

December 17, 2020
File: PE4909-LET.01

Richmond Churchill Limited Partnership
200-485 Bank Street
Ottawa, Ontario
K2P 1Z2

Attention: **Ms. Josie Tavares**

Subject: **Response to City Comments**
City File No. D02-02-20-0045 and D07-12-20-0081
Re: Phase II ESA and Geotechnical Investigation (Reports PE4909-2 and PG5351-1)
319, 325, 327, Richmond Road, 381 Churchill Avenue North, and 380 Winona Avenue
Ottawa, Ontario

154 Colonnade Road South
Ottawa, Ontario
Canada, K2E 7J5
Tel: (613) 226-7381
Fax: (613) 226-6344

Geotechnical Engineering
Environmental Engineering
Hydrogeology
Geological Engineering
Materials Testing
Building Science
Archaeological Services

www.patersongroup.ca

Dear Madam,

Paterson Group (Paterson) has prepared this letter in response to the comments issued by the City of Ottawa (City) regarding the project at the aforementioned address. Specifically, the responses addressed herein pertain to the comments issued on September 25, 2020 regarding the Phase II Environmental Site Assessment and the Geotechnical Investigation.

Infrastructure Comments

Phase II ESA

32. The results of the additional groundwater testing are attached. The updated Phase II ESA drawings have also been attached.
33. All impacted soil will be removed from site and disposed of at a licensed waste facility during the redevelopment of the property. No impacted soil will remain on site following redevelopment.

Geotechnical Investigation

34. The requirement of a sewer use agreement prior to discharge to the municipal sewer system is acknowledged.

We trust this information satisfies your requirements.

Paterson Group Inc.



Joey R. Villeneuve, M.A.Sc. P.Eng.



Michael Beaudoin, P.Eng., QP_{ESA}

Attachments:

- ☐ Analytical Test Results
- ☐ Revised Phase II ESA Drawings



Certificate of Analysis

Paterson Group Consulting Engineers

154 Colonnade Road South
Nepean, ON K2E 7J5
Attn: Mike Beaudoin

Client PO: 30439
Project: PE4909
Custody: 128511

Report Date: 16-Sep-2020
Order Date: 7-Aug-2020

Order #: 2032464

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2032464-01	17-01
2032464-02	17-03
2032464-03	17-05

Approved By:



Dale Robertson, BSc
Laboratory Director

Certificate of Analysis

Report Date: 16-Sep-2020

Client: Paterson Group Consulting Engineers

Order Date: 7-Aug-2020

Client PO: 30439

Project Description: PE4909

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
BTEX by P&T GC-MS	EPA 624 - P&T GC-MS	8-Aug-20	8-Aug-20
PHC F1	CWS Tier 1 - P&T GC-FID	7-Aug-20	11-Aug-20
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	11-Aug-20	11-Aug-20

Certificate of Analysis

Report Date: 16-Sep-2020

Client: Paterson Group Consulting Engineers

Order Date: 7-Aug-2020

Client PO: 30439

Project Description: PE4909

Client ID:	17-01	17-03	17-05	-
Sample Date:	05-Aug-20 09:00	05-Aug-20 09:00	05-Aug-20 09:00	-
Sample ID:	2032464-01	2032464-02	2032464-03	-
MDL/Units	Water	Water	Water	-

Volatiles

Benzene	0.5 ug/L	<0.5	<5.0 [1]	3.8	-
Ethylbenzene	0.5 ug/L	<0.5	23.9	5.7	-
Toluene	0.5 ug/L	<0.5	<5.0 [1]	0.6	-
m,p-Xylenes	0.5 ug/L	<0.5	2250	4.4	-
o-Xylene	0.5 ug/L	<0.5	<5.0 [1]	<0.5	-
Xylenes, total	0.5 ug/L	<0.5	2250	4.4	-
Toluene-d8	Surrogate	102%	105%	120%	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	243000	962	-
F2 PHCs (C10-C16)	100 ug/L	<100	-	<100	-
F3 PHCs (C16-C34)	100 ug/L	<100	-	<100	-
F4 PHCs (C34-C50)	100 ug/L	<100	-	<100	-

Certificate of Analysis

Report Date: 16-Sep-2020

Client: Paterson Group Consulting Engineers

Order Date: 7-Aug-2020

Client PO: 30439

Project Description: PE4909

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Volatiles									
Benzene	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Xylenes, total	ND	0.5	ug/L						
Surrogate: Toluene-d8	82.4		ug/L		103	50-140			

Certificate of Analysis

Report Date: 16-Sep-2020

Client: Paterson Group Consulting Engineers

Order Date: 7-Aug-2020

Client PO: 30439

Project Description: PE4909

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L	ND			NC	30	
Volatiles									
Benzene	ND	0.5	ug/L	ND			NC	30	
Ethylbenzene	ND	0.5	ug/L	ND			NC	30	
Toluene	ND	0.5	ug/L	ND			NC	30	
m,p-Xylenes	ND	0.5	ug/L	ND			NC	30	
o-Xylene	ND	0.5	ug/L	ND			NC	30	
Surrogate: Toluene-d8	82.3		ug/L		103	50-140			

Certificate of Analysis

Report Date: 16-Sep-2020

Client: Paterson Group Consulting Engineers

Order Date: 7-Aug-2020

Client PO: 30439

Project Description: PE4909

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	1700	25	ug/L	ND	85.0	68-117			
F2 PHCs (C10-C16)	1670	100	ug/L	ND	104	60-140			
F3 PHCs (C16-C34)	4570	100	ug/L	ND	117	60-140			
F4 PHCs (C34-C50)	3070	100	ug/L	ND	124	60-140			
Volatiles									
Benzene	38.7	0.5	ug/L	ND	96.6	60-130			
Ethylbenzene	37.8	0.5	ug/L	ND	94.6	60-130			
Toluene	39.4	0.5	ug/L	ND	98.5	60-130			
m,p-Xylenes	78.8	0.5	ug/L	ND	98.5	60-130			
o-Xylene	39.9	0.5	ug/L	ND	99.8	60-130			
Surrogate: Toluene-d8	79.7		ug/L		99.6	50-140			

Certificate of Analysis

Client: Paterson Group Consulting Engineers

Client PO: 30439

Report Date: 16-Sep-2020

Order Date: 7-Aug-2020

Project Description: PE4909

Qualifier Notes:

Login Qualifiers :

Container(s) - Bottle and COC sample ID don't match - PHCs read 17-02

Applies to samples: 17-05

Sample Qualifiers :

1 : Elevated detection limit due to dilution required because of high target analyte concentration.

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

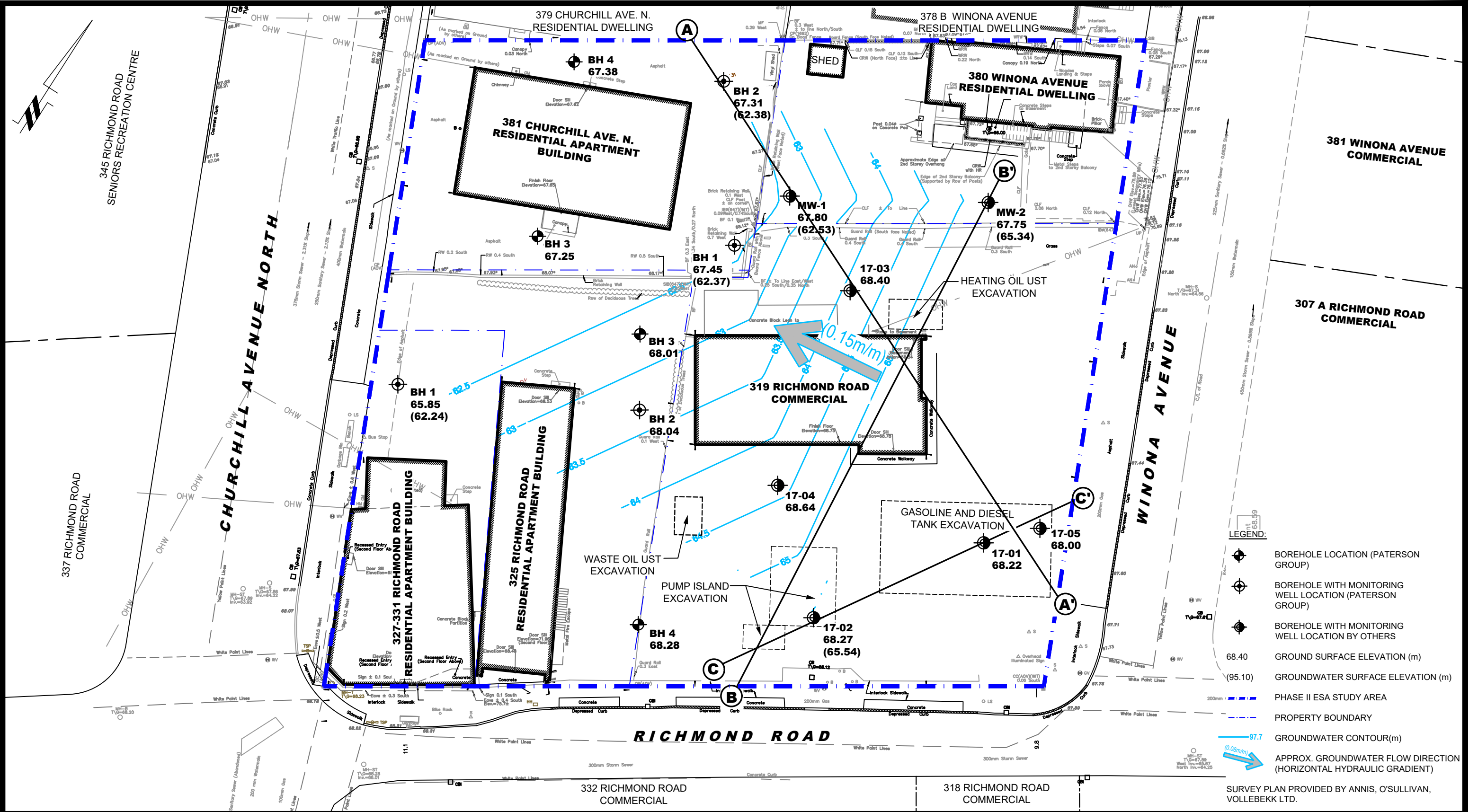
RPD: Relative percent difference.

NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.





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NO.	REVISIONS	DATE	INITIAL

RICHMOND CHURCHILL LIMITED PARTNERSHIP
PHASE II - ENVIRONMENTAL SITE ASSESSMENT
327 RICHMOND ROAD

OTTAWA,
Title:

ONTARIO

TEST HOLE LOCATION PLAN

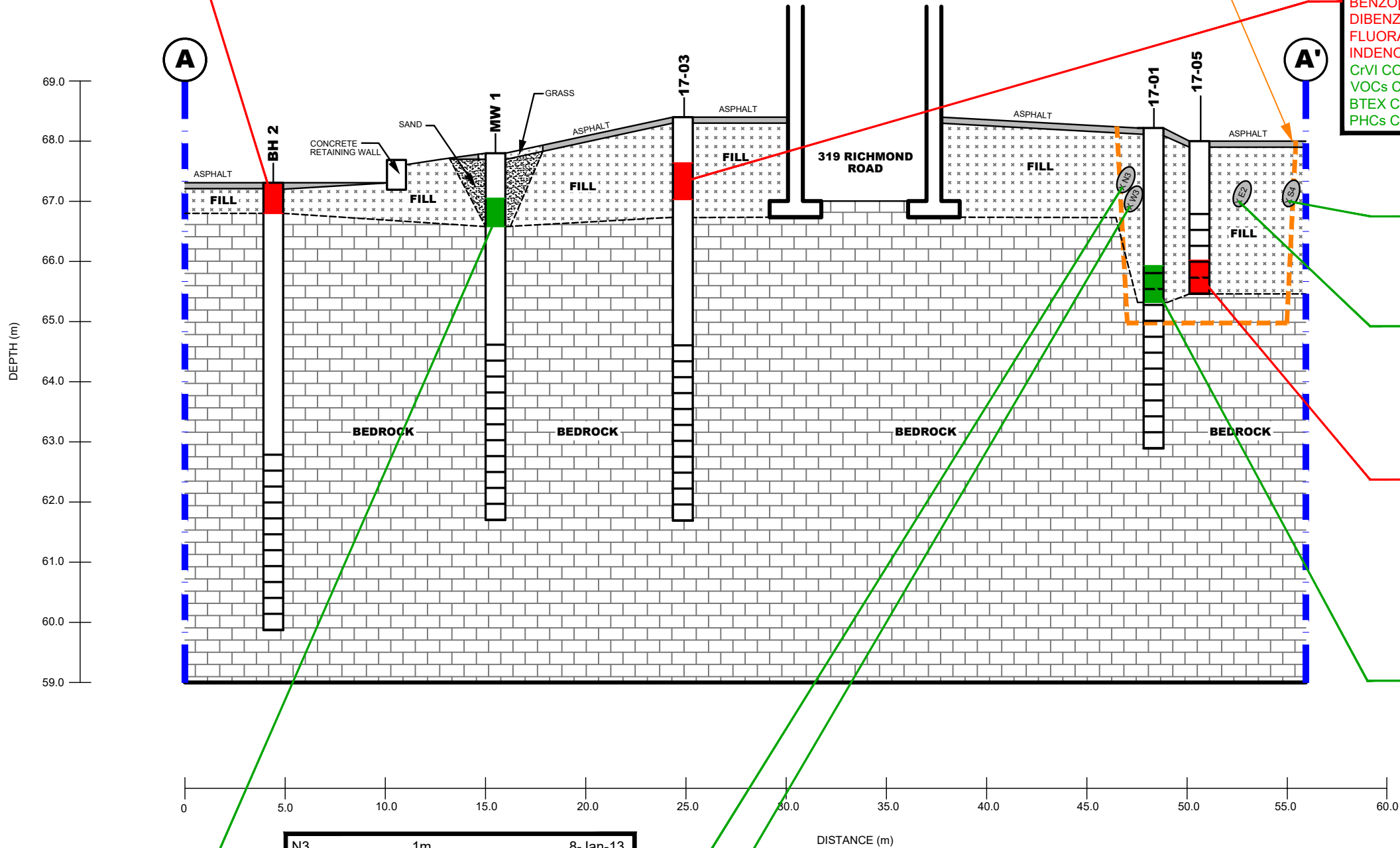
Scale:	1:300	Date:	11/2020
Drawn by:	YA	Report No.:	PE4909-2
Checked by:	MB	Dwg. No.:	PE4909-3
Approved by:	MSD	Revision No.:	

p:\autocad\drawings\environmental\pe4909\pe4909-phase ii.dwg

BH2-AU1	0.0-0.51m	21-JUL-16
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
PHC F3	390	300
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		

EXTENT OF GASOLINE AND
DIESEL TANK EXCAVATION

BH17-3 SA2	0.76-1.37m	26-JUL-17
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
COPPER	144	140
LEAD	271	120
ZINC	473	340
MERCURY	0.3	0.27
BENZO[a]ANTHRACENE	0.62	0.5
BENZO[a]PYRENE	0.69	0.3
DIBENZO[a,h]ANTHRACENE	0.13	0.1
FLUORANTHENE	1.62	0.69
INDENO[1,2,3-cd]PYRENE	0.44	0.38
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		



S4	1m	8-Jan-13
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

E2	1m	8-Jan-13
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-5 SA2	1.98-2.54m	26-JUL-17
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
PHC F1	72	55
PHC F2	192	98
METALS COMPLY WITH MECP TABLE 7 STANDARDS		
Hg COMPLY WITH MECP TABLE 7 STANDARDS		
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-1 SA4	2.29-2.90m	25-JUL-17
METALS COMPLY WITH MECP TABLE 7 STANDARDS		
Hg COMPLY WITH MECP TABLE 7 STANDARDS		
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

MW1-SS2	0.75-1.22m	16-JAN-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

N3	1m	8-Jan-13
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

W3	1m	8-Jan-13
BTEx COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

SOIL RESULT COMPLIES WITH MECP TABLE 7 STANDARDS
SOIL RESULT EXCEEDS MECP TABLE 7 STANDARDS

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154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

RICHMOND CHURCHILL LIMITED PARTNERSHIP PHASE II - ENVIRONMENTAL SITE ASSESSMENT 327 RICHMOND ROAD		ONTARIO	
OTTAWA, Title:		CROSS SECTION A-A' - SOIL	

Scale:	AS SHOWN	Date:	11/2020
Drawn by:	YA	Report No.:	PE4909-2
Checked by:	MB	Dwg. No.:	PE4909-4A
Approved by:	MSD	Revision No.:	

BH17-4 SA2	0.61-1.22m	25-JUL-17
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
CADMIUM	3.5	1.2
COPPER	338	140
LEAD	274	120
ZINC	508	340
MERCURY	0.3	0.27
ACENAPHTHYLENE	0.28	0.15
ANTHRACENE	0.99	0.67
BENZO[a]ANTHRACENE	1.47	0.5
BENZO[a]PYRENE	1.56	0.3
BENZO[b]FLUORANTHENE	1.81	0.78
BENZO[k]FLUORANTHENE	1.03	0.78
DIBENZO[a,h]ANTHRACENE	0.29	0.1
FLUORANTHENE	5.04	0.69
INDENO[1,2,3-cd]PYRENE	1.0	0.38
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-4 SA12	0.61-1.22m	25-JUL-17
DUPLICATE OF BH17-SA2		
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
CADMIUM	3.6	1.2
COPPER	275	140
LEAD	307	120
ZINC	545	340
MERCURY	0.3	0.27
ACENAPHTHYLENE	0.16	0.15
BENZO[a]ANTHRACENE	0.88	0.5
BENZO[a]PYRENE	0.94	0.3
BENZO[b]FLUORANTHENE	1.02	0.78
DIBENZO[a,h]ANTHRACENE	0.17	0.1
FLUORANTHENE	2.76	0.69
INDENO[1,2,3-cd]PYRENE	0.60	0.38
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

PI10	0.45m	9-Jan-13
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

PI7	0.45m	9-Jan-13
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
ETHYLBENZENE	3.94	2.0
TOLUENE	13.3	2.3
XYLENES	30.8	3.1
PHC F1	57	55

BH17-2 SA2	0.61-1.22m	25-JUL-17
METALS COMPLY WITH MECP TABLE 7 STANDARDS		
Hg COMPLY WITH MECP TABLE 7 STANDARDS		
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

PI2	0.45m	9-Jan-13
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
ETHYLBENZENE	2.06	2.0
TOLUENE	5.29	2.3
XYLENES	12.9	3.1
PHC F2	114	98

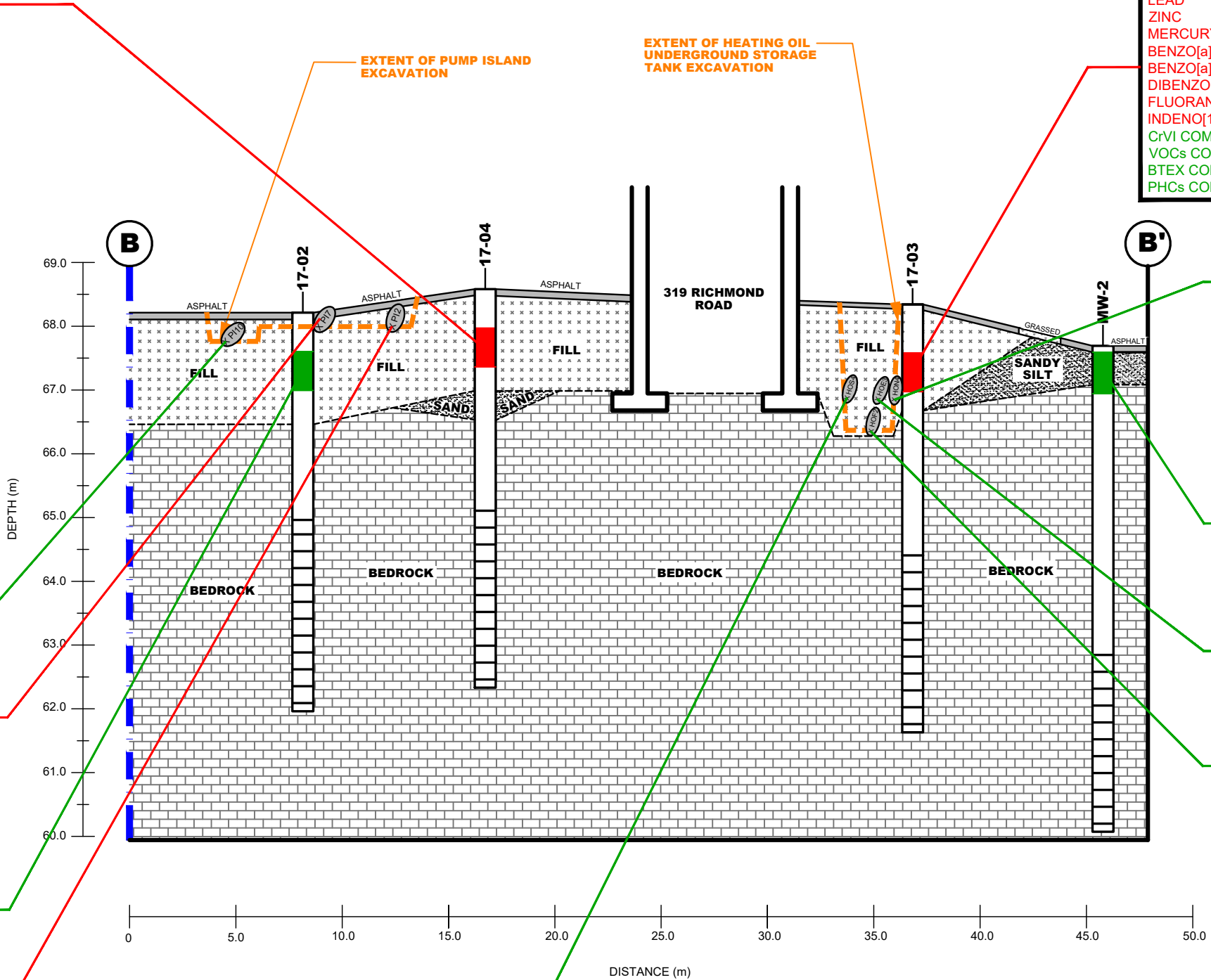
BH17-3 SA2	0.76-1.37m	26-JUL-17
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
COPPER	144	140
LEAD	271	120
ZINC	473	340
MERCURY	0.3	0.27
BENZO[a]ANTHRACENE	0.62	0.5
BENZO[a]PYRENE	0.69	0.3
DIBENZO[a,h]ANTHRACENE	0.13	0.1
FLUORANTHENE	1.62	0.69
INDENO[1,2,3-cd]PYRENE	0.44	0.38
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

HON4	1.5m	9-Jan-13
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

MW2-SS1	0.1-0.75m	16-JAN-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

HOE3	1.5m	9-Jan-13
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

HOF2	2m	9-Jan-13
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		



SOIL RESULT COMPLIES WITH MECP TABLE 7 STANDARDS
SOIL RESULT EXCEEDS MECP TABLE 7 STANDARDS

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NO.	REVISIONS	DATE	INITIAL

OTTAWA,
Title:

RICHMOND CHURCHILL LIMITED PARTNERSHIP
PHASE II - ENVIRONMENTAL SITE ASSESSMENT
327 RICHMOND ROAD

ONTARIO

CROSS SECTION B-B' - SOIL

Scale:	AS SHOWN
Drawn by:	YA
Checked by:	MB
Approved by:	MSD

Date:	11/2020
Report No.:	PE4909-2
Dwg. No.:	PE4909-4B
Revision No.:	

PI2	0.45m	9-Jan-13
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
ETHYLBENZENE	2.06	2.0
TOLUENE	5.29	2.3
XYLENES	12.9	3.1
PHC F2	114	98

PI7	0.45m	9-Jan-13
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
ETHYLBENZENE	3.94	2.0
TOLUENE	13.3	2.3
XYLENES	30.8	3.1
PHC F1	57	55

PI10	0.45m	9-Jan-13
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

S4	1m	8-Jan-13
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

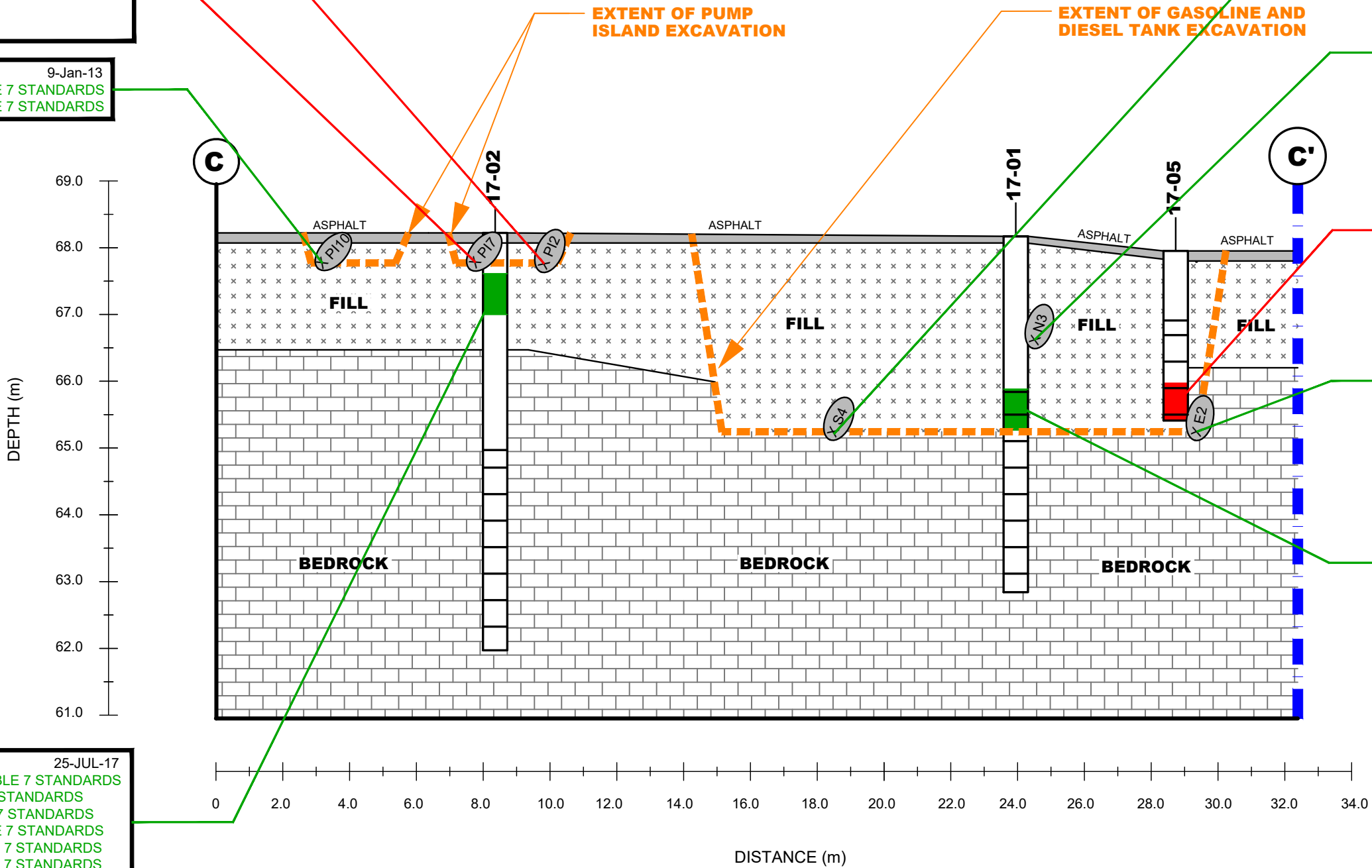
N3	1m	8-Jan-13
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-5 SA2	1.98-2.54m	26-JUL-17
PARAMETER	RESULT(µg/g)	STANDARD(µg/g)
PHC F1	72	55
PHC F2	192	98
METALS COMPLY WITH MECP TABLE 7 STANDARDS		
Hg COMPLY WITH MECP TABLE 7 STANDARDS		
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

E2	1m	8-Jan-13
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-1 SA4	2.29-2.90m	25-JUL-17
METALS COMPLY WITH MECP TABLE 7 STANDARDS		
Hg COMPLY WITH MECP TABLE 7 STANDARDS		
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-2 SA2	0.61-1.22m	25-JUL-17
METALS COMPLY WITH MECP TABLE 7 STANDARDS		
Hg COMPLY WITH MECP TABLE 7 STANDARDS		
CrVI COMPLY WITH MECP TABLE 7 STANDARDS		
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		



SOIL RESULT COMPLIES WITH MECP TABLE 7 STANDARDS
SOIL RESULT EXCEEDS MECP TABLE 7 STANDARDS

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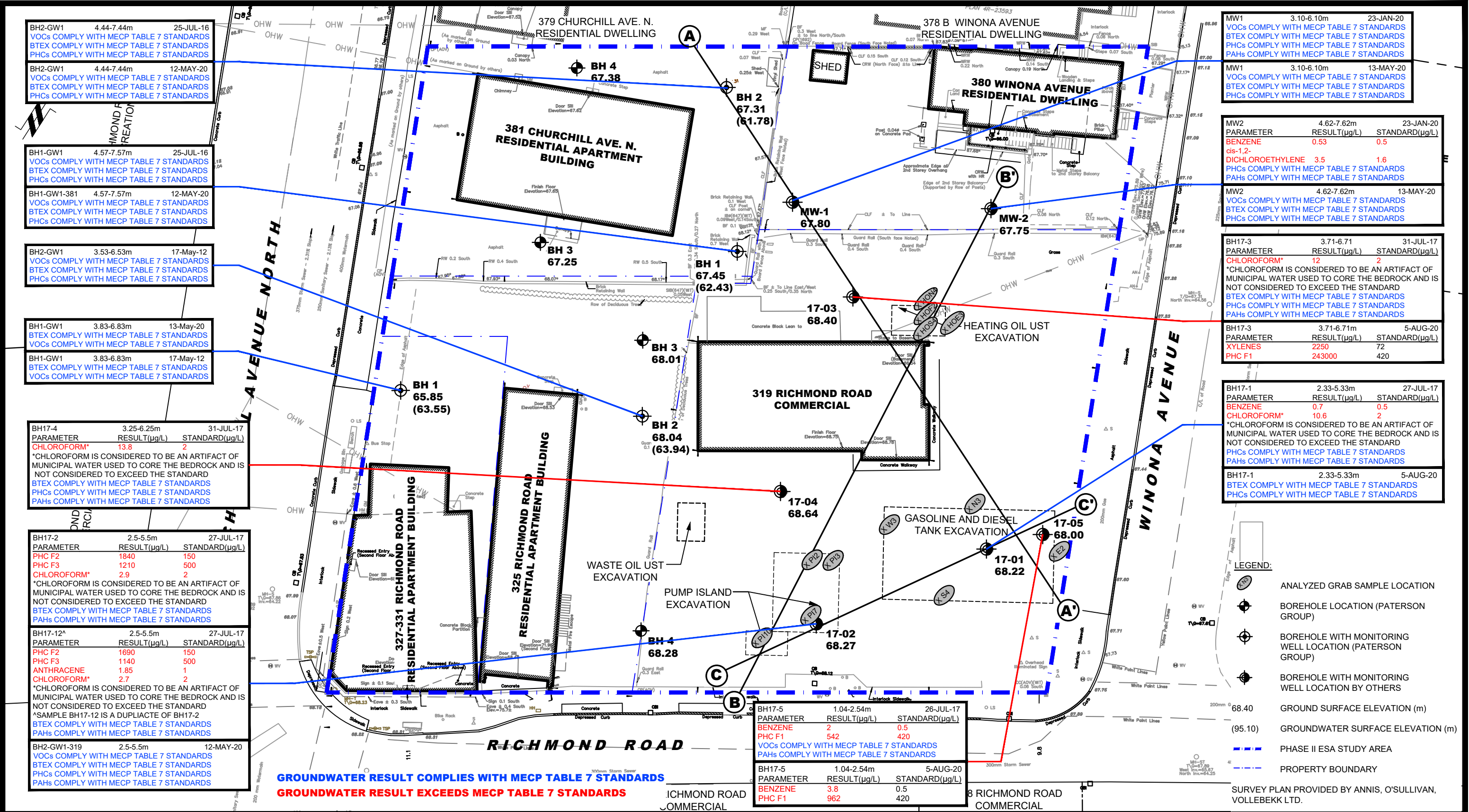
154 Colonnade Road South
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Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

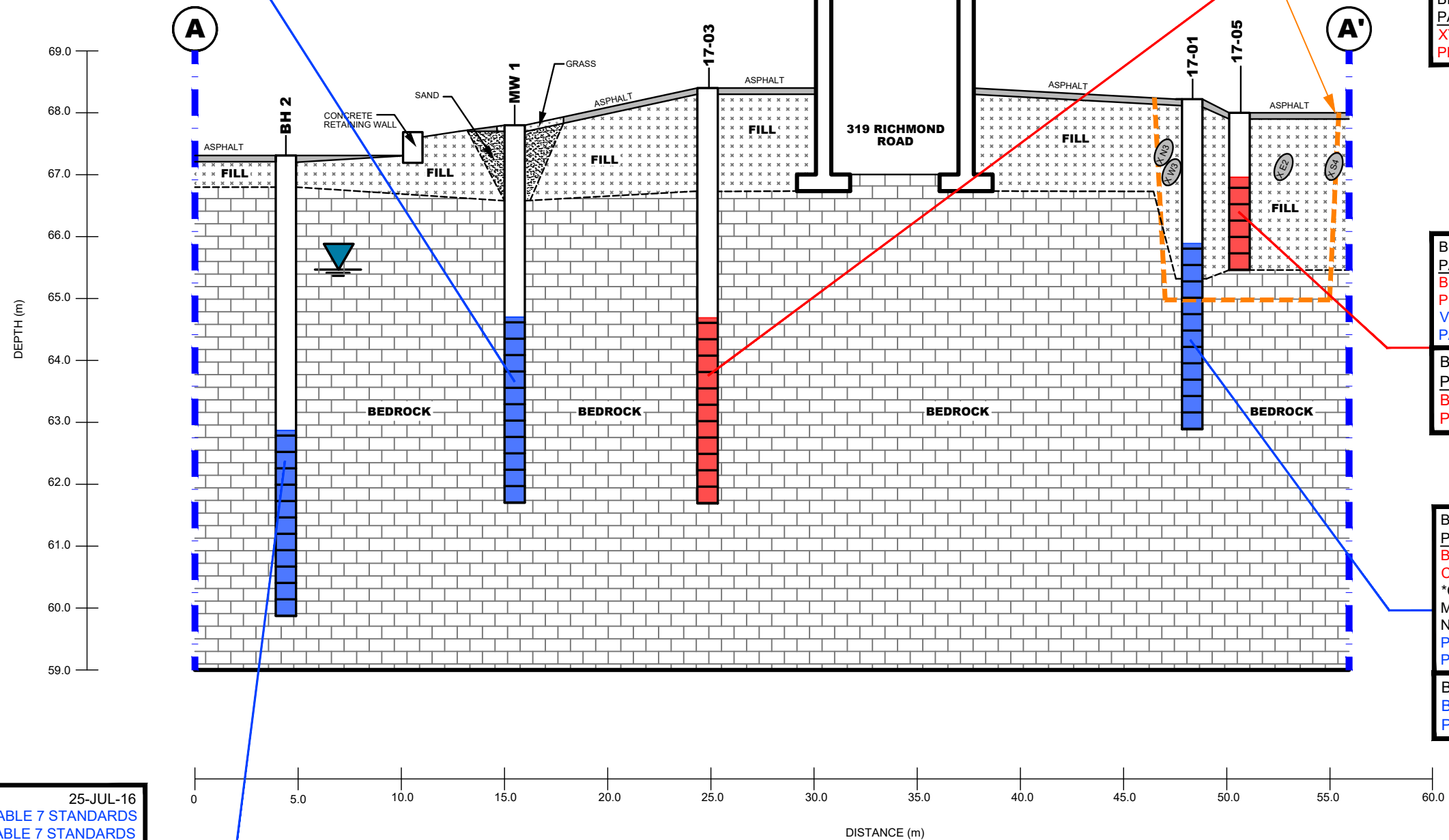
RICHMOND CHURCHILL LIMITED PARTNERSHIP
PHASE II - ENVIRONMENTAL SITE ASSESSMENT
327 RICHMOND ROAD
OTTAWA, ONTARIO
Title:
CROSS SECTION C-C' - SOIL

Scale:	AS SHOWN	Date:	11/2020
Drawn by:	YA	Report No.:	PE4909-2
Checked by:	MB	Dwg. No.:	PE4909-4C
Approved by:	MSD	Revision No.:	

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MW1	3.10-6.10m	23-JAN-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
MW1	3.10-6.10m	13-MAY-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		



BH17-3	3.71-6.71	31-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
CHLOROFORM*	12	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH17-3	3.71-6.71m	5-AUG-20
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
XYLENES	2250	72
PHC F1	243000	420

BH17-5	1.04-2.54m	26-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	2	0.5
PHC F1	542	420
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH17-5	1.04-2.54m	5-AUG-20
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	3.8	0.5
PHC F1	962	420

BH17-1	2.33-5.33m	27-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	0.7	0.5
CHLOROFORM*	10.6	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH17-1	2.33-5.33m	5-AUG-20
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

BH2-GW1	4.44-7.44m	25-JUL-16
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
BH2-GW1	4.44-7.44m	12-MAY-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		

GROUNDWATER RESULT COMPLIES WITH MECP TABLE 7 STANDARDS
GROUNDWATER RESULT EXCEEDS MECP TABLE 7 STANDARDS

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NO.	REVISIONS	DATE	INITIAL

RICHMOND CHURCHILL LIMITED PARTNERSHIP
PHASE II - ENVIRONMENTAL SITE ASSESSMENT
327 RICHMOND ROAD
OTTAWA, ONTARIO
Title: CROSS SECTION A-A' - GROUNDWATER

Scale:	AS SHOWN	Date:	11/2020
Drawn by:	YA	Report No.:	PE4909-2
Checked by:	MB	Dwg. No.:	PE4909-5A
Approved by:	MSD	Revision No.:	

BH17-2	2.5-5.5m	27-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
PHC F2	1840	150
PHC F3	1210	500
CHLOROFORM*	2.9	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-12^	2.5-5.5m	27-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
PHC F2	1690	150
PHC F3	1140	500
ANTHRACENE	1.85	1
CHLOROFORM*	2.7	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
^SAMPLE BH17-12 IS A DUPLIACTE OF BH17-2		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH2-GW1-319	2.5-5.5m	12-MAY-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

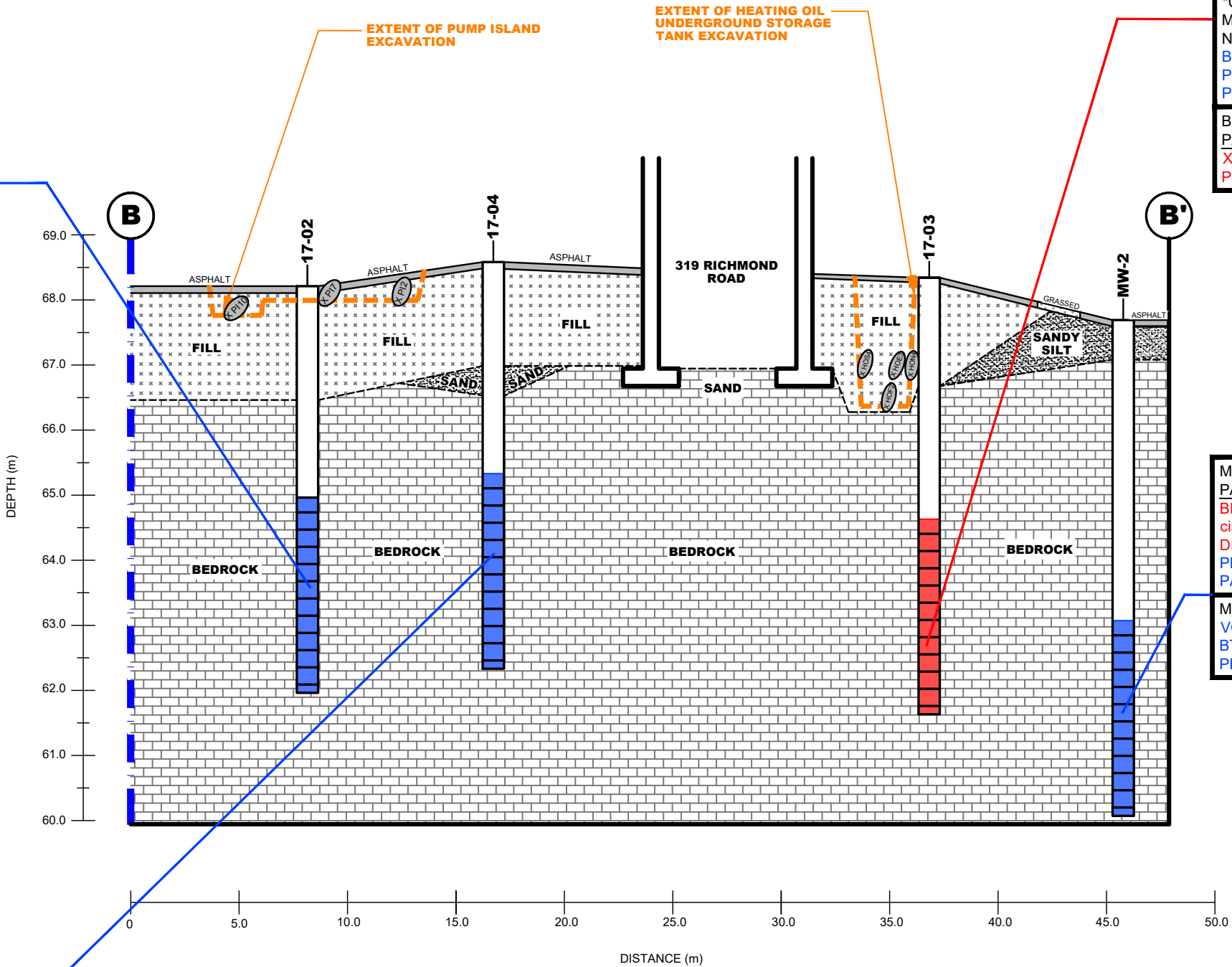
BH17-4	3.25-6.25m	31-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
CHLOROFORM*	13.8	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-3	3.71-6.71	31-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
CHLOROFORM*	12	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-3	3.71-6.71m	5-AUG-20
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
XYLENES	2250	72
PHC F1	243000	420

MW2	4.62-7.62m	23-JAN-20
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	0.53	0.5
cis-1,2-DICHLOROETHYLENE	3.5	1.6
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

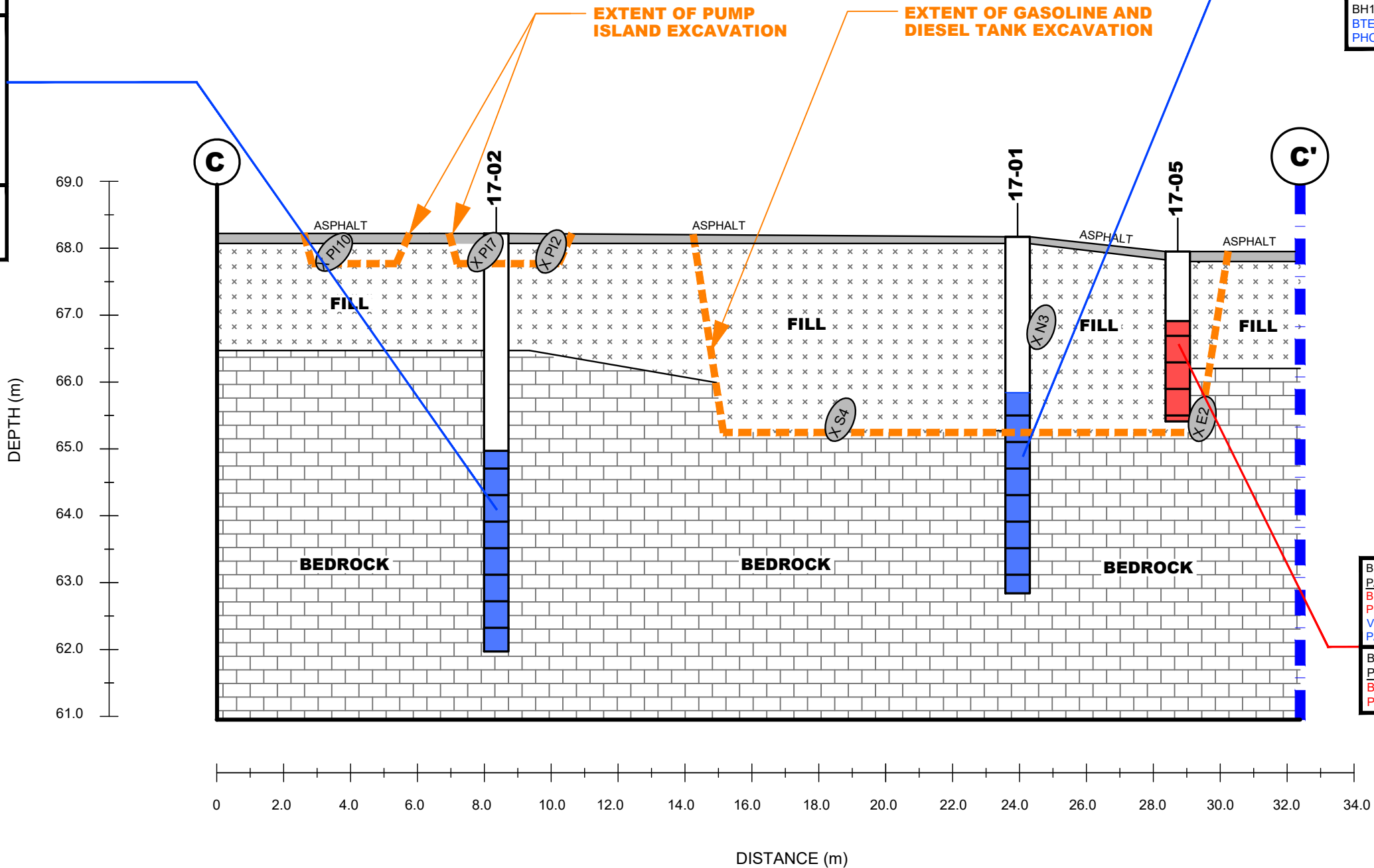
MW2	4.62-7.62m	13-MAY-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTEX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		



GROUNDWATER RESULT COMPLIES WITH MECP TABLE 7 STANDARDS
GROUNDWATER RESULT EXCEEDS MECP TABLE 7 STANDARDS

BH17-2	2.5-5.5m	27-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
PHC F2	1840	150
PHC F3	1210	500
CHLOROFORM*	2.9	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH17-12^	2.5-5.5m	27-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
PHC F2	1690	150
PHC F3	1140	500
ANTHRACENE	1.85	1
CHLOROFORM*	2.7	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
^SAMPLE BH17-12 IS A DUPLIACTE OF BH17-2		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH2-GW1-319	2.5-5.5m	12-MAY-20
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		

BH17-1	2.33-5.33m	27-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	0.7	0.5
CHLOROFORM*	10.6	2
*CHLOROFORM IS CONSIDERED TO BE AN ARTIFACT OF MUNICIPAL WATER USED TO CORE THE BEDROCK AND IS NOT CONSIDERED TO EXCEED THE STANDARD		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH17-1	2.33-5.33m	5-AUG-20
BTX COMPLY WITH MECP TABLE 7 STANDARDS		
PHCs COMPLY WITH MECP TABLE 7 STANDARDS		



BH17-5	1.04-2.54m	26-JUL-17
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	2	0.5
PHC F1	542	420
VOCs COMPLY WITH MECP TABLE 7 STANDARDS		
PAHs COMPLY WITH MECP TABLE 7 STANDARDS		
BH17-5	1.04-2.54m	5-AUG-20
PARAMETER	RESULT(µg/L)	STANDARD(µg/L)
BENZENE	3.8	0.5
PHC F1	962	420

GROUNDWATER RESULT COMPLIES WITH MECP TABLE 7 STANDARDS
GROUNDWATER RESULT EXCEEDS MECP TABLE 7 STANDARDS

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NO.	REVISIONS	DATE	INITIAL

RICHMOND CHURCHILL LIMITED PARTNERSHIP PHASE II - ENVIRONMENTAL SITE ASSESSMENT 327 RICHMOND ROAD	
OTTAWA, Title:	ONTARIO
CROSS SECTION C-C' - GROUNDWATER	

Scale: AS SHOWN	Date: 11/2020
Drawn by: YA	Report No.: PE4909-2
Checked by: MB	Dwg. No.: PE4909-5C
Approved by: MSD	Revision No.: