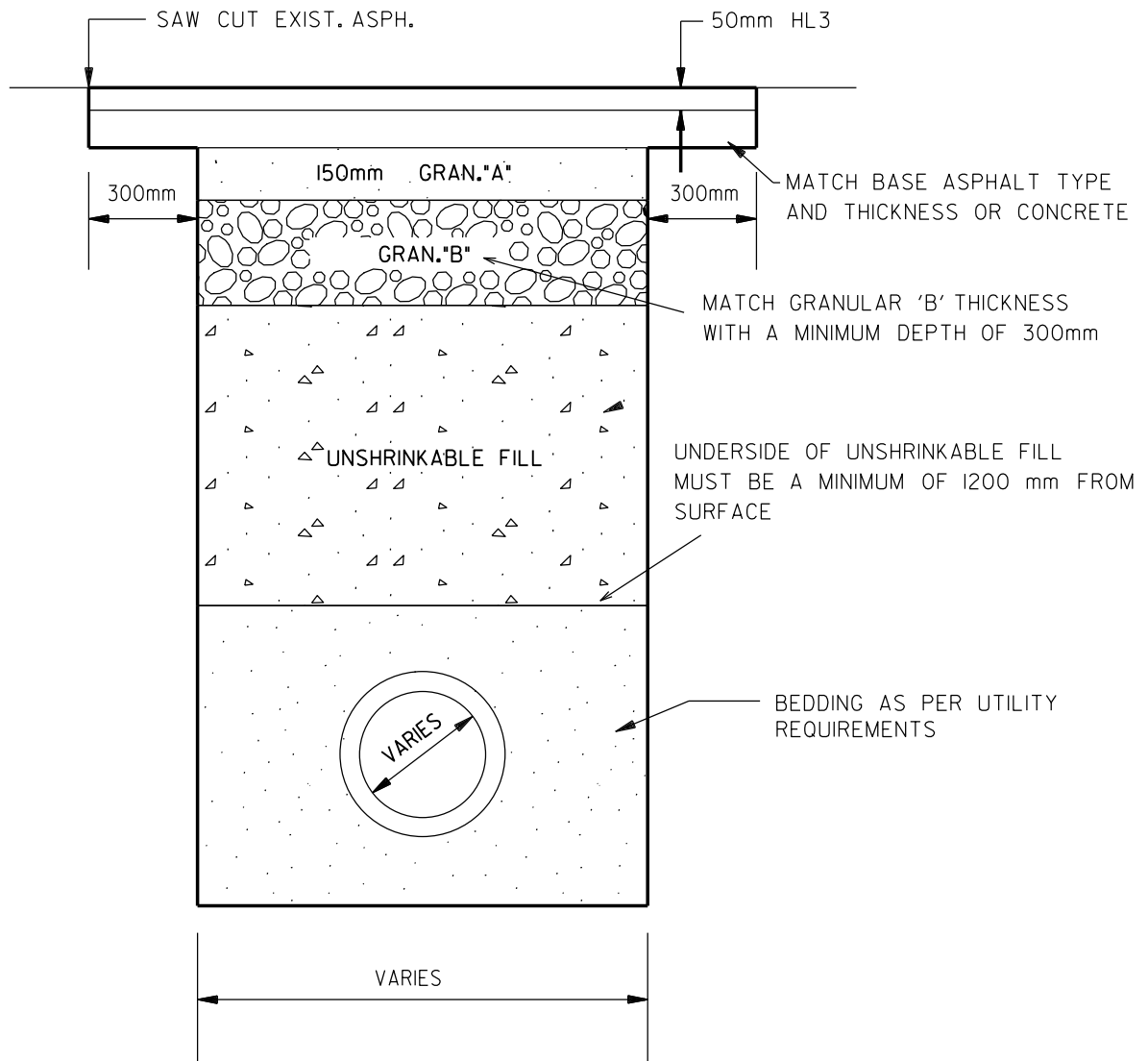


METRIC

ALL DIMENSIONS IN MILLIMETRES



NOTES

1. ALL GRANULAR MATERIALS SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY AT OPTIMUM WATER CONTENT
2. UNSHRINKABLE FILL TO EXTEND FROM TOP OF UTILITY BEDDING TO BOTTOM OF GRANULAR "B"
3. SEE NOTES ON STD. 2220.032 FOR ADDITIONAL DETAILS
4. GRANULAR "A" TO BE OPSS 1010 - 19mm CRUSHER RUN LIMESTONE
5. GRANULAR "B" TO BE OPSS 1010 - TYPE 2 50mm CRUSHER RUN LIMESTONE



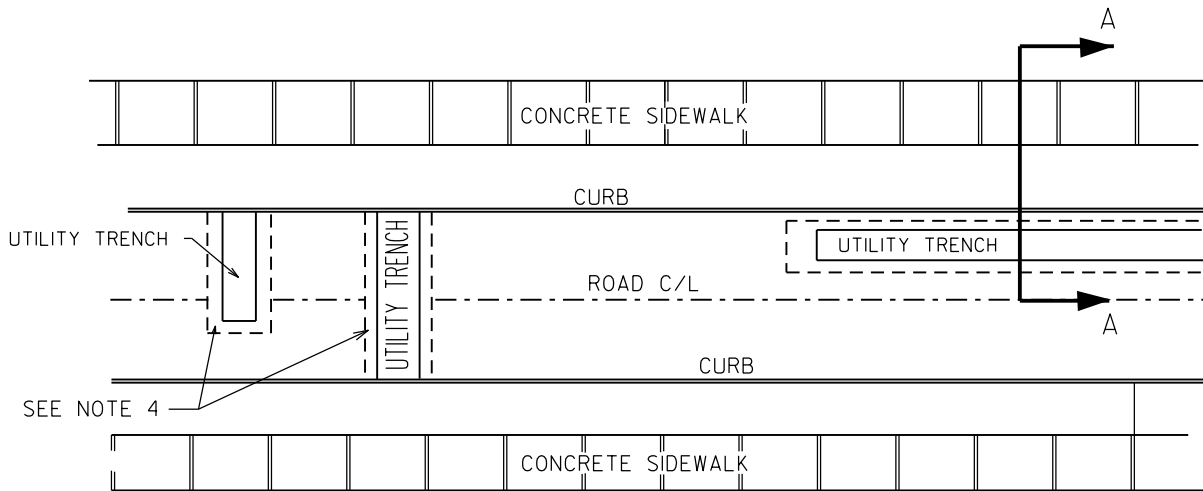
MISSISSAUGA

STANDARD TRENCH RESTORATION FOR OPEN CUT UTILITY INSTALLATION UNDER ROADWAYS

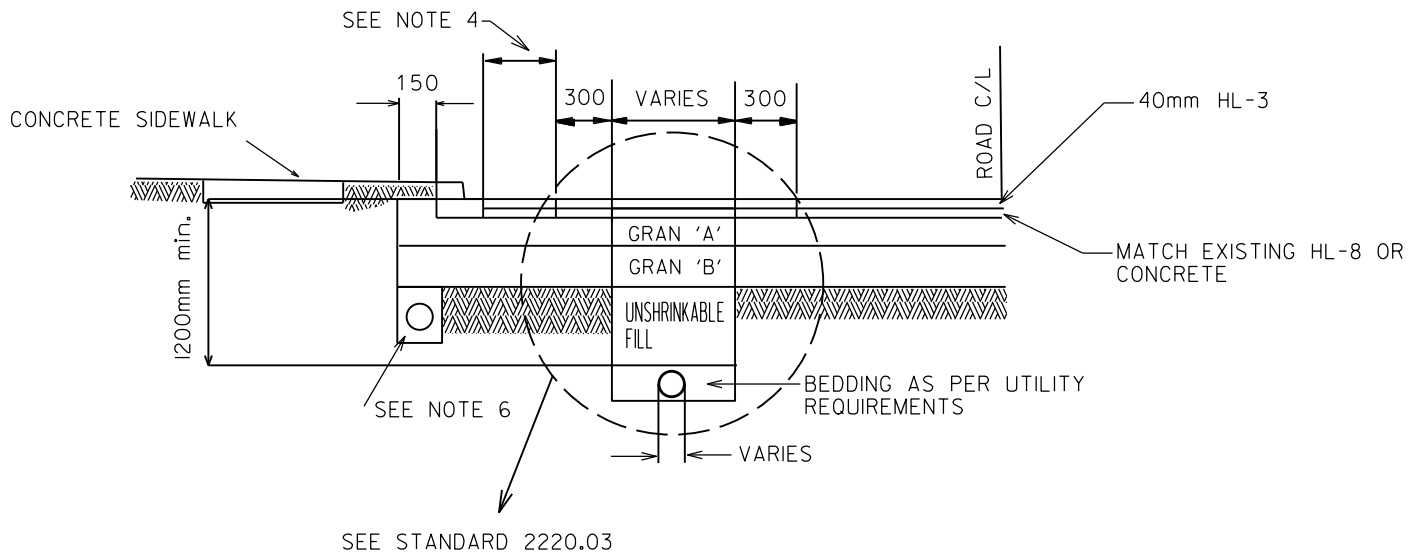
EFF. DATE	2002-01-01	SCALE	N.T.S.
REV.	4	2018-06-27	STANDARD No. 2220.030

METRIC

ALL DIMENSIONS IN MILLIMETRES



PLAN VIEW



SECTION A-A

NOTES FOUND ON STANDARD 2220.032



MISSISSAUGA

STANDARD
UTILITY INSTALLATION
URBAN/RURAL (CURB)
PERPENDICULAR AND OR
PARALLEL TO CURB

EFF. DATE	2002-01-01	SCALE	N.T.S.
REV.	3	STANDARD No.	2220.031

NOTES:

1. BACKFILL MATERIALS SHALL BE OPSS GRANULAR 'A', GRANULAR 'B' AND UNSHRINKABLE FILL PLACED AT THE SPECIFIED DEPTHS FOR SECTION A-A OF 2220.031. ALL GRANULAR MATERIAL SHALL CONFORM WITH OPSS 1010 AND THE UNSHRINKABLE FILL SHALL CONFORM TO OPSS 1359. STEEL PLATES SHALL BE SECURED OVER THE EXCAVATION FOR A MINIMUM OF 24 HOURS. AFTER WHICH THE GRANULAR MATERIALS CAN BE PLACED. ALL GRANULAR MATERIAL SHALL BE PLACED IN 150mm LIFTS AND COMPACTED TO 98% STANDARD PROCTOR DENSITY.
2. AFTER BACKFILLING THE UTILITY TRENCH, A MIN 300mm TOTAL ASPHALT REMOVAL SHALL BE CUT ON ALL SIDES OF THE TRENCH INTO THE EXISTING PAVEMENT STRUCTURE. THE PAVEMENT STRUCTURE MATERIALS SHALL MATCH THE EXISTING PAVEMENT MATERIAL TYPES.
3. ASPHALT RESTORATION SHALL BE A MINIMUM OF 40mm HL-3 AND THE HL-8 SHALL MATCH THE EXISTING PAVEMENT STRUCTURE. ALL ASPHALT RESTORATION SHALL BE IN COMPLIANCE WITH OPSS 310. ALL HOT-MIX MATERIAL SHALL CONFORM TO OPSS 1150. EXPOSED ASPHALT AND CONCRETE FACES SHALL BE CLEANED AND COATED WITH AN RS-1 (OR EQUIVALENT) ASPHALT EMULSION AND ALLOWED TO 'BREAK' PRIOR TO COMMENCING ASPHALT PLACEMENT.
4. WHEN THE REMAINING ASPHALT, FROM THE EDGE OF PAVEMENT TO THE SAWCUT IS 1.3m OR LESS. THE EXISTING ASPHALT WILL BE REMOVED FULL DEPTH AND REPAVED AS PER NOTE 3. WHEN TWO OR MORE ROAD CUTS ARE REQUIRED AT A GIVEN SITE AND THE CUTS ARE LESS THAN 2.5m APART THE ENTIRE AREA MUST HAVE FULL DEPTH ASPHALT RESTORATION FROM THE OUTER LIMITS OF ALL REPAIRS.
5. SIDEWALK RESTORATION SHALL BE A MINIMUM OF ONE FULL BAY INCLUDING EXPANSION JOINT MATERIAL . ALL CONCRETE SHALL BE AS PER OPSS 351. ALL SIDEWALKS SHALL BE 130 mm THICK EXCEPT IN INDUSTRIAL DRIVEWAYS WHERE THE THICKNESS SHALL BE 180 mm.
6. SUB-DRAINS UNDER THE CURB SHALL BE RESTORED TO ENSURE THEIR OPERATION AND SHALL BE PLACED AS PER (CITY OF MISSISSAUGA STANDARD DRAWING, NUMBER 2220.040)
7. WHERE THE CURB HAS BEEN UNDERMINED TO FACILITATE UTILITY INSTALLATION THE CURB SHALL BE REMOVED AND REPLACED. CURB RESTORATION SHALL BE MINIMUM OF 2.0m OR SHALL EXTEND 0.5m BEYOND THE OUTER TRENCH EDGES WHICH EVER IS GREATER, ALL CONCRETE SHALL BE AS PER OPSS 353.
8. ALL GRASSED BOULEVARDS SHALL BE RE-INSTATED WITH NUMBER 1 NURSERY SOD PLACED ON TOP OF 75mm OF TOPSOIL . ALL SOD SHALL BE PLACED WITH STAGGERED JOINTS, BE ROLLED, AND WHERE APPLICABLE, STAKED INTO THE GROUND.
9. EXISTING CRASH PROTECTION SYSTEMS MUST NOT BE REMOVED OR TAMPERED WITH.
10. CITY OF MISSISSAUGA FORESTRY DEPARTMENT MUST BE CONTACTED IF CITY TREES WILL BE AFFECTED BY EXCAVATION 905-615-6200 X3774.



MISSISSAUGA

STANDARD UTILITY INSTALLATION NOTES

EFF. DATE	2015-03-27	SCALE	N.T.S.
REV.	2	2015-03-27	STANDARD No. 2220.032