WATER MAIN

50 mm x 150 mm CEDAR WEDGES NAILED IN PLACE AT 400 mm c/c

50 mm x 150 mm CEDAR SPIKED TO EACH SIDE TO EXTEND FULL LENGTH OF SUPPORT BEAM TOP OF 50 mm x 150 mm TO BE LEVEL WITH BOTTOM OF MAIN

SPREADER

NOTE:
ALL VOIDS BETWEEN SUPPORT BEAM & MAIN ARE TO BE FILLED WITH EXCAVATED MATERIIAL AND THROUGHLY COMPACTED

SECTION A

RESTRICTIONS

THE SUPPORT METHODS OUTLINED HEREIN ARE DESIGNED FOR USE ONLY UNDER CITY OF TORONTO WATER MAINS. ANY PIPELINES OR GAS MAINS, ETC. UNDER THE JURISDICTION OF ANY OTHER AUTHORITY SHALL BE SUPPORTED AS DIRECTED BY THE APPROPRIATE AUTHORITY.

NOTES RE: BEAM

1. ALL HORIZONTAL SUPPORTING TIMBERS ARE TO BE CARRIED A MINIMUM OF 600 mm INTO SOLID UNDISTURBED GROUND ON EACH SIDE OF THE TRENCH. CARE SHOULD BE TAKEN TO ENSURE THAT THE TIMBERS HAVE FULL SEARING ON THE SILLS.

2. IF THE DISTANCE FROM THE VERTICAL POST TO SOLID UNDIS- TURBED GROUND EXCEEDS 2.0 m THE TIMBER SIZES SHALL BE CHECKED BY THE PROJECT ENGINEER AND INCREASED IF NEC- ESSARY.

NOTES RE: VERTICAL SUPPORT POSTS

3. VERTICAL POSTS MUST BE INSTALLED UNDER ALL SUPPORTS, I.E. FOR MAINS AND SERVICES. THERE SHALL BE AT LEAST TWO VERTICAL POSTS AND THE SPACING SHALL NEVER EXCEED 2.0 m BETWEEN THEM, UNLESS THE BEAM TIMBER SIZES ARE CHECKED BY THE PROJECT ENGINEER AND INCREASED WHERE NECESSARY.

4. ALL VERTICAL POSTS MUST REST ON EITHER:
A) THE CONCRETE BEDDING AT THE SPRINGLINE OF THE PIPE.
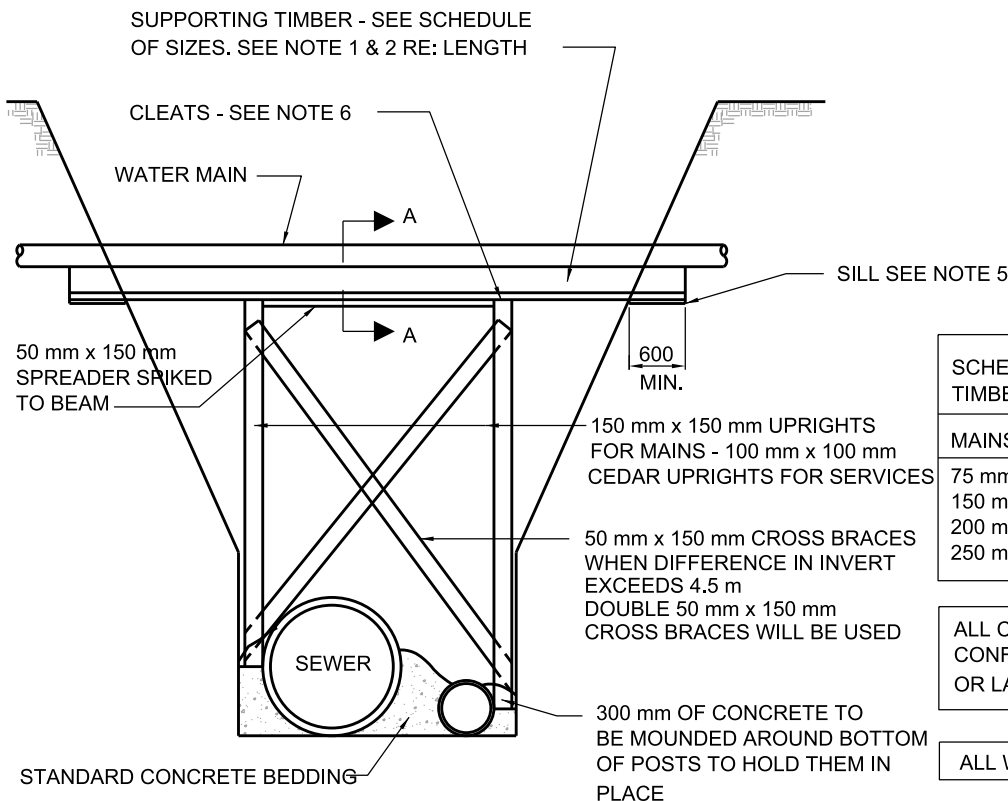B) 20 MPa CONCRETE PAD 600 mm SQUARE AND 300 mm THICK PLACED ON SOLID GROUND.
THE VERTICAL POSTS SHALL NEVER REST ON THE NORMAL CONCRETE BEDDING ABOVE THE SPRINGLINE OF THE PIPE.

NOTES RE: SILLS

5. EACH BEARING SILL SHALL BE MADE OF 2 PIECES OF 50 x 300 mm CEDAR - 600 mm LONG OR 15 MPa CONCRETE IF REQUIRED TO ENSURE FULL BEARING.

NOTES RE: CLEATS

6. ALL VERTICAL POSTS SHALL BE SECURELY CLEATED TO THE MAJOR SUPPORT TIMBER.

SUPPORTING TIMBER - SEE SCHEDULE OF SIZES. SEE NOTE 1 & 2 RE: LENGTH

CLEATS - SEE NOTE 6

WATER MAIN

A

SILL SEE NOTE 5

600 MIN.

50 mm x 150 mm SPREADER SPIKED TO BEAM

A

150 mm x 150 mm UPRIGHTS FOR MAINS - 100 mm x 100 mm CEDAR UPRIGHTS FOR SERVICES

50 mm x 150 mm CROSS BRACES WHEN DIFFERENCE IN INVERT EXCEEDS 4.5 m DOUBLE 50 mm x 150 mm CROSS BRACES WILL BE USED

SEWER

300 mm OF CONCRETE TO BE MOUNDED AROUND BOTTOM OF POSTS TO HOLD THEM IN PLACE

STANDARD CONCRETE BEDDING

SCHEDULE OF SIZES OF SUPPORTING TIMBERS FOR WATERMAINS	
MAINS SIZES	TIMBER SIZES
75 mm & 100 mm	250 mm x 250 mm
150 mm	250 mm x 250 mm
200 mm	300 mm x 300 mm
250 mm & 300 mm	300 mm x 300 mm

ALL CONCRETE TO BE ENTRINED AND TO CONFORM TO C.S.A. STD. A23.2-67-9.5.2. OR LATEST REVISION

ALL WOOD SHALL BE UNTREATED

All dimensions are in millimetres unless otherwise shown.

ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING	REV 1	APR 2013
TORONTO GUIDLINE METHOD OF SUPPORT FOR 75 mm TO 300 mm WATER MAINS FOR USE WHEN TRENCH IS "V" CUT	T-1007.01-10	
	NTS	SHEET 1