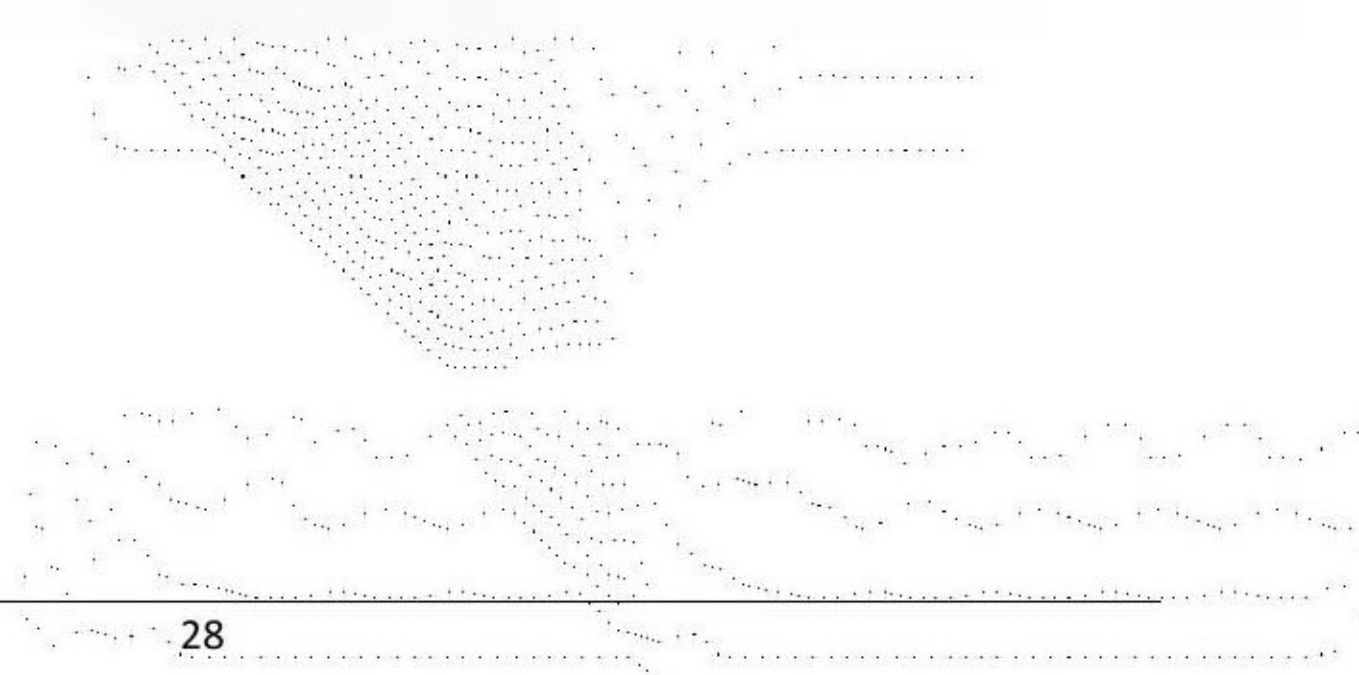
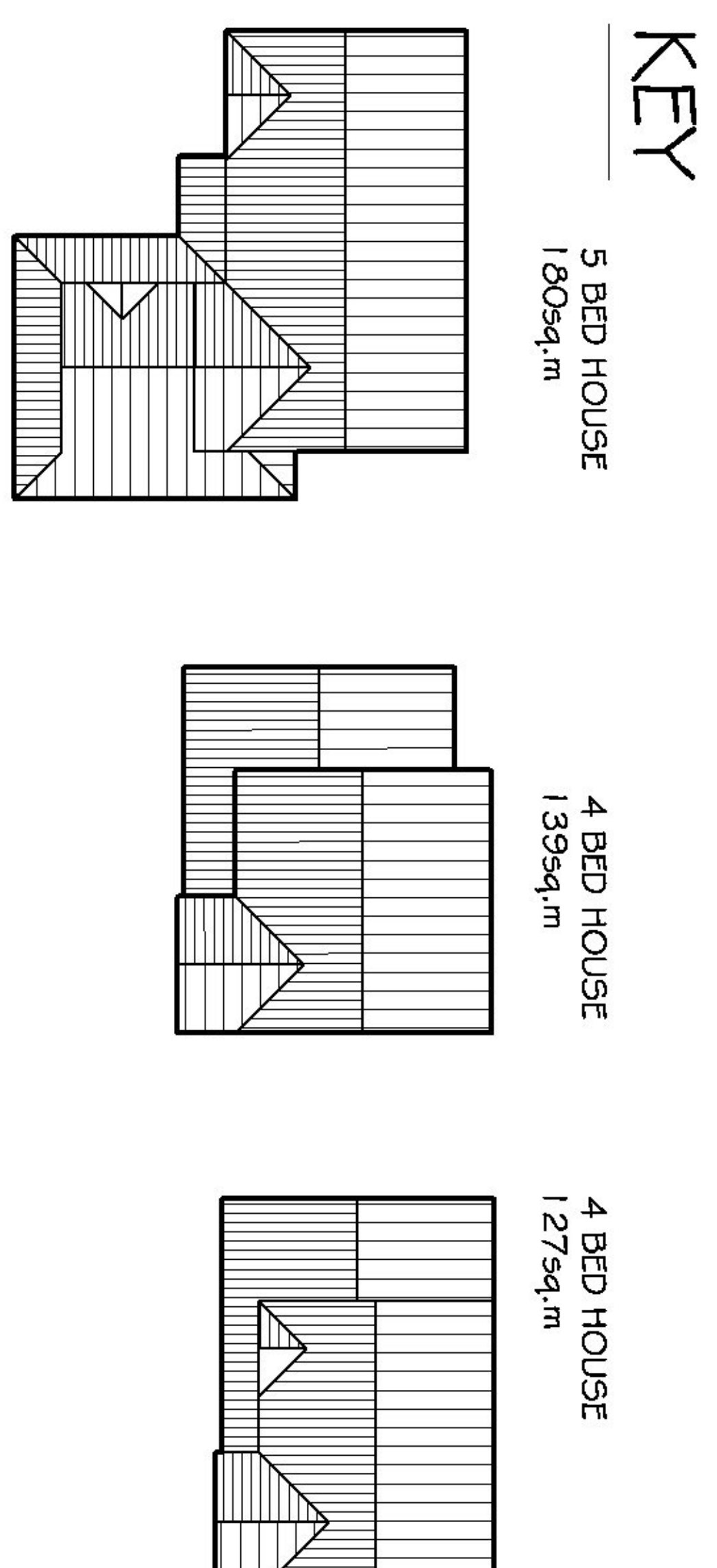
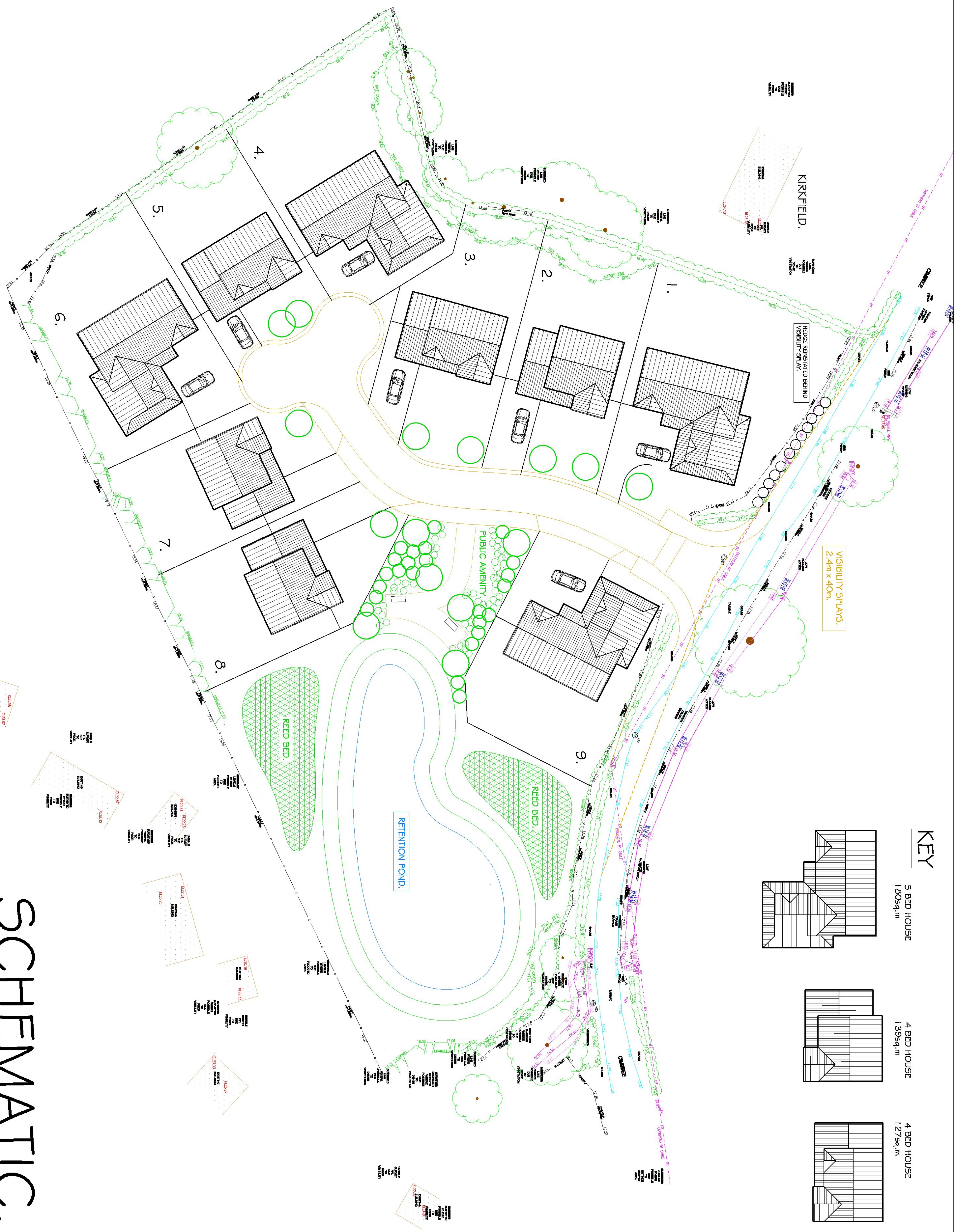
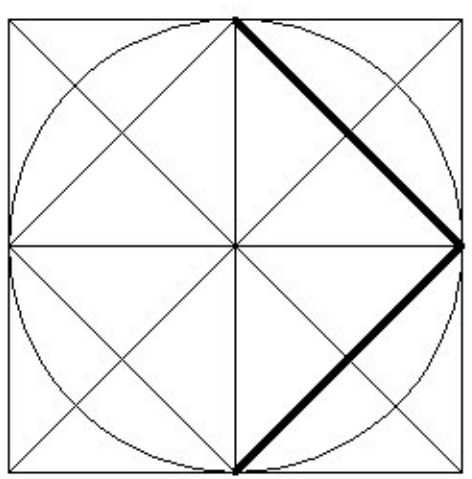


**APPENDIX A**  
**DEVELOPMENT PLAN**





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**Notes**

**PRELIMINARY**

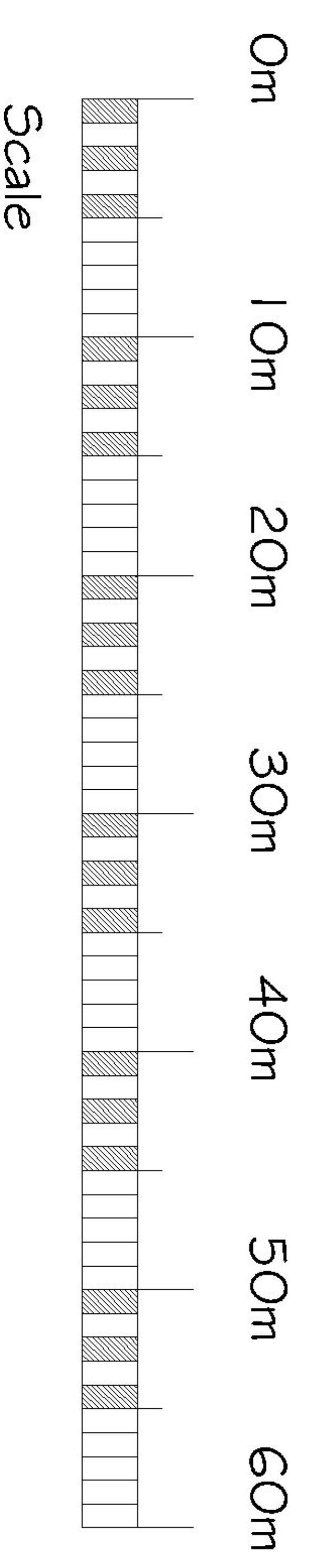
Rev. Details Date

**BYWATER + TWEEDALE**  
Architects

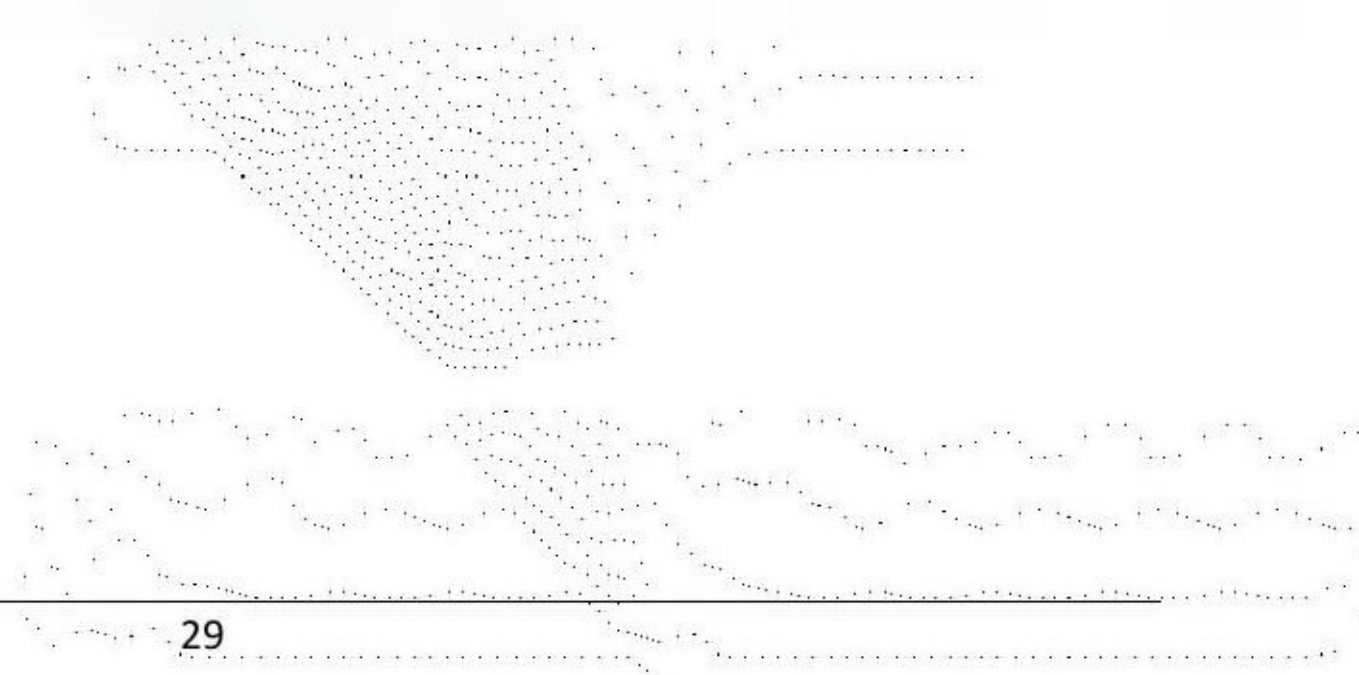
Springfield  
Preston Patrick  
Munthorpe  
Cumbria  
LA7 7PB  
Tel: 015395 - 67977  
Fax: 015395 - 67975  
enquiries@bywater-tweedale.co.uk  
www.bywater-tweedale.co.uk

Client	Clare Cooney.
Project	Residential Development Castle Lane Garstang, Lancs.
Drawing	Site Layout Plan. Proposed. SCHEMATIC.
Scale	1:250@A1
Date	3/21
Drawing Number	10043 / 1. P1.
Revision	GB.
Auth.	

**SCHEMATIC.**

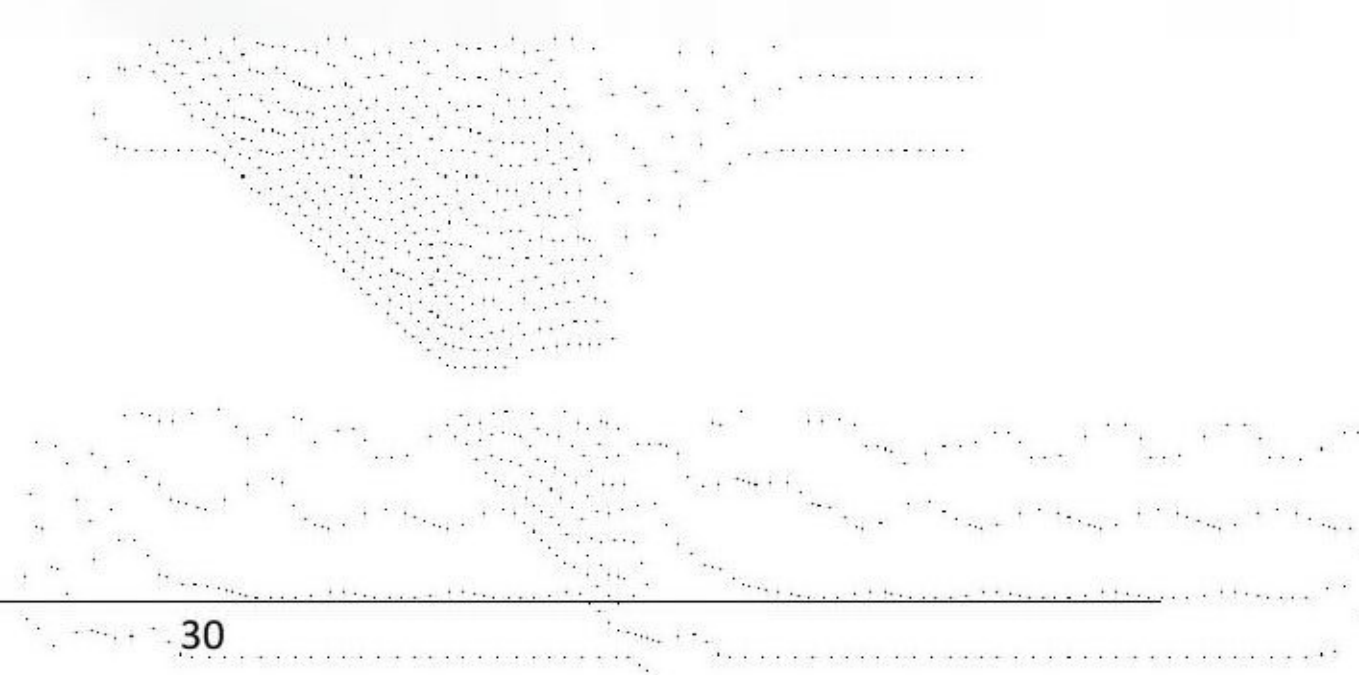


**APPENDIX B**  
**TOPOGRAPHICAL SURVEY**





**APPENDIX C**  
**UNITED UTILITIES SEWER RECORDS**



**Thomas Consulting Ltd**

21  
China Street,  
Lancaster, Lancashire  
LA1 1EX

FAO:

**How to contact us:**

**United Utilities Water Limited  
Property Searches  
Haweswater House  
Lingley Mere Business Park  
Great Sankey  
Warrington  
WA5 3LP**

Telephone: 0370 7510101

E-mail: [propertysearches@uuplc.co.uk](mailto:propertysearches@uuplc.co.uk)

Your Ref: L9861 - PO1284  
Our Ref: UUPS-ORD-294724  
Date: 07/06/2021

Dear Sirs

**Location: 1 CASTLE LANE COTTAGES CASTLE LANE, GARSTANG, PRESTON, PR3 1RB**

I acknowledge with thanks your request dated 03/06/2021 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

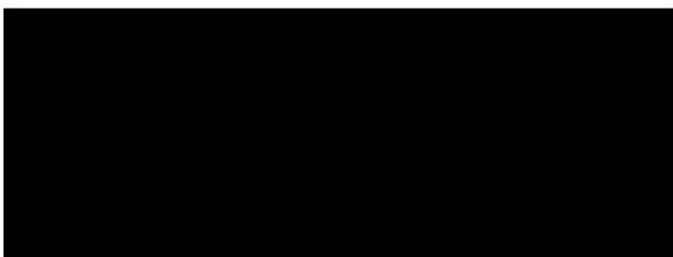
The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. <http://www.unitedutilities.com/work-near-asset.aspx>.

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please [contact us](#).

Yours Faithfully,



Karen McCormack  
Property Searches Manager

## TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

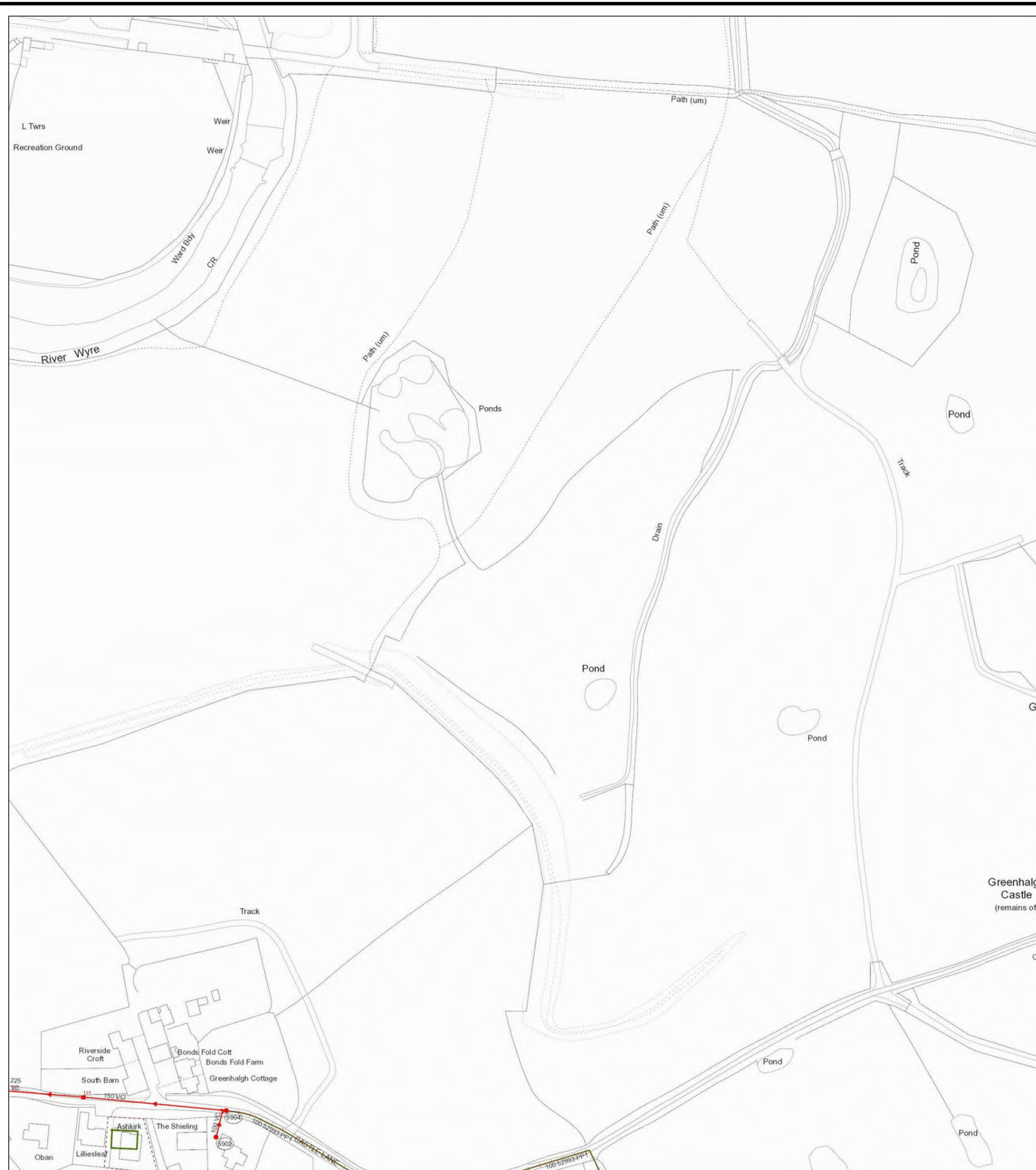
### TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.



Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	Length	Grad
4901	15.91	CO	14.98	225			VC	83.6315	1 in 380
4901	15.91	CO	14.98	225			VC	83.6315	1 in 380
1001	16.19	SW	15.39	1000			CO	69.1773	1 in 41
3301	15.93	CO	15.13	375			CO	21.0318	1 in 26
2419	16.77	SW	16.07	150			VC	30.2572	1 in 610
1509	21.35	CO	19.61	150			VC	24.3638	1 in 18
0202	18.77	CO	17.21	225			VC	11.13476	1 in 18
0402	18.35	CO	17.21	225			VC	25.2817	1 in 361
1111	18.61	SW	14.06	1000			CO	17.4289	1 in 503
2204	20.27	CO	15.31	375			CO	80.46776	1 in 201
3304	17.16	CO	15.31	375			CO	5.670996	1 in 2
3205	16.04	CO	15.42	375			VC	14.64273	1 in 49
0105	18.62	CO	18.4	100			VC	5.748817	1 in 31
3401	16.24	SW	14.25	375			VC	20.7518	1 in 40
0410	CO	0	225				VC	5.10298	1 in 18
2304	17.84	VC	16.3	150			VC	1.468885	1 in 150
2303	19.31	CO	18.86	150			VC	41.8828	1 in 299
2301	17.18	CO	15.7	375			VC	92.76796	1 in 64
2119	17.18	CO	15.7	375			VC	2.24517	1 in 562
1402	20.54	CO	18.25	225			VC	12.2314	1 in 569
0907	20.81	CO	17.12	225			VC	41.7828	1 in 696
1304	20.63	CO	18.68	225			VC	13.76884	1 in 229
2417	18.32	SW	14.95	375			VC	19.9337	1 in 447
9102	18.87	CO	16.03	600			VC	71.58841	1 in 447
0505	21.23	CO	20	150			VC	11.2607	1 in 114
2504	20.03	FO	17.12	225			VC	67.49454	1 in 562
2103	15.6	CO	14.81	375			VC	12.2314	1 in 569
3503	16.39	SW	14.95	375			VC	41.7828	1 in 696
1102	18.84	CO	15.84	375			VC	13.76884	1 in 229
9510	16.88	CO	14.88	375			VC	19.9337	1 in 447
2005	16.68	CO	14.88	375			VC	71.58841	1 in 447
2002	16.68	CO	14.88	375			VC	11.2607	1 in 114
1112	16.68	CO	14.88	375			VC	67.49454	1 in 562
2115	16.68	CO	14.88	375			VC	12.2314	1 in 569
3408	17	CO	15.31	100			VC	41.7828	1 in 696
0204	18.93	CO	0	300			VC	13.83316	1 in 876
3004	16.81	CO	16.55	750			VC	8.440379	1 in 207
3407	18.8	CO	15.44	375			VC	70.7223	1 in 681
0103	19.84	CO	15.66	150			VC	26.52467	1 in 207
1309	19.64	CO	15.66	150			VC	34.5259	1 in 681
2118	17.39	CO	15.83	100			VC	18.30357	1 in 160
3405	16.96	CO	15.83	300			VC	7.60232	1 in 160
1101	CO	0	225				VC	86.1465	1 in 160
0404	CO	0	225				VC	30.61798	1 in 160
2201	CO	0	225				VC	11.26276	1 in 160
2120	CO	0	100				VC	17.5547	1 in 160
3505	16.73	CO	15.73	300			VC	8.15378	1 in 339
1506	21.7	CO	20.6	150			VC	61.0356	1 in 339
0203	18.84	CO	16.54	375			VC	52.3227	1 in 53
3501	18.06	SW	15.54	375			VC	8.92785	1 in 803
0405	16.82	CO	16.72	225			VC	36.89956	1 in 105
2415	16.88	CO	15.88	300			VC	24.7644	1 in 105
2110	16.06	CO	0	750			VC	13.65116	1 in 273
2004	16.06	CO	0	750			VC	6.07299	1 in 273
2004	16.06	CO	0	750			VC	12.23716	1 in 273
9904	17.67	CO	15.82	150			VC	12.23716	1 in 273
0201	18.9	CO	16.06	300			VC	79.9138	1 in 273
2203	CO	0	150				VC	72.324	1 in 347
1107	CO	0	150				VC	11.0684	1 in 347
2905	16.4	CO	14.82	750			VC	14.4025	1 in 179
2805	16.4	CO	14.82	750			VC	51.78439	1 in 179
0408	19.88	FO	18.56	150			VC	13.9767	1 in 133
1504	19.74	CO	17.97	100			VC	24.2281	1 in 133
1404	19.74	CO	17.97	100			VC	61.82015	1 in 133
2405	18.52	CO	17.78	225			VC	5.0701	1 in 133
2216	CO	0	100				VC	37.67869	1 in 133
1312	CO	0	150				VC	9.66215	1 in 133
1108	19.05	CO	15.41	750			VC	89.8022	1 in 133
2205	CO	0	150				VC	18.41269	1 in 133
2906	16.16	CO	14.52	375			VC	45.91487	1 in 1330
2908	16.16	CO	14.52	375			VC	45.91487	1 in 1330
1105	18.79	CO	16.29	225			VC	15.2526	1 in 17
0411	19.89	SW	16.82	225			VC	57.40484	1 in 262
3305	17.11	CO	16.13	150			VC	17.52763	1 in 21
1501	CO	0	100				VC	9.38818	1 in 21
1006	17.69	CO	15.36	750			VC	34.2018	1 in 149
1006	17.69	CO	15.36	750			VC	34.2018	1 in 149
0302	16.95	CO	16.27	300			VC	62.95786	1 in 149
9410	CO	0	150				VC	8.40213	1 in 149
0908	19.53	FO	17.38	150			VC	22.4129	1 in 18
1902	19.53	FO	17.38	150			VC	22.4129	1 in 18
9525	19.67	SW	18.63	225			VC	6.46512	1 in 18
1205	19.82	CO	18.22	100			VC	69.9776	1 in 206
9411	CO	0	100				VC	35.1431	1 in 163
2107	20.46	CO	19.91	100			PVC	8.230399	1 in 163
0907	20.42	FO	18.46	150			VC	15.0261	1 in 14
0907	20.42	FO	18.46	150			VC	15.0261	1 in 14
1109	19.47	CO	15.47	750			VC	15.62928	1 in 14
2008	16.68	CO	14.99	150			VC	41.7169	1 in 666
0903	19.48	SW	17.76	150			VC	24.2119	1 in 11
0903	19.48	SW	17.76	150			VC	24.2119	1 in 11
2420	18.25	CO	17.28	100			VC	24.57495	1 in 11
2205	20.08	SW	16.78	375			VC	15.44666	1 in 31
2213	CO	0	150				VC	17.07192	1 in 31
1202	CO	0	100				VC	49.33725	1 in 31
1110	19.05	SW	14.33	1000			VC	2.48024	1 in 348
2414	18.63	CO	15.09	750			VC	94.0174	1 in 348
2002	17.02	CO	15.09	750			VC	0	225
2002	17.02	CO	15.09	750			VC	28.8995	1 in 107
1003	17.53	SW	13.18	1000			VC	28.8995	1 in 107
1003	17.53	SW	13.18	1000			VC	130.3458	1 in 272
1003	17.53	SW	13.18	1000			VC	130.3458	1 in 272
0401	CO	0	150				VC	21.51836	1 in 19
2202	20.58	CO	0	100			VC	15.81264	1 in 19
3903	16.08	CO	14.76	300			VC	18.23332	1 in 19
3903	16.08	CO	14.76	300			VC	15.37035	1 in 19
2106	CO	0	150				VC	48.90974	1 in 19
0902	20.38	SW	18.55	150			VC	13.00894	1 in 163
3601	CO	0	300				VC	43.00272	1 in 644
0407	19.71	FO	17.94	150			VC	69.98761	1 in 80
0101	19.15	CO	17.16	225			VC	42.2331	1 in 80
2101	20.39	CO	17.16	225			VC	39.60938	1 in 39
0106	CO	0	225				VC	8.98967	1 in 39
2409	18.82	CO	17.29	225			VC	24.32294	1 in 243
1311	CO	0	100				VC	7.20028	1 in 1643
2516	19.59	FO	17.1	225			VC	16.43358	1 in 108
0403	18.98	CO	16.62	225			VC	39.40453	1 in 289
3404	17.45	CO	15.48	375			VC	20.51571	1 in 171
2517	16.55	SW	0	375			VC	151.9165	1 in 165
2418	16.55	SW	0	300			VC	77.05704	1 in 139
0303	19.18	CO	16.43	225			VC	21.29955	1 in 102
0406	19.7	CO	16.89	225			VC	18.1014	1 in 453
2301	20.08	CO	18.08	225			VC	18.1014	1 in 453
0913	CO	0	150				VC	34.36362	1 in 102
3502	17.17	SW	15.19	375			VC	163.6688	1 in 102
0305	16.78	CO	15.27	225			VC	57.9068	1 in 102
2904	15.49	CO	14.49	375			VC	52.143	1 in 120
0002	20.41	CO	17.91	225			VC	38.78884	1 in 647
9005	16.61	SW	15.66	1000			VC	42.66669	1 in 601
9001	21.44	CO	18.37	225			VC	47.90887	1 in 601
9402	19.46	FO	18.38	150			VC	26.10808	1 in 601
2104	15.77	CO	14.87	375			VC	13.29323	1 in 70
0104	19.56	CO	15.61	875			VC	13.29323	1 in 70
3203	15.7	CO	14.97	375			VC	7.96287	1 in 70
2013	CO	0	100				VC	6.41603	1 in 70
0004	22.21	SW	19.43	150			VC	52.15947	1 in 70
0004	22.21	SW	19.43	150			VC	13.16421	1 in 70
2309	CO	0	100				VC	1.779743	1 in 70
2219	CO	0	100				VC	1.779743	1 in 70
1009	CO	0	100				VC	8.367745	1 in 46
2515	18.02	CO	17	225			VC	8.367745	1 in 46
2123	CO	0	100				VC	113.4141	1 in 46
2019	CO	0	100				VC	6.367745	1 in 46
1201	19.64	CO	18	100			VC	11.4141	1 in 46
2402	18.53	CO	17.86	225			VC	17.69031	1 in 46
2113	CO	0	100				VC	6.463959	1 in 46
2016	CO	0	100				VC	2.871454	1 in 87
2016	CO	0	100						





Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
5904	17.67	CO	15.82	150		VC	VC	79.59138	
5904	17.67	CO	15.82	150		VC	VC	79.59138	
5902		CO		100		VC	VC	15.3051	
5902		CO		100		VC	VC	15.3051	

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
-------	-------	------	--------	--------	--------	-------	------	--------	------

### LEGEND

Abandoned Foul Surface Water Combined Public Sewer Private Sewer Section 114 Rising Main Sludge Main Overflow Water Course Highway Drain

All point assets follow the standard colour convention:  
 red - combined blue - surface water  
 brown - foul purple - overflow

- Manhole
- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

**MANHOLE FUNCTION**

FO Foul  
 SW Surface Water  
 CO Combined  
 OV Overflow

**SEWER SHAPE**

CI Circular TR Trapezoidal  
 EG Egg AR Arch  
 OV Oval BA Barrel  
 FT Flat Top HO HorseShoe  
 RE Rectangular UN Unspecified  
 SQ Square

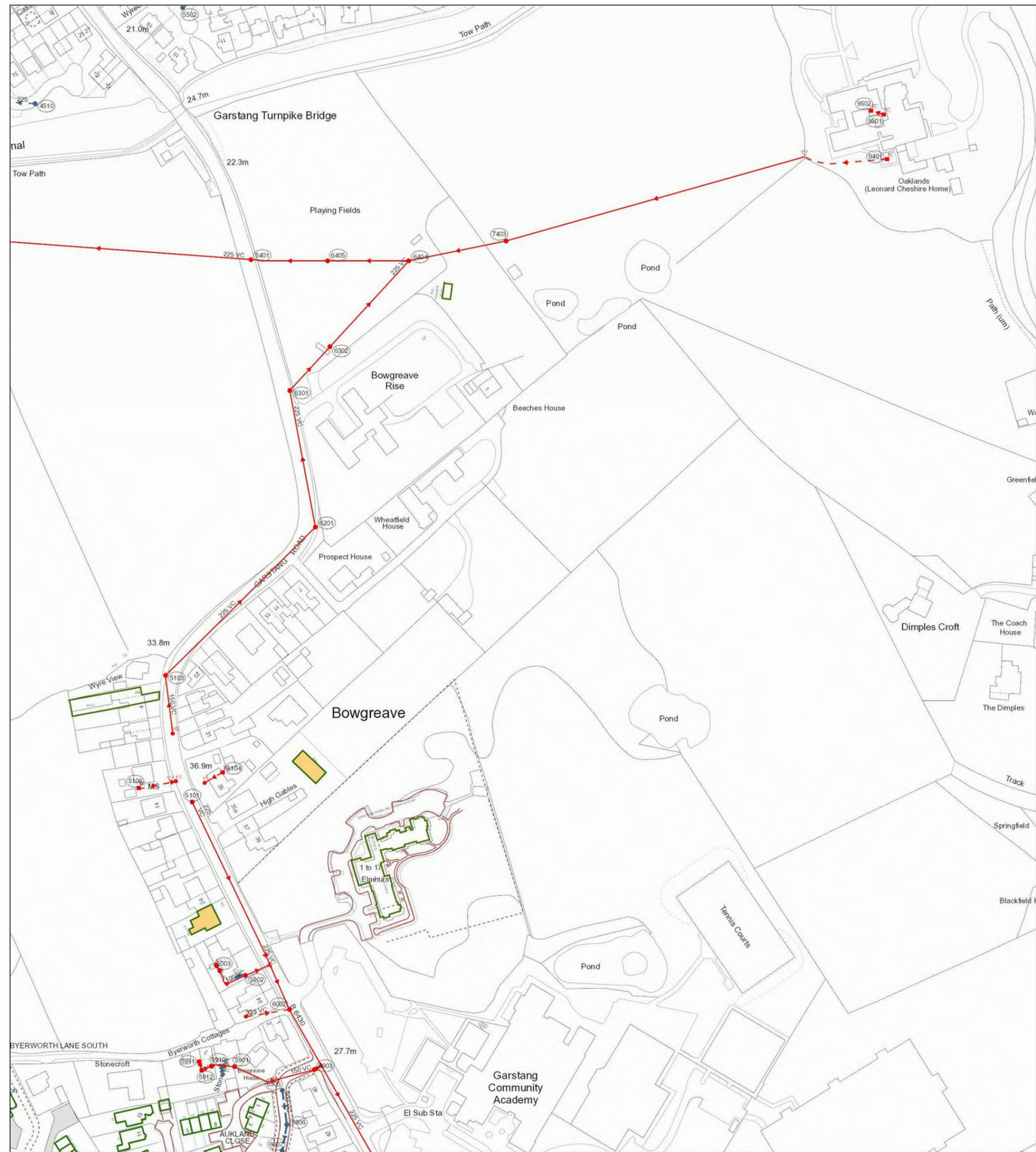
**SEWER MATERIAL**

AC Asbestos Cement  
 BR Brick  
 PE Polyethylene  
 RP Reinforced Plastic Matrix  
 CO Concrete  
 CSB Concrete Segment Bolted  
 CSU Concrete Segment Unbolted  
 CC Concrete Box Culvert  
 PSC Plastic / Steel Composite  
 GRC Glass Reinforced Plastic  
 DI Ductile Iron  
 PVC Polyvinyl Chloride  
 CI Cast Iron  
 SI Spun Iron  
 ST Steel  
 VC Vitrified Clay  
 PP Polypropylene  
 PF Pitch Fibre  
 MAC Masonry, Coursed  
 MAR Masonry, Random  
 U Unspecified

**Address or Site Reference:**  
 1 CASTLE LANE COTTAGES CASTLE LANE,  
 GARSTANG,  
 PRESTON,  
 PR3 1RB

**OS sheet** SD4945SE  
**Number:**  
**Scale:** 1:1250 **Date:** 07/06/2021  
**Nodes:** 4  
**Sheet:** 2 of 6  
**Printed by:** Property Searches

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.  
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Reho	Cover	Func	Invert	Size x	Size y	Shape	Mat	Length	Grad
8806	27.66	SW	24.54	900		VC	VC	19.14957	1 in 373
5901		CO		150		VC	VC	46.94736	
6006	27.4	SW	24.46	900		VC	VC	14.90926	1 in 373
6201	28.82	CO	28.84	225		VC	VC	77.10954	1 in 67
3502	20.45	SW	18.66	150		VC	VC	18.14808	1 in 67
5502	20.45	SW	18.66	150		VC	VC	18.14808	1 in 67
6405		CO	0	225		VC	VC	42.63496	
6301		CO	0	225		VC	VC	64.85374	
5002		CO	0	100		VC	VC	14.83606	
7403		CO	0	225		VC	VC	55.0228	1 in
7403		CO	0	225		VC	VC	55.0228	1 in
6404	22.81	CO	0	225		VC	VC	45.98001	
6301		CO	0	225		VC	VC	32.81934	
5103	33.18	CO	30.98	225		VC	VC	117.1157	1 in 28
5003		CO	0	100		VC	VC	21.33132	
5912		CO	0	100		VC	VC	5.62536	
6807	27.22	SW	24.45	900		VC	VC	8.86916	1 in 433
4510		SW	225			VC	VC	17.54259	
4510		SW	225			VC	VC	17.54259	
4510		SW	225			VC	VC	17.54259	
5910		CO	0	100		VC	VC	2.76024	
6803		CO	0	150		VC	VC	4.583993	
6002	29.84	CO	27.65	225		VC	VC	109.5301	1 in 24
5401		CO	0	100		VC	VC	170.3414	
5911		CO	0	100		VC	VC	4.785666	
5101	37.3	CO	35.75	225		VC	VC	94.31687	

### LEGEND

Abandoned    Foul    Surface Water    Combined    Public Sewer

--- Section 1104  
 --- Rising Main  
 --- Sludge Main  
 --- Overflow  
 --- Water Course  
 --- Highway Drain

All point assets follow the standard colour convention:  
 red - combined    blue - surface water  
 brown - foul    purple - overflow

- Manhole
- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

**MANHOLE FUNCTION**

FO Foul  
 SW Surface Water  
 CO Combined  
 OV Overflow

**SEWER SHAPE**

CI Circular    TR Trapezoidal  
 EG Egg    AR Arch  
 OV Oval    BA Barrel  
 FT Flat Top    HO HorseShoe  
 RE Rectangular    UN Unspecified  
 SQ Square

**SEWER MATERIAL**

AC Asbestos Cement  
 BR Brick  
 PE Polyethylene  
 RP Reinforced Plastic Matrix  
 CO Concrete  
 CSB Concrete Segment Bolted  
 CSU Concrete Segment Unbolted  
 CC Concrete Box Culverted  
 PSC Plastic / Steel Composite  
 GRC Glass Reinforced Plastic  
 DI Ductile Iron  
 PVC Polyvinyl Chloride  
 CI Cast Iron  
 SI Spun Iron  
 ST Steel  
 VC Vitrified Clay  
 PP Polypropylene  
 PF Pitch Fibre  
 MAC Masonry, Coursed  
 MAR Masonry, Random  
 U Unspecified

**Address or Site Reference:**  
 1 CASTLE LANE COTTAGES CASTLE LANE,  
 GARSTANG,  
 PRESTON,  
 PR3 1RB

**OS sheet** SD4944SE  
**Number:**  
**Scale:** 1:1250    **Date:** 07/06/2021  
**Nodes:** 27  
**Sheet:** 3 of 6  
**Printed by:** Property Searches

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.  
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Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
3301	19.87	CO	0	300			VC	157.5055	
3305	19.87	SW	17.16	300			VC	15.74154	1 in 175
3306	19.87	SW	17.16	300			VC	15.74154	1 in 175
3304	20.54	FO	18.06	300			VC	33.43893	1 in 279
3301	20.54	FO	18.06	300			VC	33.43893	1 in 279
4509		SW	0	225			VC	104.6465	
4509		SW	0	225			VC	62.11688	
4509		SW	225				VC	62.11688	
3501	20.26	FO	17.49	300			VC	20.5139	1 in 513
3501	20.26	FO	17.49	300			VC	20.5139	1 in 513
4505		SW	0	225			VC	7.663224	
4505		SW	0	225			VC	7.663224	
3507	20.44	SW	17.49	300			VC	25.7209	1 in 171
3507	20.44	SW	17.49	300			VC	25.7209	1 in 171
3401	22.04	CO	20.97	225			VC	132.6841	
3401	22.04	CO	20.97	225			VC	132.6841	
4510		SW	0	225			VC	17.54259	
4510		SW	0	225			VC	17.54259	
4510		SW	225				VC	17.54259	
4510		SW	225				VC	17.54259	
1301	21.99	CO	20.31	300			VC	131.8315	
2508	20.43	SW	19.1	150			VC	27.44435	1 in 17
2508	20.43	SW	19.1	150			VC	27.44435	1 in 17
2502	19.83	FO	15.88	300			VC	14.7622	1 in 462
2502	19.83	FO	15.88	300			VC	14.7622	1 in 462
3503	20.03	FO	19.95	300			VC	20.12318	1 in 287
3503	20.03	FO	19.95	300			VC	20.12318	1 in 287
2501	20.08	SW	17.25	300			VC	19.62853	1 in 218
2501	20.08	SW	17.25	300			VC	19.62853	1 in 218
3506	20.36	SW	17.19	300			VC	25.93699	1 in 218
3506	20.36	SW	17.19	300			VC	25.93699	1 in 218
4401	22.2	CO	21.3	225			VC	70.93719	1 in 215
4401	22.2	CO	21.3	225			VC	70.93719	1 in 215
4401	22.2	CO	21.3	225			VC	70.93719	1 in 215
4401	22.2	CO	21.3	225			VC	70.93719	1 in 215
3508		FO	100				VC	18.54511	
3508		FO	100				VC	18.54511	
3510		SW	225				VC	12.92528	
3510		SW	225				VC	12.92528	
3511		SW	225				VC	60.13037	
3511		SW	225				VC	60.13037	
3505		SW	0	300			VC	62.09639	
3509		FO	100				VC	27.46724	
3509		FO	100				VC	27.46724	
3502	20.64	FO	18.39	300			VC	57.31916	1 in 174
9901		CO	0	375			VC	112.919	
0001		CO	0	150			VC	64.15412	

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
-------	-------	------	--------	--------	--------	-------	------	--------	------

### LEGEND

Abandoned Foul Surface Water Combined Public Sewer

Private Sewer Section 1104  
Rising Main  
Sludge Main  
Overflow  
Water Course  
Highway Drain

All point assets follow the standard colour convention:  
red - combined blue - surface water  
brown - foul purple - overflow

Manhole	Side Entry Manhole
Head of System	Outfall
Extent of Survey	Screen Chamber
Rodding Eye	Inspection Chamber
Inlet	Bifurcation Chamber
Discharge Point	Lamp Hole
Vortex	T Junction / Saddle
Penstock	Catchpit
Washout Chamber	Valve Chamber
Valve	Vent Column
Air Valve	Vortex Chamber
Non Return Valve	Penstock Chamber
Soakaway	Network Storage Tank
Gully	Sewer Overflow
Cascade	Ww Treatment Works
Flow Meter	Ww Pumping Station
Hatch Box	Septic Tank
Oil Interceptor	Control Kiosk
Summit	
Drop Shaft	Change of Characteristic
Orifice Plate	

**MANHOLE FUNCTION**

FO Foul  
SW Surface Water  
CO Combined  
OV Overflow

**SEWER SHAPE**

CI Circular TR Trapezoidal  
EG Egg AR Arch  
OV Oval BA Barrel  
FT Flat Top HO HorseShoe  
RE Rectangular UN Unspecified  
SQ Square

**SEWER MATERIAL**

AC Asbestos Cement  
BR Brick  
PE Polyethylene  
RP Reinforced Plastic Matrix  
CO Concrete  
CSB Concrete Segment Bolted  
CSU Concrete Segment Unbolted  
CC Concrete Box Culverted  
PSC Plastic / Steel Composite  
GRC Glass Reinforced Plastic  
DI Ductile Iron  
PVC Polyvinyl Chloride  
CI Cast Iron  
SI Spun Iron  
ST Steel  
VC Vitrifed Clay  
PP Polypropylene  
PF Pitch Fibre  
MAC Masonry, Coursed  
MAR Masonry, Random  
U Unspecified

**Address or Site Reference:**  
1 CASTLE LANE COTTAGES CASTLE LANE,  
GARSTANG,  
PRESTON,  
PR3 1RB

**OS sheet** SD4944SW  
**Number:**  
**Scale:** 1:1250 **Date:** 07/06/2021  
**Nodes:** 46  
**Sheet:** 4 of 6  
**Printed by:** Property Searches

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.  
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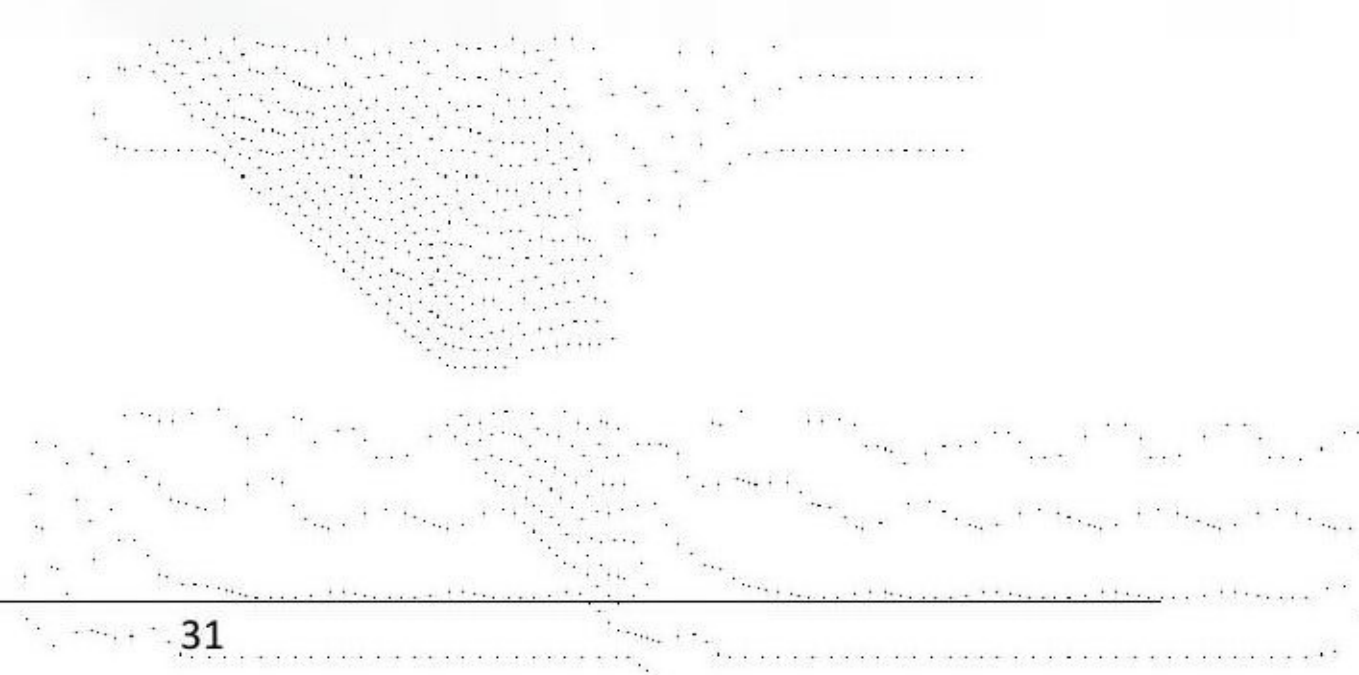


Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	Length	Grad
7602	19.61	FO	16.44	900	20.1334	1 in 144	CO	18.1408	1 in 67
5502	20.45	SW	16.66	150	18.1408	1 in 67	VC	18.1408	1 in 67
5502	20.45	SW	16.66	150	18.1408	1 in 67	VC	18.1408	1 in 67
8807	19.61	FO	16.44	75	6.40228	1 in 126	PVC	6.40228	1 in 126
7707	19.61	FO	16.44	150	18.1408	1 in 67	VC	18.1408	1 in 67
8804	18	FO	15.68	75	9.076255	1 in 118	PVC	9.076255	1 in 118
5503	20.24	FO	16.8	150	52.8231	1 in 118	VC	52.8231	1 in 118
5604	19.61	FO	16.44	150	18.1408	1 in 67	VC	18.1408	1 in 67
4502	20.08	FO	17.48	225	45.3171	1 in 46	VC	45.3171	1 in 46
4502	20.08	FO	17.48	225	45.3171	1 in 46	VC	45.3171	1 in 46
7604	19.46	SW	17.29	225	17.52492	1 in 21	VC	17.52492	1 in 21
5603	19.61	FO	16.44	150	25.9721	1 in 118	VC	25.9721	1 in 118
7616	19.61	FO	16.44	150	18.1408	1 in 67	VC	18.1408	1 in 67
8802	19.61	FO	16.44	150	18.1408	1 in 67	VC	18.1408	1 in 67
4507	20.42	FO	18.42	225	16.29972	1 in 224	VC	16.29972	1 in 224
4507	20.42	FO	18.42	225	16.29972	1 in 224	VC	16.29972	1 in 224
7706	19.3	FO	16.44	150	30.29252	1 in 118	VC	30.29252	1 in 118
5707	19.61	FO	16.44	150	29.5308	1 in 118	VC	29.5308	1 in 118
7709	19.61	FO	16.44	150	91.17074	1 in 118	VC	91.17074	1 in 118
8706	19.61	FO	16.44	150	66.07099	1 in 118	VC	66.07099	1 in 118
7707	19.35	SW	17.05	225	30.8044	1 in 118	VC	30.8044	1 in 118
5601	19.61	FO	16.44	150	18.5564	1 in 118	VC	18.5564	1 in 118
5601	19.61	FO	16.44	150	18.5564	1 in 118	VC	18.5564	1 in 118
8709	19.33	SW	17.29	225	58.0001	1 in 224	VC	58.0001	1 in 224
7604	19.41	FO	16.44	150	34.58399	1 in 290	VC	34.58399	1 in 290
8712	19.41	FO	16.44	150	63.89611	1 in 290	VC	63.89611	1 in 290
8803	19.61	FO	16.44	150	16.26803	1 in 118	VC	16.26803	1 in 118
7606	19.61	FO	16.44	150	13.20281	1 in 118	VC	13.20281	1 in 118
7403	19.61	FO	16.44	150	55.0228	1 in 118	VC	55.0228	1 in 118
7403	19.61	FO	16.44	150	55.0228	1 in 118	VC	55.0228	1 in 118
8801	19.61	FO	16.44	150	18.21483	1 in 118	VC	18.21483	1 in 118
7705	19.61	FO	16.44	150	60.9892	1 in 118	VC	60.9892	1 in 118
5705	19.61	FO	16.44	150	26.17468	1 in 118	VC	26.17468	1 in 118
5706	19.61	FO	16.44	150	26.53228	1 in 118	VC	26.53228	1 in 118
8710	19.49	SW	17.47	150	34.44444	1 in 191	VC	34.44444	1 in 191
6503	19.7	FO	18.25	150	38.51373	1 in 550	VC	38.51373	1 in 550
5605	19.04	SW	17.41	225	102.447	1 in 512	VC	102.447	1 in 512
7708	19.42	SW	17.04	225	13.26337	1 in 118	VC	13.26337	1 in 118
4510	19.61	FO	16.44	150	17.54299	1 in 118	VC	17.54299	1 in 118
4510	19.61	FO	16.44	150	17.54299	1 in 118	VC	17.54299	1 in 118
6608	19.31	SW	17.83	225	41.23708	1 in 49	VC	41.23708	1 in 49
5901	20.27	SW	16.39	225	64.13034	1 in 113	VC	64.13034	1 in 113
6602	19.29	CO	17.56	225	38.59257	1 in 244	VC	38.59257	1 in 244
4611	20.11	FO	16.87	225	44.82266	1 in 160	VC	44.82266	1 in 160
4611	20.11	FO	16.87	225	44.82266	1 in 160	VC	44.82266	1 in 160
8804	19.89	SW	16.3	100	10.3124	1 in 153	VC	10.3124	1 in 153
7611	19.5	FO	17.35	150	19.5445	1 in 163	VC	19.5445	1 in 163
7603	19.47	SW	16.16	900	16.26881	1 in 148	VC	16.26881	1 in 148
5704	19.42	SW	18.42	150	40.24823	1 in 118	VC	40.24823	1 in 118
7712	19.61	FO	16.44	150	51.5929	1 in 118	VC	51.5929	1 in 118
5608	19.61	FO	16.44	150	18.2539	1 in 118	VC	18.2539	1 in 118
5701	19.61	FO	16.44	150	31.8943	1 in 118	VC	31.8943	1 in 118
7607	19.37	SW	17.9	150	26.77794	1 in 55	VC	26.77794	1 in 55
8701	19.61	FO	16.44	150	10.27561	1 in 118	VC	10.27561	1 in 118
8703	19.61	FO	16.44	150	27.47927	1 in 118	VC	27.47927	1 in 118
5902	19.61	FO	16.44	150	15.3051	1 in 118	VC	15.3051	1 in 118
5902	19.61	FO	16.44	150	15.3051	1 in 118	VC	15.3051	1 in 118
7702	19.42	FO	16.44	150	100.9489	1 in 144	VC	100.9489	1 in 144
7605	19.27	SW	17.41	225	17.3443	1 in 144	VC	17.3443	1 in 144
5602	19.61	FO	16.44	150	16.61432	1 in 118	VC	16.61432	1 in 118
5602	19.61	FO	16.44	150	16.61432	1 in 118	VC	16.61432	1 in 118
8806	19.61	FO	16.44	150	7.119093	1 in 147	VC	7.119093	1 in 147
7613	19.62	FO	17.6	150	19.9002	1 in 147	VC	19.9002	1 in 147
7612	19.61	FO	16.44	150	8.90028	1 in 299	VC	8.90028	1 in 299
6706	19.18	FO	16.87	100	32.8787	1 in 100	VC	32.8787	1 in 100
7617	19.61	FO	16.44	150	14.30493	1 in 118	VC	14.30493	1 in 118
7713	19.61	FO	16.44	150	9.09202	1 in 118	VC	9.09202	1 in 118
7610	19.35	FO	17.98	100	10.75463	1 in 99	VC	10.75463	1 in 99
8704	19.61	FO	16.44	150	23.7623	1 in 295	VC	23.7623	1 in 295
8802	19.61	FO	16.44	150	52.1755	1 in 295	VC	52.1755	1 in 295
8804	19.61	FO	16.44	150	29.46887	1 in 295	VC	29.46887	1 in 295
8808	19.61	FO	16.44	150	14.21116	1 in 60	VC	14.21116	1 in 60
6612	19.3	FO	17.85	150	11.6183	1 in 158	VC	11.6183	1 in 158
7609	19.61	FO	16.44	150	14.52727	1 in 158	VC	14.52727	1 in 158
7614	19.26	FO	17.83	150	26.31564	1 in 158	VC	26.31564	1 in 158
7608	19.14	SW	16.05	225	6.53405	1 in 158	VC	6.53405	1 in 158
7605	19.61	FO	16.44	150	23.41017	1 in 158	VC	23.41017	1 in 158
8705	19.61	FO	16.44	150	59.4496	1 in 548	VC	59.4496	1 in 548
9701	19.07	SW	17.29	100	18.60284	1 in 31	VC	18.60284	1 in 31
6613	19.83	FO	18.18	150	22.21046	1 in 31	VC	22.21046	1 in 31
8703	19.33	FO	17.95	150	9.425503	1 in 102	VC	9.425503	1 in 102
5606	19.61	FO	16.44	150	26.56266	1 in 102	VC	26.56266	1 in 102
5606	19.61	FO	16.44	150	26.56266	1 in 102	VC	26.56266	1 in 102
5606	19.61	FO	16.44	150	26.56266	1 in 102	VC	26.56266	1 in 102
5904	17.67	CO	15.82	150	79.59138	1 in 32	VC	79.59138	1 in 32
5904	17.67	CO	15.82	150	79.59138	1 in 32	VC	79.59138	1 in 32
6502	19.75	SW	17.91	225	29.53999	1 in 102	VC	29.53999	1 in 102
6609	19.82	SW	16.51	900	21.41856	1 in 84	VC	21.41856	1 in 84
6805	19.61	FO	16.44	150	39.02289	1 in 84	PVC	39.02289	1 in 84
7502	19.61	FO	16.44	150	13.4289	1 in 139	VC	13.4289	1 in 139
6901	19.7	SW	16.98	825	29.27229	1 in 84	VC	29.27229	1 in 84
7612	19.64	FO	17.47	150	16.71258	1 in 139	VC	16.71258	1 in 139
8705	19.19	FO	17.4	150	3.61942	1 in 566	VC	3.61942	1 in 566
5401	19.61	FO	16.44	150	170.3414	1 in 89	VC	170.3414	1 in 89
7610	19.61	FO	16.44	150	15.1012	1 in 566	VC	15.1012	1 in 566
6603	19.32	SW	18.06	150	28.30995	1 in 89	VC	28.30995	1 in 89
8702	19.16	SW	18.01	150	64.1448	1 in 89	VC	64.1448	1 in 89
6701	19.61	FO	16.44	150	26.82387	1 in 118	VC	26.82387	1 in 118
7715	19.61	FO	16.44	150	62.59745	1 in 118	VC	62.59745	1 in 118
7724	19.61	FO	16.44	150	9.60866	1 in 118	VC	9.60866	1 in 118
7609	19.11	FO	17.23	150	11.62787	1 in 118	VC	11.62787	1 in 118
7611	19.61	FO	16.44	150	15.64326	1 in 118	VC	15.64326	1 in 118
8803	19.61	FO	16.44	150	7.254385	1 in 118	VC	7.254385	1 in 118
8806	19.61	FO	16.44	150	18.64432	1 in 118	VC	18.64432	1 in 118
7701	19.61	FO	16.44	150	37.13855	1 in 118	VC	37.13855	1 in 118
7704	19.61	FO	16.44	150	20.80441	1 in 118	VC	20.80441	1 in 118
8704	19.61	FO	16.44	150	60.76988	1 in 118	VC	60.76988	1 in 118

Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	Length	Grad
7602	19.61	FO	16.44	900	20.1334	1 in 144	CO	18.1408	1 in 67
5502	20.45	SW	16.66	150	18.1408	1 in 67	VC	18.1408	1 in 67
5502	20.45	SW	16.66	150	18.1408	1 in 67	VC	18.1408	1 in 67
8807	19.61	FO	16.44	75	6.40228	1 in 126	PVC	6.40228	1 in 126
7707	19.61	FO	16.44	150	18.1408	1 in 67	VC	18.1408	1 in 67
8804	18	FO	15.68	75	9.076255	1 in 118	PVC	9.076255	1 in 118
5503	20.24	FO	16.8	150	52.8231	1 in 118	VC	52.8231	1 in 118
5604	19.61	FO	16.44	150	18.1408	1 in 67	VC	18.1408	1 in 67
4502	20.08	FO	17.48	225	45.3171	1 in 46	VC	45.3171	1 in 46
4502	20.08	FO	17.48	225	45.3171	1 in 46	VC	45.3171	1 in 46
7604	19.46	SW	17.29	225	17.52492	1 in 21	VC	17.52492	1 in 21
5603	19.61	FO	16.44	150	25.9721	1 in 118	VC	25.9721	1 in 118
7616	19								

**APPENDIX D**

**ENVIRONMENT AGENCY DATA & CORRESPONDENCE**



## Julian Pearson

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**From:** CMBLNC Info Requests <Inforequests.cmbInc@environment-agency.gov.uk>  
**Sent:** 09 March 2021 15:09  
**To:** Julian Pearson  
**Subject:** CL204781KR: Product 4 Data Request - Site: PR3 1RB  
**Attachments:** CL204781 - Castle Lane, Garstang.pdf; CL204781 Castle Lane, Barnacre-with-Bonds, Garstang.pdf; CL204781 Castle Lane, Barnacre-with-Bonds, Garstang - Flood Defence Data....pdf

Dear Julian

### Enquiry regarding Product 4 Data

Thank you for your enquiry which was received on 11 February 2021.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

Please see below Product 4 response and attached for: **Castle Lane, Barnacre-with-Bonds, Garstang, Lancashire, PR3 1RB:**

- The Fluvial data has been taken from the **Wyre SFRM study** produced in 2014. Updated climate change data, including a 30%, 35% and 70% increase in river flows, have been provided from the Wyre SFRM 2020 climate change update. Information on these allowances can be viewed on the following website: [www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances](http://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances).
- For all queries relating to flooding from surface water, ordinary watercourses and groundwater flooding, please contact the Lead Local Flood Authority Lancashire County Council in this instance. Surface Water Maps can be viewed online at <https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

Please refer to [Open Government Licence](#) which explains the permitted use of this information.

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Thanks

Karen

### Karen Rooke

Customers and Engagement Officer, Cumbria and Lancashire

**Environment Agency** | Ghyll Mount, Gillan Way, Penrith 40 Business Park, Penrith, Cumbria, CA11 9BP

[inforequests.cmbInc@environment-agency.gov.uk](mailto:inforequests.cmbInc@environment-agency.gov.uk)



---

**From:** Julian Pearson [mailto:Julian.Pearson@thomasconsulting.co.uk]

**Sent:** 11 February 2021 10:02

**To:** Enquiries, Unit <enquiries@environment-agency.gov.uk>  
**Cc:** CMBLNC Info Requests <Inforequests.cmbInc@environment-agency.gov.uk>  
**Subject:** Product 4 Data Request - Site: PR3 1RB

Dear Environment Agency,

Please could we request any supporting flood data or Product 4 data you may have in relation to a site we are looking at;

Castle Lane  
Barnacre-with-Bonds  
Garstang  
Lancashire  
PR3 1RB  
Grid Ref: 349635 444934

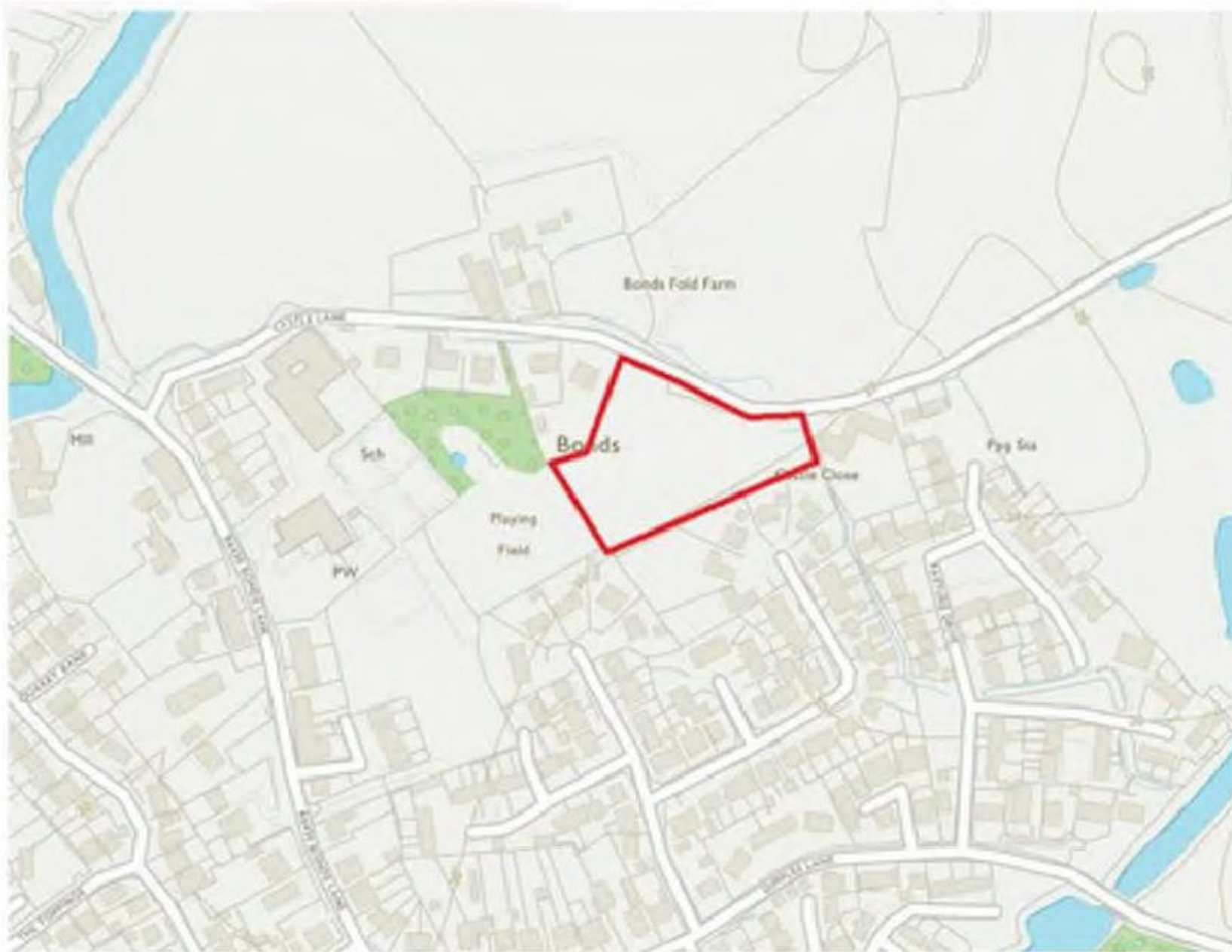


Figure 1: Site Location Plan (Source: OS Maps, 2021)

As can be seen in the attached flood map for planning there are numerous flood related zones and areas to our site and we could do with looking at the potential impacts these may have on our site.

Kind regards,



**Julian Pearson** BSc EngTech MICE  
Senior Civils Engineer

**M** [07716 640810](tel:07716640810) | **T** [01524 846022](tel:01524846022) | [thomasconsulting.co.uk](http://thomasconsulting.co.uk)

21 China Street, Lancaster, LA1 1EX

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**Flood Zones Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

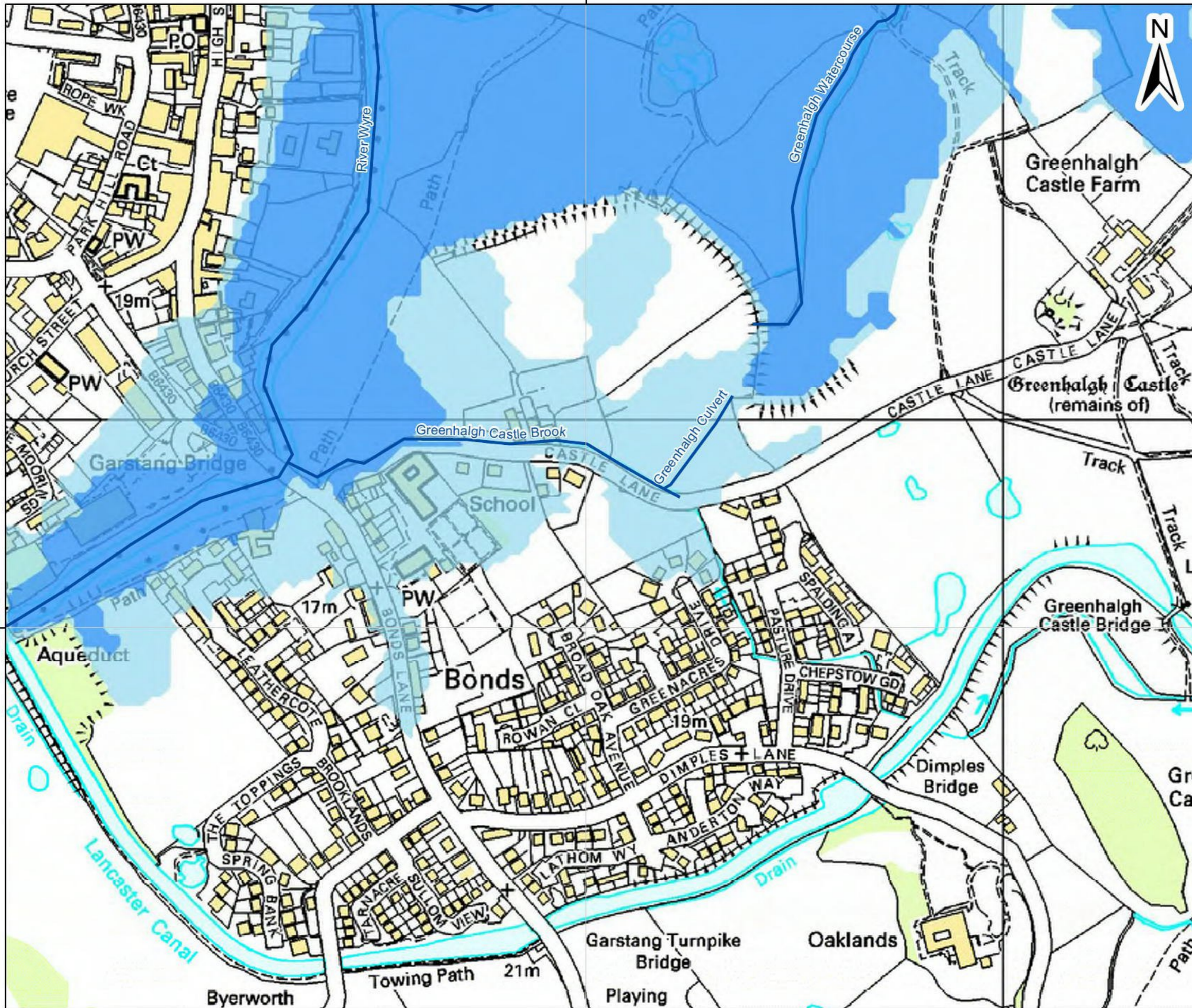
-  Main River
-  Areas Benefiting from Defences
-  Flood Zone 3
-  Flood Zone 2

**Flood Zone 3** shows the area that could be affected by flooding:

- from the sea with a 0.5% or greater chance of happening each year
- or from a river with a 1.0% or greater chance of happening each year.

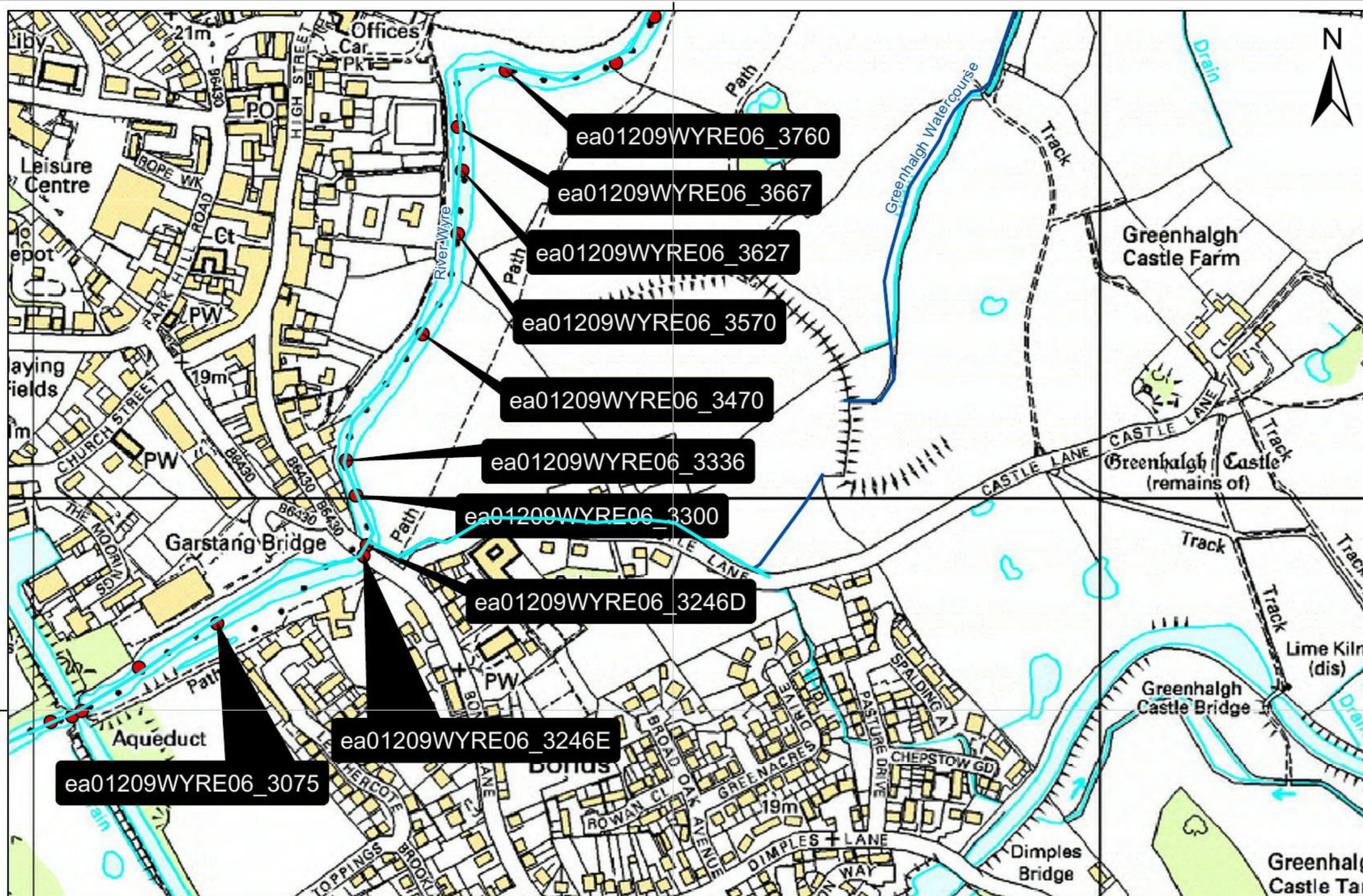
**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



### Fluvial Flood levels Map: Castle Lane, Barnacre-with-Bonds Garstang, PR3 1RB

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934



**Flood Zone 3** shows the area that could be affected by flooding:

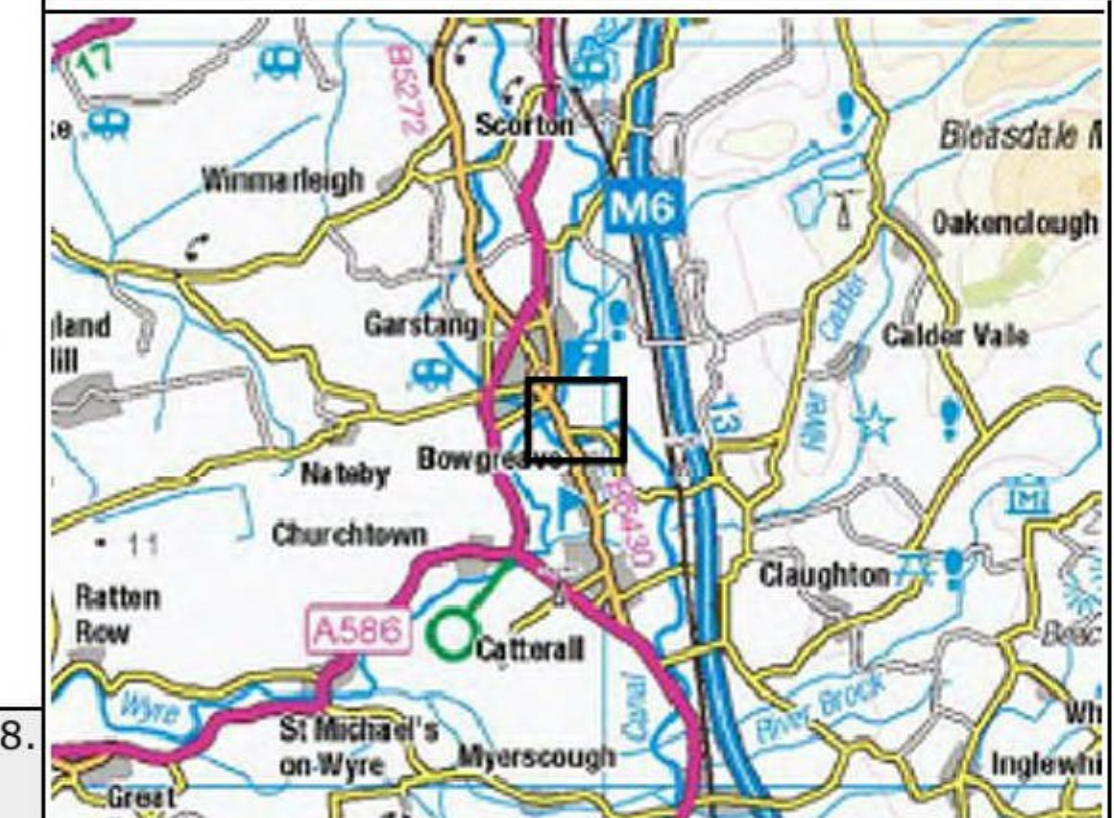
- from the sea with a 0.5% or greater chance of happening each year
- or from a river with a 1.0% or greater chance of happening each year.

**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs (Areas Benefiting from Defences)** show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.

Node Point	Flood Flow (m <sup>3</sup> s <sup>-1</sup> ) and Level (mAOD) data for a range of annual probability of flooding																			
	0.1%		1%+Climate Change (+30%)		1%+Climate Change (+35%)		1%+Climate Change (+70%)		1.0%		1.0%		1.0%		1.0%		1.0%			
	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended		
Map ID	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow
ea01209WYRE06_3760	18.45	121.68	18.28	115.32	17.32	113.96	17.35	114.66	17.52	116.29	17.51	114.40	18.10	115.04	18.25	120.28	16.74	109.59	16.84	114.69
ea01209WYRE06_3667	18.43	138.53	18.25	138.88	17.28	129.83	17.30	136.05	17.49	131.73	17.46	136.14	18.06	137.48	18.23	135.57	16.67	126.14	16.76	133.96
ea01209WYRE06_3627	18.42	144.44	18.24	143.35	17.26	136.34	17.29	140.51	17.48	138.05	17.45	140.62	18.05	142.11	18.21	141.50	16.65	130.65	16.74	138.40
ea01209WYRE06_3570	18.36	187.50	18.17	185.43	17.16	171.23	17.19	178.13	17.39	173.49	17.35	179.06	17.98	183.45	18.15	183.74	16.52	158.53	16.61	165.89
ea01209WYRE06_3470	18.33	181.26	18.13	179.87	17.11	173.52	17.13	166.52	17.34	174.41	17.30	167.42	17.93	177.22	18.11	178.65	16.40	164.56	16.51	162.76
ea01209WYRE06_3336	18.30	173.61	18.09	177.82	17.06	155.89	17.07	159.01	17.30	156.66	17.25	159.70	17.89	174.26	18.08	170.89	16.31	151.71	16.41	148.28
ea01209WYRE06_3300	18.28	192.62	18.08	187.09	17.05	160.44	17.06	166.02	17.30	161.81	17.24	166.60	17.89	182.93	18.07	183.98	16.30	155.14	16.40	156.64
ea01209WYRE06_3246D	18.32	223.95	18.09	221.45	16.97	218.42	16.98	219.99	17.23	219.33	17.18	220.19	17.88	221.90	18.08	222.68	16.24	183.90	16.34	192.68
ea01209WYRE06_3246E	18.14	223.95	17.79	221.45	16.67	218.42	16.67	219.99	16.85	219.33	16.78	220.19	17.55	221.90	17.80	222.68	16.08	183.90	16.16	192.68
ea01209WYRE06_3075	16.55	497.18	17.01	388.05	16.28	250.19	16.33	243.57	16.40	270.14	16.42	252.19	16.91	347.02	16.86	409.80	15.82	188.93	15.95	187.48



Level data in mAOD (metres above ordnance datum). Flow data in m<sup>3</sup> per second  
Data taken from Wyre 2014 Study Study



**Flood History Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

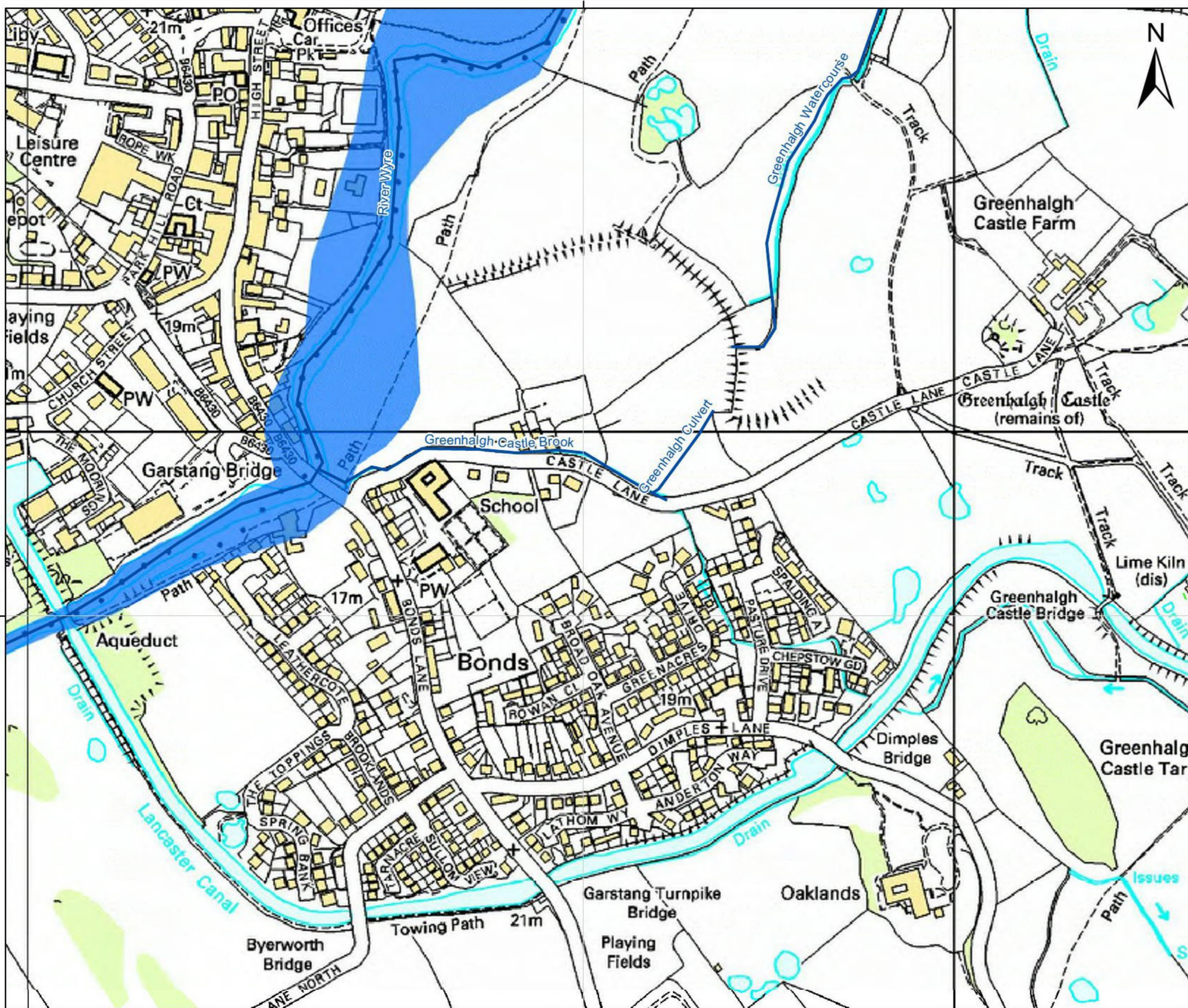
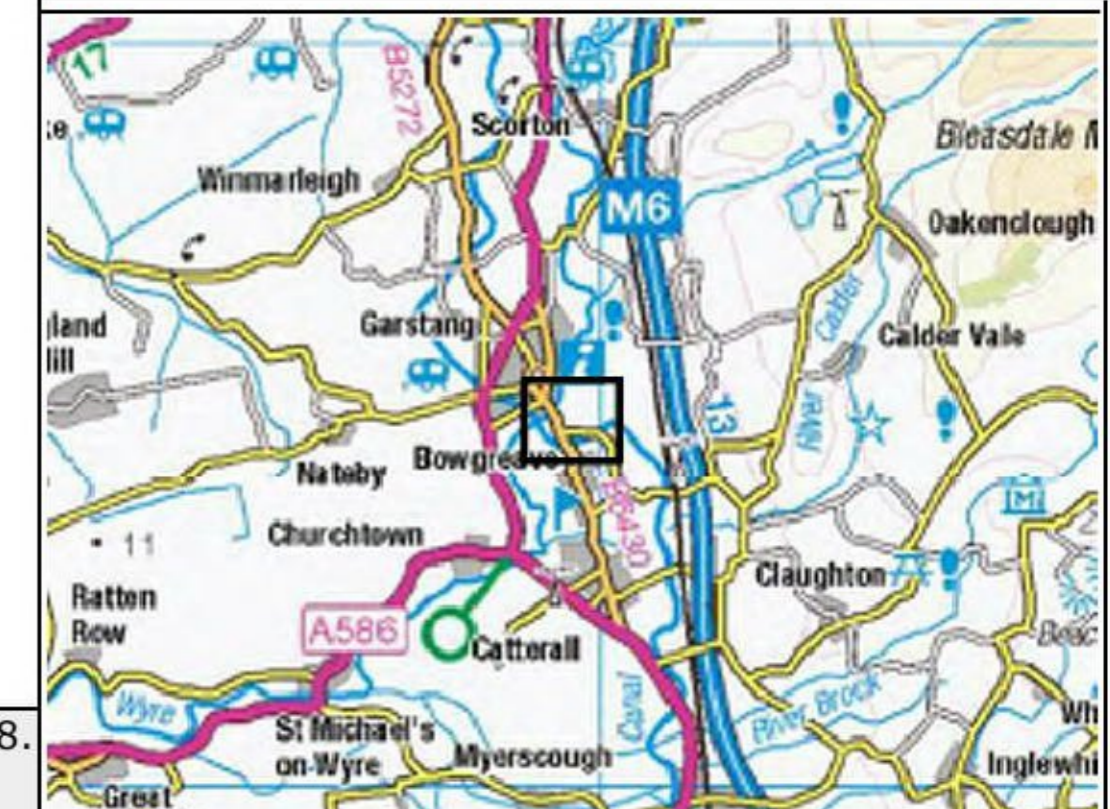
-  Main River
-  23/10/1980

**Flood Zone 3** shows the area that could be affected by flooding:

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**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



349600

**Flood History Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

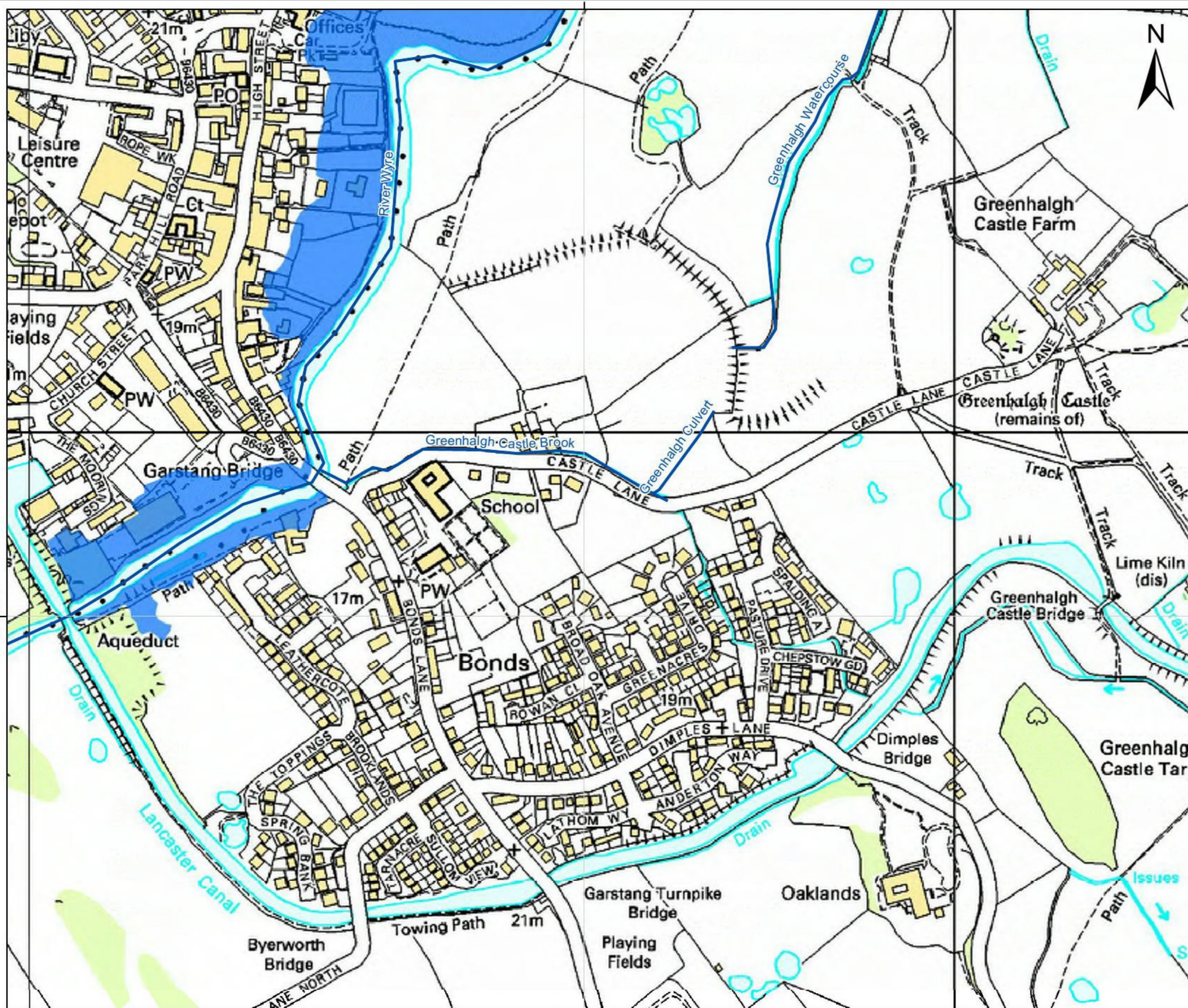
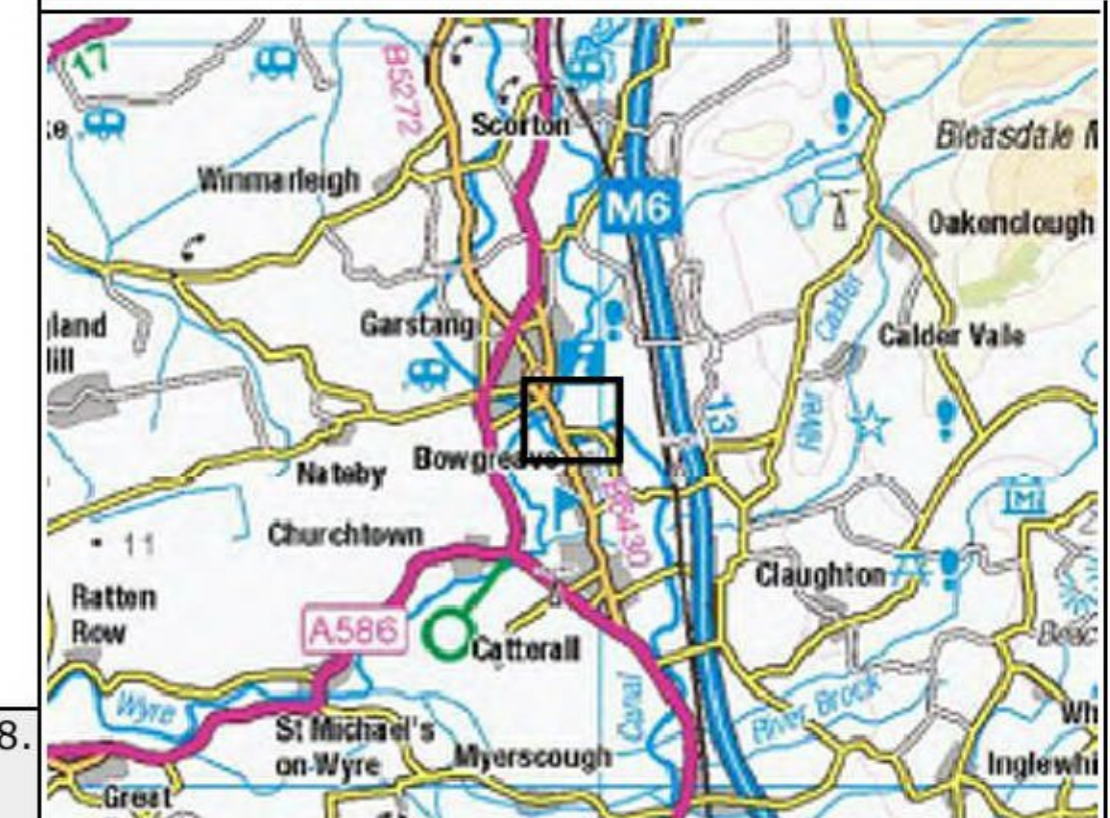
-  Main River
-  05/12/2015

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## Flood History Map: Castle Lane, Barnacre-with-Bonds Garstang, PR3 1RB

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

### Key

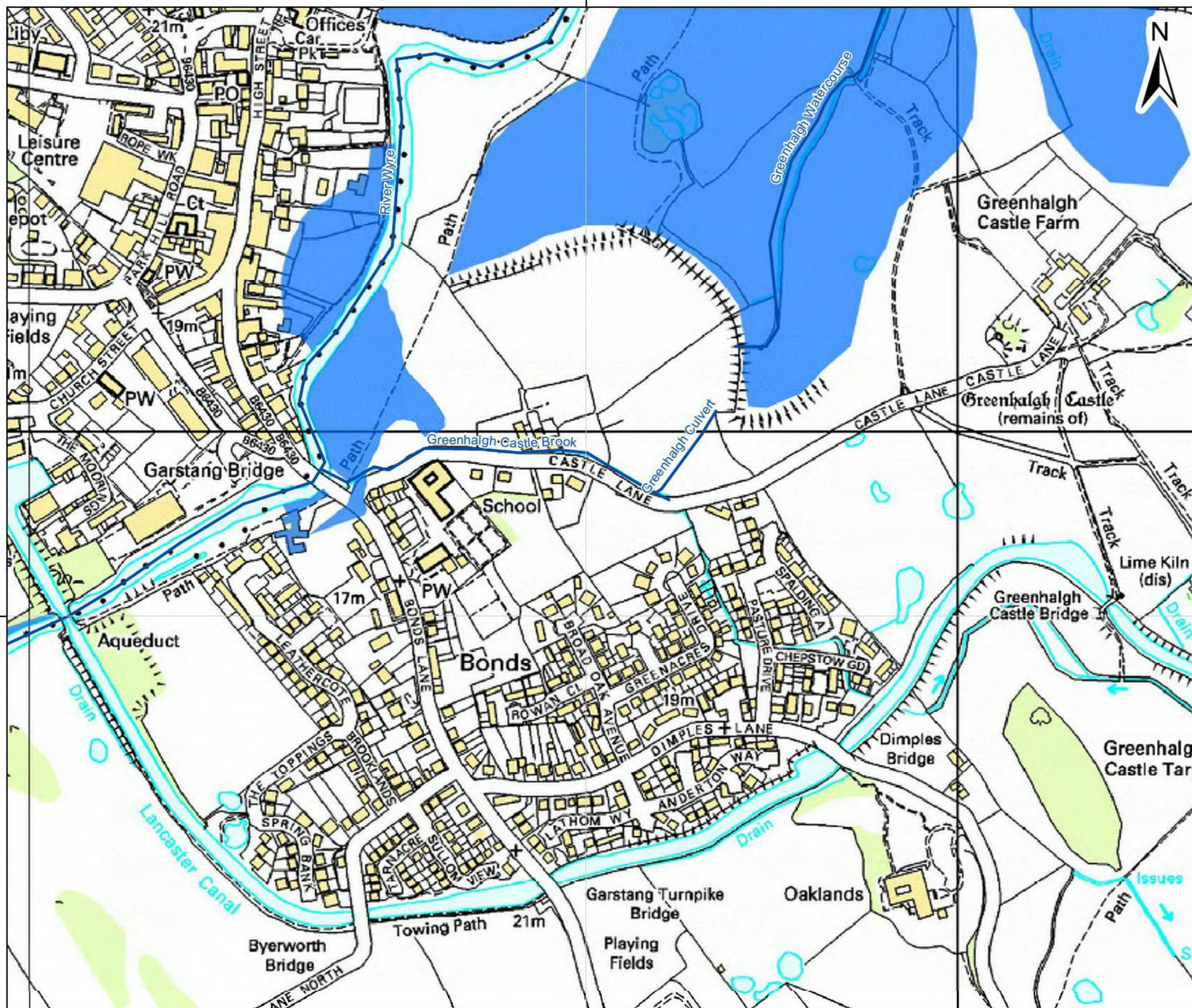
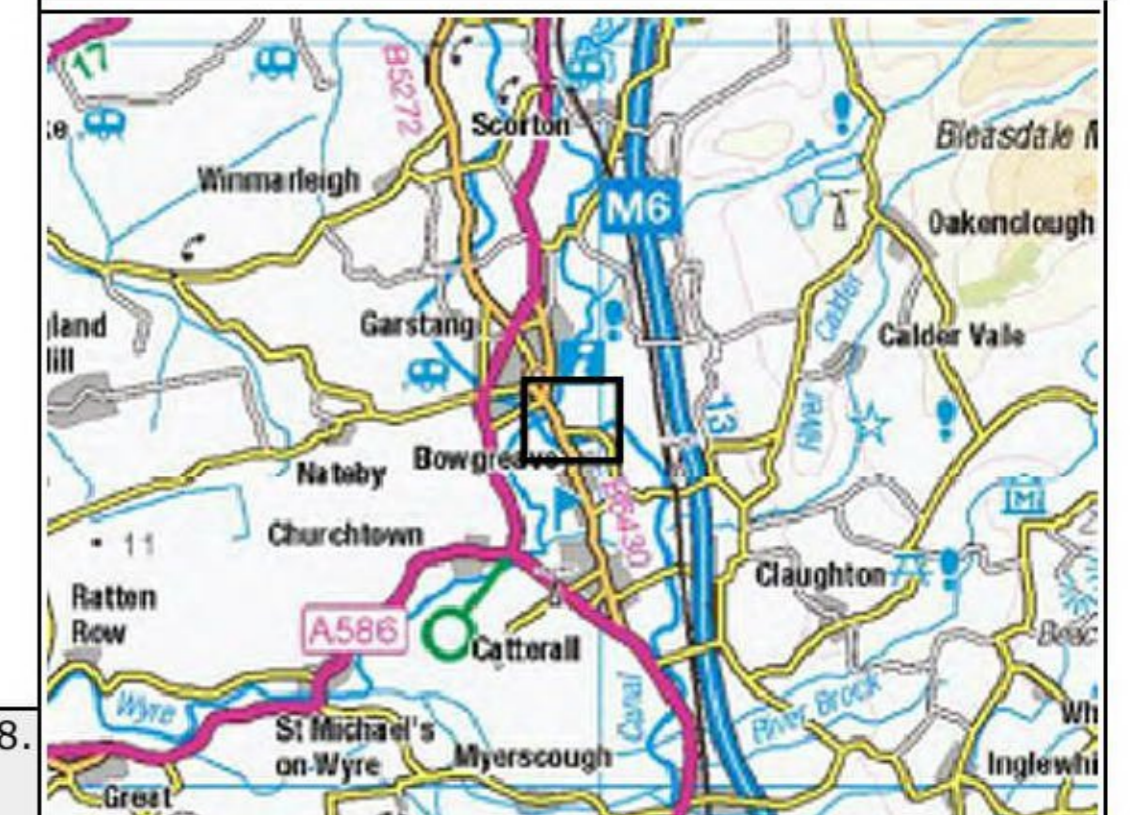
-  Main River
-  22/08/2016

**Flood Zone 3** shows the area that could be affected by flooding:

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**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



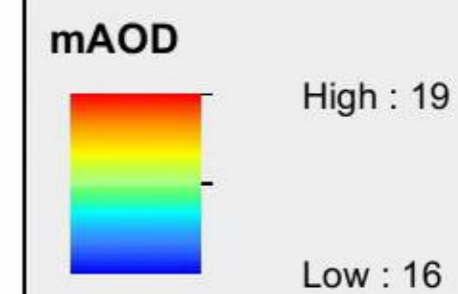
349600

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Defended 1% annual probability of flooding scenario

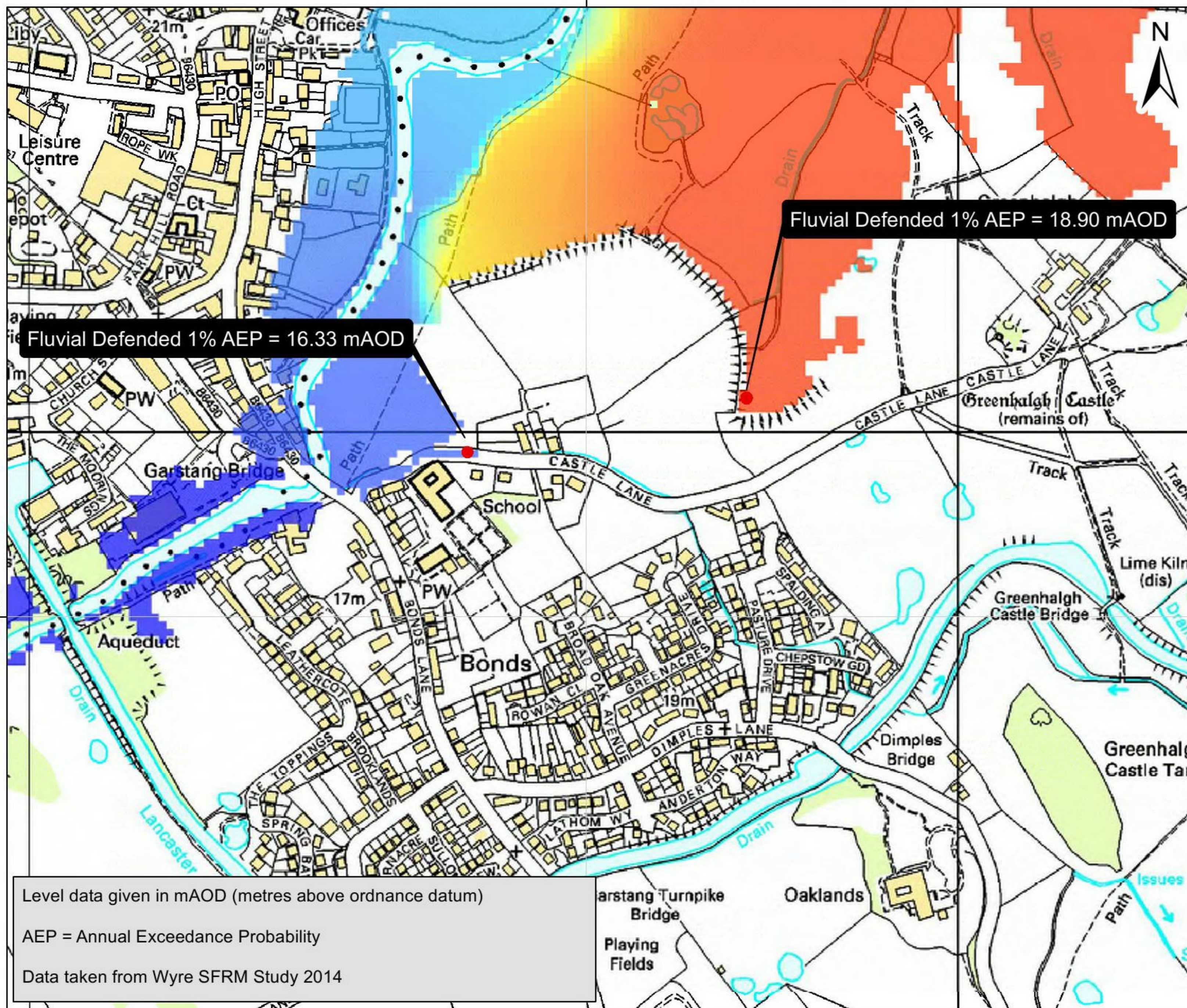
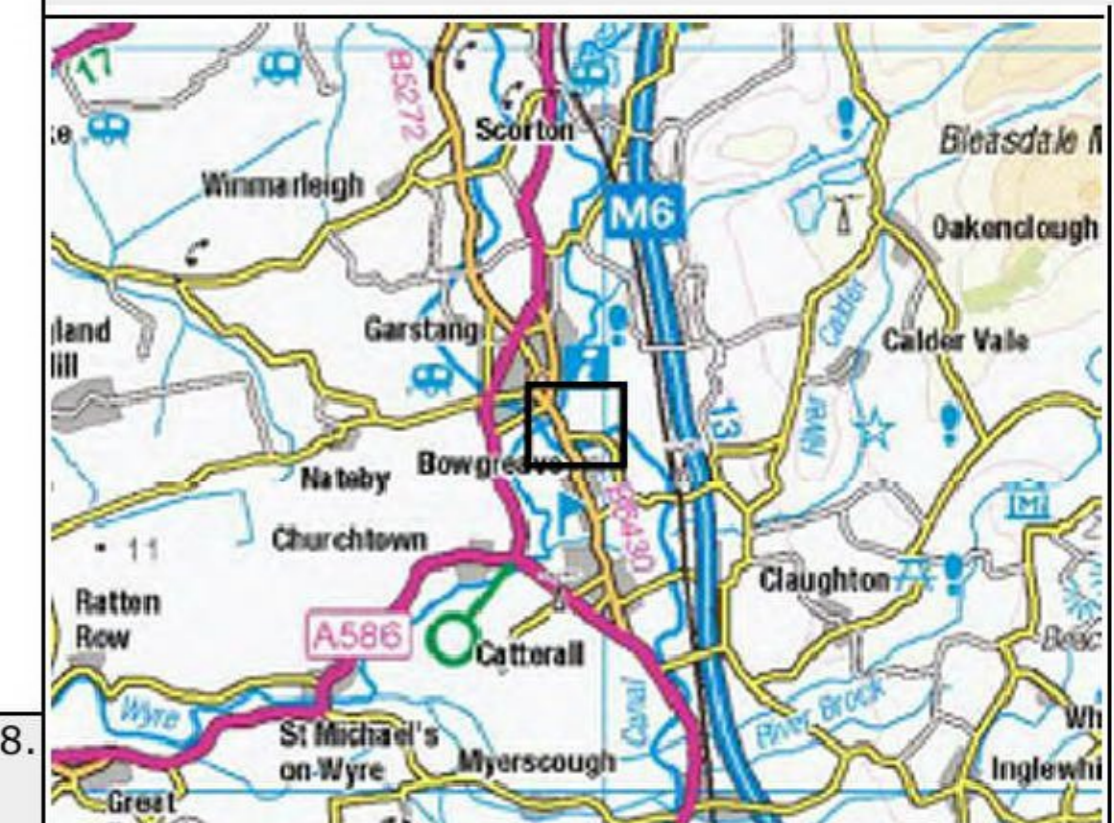


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- or from a river with a 1.0% or greater chance of happening each year.

**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



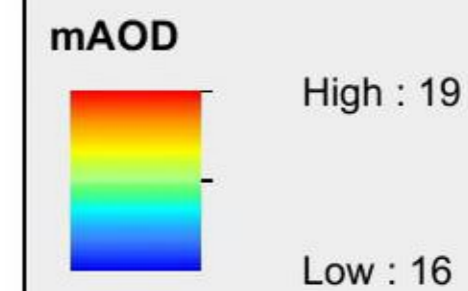
Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
Data taken from Wyre SFRM Study 2014

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Defended 1% (+30% climate change) annual probability of flooding scenario

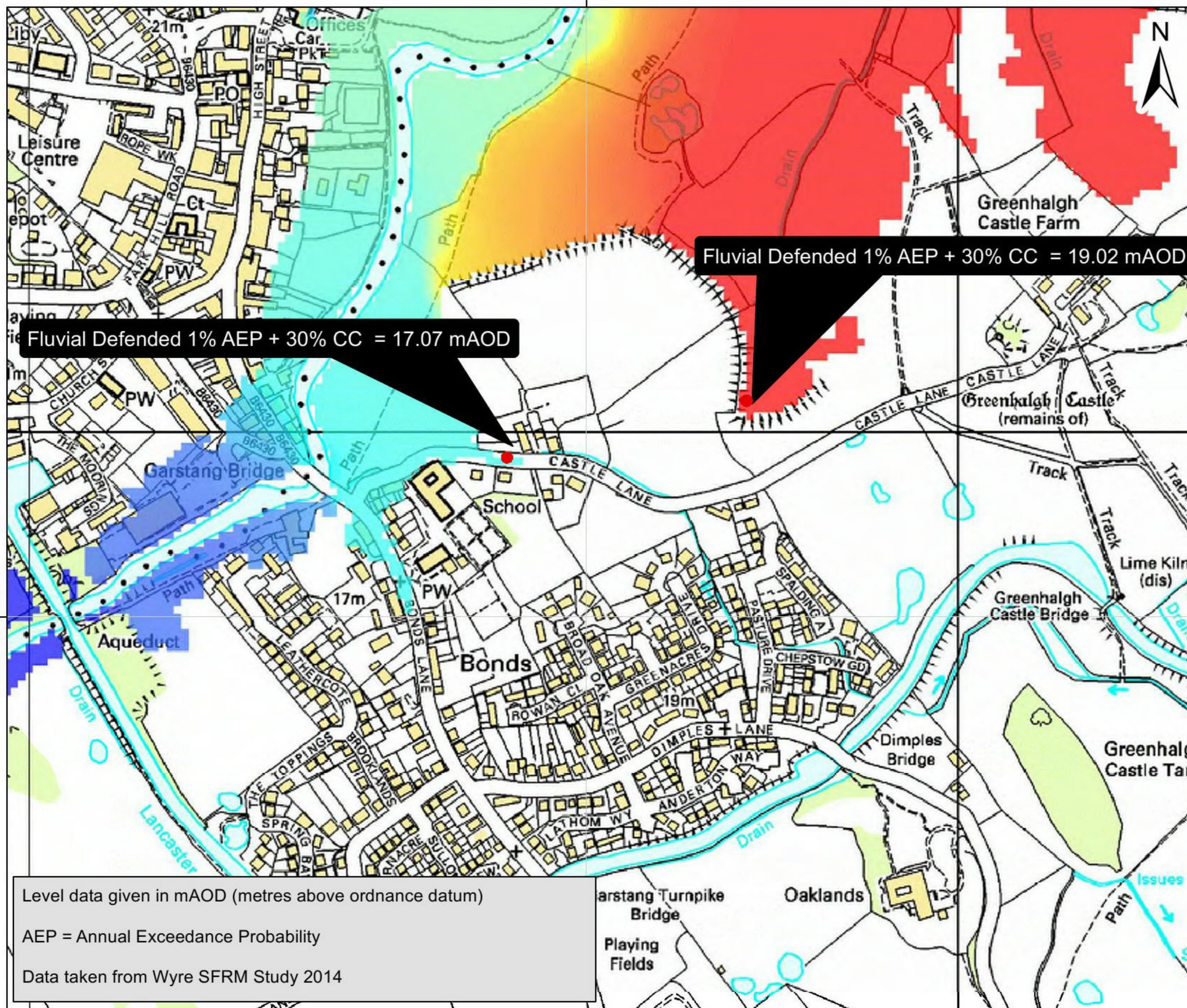
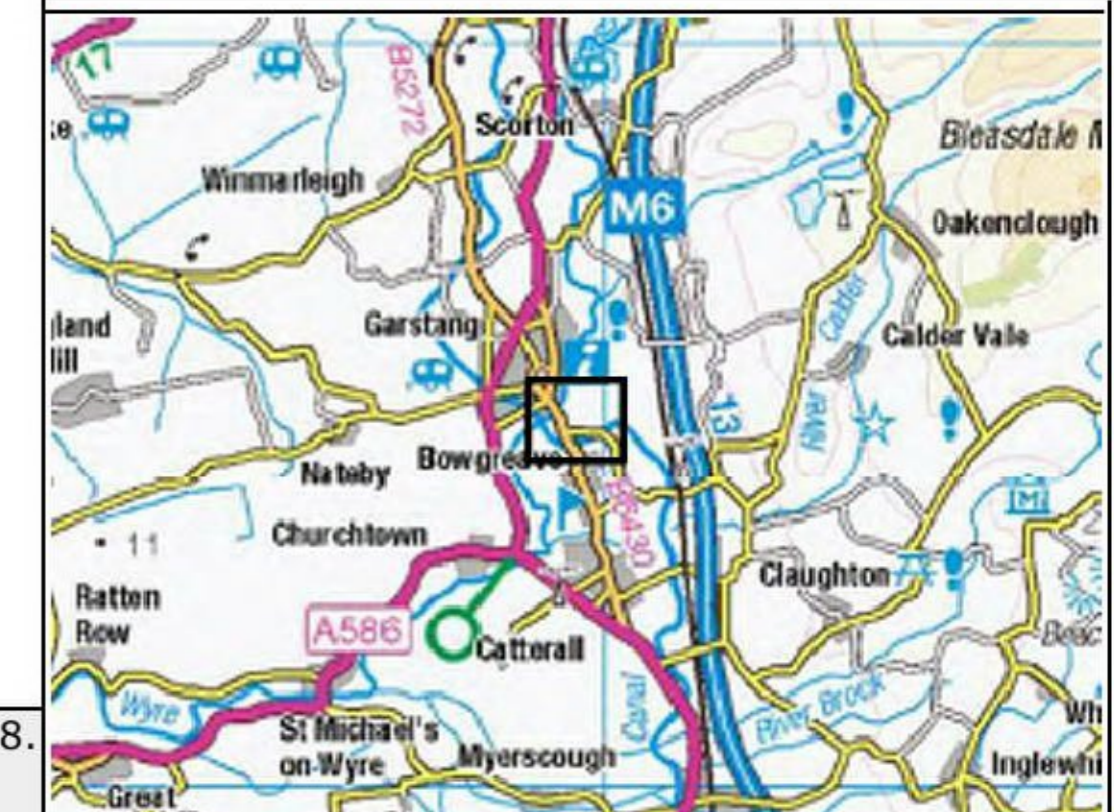


**Flood Zone 3** shows the area that could be affected by flooding:

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- or from a river with a 1.0% or greater chance of happening each year.

**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



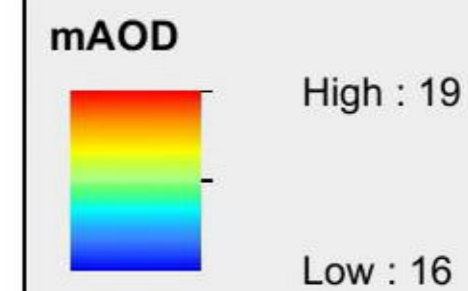
349600

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Defended 1% (+35% climate change) annual probability of flooding scenario

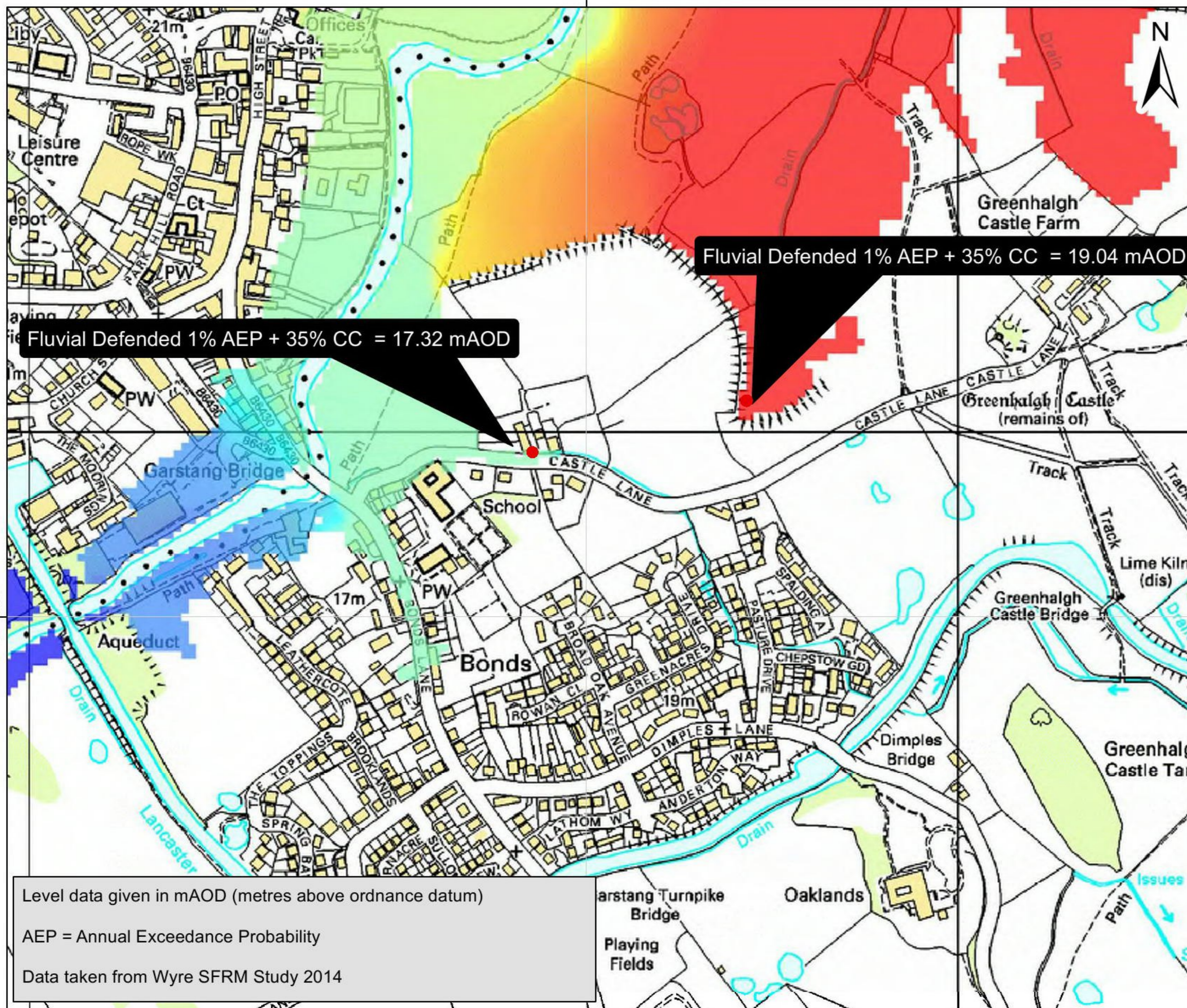
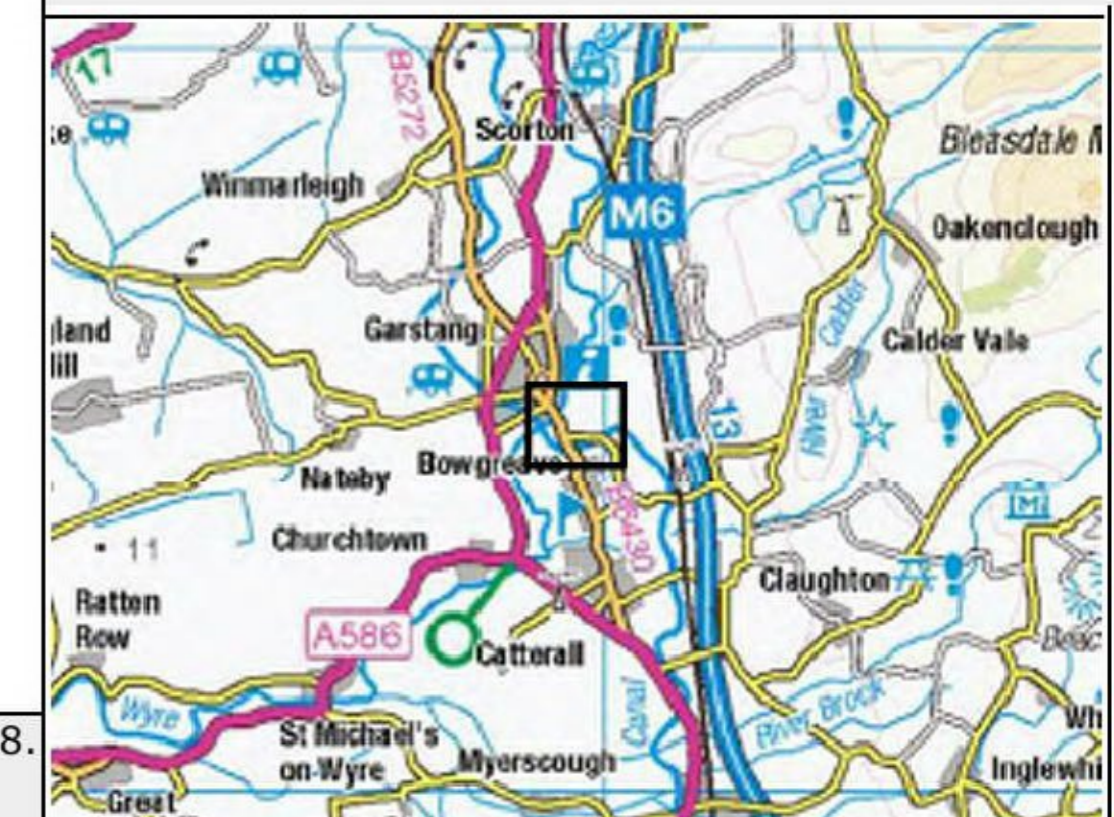


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**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



Level data given in mAOD (metres above ordnance datum)

AEP = Annual Exceedance Probability

Data taken from Wyre SFRM Study 2014

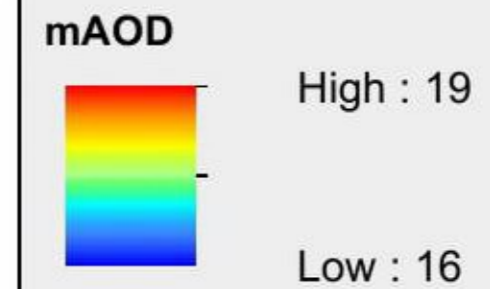


**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Defended 1% (+70% climate change) annual probability of flooding scenario

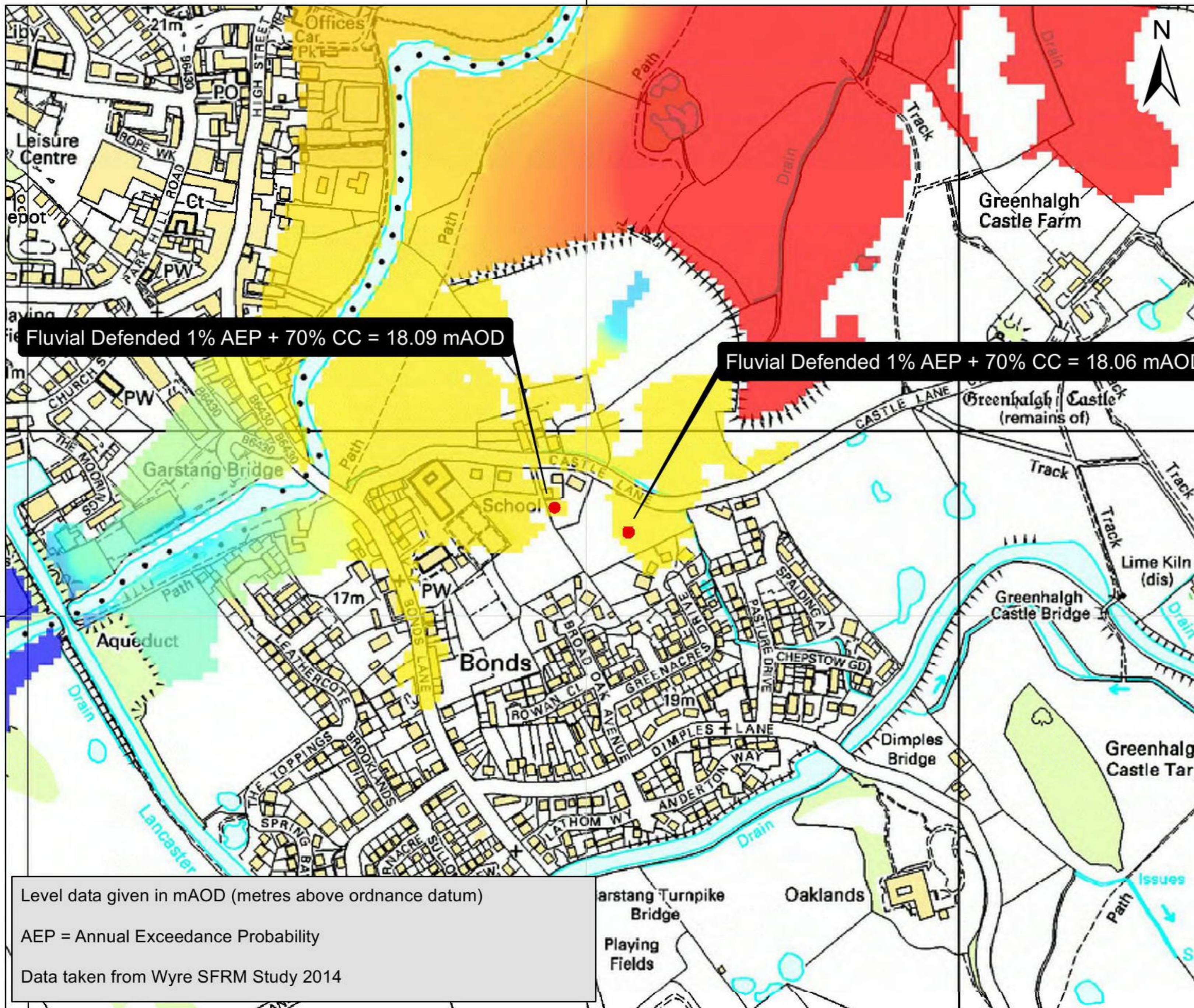
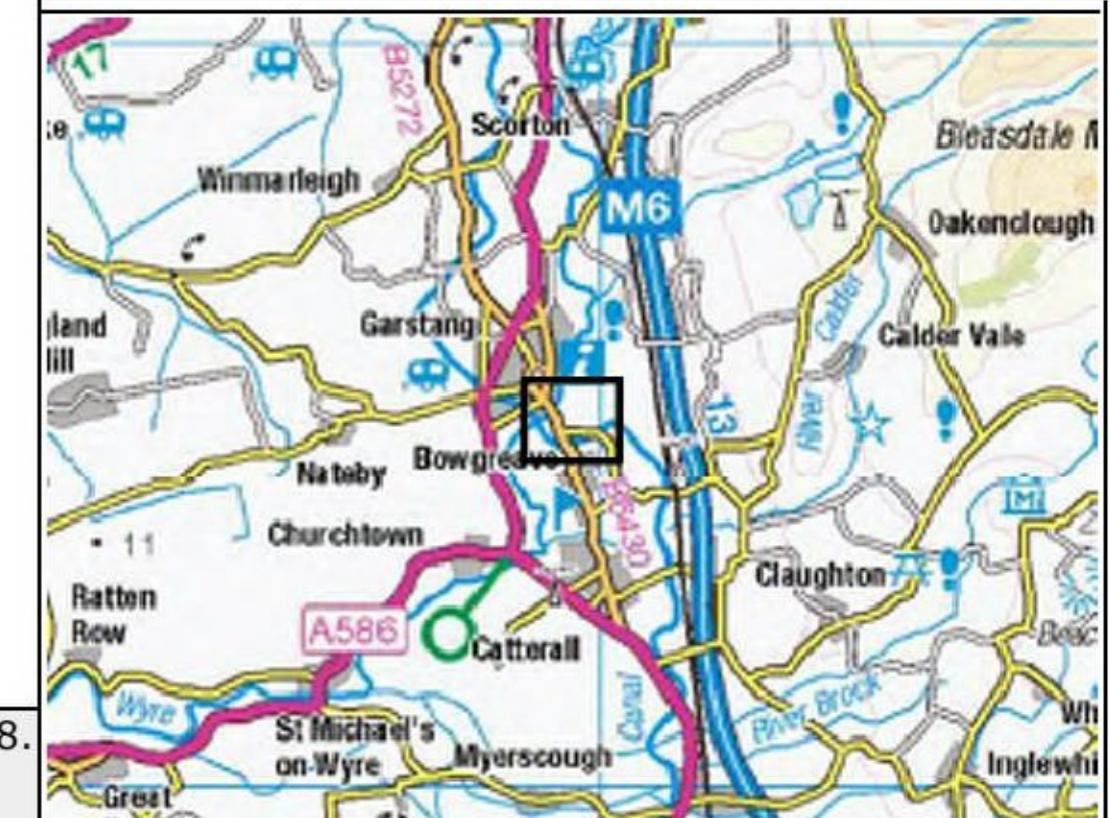


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**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



Level data given in mAOD (metres above ordnance datum)

AEP = Annual Exceedance Probability

Data taken from Wyre SFRM Study 2014

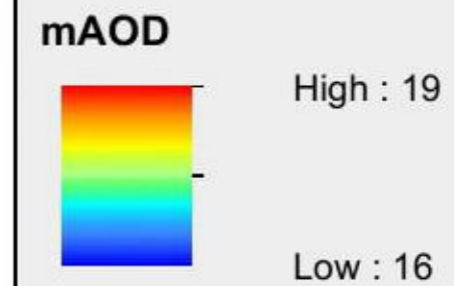
349600

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Defended 0.1% annual probability of flooding scenario

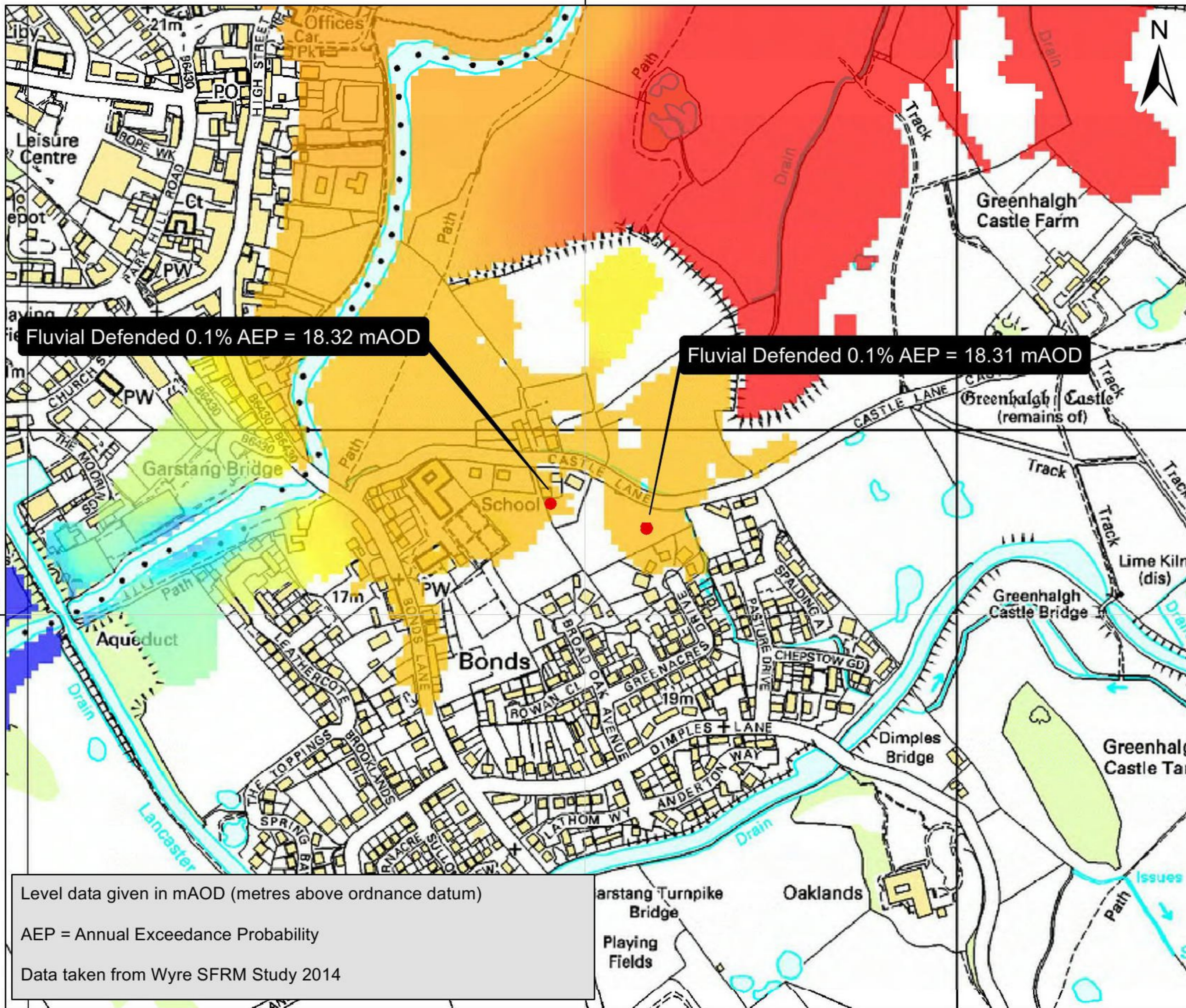
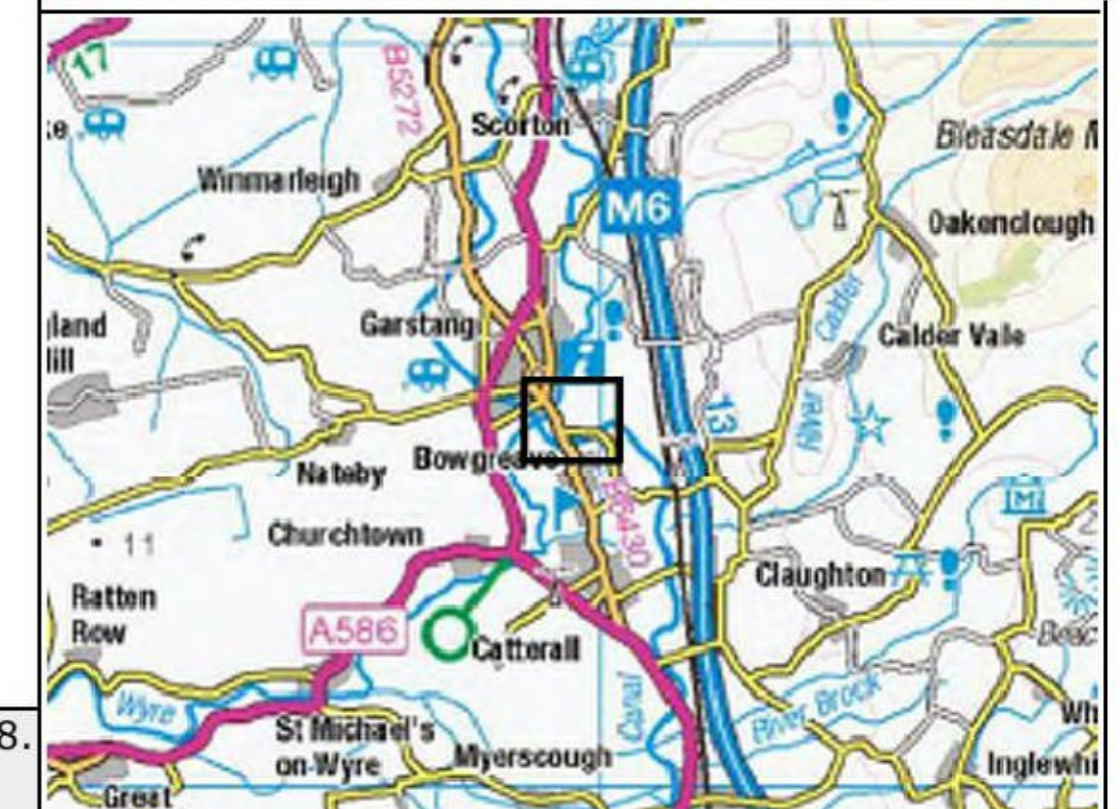


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**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



Fluvial Defended 0.1% AEP = 18.32 mAOD

Fluvial Defended 0.1% AEP = 18.31 mAOD

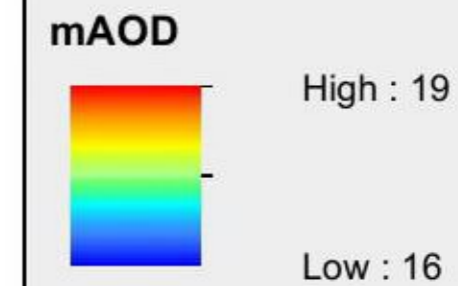
Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
Data taken from Wyre SFRM Study 2014

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Undefended 1% annual probability of flooding scenario

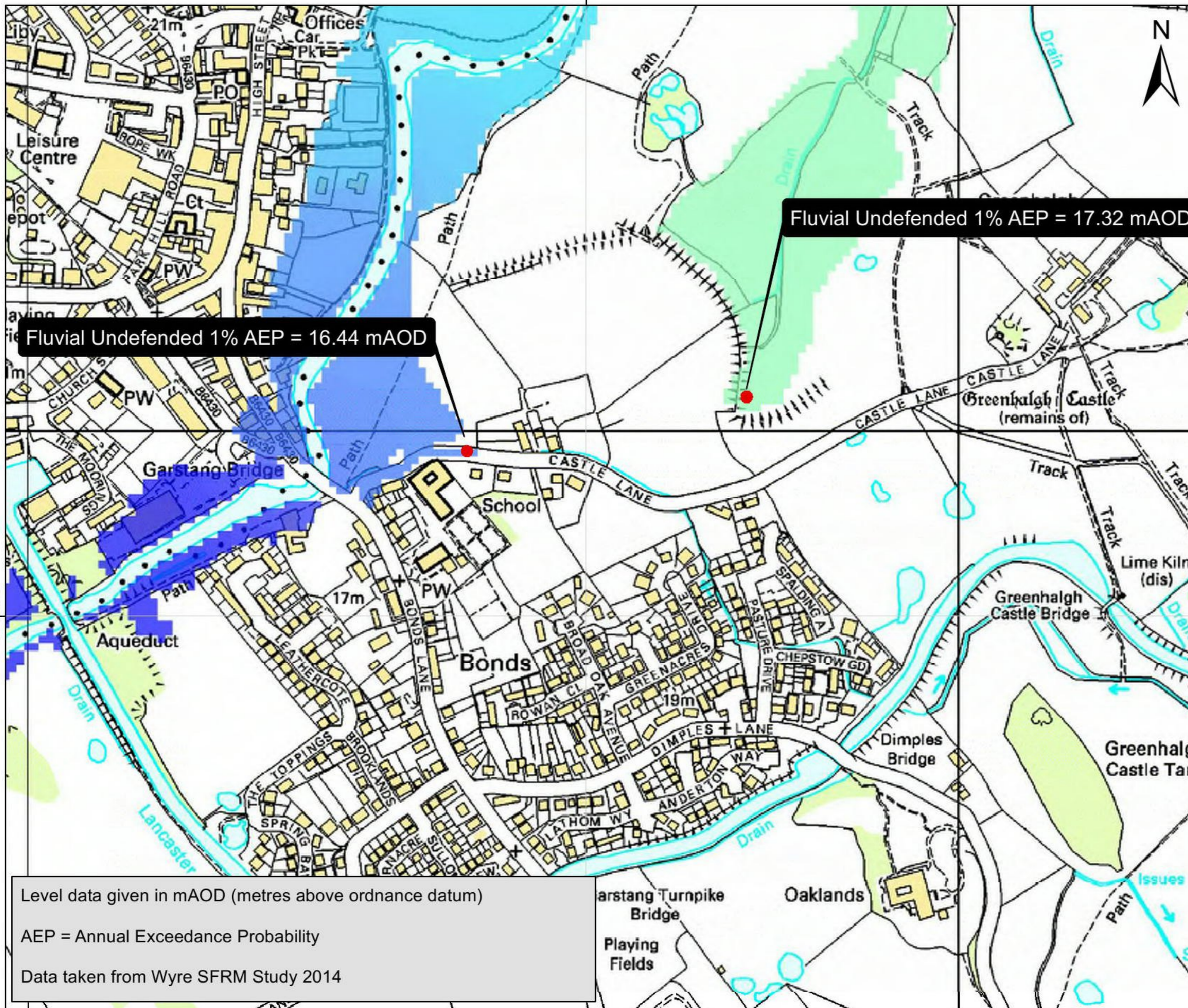
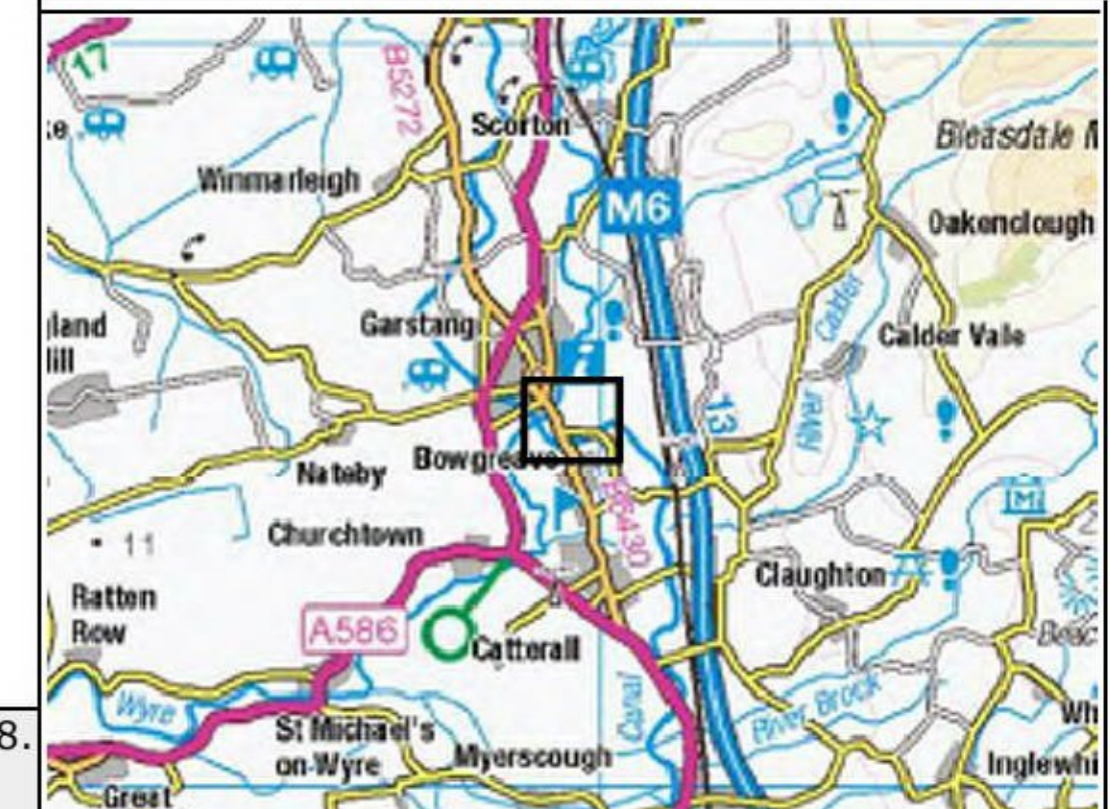


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**Flood Zone 2** shows the extent of an extreme flood from rivers or the sea with up to 0.1% chance of occurring each year.

**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



Level data given in mAOD (metres above ordnance datum)

AEP = Annual Exceedance Probability

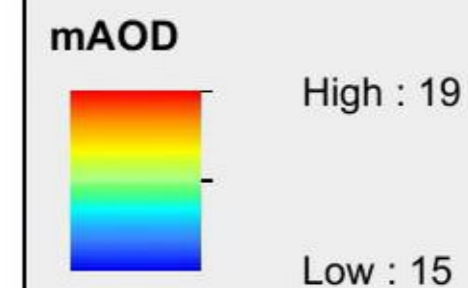
Data taken from Wyre SFRM Study 2014

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Undefended 1% (+30% climate change) annual probability of flooding scenario

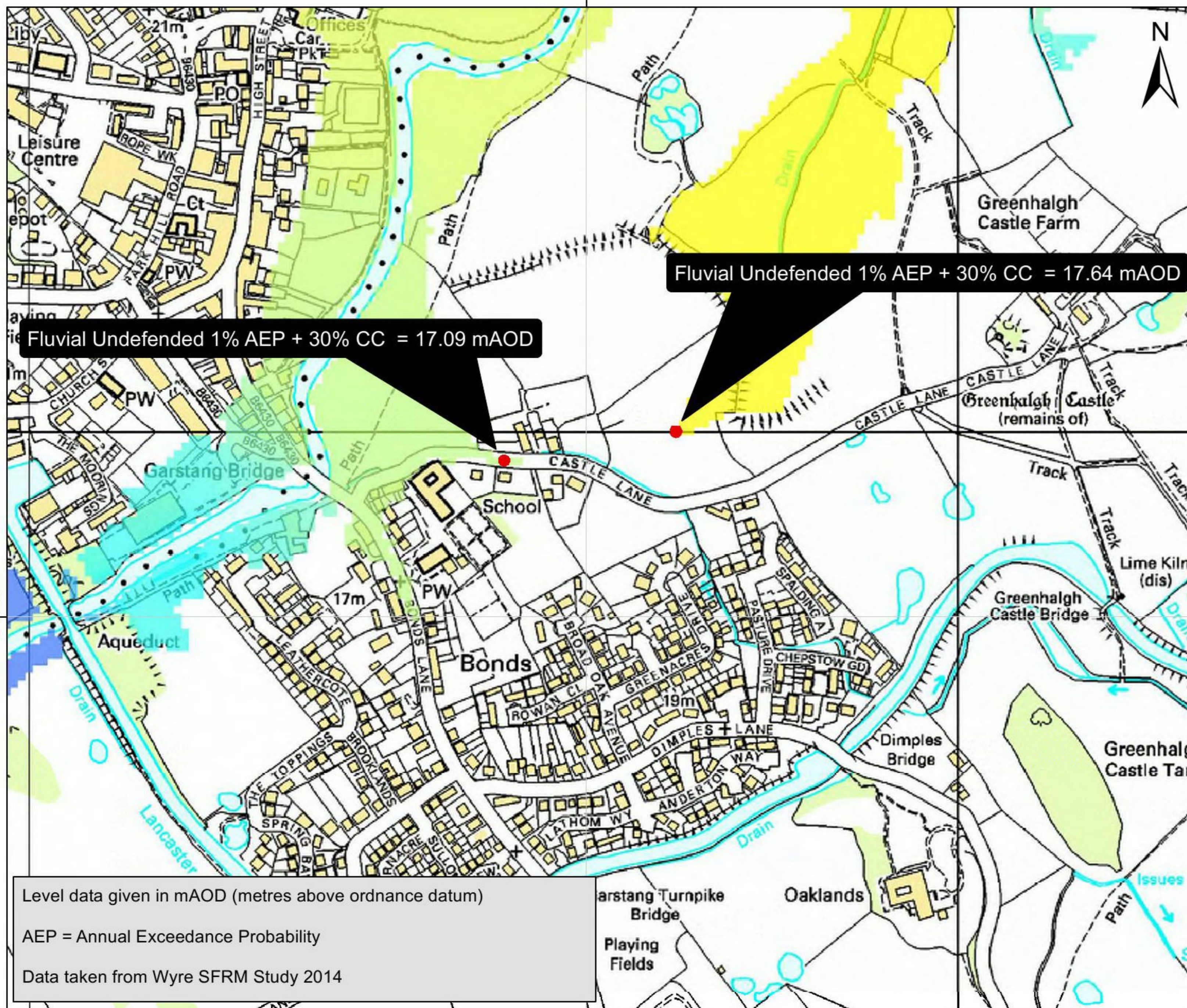
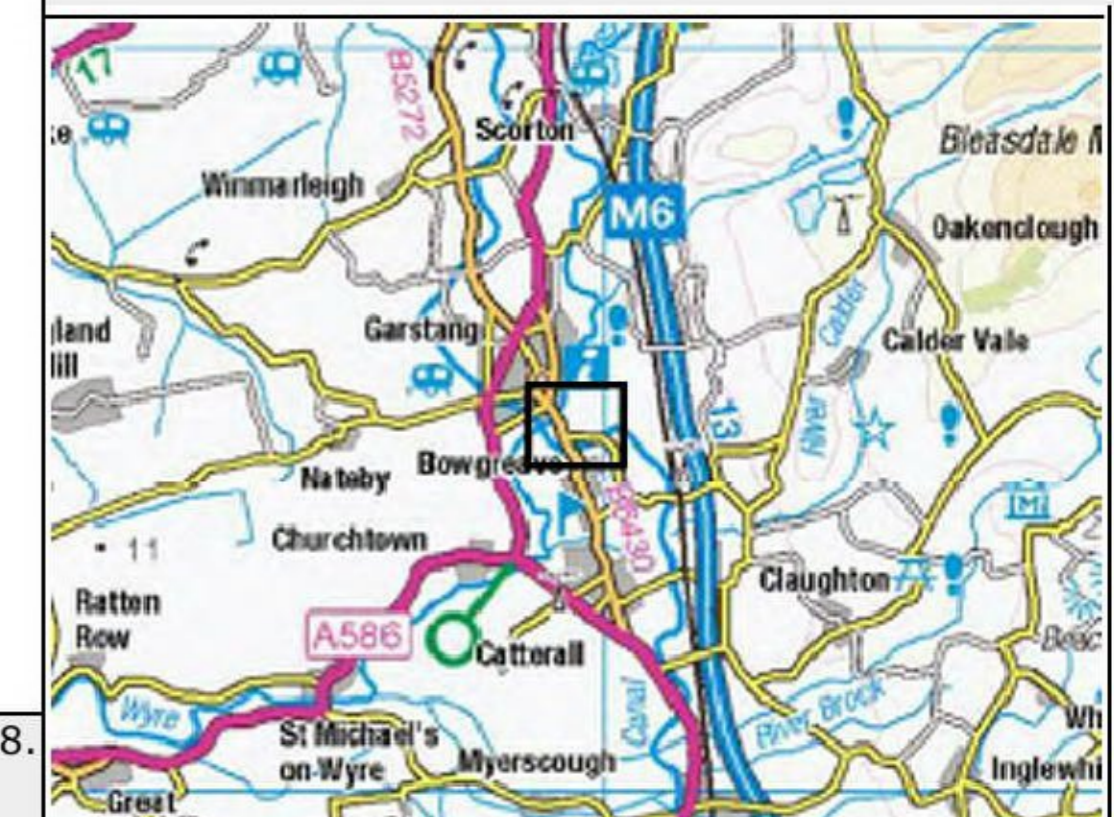


**Flood Zone 3** shows the area that could be affected by flooding:

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**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



Level data given in mAOD (metres above ordnance datum)

AEP = Annual Exceedance Probability

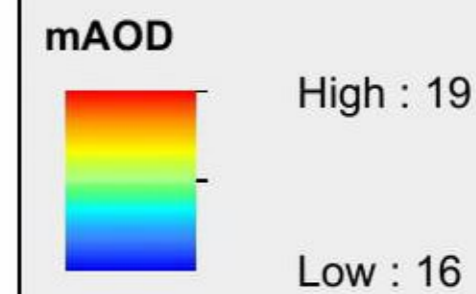
Data taken from Wyre SFRM Study 2014

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Undefended 1% (+35% climate change) annual probability of flooding scenario

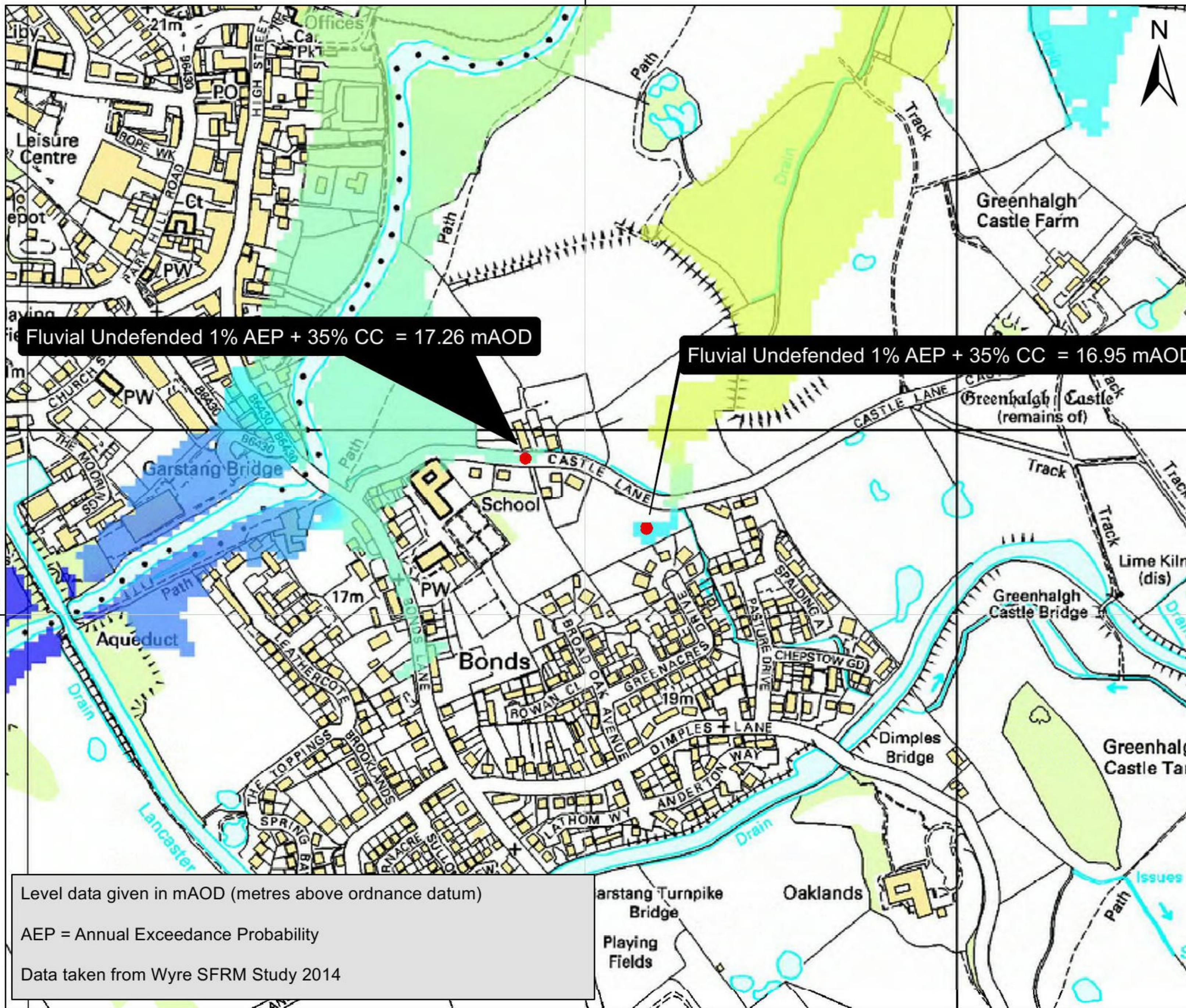
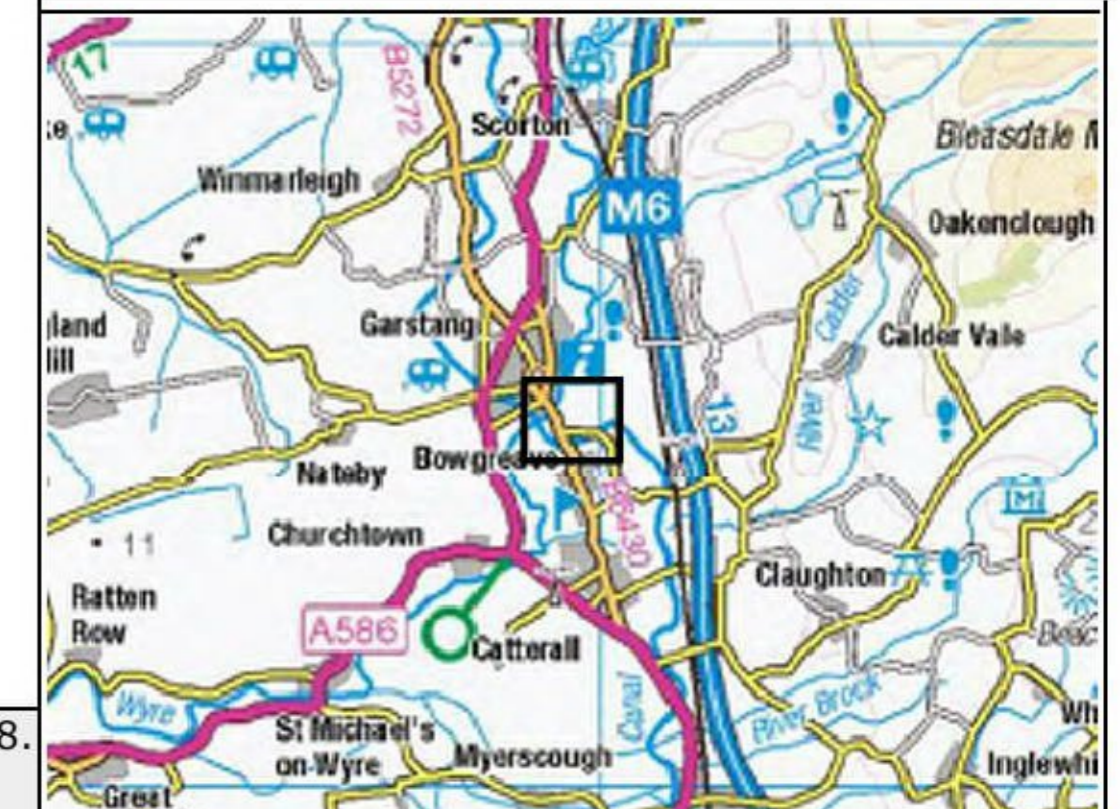


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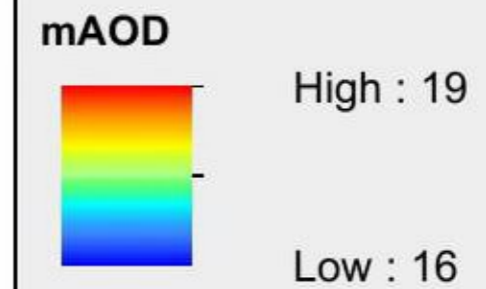
Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
Data taken from Wyre SFRM Study 2014

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Undefended 1% (+70% climate change) annual probability of flooding scenario

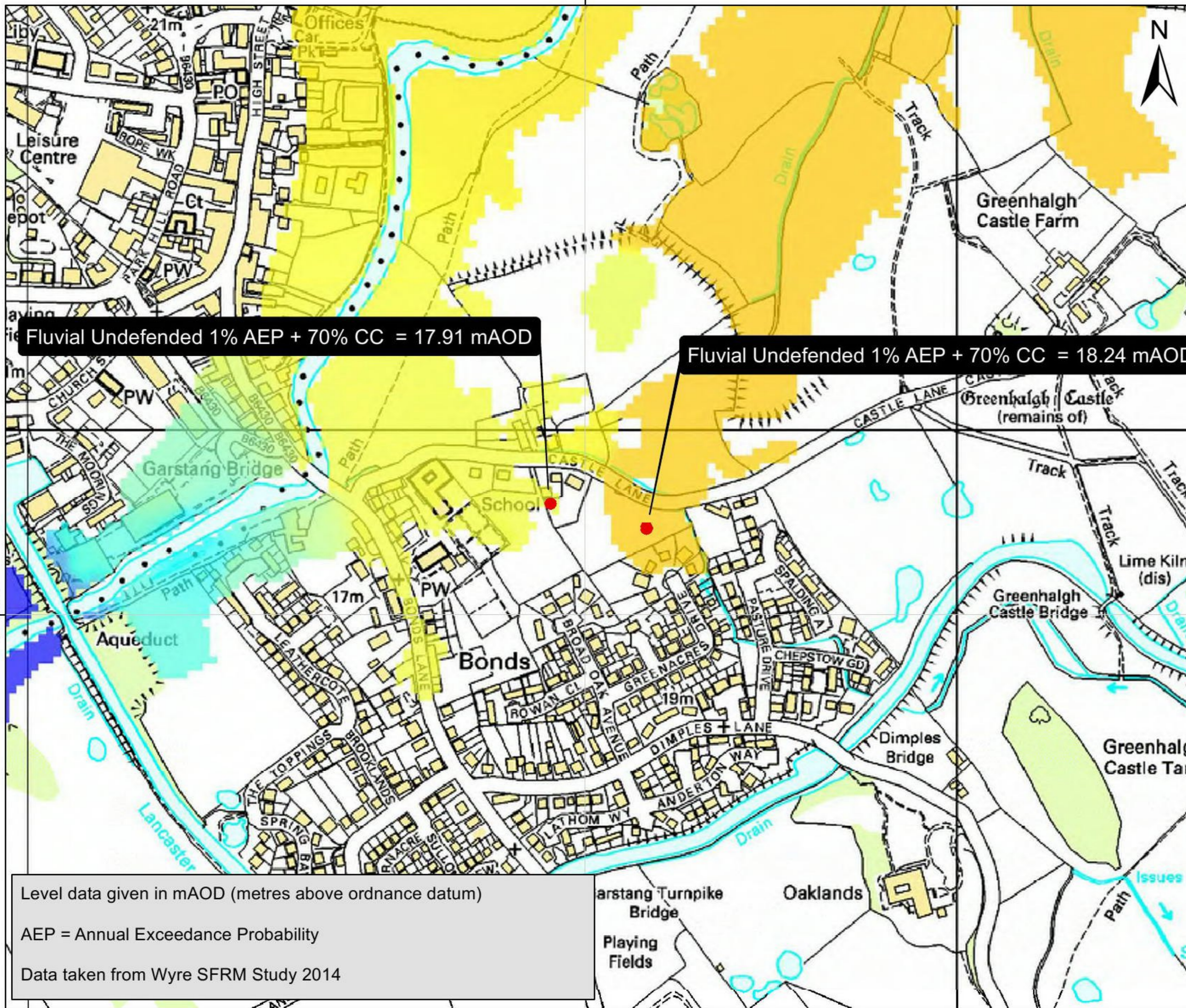
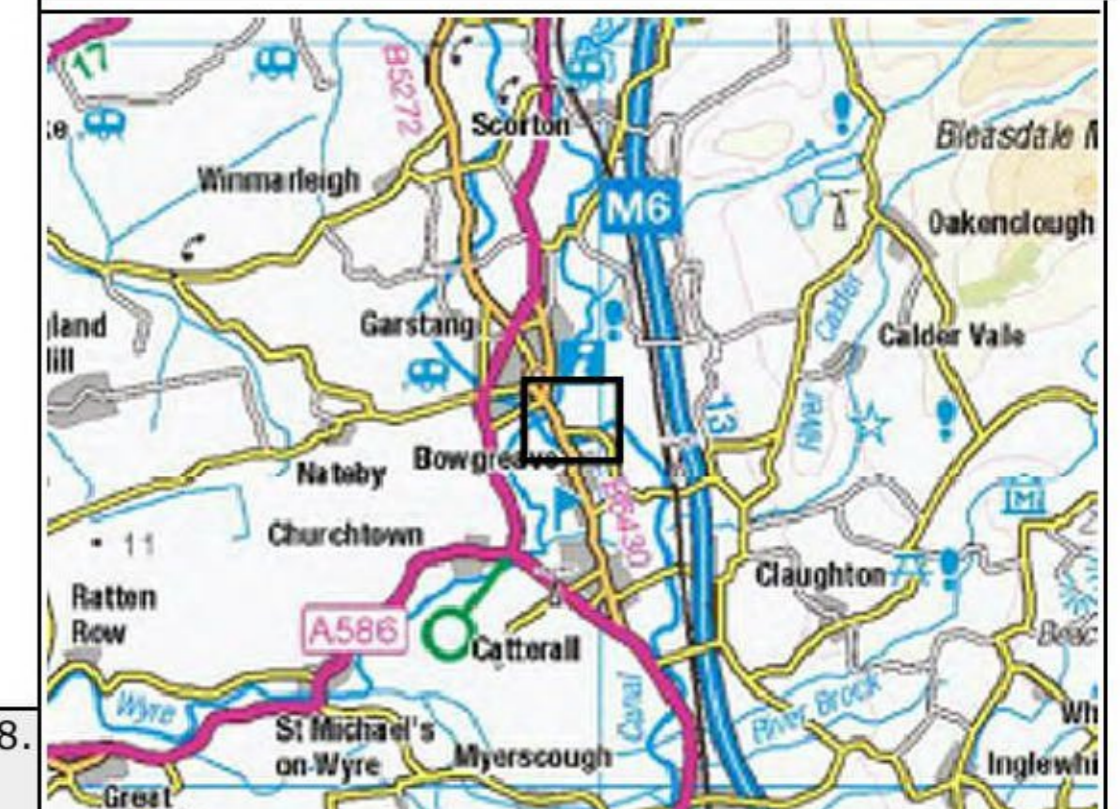


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**ABDs** (Areas Benefiting from Defences) show the area benefiting from defences during a 0.5% tidal, or 1.0% fluvial flood event.



Fluvial Undefended 1% AEP + 70% CC = 17.91 mAOD

Fluvial Undefended 1% AEP + 70% CC = 18.24 mAOD

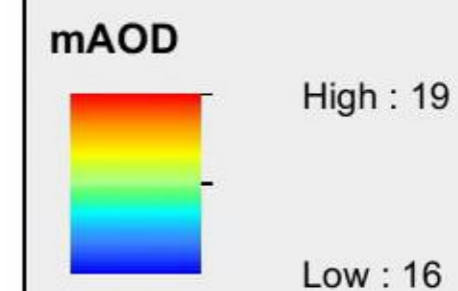
Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
Data taken from Wyre SFRM Study 2014

**Fluvial Flood levels Map:  
Castle Lane, Barnacre-with-Bonds  
Garstang, PR3 1RB**

Produced: 09 March 2021  
Our Ref: CL204781  
NGR: 349635,444934

**Key**

Fluvial Undefended 0.1% annual probability of flooding scenario

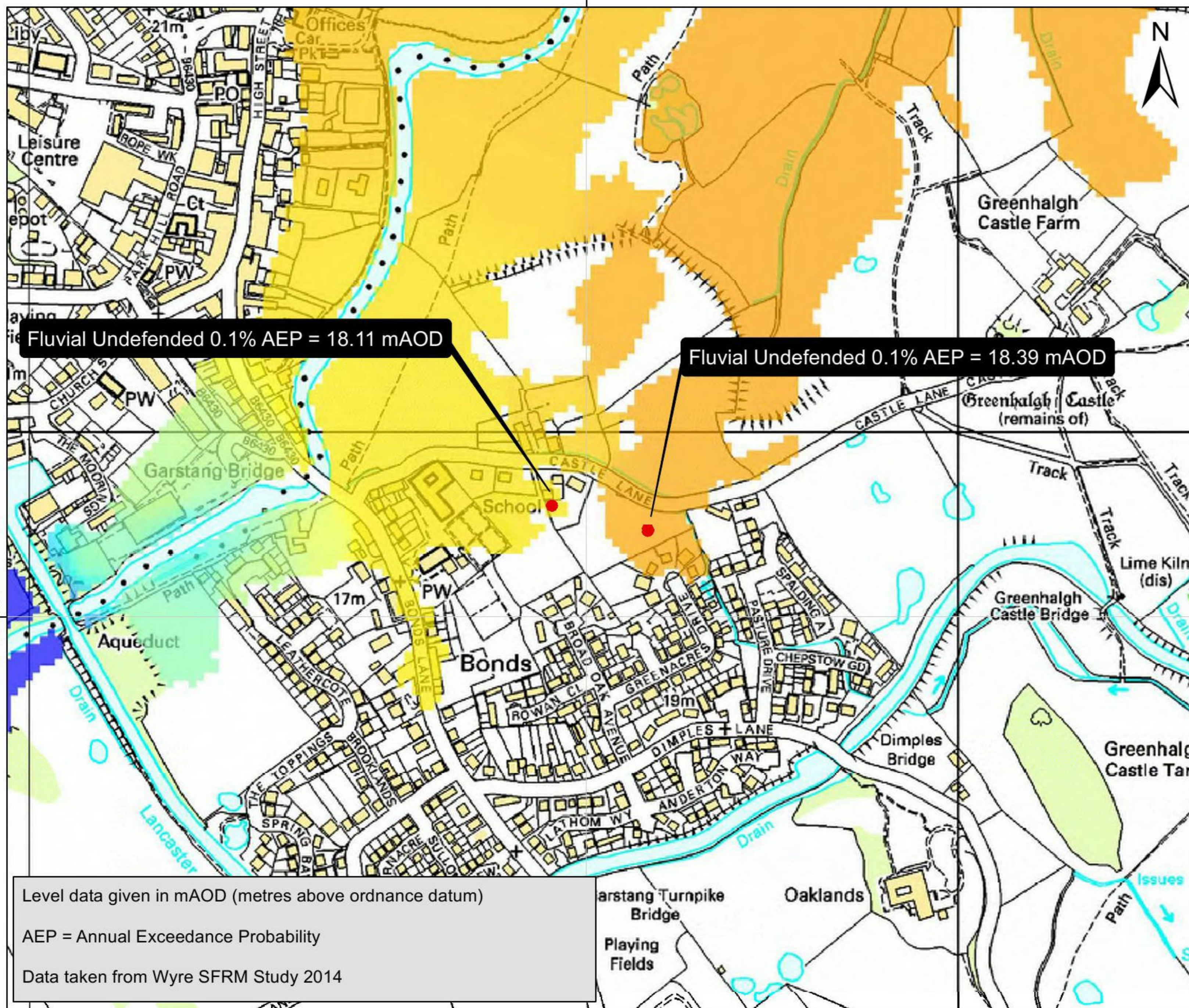


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- or from a river with a 1.0% or greater chance of happening each year.

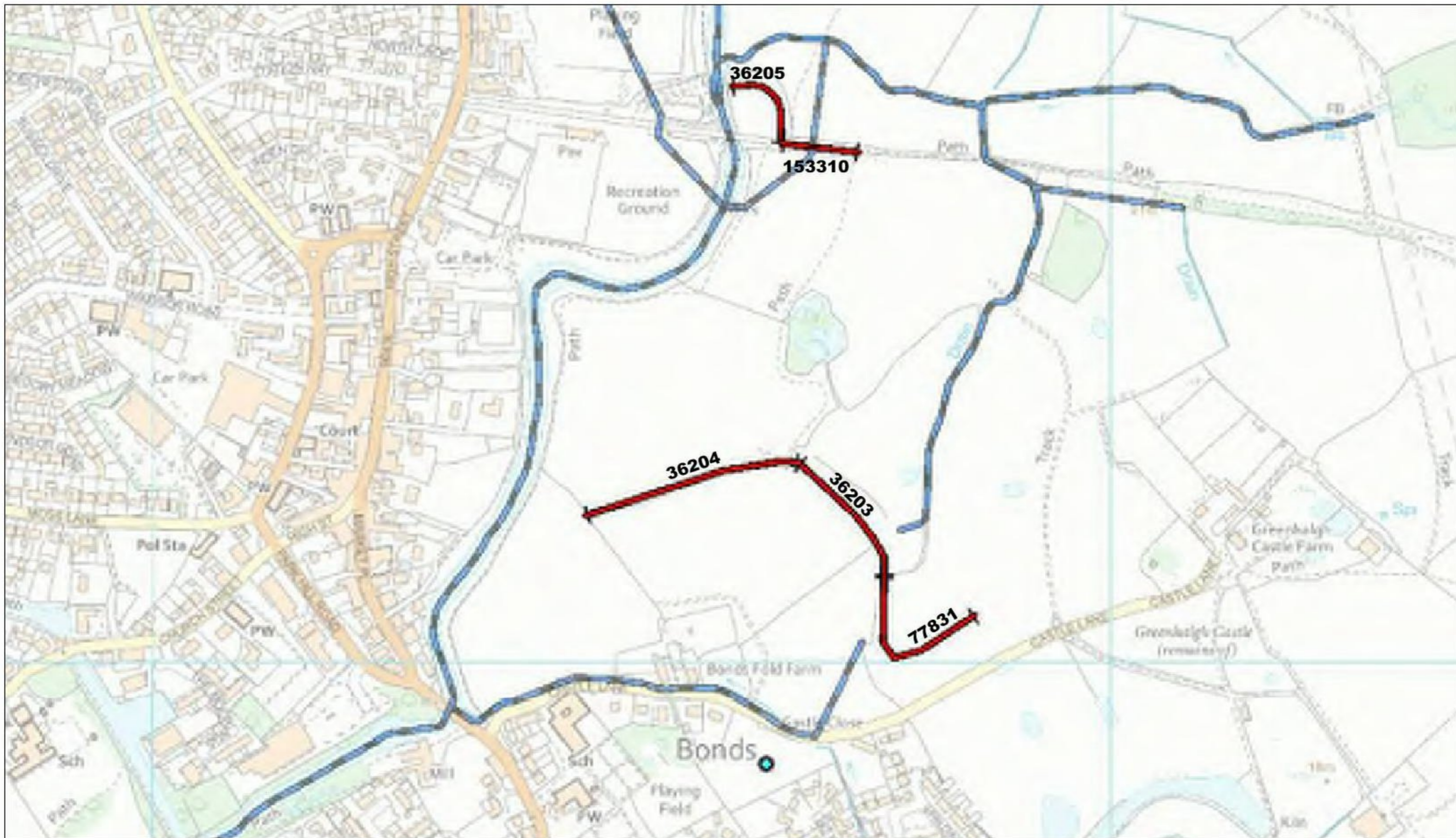
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349600

# CL204781 Castle Lane, Barnacre-with-Bonds, Garstang

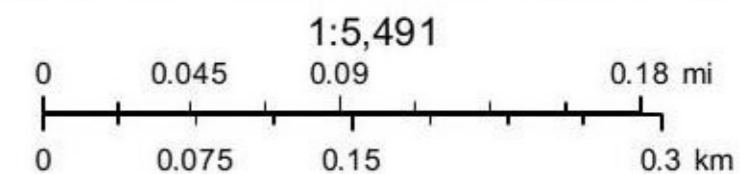


February 15, 2021

 Channels

 Defences

OS Traditional Maps





<b>Site Location</b>	Castle Lane, Barnacre-with-Bonds, Garstang	CL204781
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**Fluvial Defences**

Asset ID	National Grid Reference	Asset Type	Protection Type	Location	Maintained By	Design Standard (Return Period)	Overall Condition Grade (Excellent 1-5 Very Poor)	Effective Crest Level (m)		E.C.L Data Quality (Reliable 1-4 Unreliable)	Length (m)	Height (m)
								UCL (mAOD)	DCL (mAOD)			
36204	SD 49453 45154	Embankment	Fluvial	Concrete Ramp to End of Embankment	Environment Agency	50	2	20.08	18.93	2	230.56	1
36203	SD 49675 45209	Embankment	Fluvial	Change in bank profile to concrete ramp over embankment	Environment Agency	50	2	20.08	20.12	2	154.1	1.5
77831	SD 49764 45090	Embankment	Fluvial	Bonds Culvert to Change in bank profile	Environment Agency	50	2	19.99	20.06	1	184.48	2
36205	SD 49605 45602	Embankment	Fluvial	Doors to Old Railway Line	Environment Agency	50	2	20.16	20.05	2	99.31	3
153310	SD 49656 45542	Embankment	Fluvial	Old Railway Line	Environment Agency	50	2	20.11	20.11	1	80.9	2

**The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:**

- on or within 8 metres of a flood defence structure or culvert (16 metres if tidal)
- on or within 16 metres of a sea defence

