

NOTES:

1 For plastic service pipes, install main stop at 15' above horizontal with a minimum 1.2m long gooseneck.

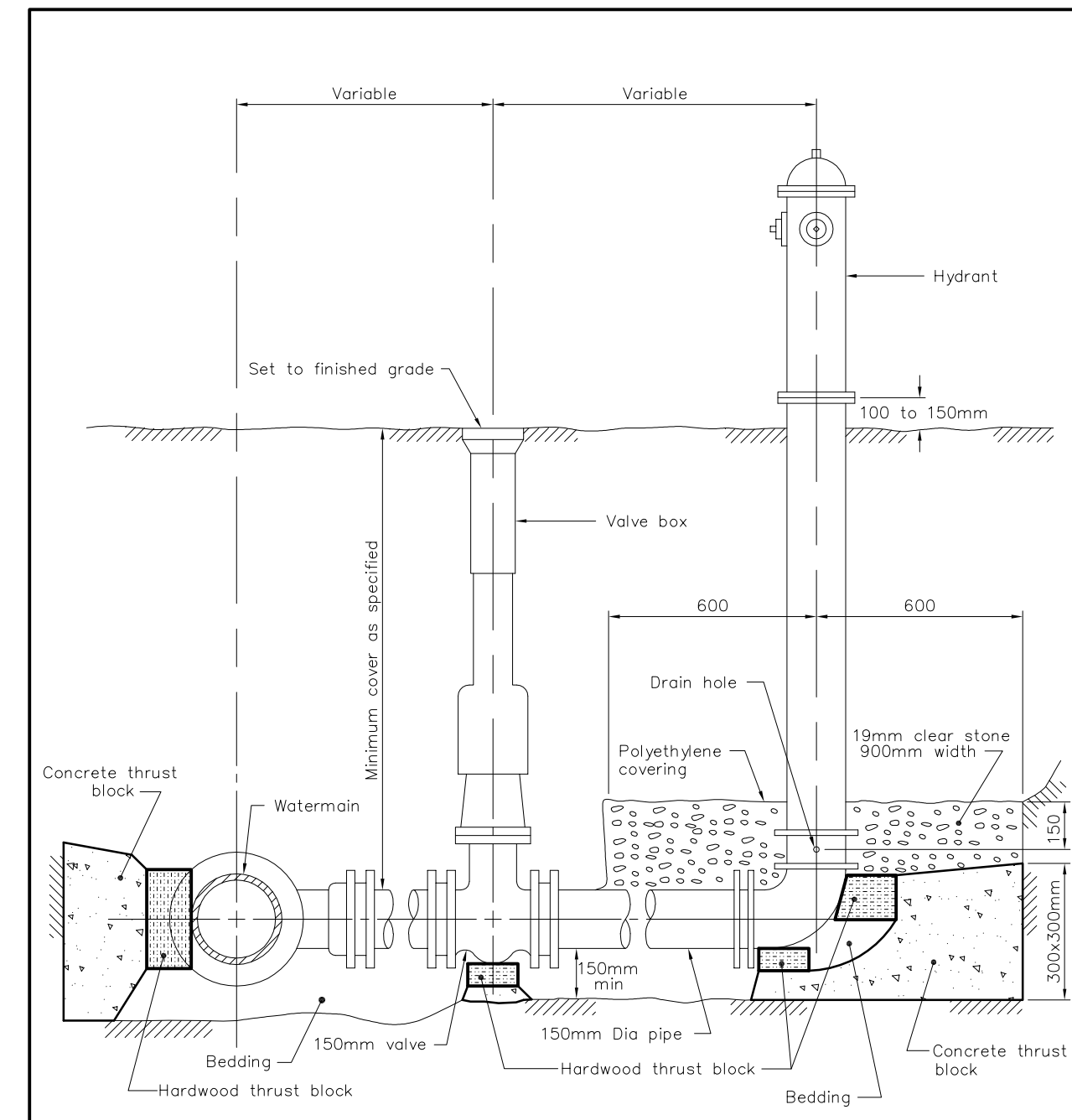
A Service connections to plastic watermains to be made using service saddles or factory made tees.

B Couplings shall not be permitted unless the service length exceeds 20m between the main stop and curb stop.

C All water services to be installed 90° to the longitudinal axis of the watermain.

D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	NOV 2006	Rev 2	
WATER SERVICE CONNECTION	OPSD 1104.010		
19 and 25mm DIAMETER SIZES			



NOTES:

A All concrete blocking to be poured against undisturbed ground.

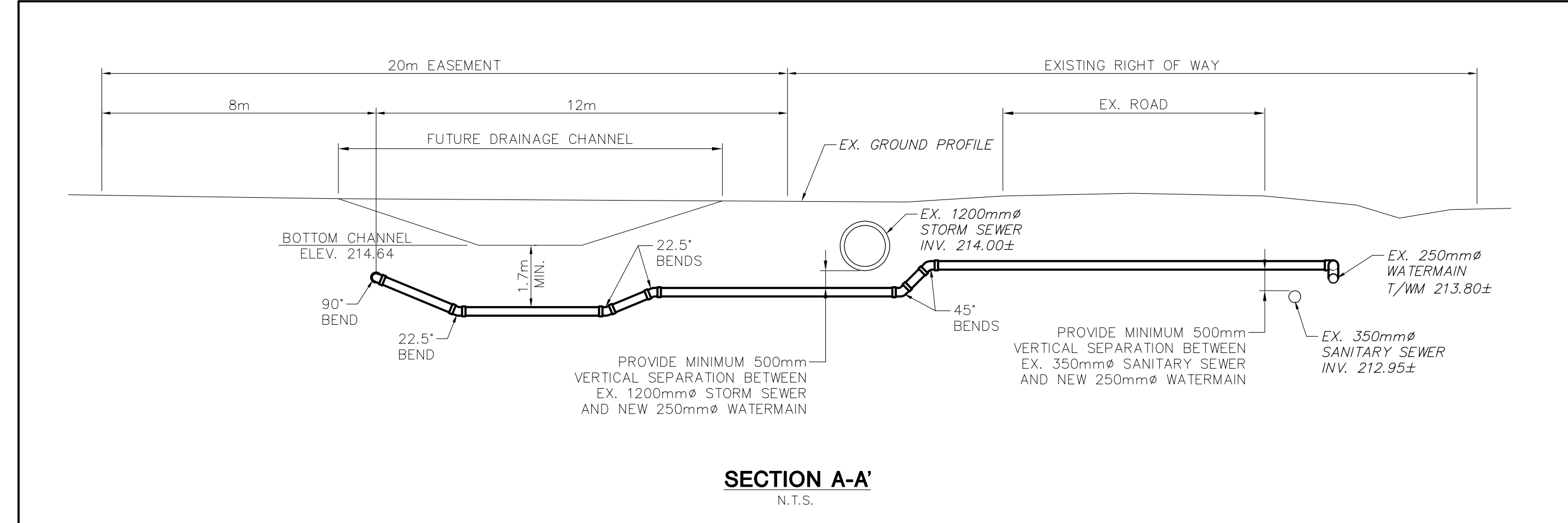
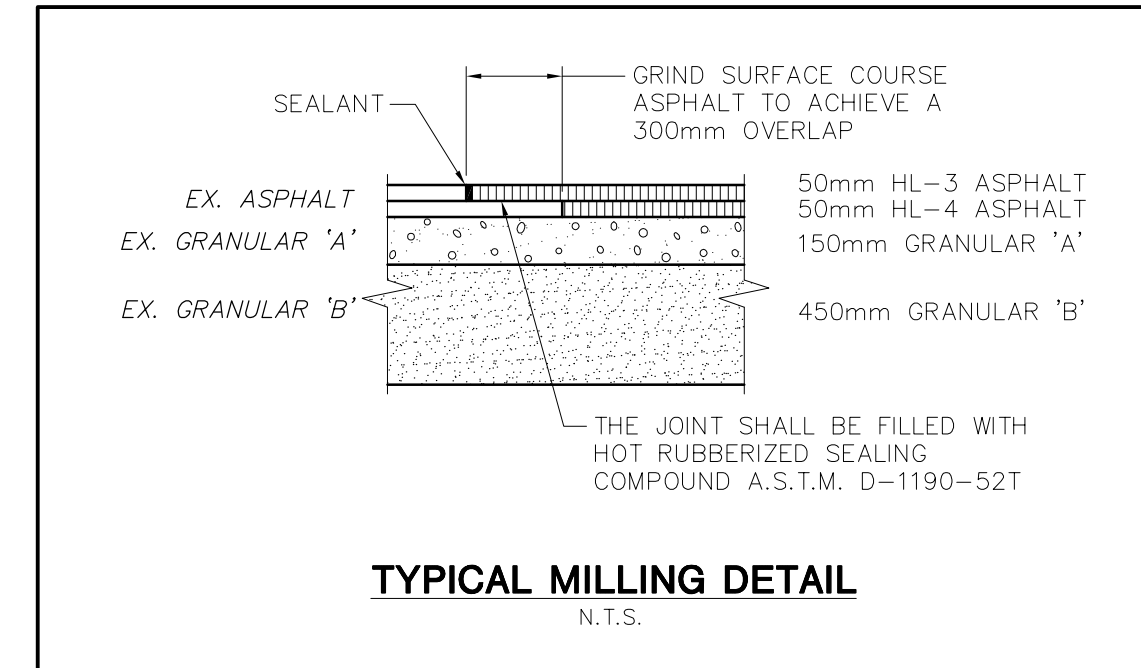
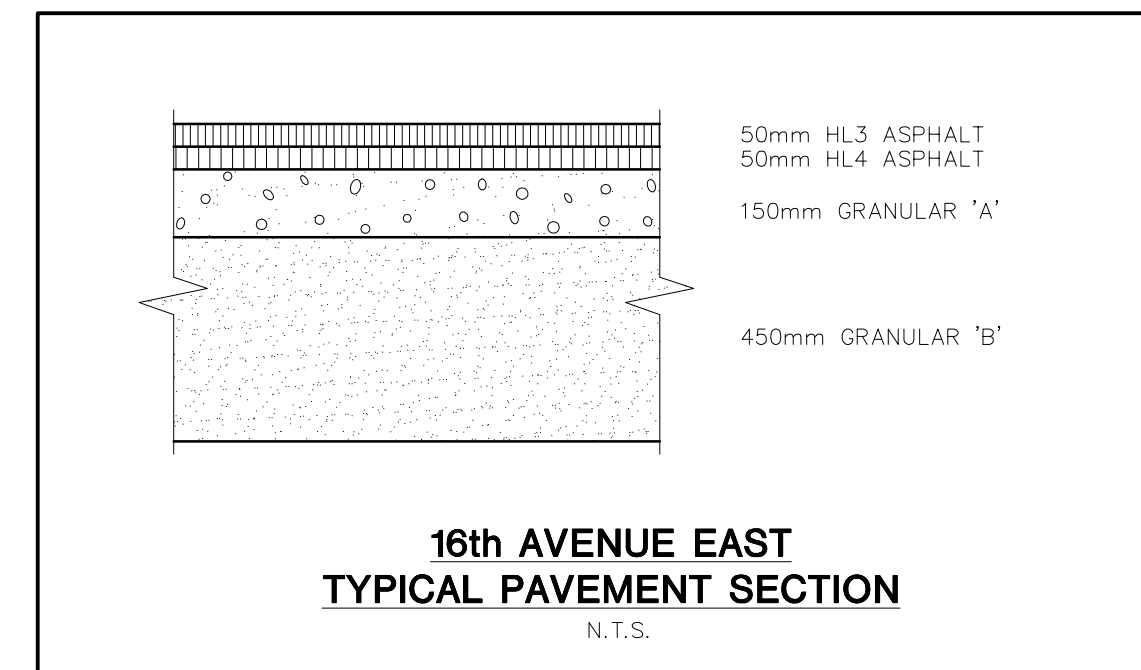
B Hardwood blocking to match nominal pipe diameter.

C Bolts for buried flange to flange connections are to be stainless steel.

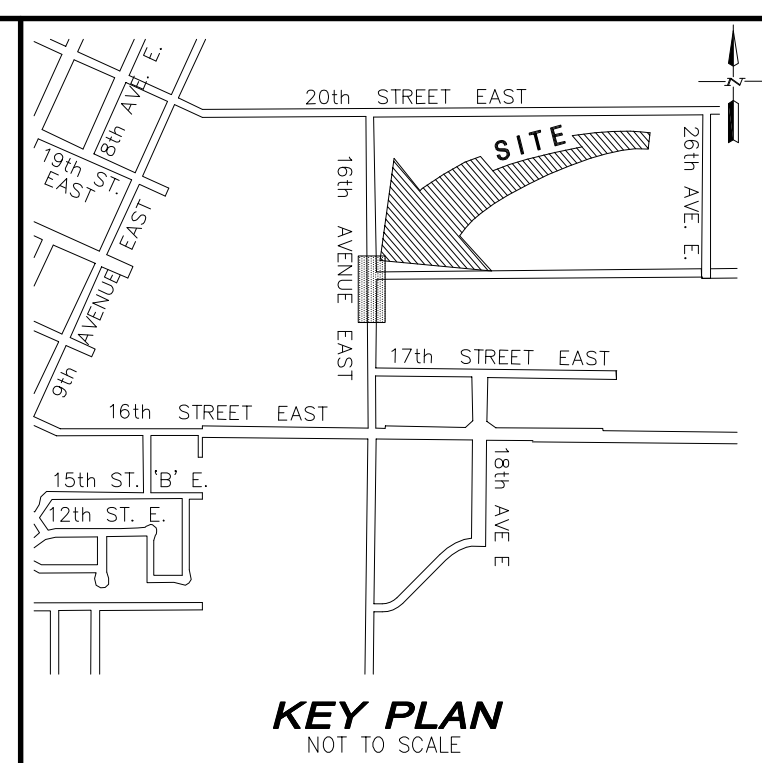
D Flange of standpipe extensions not to be in frost zone.

E All dimensions are in millimetres or metres unless otherwise shown.

CITY OF OWEN SOUND ENGINEERING DEPARTMENT
HYDRANT INSTALLATION



- NOTES :**
- RESTORE ALL DISTURBED AREAS IN ALL ROAD ALLOWANCES TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ENGINEER.
 - ALL DISTURBED LANDSCAPED AREAS TO BE RESTORED WITH MINIMUM 100mm TOPSOIL AND HYDROSEED.
 - PAVEMENT JOINT DETAIL TO BE USED AT ALL JOINTS WHEN MATCHING NEW ASPHALT WITH EXISTING.
 - RESTORE ROADWAY AS DEFINED BY LIMITS ON THIS DRAWING AND TO THE PAVEMENT STRUCTURE STANDARD.
 - RECONSTRUCT DISTURBED BOULEVARD AREAS TO CITY STANDARDS FOR ALL SERVICES.
 - ALL WORKS SHALL BE CONSTRUCTED TO CITY OF OWEN SOUND STANDARDS FOR WATERMAIN CONSTRUCTION AND TO CURRENT OPSD'S AND OPSS'S UNLESS OTHERWISE NOTED.
 - ALL BACKFILL FOR WATERMANS ON THE ROAD ALLOWANCE MUST BE MECHANICALLY COMPACTED TO 100% STANDARD PROCTOR DENSITY.
 - NEW CURB STOP AND SERVICE BOX TO BE PLACED ON PROPERTY LINE OR AS CLOSE AS POSSIBLE (TYPICAL).
 - WHERE WATER SERVICES PASS WITHIN 1.2m OF CATCHBASINS, MANS OR MANHOLES, THE CONTRACTOR SHALL PROVIDE 50mm OF STYROFOAM SM.
 - LOCATIONS OF EXISTING WATER SERVICES AND MAINS ARE SHOWN IN THEIR APPROXIMATE LOCATION. VERIFY ON SITE.



BENCHMARKS :

BENCHMARK 1 ELEV. - 222.50m
TOP NUT OF HYDRANT ON SOUTH EAST CORNER OF 16th AVENUE EAST & 16th STREET EAST

BENCHMARK 2 ELEV. - 217.50m
TOP NUT OF HYDRANT ON 17th STREET EAST AT STA. 2+146, 8m LEFT

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.

PROFESSIONAL ENGINEER
J. B. SLOCOMBE
PROVINCE OF ONTARIO

NO.	DATE	REVISION DESCRIPTION	CHK'D
4	3/22/11	ISSUED FOR TENDER	J.B.S.
3	3/9/11	ISSUED FOR TENDER REVIEW	J.B.S.
2	6/22/10	ISSUED FOR FINAL REVIEW	J.B.S.
1	6/10/10	ISSUED FOR PRELIMINARY REVIEW	J.B.S.



16th AVENUE EAST WATERMAIN RELOCATION
17th STREET EAST TO HERITAGE MALL ENTRANCE
CITY OF OWEN SOUND TENDER T11-05
DETAILS, NOTES AND STANDARDS

DRAWN BY : K.B.	APPROVED BY : J.B.S.	PROJECT NO. : M-1559	DRAWING NO. : 3
DESIGNED BY : J.B.S.	DATE : MAY 5, 2006	SCALE : N.T.S.	