Ground Investigation Summary

Scheme Name:	**Scheme N°:**	**Client:**
Llanrwst Road, Gyffin	6388	Adra
Our Reference:	**GI Date:**	**Undertaken By:**
6388	23/07/25	Beech Developments supervised by Caulmert (Cezary Salwa)

INTRODUCTION:

Ground investigation (GI) was undertaken at the site of a proposed residential development off Llanrwst Road, Gyffin, Conwy, LL38 8H.

The main objectives of the ground investigation were:

- To provide information about ground conditions.
- To take samples for geotechnical testing providing basic soil classification, compaction parameters and concrete classification.

The ground investigation was undertaken on the 12th of August 2025 by Beech Developments under the supervision of an engineer from Caulmert.

Previously ground investigation was carried out on site on the 21.07.2022. A total of seventeen machine excavated trial pits were dug with a JCB excavator.

GROUND INVESTIGATION SUMMARY:

A total of thirteen machine excavated trial pits were performed on the 12th of August 2025. The logs are provided in Appendix 2.

The positions of the exploratory holes were selected by Caulmert to provide general information on the ground conditions on site.

The trial pits, TP101 to TP113, were excavated with an 8t tracked compact excavator to maximum depths of between 0.6m and 2.6m bgl (below ground level). Disturbed samples were taken for subsequent chemical and geotechnical laboratory testing and inspection. On completion, all trial pits were carefully backfilled with arisings in thin layers, ensuring that excavated material was replaced in the same order as it had been removed.

Ground Conditions

In order to determine the ground condition on site both ground investigation, 21.07.2022 and 12.08.2025, are considered.

The site works revealed that the general succession of strata can be represented by a thin veneer of Topsoil underlain by Colluvium (unconsolidated slope and foot deposits formed as the result of runoff and creep) overlying highly weathered bedrock – Bettws Mudstone Formation.

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Topsoil – encountered in each test location TP01 to TP17 and TP101 to TP113 from ground level to depths of between 0.15 and 0.3m, typically the thickness is of 0.2m, and represented by dark brown slightly gravelly sandy clayey topsoil with grass roots.

Colluvium – encountered in each test location TP01 to TP17 and TP101 to TP113 from depths of between 0.15m and 0.3m, typically 0.2m to depths of between 0.4m and 3m. Colluvium is represented by transported unconsolidated slightly clayey sandy gravel. Gravel is typically subrounded sandstone.

Cohesive soils, slightly gravelly sandy clay, were observed in the northeastern part of the site in TP101, TP102 and TP103 from depths of 0.7m and 0.8m to 1.3m and 2.2m. The previous ground investigation recorded cohesive soils in TP02, TP03, TP07, TP08, TP09 and TP12 from depths of between 0.2m and 2m to depths of between 0.6m and 3m.

Bettws Mudstone Formation – encountered in each test location TP01 to TP17 and TP101 to TP113 from depths of between 0.4m and 3m down to the base of trial pits at between 1m and 3.2m. The thickness of the weathered bedrock depends on the excavatability and its grade of weathering. The bedrock is represented by highly weathered bedrock typically observed as clayey silty sandy gravel of mudstone.

Groundwater

Groundwater was only encountered in TP101 as seepage at 2.3m.

However, it should be noted that the ground investigation was undertaken after a period of several months of dry weather and groundwater levels may vary with time.

Observed Soil Contamination

No evidence of soil contamination was observed during the fieldwork.

LABORATORY TESTING:

The geotechnical test results are due on 15.09.2025.

Concrete Classification

Regarding concrete aggressivity, four samples were tested and recorded pH values of between 7.3 and 8.6 with water soluble sulphate concentrations of between 2.23 mg/l and 39.9 mg/l. The results indicated that a Design Sulphate Class DS-1 and ACEC Class AC-1 and respectively would be appropriate for the site.

Ground Investigation Summary

Scheme Name:	**Scheme N°:**	**Client:**
Llanrwst Road, Gyffin	6388	Adra
Our Reference:	**GI Date:**	**Undertaken By:**
6388	23/07/25	Beech Developments supervised by Caulmert (Cezary Salwa)

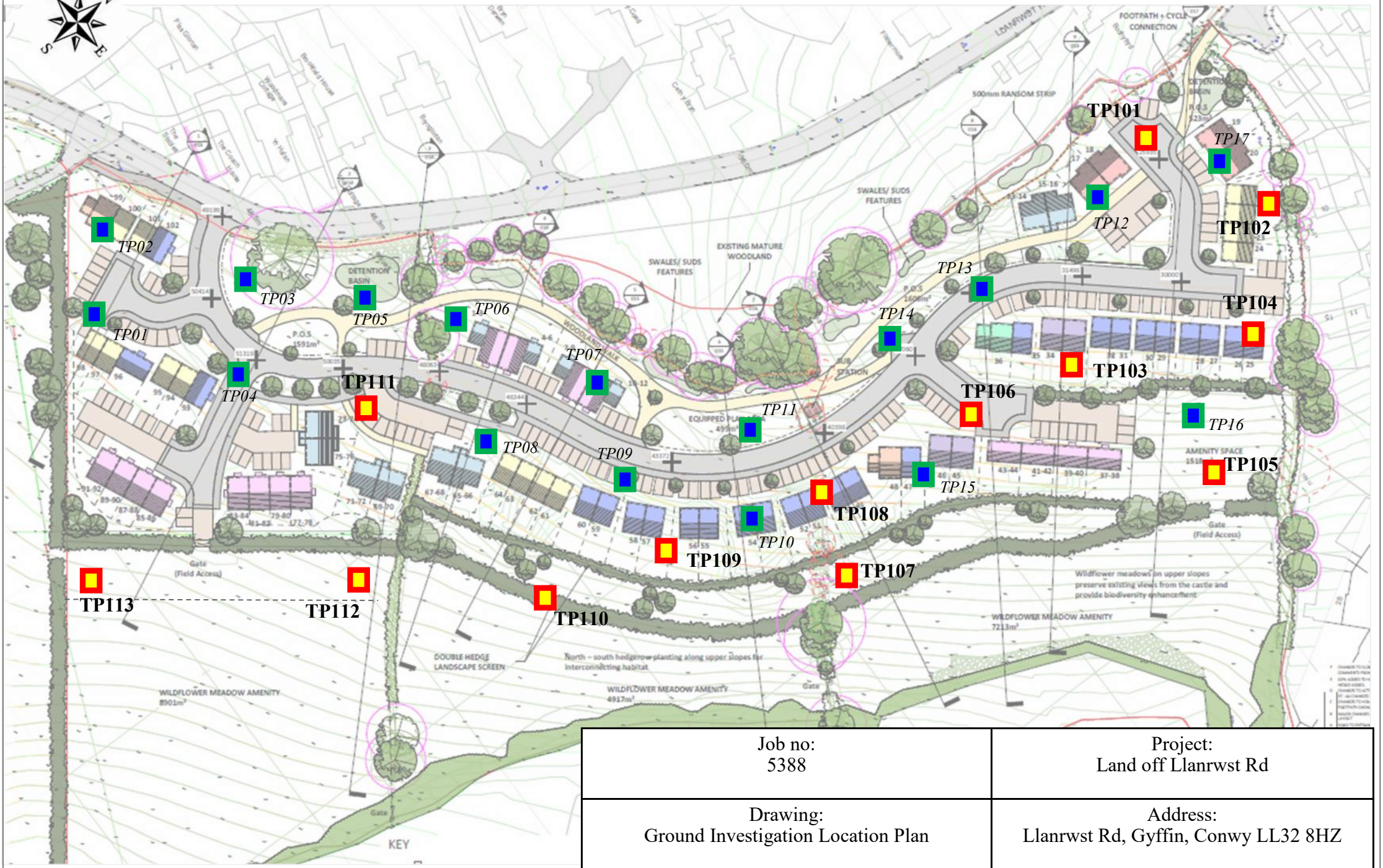
Name: Cezary Salwa

Position: Geotechnical Engineer

Date: 03.09.2025

Enclosed:

1. Ground Investigation Location Plan
2. Trial Pits Logs
3. Photographic Record
4. Sketch - top of bedrock contour lines.
5. BRE laboratory test results



Previous Ground Investigation

GI 2022 Trial Pits

GI 2025 Trial Pits

Job no: 5388	Project: Land off Llanrwst Rd
Drawing: Ground Investigation Location Plan	Address: Llanrwst Rd, Gyffin, Conwy LL32 8HZ
Date: 12.08.2025	Client: Beech Developments

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP101
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: dark brown slightly gravelly clayey topsoil with grass roots.	0.20	
B1 at 0.6m		Light brown slightly clayey sandy GRAVEL. Gravel is fine to coarse angular mudstone and occasional cobbles of subrounded sandstone.	0.50 0.70	
D1 at 1.2m		Firm to stiff light grey locally yellowish brown slightly gravelly CLAY with occasional cobbles.	1.00 1.50 2.00 2.20	
		Slightly clayey slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	2.40 2.50	
		Terminated at 2.4m due to difficult excavation in weathered bedrock - gravel.	3.00 3.50 4.00 4.50 5.00	

Groundwater: groundwater seepage at 2.3m

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP102
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown slightly clayey slightly gravelly SAND. Gravel is fine to course subrounded sandstone and subangular mudstone. Occasional cobbles of sandstone.	0.50 0.80	
		Light grey locally yellowish sandy CLAY. (COLLUVIUM/RESIDUAL)	1.00 1.30	
		Sandy fine to coarse angular to subangular GRAVEL of bluish grey mudstone. (BETTWS MUDSTONE FORMATION)	1.50	
		Terminated at 1.5m due to difficult excavation in weathered bedrock - gravel.	2.00 2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP103
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
D1 at 0.7m		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown slightly clayey slightly gravelly SAND. Gravel is fine to course subrounded sandstone and subangular mudstone. Occasional cobbles.	0.50 0.80	
		Light grey locally yellowish sandy CLAY. (COLLUVIUM/RESIDUAL)	1.00 1.30	
		Slightly clayey slightly sandy fine to coarse angular to subangular GRAVEL of bluish grey mudstone.	1.50	
		Terminated at 1.5m due to difficult excavation in weathered bedrock - gravel.	2.00 2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP104
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
D1 at 1m		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots and occasional tree roots.	0.20	
		Light brown clayey slightly gravelly SAND. Gravel is fine to course subrounded sandstone and subangular mudstone. Occasional cobbles of sandstone. (COLLUVIUM)	0.50 0.80 1.00 1.50 1.80	
		Sandy fine to coarse angular to subangular GRAVEL of grey mudstone.	2.00 2.10	
		Terminated at 2.1m due to difficult excavation in weathered bedrock - gravel.	2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks: Tree roots observed down to a depth of 1m.

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP105
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t		Operator: Beech Developments	

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots and occasional tree roots.	0.20	
		Light brown sandy GRAVEL. Gravel is fine to coarse angular mudstone and occasional cobbles of subrounded sandstone. Rare boulders of sandstone (up to 30cm in diam.)	0.50 1.00 1.40	
		Slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	1.50 1.60	
		Terminated at 1.6m due to difficult excavation in weathered bedrock - gravel.	2.00 2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Hole ID: TP03

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP106
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown gravelly SAND. Gravel is fine to coarse angular mudstone and occasional cobbles of subrounded sandstone. (COLLUVIUM)	0.50 0.90	
		Slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	1.00 1.40	
		Terminated at 1.4m due to difficult excavation in weathered bedrock - gravel.	1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP107
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t		Operator: Beech Developments	

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL. Gravel is fine to coarse subangular mudstone. (COLLUVIUM)	0.50	
			0.70	
		Slightly sandy fine to coarse angular to subangular GRAVEL of bluish grey mudstone. (BETTWS MUDSTONE FORMATION)	1.00	
		Terminated at 1m due to difficult excavation in weathered bedrock - gravel.	1.50	
			2.00	
			2.50	
			3.00	
			3.50	
			4.00	
			4.50	
			5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP108
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL. Gravel is fine to course subrounded sandstone and subangular mudstone. Occasional cobbles of sandstone.	0.50 1.00 1.50	
		Slightly sandy fine to coarse angular to subangular GRAVEL of bluish grey mudstone. (BETTWS MUDSTONE FORMATION)	1.70	
		Terminated at 1.7m due to difficult excavation in weathered bedrock - gravel.	2.00 2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP109
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL of fine to coarse angular mudstone. (COLLUVIUM)	0.50 1.00 1.50	
D1 at 3m		Brown clayey slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	2.00 2.50 3.00 3.20	
		Terminated at 3.2m due to difficult excavation in weathered bedrock - gravel.	3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP110
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t		Operator: Beech Developments	

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL. Gravel is fine to coarse angular mudstone and subrounded sandstone, occasional cobbles of subrounded sandstone.	0.50 1.00 1.50	
		Slightly clayey sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	2.00 2.50 2.80	
		Slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	3.00	
		Terminated at 3m due to difficult excavation in weathered bedrock - bedrock.	3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP111
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
B1 at 0.9m		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL of fine to coarse subrounded sandstone, occasional cobbles and rare boulders up to 30cm or 40cm in Ø.	0.50 1.00 1.20	
		Slightly clayey slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	1.50 1.80	
		Terminated at 1.8m due to difficult excavation in weathered bedrock - gravel.	2.00 2.50 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP112
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL of fine to coarse subangular to angular mudstone. (COLLUVIUM)	0.50	
			1.00	
			1.50	
		Slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	1.60	
		Terminated at 1.6m due to difficult excavation in weathered bedrock - gravel.	2.00	
			2.50	
			3.00	
			3.50	
			4.00	
			4.50	
			5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

Caulmert engineering environmental planning	Project: Land off Llanrwst Road	Location: Llanrwst Rd, Gyffin, Conwy	Hole ID: TP113
Client: Beech Developments		Job No. 5388 / Date: 12.08.2025	Sheet 1 of 1
Excavated by: Doosan DX 85R, 8t	Operator: Beech Developments		

Samples	Field Records	Description of Strata	Depth	Legend
		TOPSOIL: brown slightly gravelly sandy topsoil with grass roots.	0.20	
		Light brown sandy GRAVEL of fine to coarse subrounded sandstone, cobbles and boulders of subrounded sandstone up to 40cm in Ø.	0.50 1.00 1.50 1.70	
		Slightly clayey slightly sandy fine to coarse angular to subangular GRAVEL of dark grey mudstone. (BETTWS MUDSTONE FORMATION)	2.00 2.20	
		Terminated at 2.2m due to difficult excavation in weathered bedrock - gravel.	2.50 2.80 3.00 3.50 4.00 4.50 5.00	

Groundwater: not observed

Remarks:

D - small bag sample
B - bulk bag sample

TP102

TP103

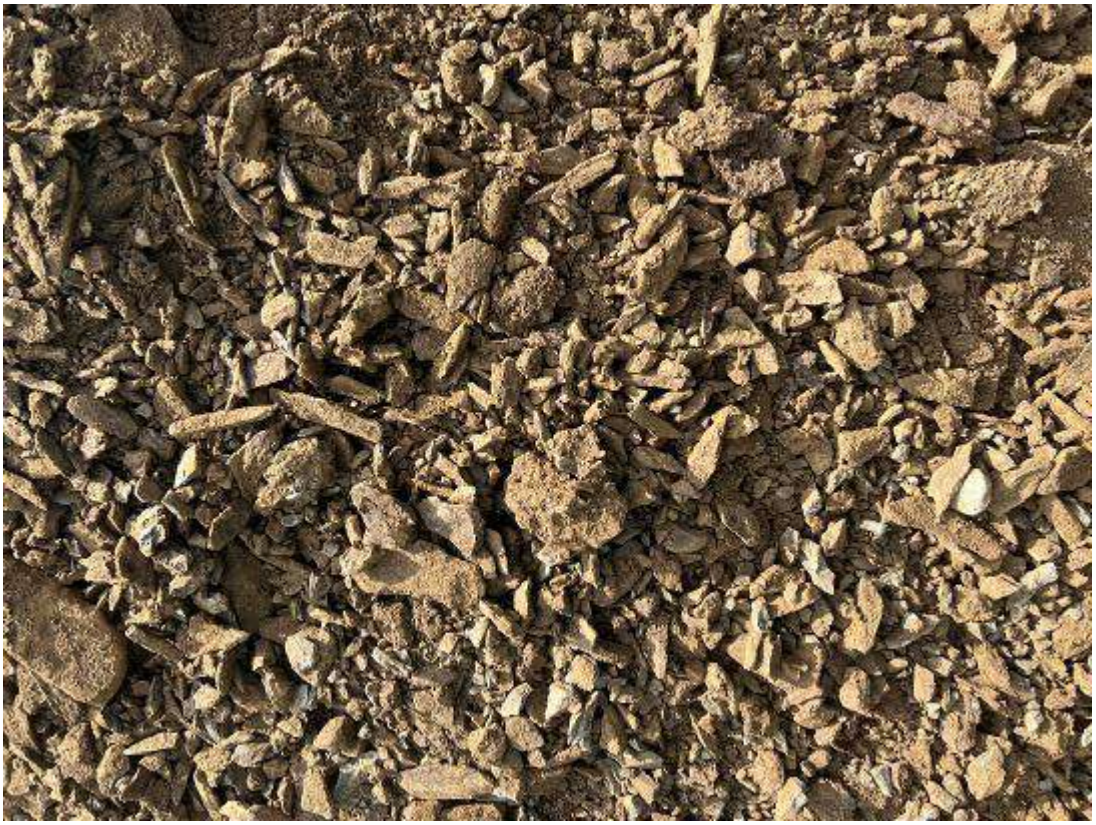
TP104

TP105

TP108

TP109

TP110



TP112


Contour 1m / base of unconsolidated colluvium
0.9 top of weathered (gravel) bedrock
TP01 0,8
TP02 1,3
TP03 0,6
TP04 1,2
TP05 1,1
TP06 0,4
TP07 1,2
TP08 1,8
TP09 3,0
TP10 2,10
TP11 2,40
TP12 2,3
TP13 2,3
TP14 0,8
TP15 1,2
TP16 1,0
TP17 0,7
TP101 2,2
TP102 1,3
TP103 1,3
TP104 1,8
TP105 1,4
TP106 0,9
TP107 0,7
TP108 1,5
TP109 1,5
TP110 1,50
TP111 1,20
TP112 1,5
TP113 1,7
1m
2m
3m
1,5
1,5m
EXISTING MATURE WOODLAND
SWALES/ SUDS FEATURES
FOOTPATH + CYCLE CONNECTION
500mm RANSOM STRIP
LLANRWST ROAD
DOUBLE HEDGE LANDSCAPE SCREEN
WILDFLOWER MEADOW AMENITY
WILDFLOWER MEADOW AMENITY 7213m²
WILDFLOWER MEADOW AMENITY 4917m²
WILDFLOWER MEADOW AMENITY 8901m²
North – south hedgerow planting along upper slopes for interconnecting habitat
Wildflower meadows on upper slopes preserve existing views from the castle and provide biodiversity enhancement
Gate (Field Access)
KEY

Previous Ground Investigation

GI 2022 Trial Pits

GI 2025 Trial Pits

Job no: 5388	Project: Land off Llanrwst Rd
Drawing: Ground Investigation Location Plan	Address: Llanrwst Rd, Gyffin, Conwy LL32 8HZ
Date: 12.08.2025	Client: Beech Developments

Caulmert Ltd
Glyndwr Innovations Ltd
St Asaph Business Park
St Asaph
LL17 0JD

e: CezarySalwa@caulmert.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 25-043514

Project / Site name:	Llanrwst Rd	**Samples received on:**	15/08/2025
Your job number:	5388	**Samples instructed on/ Analysis started on:**	15/08/2025
Your order number:	18537	**Analysis completed by:**	28/08/2025
Report Issue Number:	1	**Report issued on:**	28/08/2025
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-043514
Project / Site name: Llanrwst Rd
Your Order No: 18537

Lab Sample Number				648832	648833	648834	648835
Sample Reference				TP 101	TP 103	TP 104	TP 109
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A
Depth (m)				1.20	0.70	1.00	3.00
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	15.7	24.5	< 0.1
Moisture Content	%	0.01	NONE	16	5.9	12	7.5
Total mass of sample received	kg	0.1	NONE	0.3	0.4	0.4	0.3
General Inorganics							
pH (L099)	pH Units	N/A	MCERTS	8.6	8.5	7.3	8.2
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	19	4.5	9.9	80
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.45	2.23	4.94	39.9

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-043514
Project / Site name: Llanrwst Rd

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
648832	TP 101	None Supplied	1.2	Brown clay and sand with gravel
648833	TP 103	None Supplied	0.7	Brown loam and sand with gravel and stones
648834	TP 104	None Supplied	1	Brown loam with gravel and vegetation
648835	TP 109	None Supplied	3	Brown clay and sand with gravel

Analytical Report Number : 25-043514
Project / Site name: Llanrwst Rd

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Sample Deviation Report

Analytical Report Number : 25-043514
Project / Site name: Llanrwst Rd

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP 101	N/A	S	648832	a	Moisture Content	L019B	a
TP 101	N/A	S	648832	a	Sample Preparation	L019B	a
TP 101	N/A	S	648832	a	Soil Descriptions	L019B	a
TP 101	N/A	S	648832	a	Stones content of soil	L019B	a
TP 101	N/A	S	648832	a	Sulphate, water soluble, in soil (16hr extraction)	L038B	a
TP 101	N/A	S	648832	a	pH in soil (automated)	L099-PL	a
TP 103	N/A	S	648833	a	Moisture Content	L019B	a
TP 103	N/A	S	648833	a	Sample Preparation	L019B	a
TP 103	N/A	S	648833	a	Soil Descriptions	L019B	a
TP 103	N/A	S	648833	a	Stones content of soil	L019B	a
TP 103	N/A	S	648833	a	Sulphate, water soluble, in soil (16hr extraction)	L038B	a
TP 103	N/A	S	648833	a	pH in soil (automated)	L099-PL	a
TP 104	N/A	S	648834	a	Moisture Content	L019B	a
TP 104	N/A	S	648834	a	Sample Preparation	L019B	a
TP 104	N/A	S	648834	a	Soil Descriptions	L019B	a
TP 104	N/A	S	648834	a	Stones content of soil	L019B	a
TP 104	N/A	S	648834	a	Sulphate, water soluble, in soil (16hr extraction)	L038B	a
TP 104	N/A	S	648834	a	pH in soil (automated)	L099-PL	a
TP 109	N/A	S	648835	a	Moisture Content	L019B	a
TP 109	N/A	S	648835	a	Sample Preparation	L019B	a
TP 109	N/A	S	648835	a	Soil Descriptions	L019B	a
TP 109	N/A	S	648835	a	Stones content of soil	L019B	a
TP 109	N/A	S	648835	a	Sulphate, water soluble, in soil (16hr extraction)	L038B	a
TP 109	N/A	S	648835	a	pH in soil (automated)	L099-PL	a