

SECTION S601 - SEWER LATERAL AND CONNECTION

S601 GENERAL

Work is to be in accordance with requirements of Section R601 Sewer Lateral and Connection, with following modifications:

References to NYSDOT specifications are to be in accordance with latest edition of *NYSDOT Standard Specifications (US Customary Units)*.

S601-2 MATERIALS

At end of Section R601-2 Materials, **ADD** following:

S601-2.10 Polyvinyl Chloride Branch

Polyvinyl chloride (PVC) wye and tee branches are to be SDR35 PVC gasketed fittings in accordance with requirements of ASTM D3034.

S601-2.11 Inserta Tee

Inserta tee is to be three piece compression fitted cored connection consisting of SDR35 PVC gasketed hub, rubber sleeve and stainless steel band, in accordance with requirements of ASTM D3034 and ASTM F477.

S601-2.12 Cement Mortar

Cement mortar for plugging abandoned lateral pipe is to be regular cement mortar, Type II cement.

S601-3 CONSTRUCTION DETAILS

At beginning of Section R601-3 Construction Details, **ADD** following:

District must have access to its facilities at all times. If at any time District cannot access its facilities, it will be responsibility of Contractor to provide access. Contractor is to supply MCPW Dispatch Center with an emergency contact phone list, and will contact Contractor in event access is necessary.

Construct all sewer appurtenances in accordance with these specifications and with the specifications of Rochester Pure Waters District (RPWD).

Notify Monroe County Pure Waters (MCPW) minimum of 48 hours in advance when planning on working adjacent to existing Monroe County fiber optic utilities/facilities, by calling (585) 753-7600, option 5.

Take appropriate measures to prevent dirt, debris and construction materials from entering sewer appurtenances during construction of project. Any such invasive materials are to be removed immediately and contaminated appurtenance thoroughly cleaned.

RPWD must be notified immediately in event of any damage to existing sewer appurtenances, by calling (585) 753-7600, option 1. All repairs are to be performed in presence of representative of RPWD and are to be made in accordance with requirements of RPWD.

RPWD will not mark private service laterals. Contractor will be responsible for repair of any laterals damaged during construction activities. If available, record maps indicating lateral wye locations or recorded wyes/taps may be obtained by contacting MCPW records room by calling (585) 753-7651 weekdays between hours of 8:00AM and 4:00PM.

In event existing sewer main or lateral pipe is broken during construction, any and all repairs must be extended linearly. Introducing new bends in pipe will not be permitted.

All 5 inch inside diameter lateral pipe is to be repaired using 5 inch service weight cast iron pipe and Fernco couplers. All other sizes of lateral pipe are to be repaired with SDR-21 PVC pipe and Fernco couplers. Contractor may be permitted to use oakum and epoxy mortar to connect new PVC pipe to an existing bell that is in good condition.

Stone bedding material used for sewer main and lateral pipe repairs is to be Class B consisting of #1 and #2 washed stone at minimum depth of 6 inches.

Any new catch basin lateral pipe installed within public right-of-way is to be SDR-21 PVC pipe in accordance with ASTM D-2241. Joints on horizontal lateral pipe and bends are to be push-on neoprene gaskets. Glued or chemically welded joints are unacceptable.

Any dedicated mainline sewer pipe and associated fittings are to be SDR-35 PVC in accordance with ASTM D-3034.

DELETE Subsection R601-3.05C Lateral Connection to Existing Lateral in its entirety, and **REPLACE** with following:

C. Connect New Lateral Pipe to Existing Lateral Pipe

Remove sufficient length of existing lateral pipe to make proper connection, and any additional existing lateral pipe that is found to be unstable or otherwise damaged. Before connecting new lateral pipe, field cut new lateral pipe to obtain square plain ends at right angles to line of existing lateral pipe. Connect new lateral pipe to existing lateral pipe with new flexible rubber joint connector with stainless steel shear rings and bands.

DELETE Subsection R601-3.06C Branch Connection to Existing Sewer in its entirety, and **REPLACE** with following:

C. Branch Connection to Existing Sewer

On existing sewer pipe, expose portion of existing sewer pipe to either install new branch fitting, or to core an opening in existing sewer pipe.

1. On existing sewer pipe that is less than 2 times size of new lateral pipe, remove sufficient length of existing sewer pipe necessary to properly install new branch. Open ends of remaining existing sewer pipe are to be field cut to square plain end that is at right angle to existing sewer pipe. Connection is to be made with new flexible rubber joint connector with stainless steel shear rings and bands.

2. On existing sewer pipe that is larger than 2 times size of new lateral pipe, and on all reinforced concrete sewer pipe, core hole in sewer pipe with rotary core drill equipped with diamond bit. No other method of coring an opening is acceptable. Cored hole is to be as small as practical to accommodate new saddle, and tight fit made with 100 percent solids epoxy mortar.

Face of existing sewer pipe to be cored is to be exposed from crown to invert for minimum length of 12 inches along existing sewer pipe. Take necessary precautions to prevent damage to existing sewer pipe, and to prevent debris from entering sewer pipe. Core is to be made minimum of 6 inches away from existing sewer pipe hubs. Before making connection, thoroughly clean opening and surface of sewer pipe of all foreign matter and loose particles.

At end of Subsection R601-3.06 Branch Connections, **ADD** following:

D. Polyvinyl Chloride Branch at New Sewer Pipe

Polyvinyl chloride (PVC) branches are to be installed along with installation of new sewer pipe. New or existing lateral pipe is to be connected to branch.

E. Inserta Tee Connection to Existing Sewer Pipe

Core hole in existing sewer pipe with inserta tee hole saw, other hole saws, pneumatic devices or hammering knock-out methods are not acceptable for creating opening. Size of cored opening is limited to one-half nominal diameter of existing mainline sewer pipe.

Face of existing sewer pipe to be cored is to be exposed from crown to invert for minimum length of 12 inches along existing sewer pipe. Take necessary precautions to prevent damage to existing sewer pipe, and to prevent debris from entering sewer pipe. Core is to be made minimum of 6 inches away from existing sewer pipe hubs. Before making connection, thoroughly clean opening and surface of sewer pipe of all foreign matter and loose particles.

At end of Section R601-3 Construction Details, **ADD** following:

S601-3.07 Abandon Existing Lateral Pipe

Existing lateral pipe is to be abandoned in place and open end plugged.

Where existing lateral pipe is connected to structure, connection is to be abandoned by plugging lateral pipe at structure, and mortaring over opening in structure with cement mortar.

Where existing lateral pipe is open ended, open end is to be abandoned by plugging lateral pipe. If necessary, remove short section of existing lateral pipe before abandoning lateral pipe.

Where existing lateral pipe is 6 inch diameter and smaller, insert rubber gasketed mechanical type permanent plug into open end of lateral pipe. Where existing lateral pipe is over 6 inch diameter, fill open end with brick until opening is plugged as much as possible. Completely fill and seal any remaining void with cement mortar.

S601-4 METHOD OF MEASUREMENT

At end of Section R601-4 Method of Measurement, **ADD** following:

S601-4.05 Polyvinyl Chloride Branch and Inserta Tee

Quantity to be measured for payment will be number of wye or tee branches, or inserta tee connections installed.

S601-4.06 Abandon Existing Lateral Pipe

Quantity to be measured for payment will be number of lateral pipes abandoned.

S601-5 BASIS OF PAYMENT

At end of Subsection R601-5.05 Branch Connections, **ADD** following:

D. Polyvinyl Chloride Branch at Existing Sewer Pipe - Installed

Unit price bid includes cost of: excavation; backfill; stone bedding; select granular backfill (sewer); full pavement or pavement base restoration; sheeting; shoring; maintenance of sewage flow; pumping; bailing; furnishing and installing polyvinyl chloride branch; preparing and cutting existing sewer pipe; connecting polyvinyl chloride branch to existing sewer pipe; flexible rubber joint connector with stainless steel shear rings and bands; replacing any portion of existing sewer pipe damaged during work; connecting lateral pipe to branch; and furnishing all labor, material and equipment necessary to complete work.

E. Polyvinyl Chloride Saddle Branch at Existing Sewer Pipe - Installed

Unit price bid includes cost of: excavation; backfill; stone bedding; select granular backfill (sewer); full pavement or pavement base restoration; sheeting; shoring; maintenance of sewage flow; pumping; bailing; furnishing, installing and sealing polyvinyl chloride saddle branch; preparing existing sewer pipe; coring hole in existing sewer pipe; connecting polyvinyl chloride saddle branch to existing sewer pipe; epoxy mortar; replacing any portion of existing sewer pipe damaged during work; connecting lateral pipe to branch; and furnishing all labor, material and equipment necessary to complete work.

F. Polyvinyl Chloride Branch at New Sewer Pipe

Unit price bid includes cost of: furnishing and installing polyvinyl chloride branch; connecting polyvinyl chloride branch to existing sewer pipe; connecting lateral pipe to branch; and furnishing all labor, material and equipment necessary to complete work.

G. Inserta Tee Connection to Existing Sewer Pipe

Unit price bid includes cost of: furnishing and installing inserta tee connection; preparing and coring existing sewer pipe; connecting inserta tee to existing sewer pipe; connecting lateral pipe to inserta tee; and furnishing all labor, material and equipment necessary to complete work.

H. Inserta Tee Connection to Existing Sewer Pipe - Installed

Unit price bid includes cost of: excavation; backfill; stone bedding; select granular backfill (sewer); full pavement or pavement base restoration; sheeting; shoring; maintenance of sewage flow; pumping; bailing; furnishing and installing inserta tee connection; preparing and coring existing sewer pipe; connecting inserta tee to existing sewer pipe; replacing any portion of existing sewer pipe damaged during work; connecting lateral pipe to inserta tee; and furnishing all labor, material and equipment necessary to complete work.

At end of Section R601-5 Basis of Payment, **ADD** following:

S601-5.06 Polyvinyl Chloride Lateral Pipe – Installed (Including Lateral Connection)

Unit price bid includes cost of: excavation; backfill; stone bedding; select granular backfill (sewer); full pavement or pavement base restoration; sheeting; shoring; maintenance of sewage flow; pumping; bailing; furnishing and installing lateral pipe; bends; fittings; connecting new lateral pipe to catch basin, existing lateral pipe, or existing/new branch stub; preparing and cutting existing lateral pipe for connection; flexible rubber joint connector with stainless steel shear rings and bands; making joint; and furnishing all labor, material and equipment necessary to complete work.

S601-5.07 Abandon Existing Lateral Pipe

Unit price bid includes cost of: plugging end of lateral pipe; rubber gasketed mechanical type permanent plug; brick; regular cement mortar Type II cement; filling and sealing void at plugged end; and furnishing all labor, material and equipment necessary to complete work.

Where existing lateral pipe is connected to structure, unit price bid also includes cost of: mortaring over opening in structure;

Where existing lateral pipe is open ended, unit price bid also includes cost of: removing short section of existing lateral pipe if necessary.

S601-5.08 Excavation, Backfill, Pavement Base Restoration and Pavement Restoration

Excavation including hand and tunnel excavation, furnishing and placing of stone bedding and select granular backfill (sewer), and either pavement base or full pavement restoration, will be paid for under separate bid items or included in unit price bid for item as indicated in item description.

No separate payment will be made for placement of select backfill material excavated from trench.

Excavation that is included in bid item does not include rock excavation. Rock excavation will be paid for under separate bid item.

Where bid item includes cost of pavement base restoration, pavement base may consist of either concrete base or asphalt base course, as required in Contract Documents. Unit price bid will be same regardless of which type of pavement base is used, and bid items will include cost of: subbase courses type 1 and type 2; either Class C concrete foundation or asphalt base course; asphalt binder course; and asphalt tack coat.

Where bid item includes cost of pavement restoration, pavement base may consist of either concrete base or asphalt base course, as required in Contract Documents. Unit price bid will be same regardless of which type of pavement base is used, and bid items will include cost of: subbase courses type 1 and type 2; either Class C concrete foundation or asphalt base course; asphalt binder course; asphalt top course; and asphalt tack coat.

Payment will be made under:

Note: XX in bid item number and X" in item description represent size of branch, connection or lateral pipe. i.e.: 8 inch inserta tee connection would be bid as S601.2308 8" Inserta Tee Connection to Existing Sewer.

ITEM NO.	ITEM	PAY UNIT
S601.1501XXXX	X" x X" Polyvinyl Chloride Branch at Existing Sewer Pipe – Installed (Including Excavation, Backfill and Pavement Base Restoration)	Each
S601.1502XXXX	X" x X" Polyvinyl Chloride Branch at Existing Sewer Pipe - Installed (Including Excavation, Backfill and Pavement Restoration)	Each
S601.2001XX	X" Polyvinyl Chloride Saddle Branch at Existing Sewer Pipe - Installed (Including Excavation, Backfill and Pavement Base Restoration)	Each
S601.2002XX	X" Polyvinyl Chloride Saddle Branch at Existing Sewer Pipe - Installed (Including Excavation, Backfill and Pavement Restoration)	Each
S601.22XXXX	X" x X" Polyvinyl Chloride Branch at New Sewer Pipe	Each
S601.23XX	X" Inserta Tee Connection to Existing Sewer Pipe	Each
S601.2301XX	X" Inserta Tee Connection to Existing Sewer Pipe - Installed (Including Excavation, Backfill and Pavement Base Restoration)	Each
S601.2302XX	X" Inserta Tee Connection to Existing Sewer Pipe - Installed (Including Excavation, Backfill and Pavement Restoration)	Each
S601.26XX	X" Polyvinyl Chloride Lateral Pipe, SDR21 - Installed (Including Lateral Connection) (Including Excavation, Backfill and Pavement Base Restoration)	Linear Foot
S601.27XX	X" Polyvinyl Chloride Lateral Pipe, SDR21 - Installed (Including Lateral Connection) (Including Excavation, Backfill and Pavement Restoration)	Linear Foot
S601.28XX	X" Polyvinyl Chloride Lateral Pipe, SDR21 - Installed (Including Lateral Connection) (Including Excavation and Backfill)	Linear Foot
S601.2901	Abandon Existing Lateral Pipe at Structure	Each
S601.2902	Abandon Existing Lateral Pipe at Structure (Including Excavation and Backfill)	Each
S601.2903	Abandon Existing Lateral Pipe at Structure (Including Excavation, Backfill and Pavement Base Restoration)	Each
S601.2904	Abandon Existing Lateral Pipe at Structure (Including Excavation, Backfill and Pavement Restoration)	Each

ITEM NO.	ITEM	PAY UNIT
S601.3001	Abandon Existing Open Ended Lateral Pipe	Each
S601.3002	Abandon Existing Open Ended Lateral Pipe (Including Excavation and Backfill)	Each

REVISED: July 1, 2018