

1 SITE GRADING PLAN C2.1 1:300

GENERAL CONSTRUCTION NOTES:

- ALL CONSTRUCTION AND MATERIALS INCORPORATED IN THE WORK SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF WINNIPEG "STANDARD CONSTRUCTION SPECIFICATIONS", UNLESS NOTED OTHERWISE.
- LOCATIONS 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 EXISTENCE, EXACT LOCATION AND DEPTH OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES
- LOCATIONS OF PROPERTY LIMITS AND EXISTING AND/OR PROPOSED FEATURES RELATIVE TO THESE LIMITS AS SHOWN DO NOT REPRESENT A LEGAL SURVEY. SBC INC. MAKES NO REPRESENTATION OR GUARANTEE THAT THE PROPERTY LIMIT INFORMATION SHOWN IS ACCURATE, AND ACCEPTS NO RESPONSIBILITY FOR ANY DAMAGES SUFFERED BY ANY THIRD PARTY AS A RESULT OF DECISIONS OR ACTIONS BASED ON THIS DRAWING.
- ALL SURFACES AND ANY EXISTING UTILITIES DAMAGED OR DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO IT'S ORIGINAL CONDITION OR BETTER, OR REPLACED, AT THE CONTRACTOR'S EXPENSE.

100 mm ASPHALT (TYPE 1A) 75 mm BASE COURSE (CRUSHED LIMESTONE, GRANULAR B - 20 mm MAX. AGG.) 250 mm SUB-BASE (CRUSHED LIMESTONE, GRANULAR B - 50 mm MAX. AGG.)

NON-WOVEN GEOTEXTILE COMPACTED SUITABLE SUB-GRADE

- BASE COURSE AND SUB-BASE TO EXTEND MIN. 300 mm FROM EDGE OF ASPHALT OR BACK OF CONCRETE CURB

ASPHALT SURFACE STRUCTURE

NOTE: ASPHALT STRUCTURE BASED ON GEOTECHNICAL INVESTIGATION REPORT RECOMMENDATIONS COMPLETED BY TREK GEOTECHNICAL (DATED OCTOBER 8, 2021).

400 mm SUB-BASE (CRUSHED LIMESTONE, GRANULAR B - 50 mm MAX. AGG.)

150 mm BASE COURSE (CRUSHED LIMESTONE, GRANULAR B - 20 mm MAX. AGG.)

NON-WOVEN GEOTEXTILE COMPACTED SUITABLE SUB-GRADE

GRAVEL SURFACE STRUCTURE

NOTE:
GRAVEL STRUCTURE BASED ON GEOTECHNICAL INVESTIGATION RECOMMENDATIONS PROVIDED BY TREK GEOTECHNICAL (DATED OCTOBER 22, 2021).

STORM WATER MANAGEMENT CRITERIA

RUN-OFF FLOWS DETERMINED BY THE RATIONAL FORMULA METHOD Q = 0.278CIA, WHERE Q = RATE OF RUNOFF (cms) C = COEFFICIENT OF RUNOFF I = RAINFALL INTENSITY (mm/hr) A = DRAINAGE AREA (ha)

TIME OF CONCENTRATION, Tc = 10 min RAINFALL INTENSITY, I = 5 YEAR DESIGN STORM, I = 109.5 mm/hr I = 25 YEAR DESIGN STORM, I = 154.3 mm/hr

AREA OF PROPOSED WORK = 2,797 sq.m.

(NOTE: EXISTING DRAINAGE PATTERN SHALL BE MAINTAINED AND ALL RUNOFF SHALL BE DIRECTED TO RED RIVER VIA SURFACE DRAINAGE THROUGH PARK.)

	TOTAL SITE	TOTAL SITE W/ ALTERNATE SURFACE
IMPERVIOUS AREA	1,652 sq.m.	2,282 sq.m.
PERVIOUS AREA	1,145 sq.m.	515 sq.m.
C - PRE-DEVELOPMENT	0.26	0.26
C - POST-DEVELOPMENT	0.66	0.83
Q - 5Y PRE-DEVELOPMENT	0.022 cms	0.022 cms
Q - 5Y POST-DEVELOPMENT	0.057 cms	0.070 cms
Q - 25Y PRE-DEVELOPMENT	0.031 cms	0.031 cms
Q - 25Y POST-DEVELOPMENT	0.080 cms	0.099 cms
Q - 5Y INCREASE	0.035 cms	0.048 cms
Q - 25Y INCREASE	0.049 cms	0.068 cms

150_WM	WATERMAIN	150 WM
250_WWS	WASTEWATER	150 WWS
300_LDS	LAND DRAINAGE SEWER	300 LDS
-	HYDRANT ASSEMBLY	-
\otimes	GATE VALVE	•
۵,	CURB STOP	•,
	REDUCER	H
0	MANHOLE	
	CATCH BASIN	
riangle	CATCH PIT	▼
<u></u>	CLEAN OUT	—
•	TESTHOLE	
+	SURVEY BAR	
~	SIGN	
•	UTILITY POLE	
	UTILITY PEDESTAL	
	HYDRO	
	GAS	
	MTS	
	TREE LINE	
	CULVERT	c====3
>>>>>	SWALE	>>>>>
	DIRECTION OF FLOW	─ ►
235.380	GROUND ELEVATION	235.38
235.38	DITCH ELEVATION	235.38
<u>235.400</u>	ROAD ELEVATION	235.400
EXISTING	LEGEND	PROPOSED

3 21.11.02 ISSUED FOR CONSTRUCTION - ISSUED FOR 99% REVIEW 1 21.08.20 ISSUED FOR 66% REVIEW 0 21.07.05 ISSUED FOR 33% REVIEW REVISION / ISSUANCE

ENGINEERS GEOSCIENTISTS MANITOBA Certificate of Authorization Sison Blackburn Consulting Inc. No. 5581



architecture inc.



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ST. VITAL PARK MAINTENANCE FACILITY

190 RIVER ROAD

SITE GRADING PLAN

20105

21.10.02

METRIC WHOLE NUMBERS INDICATE MILLIMETRES DECIMALIZED NUMBERS INDICATE METRES