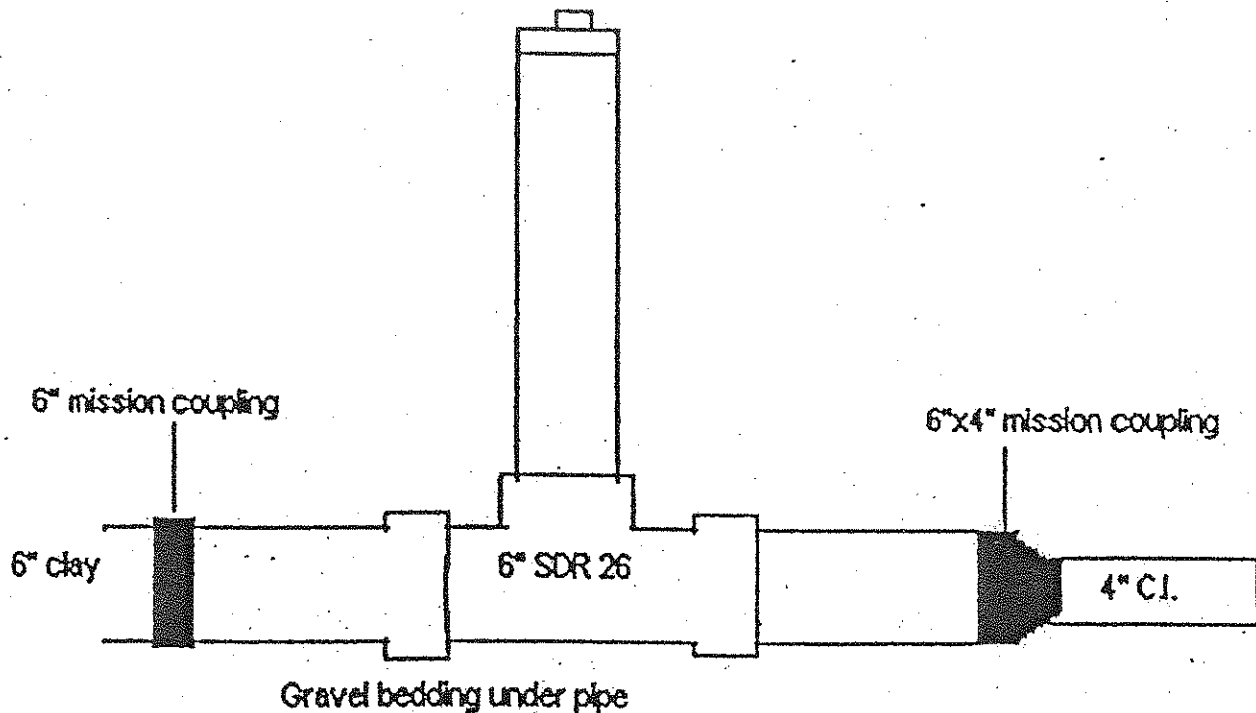


GENERAL INFORMATION TO INSTALL A CLEANOUT

Overview

This information is designed to assist an applicant in applying for a permit for a cleanout that will meet the codes of the City of Rolling Meadows. Special circumstances or unique properties may involve more than the information contained herein is intended to cover.

Typical Installation



1. Cut the clay pipe leaving a clean straight edge.
2. Install the SDR 26 tee or pipe and tee, as needed using the 6" no shear mission coupling.
3. Provide a 4" gravel base under all pipe.
4. Use the 6"x4" mission coupling to join the cleanout tee to the cast iron or plastic pipe coming from the house.
5. Install the 6" SDR 26 riser and cleanout ferrel even with grade.
6. Rod out the sewer, using a cutter to match the inside diameter of the pipe.
7. Remove all the old pipe from the ditch and the job site.
8. Test the sewer line – check for leaks and make sure the line is running freely.
9. Cover the sewer line – check for leaks and make sure the line is running freely.
10. Backfill under service walks, drives and sidewalks with granular fill to grade.

- ◆ A permit is required and the contractor must be licensed.
- ◆ A refundable cash bond is required for working in or near the public right-of-way.
- ◆ The cleanout should be located within five (5) feet of the building.
- ◆ Approved materials shall be SDR 26, cast iron or ductile iron.
- ◆ Inspection is required before backfilling.

24 hours notice is required for inspections. Please call our office or you may schedule an inspection on our website.

This brochure neither amends or substitutes for the codes and standards of the City of Rolling Meadows and the codes and standards shall govern.

Excerpt from MWRD Manual of Procedures for
the Administration of the Sewer Permit Ordinance

4-3. Pipe Bedding. Bedding, other than concrete embedment, shall consist of gravel, crushed gravel, crushed stone or crushed slag, 1/4" to 1" in size. As a minimum, the material shall conform to the requirements of Article 704.01 of the "Standard Specifications for Road and Bridge Construction," of the State of Illinois or ASTM C-33. The gradation shall conform to gradation CA 11 or CA 13 of the Illinois Standard Specifications or to ASTM Gradation No. 67. The pipe shall be laid so that it will be uniformly supported and the entire length of the pipe barrel will have full bearing. No blocking of any kind shall be used to adjust the pipe to grade except when used with embedment concrete. Bedding shall be required for all sewer construction, except ductile iron pipe, and shall be of a thickness equal to 1/4th of the outside diameter of the sewer pipe with a maximum required thickness of eight inches (8") but shall not be less than four inches (4"). Where polyvinyl chloride (PVC) pipe is specified, the backfill material to a level two inches (2") over the top of the pipe shall be of the same material as the bedding material specified above and shall be carefully placed so as to completely fill the space under and around the pipe, in eight inch layers, loose measurement, and compacted to the satisfaction of the Inspection Engineer named in the permit.

Where unsuitable material is encountered at the grade established, all such unsuitable soil shall be removed under the pipe and for the width of the trench,

and shall be replaced with well compacted bedding material, to the satisfaction of the Inspection Engineer named in the Permit.

Where rock is encountered, it shall be removed below grade and replaced with a cushion of well compacted bedding material having a thickness under the pipe of not less than eight inches (8") for all types of pipe including ductile iron pipe.

and regulations incorporated under Article 2 above, as supplemented by the provisions outlined herein.

All sewer systems, whether private or public, and whether constructed on private or public property, including sewer construction exempted from the permit requirement, shall conform to the design standards and other requirements contained herein.

3-2. Design Slopes. Minimum and maximum slopes are tabulated below. The slopes are those that produce minimum and maximum velocities of 2.0 fps and 15.0 fps based on Kutter's Formula, with "n" equal 0.013, and the pipe flowing full, as provided in the rules and regulations of the Illinois Pollution Control Board.

Sewer Size-Inches	Minimum Slope Percent	Maximum Slope Percent
6-(Service Sewers)	1.00	33.0
8	0.40	22.0
10	0.28	15.0
12	0.22	11.0
14	0.17	9.0
15	0.15	8.3
16	0.14	7.8
18	0.12	6.5
21	0.10	5.1
24	0.08	4.2

3-3. Manholes, Drop Manholes. An exterior drop pipe should be provided for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert, as provided in the State of Illinois Title 35, Part 370. The minimum diameter of any manhole shall be 48 inches. The diameter of the drop pipe shall preferably be larger than, or of the same diameter as, the entering sewer. The minimum diameter of the drop pipe shall not be smaller than the diameter of the entering sewer by more than two nominal diameters (e.g. for 12", 15" and 18" entering sewer, the drop shall be 8", 10" and 12" respectively), provided that the minimum diameter of the drop pipe shall not be less than 8". If a smaller drop is desired, design calculations and configurations shall be submitted for review and approval. The drop pipe shall be encased in concrete. The flow channel through manholes shall be made to conform in shape and slope to that of the sewers. A bench shall be provided which shall have a minimum slope of two (2) inches per foot.

3-4. Protection of Water Mains. Water mains shall be protected in accordance with the requirements of the State of Illinois Recommended Standards for Sewage Works (Title 35 Part 370). Where a sewer main lateral or building service sewer crosses a water main, a minimum vertical separation of 18" shall be provided

between the top of the lower pipe and the bottom of the upper pipe. Where the 18" vertical separation is not provided, the sewer shall be designed and constructed of pipe equal to water pipe or shall be encased in concrete for a minimum distance of 10 feet on each side of the water main.

3-5. Materials. All materials shall conform to the applicable ASTM, ASA or other national or accepted standards. When the materials indicated below are specified by the design engineer, the materials and the joints for pipe made of that material shall conform to the specifications shown, for sanitary sewer work in separate areas and for all sewer work in combined areas:

Material		Joints
a. Vitrified Clay Pipe		
Standard Strength	ASTM C-700	ASTM C-425
Extra Strength	ASTM C-700	ASTM C-425
b. Concrete Sewer Pipe	ASTM C-14	ASTM C-443
c. Reinforced Concrete Sewer Pipe	ASTM C-76	ASTM C-443
d. Asbestos Cement Pipe	ASTM C-428	ASTM D-1869
e. Truss Pipe (ABS Pipe)		
Solid Wall (6" Dia. only; SDR 35)	ASTM D-2751	ASTM D-2751
Truss Wall (8"-15" Dia.)	ASTM D-2680	ASTM D-2680
f. Cast Iron Soil Pipe	ASTM A-74	ASTM C-564
g. Ductile Iron Pipe	ANSI A-21.51	ANSI-21.11
h. Polyvinyl chloride (PVC) Pipe		
6" to 15" Diameter; SDR 35	ASTM D-3034	ASTM D-2855 ASTM D-3212
18" to 27" Diameter; F/dy = 46	ASTM F-679	ASTM D-2855 ASTM D-3212

Nothing contained in this Article shall be interpreted to mean nor imply an endorsement by the District of any material over another, nor an opinion by the District regarding the equality or superiority of the performance qualities of any of the materials.

3-6. Workmanship. As a minimum requirement all sewer pipes shall be laid in accordance with the applicable ASTM specification. The specifications for the construction of any sewers within the District shall not be less stringent than the latest version of the "Standard Specifications for Water and Sewer Main Construction in Illinois," adopted by a joint committee of the Illinois Society of Professional Engineers,