

APPENDIX B

MATRIX OF AREAS

Site	Current Land Use	Proposed Land Use	NPPF Zone			Approx % of defended Flood Zone 2 & 3	Known risk of flooding from other sources	Residual Risk	Specific Comments	Suitability of NPPF Flood Risk Vulnerability Classification within Worst Case Flood Zone					Comments
			Approximate % in Flood Zone 1	Approximate % in Flood Zone 2	Approximate % in Flood Zone 3					Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water-compatible	
Barking Town Centre	Mixed Use	Residential	65%	5%	30%	95%	Pockets of significant surface water flood risk. Area of increased potential for elevated groundwater. Risk of flooding from reservoirs.	Breach of defences posing high risk of fluvial flooding from Barking Creek / River Roding and tidal flooding from the River Thames to c. 35% of site. Very high flood hazard and rate of inundation less than 5 hours in some areas.	This site is situated partially within high risk Flood Zone 3a. Following the application of the Sequential Test, future development within this zone should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. All development should be guided towards areas of lowest risk within the site and development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA.						Many areas in FZ1. Areas within FZ2 and FZ3 are susceptible to both tidal and fluvial flooding, but vast majority of areas protected by flood defences. Management of surface water flooding key consideration.
Barking Riverside	Mixed Use	Residential	50%	5%	45%	100%	Generally low risk of surface water flood risk. Area of increased potential for elevated groundwater. Risk of flooding from reservoirs.	Breach of defences posing high risk of fluvial flooding from Barking Creek / River Roding and tidal flooding from the River Thames to c. 20% of site. Very high flood hazard and rate of inundation less than 5 hours in some areas.	This site is situated partially within high risk Zone 3a, although land raising has moved much of the site into Flood Zone 1. Following the application of the Sequential Test, future development within Flood Zone 3 should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. All development should be guided towards areas of lowest risk within the site and development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA.						Majority of site raised to be located in FZ1. Sections of site in FZ2 and FZ3 at risk of rapid inundation following breach of defences. Management of residual risks, particularly access/egress, are of key consideration.
Creekmouth	Industrial	Residential	2%	1%	97%	97%	Generally low risk of surface water flood risk, although moderate hazard within River Road.	Breach of defences posing high risk of fluvial flooding from Barking Creek / River Roding and tidal flooding from the River Thames to c. 95% of site. Very high flood hazard and rate of inundation less than 5 hours in some areas.	The vast majority of the site is situated within high risk Zone 3a. Following the application of the Sequential Test, future development within this zone should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. Development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA.						Vast majority of site within high risk FZ3, although area is protected by flood defences. Management of residual risks are of key consideration.
Thames Road	Industrial	Residential	0%	0%	100%	100%	Generally low risk of surface water flood risk, although moderate hazard within Thames Road.	Breach of defences posing high risk of fluvial flooding from Barking Creek / River Roding and tidal flooding from the River Thames to 100% of site. Very high flood hazard and rate of inundation less than 5 hours in some areas.	The site is entirely situated within high risk Zone 3a. Following the application of the Sequential Test, future development within this zone should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. Development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA.						All of site within high risk FZ3, although area is protected by flood defences. Management of residual risks are of key consideration.
Dagenham Dock	Industrial	Industrial	0%	0%	100%	100%	Generally low risk of surface water flood risk, although significant hazard within Chequers Lane. Area of increased potential for elevated groundwater. Risk of flooding from Washlands flood storage area.	Breach of defences posing high risk of fluvial flooding from River Beam and River Roding, and tidal flooding from the River Thames to c. 80% of site. Beam defences less than 1% SoP. Very high flood hazard and rate of inundation of less than 5 hours in some areas.	The site is entirely situated within high risk Zone 3a. Following the application of the Sequential Test, future development within this zone should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. Development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA. Consideration must be given to fluvial flooding from Beam River.						All of site within high risk FZ3, although area is largely protected by flood defences. Management of residual risks and flooding from Beam River are of key consideration.
Ford Stamping Plant (including Chequers Corner) and Beam Park	Industrial	Residential	5%	1%	94%	100%	Generally low risk of surface water flood risk, although moderate hazard around perimeter of Ford Stamping Plant and fire station. Area of increased potential for elevated groundwater. Risk of flooding from Washlands flood storage area.	Breach of defences posing high risk of fluvial flooding from River Beam and River Roding, and tidal flooding from the River Thames to c. 95% of site. Very high flood hazard and rate of inundation of less than 5 hours in some areas.	The vast majority of the site is situated within high risk Zone 3a. Following the application of the Sequential Test, future development within this zone should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. Development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA.						Vast majority site within high risk FZ3, although area is protected by flood defences. Management of residual risks are of key consideration.
Chadwell Heath Local Significant Industrial Site	Industrial	Residential / Industrial	100%	0%	0%	N/A	Generally low risk of surface water flood risk, although significant hazard at the junction of Selinas Road and Coppen Road. Area of increased potential for elevated groundwater.	Low residual risk.	The site is located within Flood Zone 1 and therefore all types of development are considered appropriate. Consideration should be given to the management and, where possible, reduction of surface water flood risk. Sustainable drainage techniques should be stipulated as a development control recommendation to reduce runoff from the site, thereby not exacerbating existing localised drainage problems and providing betterment to areas at risk elsewhere.						Site located entirely in Flood Zone 1 and all types of development permitted. Opportunity to reduce surface water flood risk elsewhere.
Wantz Industrial Estate Local Significant Industrial Site	Industrial	Industrial / Residential	100%	0%	0%	N/A	Significant surface water flood hazard through centre of site with depths greater than 1m predicted during 1 in 100 (1%) annual probability rainfall event. Area of increased potential for elevated groundwater.	Low residual risk.	The site is located within Flood Zone 1 and therefore all types of development are considered appropriate. Consideration should be given to the management and, where possible, reduction of surface water flood risk. Sustainable drainage techniques should be stipulated as a development control recommendation to reduce runoff from the site, thereby not exacerbating existing localised drainage problems and providing betterment to areas at risk elsewhere.						Site located entirely in Flood Zone 1 and all types of development permitted. Significant risk of surface water flooding in the centre of this site, and opportunity to reduce surface water flood risk elsewhere.
Dagenham East	Industrial	Industrial / Residential	100%	0%	0%	N/A	Generally low risk of surface water flood risk, although significant hazard at junction of Rainham Road South, Reede Road and Fowlands Road. Area of increased potential for elevated groundwater.	Low residual risk.	The site is located within Flood Zone 1 and therefore all types of development are considered appropriate. Consideration should be given to the management and, where possible, reduction of surface water flood risk. Consideration must also be given to safe access and egress. Sustainable drainage techniques should be stipulated as a development control recommendation to reduce runoff from the site, thereby not exacerbating existing localised drainage problems and providing betterment to areas at risk elsewhere.						Site located entirely in Flood Zone 1 and all types of development permitted. Significant risk of surface water flooding to west of this site, and opportunity to reduce surface water flood risk elsewhere.
Rippleside Commercial Area	Commercial	Residential	45%	5%	50%	100%	Generally low risk of surface water flood risk, although significant hazard in Renwick Road and Wayside Commercial Estate. Area of increased potential for elevated groundwater.	Breach of defences posing high risk of fluvial flooding from Barking Creek / River Roding and tidal flooding from the River Thames to 95% of site. Very high flood hazard and rate of inundation less than 5 hours in some areas.	Approximately half of the site is situated within high risk Zone 3a. Following the application of the Sequential Test, future development within this zone should be restricted to water compatible and less vulnerable uses and, following the successful application of the Exception Test, more vulnerable uses and essential infrastructure. Development should be designed in strict accordance with the development and control recommendations set out in the Level 1 SFRA.						Much of the site within high risk FZ3, although area is protected by flood defences. Management of residual risks and surface water flooding are of key consideration.
Dagenham Leisure Park	Commercial	Residential	100%	0%	0%	N/A	Low risk of flooding from other sources.	Low residual risk.	The site is located within Flood Zone 1 and therefore all types of development are considered appropriate.						Site located entirely in Flood Zone 1 and all types of development permitted.
Barking and Dagenham College	Educational / Greenfield	Residential	100%	0%	0%	N/A	Low risk of flooding from other sources.	Low residual risk.	The site is located within Flood Zone 1 and therefore all types of development are considered appropriate. Sustainable drainage techniques should be stipulated as a development control recommendation to control runoff from the site, thereby not exacerbating existing localised drainage problems and providing betterment to areas at risk elsewhere.						Site located entirely in Flood Zone 1 and all types of development permitted. Opportunity to reduce surface water flood risk elsewhere.
Marks Gate including Green Belt to north of Billet Lane and to east of Whalebone Lane north	Residential / Greenfield	Residential	100%	0%	0%	N/A	Low risk of flooding from other sources. Small area with increased potential for elevated groundwater.	Low residual risk.	The site is located within Flood Zone 1 and therefore all types of development are considered appropriate. Sustainable drainage techniques should be stipulated as a development control recommendation to control runoff from the site, thereby not exacerbating existing localised drainage problems and providing betterment to areas at risk elsewhere.						Site located entirely in Flood Zone 1 and all types of development permitted. Opportunity to reduce surface water flood risk elsewhere.