Level 2 SFRA Site Assessment Potential Sites along Crow Brook

<u>Site</u> ID/Ref	SHLAA Site/ ABD Number	SHLAA Name/ Full Ref	SHLAA LOCAL/ Site Name	Site Description	Flood Depth Assessment	Flood Velocity Assessment	Flood Hazard Assessment	Blockage Scenario	
164	Land at Teagues Bridge Community Centre	Teagues Crescent	Trench	Site lies fully in Flood Zone 1. Flood Zones 3b, 3a and 2 are located approximately 8m from the western boundary of the site, but do not extend into the site itself.	n/a	n/a	n/a	n/a	Fol rec froi ext
195	Land south	Capewell Road	Trench	Site lies fully in Flood Zone 1.	n/a	n/a	n/a	n/a	Fol
414	Land at Wheat Leasows	North Hadley Park / St Lukes Road	Wheat Leasows	The site is split into three separate parts with the majority of the site lying within Flood Zone 1. The far western third of the site is affected by the Hurley Brook and part of the site furthest east by the Crow Brook. Flood Zones 3a and 2 extend into the western extent of the site for approximately 60m. There is very little difference in the extent of Flood Zones 3a and 2. The Shropshire Union Canal Trench Branch (disused) runs along the eastern boundary of the most western area of the site furthest east adjacent to the Crow Brook. Flood Zones 3b and 3a remain within bank, although the 1 in 100 year plus climate change event affects part of the site.	Depth of flooding across the site is generally shallow for most of the affected area along the western third of the site (typically <0.2m). In general the depth between the 100 year event with climate change and the 1000 year event is approximately 10cm. The depth of flooding within the eastern third of the site is generally <30cm within Flood Zone 2.	Velocities for the affected area along the western third of the site are generally slow to mid-range (0.2 to 0.6m/s) for Flood Zone 2. Within the eastern third of the site, the velocities across the affected areas within Flood Zone 2 tend to be slow to mid-range and are generally <0.9m/s.	The flood hazard is generally low through the affected parts of the site (both the western and eastern thirds) across the range of return periods, with 'danger for some.'	n/a	The affe ver Zope The yea als
471	Land at Capewell Works	Sommerfeld Road	Trench Lock	Flood Zones 3b, 3a and 2 extend into the centra and north western parts of the site. Surcharging of the culvert on the Crow Brook results in flood waters flowing down Somerfield Road and through the centre of the site. The eastern part of the site lies predominantly in Flood Zone 1. A drain is located in the south eastern corner of the site.	The depth of water within the site is generally shallow (<30cm) with little difference between the modelled return periods. Towards the western part of the site, a small, localised area of greater depths can be found (up to 2m). Here the depth of water varies by approximately 20cm between the different modelled return periods.	Velocities vary across the range of modelled return periods. In general velocities are slow (<0.5m/s), however, through the centre of the affected area the velocities are higher, reaching velocities of approximately 1.6m/s in Flood Zone 3b.	Flood hazard is generally low to moderate for the range of modelled return period, with 'danger for some.' A small part of the site exhibits a moderate to significant flood hazard towards the western side of the affected area.	The extent, depth and velocity of flooding for the blockage scenario is similar to the existing 100 year event. The prevalent flood hazard is similar to the 100 year event with 'danger for some.'	Giv Flo
EMP4- POR	61900	TF60061900	Hortonwood 35 - Plot 8	Previous JFLOW outlines showed the majority of this site to lie within Flood Zones 3a and 2. Updated modelling has indicated that the site lies fully within Flood Zone 1. The site itself follows the course of a surface water drain through Hortonwood.	n/a	n/a	n/a	n/a	Fol dev the
EMP4- POB	61950	TF60061950	Hortonwood - Hortonwood 40	Site lies fully in Flood Zone 1. Two small water	n/a	n/a	n/a	n/a	Fol
EMP4- POR	62000		Hortonwood 1	Site lies fully in Flood Zone 1. Flood Zones 3a and 2 are located along to the west of the site boundary but do not encroach into the site itself.	n/a	n/a	n/a	n/a	Fol rec fror
EMP4- POR	62060	TF60062060	Hortonwood - Plot 6 & 7 Hortonwood 60	Previous JFLOW modelling showed approximately 50% of this site to lie within Flood Zones 3a and 2. Updated modelling demonstrates that this site lies fully in Flood Zone 1. Two small water bodies are located at the western and eastern extents of the site. A surface water drain is located approximately 30m form the southern boundary and runs parallel to the site. A series of embankments are located between the drain and the site boundary.	n/a	n/a	n/a	n/a	Fol ass dev neg
EMP4- POR	62070	TF60062070	Hortonwood - Plot 1 Hortonwood 65	this site to lie within Flood zones 3a and 2. Updated modelling shows the site to lie fully in Flood Zone 1. A small water body is located within the site on the eastern edge.	n/a	n/a	n/a	n/a	Fol

Recommendations

Ilow requirements for development in Flood Zone 1. It is commended that more vulnerable development is directed away im the north western edge of the site as Flood Zones 3b, 3a and 2 tend close to the edge of the site.

llow requirements for development in Flood Zone 1.

the majority of the site is located within Flood Zone 1, apart from e far western and eastern extents. The western third of the site is fected by Flood Zones 3a and 2 (from Hurley Brook) and there is ry little difference in the extent of the flood outlines for Flood ones 3a and 2, therefore it is recommended that this area is left as en space. This should be achievable given the size of the site. the eastern third of the site is affected by Flood Zone 2 and the 100 ar plus climate change event (from Crow Brook), which should so be left as open space.

ven the extent of flood risk posed to this site, alternative sites in bod Zone 1 should be considered.

Ilow requirements for development in Flood Zone 1. A velopment easement for development from the top of the banks of e drain should be negotiated with the EA (typically 8m)

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Ilow requirements for development in Flood Zone 1. It is commended that more vulnerable development is directed away on the western edge of the site as Flood Zones 3a and 2 extend pose to the boundary of the site.

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<u>Site</u> ID/Ref	SHLAA Site/ ABD Number	SHLAA Name/ Full Ref	SHLAA LOCAL/ Site Name	Site Description	Flood Depth Assessment	<u>Flood Velocity</u> <u>Assessment</u>	Flood Hazard Assessment	Blockage Scenario	
EMP4- POR	62090	TF60062090	Hortonwood - Plot 2 Hortonwood 66	Previous JFLOW outlines showed the south western corner of the site to lie within Flood Zones 3a and 2. Updated modelling shows the site to lie predominantly in Flood Zone 1, apart from a small section of the north western corner of the site where Flood Zones 3b, 3a and 2 extend into the site.	Depth of flooding is generally <30cm within the affected parts of the site for the range of modelled return periods. Depths increase by approximately 10cm between the different modelled return periods.	Velocities across the affected part of the site are generally slow (<0.5m/s).	The prevalent flood hazard is 'danger for some' across the affected part of the site.	n/a	Site nor 2, v
EMP4- POR	62200	TF60062200	Hortonwood - Site E (Horton Lane)	Site lies fully in Flood Zone 1. A series of drains are located towards the western half of the site. A surface water drain is located approximately 30m form the southern boundary and runs parallel to the site. A series of embankments are located between the drain and the site boundary.	n/a	n/a	n/a	n/a	Fol dev the
EMP4- POR	62200	TF60062200	Hortonwood - Site D (Horton Lane)	Site lies fully in Flood Zone 1. A drain is located towards the south western corner of the site.	n/a	n/a	n/a	n/a	Fol dev the
emp4- Por	62200	TF60062200	Hortonwood - Site B (Horton Lane)	Site lies fully in Flood Zone 1. A surface water drain is located approximately 30m form the southern boundary and runs parallel to the site. A series of embankments are located between the drain and the site boundary.	n/a	n/a	n/a	n/a	Fol
EMP3- POR	62300		Hadley Park East (aware some devt. on site 06.08)	Part of this site is affected by Flood Zone 2 in the south western corner and along parts of the eastern and northern boundaries of the site. Surcharging of the culvert upstream may create some residual risk.	Depths across the affected parts of the site and the roads running adjacent to the site are shallow (<30cm).	Velocities across the affected parts of the site are generally slow (<0.5m/s) with some slightly higher velocities towards the northern boundary (up to approximately 0.8m/s).	The prevalent flood hazard across the affected part of the site is 'danger for some.' A small localised part of the site adjacent to the northern boundary is classified as a significant flood hazard with 'danger for most.'	n/a	App alte to t der Exc sati of F are shc be sur Zor
EMP3- POR	62300	TF60062300	Hadley Park East - A Ph2 (aw devt. @front 06.08)	Approximately 50% of this site is affected by Flood Zone 2. Surcharging of the culvert upstream may create some residual risk.	Depths across the affected parts of the site and the roads running adjacent to the site are shallow (<30cm).	Velocities across the affected parts of the site are generally slow (<0.5m/s) with some slightly higher velocities towards the northern boundary (up to approximately 0.7m/s).	The prevalent flood hazard across the affected part of the site is 'danger for some.'	n/a	App alte to t der Exc sati of F are sho be sur Zor
EMP3- POR	62310	TF60062310	Hadley Park East - B	Part of this site is affected by Flood Zone 2 in the south western corner and along parts of the eastern and northern boundaries of the site. Flood waters cause access to the site to be restricted with the roads running adjacent to the site affected by Flood Zone 2. Surcharging of the culvert upstream may create some residual risk.	Depths across the affected parts of the site are shallow (<30cm). The depth of flooding on the roads running adjacent to the site is shallow (<30cm).	Velocities across the affected part of the site are generally slow (<0.5m/s). Some parts of the affected area close to the A442 on the northern boundary exhibit slightly faster velocities of up to 0.8m/s.	The prevalent flood hazard across the affected part of the site is 'danger for some.'	n/a	The sho spa der rec the enc req
EMP3- POR	62321	TF60062321	Plot C2 Hadley Park East	Site lies fully in Flood Zone 1	n/a	n/a	n/a	n/a	Fol
EMP3- POR	62330	TF60062330	Hadley Park East - D	Site lies fully in Flood Zone 1	n/a	n/a	n/a	n/a	Fol

Recommendations

e lies predominantly in Flood Zone 1. Only a small part of the rth western corner of the site lies within Flood Zones 3b, 3a and which should be left as open space.

Ilow requirements for development in Flood Zone 1. A velopment easement for development from the top of the banks of a drain should be negotiated with the EA (typically 8m)

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proximately 50% of this site lies within Flood Zone 2 and as such, ernative sites in Flood Zone 1 should be considered in preference this site as part of the Sequential Test. Only if it can be monstrated that the Sequential Test has been carried out and the ception Test (in accordance with Table D3 of PPS25) can be tisfied, should this site be developed in accordance with Table D3 PPS25, where the most vulnerable elements of the development e placed in the lowest risk Flood Zone. Ideally, Flood Zones 2 build be left as open space. Safe access to the site would need to ensured given that Flood Zone 2 encroaches on a number of the rounding roads. Follow requirements for development in Flood ne 1.

proximately 50% of this site lies within Flood Zone 2 and as such, ernative sites in Flood Zone 1 should be considered in preference this site as part of the Sequential Test. Only if it can be monstrated that the Sequential Test has been carried out and the ception Test (in accordance with Table D3 of PPS25) can be tisfied, should this site be developed in accordance with Table D3 PPS25, where the most vulnerable elements of the development e placed in the lowest risk Flood Zone. Ideally, Flood Zones 2 buld be left as open space. Safe access to the site would need to ensured given that Flood Zone 2 encroaches on a number of the rrounding roads. Follow requirements for development in Flood ne 1.

e majority of this site lies within Flood Zone 1. Parts of the site own to be affected by Flood Zone 2 should ideally be left as open ace. However, Flood Zone 2 could be developed if it can be monstrated that there are no other sites fully in Flood Zone 1 (see commendations for development in Flood Zone 2). Safe access to a site would need to be ensured given that Flood Zone 2 croaches on a number of the surrounding roads. Follow quirements for development in Flood Zone 1.

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EMP3- POR	62340	TF60062340	Hadley Park East - E	Part of this site is affected by Flood Zone 2 in the south eastern corner and towards the northern extent of the site. Flood waters cause restricted access to the site with the roads shown to be affected by Flood Zone 2. Surcharging of the culvert upstream may create some residual risk.	Depths across the affected parts of the site are shallow (<30cm).	Velocities across the affected parts of the site are slow, generally being <0.5m/s.	The prevalent flood hazard across the affected part of the site is 'danger for some.'	n/a	The sho spa dev fully Flo give roa
100- SHLAA		83070	Land off Horton Road, Trench	Site lies fully in Flood Zone 1. Drains are located at the northern and eastern boundaries of the site, and, also through the centre of the site itself.	n/a	n/a	n/a	n/a	Fol dev the
383- SHLAA		61900	Land adjacent Oakland House, Hortonwood	Previous JFLOW outlines showed the majority of this site to lie within Flood Zones 3a and 2. Updated modelling has indicated that the site lies fully within Flood Zone 1. The site itself follows the course of a surface water drain through Hortonwood.	n/a	n/a	n/a	n/a	Foll ass dev neç
471- SHLAA	(Also housing site 471)		Capewell Works, Trench Lock	Flood Zones 3b, 3a and 2 extend into the central and north western parts of the site. Surcharging of the culvert on the Crow Brook results in flood waters flowing down Somerfield Road and through the centre of the site. The eastern part of the site lies predominantly in Flood Zone 1. A drain is located in the south eastern corner of the site.	The depth of water within the site is generally shallow (<30cm) with little difference between the modelled return periods. Towards the western part of the site, a small, localised area of greater depths can be found (up to 2m). Here the depth of water varies by approximately 20cm between the different modelled return periods.	Velocities vary across the range of modelled return periods. In general velocities are slow (<0.5m/s), however, through the centre of the affected area the velocities are higher, reaching velocities of approximately 1.6m/s in Flood Zone 3b.	Flood hazard is generally low to moderate for the range of modelled return period, with 'danger for some.' A small part of the site exhibits a moderate to significant flood hazard towards the western side of the affected area.	The extent, depth and velocity of flooding for the blockage scenario is similar to the existing 100 year event. The prevalent flood hazard is similar to the 100 year event with 'danger for some.'	Giv Flo

Recommendations

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