Appendix D Other Sites

The need to complete the NPPF Exception Test (Table 1-1) is identified through reference to the site vulnerability and Flood Zone classification. However, approximately 50 additional sites have been included in the Croydon Level 2 assessment for one or more of the following reasons:

Group 1

The site is in Flood Zone 3 and the proposed use is Less Vulnerable. The Exception Test is not currently required, but in the event More Vulnerable development types (i.e. residential) are added to the site, the Exception Test would be needed.

Site 495: Dairy Crest dairy, 823-825 Brighton Road

Group 2

Whilst not in Flood Zone 3 currently, the site is still at fluvial flood risk (i.e. Flood Zone 2) or could be in the future when looking at the climate change modelling for the River Wandle.

Site 125: Sainsburys, Trafalgar Way

Site 144: Sofology

Site 147: IKEA

Site 314: Valley Park (B&Q and Units A-G Daniell Way), Hesterman Way

Site 332: Superstores, Drury Crescent

Site 334: Valley Leisure Park, Hesterman Way

Site 351: Furniture Village, 222 Purley Way

Site 355: 2 Trafalgar Way

Group 3

The site is at risk of surface water flooding (defined as within a Critical Drainage Area) and consideration of how the development can be safe should be made as part of a site proforma.

This group has been subdivided into Group 3A, sites identified to be at risk of surface water flooding; and Group 3B where the sites are not shown to be at significant risk of surface water flooding.

Group 3A

Site 30: Purley Leisure Centre, car park and former Sainsbury's Supermarket, High Street

Site 40: West Croydon Bus Station

Site 51: Land and car park between Belgrave Road and Grosvenor Road

Site 61: Car park, 54-58 Whytecliffe Road South

Site 64: 112a and 112b Brighton Road

Site 85: The Forestdale Centre

Site 106: CACFO, 40 Northwood Road

Site 123: Prospect West and car park to the rear of, 81-85 Station Road

Site 130: 1-9 Banstead Road

Site 136: Supermarket, car park, 54 Brigstock Road

Site 149: Tesco, Thornton Heath

Site 203: West Croydon station and shops, 176 North End

Site 222: Multi-storey car park, 1 Whitgift Street

Site 284: Asharia House, 50 Northwood Road

Site 326: Ambassador House, 3-17 Brigstock Road

Site 372: Car park, Lion Green Road

Site 374: Reeves Corner former buildings, 104-112 Church Street

Site 410: 100 Brighton Road

Site 490: 95-111 Brighton Road and 1-5, 9-15 and 19 Old Lodge Lane

Site 945: Waitrose, 110-112 Brighton Road

Group 3B

Site 1: Land Fronting North Downs Road and Overbury Crescent

Site 2: Blackhorse Lane Station

Site 28: Bowyers Yard, Bedwardine Road

Site 41: Direct Line House, 3 Edridge Road

Site 47: 3-7 Park Street

Site 58: 140 & 140a Hermitage Road

Site 59: Garages at rear of 96 College Green and land at Westow Park, Upper Norwood

Site 184: 1-19 Derby Road

Site 190: Car park to the rear of Leon House, 22-24 Edridge Road

Site 194: St George's Walk, Katharine House and Park House, Park Street

Site 211: Poplar Walk car park and, 16-44 Station Road

Site 220: 9-11 Wellesley Road

Site 231: Segas House, Park Lane

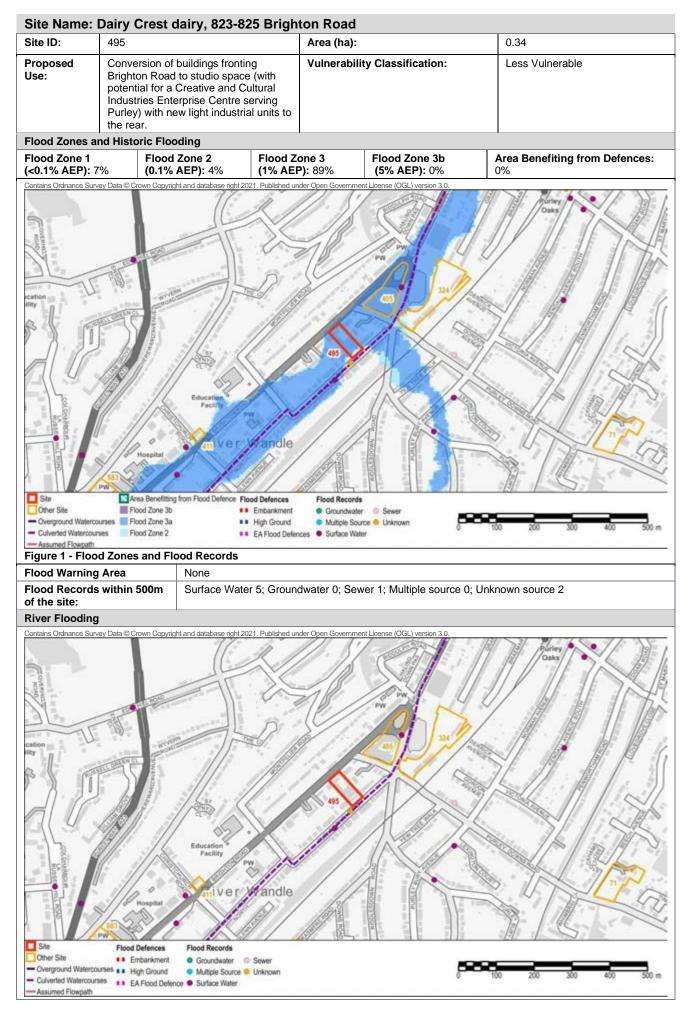
Site 357: Norwood Heights Shopping Centre, Westow Street

Site 393: Whitgift Centre, North End

Site 937: Kempsfield House, 1 Reedham Park Avenue

Site 948: 230 Addington Road

Site 951: 1485-1489 London Road



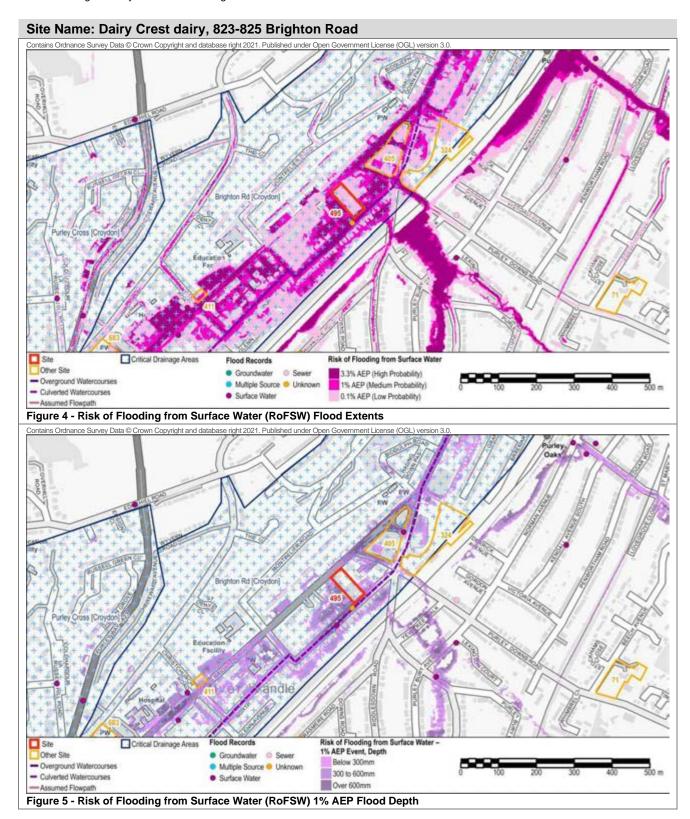
Critical Drainage Area

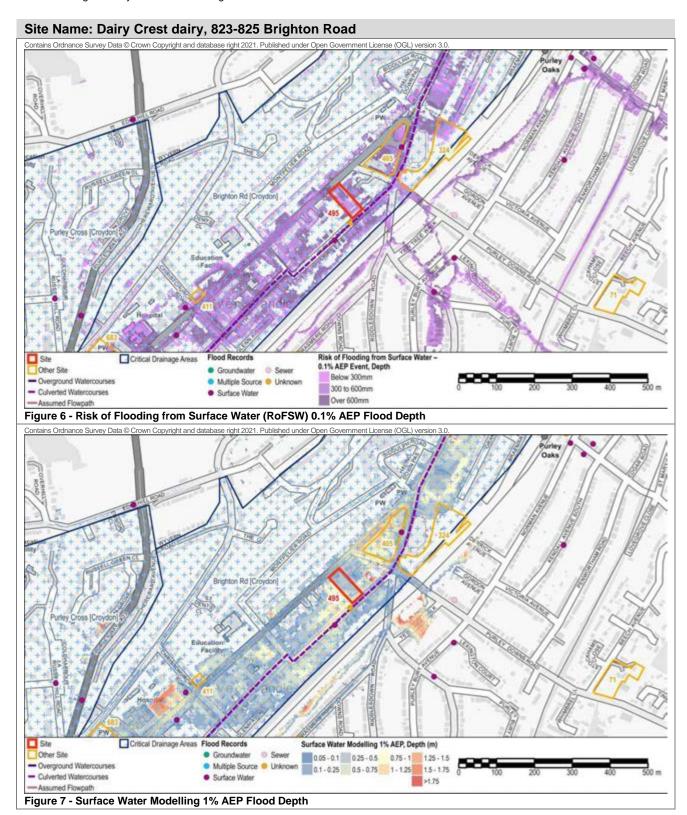
Drainage Catchment

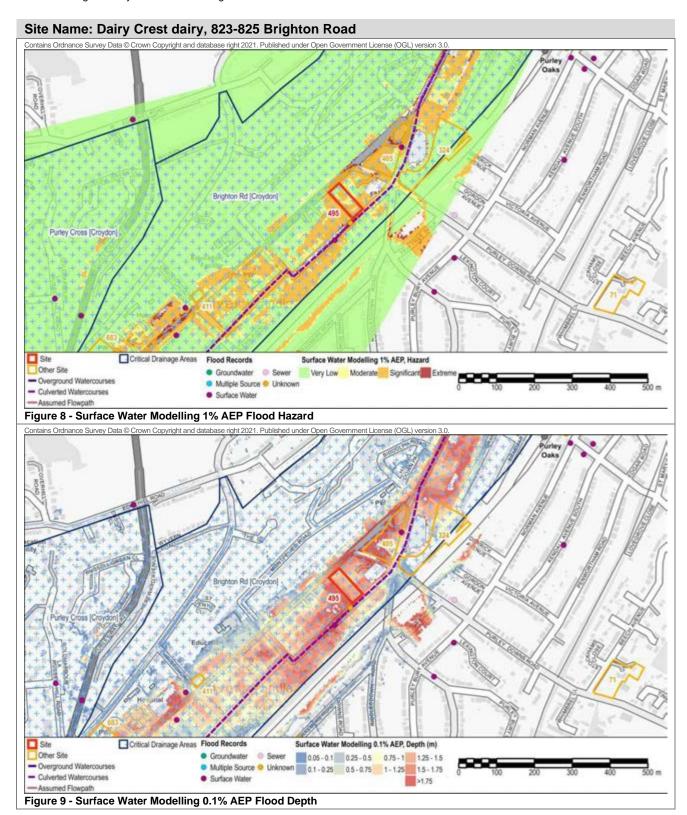
Figure 2 – River Wandle Maximum Flood Depth (1% AEP plus 35% climate change) Please note: Data does not extend to the extent of this figure. Contains Orthance Survey Data © Crown Copyright and database right 2021. Published under Open Government License (OGL) version 3.0. Published Under Open Government

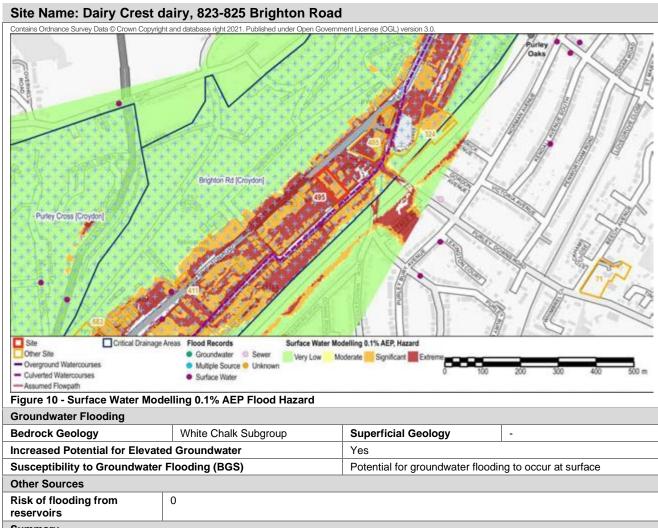
Group8_041 - Brighton Rd [Croydon]

DC39









Summary

The majority of the site is in Flood Zone 3, High probability of river flooding with a small part of the southern extent of the site is defined as Flood Zone 2, Medium probability and Flood Zone 1, Low probability.

A 1050mm diameter culvert runs in a northern direction along Brighton Road approximately 600m east of the site, conveying runoff generated in the surroundings and flows from the intermittent watercourses of the Merstham Bourne and Caterham Bourne.

This culverted part of the Wandle catchment was not included within the River Wandle modelling and therefore there are no modelling outputs for the 1% AEP fluvial flood event including 35% increase in peak river flows as a result of climate change (Figures 2 and 3).

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow along the western edge of the site boundary adjacent to Morden Road. There are multiple records of flooding from surface water within 500m of the site.

There are groundwater flooding records in this area, and broadscale mapping suggests that the local area may be susceptible to groundwater flooding at surface.

One unknown flood event has been recorded near to the southern border of the site but does not fall within the boundary. The site lies within the Brighton Road Critical Drainage Area (CDA). Surface water modelling undertaken by Arcadis (July 2020) shows that in a 1% AEP event, the site experiences flooding from 0.1-0.25m in the north west to 0.75-1m in the south east. The hazard rating for this site is Low to Significant. For the 0.1% AEP event, flood depths range from 0.75-1m in the north west to 1.5-1.75m in the south east. The hazard rating for the 0.1% AEP event is Significant to Extreme.

Site Specific Recommendations

The proposed uses for the site are defined as Less Vulnerable. Less Vulnerable development is permitted within Flood Zone 3 and the Exception Test does not need to be applied.

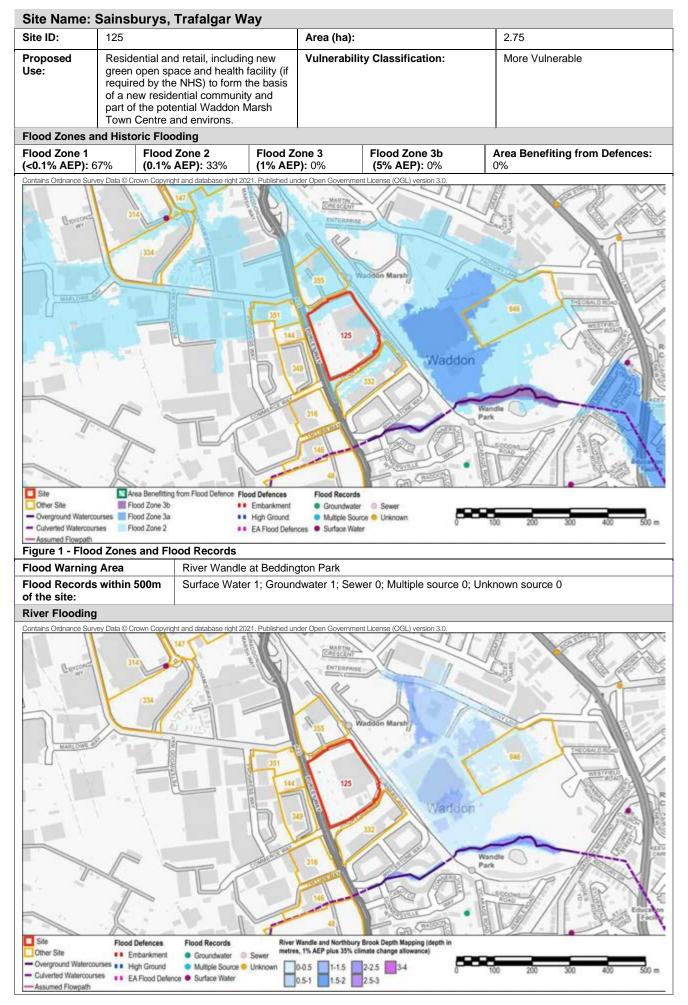
However, given the risk of flooding posed to the site, and in the event that More Vulnerable uses are added to the site (for example residential), the following recommendations are made to ensure that development on the site can be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall:

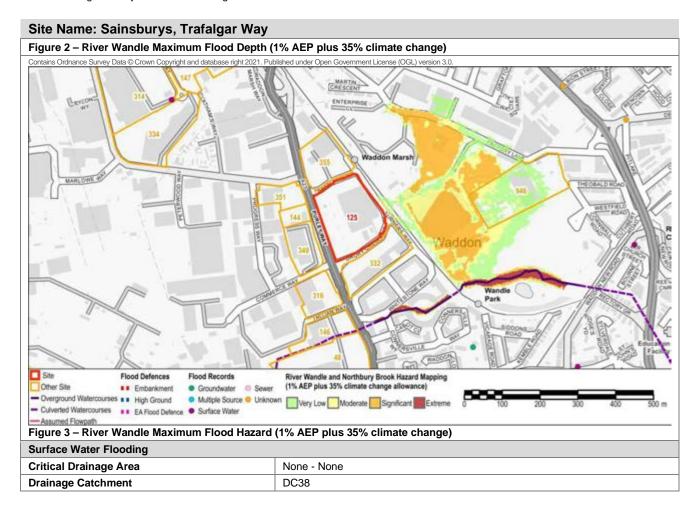
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems across
 multiple plots within this area.
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- Development of the site should consider the footprint of the existing buildings are ensure no loss of floodplain storage.

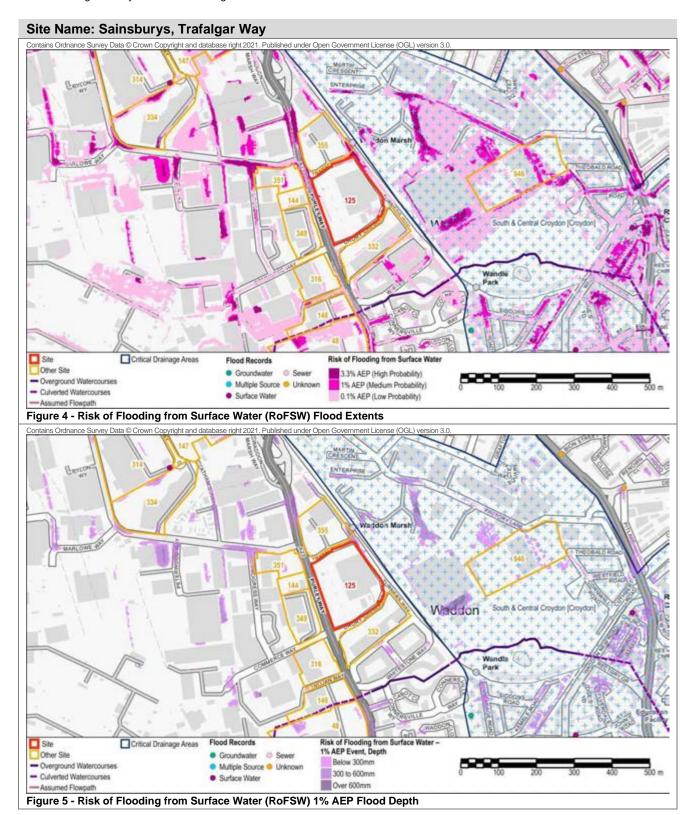
 Development of the site should consider the surface water flow paths in the area and ensure there is no increase in flood risk

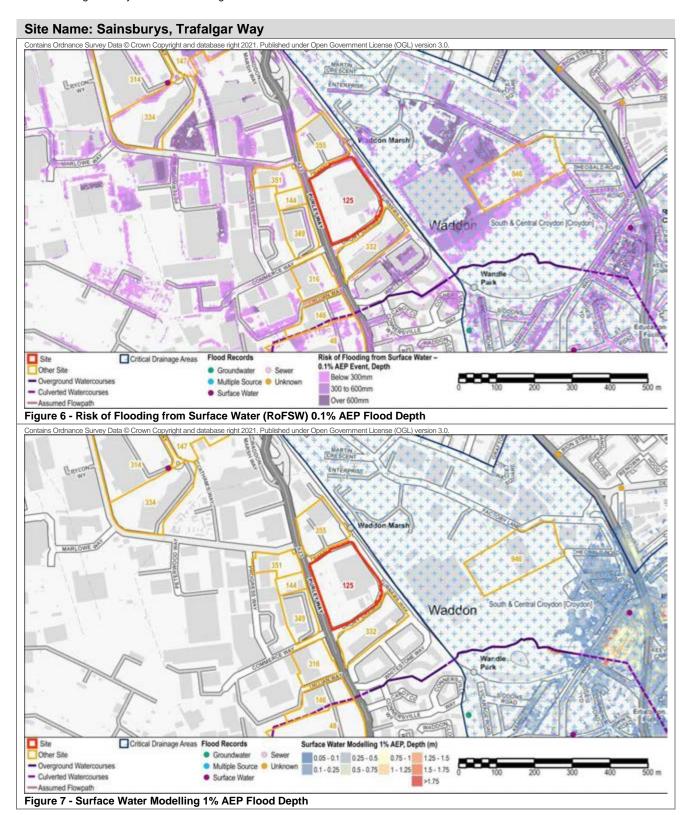
Site Name: Dairy Crest dairy, 823-825 Brighton Road

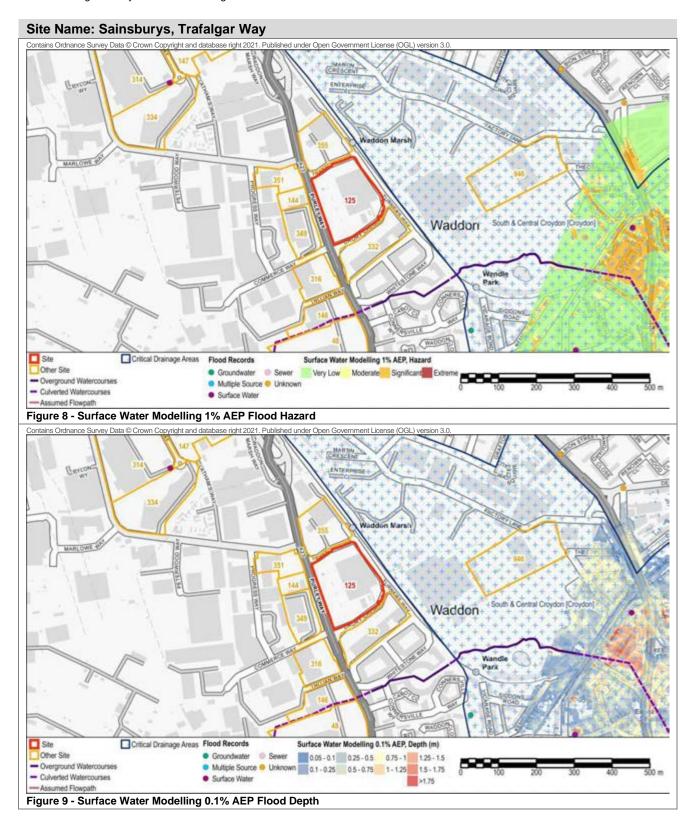
- to neighbouring areas. Opportunities should be taken to reduce the risk of surface water flooding to the surrounding areas through the layout of the development.
- Finished floor levels do not need to be raised for Less Vulnerable development, however flood resilience measures should be adopted within these developments to reduce potential damage during flooding and enable rapid re-occupancy.
- Should More Vulnerable development be proposed for this site, finished floor levels for More Vulnerable development should be set above the modelled flood level for the 1% AEP event, including a 300mm freeboard. Flood depths for the modelled 1% AEP event are shown in Figure 7.
- Surface water modelling shows that the main access routes throughout this area are at risk of flooding with a Significant or
 Extreme hazard rating during the 1% and 0.1% AEP events. Development proposals for the site should consider how safe
 access/egress can be provided during these events. In addition, given the potential for surface water to have rapid onset, a
 place of safe refuge should be provided within new developments above the modelled flood level for the 0.1% AEP event
 (Figure 9).
- A flood warning and evacuation plan should be prepared, in accordance with the Council's wider emergency planning response.
- This area is covered by the Environment Agency Flood Alert Area for Groundwater flooding in South East London (Areas at
 risk from Groundwater flooding including Caterham Bourne, Coulsdon Bourne, Beddington, Carshalton, Coulsdon, Kenley,
 Purley, South Croydon, Whyteleafe, Bromley, Bexley and Lewisham). This service has a wide geographic coverage and does
 not give time-specific warnings.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals within the site.

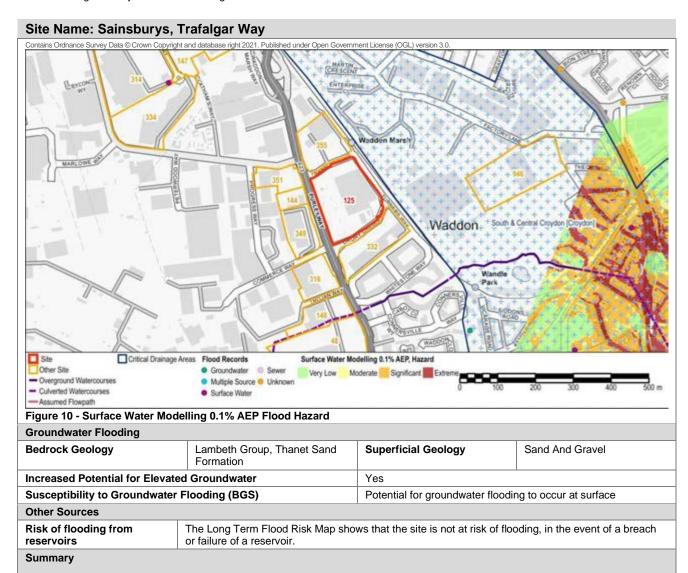












The majority of the site (67%) is defined as Flood Zone 1, Low probability of river flooding, and the remainder of the site in defined as Flood Zone 2 (33%) Medium probability flooding. The River Wandle is located approximately 190m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change extends just to the east of the site (Figures 2 and 3) on Drury Crescent with flood levels of 39.42m AOD. For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends to cover the northern and eastern edges of the site, with maximum flood levels of approximately 39.77 m AOD.

There are records of flooding from groundwater and unknown sources within 500m of the site.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow along the railway. There are records of surface water flooding within 500m of the site.

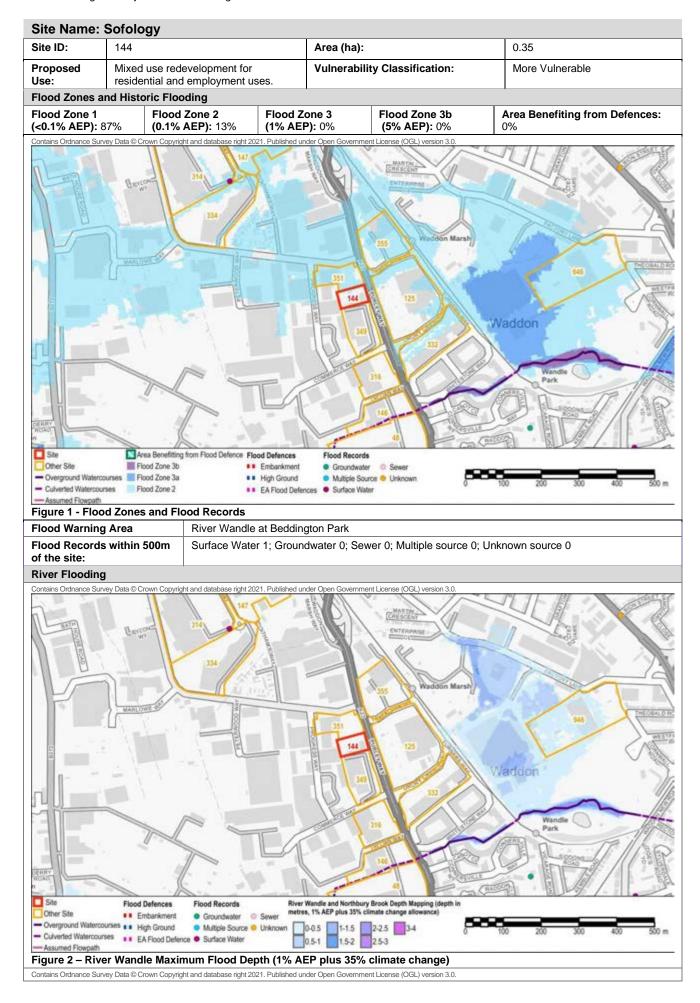
Site Specific Recommendations

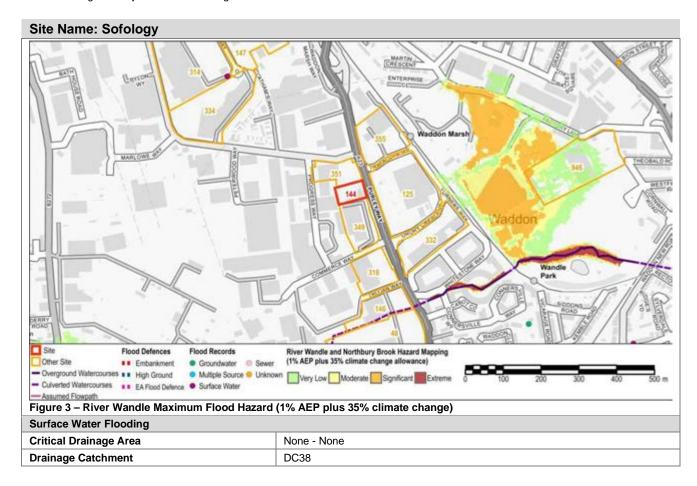
The proposed use for the site is mixed use including residential (More Vulnerable), retail (Less Vulnerable) and health facility (More Vulnerable) uses. More Vulnerable and Less Vulnerable development is permitted in Flood Zones 1 and 2 and the Exception Test is not required. However, given the risk of flooding from the River Wandle to the area local to the site in the future as a result of climate change, a number of recommendations are made for the site:

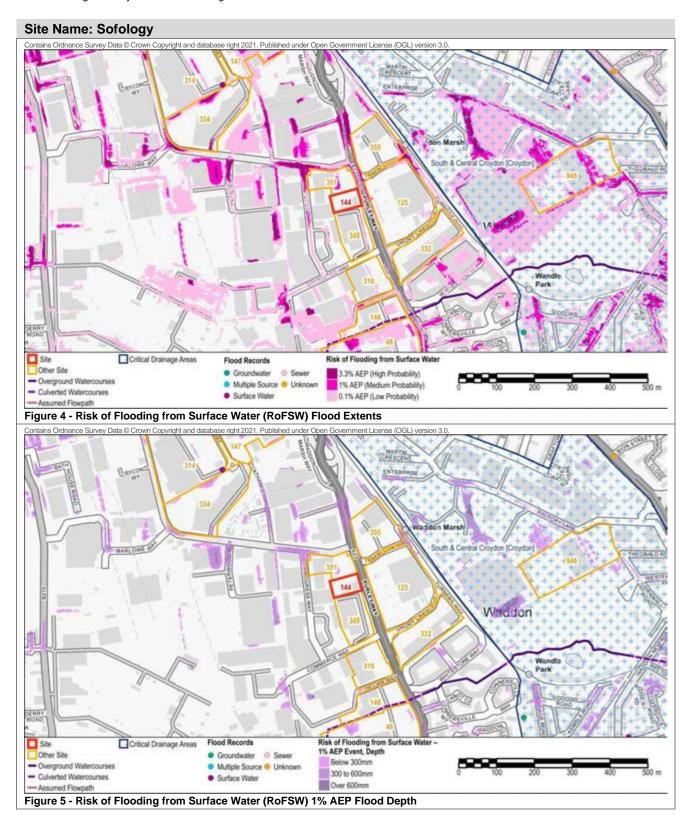
- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the fringe of the site along Latham's Way could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved along Beddington Farm Road. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning
 response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning
 (for example evacuating prior to a flood or remaining within their safe place of refuge).
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.

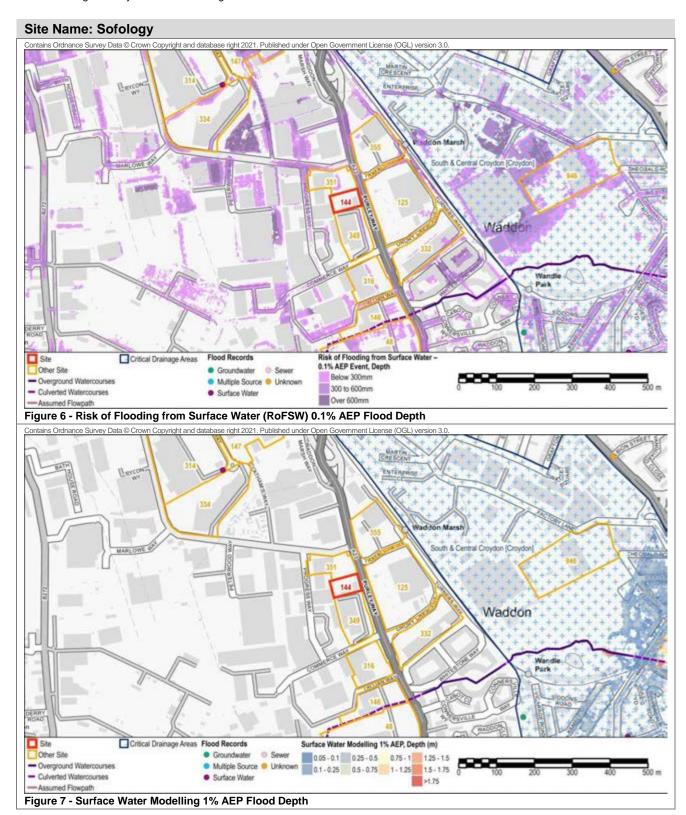
Site Name: Sainsburys, Trafalgar Way

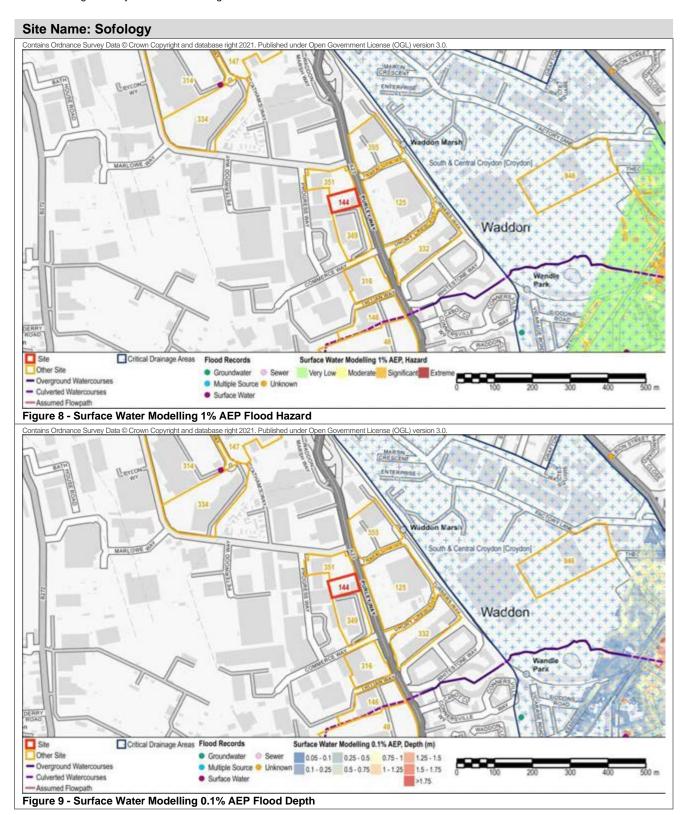
 The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.

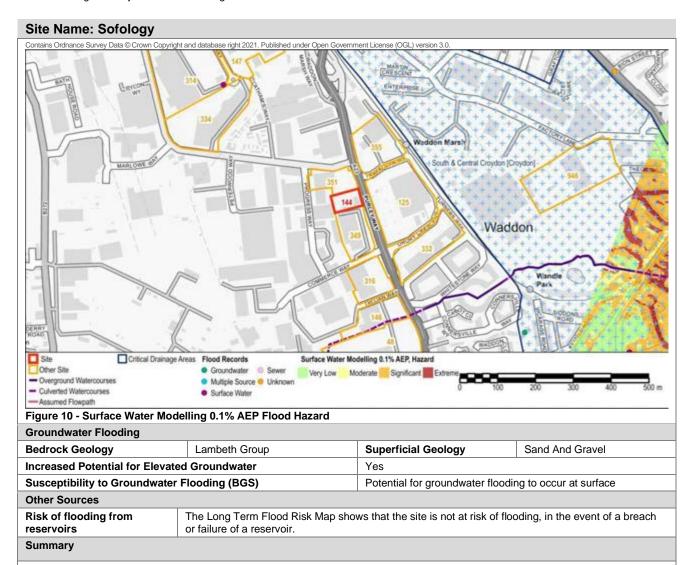












The majority of the site (87%) is defined as Flood Zone 1, Low probability of river flooding, and the remainder of the site (13%) is defined as Flood Zone 2, Medium probability of river flooding. The River Wandle is located approximately 310m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change does not extend to reach the site (Figures 2 and 3). For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends across the A23 along Beddington Farm Road and Progress Way to the north and west of the site, with maximum flood levels of approximately 38.0 m AOD.

There are records of flooding from a range of sources including surface water and sewers within 500m of the site. There are no groundwater flooding records in this area.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow and pond at the centre of the site. There are records of surface water flooding within 500m of the site.

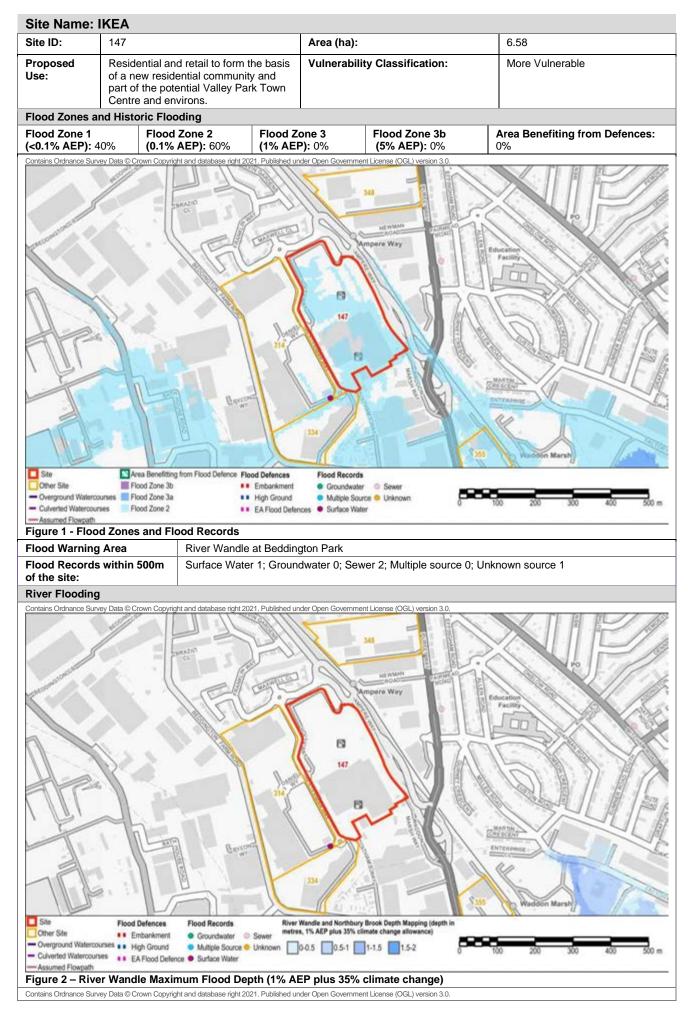
Site Specific Recommendations

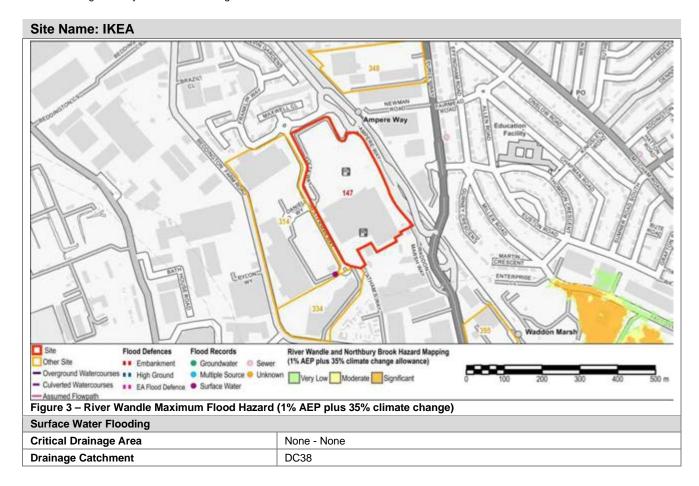
The proposed use for the site includes residential uses which are defined as More Vulnerable. More Vulnerable development is permitted in Flood Zone 2 and the Exception Test is not required. However, even where the Exception Test is not required (in line with Table 3 of the PPG), in the light of the risk of flooding from the River Wandle to the access routes for the site in the future as a result of climate change, steps should be taken to ensure that development is safe for its lifetime considering the impact of climate change, will not increase flood risk elsewhere, and where possible will reduce flood risk overall. To this end, the following recommendations are made for the site:

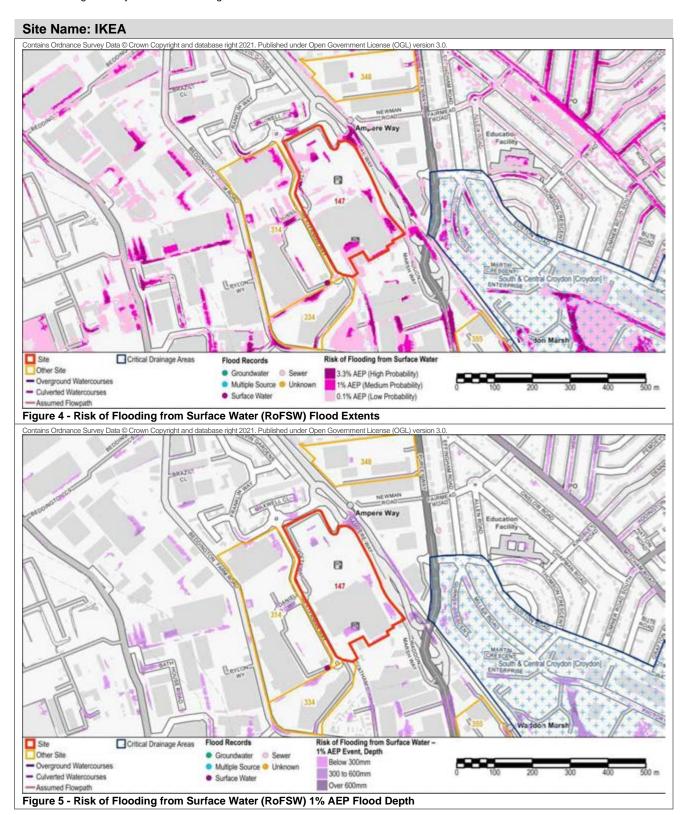
- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the access routes for the site along Beddington Farm Road and Progress Way could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved along Beddington Farm Road for the 1% AEP event including 35% climate change allowance. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning
 response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning
 (for example evacuating prior to a flood or remaining within their safe place of refuge).
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.

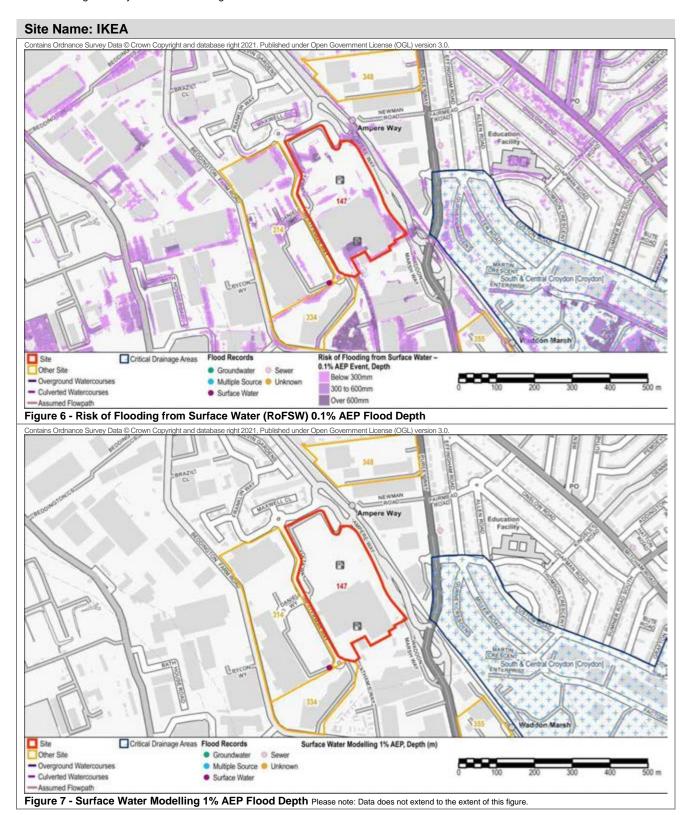
Site Name: Sofology

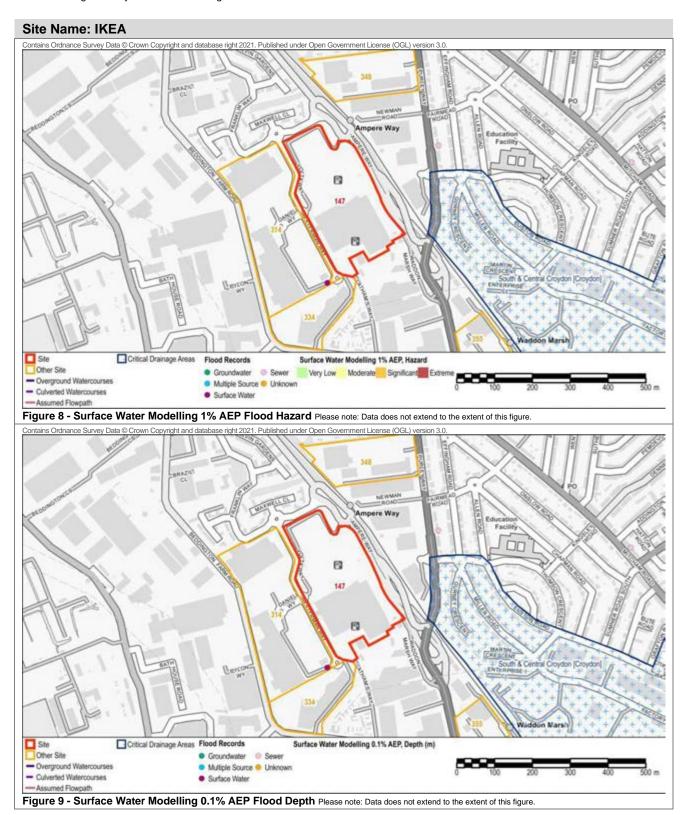
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.

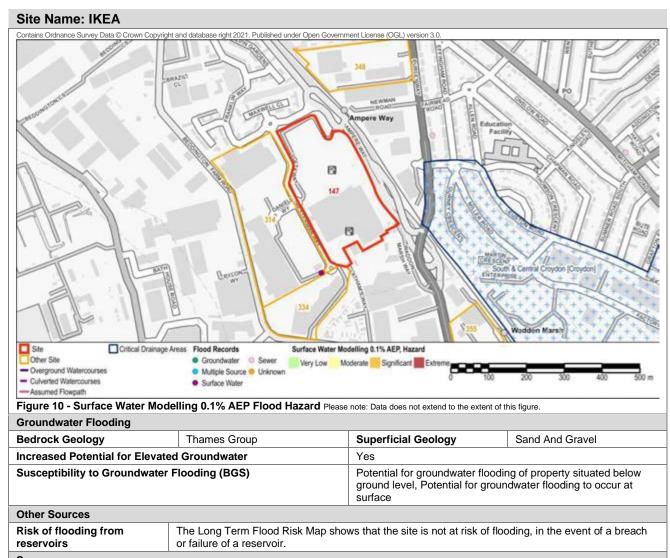












Summary

The majority of the site (60%) is defined as Flood Zone 2, Medium probability of river flooding, and the remainder of the site in defined as Flood Zone 1 (40%). The River Wandle is located approximately 760m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change does not extend to reach the site (Figures 2 and 3). For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends to the area to the east of the site, with maximum flood levels of approximately 37.8 m AOD.

There are records of flooding from a range of sources including surface water and sewers within 500m of the site. There are no groundwater flooding records in this area.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to pond to the north of the site and along the south and south west edge of the site. There are records of surface water flooding in proximity to the site. The site is not located within a Critical Drainage Area.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to affect Ampere Way and other roads around the site.

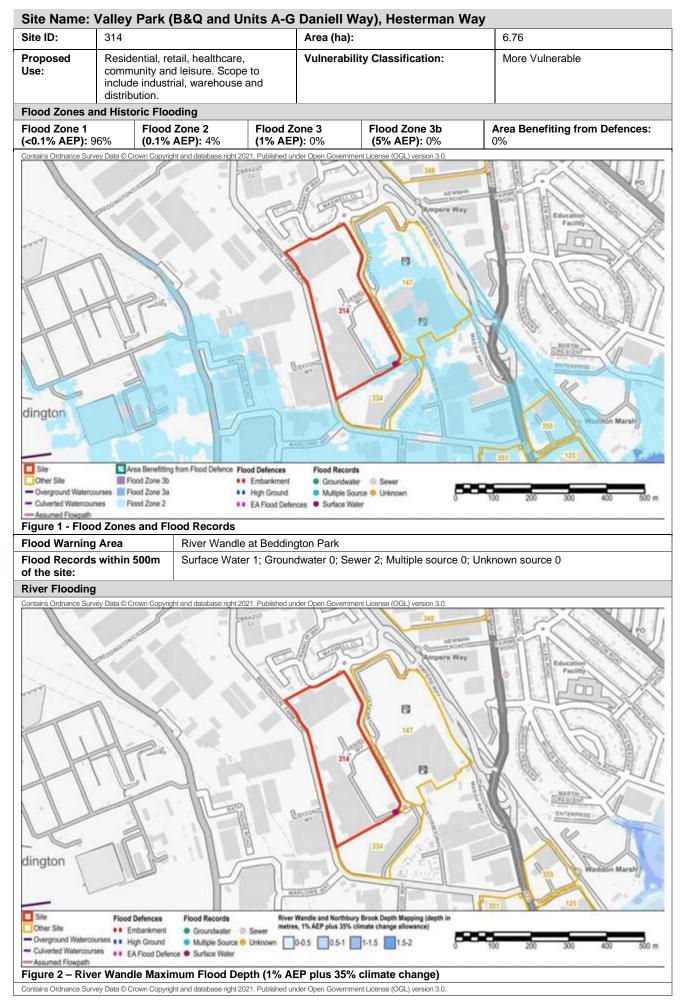
Site Specific Recommendations

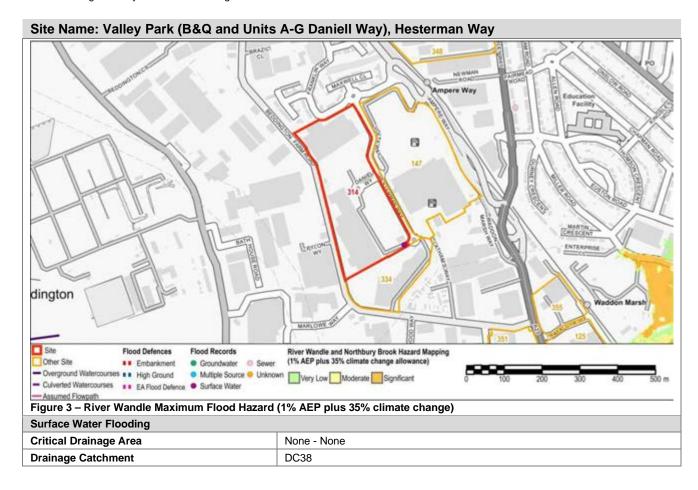
The proposed use for the site includes residential which are defined as More Vulnerable. More Vulnerable development is permitted in Flood Zone 2 and the Exception Test is not required. However, given the risk of flooding from the River Wandle to the area local to the site in the future as a result of climate change, a number of recommendations are made for the site:

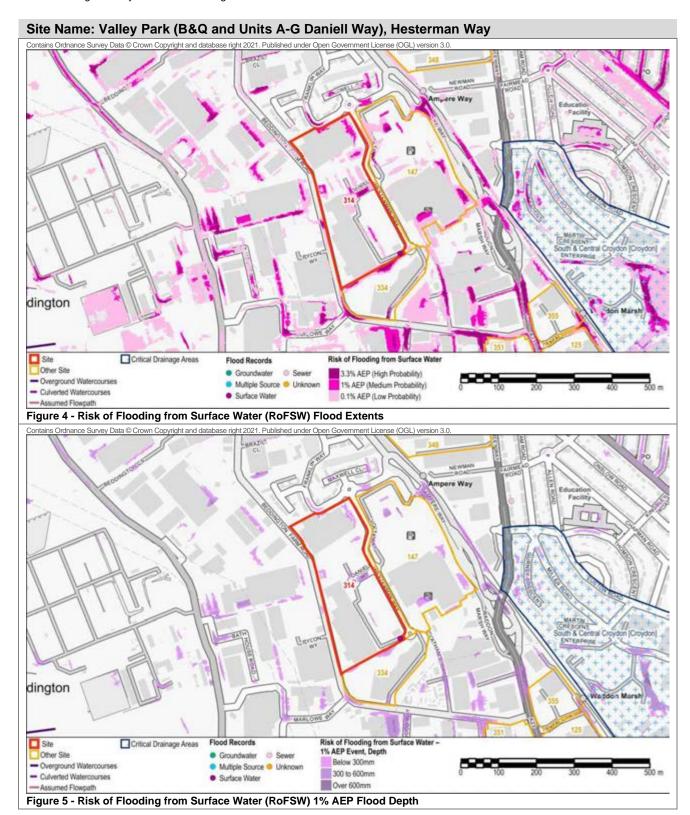
- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the roads to the east of the site could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved to the north. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning (for example evacuating prior to a flood or remaining within their safe place of refuge).

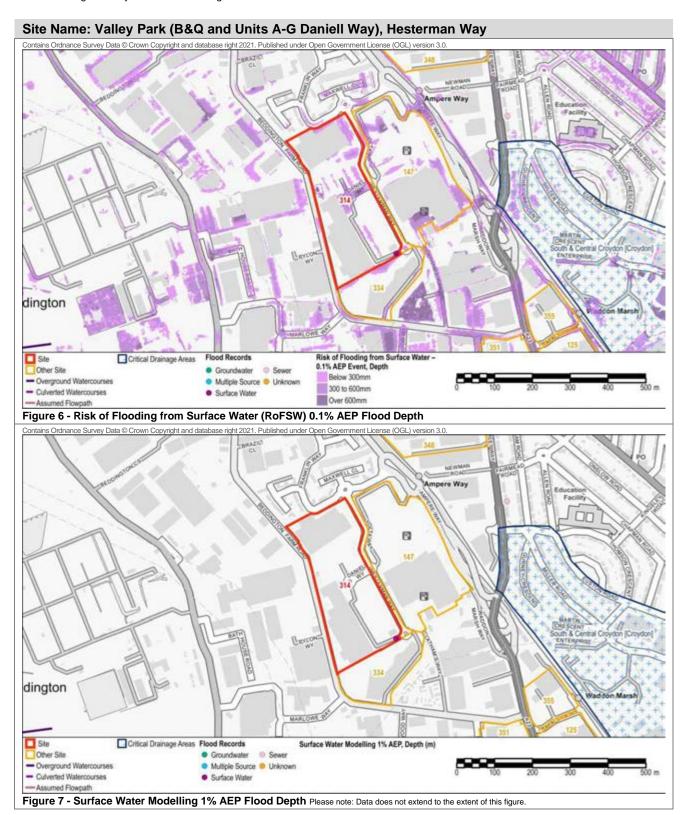
Site Name: IKEA

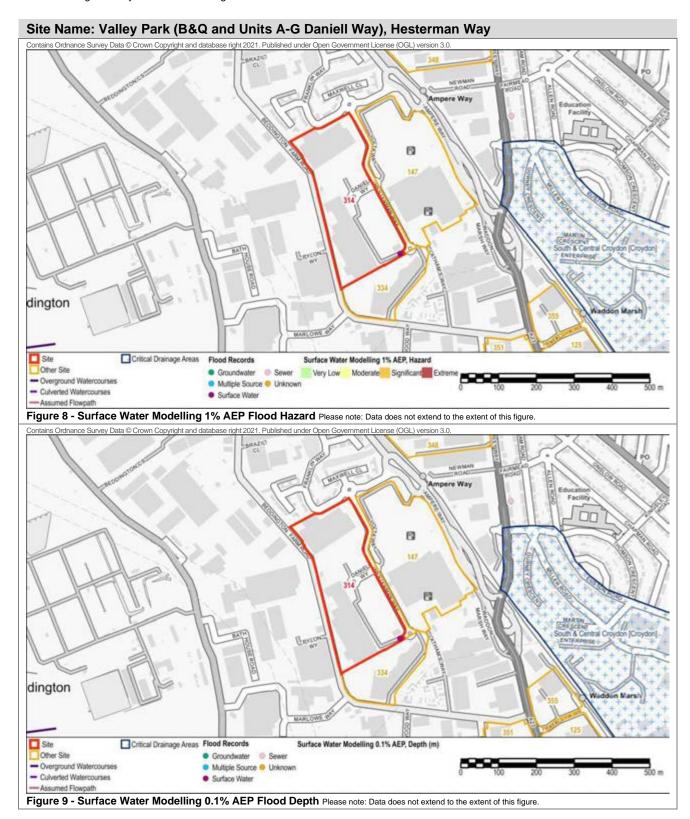
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.

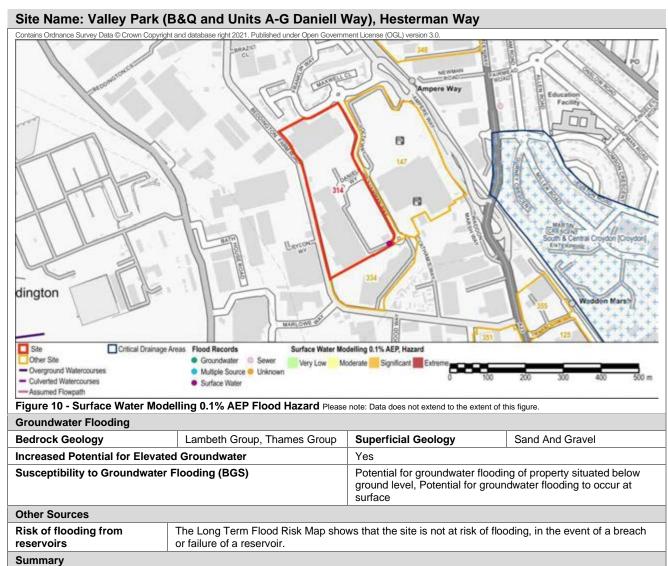












The majority of the site (96%) is in Flood Zone 1, Low probability of river flooding with a small part of the southern extent of the site is defined as Flood Zone 2, Medium probability of river flooding. The River Wandle is located approximately 800m south from the site. The site is not shown to be at risk of flooding from the River Wandle during the 1% AEP modelled event including 35% allowance for

There are records of flooding from a range of sources including surface water and sewers within 500m of the site. There are no groundwater flooding records in this area.

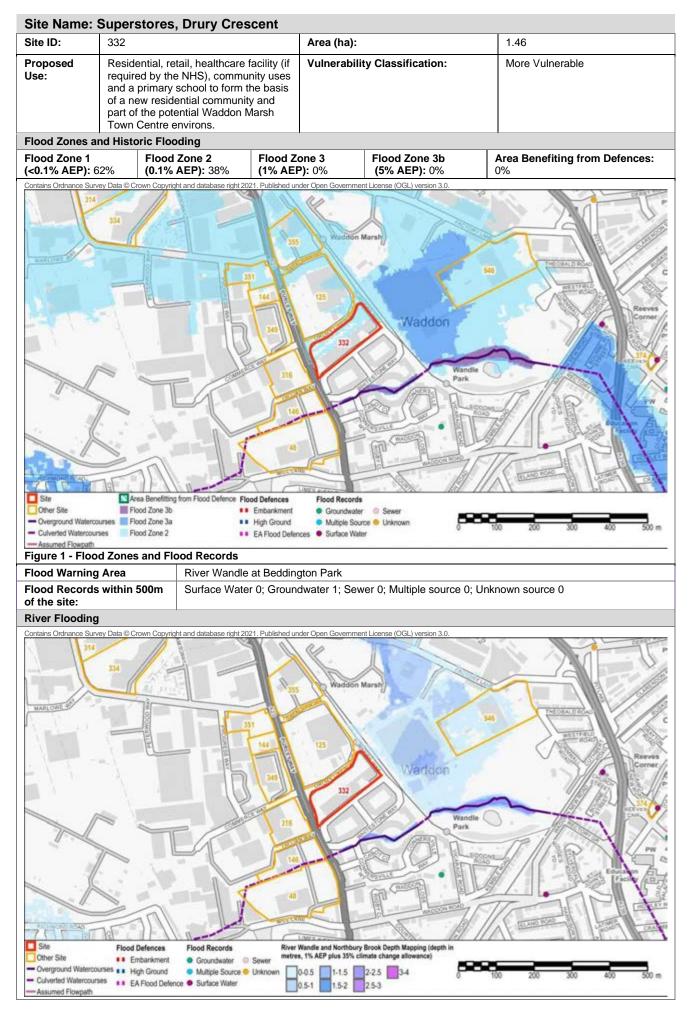
climate change, or during the 1% AEP including 70% allowance for climate change.

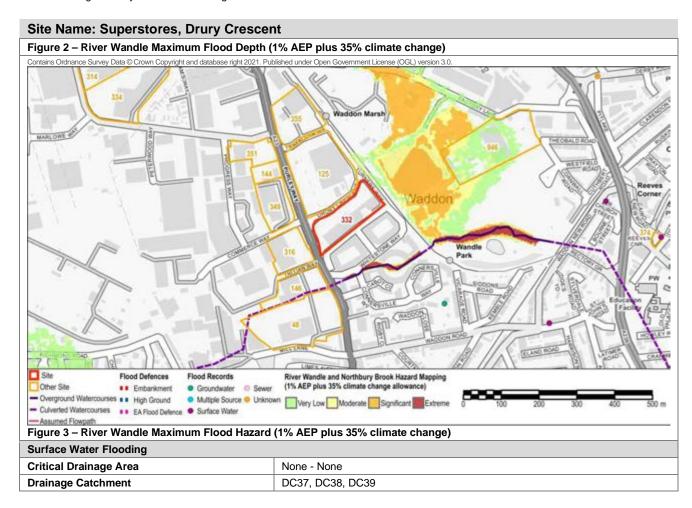
The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow at the northern, eastern and southern parts of the site and pond at those areas. There are records of surface water flooding in proximity to the site. The site is not located within a Critical Drainage Area.

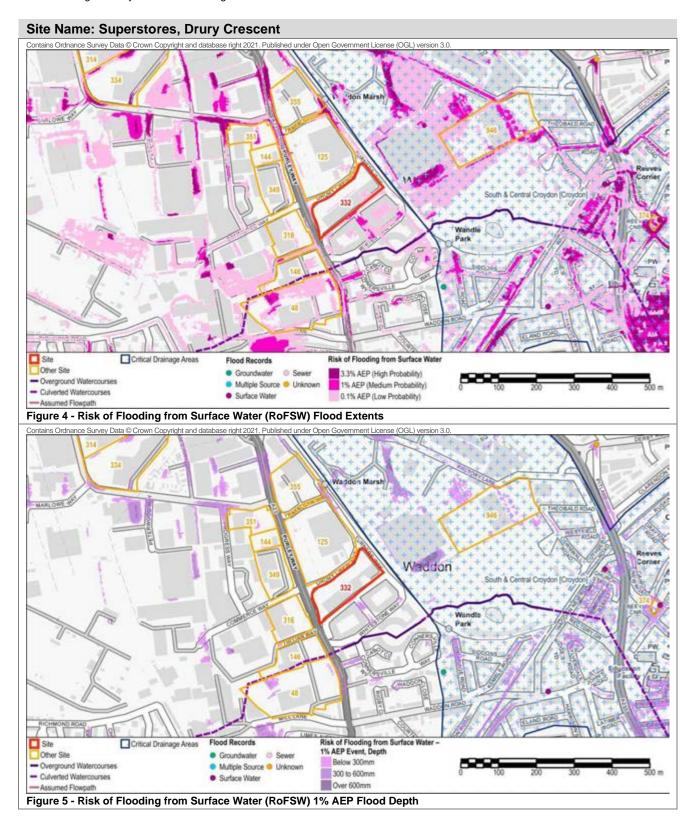
Site Specific Recommendations

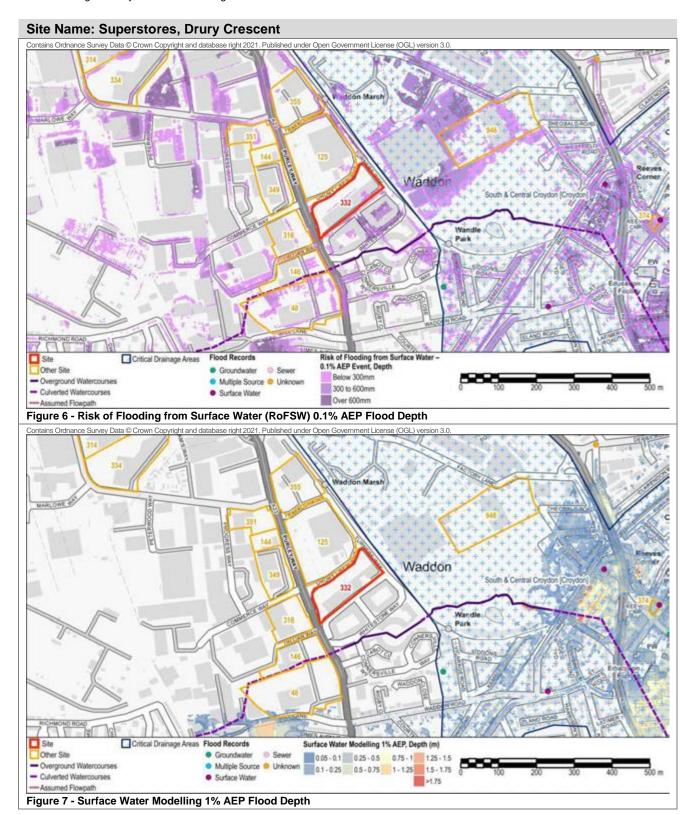
The proposed use for the site includes residential which are defined as More Vulnerable. More Vulnerable development is permitted in Flood Zone 2 and the Exception Test is not required. The following recommendations are made for the site:

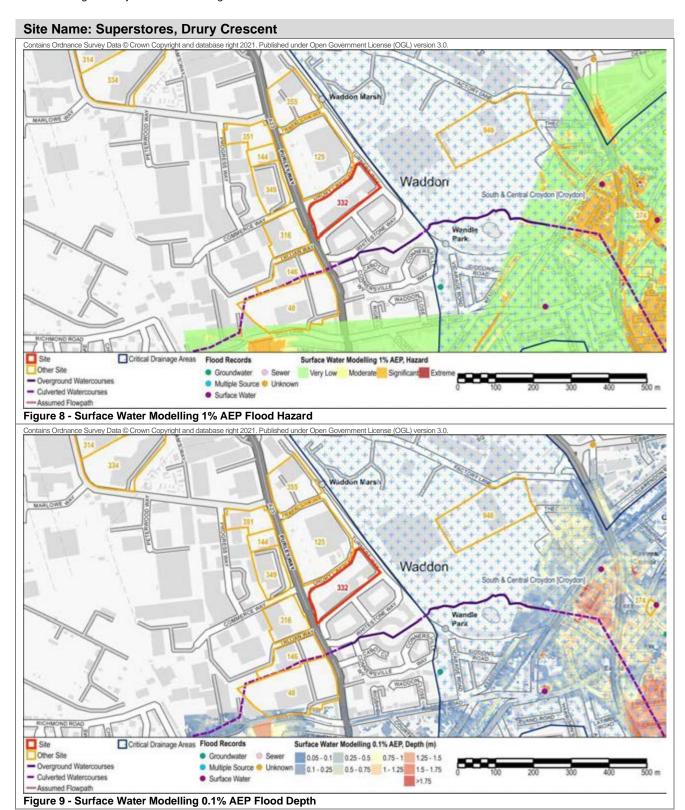
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Although the site is not shown to be
 at risk of flooding from the River Wandle, there is a risk to the surrounding area. Occupants of the site should sign up to
 receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning
 response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning
 (for example evacuating prior to a flood or remaining within their safe place of refuge).

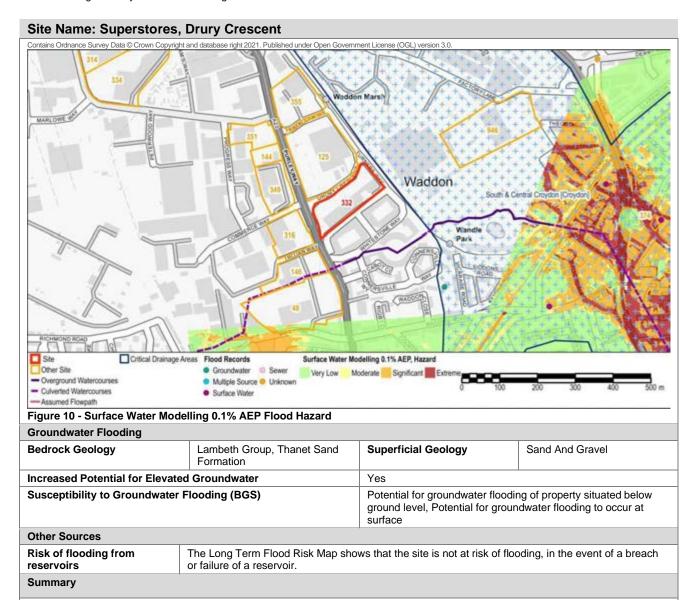












The majority of the site (62%) is defined as Flood Zone 1, Low probability of river flooding, and the remainder of the site in defined as Flood Zone 2 (38%) Medium probability flooding. The River Wandle is located approximately 110m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change extends just to the north east of the site (Figures 2 and 3) on Drury Crescent with flood levels of 39.42m AOD. For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends to cover the north eastern edges of the site, with maximum flood levels of approximately 40.65 m AOD.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow and pond along the southern fringe of the site adjacent to Turners Way, and west to east at the centre of the site . There are no records of surface water flooding within 500m of the site.

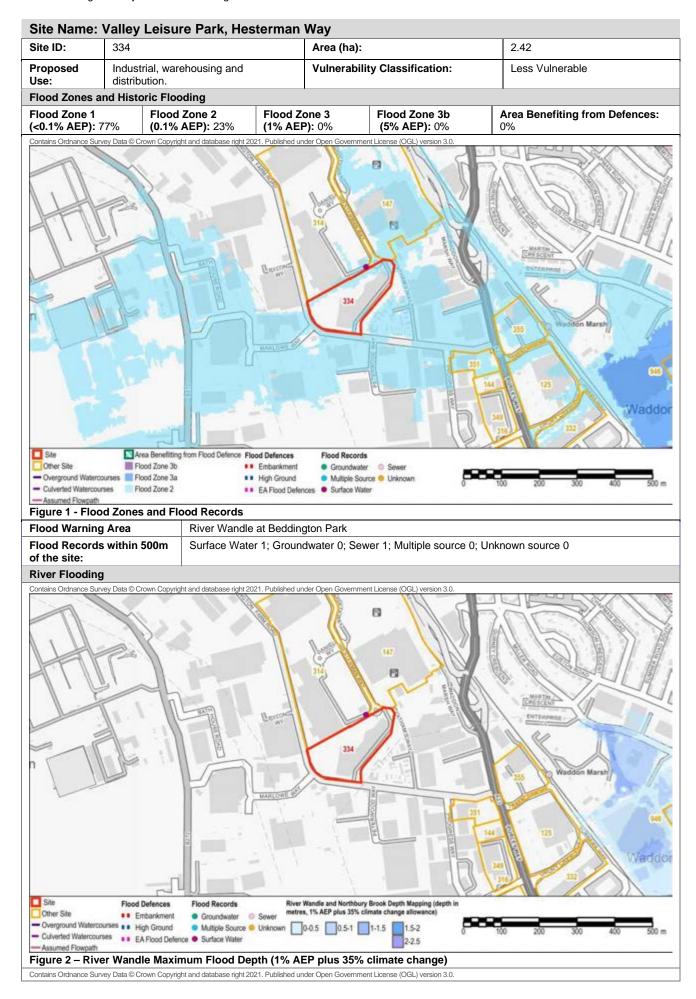
Site Specific Recommendations

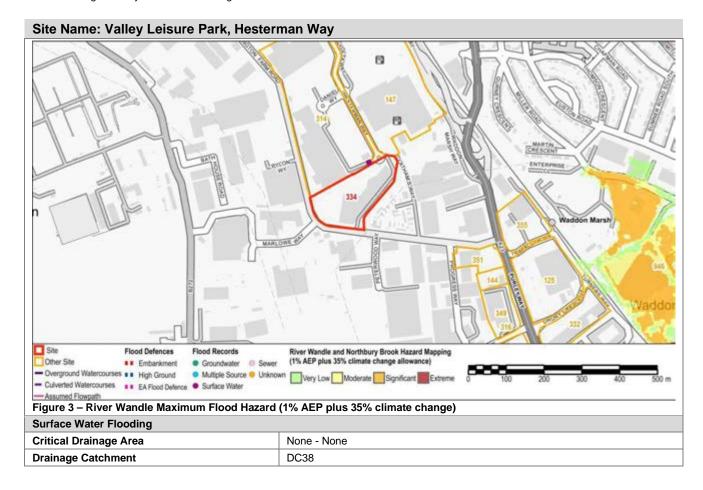
The proposed use for the site includes residential uses which are defined as More Vulnerable. More Vulnerable development is permitted in Flood Zone 2. The Exception Test is not required. However, given the risk of flooding from the River Wandle to the site and surrounding area in the future as a result of climate change, a number of recommendations are made for the site:

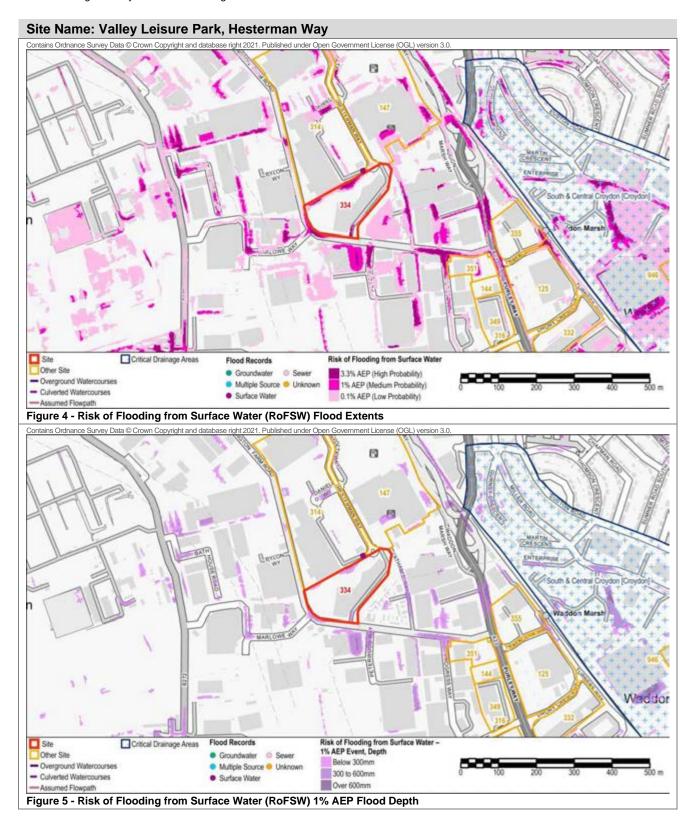
- Finished floor levels for More and Less Vulnerable development should be set 300mm above the 1% AEP flood event including 35% allowance for climate change (39.42m AOD).
- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the north eastern part of the site and the access route along Drury Crescent could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved during the 1% AEP event including 35% climate change allowance. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning
 response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning
 (for example evacuating prior to a flood or remaining within their safe place of refuge).
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.

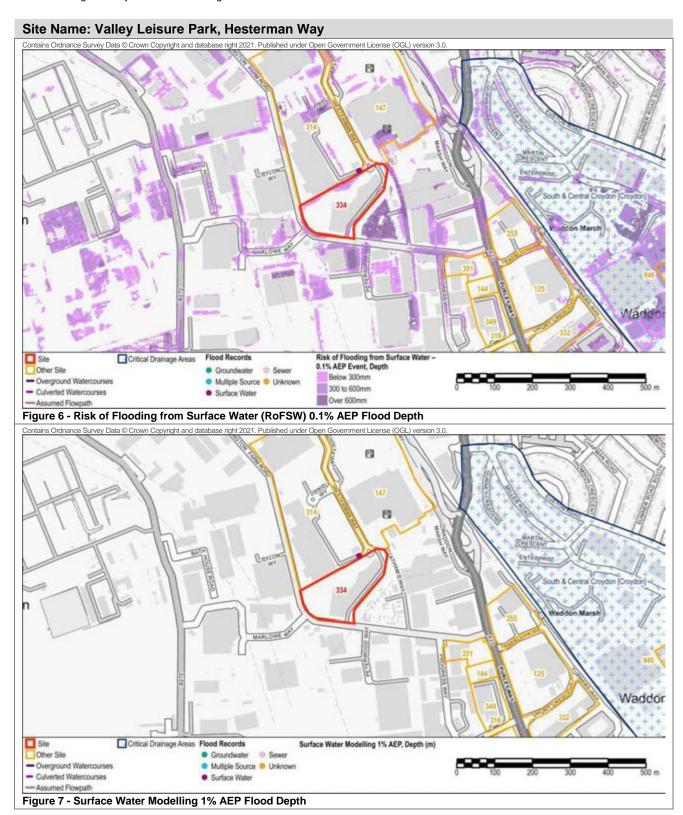
Site Name: Superstores, Drury Crescent

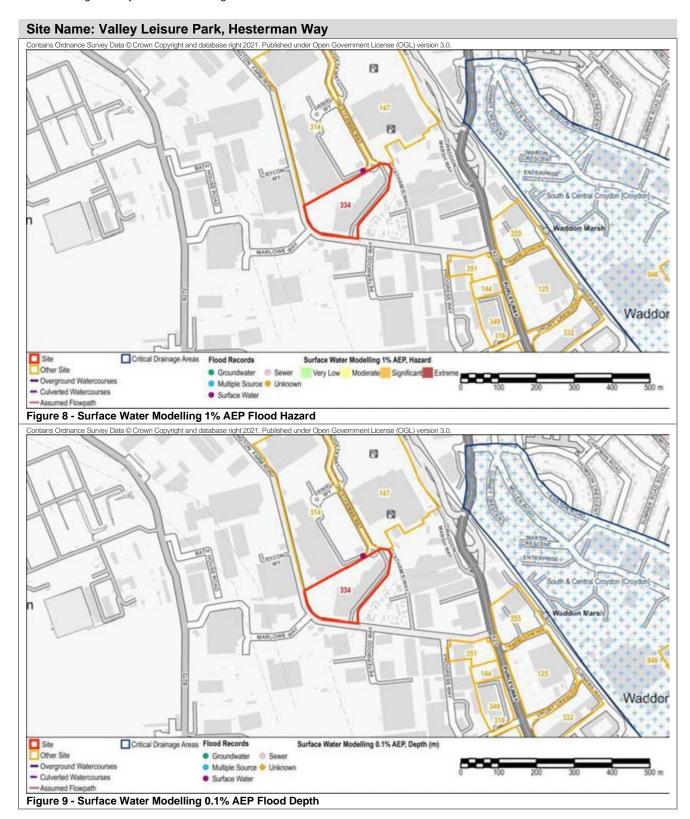
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.

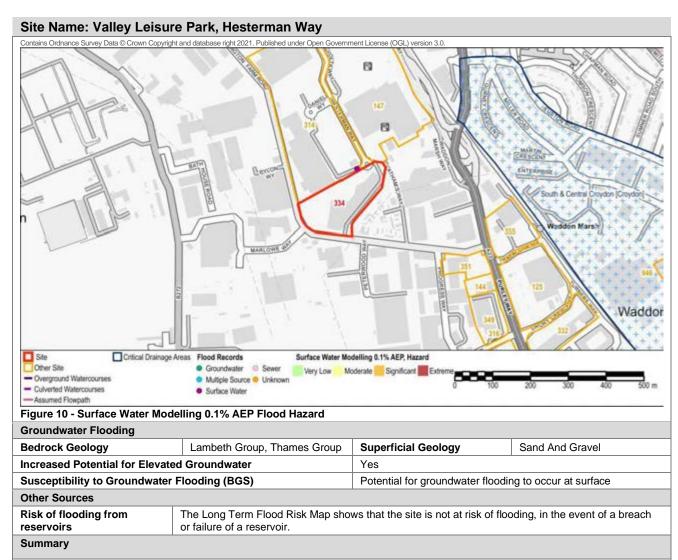












The majority of the site is in Flood Zone 1, Low probability of river flooding with a small part of the northern and southern extent of the site is defined as Flood Zone 2, Medium probability of river flooding. The River Wandle is located approximately 720m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change does not extend to reach the site (Figures 2 and 3). For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends to the area to the east and south of the site along Latham's Way, with maximum flood levels of approximately 37.6 m AOD.

There are records of flooding from a range of sources including surface water and sewers within 500m of the site. There are no groundwater flooding records in this area.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to pond to the north of the site and along the south and south west edge of the site. There are records of surface water flooding in proximity to the site. The site is not located within a Critical Drainage Area.

The ROFSW maps show that in a 1% AEP event there is a risk of flooding between 0-300mm in small areas to the west and north west of the site and a risk of flooding between 0-600mm in the north of the site. In a 0.1% AEP event, the risk of flooding increases slightly with some areas to the east also experiencing flooding up to 600mm.

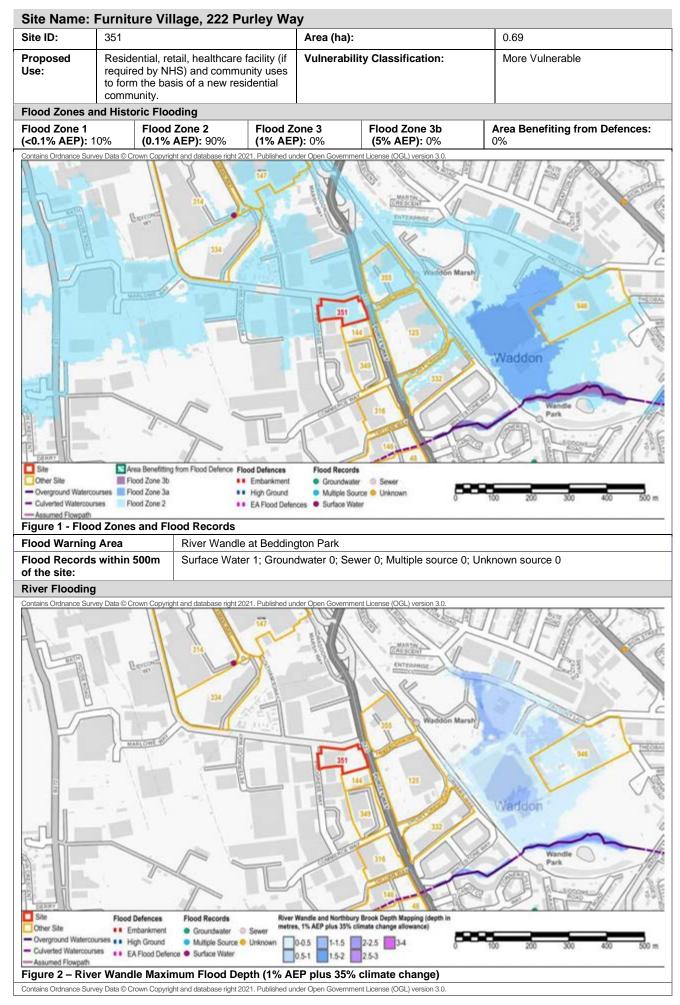
Site Specific Recommendations

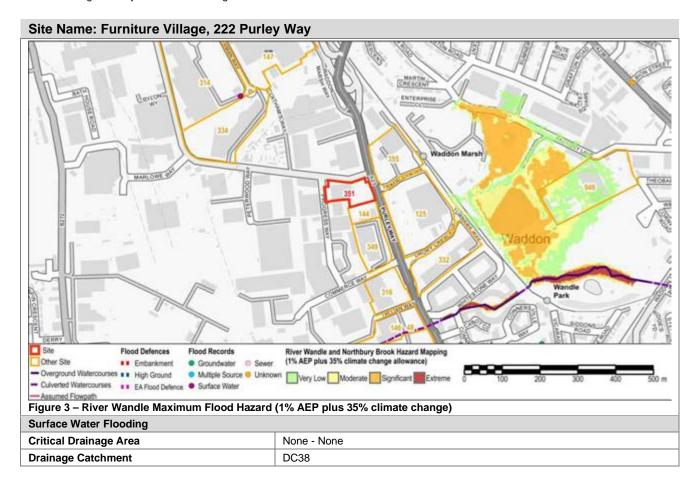
The proposed use for the site is industrial, warehousing and distribution uses which are defined as Less Vulnerable. Less Vulnerable development is permitted in Flood Zone 2. The Exception Test is not required. However, given the risk of flooding from the River Wandle to the area local to the site in the future as a result of climate change, a number of recommendations are made for the site:

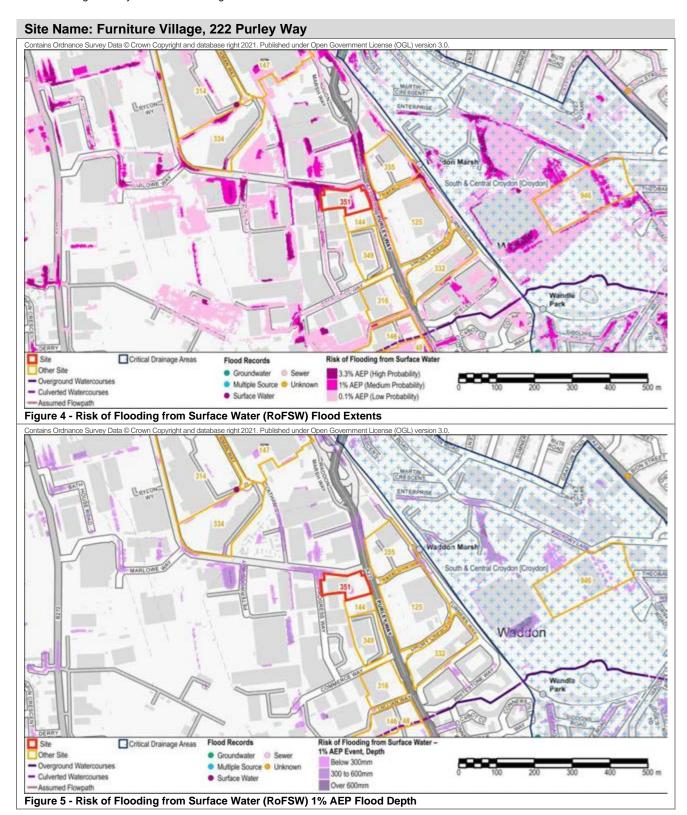
- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the fringe of the site along Latham's Way could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved along Beddington Farm Road. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning (for example evacuating prior to a flood or remaining within their safe place of refuge).

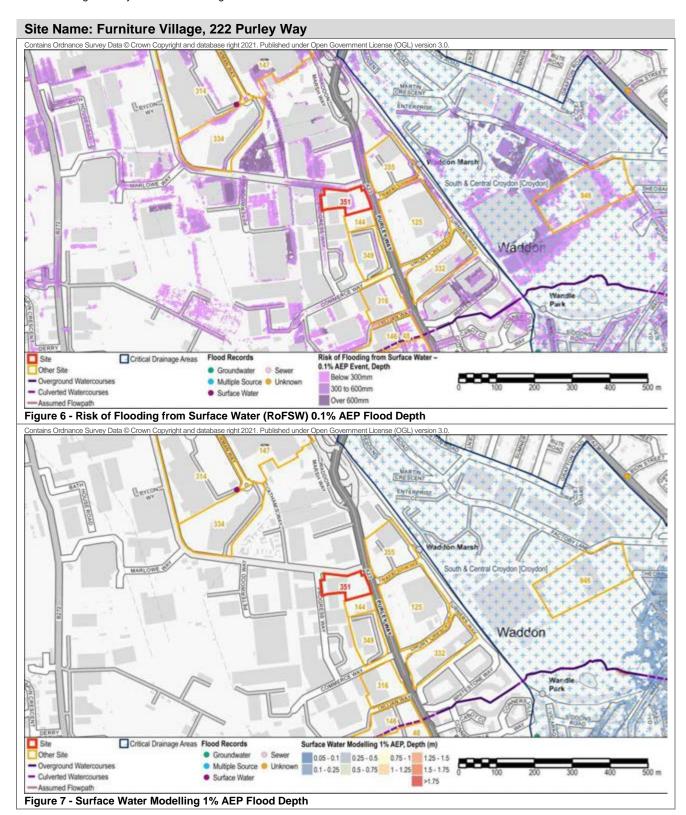
Site Name: Valley Leisure Park, Hesterman Way

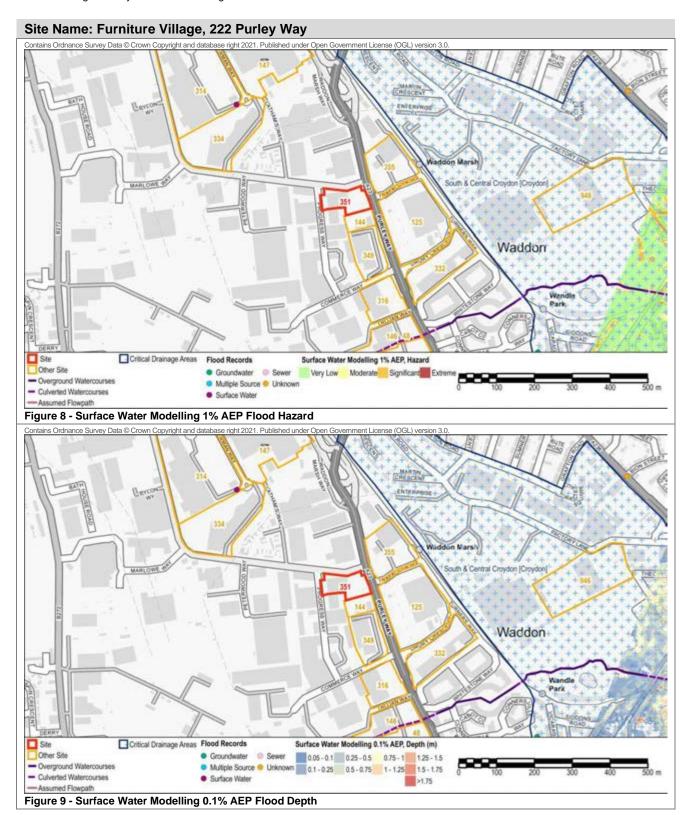
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.

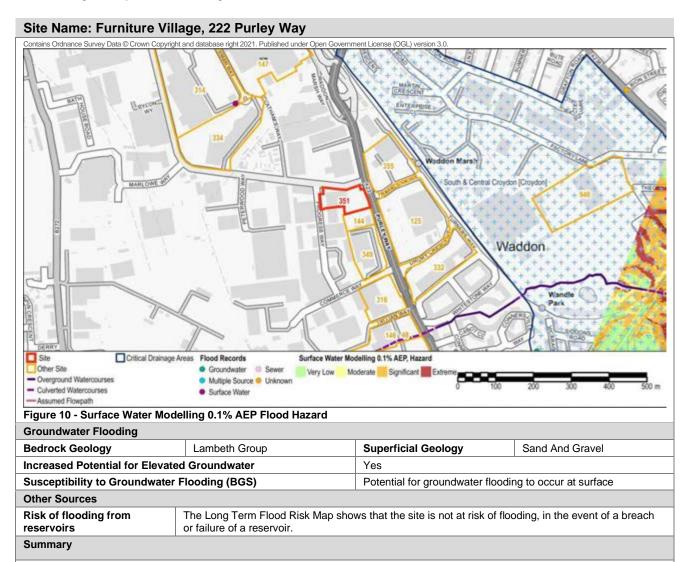












The majority of the site (90%) is defined as Flood Zone 2, Medium probability of river flooding, and the remainder of the site in defined as Flood Zone 1 (10%). The River Wandle is located approximately 370m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change does not extend to reach the site (Figures 2 and 3). For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends across the A23 along Beddington Farm Road and Progress Way around the north and west of the site, with maximum flood levels of approximately 38.0 m AOD.

There are records of flooding from a range of sources including surface water and sewers within 500m of the site. There are no groundwater flooding records in this area.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow and pond at the centre of the site. There are records of surface water flooding within 500m of the site.

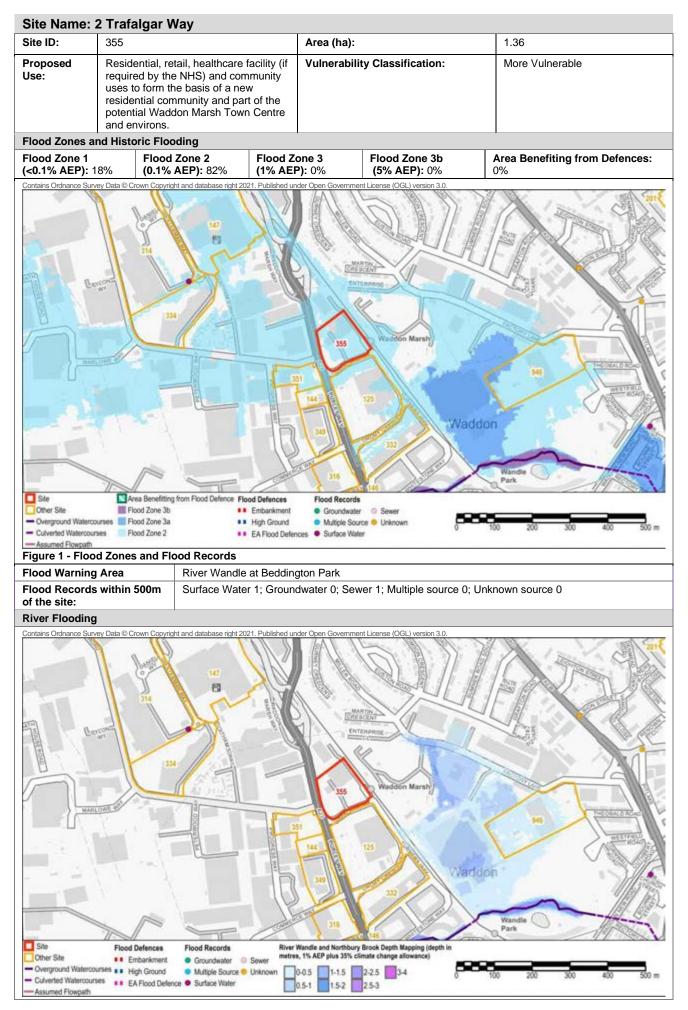
Site Specific Recommendations

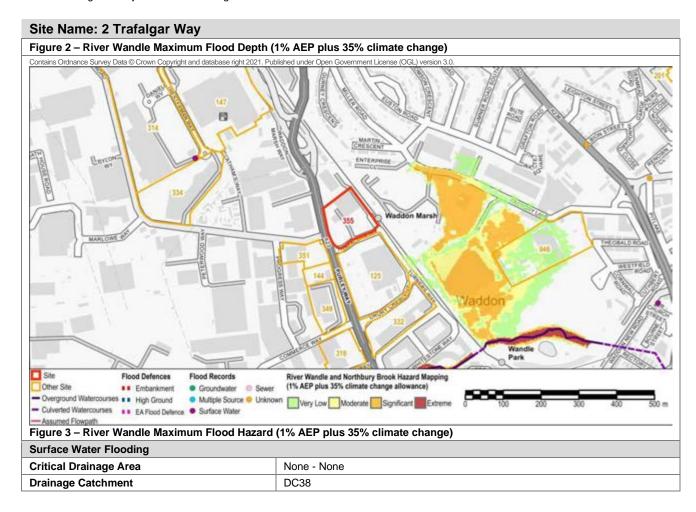
The proposed use for the site includes residential uses which are defined as More Vulnerable. More Vulnerable development is permitted in Flood Zone 2 and the Exception Test is not required. However, even where the Exception Test is not required (in line with Table 3 of the PPG), in the light of the risk of flooding from the River Wandle to the site and access routes in the future as a result of climate change, steps should be taken to ensure that development is safe for its lifetime considering the impact of climate change, will not increase flood risk elsewhere, and where possible will reduce flood risk overall. To this end, the following recommendations are made for the site:

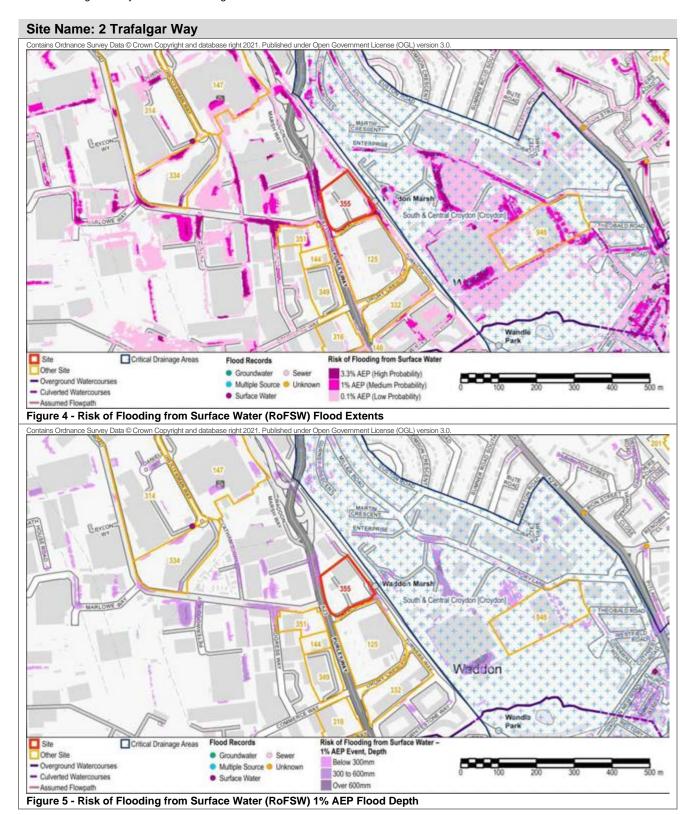
- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the site and the access routes along Beddington Farm Road and Progress Way could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved along Beddington Farm Road for the 1% AEP event including 35% climate change allowance. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning
 response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning
 (for example evacuating prior to a flood or remaining within their safe place of refuge).
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.

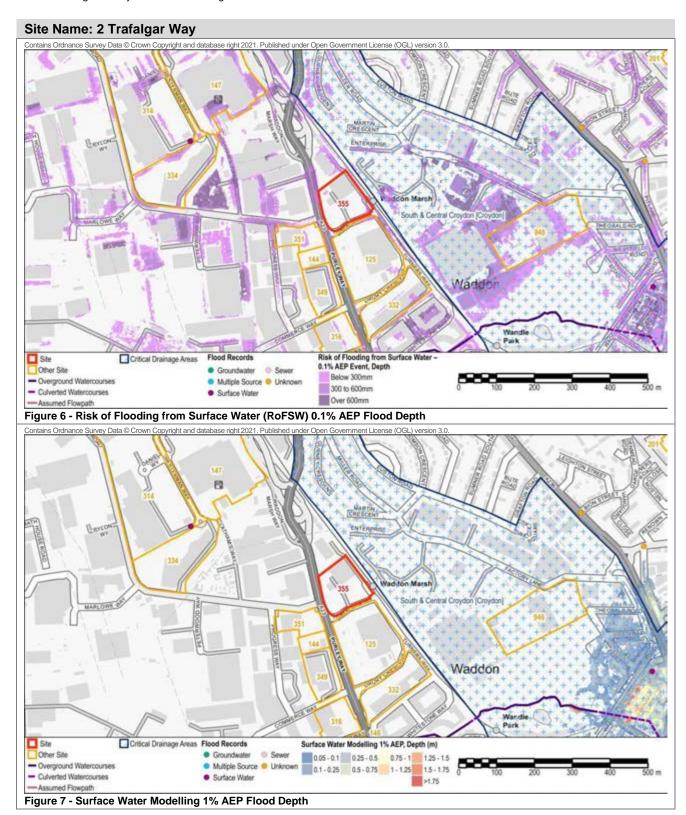
Site Name: Furniture Village, 222 Purley Way

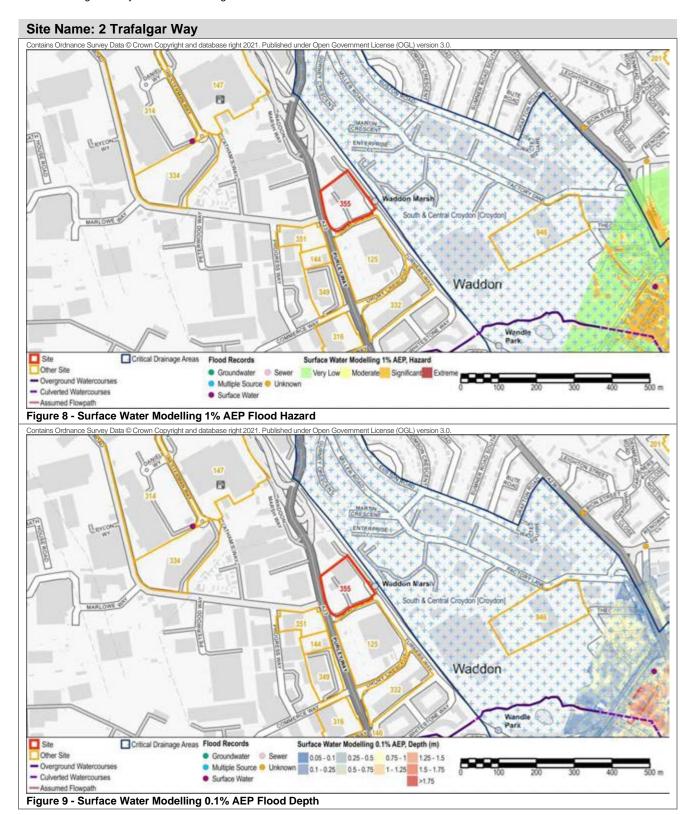
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.
- The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.

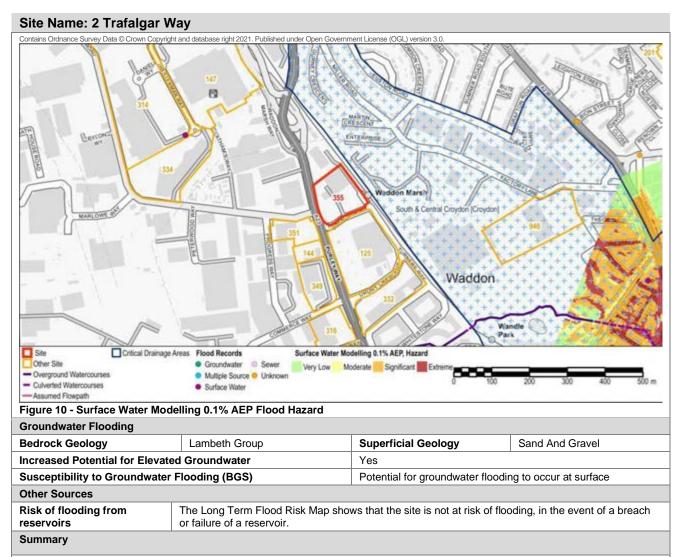












The majority of the site (82%) is defined as Flood Zone 2, Medium probability of river flooding, and the remainder of the site in defined as Flood Zone 1 (18%), Low probability flood of river flooding. The River Wandle is located approximately 400m south of the site.

Modelling outputs for the River Wandle modelling study show that the 1% AEP event including 35% allowance for climate change does not extend to reach the site (Figures 2 and 3). For the 1% AEP event including 70% increase in peak river flows as a result of climate change, flooding extends to cover the site and across Purley Way, with maximum flood levels of approximately 39.78 m AOD.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow and pond adjacent to the railway line, as well as on Purley Way. There are records of flooding from a range of sources including surface water and sewers within 500m of the site.

Site Specific Recommendations

The proposed use for the site includes residential uses which are defined as More Vulnerable. More Vulnerable development is permitted in Flood Zone 2 and the Exception Test is not required. However, even where the Exception Test is not required (in line with Table 3 of the PPG), in the light of the risk of flooding from the River Wandle to the site and access routes in the future as a result of climate change, steps should be taken to ensure that development is safe for its lifetime considering the impact of climate change, will not increase flood risk elsewhere, and where possible will reduce flood risk overall. To this end, the following recommendations are made for the site:

- In the future, as a result of climate change under the 1% AEP event including 70% climate change allowance, hydraulic modelling shows that the site and the access routes along Purley Way could be at risk of flooding from the River Wandle. A dry access/egress route into an area at low risk of flooding can be achieved for the 1% AEP event including 35% climate change allowance. A place of safe refuge should be provided in the development, above the flood level for the 1% AEP event including 70% allowance for climate change.
- The site is located within the Flood Warning Area for River Wandle at Beddington Park. Occupants of the site should sign up to receive the Flood Warning Service.
- Flood warning and evacuation plans should be prepared, in accordance with the Council's wider emergency planning
 response. The flood warning and evacuation plan should set out the response of occupants upon receiving a flood warning
 (for example evacuating prior to a flood or remaining within their safe place of refuge).
- Planning for the site should consider how it can 'make space for water' and consider the need to temporarily store surface
 water runoff during heavy rainfall events. Opportunities should be sought for providing strategic SuDS systems in
 collaboration with other plots within the area.
- Development proposals should seek to restrict surface water runoff rates to greenfield rates; demonstrate sustainable
 approaches to the management of surface water making use of SuDS including green roofs, rainwater harvesting and other
 innovative technologies; and incorporate soft landscaping, planting and impermeable surfacing.

Site Name: 2 Trafalgar Way

 The risk of groundwater flooding and groundwater levels should be further assessed as part of a Site Investigation for specific development proposals on the site.