

GENERAL NOTES

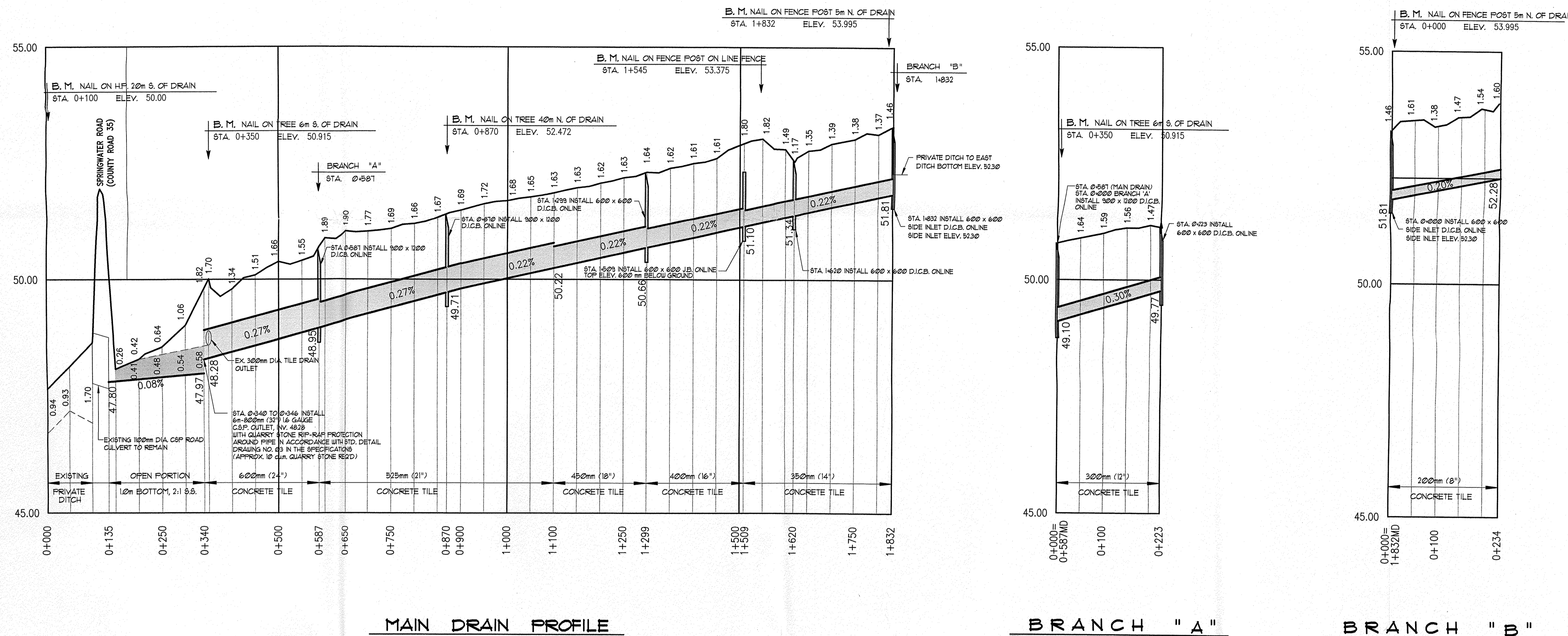
- 1/ OUR SPECIFICATIONS DATED NOVEMBER 2000 APPLY TO THIS PROJECT.
- 2/ THE WORKING WIDTH AVAILABLE TO THE CONTRACTOR TO CONSTRUCT THE NEW DRAINS SHALL CONSIST OF THOSE LANDS IMMEDIATELY ADJACENT TO THE DRAIN AND CONNECTIONS AND SHALL NOT EXCEED THE FOLLOWING AVERAGE WIDTHS:
 OPEN PORTIONS - 15 meters INCLUDING BUFFER STRIPS
 OPEN PORTIONS-BUSH AREAS - 15 meters TOTAL
 CLOSED PORTIONS - 15 meters
 THE WORKING WIDTH FOR PURPOSES OF FUTURE MAINTENANCE SHALL BE 10 m FOR CLOSED PORTIONS AND 15 m FOR OPEN PORTIONS.
- 3/ ALL OWNERS ALONG THE COURSE OF THE DRAIN SHALL MAKE AN ACCESS ROUTE FROM THE NEAREST ROAD TO THE DRAIN LOCATION AVAILABLE TO THE CONTRACTOR. THE AVERAGE WIDTH OF THIS ROUTE SHALL NOT EXCEED 8 METERS. THE ACCESS ROUTE SHALL ALSO APPLY FOR FUTURE MAINTENANCE PURPOSES.
- 4/a) ALL UTILITIES TO BE LOCATED AND EXPOSED PRIOR TO CONSTRUCTION SO THAT THE NEW TILE GRADES CAN BE CONFIRMED. IF THERE IS A CONFLICT IN ELEVATION BETWEEN THE PROPOSED DRAIN AND THE UTILITY, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY.
 b) CONTRACTOR TO NOTIFY ALL UTILITIES 12 HOURS PRIOR TO HIS SCHEDULED TIME FOR STARTING THE ABOVE WORK.
- 5/ ALL TREES, SCRUB, BRUSH, ETC. TO BE CLEARED AND GRUBBED IN ACCORDANCE WITH SPECIFICATIONS.
- 6/ QUARRY STONE SHALL RANGE IN SIZE FROM 150mm TO 300mm EVENLY DISTRIBUTED AND SHALL BE PLACED TO A 300mm THICKNESS ON A SUITABLE FILTER BLANKET AT A 1.5 : 1 SLOPE UNLESS OTHERWISE NOTED. FILTER BLANKET TO BE "MIRAFI 160 N" OR APPROVED EQUAL.
- 7/ CONTRACTOR TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, DRAINAGE SUPERINTENDENT AND THE AFFECTED OWNERS. ALL PARTIES SHALL RECEIVE 48 HOURS NOTICE PRIOR TO THE MEETING.

CLOSED PORTIONS

- 8/a) ALL CONCRETE TILE TO BE A.S.T.M. C 412 EXTRA-QUALITY PLUS 25 % UNLESS OTHERWISE NOTED.
- 9/a) EXACT LOCATION AND ELEVATION OF NEW CATCH BASINS AND JUNCTION BOX TO BE CONFIRMED BY ENGINEER OR DRAINAGE SUPERINTENDENT.
 b) CATCHBASINS TO HAVE "GRID CAGE" TYPE GRATES WHICH ARE TO BE SECURED WITH NON-CORROSIVE FASTENERS.
 c) CONSTRUCT COMPACTED & SEEDED CLAY BERRIS BEHIND ALL DITCH INLET CATCHBASINS. BERRIS TO BE KEVED 300mm INTO UNDISTURBED SOIL.
 d) THERE SHALL BE ONE 150mm RISER SECTION BETWEEN THE SLOPE TOP RISER AND THE BASE OF ALL DITCH INLET CATCHBASINS.
- 10/ NEW TILE DRAINS TO BE LOCATED AS FOLLOWS:
 MAIN DRAIN
 a) ALONG EXISTING MARSHALL AWARD DRAIN LOCATION.
 BRANCH "A" & "B"
 b) EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION BY DRAINAGE SUPERINTENDENT OR ENGINEER.
 c) EXISTING TILE DRAINS TO BE EXPOSED IN AS MANY LOCATIONS AS ARE NECESSARY TO CONFIRM THEIR EXACT LOCATION AND ELEVATION PRIOR TO CONSTRUCTION. EXACT LOCATION OF NEW TILE DRAINS THEN TO BE CONFIRMED BY DRAINAGE SUPERINTENDENT OR ENGINEER.
- 11/ a) TRENCH BOTTOM FOR CONCRETE TILE SHALL BE SHAPED TO CONFORM TO THE OUTSIDE DIAMETER OF THE PIPE FOR A MINIMUM WIDTH OF ONE-HALF OF THE OUTSIDE DIAMETER.
 b) THE MINIMUM TRENCH WIDTH SHALL BE EQUAL TO THE OUTSIDE DIAMETER OF THE TILE TO BE INSTALLED PLUS 100mm (4") ON EACH SIDE UNLESS OTHERWISE APPROVED.
 c) THE MAXIMUM TRENCH WIDTH SHALL BE EQUAL TO THE OUTSIDE DIAMETER OF THE TILE TO BE INSTALLED PLUS 250mm (10") ON EACH SIDE. WIDER MAXIMUM TRENCH WIDTHS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
 d) ALL JOINTS BETWEEN CONCRETE TILES, AND CONCRETE TILE & VARIOUS PIPES, ARE TO BE SECURELY AND COMPLETELY WRAPPED WITH GEOTEXTILE SUCH AS "MIRAFI 140 N L" OR EQUIVALENT. THE GEOTEXTILE SHALL BE 300mm WIDE FOR TILE SIZES OF 150mm TO 300mm AND 400mm WIDE FOR TILE SIZES OF 350mm TO 1500mm. THE ENDS OF THE WRAP AT EACH JOINT SHALL OVERLAP A MINIMUM OF 100mm.
 e) NO TILE SHALL BE BACKFILLED UNTIL INSPECTED BY THE ENGINEER OR MUNICIPALITY UNLESS OTHERWISE APPROVED BY THE ENGINEER.

OPEN PORTIONS

- 12/ EXISTING DITCH BOTTOM ONLY TO BE CLEANED OUT IN ACCORDANCE WITH THE SPECIFICATIONS UNLESS OTHERWISE NOTED ON PROFILES AND IN SECTIONS.
- 13/ EXCAVATED MATERIAL TO BE DEPOSITED AND LEVELLED BESIDE THE DITCH SIDE TO BE CONFIRMED BY OWNER.
- 14/ A 3 METER WIDE BUFFER STRIP OF EXISTING AND NEW VEGETATION BETWEEN THE TOP OF THE BANK AND THE CULTIVATED LANDS ON BOTH SIDES OF THE DITCH SHALL BE MAINTAINED AS PART OF ALL OPEN PORTIONS OF THE DRAIN.
- 15/ NEWLY RECONSTRUCTED DITCH BANKS AND BUFFER STRIPS ARE TO BE HYDRO SEEDED AND MULCHED UPON COMPLETION OF CONSTRUCTION IN ACCORDANCE WITH O. P. S. 512 AND WITH THE FOLLOWING APPLICATION RATES:
 PRIMARY SEED 50 % CREEPING RED FESCUE
 40 % PERENNIAL RYEGRASS
 5 % WHITE CLOVER
 NURSE CROP ITALIAN (ANNUAL) RYE GRASS AT 25 % OF TOTAL WEIGHT
 FERTILIZER : (300 Kg / Ha.) 8 - 32 - 16 HYDRAULIC MULCH : (2,000 Kg / Ha.) TYPE "B" WATER : (52, 100 L / Ha.)
 CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL SEEDING IF REQUIRED TO PROVIDE A SUFFICIENT AND UNIFORM CATCH.
- 16/ SILT FENCE TO BE PLACED ACROSS DITCH BOTTOM AT Sta. 0+160 DURING CONSTRUCTION TO PREVENT SILT FROM FLUSHING DOWNSTREAM. SILT FENCE AND SILT TO BE REMOVED AND DISPOSED OF AFTER CONSTRUCTION.
- 17/ STATIONS 0+160, CONSTRUCT SEDIMENT BASIN IN DITCH BOTTOM FOR FULL WIDTH OF DITCH BOTTOM. SEDIMENT BASIN TO BE 450mm DEEP WITH PARABOLIC SHAPE AND 15m LONG.



MAIN DRAIN PROFILE

SCALE: HOR. 1 : 5,000
 VERT. 1 : 50

BRANCH "A"

BRANCH "B"

RE-SUBMITTED FEBRUARY 21, 2004
 Drainage Superintendent: DON WEIR (Tel. 519-713-5344)

HERRIES DRAIN
 TOWNSHIP OF MALAHIDE

Drawn By: C. S. L.	Field Book: B-140	JOB No: 202282	Drawing No: 2 of 2
Date: AUG. 29, 2003	PROFILES		

SPRIET ASSOCIATES LIMITED
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REGISTERED PROFESSIONAL ENGINEER
 J. R. SPRIET
 Province of Ontario