## **As-Constructed Drawing**

Certification:	Original copy of drawing must be signed and sealed by either:	
		A British Columbia Land Surveyor or a Professional Engineer
E tata defendate	_	
Existing Information:		Location of main (from Property line)
		Main Pipe Size
		Material
		Inverts
		Length
New Information:		Size
		Material
		Depths
		Inverts
		Length
		Grade
		Location of new connection (offset to iron pins at property corners)
		Survey Monument # and elevation
<b>Good Drafting Practice</b> :		
		Drawing prepared in metric units at a scale of 1:500 or better
		8½ x 11 minimum sheet size (11 x 17 maximum)
		Legal (property lines and dimensions for the subject lot)
		Address of the property & adjoining lots

## **Further Information**

For further information or to obtain permits, please contact:

City of Surrey – Engineering Department - Engineering Counter 14245 – 56 Avenue, Surrey, BC V3X 3A2 Telephone: 604-591-4340 Fax: 604-591-8693 engineering@surrey.ca

This guideline is intended to provide general information only. City by-laws and policies shall take precedence.



# A General Guide to Storm and Sanitary Service Connections

This guide describes the Engineering Department's requirements for a permit to connect storm and sanitary services to the City mains excluding Bridgeview/South Westminster.

For these areas, refer to "A General Guide to Bridgeview and South Westminster Servicing" brochure

## **General Information**

Prior to starting construction a **City Road & Right of Way and Traffic Obstruction Permit** issued by the Engineering Department are required to construct storm and sanitary service connections within the City of Surrey. While working within the road right of way, contractors must follow the terms of the City's **Traffic By-law # 13007** and follow traffic control measures specified in the **B.C. Traffic Control Manual for Work on Roadways**. Information is available for all permits at the Engineering Counter at City Hall.

When working within Provincial Highways, a permit from the Ministry of Transportation is also required.

Contractors must be skilled with all aspects of construction when working within the City's road right of way and must provide the City confirmation in three key areas: Insurance, WorkSafeBC Registration and a City of Surrey Business License.

Contractors are required to provide an insurance certificate which names the City of Surrey as an additional insured, as proof of valid insurance prior to the start of construction. The Certificate of Insurance is obtained from your insurance broker. The **Certificate Form** is available on the City's website using the Search utility on the home page. The amount of insurance coverage required is \$5,000,000.

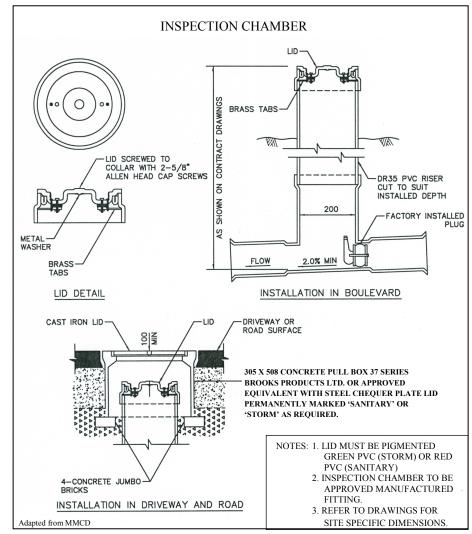
The Contractor is also required to provide the City confirmation of current registration with WorkSafeBC. Confirmation that for purposes of the Occupational Health and Safety Regulation on the Province of British Columbia, B.C. Regulation 296/97, the Contractor shall be the "prime contractor" for the work and shall comply with all requirements of the aforesaid regulation, and shall provide a copy of this Safety Program as accepted by WorkSafeBC.

Fees for City Road and Right-of-Way Permits (link)

City of Surrey Engineering Department December / 2010

### Construction

All construction shall be completed in accordance with the **Master Municipal Construction Document – Volume II** (link) and with the City's **Standard Construction Documents** (link) available at the Engineering Front Counter. The MMCD is available at: Support Services Unlimited, Suite 302, 1107 Homer Street, Vancouver, BC V6B 2Y1 (telephone: 604-681-0295).



#### Installation:

- ensure barrel of each pipe is supported with granular bedding material for its entire length, completed joints are restrained by compacting bedding material
- commence laying at outlet with bell ends of the pipe facing upgrade
- keep joints and pipe free of dirt, mud, gravel and water
- complete each joint before laying next pipe
- minimize joint deflection after joint has been made
- perform leakage testing using pressure testing
- install a 40 mm x 90 mm painted marker stake (green for storm and red for sanitary)

#### Bedding/Backfilling:

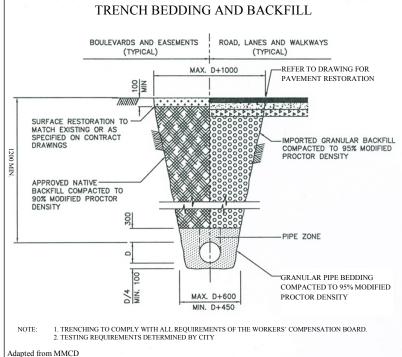
- granular bedding shall be placed in uniform layers less than 150 mm
- in boulevards approved native backfill compacted to 90% Modified Proctor Density
- in roads and walkways imported granular backfill compacted to 95% Modified Proctor Density
- bedding and imported backfill testing may be required

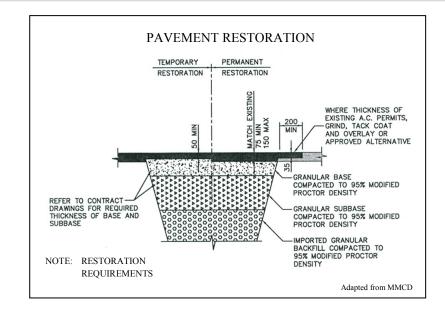
#### **Pipe Material:**

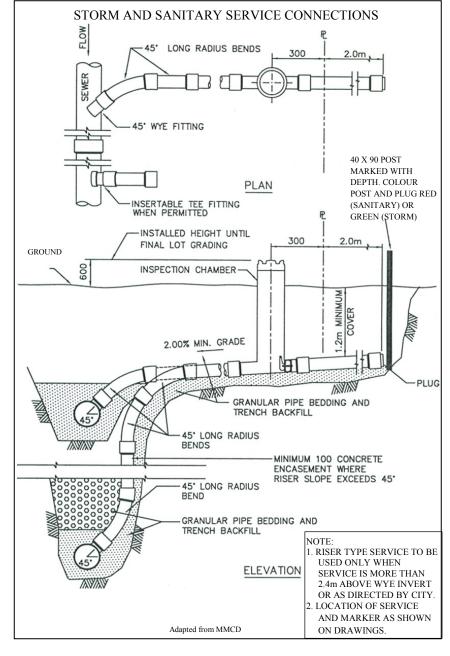
- generally 100 mm or 150 mm diameter
- PVC type PSM DR 28
- minimum pipe stiffness of 625 kPa
- manufactured to ASTM D3034, certified to CSA B182.2
- fittings are push-on type with single electrometric gasket to ASTM D3212 and F477
- length to be 4.0 metres

#### **Connections:**

- manufactured connections to concrete mains shall use sanded PVC pipe male end stub with integral bell by either grouted into chipped hole in pipe or epoxy resin into cored hole in pipe
- manufactured wye connections to PVC mains to ASTM D3034 and CSA B182.2
- field installed tees and wyes shall be made with an approved PVC saddle installed to the manufacturers specifications
- connections to ribbed PVC mains shall be up to two sizes smaller than the main, cutting across pipe ribs is not permitted, an insertable tee is permitted







## Inspection

## Call 604-591-4340 to arrange for inspections

- FIRST inspection required when tie-in to City main completed, inspection chamber installed and surveyor has determined elevations and grades prior to backfill
- Video inspections required after backfill
- FINAL inspection required when surface has been reinstated and As
   Constructed Drawing has been submitted for approval
- Re-inspection charges will be deducted from the security deposit
- Security deposits will be returned after FINAL inspection and As Constructed drawing have been approved