

**Bylaw 18100
EPCOR Drainage Services Bylaw
Code of Practice**

Flow Monitoring Point Installation & Maintenance Requirements

APPROVED:

Cindy Shepel, Director, Drainage Operations

January _____, 2018

This Code of Practice, adopted by EPCOR Water Services Inc., contains written requirements, standards, specifications, procedures, protocols or guidelines that form part of the Drainage Services Guidelines and are binding on all Customers pursuant to Bylaw 18100.

Schedule 2, s. 2.3(d)

1.0 Application

1.1 Pursuant to Drainage Bylaw 18100, the owner of a premises serviced by the sewerage system shall install and maintain an accessible flow monitoring point on each pipe leaving the property:

- (a) when the pipe is new;
- (b) when the premises is redeveloped; or
- (d) when required to do so by EWSI.

Schedule 2, s. 4.3(a)

1.2 The owner of a premises shall ensure that EWSI has a safe and reasonable means of accessing the flow monitoring point.

Schedule 2, s. 4.3(c)

1.3 This does not apply to:

- (a) residential properties discharging only wastewater from domestic sources; or
- (b) minor redevelopments exempted by EWSI.

Schedule 2, s. 4.3(d)

1.4 All required flow monitoring points must be installed and maintained in accordance with this Code of Practice provided in the Drainage Services Guidelines established by EWSI.

Schedule 2, s. 4.3(b)

1.5 Nothing in this Code of Practice exempts a person from the requirements, penalties and/or liabilities within all applicable municipal, provincial, or federal legislation or standards.

2.0 Installation Requirements

2.1 An acceptable flow monitoring point is a standard manhole having a minimum 1200mm diameter. See ATTACHMENT A, reproduced from Design and Construction Standards for the City of Edmonton – Volume 3 Drainage for technical drawings.

2.2 The collar and cover for the flow monitoring point shall not exceed 200 mm above or 100 mm below grade.

2.3 Flow monitoring points shall be installed within the property lines or boundaries from where the wastewater originates.

2.4 If space limitations will not allow the installation of a standard 1200mm flow monitoring point then alternative plans may be submitted to EWSI for consideration. These alternative plans may include a 900mm flow monitoring point or dipwell (standpipe) which is a vertical pipe that extends from a sewer pipe for purpose of obtaining a wastewater sample.

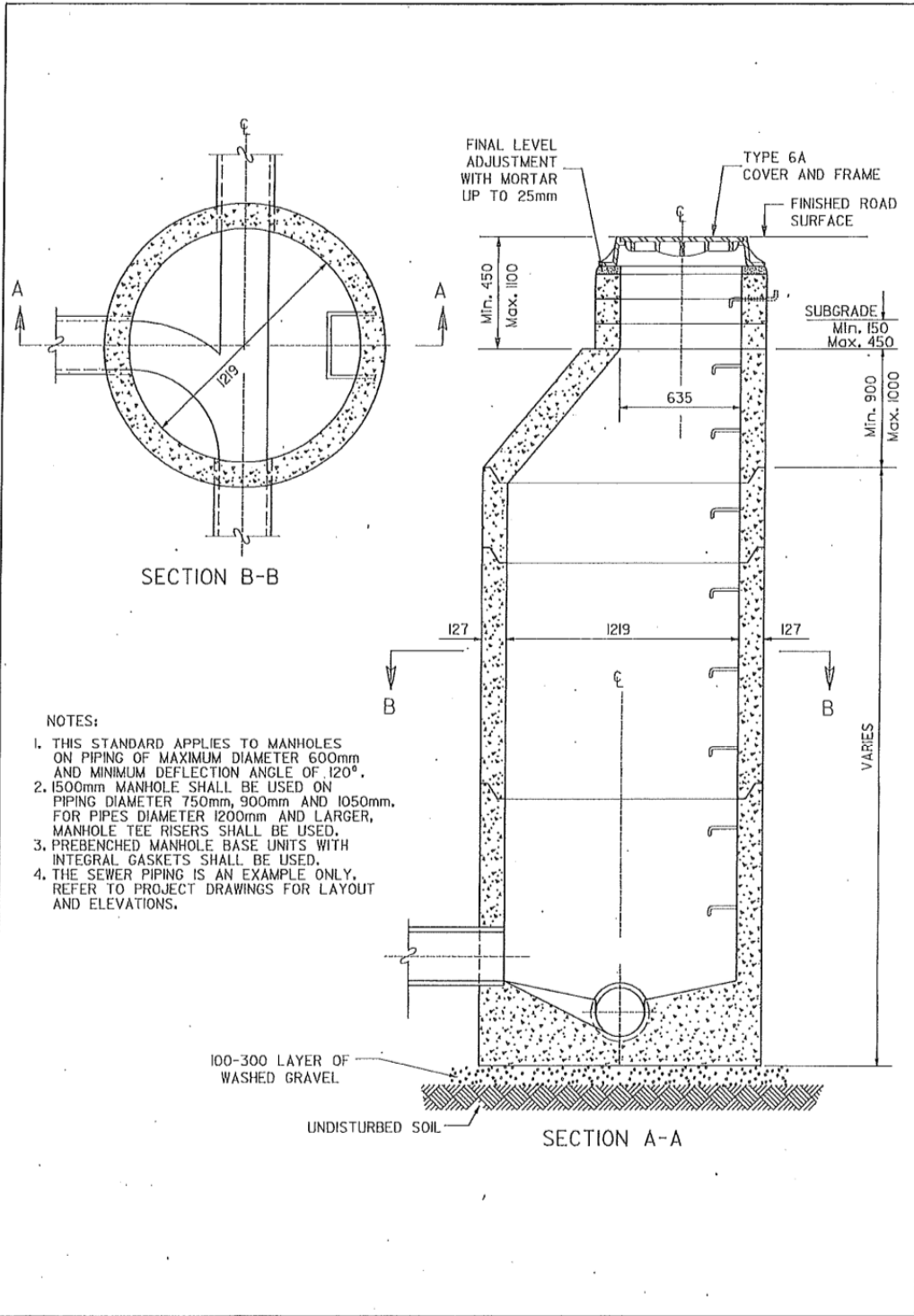
- 2.5 A dipwell (standpipe) must meet the following criteria:
- (a) EWSI must be able to view the flow;
 - (b) it must have a minimum diameter of 150mm (6 inches);
 - (c) it must have a removable cap; and
 - (d) it must have a sheltered and tamper proof enclosure to accommodate both automated sampling and/or flow monitoring equipment.

3.0 Maintenance Requirements

- 3.1 The sewer pipe at the base of the flow monitoring point must be exposed (open) to the wastewater flow.
- 3.2 The flow monitoring point must be benched where the surface contouring at the base of a flow monitoring point will confine the flow of sewage to avoid the accumulation of deposits.
- 3.3 The flow monitoring point must be free of obstructions and prohibited wastes (as defined in Bylaw 18100, Schedule 2, Appendix A) at all times.
- 3.4 The manhole collars and covers must be aligned with the interior walls or cone at all times.

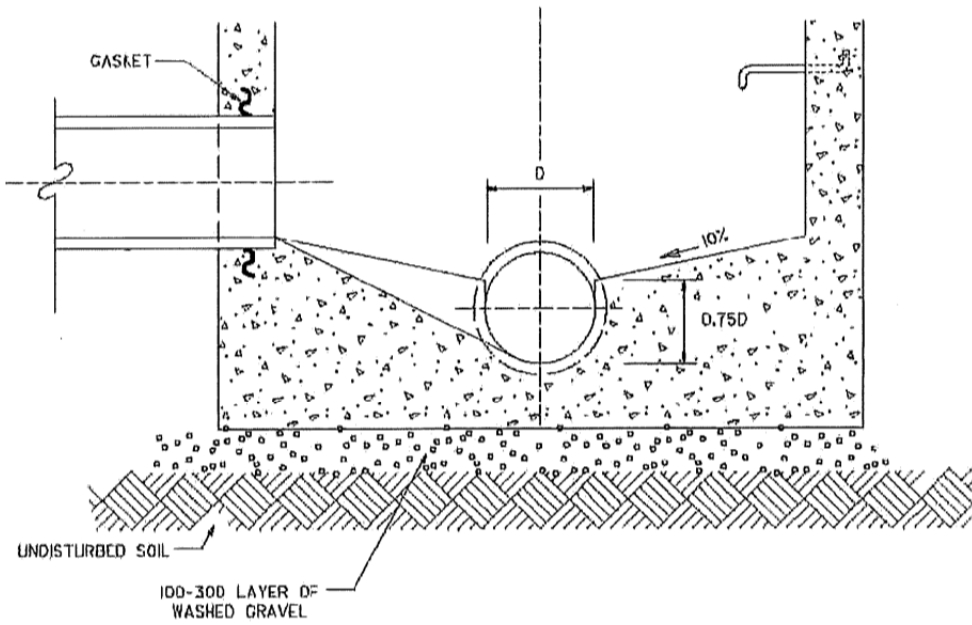
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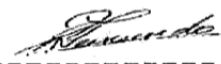
ATTACHMENT A

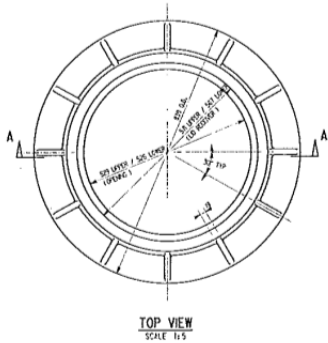


		STANDARD 1200 MANHOLE FOR PIPING UP TO 600mm DIAMETER WITH TYPE 6A COVER AND FRAME	
STANDARD DRAWING			
Date Approved: MAR-03-15	Drawn By: J.L.	Approved: 	Revision #: 1
Scale: NTS	Checked By: DJ		Drawing #: 7013

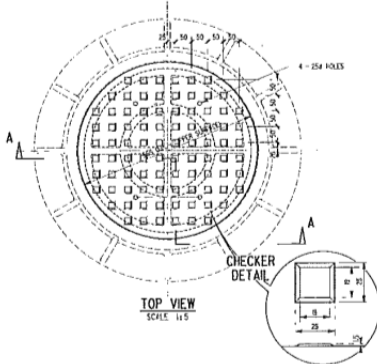
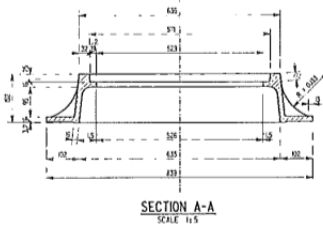
December 10, 2014 mfp: spec7013.dgn



		BENCHING DETAIL FOR STANDARD 1200 MANHOLE	
Date Approved: 98-11-16	Drawn By: J.L.	Approved 	Revision # 0
Code: NTS	Checked By: MJB	_____	Drawing # 7020



No 6 STANDARD FRAME FOR MANHOLE AND ROUND CATCH BASIN TOP
(WEIGHT = 80kg)



No 6A STANDARD MANHOLE COVER
(WEIGHT = 54.0kg)

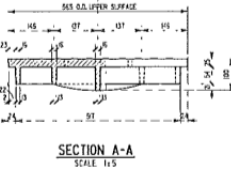
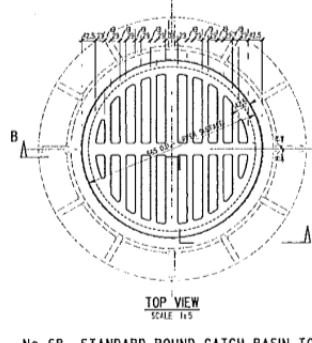


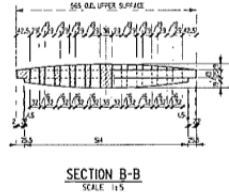
TABLE 1 - MANUFACTURING TOLERANCES

- NO DEVIATION SHALL BE ACCEPTABLE FOR DIMENSIONS WHICH ARE LESS THAN 10mm
- ALL DIMENSIONS GREATER THAN 10mm SHALL CONFORM TO ±3% TOLERANCE.

NOTE
 (1) THE DRAWING REPRESENTS DIMENSIONAL INFORMATION FOR PRODUCTS THAT HAVE BEEN PROVIDED FOR THE CITY HISTORICALLY. ALTERNATE DIMENSIONS AND DETAILS MAY BE REQUIRED FOR ALL REPLACEMENT PRODUCTS AND CONSIDER THE CITY APPROVING AGENCY FOR THESE PRODUCTS. ALL NEW DIMENSIONS NOTED IN THIS DRAWING SHALL BE THE SAME DIMENSIONS AS THE CITY APPROVING AGENCY. THE CITY APPROVING AGENCY SHALL BE NOTIFIED OF ANY DIMENSIONAL CHANGES TO THE PRODUCTS MEET THE PROOF TEST REQUIREMENTS FOR 10-20 YEARS (LOADING AS OUTLINED IN AS100 WITH LATEST EDITION).



No 6B STANDARD ROUND CATCH BASIN TOP
(WEIGHT = 50kg)



SPECIFICATIONS

- MATERIAL SPECIFICATIONS**
 FRAME AND COVER - GREY CAST IRON TO CONFORM TO CLASS 300 AS10 AS LATEST EDITION.
- CASTINGS SHALL BE PRODUCED TO THE DIMENSIONS SHOWN AND WITHIN THE TOLERANCES NOTED IN TABLE 1 - MANUFACTURING TOLERANCES.
- COATED CASTINGS WILL NOT BE ACCEPTED.
- CASTINGS SHALL BE MARKED WITH THE PROPER IDENTIFICATION MARKINGS WHICH WILL INCLUDE:
 - BY ORDER (MANUFACTURER'S CITY OR COUNTRIES)
 - BY FREQUENT IDENTIFICATION MARKINGS AND YEAR OF CASTING AND OTHER REQUIREMENTS AS PER AS100 MOSE SEVENTH.
- ALL CASTINGS SHALL BE FREE OF DEFECTS, TRUE TO PATTERN AND FREE FROM CRACKS, GAS HOLES, FLAKES AND EXCESSIVE SURFACE DEFECTS. THE CASTING SHALL BE FREE FROM RUST ON SOON AND SHALL BE REASONABLY SMOOTH.
- WELT SURFACES SHALL BE WORKED SUCH THAT CASTINGS SHALL NOT ROCK WHEN INSTALLED. THE MANUFACTURER SHALL FIT THE CASTINGS AGAINST A TYPICAL FRAME OR COVER.

REV.	DATE	BY	CHKD.	DESCRIPTION
1	10/10/10	J. SMITH	M. JONES	ISSUED FOR CONSTRUCTION

THESE DRAWINGS ARE THE PROPERTY OF EPCOR. NO PART OF THESE DRAWINGS IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF EPCOR.

MANUFACTURER'S MARK

DRAINAGE SERVICES
 1000 10th Street
 Calgary, Alberta T2C 1A8
 Canada

DATE 10/10/10
BY J. SMITH
CHKD. M. JONES

EPCOR
 INFRASTRUCTURE SERVICES
 DRAINAGE SERVICES

TITLE
 No 6 STANDARD MANHOLE FRAME, COVER AND ROUND CATCH BASIN TOP
CONSTRUCTION DETAILS

LOCATION

APP. NO. 7043A
IDENT. 7043B

DATE	BY	CHKD.
10/10/10	J. SMITH	M. JONES