R.J. Burnside & Associates Limited 6990 Creditview Road, Unit 2 Mississauga ON L5N 8R9 CANADA
telephone (905) 821-1800 **fax** (226) 526-9660 **web** www.rjburnside.com

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Stormwater Management Brief

Date: June 17, 2025 **Project No.:** 300058248.1000

Project Name: Sandbanks River Country Campground - Site Plan

Client Name: Summerhill Resorts Ltd.

Submitted To: Ina Rivard

Submitted By: Bob Garner

1.0 Introduction

The Sandbanks River Country Campground (the Site) is located at 1854 County Road 18 in Prince Edward County. It is an existing campground, there are no plans for expansion or other changes to the Site that would impact the Site's Stormwater Management at this time. The Site has an area of approximately 9.3 ha and borders the Outlet River of East Lake to the Northeast and Country Road 18 to the Southwest.

2.0 Existing Topography

The layout of the Site and existing topography is shown on the appended topographic survey. R.J. Burnside & Associates Limited (Burnside) conducted a site visit on May 15, 2025, to review site drainage features. In general, the topography slopes up from the edge of the Outlet River to the inland centre of the Site. Most of the Site drains towards the Outlet River. In isolated locations, areas of the Site drain towards the County Road 18 right-of-way, some isolated areas of the County Road 18 right-of-way drain onto the Site.

3.0 Existing Stormwater Management

There are no existing stormwater quantity or quality controls on the Site. There are no existing erosion or sediment controls present on the Site. Given the native soil conditions, it is expected that minimal stormwater run-off occurs at the Site. Samples of the native soil were taken at locations SS2 and SS4, as shown on drawing S1. Grain size analysis was completed on these samples and results are appended for reference. The grain size analysis concluded that the native soil is almost completely poorly graded sand with minimal fines present, therefore the

native soil is porous and conducive to infiltration of stormwater. During our site investigation, there were not any areas of significant erosion or other drainage related concerns identified.

4.0 Summary

The Site generally slopes towards the Outlet River which is where nearly all stormwater run-off is directed. Given the native sandy soil conditions, it is expected that nearly all of the stormwater on the Site infiltrates. During our site investigation, there were not any areas of significant erosion identified. There are no plans for expansion or other changes to the Site that would impact the Site's Stormwater Management at this time

R.J. Burnside & Associates Limited

Bob Garner, P.Eng.
Project Engineer
BG:rk

Enclosure(s) Topographic Survey
Drawing S1
Grain Size Analysis – SS2
Grain Size Analysis – SS4

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Topographic Survey

PLAN OF SURVEY WITH
TOPOGRAPHIC DETAIL OF

PART OF LOT A, LYING BETWEEN EAST LAKE AND LAKE ONTARIO

GEOGRAPHIC TOWNSHIP OF ATHOL

COUNTY OF PRINCE EDWARD

SCALE 1 : 400 METRES

0 5 10 20 30

BEARING NOTE

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK OBSERVATIONS, UTM ZONE 18 (75° WEST LONGITUDE) NAD83(CSRS)-(7)2010.

FOR BEARING COMPARISONS, THE FOLLOWING ROTATIONS WERE APPLIED: P1 - 1°33'00" CLOCKWISE

DISTANCE NOTES - METRIC

DISTANCES AND COORDINATES ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999987.

CONTOUR NOTE

CONTOURS SHOWN HEREON ARE DRAWN AT 0.20 METRE INTERVALS.

ELEVATION NOTE

ELEVATIONS ARE GEODETIC AND REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM (CGVD2878) BY DIRECT MEASUREMENT TO A REAL TIME NETWORK.

LEGEND

■	DENOTES SURVEY MONUMENT FOUND
□	DENOTES SURVEY MONUMENT SET
SSIB	DENOTES SHORT STANDARD IRON BAR
SIB	DENOTES STANDARD IRON BAR
IB	DENOTES IRON BAR
WIT	DENOTES WITNESS
M	DENOTES MEASURED
P1	DENOTES PLAN 47R-2693
P2	DENOTES PLAN 47R-840
425	DENOTES JOHN THOMAS RANSOM, O.L.S.
1,363	DENOTES HUME AND PICKARD LTD., O.L.S.
DSE	DENOTES DOOR SILL ELEVATION
GSE	DENOTES GARAGE SILL ELEVATION
GDW	DENOTES GRAVEL DRIVEWAY
ANT	DENOTES ANTENNA
⟵AN	DENOTES ANCHOR POINT
BL	DENOTES BOLLARD
MB	DENOTES MAILBOX
POSC	DENOTES SECURITY CAMERA POLE
POU	DENOTES UTILITY POLE
POLP	DENOTES LIGHT POST
POF	DENOTES FLAG POLE
OH	DENOTES OVERHEAD UTILITY WIRES
MH	DENOTES MAINTENANCE HOLE
AC	DENOTES AIR CONDITIONER UNIT
BF	DENOTES BOARD FENCE
HR	DENOTES HANDRAIL
UV	DENOTES UTILITY VAULT
TRF	DENOTES ELECTRICAL TRANSFORMER
	DENOTES FENCE LINE(TYPE AS MARKED)
FS	DENOTES FRAME SHED
CONC	DENOTES CONCRETE
PTB	DENOTES PLANTER BOX
	DENOTES SIGN
	DENOTES CONIFEROUS TREE W/TRUNK DIAMETER
	DENOTES DECIDUOUS TREE W/TRUNK DIAMETER
	DENOTES SHRUB

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT AND THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON (FIELD NOTE DATE).

DRAFT

(SIGNATURE DATE) ***, O.L.S.

DATE

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER V-*****

INTEGRATION DATA

OBSERVED REFERENCE POINTS DERIVED FROM GPS OBSERVATIONS USING A REAL TIME NETWORK AND ARE REFERRED TO UTM ZONE 18 (75° WEST LONGITUDE) NAD83(CSRS)-(7)2010.
URBAN ACCURACY PER SEC. 14(2), O.REG. 216/10.

POINT ID	NORTHING	EASTING
A	4863956.50	329205.96
B	4863639.08	329548.64

CAUTION: COORDINATES CANNOT IN THEMSELVES BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

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copies available at ProtectYourBoundaries.ca

DRAFTED BY	CHECKED	NUMBER	SECTION	REVISION DATE (YY-MM-DD)	
KS	A-050620				A-050620

PLAN OF SURVEY WITH
TOPOGRAPHIC DETAIL OF

PART OF LOT A, LYING BETWEEN EAST LAKE AND LAKE ONTARIO

GEOGRAPHIC TOWNSHIP OF ATHOL

COUNTY OF PRINCE EDWARD

SCALE 1 : 400 METRES

0 1 2 3 4 5 15 30

BEARING NOTE

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK OBSERVATIONS, UTM ZONE 18 (75° WEST LONGITUDE) NAD83(CSRS)v7(2010).

FOR BEARING COMPARISONS, THE FOLLOWING ROTATIONS WERE APPLIED: P1 - 1°33'00" CLOCKWISE

DISTANCE NOTES - METRIC

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CONTOUR NOTE

CONTOURS SHOWN HEREON ARE DRAWN AT 0.20 METRE INTERVALS.

ELEVATION NOTE

ELEVATIONS ARE GEODETIC AND REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM (CGVD28:78) BY DIRECT MEASUREMENT TO A REAL TIME NETWORK.

LEGEND

■	DENOTES SURVEY MONUMENT FOUND
□	DENOTES SURVEY MONUMENT SET
SSIB	DENOTES SHORT STANDARD IRON BAR
SIB	DENOTES STANDARD IRON BAR
IB	DENOTES IRON BAR
WIT	DENOTES WITNESS
M	DENOTES MEASURED
P1	DENOTES PLAN 47R-2693
P2	DENOTES PLAN 47R-840
425	DENOTES JOHN THOMAS RANSOM, O.L.S.
1363	DENOTES HUME AND PICKARD LTD., O.L.S.
DSE	DENOTES DOOR SILL ELEVATION
GSE	DENOTES GARAGE SILL ELEVATION
GDW	DENOTES GRAVEL DRIVEWAY
ANT	DENOTES ANTENNA
AN	DENOTES ANCHOR POINT
BL	DENOTES BOLLARD
POMB	DENOTES MAILBOX
POSC	DENOTES SECURITY CAMERA POLE
POU	DENOTES UTILITY POLE
POLP	DENOTES LIGHT POST
POF	DENOTES FLAG POLE
-OH-	DENOTES OVERHEAD UTILITY WIRES
MH	DENOTES MAINTENANCE HOLE
AC	DENOTES AIR CONDITIONER UNIT
BF	DENOTES BOARD FENCE
	DENOTES HANDRAIL
UV	DENOTES UTILITY VAULT
TRF	DENOTES ELECTRICAL TRANSFORMER
—x—	DENOTES FENCE LINE(TYPE AS MARKED)
FS	DENOTES FRAME SHED
CONC.	DENOTES CONCRETE
PTB	DENOTES PLANTER BOX
	DENOTES SIGN
0.10ø	DENOTES CONIFEROUS TREE W/TRUNK DIAMETER
0.10ø	DENOTES DECIDUOUS TREE W/TRUNK DIAMETER
	DENOTES SHRUB

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(SIGNATURE DATE) DRAFT

DATE ***, O.L.S.

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER V-*****

INTEGRATION DATA

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URBAN ACCURACY PER SEC. 14(2), O.REG. 216/10.

POINT ID	NORTHING	EASTING
A	4863596.50	321005.98
B	4863031.08	321548.84

CAUTION: COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN

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PARTY CHIEF:BP	DRAWN:AAC	CHECKED:*	PLOT DATE: JUNE 06, 2025	A-050620
FILE: A-050620-PSTP				

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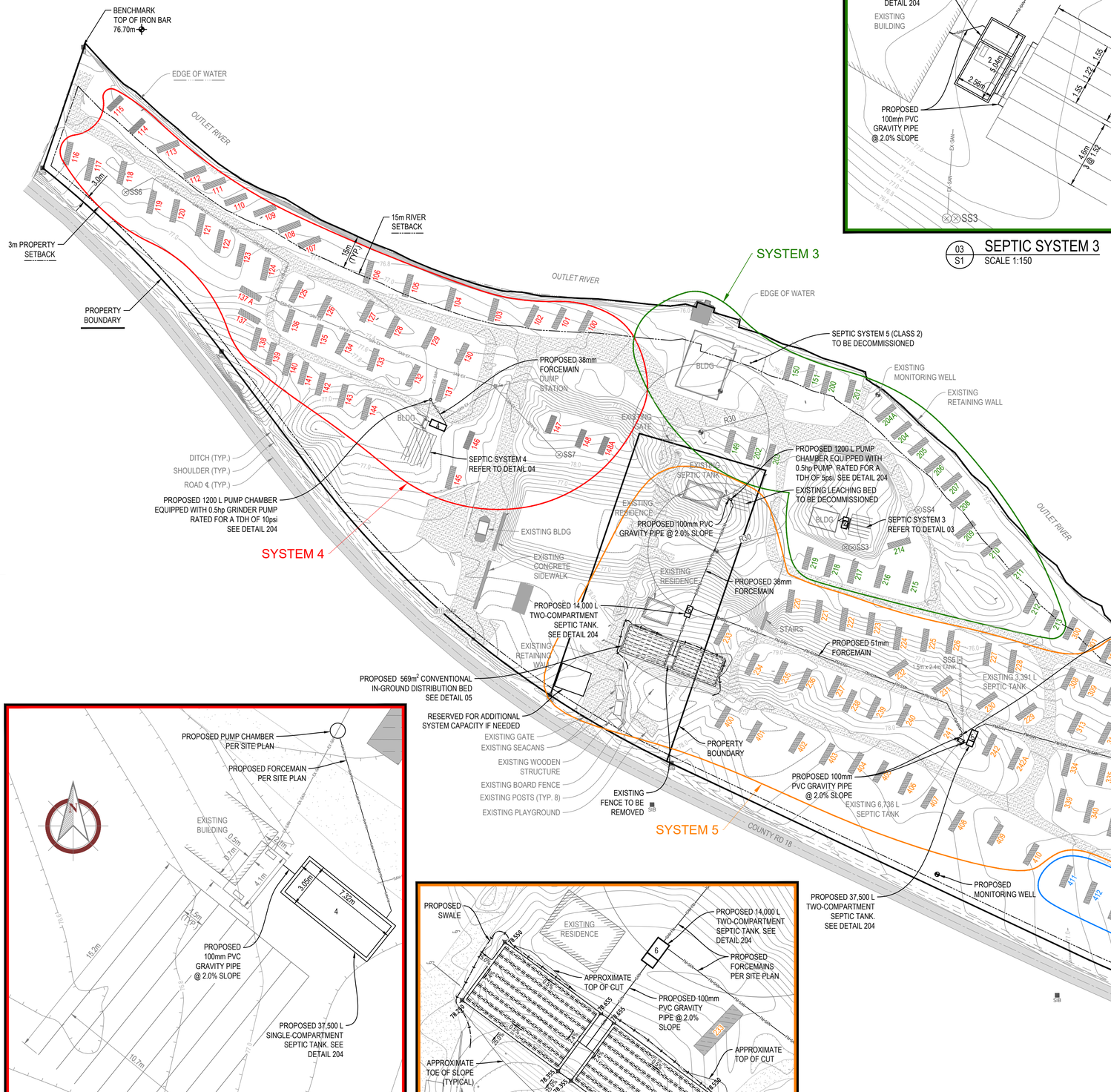
Drawing S1 – Sewage System Upgrades

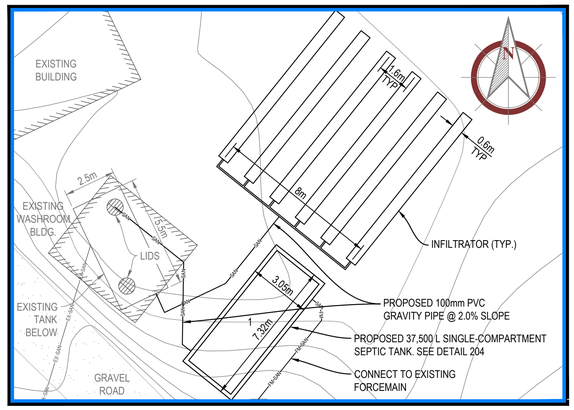


03 / S1 **SEPTIC SYSTEM 3**
SCALE 1:150

OBC Table 8.2.1.6.A Minimum Clearnaces for *Treatment Units*	
Object	Minimum Clearance (m)
Structure	1.5
Well	15
Lake	15
Pond	15
Reservoir	15
River	15
Spring	15
Stream	15
Property Line	3

OBC Table 8.2.1.6.B Minimum Clearnaces for *Distribution Piping*	
Object	Minimum Clearance (m)
Structure	5 (* 5)
Well with a watertight casing to a depth of at least 6m	15 (* 15)
Any other well	30 (* 30)
Lake	15 (* 15)
Pond	15 (* 15)
Reservoir	15 (* 15)
River	15 (* 15)
Spring not used as a source of potable water	15 (* 15)
Stream	15 (* 15)
Property Line	3 (* 3)

* Per OBC 8.7.4.2.(11), "the distances set out in Column 2 of Table 8.2.1.6.B. shall be increased by twice the height that the *leaching bed* is raised above the original grade." Resultant distances shown above are for a distribution bed raised 0m .



01 / S1 **SEPTIC SYSTEM 1**
SCALE 1:150

04 / S1 **SEPTIC SYSTEM 4**
SCALE 1:150

05 / S1 **SEPTIC SYSTEM 5**
SCALE 1:400

SCALE 1:1000 (A1 PLOT)
25m 0 25m 50m

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CONSULTING ENGINEERS
PETERBOROUGH
BELLEVILLE
KINGSTON
1620 WALLBRIDGE LOYALIST ROAD
BELLEVILLE, ONTARIO, K8N 4Z5
PHONE: 613-966-3068
FAX: 613-966-3087

NOTES:
1. ALL WORK SHALL BE IN ACCORDANCE WITH RELEVANT CODES AND GUIDELINES.
2. ALL DRAWINGS AND ADDENDA ARE TO BE READ AS, AND IN CONJUNCTION WITH THE SPECIFICATIONS.
3. ALL EQUIPMENT SHALL BE INSTALLED AS SPECIFIED OR APPROVED EQUIVALENT.
4. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH WORK AND BE RESPONSIBLE FOR SAME.
5. CONTRACTOR MUST REPORT ANY DISCREPANCIES TO ENGINEER FOR RESOLUTION BEFORE COMMENCING THE WORK.
6. ANY CHANGES MUST BE APPROVED BY THE ENGINEER.

A / B — A DETAIL NO. / B DRAWING NO. – WHERE DETAILED

LEGEND (EXISTING FEATURES)
- ASPHALT
- CONCRETE
- GRAVEL
- PROPERTY BOUNDARY
- PROPERTY SETBACK
- CENTRE OF ROAD
- EDGE OF SHOULDER
- EDGE OF WATER
- DITCH
- POLE (UTILITY / LIGHT)
- WELL
- TRAILER (APPROXIMATE LOCATION)
- CABIN (APPROXIMATE LOCATION)
- SATELLITE SEPTIC SYSTEM (WELL TILE)
- SATELLITE SEPTIC SYSTEM (TANK)
- SANITARY (ASSUMED)

REVISION	DESCRIPTION	DATE
01	–	YY/MM/DD

NORTH

STAMP

PROJECT
SANDBANKS CAMPGROUND ECA
1854 COUNTY ROAD 18
CHERRY VALLEY, ONTARIO

SANDBANKS RIVER COUNTRY CAMPGROUND

DRAWING TITLE
PROPOSED SITE PLAN

DESIGNED BY: D. COOPER
DRAWN BY: N.W./A.B./C.C.
REVIEWED BY: C. MITZ
APPROVED BY: C. MITZ
PROJECT DATE: 2018/03/28 (YYYY/MM/DD)
PROJECT #: 17-3-8225
DRAWING #: S1
DRAWING SCALE (ISO A1): HOR: 1 : 1,000 VER: N/A

FILE PATH: P:\Belleville Project\8000\1738225 – Sandbanks Campground ECA\Drawings\Working Drawings\1738225 – Sandbanks Campground Septic.dwg
PLOT DATE: 2024 / 10 / 11 @ 12:07 PM
BORDER SIZE: ISO A1 (841mm x 594mm)
(METRIC SCALE – ALL DIMS IN MILLIMETERS U.N.O.)
CAD PLOTTER: Curtis Clark

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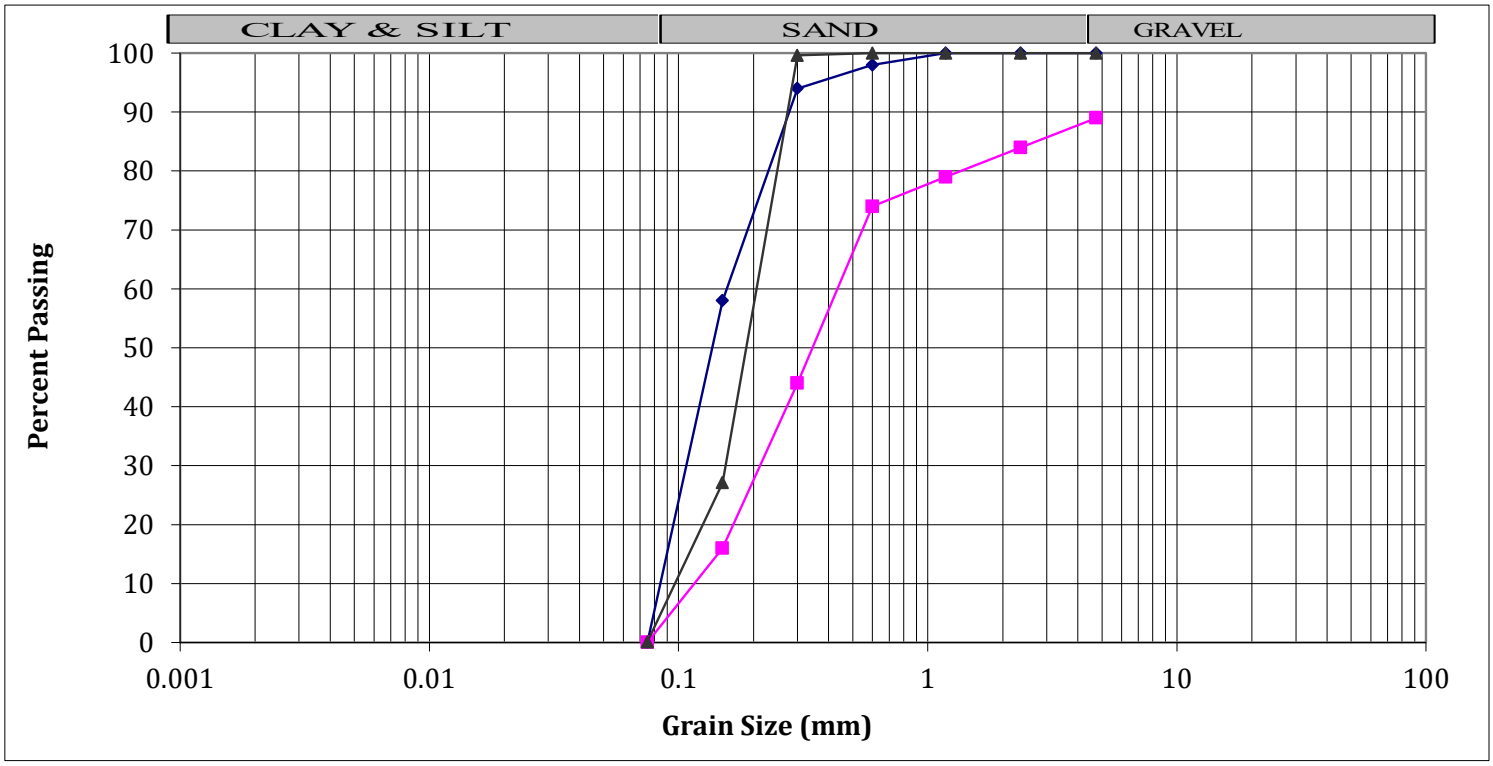
Grain Size Analysis – SS2

SOIL GRAIN SIZE ANALYSIS



SAMPLE SITE: Sandbanks River Country Campground
ANALYSIS BY: Shane Galloway
SAMPLE MATRIX: Native
DEPTH (m): 1.4
SAMPLE No.: SS2
MASS OF DRY SAMPLE (g): 100

Poorly graded sands, little fines
SP = (2<T<8 min/cm)

	△	◇	□
D_{60} =	0.21	0.16	0.43
D_{30} =	0.17	0.11	0.21
D_{10} =	0.10	0.16	0.13
C_U =	2.19	1.00	3.31
C_C =	1.43	0.47	0.79

SIEVE #	Screen Opening		Weight Recorded	Net Retained	Percent Retained	Percent Passed	Percent Passed	Percent Passed
						Sample	*Envelope*	*Envelope*
4	4.75			0	0.0	100.0	100	89
8	2.36			0.0	0.0	100.0	100	84
16	1.18			0.0	0.0	100.0	100	79
30	0.6			0.0	0.0	100.0	98	74
50	0.3			0.4	0.4	99.6	94	44
100	0.15			72.5	72.5	27.1	58	16
200	0.075			27.0	27.0	0.1	0.01	0.01
PAN				0.1	0.1			

CLIENT: SRCC
DATE: 17/4/2018
PROJECT No. 17-3-8225

1620 Wallbridge-Loyalist Road
Belleville, Ontario
Tel: 613-966-3068
Fax: 613-966-3087
www.greergalloway.com

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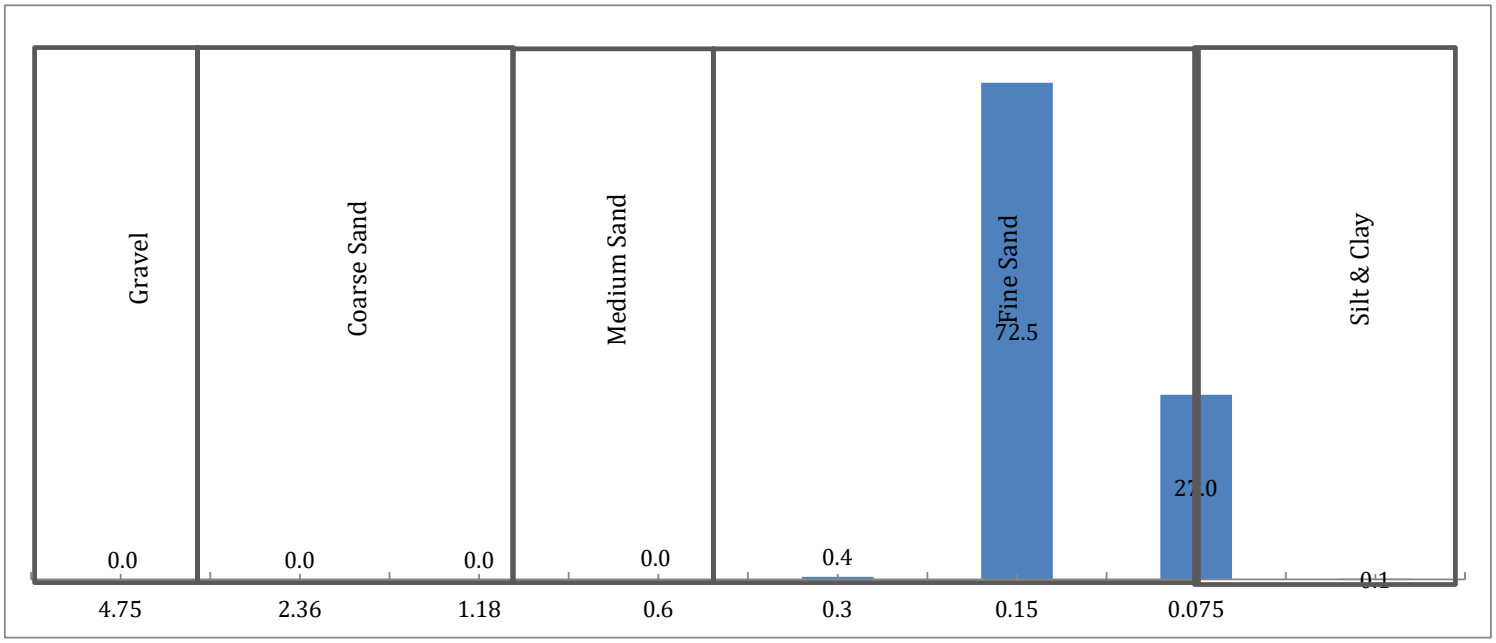
April 17, 2018

GRAIN SIZE DISTRIBUTION CURVE



SAMPLE SITE: Sandbanks River Country Campground
ANALYSIS BY: Shane Galloway
SAMPLE MATRIX: Native
DEPTH (m): 1.4
SAMPLE No.: SS2
MASS OF DRY SAMPLE (g): 100

Poorly graded sands, little fines
SP = (2<T<8 min/cm)

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CONSULTING ENGINEERS

April 17, 2018

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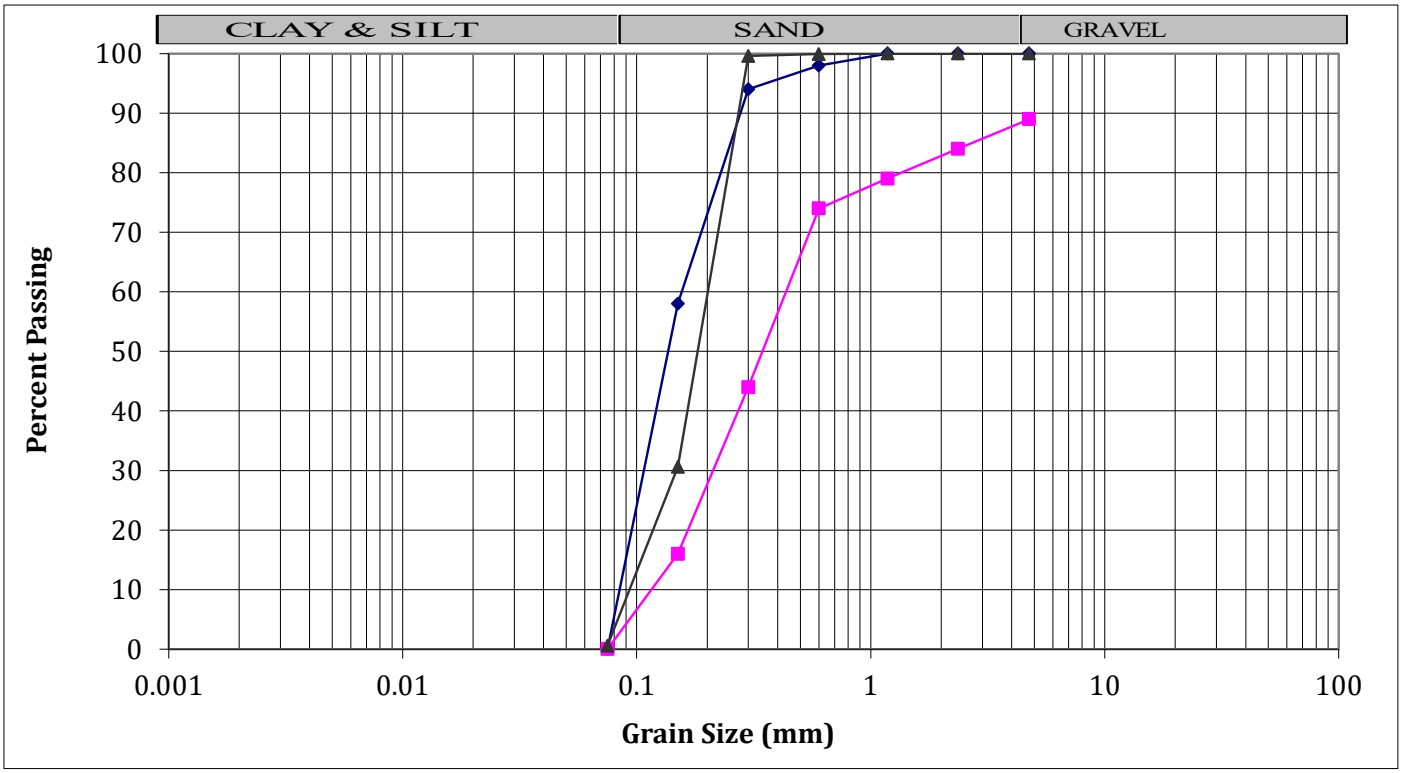
Grain Size Analysis – SS4

Grain Size Analysis – SS4

SOIL GRAIN SIZE ANALYSIS



SAMPLE SITE: Sandbanks River Country Campground Poorly graded sands, little fines
ANALYSIS BY: Shane Galloway **SP =** (2<T<8 min/cm)
SAMPLE MATRIX: Native
DEPTH (m): 0.4
SAMPLE No.: SS4
MASS OF DRY SAMPLE (g): 100

	△	◇	□
D_{60} =	0.21	0.16	0.43
D_{30} =	0.18	0.11	0.21
D_{10} =	0.90	0.16	0.13
C_U =	0.23	1.00	3.31
C_C =	0.17	0.47	0.79

SIEVE #	Screen Opening	Weight Recorded	Net Retained	Percent Retained	Percent Passed	Percent Passed	Percent Passed
					Sample	*Envelope*	*Envelope*
4	4.75		0	0.0	100.0	100	89
8	2.36		0.0	0.0	100.0	100	84
16	1.18		0.0	0.0	100.0	100	79
30	0.6		0.1	0.1	99.9	98	74
50	0.3		0.3	0.3	99.6	94	44
100	0.15		69.0	69.0	30.6	58	16
200	0.075		30.0	30.0	0.6	0.01	0.01
PAN			0.6	0.6			

CLIENT: SRCC
DATE: 17/4/2018
PROJECT No. 17-3-8225

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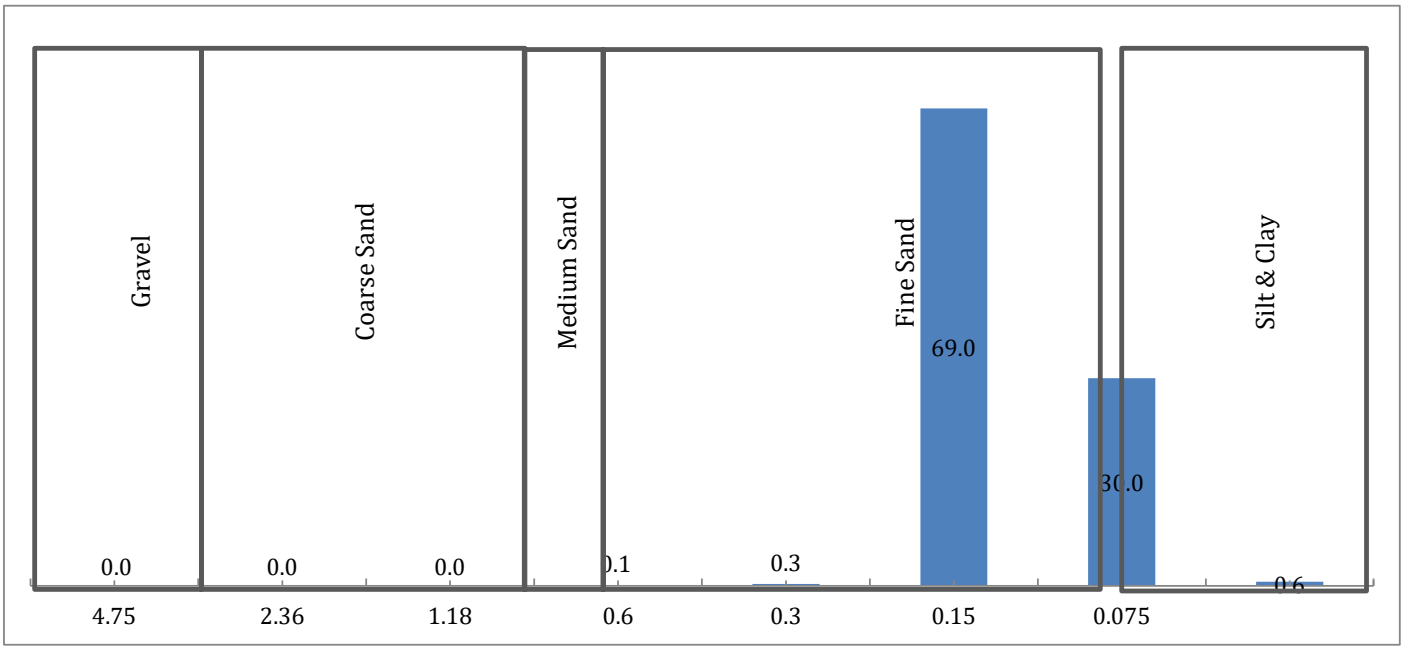
April 17, 2018

GRAIN SIZE DISTRIBUTION CURVE



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SAMPLE MATRIX: Native
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MASS OF DRY SAMPLE (g): 100

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April 17, 2018