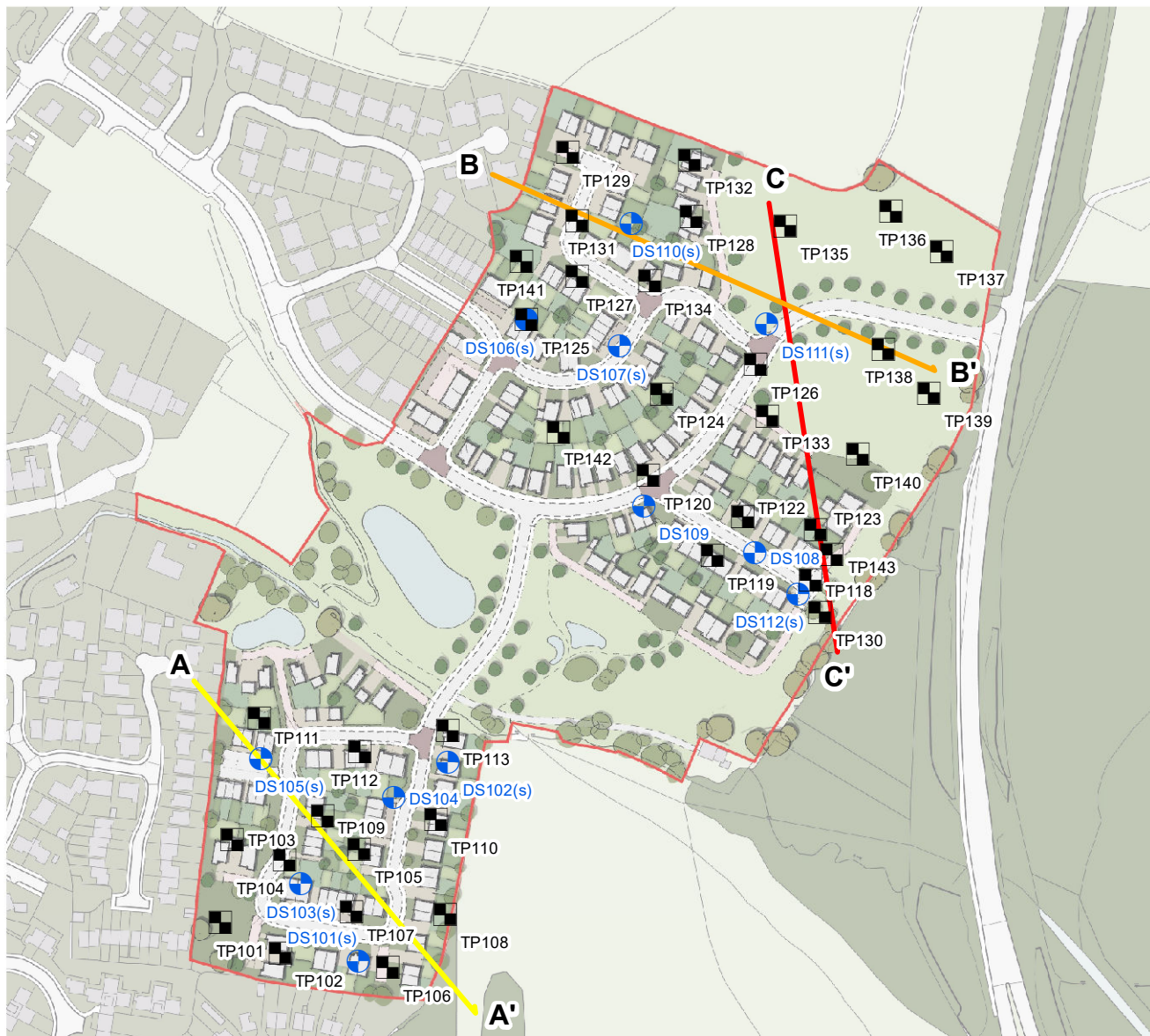





## Figure 2 – Exploratory Hole Location and Proposed Development Plan

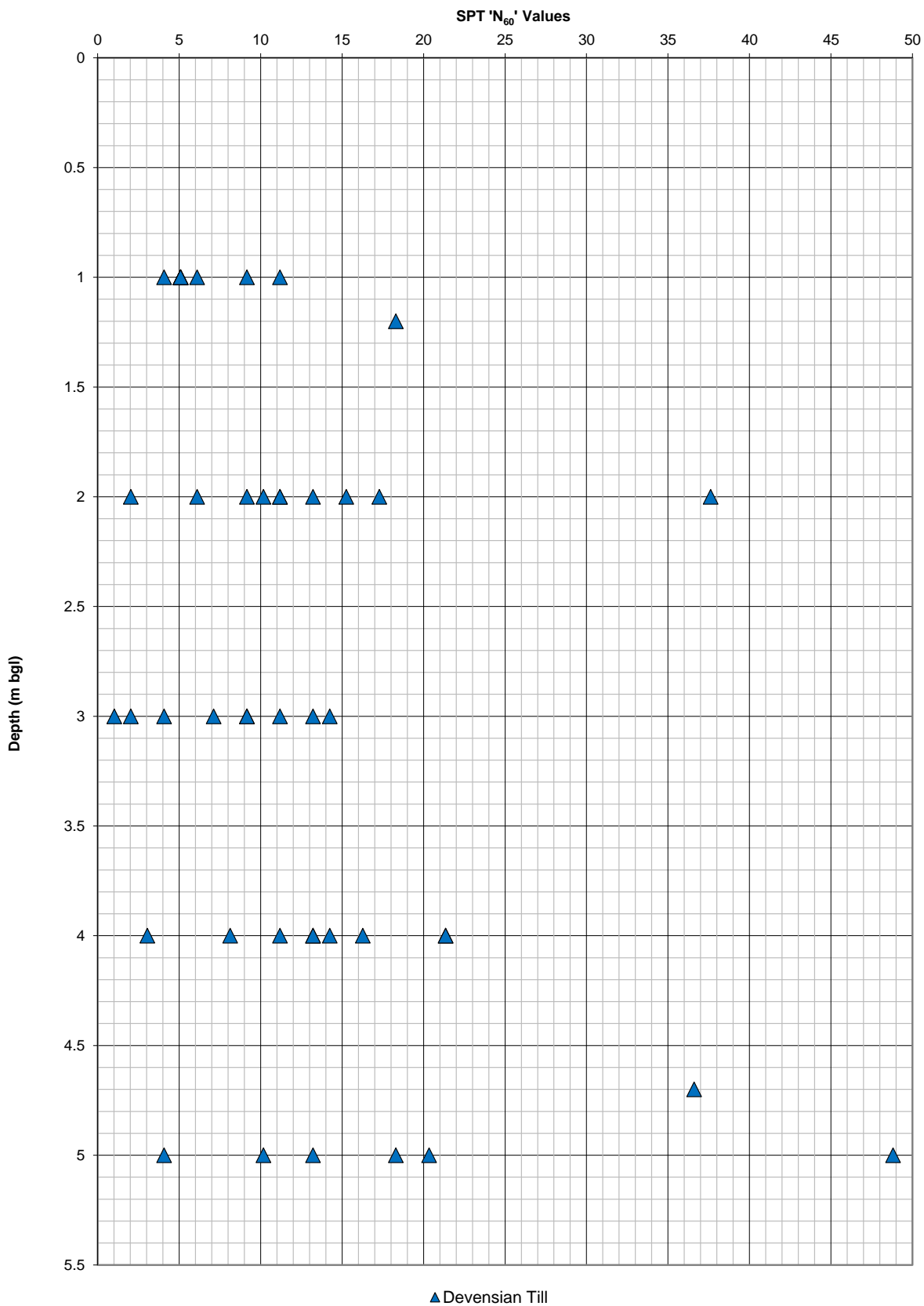


## LEGEND

-  TP10x Trial Pit
-  DS10x Dynamic Sampler
-  (s) Locations with Installs

Site Plan Provided by Client

## Figure 3 – SPT N60 versus Depth Plot



TITLE:

Corrected SPT N<sub>60</sub> versus Depth Plot  
Clitheroe Road, Whalley

DWN:

RJS

PROJECT NO.:

18-0886.03

DATE:

Aug-18

Figure:

3

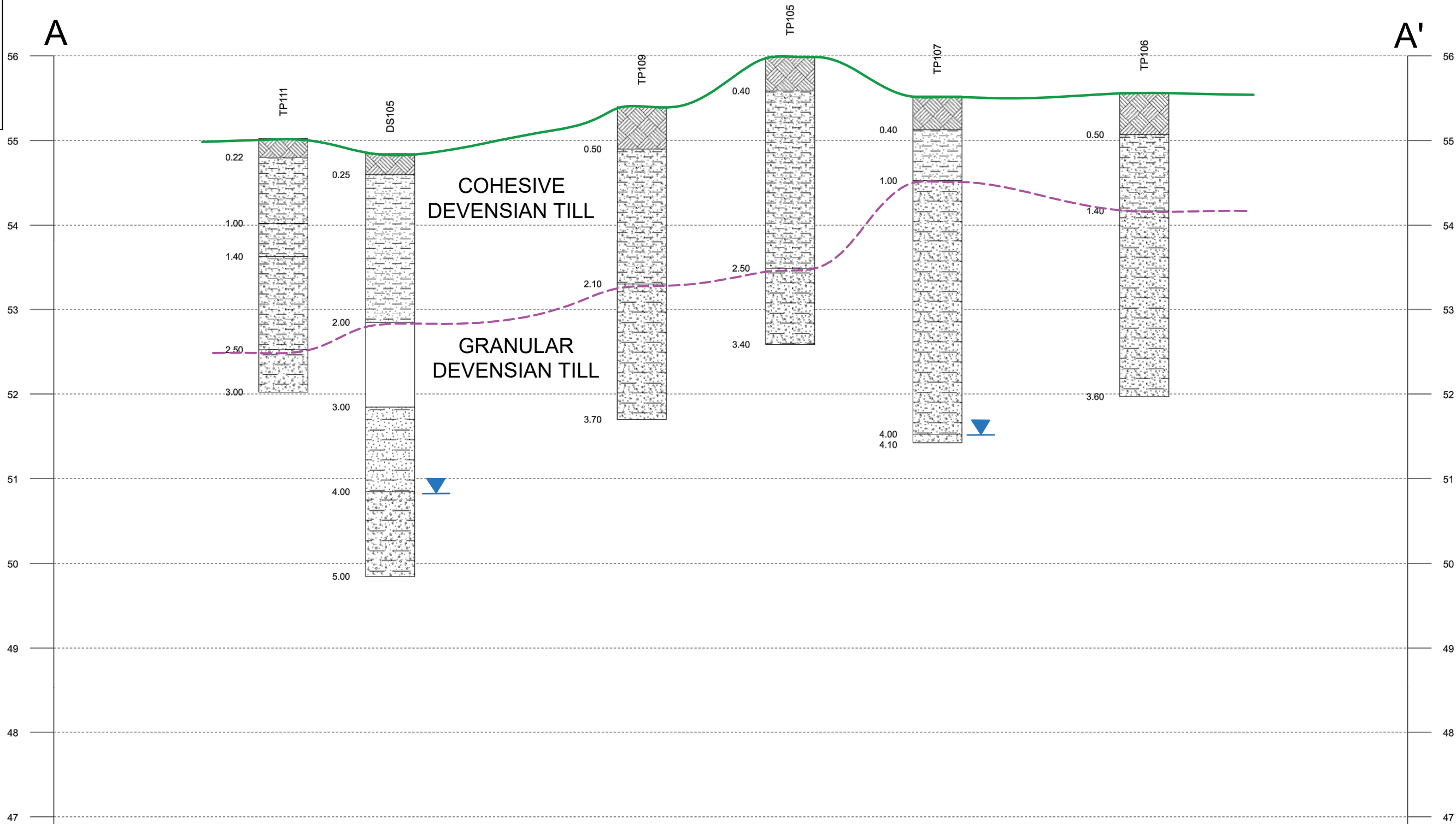
## Figure 4a – 4c – Inferred Geological Cross Sections

LEGEND

- Existing Ground Level (mAOD)
- Indicative boundary between cohesive and granular material
- Groundwater Strike

Legend Key

- TOPSOIL
- Sandy gravelly CLAY
- Sandy CLAY
- Clayey gravelly SAND
- No Recovery
- Clayey sandy GRAVEL
- Clayey SAND
- Sandy GRAVEL



46.00

Chainage (m)	0.00	21.74	39.43	81.06	105.61	129.98	164.20	189.42
Offset (m)		2.09	8.72	1.25	7.33	13.50	14.14	
Elevation (mAOD)		55.02	54.85	55.40	55.98	55.53	55.57	



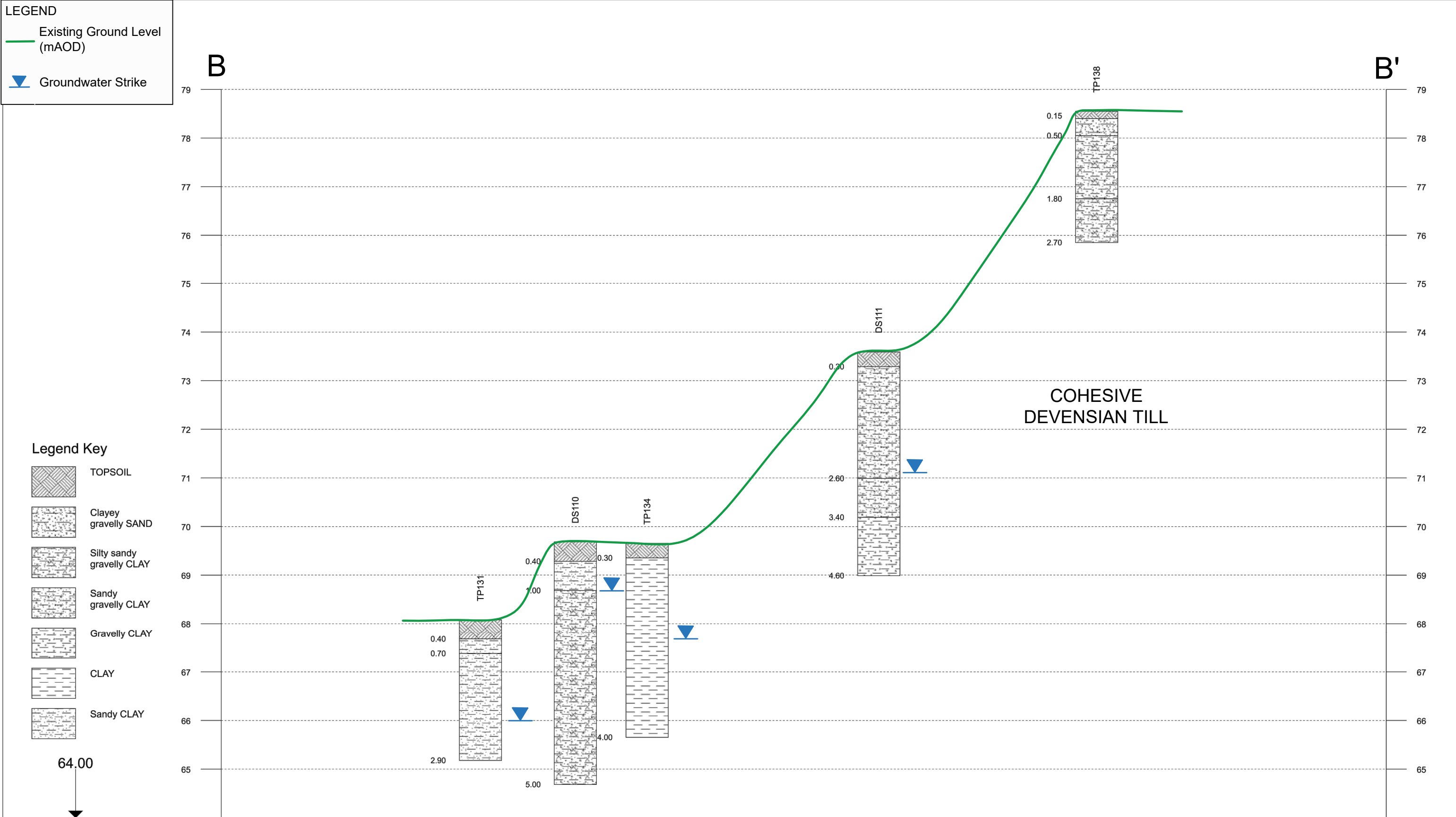
TITLE:  
Section A-A'  
Clitheroe Road, Whalley

DRAWN BY: JR	ENGINEER:	VERTICAL SCALE: 1:50	PROJECT NO: 18-0886.03
CHECKED BY: RS	REVISION: -	HORIZONTAL SCALE: 1:700	FIGURE NO: 4a
DATE: 16 August 2018	CLIENT: Trafford Housing Trust		

LEGEND

Existing Ground Level (mAOD)

Groundwater Strike



LEGEND

Existing Ground Level (mAOD)

Indicative boundary between cohesive and granular material

Groundwater Strike

Legend Key

Clayey SAND

Sandy CLAY

TOPSOIL

Sandy gravelly CLAY

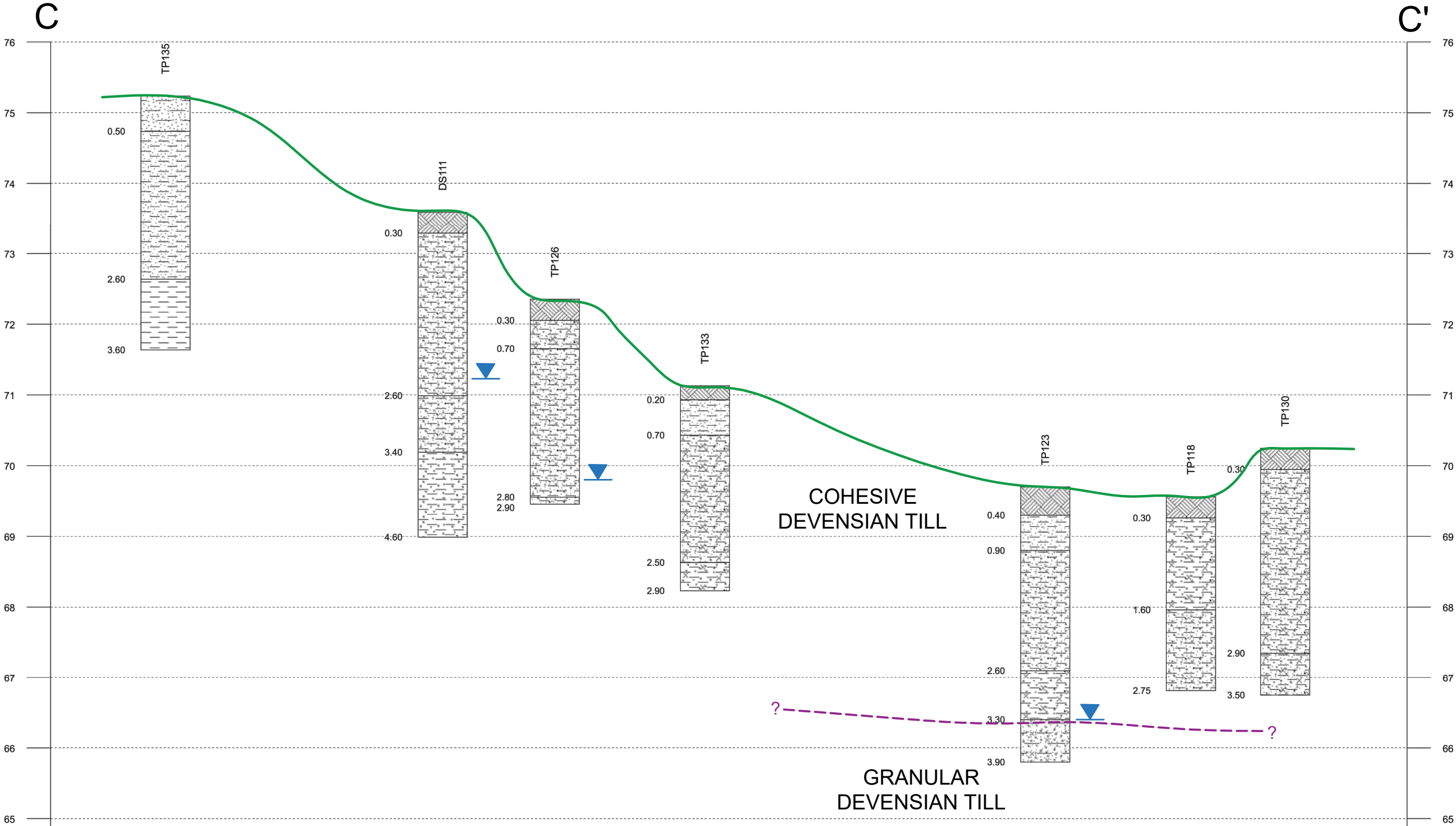
CLAY

Silty sandy gravelly CLAY

Gravelly CLAY

Silty gravelly CLAY

Clayey silty sandy GRAVEL



Chainage (m)	0.00	2.93	51.98	71.83	98.38	158.59	184.37	190.59	201.05	207.14
Offset (m)	11.52		3.60	11.38	8.42	9.63	4.45	2.76	7.15	
Elevation (mAOD)	75.24		73.59	72.35	71.13	69.70	69.56	69.68	70.25	



TITLE:  
Section C-C'  
Clitheroe Road, Whalley

DRAWN BY: JR	ENGINEER:	VERTICAL SCALE: 1:60	PROJECT NO: 18-0886.03
CHECKED BY: RS	REVISION: -	HORIZONTAL SCALE: 1:750	FIGURE NO: 4c
DATE: 16 August 2018	CLIENT: Trafford Housing Trust		

## Appendix A – Limitations



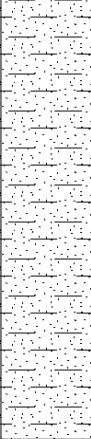
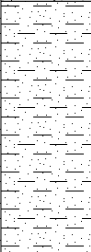
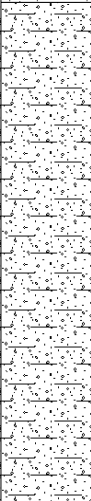

## Limitations


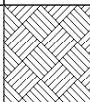

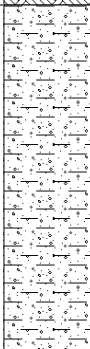
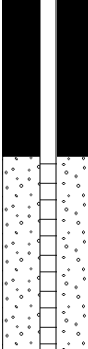
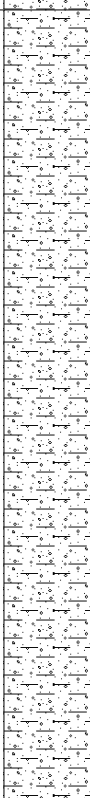
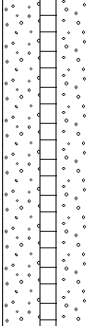
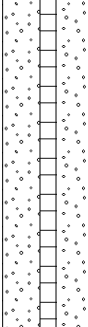


The recommendations contained in this Report represent Delta-Simons professional opinions, based upon the information listed in the Report, exercising the duty of care required of an experienced Environmental Consultant. Delta-Simons does not warrant or guarantee that the Site is free of hazardous or potentially hazardous materials or conditions.



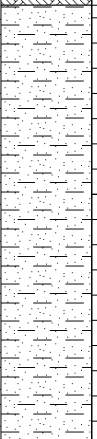


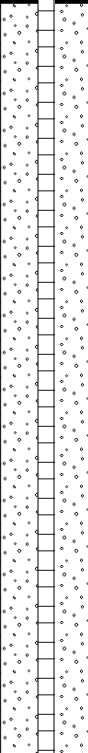
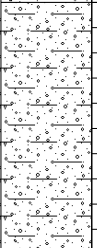

Delta-Simons obtained, reviewed and evaluated information in preparing this Report from the Client and others. Delta-Simons conclusions, opinions and recommendations has been determined using this information. Delta-Simons does not warrant the accuracy of the information provided to it and will not be responsible for any opinions which Delta-Simons has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.




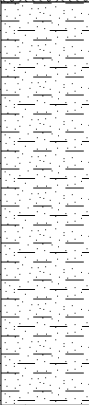
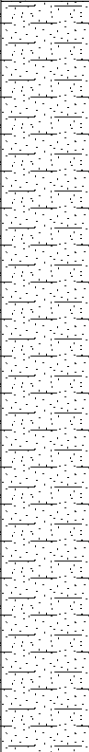
This Report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this Report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the Report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.



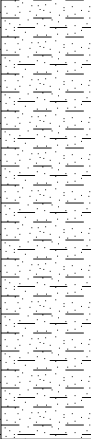

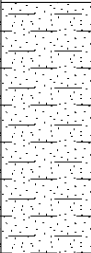
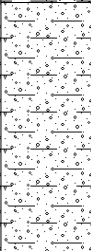

## Appendix B – Borehole and Trial Pit Logs, SPT Calibration Certificate



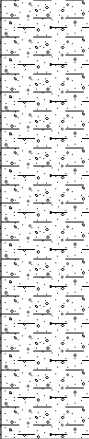
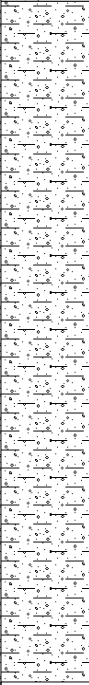
<div><div><b>Head Office</b> 3 Henley Way, Doddington Road Lincoln, LN6 3QR Tel: +44 (0) 1522 882555 Email: info@deltasimons.com</div></div>					Project No: <b>18-0886.03</b>		Hole ID: <b>DS101</b>		Page: <b>1 of 1</b>				
					Project: <b>Clitheroe Road, Whalley</b>								
<b>Dynamic Sampler Log</b>					Date: <b>11/07/2018</b>		Client: <b>Trafford Housing Trust</b>						
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill	
							Depth (m)	Type	Ref	Depth (m)	Results		
TOPSOIL: Brown slightly clayey SAND with frequent rootlets. Sand is fine to medium.		0.25	(0.25)	54.59			0.00 - 0.25	ES	1				
Loose light brown becoming black at 2m bgl slightly clayey fine to coarse SAND with occasional gravel. Gravel is subrounded fine of natural lithologies. [DEVENSIAN TILL]		2.00	(1.75)	52.84			1.80 - 2.00	ES	2	1.00	SPT(S) N=9 (2,2/2,2,2,3)		
		3.00	(1.00)	51.84						2.00	SPT(S) N=11 (2,3/2,3,3,3)		
Soft to firm orangish brown slightly sandy CLAY. Sand is fine to coarse. [DEVENSIAN TILL]										3.00	SPT(S) N=1 (0,0/0,1,0,0)		
Very loose brown slightly clayey gravelly fine to coarse SAND with occasional cobbles. Gravel is subangular to subrounded fine to coarse of natural lithologies. Cobbles are rounded of sandstone. At 5.0 m bgl: Becomes medium dense. [DEVENSIAN TILL]		5.00	(2.00)	49.84						4.00	SPT(S) N=3 (0,1/0,1,1,1)		
											5.00	SPT(S) N=20 (2,3/5,4,6,5)	
Borehole complete at 5.00 m bgl.													
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 5.0 m bgl. 3. Hole terminated in superficial sand deposits. 4. Groundwater was encountered at 3.0 m bgl. 5. No visual or olfactory evidence of contamination was encountered. 6. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter			
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter		
					11/07/2018		3.00 m						
Coordinates: <b>E373663.44 N436217.64</b>		Elevation (mAOD): <b>54.84</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Archway Dart</b>		Logged: <b>RR</b>	Checked: <b>MB</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>		




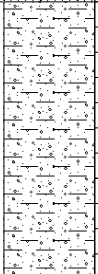
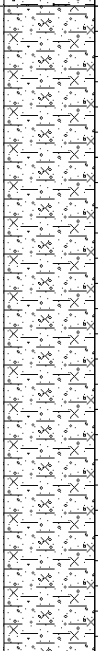
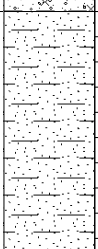
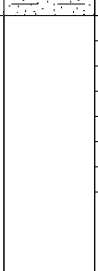

<div><div>Environment - Health &amp; Safety - Sustainability</div></div> <div>Head Office 3 Henley Way, Doddington Road Lincoln, LN6 3QR Tel: +44 (0) 1522 882555 Email: info@deltasimons.com</div>					Project No: 18-0886.03		Hole ID: DS102		Page: 1 of 1			
Dynamic Sampler Log					Project: Clitheroe Road, Whalley							
					Date: 11/07/2018			Client: Trafford Housing Trust				
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill
							Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Brown slightly clayey fine to coarse SAND with frequent rootlets.		0.40	(0.40)	57.55			0.00 - 0.40	ES	1			
Soft to firm orangish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		1.80	(1.40)	56.15		1.50	1.50 - 1.60	ES	2	1.00	SPT(S) N=5 (1,1/1,1,2,1)	
Very soft brownish grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of mudstone. Poor recovery between 2 - 3m bgl. At 4.0 m bgl: Becomes firm. [DEVENSIAN TILL]		5.00	(3.20)	52.95						2.00	SPT(S) N=2 (1,0/1,0,0,1)	
										3.00	SPT(S) N=2 (0,1/0,1,0,1)	
										4.00	SPT(S) N=11 (2,3/2,3,3,3)	
Borehole complete at 5.00 m bgl.										5.00	SPT(S) N=13 (2,1/2,3,4,4)	
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 5.0 m bgl. 3. SPT taken from 5.0 m to 5.45 m bgl. 4. Groundwater was encountered at 1.5 m bgl. 5. No visual or olfactory evidence of contamination was encountered. 6. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter		
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter	
					11/07/2018		1.50 m					
Coordinates: E373709.00 N436319.81		Elevation (mAOD): 57.95		Drilled By: Earth Engineering		Plant Used: Global Geotech		Logged: MB	Checked: RJS	Approved: RJS	Scale: 1:30	




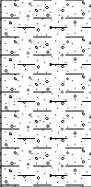
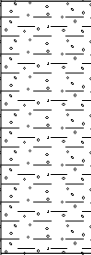
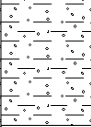
 <div> <b>Head Office</b>            3 Henley Way, Doddington Road            Lincoln, LN6 3QR            Tel: +44 (0) 1522 882555            Email: info@deltasimons.com         </div>					Project No: <b>18-0886.03</b>		Hole ID: <b>DS103</b>		Page: <b>1 of 1</b>				
					Project: <b>Clitheroe Road, Whalley</b>								
<b>Dynamic Sampler Log</b>					Date: <b>11/07/2018</b>			Client: <b>Trafford Housing Trust</b>					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill	
							Depth (m)	Type	Ref	Depth (m)	Results		
TOPSOIL: Brown slightly clayey fine to medium SAND with frequent rootlets.		0.25	(0.25)	54.63			0.00 - 0.25	ES	1				
Soft to firm brown slightly sandy CLAY. Sand is fine to medium. [DEVENSIAN TILL]			(1.75)								1.00	SPT(S) N=5 (1,0/1,1,2,1)	
		2.00		52.88			1.50 - 1.60	ES	2				
Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]			(1.00)								2.00	SPT(S) N=9 (2,2/3,2,2,2)	
		3.00		51.88			2.90 - 3.00	ES	3		3.00	SPT(S) N=4 (0,3/1,1,1,1)	
Loose brown slightly clayey sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone. [DEVENSIAN TILL]			(1.00)										
		4.00		50.88		3.90					4.00	SPT(S) N=13 (0,0/0,2,5,6)	
No recovery.			(1.00)										
		5.00		49.88							5.00	SPT(S) N=10 (3,1/2,2,3,3)	
Borehole complete at 5.00 m bgl.													
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 5.0 m bgl. 3. SPT taken from 5.0 m to 5.45 m bgl. 4. Groundwater was encountered at 3.9 m bgl. 5. No visual or olfactory evidence of contamination was encountered. 5. Backfilled with arisings.					<b>Water Strike</b>			<b>Water Level</b>		<b>Borehole Diameter</b>			
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter		
					11/07/2018		3.90 m						
Coordinates: <b>E373634.04 N436257.56</b>		Elevation (mAOD): <b>54.88</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Archway Dart</b>		Logged: <b>RR</b>	Checked: <b>MB</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>		



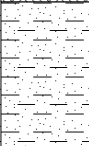
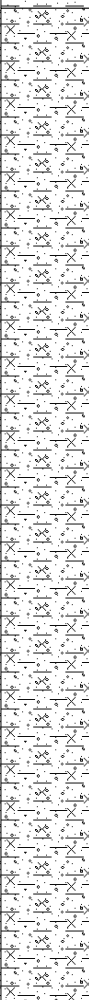
<div><div><b>Head Office</b> 3 Henley Way, Doddington Road Lincoln, LN6 3QR Tel: +44 (0) 1522 882555 Email: info@deltasimons.com</div></div>					Project No: <b>18-0886.03</b>		Hole ID: <b>DS104</b>		Page: <b>1 of 1</b>			
					Project: <b>Clitheroe Road, Whalley</b>							
<b>Dynamic Sampler Log</b>					Date: <b>11/07/2018</b>		Client: <b>Trafford Housing Trust</b>					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill
							Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Brown slightly clayey fine to coarse SAND with frequent rootlets.		0.40	(0.40)	56.22		<div>1.20</div>	0.00 - 0.40	ES 1		1.00	SPT(S) N=5 (2,1/1,1,2,1)	
Soft to firm orangish brown sandy CLAY with occasional gravel. Sand is fine to coarse. Gravel of natural lithologies. [DEVENSIAN TILL]		2.00	(1.60)	54.62						2.00	SPT(S) N=10 (2,2/2,2,3,3)	
Loose brown clayey fine to medium SAND. Between 3 - 3.2m bgl band of firm grey slightly silty CLAY. [DEVENSIAN TILL]		5.00	(3.00)	51.62			2.30 - 2.40	ES 2		3.00	SPT(S) N=7 (0,2/1,2,2,2)	
										4.00	SPT(S) N=8 (0,2/2,1,2,3)	
										5.00	SPT(S) N=4 (0,0/1,0,2,1)	
Borehole complete at 5.00 m bgl.												
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 5.0 m bgl. 3. SPT taken from 5.0 m to 5.45 m bgl. 4. Hole terminated in superficial clay deposits. 5. Groundwater was encountered at 1.2 m bgl. 6. No visual or olfactory evidence of contamination was encountered. 7. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter		
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter	
					11/07/2018		1.20 m					
Coordinates: <b>E373681.60 N436301.52</b>		Elevation (mAOD): <b>56.62</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Global Geotech</b>		Logged: <b>MB</b>	Checked: <b>RJS</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>	



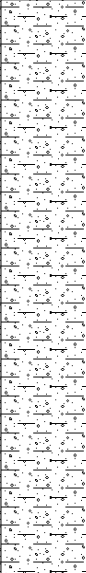
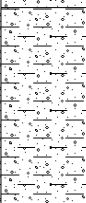
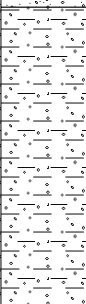

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<b>Dynamic Sampler Log</b>					Date: <b>11/07/2018</b>		Client: <b>Trafford Housing Trust</b>											
					Project: <b>Clitheroe Road, Whalley</b>													
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill						
							Depth (m)	Type	Ref	Depth (m)	Results							
TOPSOIL: Brown slightly clayey fine to medium SAND with frequent rootlets.		0.25	(0.25)	54.60			0.00 - 0.25	ES	1									
Soft to firm brown slightly sandy CLAY. Sand is fine to medium.		2.00	(1.75)	52.84														
No recovery.		3.00	(1.00)	51.84														
Brown slightly clayey fine to coarse SAND with occasional gravel. Gravel is subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		4.00	(1.00)	50.84														
Brown slightly clayey sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		5.00	(1.00)	49.84														
Borehole complete at 5.00 m bgl.																		
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 5.0 m bgl. 3. Hole terminated in superficial gravel deposits. 4. Groundwater was encountered at 4.0 m bgl. 5. No visual or olfactory evidence of contamination was encountered. 6. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter								
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter							
					11/07/2018		4.00 m											
Coordinates: <b>E373613.60 N436321.29</b>		Elevation (mAOD): <b>54.84</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Global Geotech</b>		Logged: <b>RR</b>	Checked: <b>MB</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>							










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					Project: <b>Clitheroe Road, Whalley</b>								
Dynamic Sampler Log					Date: <b>10/07/2018</b>		Client: <b>Trafford Housing Trust</b>						
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill	
							Depth (m)	Type	Ref	Depth (m)	Results		
TOPSOIL: Brown slightly clayey gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of sandstone.		0.25	(0.25)	64.21			0.00 - 0.25	ES	1				
Soft to firm brown slightly sandy gravelly CLAY. Sand is fine to medium. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]			(1.75)							1.00	SPT(S) N=5 (1,1/1,1,1,2)		
		2.00		62.46									
Stiff greyish brown slightly sandy gravelly CLAY with frequent cobbles. Sand is fine to medium. Gravel is subangular to subrounded fine to coarse of natural lithologies. Cobbles rounded of mudstone. At 3.0 m bgl: Becomes firm. At 4.7 m bgl: Becomes stiff. [DEVENSIAN TILL]			(2.70)				2.00 - 2.10	ES	2	2.00	SPT(S) N=17 (7,7/6,4,3,4)		
										3.00	SPT(S) N=11 (3,3/4,2,2,3)		
										4.00	SPT(S) N=14 (3,6/3,3,4,4)		
		4.70		59.76						4.70	SPT(S) N=36 (7,6/7,8,10,11)		
Borehole complete at 4.70 m bgl.													
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 4.7 m bgl. 3. SPT taken from 4.7 to 5.15 m bgl. 4. Hole terminated in superficial clay deposits. 5. Groundwater was not encountered. 6. No visual or olfactory evidence of contamination was encountered. 7. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter			
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter		
Coordinates: <b>E373749.36 N436545.56</b>		Elevation (mAOD): <b>64.46</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Global Geotech</b>		Logged: <b>MB</b>	Checked: <b>RJS</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>		


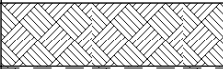
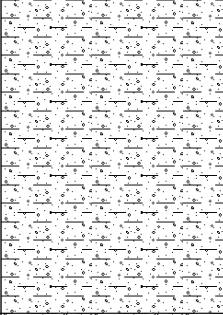
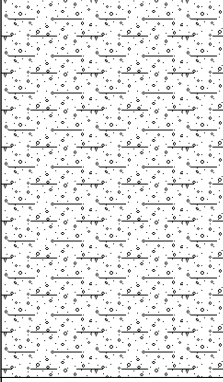

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					Project: Clitheroe Road, Whalley									
Dynamic Sampler Log					Date: 10/07/2018		Client: Trafford Housing Trust							
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill		
							Depth (m)	Type	Ref	Depth (m)	Results			
TOPSOIL: Brown slightly clayey fine to medium SAND with frequent rootlets.		0.30	(0.30)	67.47		<div>1.40</div>	0.00 - 0.30	ES	1	1.00	SPT(S) N=4 (1,1/2,1,1,0)			
Soft orangish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		1.40	(1.10)	66.37			2.00 - 2.10	ES	2				2.00	SPT(S) N=13 (1,2/3,3,3,4)
Firm brownish grey slightly silty sandy gravelly CLAY. Sand is fine to medium. Gravel is subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		4.00	(2.60)	63.77			3.00	SPT(S) N=14 (3,4/4,3,3,4)						
Medium dense to dense grey slightly clayey fine to coarse SAND. [DEVENSIAN TILL]		5.00	(1.00)	62.77			4.00	SPT(S) N=21 (3,3/3,4,6,8)						
Borehole complete at 5.00 m bgl.							5.00	SPT(S) N=48 (11,8/10,11,14,13)						
<div>Remarks:</div> <div>1. Engineer verified logged in general accordance with BS 5930:2015.</div> <div>2. Dynamic sampled between 1.0 m and 5.0 m bgl.</div> <div>3. SPT taken from 5.0 m to 5.45 m bgl.</div> <div>4. Hole terminated in superficial sand deposits.</div> <div>5. Groundwater was encountered at 1.4 m bgl.</div> <div>6. No visual or olfactory evidence of contamination was encountered.</div> <div>7. Backfilled with arisings.</div>					Water Strike			Water Level		Borehole Diameter				
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter			
					10/07/2018		1.40 m							
Coordinates: E373796.71 N436532.19		Elevation (mAOD): 67.77		Drilled By: Earth Engineering		Plant Used: Global Geotech		Logged: MB	Checked: RJS	Approved: RJS	Scale: 1:30			

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					Project: <b>Clitheroe Road, Whalley</b>							
<b>Dynamic Sampler Log</b>					Date: <b>10/07/2018</b>		Client: <b>Trafford Housing Trust</b>					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill
							Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Brown slightly clayey gravelly SAND. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone.		0.25	(0.25)	67.64			0.00 - 0.25	ES	1			
Soft to firm brownish grey slightly sandy gravelly CLAY. Sand is fine to medium. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		1.00	(0.75)	66.89						1.00	SPT(S) N=6 (2,0/1,1,1,3)	
Soft to firm brownish grey slightly gravelly CLAY with occasional cobbles. Gravel is subangular to subrounded fine to coarse of natural lithologies. Cobbles rounded of mudstone. [DEVENSIAN TILL]		2.00	(1.00)	65.89						2.00	SPT(S) N=37 (1,1/3,2,20,12)	
Stiff grey gravelly CLAY with frequent cobbles. Gravel is subangular to subrounded fine to coarse of natural lithologies. Cobbles rounded of mudstone and sandstone. [DEVENSIAN TILL]		2.50	(0.50)	65.39			2.20 - 2.50	ES	2			
Borehole complete at 2.50 m bgl.							2.40					
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 2.5 m bgl. 3. SPT taken from 2.0 m bgl. 4. Hole terminated in superficial clay deposits. 5. Groundwater was encountered at 2.4 m bgl. 6. No visual or olfactory evidence of contamination was encountered. 7. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter		
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter	
					10/07/2018		2.40 m					
Coordinates: <b>E373865.76 N436426.96</b>		Elevation (mAOD): <b>67.89</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Global Geotech</b>		Logged: <b>RR</b>	Checked: <b>MB</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>	

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					Project: <b>Clitheroe Road, Whalley</b>													
<b>Dynamic Sampler Log</b>					Date: <b>10/07/2018</b>		Client: <b>Trafford Housing Trust</b>											
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill						
							Depth (m)	Type	Ref	Depth (m)	Results							
TOPSOIL: Brown slightly clayey fine to coarse SAND with frequent rootlets.		0.40	(0.40)	69.28		<div>1.00</div>	0.00 - 0.40	ES	1									
Firm dark brown slightly sandy CLAY. Sand is fine to coarse. [DEVENSIA TILL]		1.00	(0.60)	68.68														
Soft to firm dark brown slightly silty sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of natural lithologies. At 4.0 m bgl: Becomes stiff. Between 4.1 m bgl and 4.8 m bgl: Becomes soft. At 5.0 m bgl: Becomes very stiff. [DEVENSIA TILL]			(4.00)															
Borehole complete at 5.00 m bgl.		5.00		64.68														
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 5.0 m bgl. 3. SPT taken from 5.0m to 5.45m bgl. 4. Hole terminated in superficial clay deposits. 5. Groundwater was encountered at 1.0 m bgl. 6. No visual or olfactory evidence of contamination was encountered. 7. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter								
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter							
					10/07/2018		1.00 m											
Coordinates: <b>E373802.97 N436594.82</b>		Elevation (mAOD): <b>69.68</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Global Geotech</b>		Logged: <b>MB</b>	Checked: <b>RJS</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>							

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					Project: <b>Clitheroe Road, Whalley</b>								
Dynamic Sampler Log					Date: <b>10/07/2018</b>		Client: <b>Trafford Housing Trust</b>						
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill	
							Depth (m)	Type	Ref	Depth (m)	Results		
TOPSOIL: Brown slightly clayey fine to coarse SAND with frequent rootlets.		0.30	(0.30)	73.29			0.00 - 0.30	ES	1				
Firm greyish orangish brown slightly sandy gravelly CLAY with occasional laminations. Sand is fine to coarse. At 2.0 m bgl: Becomes soft. [DEVENSIAN TILL]			(2.30)				1.30 - 1.40	ES	2	1.00	SPT(S) N=11 (2,2/3,2,3,3)		
		2.60		70.99						2.00	SPT(S) N=6 (1,1/2,1,1,2)		
Firm brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subrounded fine to medium of sandstone. [DEVENSIAN TILL]			(0.80)				2.70 - 2.80	ES	3	3.00	SPT(S) N=9 (0,1/2,2,2,3)		
		3.40		70.19									
Firm to stiff grey slightly gravelly CLAY with thin (0. 1m) bands of coarse gravelly sand. Gravel is subrounded fine to coarse of natural lithologies. At 4.4 m bgl: becomes gravelly with frequent cobbles. Gravel and cobbles are subangular to subrounded fine to coarse of sandstone. [DEVENSIAN TILL]			(1.20)				3.50 - 3.60	ES	4	4.00	SPT(S) N=21 (4,3/3,4,7,7)		
		4.60		68.99						4.60	SPT(S) 50 (25 for 10mm/50 for 70mm)		
Borehole complete at 4.60 m bgl.													
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 1.0 m and 4.6 m bgl. 3. SPT taken from 4.6 m to 5.05 m bgl. 4. Hole terminated in superficial clay deposits. 5. Groundwater was encountered at 2.4 m bgl. 6. No visual or olfactory evidence of contamination was encountered. 7. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter			
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter		
					10/07/2018		2.40 m						
Coordinates: <b>E373871.84 N436543.12</b>		Elevation (mAOD): <b>73.59</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Archway Dart</b>		Logged: <b>MB</b>	Checked: <b>RJS</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>		

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					Project: <b>Clitheroe Road, Whalley</b>								
<b>Dynamic Sampler Log</b>					Date: <b>11/07/2018</b>		Client: <b>Trafford Housing Trust</b>						
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details			Test Details		Backfill	
							Depth (m)	Type	Ref	Depth (m)	Results		
TOPSOIL: Brown slightly clayey fine to coarse SAND with frequent rootlets.		0.20	(0.20)	69.48			0.00 - 0.20	ES	1				
Firm to stiff orangish brown slightly sandy CLAY. Sand is fine to coarse. [DEVENSIAN TILL]			(1.80)				0.20 - 0.40	ES	2				
											1.20	SPT(S) N=18 (4,5/4,5,5,4)	
		2.00		67.68							2.00	SPT(S) N=15 (2,2/3,2,4,6)	
Firm brownish grey slightly sandy gravelly CLAY with occasional mudstone cobbles. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]			(3.00)			2.40					3.00	SPT(S) N=13 (2,3/3,3,3,4)	
											4.00	SPT(S) N=13 (2,2/3,3,3,4)	
		5.00		64.68							5.00	SPT(S) N=18 (3,3/4,4,5,5)	
Borehole complete at 5.00 m bgl.													
Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Dynamic sampled between 2.4 m and 5.0 m bgl. 3. SPT taken from 5.0 m to 5.45 m bgl. 4. Hole terminated in superficial clay deposits. 5. Groundwater was encountered at 2.4 m bgl. 6. No visual or olfactory evidence of contamination was encountered. 7. Backfilled with arisings.					Water Strike			Water Level		Borehole Diameter			
					Date	Time	Depth Strike	Duration	Depth Water	Depth Base	Diameter		
					11/07/2018		2.40 m						
Coordinates: <b>E373887.97 N436405.45</b>		Elevation (mAOD): <b>69.68</b>		Drilled By: <b>Earth Engineering</b>		Plant Used: <b>Archway Dart</b>		Logged: <b>MB</b>	Checked: <b>RJS</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>		

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		Project: <b>Clitheroe Road, Whalley</b>						
<b>Trial Pit Log</b>		Date: <b>11/07/2018</b>		Client: <b>Trafford Housing Trust</b>				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type Ref	Depth (m)	Results
TOPSOIL: Brown slightly clayey fine to medium sand.		0.25	53.46					
Soft brown slightly sandy slightly gravelly CLAY. Gravel is subrounded fine to coarse of natural lithologies. [DEVENSIAN TILL]		1.50	52.20					
Dark brown slightly clayey sandy subrounded to subangular fine to coarse GRAVEL of mudstone and other natural lithologies. Frequent cobbles. [DEVENSIAN TILL]		3.00	50.70					
Trial pit complete at 3.00 m bgl.				3.00	B 1			
Dimensions and Orientation: <div> Length = 3.10 m  Width = 0.80 m   </div>				Orientation:  Inclination:  Remarks: 1. Engineer verified logged in general accordance with BS 5930:2015. 2. Area cleared for services prior to excavations. 3. Groundwater encountered at 3.0 m during excavation. 4. No visual or olfactory evidence of contamination was encountered. 5. Hole terminated at 3.0 m due to instability. 6. Hole backfilled with arisings in reverse order of excavation.				
Coordinates: <b>E373592.00 N436237.00</b>	Elevation (mAOD): <b>53.70</b>	Excavated By: <b>Clive Hurt Limited</b>		Plant Used: <b>JCB 3CX</b>	Logged: <b>RR</b>	Checked: <b>MB</b>	Approved: <b>RJS</b>	Scale: <b>1:30</b>