## **GENERAL NOTES:** LEGEND: **SPECIFICATIONS** ---- PROPERTY LINE ONTARIO PROVINCIAL STANDARD SPECIFICATION, DIVISION 9 **EXISTING CONTOUR LINE** CANADIAN HIGHWAY BRIDGE DESIGN CODE, 2014 315.58 EXISTING ELEVATION × 315.58 PROPOSED ELEVATION TOWNSHIP OF BROCK, ENGINEERING DESIGN CRITERIA & **EXISTING DITCH** STANDARD DRAWINGS, 2018 — - — PROPOSED SWALE SWALE WETLAND CONSERVATION AREAS 4. GRASS DITCH/ SWALE SHALL BE CONSTRUCTED WITH 3:1 SIDE ---- 30.0M SETBACK FROM WETLAND CONSERVATION AREAS SLOPES, WITH AN AVERAGE DEPTH OF 600MM BELOW GRADE. —□—— SILT FENCE LONGITUDINAL SLOPE SHALL FOLLOW DRIVEWAY'S SLOPE. SEEDED WITH LAWN GRASS DURING MAY - SEPTEMBER, WATERED WEEKLY UNTIL FULLY ROOTED 5. PERMANENT RIVER-RUN STONE CHECK DAM SHALL BE INSTALLED WITH 30.0M INTERVALS, 450MM DEPTH. 6. LANDSCAPING SHRUBS OR OTHER SMALL-FORM VEGETATION MAY BE PLANTED WITHIN THE GRASS SWALES. ROOT-BALL AND RAISED SOIL AROUND EACH SHRUB MAY FORM A DAM UP TO 500MM IN HEIGHT WITHIN THE SWALE, BUT NOT FULLY SQUARE END END FINISH OBSTRUCT THE SWALE STEP-BEVEL ALL TYPES CORRUGATED CULVERT TRUCTURAL PLATE CORRUGATED STEEL PIPE 7. CORRUGATED STEEL PIPE SHALL BE 3.5MM THICK, 125MM X 25MM CORRUGATIONS. A skew end cut end finish shall not be combined with a partial bevel or a step-bevel cut end finish. BACKFILL MATERIAL SHALL BE PLACED IN MAXIMUM 200MM B Square end, partial bevel, or step-bevel cut end finish may be used on a culvert installed on a skew between skew numbers 60 and 120. A skew end cut end finish may be used on a culvert installed on a skew between skew numbers 50 and 130. THICK LAYERS SIMULTANEOUSLY ON BOTH SIDES OF CULVERT Reinforcement of pipe ends or contour grading of embankment slope shall be as specified. ONTARIO PROVINCIAL STANDARD DRAWING AND COMPACTED TO 100% STANDARD PROCTOR DRY DENSITY. CUT END FINISH Slope protection shall be as specified. CIRCULAR PIPE AND PIPE-ARCH **DRIVEWAY** All dimensions are in millimetres CORRUGATED STEEL PIPE DRIVEWAY SHALL BE CONSTRUCTED USING THE FOLLOWING: 150MM OF OPSS 1010 GRANULAR "A" BASE, VIRGIN CRUSH 225MM OF OPSS 1010 GRANULAR "B" SUB-BASE, TYPE I, CORRUGATED OUTSIDE AND SMOOTH INSIDE CULVERTS MAY BE SUBSTITUTED WITH CORRUGATED STEEL PIPE **DETAIL A-1 (N.T.S.)** VIRGIN CRUSH TYP. DRIVEWAY WITH CULVERT A-A' WHERE RECOMMENDED MARTERIAL STOCK IS NOT **CROSS-SECTION VIEW** OPSD 806.020 THROUGH 806.023 SHALL BE REVIEWED GRANULAR COMPACTION SHALL BE TO 98% SPMDD BEFORE CONSTRUCTION. CULVERT SHALL BE BACKFILLED VERTICAL SCALE = N.T.S. SITE SURVEY A' - NORTHWEST A - SOUTHEAST VIEWING SOUTHWEST 10. LEGAL PROPERTY BOUNDARY IS REFERENCED BY "R.G. MCKIBBON ONTARIO LAND SURVEYOR" ON MARCH 10, 1973. STEP-BEVEL ENTRANCE REFER TO OPSD 801.010 11. EXISTING TOPOGRAPHIC CONTOUR LINES AND LOCAL DITCH SQUARE END √-5.00m DRIVEWAY →-1.0% GRADE (MIN.) **600MM** REFER TO OPSD 801.010 ARE REFERENCED BY "DRONE SERVICES CANADA INC." LIDAR -1V:3H 300MM DEP. STONE SPLASH TO SLOW DOWN FLOW DETAIL REFER TO DETAIL B SURVEY ON JANUARY 09, 2023 AND "KING EPCM" GPS SURVEY ON JANUARY 11, 2023 RESPECTIVELY. 300MM DIA. C.S.P. CULVERT 12. UNIVERSAL TRANSVERSE MERCATOR (UTM): H: NAD83(CSRS) / UTM ZONE 17N; V: CGVD28 (HT2 0) GEOID. DETAIL A-3 (N.T.S.) DETAIL A-2 (N.T.S.) **TYP. STONE SPLASH** TYP. DITCH & CHECK DAM **CROSS-SECTION VIEW CROSS-SECTION VIEW** HORIZONTAL SCALE = N.T.S. VERTICAL SCALE = N.T.S. **Backfill Plan** VERTICAL SCALE = N.T.S. —1.20M—— -1.0% GRADE (MIN.) **DRIVEWAY SURFACE** Area(m2) Backfill Volume (m3) Backfill Depth(m) 31,908 32,261 1.0 Part-1 300MM MIN. 10,732 14,003 8.0 Part-2 GRANULAR MARTERIAL TO SLOW DOWN FLOW N/A 46,264 42,640 **Total** 1V: 2H RATIO BANK 1.2M WIDTH X 8.0M LENGTH TO WETLAND 300MM DIA. C.S.P. CULVERT 8.8M LENGTH MIN. **DETAIL B ENTRANCE CULVERT B-B' CROSS-SECTION VIEW** HORIZONTAL SCALE = N.T.S. VERTICAL SCALE = N.T.S. **B'-NORTHEAST B** - SOUTHWEST VIEWING NORTHWEST GRANULAR "B" TYPE I BACKFIL 200MM RIVER-RUN-STONE AT INLET AND

SCALE 1:2000

100m

200m

1cm = 20m

OUTLET

200mm GRANULAR "A" BEDDING COMPACTED TO 100% SPDD



APR. 21, 2023

Y. T. WANG

100228476

King EPCM

570 Hood Rd, Unit 26 Markham, ON, L3R 4G7 www.KingEPCM.com 647-459-5647 General@KingEPCM.com

OPSD 801.010

EX. WETLAND

200MM RIVER-RUN STONE AT

400mmØ CSP CULVERT

**GRAVEL** 

**DRIVEWAY** 

450MM DEP.

RIVER-RUN STONE CHECK DAM

DETAILS REFER TO "OPSD 219.180"

30M INTERVALS TOTAL 20

1000404455 ONTARIO INC. O/A. Wanderosa Tree Farms

PROJECT NAME

**CONSTRUCTION TOPSOIL FILL AND DRIVEWAY** 

PROJECT LOCATION

410B HWY48, BEAVERTON, ON **PART OF LOT 3 CONCESSION 14 INST. NO. 16025** 

PRINT TITLE

SITE GRADING PLAN

FILE No.

**EGR - 1.1** 

No.	ISSUED FOR:	DATE	DRAW BY	CHECK
V1	INTERNAL REVIEW	FEB. 08, 2023	ZW	
V2	CLIENT REVIEW	FEB. 27, 2023	ZW	
V3	CLIENT REVIEW	MAR. 21, 2023	ZW	
V5	ISSUED FOR PERMITS	APR. 21, 2023	QC	TW