

NOTE:

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





RESTRICTIONS

50 mm x150 mm SPREADER SPIKED

50 mm x150 mm -**CROSS BRACES**

4.5 m DOUBLE

50 mm x150 mm

CROSS BRACES

WILL BE USED

WHEN DIFFERENCE INVERT EXCEEDS

TO BEAM

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

> REMOVE PORTION OF SHEETING ABOVE THE LEVEL OF THE UTILITY TO PERMIT INSTALLATION OF THE SUPPORT BEAM

> > DISTURBED GROUND

/arie

600

MIN.

WATER MAIN

SEWER

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. THE VERTICAL POSTS SHALL NEVER REST ON THE NORMAL CONCRETE BEDDING ABOVE THE SPRINGLINE OF THE PIPE.

NOTES RE: SILLS

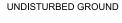
5. EACH BEARING SILL SHALL BE MADE OF 2 PIECES OF 50 x 300 mm CEDAR - 600 mm LONG OR 15 MPa CONCRETE IF REQUIRED TO ENSURE FULL BEARING.

NOTES RE: CLEATS

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

NOTES RE: SHEETING

7. FROM THE UNDERSIDE OF THE SUPPORT BEAM DOWN TO INVERT OF THE TRENCH AT EACH UTILITY SUPPORT, A MINIMUM OF FOUR PLANKS OF SHEETING SHALL BE LEFT IN PLACE ON EITHER SIDE OF THE UTILITY BEING SUPPORTED AND ON BOTH SIDES OF THE TRENCH.



POSSIBLE LINE OF OUTBREAK WILL VARY WITH EACH JOB

CLEATS - SEE NOTE 6

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

SILL SEE NOTE 5

SEE NOTE 2

- SEE NOTE 7, RE: LEAVING THIS SHEETING IN

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

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

SCHEDULE OF SIZES OF SUPPORTING TIMBERS FOR WATERMAINS MAINS SIZES TIMBER SIZES ALL MAINS UP TO 300 mm & 300 mm 300 mm

ALL MEMBERS TO BE SPIKED TOGETHER USING GALVANIZED SPIKES

ALL WOOD SHALL BE UNTREATED

IF THE PIPE BEDDING IS NOT CONCRETE THEN A 20 MPa CONCRETE PAD SHALL BE PLACED ON SOLID GROUND AS DIRECTED BY THE ENGINEER TO PROVIDE BEARING FOR THE VERTICAL POSTS.

STANDARD CONCRETE BEDDING

All dimensions are in millimetres unless otherwise shown.



ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING

APR 2013

GUIDLINE METHOD OF SUPPORT FOR 75 mm TO 300 mm WATER MAINS FOR USE WHEN SHEETING AND SHORING IS WITHDRAWN

T-1007.01-9

NTS

REV 1

SHEET 1