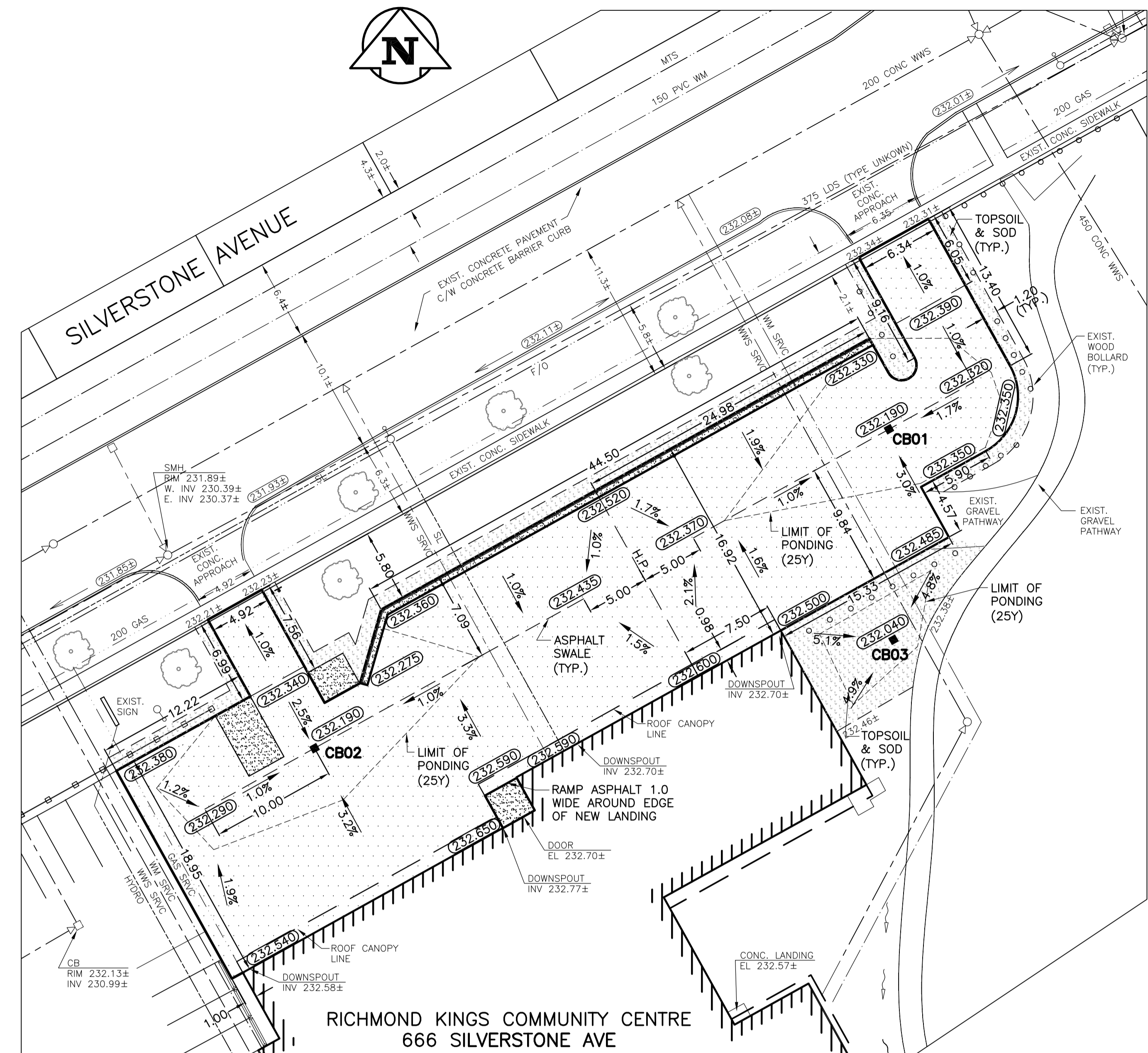


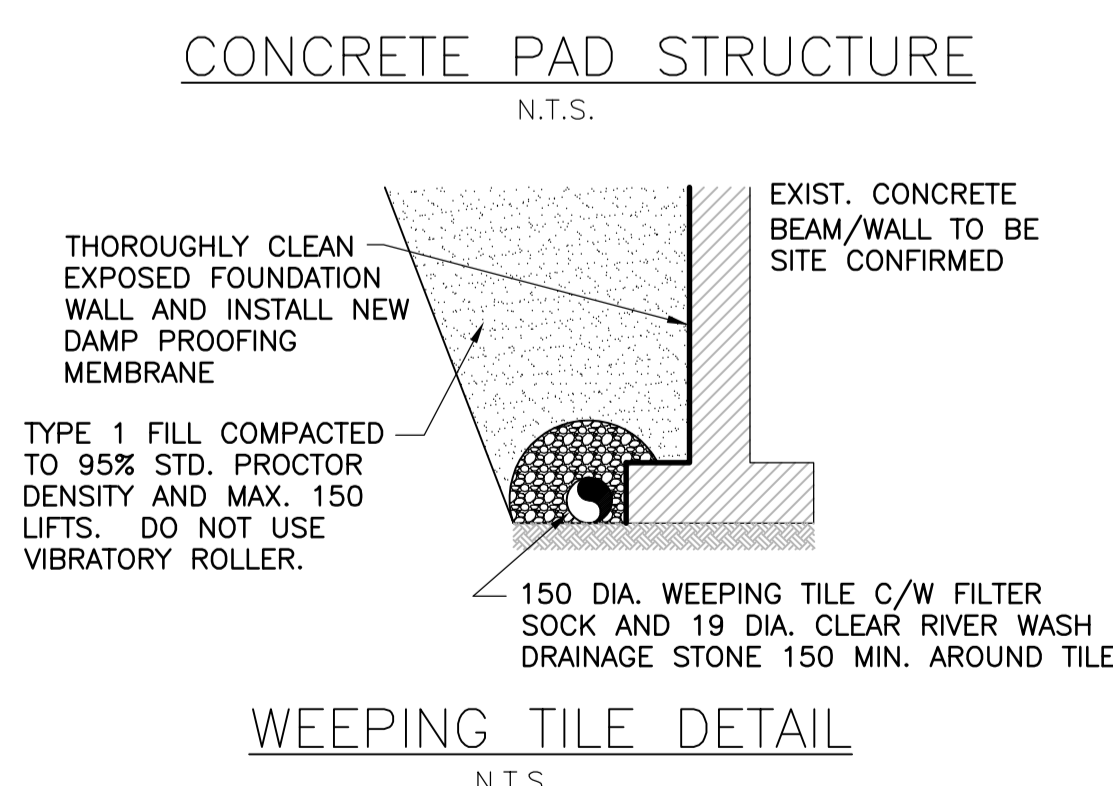
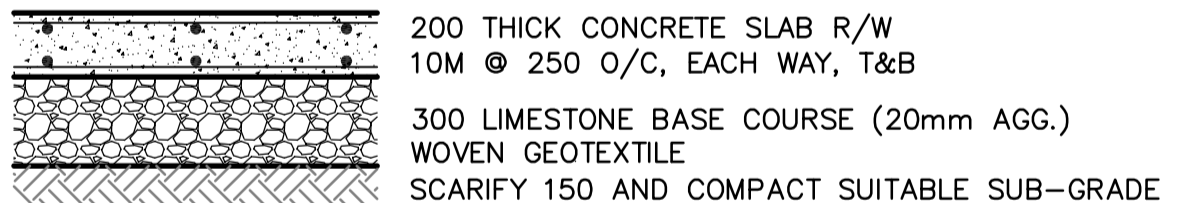
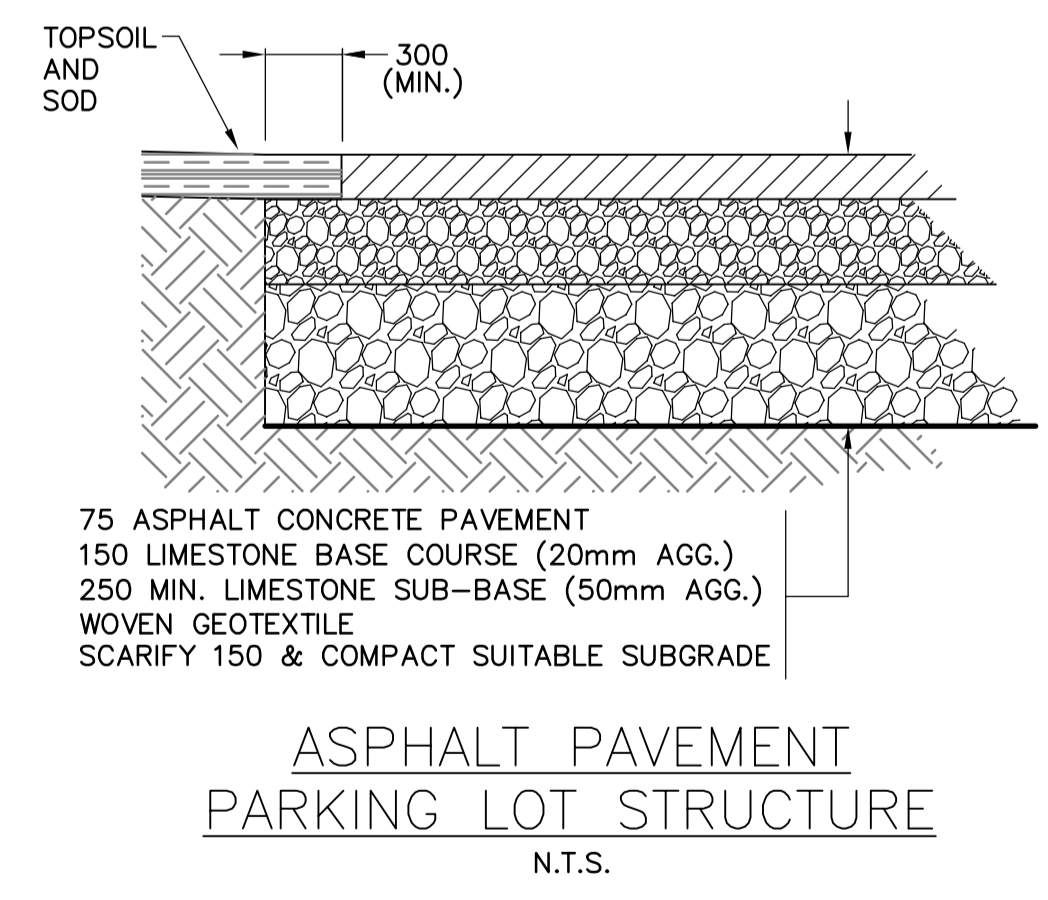
PROPOSED LAYOUT PLAN  
1:250



PROPOSED GRADING PLAN  
1:250

CONSTRUCTION NOTES:

- ALL PRODUCTS INCORPORATED IN THE WORK SHALL CONFORM TO THE CITY WINNIPEG "STANDARD CONSTRUCTION SPECIFICATIONS" AND BE REGISTERED IN THE CITY OF WINNIPEG LISTING OF APPROVED PRODUCTS OR AS SPECIFIED ON THIS DRAWING. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WINNIPEG "STANDARD CONSTRUCTION SPECIFICATIONS", LATEST EDITION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL UTILITIES, PIPES, SURVEY MARKERS, OR STRUCTURES, AND TO NOTIFY ALL RELEVANT UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CONTRACT ADMINISTRATOR OF ANY ERROR OR OMISSION PRIOR TO CONSTRUCTION.
- IN ACCORDANCE WITH THE CITY OF WINNIPEG SURVEY INFRASTRUCTURE PROTECTION PROGRAM, THE CONTRACTOR SHALL NOTIFY THE GEOMATICS BRANCH A MINIMUM 3 DAYS PRIOR TO START OF CONSTRUCTION.
- DESCRIPTION OF PROPERTY LIMITS, AND EXISTING AND/OR PROPOSED FEATURES RELATIVE TO THESE LIMITS AS SHOWN ON THIS DRAWING DO NOT REPRESENT A LEGAL SURVEY. GENIVAR MAKES NO REPRESENTATION OR GUARANTEE THAT THE PROPERTY LIMIT INFORMATION IS ACCURATE. GENIVAR ACCEPTS NO RESPONSIBILITY FOR DAMAGES, IF ANY, SUFFERED BY ANY THIRD PARTY AS A RESULT OF DECISIONS OR ACTIONS BASED ON THIS DRAWING.
- ALL AREAS AFFECTED BY CONSTRUCTION TO BE RESTORED TO THE ORIGINAL CONDITION OR BETTER UNLESS NOTED OTHERWISE ON THE DRAWING. ALL REGRADED/DISTURBED SOD AREAS TO RECEIVE TOPSOIL AND SOD UNLESS NOTED OTHERWISE.



**STORM WATER DISCHARGE CRITERIA**

- RUN-OFF FLOWS DETERMINED BY THE RATIONAL FORMULA METHOD  
 $Q = 0.278CIA$ , WHERE Q = RATE OF RUNOFF ( $m^3/s$ )  
 C = COEFFICIENT OF RUNOFF  
 I = RAINFALL INTENSITY (mm/HR)  
 A = DRAINAGE AREA ( $km^2$ )
- RAINFALL INTENSITY (I) = 5 YEAR C.O.W. DESIGN STORM, I = 110mm/HR  
 (I) = 25 YEAR C.O.W. DESIGN STORM, I = 154mm/HR
- 'Q' (5-YEAR) - PRE-DEVELOPMENT  
 CATCHMENT AREA = 0.3 Ha (or 0.73 ACRES)  
 'C' - ALLOWABLE = 0.35  
 ALLOWABLE DISCHARGE FROM SITE,  $Q_s = 32 L/s$
- 'Q' (25-YEAR) - POST DEVELOPMENT  
 TIME OF CONCENTRATION = 10 MINUTES  
 $Q_{25} = 89 L/s$   
 RESTRICTED FLOW, Q = 27 L/s (USING 100mm FLOW RESTRICTOR)  
 REQUIRED ON-SITE STORAGE = 37  $m^3$   
 AVAILABLE ON-SITE STORAGE = 36  $m^3$

**METRIC**  
 WHOLE NUMBERS INDICATE MILLIMETRES  
 DECIMALIZED NUMBERS INDICATE METRES

**APEGM**  
 Certificate of Authorization  
 GENIVAR Inc.  
 No. 5079 Date: February 4, 2011

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
150 mm WM	WATERMAIN	150 mm WM	---	GAS	---	300 mm LDS	LAND DRAINAGE SEWER	300 mm LDS
⊙	HYDRANT	●	---	HYDRO	---	250 mm CS	WASTE WATER SEWER	250 mm CS
⊗	VALVE	⊙	---	M.T.S.	---	---	MANHOLE	---
---	---	---	---	PEDESTAL	---	---	CATCH BASIN	---
---	---	---	---	GROUND ELEVATION	230.00	---	CURB INLET	---
---	---	---	---	PAVEMENT ELEVATION	(230.000)	---	SIGN	---
---	---	---	---	PROPERTY LINE	---	---	LAMP STANDARD	---
---	---	---	---	SURVEY BAR	---	---	UTILITY POLE	---
---	---	---	---	CURB STOP	---	---	---	---
---	---	---	---	TESTHOLE	---	---	---	---

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

NOTE:  
 LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTING AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

C.W.B.M. 72-028-232.176m  
 S. SIDE OF SILVERSTONE AVE. & AURORA ST., TBLT. ON TOP OF 0.05 DIA. X 2.4M IRON PIPE, 3.0M N. OF S.L. OF SILVERSTONE AVE. & 10.1M W. OF E.L. OF AURORA ST. PRODUCED FROM THE N.

DESIGNED BY R.C.  
 CHECKED BY D.T.B./B.D.E.  
 DRAWN BY R.C.  
 APPROVED BY B.D.E.  
 HOR. SCALE: 1:250 (A1)  
 VERT. SCALE:  
 ISSUED FOR REVIEW 11/02/04 R.C.  
 NO. REVISIONS DATE BY  
 DATE: FEBRUARY 2011

**GENIVAR**  
 10 PRAIRIE WAY WINNIPEG, MANITOBA R2J 3J8  
 PH: (204)-477-6650 FAX: (204)-474-2864

ENGINEER'S SEAL  
 R. CABIGTING  
 Member 24617  
 REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO. 101-17599-C02

**THE CITY OF WINNIPEG**  
 PLANNING, PROPERTY & DEVELOPMENT

LAND DRAINAGE IMPROVEMENTS AND PARKING LOT REDEVELOPMENT FOR THE RICHMOND KINGS COMMUNITY CENTRE AND ARENA

PROPOSED SITE PLAN

CITY DRAWING NO. 54-2011-C01  
 SHEET 2 OF 3  
 REV. 20