

A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 6 **6.8 Environmental Masterplan**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

August 2021

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A47 Wansford to Sutton Development Consent Order 202[x]

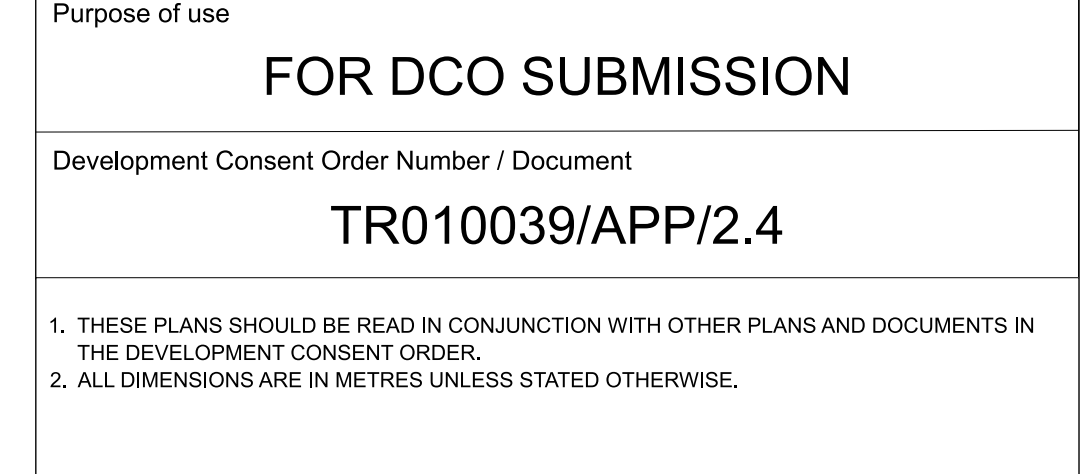
6.8 ENVIRONMENTAL MASTERPLAN

Regulation Number:	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010039
Application Document Reference	TR010039/APP/6.8
Author:	A47 Wansford to Sutton Project Team, National Highways

Version	Date	Status of Version
Rev 0	July 2021	Application Issue
Rev 1	August 2021	Updated following PINS advice

SCHEDULE OF PLANS INCLUDED IN THIS APPLICATION DOCUMENT

Drawing Title	Drawing number
Environmental Masterplan (DCO) – Key Plan	HE551494-GTY-ELS-000-DR-LE-33008
Environmental Masterplan (DCO) – Plant Schedule	HE551494-GTY-ELS-000-DR-LE-32009
Environmental Masterplan (DCO) – Sheet 1	HE551494-GTY-ELS-000-DR-LE-33001
Environmental Masterplan (DCO) – Sheet 2	HE551494-GTY-ELS-000-DR-LE-33002
Environmental Masterplan (DCO) – Sheet 3	HE551494-GTY-ELS-000-DR-LE-33003
Environmental Masterplan (DCO) – Sheet 4	HE551494-GTY-ELS-000-DR-LE-33004
Environmental Masterplan (DCO) – Sheet 5	HE551494-GTY-ELS-000-DR-LE-33005
Environmental Masterplan (DCO) – Sheet 6	HE551494-GTY-ELS-000-DR-LE-33006
Environmental Masterplan (DCO) – Sheet 7	HE551494-GTY-ELS-000-DR-LE-33007



ORDER LIMITS

DESIGNER

SWECO 

 GallifordTry



highways
england

A47 WANSFORD TO SUTTON DUALLING

PCF STAGE 3


ENVIRONMENTAL MASTERPLAN

KEY PLAN

SHEET SIZE A1	SCALE N/A	STATUS S4	REVISION P01
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HE551494-GTY-ELS-000-DR-LE-33008

	LE 2.5 Shrubs with Intermittent Trees		
	Shrubs with LE5.1.1 individual trees; to be planted in naturalistic groups		
	Supply size		
	Shrubs: 1+1 450-600mm high transplants		
	Trees: 8-10cm girth standards and 12-14cm girth heavy standard trees		
	Plant spacing		
	Plant in groups at 1.5m centres		
	Plant grouping		
	Plant all species in single species of 3-5		
	Species		
Latin Name	Common Name	% of mix	
Crataegus monogyna	Hawthorn	30	
Prunus spinosa	Blackthorn	7.5	
Sambucus nigra	Elder	7.5	
Rosa canina	Dog rose	15	
Rubus fruticosus	Bramble	5	
Cornus sanguinea	Dogwood	15	
Corylus avellana	Hazel	20	

	<u>LE 5.1 Individual Trees</u> Supply size Mix of 6-8cm girth light standard trees	
	Species	
	Latin Name	Common Name
	Acer campestre	Field maple
	Acer pseudoplatanus	Sycamore
	Malus sylvestris	Common crab apple
	Pinus sylvestris	Scots pine
	Prunus avium	Wild cherry
	Quercus robur	Pedunculate oak
	Salix alba	White willow

	LE 6.4 Marsh and Wet Grassland		
	Riparian seed mix and plug plants		
	Riparian Seed Mix		
	Emorsgate EP1 Pond Edge mixture		
	Sowing rate:		
	4g/m2		
	Species		
	Latin Name	Common Name	% of mix
	Wildflowers (20%)		
	Achillea ptarmica	Sneezewort	1
	Angelica sylvestris	Wild angelica	2.3
	Caltha palustris	Marsh marigold	0.1
	Eupatorium cannabinum	Hemp agrimony	0.6
	Filipendula ulmaria	Meadowsweet	3
	Geum rivale	Water avens	1
	Hypericum tetrapterum	Square-stalked st john's wort	0.4
	Iris pseudacorus	Yellow Iris	4
	Lotus pedunculatus	Greater birdsfoot trefoil	1
	Lycopus europaeus	Gypsywort	0.8
	Lythrum salicaria	Purple loosestrife	0.6
	Mentha aquatica	Water mint	0.1
	Pulicaria dysenterica	Common fleabane	0.1
	Ranunculus acris	Meadow buttercup	2.5
	Scrophularia auriculata	Water figwort	0.1
	Silene flos-cuculi	Ragged robin	1
	Succisa pratensis	Devil's-bit scabious	1
	Vicia cracca	Tufted vetch	0.4
	Grasses (80%)		
Agrostis capillaris	Common bent	10	
Alopecurus pratensis	Meadow foxtail	3	
Anthoxanthum odoratum	Sweet vernal-grass	3	
Cynosurus cristatus	Crested dogstail	32	
Dechampsia cespitosa	Tufted hair-grass	1	
Festuca rubra	slender-creeping red-fescue	24	
Hordeum secalinum	Meadow barley	1	
Schedonorus pratensis	Meadow fescue	6	
Riparian Plug Plants			
Plants to be notch planted in single species swaths at 0.5m centres			
7cm pot			
Species			
Latin Name	Common Name	% of mix	
Alisma plantago-aquatica	Water plantain	6.25	
Butomus umbellatus	Flowering rush	6.25	
Carex elata	Tufted sedge	6.25	
Glyceria maxima	Reed sweet-grass	6.25	
Iris pseudacorus	Yellow flag iris	6.25	
Myosotis scorpioides	Water forget-me-not	6.25	
Veronica beccabunga	Brooklime	6.25	
Stachys palustris	Marsh woundwort	6.25	
Caltha palustris	Marsh-marigold	6.25	
Eupatorium cannabinum	Hemp agrimony	6.25	
Allium ursinum	Wild garlic	6.25	
Persicaria bistorta	Common bistort	6.25	
Mentha aquatica	Water mint	6.25	
Ranunculus acris	Meadow buttercup	6.25	
Geum rivale	Water avens	6.25	
Carex riparia	Greater pond sedge	6.25	

The image shows the logos for SWECO and GallifordTry. SWECO is represented by the word "SWECO" in a bold, black, sans-serif font, followed by a stylized black icon of a person with arms raised. Below this, separated by a horizontal line, is the GallifordTry logo. It features a stylized red and grey leaf-like icon above the word "GallifordTry" in a large, grey, sans-serif font.

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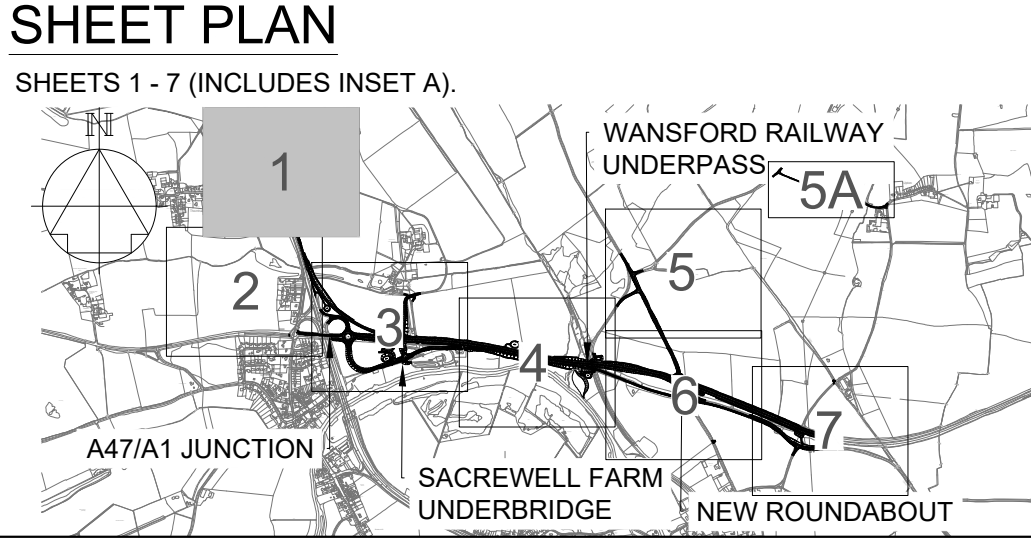


CODE	ENVIRONMENTAL FUNCTION
EFA	VISUAL SCREENING
EFB	LANDSCAPE INTEGRATION
EFD	NATURE CONSERVATION AND BIODIVERSITY
EFE	VISUAL AMENITY
EFF	HERITAGE
EFG	AUDITORY AMENITY
EFH	WATER QUALITY

NOTES

Purpose of use
FOR DCO SUBMISSION

Development Consent Order Number / Document
TR010039/APP/2.13



1. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH OTHER PLANS AND DOCUMENTS IN THE DEVELOPMENT CONSENT ORDER.
2. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
3. ONLY HEDGES WITHIN THE ORDER LIMITS ARE DISPLAYED ON THIS DRAWING SET.

KEY TO SYMBOLS	
ORDER LIMITS	LE6.2 BANKS AND DITCHES
EXISTING VEGETATION TO BE RETAINED	LE6.4 MARSH AND WET GRASSLAND
EXISTING POND TO BE RETAINED	PROPOSED ENVIRONMENTAL ELEMENTS
EXISTING FENCE TO BE RETAINED	E2.1 ATTENUATION/INFILTRATION BASINS
EXISTING PARAPET TO BE RETAINED	E3.2.1 ENVIRONMENTAL FENCING
EXISTING LIGHTING COLUMN TO BE RETAINED	E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH
PROPOSED LANDSCAPE ELEMENTS	PROPOSED ELEMENTS - OTHER
LE1.3 SPECIES RICH GRASSLAND	AGRICULTURAL LAND RESTORED
LE2.1 WOODLAND	HIGHWAYS FENCE (INDICATIVE)
LE2.5 SHRUBS WITH INTERMITTENT TREES	ANTIGLARE FENCE (INDICATIVE)
LE4.3 NATIVE SPECIES HEDGEROWS	PARAPET (INDICATIVE)
LE4.4 NATIVE HEDGEROWS WITH TREES	LIGHTING COLUMN (INDICATIVE)
LE5.1 INDIVIDUAL TREES	

P01	04/08/21	FOR ISSUE	LS	PBla	BJon
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE
A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE
PCF STAGE 3

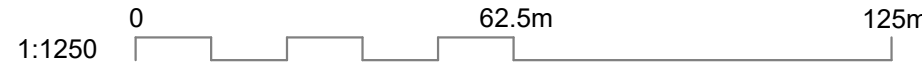
DRAWING TITLE
**ENVIRONMENTAL MASTERPLAN
SHEET 1 OF 7**

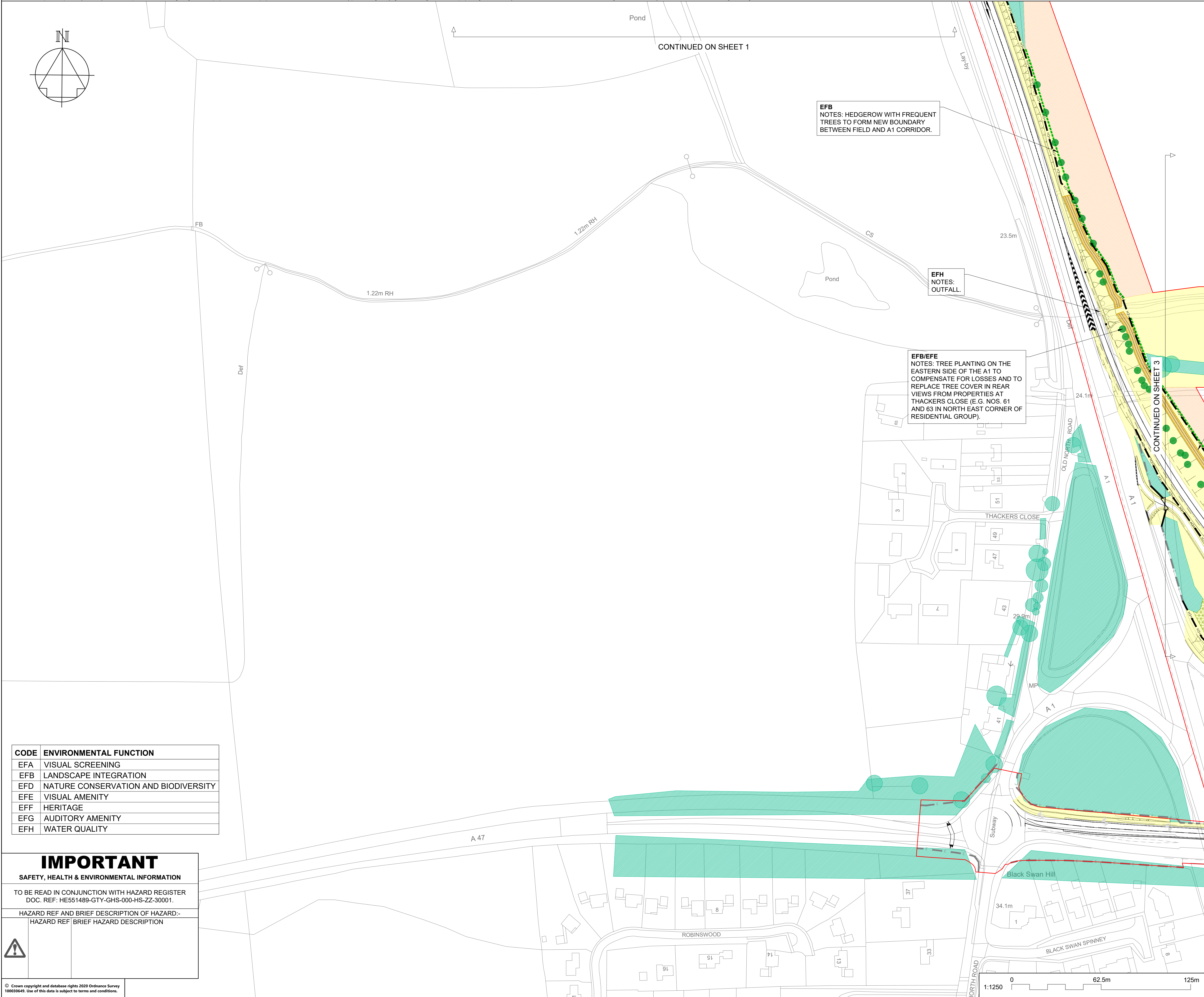
SUITABILITY
SUITABLE FOR STAGE APPROVAL

SHEET SIZE A1	SCALE 1:1250	STATUS S4	REVISION P01
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DRAWING NUMBER
HE551494-GTY-ELS-000-DR-LE-33001

IMPORTANT
SAFETY, HEALTH & ENVIRONMENTAL INFORMATION
TO BE READ IN CONJUNCTION WITH HAZARD REGISTER
DOC. REF: HE551489-GTY-GHS-000-HS-ZZ-30001.
HAZARD REF AND BRIEF DESCRIPTION OF HAZARD:-
HAZARD REF | BRIEF HAZARD DESCRIPTION





NOTES

Purpose of use	
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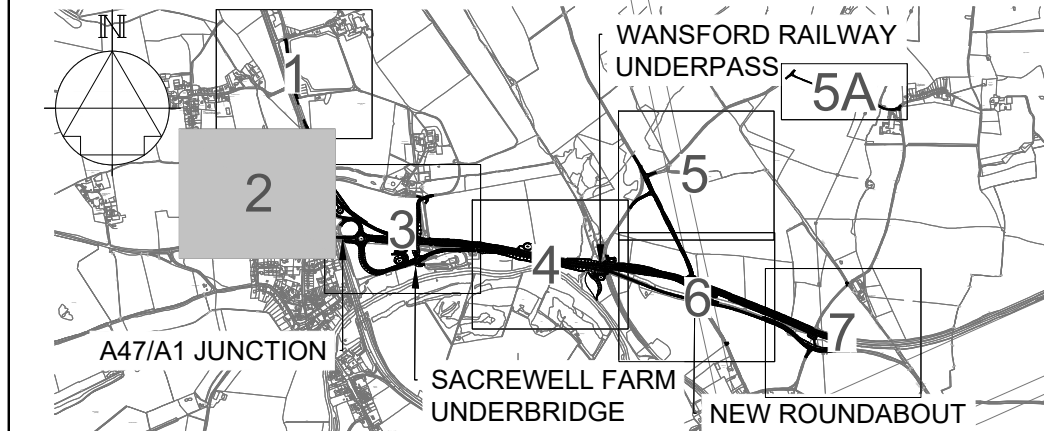
FOR DCO SUBMISSION

Development Consent Order Number / Document

TR010039/APP/2.13























SHEET PLAN

SHEETS 1 - 7 (INCLUDES INSET A).



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KEY TO SYMBOLS

- | | | | |
|---|---|---|---|
|  | ORDER LIMITS |  | LE6.2 BANKS AND DITCHES |
|  | EXISTING VEGETATION TO BE RETAINED |  | LE6.4 MARSH AND WET GRASSLAND |
|  | EXISTING POND TO BE RETAINED | PROPOSED ENVIRONMENTAL ELEMENTS | |
|  | EXISTING FENCE TO BE RETAINED |  | E2.1 ATTENUATION/INFILTRATION BASINS |
|  | EXISTING PARAPET TO BE RETAINED |  | E3.2.1 ENVIRONMENTAL FENCING |
|  | EXISTING LIGHTING COLUMN TO BE RETAINED |  | E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH |
| PROPOSED LANDSCAPE ELEMENTS | | PROPOSED ELEMENTS - OTHER | |
|  | LE1.3 SPECIES RICH GRASSLAND |  | AGRICULTURAL LAND RESTORED |
|  | LE2.1 WOODLAND |  | HIGHWAYS FENCE (INDICATIVE) |
|  | LE2.5 SHRUBS WITH INTERMITTENT TREES |  | ANTI GLARE FENCE (INDICATIVE) |
|  | LE4.3 NATIVE SPECIES HEDGEROWS |  | PARAPET (INDICATIVE) |
|  | LE4.4 NATIVE HEDGEROWS WITH TREES |  | LIGHTING COLUMN (INDICATIVE) |
|  | LE5.1 INDIVIDUAL TREES | | |

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REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

SWECO 

CONTRACTOR

 GallifordTry

CLIENT



PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

ENVIRONMENTAL MASTERPLAN
SHEET 2 OF 7

SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE

SHEET SIZE

SCALE

STATUS

REVISION

P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33002

CODE	ENVIRONMENTAL FUNCTION
EFA	VISUAL SCREENING
EFB	LANDSCAPE INTEGRATION
EFD	NATURE CONSERVATION AND BIODIVERSITY
EFE	VISUAL AMENITY
EFF	HERITAGE
EFG	AUDITORY AMENITY
EFH	WATER QUALITY

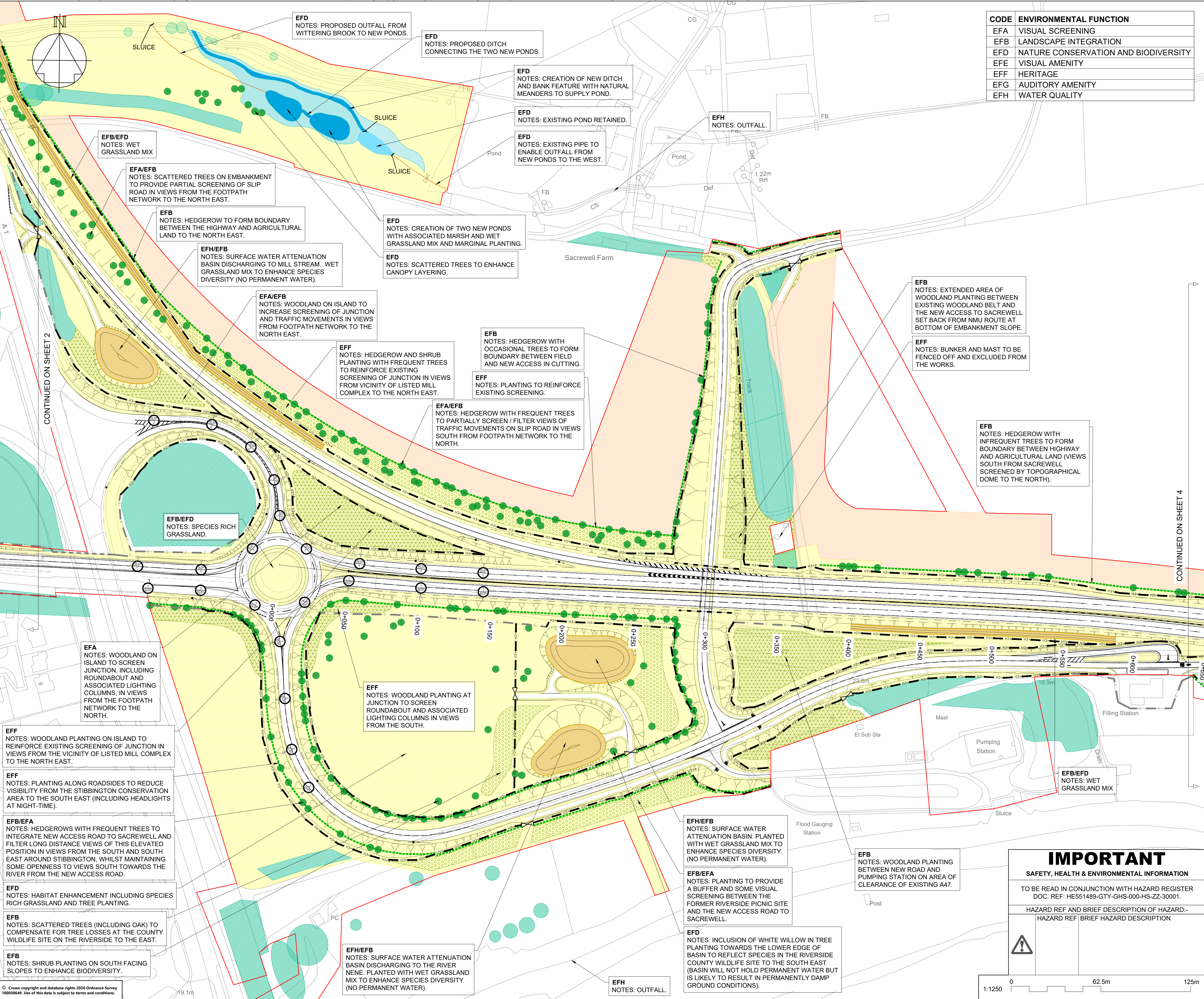
IMPORTANT

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION

DO NOT BE READ IN CONJUNCTION WITH HAZARD REGISTER
DOC. REF: HE551489-GTY-GHS-000-HS-ZZ-30001.

HAZARD REF AND BRIEF DESCRIPTION OF HAZARD:-





NOTES

Purpose of use

FOR DCO SUBMISSION

Development Consent Order Number / Document

TR010039/APP/2.13

SHEET PLAN

SHEETS 1 - 7 (INCLUDES INSET A).

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KEY TO SYMBOLS

ORDER LIMITS
EXISTING VEGETATION TO BE RETAINED
EXISTING POND TO BE RETAINED
EXISTING FENCE TO BE RETAINED
EXISTING PARAPET TO BE RETAINED
EXISTING LIGHTING COLUMN TO BE RETAINED

PROPOSED LANDSCAPE ELEMENTS
LE1.3 SPECIES RICH GRASSLAND
LE2.1 WOODLAND
LE2.5 SHRUBS WITH INTERMITTENT TREES
LE4.3 NATIVE SPECIES HEDGEROWS
LE4.4 NATIVE HEDGEROWS WITH TREES
LE5.1 INDIVIDUAL TREES

LE6.2 BANKS AND DITCHES
LE6.4 MARSH AND WET GRASSLAND
E2.1 ATTENUATION/INFILTRATION BASINS
E3.2.1 ENVIRONMENTAL FENCING
E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH
PROPOSED ELEMENTS - OTHER
AGRICULTURAL LAND RESTORED
HIGHWAYS FENCE (INDICATIVE)
ANTIGLARE FENCE (INDICATIVE)
PARAPET (INDICATIVE)
LIGHTING COLUMN (INDICATIVE)

P01 04/08/21 FOR ISSUE LS PBlA BJon
REV DATE REVISION NOTE ORG CHKD APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

**ENVIRONMENTAL MASTERPLAN
SHEET 3 OF 7**

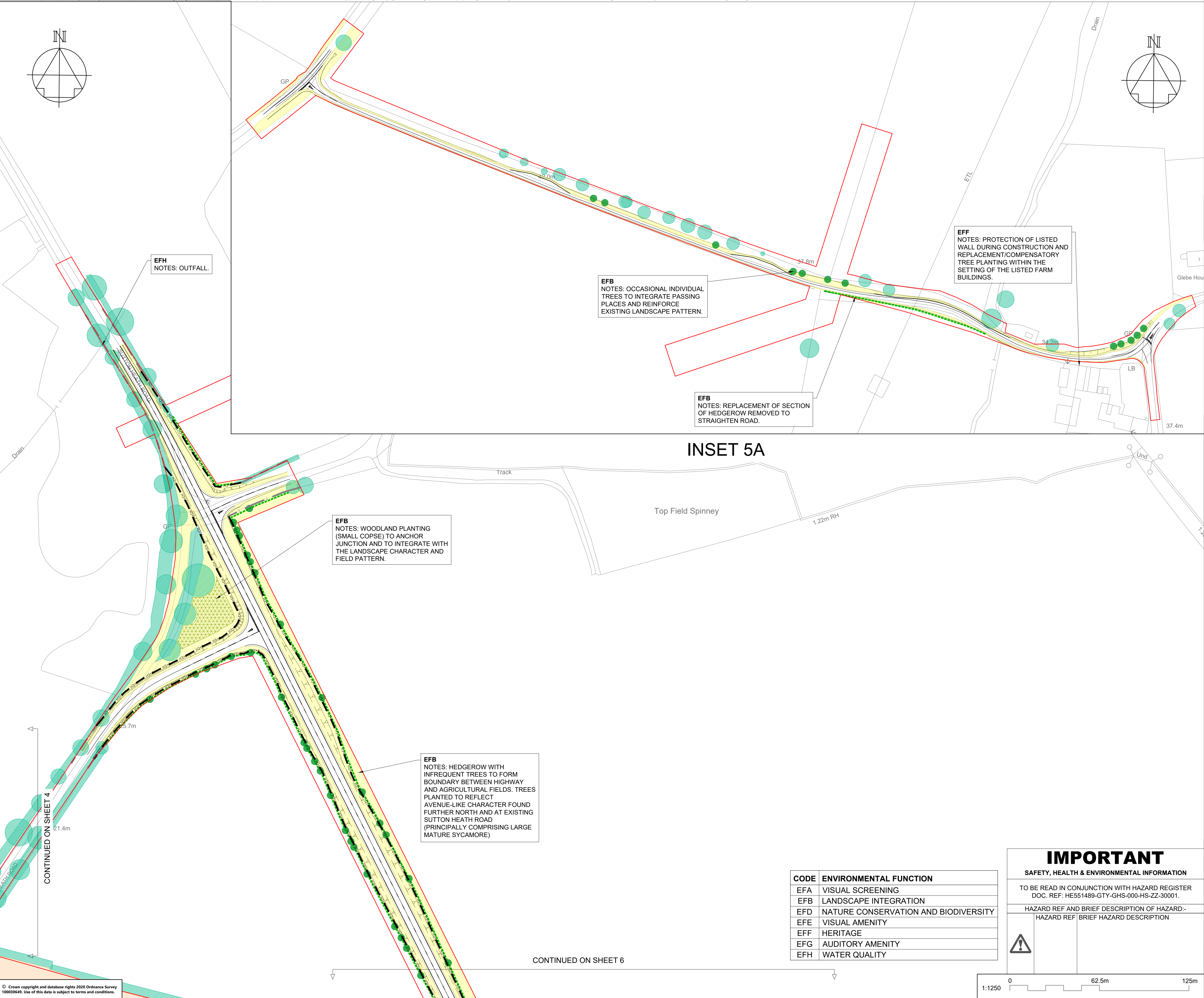
SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE SCALE STATUS REVISION
A1 1:1250 S4 P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33003



NOTES

Purpose of use

FOR DCO SUBMISSION

Development Consent Order Number / Document

TR010039/APP/2.13

SHEET PLAN

SHEETS 1 - 7 (INCLUDES INSET A).

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KEY TO SYMBOLS

ORDER LIMITS

EXISTING VEGETATION TO BE RETAINED

EXISTING POND TO BE RETAINED

EXISTING FENCE TO BE RETAINED

EXISTING PARAPET TO BE RETAINED

EXISTING LIGHTING COLUMN TO BE RETAINED

PROPOSED LANDSCAPE ELEMENTS

LE1.3 SPECIES RICH GRASSLAND

LE2.1 WOODLAND

LE2.5 SHRUBS WITH INTERMITTENT TREES

LE4.3 NATIVE SPECIES HEDGEROWS

LE4.4 NATIVE HEDGEROWS WITH TREES

LE5.1 INDIVIDUAL TREES

LE6.2 BANKS AND DITCHES

PROPOSED ENVIRONMENTAL ELEMENTS

E2.1 ATTENUATION/INFILTRATION BASINS

E3.2.1 ENVIRONMENTAL FENCING

E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH

PROPOSED ELEMENTS - OTHER

AGRICULTURAL LAND RESTORED

HIGHWAYS FENCE (INDICATIVE)

ANTI GLARE FENCE (INDICATIVE)

PARAPET (INDICATIVE)

LIGHTING COLUMN (INDICATIVE)

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REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

ENVIRONMENTAL MASTERPLAN
SHEET 5 OF 7

SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33005

IMPORTANT

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION

TO BE READ IN CONJUNCTION WITH HAZARD REGISTER
DOC. REF: HE551489-GTY-GHS-000-HS-ZZ-30001.

HAZARD REF AND BRIEF DESCRIPTION OF HAZARD:-
HAZARD REF | BRIEF HAZARD DESCRIPTION

CODE

ENVIRONMENTAL FUNCTION

EFA	VISUAL SCREENING
EFB	LANDSCAPE INTEGRATION
EFD	NATURE CONSERVATION AND BIODIVERSITY
EFE	VISUAL AMENITY
EFF	HERITAGE
EFG	AUDITORY AMENITY
EFH	WATER QUALITY

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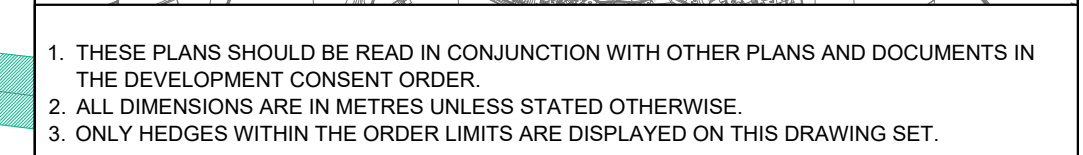
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125m

1:1250

Development Consent Order Number / Document
TR010039/APP/2.13

SHEETS 1 - 7 (INCLUDES INSET A).



KEY TO SYMBOLS

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DESIGNER	
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CONTRACTOR

CLIENT _____

PROJECT TITLE

[illegible]

PROJECT STAGE

DRAWING TITLE

[illegible]

SUITABLE FOR STAGE APPROVAL

DRAWING NUMBER			

[illegible]

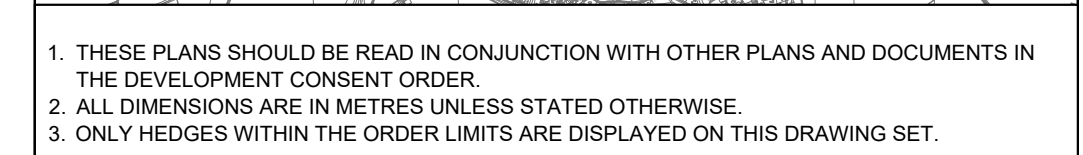
EFA
NOTES: HEDGEROW WITH
FREQUENT TREES TO
SCREEN/FILTER VIEWS OF TRAFFIC
MOVEMENT IN VIEWS FROM THE
NORTH WESTERN FRINGES OF
SUITON TO THE SOUTH

CODE	ENVIRONMENTAL FUNCTION
EFA	VISUAL SCREENING
EFB	LANDSCAPE INTEGRATION
EFD	NATURE CONSERVATION AND BIODIVERSITY
EFE	VISUAL AMENITY
EFF	HERITAGE
EFG	AUDITORY AMENITY
EFH	WATER QUALITY

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FOR DCO SUBMISSION

SHEET PLAN



KEY TO SYMBOLS

- [illegible]

[illegible]

CONTRACTOR


CLIENT

PROJECT TITLE	

	DRAWING TITLE

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P01

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