

ADDITIONAL CHARGES MAY BE APPLIED IF RESTORATION IS NOT RESTORED IN 7 DAYS FOR CONC. OR 30 DAYS FOR DIRTWORK. TIME MAY BE EXTENDED BASED ON SIZE OF REPAIR AND WEATHER CONDITIONS. CHARGES MAY BE INCREASED DEPENDING ON SIZE OF REPAIR. DIRT RESTORATION SHALL BE COMPLETED IN R.O.W. WITHIN 30 DAYS OF EXCAVATION OR A \$200 CHARGE WILL BE BILLED TO PERMIT HOLDER.

**NOTES:**

FOR CURB, DRIVE APRON AND SIDEWALK INSPECTIONS CALL THE PUBLIC WORKS DEPARTMENT AT 573-364-8659.

24 HOUR NOTICE TO PUBLIC WORKS DEPARTMENT IS REQUIRED BEFORE EXCAVATION BEGINS IN RIGHT OF WAY.

CONTRACTOR SHALL PROVIDE ALL SIGNS AND BARRICADES.

REFUNDS OR ADDITIONAL FEES WILL BE BASED ON MATERIAL CALCULATIONS AFTER THE EXCAVATED AREA IS COMPLETELY RESTORED TO GOOD OR BETTER CONDITION AS ORIGINAL.

DIRT RESTORATION SHALL BE COMPLETED IN R.O.W. WITHIN 30 DAYS OF EXCAVATION OR A \$200 PENALTY WILL BE BILLED TO PERMIT HOLDER.

OPEN EXCAVATIONS WILL NOT BE ALLOWED IN STREET OVERNIGHT UNLESS PRIOR APPROVAL WAS OBTAINED FROM THE PUBLIC WORKS DIRECTOR.


FOR DRIVE APRONS REFER TO STANDARD 212.

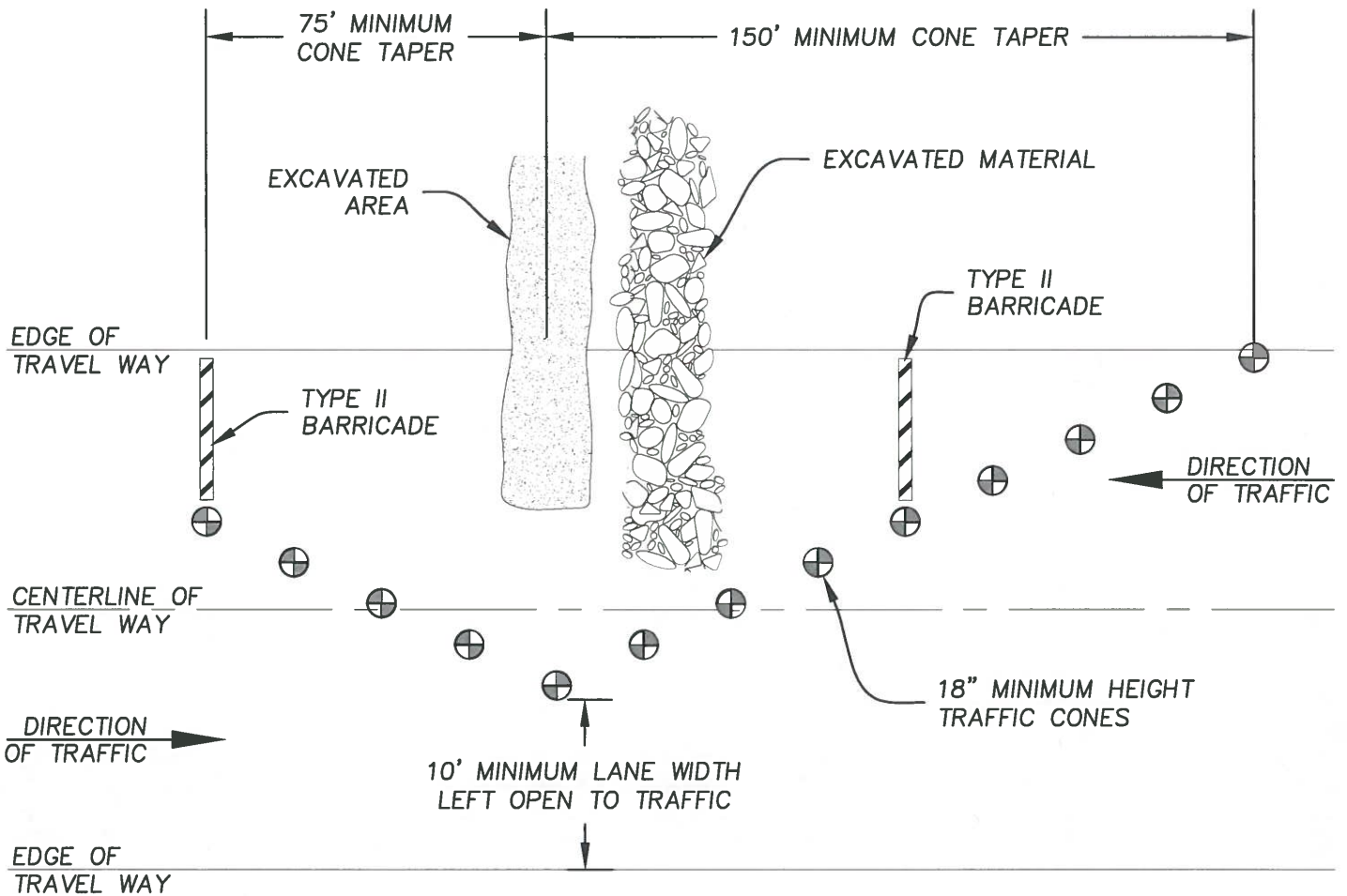
FOR STREET PATCH DETAIL REFER TO STANDARD 102.

PERMANENT PRIVATE APPURTENANCES SHALL NOT BE INSTALLED IN OR ENCROACH ON THE CITY RIGHT-OF-WAY; I.E. LAWN SPRINKLER LINES, FENCES, UNDERGROUND WIRING, ETC.

EXCAVATION PERMITS WILL BE CLOSED OUT AND REFUNDED IF NO ACTIVITY WITHIN 1 YEAR.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

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|  |   | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b>  |                                  |
| <b>APPROVED:</b><br>NUMBER<br>E-21915<br>DATE<br>5/1/18                             | <b>REVISED:</b><br>05/24/11<br>04/30/18 | <b>STREET AND SIDEWALK<br/>         STD. AND SPEC. REQUIREMENTS<br/>         MINIMUM EXCAVATION DEPOSITS</b> | <b>STANDARD<br/>         100</b> |
| <b>DIRECTOR OF PUBLIC WORKS</b>   |   |  |                                  |



**NOTES:**

EXCAVATION TO PROGRESS AS TO ALLOW AT LEAST A 10' MINIMUM LANE WIDTH OPEN TO TRAFFIC. UNDER NO CIRCUMSTANCES IS THE ENTIRE STREET TO BE CLOSED TO TRAFFIC.

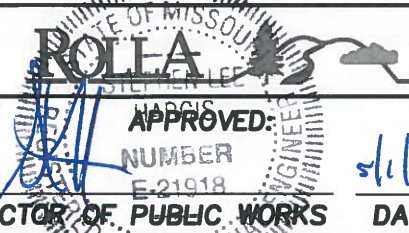
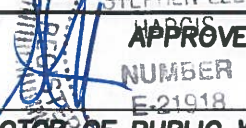
EXCAVATION TO BE SCHEDULED AS TO BE COMPLETED DURING DAY LIGHT HOURS. UNDER NO CIRCUMSTANCES IS AN EXCAVATION TO BE LEFT UNCOVERED OVER NIGHT OR LEFT UNATTENDED.

IF AT ANY TIME A QUESTION ARISES AS TO PROPER PLACEMENT OF BARRICADES, CALL 573-364-8659 TO REQUEST ASSISTANCE.

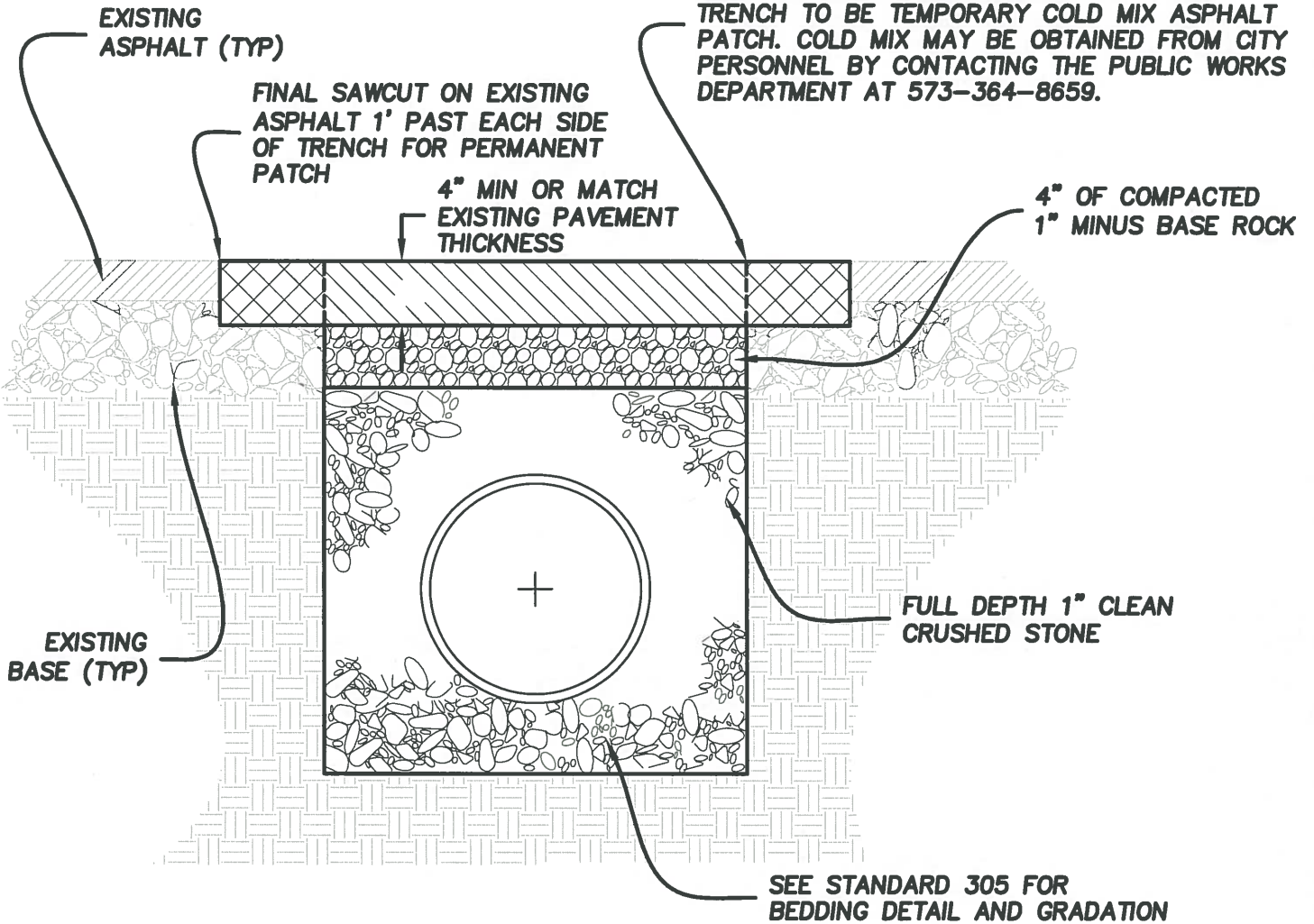
BARRICADES MUST CONFORM TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". IF BARRICADES ARE NEEDED, THEY MAY BE OBTAINED FROM LOCAL EQUIPMENT RENTAL STORES.

STREET LANE RESTRICTIONS AND/OR CLOSINGS SHALL BE COORDINATED WITH THE CITY OF ROLLA STREET DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR BUT NOT LIMITED TO PROVIDING ALL TRAFFIC CONTROL SIGNAGE, LIGHTS, CONES, BARRICADES, FLAGPERSONS, AND/OR ANY DEVICE NEEDED FOR SAFE TRAFFIC CONTROL ON FEDERAL, STATE, COUNTY, AND CITY RIGHT-OF-WAYS.

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|  |  | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b>   |                                     |  |                         |
|   |  | APPROVED:<br><br>NUMBER<br>E-21918<br>DIRECTOR OF PUBLIC WORKS | REVISED:<br>_____<br>_____<br>_____ | <b>STANDARD BARRICADING<br/>FOR EXCAVATION</b> | <b>STANDARD<br/>101</b> |
|   |  | DATE<br>5/1/18  |                                     |  |                         |

INITIAL SAWCUT ON EXISTING ASPHALT TO BE WIDTH OF EXCAVATED TRENCH. TOP 4" OF TRENCH TO BE TEMPORARY COLD MIX ASPHALT PATCH. COLD MIX MAY BE OBTAINED FROM CITY PERSONNEL BY CONTACTING THE PUBLIC WORKS DEPARTMENT AT 573-364-8659.





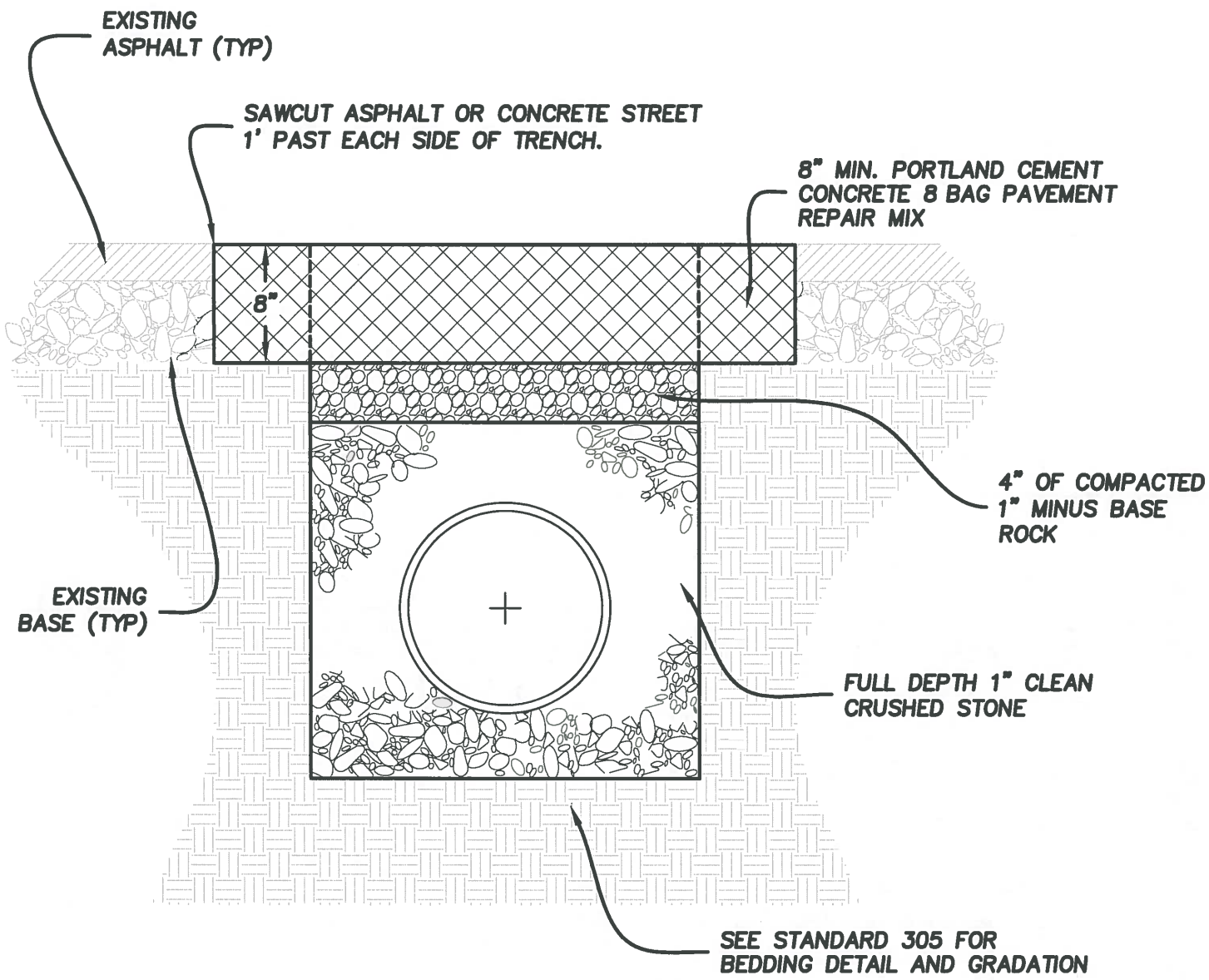
**NOTES:**

24 HOUR NOTICE TO PUBLIC WORKS DEPARTMENT IS REQUIRED BEFORE DIGGING IN THE RIGHT OF WAY.

BP1 ASPHALTIC CONCRETE SHALL BE COMPACTED IN PLACE IN MAXIMUM LIFTS OF 3 INCHES.

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|  <b>ROLLA</b><br>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS     |                       |  |  |
| APPROVED:<br><br>NUMBER<br>E-21918<br>DIRECTOR OF PUBLIC WORKS | DATE<br><i>skl/18</i> | REVISED:<br>02/16/2011<br>06/06/2011<br>04/30/2018 | ASPHALT STREET<br>PATCH<br><br>STANDARD<br>102 |



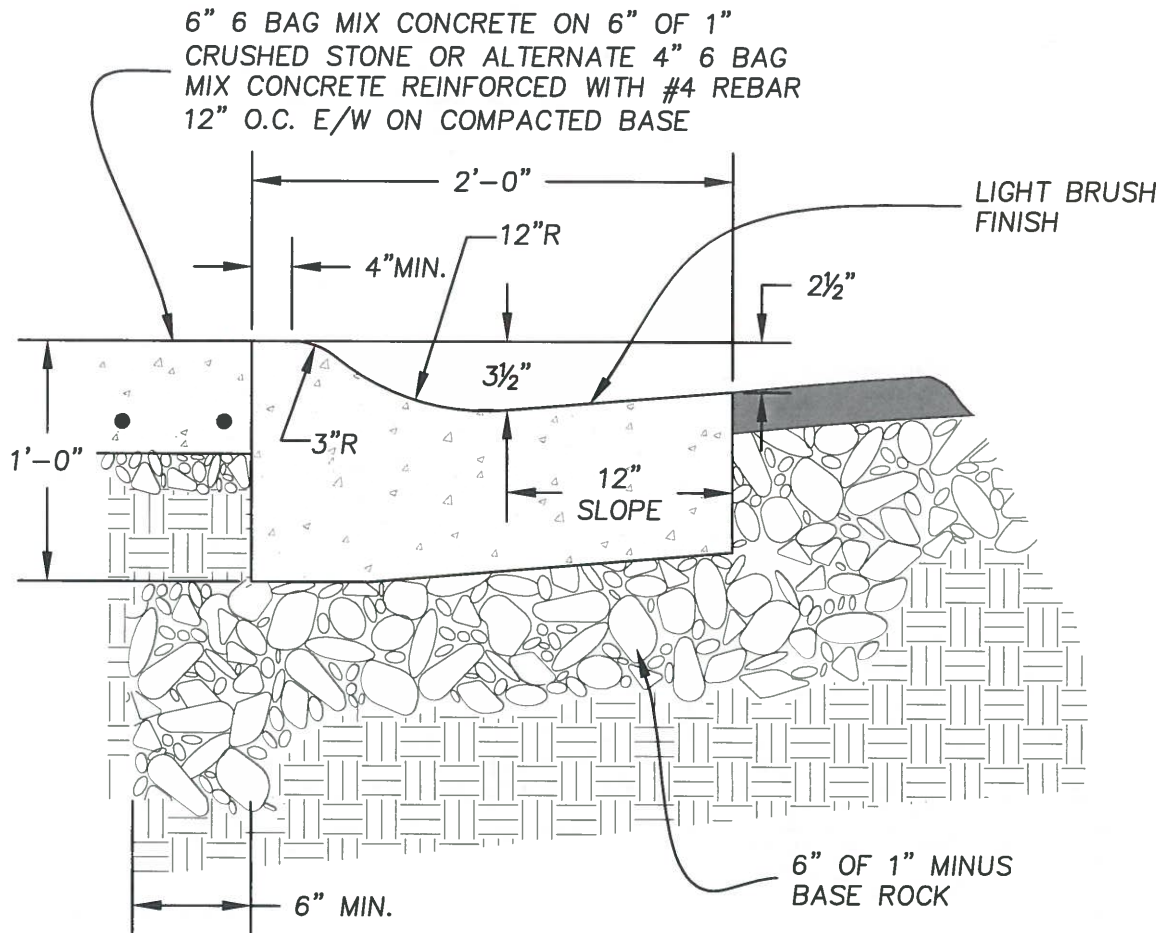
**NOTES:**

24 HOUR NOTICE TO PUBLIC WORKS DEPARTMENT IS REQUIRED BEFORE DIGGING IN THE RIGHT OF WAY.

PORTLAND CEMENT CONCRETE REQUIRES A MINIMUM OF 4 HOURS CURING TIME BEFORE BEING OPENED TO TRAFFIC. SURFACE SHALL BE BROOM FINISHED.

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|                          |  | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS |  |                          |                 |
|                          |  | APPROVED:<br>NUMBER<br>DATE              | REVISED:<br>02/16/2011<br>06/06/2011<br>04/30/2018 | CONCRETE STREET<br>PATCH | STANDARD<br>103 |
| DIRECTOR OF PUBLIC WORKS |  | <i>slc/B</i>                             |  |                          |                 |



**NOTES:**

ROLLOVER CURB TO BE APPROVED ON CASE BY CASE BASIS UPON PWD APPROVAL.

USE OF ROLLOVER CURB WILL REQUIRE ADDITIONAL STORM SEWER INLETS. REFER TO SECTION 3.10 OF THE CITY'S STORM WATER DESIGN STANDARDS, TABLE 3-6, FOR ALLOWABLE GUTTER FLOW AND SPREAD LIMITS.

CONCRETE SHALL BE 6 BAG MIX (4,000 PSI) WITH SLUMP TEST LIMITS OF NOT LESS THAN 1 INCH NOR MORE THAN 4 INCHES.



WHERE CURB IS PLACED WITHOUT STREET IMPROVEMENT, A MIN. OF 6 INCHES BASEROCK IS REQUIRED AT NOT LESS THAN 95% STANDARD PROCTER TEST AT OPTIMUM MOISTURE CONTENT.

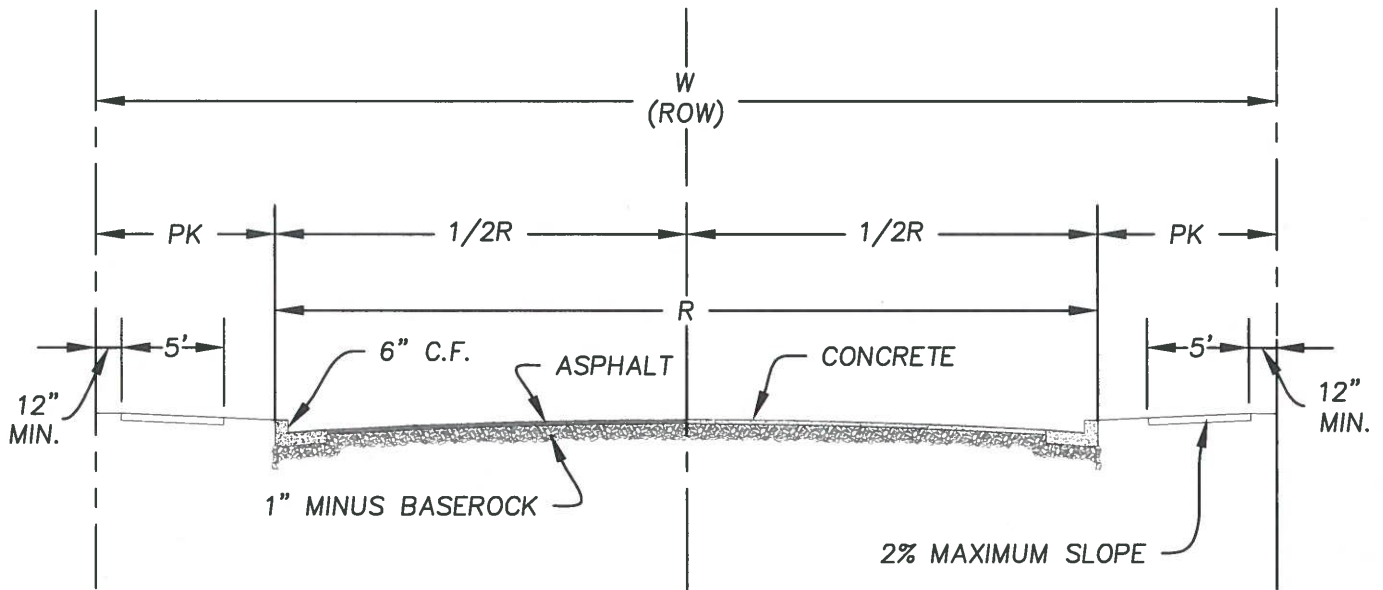
1/2" PREMOLDED EXPANSION JOINT PLACED EVERY 100 FT. (MIN.) THROUGH ENTIRE CROSS SECTION OF CURB.

CONSTRUCTION JOINTS SHALL BE PLACED EVERY 10 FT.

FRAME AND GRATE ASSEMBLY SHALL BE NEENAH R-3501-TR OR -TL (DEPENDING ON FLOW DIRECTION) OR APPROVED EQUAL IF INLET FALLS IN DRIVEWAY.

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|  <p><b>ROLLA</b><br/>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</p> |  | <p><b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b></p> |  |
| <br><p><b>DIRECTOR OF PUBLIC WORKS</b></p>                         | <p><b>APPROVED:</b><br/>NUMBER<br/>E-21918</p> | <p><b>REVISED:</b><br/>04/30/2018</p>                  | <p><b>OPTIONAL ROLLOVER CONCRETE CURB AND GUTTER SECTION ADJACENT SIDEWALK MANDATORY</b></p> |
|  | <p>DATE</p>                                    | <p>DATE</p>  | <p>DATE</p>  |



| TYPE                                  | W   | R   | PK  | S              | PARKING    | GRASS STRIP | MINIMUM THICKNESS  |           |                   |           |          |           |
|---------------------------------------|-----|-----|-----|----------------|------------|-------------|--------------------|-----------|-------------------|-----------|----------|-----------|
|                                       |     |     |     |                |            |             | FULL DEPTH ASPHALT |           | ASPHALT/BASE ROCK |           | CONCRETE |           |
|                                       |     |     |     |                |            |             | ASPHALT            | BASE ROCK | ASPHALT           | BASE ROCK | CONCRETE | BASE ROCK |
| CUL-DE-SAC (ADT <250)                 | 50' | 30' | 10' | * ONE SIDE 5'  | BOTH SIDES | NONE        | 3 1/2"             | 4"        | 3"                | 6"        | 6"       | 4"        |
| ESTATE LANE (ADT <1000)               | 50' | 30' | 10' | ** ONE SIDE 5' | BOTH SIDES | NONE        | 4"                 | 4"        | 3"                | 8"        | 6"       | 4"        |
| MINOR RESIDENTIAL (ADT <1000)         | 50' | 30' | 10' | ONE SIDE 5'    | BOTH SIDES | 3'          | 4"                 | 4"        | 3"                | 8"        | 6"       | 4"        |
| RESIDENTIAL COLLECTOR (ADT 1000-3000) | 50' | 34' | 8'  | BOTH SIDES 5'  | ONE SIDE   | 3'          | 6 1/2"             | 4"        | 4"                | 12"       | 6"       | 4"        |
| COLLECTOR/COMMERCIAL (ADT 2000-6000)  | 60' | 34' | 13' | BOTH SIDES 5'  | NO PARKING | 3'          | 10"                | 4"        | 5"                | 16"       | 7"       | 4"        |
| INDUSTRIAL (ADT <6000)                | 60' | 34' | 13' | NONE           | NO PARKING | NONE        | 10"                | 4"        | 5"                | 16"       | 7"       | 4"        |
| ARTERIAL (ADT 3000-10000)             | 80' | 34' | 23' | BOTH SIDES 5'  | NO PARKING | 3'          | 12"                | 4"        | 6"                | 18"       | 8"       | 4"        |

W=WIDTH S=SIDEWALK R=WIDTH OF ROADWAY ADT=AVERAGE DAILY TRAFFIC

**NOTES:**

SUBGRADE AND AGGREGATE BASE SHALL BE COMPACTED TO NOT LESS THAN 95% STANDARD PROCTER TEST AT OPTIMUM MOISTURE CONTENT.

CROWN NOT LESS THAN 4 INCHES NOR MORE THAN 6 INCHES.

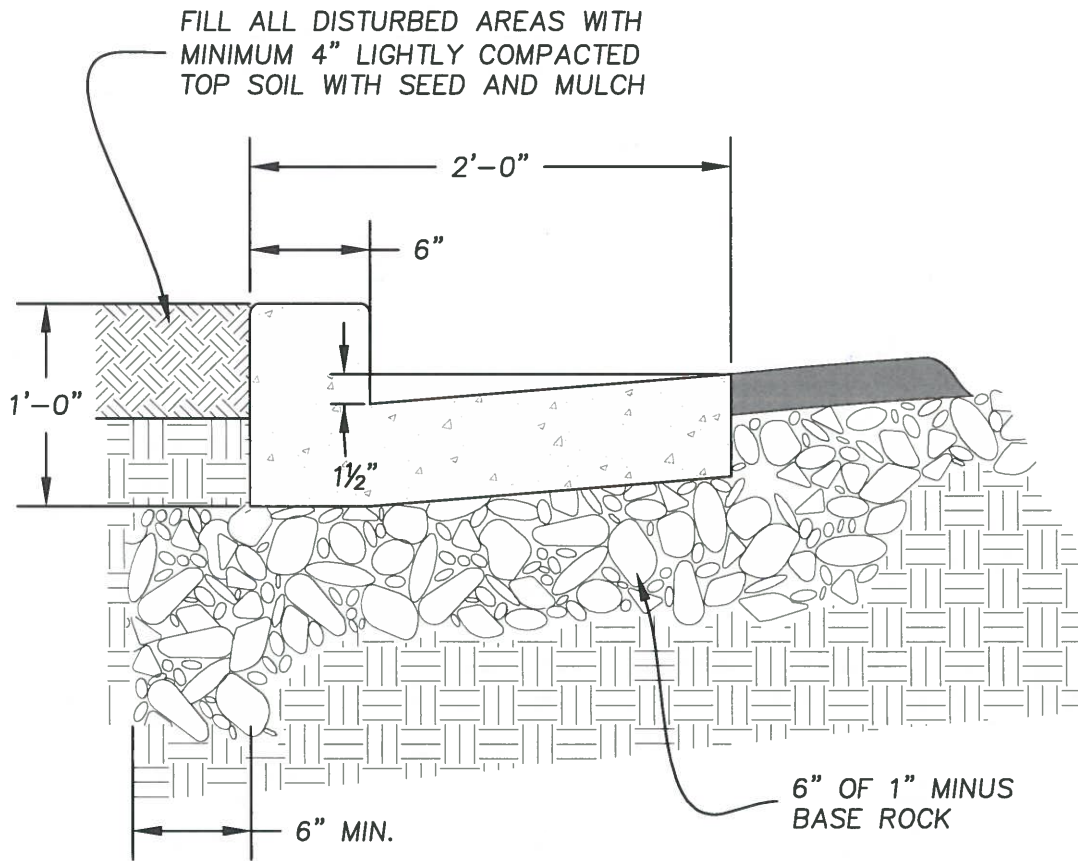
\*NO SIDEWALKS WILL BE REQUIRED ON RESIDENTIAL CUL-DE-SAC STREETS THAT ARE LESS THAN 600 FEET IN LENGTH AND HAVE NO MORE THAN 15 LOTS OR DWELLING UNITS.

\*\*NO SIDEWALKS WILL BE REQUIRED ON ESTATE LANES WITH LARGE LOTS 25,000 SQUARE FEET, RESIDENTIAL SUBDIVISIONS WITH 10 LOTS OR MORE WITH A MINIMUM PER LOT FRONTAGE OF 150 FEET.

SUBGRADE MUST BE PROOFROLLED PRIOR TO INSTALLATION OF AGGREGATE MATERIAL. AGGREGATE MATERIAL MUST BE PROOFROLLED PRIOR TO ASPHALT INSTALLATION. PROOFROLLING SHALL BE DONE BY CITY PERSONNEL.

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|                                 |  | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b>                 |  |
|                                 |  | <b>APPROVED:</b><br>NUMBER<br>E-21918<br>DATE <u>          </u> | <b>REVISED:</b><br><u>04/30/2018</u><br>DATE <u>          </u> |
| <b>DIRECTOR OF PUBLIC WORKS</b> |  | <b>DATE</b>   |  |



NOTES:

CONCRETE SHALL BE 6 BAG MIX (4,000 PSI) WITH SLUMP TEST LIMITS OF NOT LESS THAN 1 INCH NOR MORE THAN 4 INCHES.


WHERE CURB IS PLACED WITHOUT STREET IMPROVEMENT, A MIN. OF 6 INCHES BASEROCK IS REQUIRED AT NOT LESS THAN 95% STANDARD PROCTER TEST AT OPTIMUM MOISTURE CONTENT.

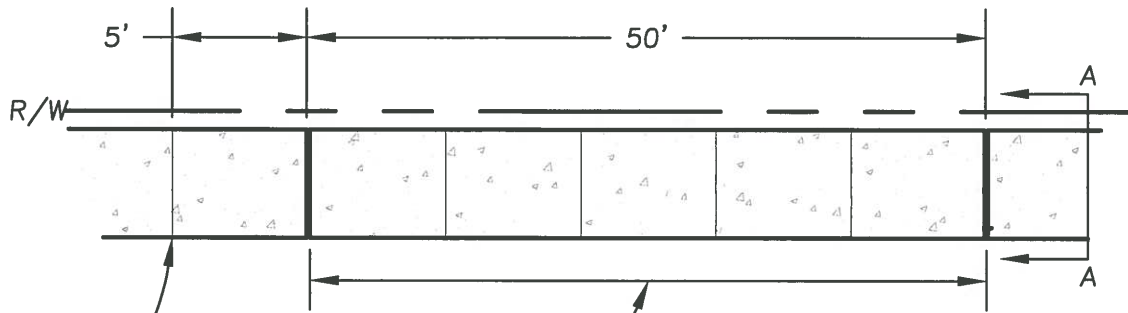
1/2" PREMOLDED EXPANSION JOINT PLACED EVERY 100 FT. (MIN.) THROUGH ENTIRE CROSS SECTION OF CURB.

CONSTRUCTION JOINTS SHALL BE PLACED EVERY 10 FT.

CONCRETE TO HAVE LIGHT BRUSH FINISH AND 1/4"R EDGE ON EXPOSED CORNERS.

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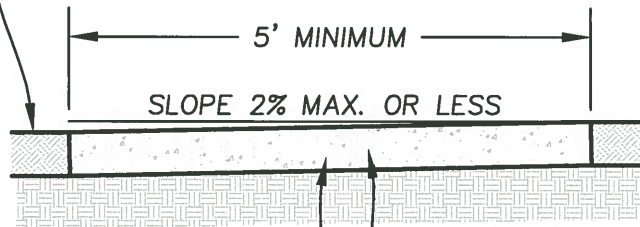
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|  <p><b>ROLLA</b><br/>CITY OF ROLLA</p> |  | <p><b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b></p> |                                |
| <p><b>APPROVED:</b><br/>NUMBER<br/>E-21918</p> <p><i>skl/ls</i></p>   | <p><b>REVISED:</b><br/><b>04/30/2018</b></p> | <p><b>CONCRETE CURB AND<br/>GUTTER SECTION</b></p>     | <p><b>STANDARD<br/>202</b></p> |
| <p><b>DIRECTOR OF PUBLIC WORKS</b></p>  | <p><b>DATE</b></p>                           |  |                                |



CONSTRUCTION JOINTS SHALL BE PLACED EVERY 5'

EXPANSION JOINTS ARE TO BE SET EVERY 50'(MAX.) WITH 1/2" EXPANSION MATERIAL AND BE FLUSH WITH THE TOP OF THE WALK. EXPANSION MATERIAL SHALL BE SAME DEPTH AS SIDEWALK.

FILL ALL DISTURBED AREAS WITH MINIMUM 4" LIGHTLY COMPACTED TOPSOIL WITH SEED AND MULCH



SIDEWALK CROSS SLOPE SHALL BE 2.00% MAX. OR LESS TOWARD ROADWAY UNLESS OTHER APPROVED BY DEPT OF PUBLIC WORKS. SLOPE MUST ALLOW FOR APPROPRIATE DRAINAGE.

SIDEWALK SHALL BE 4" THICK

SECTION A-A

NOTES:



6 BAG CONCRETE MIX (4,000 PSI) SHALL BE USED ON ALL SIDEWALK.

ALL FILL UNDER SIDEWALK SHALL BE TO 95% COMPACTION NONORGANIC MATERIAL APPROVED BY DEPARTMENT OF PUBLIC WORKS.

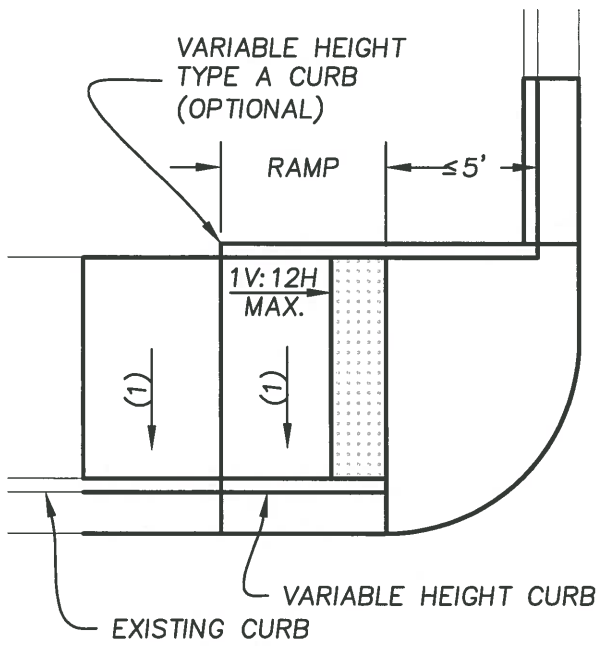
WHEN CROSSING THE WIDTH OF A DRIVEWAY, SIDEWALK SHALL BE 6" THICK CONCRETE WITH 6" OF 1" CLEAN ROCK UNDERNEATH.

CONCRETE TO HAVE LIGHT BRUSH FINISH AND 1/4" R EDGE ON EXPOSED CORNERS.

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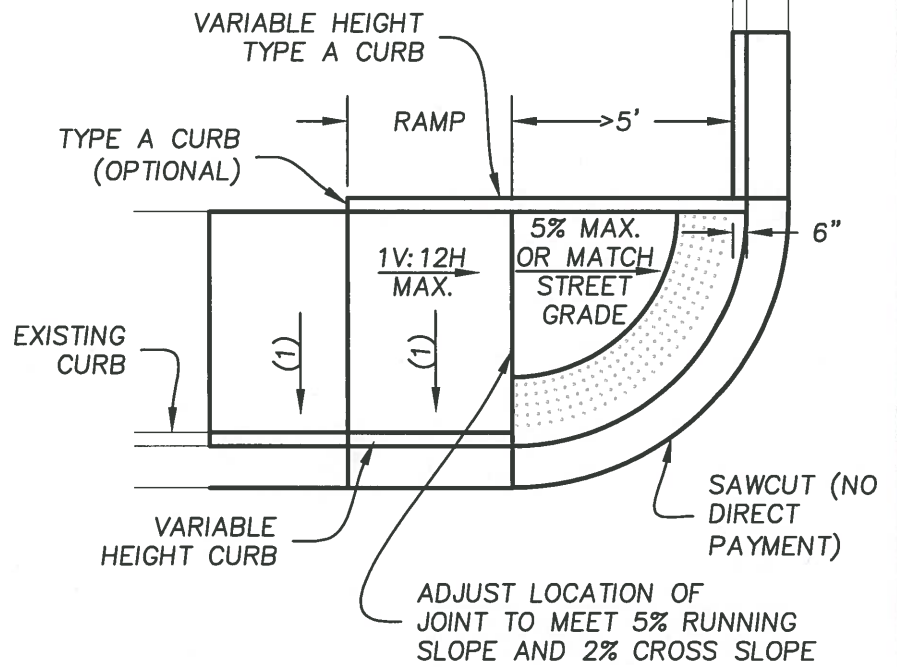
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|    |                  | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS |  |
| APPROVED:<br><br>NUMBER<br>F-21018<br>DIRECTOR OF PUBLIC WORKS | DATE<br>04/30/18 | REVISED:<br>08/12/09<br>04/30/18         | CONCRETE SIDEWALK<br>STANDARD<br>STANDARD<br>204 |



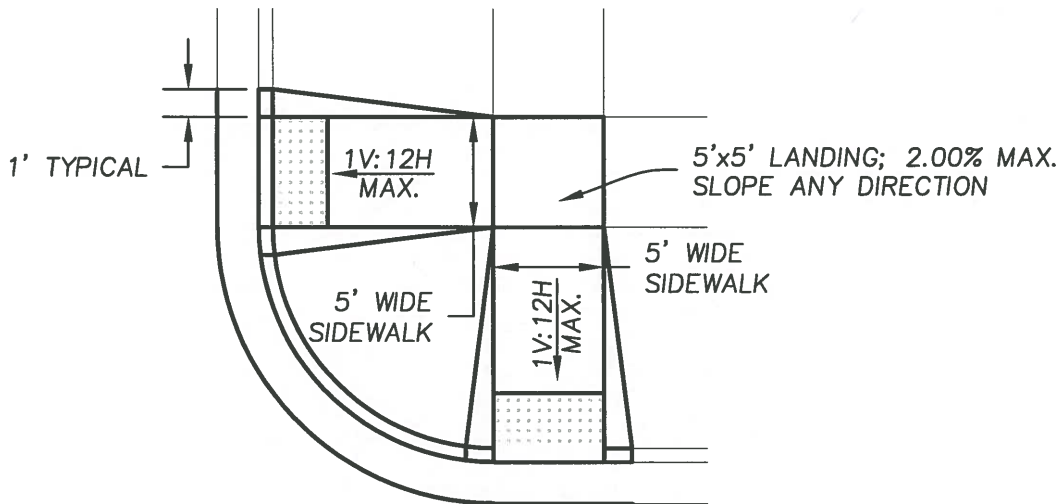


OPTION A


(1) 2.00% MAXIMUM

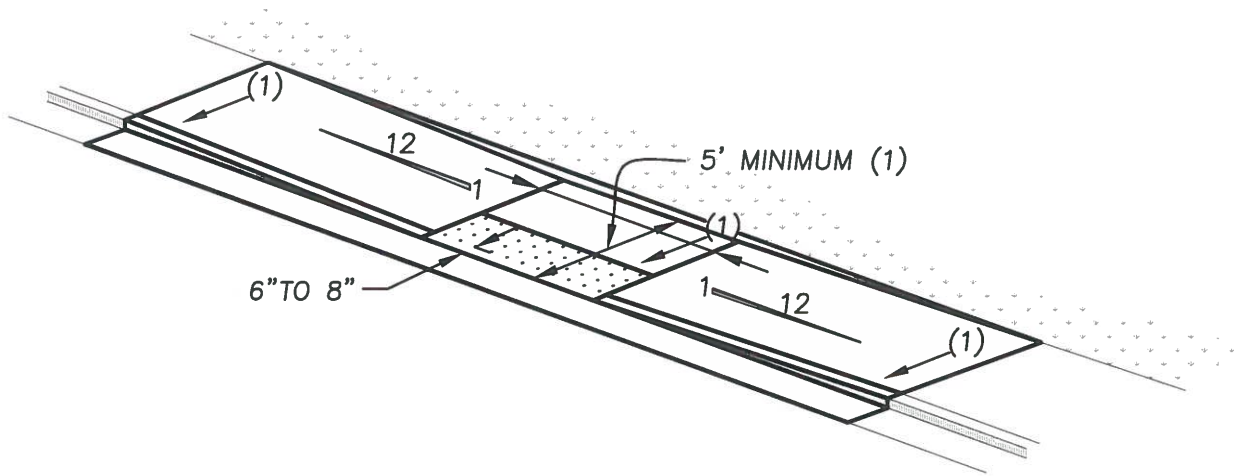


OPTION B

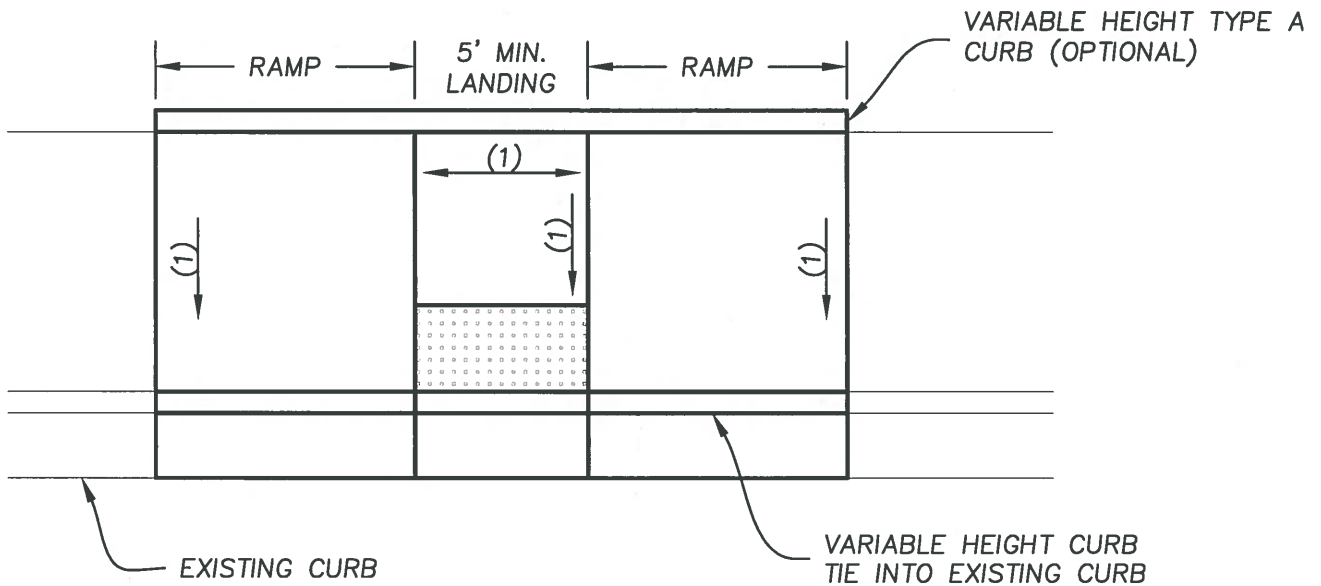


OPTION C

|   |                                 |  |   |                                |
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|  <p><b>ROLLA</b><br/>STATE OF MISSOURI</p> |                                 | <p><b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b></p> |   |                                |
| <p><b>APPROVED:</b><br/>NUMBER<br/>E-21918</p> <p><b>DIRECTOR OF PUBLIC WORKS</b></p>   | <p>STEPHEN LEE<br/>ENGINEER</p> | <p><b>REVISED:</b><br/><u>04/30/2018</u></p>           | <p><b>PERPENDICULAR HANDICAP RAMP<br/>OPTIONS A, B AND C<br/>STANDARD</b></p> | <p><b>STANDARD<br/>205</b></p> |
|   | <p>DATE<br/><u>5/6/18</u></p>   |  |   |                                |

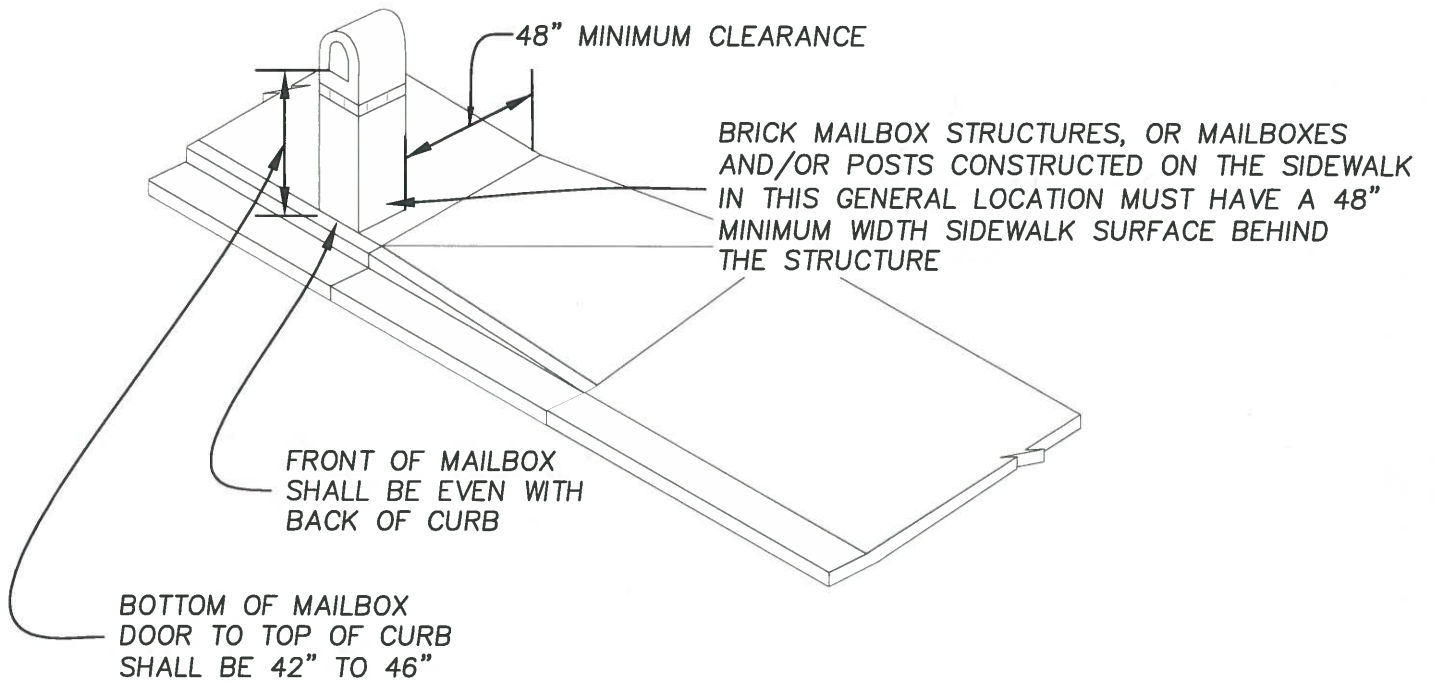


(1) 2.00% MAXIMUM





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|                          |  | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS               |                               |   |
|                          |  | APPROVED<br>NUMBER<br>E-21918<br>DATE<br><i>5/6/18</i> | REVISED:<br><b>04/30/2018</b> | <b>PARALLEL HANDICAP RAMP<br/>         STANDARD</b> |
| DIRECTOR OF PUBLIC WORKS |  | DATE   |                               |   |

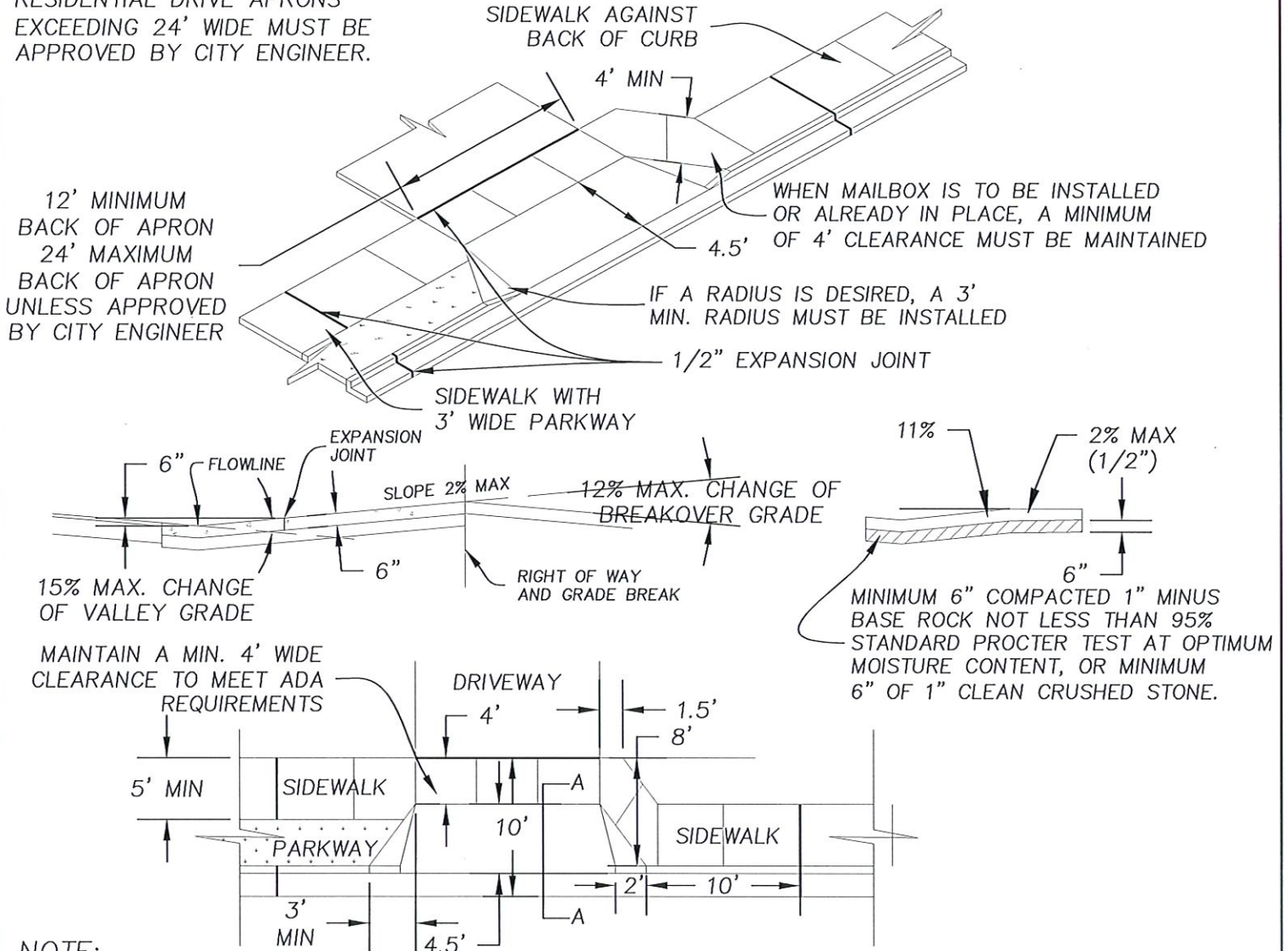


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|    |                       | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS |                              |
| <br>APPROVED:<br>NUMBER<br>E-21918<br>DIRECTOR OF PUBLIC WORKS | DATE<br><i>5/4/18</i> | REVISED:<br><u>04/30/2018</u>            | MAILBOX LOCATION<br>STANDARD |
|   |                       |  |                              |

CONSTRUCTION JOINT 1" DEEP AND GROOVED OR SAWCUT AT END OF TAPER. FOR DRIVE APRONS EXCEEDING 12' WIDE, CONSTRUCTION JOINTS SHALL BE EVENLY SPACED ACROSS APRON AT INCREMENTS NO GREATER THAN 12'6". ADDITIONAL EXPANSION JOINTS SHALL BE USED IF APRON IS POURED IN SEPARATE POURS. FOR DRIVE APRONS EXCEEDING 25' WIDE, EXPANSION JOINTS SHALL BE EVENLY SPACED ACROSS APRON AT INCREMENTS NO GREATER THAN 25'.

RESIDENTIAL DRIVE APRONS EXCEEDING 24' WIDE MUST BE APPROVED BY CITY ENGINEER.



NOTE:

WHEN INSTALLING A NEW CONCRETE DRIVE AT EXISTING CONCRETE CURB AND GUTTER, THE ENTIRE CURB AND GUTTER SECTION IN THE AREA OF THE NEW DRIVE MUST BE REMOVED BY EITHER SAWCUTTING OR REMOVING TO AN EXISTING JOINT.

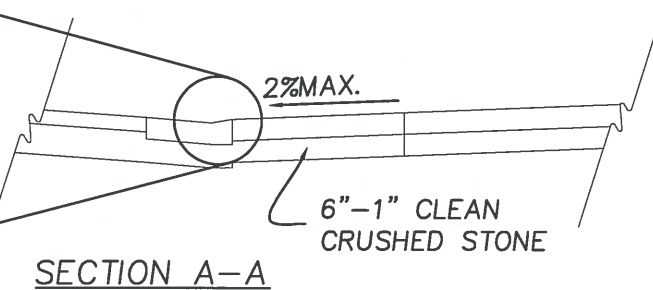
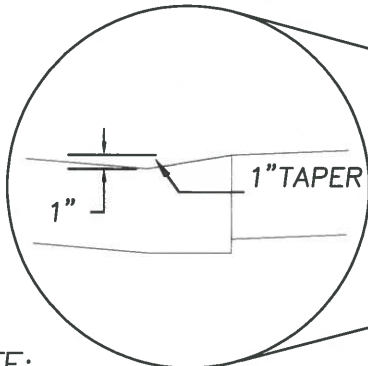
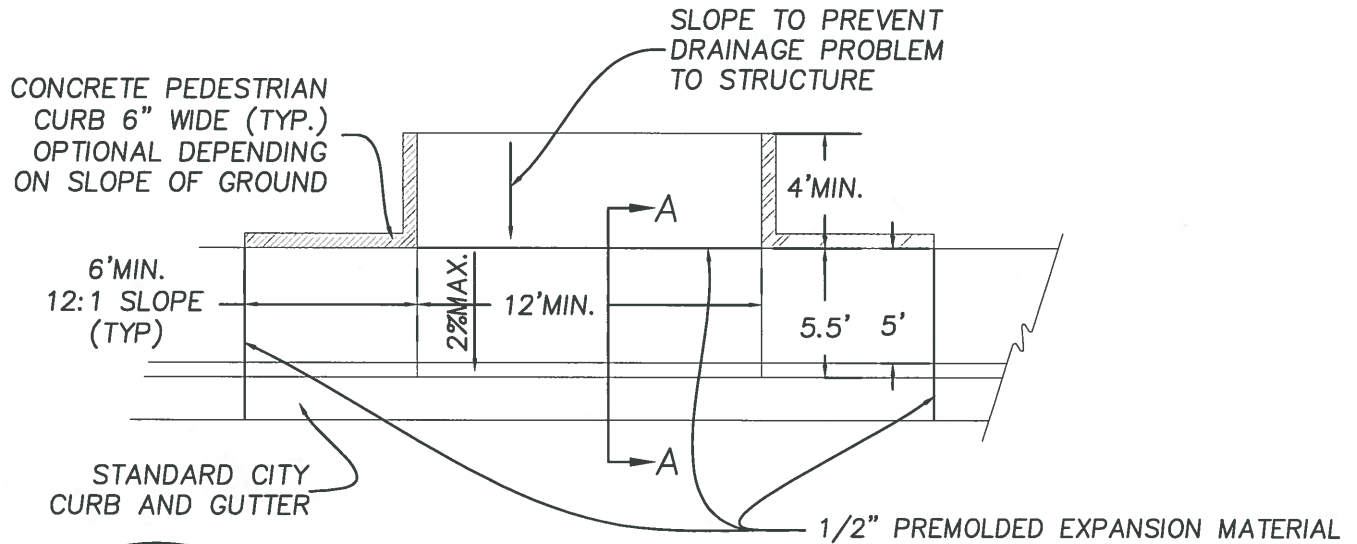
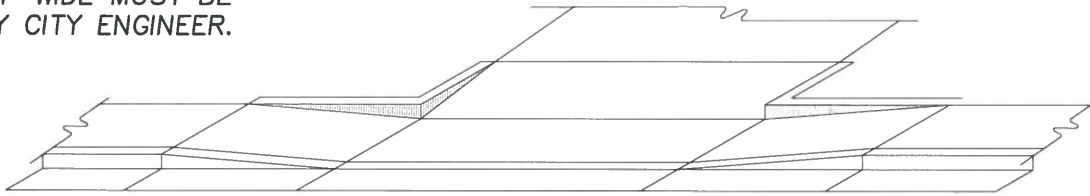
CONCRETE SHALL BE 6 BAG MIX (4,000 PSI) WITH SLUMP TEST LIMIT OF NOT LESS THAN 2 INCHES NOR MORE THAN 4 INCHES.

AN EXCAVATION PERMIT IS REQUIRED TO DIG IN PUBLIC RIGHT OF WAY. PERMIT SHALL BE OBTAINED FROM THE CITY OF ROLLA COMMUNITY DEVELOPMENT DEPARTMENT AT (573) 364-5333. AN INSPECTION IS REQUIRED BEFORE POURING ANY CONCRETE IN PUBLIC RIGHT OF WAY. CONTACT THE CITY OF ROLLA PUBLIC WORKS DEPARTMENT AT (573) 364-8659 FOR INSPECTION.

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|                          |  | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS              |  |
|                          |  | MARKIS APPROVED:<br>NUMBER<br>E-21918<br>DATE 3/30/22 | REVISED:<br>04-30-18<br>07-03-18<br>03-28-22 |
| DIRECTOR OF PUBLIC WORKS |  |   |  |

CONSTRUCTION JOINT 1" DEEP AND GROOVED OR SAWCUT AT END OF TAPER. FOR DRIVE APRONS EXCEEDING 12' WIDE, CONSTRUCTION JOINTS SHALL BE EVENLY SPACED ACROSS APRON AT INCREMENTS NO GREATER THAN 12'6". ADDITIONAL EXPANSION JOINTS SHALL BE USED IF APRON IS POURED IN SEPARATE POURS. FOR DRIVE APRONS EXCEEDING 25' WIDE, EXPANSION JOINTS SHALL BE EVENLY SPACED ACROSS APRON AT INCREMENTS NO GREATER THAN 25'. RESIDENTIAL DRIVE APRONS EXCEEDING 24' WIDE MUST BE APPROVED BY CITY ENGINEER.




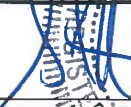
**NOTE:**

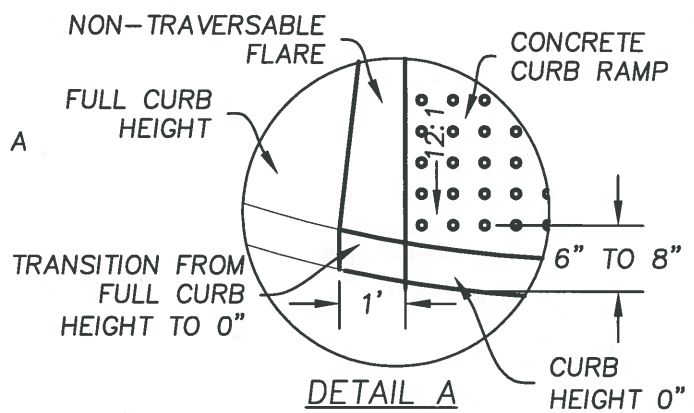
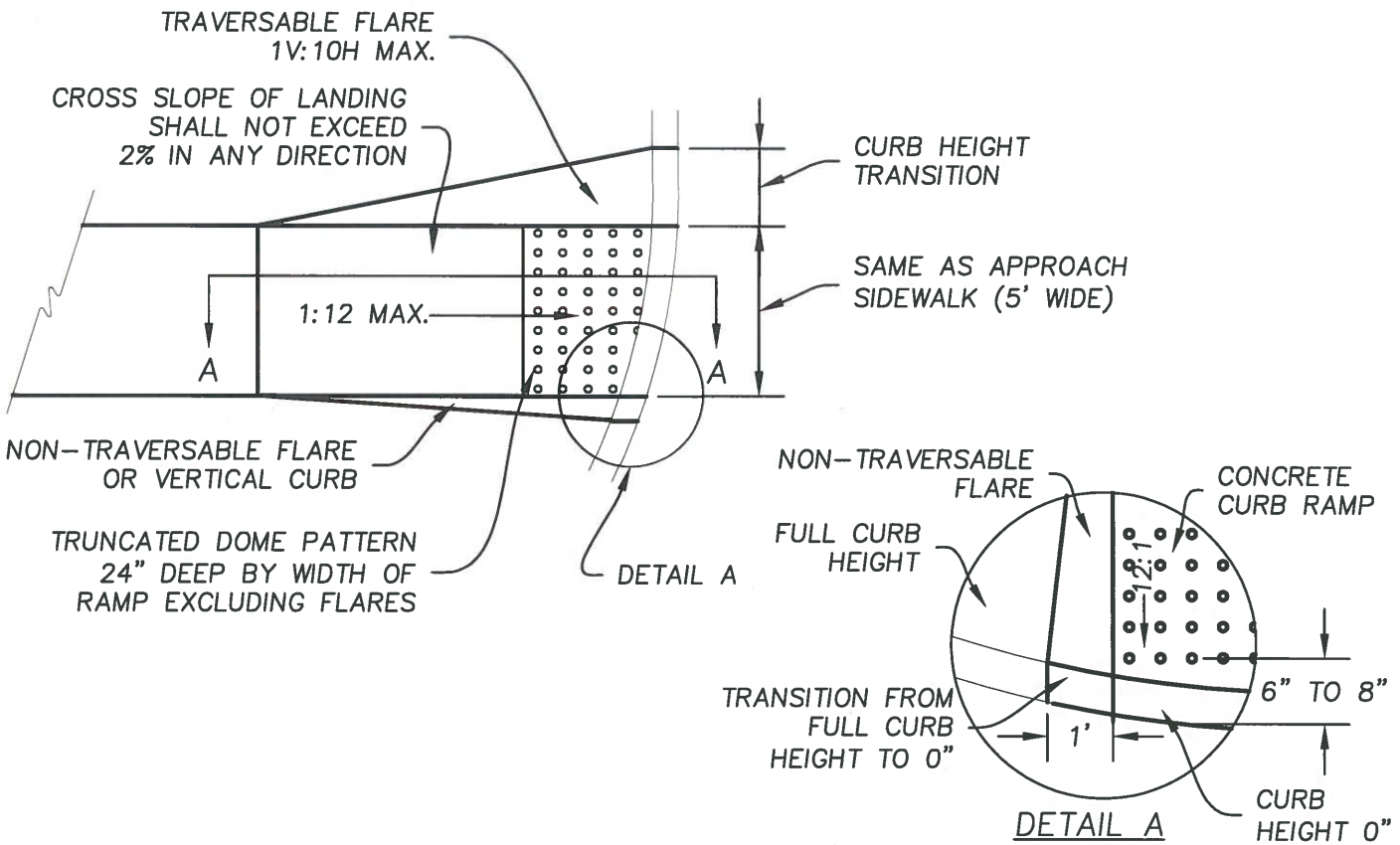
WHEN INSTALLING A NEW CONCRETE DRIVE AT EXISTING CONCRETE CURB AND GUTTER, THE ENTIRE CURB AND GUTTER SECTION IN THE AREA OF THE NEW DRIVE MUST BE REMOVED BY EITHER SAWCUTTING OR REMOVING TO AN EXISTING JOINT.

CONCRETE SHALL BE 6 BAG MIX (4,000 PSI) WITH SLUMP TEST LIMIT OF NOT LESS THAN 2 INCHES NOR MORE THAN 4 INCHES.

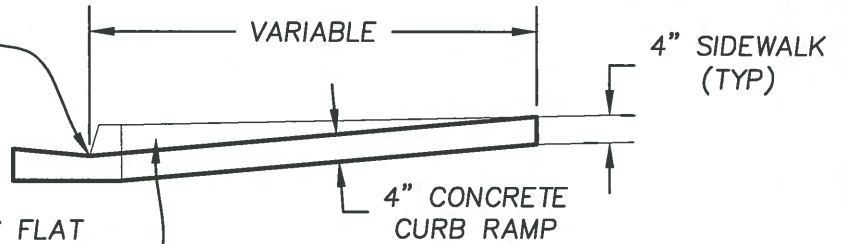
AN EXCAVATION PERMIT IS REQUIRED TO DIG IN PUBLIC RIGHT OF WAY. PERMIT SHALL BE OBTAINED FROM THE CITY OF ROLLA COMMUNITY DEVELOPMENT DEPARTMENT AT (573) 364-5333. AN INSPECTION IS REQUIRED BEFORE POURING ANY CONCRETE IN PUBLIC RIGHT OF WAY. CONTACT THE CITY OF ROLLA PUBLIC WORKS DEPARTMENT AT (573) 364-8659 FOR INSPECTION.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

|   |                |                        |  |
|---|----------------|------------------------|--|
|  <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b>               |                |                        |  |
| APPROVED:<br><br>NUMBER<br>E-21918<br>DIRECTOR OF PUBLIC WORKS | DATE<br>5/1/18 | REVISED:<br>04/30/2018 | ADA COMPLIANT FLAT<br>DRIVEWAY STANDARD<br>STANDARD<br>213 |



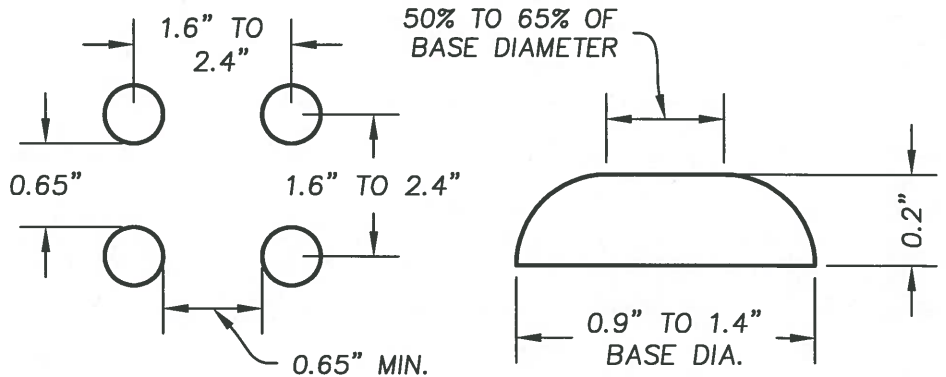
THE COUNTER SLOPE OF THE GUTTER OR STREET @ THE FOOT OF A CURB RAMP, LANDING OR BLENDED TRANSITION SHOULD BE 5% MAXIMUM.



RAMP SLOPE SHOULD BE AS FLAT AS POSSIBLE, AND SHALL NOT EXCEED 12V:1H (8.33%)

SECTION A-A

WHEN IT IS TECHNICALLY NOT FEASIBLE TO CONSTRUCT 1V:12H RAMP SLOPE, WHILE ALTERING EXISTING PEDESTRIAN FACILITIES, A SLOPE BETWEEN 1V:12H AND 1V:10H IS PERMISSIBLE FOR A MAXIMUM RISE OF 6", AND A SLOPE BETWEEN 1V:10H AND 1V:8H IS PERMISSIBLE FOR A MAXIMUM RISE OF 3".




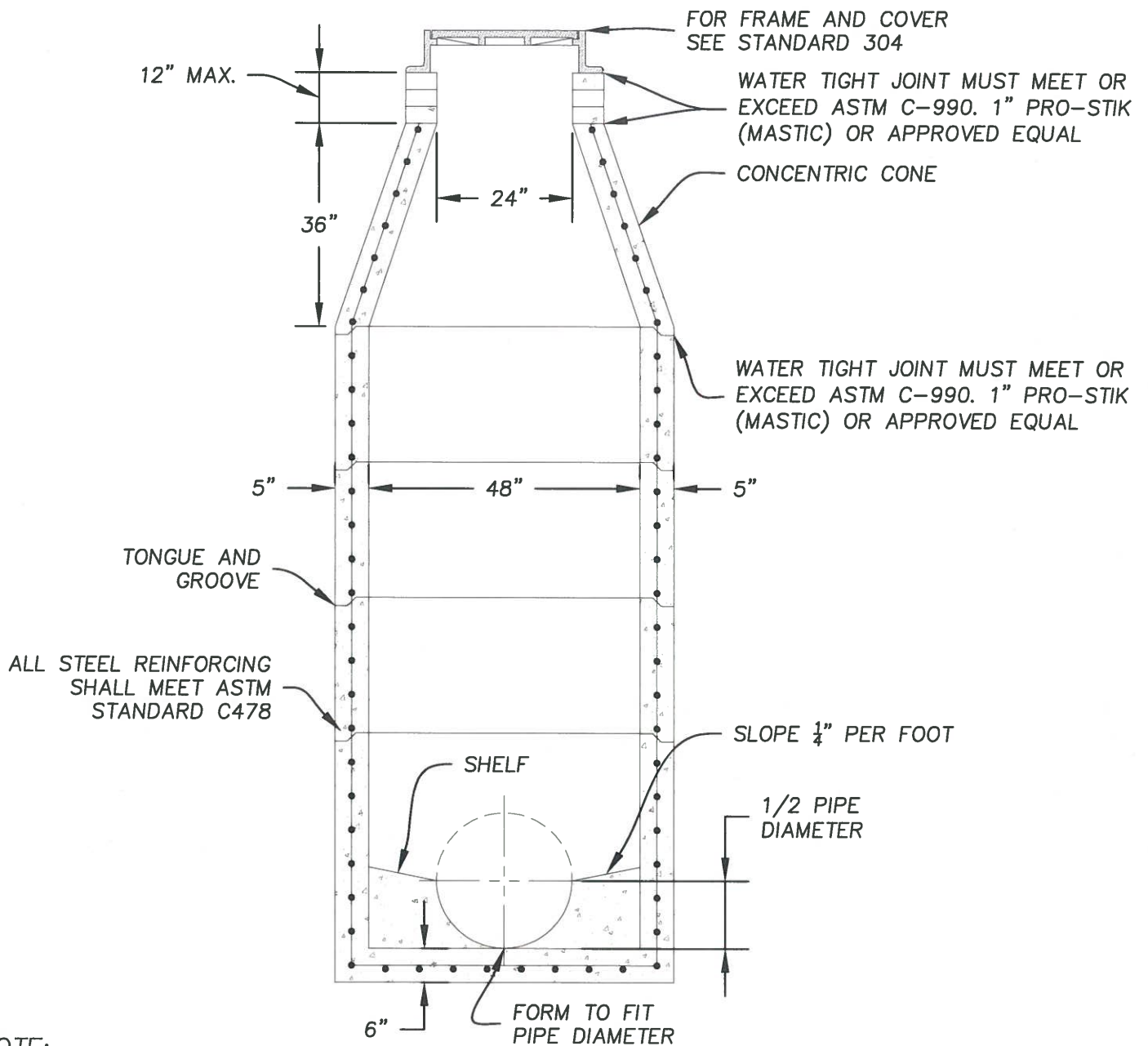
CROSS SECTION

ALL DOMES WITHIN CITY R.O.W. MUST BE BARE CAST IRON WET SET.

SPACING

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

|  |                                |                                    |                         |
|--|--------------------------------|------------------------------------|-------------------------|
|  <p><b>ROLLA</b><br/>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</p> |                                |                                    |                         |
| <p>APPROVED:<br/>E-21918</p> <p><i>[Signature]</i><br/>DATE</p>  | <p>REVISED:<br/>04/30/2018</p> | <p>TRUNCATED DOME<br/>STANDARD</p> | <p>STANDARD<br/>251</p> |



**NOTE:**

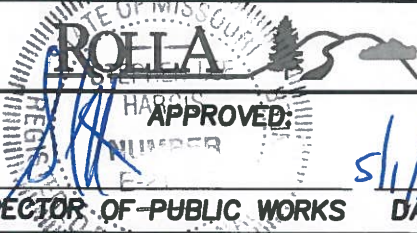

SEWER LATERALS TO BE INSTALLED IN MANHOLES ONLY IF PRE APPROVAL GIVEN BY CITY ENGINEER. A-LOCKS MUST BE PRECAST IN MANHOLE TO ALLOW 4" SCHEDULE 40 INSTALLATION AT SHELF ELEVATION.

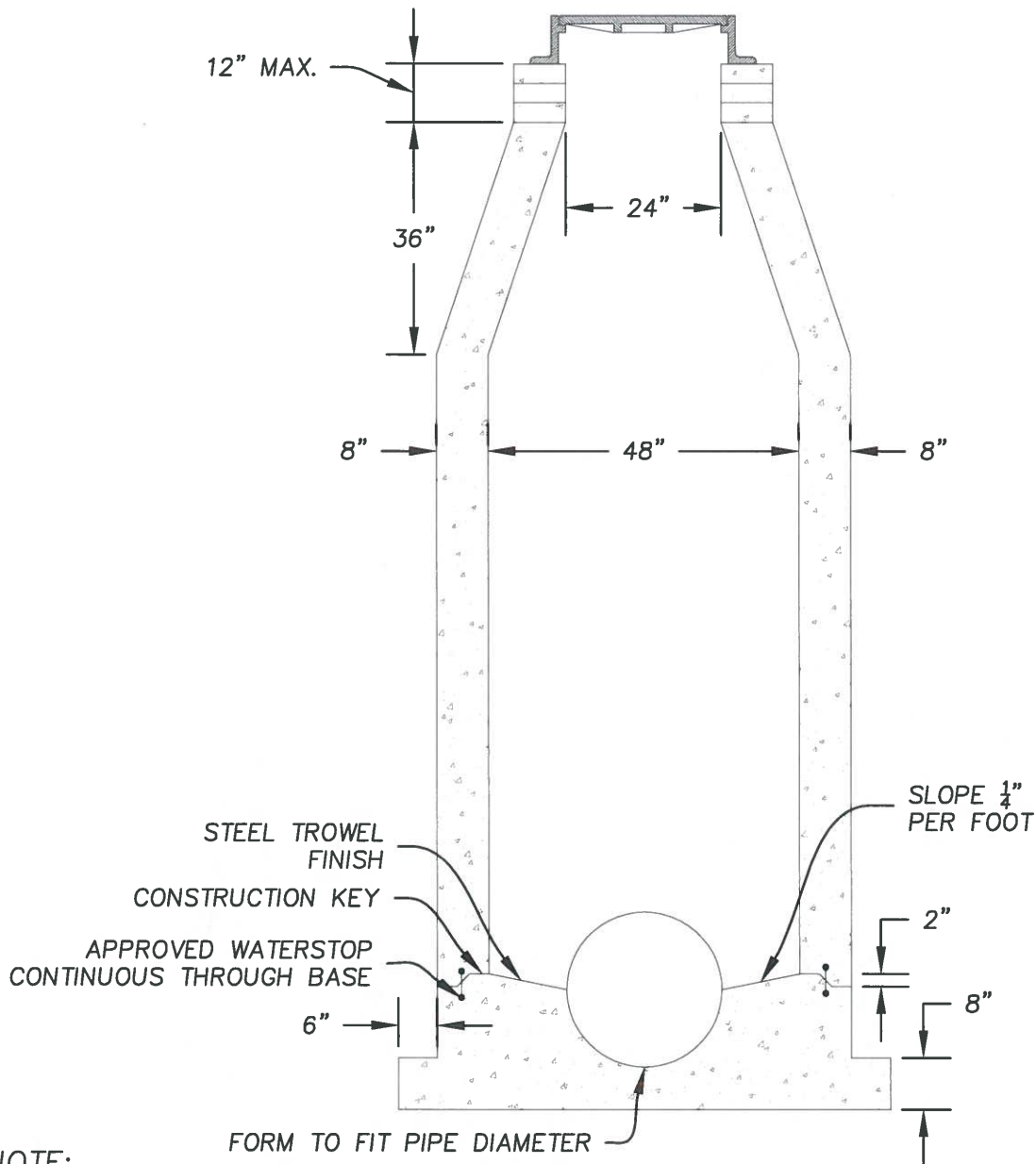
BASE SHALL BE PLACED ON LEVEL COMPACTED OR UNDISTURBED SOIL. COMPACTION SHALL BE BY MECHANICAL TAMPER.

ENTIRE EXTERIOR SURFACE OF MANHOLE SHALL BE WATERPROOFED BEFORE BACKFILLING IS COMMENCED (SEE SPECIFICATIONS).

FOR ALTERNATE POURED IN PLACE MANHOLE BASE, SEE STANDARD 302.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtml](http://www.rollacity.org/pubworks/drawings.shtml)

|  |                |  |   |
|--|----------------|--|---|
|   |                | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS |   |
| APPROVED:<br><br>DIRECTOR OF PUBLIC WORKS | DATE<br>5/1/18 | REVISED:<br>04/30/2018                   | PRECAST CONCRETE MANHOLE<br>WITH PRECAST BASE |
|  |                |  | STANDARD 301                                  |



**NOTE:**

MANHOLE SHALL BE RAISED 18 INCHES FROM NATURAL GROUND TO FRAME AND COVER WHEN LOCATED OUTSIDE OF IMPROVED AREA.



SEWER LATERALS TO BE INSTALLED IN MANHOLES ONLY IF PREAPPROVAL GIVEN BY CITY ENGINEER. A-LOCKS MUST BE PRECAST IN MANHOLE TO ALLOW 4" SCHEDULE 40 INSTALLATION AT SHELF ELEVATION.

BASE SHALL BE PLACED ON LEVEL COMPACTED OR UNDISTURBED SOIL. COMPACTION SHALL BE BY MECHANICAL TAMPER.

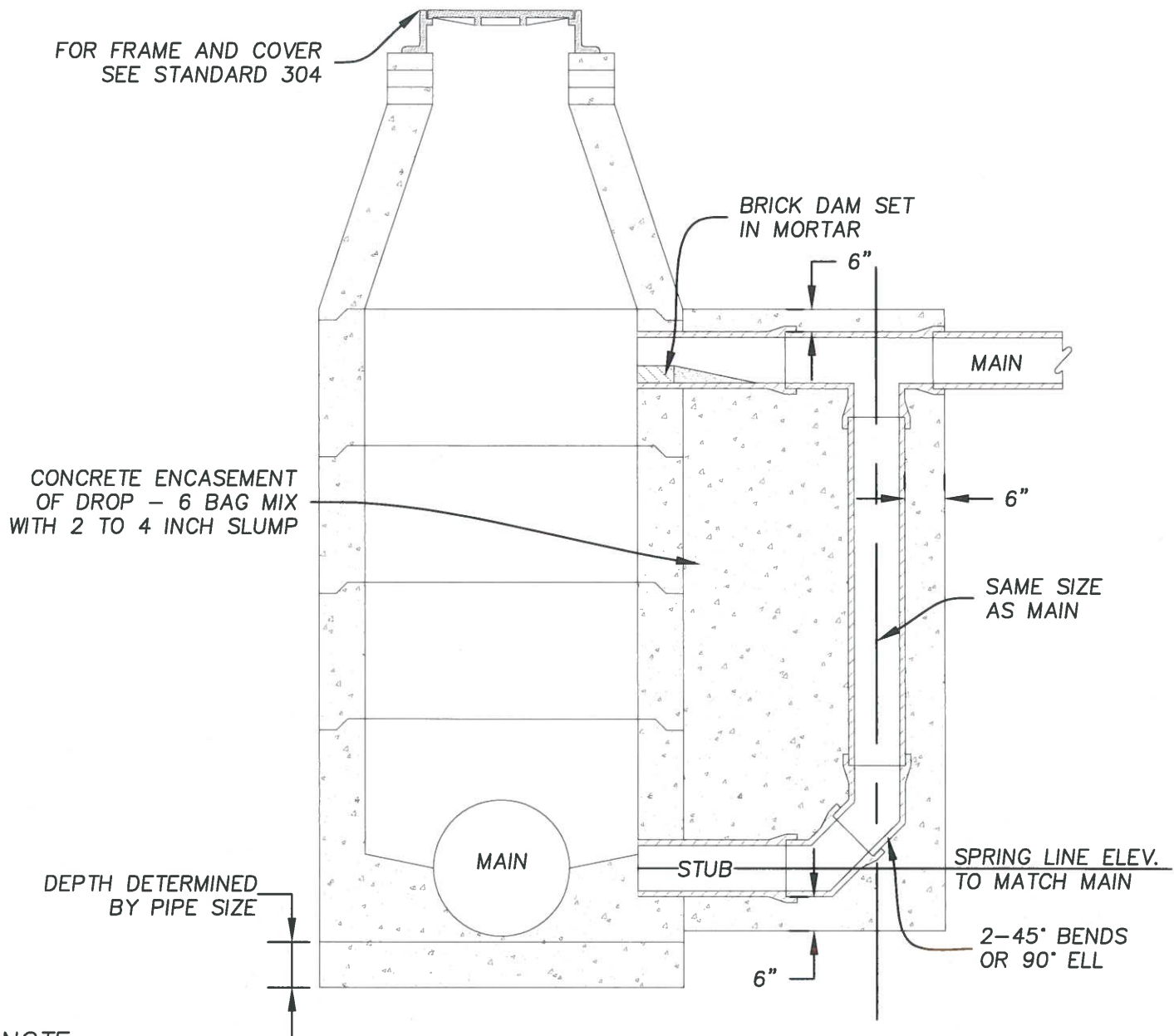
ENTIRE EXTERIOR SURFACE OF MANHOLE SHALL BE WATERPROOFED BEFORE BACKFILLING IS COMMENCED (SEE SPECIFICATIONS).

FORMS SHALL BE USED WHEN CONSTRUCTING THE BASE.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

|   |                                       |   |  |
|---|---------------------------------------|---|--|
|  |                                       | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b> |  |
|   | <b>APPROVED:</b><br>NUMBER<br>E-21918 | <b>REVISED:</b><br>_____<br>_____<br>_____      | <b>POURED IN PLACE<br/>         CONCRETE MANHOLE</b> |
|   | DATE<br>5/1/18                        |   |  |





**NOTE:**

DROP MANHOLE SHALL BE REQUIRED WHEN DIFFERENCE IN ELEVATION OF INVERTS OF TWO INTERSECTING CONDUITS IS GREATER THAN 24 INCHES.

MAXIMUM PIPE SIZE SHALL BE 36 INCHES.

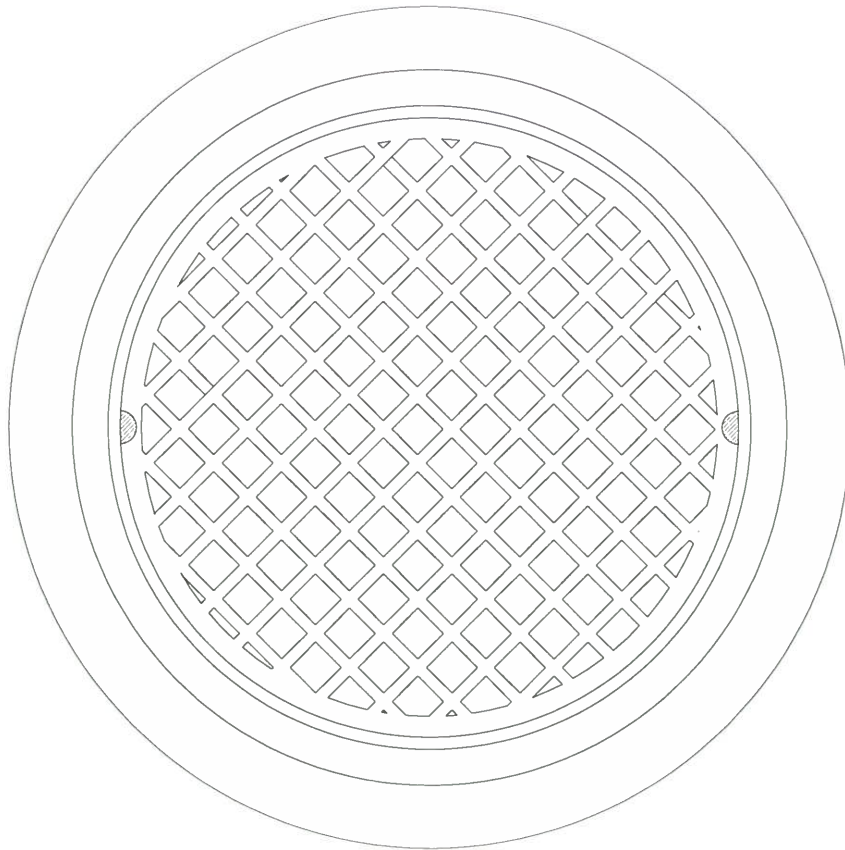
BASE SHALL BE PLACED ON LEVEL COMPACTED OR UNDISTURBED SOIL. COMPACTION SHALL BE BY MECHANICAL TAMPER.

ENTIRE EXTERIOR SURFACE OF MANHOLE SHALL BE WATERPROOFED BEFORE BACKFILLING IS COMMENCED (SEE SPECIFICATIONS).

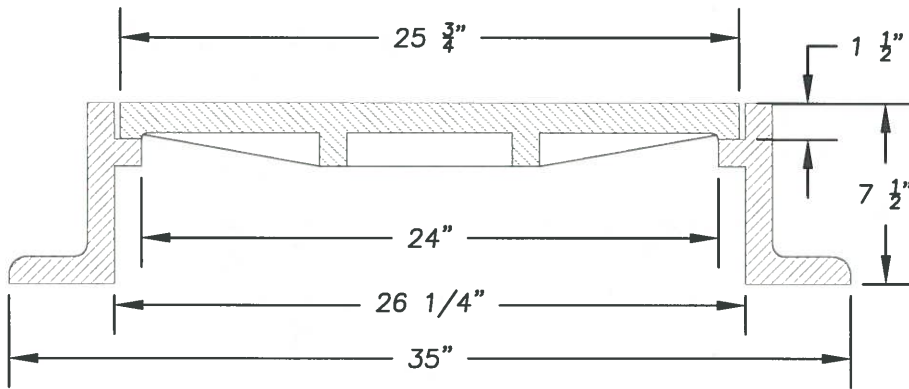
SEE MANHOLE STANDARD 301 FOR MANHOLE DETAILS.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

|   |   |                            |                                |
|---|---|----------------------------|--------------------------------|
| <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b>   |   |                            |                                |
| <p><b>APPROVED:</b><br/> <br/>         NUMBER<br/>         E-21918<br/> <b>DIRECTOR OF PUBLIC WORKS</b></p> | <p><b>REVISED:</b><br/>         _____<br/>         _____<br/>         _____</p> | <p><b>DROP MANHOLE</b></p> | <p><b>STANDARD<br/>303</b></p> |
| <p>DATE<br/> </p>   |   |                            |                                |



PLAN



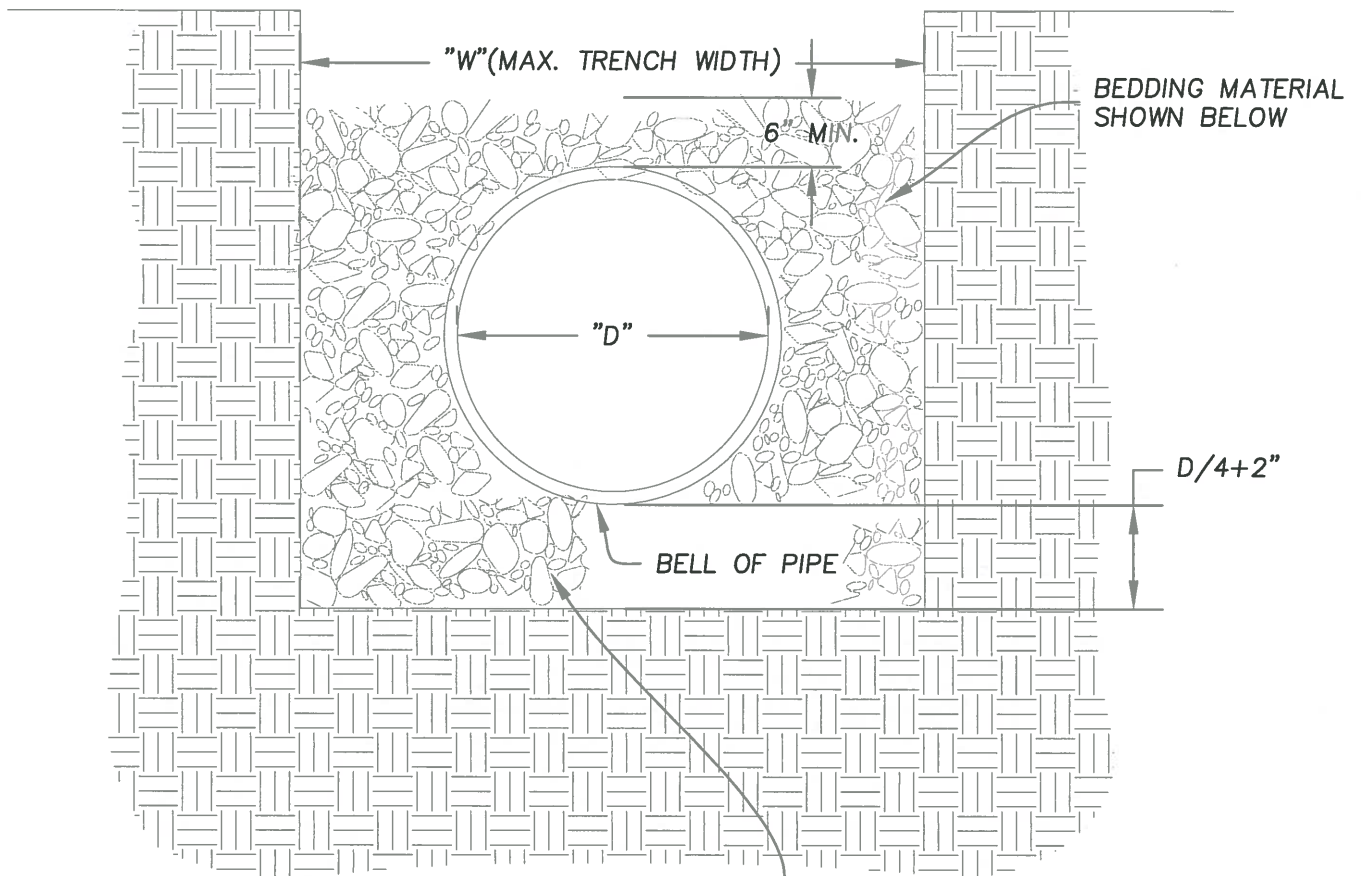
SECTION

**NOTE:**

MANHOLE FRAME AND COVER SHALL BE "NEENAH FOUNDRY CO." R-1642, R-1643, EJIW 1045Z FRAME & 1040A COVER OR APPROVED EQUAL.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

|  |               |   |                     |
|--|---------------|---|---------------------|
|  |               | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b> |                     |
|  |               | <b>MANHOLE FRAME AND COVER</b>                  | <b>STANDARD 304</b> |
| <b>APPROVED:</b><br>NUMBER<br>E-21918<br><b>DIRECTOR OF PUBLIC WORKS</b> | sl/ls<br>DATE | <b>REVISED:</b><br><b>04/30/2018</b>            |                     |




SHAPE BEDDING PRIOR TO INSTALLATION OF PIPE TO A DEPTH OF  $D/4+2$ "

| MAXIMUM TRENCH WIDTH |                          |
|----------------------|--------------------------|
| SEWER SIZE "D"       | MAXIMUM TRENCH WIDTH "W" |
| 8"                   | 24"                      |
| 10"                  | 24"                      |
| 12"                  | 30"                      |
| 15"                  | 30"                      |
| 18"                  | 36"                      |
| 21"                  | 42"                      |
| 24"                  | 48"                      |

| CRUSHED LIMESTONE BEDDING                                      |           |          |
|--|-----------|----------|
| GRADATION IN PERCENTAGES BY WEIGHT PASSING SQUARE MESH SCREENS |           |          |
| SCREEN SIZE  | % PASSING | RETAINED |
| 1"   | 100%      | —        |
| 3/4"   | 95%       | —        |
| NO. 4  | —         | 95%      |

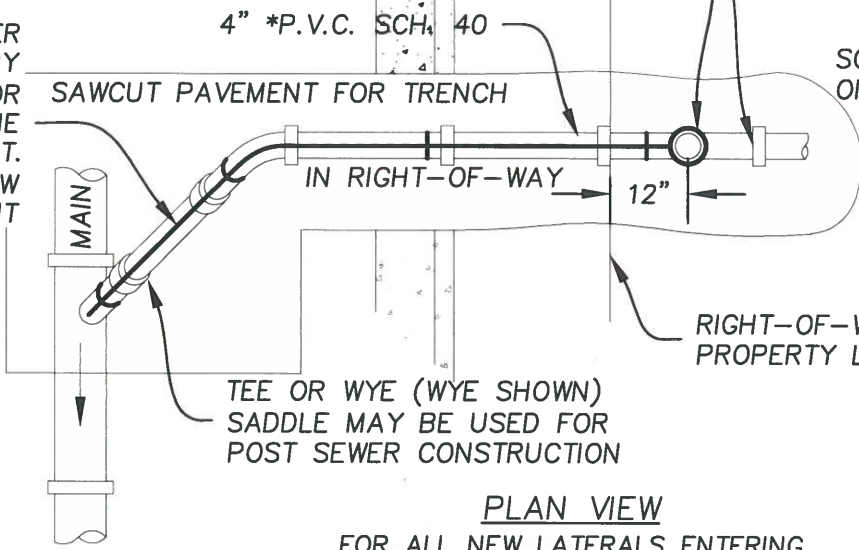
PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtm](http://www.rollacity.org/pubworks/drawings.shtm)

|   |  |  |                      |
|---|--|--|----------------------|
|  |  | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b>  |                      |
|   |  | APPROVED:<br>NUMBER<br>E-21918<br>DATE<br>5/1/18 | REVISED:<br><br><br> |
| <b>DIRECTOR OF PUBLIC WORKS</b>   |  |  |                      |

GLUE CAP AT CLEANOUT IF INSTALLED  
PRIOR TO HOUSE CONNECTION  
TOP OF CLEANOUT TO BE FLUSH WITH  
GROUND LEVEL IN CITY R.O.W.

ANY C.O. UNDER VEHICLE  
OR PED. TRAVEL WAY  
SHALL BE FLUSH AND  
HAVE BRASS TOP

#12 INSULATED TRACER  
WIRE SECURED EVERY  
5' WITH DUCT TAPE OR  
PLASTIC TIES FROM THE  
MAIN TO THE CLEANOUT.  
SECURE WIRE 4" BELOW  
GRADE AT CLEANOUT



SCH. 40 REQUIRED  
ON PRIVATE PROPERTY

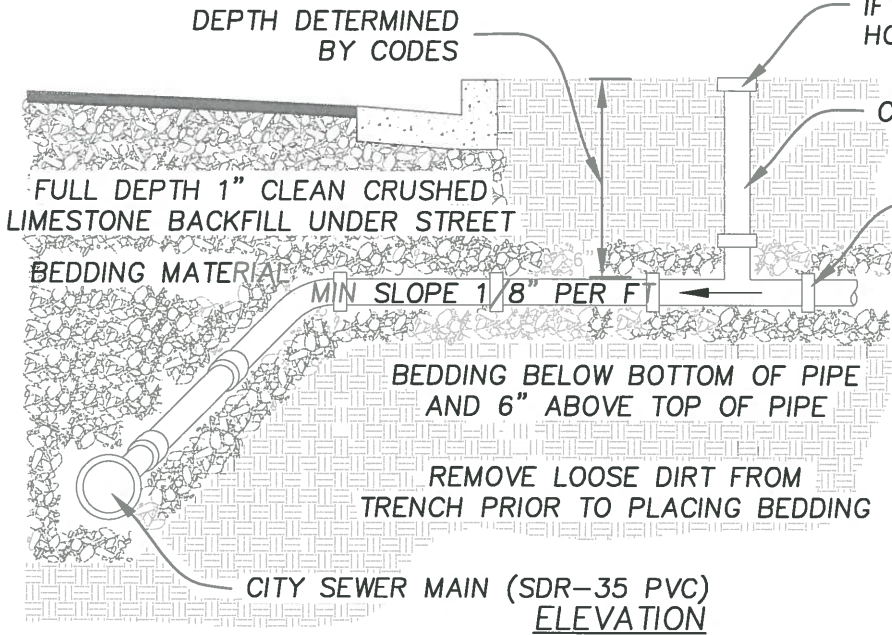
CLEANOUT REQUIRED  
AT RIGHT-OF-WAY  
AND EVERY 100 FEET

RIGHT-OF-WAY OR  
PROPERTY LINE

TEE OR WYE (WYE SHOWN)  
SADDLE MAY BE USED FOR  
POST SEWER CONSTRUCTION

**PLAN VIEW**

FOR ALL NEW LATERALS ENTERING  
STREET RIGHT-OF-WAY



GLUE CAP AT CLEANOUT  
IF INSTALLED PRIOR TO  
HOUSE CONNECTION

CLEANOUT TO GRADE

GLUE CAP AT  
CLEANOUT IF  
INSTALLED PRIOR TO  
HOUSE CONNECTION

FULL DEPTH 1" CLEAN CRUSHED  
LIMESTONE BACKFILL UNDER STREET

BEDDING MATERIAL

BEDDING BELOW BOTTOM OF PIPE  
AND 6" ABOVE TOP OF PIPE

REMOVE LOOSE DIRT FROM  
TRENCH PRIOR TO PLACING BEDDING

CITY SEWER MAIN (SDR-35 PVC)  
ELEVATION

**NOTE:**

SEWER LATERAL TAP MUST BE INSPECTED BY CITY BEFORE BACKFILLING ON BOTH  
PRIVATE PROPERTY AND PUBLIC RIGHT-OF-WAY



SEWER LINE MUST BE EXCAVATED AS SHOWN ABOVE.

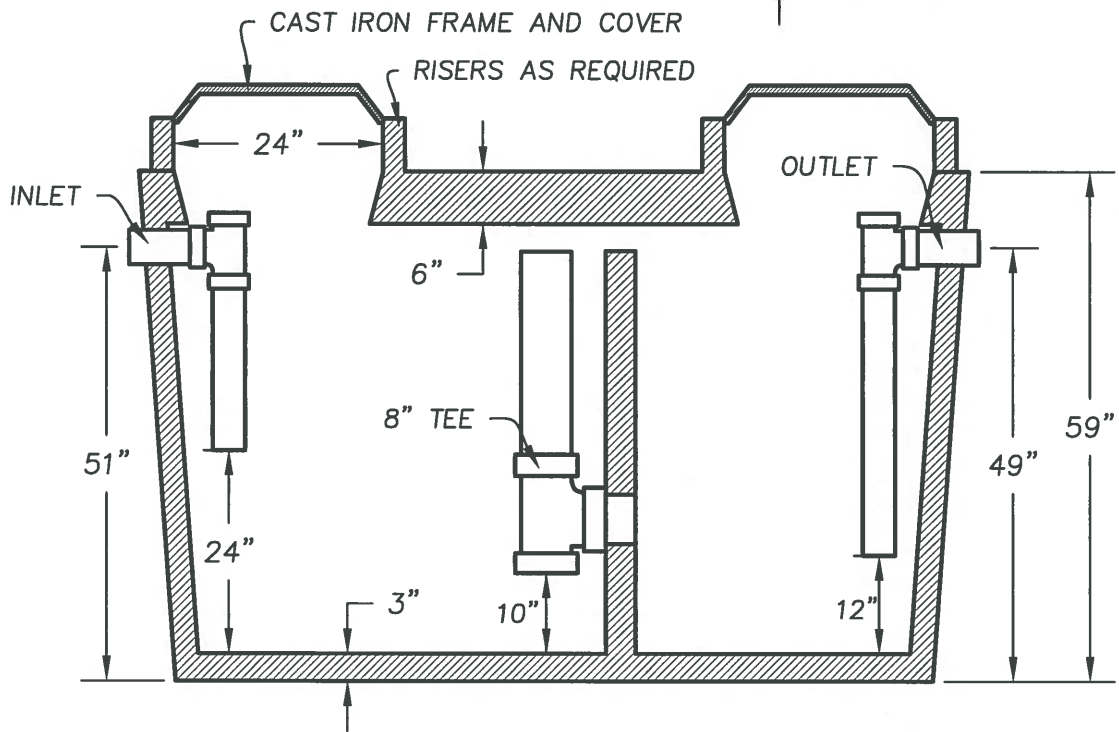
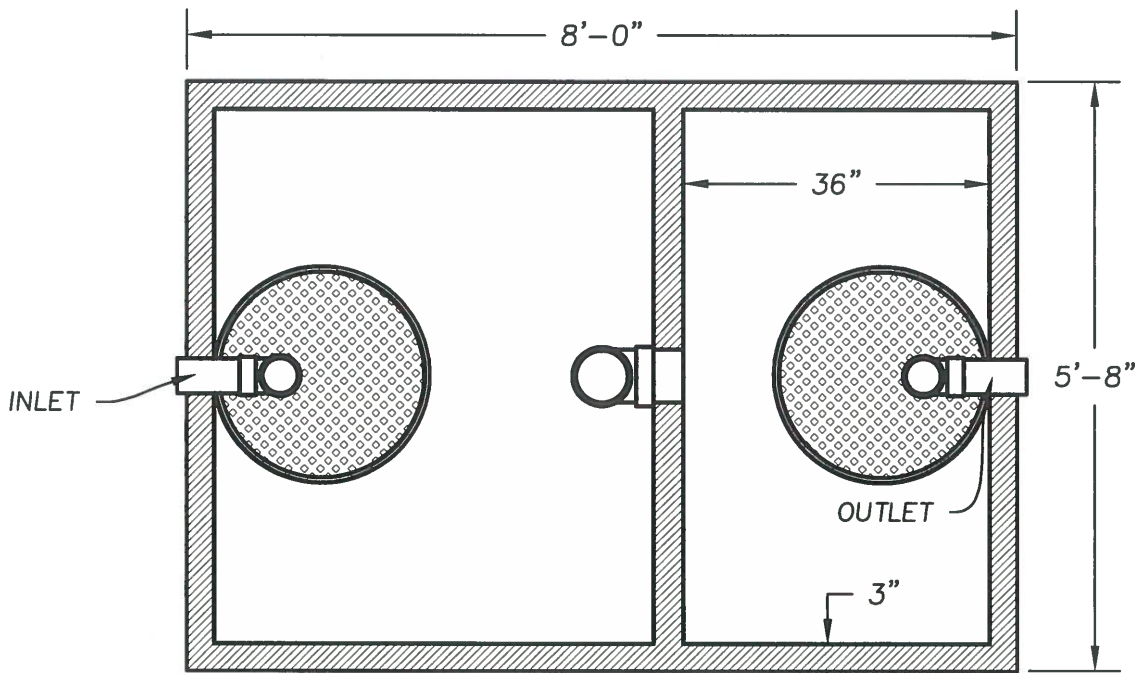
FOR BEDDING DETAIL, SEE STANDARD DRAWING 305.

\*P.V.C. - POLYVINYL CHLORIDE

PVC SEWER LATERALS  
6" AND ABOVE = SDR 35 (SLOPE 1/8"  
PER 1' OR 1%)  
4" AND UNDER = SCH 40 (SLOPE 1/4"  
PER 1' OR 2%)

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|   |                |                                  |                                    |
|---|----------------|----------------------------------|------------------------------------|
|  <b>ROLLA</b><br>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS      |                |                                  |                                    |
| APPROVED:<br><br>NUMBER<br>E-21918<br>DIRECTOR OF PUBLIC WORKS | DATE<br>5/1/18 | REVISED:<br>08-10-05<br>04-30-18 | PRIVATE SEWER<br>LATERAL STANDARDS |
|   |                |                                  | STANDARD<br>306                    |





**REINFORCEMENT:**

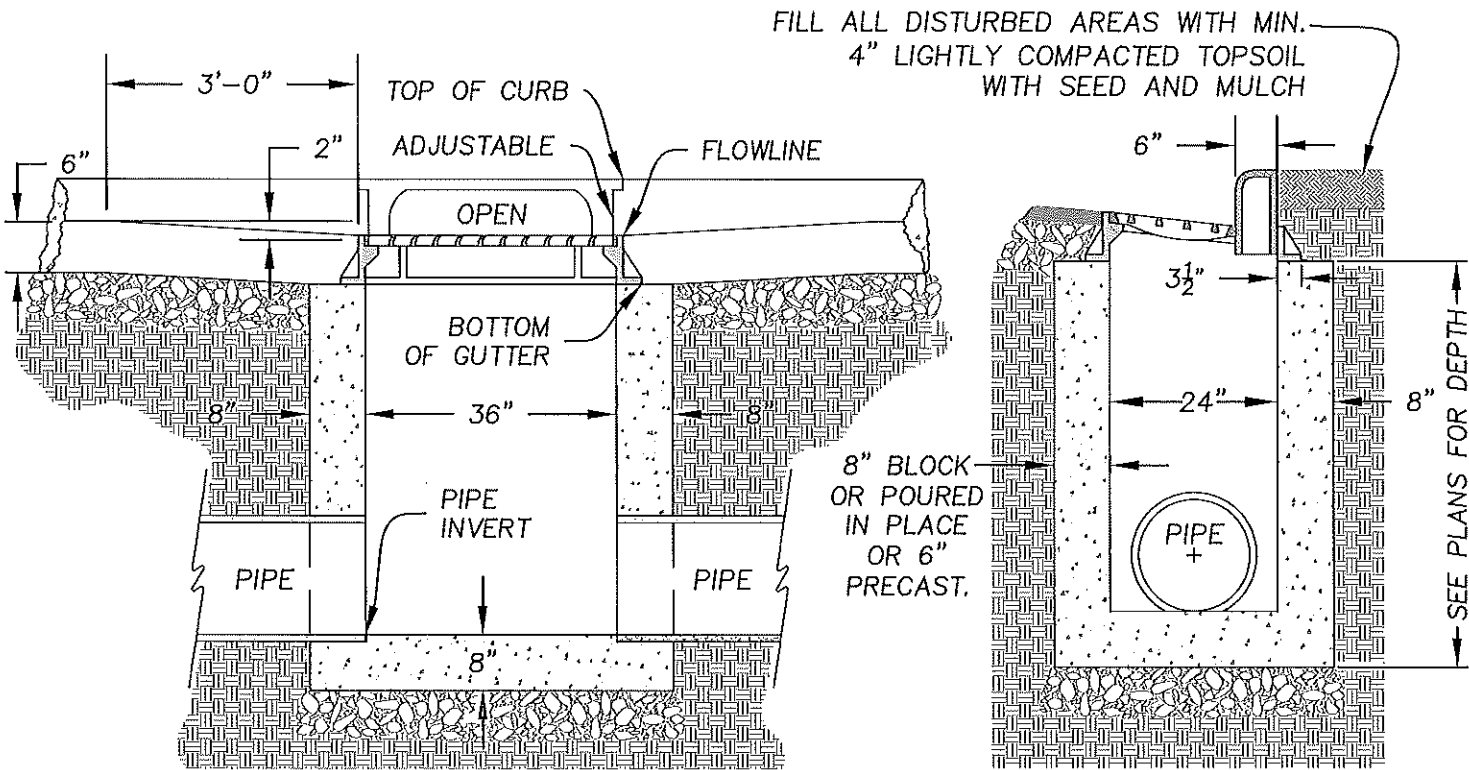
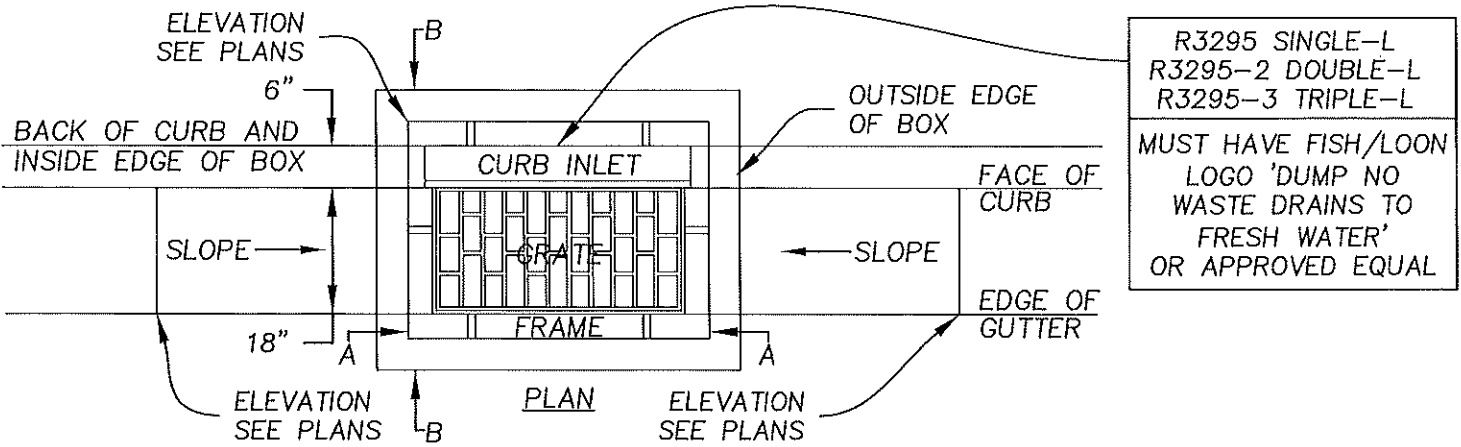
TOP - 6x6x10x10 WWF, #4 REBAR 12" O.C. EW

SIDES - #4 BAR 12" DOWN, 12" AROUND CORNER, #4 BAR VERTICAL 12" O.C.

BOTTOM - 6x6x10x10 WWF, #3 BAR 12" O.C., L BARS 12" INTO WALL

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtml](http://www.rollacity.org/pubworks/drawings.shtml)

|   |                                     |  |                 |
|---|-------------------------------------|--|-----------------|
|    |                                     | CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS |                 |
| APPROVED:<br><br>E-21918<br>DIRECTOR OF PUBLIC WORKS | REVISED:<br>_____<br>_____<br>_____ | GREASE TRAP<br>DETAIL                    | STANDARD<br>307 |
| DATE<br>5/1/18  |                                     |  |                 |



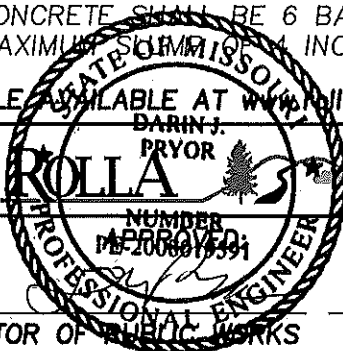
NOTES:

WALL CONSTRUCTION SHALL BE 8" POURED IN PLACE CONCRETE, 8"Tx8"Hx16"L CONCRETE BLOCK GROUTED SOLID, OR 6" PRECAST CONCRETE.

BASE CONSTRUCTION SHALL BE POURED IN PLACE CONCRETE FORMED TO DIMENSION SHOWN.

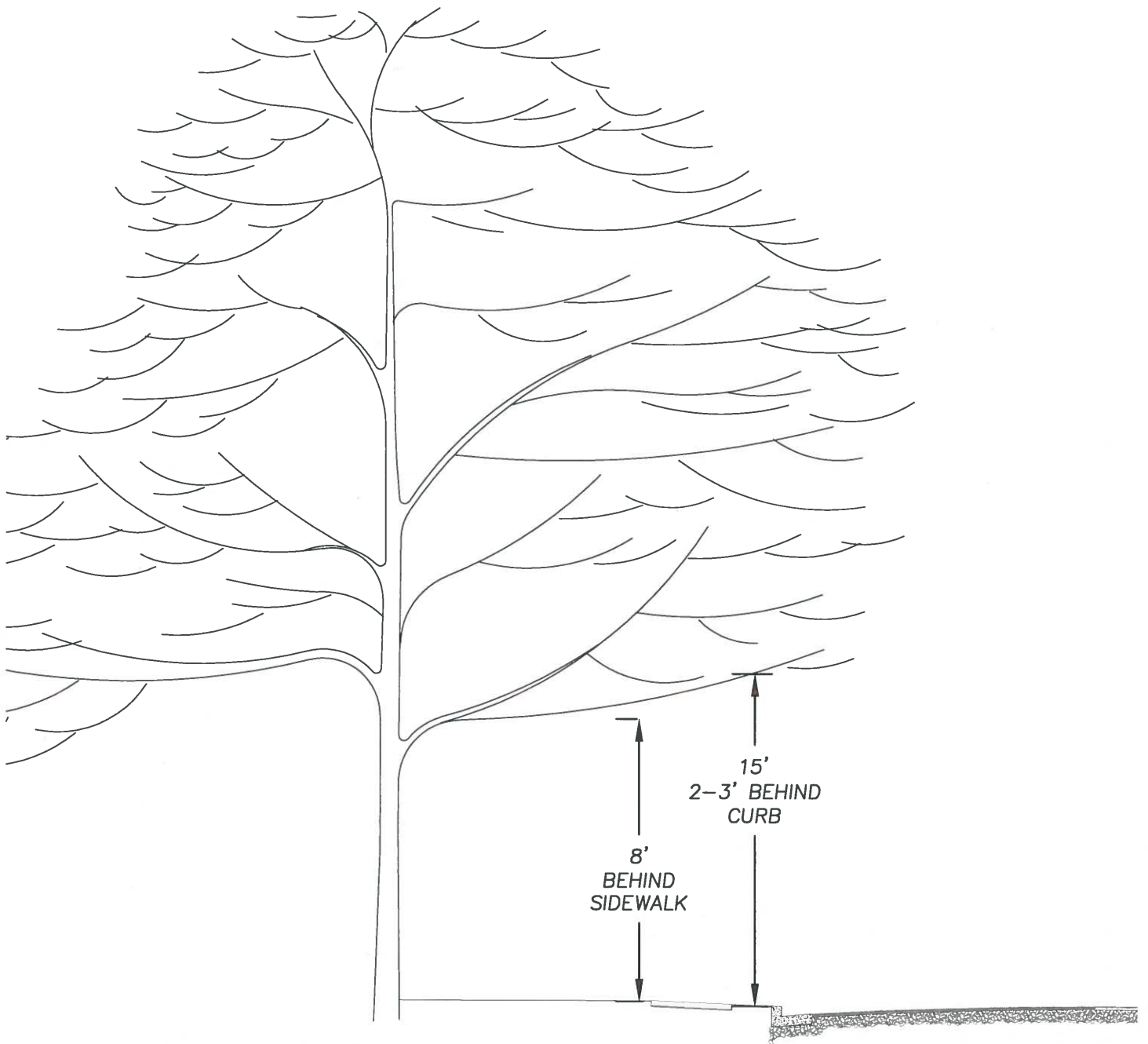
CONCRETE SHALL BE 6 BAG MIX (4,000 PSI) WITH MINIMUM SLUMP OF 1 INCH AND MAXIMUM SLUMP OF 4 INCHES.

PDF FILE AVAILABLE AT [www.rollacity.org/pubworks/drawings.shtml](http://www.rollacity.org/pubworks/drawings.shtml)





CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS

|                          |      |  |   |                 |
|--------------------------|------|--|---|-----------------|
| DIRECTOR OF PUBLIC WORKS | DATE | REVISED:<br>04-30-18<br>03-28-22<br>03-13-23 | CATCH BASIN AND CURB INLET<br>INSTALLATION DETAIL | STANDARD<br>401 |
|--------------------------|------|--|---|-----------------|



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|  |  |   |                         |
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|   |  | <b>CITY OF ROLLA DEPARTMENT OF PUBLIC WORKS</b> |                         |
| <b>APPROVED:</b><br><br>NUMBER<br>E-21918<br>DATE<br>7/18 | <b>REVISED:</b><br>_____<br>_____<br>_____ | <b>TREE TRIMMING DETAIL</b>                     | <b>STANDARD<br/>501</b> |
| <b>DIRECTOR OF PUBLIC WORKS</b>  |  | <b>DATE</b>                                     |                         |