

# Lower Thames Crossing

## 6.3 Environmental Statement Appendices

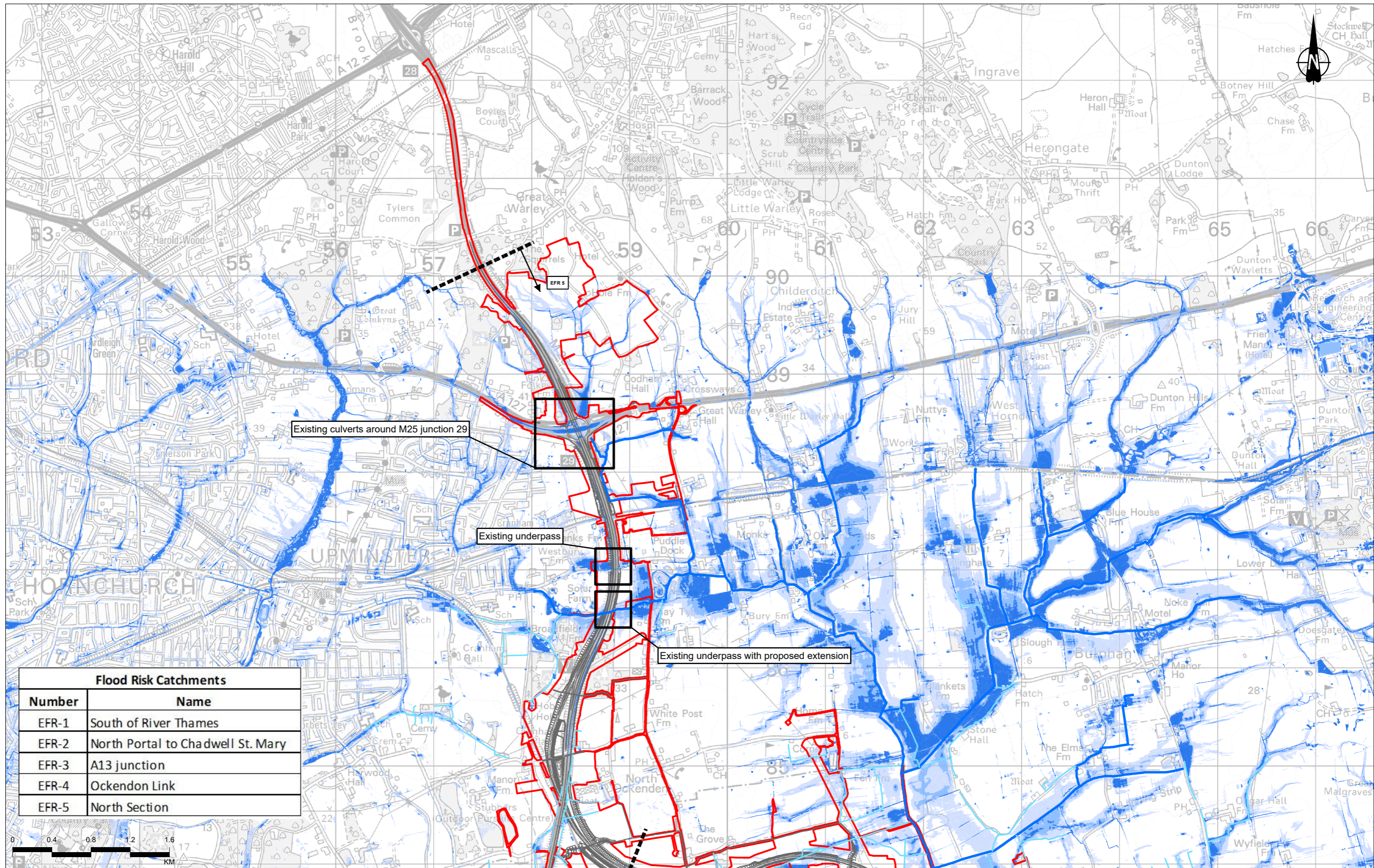
### Appendix 14.6 - Flood Risk Assessment - Part 9 Annex B

APFP Regulation 5(2)(a)  
Infrastructure Planning  
(Applications: Prescribed Forms and Procedure)  
Regulations 2009  
Volume 6

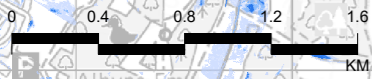
**DATE:** October 2022

Planning Inspectorate Scheme Ref: TR010032  
Application Document Ref: TR010032/APP/6.3

**VERSION:** 1.0



Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd
P01	S8	10/20/2022	DCO Application	SW	IF	BF

- Legend**
- Route alignment and earthworks
  - Order Limits
  - Flood risk catchment
  - Main river
  - Ordinary watercourse
  - High risk: Areas that have a chance of flooding of greater than 3.3% each year
  - Medium risk: Areas that have a chance of flooding of between 1% and 3.3% each year
  - Low risk: Areas that have a chance of flooding of between 0.1% and 1% each year
  - Very low risk: Areas that have a chance of flooding of less than 0.1% each year

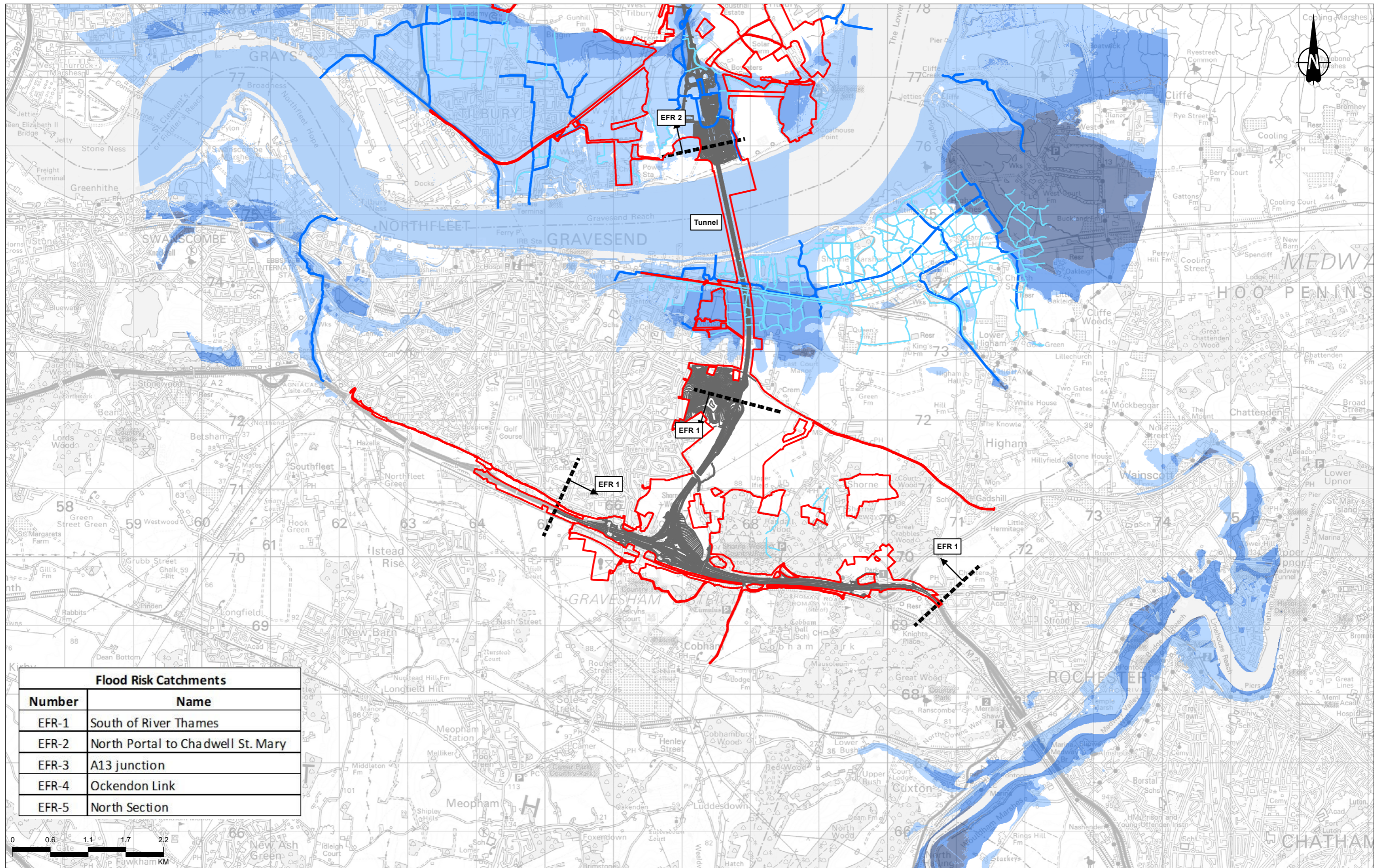
**Notes:**  
 Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding.



Client: national highways

Project: LOWER THAMES CROSSING

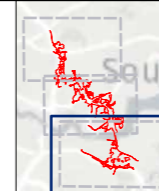
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Application Document Number	TR010032/APP/6.3	Scale	1:35,000		
Drawing Title	Flood Risk Assessment Extent of Surface Water Sheet 3 of 3				
Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZ-DR-LF-00132				



Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



Legend					
	Route alignment and earthworks		Main river		High
	Order Limits		Ordinary watercourse		Moderate
	Flood risk catchment				Low

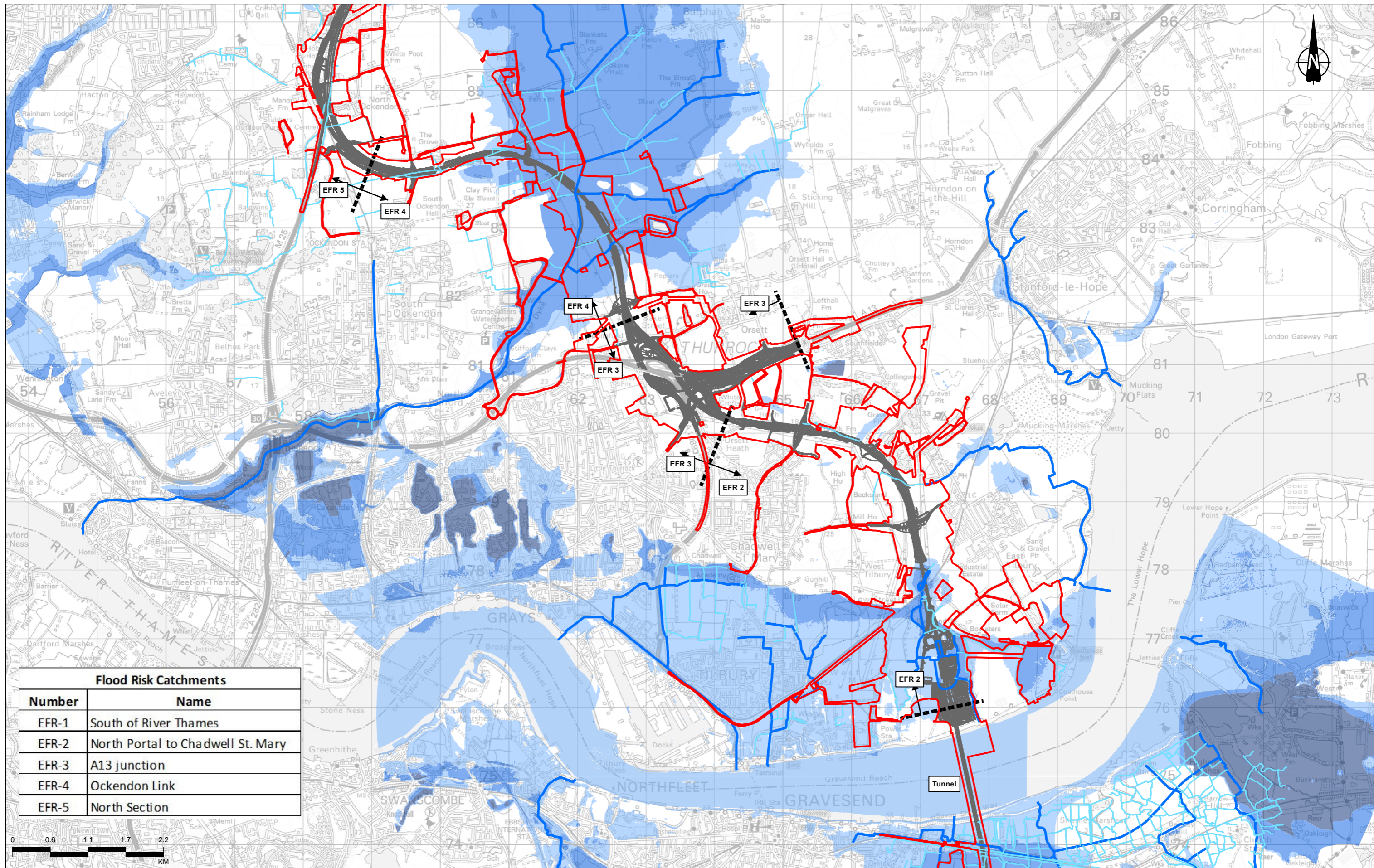


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Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/6.3	Scale	1:50,000		
Drawing Title	Flood Risk Assessment Groundwater Flooding Susceptibility - Sheet 1 of 3				
Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZ-DR-LF-00151				

P01	S8	20/10/2022	DCO Application	SW	IF	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Appvd

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Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



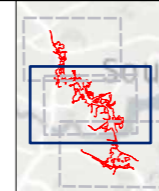
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**Legend**

- Route alignment and earthworks
- Main river
- Ordinary watercourse
- Order Limits
- Flood risk catchment

**Groundwater flood risk**

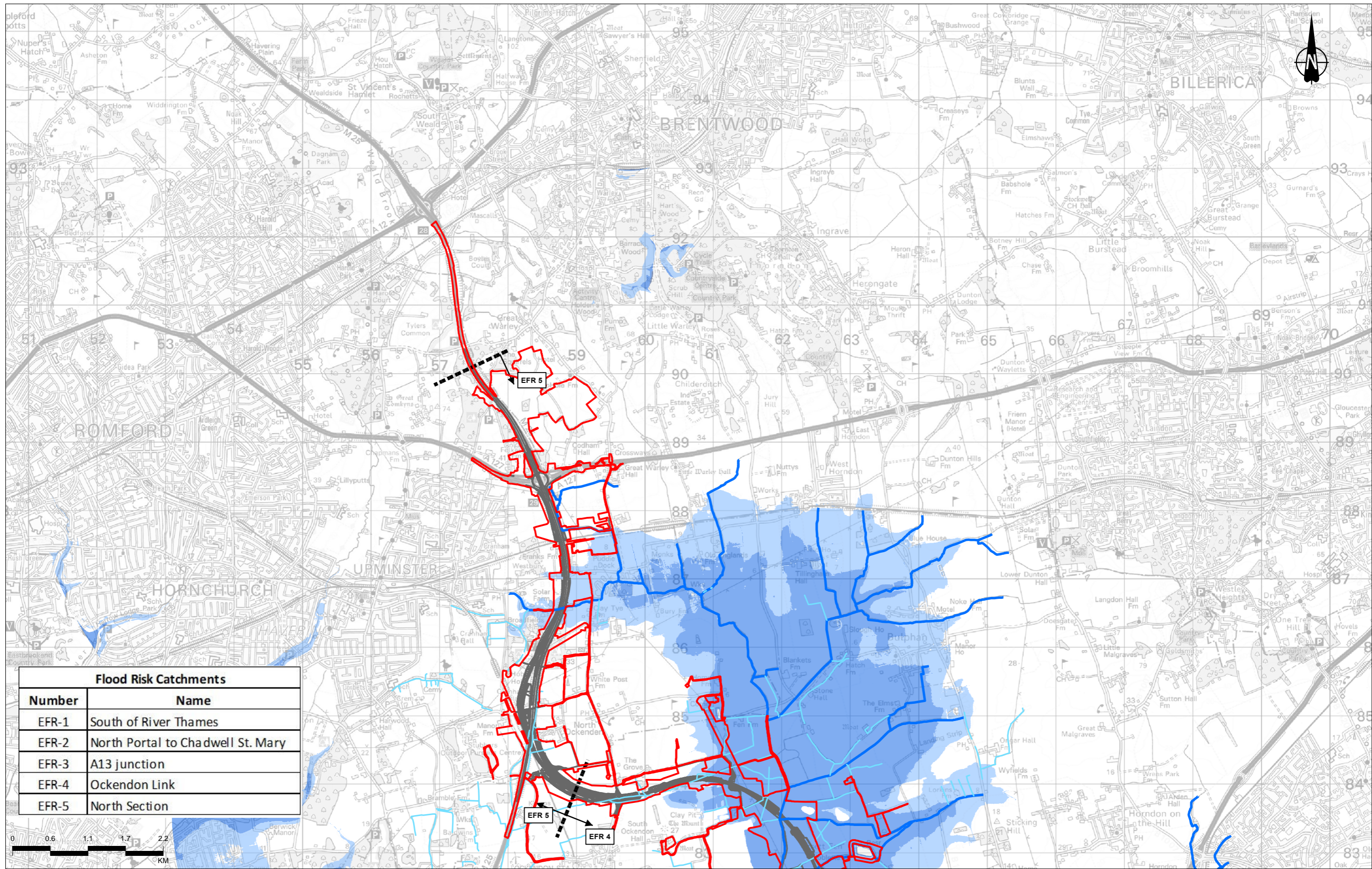
- High
- Moderate
- Low



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Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/6.3	Scale	1:50,000		
Drawing Title	Flood Risk Assessment Groundwater Flooding Susceptibility - Sheet 2 of 3				
Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZ-DR-LF-00152				

P01	S8	20/10/2022	DCO Application	SW	IF	BF
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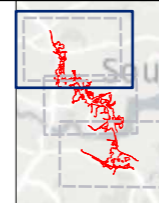


Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



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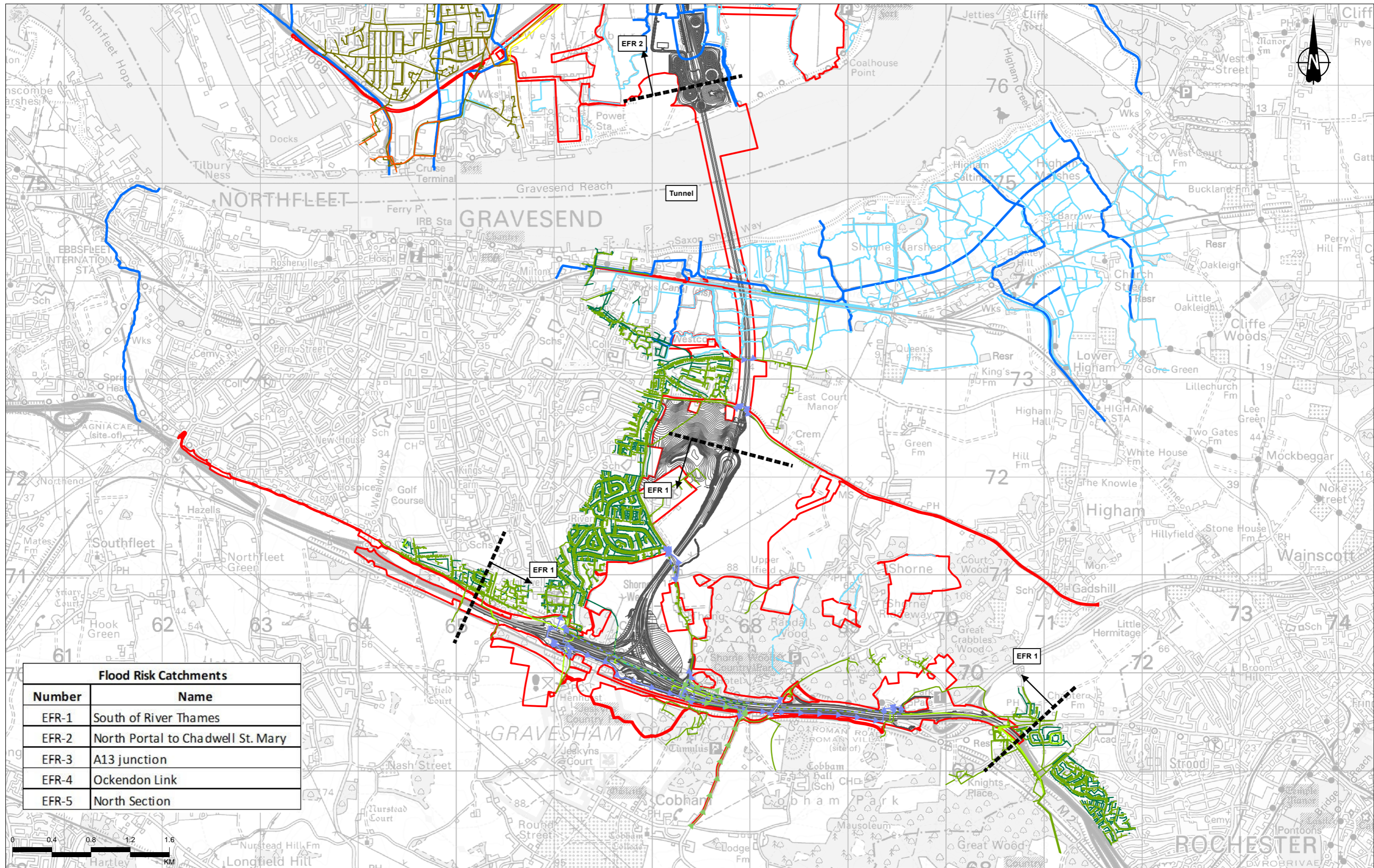
Legend	
— Route alignment and earthworks	— Main river
— Order Limits	— Ordinary watercourse
■ Flood risk catchment	
	<b>Groundwater flood risk</b>
	■ High
	■ Moderate
	■ Low



Client  
 national highways  
 Project  
**LOWER THAMES CROSSING**

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/6.3	Scale	1:50,000		
Drawing Title	Flood Risk Assessment Groundwater Flooding Susceptibility - Sheet 3 of 3				
Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZ-DR-LF-00153				

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Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd
P01	S8	20/10/2022	DCO Application	LK	IF	BF

Legend	
	Order Limits
	Route alignment and earthworks
	Flood risk catchment
	Main river
	Ordinary watercourse
	Existing utility water network
	Thames waste water
	Anglian waste water - drainage
	Anglian waste water - wastewater gravity
	Anglian waste water - wastewater rising main
	Essex and Suffolk Water assets
	Clean water - abandoned
	Clean water - operational
	Gravity pipes - abandoned
	Gravity pipes - operational
	Gravity structures - manhole
	Gravity structures - pumping station
	Proposed utility water network
	Water distribution network - CA05 - Compound supply
	Water distribution network - abandoned
	Water distribution network - proposed
	Proposed diversion
	Gravity - abandoned
	Gravity - proposed
	Clean water - abandoned
	Clean water - proposed
	Anglian sewer water - gravity
	Anglian sewer water - gravity redundant
	Anglian sewer water - rising main
	Anglian sewer water - rising main redundant

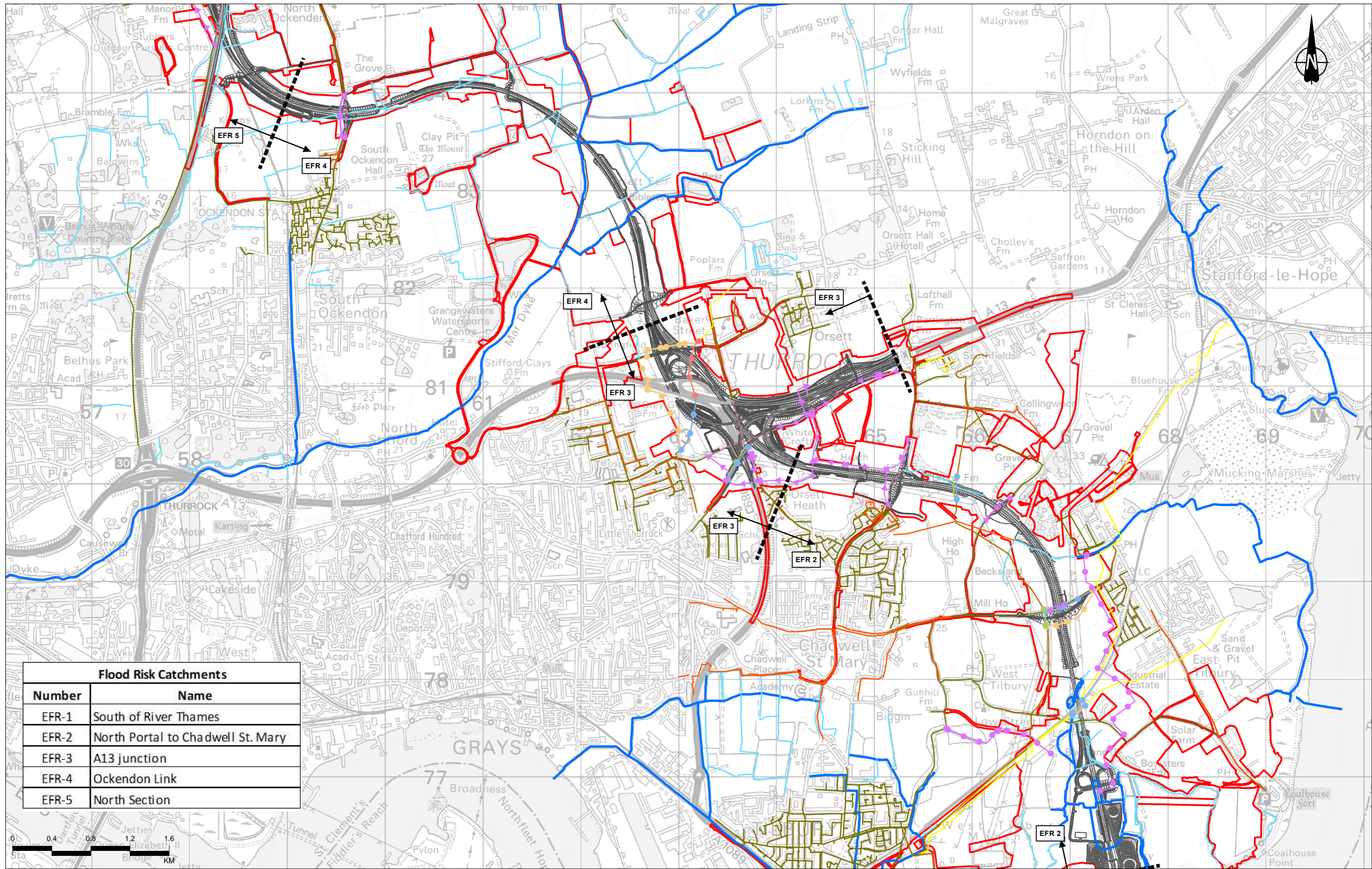


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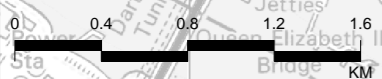
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Application Document Number	TR010032/APP/6.3	Scale	1:35,000		
Drawing Title	Flood Risk Assessment Water Utilities Asset Data Sheet 1 of 3				
Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZZ-DR-LF-00170				

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Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



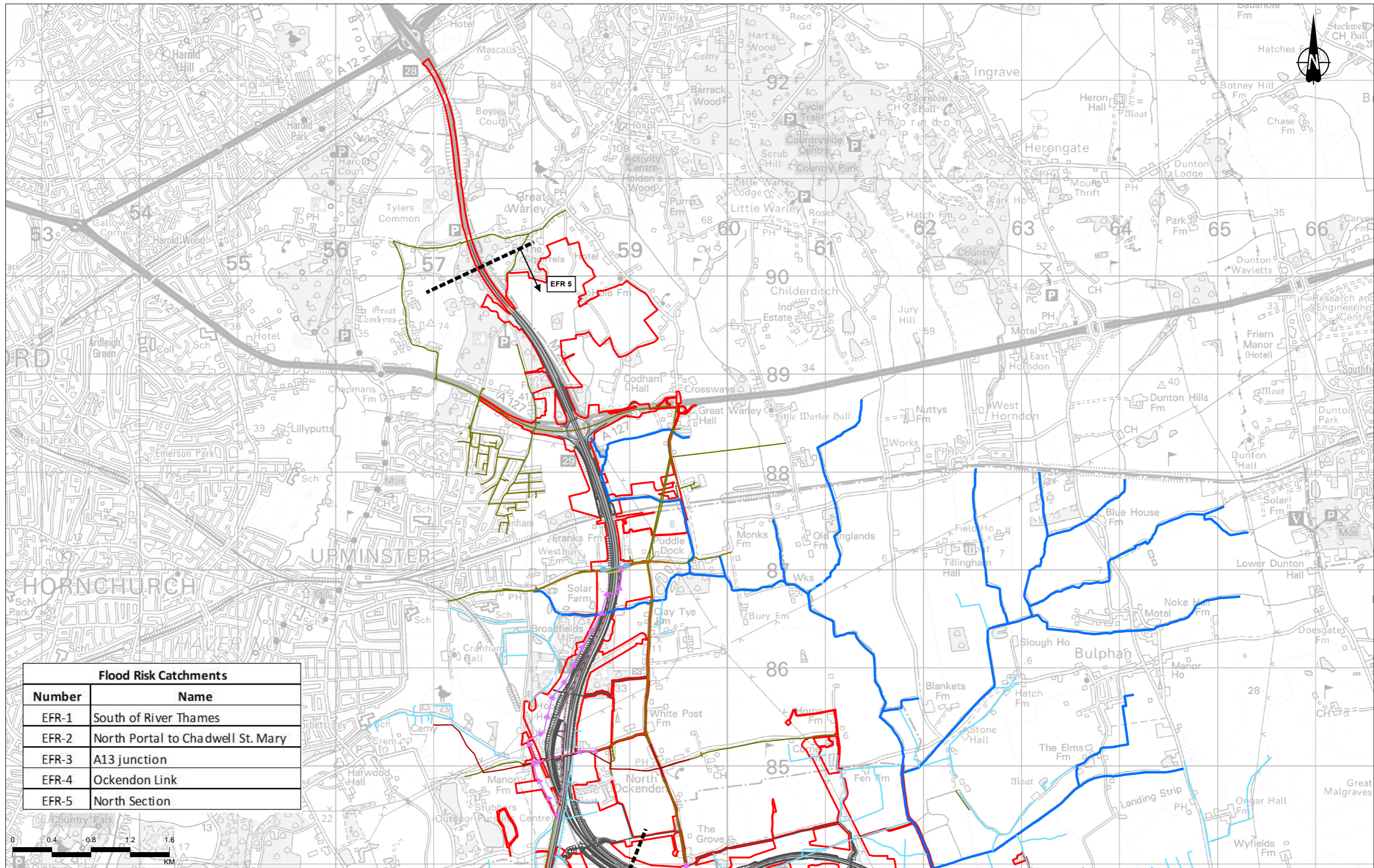
Legend	
Order Limits	Anglian waste water - drainage
Route alignment and earthworks	Gravity pipes - abandoned
Flood risk catchment	Gravity pipes - operational
Main river	Gravity structures - manhole
Ordinary watercourse	Gravity structures - pumping station
Existing utility water network	<b>Proposed utility water network</b>
Thames waste water	Water distribution network - abandoned
Anglian waste water - wastewater gravity	Water distribution network - proposed
Anglian waste water - wastewater rising main	Proposed diversion
Essex and Suffolk Water assets	Gravity - abandoned
Clean water - abandoned	Gravity - proposed
Clean water - operational	Compound supply
	Clean water - abandoned
	Clean water - proposed
	Anglian sewer water - gravity
	Anglian sewer water - gravity redundant
	Anglian sewer water - rising main
	Anglian sewer water - rising main redundant

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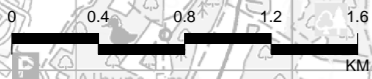
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Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/6.3	Scale	1:35,000		
Drawing Title	Flood Risk Assessment Water Utilities Asset Data Sheet 2 of 3				
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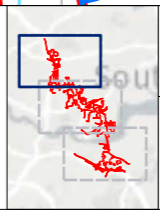


Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
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EFR-5	North Section



Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd
P01	S8	20/10/2022	DCO Application	LK	IF	BF

Existing utility water network		Proposed utility water network	
Order Limits	Anglian waste water - drainage	Gravity pipes - abandoned	Water distribution network - abandoned
Route alignment and earthworks	Anglian waste water - wastewater gravity	Gravity pipes - operational	Water distribution network - proposed
Flood risk catchment	Anglian waste water - wastewater rising main	Gravity structures - manhole	Proposed diversion
Main river	Essex and Suffolk Water assets	Gravity structures - pumping station	Gravity - abandoned
Ordinary watercourse	Clean water - abandoned	Gravity - proposed	Gravity - proposed
Existing utility water network	Clean water - operational	Water distribution network - CA05 - Compound supply	Clean water - abandoned
Thames waste water			Clean water - proposed
			Anglian sewer water - gravity
			Anglian sewer water - gravity redundant
			Anglian sewer water - rising main
			Anglian sewer water - rising main redundant



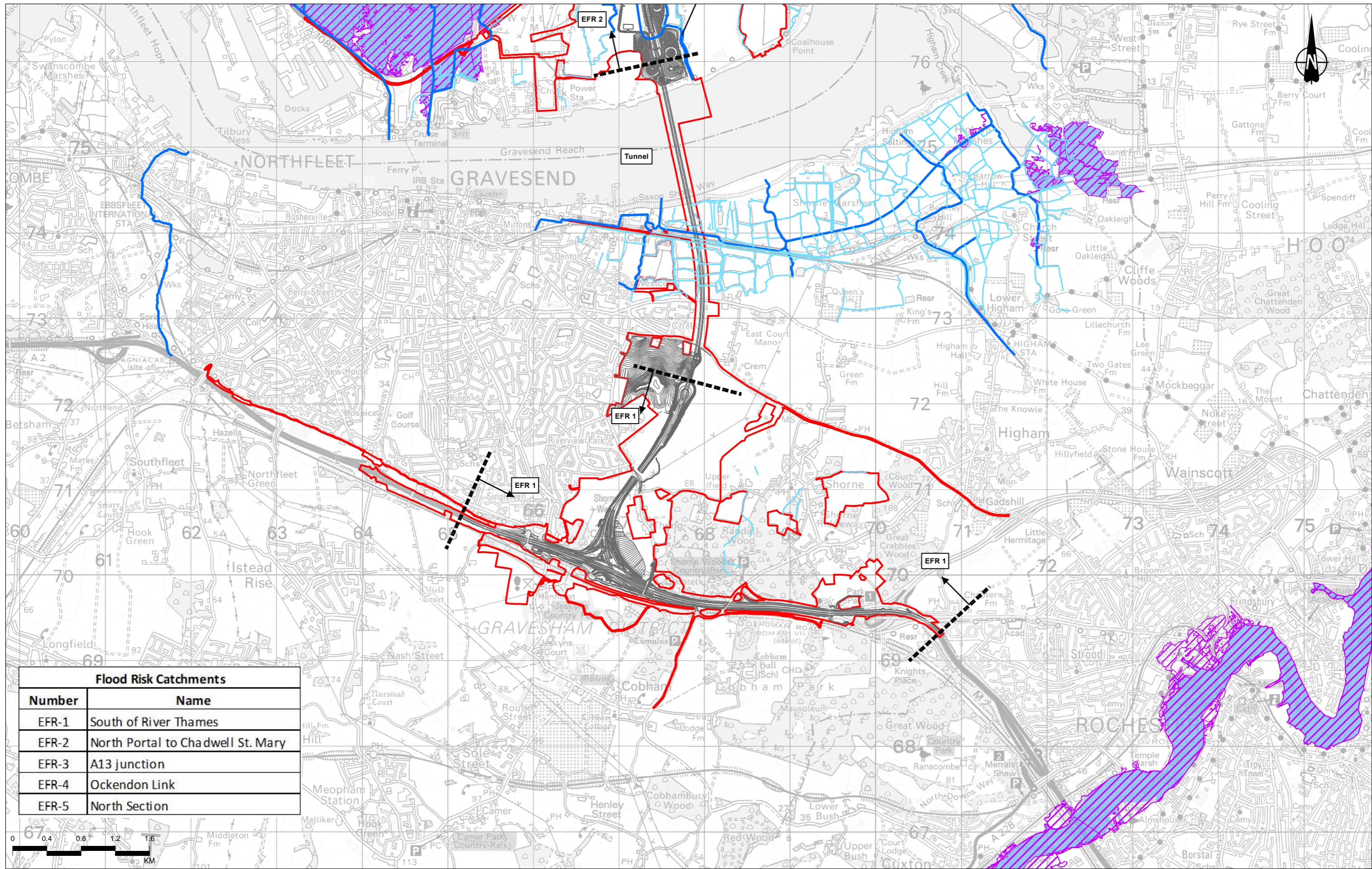
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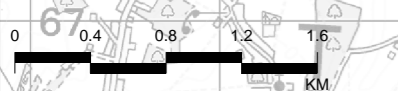
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Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZZ-DR-LF-00172				

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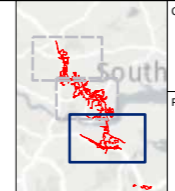




Flood Risk Catchments	
Number	Name
EFR-1	South of River Thames
EFR-2	North Portal to Chadwell St. Mary
EFR-3	A13 junction
EFR-4	Ockendon Link
EFR-5	North Section



Legend	
	Route alignment and earthworks
	Order Limits
	Flood risk catchment
	Main river
	Ordinary watercourse
	Maximum extent of flooding from reservoirs when river levels are normal
	Maximum extent of flooding from reservoirs when there is also flooding from rivers



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Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/6.3	Scale	1:40,000		
Drawing Title	Flood Risk Assessment Flood Risk from Reservoirs Page 1 of 3				
Drawing Number	HE540039-CJV-EFR-SZP_GNZZZZZZ-DR-LF-00174				

P01	S8	20/10/2022	DCO Application	SW	IF	BF
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