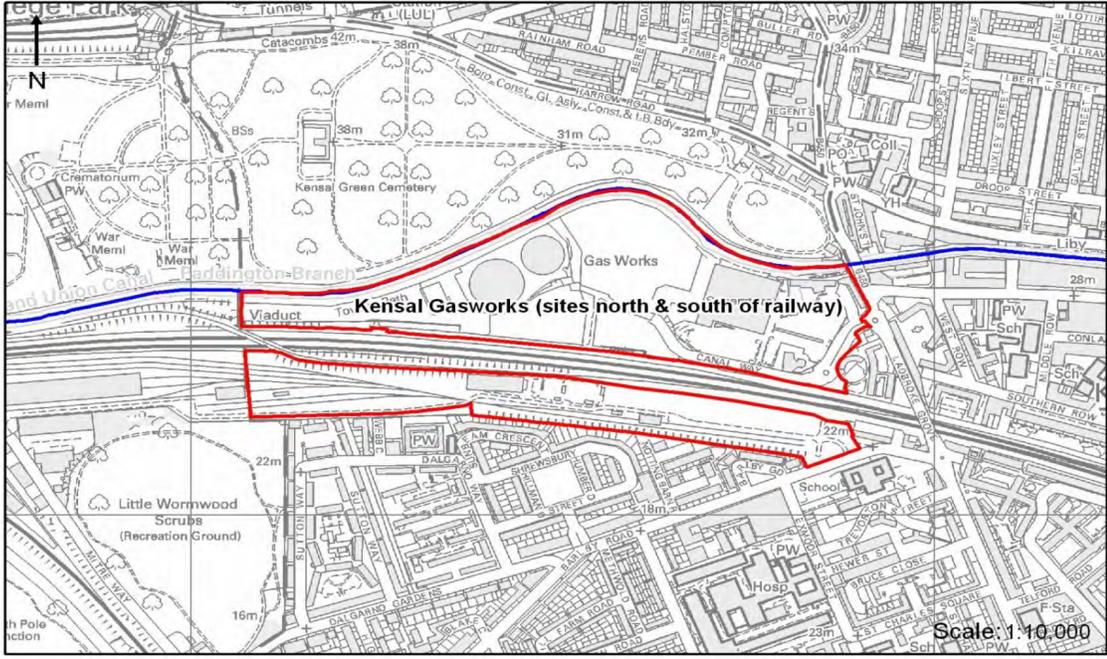
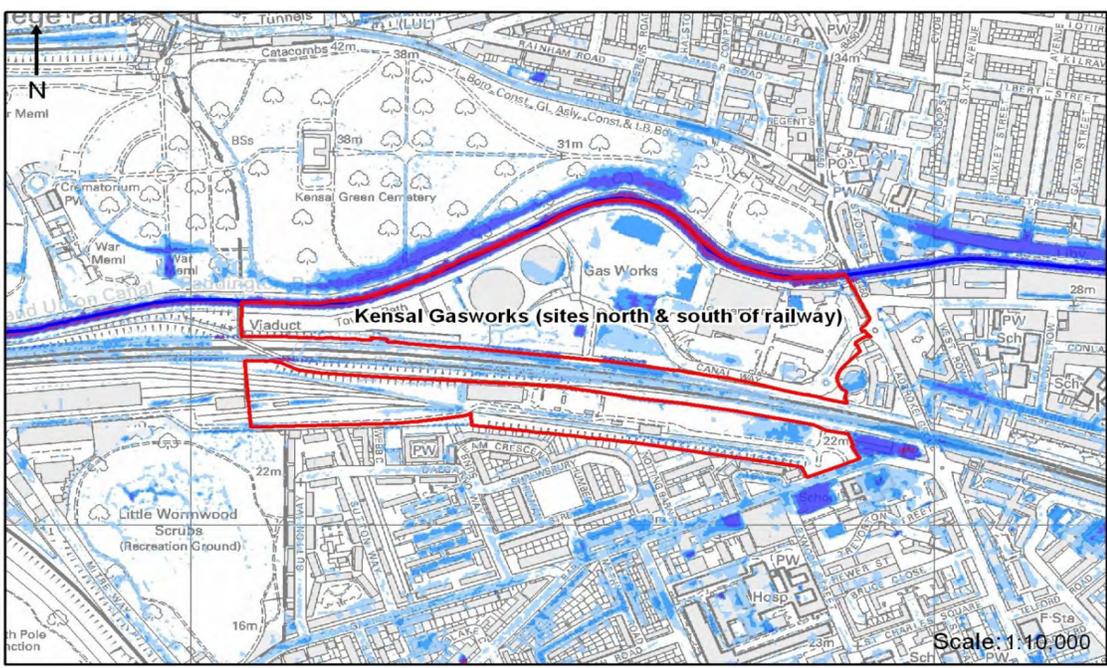
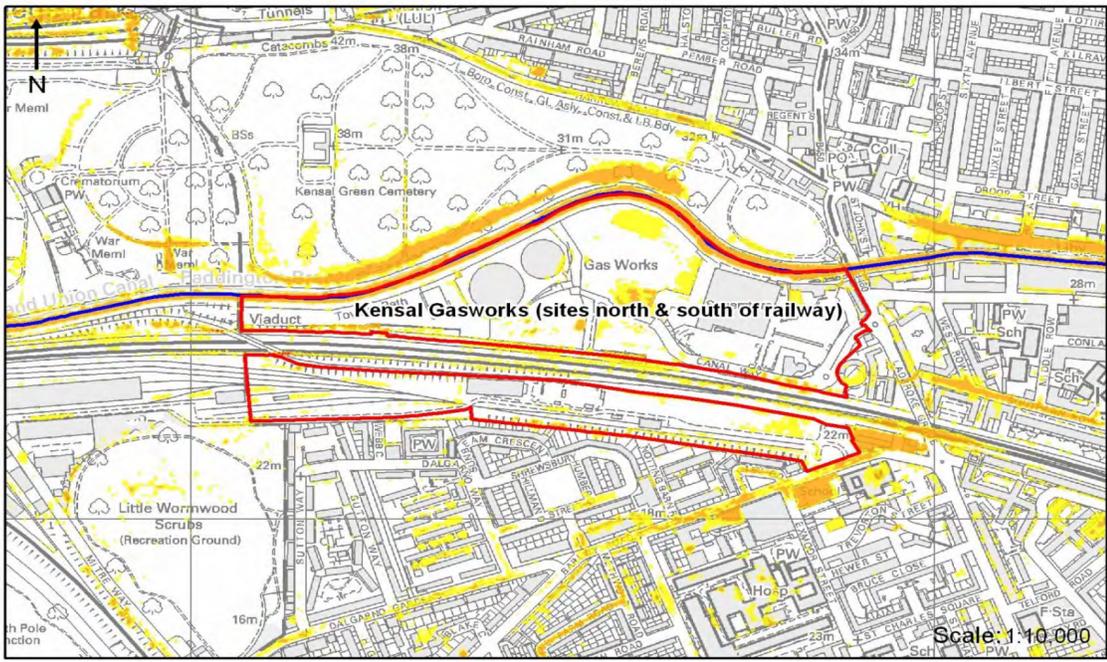
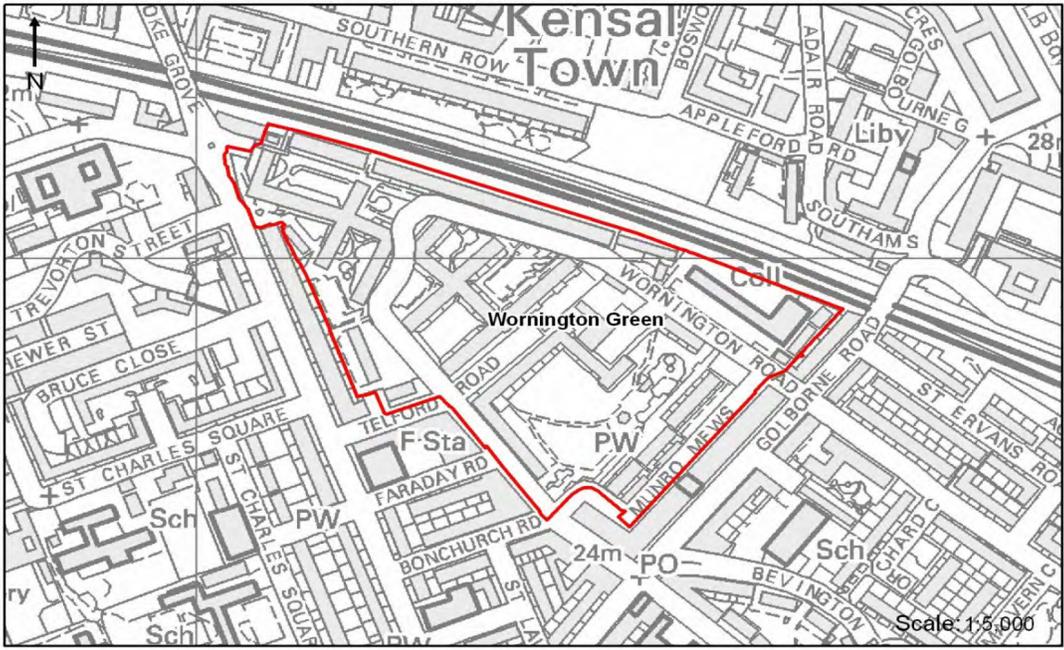
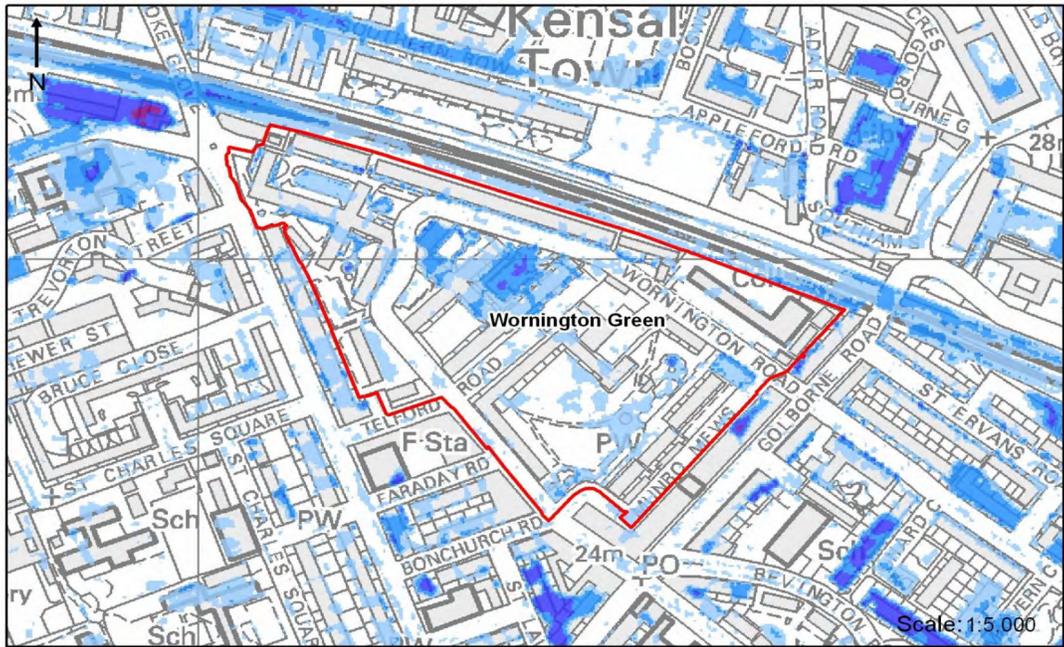
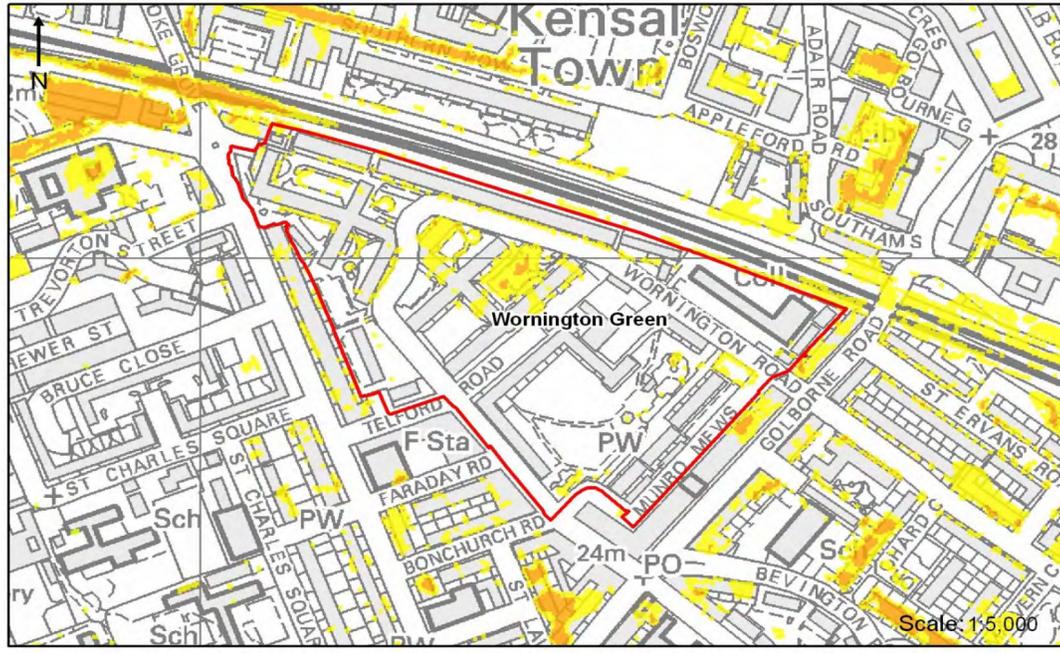
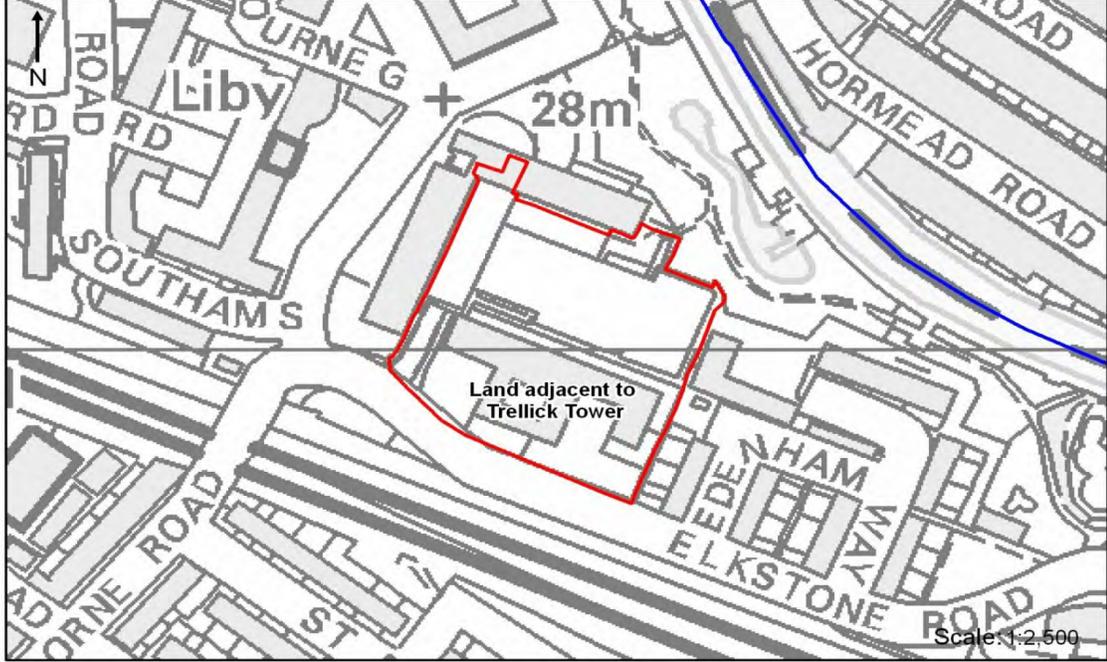
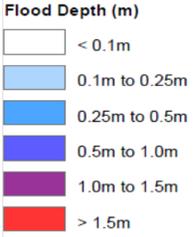


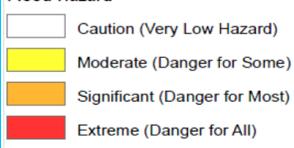
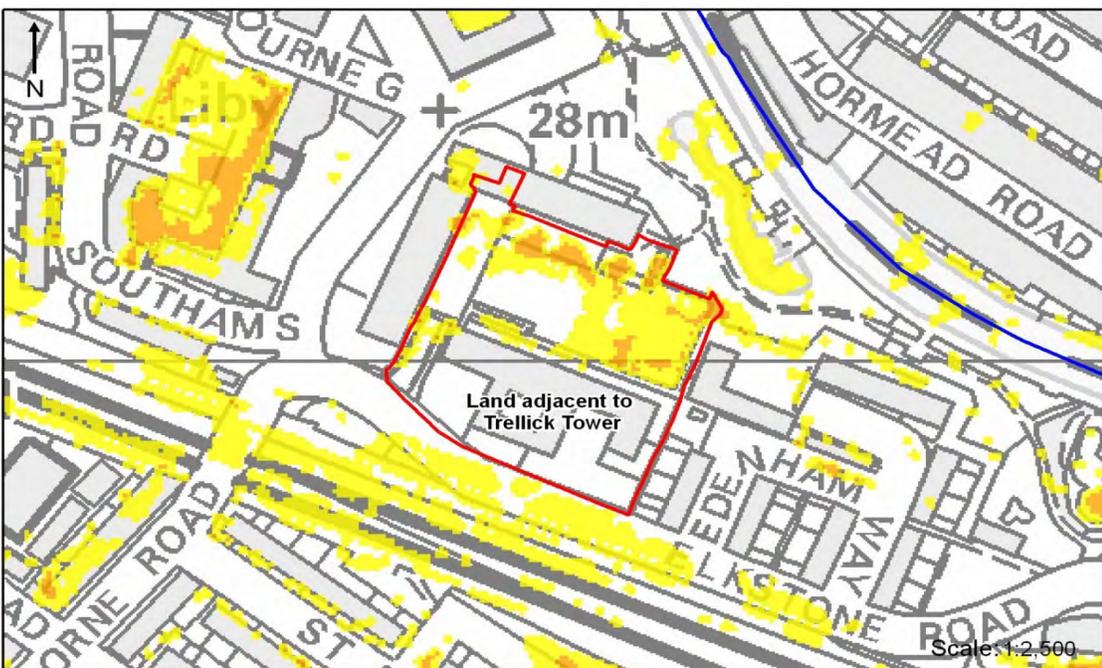
<b>Site Number</b>	01
<b>Site Name</b>	Kensal Gasworks (sites north & south of railway)
<b>Grid Reference</b>	523491, 182335
<b>CDA</b>	This site does not fall within a CDA
<b>Location Plan</b>	
<b>Size of site (ha)</b>	18
<b>Description of Existing Flood Management Infrastructure (and condition)</b>	NFCDD does not contain any information on any structures or defences at the site. The Grand Union Canal (Paddington Branch) forms the northern boundary of the site. A review of the DTM indicates that canal follows the land contour and is not embanked adjacent to the site.
<b>Existing Land use</b>	The site is split north and south of the railway line. The northern section of the site is currently occupied by Kensington Gas Works in the west, undeveloped land and Sainsbury (Ladbroke Grove) supermarket and car park in the east. These have been split into seven separate sites: the west site (the current gas holders site), the central site (currently vacant), the east site (Sainsbury's supermarket), Canalside House, the Water Tower, the Boathouse Centre and the canal towpath. The south site covers a grassed section south of the railway and the North Pole railway depot.
<b>Proposed Land use</b>	Development of the site to include: - upwards of 2,500 new dwellings [more vulnerable land use] - at least 10,000sq.m of offices or other B1 uses [less vulnerable land use] - amenity space [less vulnerable land use] - new Crossrail station [essential infrastructure] - on site waste management facilities [more vulnerable land use]
<b>Topography</b>	> Ground levels on the site range between 25mAOD and 30mAOD
<b>Risk Assessment</b>	
<b>Flood Zones</b>	Proportion of the site located in:- <b>Flood Zone 1 = 18ha (low risk of flooding)</b> <b>Flood Zone 2 = 0ha</b> <b>Flood Zone 3a = 0ha</b> <b>Flood Zone 3b = 0ha</b>
<b>Surface Water (Pluvial)</b>	Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts some areas of ponding on the site during the 1 in 100 year rainfall event with an allowance for climate change. These areas of ponding are associated with a moderate (danger for some) and significant (danger for most) hazard rating. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.
	

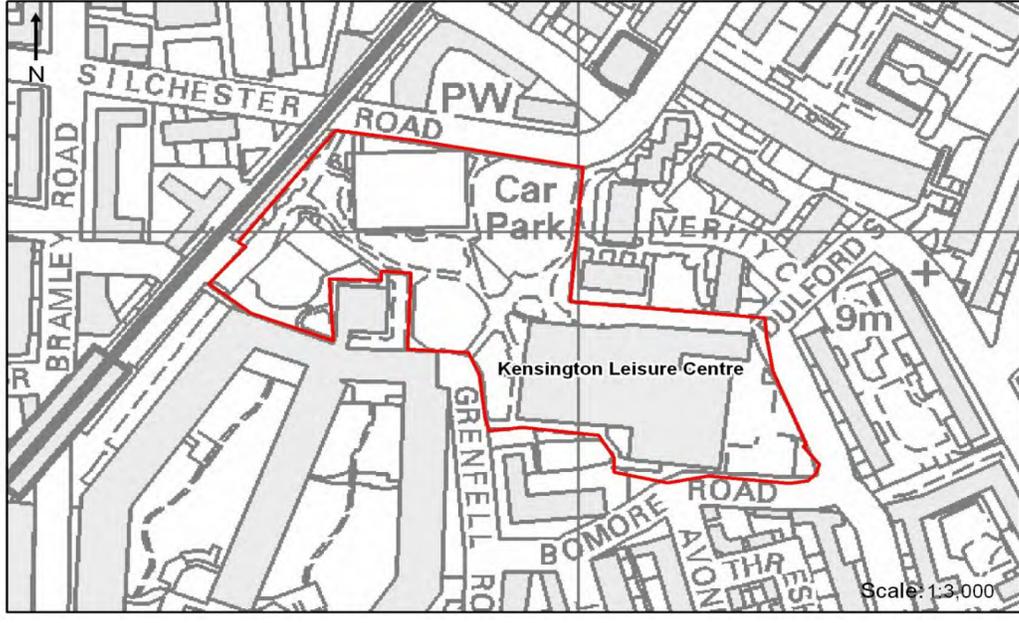
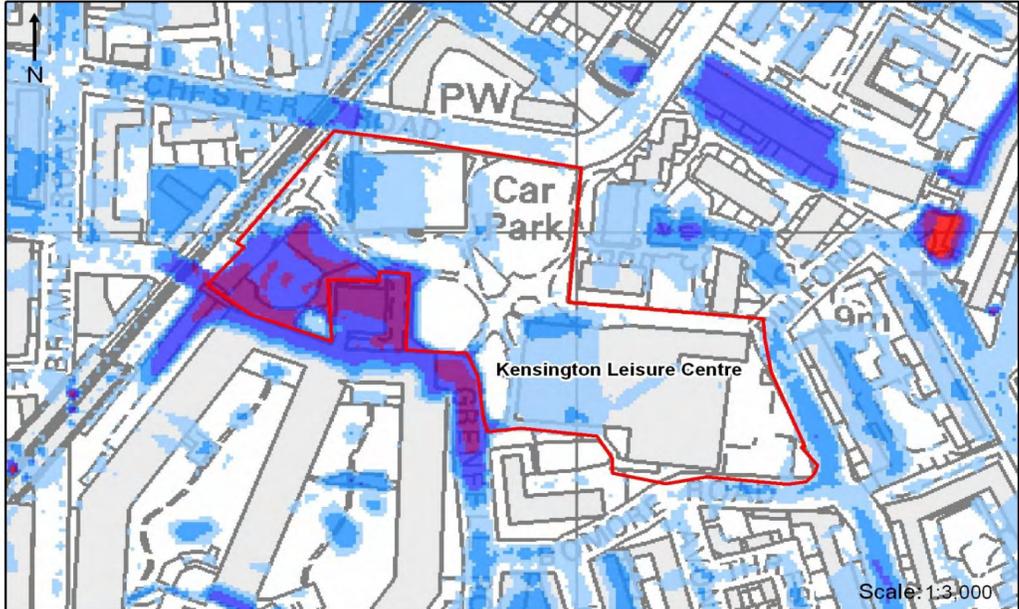
<b>Site Number</b>	01
<b>Site Name</b>	Kensal Gasworks (sites north & south of railway)
<b>Grid Reference</b>	523491, 182335
<b>CDA</b>	This site does not fall within a CDA
<b>Flood Hazard</b> 	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset and the 'Areas Susceptible to Groundwater Flooding' dataset indicates that the site is not classified as susceptible to groundwater flooding.
<b>Artificial Sources</b>	The Grand Union Canal Paddington Branch forms the northern boundary of the site. A Review of the DTM indicates that canal follows the land contour and is not embanked adjacent to the site.
<b>Summary of Risk</b>	<ul style="list-style-type: none"> <li>&gt; The site is located in Flood Zone 1, all uses of land are appropriate in this zone.</li> <li>&gt; The site is not at risk from groundwater flooding. There is a risk of surface water flooding in some locations, though these are limited to low lying areas. Flood risk from the Grand Union Canal (Paddington Branch) is not expected to be significant as the canal is not embanked adjacent to the site, however the Canal &amp; Rivers Trust should be consulted as part of a site specific Flood Risk Assessment.</li> <li>&gt; Due to the size of the site (greater than 1ha), a flood risk assessment will be required to support the planning application and it would focus on the management of surface water. There would be no requirement for the site to pass the Sequential or Exception Test as it is located in Flood Zone 1 (lowest risk of flooding).</li> </ul>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<ul style="list-style-type: none"> <li>&gt; The design and layout of the proposed development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</li> <li>&gt; A review of the DTM indicates that the Grand Union Canal (Paddington Branch) is not embanked adjacent to the site. However, it is recommended the Canal &amp; River Trust are consulted about any future development as part of a site specific Flood Risk Assessment.</li> <li>&gt; Ground floor levels should be above surrounding ground levels to prevent ingress of surface water runoff. This should be agreed with the EA at the earliest opportunity.</li> </ul>
<b>SUDS Options appraisal</b>	<ul style="list-style-type: none"> <li>&gt; There is a large grassed area between to the Gasworks and the Sainsbury supermarket. Any development in this area is likely to result in an increase in surface water runoff, however this can be appropriately managed through the development of a SUDS treatment train for the site.</li> <li>&gt; The site is underlain by London Clay and typically does not have a high level of permeability. Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</li> <li>&gt; All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.</li> </ul>
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is fully located in Flood Zone 1 and therefore there is no need to apply the Exception Test.

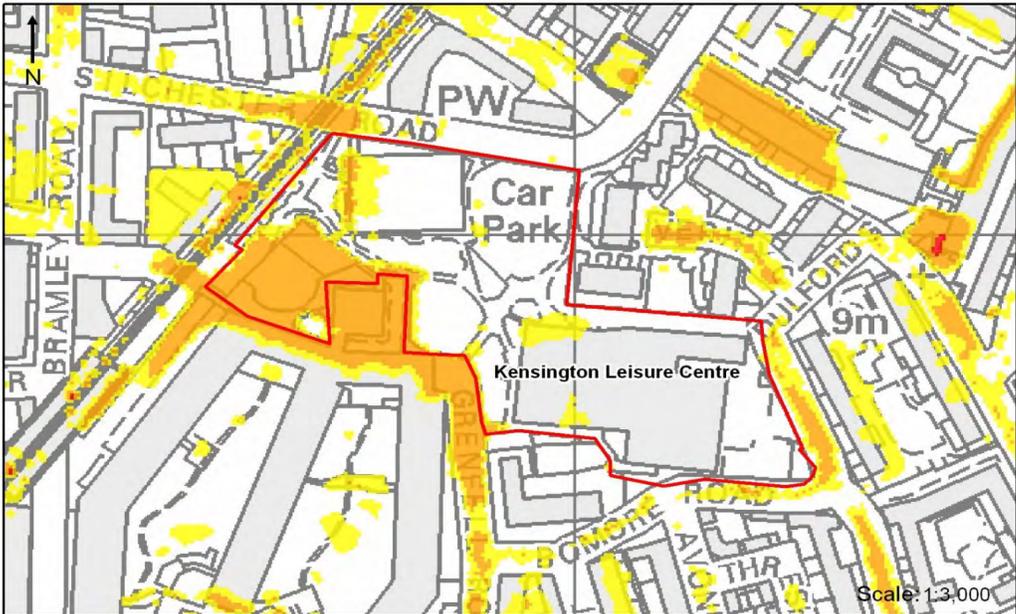
Site Number	02
Site Name	Worlington Green
Grid Reference	524235, 181950
CDA	This site does not fall within a CDA
Location Plan	
Size of site (ha)	6.4
Description of Existing Flood Management Infrastructure (and condition)	NFCDD does not contain any information on any structures or defences at the site.
Existing Land use	The Estate currently contains 538 flats and houses, which are all socially rented, accommodating approximately 1,700 residents, Athlone Gardens, the Venture Centre, Kensington Housing Trust Offices, two retail units and The Open Door Friendship Centre. The site is bounded to the north by the Hammersmith and City and the Circle Line London Underground tracks.
Proposed Land use	Re-development of the site to provide: <ul style="list-style-type: none"> <li>- a minimum of 538 affordable dwelling units to replace those that have been demolished [more vulnerable land use]</li> <li>- an additional 30 shared ownership homes [more vulnerable land use]</li> <li>- more than 300 new homes for sale [more vulnerable land use]</li> <li>- approximately 20 new retail units for Portobello Road [less vulnerable land use]</li> <li>- improved community and leisure facilities inc. Athlone Gardens [less vulnerable land use]</li> <li>- the return of a park at least the same size as the existing Athlone Gardens [less vulnerable land use]</li> <li>- the replacement of the Venture Centre, the new centre to be at least as large as the current facility [more vulnerable land use]</li> <li>- the replacement of the lock-ups on Munro Mews [less vulnerable land use]</li> </ul>
Topography	> Ground levels on the site range between 23mAOD and 26mAOD
Risk Assessment	
Flood Zones	<p>Proportion of the site located in:-</p> <p><b>Flood Zone 1 = 6.4ha (low risk of flooding)</b></p> <p><b>Flood Zone 2 = 0ha</b></p> <p><b>Flood Zone 3a = 0ha</b></p> <p><b>Flood Zone 3b = 0ha</b></p>
Surface Water (Pluvial)	<p>Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts some areas of ponding on the site during the 1 in 100 year rainfall event with an allowance for climate change. These areas of ponding are associated with a moderate (danger for some) and two small areas of significant (danger for most) hazard rating. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.</p> 

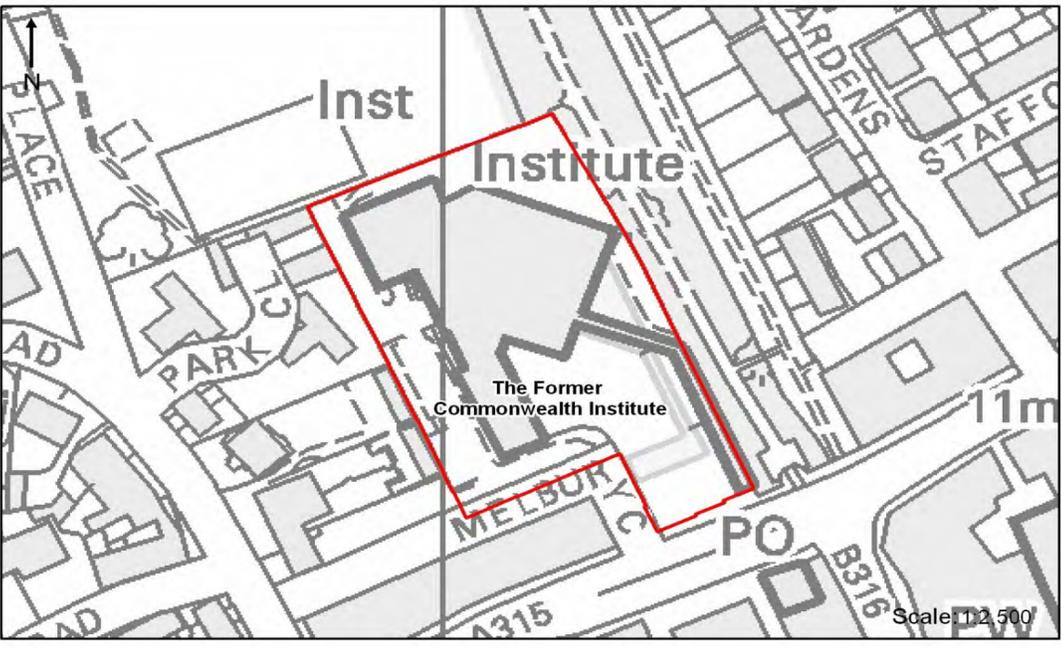
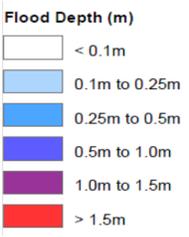
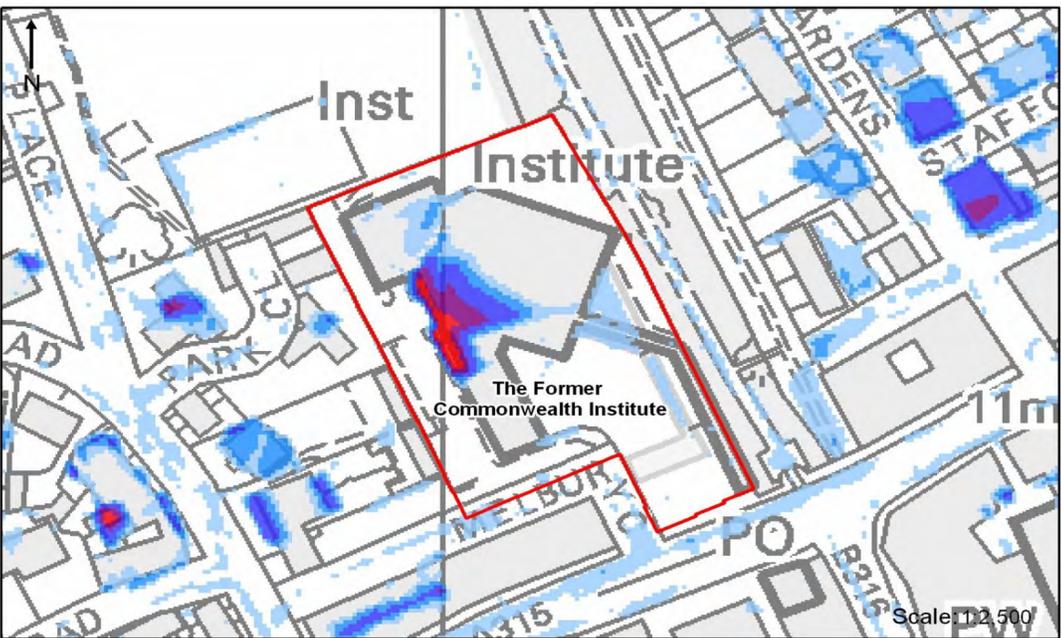
<b>Site Number</b>	02
<b>Site Name</b>	Wornington Green
<b>Grid Reference</b>	524235, 181950
<b>CDA</b>	This site does not fall within a CDA
<b>Flood Hazard</b> 	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset and the 'Areas Susceptible to Groundwater Flooding dataset' indicates that the site is not classified as susceptible to groundwater flooding.
<b>Artificial Sources</b>	The Environment Agency's reservoir inundation mapping shows areas at risk of flooding from large reservoirs which hold over 25,000 cubic metres of water. The site is not shown to be at risk of flooding from a large reservoir. The Grand Union Canal Paddington Branch is located 300m north and 250m east of the site and is at a higher elevation (approximately 28.6m).
<b>Summary of Risk</b>	<ul style="list-style-type: none"> <li>&gt; The site is located in Flood Zone 1, all uses of land are appropriate in this zone.</li> <li>&gt; The site is not at risk from groundwater flooding. There is a risk of surface water flooding in some locations, though these are limited to low lying areas. There is an unquantified flood risk from the Grand Union Canal (Paddington Branch) located at higher elevations (approximately 28.6m) to the north of the site.</li> <li>&gt; Due to the size of the site (greater than 1ha), a flood risk assessment will be required to support the planning application and it would focus on the management of surface water. There would be no requirement for the site to pass the Sequential or Exception Test as it is located in Flood Zone 1 (lowest risk of flooding).</li> </ul>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<ul style="list-style-type: none"> <li>&gt; The design and layout of the re-development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</li> <li>&gt; There is an unquantified flood risk from the Grand Union Canal (Paddington Branch) located at a higher elevation (approximately 28.6m) to the north of the site. It is recommended that the Canal &amp; Rivers Trust should be consulted as part of a site specific Flood Risk Assessment.</li> <li>&gt; Ground floor levels should be above surrounding ground levels to prevent ingress of surface water runoff. This should be agreed with the EA at the earliest opportunity.</li> </ul>
<b>SUDS Options appraisal</b>	<ul style="list-style-type: none"> <li>&gt; Re-development of in this area is unlikely to result in an increase in surface water runoff if the current area of green space is retained. Improvements to the current situation may be achieved and surface water runoff can be appropriately managed through the development of a SUDS treatment train for the site.</li> <li>&gt; The site is underlain by London Clay and typically does not have a high level of permeability. Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</li> <li>&gt; All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.</li> </ul>
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is fully located in Flood Zone 1 and therefore there is no need to apply the Exception Test.

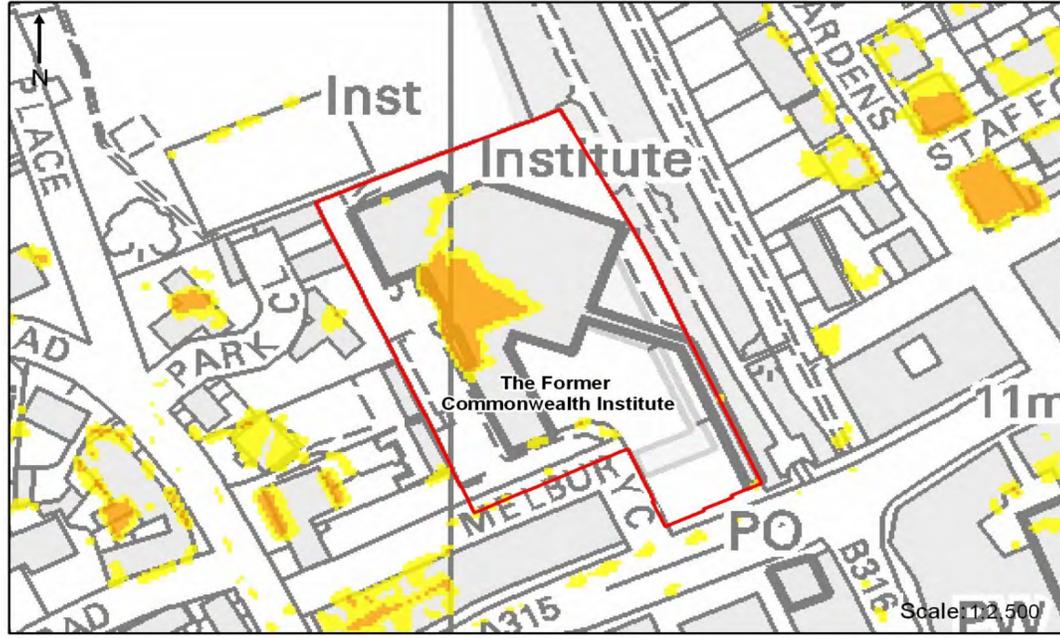
<b>Site Number</b>	03
<b>Site Name</b>	Land adjacent to Trellick Tower
<b>Grid Reference</b>	524590, 182010
<b>CDA</b>	This site does not fall within a CDA
<b>Location Plan</b> 	
<b>Size of site (ha)</b>	0.8
<b>Description of Existing Flood Management Infrastructure (and condition)</b>	NFCDD does not contain any information on any structures or defences at the site.
<b>Existing Land use</b>	The site encompasses the former Edenham Care Home and land adjoining Trellick Tower, which is located in the north-east of the Borough and is situated in Golborne Ward. The site largely comprises of car parking and recreational area and gardens.
<b>Proposed Land use</b>	The development of the site to include: - new residential units [more vulnerable land use] - improvements to social and community facilities and housing
<b>Topography</b>	> Ground levels on the site vary. The gardens around the base of Trellick Tower are at elevations of approximately 29m. The basket ball court, playground and west car parking area which are at lower elevations compared to the rest of the site (approximately 23m to 23.5m). The car park area in the south of the site is approximately 25.5m
<b>Risk Assessment</b>	
<b>Flood Zones</b>	<b>Proportion of the site located in:-</b> <b>Flood Zone 1 = 0.8ha (low risk of flooding)</b> <b>Flood Zone 2 = 0ha</b> <b>Flood Zone 3a = 0ha</b> <b>Flood Zone 3b = 0ha</b>
<b>Surface Water (Pluvial)</b>	Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts ponding on the site during the 1 in 100 year rainfall event with an allowance for climate change. These areas of ponding occur in the lower elevations on the site (the basket ball court, playground and west car parking area). Surface water flooding on the site is associated with a moderate (danger for some) and significant (danger for most) hazard rating. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.
<b>Flood Depth (m)</b> 	

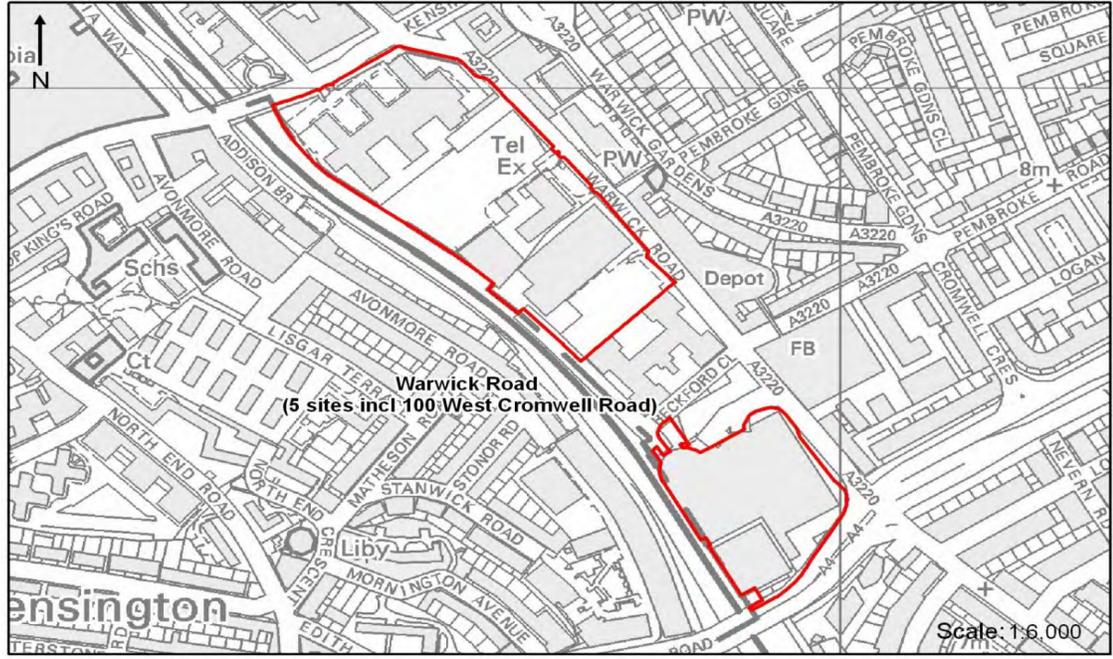
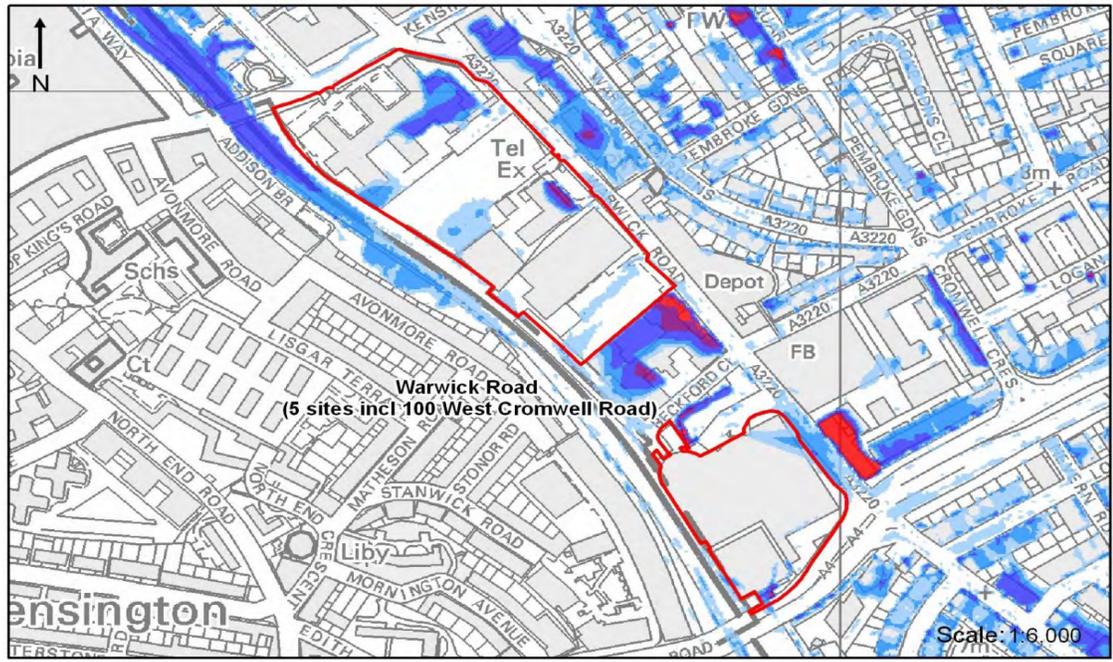
<b>Site Number</b>	03
<b>Site Name</b>	Land adjacent to Trellick Tower
<b>Grid Reference</b>	524590, 182010
<b>CDA</b>	This site does not fall within a CDA
<b>Flood Hazard</b> 	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset and the 'Areas Susceptible to Groundwater Flooding dataset' indicates that the site is not classified as susceptible to groundwater flooding.
<b>Artificial Sources</b>	The Environment Agency's reservoir inundation mapping shows areas at risk of flooding from large reservoirs which hold over 25,000 cubic metres of water. The site is not shown to be at risk of flooding from a large reservoir. The Grand Union Canal Paddington Branch is located approximately 50m east of the site and is at a higher elevation (approximately 30m).
<b>Summary of Risk</b>	<ul style="list-style-type: none"> <li>&gt; The site is located in Flood Zone 1, all uses of land are appropriate in this zone.</li> <li>&gt; The site is not at risk from groundwater flooding. There is a risk of surface water flooding in the low lying areas. There is an unquantified flood risk from the Grand Union Canal (Paddington Branch) located at higher elevations (approximately 30m) to the east of the site.</li> <li>&gt; Although the site is less than 1ha (0.8ha) and within Flood Zone 1, it is recommended that the planning application is supported by a flood risk assessment to consider surface water flooding at the site and the management of surface water. There would be no requirement for the site to pass the Sequential or Exception Test as it is located in Flood Zone 1 (lowest risk of flooding).</li> </ul>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<ul style="list-style-type: none"> <li>&gt; The design and layout of the proposed development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</li> <li>&gt; There is an unquantified flood risk from the Grand Union Canal (Paddington Branch) located at higher elevations (approximately 30m) to the east of the site. It is recommended that the Canal &amp; Rivers Trust should be consulted as part of a site specific Flood Risk Assessment.</li> <li>&gt; Ground floor levels should be above surrounding ground levels to prevent ingress of surface water runoff. This should be agreed with the EA at the earliest opportunity.</li> </ul>
<b>SUDS Options appraisal</b>	<ul style="list-style-type: none"> <li>&gt; Development of this site is likely to result in an increase in surface water runoff, however this can be appropriately managed through the development of a SUDS treatment train for the site.</li> <li>&gt; The site is underlain by London Clay and typically does not have a high level of permeability. Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</li> <li>&gt; All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.</li> </ul>
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is fully located in Flood Zone 1 and therefore there is no need to apply the Exception Test.

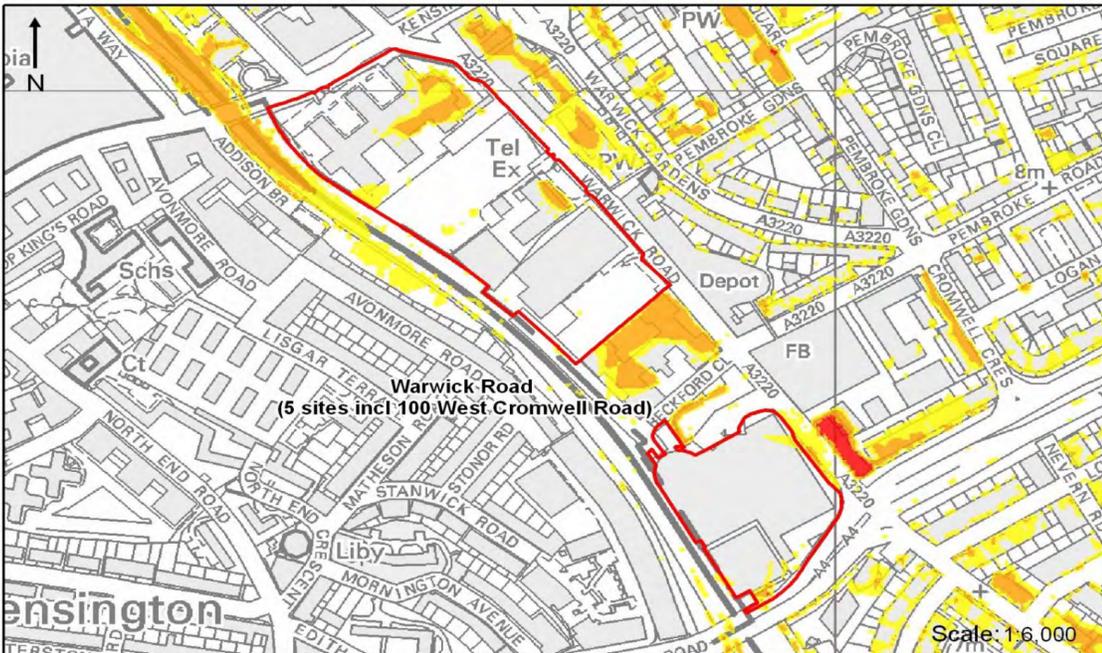
Site Number	04
Site Name	Kensington Leisure Centre
Grid Reference	523970, 180960
CDA	01 North Kensington
<b>Location Plan</b> 	
Size of site (ha)	2.1
Description of Existing Flood Management Infrastructure (and condition)	NFCDD does not contain any information on any structures or defences at the site.
Existing Land use	The Kensington Leisure Centre site is located in the north west of the Borough, to the south of the Westway in the Latimer Place. The site currently comprises of; Kensington Leisure Centre, car parking areas, sports pitches, playground and Lancaster Green.
Proposed Land use	Development of the site to include: - rebuilding a leisure centre and swimming pool on the existing sports centre site [less vulnerable land use] - development of a new school [more vulnerable land use] - retaining an area of external public open space [less vulnerable land use] - re-providing the existing all-weather pitches at the Westway Sports Centre [less vulnerable land use] - a comprehensive landscape design including the planting of semi-mature trees - provide access to the main entrances for the school and new leisure centre - new housing, so long as the housing does not compromise any of the other objectives for the site [more vulnerable land use]
Topography	> Ground levels on the site range between 6mAOD (in the south west of the site) and 9mAOD
<b>Risk Assessment</b>	
Flood Zones	<b>Proportion of the site located in:-</b> <b>Flood Zone 1 = 2.1ha (low risk of flooding)</b> <b>Flood Zone 2 = 0ha</b> <b>Flood Zone 3a = 0ha</b> <b>Flood Zone 3b = 0ha</b>
Surface Water (Pluvial)	Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts ponding on the site during the 1 in 100 year rainfall event with an allowance for climate change. The deepest areas of ponding occur in the lower elevations in the south west area. Surface water flooding on the site is associated with a moderate (danger for some) and significant (danger for most) hazard rating in the south west area. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.
<b>Flood Depth (m)</b> 	

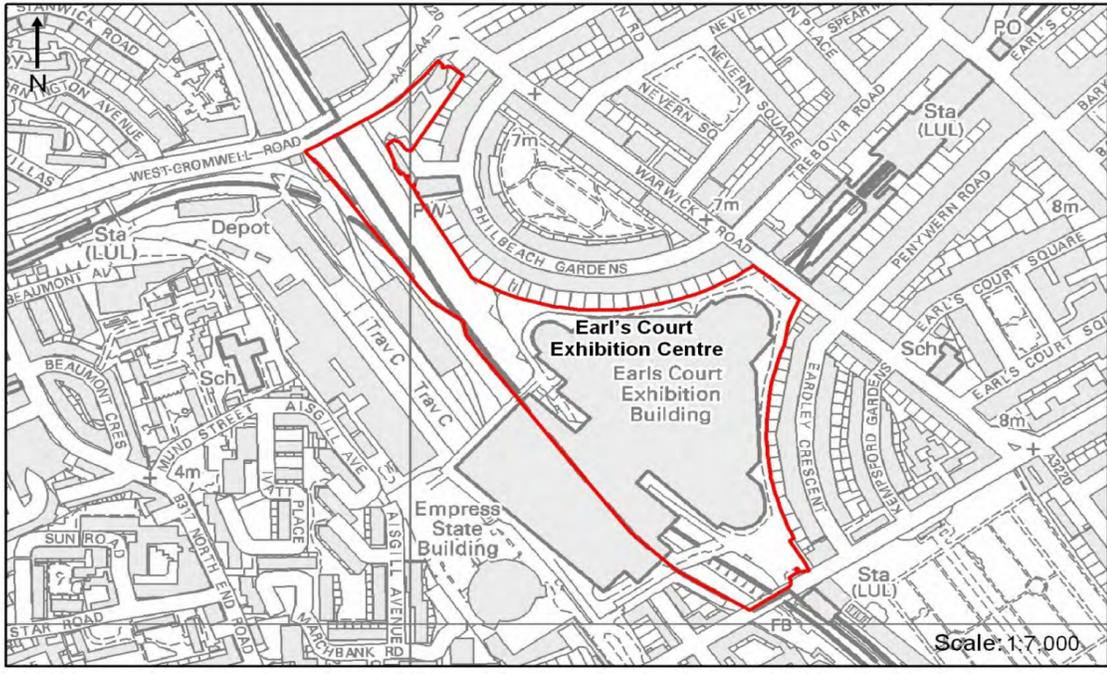
<b>Site Number</b>	04
<b>Site Name</b>	Kensington Leisure Centre
<b>Grid Reference</b>	523970, 180960
<b>CDA</b>	01 North Kensington
<b>Flood Hazard</b>	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset indicates that the site is not at risk of ground water flooding. The 'Areas Susceptible to Groundwater Flooding dataset' shows the site to fall within an area as having low (less than 25%) susceptibility to groundwater flooding.
<b>Artificial Sources</b>	The Environment Agency's reservoir inundation mapping shows areas at risk of flooding from large reservoirs which hold over 25,000 cubic metres of water. The site is not shown to be at risk of flooding from a large reservoir. The Grand Union Canal Paddington Branch is located over 1km to the north east.
<b>Summary of Risk</b>	<ul style="list-style-type: none"> <li>&gt; The site is located in Flood Zone 1, all uses of land are appropriate in this zone.</li> <li>&gt; The site is at low risk from groundwater flooding. There is a significant risk of surface water flooding in some locations in low lying south west areas. There is a low risk of flooding from artificial sources.</li> <li>&gt; Due to the size of the site (greater than 1ha), a flood risk assessment will be required to support the planning application and it would focus on the management of surface water. There would be no requirement for the site to pass the Sequential or Exception Test as it is located in Flood Zone 1 (lowest risk of flooding).</li> </ul>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<ul style="list-style-type: none"> <li>&gt; The design and layout of the proposed development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</li> <li>&gt; Ground floor levels should be above surrounding ground levels to prevent ingress of surface water runoff. This should be agreed with the EA at the earliest opportunity.</li> </ul>
<b>SUDS Options appraisal</b>	<ul style="list-style-type: none"> <li>&gt; An increase in impermeable surfaces from development of this site is likely to result in an increase in surface water runoff, however this can be appropriately managed through the development of a SUDS treatment train for the site.</li> <li>&gt; The site is underlain by London Clay bedrock, which typically has a low level of permeability, and superficial deposits from the Langley Silt Member (which varies from clay to silt) in the south and west of the site. Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</li> <li>&gt; All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.</li> </ul>
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is fully located in Flood Zone 1 and therefore there is no need to apply the Exception Test.

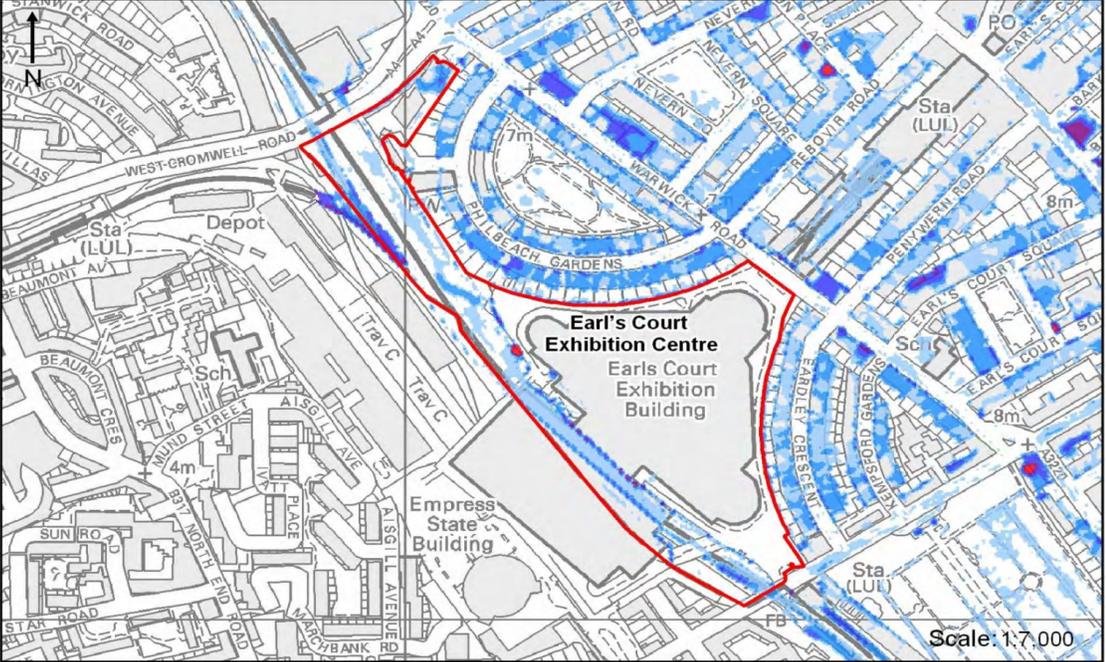
Site Number	05
Site Name	The Former Commonwealth Institute
Grid Reference	525030, 179400
CDA	This site does not fall within a CDA
<b>Location Plan</b> 	
Size of site (ha)	1.4
Description of Existing Flood Management Infrastructure (and condition)	NFCDD does not contain any information on any structures or defences at the site.
Existing Land use	The Grade II listed former Commonwealth Institute 'tent' building. The building lies within and is surrounded by conservation areas. There are also a number of trees which occupy the site all of which are protected by Tree Preservation Orders.
Proposed Land use	Re-development of the site to include: - 9,300 m2 (net) of exhibition or assembly and leisure floor space within the 'tent' building [less vulnerable land use] - retail, restaurant and café, office, storage and ancillary uses [less vulnerable land use] - the erection of two residential buildings and one mixed use building containing: - 62 residential units [more vulnerable land use] - retail and ancillary D1 uses together with basement storage, car, motorcycle and cycle parking, and cinema, fitness centre, swimming pool and spa facilities [less vulnerable land use]
Topography	> Ground levels on the site range between 9mAOD and 15mAOD
<b>Risk Assessment</b>	
Flood Zones	<b>Proportion of the site located in:-</b> <b>Flood Zone 1 = 1.4ha (low risk of flooding)</b> <b>Flood Zone 2 = 0ha</b> <b>Flood Zone 3a = 0ha</b> <b>Flood Zone 3b = 0ha</b>
Surface Water (Pluvial)	Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts deep ponding in the central area of the site (on the west side of the building) during the 1 in 100 year rainfall event with an allowance for climate change. This area of ponding is associated with a significant (danger for most) hazard rating. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.
<b>Flood Depth (m)</b> 	

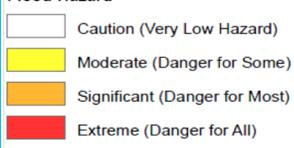
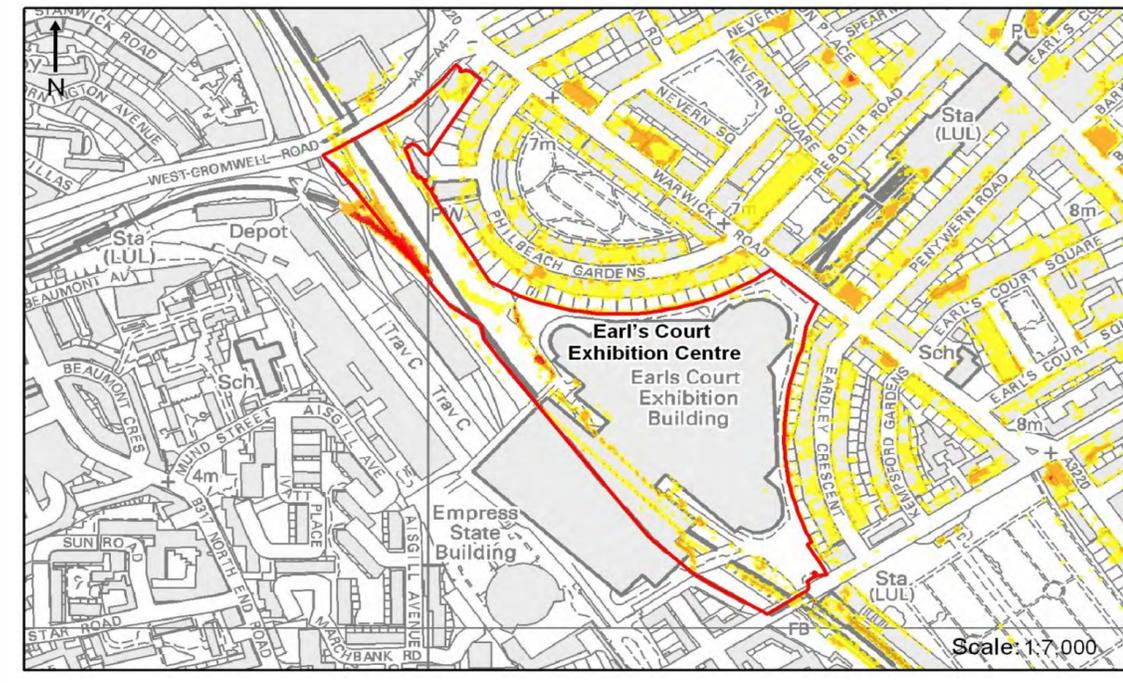
<b>Site Number</b>	05
<b>Site Name</b>	The Former Commonwealth Institute
<b>Grid Reference</b>	525030, 179400
<b>CDA</b>	This site does not fall within a CDA
<b>Flood Hazard</b> 	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset shows that the southern part of the site adjacent to Melbury Close is at risk from groundwater flooding. The 'Areas Susceptible to Groundwater Flooding dataset' indicates that the site falls within an area as having high (50% to 75%) susceptibility to groundwater flooding.
<b>Artificial Sources</b>	The Environment Agency's reservoir inundation mapping shows areas at risk of flooding from large reservoirs which hold over 25,000 cubic metres of water. The site is not shown to be at risk of flooding from a large reservoir. Round Pond in Kensington Gardens is located over 1km to the north east.
<b>Summary of Risk</b>	<ul style="list-style-type: none"> <li>&gt; The site is located in Flood Zone 1, all uses of land are appropriate in this zone.</li> <li>&gt; The site is shown to be at high risk from groundwater flooding. There is a risk of surface water flooding in the central area (on the west side of the building) which is the lowest lying area on the site. There is a low risk of flooding from artificial sources.</li> <li>&gt; Due to the size of the site (greater than 1ha), a flood risk assessment will be required to support the planning application and it would focus on the management of surface water. There would be no requirement for the site to pass the Sequential or Exception Test as it is located in Flood Zone 1 (lowest risk of flooding).</li> </ul>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<ul style="list-style-type: none"> <li>&gt; The design and layout of the proposed development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</li> <li>&gt; The surface water flood risk to the site should be investigated as part of the site specific flood risk assessment. Re-grading/ landscaping of the grounds and the incorporation of SUDs should be considered to prevent ponding directly next to the building.</li> <li>&gt; The existing ground floor levels of the building should be assessed and (if required) options to prevent the ingress of groundwater and surface water runoff into the building should be considered.</li> </ul>
<b>SUDS Options appraisal</b>	<ul style="list-style-type: none"> <li>&gt; The building is surrounded by grassed areas providing space and opportunity to incorporate SUDs. Re-development of in this area is unlikely to result in an increase in surface water runoff if the current area of green space is retained. Improvements to the current situation may be achieved and surface water runoff can be appropriately managed through the development of a SUDS treatment train for the site.</li> <li>&gt; The site is underlain by London Clay bedrock, which typically has a low level of permeability, and superficial deposits from the Taplow Gravel Formation (sands and gravels). Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</li> <li>&gt; All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.</li> </ul>
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is fully located in Flood Zone 1 and therefore there is no need to apply the Exception Test.

Site Number	06
Site Name	Warwick Road (5 sites including 100 West Cromwell Road)
Grid Reference	524700, 178895
CDA	This site does not fall within a CDA
Location Plan	
Size of site (ha)	5.6
Description of Existing Flood Management Infrastructure (and condition)	This sites is not within the flood zones, however flood zones 2 and 3 come close (within 50m) to the northern and the southern site boundaries. NFCDD does not contain any information on any structures or defences at the site.
Existing Land use	These sites lie on the western boundary of the Borough, bordering the London Borough of Hammersmith and Fulham, adjacent to the West London Line. There are five sites in total: Charles House, the former Territorial Army Site, Empress Telephone Exchange, Homebase and, further to the south, 100 West Cromwell Road.
Proposed Land use	Development of the site to include: - 1550 total combined residential units across all 5 sites [more vulnerable land use] - a primary school on-site [more vulnerable land use] - on-site public open space, including outdoor play space [less vulnerable land use]
Topography	> Ground levels on the northern sites range between 3.5mAOD and 7mAOD and on the southern sites, from 3.5m to 8.5m.
Risk Assessment	
Flood Zones	<p>Proportion of the site located in:-</p> <p><b>Flood Zone 1 = 5.6ha (low risk of flooding)</b></p> <p><b>Flood Zone 2 = 0ha</b></p> <p><b>Flood Zone 3a = 0ha</b></p> <p><b>Flood Zone 3b = 0ha</b></p>
Surface Water (Pluvial)	<p>Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts some areas of ponding on the site during the 1 in 100 year rainfall event with an allowance for climate change. These areas of ponding are associated with a moderate (danger for some) and significant (danger for most) hazard rating. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.</p> 

<b>Site Number</b>	06
<b>Site Name</b>	Warwick Road (5 sites including 100 West Cromwell Road)
<b>Grid Reference</b>	524700, 178895
<b>CDA</b>	This site does not fall within a CDA
<b>Flood Hazard</b> 	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset shows the site to be at risk from groundwater flooding. The 'Areas Susceptible to Groundwater Flooding' dataset indicates that the site falls within an area as having very high (greater than 75%) susceptibility to groundwater flooding.
<b>Artificial Sources</b>	A review of the Environment Agency's reservoir inundation mapping shows areas at risk of flooding from large reservoirs which hold over 25,000 cubic metres of water indicates that the flood extents from a reservoir breach scenario of the Queen Mary and Queen Mother Reservoirs (located over 19km to the west of the site) extend as far as the site.
<b>Summary of Risk</b>	<ul style="list-style-type: none"> <li>&gt; The site is located in Flood Zone 1, all uses of land are appropriate in this zone.</li> <li>&gt; The site is shown to be at high risk from groundwater flooding. There is a risk of surface water flooding in some locations, though these are limited to low lying areas. The site is predicted to be within the maximum extent of flooding from a breach of the Queen Mary and Queen Mother Reservoirs (located over 19km to the west of the site). Reservoir flooding is extremely unlikely to happen. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, the Environment Agency ensures that reservoirs are inspected regularly and essential safety work is carried out. The site is considered to be at 'low' actual risk from reservoir flooding and at 'medium' residual risk from a reservoir breach scenario of the Queen Mary and Queen Mother Reservoirs.</li> <li>&gt; Due to the size of the site (greater than 1ha), a flood risk assessment will be required to support the planning application and it would focus on the management of surface water. There would be no requirement for the site to pass the Sequential or Exception Test as it is located in Flood Zone 1 (lowest risk of flooding).</li> </ul>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<ul style="list-style-type: none"> <li>&gt; The design and layout of the proposed development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</li> <li>&gt; Thames Water Ltd own the Queen Mary and Queen Mother Reservoirs. The site developer should contact the local authorities who are responsible for developing emergency plans in the event of a reservoir breach.</li> <li>&gt; Ground floor levels should be above surrounding ground levels to prevent ingress of surface water runoff and groundwater flooding. This should be agreed with the EA at the earliest opportunity.</li> </ul>
<b>SUDS Options appraisal</b>	<ul style="list-style-type: none"> <li>&gt; An increase in impermeable surfaces from development of this site is likely to result in an increase in surface water runoff, however this can be appropriately managed through the development of a SUDS treatment train for the site.</li> <li>&gt; The site is underlain by London Clay bedrock, which typically has a low level of permeability, and superficial deposits from the Kempton Park Gravel Formation (sand and gravels). Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</li> <li>&gt; All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.</li> </ul>
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is fully located in Flood Zone 1 and therefore there is no need to apply the Exception Test.

<b>Site Number</b>	07
<b>Site Name</b>	Earl's Court Exhibition Centre
<b>Grid Reference</b>	525140, 178300
<b>CDA</b>	This site does not fall within a CDA
<b>Location Plan</b>	
<b>Size of site (ha)</b>	7.9
<b>Description of Existing Flood Management Infrastructure (and condition)</b>	The majority of the site is within Flood Zone 1 however part of the site lies within Flood Zones 2 and 3. The site benefits from the River Thames tidal flood defences. These are designed and maintained to provide up to a 1 in 1000 year return period standard of protection.
<b>Existing Land use</b>	This site lies on the western boundary of the Borough, bordering the London Borough of Hammersmith and Fulham, adjacent to the West London Line. The site is currently occupied by the Earl's Court Exhibition Centre and associated uses in the south / east part of the site. TFL London underground tracks are within the western site boundary. The northern part of the site is undeveloped adjacent to the tracks with offices in the north east arm.
<b>Proposed Land use</b>	Development of the site to include: <ul style="list-style-type: none"> <li>- a minimum of 500 homes [more vulnerable land use]</li> <li>- a minimum of 10,000sq.m (108,000sq.ft) of office floor space [less vulnerable land use]</li> <li>- retail and other uses [less vulnerable land use]</li> <li>- a significant cultural facility to retain Earl's Court as an important cultural destination [less vulnerable land use]</li> <li>- other non-residential uses such as hotel and leisure uses [mixed vulnerability]</li> <li>- on-site waste management facilities [more vulnerable land use]</li> </ul>
<b>Topography</b>	The topography on site varies. The lowest elevations are along the London underground lines which range from approximately -1m to 3mAOD. Elevations on the rest of the site range from approximately 5.5mAOD to 11.5mAOD.
<b>Risk Assessment</b>	
<b>Flood Zones</b>	<p><b>Proportion of the site located in:-</b></p> <p><b>Flood Zone 1 = 6.1ha (low risk of flooding)</b></p> <p><b>Flood Zone 2 = 1.8ha</b></p> <p><b>Flood Zone 3a = 1.5ha</b></p> <p><b>Flood Zone 3b = unknown</b></p> <p><b>(3) The site is predominantly located in Flood Zone 1, the north / west area is within Flood Zone 3 and a small area in the south of the site is within Flood Zone 2 (refer to the figure below). The site benefits from the River Thames tidal flood defences. These are designed and maintained to provide up to a 1 in 1000 year return period standard of protection.</b></p>

<b>Site Number</b>	07
<b>Site Name</b>	Earl's Court Exhibition Centre
<b>Grid Reference</b>	525140, 178300
<b>CDA</b>	This site does not fall within a CDA
<div data-bbox="216 537 506 685"> <ul style="list-style-type: none"> <li> Areas Benefitting from Defences</li> <li> Environment Agency Flood Zone 3</li> <li> Environment Agency Flood Zone 2</li> </ul> </div>	
<b>Surface Water (Pluvial)</b>	<p>Surface water modelling undertaken for the Royal Borough of Kensington and Chelsea Surface Water Management Plan predicts some areas of ponding on the site during the 1 in 100 year rainfall event with an allowance for climate change. These areas of ponding are located along the train tracks in the south of the site and around the existing office blocks in the north of the site. These areas are associated with a moderate (danger for some) and significant (danger for most) hazard rating. A small area of deep ponding located at the foot of the track embankment behind Earls Court Exhibition Centre and along the north west boundary is associated with an Extreme (Danger for All) hazard rating. Refer to the figures below for the 1 in 100 year rainfall event with an allowance for climate change.</p>
<div data-bbox="216 1457 506 1694"> <p><b>Flood Depth (m)</b></p> <ul style="list-style-type: none"> <li> &lt; 0.1m</li> <li> 0.1m to 0.25m</li> <li> 0.25m to 0.5m</li> <li> 0.5m to 1.0m</li> <li> 1.0m to 1.5m</li> <li> &gt; 1.5m</li> </ul> </div>	

<b>Site Number</b>	07
<b>Site Name</b>	Earl's Court Exhibition Centre
<b>Grid Reference</b>	525140, 178300
<b>CDA</b>	This site does not fall within a CDA
<b>Flood Hazard</b> 	
<b>Groundwater</b>	Review of the 'Increased Potential for Elevated Groundwater' dataset shows the site to be at risk from groundwater flooding. The 'Areas Susceptible to Groundwater Flooding' dataset indicates that the site falls within an area as having very high (greater than 75%) susceptibility to groundwater flooding.
<b>Artificial Sources</b>	A review of the Environment Agency's reservoir inundation mapping shows areas at risk of flooding from large reservoirs which hold over 25,000 cubic metres of water indicates that the flood extents from a reservoir breach scenario of the Queen Mary and Queen Mother Reservoirs (located over 19km to the west of the site) extend as far as the site.
<b>Residual Risk</b>	The site does not lie within the flood extents from the 1 in 200 year event (with an allowance for climate change) breach modelling for Kensington and Chelsea. The flood extent from the 1 in 200 year event breach model scenario for the Hammersmith and Fulham SFRA comes close to the southern boundary of the site (but does not enter the site). Updates to the breach modelling are being carried out as part of updates to the Hammersmith and Fulham SFRA.
<b>Summary of Risk</b>	<p>&gt; The site is partly located in Flood Zone 3. In accordance with the NPPF guidance, 'Water Compatible' and 'Less Vulnerable' land uses are appropriate with in Flood Zone 3a, 'Essential Infrastructure' and 'More Vulnerable' land uses require the Exception Test to be passed. 'Highly Vulnerable' land uses are not appropriate within Flood Zone 3a.</p> <p>&gt; The site is shown to be at high risk from groundwater flooding. There is a risk of surface water flooding in the lower lying areas of the site along the south and western boundary. The site is predicted to be within the maximum extent of flooding from a breach of the Queen Mary and Queen Mother Reservoirs (located over 19km to the west of the site). Reservoir flooding is extremely unlikely to happen. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, the Environment Agency ensures that reservoirs are inspected regularly and essential safety work is carried out. The site is considered to be at 'low' actual risk from reservoir flooding and at 'medium' residual risk from a reservoir breach scenario of the Queen Mary and Queen Mother Reservoirs.</p> <p>&gt; The flood extent from the 1 in 200 year event breach model scenario for the Hammersmith and Fulham SFRA comes close to the southern boundary of the site (but does not enter the site). The site is currently considered to be at 'low' actual risk from a breach of the Thames flood defences, however updates to the breach modelling for the Hammersmith and Fulham SFRA should be consulted as part of a site specific flood risk assessment.</p>
<b>Risk Management</b>	
<b>Flood risk management recommendations</b>	<p>&gt; A flood risk assessment will be required to support the planning application for this site. The Sequential Test will need to be applied for all types of development within the development site, however, if there is More Vulnerable development proposed within the 1% AEP flood extent the Exception Test must also be applied. Substitution of More Vulnerable development for any Less Vulnerable development within the 1% AEP flood extent is recommended wherever possible. Replacing More Vulnerable uses on the ground floor with Less Vulnerable uses on the ground floor may also be appropriate.</p> <p>&gt; The design and layout of the proposed development should seek as much as possible to avoid impacting overland flow routes within the site, which may increase flood risk elsewhere.</p> <p>&gt; Thames Water Ltd own the Queen Mary and Queen Mother Reservoirs. The site developer should contact the local authorities who are responsible for developing emergency plans in the event of a reservoir breach.</p> <p>&gt; Updates to the breach modelling for the Hammersmith and Fulham SFRA should be consulted as part of a site specific flood risk assessment.</p> <p>&gt; Ground floor levels should be set above surrounding ground levels to prevent ingress of groundwater and surface water. This should be agreed with the EA at the earliest opportunity.</p>
<b>SUDS Options appraisal</b>	<p>&gt; An increase in impermeable surfaces from development of this site (in particular the green areas adjacent to the train tracks) is likely to result in an increase in surface water runoff, however this can be appropriately managed through the development of a SUDS treatment train for the site.</p> <p>&gt; The site is underlain by London Clay bedrock, which typically has a low level of permeability, and superficial deposits from the Kempton Park Gravel Formation (sand and gravels). Therefore there maybe limited opportunity to utilise infiltration based SUDS techniques at the site.</p>

<b>Site Number</b>	07
<b>Site Name</b>	Earl's Court Exhibition Centre
<b>Grid Reference</b>	525140, 178300
<b>CDA</b>	This site does not fall within a CDA
	> All SUDS measures are suitable depending on the final layout and results of permeability testing of the insitu soils. It is recommended that infiltration testing is undertaken to determine the suitability of infiltration devices within the site.
<b>Reasonable prospect of compliance with the Exception Test?</b>	> The site is partly located in Flood Zone 3. If either 'Essential Infrastructure' and 'More Vulnerable' land uses are located within Flood Zone 3a, the Exception Test must be passed. There is a reasonable prospect of the site complying with the Exception Test: The site has been allocated The site benefits from the River Thames tidal flood defences designed and maintained to provide up to a 1 in 1000 year return period standard of protection. Breach modelling shows that the site is not predicted to be at residual risk of flooding from a breach of the tidal defences. The site specific flood risk assessment must demonstrate that development will be safe for its lifetime.