF STRUCTURE
FOUR FEET (4')
FIVE FEET (5')
SIX FEET (6')
EIGHT FEET (8')
SPECIAL JUNCTION STRUCTURE



NOTES;

1. THE BOTTOM SLAB SHALL BE CAST IN PLACE CONCRETE ON UNDISTURBED EARTH OR PRECAST CONCRETE ON 4" MINIMUM THICKNESS OF GRANULAR BEDDING.
2. PROVIDE APPROPRIATE FLOW PROFILE THRU BOX INVERT.
3. PROVIDE INVERT CHANNEL WITH 4000 PSI, TYPE PORTLAND CEMENT CONCRETE.
4. ALL PIPES SHALL FIT FLUSH WITH INSIDE FACE OF INLET.
5. PROVIDE #4 BARS @ 10" O.C.E.W. FOR ALL WALLS, (VERT., HORIZ. AND SLAB). SEE TOP SLAB REINFORCEMENT DETAIL.
6. CONCRETE TOP SLAB SHALL BE PINNED TO THE STRUCTURE AT EACH CORNER WITH ONE #4 DEFORMED BAR EXTENDED A MINIMUM OF 6" INTO RISER BELOW.
7. PROVIDE MASTIC GASKET FOR ALL JOINTS.
8. PROVIDE MANHOLE FRAME AND LID WITH FISH SYMBOL AND LETTERING.

CITY OF OZARK

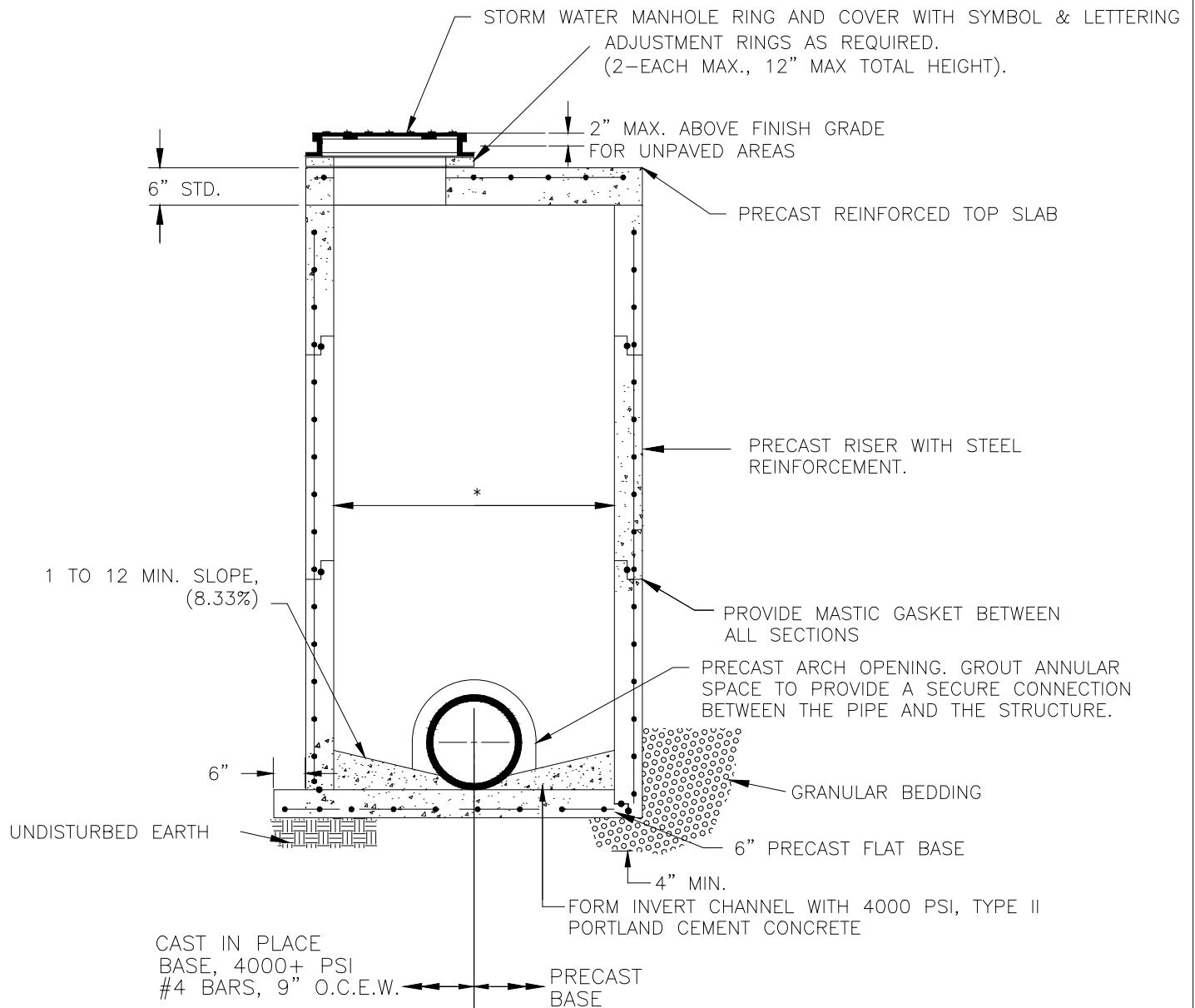
OPEN SIDE DROP INLET
DETAIL

NTS

DATE
12-28-2016

REVISION
1

STM-6



NOTES;

1. THE BOTTOM SLAB SHALL BE CAST IN PLACE CONCRETE ON UNDISTURBED EARTH OR PRECAST CONCRETE ON 4" MINIMUM THICKNESS OF GRANULAR BEDDING.
2. MANHOLE SHALL BE DESIGNED TO WITHSTAND DEAD LOADS AND TRAFFIC LOADS IN ACCORDANCE WITH ASTM C890.
3. PROVIDE APPROPRIATE FLOW PROFILE THRU INVERT.
4. THE MANHOLE WALL THICKNESS SHALL BE 1/12 OF INSIDE DIAMETER PLUS ONE INCH.
5. DO NOT PROVIDE STEPS
6. THE MANHOLE SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ASTM C478.
7. ALL PIPES SHALL FIT FLUSH AT INSIDE FACE OF MANHOLE.
8. PROVIDE MANHOLE FRAME AND LID WITH SYMBOL AND LETTERING.

PIPE DIAMETER
15"-24"
27"-42"
48"
54"-66"
>66"

*MINIMUM INSIDE DIAMETER OF MANHOLE
FOUR FEET (4')
FIVE FEET (5')
SIX FEET (6')
EIGHT FEET (8')
SPECIAL MANHOLE STRUCTURE

CITY OF OZARK

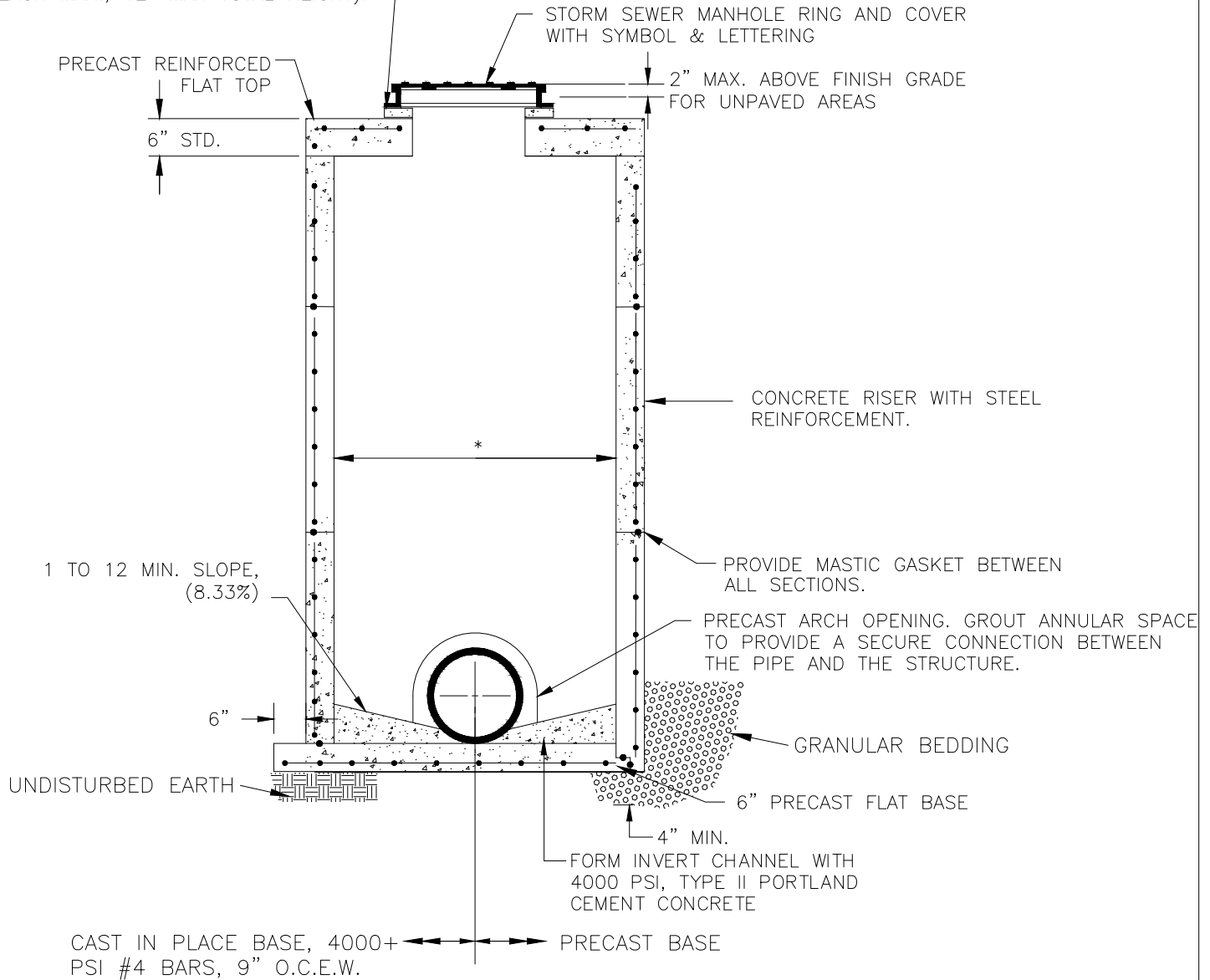
STORM MANHOLE
DETAIL

NTS

STM-7

DATE
12-19-2016

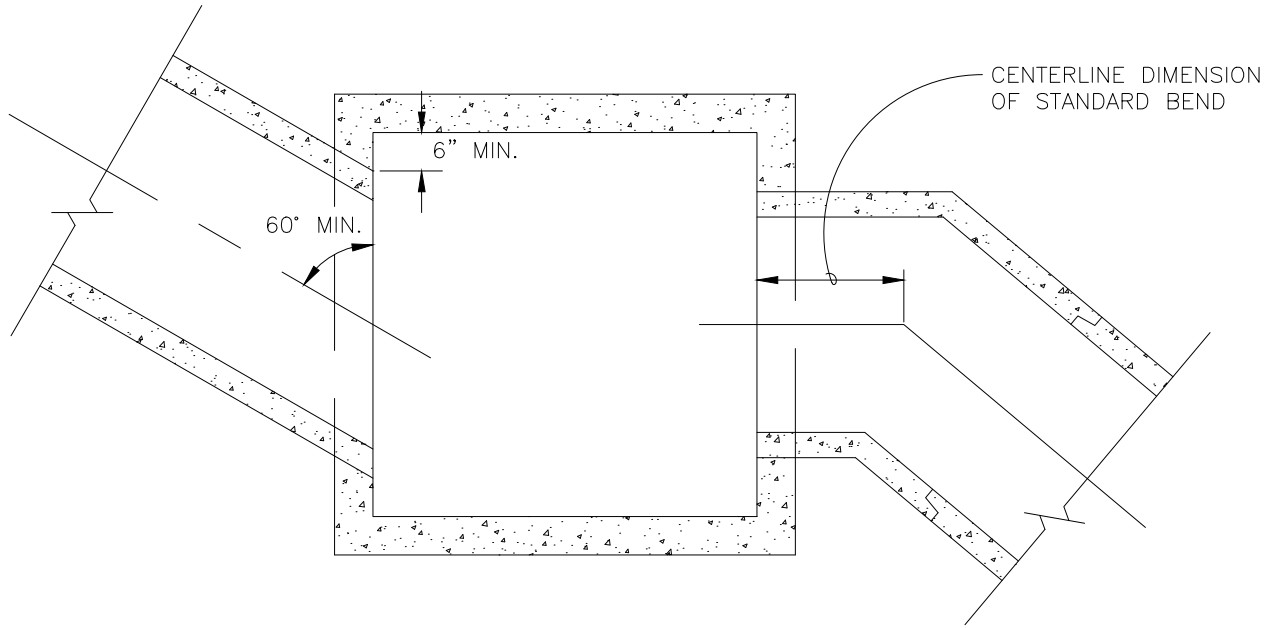
REVISION
2



NOTES;

1. THE BOTTOM SLAB SHALL BE CAST IN PLACE CONCRETE ON UNDISTURBED EARTH OR PRECAST CONCRETE ON 4" MINIMUM THICKNESS OF COMPACTED GRANULAR BEDDING.
2. JUNCTION BOX SHALL BE DESIGNED TO WITHSTAND DEAD LOADS AND TRAFFIC LOADS IN ACCORDANCE WITH ASTM C890.
3. CONCRETE TOP SLAB SHALL BE PINNED TO THE STRUCTURE AT EACH CORNER WITH ONE #4 DEFORMED BAR EXTENDED A MINIMUM OF 6" INTO RISER BELOW.
4. PROVIDE APPROPRIATE FLOW PROFILE THRU INVERT.
5. ALL PIPES SHALL FIT FLUSH WITH INSIDE FACE OF JUNCTION BOX.
6. DO NOT PROVIDE STEPS.
7. THE CIRCULAR PRECAST SECTIONS AND STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH ASTM C478.
- 10 PROVIDE MANHOLE FRAME AND LID WITH SYMBOL AND LETTERING.

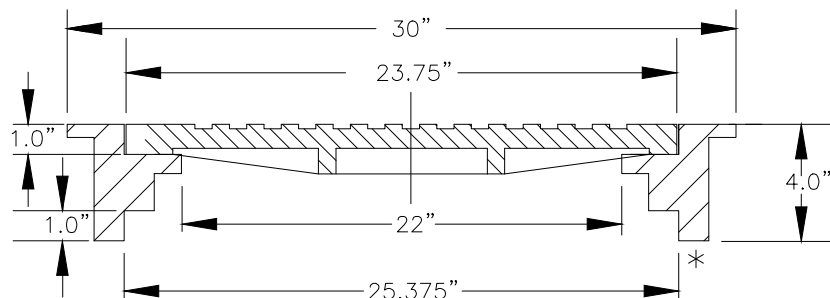
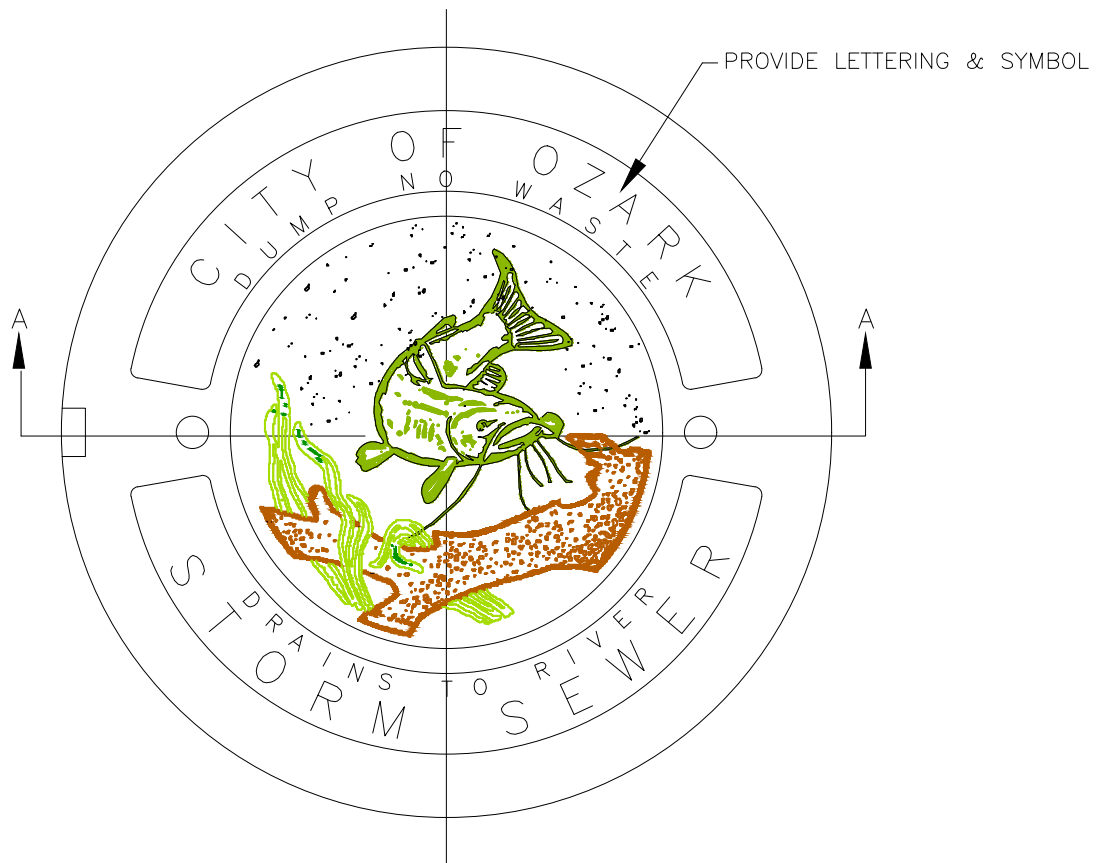
PIPE DIAMETER	*MINIMUM INSIDE DIMENSION OF STRUCTURE
15"-24"	FOUR FEET (4')
27"-42"	FIVE FEET (5')
48"-54"	SIX FEET (6')
54"-66"	EIGHT FEET (8')
>66"	SPECIAL JUNCTION STRUCTURE



CITY OF OZARK	TYPICAL PIPE CONNECTIONS AT JUNCTION STRUCTURE	STM-9	
		DATE 4-21-06	REVISION 0

NOTES:

1. DEETER 1157 MANHOLE RING AND SOLID COVER OR APPROVED EQUAL.
2. COVERS WITH A SIMILIAR SYMBOL MAY BE SUBMITTED FOR APPROVAL
3. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED .



SECTION A-A

*MANHOLE RING IS REVERSIBLE

CITY OF OZARK

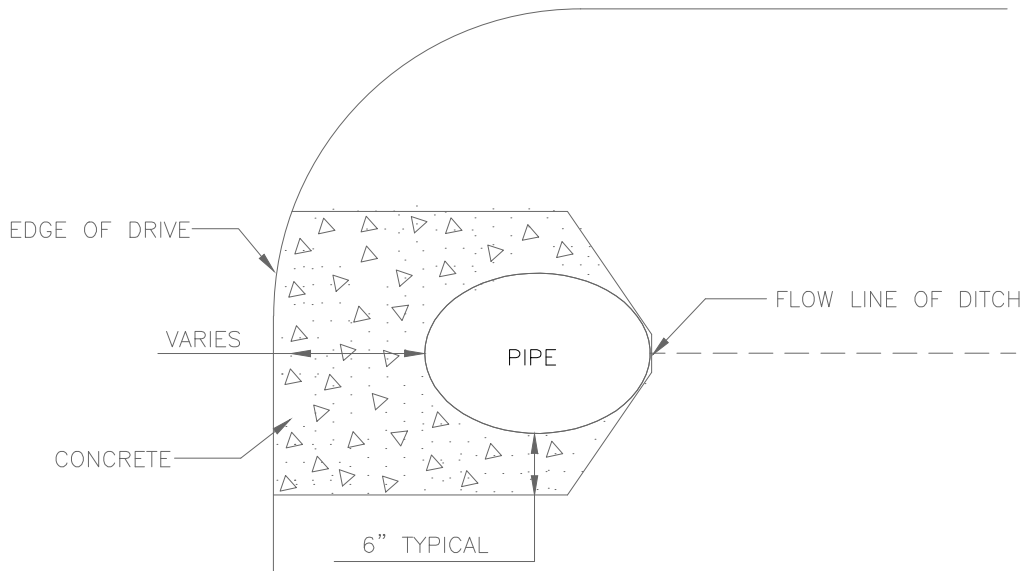
RING AND COVER FOR STORM INLET,
STORM MANHOLE & JUNCTION BOX

NTS

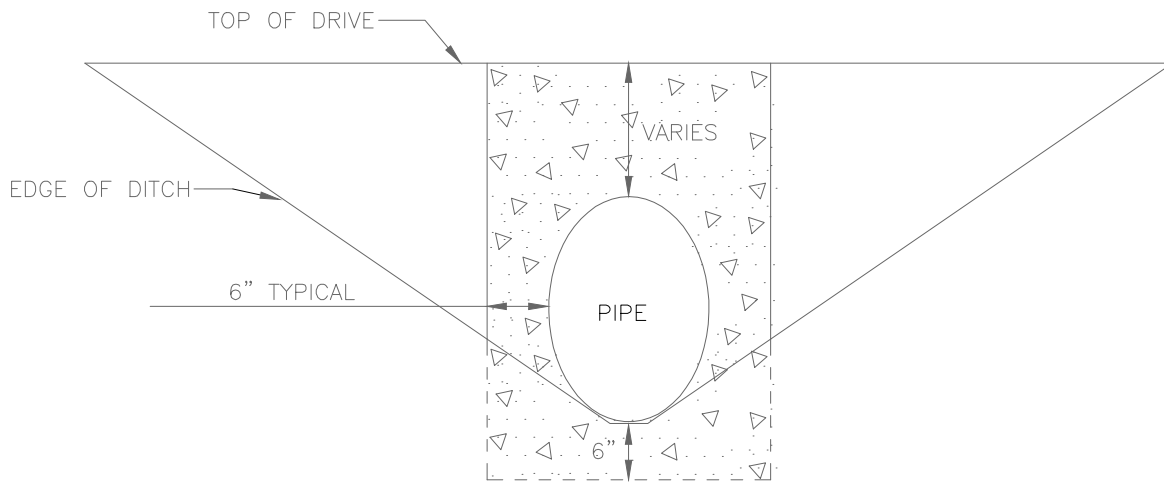
STM-10

DATE
12-19-2016

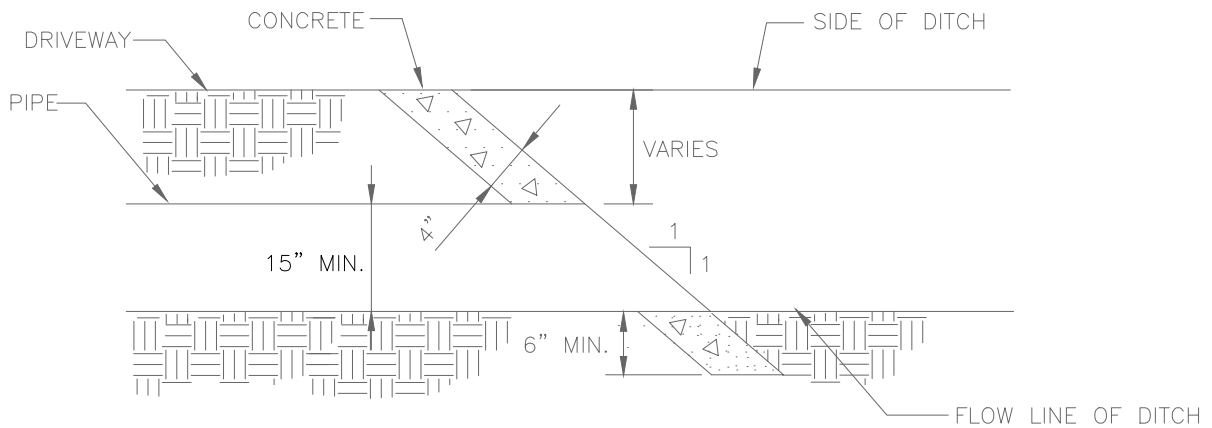
REVISION
2



PLAN



ELEVATION



SECTION

FOR DRIVEWAY CROSSINGS AT UNIMPROVED STREETS WITH CORRUGATED OR CONCRETE PIPE.
CUT PIPE AT A BEVEL AND POUR CONCRETE AROUND END TO MEASUREMENTS INDICATED.

CITY OF OZARK

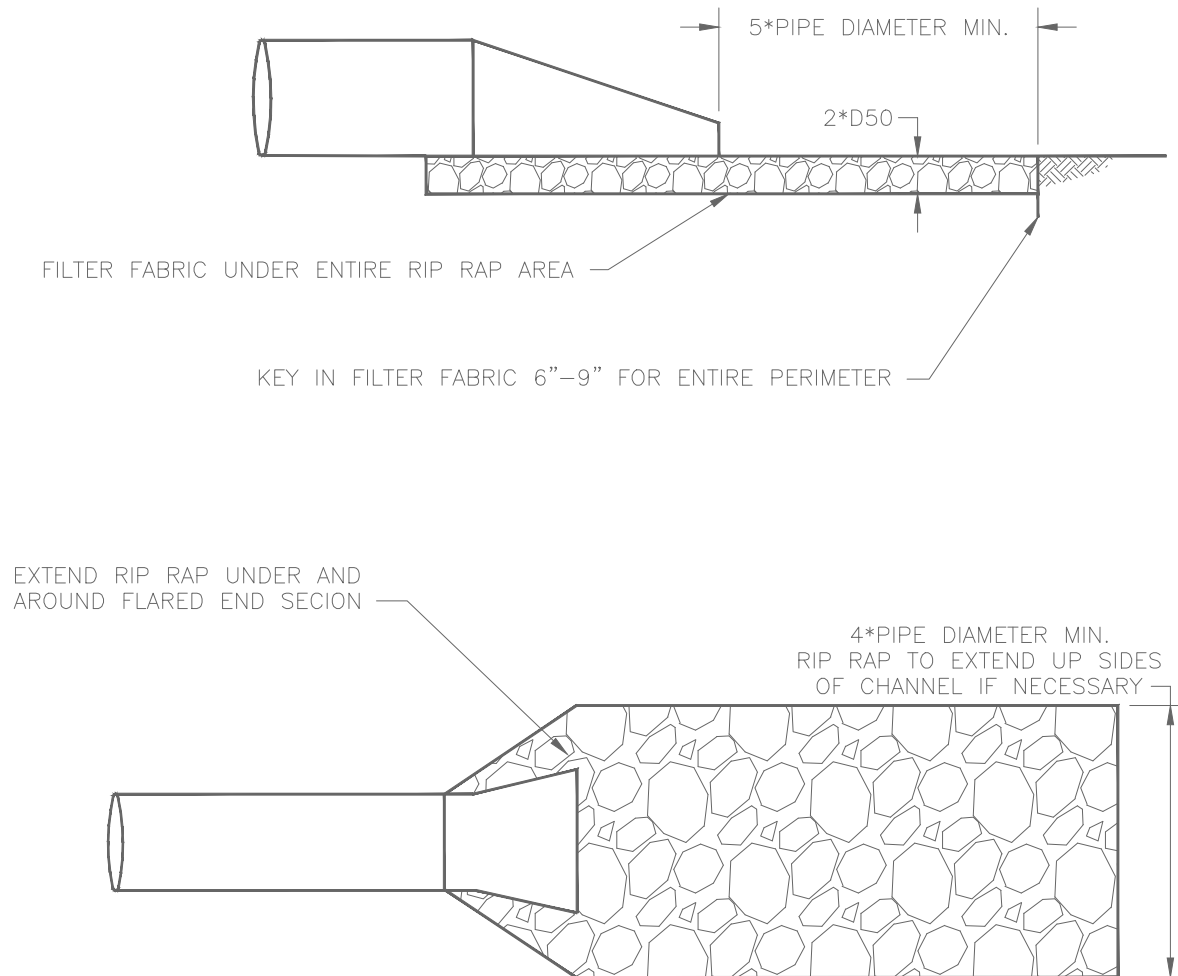
CONCRETE CULVERT CAP
FOR DRIVEWAYS

NTS

STM-11

DATE
12-19-2016

REVISION
1

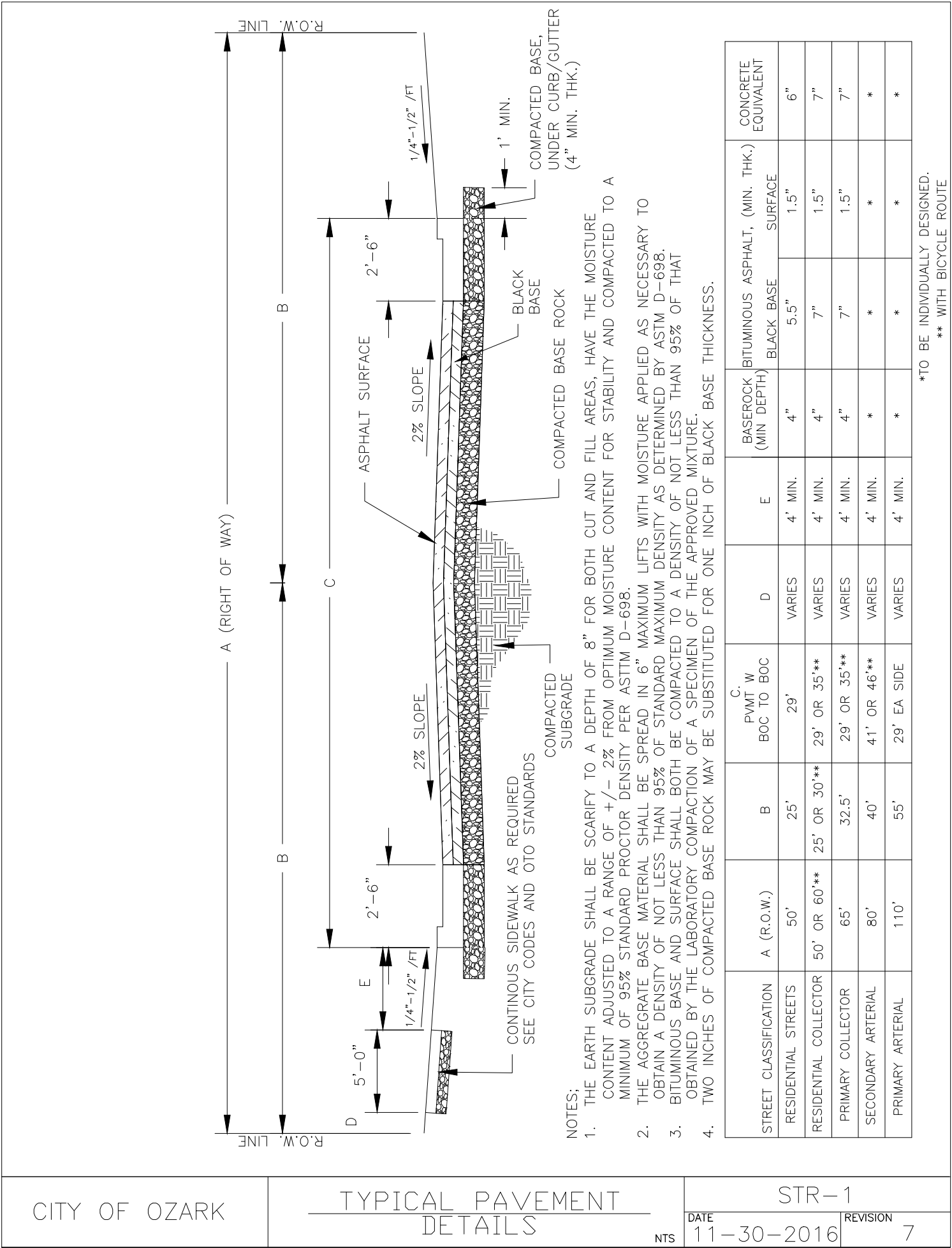


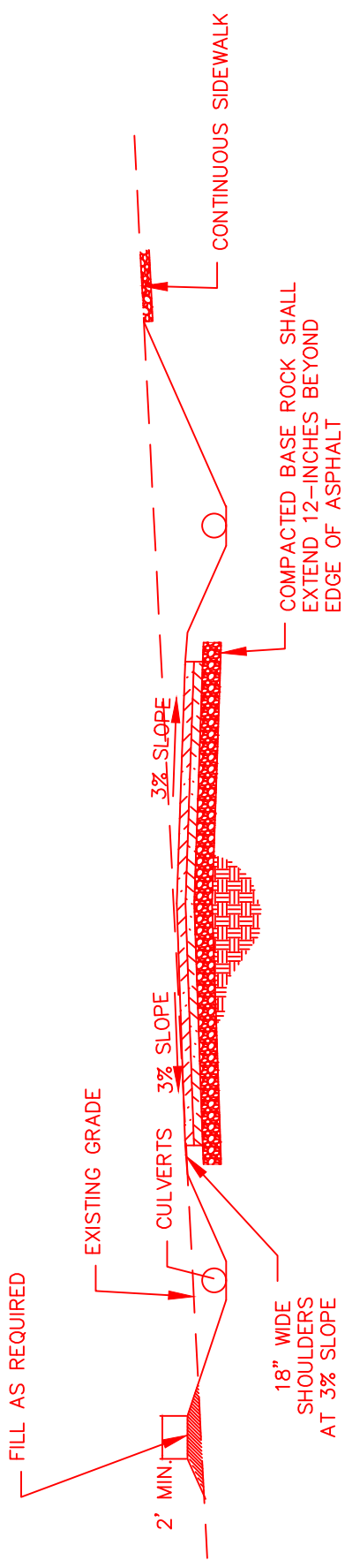
VELOCITY (FPS)	RIP RAP D50 MIN DIAMETER (INCHES)
$V < 8$	12
$8 < V < 12$	24
$V > 12$	NOT PERMITTED

D50 OF LESS THAN 12 INCHES IS NOT PERMITTED

NOTES;

1. FOR PIPES WITH HEADWALLS, BEGIN RIP RAP AT TOE OF HEADWALL. RIP RAP MINIMUM WIDTH TO BE WIDTH OF HEADWALL PLUS ONE FOOT BOTH SIDES.
2. FOR MULTIPLE PIPES AND ARCHED PIPES, RIP RAP TO BE AT A MINIMUM OF THE TOTAL WIDTH OF THE OPENING PLUS ONE FOOT ON BOTH SIDES.
3. D50 IS THE ROCK SIZE THAT CORRESPONDS TO 50 PERCENT OF THE ROCKS BEING SMALLER AND 50 PERCENT OF THE ROCKS BEING LARGER.

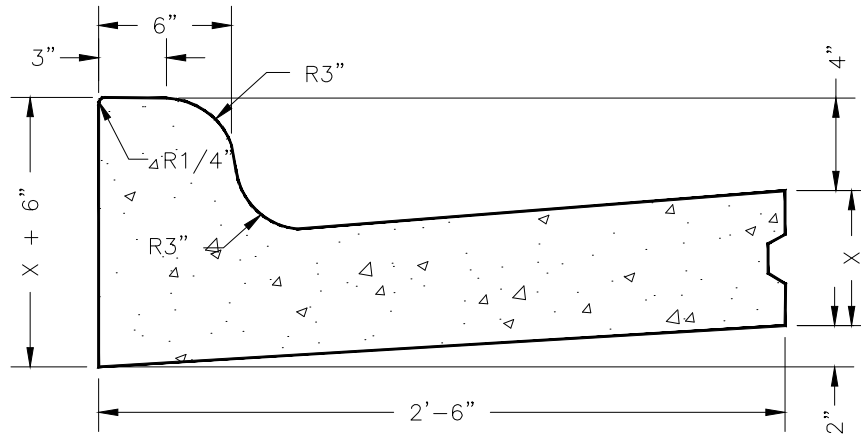




GENERAL NOTES:

1. RIGHT-OF-WAY SHALL BE OF SUFFICIENT WIDTH TO CONTAIN ALL DITCHES, SLOPES AND SIDEWALKS.
2. PAVEMENT WIDTH SHALL BE 28' MINIMUM.
3. CROSS PAVEMENT SLOPES SHALL BE 3%.
4. PAVEMENT STRUCTURE SHALL COMPLY WITH THE STANDARDS STATED IN DETAIL STR-1 AND WITH THE OZARK DESIGN STANDARDS.
5. ALL DITCH SLOPES SHALL BE GRADED AT A MAXIMUM OF 1V:3H.
6. DITCH BOTTOM WIDTHS SHALL BE A MINIMUM OF 2'.
7. MINIMUM PROFILE FOR DITCHES SHALL BE 1%.
8. EROSION CONTROL SHALL BE PROVIDED AS REQUIRED FOR STEEPER PROFILES.
9. DITCH DEPTHS SHALL BE A MINIMUM OF 2'. PROVIDE FILL AS REQUIRED TO ACHIEVE THIS DEPTH.
10. DITCH CAPACITY SHALL BE INCREASED AS REQUIRED TO ACHIEVE PROPER STORM-WATER FLOW CAPACITY.
11. SHOULDER WIDTHS SHALL BE 18" AND SLOPED AT 3%.
12. SIDEWALK WIDTHS SHALL BE 5' MINIMUM AND COMPLY WITH THE OZARK DESIGN STANDARDS.
13. PROVIDE CULVERTS WITH A MINIMUM DIAMETER OF 15" UNDER DRIVEWAYS, SIDE STREETS, SIDEWALKS AND ETC.
14. CULVERT SIZES SHALL BE INCREASED AS REQUIRED TO ACHIEVE PROPER STORM-WATER FLOW CAPACITY.
15. ALL DISTURBED AREAS BEYOND THE PAVED AREAS SHALL BE REVEGETATED AS PER OZARK'S CONSTRUCTION SPECIFICATIONS..
16. ROADSIDE DITCHES SHALL DISCHARGE EITHER TO AN EXISTING STORM SYSTEM OR A DETENTION BASIN.
17. STORM DRAINAGE SHALL COMPLY WITH APPROPRIATE STORM-WATER SECTIONS OF THE CITY OF OZARK'S DESIGN STANDARDS.

CITY OF OZARK	PAVEMENT WITH DITCHES DETAILS	STR-1A DATE 6/11/2024
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NOTE;

1. X DENOTES THE THICKNESS OF THE PAVEMENT, (ASPHALT OR CONCRETE).
2. PROVIDE THE KEYWAY OR #5 REBAR AT 2'-6" O.C. FOR ALL CONCRETE PAVEMENT. KEYWAY OR REBAR SHALL BE OMITTED FOR ASPHALT PAVEMENT.
3. EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER THE CONCRETE JOINT DETAIL. EXPANSION JOINTS SHALL BE PLACED AS PER THE JOINT LAYOUT DETAIL AND AT ALL STRUCTURES SUCH AS BOX CULVERTS, JUNCTION BOXES, INLETS AND ETC.
4. CONTRACTION JOINTS SHALL BE CONSTRUCTED AS PER THE CONCRETE JOINT DETAIL. CONTRACTION JOINTS SHALL BE PLACED AS PER THE JOINT LAYOUT DETAIL AND AT INTERVALS OF NOT MORE THAN 25' NOR MORE THAN 25' FROM ANY EXPANSION JOINT.

CITY OF OZARK

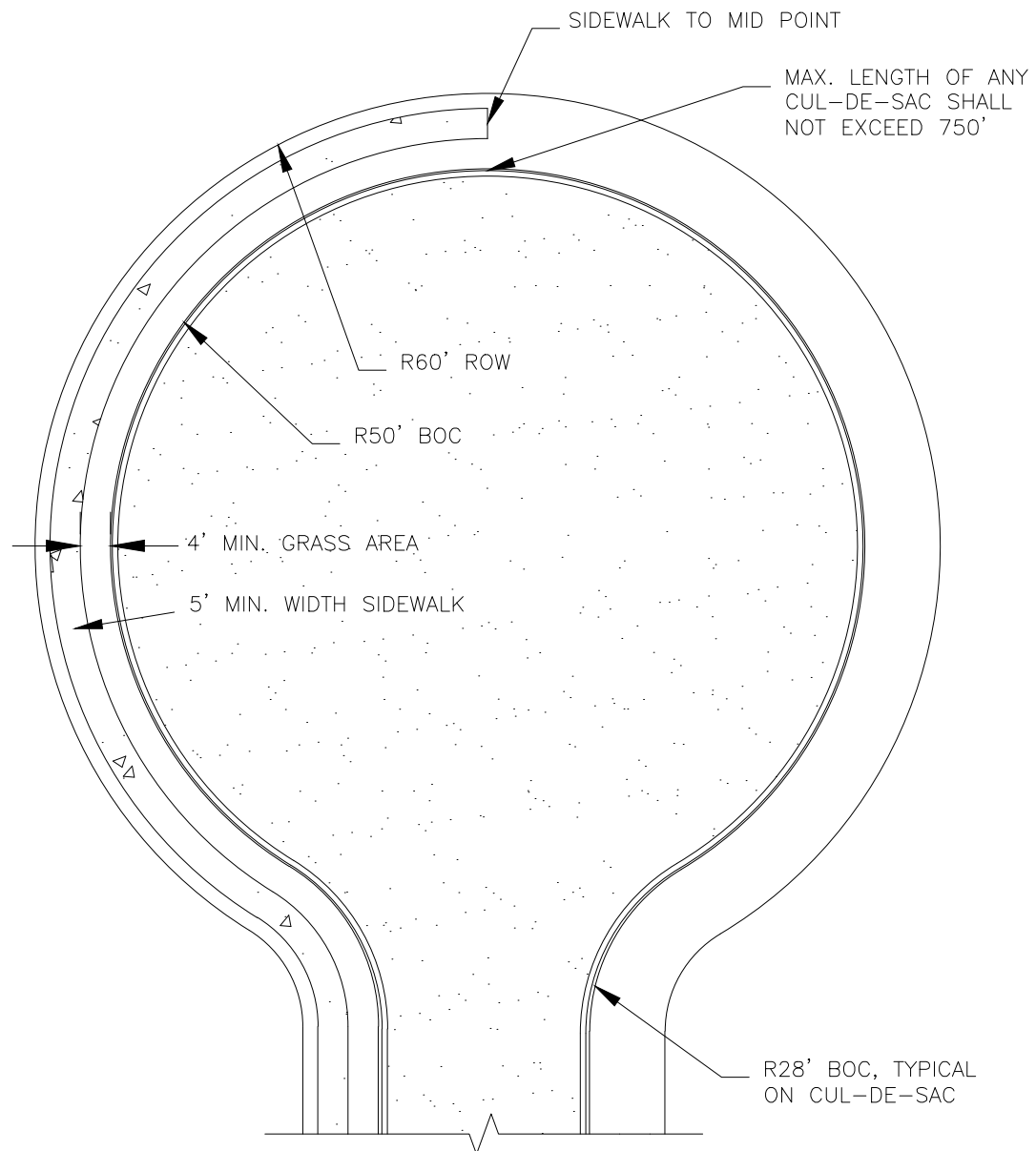
STANDARD CURB
DETAILS

NTS

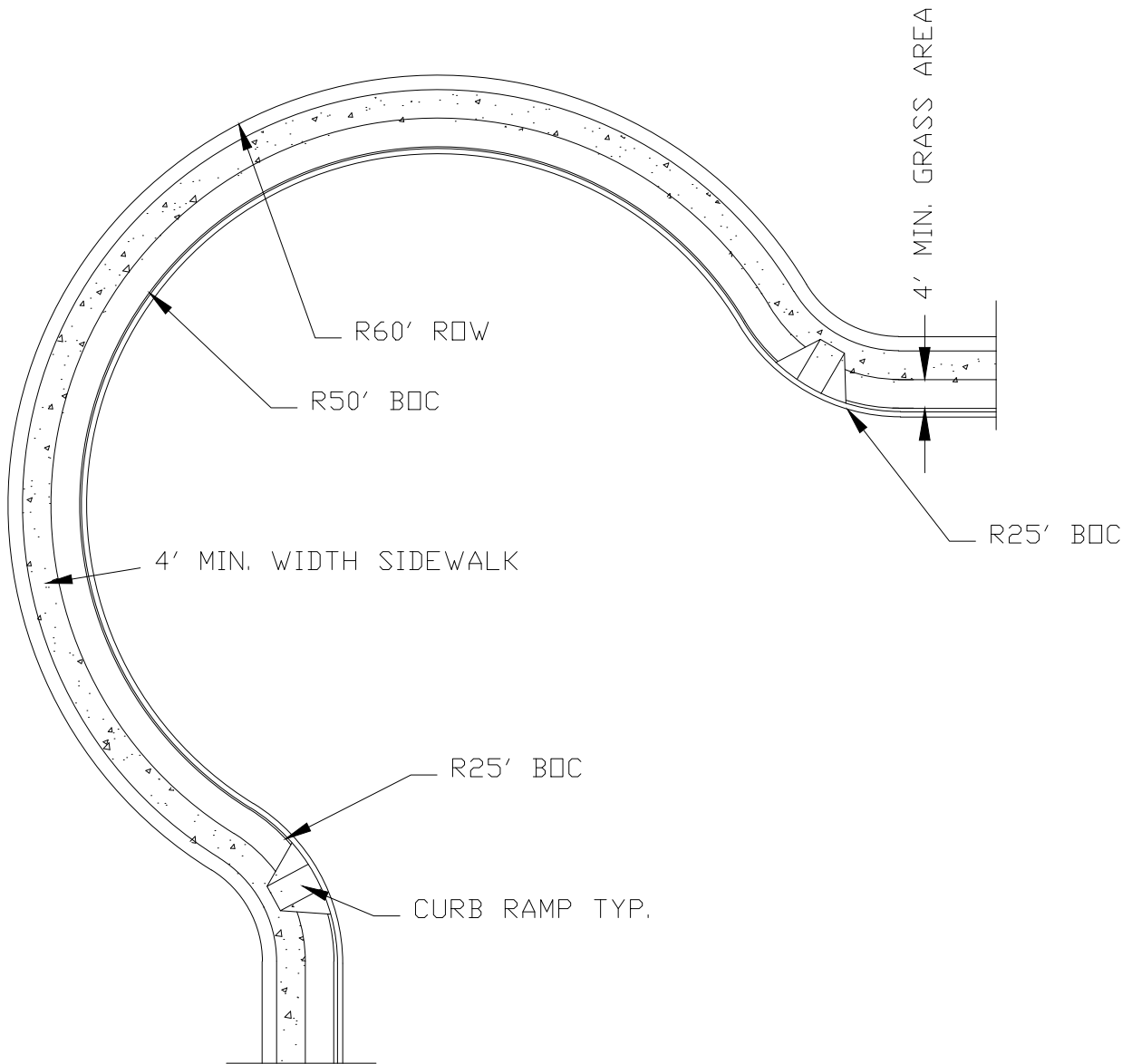
DATE
4-20-10

REVISION
1

STR-2



NOTE:
 1. ALL SIDEWALKS TERMINATING IN CUL-DE-SACS MUST INCLUDE AN A.D.A. ACCESSIBLE ACCESS RAMP WITHIN THE CUL-DE-SAC..



CITY OF OZARK

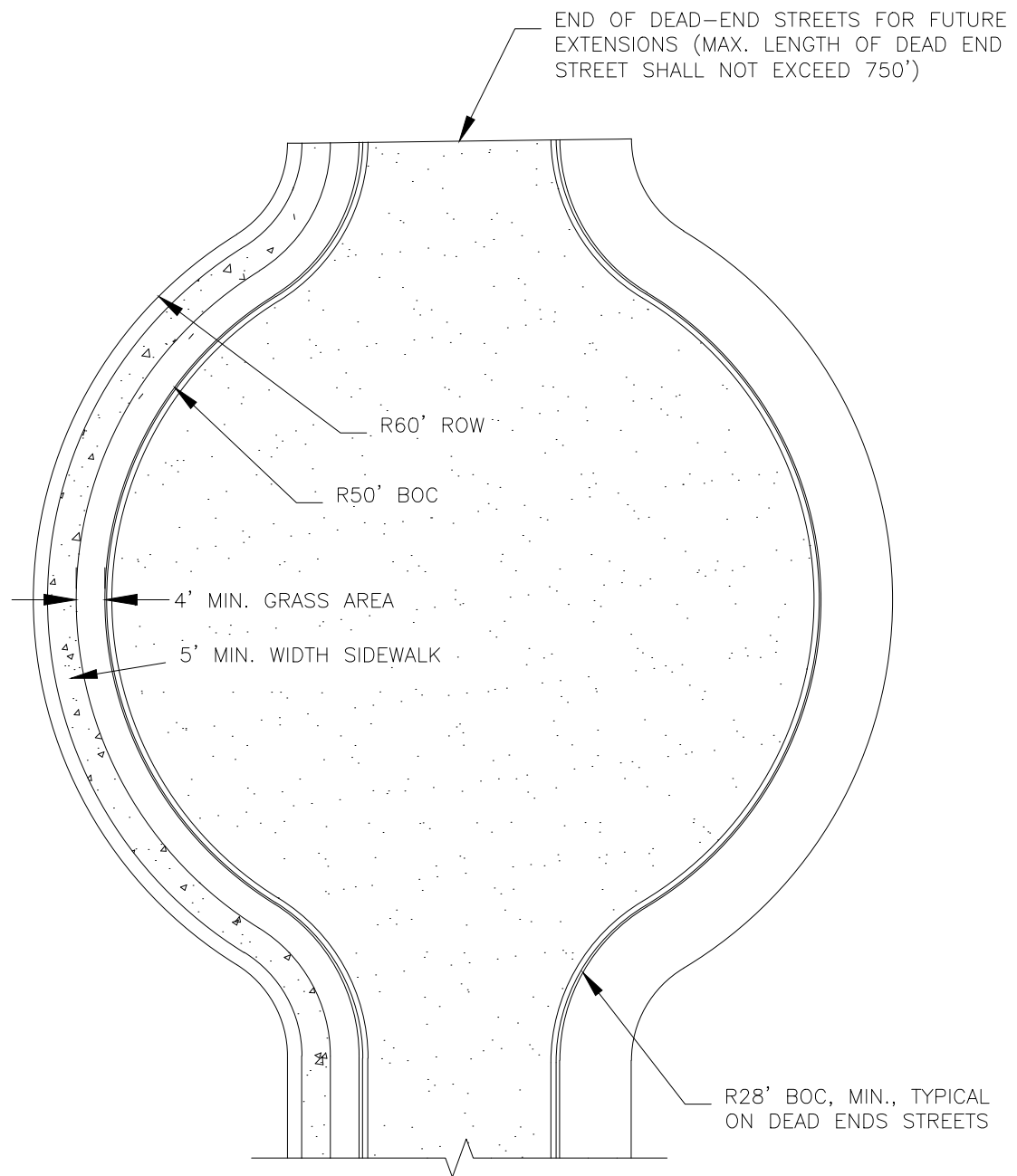
"KNUCKLES" PLAN
MINIMUM STANDARDS

NTS

STR-3A

DATE
2-01-2021

REVISION
2



NOTE:

1. AN APPROPRIATE SIZED AND DESIGNED "T" TYPE MAY BE APPROVED ON A CASE BY CASE REQUEST.

CITY OF OZARK

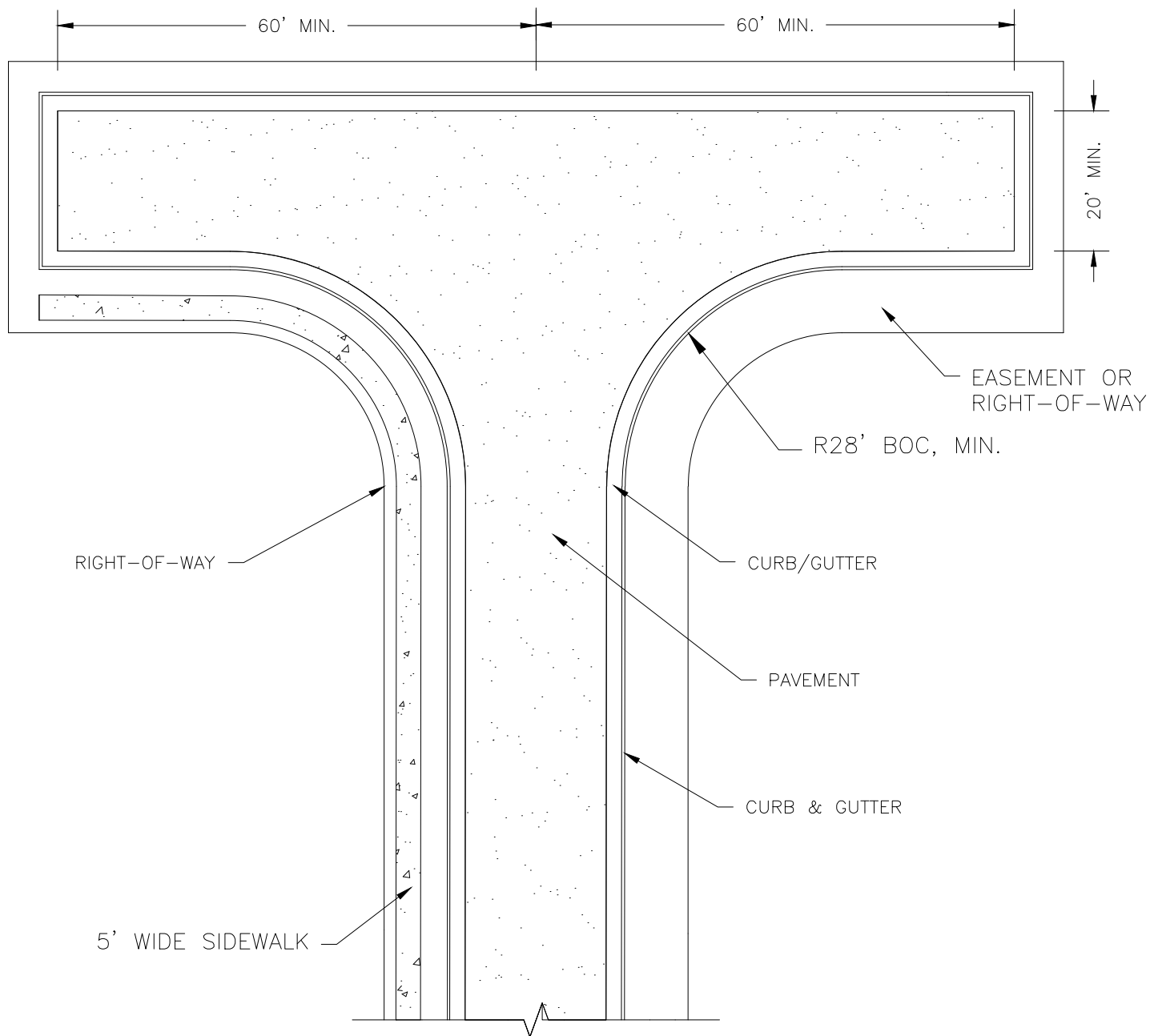
TEMPORARY DEAD ENDS
MINIMUM STANDARDS

NTS

DATE
11-28-2016

STR-4

REVISION
3



NOTE:

1. A "T" TYPE DEAD-END MAY BE APPROVED FOR A FIRE APPARATUS ACCESS ROAD TURNAROUND ON A CASE BY CASE REQUEST.
2. FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10 PERCENT IN GRADE WITHOUT APPROVAL FROM THE FIRE CHIEF.
3. PROVIDE APPROPRIATE STORM DRAINAGE.
4. LENGTH OF DEAD END STREETS SHALL NOT EXCEED 750'

CITY OF OZARK

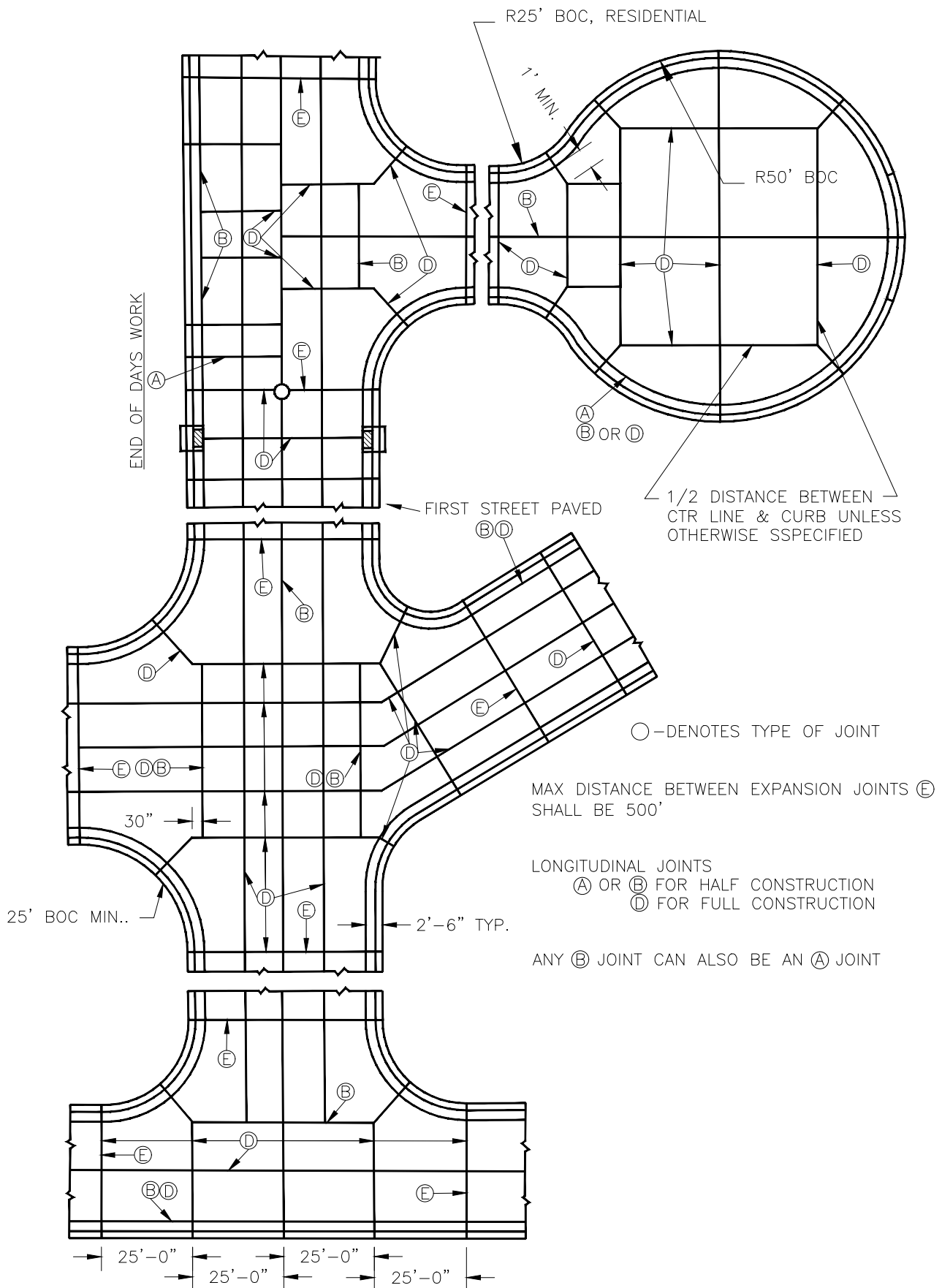
"T" HAMMERHEADS
MINIMUM STANDARDS

NTS

STR-5

DATE
11-28-2016

REVISION
0



CITY OF OZARK

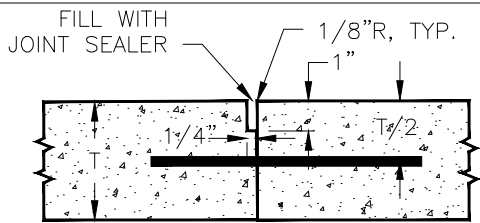
JOINT LAYOUT, CONCRETE DETAILS

NTS

STR-6

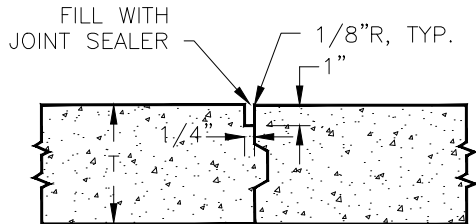
DATE
4-20-10

REVISION
0



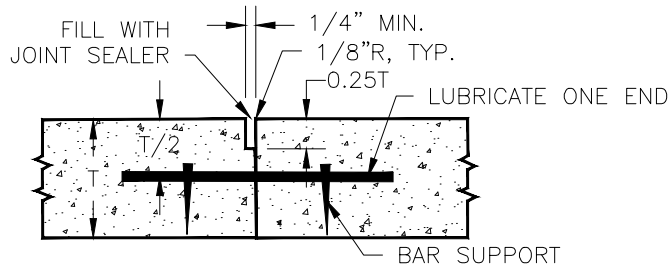
DOWELED LONGITUDINAL JOINT
WITH 24\" NO. 6 DEFORMED BAR AT 24\" O.C.

TYPE "A"



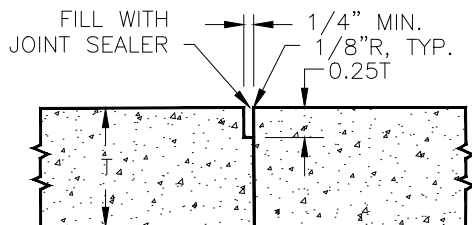
KEYED LONGITUDINAL JOINT

TYPE "B"



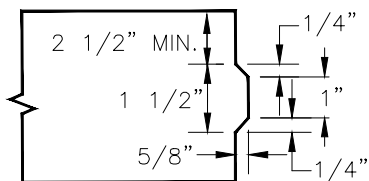
SAWED CONTRACTION JOINT WITH
1\" X 18\" DOWEL BAR AT 24\" O.C.

TYPE "C"

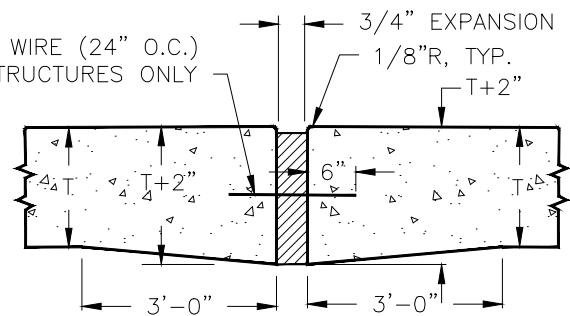


SAWED CONTRACTION JOINT

TYPE "D"

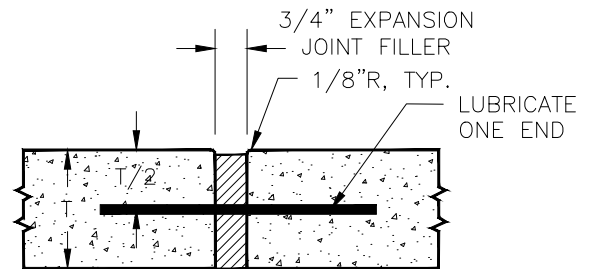


DETAIL KEY
KEYWAY FORMED BY FASTENING KEY TO FORM



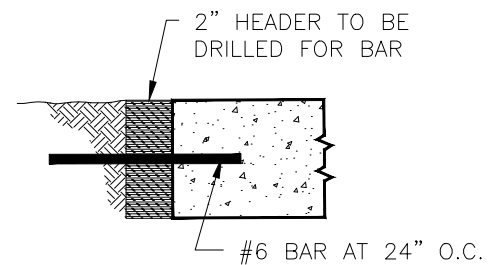
EXPANSION JOINT

TYPE "E"



DOWELED EXPANSION JOINT
3/4\" X 15\" DOWEL BAR AT 24\" O.C.

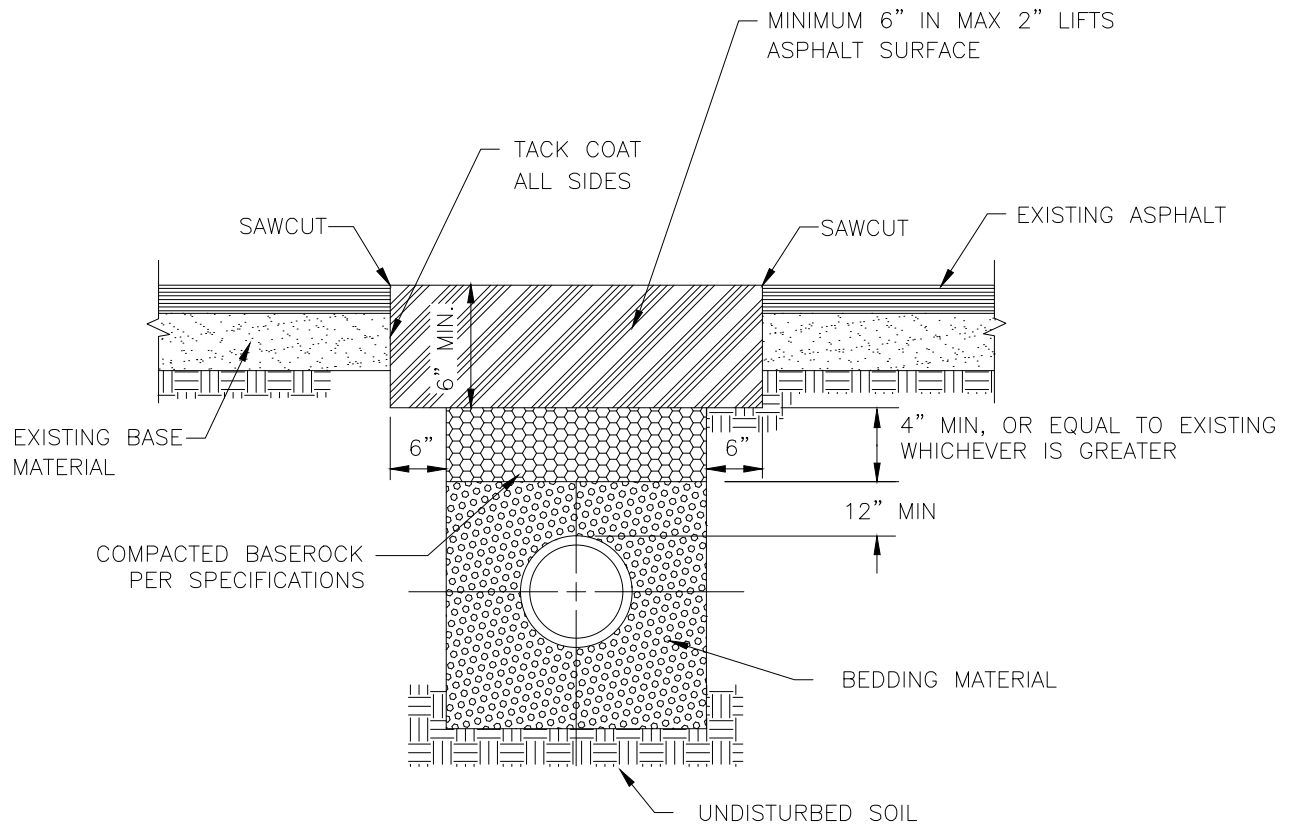
TYPE "F"



CONSTRUCTION HEADER CONCRETE

DEPTH OF SAW JOINT

6\" PAV. = 1-1/2\"
7\" PAV. = 1-3/4\"
8\" PAV. = 2\"



NOTES:

1. PROVIDE FLOWABLE FILL MIX TO TOP OF EXISTING ASPHALT FOR TEMPORARY DRIVING SURFACES.
2. COMPACTED BASE MUST HAVE OPTIMAL MOISTURE CONTENT AND BE COMPACTED TO 95% DENSITY EVERY LIFT FOOT.
3. PROVIDE TRACER WIRES AND WARNING TAPES AS SPECIFIED.
4. THE PUBLIC WORKS DIRECTOR MAY APPROVE A CONCRETE PATCH IN LIEU OF ASPHALT.

CITY OF OZARK

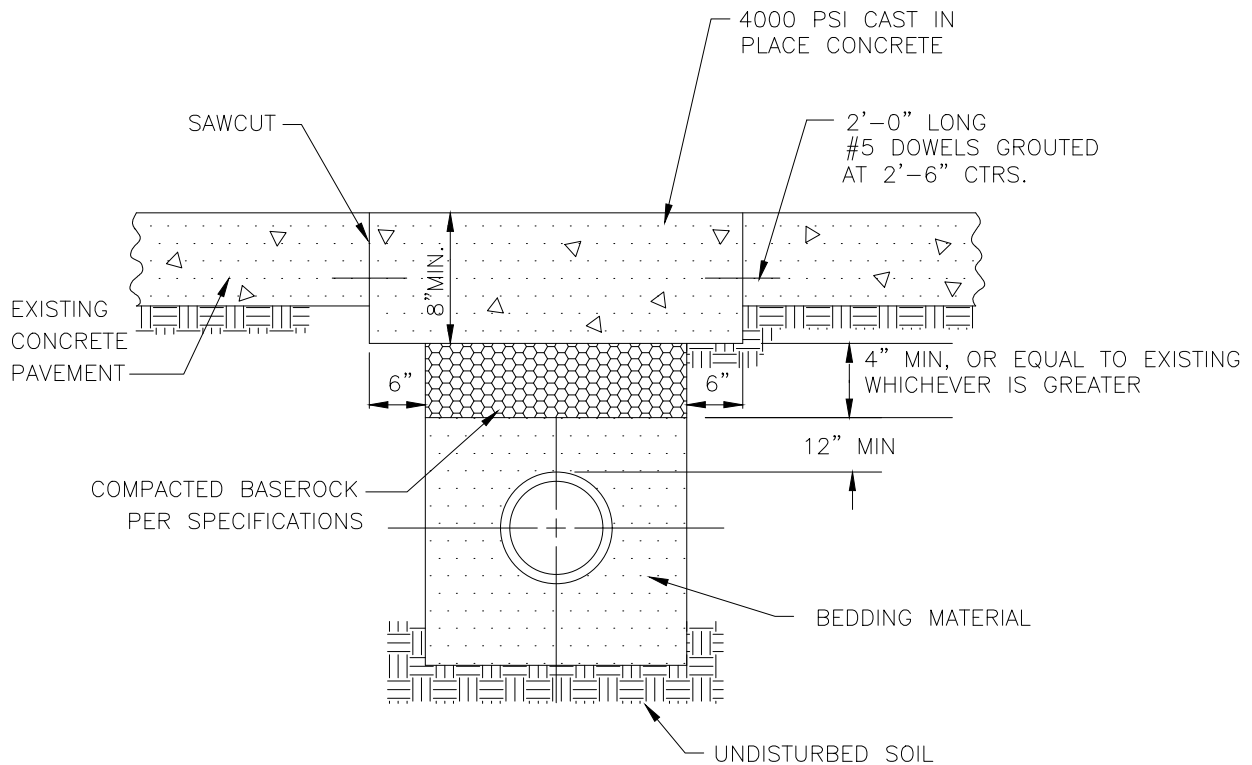
ASPHALT STREET REPAIR
DETAIL

NTS

DATE
11-23-16

REVISION
4

STR-8



NOTES:

1. PROVIDE FLOWABLE FILL MIX TO TOP OF PATCH FOR TEMPORARY DRIVING SURFACE.
2. COMPACTED BASE MUST HAVE OPTIMAL MOISTURE CONTENT AND BE COMPACTED TO 95% DENSITY EVERY LIFT FOOT.
3. TEMPORARY 3" COLD MIX ASPHALT OR UPM PATCH MAY BE REQUIRED.
4. PROVIDE TRACER WIRES AND WARNING TAPE AS SPECIFIED.

CITY OF OZARK

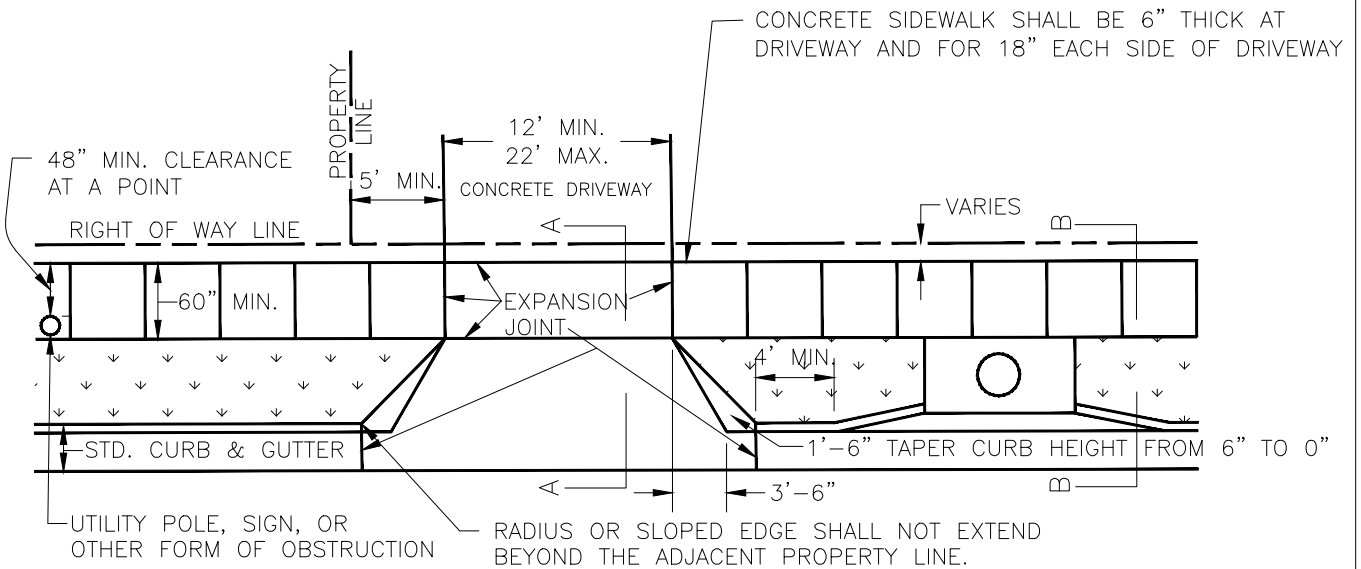
CONCRETE STREET REPAIR
DETAIL

NTS

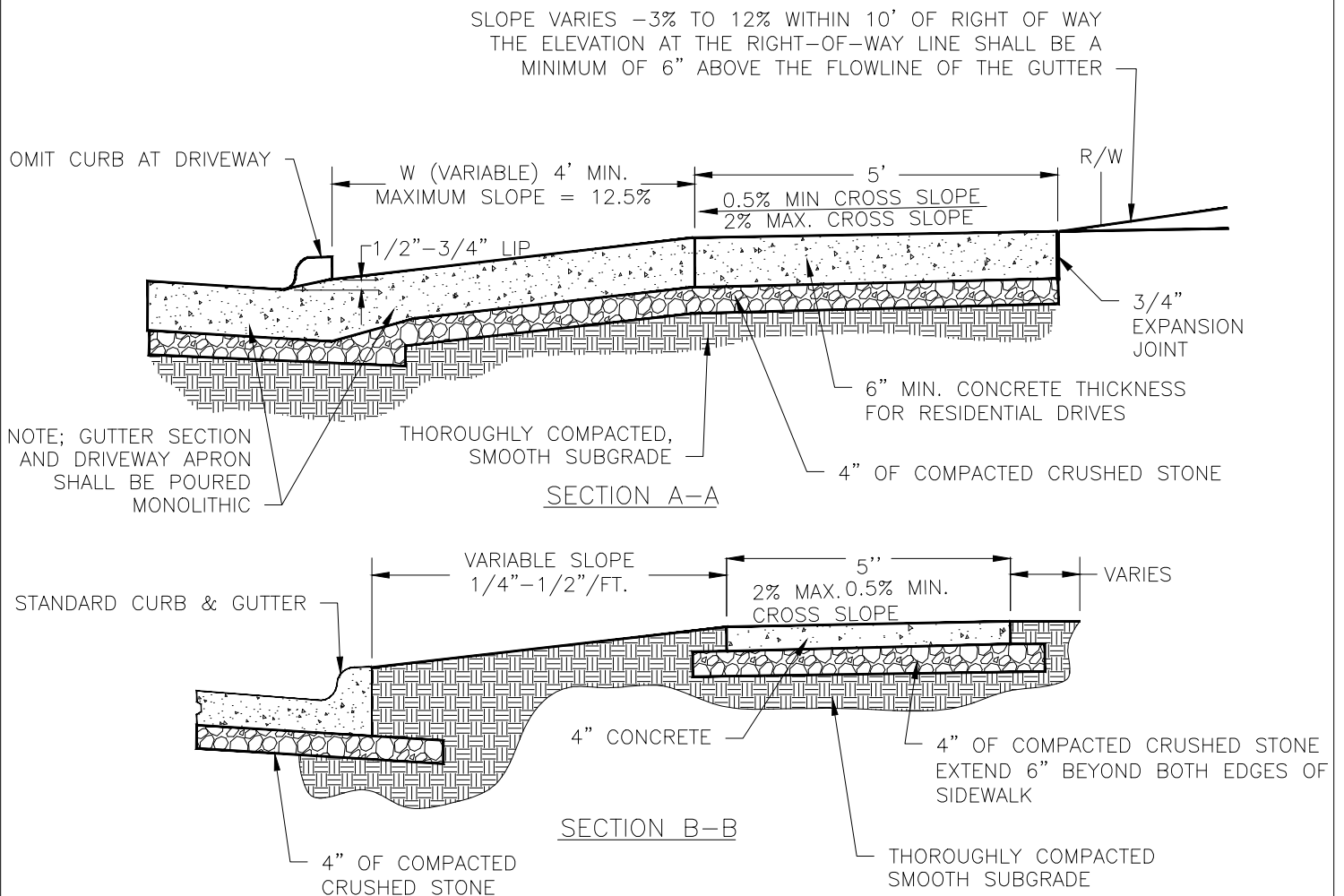
STR-9

DATE
4-13-15

REVISION
2

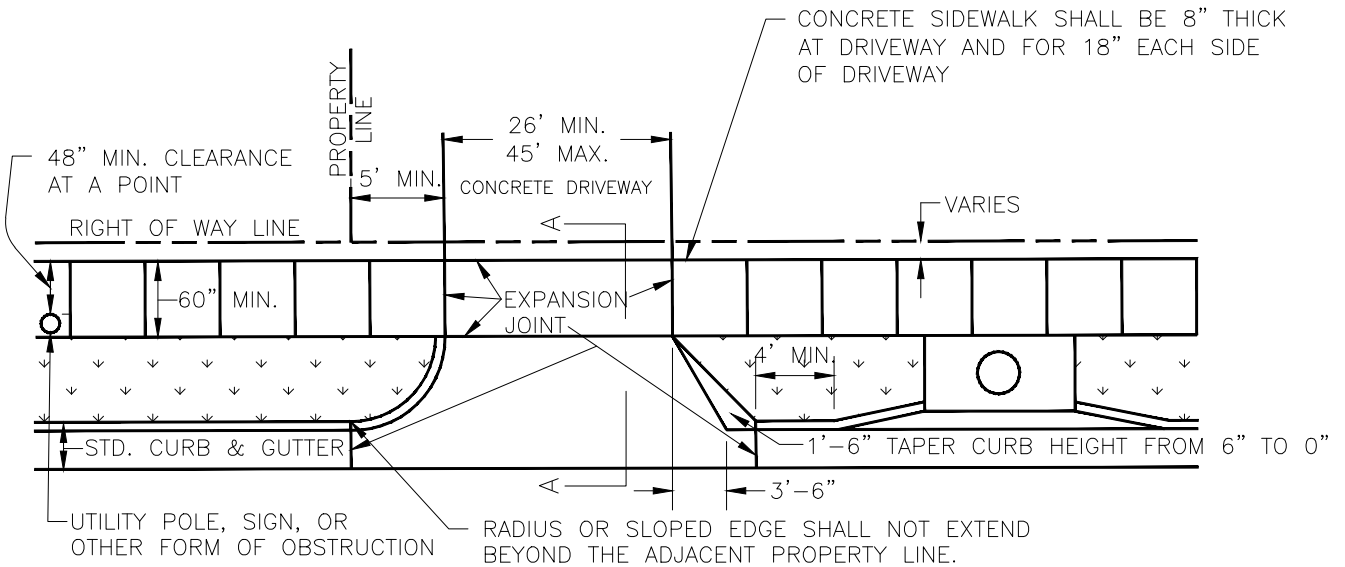


TYPICAL DRIVEWAY PLAN VIEW



- NOTES:
1. POSITIVE GUTTER FLOW SHALL BE MAINTAINED ACROSS ALL DRIVEWAYS.
 2. REMOVAL OF EXISTING CURB/GUTTERS FOR DRIVEWAYS SHALL BE ACCOMPLISHED AT THE NEXT EXISTING JOINT.
 3. DRIVEWAYS SHALL NOT BE LOCATED WITHIN 15' OF FIRE HYDRANTS. THEY SHALL ALSO NOT BE LOCATED OVER METER BOXES, VALVE BOXES OR MANHOLES. LOCATIONS OF DRIVEWAYS SHALL NOT INTERFERE WITH ANY OTHER UTILITY.

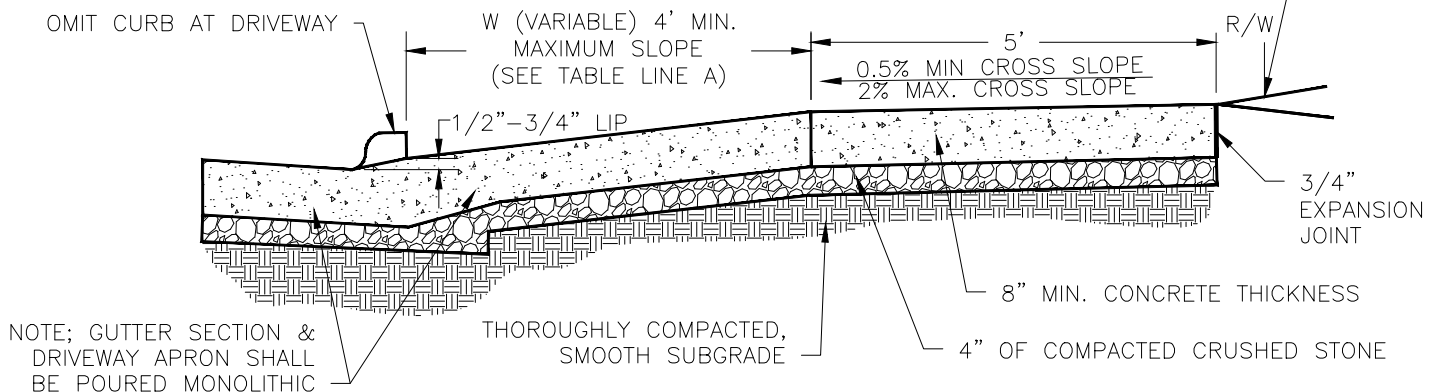
CITY OF OZARK	RESIDENTIAL DRIVEWAY AND SIDEWALK	STR-10	
	NTS	DATE 10-03-2024	REVISION 6



TYPICAL DRIVEWAY PLAN VIEW

REQUIRED DRIVEWAY GRADES				
	MAJOR ARTERIAL	SECONDARY ARTERIAL	COLLECTOR	RESIDENTIAL-COLLECTOR
A. DRIVEWAY APPROACH GRADE	1/4"/FT TO 1/2"/FT	1/4"/FT TO 5/8"/FT	1/4"/FT TO 3/4"/FT	1/4"/FT TO 1"/FT
B. MAXIMUM CHANGE OF GRADE AT BACK OF SIDEWALK	4%	5%	6%	8%
C. SLOPE WITHIN 10 FEET OF RIGHT-OF-WAY LINE	-2% TO 6% 1/4"/FT TO 3/4"/FT	-3% TO 7% -3/8"/FT TO 7/8"/FT	-4% TO 8% -1/2"/FT TO 1"/FT	-6% TO 10% -3/4"/FT TO 1-1/4"/FT

SLOPE VARIES WITHIN 10' OF RIGHT OF WAY
THE ELEVATION AT THE RIGHT-OF-WAY LINE SHALL BE A
MINIMUM OF 6" ABOVE THE FLOWLINE OF THE GUTTER



SECTION A-A

NOTES:

1. POSITIVE GUTTER FLOW SHALL BE MAINTAINED ACROSS ALL DRIVEWAYS.
2. REMOVAL OF EXISTING CURB/GUTTERS FOR DRIVEWAYS SHALL BE ACCOMPLISHED AT THE NEXT EXISTING JOINT.
3. DRIVEWAYS SHALL NOT BE LOCATED WITHIN 15' OF FIRE HYDRANTS. THEY SHALL ALSO NOT BE LOCATED OVER METER BOXES, VALVE BOXES OR MANHOLES. LOCATIONS OF DRIVEWAYS SHALL NOT INTERFERE WITH ANY OTHER UTILITY.

CITY OF OZARK

COMMERCIAL DRIVEWAY
AND SIDEWALK

NTS

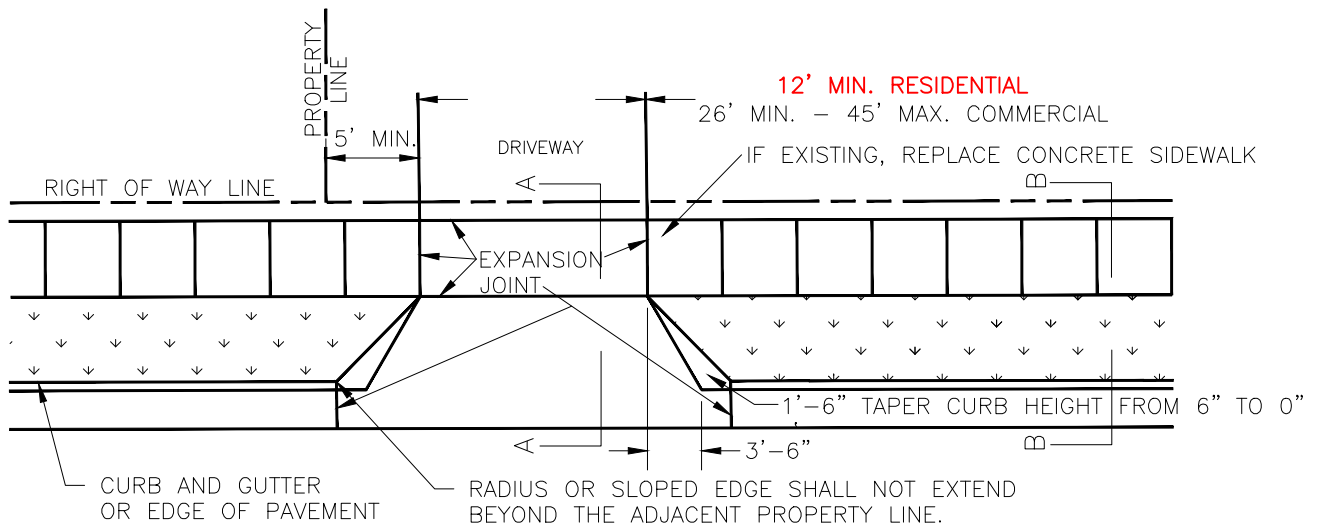
STR-11

DATE

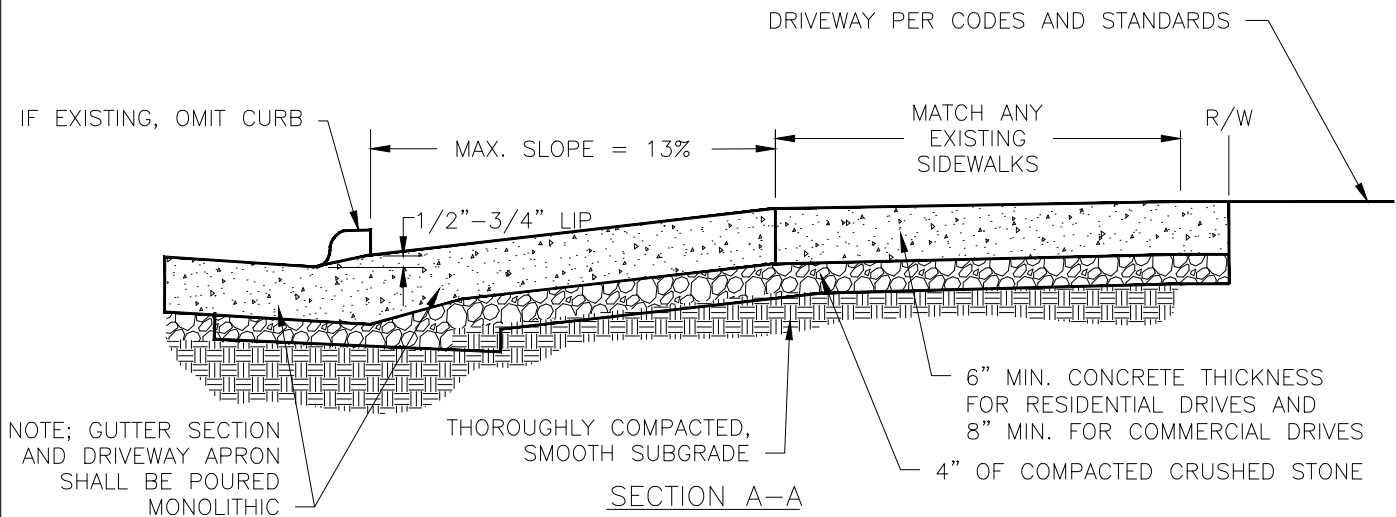
10-03-2024

REVISION

1



TYPICAL DRIVEWAY ADDITION PLAN VIEW



NOTES;

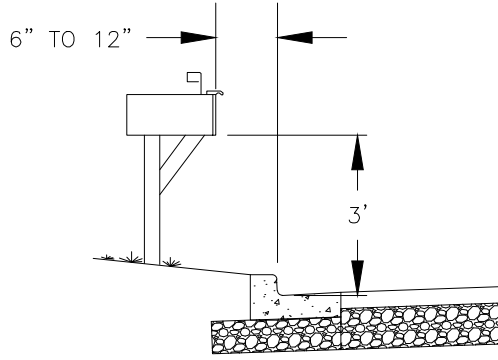
1. THE PURPOSE OF THIS DETAIL IS TO PROVIDE GUIDANCE FOR INSTALLATION OF A DRIVEWAY AT A LOCATION WHERE NO DRIVEWAY EXISTS OR FOR REPLACEMENT OF AN EXISTING DRIVEWAY. SEE OTHER STANDARD DETAILS FOR DRIVEWAYS IN NEW SUBDIVISIONS.
2. DRIVEWAYS SHALL NOT BE LOCATED WITHIN 15' OF FIRE HYDRANTS. THEY SHALL ALSO NOT BE LOCATED OVER METER BOXES, VALVE BOXES NOR MANHOLES. LOCATIONS OF DRIVEWAYS SHALL NOT INTERFERE WITH ANY OTHER UTILITY SUCH AS UTILITY POLES, STORM BOXES AND ETC.
3. REMOVAL OF ANY EXISTING CURB/GUTTER SHALL BE ACCOMPLISHED AT THE NEXT EXISTING JOINT.
4. POSITIVE GUTTER FLOW SHALL BE MAINTAINED ACROSS ALL DRIVEWAY OPENINGS.
5. THE CONCRETE APPROACH SHALL EXTEND TO THE RIGHT-OF-WAY, (PROPERTY LINE).
6. ENSURE THAT THE APPROACH SLOPE IS OF SUFFICIENT HEIGHT TO DETER THE ENTRANCE OF STORM-WATER FROM THE GUTTER.
7. ANY SIDEWALK REMOVED FOR A DRIVEWAY INSTALLATION SHALL BE REINSTALLED TO EXISTING WIDTH AND MATERIAL
8. DRIVEWAY SURFACING SHALL COMPLY WITH APPROPRIATE CODES AND STANDARDS FOR THE SITE..

CITY OF OZARK	ADDED DRIVEWAY DETAIL	STR-12	
		DATE 09-25-24	REVISION 0

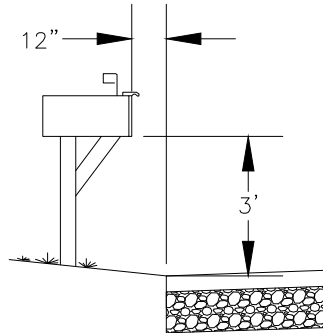
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STRUCTURE NOTES:

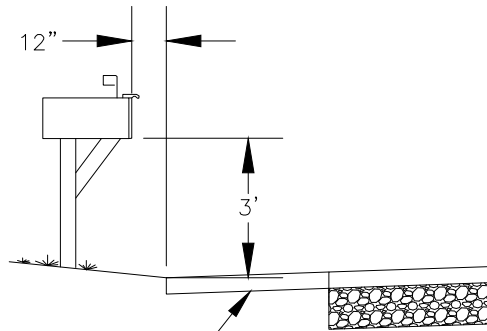
1. MAILBOXES SHALL BE OF LIGHT SHEET METAL OR PLASTIC CONSTRUCTION CONFORMING TO THE REQUIREMENTS OF THE U.S. POSTAL SERVICE. NEWSPAPER DELIVERY BOXES SHALL BE OF LIGHT SHEET METAL OR PLASTIC CONSTRUCTION OF MINIMUM DIMENSIONS SUITABLE FOR HOLDING A NEWSPAPER.
2. NO MORE THAN TWO (2) MAILBOXES MAY BE MOUNTED ON A SUPPORT STRUCTURE UNLESS THE SUPPORT STRUCTURE AND MAILBOX ARRANGEMENT HAVE BEEN SHOWN TO BE SAFE BY CRASH TESTING. HOWEVER, LIGHTWEIGHT NEWSPAPER BOXES MAY BE MOUNTED BELOW THE MAILBOX.
3. MAILBOX SUPPORTS SHALL NOT BE SET IN CONCRETE UNLESS THE SUPPORT DESIGN HAS BEEN SHOWN TO BE SAFE BY CRASH TESTS WHEN SO INSTALLED.
4. A SINGLE FOUR (4) INCH OR FOUR AND ONE-HALF (4 1/2) INCH DIAMETER WOODEN POST OR A METAL POST WITH A STRENGTH NO GREATER THAN A TWO (2) INCH DIAMETER STANDARD STRENGTH STEEL PIPE AND EMBEDDED NO MORE THAN TWENTY-FOUR (24) INCHES INTO THE GROUND WILL BE ACCEPTABLE AS A MAILBOX SUPPORT. A METAL POST SHALL NOT BE FITTED WITH AN ANCHOR PLATE, BUT IT MAY HAVE AN ANTI-TWIST DEVICE THAT EXTENDS NO MORE THAN TEN (10) INCHES BELOW THE GROUND SURFACE.
5. THE BOX TO POST ATTACHMENT SHALL BE OF SUFFICIENT STRENGTH TO PREVENT THE BOX FROM SEPARATING FROM THE POST IF THE INSTALLATION IS STRUCK BY A VEHICLE.
6. THE MINIMUM SPACING BETWEEN THE CENTERS OF SUPPORT POSTS SHALL BE THREE-FOURTHS (3/4) THE HEIGHT OF THE POSTS ABOVE THE GROUNDLINE.
7. OTHER MAILBOX SUPPORT DESIGNS MAY BE SUBMITTED FOR REVIEW.



IMPROVED STREETS



UNIMPROVED STREETS
WITHOUT SHOULDERS



ALL-WEATHER SHOULDER

UNIMPROVED STREETS
WITH SHOULDERS

LOCATION NOTES:

1. NO MAILBOX WILL BE PERMITTED WHERE ACCESS IS OBTAINED FROM THE LANES OF A FREEWAY OR WHERE ACCESS IS OTHERWISE PROHIBITED BY LAW OR REGULATION.
2. WHERE A MAILBOX IS LOCATED AT A DRIVEWAY ENTRANCE, IT SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF THE DELIVERY ROUTE.
3. WHERE A MAILBOX IS LOCATED AT AN INTERSECTING ROAD, IT SHALL BE LOCATED A MINIMUM OF FIFTY (50) FEET BEYOND THE CENTER OF THE INTERSECTING ROAD IN THE DIRECTION OF THE DELIVERY ROUTE. THE DISTANCE SHALL BE INCREASED TO ONE HUNDRED (100) FEET WHEN THE AVERAGE DAILY TRAFFIC ON THE INTERSECTING ROAD EXCEEDS FOUR HUNDRED (400) VEHICLES PER DAY.
4. ALL MAILBOX LOCATIONS SHALL BE COORDINATED WITH THE OZARK POST OFFICE TO ENSURE PLACEMENT ON CORRECT SIDE OF STREET.

CITY OF OZARK

MAILBOX
DETAILS

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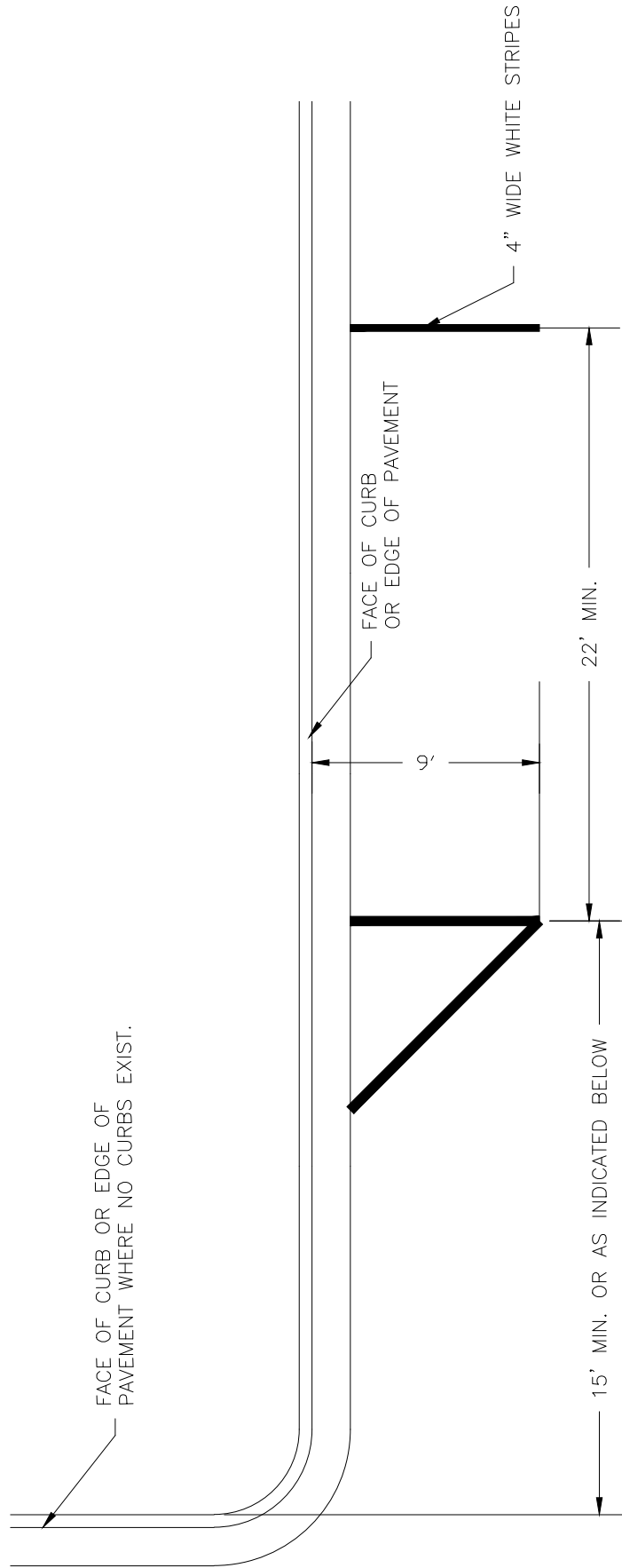
DATE

10-03-2024

REVISION

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STR-13



CURB SIDE PARALLEL STALL STRIPING

NOTES;

1. PARKING STALLS SHALL NOT ENCROACH INTO ANY PART OF HANDICAP RAMPS, SIDEWALKS, OR DRIVEWAYS.
2. PARKING STALLS SHALL BE A MINIMUM OF 20' FROM ANY CROSSWALKS AT A INTERSECTION.
3. PARKING STALLS SHALL NOT BE LOCATED WITHIN 30' UPON THE APPROACH TO ANY FLASHING SIGNAL, STOP SIGN OR TRAFFIC CONTROL SIGNAL LOCATED AT THE SIDE OF A ROADWAY.
4. PARKING STALLS SHALL BE A MINIMUM OF 15 FEET FROM ANY FIRE HYDRANTS AND 20' FROM ANY FIRE STATION ENTRANCE AND WITHIN 75' OF SAID ENTRANCE ON THE OPPOSITE SIDE OF THE ENTRANCE.
5. PARKING STALLS SHALL BE A MINIMUM OF 10' FROM ANY MAILBOX.

CITY OF OZARK

PARALLEL PARKING STALLS DETAILS

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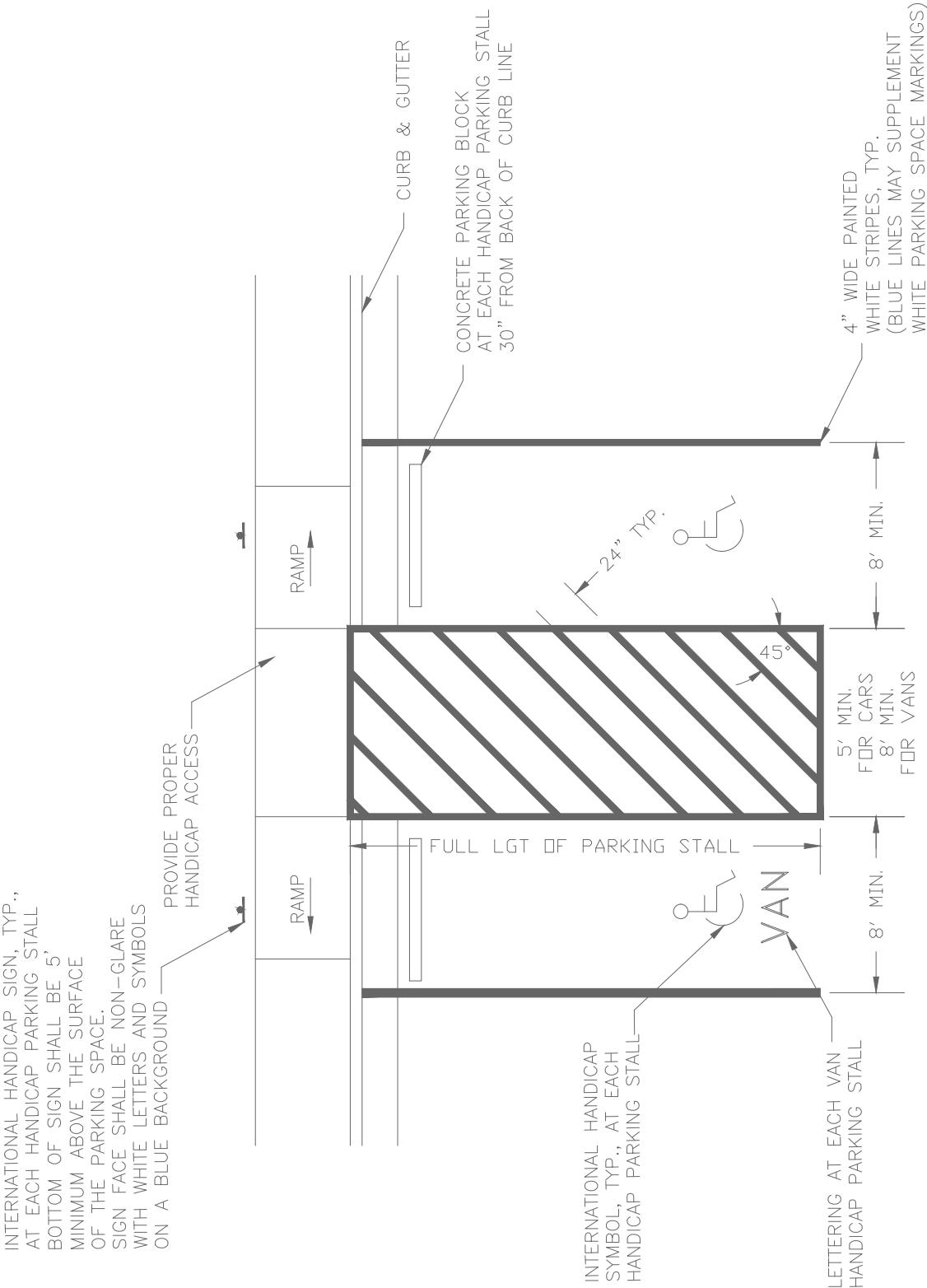
DATE

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STR-14

REVISION

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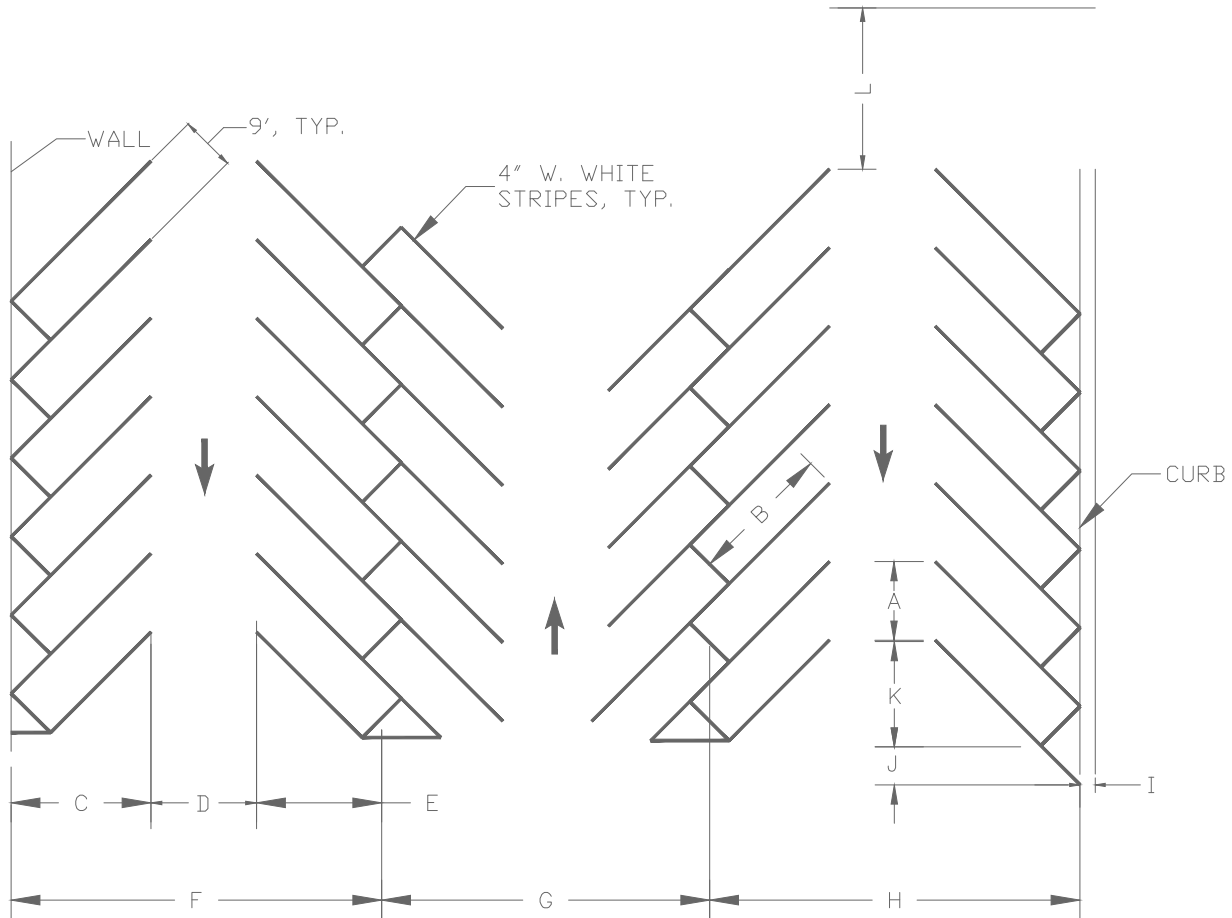
HANDICAP ZONE STRIPING

NOTES; ALL VEHICLE STANDING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SLOPES NOT EXCEEDING 2% IN ALL DIRECTIONS. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.

MINIMUM REQUIREMENTS FOR LAYOUT ELEMENTS

NOTES;

1. ON STREET ANGLE PARKING SHALL ALSO COMPLY WITH THE LAYOUT BELOW. PARALLEL PARKING STALLS SHALL PROVIDE A MINIMUM STALL WIDTH OF 9' AND LENGTH OF 22'.
2. FOR COMMERICAL AND INDUSTRIAL USES, 10' WIDE STALLS MAY BE SUBSTITUTED FOR 9' WIDE STALLS AT THE RATE OF 1.11 PER 1. THEREFORE, FOR EVERY 10 TOTAL 9' WIDE STALLS REQUIRED, THE PROPERTY OWNER/DEVELOPER MAY SUBSTITUTE 9 TOTAL 10' WIDE STALLS AND STILL MAINTAIN COMPLIANCE WITH THE CITY OF OZARK CODE FOR OFF-STREET REQUIRED MINIMUM PARKING SPACES,



PARKING LAYOUT DIMENSIONS (IN FEET) FOR 9' WIDE STALLS AT VARIOUS ANGLES

DIMENSIONS	SYMBOL	90	75	60	45	30
STALL WIDTH, PARALLEL TO AISLE	A	9.0	9.3	10.4	12.7	18.0
STALL LENGTH OF LINE	B	18.5	20.0	22.0	25.0	34.1
STALL DEPTH TO WALL	C	18.5	19.5	19.0	17.5	17.1
AISLE WIDTH BETWEEN STALL LINES	D	26.0	23.0	16.0	12.0	10.0
STALL DEPTH, INTERLOCK	E	18.5	18.8	17.5	15.3	13.2
MODULE, WALL TO INTERLOCK	F	63.0	61.3	52.5	44.8	40.3
MODULE, INTERLOCKING	G	63.0	61.0	51.0	42.6	36.4
MODULE, INTERLOCK TO CURB FACE	H	60.5	58.8	50.2	42.8	38.8
BUMPER OVERHANG (TYPICAL)	I	2.5	2.5	2.3	2.0	1.5
OFFSET	J	0.0	0.5	2.7	6.3	13.5
SETBACK	K	0.0	5.0	8.3	11.0	16.0
CROSS AISLE, ONE-WAY	L	14.0	14.0	14.0	14.0	14.0
CROSS AISLE, TWO-WAY	L	24.0	24.0	24.0	24.0	24.0

NOTE;

ANY DESIRED VARIATION TO THE LAYOUT SHOWN SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE.

CITY OF OZARK

PARKING STALL LAYOUT
DETAILS

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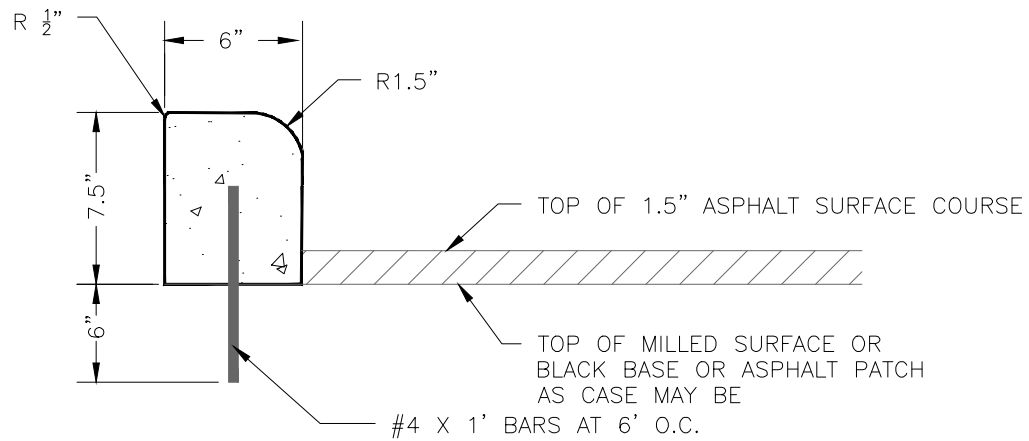
STR-16

DATE

10-03-2024

REVISION

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NOTE;

1. CURBS MAY BE PRE-CAST OR CAST IN PLACE CONCRETE.
2. INSTALL AS REPLACEMENT FOR ASPHALT CURB. PROVIDE ASPHALT PATCH IF NECESSARY AFTER REMOVAL OF ASPHALT CURB.
3. INSTALL AS REPLACEMENT FOR BROKEN CURB.
4. PROVIDE OPENINGS FOR DRIVEWAYS AND ANY WALKWAYS WHERE EXISTING OPENINGS OCCUR.
5. EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER THE CONCRETE JOINT DETAIL. EXPANSION JOINTS SHALL BE PLACED AS PER THE JOINT LAYOUT DETAIL.
6. CONTRACTION JOINTS SHALL BE CONSTRUCTED AS PER THE CONCRETE JOINT DETAIL. CONTRACTION JOINTS SHALL BE PLACED AS PER THE JOINT LAYOUT DETAIL AND AT INTERVALS OF NOT MORE THAN 25' NOR MORE THAN 25' FROM ANY EXPANSION JOINT.

CITY OF OZARK

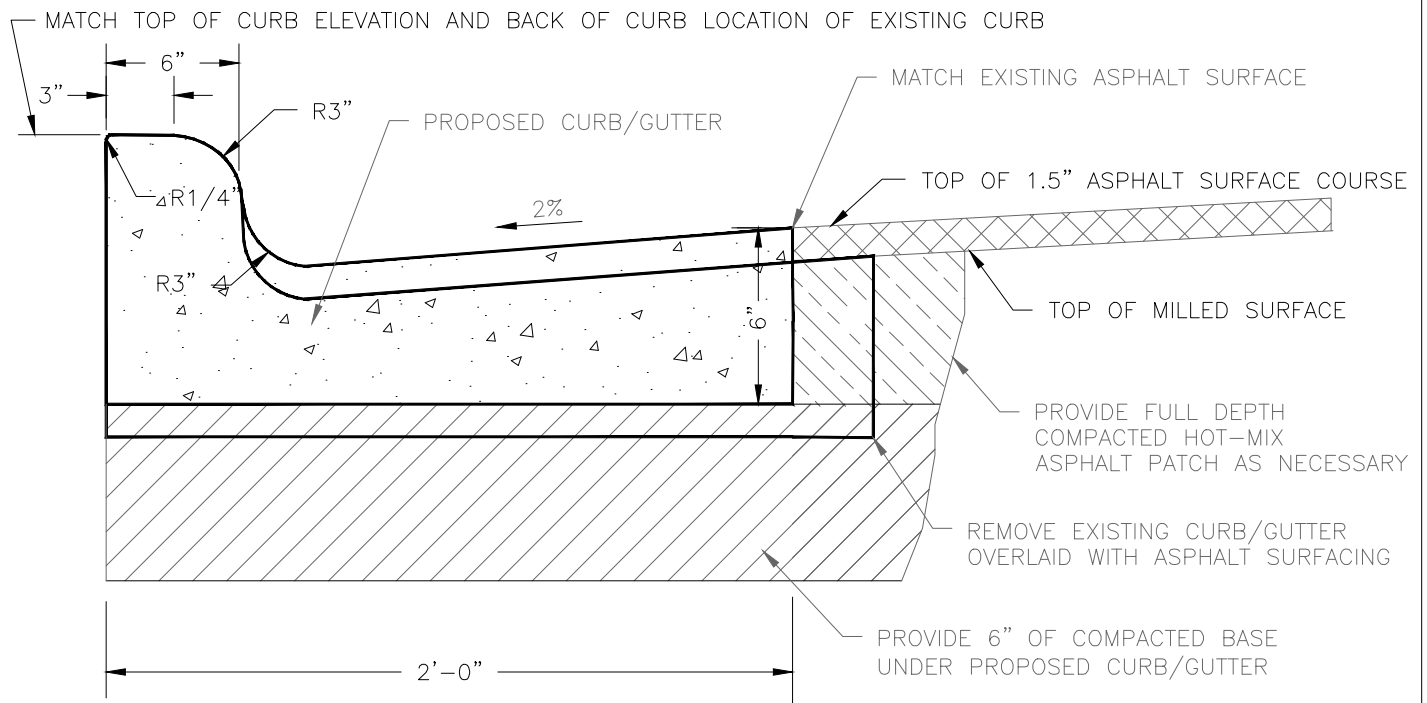
CURB
DETAIL "A"

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STR-17

DATE
10-03-2024

REVISION
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NOTE;

1. REPLACE EXISTING CONCRETE CURB/GUTTER THAT HAS BEEN PREVIOUSLY OVERLAID WITH ASPHALT WITH A PROPOSED CONCRETE CURB/GUTTER OF 2' WIDTH AND WITH SHORTER CURB HEIGHT TO MATCH EXISTING TOP OF CURB ELEVATION.
2. PROVIDE OPENINGS FOR ANY DRIVEWAYS OR WALKWAYS WHERE EXISTING OPENINGS OCCUR.
3. EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER THE CONCRETE JOINT DETAIL. EXPANSION JOINTS SHALL BE PLACED AS PER THE JOINT LAYOUT DETAIL AND AT ALL STRUCTURES SUCH AS BOX CULVERTS, JUNCTION BOXES, INLETS AND ETC.
4. CONTRACTION JOINTS SHALL BE CONSTRUCTED AS PER THE CONCRETE JOINT DETAIL. CONTRACTION JOINTS SHALL BE PLACED AS PER THE JOINT LAYOUT DETAIL AND AT INTERVALS OF NOT MORE THAN 25' NOR MORE THAN 25' FROM ANY EXPANSION JOINT.

CITY OF OZARK

STANDARD CURB/GUTTER
DETAIL-B

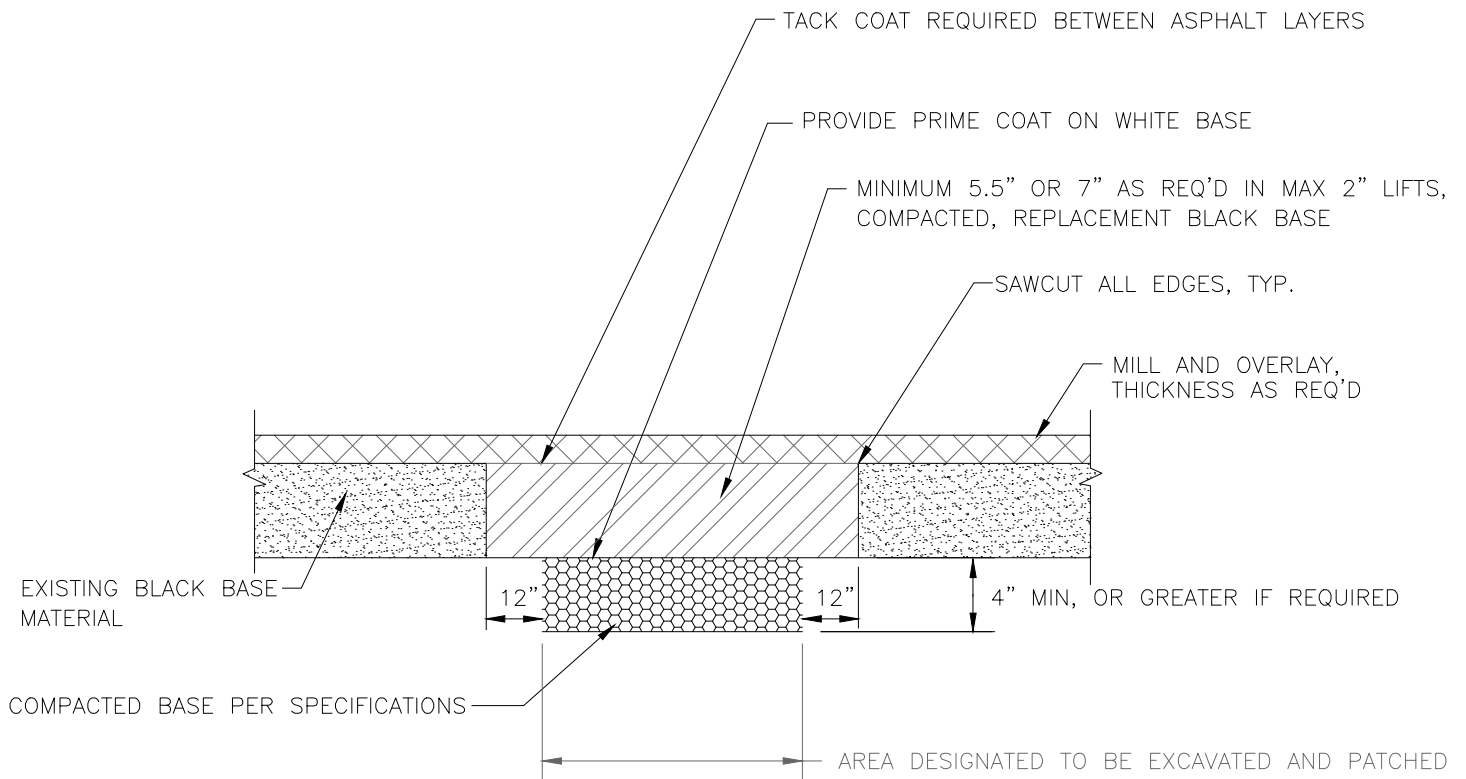
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STR-18

DATE
10-03-2024

REVISION

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NOTES:

1. DETAIL FOR PATCHING PRIOR TO MILLING AND OVERLAY OF ASPHALT SURFACE.
2. COMPACTED WHITE BASE MUST HAVE OPTIMAL MOISTURE CONTENT AND BE COMPACTED TO 95% DENSITY EVERY LIFT FOOT.
3. REPLACE ANY DISTURBED TRACER WIRES AND WARNING TAPES AS REQUIRED.
4. IF THE CONTRACTOR ENCOUNTERS ADDITIONAL UNSUITABLE SUB-BASE, HE SHALL NOTIFY THE PUBLIC WORKS DIRECTOR OR HIS REPRESENTATIVE PRIOR TO PROCEEDING.

CITY OF OZARK

ASPHALT PATCHING
DETAIL

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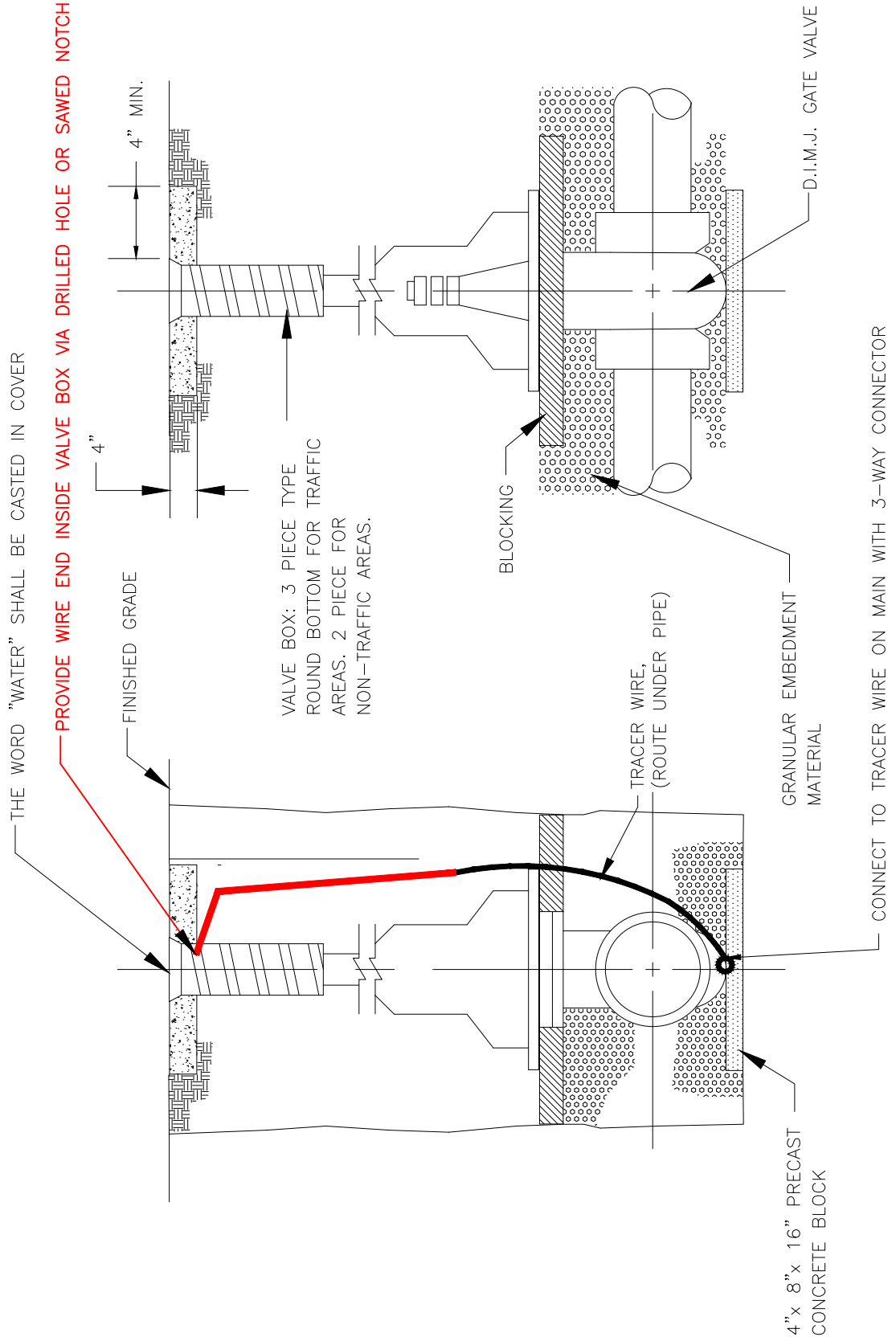
STR-19

DATE
10-03-2024

REVISION
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NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
2. WATER VALVES LOCATED IN TRAFFICWAYS SHALL BE ENCASED IN 4" MINIMUM THICKNESS CONCRETE.
3. ALL VALVE BOXES SHALL BE CAST IRON.
4. EXTENSION STEMS SHALL BE PROVIDED FOR BURIED VALVES WHEN THE OPERATING NUT IS MORE THAN THREE FEET BELOW FINISHED GRADE.
5. EACH EXTENSION STEM FOR A BURIED VALVE SHALL EXTEND TO WITHIN THREE FEET OF THE GROUND SURFACE, SHALL BE PROVIDED WITH SPACERS WHICH WILL CENTER THE STEM IN THE VALVE BOX, AND SHALL BE EQUIPPED WITH A WRENCH NUT.



CITY OF OZARK

VALVE
DETAILS

NTS

WAT-1

DATE

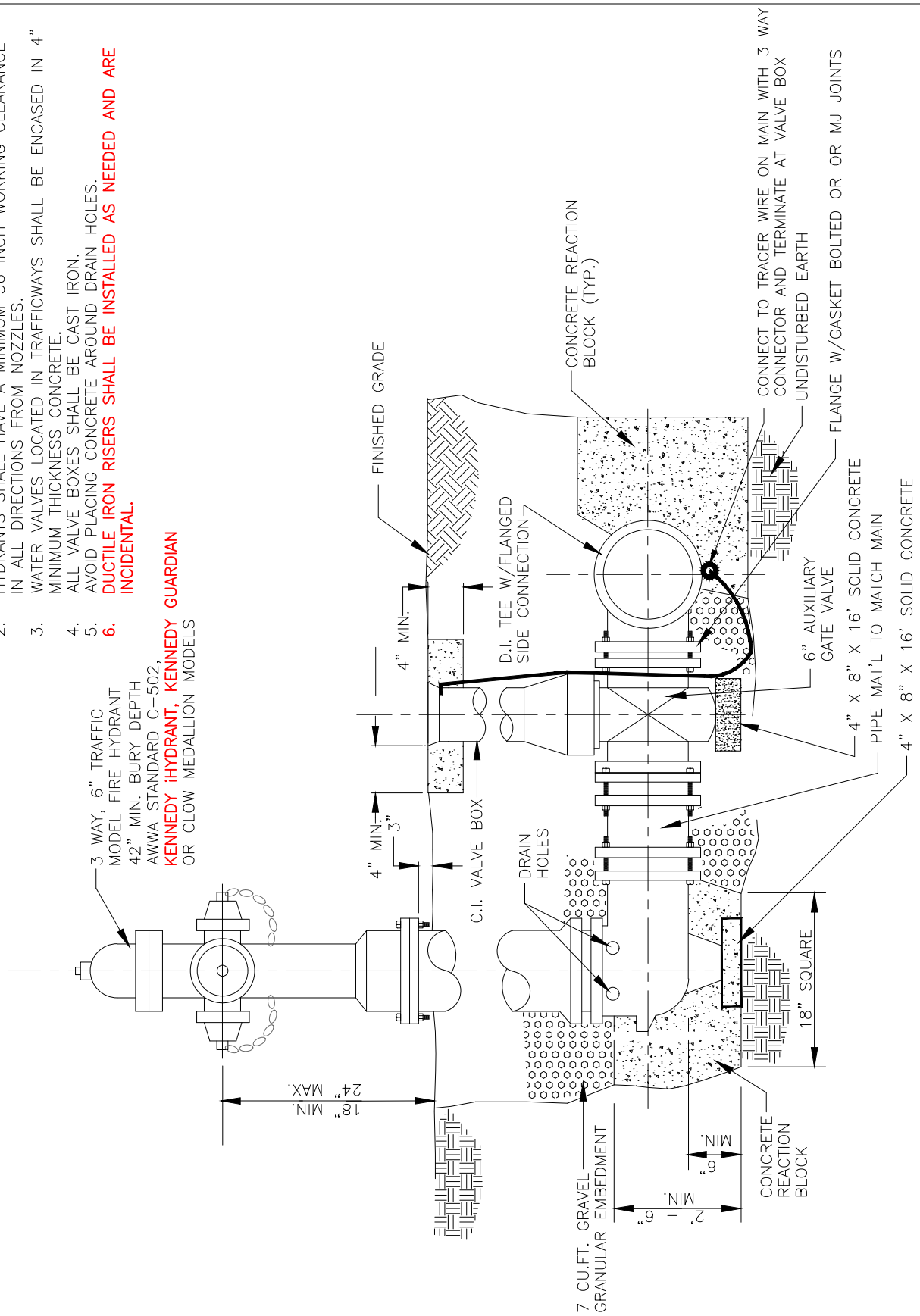
7-28-2023

REVISION

1

NOTES:

1. HYDRANTS SHALL BE TRAFFIC MODELS WITH BREAKAWAY FLANGES AND SHALL HAVE ONE 4-1/2" PUMPER NOZZLE AND TWO 2-1/2" NOZZLES. THE PUMPER NOZZLE SHOULD NORMALLY BE ORIENTED PERPENDICULAR TO THE STREET CURB.
2. HYDRANTS SHALL HAVE A MINIMUM 36 INCH WORKING CLEARANCE IN ALL DIRECTIONS FROM NOZZLES.
3. WATER VALVES LOCATED IN TRAFFICWAYS SHALL BE ENCASED IN 4" MINIMUM THICKNESS CONCRETE.
4. ALL VALVE BOXES SHALL BE CAST IRON.
5. AVOID PLACING CONCRETE AROUND DRAIN HOLES.
6. **DUCTILE IRON RISERS SHALL BE INSTALLED AS NEEDED AND ARE INCIDENTAL.**



CITY OF OZARK

FIRE HYDRANT
DETAILS

NTS

DATE
07-28-2023

REVISION

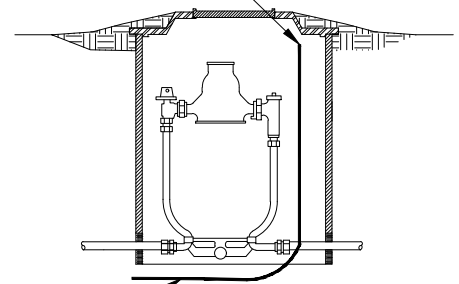
5

WAT-2

NOTES;

1. PROVIDE APPROPRIATE WARNING TAPE LOCATED 18" TO 24" BELOW FINISH GRADE AT THE SERVICE LINE AND TRACER WIRE UNDER THE SERVICE LINE FROM THE MAIN TO WITHIN THE WATER METER PIT.
2. TRACER WIRE SHALL BE PROVIDED FOR EVERY WATER SERVICE AND SHALL BE #12 AWG COPPER CLAD STEEL, (CCS). CORROSION PROOF/FILLED WIRE CONNECTIONS SHALL BE USED AT SPLICE LOCATIONS.
3. THE TRACER WIRE CONDUCTIVITY SHALL BE TESTED PRIOR TO ACCEPTANCE.
4. WATER SERVICE SHALL BE PROVIDED TO EVERY BUILDABLE PLATTED LOT WITHIN A SUBDIVISION.
5. TAPPING SLEEVES AND VALVES SHALL BE USED WHERE REQUIRED TO CONNECT TO EXISTING IN-SERVICE MAINS.
6. THE MAXIMUM NUMBER OF UNITS TO BE CONNECTED ON A 1" WATER SERVICE SHALL BE ONE EACH DUPLEX.

WIRE END SHALL BE READILY ACCESSIBLE



TRACER WIRE

1", (3/4" FOR SGL SETTER), 200 PSI SDR-9 ASTM-D-2737 CTS-OD-PIPE
NO PVC PIPE SHALL BE USED BETWEEN MAIN AND METER

METER, TYP.

SADDLE BY A.Y. McDONALD
4168, OR APPROVED
EQUAL, (BRASS ONLY)

TO METER

PROVIDE
SUFFICIENT
LENGTH OF
WIRE WITHIN
THE PIT FOR
CONNECTION

TRACER WIRE

BEDDING MATERIAL FULL
LENGTH OF SERVICE LINE

CORPORATION STOP BY
A.Y. McDONALD 76100 OR APPROVED EQUAL

COPPERHEAD GROUNDING
ANODE OR EQUAL

PROVIDE GROUND WITH
#12 AVG CCS-RED WIRE

18.5"

THE ANODE SHALL BE 1/2 LB BARE ZINC OR
MAGNESIUM, COPPERHEAD PART #ANO-1005 OR
EQUAL. THE ANODES SHALL BE BURIED IN CLOSE
PROXIMITY TO THE UTILITY. THE ANODE SHALL BE
SECURELY CONNECTED TO THE TRACER WIRE.

CONNECT TO TRACER
WIRE AT MAIN WITH 3-WAY CONNECTOR OR GROUND
ROD AS SHOWN WHERE NO TRACER WIRE EXIST.

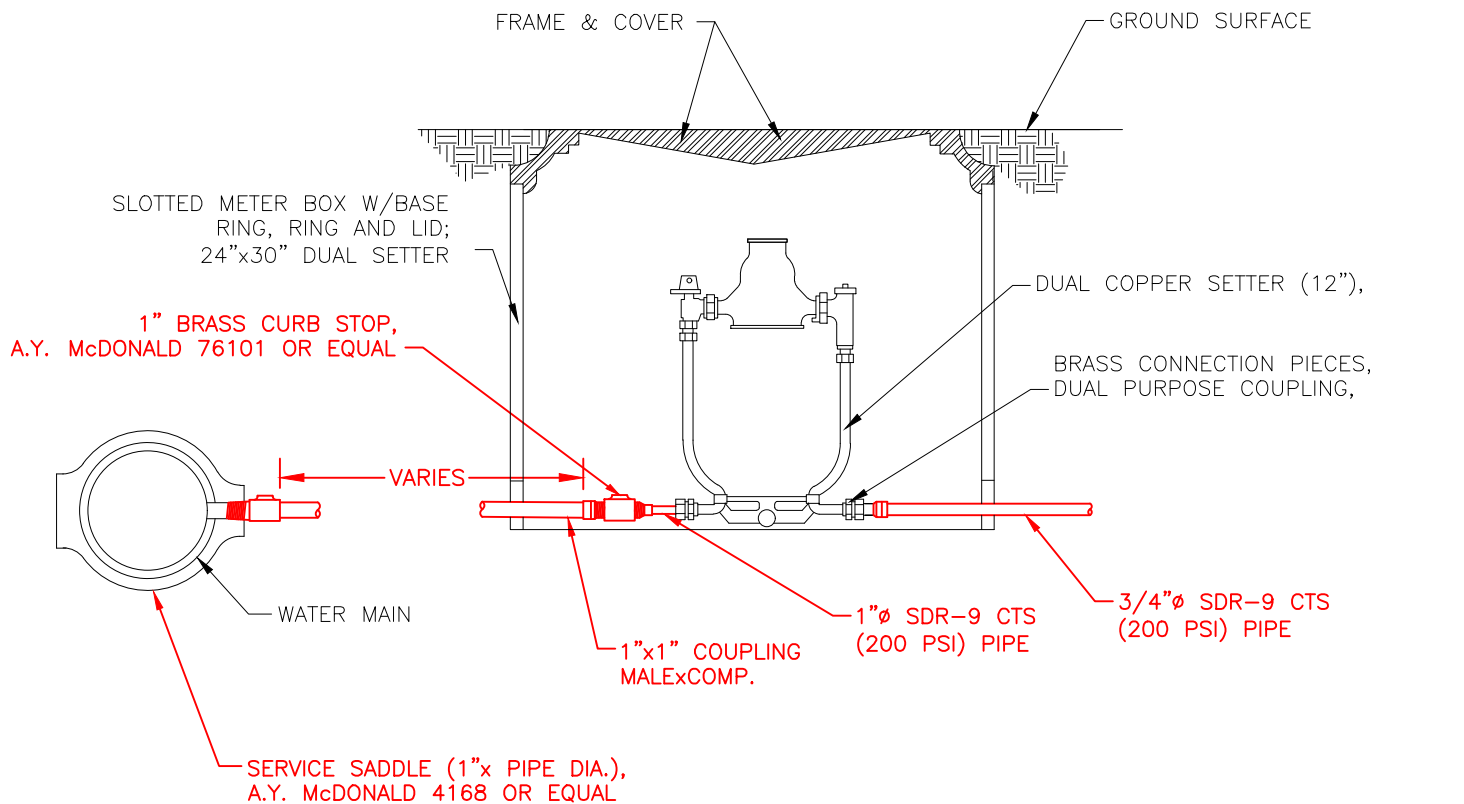
CITY OF OZARK

CORPORATION STOP
DETAIL

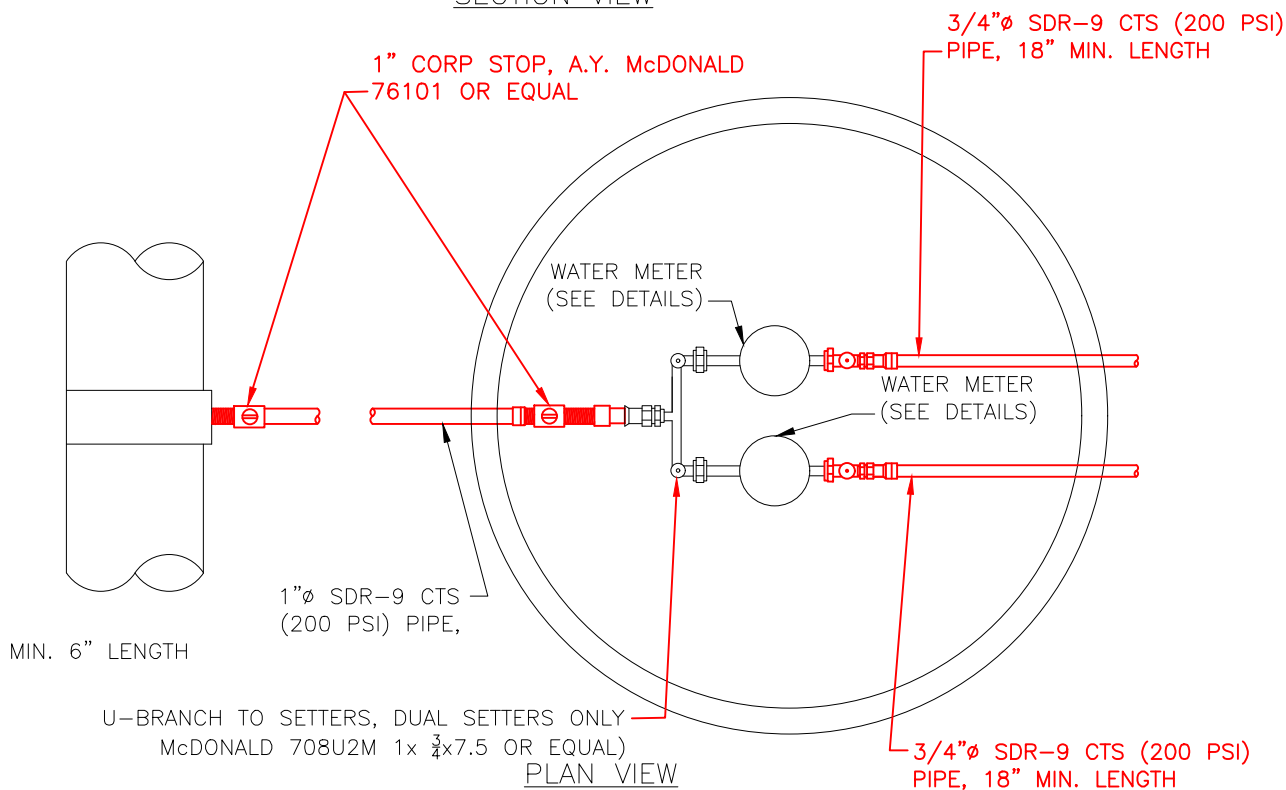
WAT-3

DATE
07-28-2023

REVISION
4



SECTION VIEW



PLAN VIEW

NOTES:

1. PROVIDE #12 TRACER WIRE UNDER ALL SERVICES AND INDICATOR TAPE ABOVE ALL SERVICES.
2. THE EXTRA CURB STOP AT THE METER PIT MAY BE ELIMINATED WHERE THE METER PIT IS LOCATED WITHIN CLOSE PROXIMITY, (10'), OF THE WATER MAIN AND THE WATER MAIN IS LOCATED OUTSIDE OF ALL PAVED AREAS.
3. ALL SERVICE LINES SHALL HAVE A MINIMUM OF 36" OF COVER FROM THE WATER MAIN INTO THE BUILDING.

CITY OF OZARK

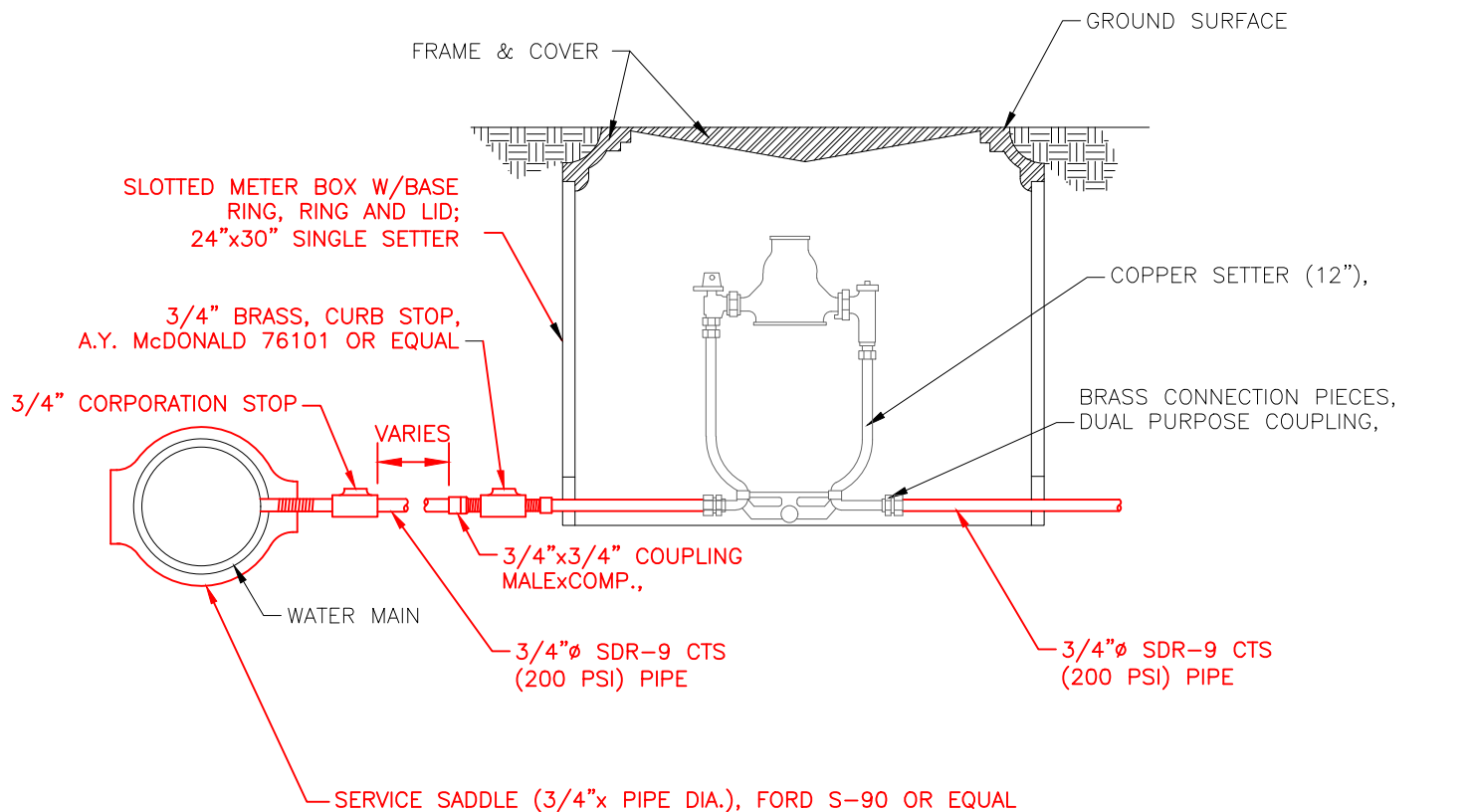
DUAL SETTER WATER SERVICE
DETAIL

NTS

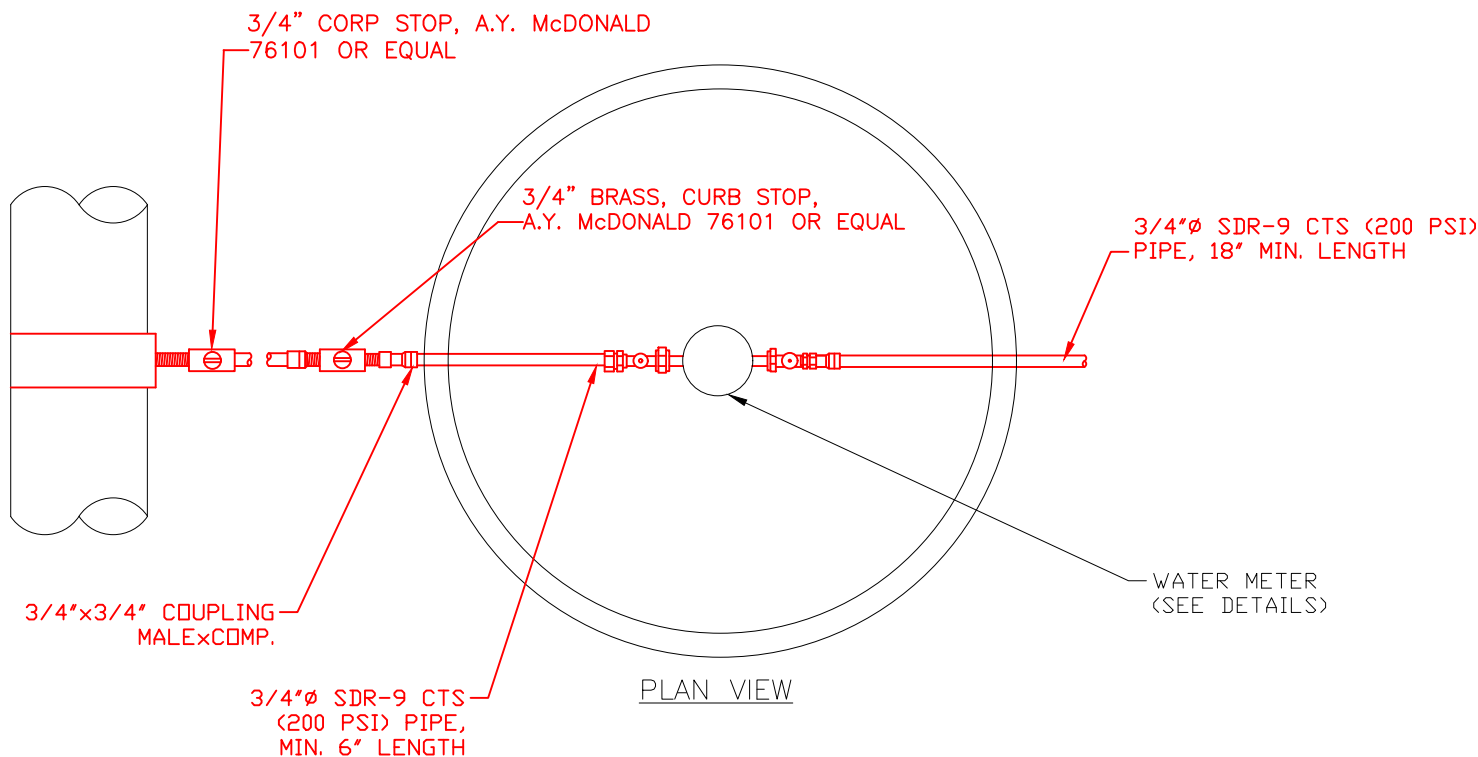
WAT-4

DATE
07-28-2023

REVISION
3



SECTION VIEW



PLAN VIEW

NOTE:

1. PROVIDE #12 TRACER WIRE UNDER ALL SERVICES AND INDICATOR TAPE ABOVE ALL SERVICES.
2. THE EXTRA CURB STOP WITHIN THE METER PIT MAY BE ELIMINATED WHERE THE METER PIT IS LOCATED WITHIN CLOSE PROXIMITY, (10'), OF THE WATER MAIN AND WATER MAIN IS LOCATED OUTSIDE OF ALL PAVED AREAS.
3. ALL SERVICE LINES SHALL HAVE A MINIMUM OF 36" OF COVER FROM THE WATER MAIN INTO THE BUILDING.

CITY OF OZARK

SGL SETTER WATER SERVICE
DETAIL

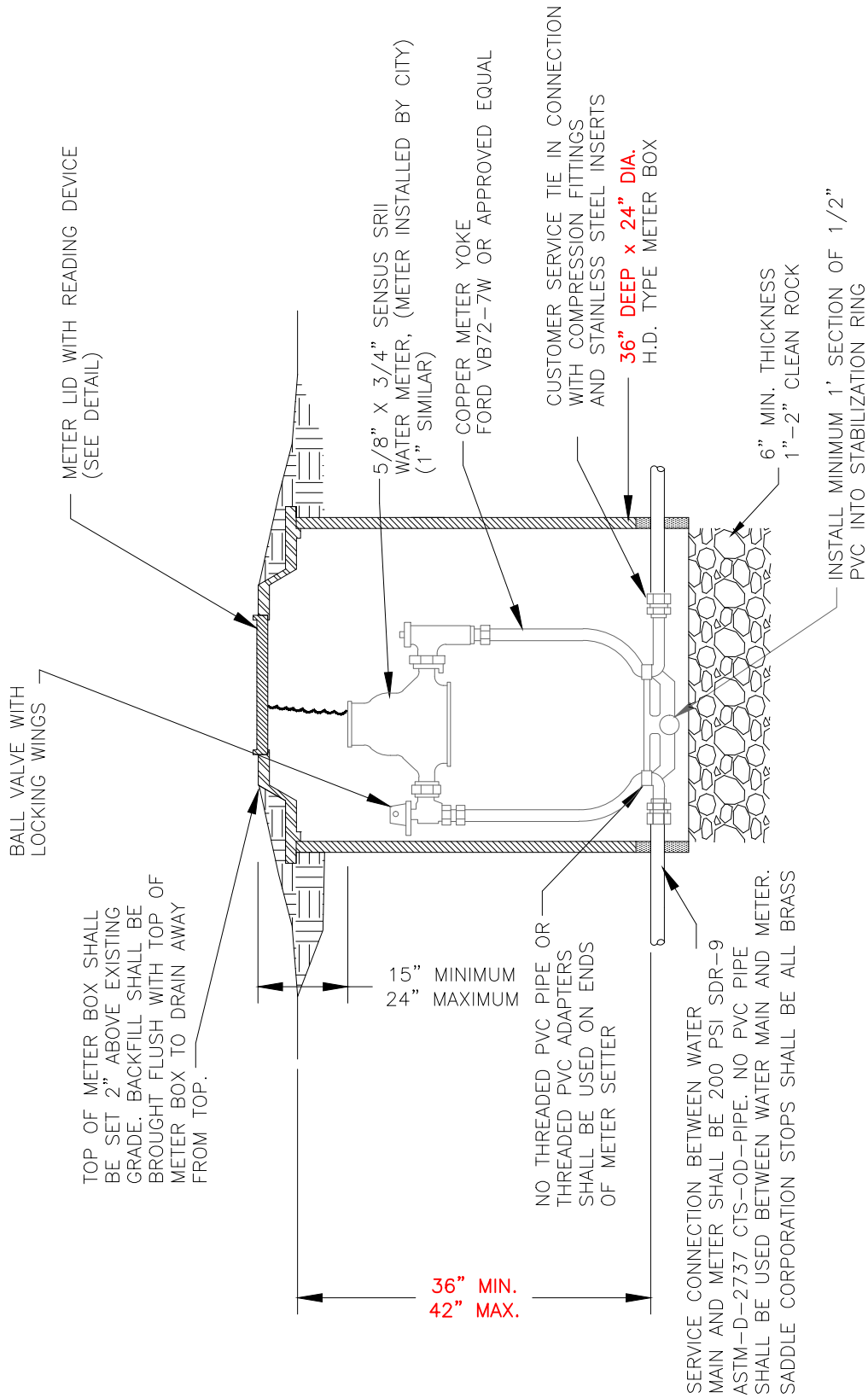
NTS

WAT-5

DATE
07-28-2023

REVISION

1



NOTES:

1. ALL SERVICE LINES REQUIRE TRACER WIRE BETWEEN THE WATER MAIN AND THE WATER METER.
2. SINGLE FAMILY UNITS, EACH UNIT OF A TOWNHOME, DUPLEX, TRIPLEX AND FOUR-PLEX SHALL NORMALLY BE PROVIDED WITH SEPARATE WATER METERS FOR EACH LIVING UNIT UNLESS OTHERWISE APPROVED BY THE CITY.
3. MULTI-FAMILY APARTMENT UNITS SHALL BE PROVIDED WITH ONE WATER METER FOR THE ENTIRE FACILITY.
4. IRRIGATION SYSTEMS MAY BE PROVIDED WITH SEPARATE WATER METERS.
5. METER LIDS AND METER BOXES LOCATED IN TRAFFICWAYS SHALL BE TRAFFIC RATED.

CITY OF OZARK

5/8" & 1" METERS
DETAIL

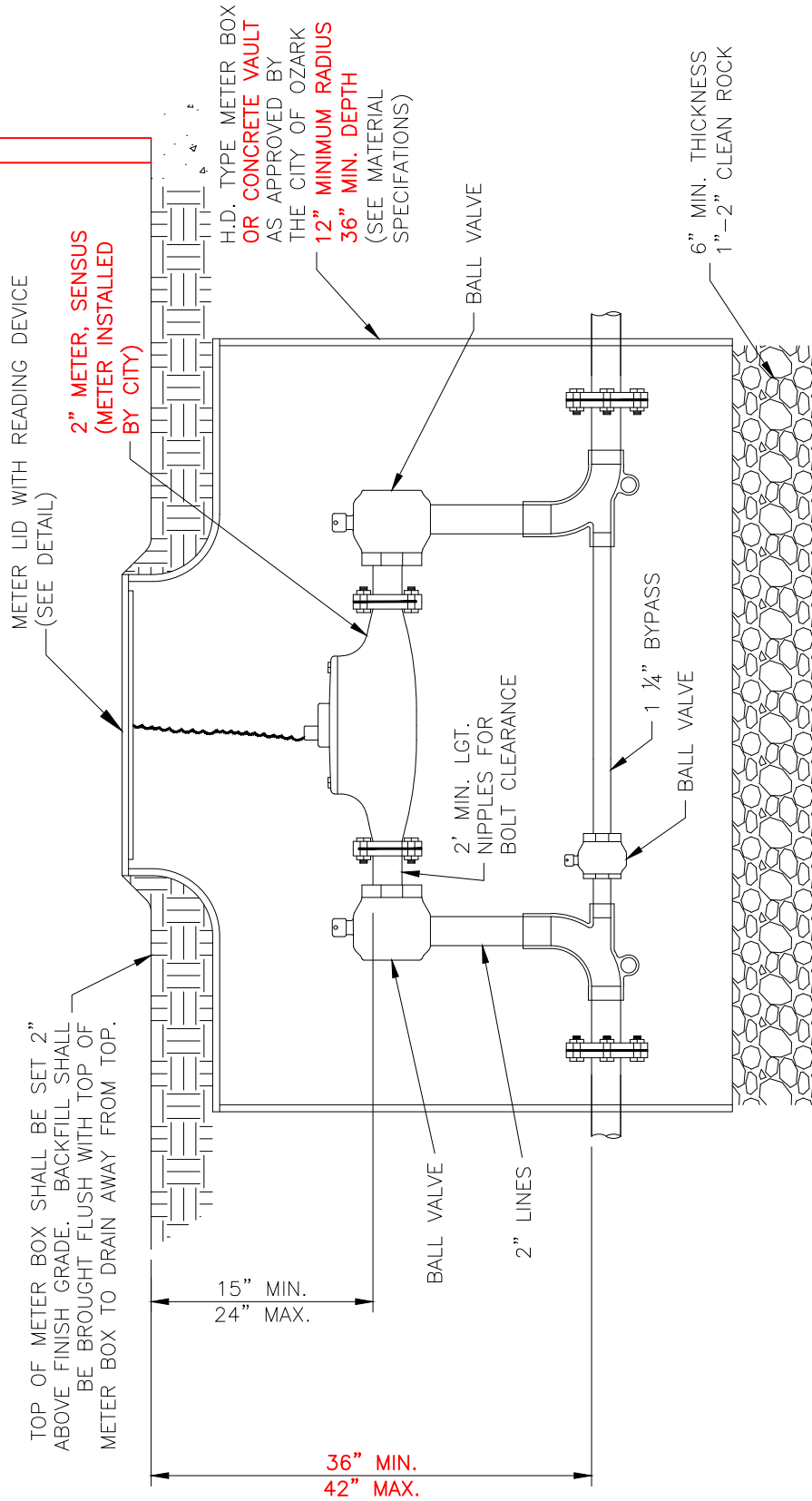
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WAT-6

DATE
7-28-2023

REVISION
5

4 OR MORE STEEL BOLLARDS SHALL BE REQUIRED
TO SURROUND ALL METERS IN TRAFFIC AREAS



NOTES:

1. ALL BALL VALVES SHALL BE "LOCKABLE" TYPE.
2. MULTI-FAMILY APARTMENT UNITS SHALL BE PROVIDED WITH ONE WATER METER FOR THE ENTIRE FACILITY.
3. A SEPARATE COMMERCIAL WATER METER SHALL BE PROVIDED FOR EACH SEPARATE COMMERCIAL UNIT UNLESS OTHERWISE APPROVED BY THE CITY.
4. IRRIGATION SYSTEMS MAY BE PROVIDED WITH SEPARATE WATER METERS. IRRIGATION WATER METER ARE NOT REQUIRED TO HAVE BYPASS LINE.
5. METER BOXES LOCATED IN TRAFFICWAYS SHALL BE CONSTRUCTED AS CONCRETE VAULTS IN LIEU OF H.D. TYPE METER BOXES.
6. METER LIDS SHALL BE DUCTILE IRON.
7. ALL SERVICE LINES REQUIRES TRACER WIRE BETWEEN THE WATER MAIN AND THE WATER METER.

CITY OF OZARK

2" COMMERCIAL METER
DETAIL

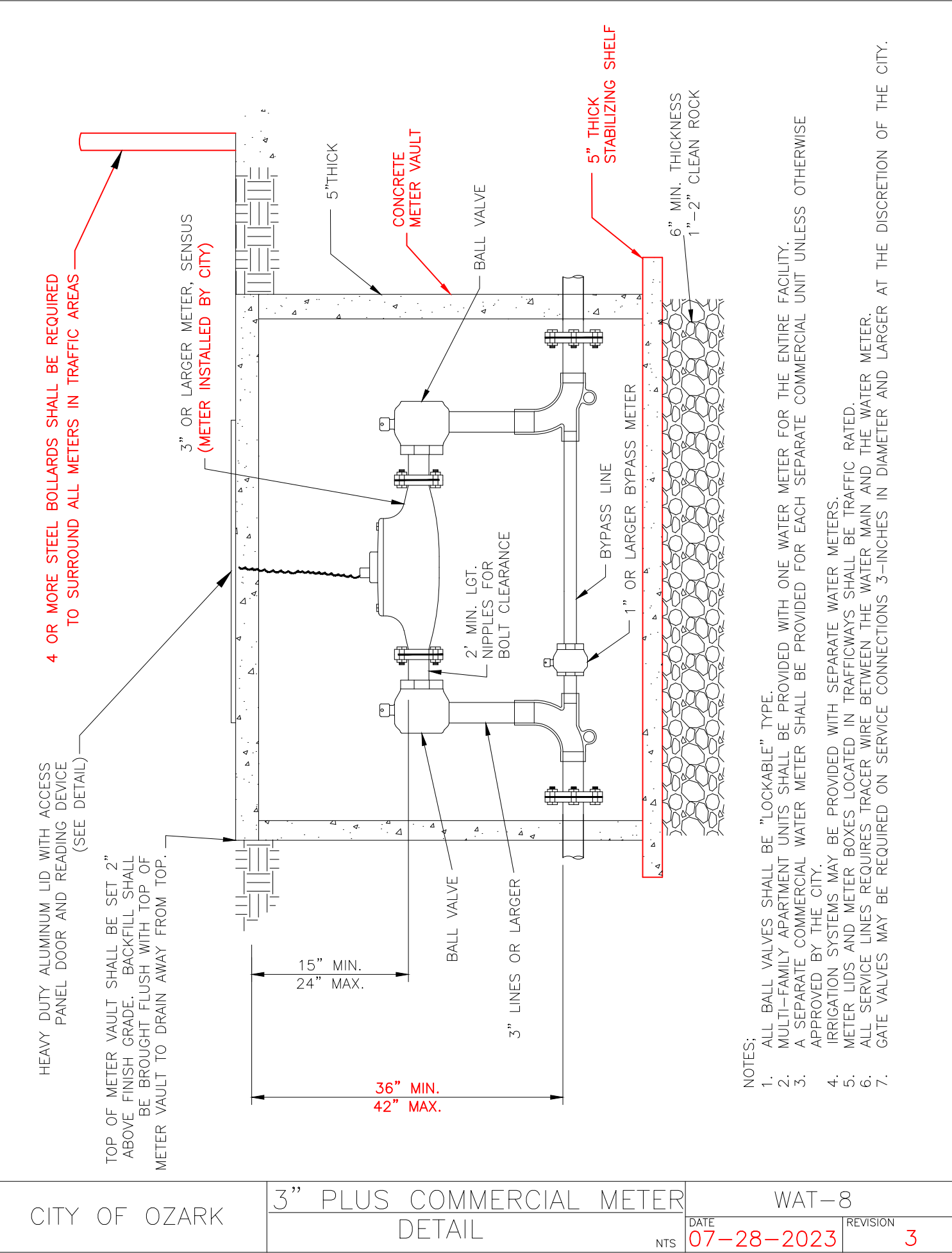
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DATE
07-28-2023

REVISION

4

WAT-7



CITY OF OZARK

3" PLUS COMMERCIAL METER
DETAIL

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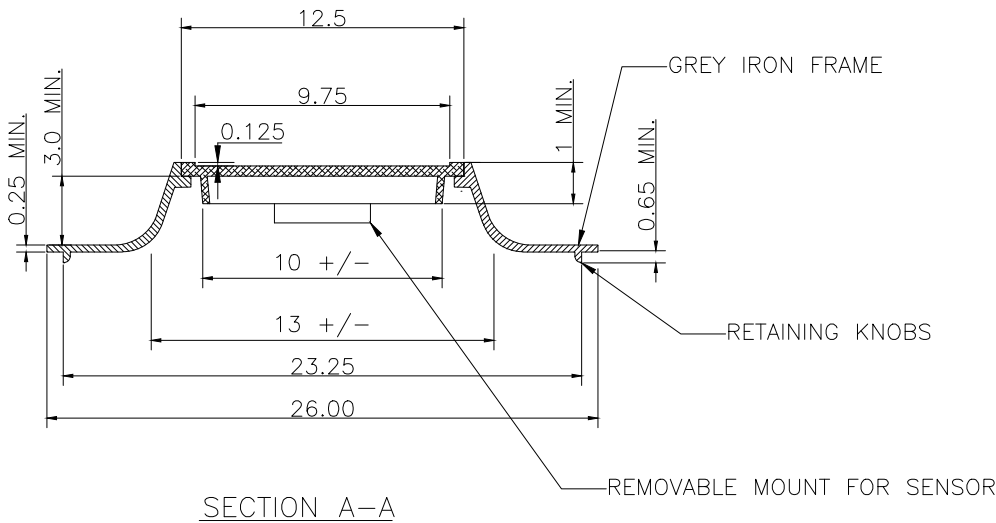
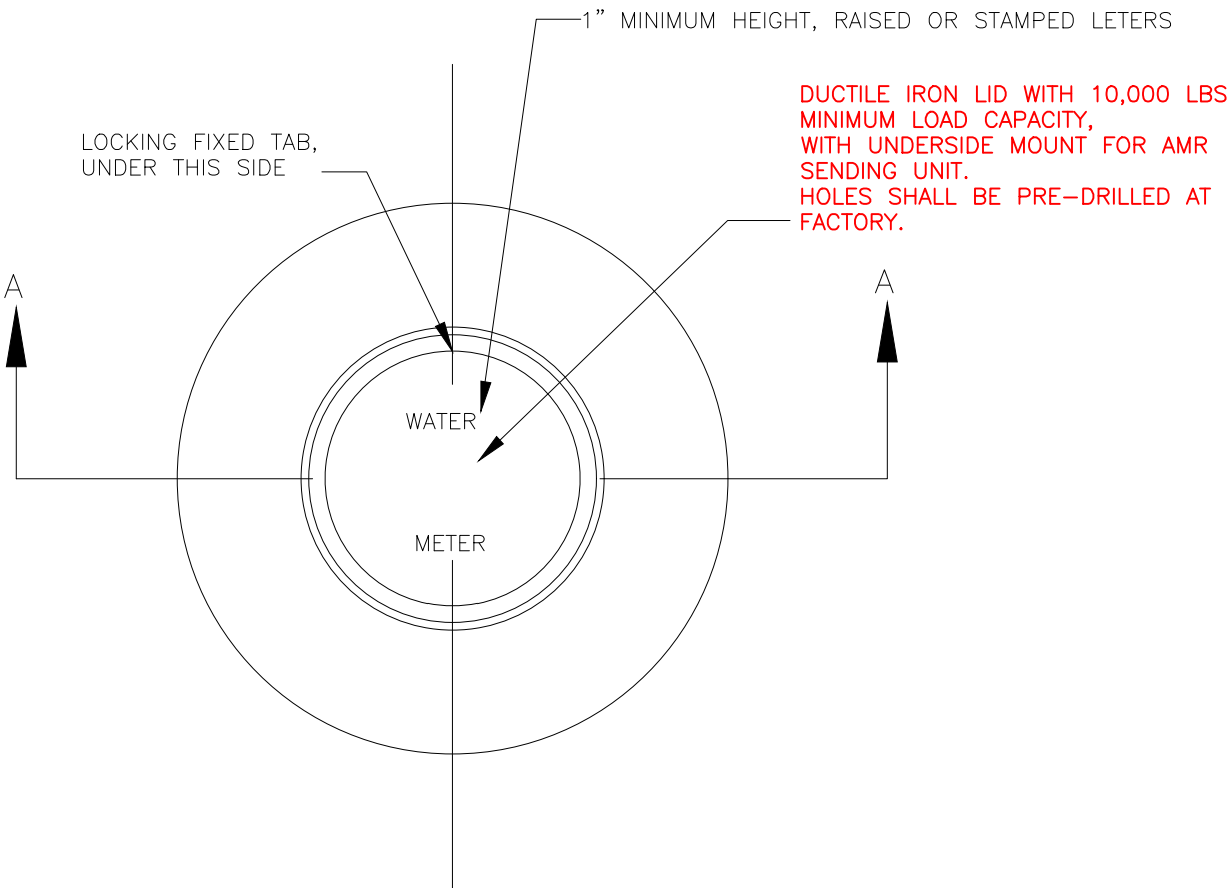
DATE
07-28-2023

REVISION
3

WAT-8

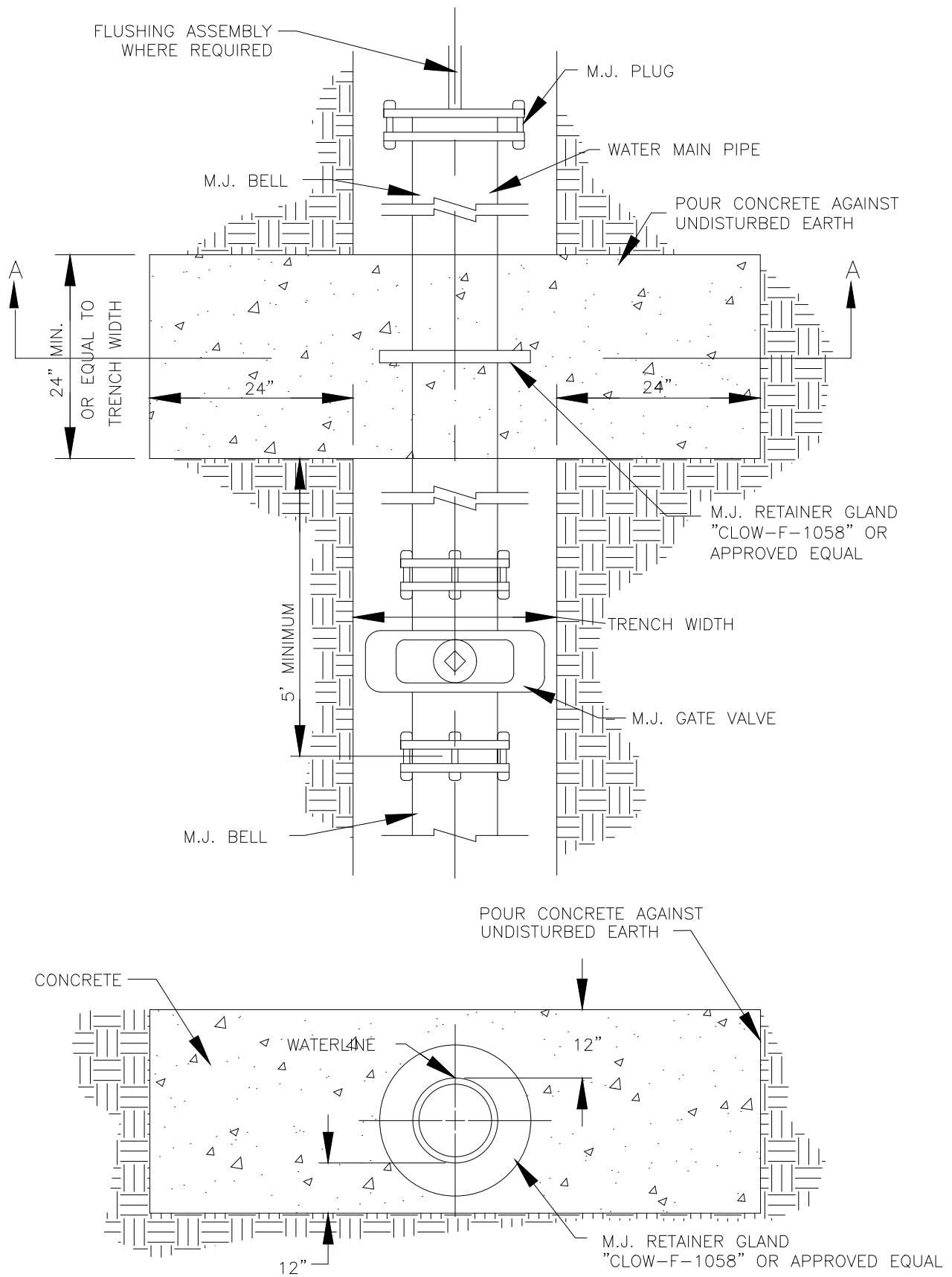
NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
2. FRAME AND LID SHALL FIT AND LOCK TOGETHER TIGHTLY WITHOUT FORCING.



CITY OF OZARK	METER LID FOR READERS	WAT-9	
		DATE 10-03-2024	REVISION 2

NTS



SECTION A-A

NOTE; IF LOCATED ADJACENT TO A TEE, THEN PROVIDE A FOSTER ADAPTER TO THE TEE.

CITY OF OZARK

DEAD END ASSEMBLY
DETAILS

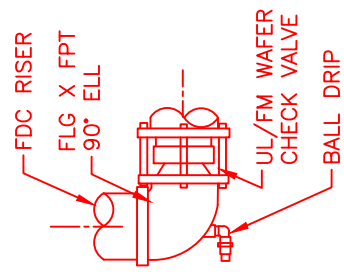
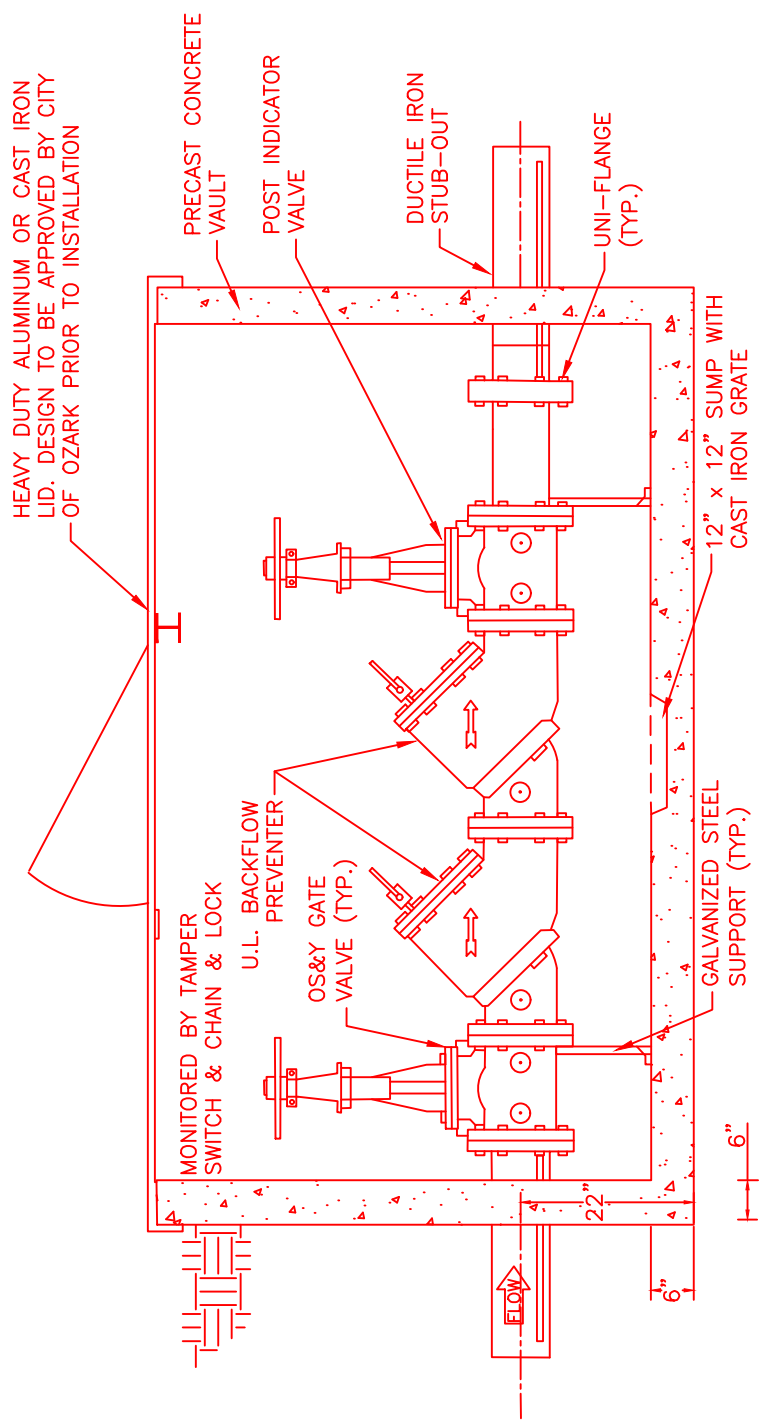
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DATE
12-27-2016

REVISION

2

WAT-10



CITY OF OZARK	BACKFLOW PREVENTION FIRE VAULT DETAIL	WAT-11	
		DATE 07-28-2023	REVISION 0

NTS