



Allocations and Development
Management Local Plan

**Wigan Borough Flood Risk
Review**

October 2015

1. Introduction

- 1.1 The Wigan Strategic Flood Risk Assessment (SFRA) was completed in 2011 as part of the evidence base for the Local Plan Core Strategy, which was adopted in 2013. The primary objective of the Wigan SFRA was to inform the evidence base and policies within the Core Strategy. It informed the capacity of the land supply identified for the Core Strategy, through the Strategic Housing Land Availability Assessment and the Employment Land Review prepared for it. It also specifically informed policy CP16 on 'Flooding' within the Core Strategy, which states that we will help reduce flood risk from all sources, including surface water run-off.
- 1.2 Since the SFRA was produced there have been changes to flooding policy following the introduction of the National Planning Policy Framework (NPPF) in 2012. There have also been updates to the mapping of flood risk zones by the Environment Agency, and a new national Flood Map for Surface Water has been introduced, which is also regularly updated. This provides much more detailed information on potential surface water flooding than was previously available.
- 1.3 The NPPF replaced topic specific Planning Policy Statements, including PPS25 on flood risk. The government has also since published online National Planning Practice Guidance (NPPG), which provides further specific guidance on flood risk.
- 1.4 The objective of this review is to ensure that the evidence base for policies and sites in the emerging Wigan Allocations and Development Management Local Plan is appropriate and sound. The Plan will allocate land for future development and set out detailed development management policies up to 2026, largely in line with the Local Plan Core Strategy. The review compares existing SFRA data against the most up to date Environment Agency (EA) mapping, to inform the updated Strategic Housing Land Availability Assessment (SHLAA) and new Employment Land Review (ELR). All SHLAA and ELR sites have been assessed against the original SFRA mapping as well as the newly updated Environment Agency Flood Maps for Planning.

2. Fluvial Flood Risk

- 2.1 The attached tables show a comparison of the percentage of each site affected by Flood Zone 3a as mapped in the SFRA, against the most up-to-date Flood Zone 3 mapping from the EA. Against the latest Agency data, a number of the sites have smaller areas in Flood Zone 3 than within Flood Zone 3a as mapped in the SFRA. This means the potential developable area of these sites has increased.
- 2.2 A number of new SHLAA sites that have been identified since the SFRA was undertaken and these have now been reviewed against the original SHRA data and the current EA flood maps. This again shows that the majority of sites are at low risk of fluvial flooding. Again, for those that parts show a high risk of fluvial flooding, it is a lower proportion of the site area when comparing the current EA flood map against the original SFRA data.
- 2.3 It is a similar situation for the ELR sites and the major sites that are listed separately.
- 2.4 The reason for the reduction in most cases is due to more up to date mapping techniques and the inclusion of flood defences. EA maps are updated quarterly and take into account appropriate information when it is available. The EA also has a continuing programme of improvement meaning that when more detailed modelling and data is available it can be applied to the maps. The quarterly updates also allow the opportunity to add constructed flood defences to the mapping as well as any local data relating to actual flood events.

- 2.5 Where a site is highlighted as having a flood risk it will only be considered appropriate for development where priority has been given to the use of sustainable drainage systems, in line with national guidance.

3. **Surface Water Flooding**

- 3.1 The SFRA included an element of surface water flooding data that mapped areas within the borough as at high, intermediate or low risk of surface water flooding. The SFRA also led to the inclusion of a specific surface water run-off element to policy CP16 in the Local Plan Core Strategy. This states that development should not increase the rate of surface water run-off at greenfield sites and that a reduction of at least 30% will be sought on previously developed land, rising to a minimum of 50% in critical drainage areas. Since the SFRA was produced the Environment Agency has provided a new national Flood Map for Surface Water (FMfSW). This gives a more detailed view of surface water flooding than was available at the time the SFRA was undertaken.
- 3.2 Greater Manchester has also produced a Surface Water Management Plan (SWMP) using the same methodology as the FMfSW. The GM SWMP was used to highlight surface water flooding hotspots within the 10 Greater Manchester districts. The Saddle Junction was highlighted in Wigan as a surface water flooding hotspot and surface water detention tanks were installed as part of the construction of Southgate and the remodelling of the junction.
- 3.3 National policy now states that local planning authorities must ensure that sustainable drainage systems (SuDS) are used for all 'major' developments unless it can be demonstrated that they would be inappropriate. The decision on whether a sustainable drainage system would be inappropriate is a matter of judgement, based on guidance and advice from drainage colleagues, acting as the lead local flood authority who will consider what sort of sustainable drainage system is reasonably practicable for a site.
- 3.4 Sustainable drainage systems are often viewed as taking up large areas of land within development sites. This is not necessarily the case, as there are a number of different SuDS components that can be used. With careful planning from the outset, a creative solution can usually be found that will deliver a high quality development.
- 3.5 The following hierarchical approach should be used when considering drainage options, where reasonably practicable:
- a) into the ground (infiltration);
 - b) to a surface water body;
 - c) to a surface water sewer, highway drain, or another drainage system;
 - d) to a combined sewer.
- 3.6 It is accepted that due to the underlying geology of Wigan Borough infiltration is unlikely to be a practicable option. This does not mean that a SuDS approach does not need to be used. Careful thought will however be needed to ensure that water can be treated adequately to improve quality and attenuated to reduce peak flows. Contaminated land can be a problem within Wigan, given the borough's industrial past, but it does not represent a barrier to SuDS use, subject to the careful planning and design of the system.
- 3.7 Sustainable drainage systems have the opportunity to deliver multiple benefits in terms of high quality landscape design, opportunities for biodiversity and to improve water quality. Developers will get the best from a site if they consider sustainable drainage from the outset of the planning process rather than just at the detailed design stage.

4. Sewer Flooding

- 4.1 A number of areas within Wigan Borough have experienced sewer flooding to property, both externally and internally. These and a number of other properties are listed as at risk of sewer flooding by United Utilities on their sewer flooding risk register.
- 4.2 United Utilities has recently invested in upgrading sewer capacity and storage at a number of their water treatment sites, particularly in the east of the borough. There have been instances of sewers becoming overloaded during high rainfall events as the surface water and foul sewers are combined. New storm water storage tanks allow excess flows to be attenuated during high rainfall events, preventing backing up of the system and sewer flooding at properties. This is ongoing at the moment and will reduce the risk of sewer flooding to existing properties that have suffered previously, whilst also increasing capacity in line with expected future development.

5. Summary

- 5.1 The review of current flood risk mapping against the original SFRA mapping shows that the majority of potential housing and development sites are at a low risk of fluvial or surface water flooding.
- 5.2 Where sites were shown to have a proportion of their area at high risk of flooding through the SFRA mapping this has reduced in most cases when using more recent EA flood maps. This means the developable area of the sites has increased. Any site where part has an identified at risk of flooding will only be considered appropriate for development where priority has been given to the use of SuDS, as well as ensuring that the development is appropriately flood resilient and resistant.
- 5.3 A development management policy is required to ensure surface approaches to SuDS are fully considered by developers. These 'soft' SuDS elements deliver multiple benefits when compared to below ground 'hard' storage options. Where a large development is proposed that includes on site open space an element of 'soft' SuDS (not just underground options) should form part of the overall drainage approach. This could include ponds, reed beds, swales, detention basins etc, as they provide multiple benefits. Such a policy is proposed as part of the Wigan Allocations and Development Management Local Plan: Initial Draft Plan.
- 5.4 The Environment Agency has requested that land at Lilford Park Basin currently used for flood water storage needs to be safeguarded for ongoing use through a policy in the A&DMP.

SHLAA Sites

Ref	Location	Site Area (ha)	Wigan SFRA flood zones				Updated Flood Map for Surface Water (EA)		Flood Map for Planning (EA Flood Zones)		Flood Map for Planning (EA Flood Zones)		Comments
			3a	3a with cc	Total	% of site at risk from SFRA	uFMFSW	% of site at risk from uFMFSW	Zone 2	% of site at risk from Flood Zone 2	Zone 3	% of site at risk from Flood Zone 3	
SHLAA0052	Liverpool Road, Platt Bridge	4.480					0.03	0.64					
SHLAA0103	Land at Mersey Road, Platt Bridge	3.149					0.25	7.80					
SHLAA0106	Land at Bolton House Road, Bickershaw	2.305											
SHLAA0164	Springbank Industrial Estate, Liverpool Road, Platt Bridge	1.417					0.02	1.13					
SHLAA0014	Millingford Grove, Ashton	2.152	0.94	0.28	1.22	56.55	0.70	32.69	0.86	39.91	0.55	25.72	Significant reduction in % site area at risk of flooding
SHLAA0015	Off Lincoln Drive, Ashton	4.841	1.81	0.84	2.64	54.60	1.51	31.26	4.74	97.95	0.03	0.67	Significant reduction in % site area at risk of flooding
SHLAA0153	Site of Cranberry Hotel and 641-643 Wigan Road	0.483											
SHLAA0038	Ashton FC Ground, off Golborne Road, Ashton	1.114					0.05	4.13					
SHLAA0090	Knowles Yard off Ratcliffe Road, Aspull	0.807											
SHLAA0152	Disconson Mill, Mill Lane, Aspull	1.189	0.67	0.01	0.68	57.52	0.07	5.82	0.75	63.15	0.63	53.13	Site Removed
SHLAA0031	Land adjacent Holy Family RC Church, Astley	0.663					0.02	3.62					
SHLAA0160	Land at Chaddock Hall, Astley	0.808					0.05	5.84					
SHLAA0133	Land at Coldhurst Lane, Astley	13.181	1.60	0.64	2.24	16.99	1.20	9.08	6.10	46.32	1.38	10.44	Small reduction in % site area at risk of flooding
SHLAA0017	Land to rear of 234-258 Chaddock Lane, Astley	2.347											
SHLAA0105	Land at Lower Green Lane, Astley	1.146					0.25	21.77					
SHLAA0082	Norfolk Road/Tarleton Avenue/Woodvale Avenue, Atherton	0.869					0.00	0.17					
SHLAA0148	Collier Brook Farm, Bag Lane, Atherton	0.468		0.00	0.00	0.55							No longer at high risk
SHLAA0181	Collier Brook Industrial Estate, Bag Lane, Atherton	0.478	0.08	0.30	0.38	80.28	0.16	32.70					Significant reduction in % site area at risk of flooding
SHLAA0033	Victoria Mill and adjacent land, Bolton Old Road, Atherton	0.917	0.63	0.05	0.68	73.67	0.11	11.69	0.31	33.85	0.31	33.61	Site Removed
SHLAA0048	Land to west of Lovers Lane, Howe Bridge, Atherleigh	3.109					0.00	0.01					
SHLAA0191	Site at AG Barr Factory, North Road, Atherton	10.350	0.37	0.40	0.77	7.42	0.61	5.87					No longer at high risk
SHLAA0035	Rosedale Avenue/Water Street, Atherton	0.801											
SHLAA0068	Part of Newton Road Primary Employment Area, Lowton	1.483											
SHLAA0069	Part of Moss Industrial Estate Primary Employment Area, Lowton	2.459											Site Removed
SHLAA0204	The Bungalow and Scrap Yard, Pocket Nook Lane, Lowton	1.073											
SHLAA0007	Land east of Stone Cross Lane, Lowton	25.929	0.84	1.19	2.04	7.85	1.41	5.46					
SHLAA0203	The Nook, Land at Millfield Farm, Nook Lane, Lowton	1.642			0.00	0.00	0.02	1.47					
SHLAA0049	Land to northwest of Lowton Civic Hall, Hesketh Meadow Lane, Lowton	5.314	2.62	1.04	3.65	68.72	0.97	18.17	0.07	1.32	0.01	0.20	Significant reduction in % site area at risk of flooding
SHLAA0006	Rothwells Farm, Golborne	17.103					1.07	6.28					
SHLAA0202	Prospect Industrial Estate, Platt Lane, Hindley	0.741	0.70	0.04	0.74	100.08	0.02	2.81	0.74	100.08	0.29	39.10	Significant reduction in % site area at risk of flooding
SHLAA0020	Smiths Lane, Hindley Green	8.391					0.69	8.16					
SHLAA0155	Hill Top Farm, Off Ravenswood Drive, Hindley	1.522											
SHLAA0089	Rear of Woodland Avenue/Athol Crescent, Hindley	0.743											
SHLAA0093	Land at Green Lane/Alder Lane, Hindley Green	2.942	0.56	0.19	0.75	25.58	0.02	0.62					Site Removed
SHLAA0143	Former Hindley Green Primary School, Thomas Street, Hindley	0.858					0.00	0.42					
SHLAA0100	Former Tansfield Special School, Hindley	0.531											
SHLAA0209	Borsdane Precinct, 1-7 Borsdane Avenue, Hindley	0.518											
SHLAA0117	Hindley Learning Centre, Park Road/Close Lane, Hindley	2.080					0.02	0.96					
SHLAA0092	Land at Coupland Road, Hindley Green	2.879		0.40	0.40	13.78		0.00					Site Removed
SHLAA0118	Hindley Towns Yard, Wigan Road, Hindley	1.908	0.02	0.00	0.02	1.19	0.00	0.19	0.01	0.63	0.01	0.63	Small reduction in % site area at risk of flooding
SHLAA0104	Amberswood/Hydelle Lodge King Street Hindley	1.801											
SHLAA0109	Castle Hill Hindley	1.351											
SHLAA0079	Land off Ravenswood Drive, Hindley	0.975											
SHLAA0171	Former Hilton Park site, Atherleigh Way, Leigh	2.228					0.04	1.82					
SHLAA0045	Firs Lane/Plank Lane Canal side	19.645	0.88	0.05	0.93	4.74	1.30	6.62	7.85	39.93	0.59	2.99	Small reduction in % site area at risk of flooding
SHLAA0084	Land rear of Eden Grove, Lune Leigh	0.426											
SHLAA0086	Land at 230-256A York Street, Leigh	0.415					0.00	0.09					
SHLAA0019	Land off Pennington Road, Leigh	4.683	0.04	0.02	0.06	1.27							Site Removed
SHLAA0013	Land opp 150-164 Kirkhall Lane and parallel to Robertshaw St, Leigh	1.468					0.00	0.20					Site Removed
SHLAA0166	Glover House Farm, Hand Lane, Leigh	0.437											Site Removed
SHLAA0205	Parsonage, Leigh	4.794	0.79	0.01	0.80	16.65	0.41	8.50	0.95	19.78	0.76	15.82	Outline application with FRA submitted.
SHLAA0071	Land south of Parsonage Farm, Westleigh Lane, Leigh	2.055	0.46	0.01	0.47	22.90	0.04	1.95	0.77	37.43	0.44	21.52	No change
SHLAA0043	Land between Crankwood Road and Leeds/Liverpool Canal	1.311					0.00	0.25					
SHLAA0070	Welch Hill Mill, Welch Hill Street, Leigh	0.840											Site Removed
SHLAA0072	Hall House Lane	0.469											
SHLAA0036	Coronation Drive/Royal Drive, Higher Folds, Leigh	0.525							0.37	69.56	0.27	50.88	Significant increase in % site area at risk of flooding
SHLAA0200	Bridgewater Business Park, West Bridgewater Street, Leigh	9.761					0.13	1.38					
SHLAA0001	Northleigh, Hindley Green	71.129	3.19	0.08	3.28	4.61	4.63	6.52	3.49	4.91	3.01	4.23	No change
SHLAA0114	Former Sportsman Inn and cricket ground, Twist Lane, Leigh	1.304	1.58		1.58	121.28	0.29	21.38	1.60	122.36	1.58	121.28	Site Removed
SHLAA0021	Hooten Gardens, Leigh	3.267	0.98	0.12	1.10	33.59	0.11	3.29	1.00	30.48	0.77	23.54	Significant reduction in % site area at risk of flooding.
SHLAA0124	Heather Grove Leigh	0.458											
SHLAA0132	Land at Thames Avenue, Leigh (North)	2.326	1.86	0.31	2.17	93.46	0.30	12.71					Significant reduction in % site area at risk of flooding.
SHLAA0040	Former Our Lady of the Rosary Primary School Heath Lane Leigh	1.651					0.01	0.88					Site Removed
SHLAA0039	Land at Coal Pit Lane, Atherleigh	5.340					0.51	9.61					
SHLAA0201	Bickershaw Colliery, Plank Lane, Leigh	18.875					0.56	2.98					
SHLAA0130	Walmesleys Farm Higher Folds Leigh	10.445					0.20	1.95					
SHLAA0158	Bispham Hall Brick and Terracotta Works, Smethurst Rd, Billinge	4.337					0.23	5.26					
SHLAA0154	Billinge Hospital, Upholland Road	6.338					0.02	0.26					
SHLAA0207	Land (north) on site of former Billinge Hospital	0.602						0.00					
SHLAA0206	Land (south) on site of former Billinge Hospital	1.512					0.33	21.60					
SHLAA0175	Former coal yard, land off Delphside/Dandbrook Close, Orrell, Wigan	0.456					0.27	59.56					Site Removed
SHLAA0157	Orrell West Sidings, Ld r/o Sandbrook Service Stn, Sandbrook Rd, Orrell	0.433											Site Removed
SHLAA0087	Land at Woodcock Drive, Abram	0.401											
SHLAA0051	Land north of Bickershaw Lane, Abram	1.227	0.54	0.19	0.73	59.41	0.08	6.55	0.53	43.11	0.35	28.20	Significant reduction in % site area at risk of flooding
SHLAA0029	Former St Nathaniels Primary School & land between 525-539 Liverpool Road	1.304					0.01	1.11					
SHLAA0174	St Johns Vicarage, 9 Lee Lane, Abram	0.434					0.04	9.19					
SHLAA0101	Land at Calder Drive, Platt Bridge	0.986					0.02	2.35					
SHLAA0149	Orica Ltd UK Site, Shevington	29.464					1.16	3.92					
SHLAA0129	Land at Herons Wharf, Appley Bridge	1.781	0.16		0.16	9.24	0.08	4.68	0.16	9.24	0.16	9.24	No change, planning permission approved.
SHLAA0011	Rectory Lane South, Standish	80.171					3.63	4.53					Site Removed
SHLAA0009	Almond Brook, Standish	48.422					5.19	10.73					
SHLAA0156	Chorley Road (Worthington Park) (Bleachworks), Worthington	5.586	3.80	0.13	3.92	70.23			3.35	60.00	2.94	52.71	Site Removed
SHLAA0178	Rear of Bradley Lane and Bentham Place, Standish	0.475											Site Removed
SHLAA0141	Bradley Hall Industrial Estate	0.132	0.00	0.00	0.00	2.53							Site Removed
SHLAA0010	Rectory Lane North, Standish	29.463					1.18	4.01					
SHLAA0047	Land to north of Treen Street/Bodmin Road/Cranleigh Drive	5.655					0.84	14.81					
SHLAA0046	Lancaster Avenue, Tyldesley	0.931					0.00	0.09					

SHLAA0262	Land To Rear Of Boardman House Leigh Road Leigh	0.08								0.08	100.00				
SHLAA0265	Hindleys Farm Wigan Road Atherton	1.29						0.001	0.08						
SHLAA0266	Land east of Pocket Nook Farm Pocket Nook Lane Lowton	7.19	0.26	0.00	0.26	3.62		0.26	3.62	0.50	6.95	0.02	0.28		Small reduction in % site area at risk of flooding
SHLAA0267	Land south of Lower Pocket Nook Farm Lowton	13.84	5.37	0.00	5.37	38.80		3.57	25.79	3.38	24.42	2.44	17.63		Significant reduction in % site area at risk of flooding
SHLAA0268	Land south of Carr Farm Pocket Nook Lowton	29.86	0.52	0.00	0.52	1.74		0.58	1.94	0.44	1.47	0.14	0.47		Small reduction in % site area at risk of flooding
SHLAA0269	Land south of Stirrups Farm Stone Cross Lane Lowton	12.81	0.82	0.00	0.82	6.40		0.92	7.18						No longer at high risk
SHLAA0270	Land to rear of 43-99a Pepper Lane Standish	5.76						0.33	5.73						
SHLAA0272	Land to rear of Rectory Farm Rectory Lane Standish	5.86						0.12	2.05						
SHLAA0273	Land south of Rectory Lane (former golf course) Standish	9.68						0.01	0.10						
SHLAA0274	Land north of former Victoria Colliery off Cranleigh Standish	15.27						0.23	1.51						
SHLAA0275	Land off Lurdin Lane Standish	4.19						0.07	1.65						
SHLAA0276	Land rear of Rowton Rise Standish	2.95						0.03	1.02						
SHLAA0277	Land north of 23 Old Pepper Lane Standish	1.55						0.22	14.19						
SHLAA0278	Agricultural land west of Cat I'Th' Window Farm Almond Brook Road	12						1.01	8.42						
SHLAA0279	Land to rear of 214 Almond Brook Road	0.2						0.01	3.00						
SHLAA0280	Land to the north of Rectory Lane	6.4						0.04	0.55						
SHLAA0281	Open Land East Of Stone Cross Place Stone Cross Lane North Lowton	0.43						0.08	18.60						
SHLAA0282	Open Land North-west of A580 and Caldwell Ave Tyldesley	3.54	0.19	0.46	0.65	18.36		0.23	6.50	1.24	35.03				Significant reduction in % site area at risk of flooding
SHLAA0283	Land south of 25 Brook Drive Astley	0.75								0.12	16.00				Reserved matters application approved
SHLAA0284	Land south of 25-51A Brook Drive Astley	1.23	0.34	0.03	0.37	30.08		0.05	4.07	1.09	88.62				Significant reduction in % site area at risk of flooding
SHLAA0285	Land at Thames Avenue Leigh (South)	2.14						0.11	5.14						Planning permission approved.
SHLAA0286	Land at Brentwood 251 Wigan Lane Wigan	0.41						0.00	0.00						
SHLAA0287	Former Keepers Inn Woodhouse Lane	0.11						0.03	22.73						
SHLAA0288	Land north east of 73 Samuel Street Atherton	0.33						0.01	1.52						
SHLAA0289	Land north of Haydock Park Racecourse	2.66													
SHLAA0290	Chatham Windows Chatham Mill Chatham Street Wigan WN1 3DB	0.05													
SHLAA0291	College Street Health Centre College Street Leigh WN7 2RD	0.22													
SHLAA0292	Airflow 100 Lord Street Leigh WN7 1BY	0.07													
SHLAA0294	Open Land West Of 1 Romford Place Hindley	0.45						0.01	2.22	0.09	18.89	0.05	10.22		Small increase in % site area at risk of flooding
SHLAA0295	37-45 Wigan Road Ashton-In-Makerfield Wigan WN4 9AR	0.05						0.01	14.00	0.04	70.00				
SHLAA0296	Bull And Butcher 426 Westleigh Lane Leigh WN7 5PU	0.14													
SHLAA0297	Off Bolton Road Aspull	0.37													
SHLAA0298	Site Of Atherton Clinic Formby Avenue Atherton Manchester M46 0HX	0.14						0.01	7.86						
SHLAA0299	592 Liverpool Road Platt Bridge Wigan WN2 3UJ	0.04													
SHLAA0300	79 - 87 Twist Lane Leigh WN7 4DW	0.05						0.0001	0.20						
SHLAA0301	Pemberton Central Ward Labour Club Enfield Street Wigan WN5 8DJ	0.14						0.0003	0.21						
SHLAA0302	Former Pembway Leopold Street Pemberton Wigan WN5 8JG	0.29													
SHLAA0303	Greater Manchester Police Ince Police Station 492 - 494 Warrington Road Ince W	0.08													
SHLAA0304	43 Upper Dicconson Street Wigan WN1 2AG	0.02													
SHLAA0305	Land At Marklands Farm Manchester Road Astley Tyldesley Manchester M29 7F	0.33													
SHLAA0306	Site Of 95-101 Ormskirk Road Wigan WN5 9EA	0.08													
SHLAA0307	Development Land East Of 2 - 4 Woods Lane Ashton-In-Makerfield	0.1													
SHLAA0308	14-15 Bridgeman Terrace Wigan WN1 1SX	0.03													
SHLAA0309	Site Of 86 To 94 High Street, Golborne	0.13													
SHLAA0310	Incefield House 234 Ince Green Lane Ince Wigan WN3 4RJ	0.08													
SHLAA0311	Bridgeman House Bridgeman Terrace Wigan WN1 1TR	0.09													
SHLAA0312	1 - 5 New Market Street Wigan WN1 1SE	0.04													
SHLAA0313	159-163 Downall Green Road Ashton-In-Makerfield Wigan WN4 0DW	0.05													
SHLAA0314	Car Park Anderton Street Ince	0.14													
SHLAA0315	114 High Street Atherton	0.36													
SHLAA0316	81 East Lancashire Road Lowton	0.49						0.02	3.27						
SHLAA0317	Site of 186 Wigan Lower Road Standish Lower Ground	0.15													
SHLAA0319	Land at Worsley Terrace Wigan	0.25						0.0002	0.08						
SHLAA0320	Playing fields to former Pemberton Primary School, Norley Hal	1.35													
SHLAA0321	Fourways Assessment Unit, Cleworth Hall Lane, Tyldesley	0.69						0.06	8.26						
SHLAA0322	Land at Frog Lane and Prescott Street, Wigan	0.64													
SHLAA0323	Laurel Nurseries Atherton Road Hindley	0.6						0.11	17.83						
SHLAA0325	Former Gas Depot York Road Ashton-In-Makerfield	0.62						0.14	22.42						

Cluster 05	Kirklees Estate, Cale Lane, Aspull (WN2 1HB)	18.04													
EM1A 01	Stone Cross Park, Golborne (WA3 3JD)	31.60	2.01	0.18	2.20	6.95		1.38	4.35	1.88	5.94	0.29	0.93		Significant reduction in % site area at risk of flooding
EM1A 02	Golborne Enterprise Park (WA3 3DR)	4.00						0.24	5.93						
EM1A 03	Bridge Street, Golborne (WA3 3BB)	7.30	2.96	0.12	3.08	42.25		1.14	15.59	3.03	41.45	0.64	8.80		Significant reduction in % site area at risk of flooding
EM1A 04	Newton Road, Lowton (WA3 2BP)	7.30						0.23	3.12						
EM1A 05	Moss Industrial Estate, Lowton (WN7 3PT)	20.00						0.43	2.15						
EM1A 06	Parsonage, Leigh (WN7 5RS)	23.58	3.29	0.04	3.32	14.09		1.39	5.89	6.09	25.81	3.23	13.68		Small reduction in % site area at risk of flooding
EM1A 07	Bridgewater, Leigh (WN7 4PF)	15.26						0.33	2.17						
EM1A 08	Hope Carr/Leigh Commerce Park, Leigh (WN7 3XT)	33.48	3.64	0.51	4.15	12.40		1.55	4.63	5.07	15.14	3.51	10.49		Small reduction in % site area at risk of flooding
EM1A 09	Chaddock Lane, Astley (M29 7JS)	41.81						2.18	5.21						
EM1A 10	Parr Brow, Tyldesley (M29 8QH)	7.36	1.44	0.01	1.45	19.67		1.06	14.43	1.38	18.75	1.33	18.11		Small reduction in % site area at risk of flooding
EM1A 11	Chanters Industrial Estate, Hindsford (M46 9BP)	11.40						0.18	1.57						
EM1A 12	Gibfield, Atherton	39.93	2.01	1.42	3.44	8.61		2.39	5.98	0.01	0.02	0.01	0.02		Significant reduction in % site area at risk of flooding
EM1A 14	West of Leigh Road, Hindley Green (WN2 4TN)	52.41	1.01	0.22	1.23	2.35		2.41	4.59	0.07	0.14	0.04	0.08		Small reduction in % site area at risk of flooding
EM1A 15	Swan Lane, Hindley Green (WN2 4HD)	29.60	1.59	5.77	7.36	24.85		1.05	3.53	0.02	0.06				Significant reduction in % site area at risk of flooding
EM1A 16	Makerfield Way, Ince (WN2 2PR)	24.10						1.24	5.14						
EM1A 17	Wigan Enterprise Park, Ince (WN2 2LE)	12.85	3.56	0.01	3.57	27.77		0.35	2.68	4.56	35.47	3.44	26.79		Small reduction in % site area at risk of flooding
EM1A 18	Dobson Park Industrial Estate, Ince (WN2 2DX)	13.70	0.00	0.00	0.00	0.02		0.62	4.54	0.01	0.05	0.00	0.03		No change
EM1A 19	Rosebridge, Ince (WN1 3DG)	8.40	0.76	0.75	1.51	17.97		0.42	4.98						Significant reduction in % site area at risk of flooding
EM1A 21	Wigan Pier Business Park/ Riverside, Wigan (WN3 5BA)	5.56	4.10	0.09	4.20	75.45		0.25	4.46	5.09	91.59	3.91	70.33		Small reduction in % site area at risk of flooding
EM1A 22	Chapel Lane, Wigan (WN3 4DQ)	7.10	3.14	0.31	3.45	48.53		0.49	6.93	4.88	68.80	0.64	8.96		Significant reduction in % site area at risk of flooding
EM1A 23	Wallgate, Wigan (WN3 4AF)	17.29	0.16	0.68	0.85	4.89		0.73	4.19	1.00	5.78	0.16	0.94		Significant reduction in % site area at risk of flooding
EM1A 24	Springfield and Miry Lane, Wigan (WN6 7TG)	33.20	1.89	1.01	2.89	8.71		2.18	6.56						No longer at high risk
EM1A 25	Martland Park and Heinz, Wigan (WN5 0BY)	100.40	0.00	0.01	0.01	0.01		3.28	3.27	0.29	0.29				
EM1A 26	Gidlow Lane, Beech Hill (WN6 8RN)	8.70						0.02	0.17						
EM1A 27	Bradley Lane, Standish (WN6 0XQ)	28.50						1.31	4.60						
EM1A 28	Richmond Hill Industrial Estate, Pemberton (WN5 8AA)	2.20						0.04	1.91						
EM1A 29	Lamberhead Industrial Estate, Pemberton	18.00						0.89	4.93						
EM1A 30	Pemberton Colliery (WN3 6PR)	20.23	0.02	0.01	0.03	0.16		0.13	0.62	0.10	0.47	0.01	0.03		Small reduction in % site area at risk of flooding
EM1A 31	Warrington Road Industrial Estate, Wigan (WN3 6PH)	8.34						0.54	6.45						
EM1A 32	Warrington Road, Hawley (WN3 6XD)	13.68	0.00	0.00	0.00	0.03		0.62	4.52						No longer at high risk
EM1A 33	Wheatlea Industrial Estate, Wigan (WN3 6XR)	20.40						2.18	10.67						

Employment sites

	EM1A.34	Haslemere and Land Gate, Bryn (WN4 0BW)	7.80						0.01	0.15						
	EM1A.35	Park Brook, Wigan Road, Bryn (WN4 0DA)	3.20						1.00	31.34						
	EM1A.36	South Lancashire Industrial Estate, Ashton (WN4 8DE)	91.00						2.58	2.83						
New	EM1.1	Land at Leopold Street, Pemberton	2.19													
	EM1.2	Land at Smithy Brook Road, Wigan	14.42						0.47	3.26						
	EM1.3	Land at Landgate Lane, Landgate	5.49						0.45	8.20						
	EM1.4	South Lincs Ind Estate extension	32.92						1.13	3.43						
	EM1.5	Land at Chaddock Lane, Astley	13.37						0.36	2.69						
	Clusters allocated in Plan															
Clusters	EM1C.001	Bridgeman Terrace	1.03						0.01	0.97						
	EM1C.002	Bickershaw Lane	2.9						0.037	1.28		0.014	0.48			
	EM1C.003	Billinge Road Wigan	1.88	0.18	0.11	0.29	15.43		0.09	4.79						Significant reduction in % site area at risk of flooding
	EM1C.004	Bolton House Road	8.33						0.62	7.44						
	EM1C.005	Cale Lane	18.04						0.22	1.22						
	EM1C.006	Queen/Caroline Street	27.25	15.93	0.25	16.18	59.38		1.27	4.66		20.02	73.47	12.44	45.65	Small reduction in % site area at risk of flooding
	EM1C.007	Johnson Street	2.05						0.04	1.95						
	EM1C.008	Cemetery Road, Ince	11.58	2.85	0.07	2.92	25.22		0.61	5.27						Significant reduction in % site area at risk of flooding
	EM1C.009	Darby Lane	1.36	0.05	0.03	0.08	5.88		0.05	3.68						No longer at high risk
	EM1C.010	English Street	2.76						0.03	1.09						
	EM1C.011	Rosedale Avenue/Flapper Fold Lane	3.37						0.04	1.19						
	EM1C.012	Harvey Lane	4.67						0.03	0.64		0.01	0.21			
	EM1C.013	Leyland Mill Lane	2.15	1.60	0.02	1.62	75.35		0.17	7.91		0.74	34.42			No longer at high risk
	EM1C.015	Lower Green Lane	4.41	0.10	0.13	0.23	5.22		0.11	2.49		0.50	11.34			No longer at high risk
	EM1C.016	Bolton Road, Atherton	7.95	3.93	1.19	5.12	64.40		0.25	3.14		0.40	5.03	0.41	5.16	Significant reduction in % site area at risk of flooding
	EM1C.017	Nangreaves Street	2.99													
	EM1C.018	Moat House Street	1.92						0.06	3.13						
	EM1C.019	Mort Lane, Tyldesley	1.76													
	EM1C.020	Platt Fold Street	5.32						0.12	2.26						
	EM1C.021	Platt Lane	2.01	1.42	0.45	1.87	93.03		0.02	1.00		2.01	100.00	0.73	36.32	Significant reduction in % site area at risk of flooding
	EM1C.022	Prescott Street	1.1													
	EM1C.023	Richard Street	16.05	6.19	0.45	6.64	41.37		2.2	13.71		4.40	27.41			No longer at high risk
	EM1C.024	Smethurst Road	2.69						0.16	5.95						
	EM1C.025	Victoria Street	2.9						0.02	0.69						
	EM1C.026	Welch Hill Street	0.86	0.16	0.00	0.16	18.60		0.01	1.16		0.18	20.93	0.01	1.05	Significant reduction in % site area at risk of flooding
	EM1C.027	Wigan Road	6.52						0.1	1.53						
	EM1C.028	Wigan Road	1.83	0.01	0.00	0.01	0.38		0.003	0.16				0.01	0.38	
	EM1C.029	Winstanley Road	1.22						0.005	0.41						
	EM1C.030	Atherton Road	2.53						0.04	1.58						
	Major	MS1	South of Hindley	109.017	0.83	0.07	0.91	0.83		6.18	5.67		0.73	0.67	0.52	0.48
MS2		South of Atherton	55.610	4.12	0.73	4.85	8.72		3.66	6.58		3.34	6.01	2.96	5.33	Small reduction in % site area at risk of flooding
MS3		East of Atherton	42.113		0.66	0.66	1.56		1.92	4.56						No longer at high risk
MS4		Pocket Nook, Lowton	67.390	6.67	0.44	7.11	10.55		4.72	7.00		7.16	10.62	2.94	4.37	Significant reduction in % site area at risk of flooding
MS5.1		Westwood Park, Wigan	33.858	6.78	3.50	10.28	30.37		2.11	6.22						No longer at high risk of flooding
MS5.2	Landgate, Ashton	45.513						4.56	10.02						No change	