



Development Consent Order

Application Reference Number: WW010001

Documents for Certification September 2014

We, Lindsay Speed and Sarah Fairbrother hereby certify that this is a true copy of the environmental statement referred to in Article 61 (1) (f) of the Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014.

Lindsay Speed

Sarah Fairbrother

September 2014

**Thames
Tideway Tunnel**



Creating a cleaner, healthier River Thames

Thames Tideway Tunnel
Thames Water Utilities Limited



Application for Development Consent

Application Reference Number: WWO10001

Environmental Statement

Doc Ref: **6.2.07**

Volume 7: Putney Embankment Foreshore figures

APFP Regulations 2009: Regulation **5(2)(a)**

Hard copy available in

Box **66** Folder **B**
January 2013

Thames
Tideway Tunnel 
Creating a cleaner, healthier River Thames

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Thames Tideway Tunnel

Environmental Statement

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Thames Tideway Tunnel

Environmental Statement

Volume 7 Putney Embankment Foreshore site assessment

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Thames Tideway Tunnel

Environmental Statement

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1 Plans from the Book of Plans

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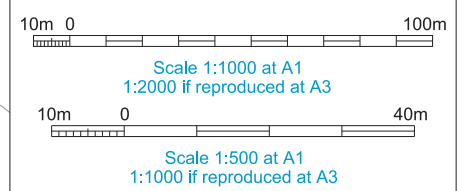
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Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

- Key:**
- Limits of land to be acquired or used (LLAU)
 - Zone within which all permanent site structures would be located
 - Zone within which the shaft would be located
 - Zone within which permanent above ground structures would be located (those listed in Table 1)
 - Zone within which required landscaping would be located
 - Maximum extent of top of river/parapet wall
 - Maximum extent of temporary works platform

- Notes:**
1. All dimensions and levels are approximate.
 2. The Site Works Parameter Key Plan identifies each zone independently.
 3. The zone within which the shaft would be located would include all permanent works including shaft walls (including appropriate allowances for construction tolerances) and if applicable under-reaming. Shaft construction temporary works may be located within or outside this zone provided they are located within the Limits of land to be acquired or used.



FOR APPROVAL

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Site works parameter plan

Book of plans - section 8
DCO-PP-05X-PUTEF-080008
January 2013

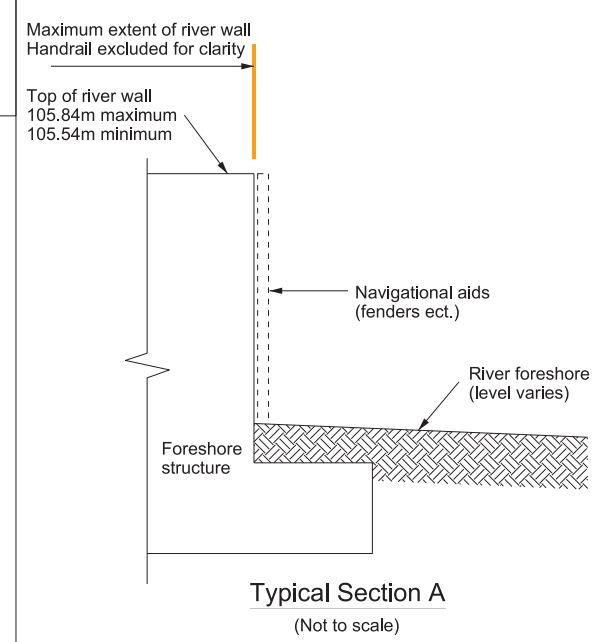
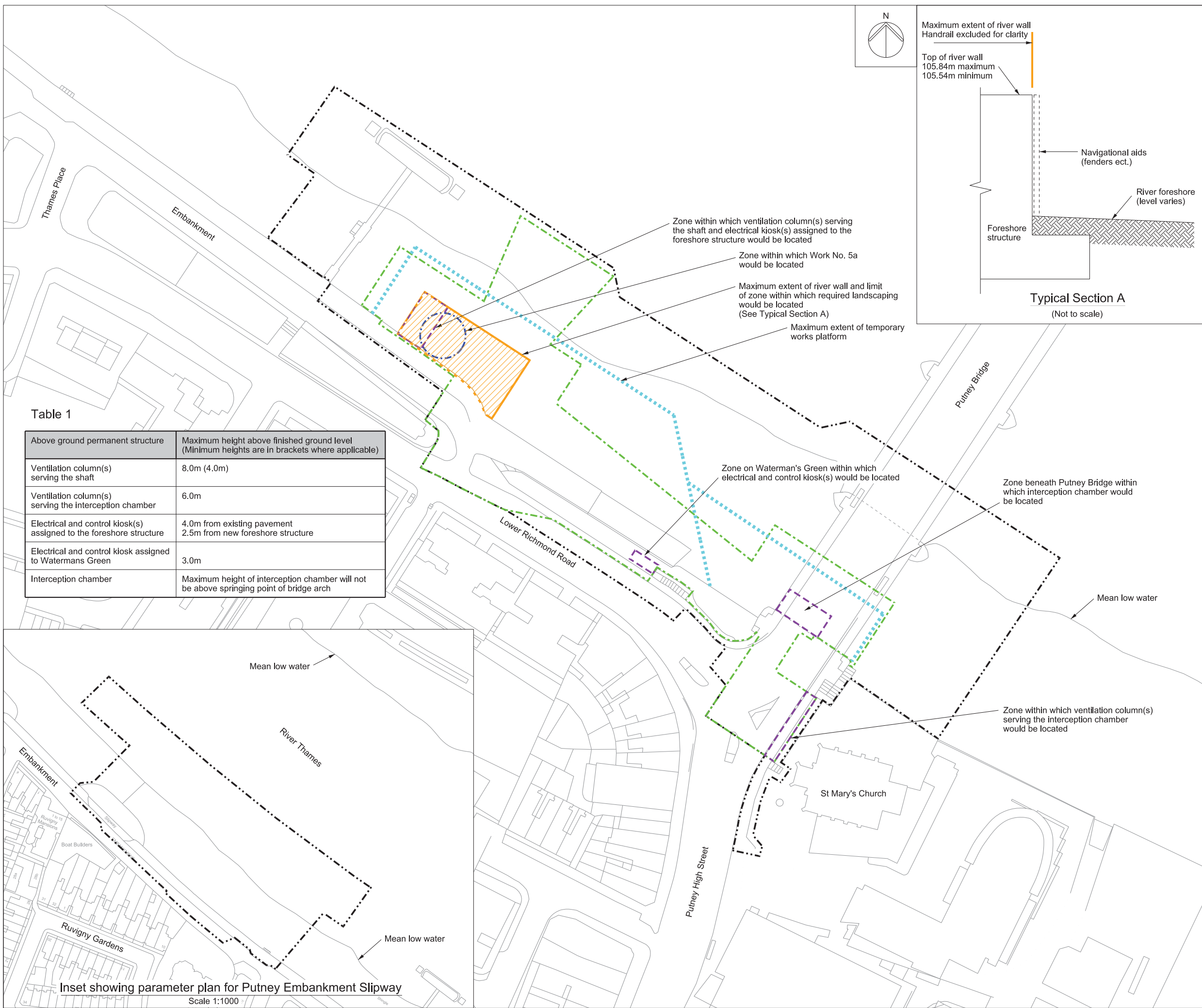
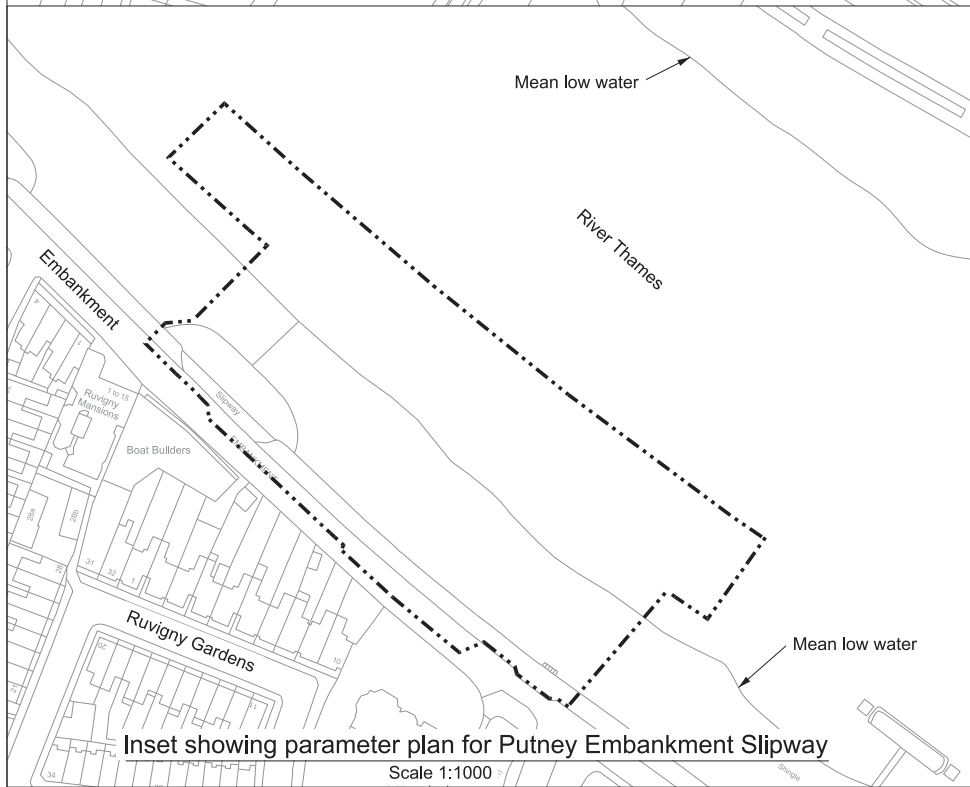
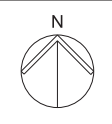
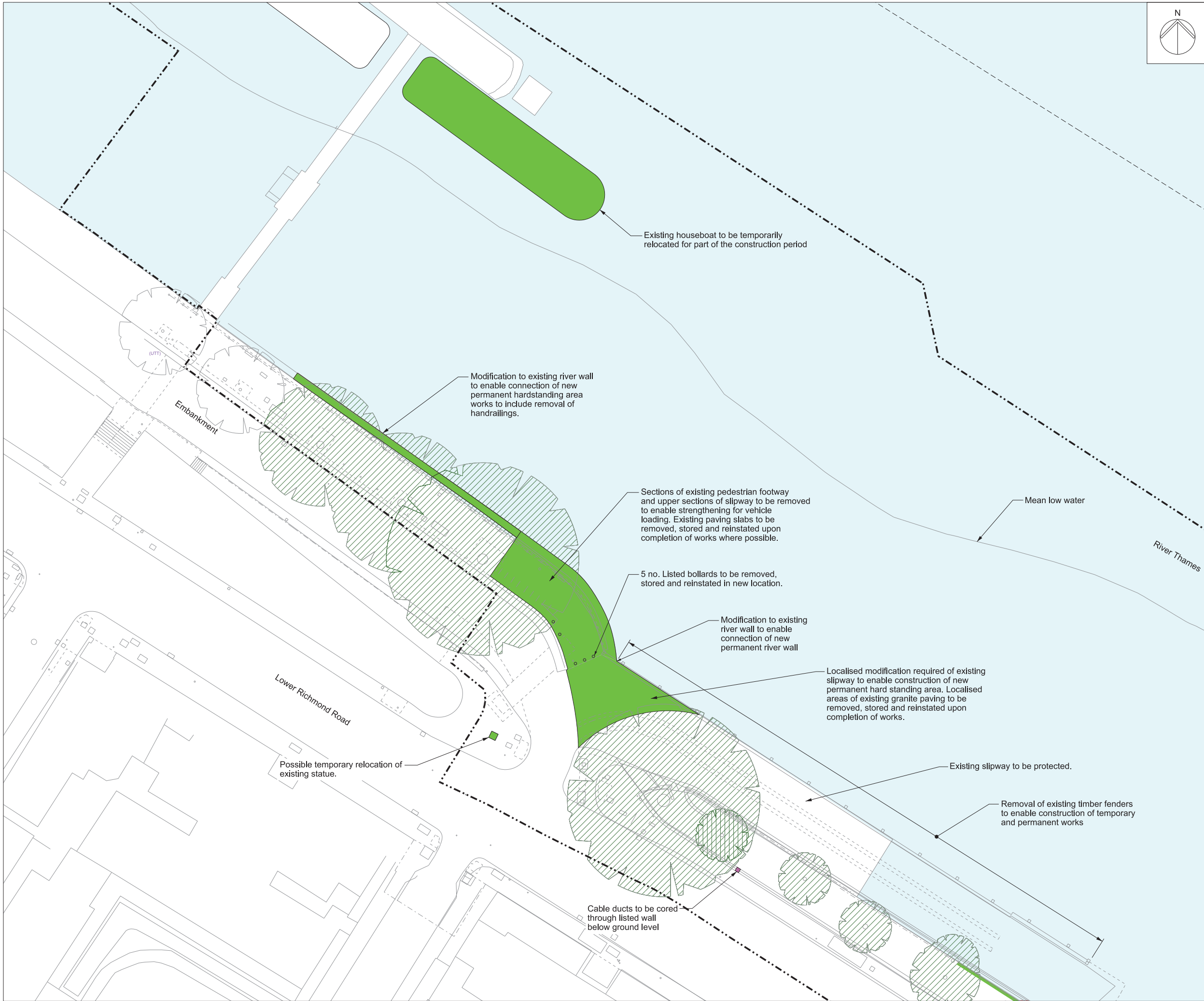


Table 1

Above ground permanent structure	Maximum height above finished ground level (Minimum heights are in brackets where applicable)
Ventilation column(s) serving the shaft	8.0m (4.0m)
Ventilation column(s) serving the interception chamber	6.0m
Electrical and control kiosk(s) assigned to the foreshore structure	4.0m from existing pavement 2.5m from new foreshore structure
Electrical and control kiosk assigned to Watermans Green	3.0m
Interception chamber	Maximum height of interception chamber will not be above springing point of bridge arch





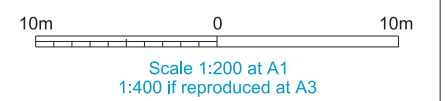
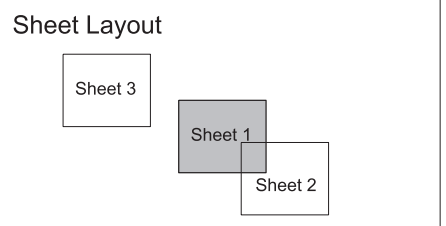
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Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

- Key:
- Limits of land to be acquired or used (LLAU)
 - Trees to be pruned
 - Structure to be removed and relocated or reinstated
 - Below ground structures to be removed or infilled

- Notes:
1. Area of foreshore will require dredging prior to formation of temporary working area.
 2. Formation of temporary working area not illustrated. refer to construction phasing layout drawings.
 3. Minor items to be removed (e.g. barriers, bollards etc.) are not shown.
 4. General activities of site clearance such as removal of hardstanding and foundations, stripping of topsoil and clearance of minor vegetation not shown.

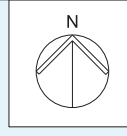


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Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Demolition and site clearance
Sheet 1 of 3
Book of plans - section 8
DCO-PP-05X-PUTEF-080005
January 2013








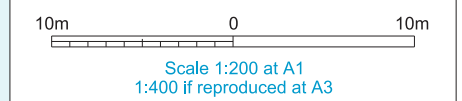
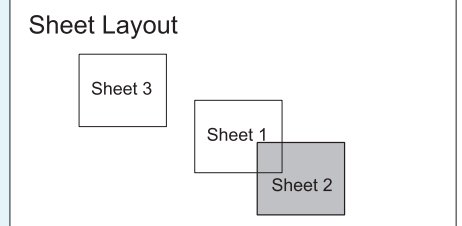


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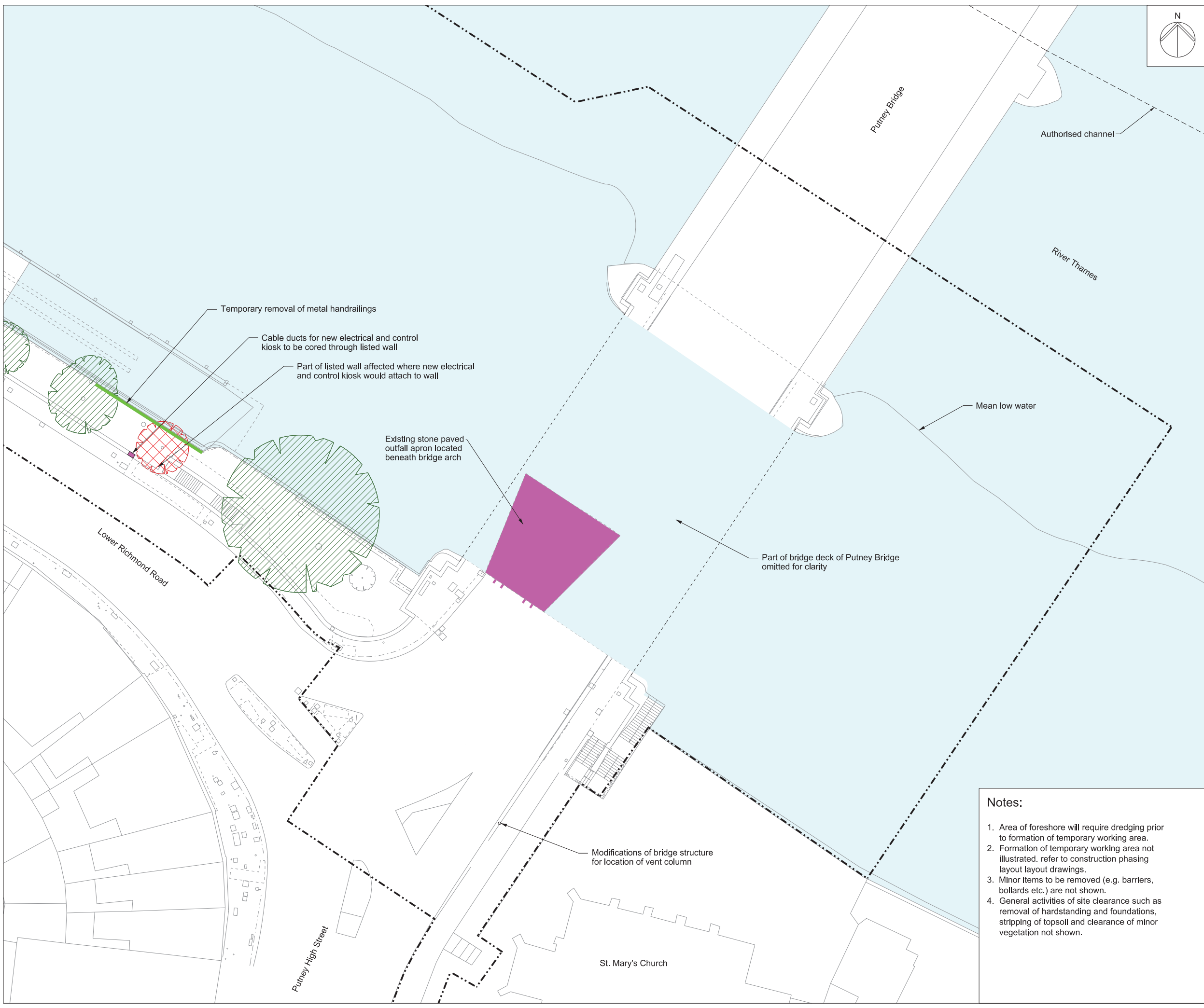


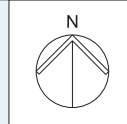
FOR APPROVAL

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Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Demolition and site clearance
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January 2013





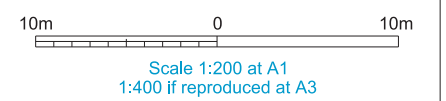
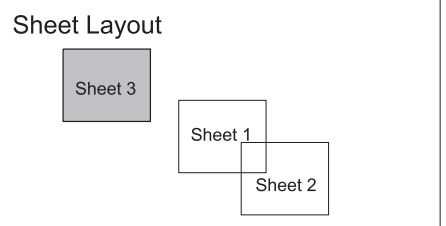
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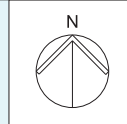
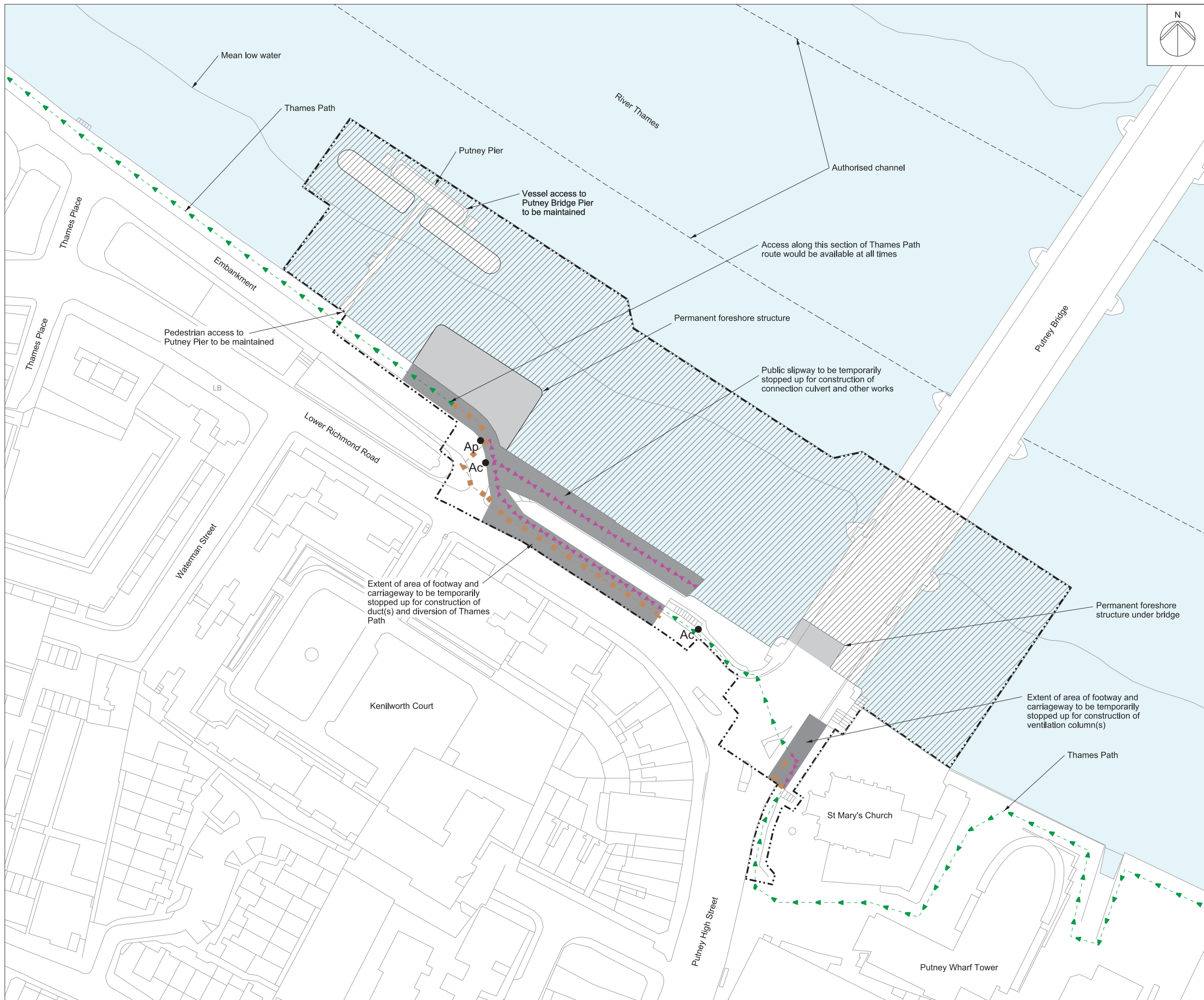


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Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Demolition and site clearance
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Book of plans - section 8
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January 2013





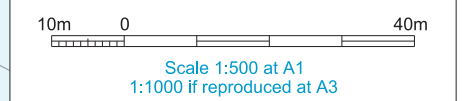
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- Key:**
- Limits of land to be acquired or used (LLAU)
 - Existing public right of way
 - Route of temporary diversion of right of way
 - Existing right of way temporarily stopped up
 - Area of highway to be temporarily stopped up
 - Area of temporary suspension of public rights of navigation
 - Area of permanent extinguishment of public rights of navigation
 - Ap ● Access to permanent works
 - Ac ● Access to construction works

- Notes:**
1. This plan does not show stopping up and diversions of limited duration (eg hoarding erection, minor utility diversions and minor highway works).
 2. Only rights of way in or close to worksites are shown. The full extents of rights of way are not shown where they cease to be relevant to the project.



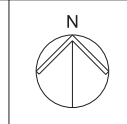
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Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Access plan

Book of plans - section 8
DCO-PP-05X-PUTEF-080003
January 2013





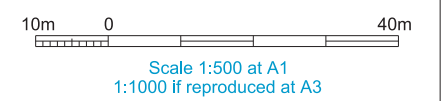
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- Key:**
- Limits of land to be acquired or used (LLAU)
 - Existing public right of way
 - Route of temporary diversion of right of way
 - Existing right of way temporarily stopped up
 - Area of highway to be temporarily stopped up
 - Area of temporary suspension of public rights of navigation
 - Ac ● Access to construction works
 - At ● Access to temporary slipway

- Notes:**
- This plan does not show stopping up and diversions of limited duration (eg hoarding erection, minor utility diversions and minor highway works).
 - Only rights of way in or close to worksites are shown. The full extents of rights of way are not shown where they cease to be relevant to the project.

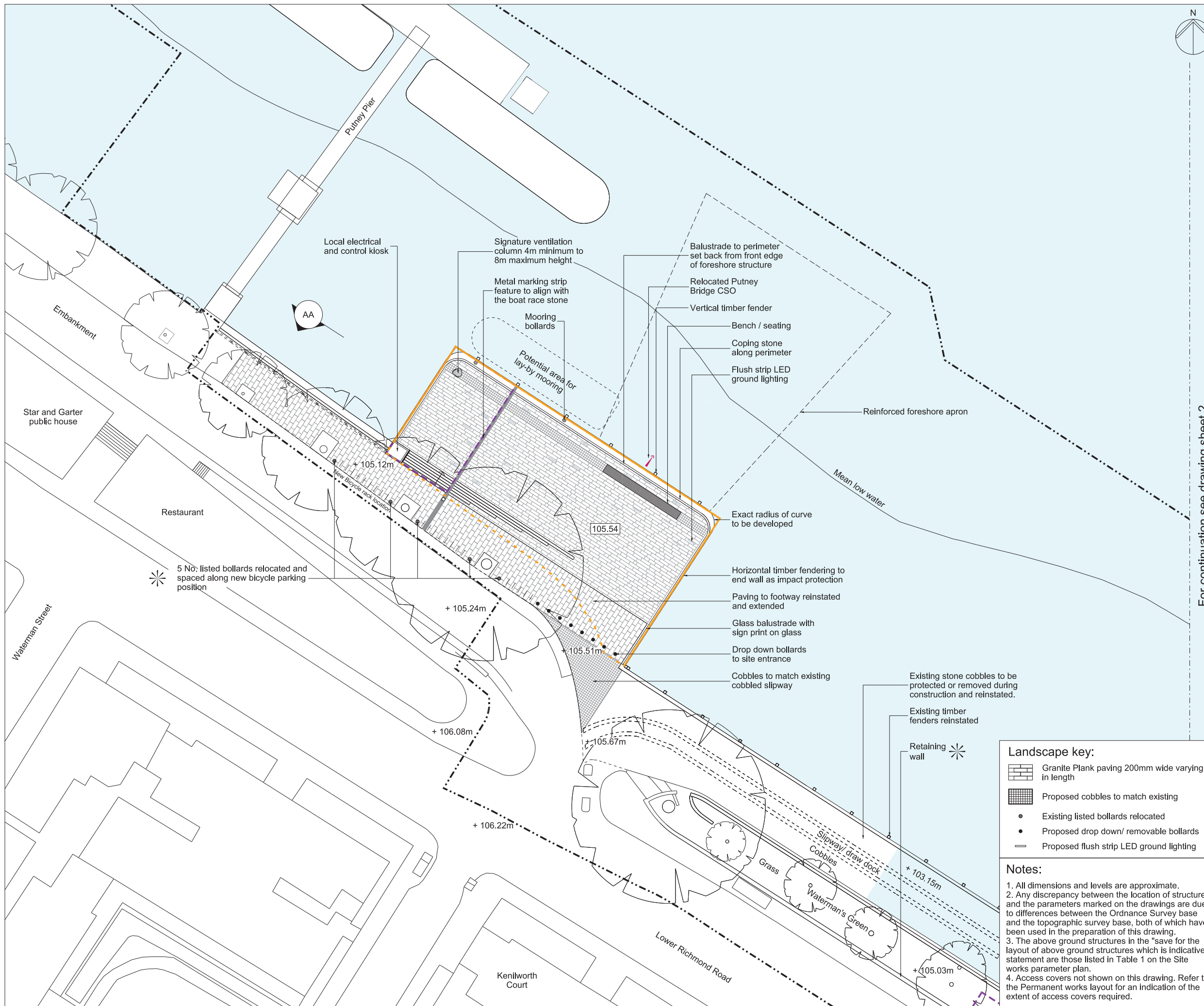


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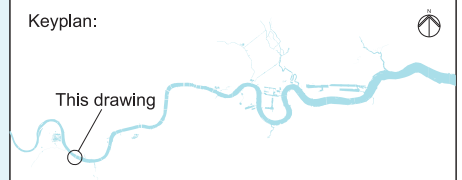
Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Application for Development Consent
 Access plan
 Temporary slipway
 Book of plans - section 8
 DCO-PP-05X-PUTEF-080004
 January 2013



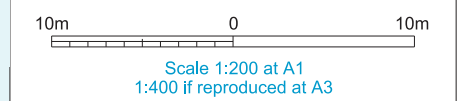
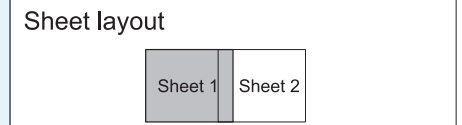


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- Key:**
- Limits of land to be acquired or used (LLAU)
 - Zone within which permanent above ground structures would be located
 - Zone within which required landscaping would be located
 - Maximum extent of foreshore structure
 - + 105.40m Existing levels (shown in metres above tunnel datum)
 - Proposed levels (shown in metres above tunnel datum)
 - Listed buildings/structures
 - Approximate position of CSO outlet
 - Existing trees within surveyed area (trunk sizes vary)



INDICATIVE
Save for layout of above ground structures which is illustrative

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent

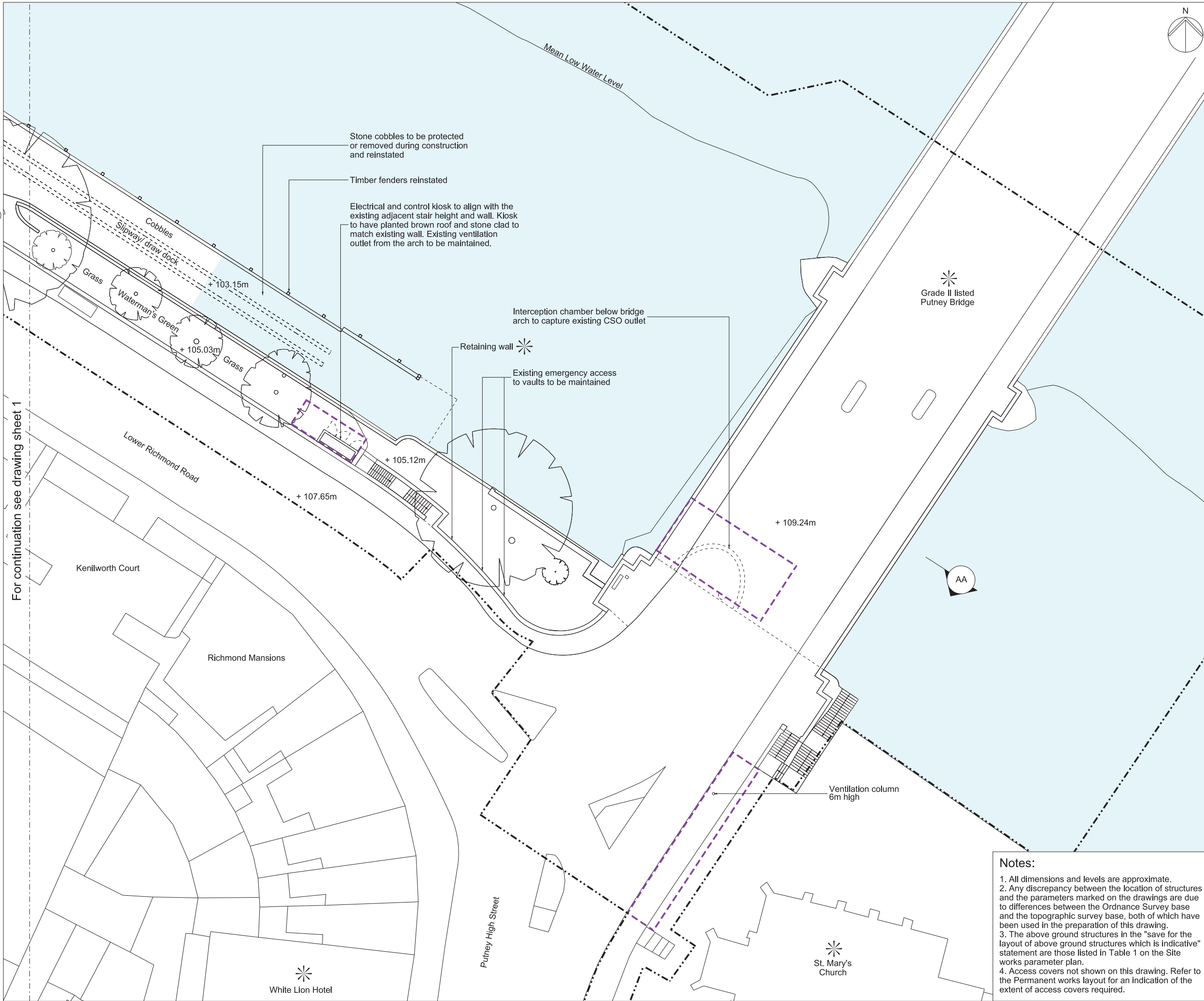
Proposed
Landscape plan sheet 1 of 2
Book of plans - section 8
DCO-PP-05X-PUTEF-080013
January 2013



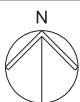
- Landscape key:**
- Granite Plank paving 200mm wide varying in length
 - Proposed cobbles to match existing
 - Existing listed bollards relocated
 - Proposed drop down/ removable bollards
 - Proposed flush strip LED ground lighting

- Notes:**
1. All dimensions and levels are approximate.
 2. Any discrepancy between the location of structures and the parameters marked on the drawings are due to differences between the Ordnance Survey base and the topographic survey base, both of which have been used in the preparation of this drawing.
 3. The above ground structures in the "save for the layout of above ground structures which is indicative" statement are those listed in Table 1 on the Site works parameter plan.
 4. Access covers not shown on this drawing. Refer to the Permanent works layout for an indication of the extent of access covers required.

For continuation see drawing sheet 2



For continuation see drawing sheet 1



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Keyplan:

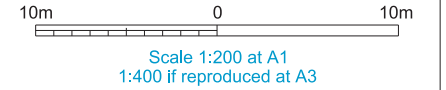


Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Key:

- Limits of land to be acquired or used (LLAU)
- Zone within which permanent above ground structures would be located
- + 105.40m Existing levels (shown in metres above tunnel datum)
- Listed buildings/structures
- Existing trees within surveyed area (trunk sizes vary)

Sheet layout



INDICATIVE
Save for layout of above ground structures which is illustrative

Location
Putney Embankment Foreshore
London Borough of Wandsworth

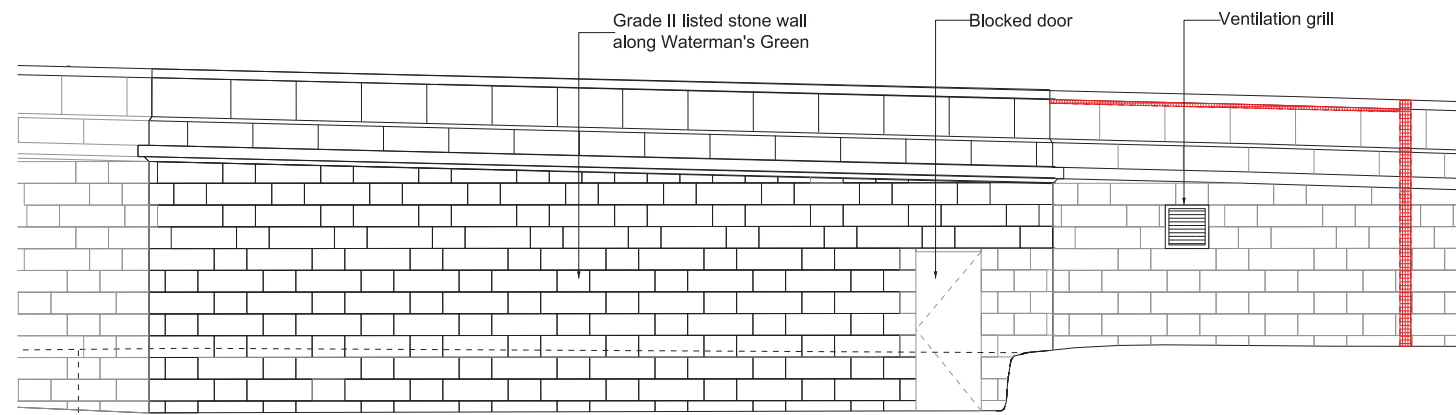
Document Information
Application for Development Consent

Proposed
Landscape plan sheet 2 of 2
Book of plans - section 8
DCO-PP-05X-PUTEF-080014
January 2013

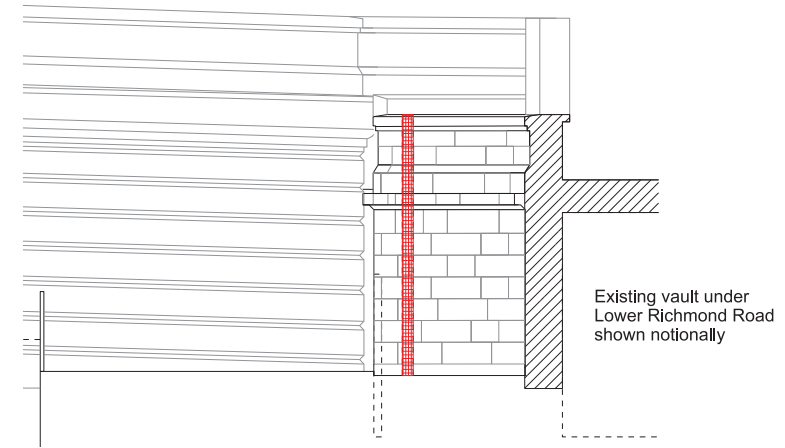


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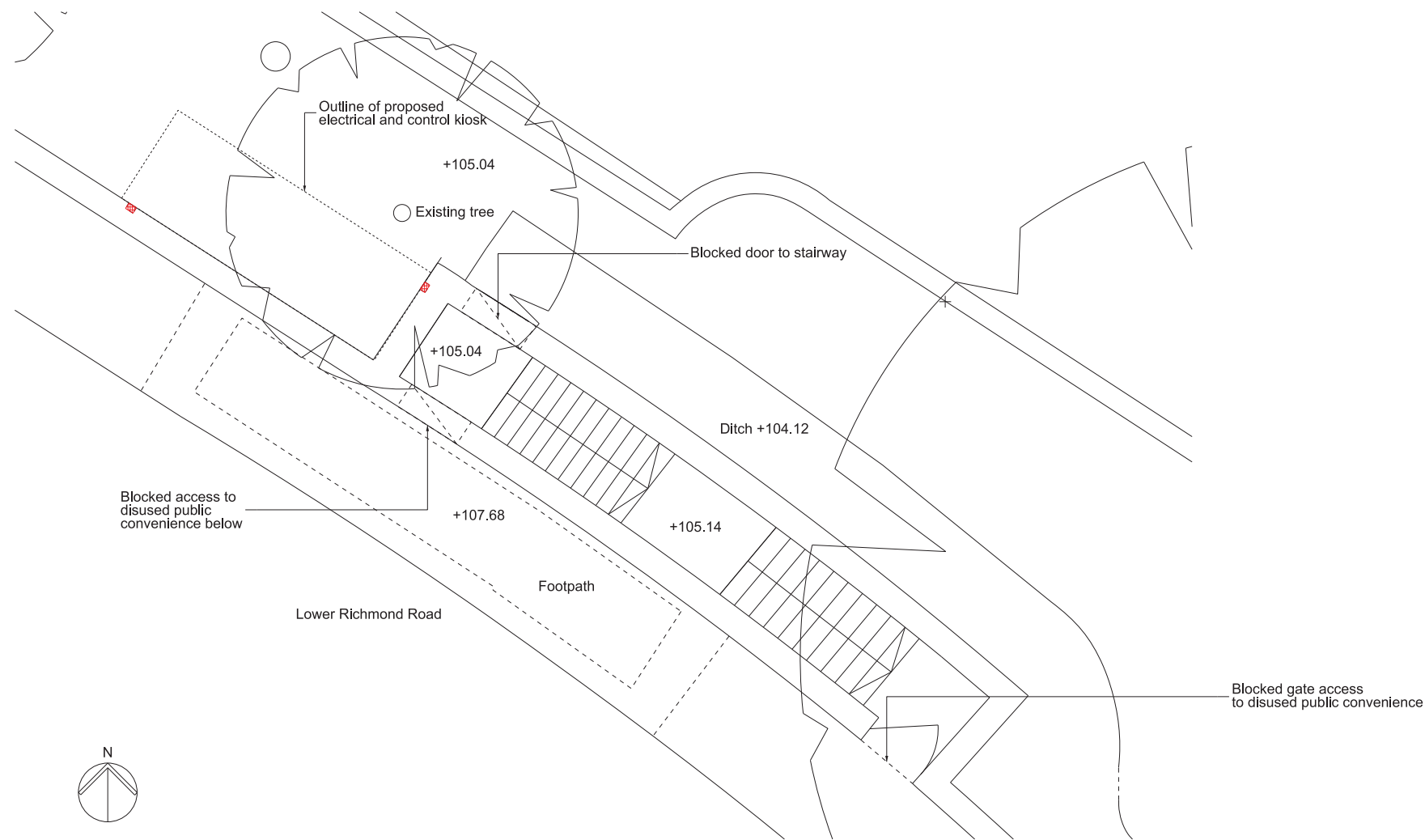
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4. Access covers not shown on this drawing. Refer to the Permanent works layout for an indication of the extent of access covers required.



As Existing: Waterman's Green wall elevation showing extent of loss



As Existing: Waterman's Green side elevation



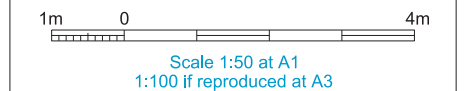
As Existing: Waterman's Green plan showing extent of loss



Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Key:
 Maximum permanent extent of loss of listed buildings / structures

Notes:
 1. All dimensions and levels are approximate.
 2. Drawing is based on as-constructed drawings and topographical survey and not on heritage survey.



FOR INFORMATION
 Save for maximum extent of loss of listed structures which is for approval

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

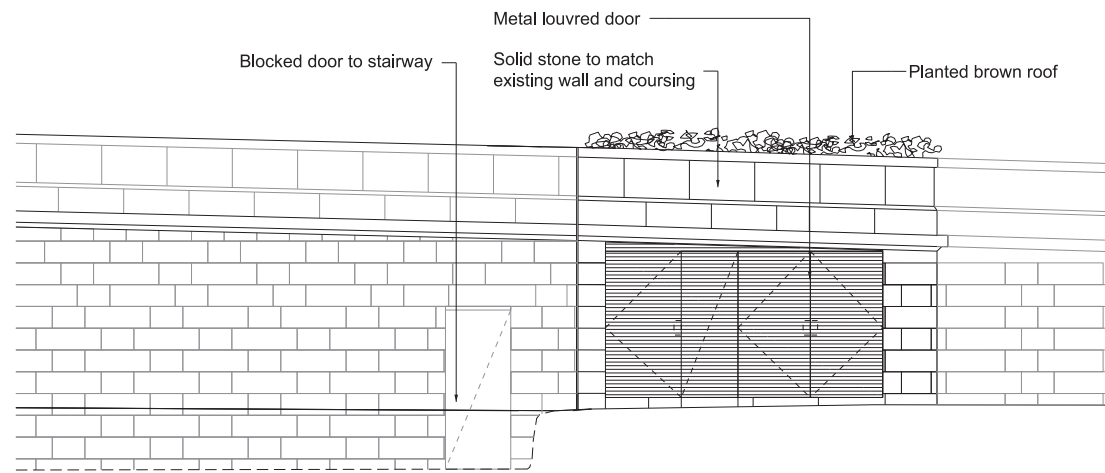
Document Information
Application for Development Consent
 As existing listed structure interface - Kiosk
 Book of plans - section 8
 DCO-PP-05X-PUTEF-080024
 January 2013



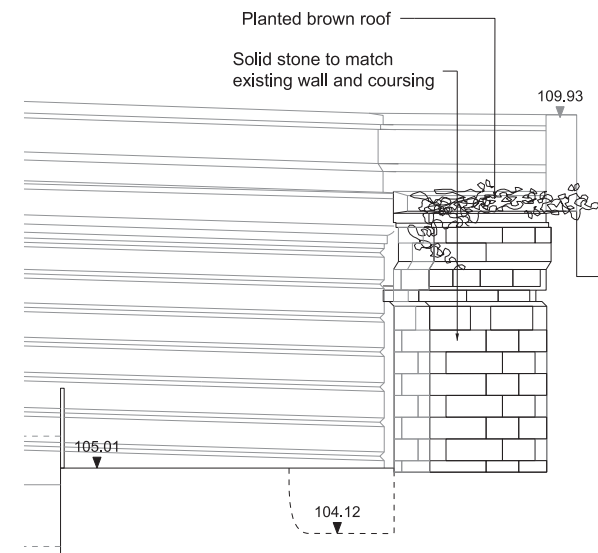


Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

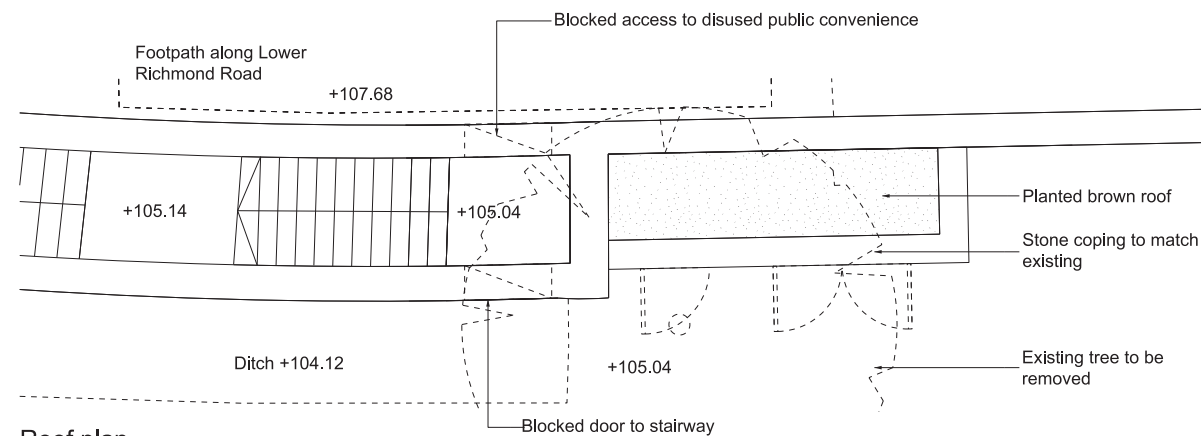
- Notes:
1. All dimensions and levels are approximate.
 2. Drawing is based on as-constructed drawings and topographical survey and not on heritage survey.



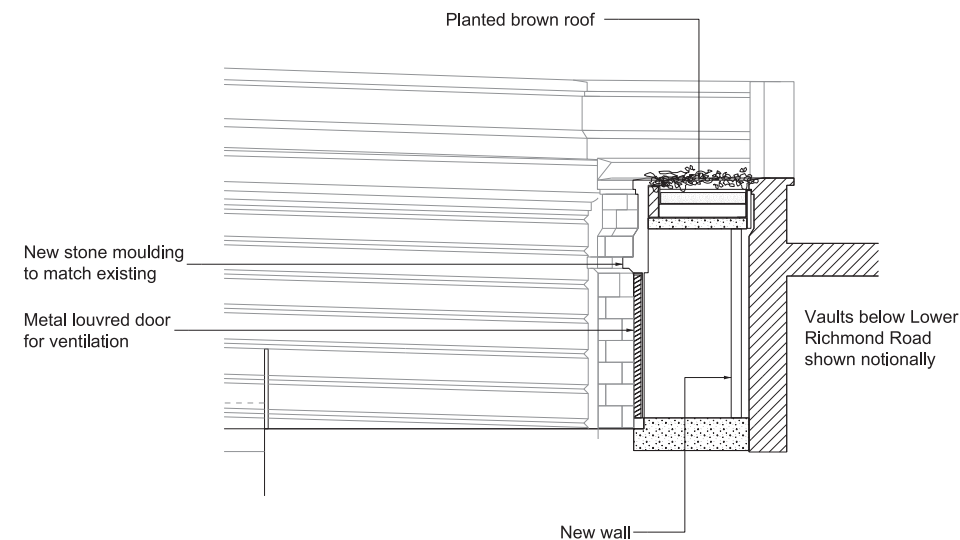
Front wall elevation



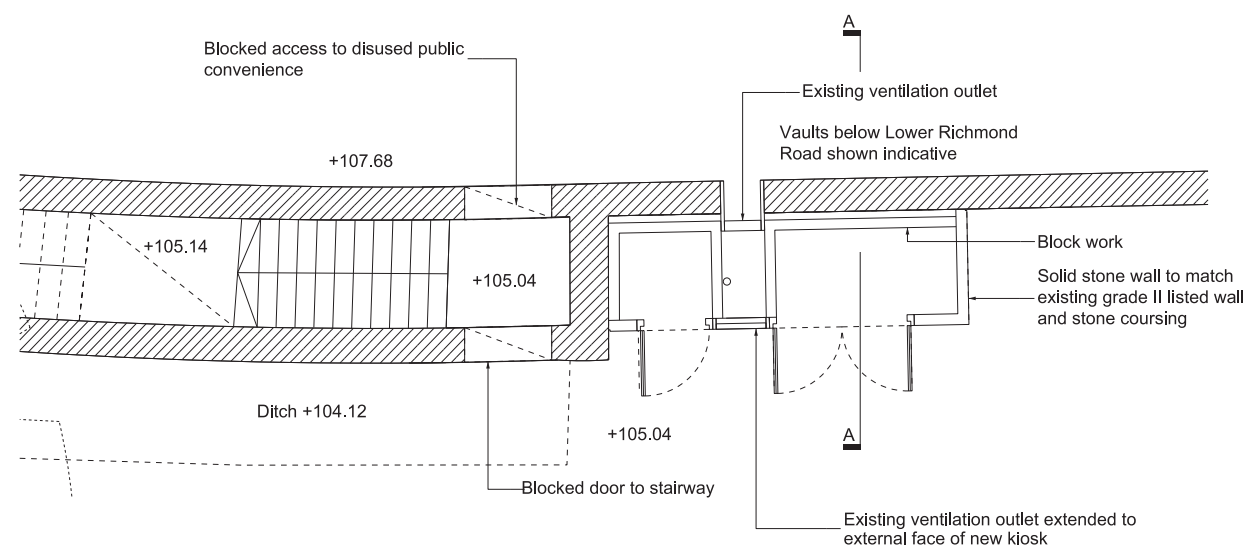
Side elevation



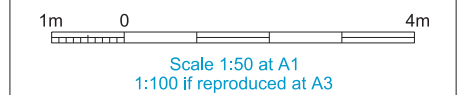
Roof plan



Section AA



Floor plan



INDICATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

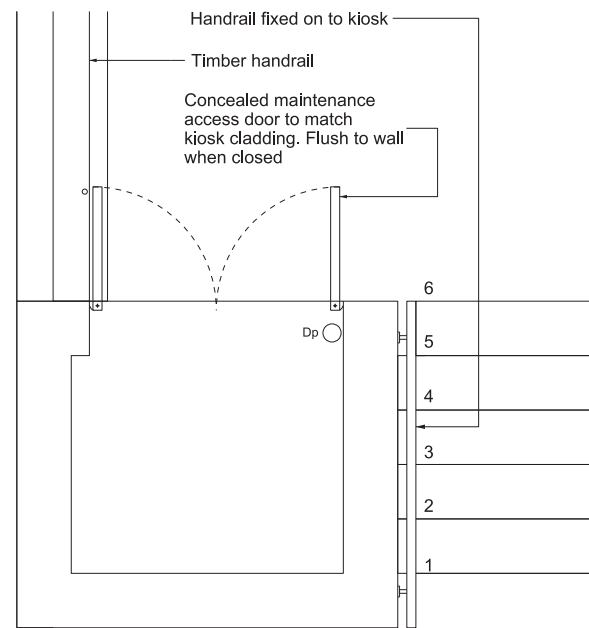
Document Information
Application for Development Consent
Proposed listed structure interface - Kiosk
Book of plans - section 8
DCO-PP-05X-PUTEF-080025
January 2013



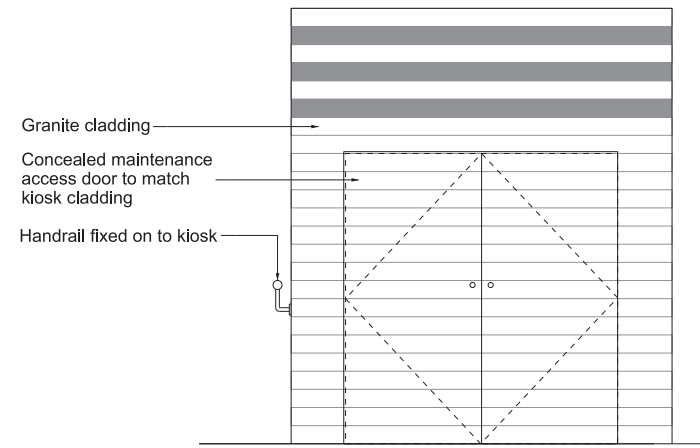


Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

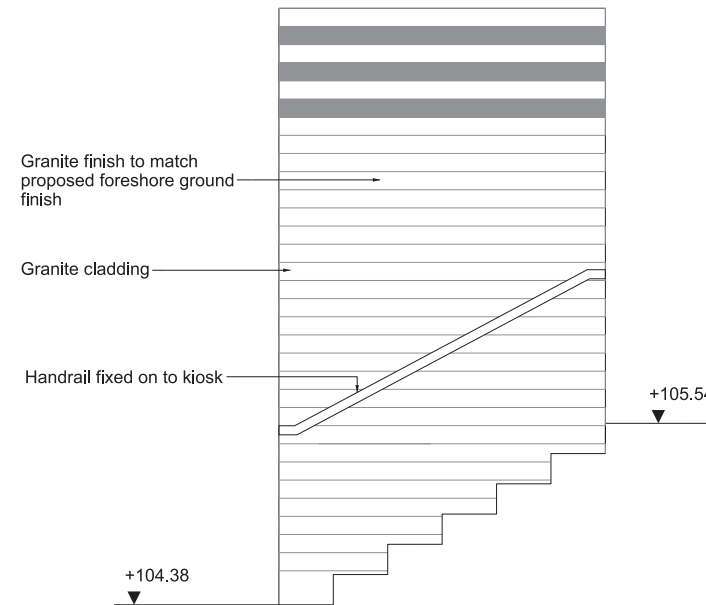
Notes:
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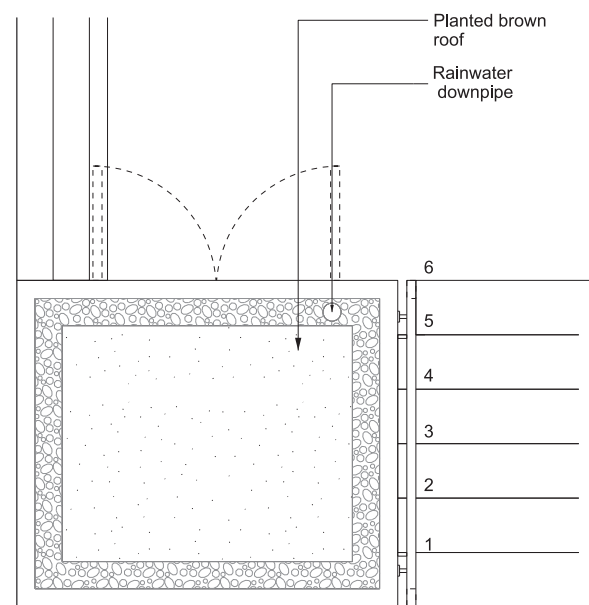
Plan



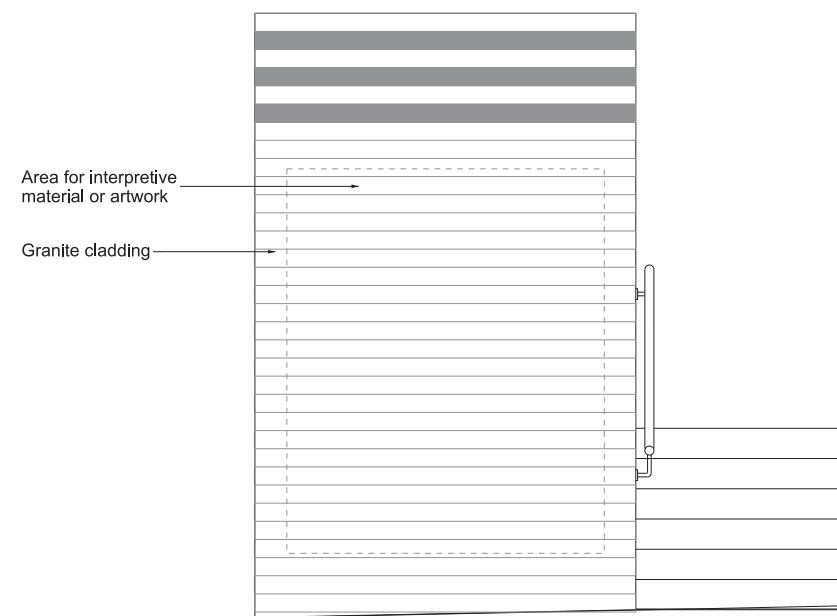
North elevation



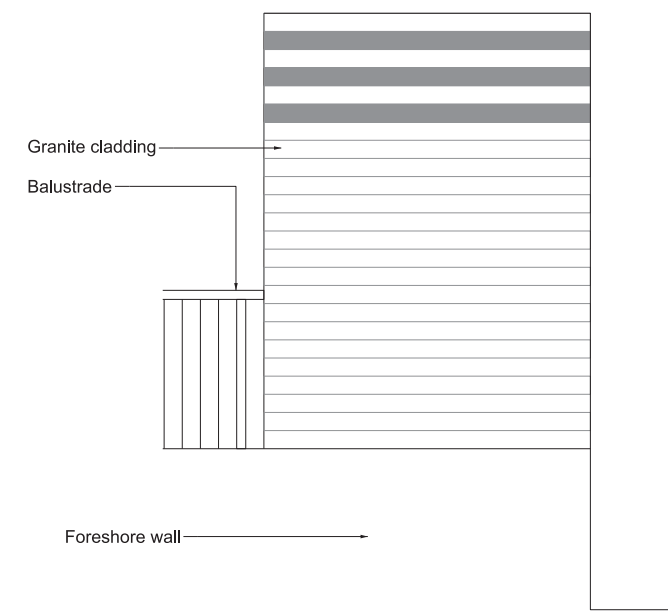
East elevation



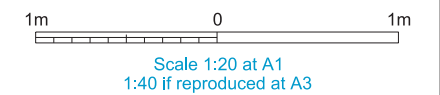
Roof plan



South elevation



West elevation



INDICATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Foreshore kiosk design intent

Book of plans - section 8
DCO-PP-05X-PUTEF-080026
January 2013

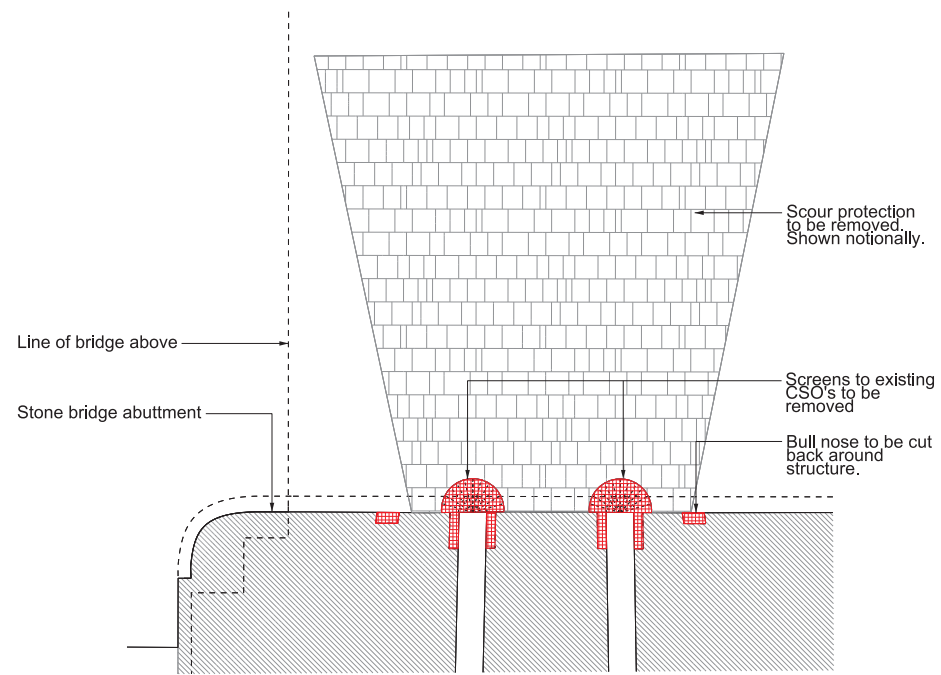




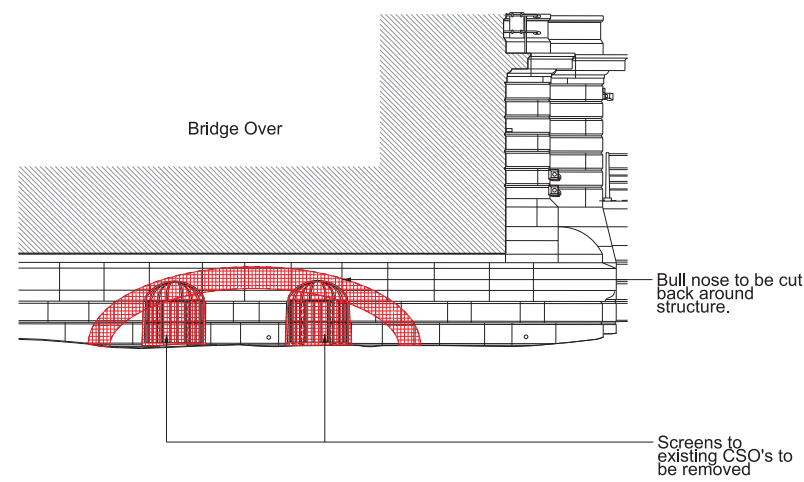
Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Key:
 Maximum permanent extent of loss of listed buildings / structures

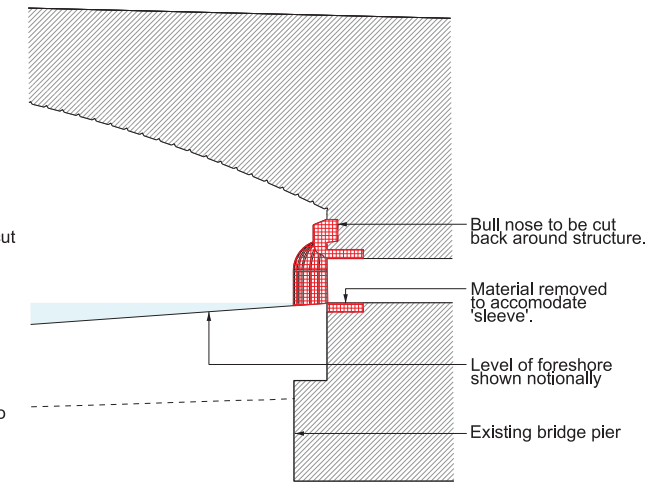
Notes:
 1. All dimensions and levels are approximate.
 2. Drawing is based on as-constructed drawings and topographical survey and not on heritage survey.



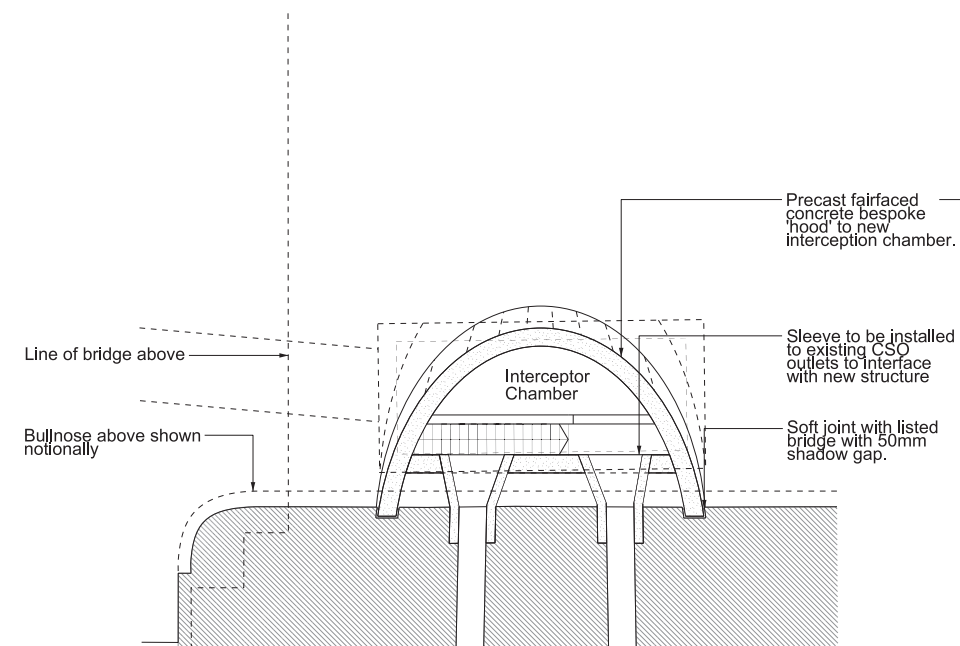
As Existing Plan



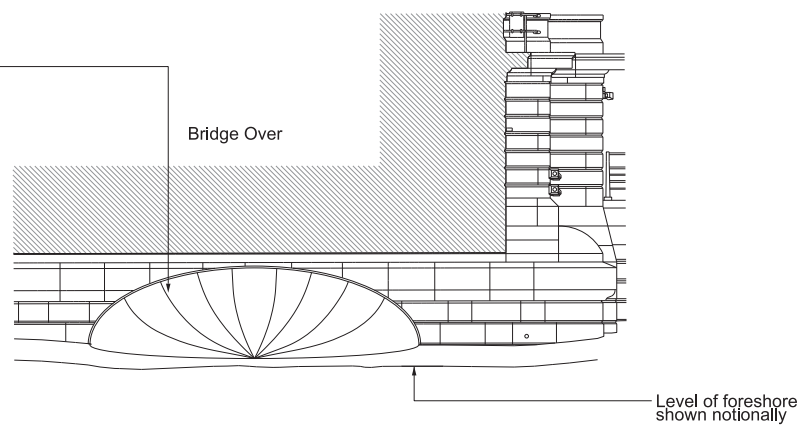
As Existing Front Elevation



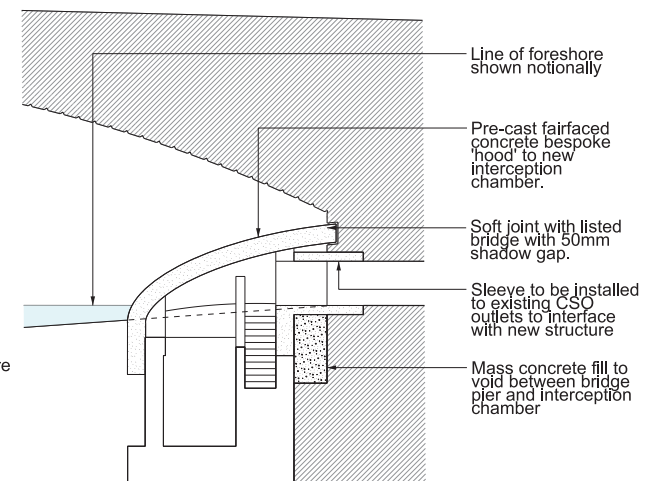
As Existing Section AA



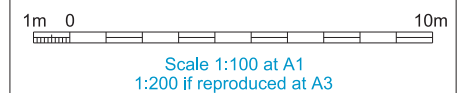
Proposed Plan



Proposed Front Elevation



Proposed Section AA

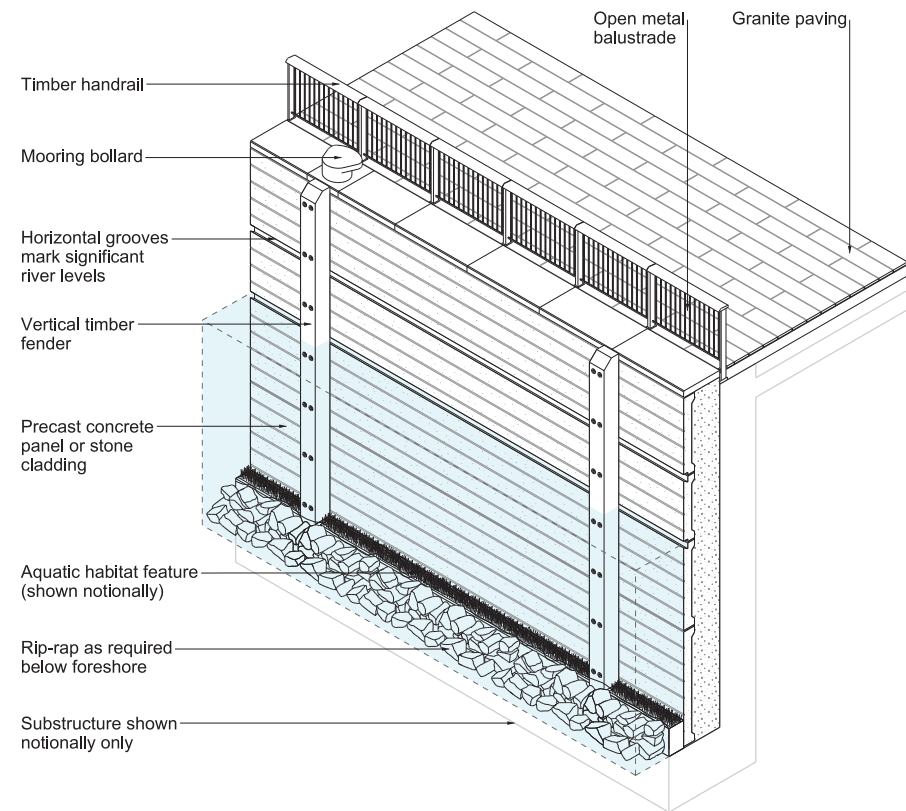


INDICATIVE
 Save for maximum extent of loss of listed structures which is for approval

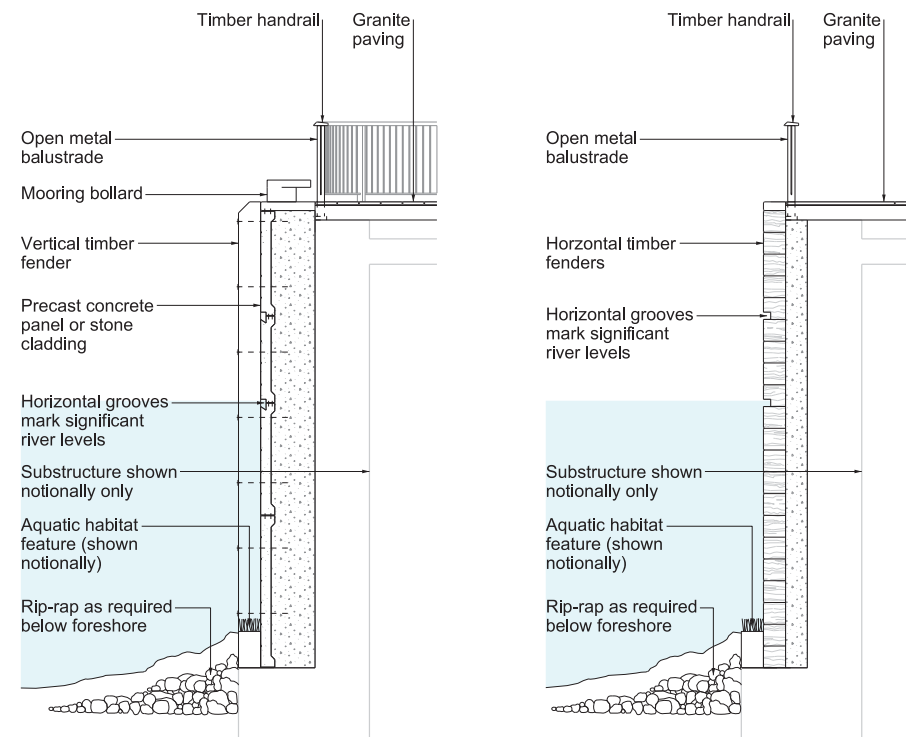
Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
 Application for Development Consent
 Proposed listed structure interface -
 Interception chamber
 Book of plans - section 8
 DCO-PP-05X-PUTEF-080027
 January 2013



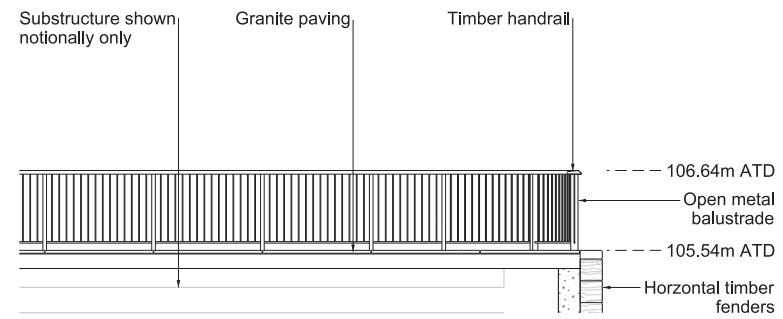


Isometric
NTS

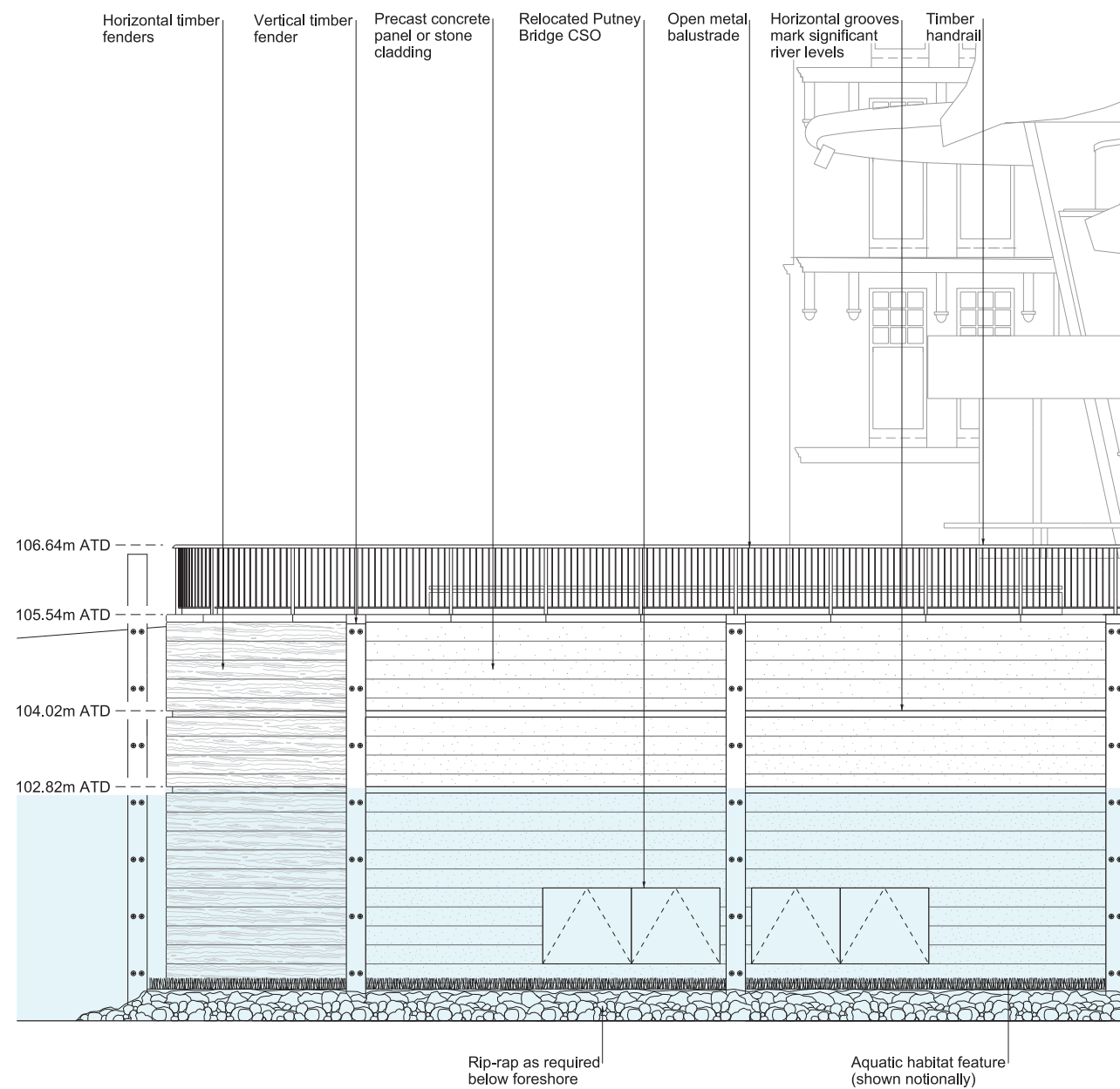


Section CC
Scale 1:50

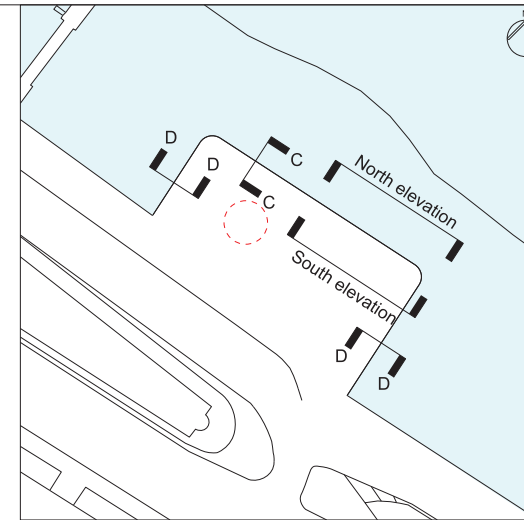
Section DD
Scale 1:50



South elevation
Scale 1:50



North elevation
Scale 1:50



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Keyplan:

This drawing

Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Notes:

1. All dimensions and levels are approximate.



Scale 1:50 at A1
1:100 if reproduced at A3

INDICATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Typical river wall design intent

Book of plans - section 8
DCO-PP-05X-PUTEF-080028
January 2013



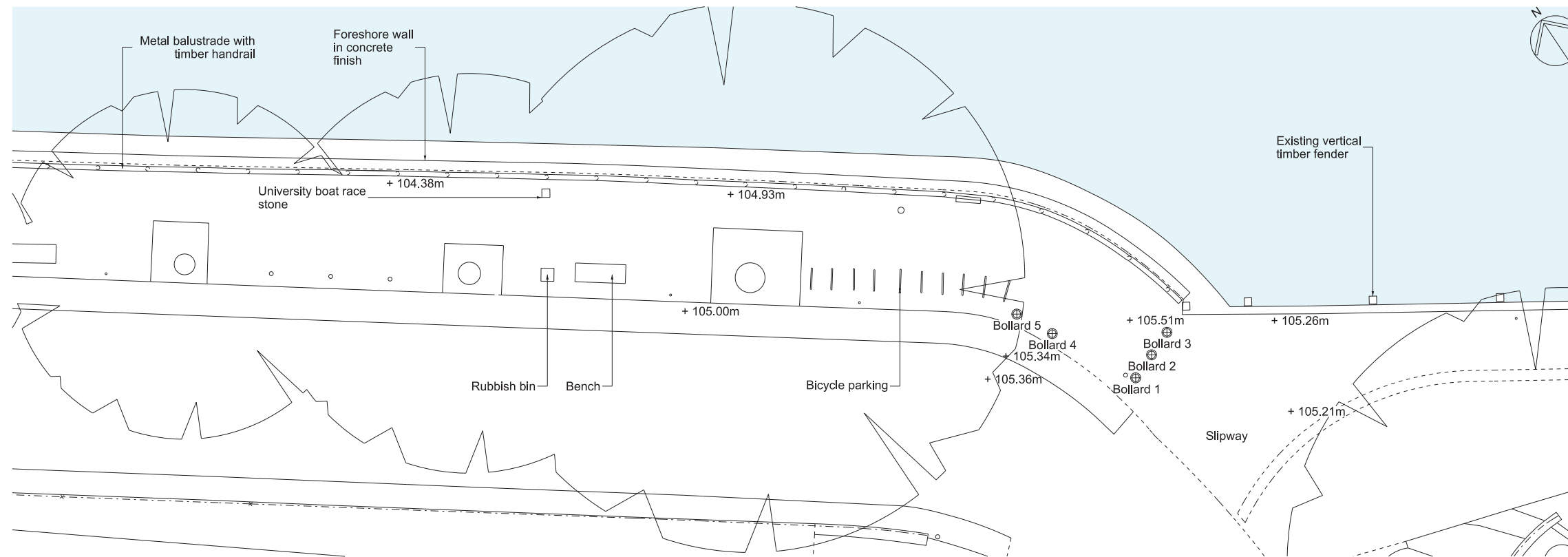
Keyplan:



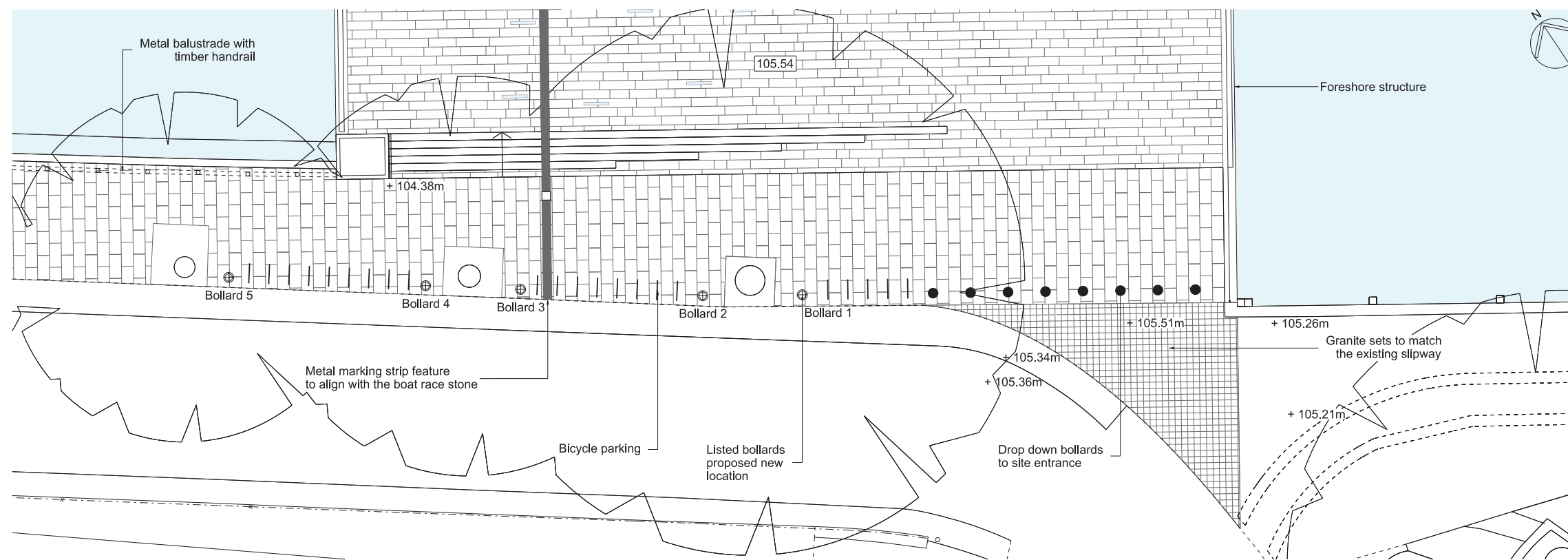
Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Notes:

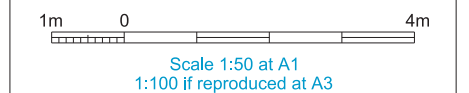
1. All dimensions and levels are approximate.
2. Any discrepancy between the location of structures and the parameters marked on the drawings are due to differences between the Ordnance Survey base and the topographic survey base, both of which have been used in the preparation of this drawing.
2. Drawing is based on as-constructed drawings and topographical survey and not on heritage survey.



As existing bollard location



Proposed bollard relocation



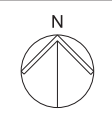
ILLUSTRATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent

As existing and proposed
Listed bollard location plan
Book of plans - section 8
DCO-PP-05X-PUTEF-080029
January 2013





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- Key:**
- Limits of land to be acquired or used (LLAU)
 - Hoarding
 - Maximum extent of working area
 - Existing public right of way
 - Route of temporary diversion of right of way
 - Site access
 - Access / haul route

- Notes :**
1. These construction phasing plans have been prepared to illustrate possible site layouts for the principal construction phases. Contractors may choose to lay sites out differently during construction depending on their preferred construction methods subject to any controls on layout imposed through the planning submission and approval process.
 2. Traffic management plans for construction phases of the work would be submitted to the appropriate authority for approval. Where appropriate, outline traffic management arrangements are shown.
 3. Utility supplies for the construction of the works would be agreed with the relevant utility company.
 4. Additional noise mitigation including noise barriers may be required but is not shown on this drawing.



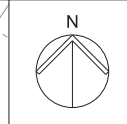
ILLUSTRATIVE

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
 Application for Development Consent
 Construction phase - Temporary slipway

Book of plans - section 8
 DCO-PP-05X-PUTEF-080034
 January 2013



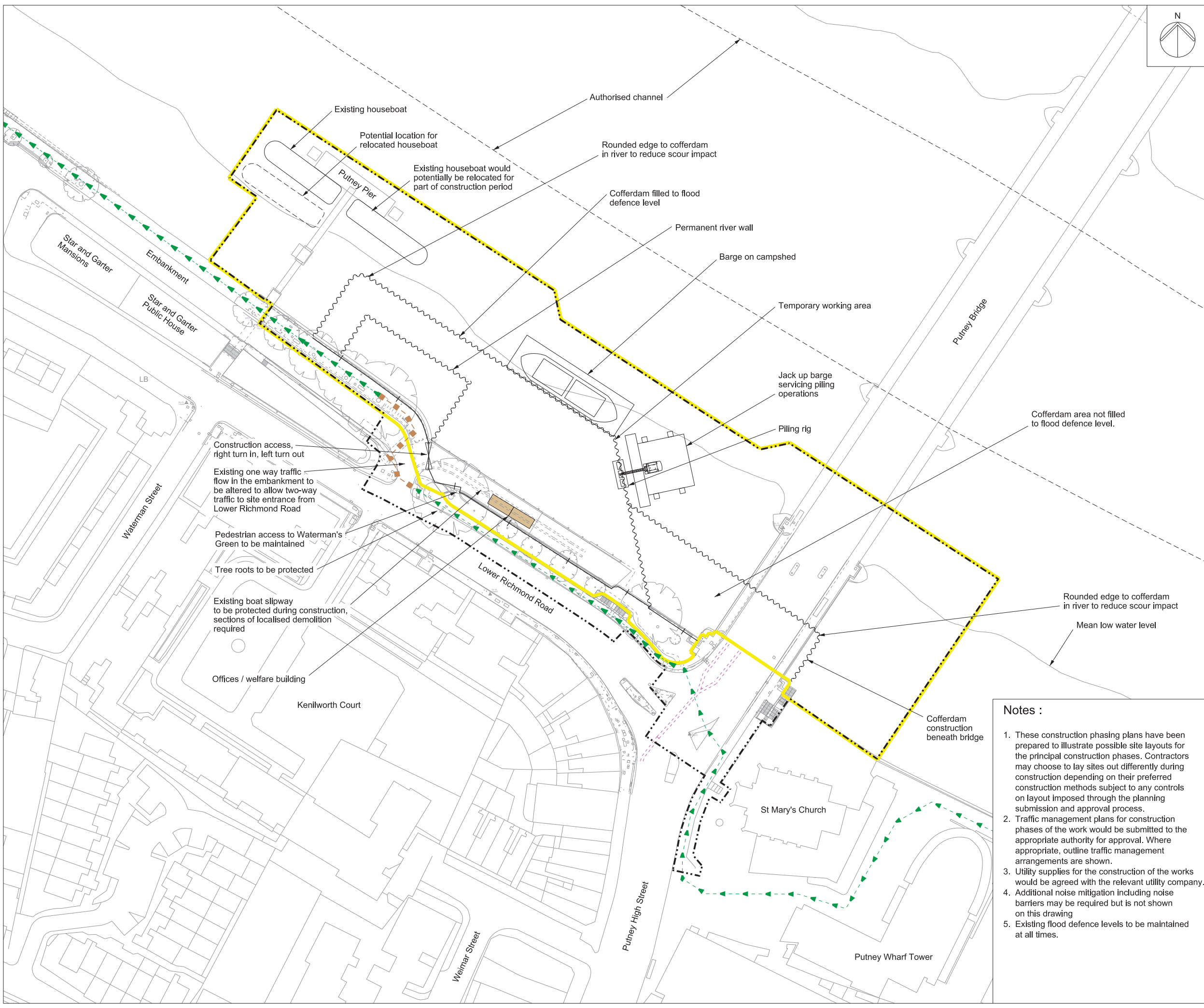


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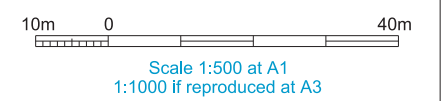


Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

- Key:
- Limits of land to be acquired or used (LLAU)
 - Hoarding
 - Maximum extent of working area
 - Existing public right of way
 - Route of temporary diversion of right of way
 - Site access
 - Access / haul route
 - Existing sewers
 - Sheet piles



- Notes :
1. These construction phasing plans have been prepared to illustrate possible site layouts for the principal construction phases. Contractors may choose to lay sites out differently during construction depending on their preferred construction methods subject to any controls on layout imposed through the planning submission and approval process.
 2. Traffic management plans for construction phases of the work would be submitted to the appropriate authority for approval. Where appropriate, outline traffic management arrangements are shown.
 3. Utility supplies for the construction of the works would be agreed with the relevant utility company.
 4. Additional noise mitigation including noise barriers may be required but is not shown on this drawing
 5. Existing flood defence levels to be maintained at all times.

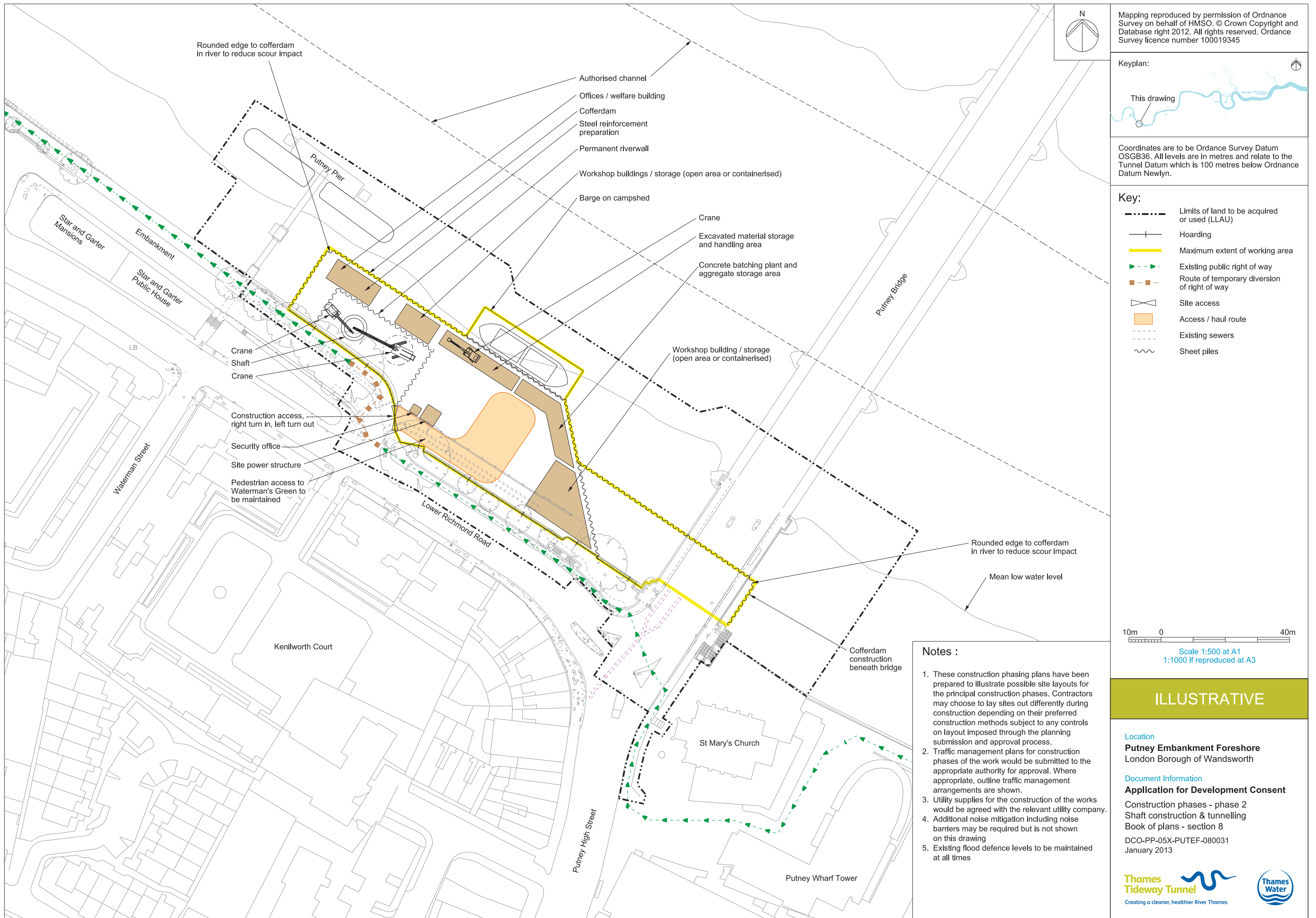


ILLUSTRATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Construction phases - phase 1
Site setup
Book of plans - section 8
DCO-PP-05X-PUTEF-080030
January 2013





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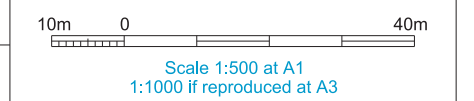


Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Key:

	Limits of land to be acquired or used (LLAU)
	Hoarding
	Maximum extent of working area
	Existing public right of way
	Route of temporary diversion of right of way
	Site access
	Access / haul route
	Existing sewers
	Sheet piles

- Notes :**
1. These construction phasing plans have been prepared to illustrate possible site layouts for the principal construction phases. Contractors may choose to lay sites out differently during construction depending on their preferred construction methods subject to any controls on layout imposed through the planning submission and approval process.
 2. Traffic management plans for construction phases of the work would be submitted to the appropriate authority for approval. Where appropriate, outline traffic management arrangements are shown.
 3. Utility supplies for the construction of the works would be agreed with the relevant utility company.
 4. Additional noise mitigation including noise barriers may be required but is not shown on this drawing
 5. Existing flood defence levels to be maintained at all times

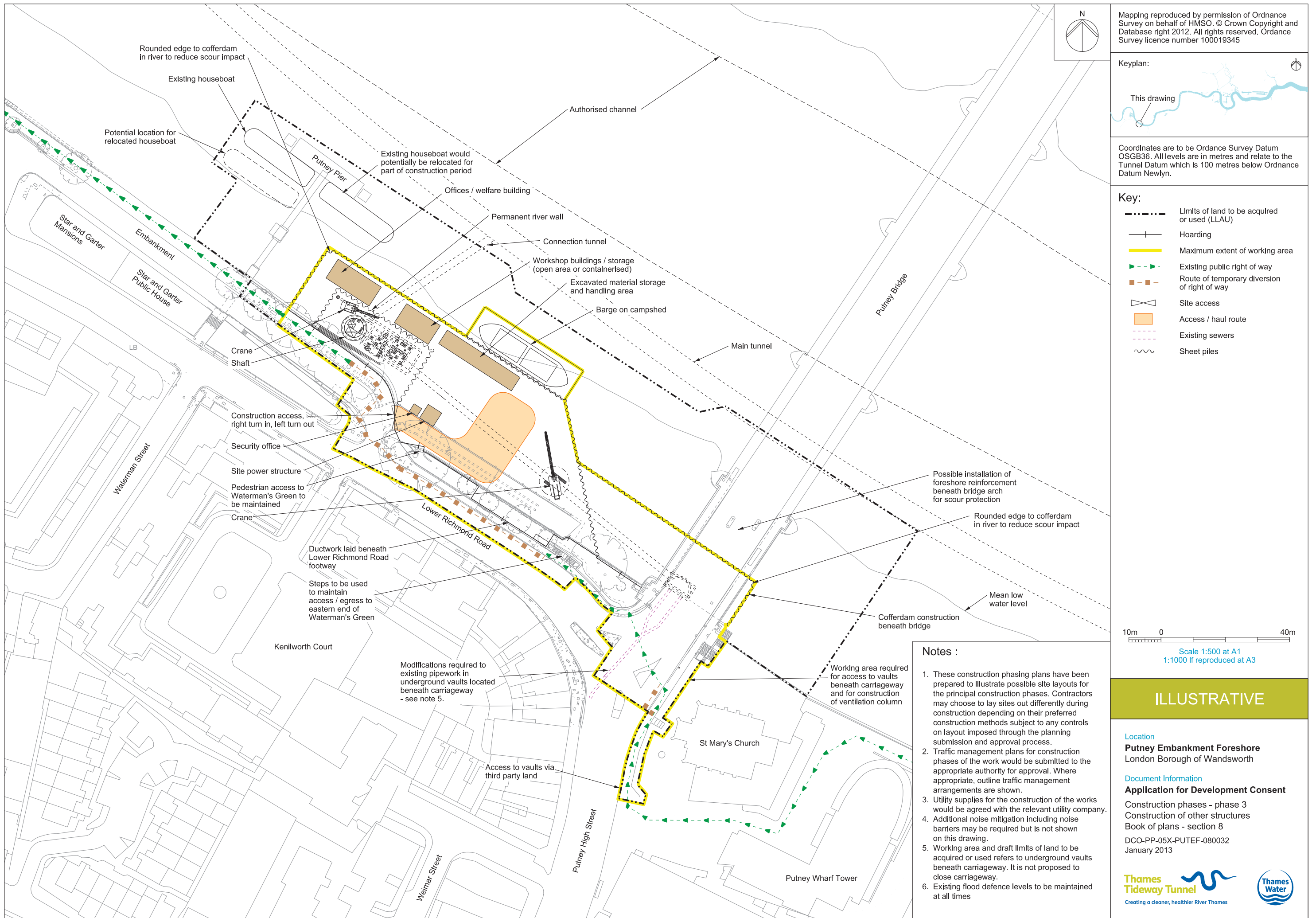


ILLUSTRATIVE

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Application for Development Consent
 Construction phases - phase 2
 Shaft construction & tunnelling
 Book of plans - section 8
 DCO-PP-05X-PUTEF-080031
 January 2013





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Keyplan:
This drawing

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- Key:**
- Limits of land to be acquired or used (LLAU)
 - Hoarding
 - Maximum extent of working area
 - Existing public right of way
 - Route of temporary diversion of right of way
 - Site access
 - Access / haul route
 - Existing sewers
 - Sheet piles

- Notes :**
1. These construction phasing plans have been prepared to illustrate possible site layouts for the principal construction phases. Contractors may choose to lay sites out differently during construction depending on their preferred construction methods subject to any controls on layout imposed through the planning submission and approval process.
 2. Traffic management plans for construction phases of the work would be submitted to the appropriate authority for approval. Where appropriate, outline traffic management arrangements are shown.
 3. Utility supplies for the construction of the works would be agreed with the relevant utility company.
 4. Additional noise mitigation including noise barriers may be required but is not shown on this drawing.
 5. Working area and draft limits of land to be acquired or used refers to underground vaults beneath carriageway. It is not proposed to close carriageway.
 6. Existing flood defence levels to be maintained at all times

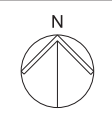
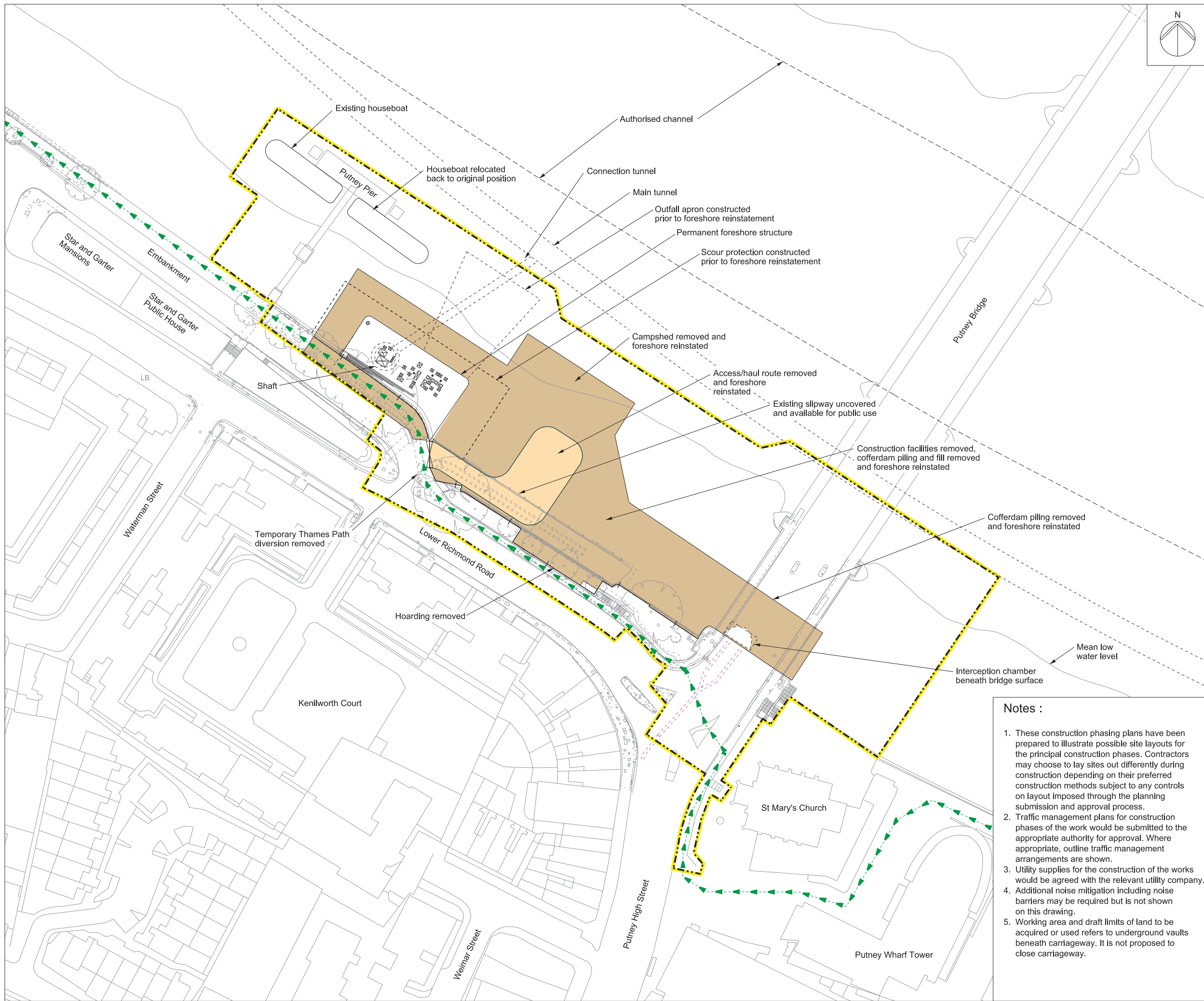
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1:1000 if reproduced at A3

ILLUSTRATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Construction phases - phase 3
Construction of other structures
Book of plans - section 8
DCO-PP-05X-PUTEF-080032
January 2013



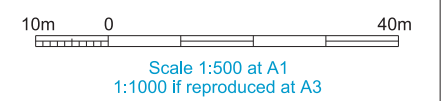


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- Key:**
- Limits of land to be acquired or used (LLAU)
 - Hoarding
 - Maximum extent of working area
 - Existing public right of way
 - Route of temporary diversion of right of way
 - Site access
 - Access / haul route
 - Existing sewers



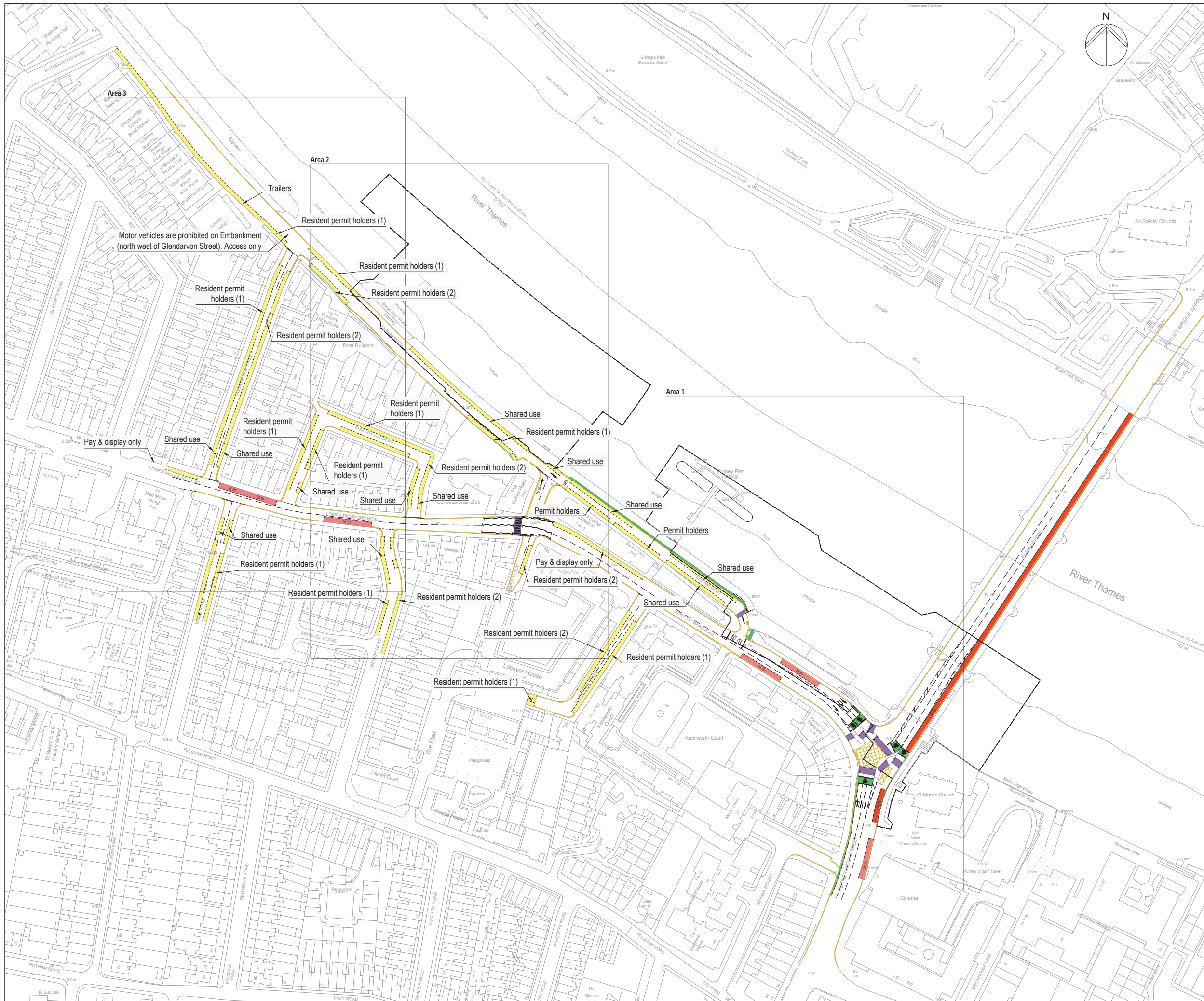
- Notes :**
1. These construction phasing plans have been prepared to illustrate possible site layouts for the principal construction phases. Contractors may choose to lay sites out differently during construction depending on their preferred construction methods subject to any controls on layout imposed through the planning submission and approval process.
 2. Traffic management plans for construction phases of the work would be submitted to the appropriate authority for approval. Where appropriate, outline traffic management arrangements are shown.
 3. Utility supplies for the construction of the works would be agreed with the relevant utility company.
 4. Additional noise mitigation including noise barriers may be required but is not shown on this drawing.
 5. Working area and draft limits of land to be acquired or used refers to underground vaults beneath carriageway. It is not proposed to close carriageway.

ILLUSTRATIVE

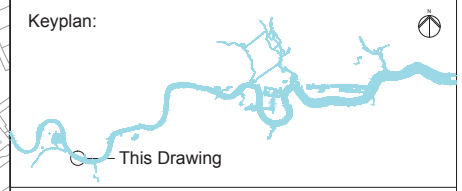
Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Construction phases - phase 4
Site demobilisation
Book of plans - section 8
DCO-PP-05X-PUTEF-080033
January 2013





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- Key**
- Existing**
- Parking restrictions
 - On street parking
 - Bus stop / stand
 - Bus lane
 - Pedestrian crossing
 - Cycle lane / advance stop line
 - Bicycle stands
 - Bollards
- Revised**
- - - - - Limit of land to be acquired or used (LLAU)

On Street Parking

Shared Use - A1 permit holders or pay & display max stay 4 hrs
 Mon - Sat 8:30am - 6:30pm

A1 - A1 permit holders only Mon - Sat 8:30am - 6:30pm
 Pay & display only - Pay & display only max stay 1 hr Mon - Sat
 10:00am - 4:00pm

Residence permit holders (1) - Residence permit holders only at all times

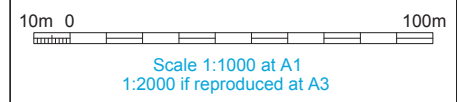
Residence permit holders (2) - Residence permit holders only
 Mon - Sat 8:30am - 6:30pm

Trailers - Trailers or towing vehicles with trailers only. Mon - Sat
 8:30am - 6:30pm

Stage

Existing and construction base case

- Standards**
- Design Manual for Roads and Bridges, DfT, 1992
 - Traffic Signs Regulations & General Directions, Tso, 2002
 - Traffic Signs Manual, DfT, 2006
 - Manual for Streets, DfT, 2007
 - Manual for Streets 2, CIHT, 2010
 - Designing for Deliveries, Fta, 1998
 - Cycle Infrastructure Design Ltn 2/08, DfT, 2008
 - Design of Pedestrian Crossings Ltn 2/95, DfT, 1995
 - Guidance on the use of Tactile Paving Surfaces, DfT, 1998
 - Accessible Bus Stop Design Guidance, TfL, 2006



FOR INFORMATION

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
 Application for Development Consent
 Existing highway layout

DCO-PP-05X-PUTEF-080039
 January 2013



Existing & construction base case highway layout



Highway layout during construction



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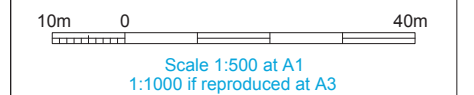
Key

Existing	
	Parking restrictions
	On street parking
	Bus stop / stand
	Bus lane
	Pedestrian crossing
	Cycle lane / advance stop line
	Bicycle Parking
	Bollard
Revised	
	Parking restrictions
	Suspension of footway
	Suspension of Slipway
	Suspended on street parking
	Relocated cycle path
	Illustrative on-site manoeuvring zone
	Visibility splay - 2.4m x 43m / 2.4m x 27m (ssd adjust for bonnet length)
	Site hut
	Site hoarding
	Access gate
	Limit of land to be acquired or used (LLAU)
	PWH1X_C00 See schedule of works

On Street Parking
 Shared Use - A1 permit holders or pay & display max stay 4 hrs
 Mon - Sat 8:30am - 6:30pm

- Standards**
- Design Manual for Roads and Bridges, DfT, 1992
 - Traffic Signs Regulations & General Directions, TSO, 2002
 - Traffic Signs Manual, DfT, 2006
 - Manual for Streets, DfT, 2007
 - Manual for Streets 2, CIHT, 2010
 - Designing for Deliveries, Fta, 1998
 - Cycle Infrastructure Design Ltn 2/08, DfT, 2008
 - Design of Pedestrian Crossings Ltn 2/95, DfT, 1995
 - Guidance on the use of Tactile Paving Surfaces, DfT, 1998
 - Accessible Bus Stop Design Guidance, TfL, 2006

Stage
 Phase 1-3



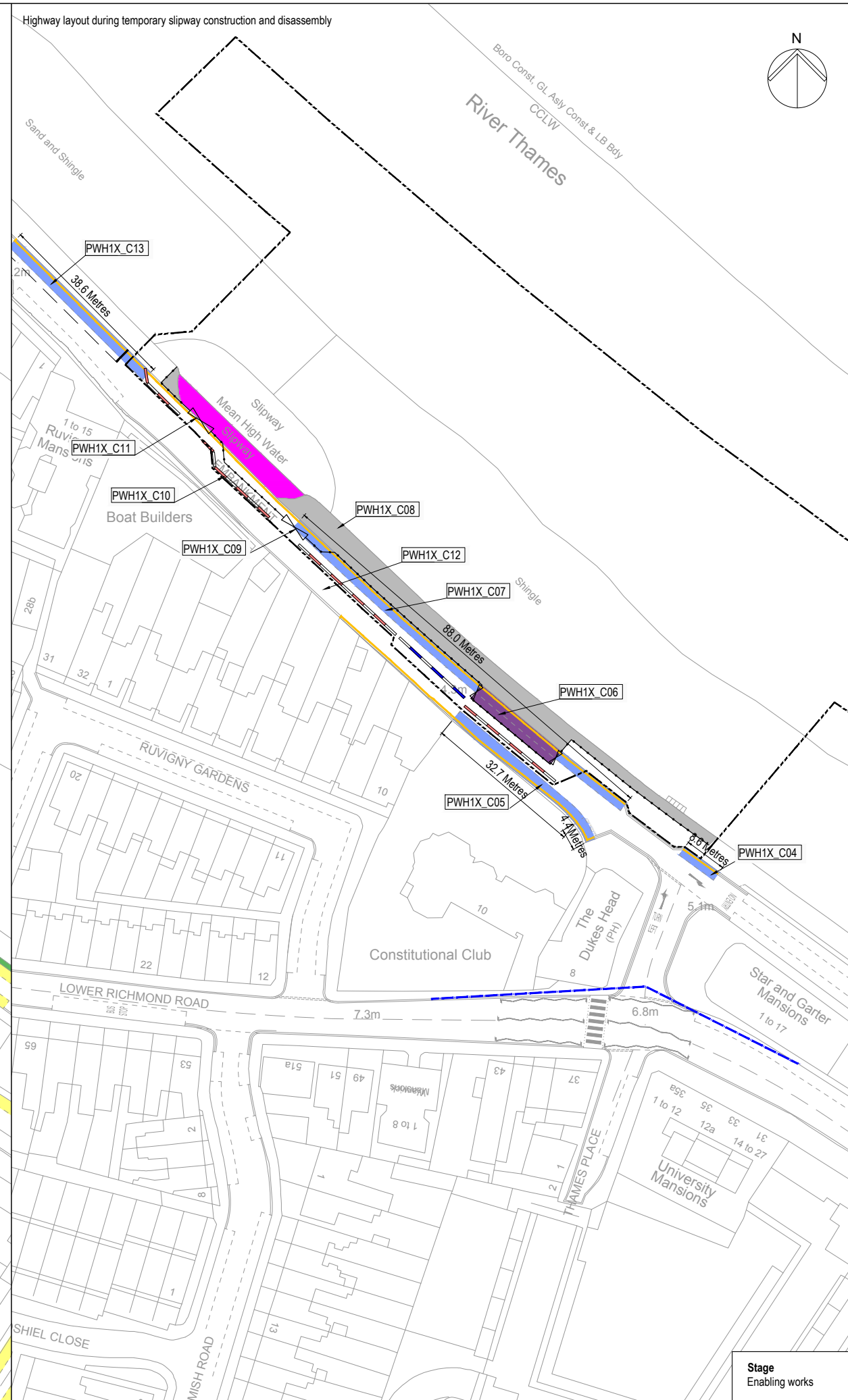
ILLUSTRATIVE

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
 Application for Development Consent
 Highway layout during construction
 (Area 1)

DCO-PP-05X-PUTEF-080040
 January 2013





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Keyplan:

Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Key

Existing	
	Parking restrictions
	On street parking
	Bus stop / stand
	Pedestrian crossing
	Cycle lane / advance stop line

Revised	
	Parking restrictions
	Suspension of footway
	Suspension of slipway
	Suspended on street parking
	Intermittent loading area (with associated traffic management)
	Temporary barrier
	Intermittent barrier, to be removed during hgv access
	Site hoarding
	Access gate
	Visibility splay - 2.4m x 43m (ssd adjust for bonnet length)
	Limit of land to be acquired or used (LLAU)

PWH1X_C00 See schedule of works

On street parking

Shared use - Shared use A1 permit holders or pay & display max stay 4hrs Mon - Sat 8:30am - 6:30pm

Permit holders - A1 permit holders only Mon - Sat 8:30am - 6:30pm

Pay & display - Pay & display only max stay 1 hr Mon - Sat 10:00am - 4:00pm

Residence permit holders (1) - Residents permit holders only at all times

Residents permit holders (2) - Residents permit holders only Mon - Sat 8:30am - 6:30pm

Standards

- Design Manual for Roads and Bridges, Dft, 1992
- Traffic Signs Regulations & General Directions, Tso, 2002
- Traffic Signs Manual, Dft, 2006
- Manual for Streets, Dft, 2007
- Manual for Streets 2, CIHT, 2010
- Designing for Deliveries, Fta, 1998
- Cycle Infrastructure Design Ltn 2/08, Dft, 2008
- Design of Pedestrian Crossings Ltn 2/95, Dft, 1995
- Guidance on the use of Tactile Paving Surfaces, Dft, 1998
- Accessible Bus Stop Design Guidance, TfL, 2006

10m 0 40m

Scale 1:500 at A1
1:1000 if reproduced at A3

ILLUSTRATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Highway layout during construction
(Area 2)

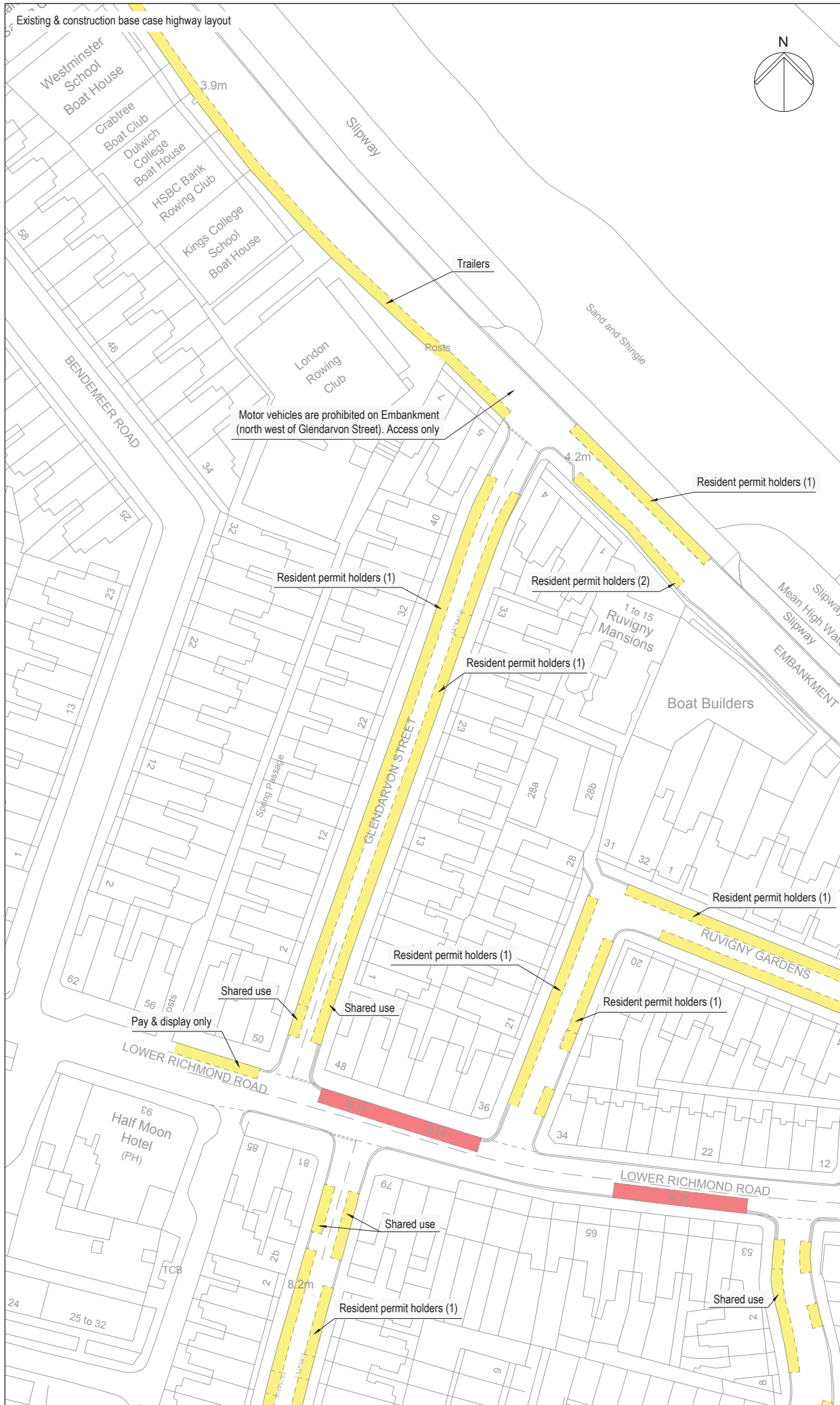
DCO-PP-05X-PUTEF-080041
January 2013

Stage
Enabling works

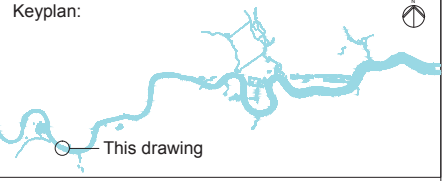
Thames Tideway Tunnel
Creating a cleaner healthier River Thames

Thames Water

© Thames Water Utilities Ltd 2008



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Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

Key

	Existing		Parking restrictions
	Suspension of footway		On street parking
	Suspension of slipway		Bus stop / stand
	Suspended on street parking		Illustrative on-site manoeuvring zone
	Temporary barrier		Visibility splay - 2.4m x 43m (ssd adjust for bonnet length)
	Site hoarding		Access gate
	Limit of land to be acquired or used (LLAU)		

PWH1X_C00 See schedule of works

On street parking

Shared use - Shared use A1 permit holders or pay & display max stay 4hrs Mon - Sat 8:30am - 6:30pm

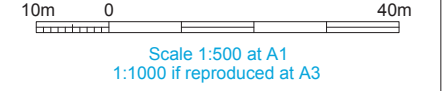
Permit holders - A1 permit holders only Mon - Sat 8:30am - 6:30pm

Pay & display - Pay & display only max stay 1 hr Mon - Sat 10:00am - 4:00pm

Residence permit holders (1) - Residents permit holders only at all times

Residents permit holders (2) - Residents permit holders only Mon - Sat 8:30am - 6:30pm

- Stage**
Enabling works
- Standards**
- Design Manual for Roads and Bridges, DfT, 1992
 - Traffic Signs Regulations & General Directions, Tso, 2002
 - Traffic Signs Manual, DfT, 2006
 - Manual for Streets, DfT, 2007
 - Manual for Streets 2, CIHT, 2010
 - Designing for Deliveries, Fla, 1998
 - Cycle Infrastructure Design Ltn 2/08, DfT, 2008
 - Design of Pedestrian Crossings Ltn 2/95, DfT, 1995
 - Guidance on the use of Tactile Paving Surfaces, DfT, 1998
 - Accessible Bus Stop Design Guidance, TfL, 2006



ILLUSTRATIVE

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Application for Development Consent
Highway layout during construction
(Area 3)

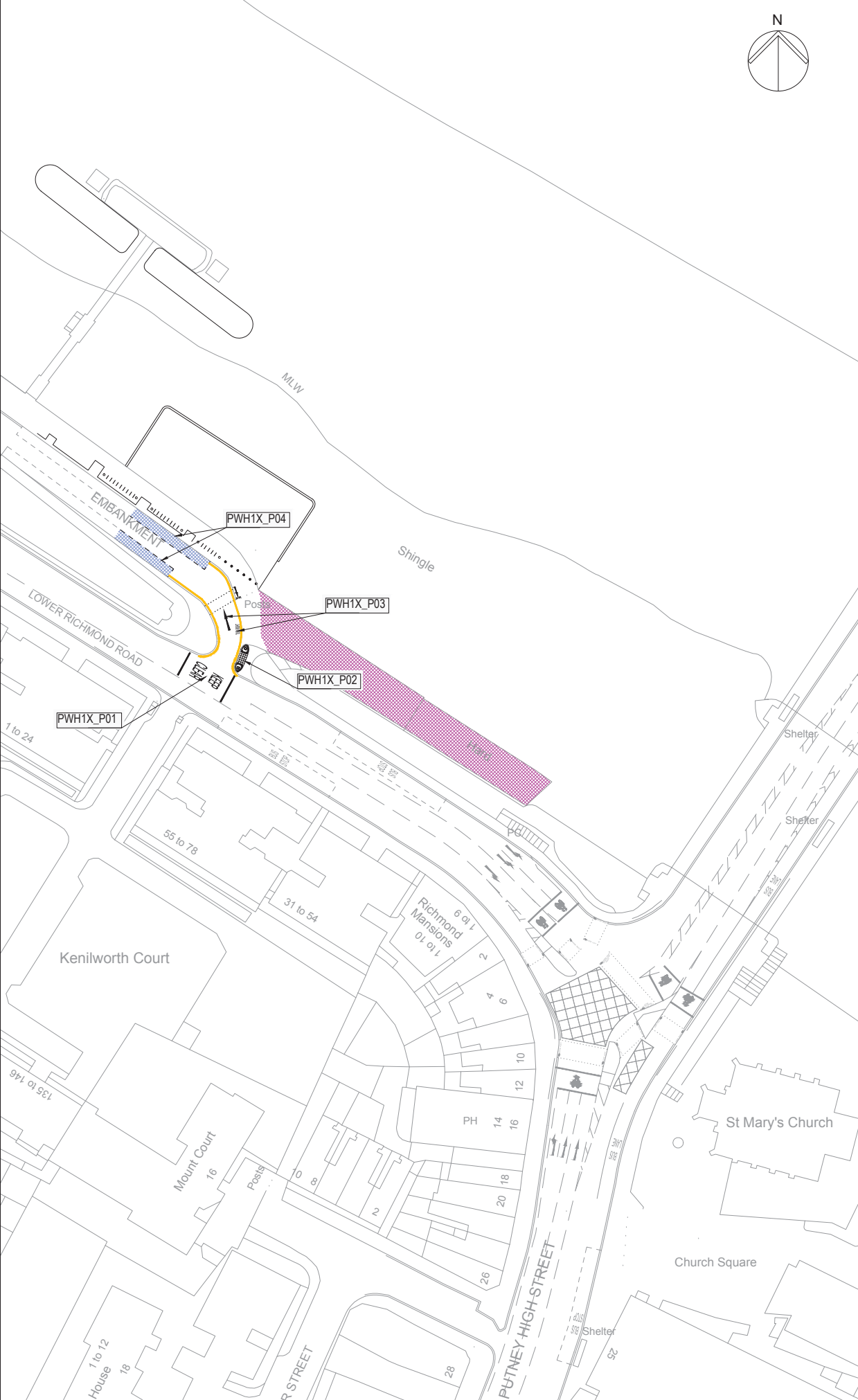
DCO-PP-05X-PUTEF-080042
January 2013



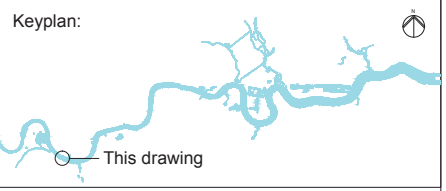
Existing & construction base case highway layout



Permanent highway layout



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Coordinates are to be Ordnance Survey Datum OSGB36. All levels are in metres and relate to the Tunnel Datum which is 100 metres below Ordnance Datum Newlyn.

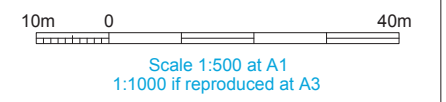
Key

	Existing		Parking restrictions
	On street parking		On street parking
	Bus stop / stand		Reinstated slipway
	Bus lane		Reinstated on street parking
	Pedestrian crossing		Reinstated bollards
	Cycle lane / advance stop line		Proposed removable bollards
	Bicycle stand		New shoreline wall
	Bollard		New bicycle parking
			See schedule of works

On street parking
 Shared use - A1 permit holders or pay & display max stay 4hrs
 Mon - Sat 8:30am - 6:30pm

Stage
 Permanent phase

- Standards**
- Design Manual for Roads and Bridges, DfT, 1992
 - Traffic Signs Regulations & General Directions, TSO, 2002
 - Traffic Signs Manual, DfT, 2006
 - Manual for Streets, DfT, 2007
 - Manual for Streets 2, CIHT, 2010
 - Designing for Deliveries, Fla, 1998
 - Cycle Infrastructure Design Ltn 2/08, DfT, 2008
 - Design of Pedestrian Crossings Ltn 2/95, DfT, 1995
 - Guidance on the use of Tactile Paving Surfaces, DfT, 1998
 - Accessible Bus Stop Design Guidance, TfL, 2006



ILLUSTRATIVE

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

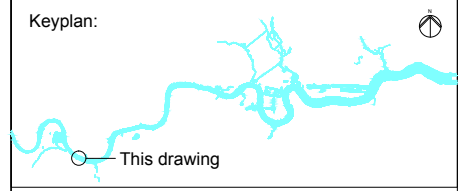
Document Information
 Application for Development Consent
 Permanent highway layout
 Area 1 work

DCO-PP-05X-PUTEF-080043
 January 2013





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- Key**
- Existing
 - Parking restrictions
 - On street parking
 - Bus stop / stand
 - Pedestrian crossing
 - Cycle lane / advance stop line
 - Revised
 - Reinstated parking restrictions
 - Reinstated footway
 - Reinstated slipway
 - Reinstated on street parking
 - See schedule of works
- PWH1X_P00

On street parking

Shared use - Shared use A1 permit holders or pay & display max stay 4hrs Mon - Sat 8:30am - 6:30pm

Permit holders - A1 permit holders only Mon - Sat 8:30am - 6:30pm

Pay & display - Pay & display only max stay 1 hr Mon - Sat 10:00am - 4:00pm

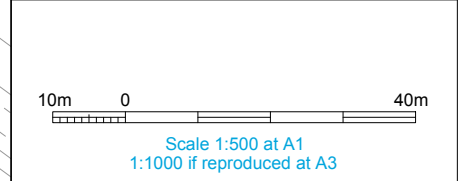
Residence permit holders (1) - Residents permit holders only at all times

Residents permit holders (2) - Residents permit holders only Mon - Sat 8:30am - 6:30pm

Stage

Permanent phase

- Standards**
- Design Manual for Roads and Bridges, DfT, 1992
 - Traffic Signs Regulations & General Directions, TSO, 2002
 - Traffic Signs Manual, DfT, 2006
 - Manual for Streets, DfT, 2007
 - Manual for Streets 2, CIHT, 2010
 - Designing for Deliveries, Fla, 1998
 - Cycle Infrastructure Design Ltn 2/08, DfT, 2008
 - Design of Pedestrian Crossings Ltn 2/95, DfT, 1995
 - Guidance on the use of Tactile Paving Surfaces, DfT, 1998
 - Accessible Bus Stop Design Guidance, TfL, 2006



ILLUSTRATIVE

Location

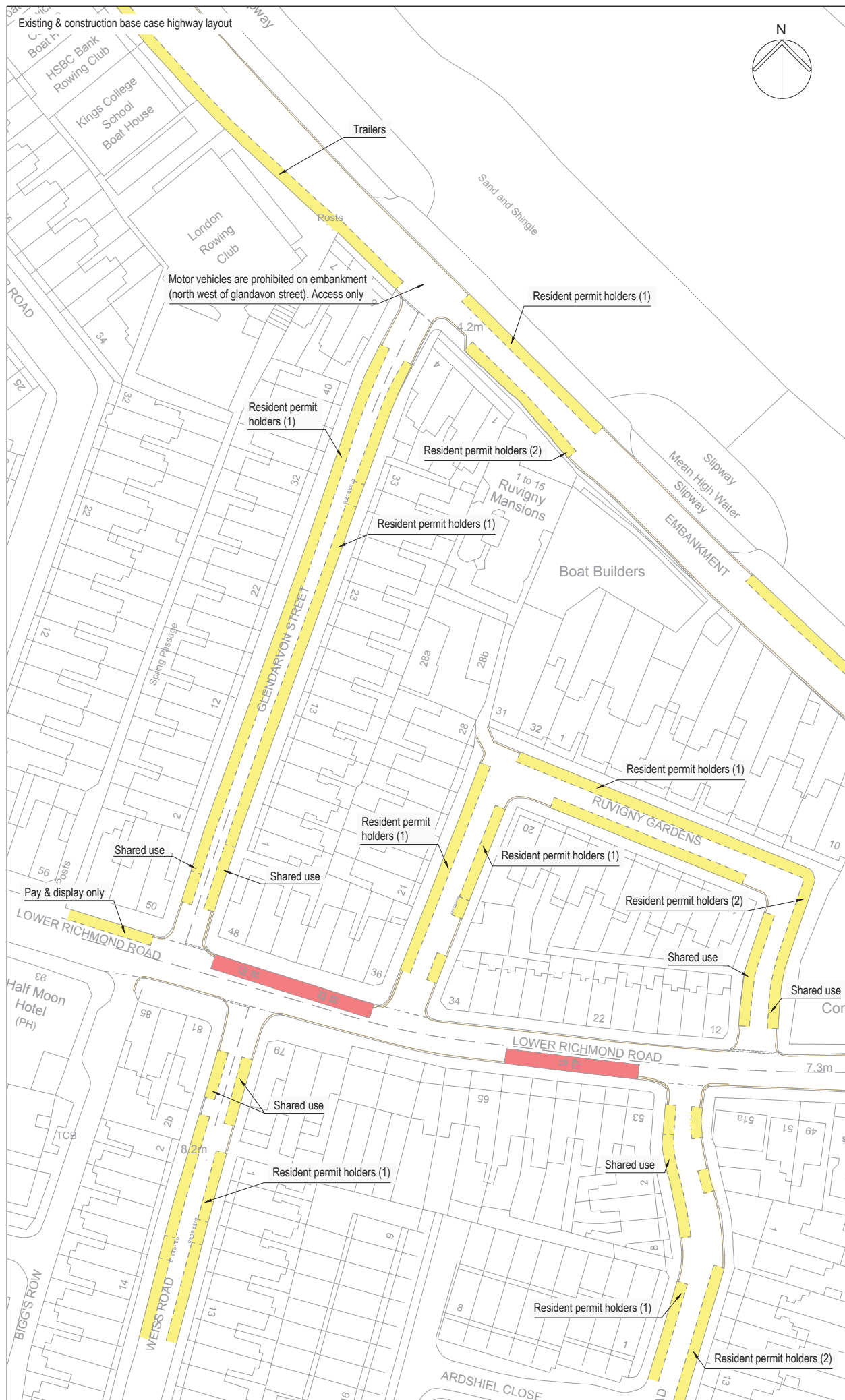
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

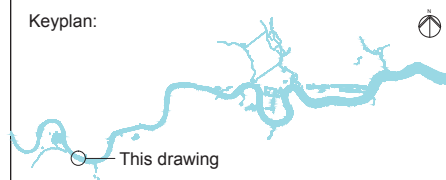
Application for Development Consent
Permanent highway layout
Area 2 work

DCO-PP-05X-PUTEF-080044
January 2013





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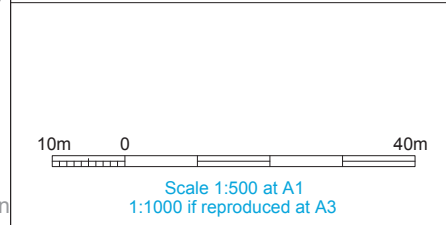
Key

Existing	—	Parking restrictions
	—	On street parking
	—	Bus stop / stand
Revised	—	Reinstated parking restrictions
	—	Reinstated footway
	—	Reinstated slipway
	—	Reinstated on street parking
	—	PWH1X_P00 See schedule of works

On street parking
 Shared use - Shared use A1 permit holders or pay & display max stay 4hrs Mon - Sat 8:30am - 6:30pm
 Permit holders - A1 permit holders only Mon - Sat 8:30am - 6:30pm
 Pay & display - Pay & display only max stay 1 hr Mon - Sat 10:00am - 4:00pm
 Residence permit holders (1) - Residents permit holders only at all times
 Residents permit holders (2) - Residents permit holders only Mon - Sat 8:30am - 6:30pm

Stage
 Permanent phase

- Standards**
- Design Manual for Roads and Bridges, DfT, 1992
 - Traffic Signs Regulations & General Directions, TSO, 2002
 - Traffic Signs Manual, DfT, 2006
 - Manual for Streets, DfT, 2007
 - Manual for Streets 2, CIHT, 2010
 - Designing for Deliveries, Fla, 1998
 - Cycle Infrastructure Design Ltn 2/08, DfT, 2008
 - Design of Pedestrian Crossings Ltn 2/95, DfT, 1995
 - Guidance on the use of Tactile Paving Surfaces, DfT, 1998
 - Accessible Bus Stop Design Guidance, TfL, 2006



ILLUSTRATIVE

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
 Application for Development Consent
 Permanent highway layout
 Area 3 work

DCO-PP-05X-PUTEF-080045
 January 2013



2 Environmental impact assessment figures

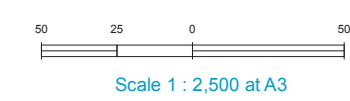
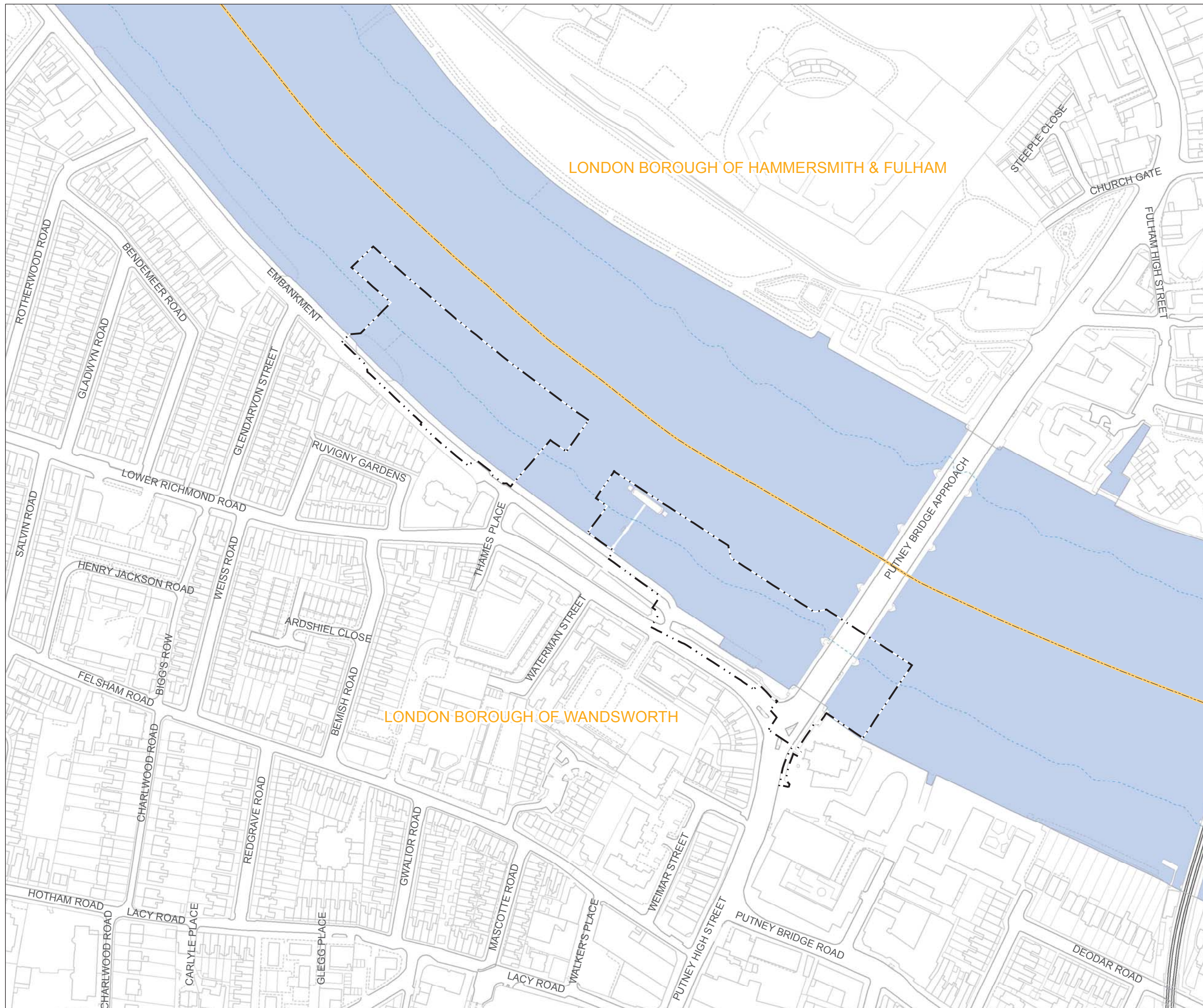
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Keyplan:



Key

- Limits of Land to be Acquired or Used
- Local Authority Boundary
- River Thames



FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Site location plan
Vol. 7 Figure 2.1.1

1PL03-MG-00700
January 2013



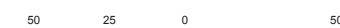


Key

- Limits of Land to be Acquired or Used
- Local Authority Boundary

Land Use

- Class A1-A5 (Shops, Financial & Professional Services, Restaurants, Drinking Establishments and Hot Food Takeaways)
- Class B1 (Business (Offices except A2) Research and Development, Light Industry)
- Class B2-B8 (General Industrial / Storage or Distribution)
- Class C1 (Hotels)
- Class C2-C2A (Residential Institutions)
- Class C3-C4 (Dwelling Houses)
- Class D1-D2 (Non Residential Institutions (Community Facilities) and Assembly and Leisure)
- Mixed Use
- Other
- Open Space



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

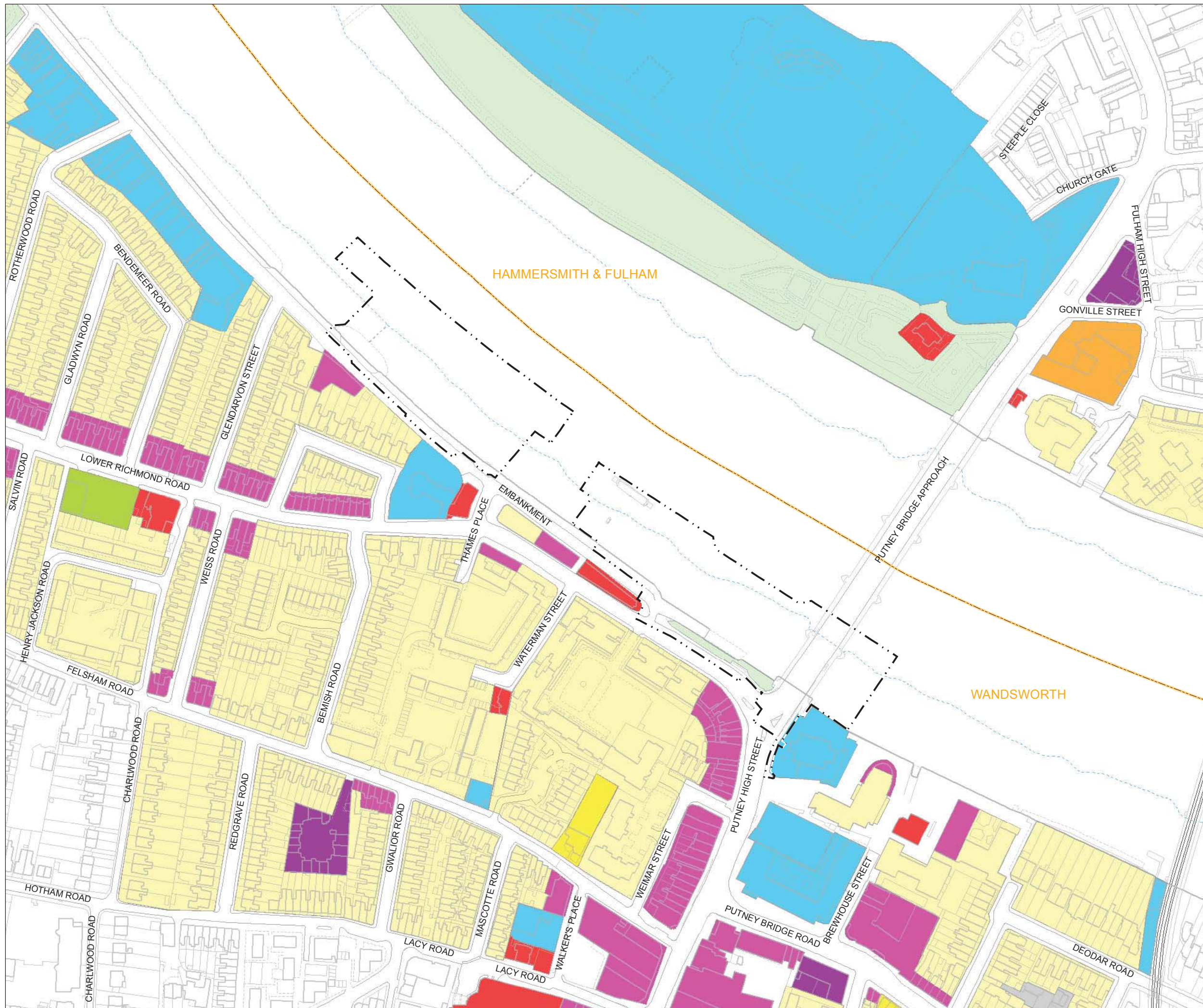
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

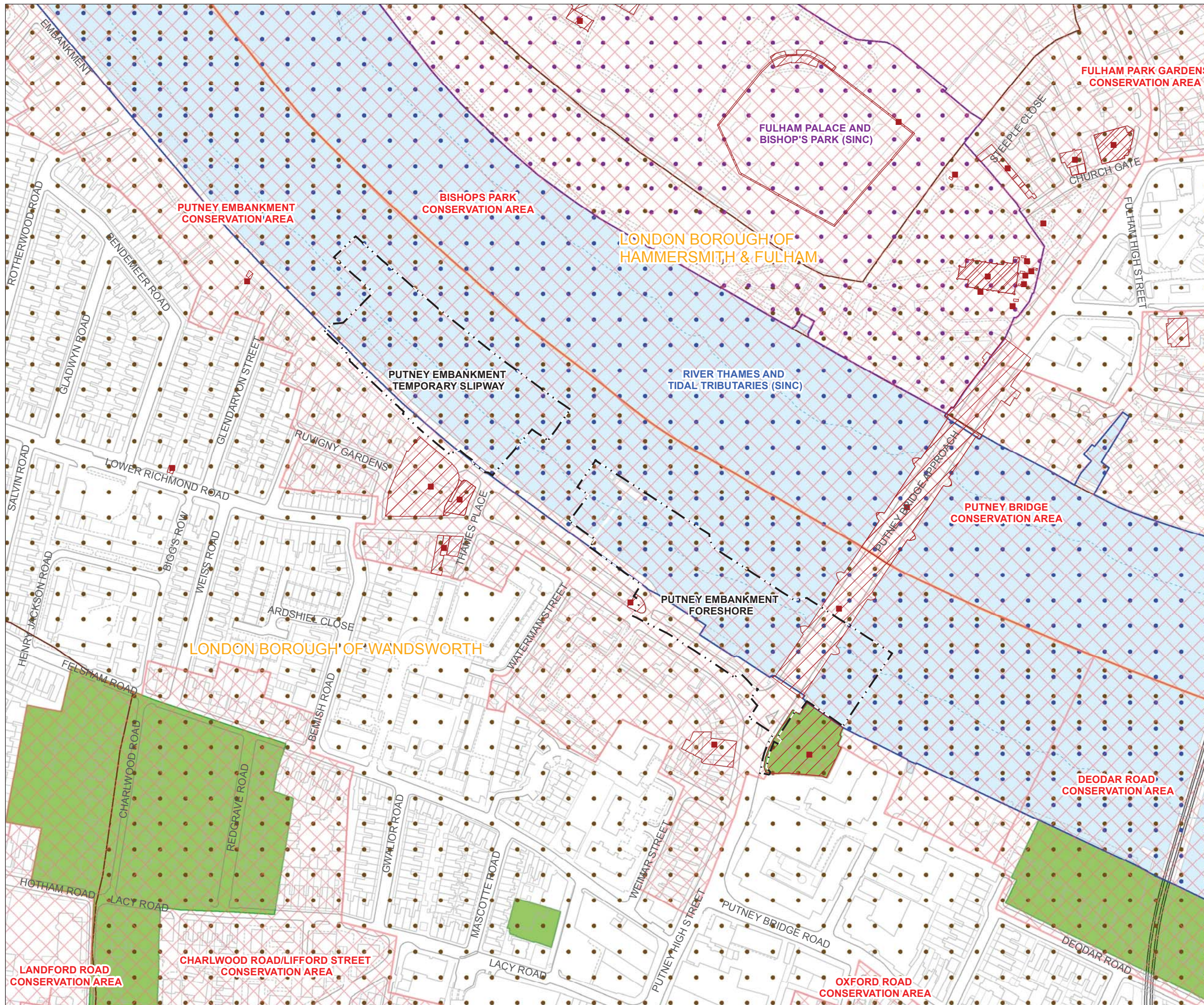
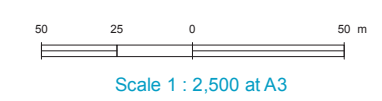
Land use
Vol. 7 Figure 2.1.2

1PL03-MG-00759
January 2013





- Key**
- Listed Building Point
 - Limits of Land to be Acquired or Used
 - ▨ Listed Building Area
 - ▧ LPA Conservation Area
 - Tree Preservation Order Area
 - LPA Archaeological Area
 - Local Authority Boundary
 - River Thames
- Sites of Importance for Nature Conservation (SINC)**
- Metropolitan Importance
 - Borough Importance



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Environmental setting
 Vol. 7 Figure 2.1.3

1PL03-MG-00693
 January 2013

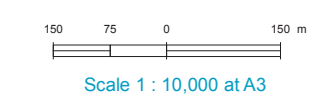


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- Key**
- Planning Application
 - Limits of Land to be Acquired or Used
 - Planning Application (1km Boundary)
 - Local Authority Boundary

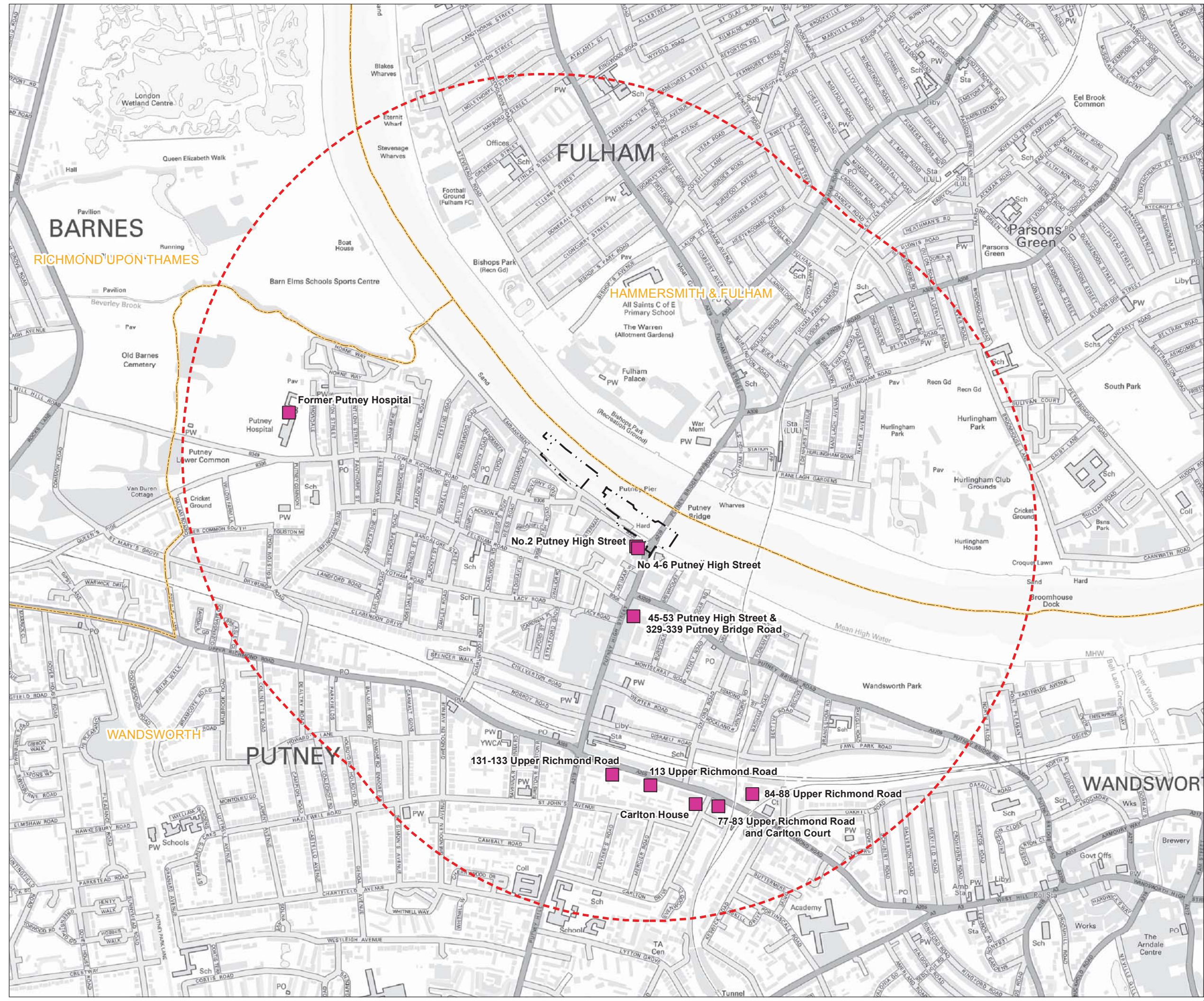
Note: This plan does not show the full extent for each planning application, but a single point within the application site.

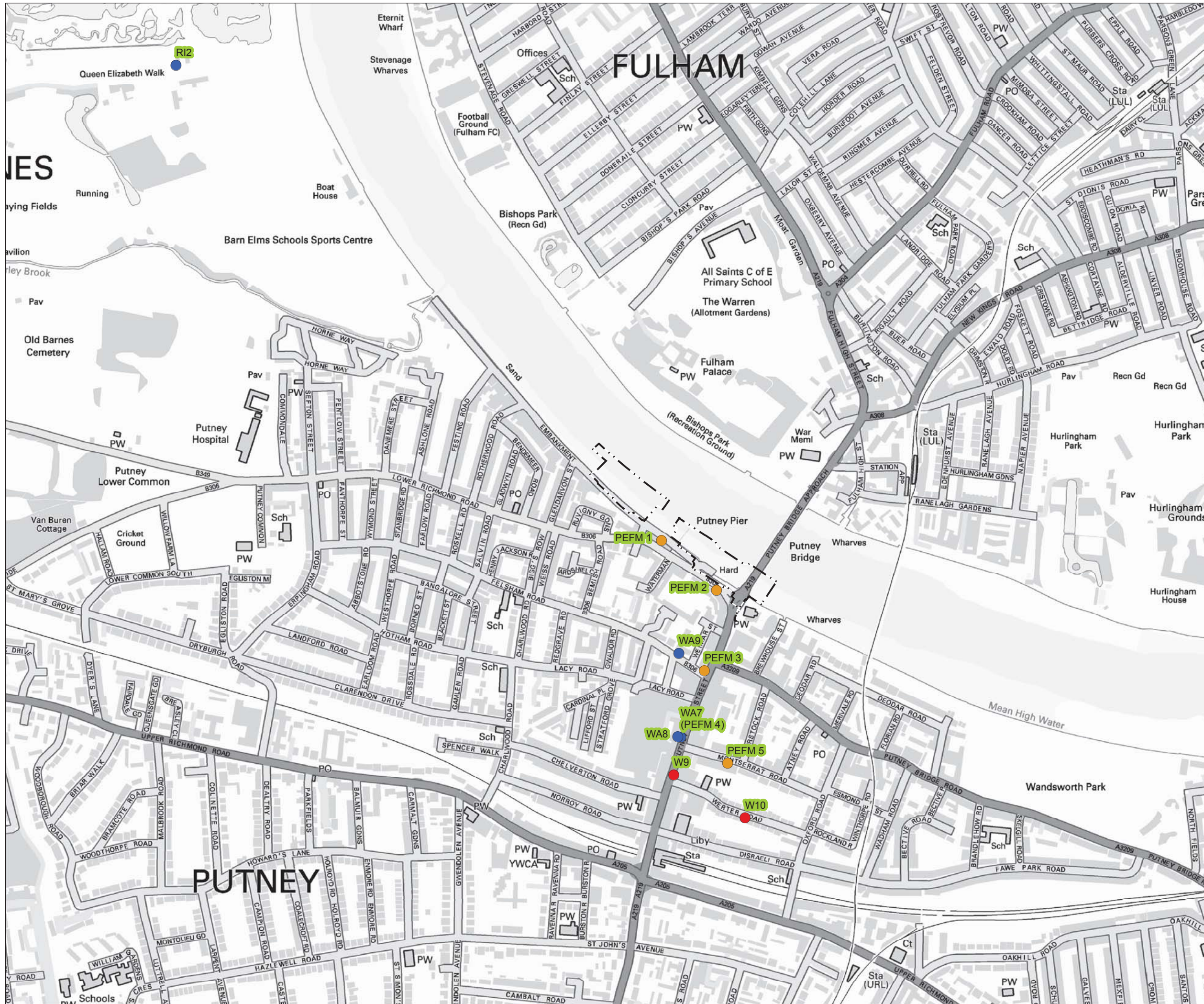


FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Base case and cumulative development projects
 Vol. 7 Figure 3.5.1
 1PL03-MG-00723
 January 2013

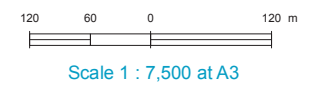




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- Key
- Limits of Land to be Acquired or Used
 - Existing Local Authority Continuous Monitors
 - Existing Local Authority Diffusion Tubes
 - New Diffusion Tubes (Project)

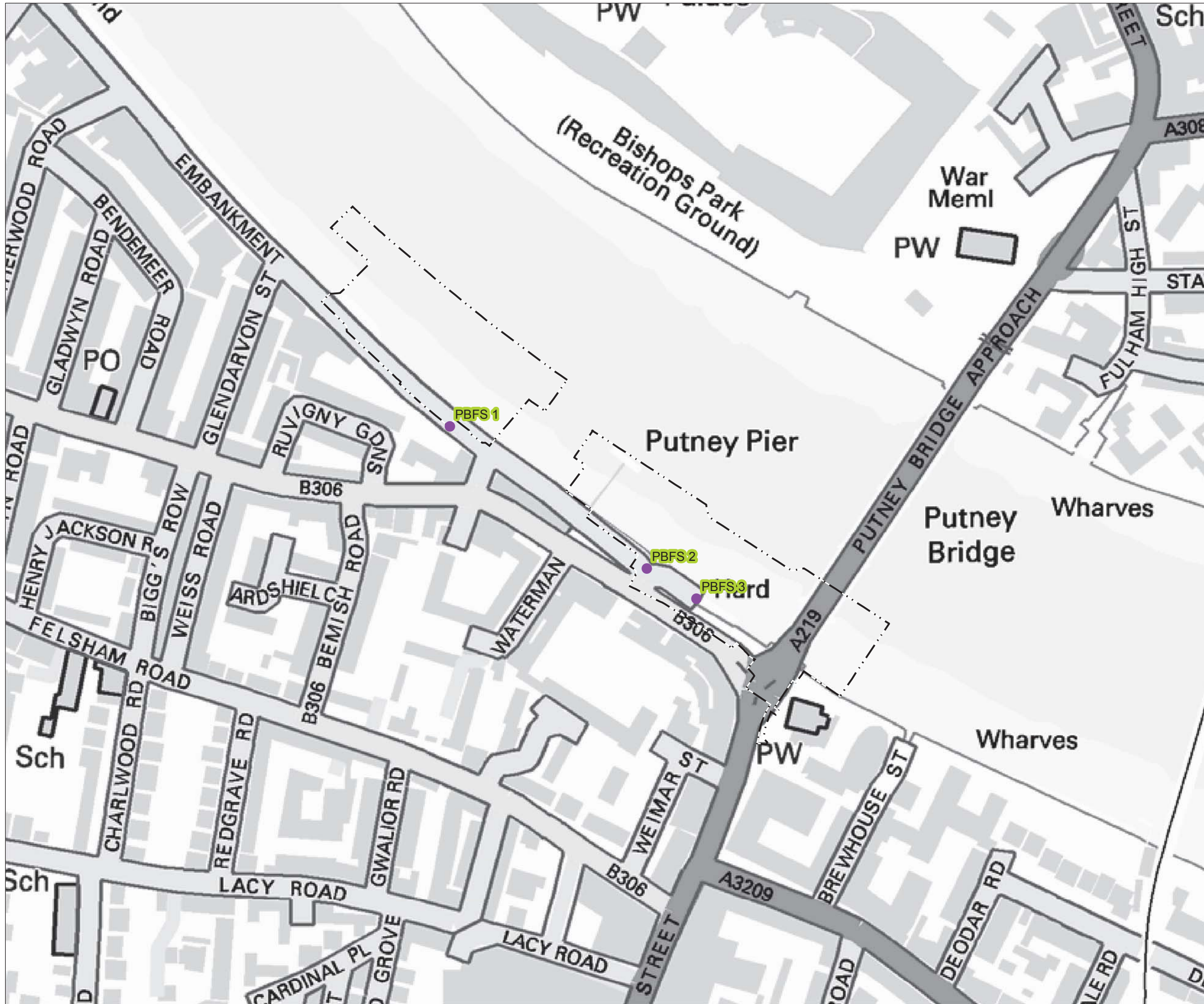


FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Air quality and odour - air quality monitoring sites
 Vol.7 Figure 4.4.1
 1PL03-AQ-10959
 January 2013



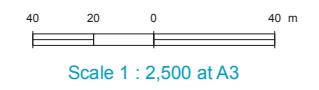


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Key

- Limits of Land to be Acquired or Used
- H₂S Monitoring Locations



FOR INFORMATION

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Air quality and odour - H₂S monitoring locations
 Vol.7 Figure 4.4.2
 1PL03-AQ-10960
 January 2013



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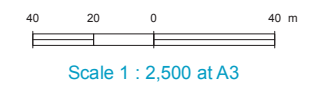


Key

- - - Limits of Land to be Acquired or Used
- Modelled Receptors

Note: The receptors are selected on the basis that they are representative of sensitive land uses closest to the site.

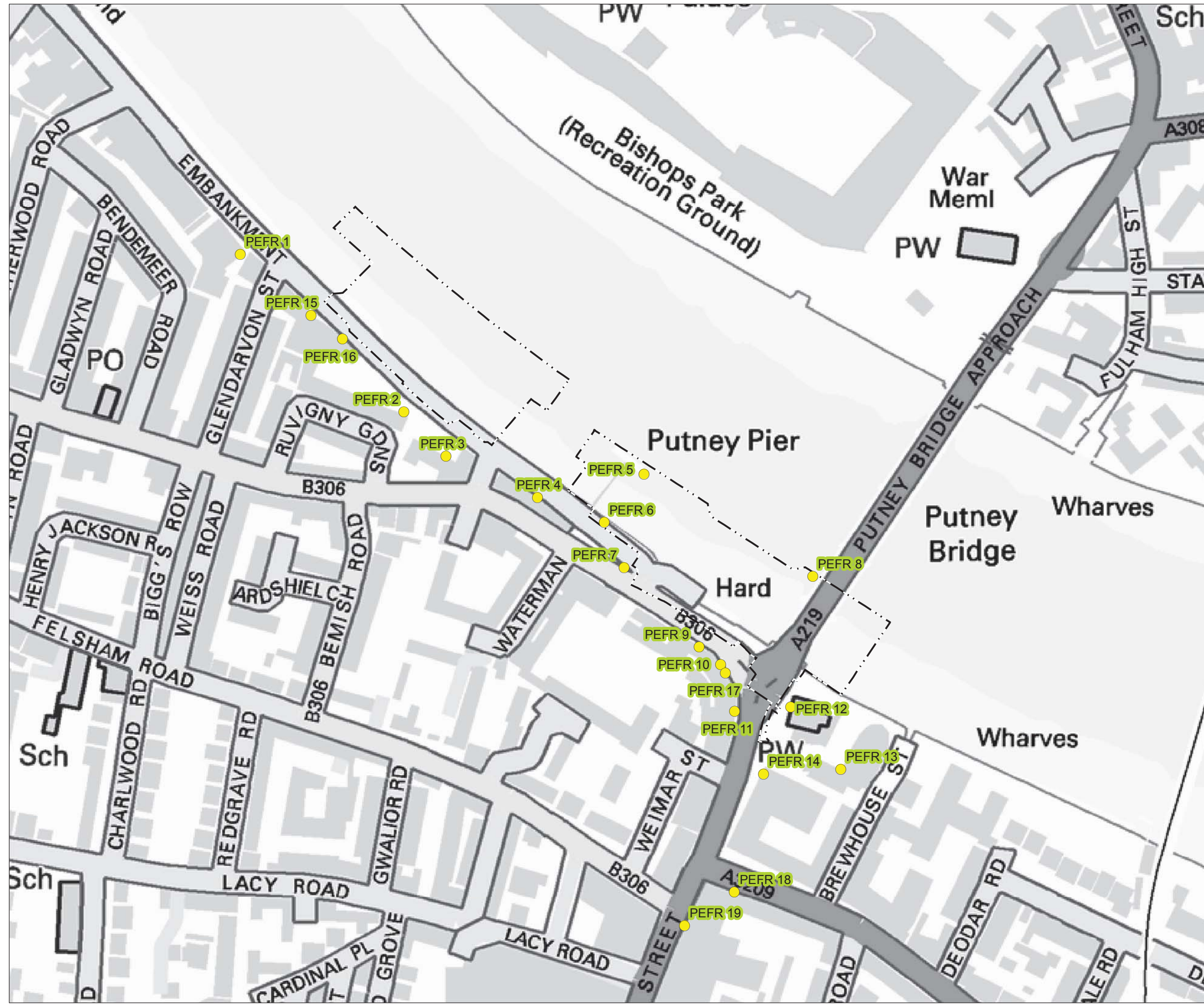
- PEFR 1 - London Rowing Club
- PEFR 2 - Ruvigny Gardens
- PEFR 3 - Constitutional Club
- PEFR 4 - Star & Garter Mansions
- PEFR 5 - Houseboat
- PEFR 6 - Thames Path
- PEFR 7 - Commercial - Thai Square Restaurant
- PEFR 8 - River Thames
- PEFR 9 - Kenilworth Court
- PEFR 10 - 2 Putney High Street (Proposed)
- PEFR 11 - Duke's Head Public House
- PEFR 12 - St Mary's Church
- PEFR 13 - Putney Wharf Tower
- PEFR 14 - Odeon Cinema
- PEFR 15 - Ruvigny Mansions
- PEFR 16 - Commercial - Chas Newen Marine (Boat Repair and Builders)
- PEFR 17 - 4 - 6 Putney High Street (Proposed)
- PEFR 18 - 329 - 339 Putney Bridge Road (Proposed)
- PEFR 19 - 45 - 53 Putney High Street (Proposed)



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Air quality and odour - modelled air quality receptors
 Vol.7 Figure 4.4.3
 1PL03-AQ-10961
 January 2013



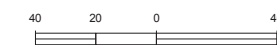
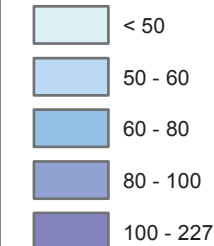
Keyplan:



Key

— Limits of Land
 - - - to be Acquired or Used

Predicted Annual Mean NO₂ Concentration (µg/m³)



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information

Environmental Statement

Air quality and odour - annual mean NO₂
 for 2010 baseline
 Vol.7 Figure 4.5.1

1PL03-AQ-10962
 January 2013



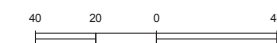
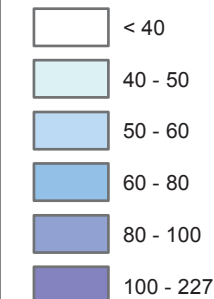
Keyplan:



Key

— Limits of Land
 - - - to be Acquired or Used

Predicted Annual Mean NO₂ Concentration (µg/m³)



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information

Environmental Statement

Air quality and odour - annual mean NO₂ for peak construction year base case
 Vol.7 Figure 4.5.2

1PL03-AQ-10963
 January 2013

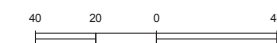
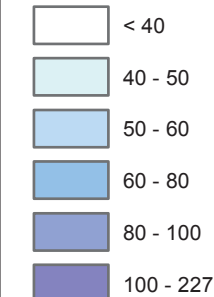
Keyplan:



Key

— Limits of Land
 - - - to be Acquired or Used

Predicted Annual Mean NO₂ Concentration (µg/m³)



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information

Environmental Statement

Air quality and odour - annual mean NO₂
 for peak construction year development case
 Vol.7 Figure 4.5.3

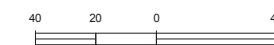
1PL03-AQ-10964
 January 2013

Keyplan:



Key

- · · · Limits of Land to be Acquired or Used
- Predicted Annual Mean NO₂ Impact (µg/m³)
- < 1
- 1 - 1.5
- 1.5 - 2
- 2 - 2.5



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

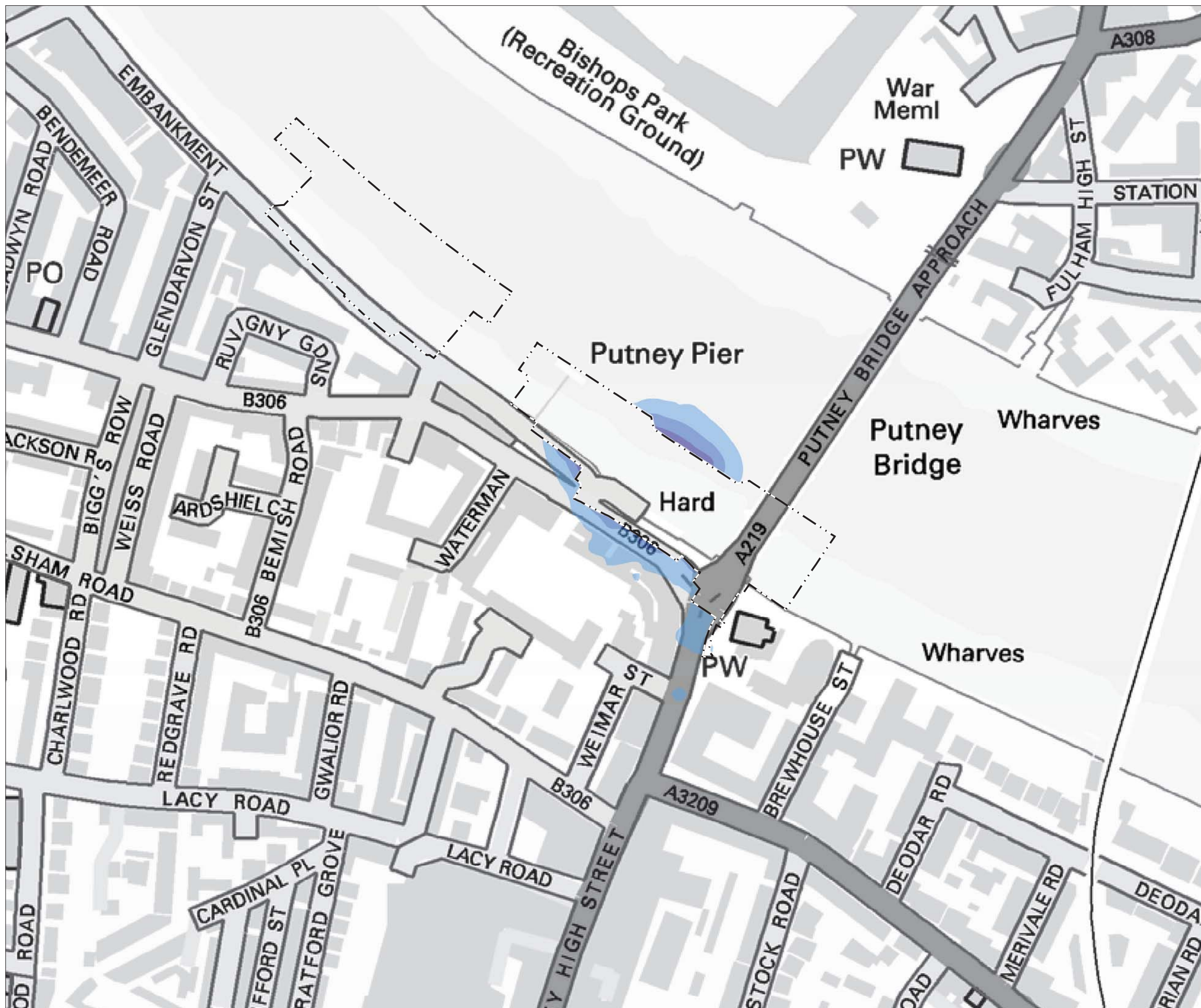
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

Air quality and odour - annual mean NO₂ impact for peak construction year
Vol.7 Figure 4.5.4

1PL03-AQ-10965
January 2013



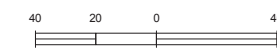
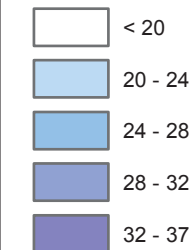
Keyplan:



Key

— Limits of Land to be Acquired or Used

Predicted Annual Mean PM₁₀ Concentration (µg/m³)



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

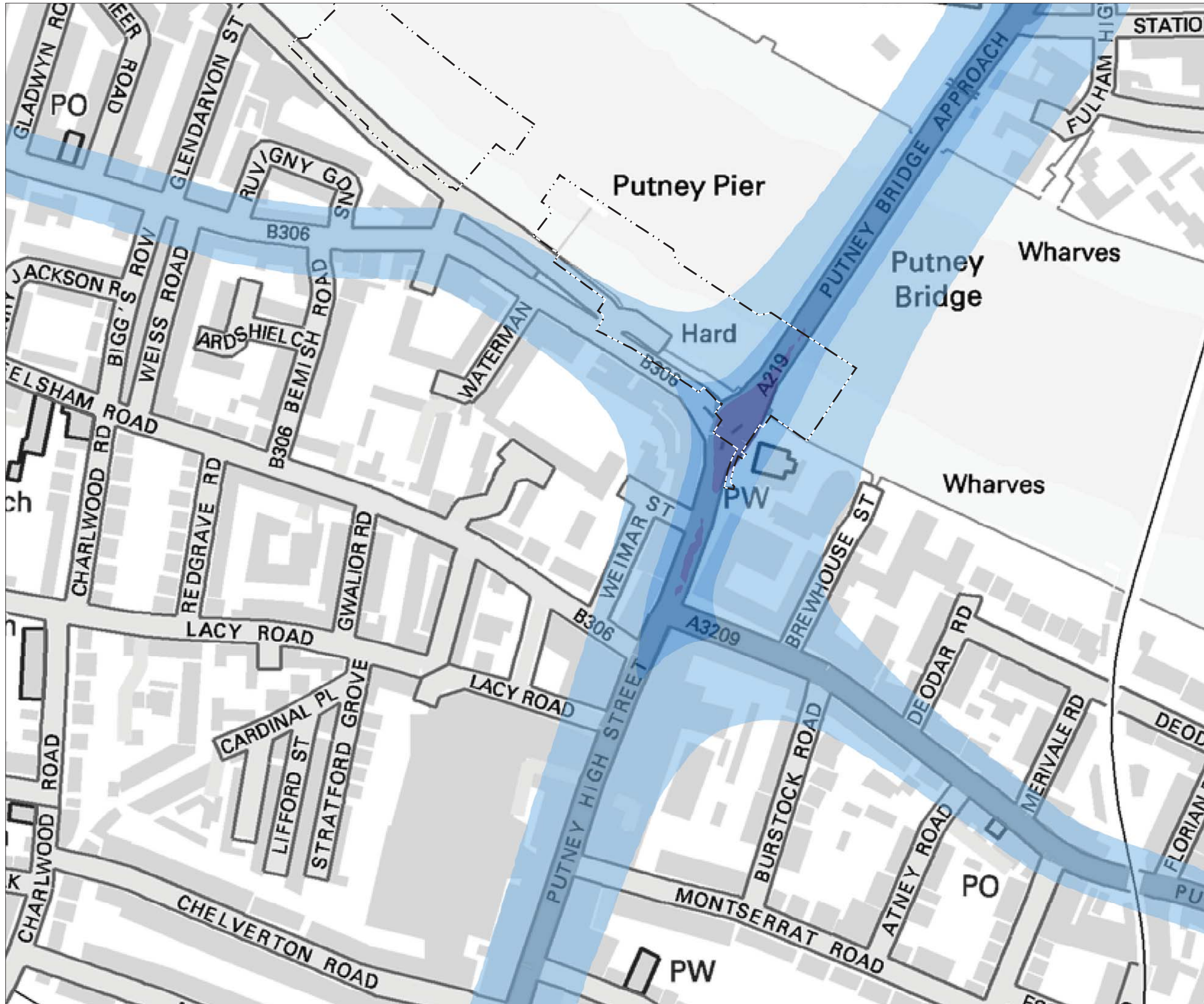
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

Air quality and odour - annual mean PM₁₀
for 2010 baseline
Vol.7 Figure 4.5.5

1PL03-AQ-10966
January 2013



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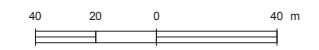
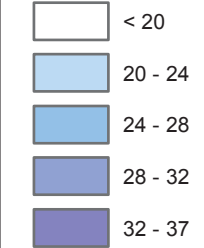
Keyplan:



Key

— Limits of Land
 - - - to be Acquired or Used

Predicted Annual Mean PM_{10} Concentration ($\mu\text{g}/\text{m}^3$)



Scale 1 : 2,500 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
 London Borough of Wandsworth

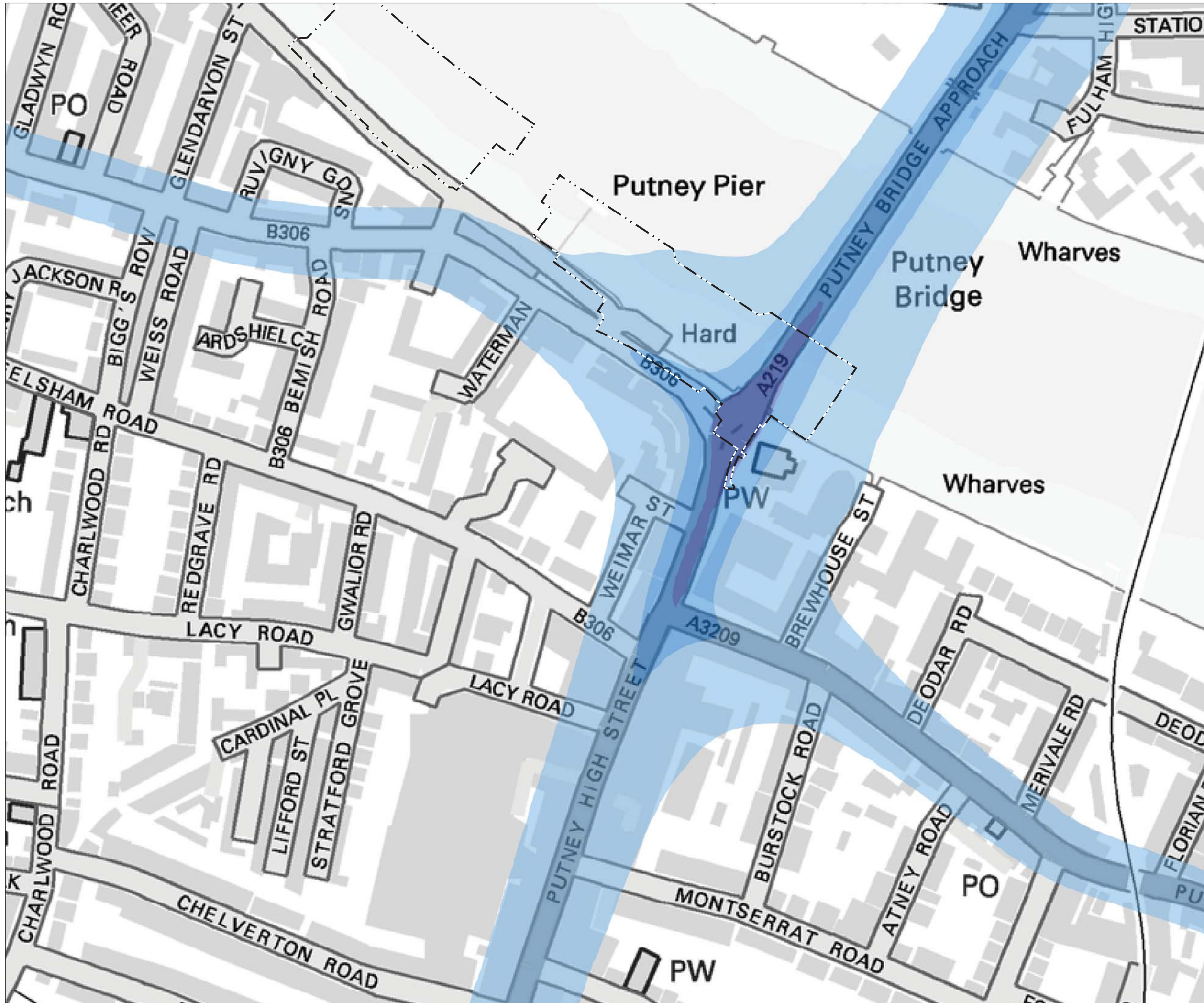
Document Information

Environmental Statement

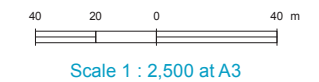
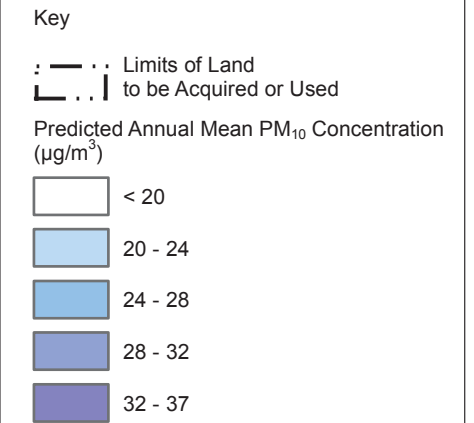
Air quality and odour - annual mean PM_{10}
 for peak construction year base case
 Vol.7 Figure 4.5.6

1PL03-AQ-10967
 January 2013





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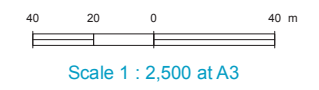
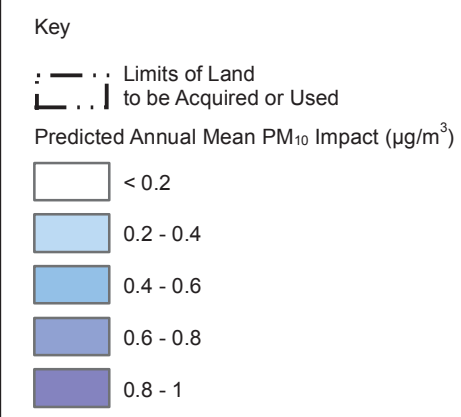
FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Air quality and odour - annual mean PM₁₀
for peak construction year development case
Vol.7 Figure 4.5.7
1PL03-AQ-10968
January 2013



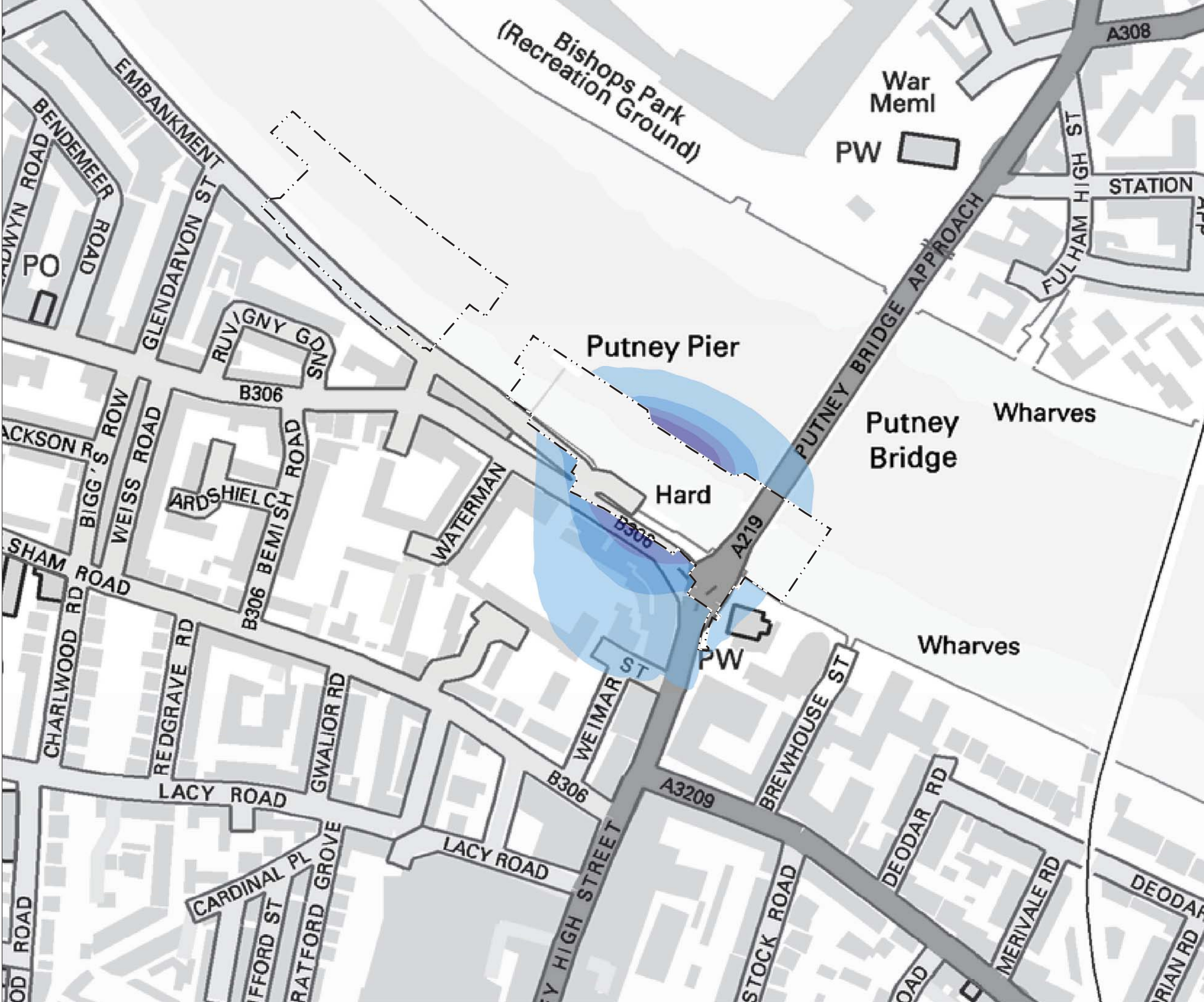
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FOR INFORMATION

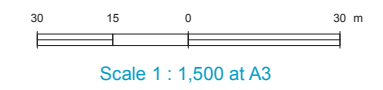
Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Air quality and odour - annual mean PM₁₀ impact for peak construction year
Vol.7 Figure 4.5.8
1PL03-AQ-10965
January 2013





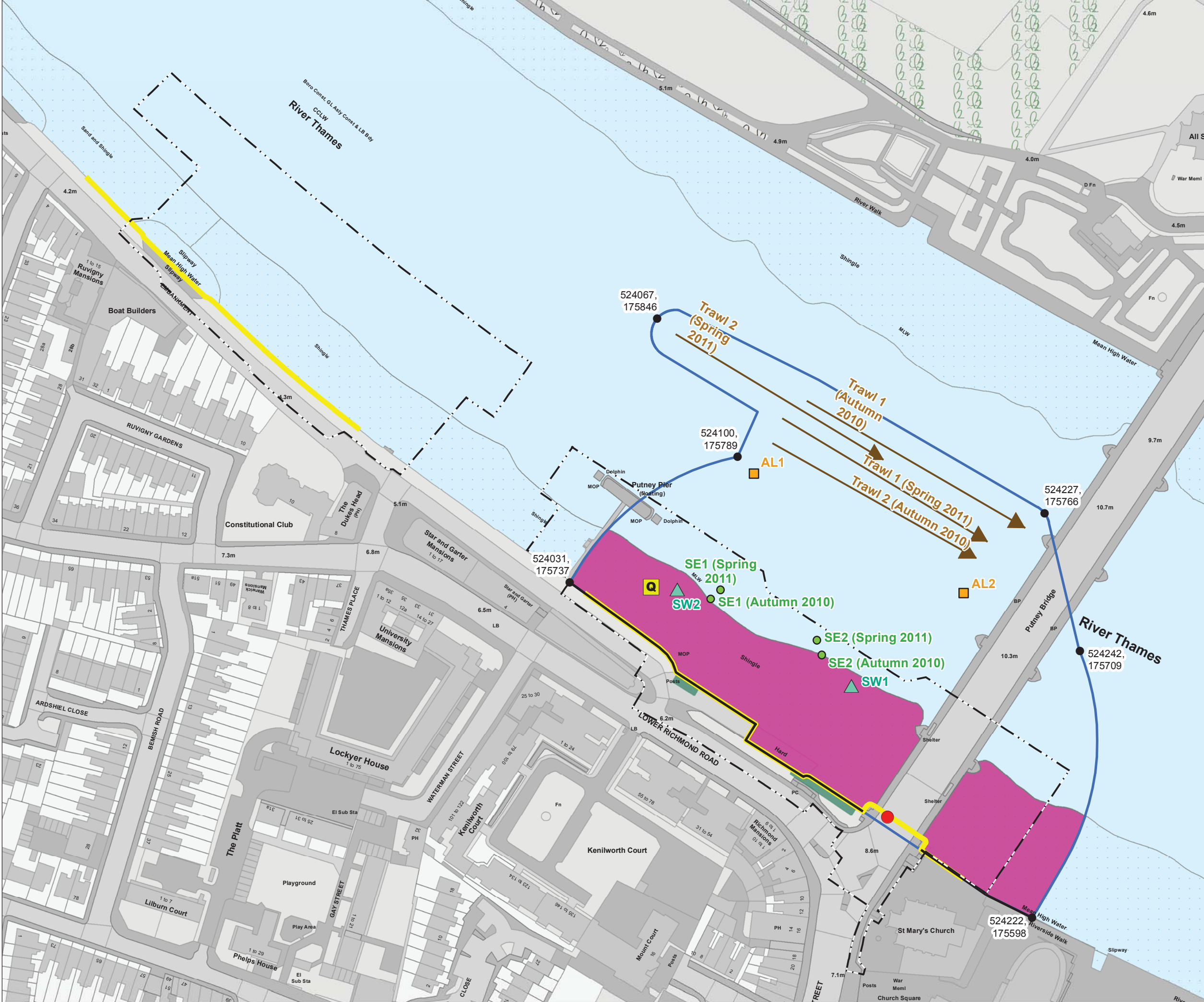
- Key**
- Limits of Land to be Acquired or Used
 - Sampling Area for Fish and Benthic Invertebrates
 - Coordinates of Sampling Area
 - Algae Survey Area
 - CSO (directly controlled)
 - River Wall
- Habitats**
- Shingle and Pebbles with Sand, Silt and Cobbles
 - Vegetation
- Fish**
- Seine Netting
 - Boat Fish Trawl
- Invertebrates**
- Airlift
 - Quadrat
 - ▲ Sweep/Kick Sample



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Aquatic ecology - habitats and sampling locations
 Vol.7 Figure 5.4.1
 1PL03-AE-20087
 January 2013

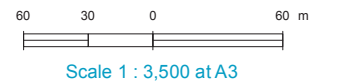




Key

- Limits of Land
- to be Acquired or Used
- 250m from Site
- Local Authority Boundary
- Sites of Importance for Nature Conservation (SINC)
 - Metropolitan Importance
 - Borough Importance
 - Local Importance

Note:
Aerial Imagery taken in 2010, before assessment.



FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Terrestrial ecology - designated sites

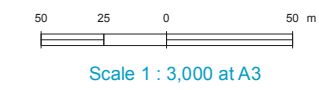
Vol. 7 Figure 6.4.1
1PL03-TE-40134
January 2013



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- Key**
- Limits of Land to be Acquired or Used
 - Survey Area
 - Local Authority Boundary
 - Built-Up Areas - Buildings
 - Cultivated/Disturbed Land - Amenity Grassland
 - Hard Standing
 - Intertidal - Mud/Sand
 - Running Water
 - Scattered Trees

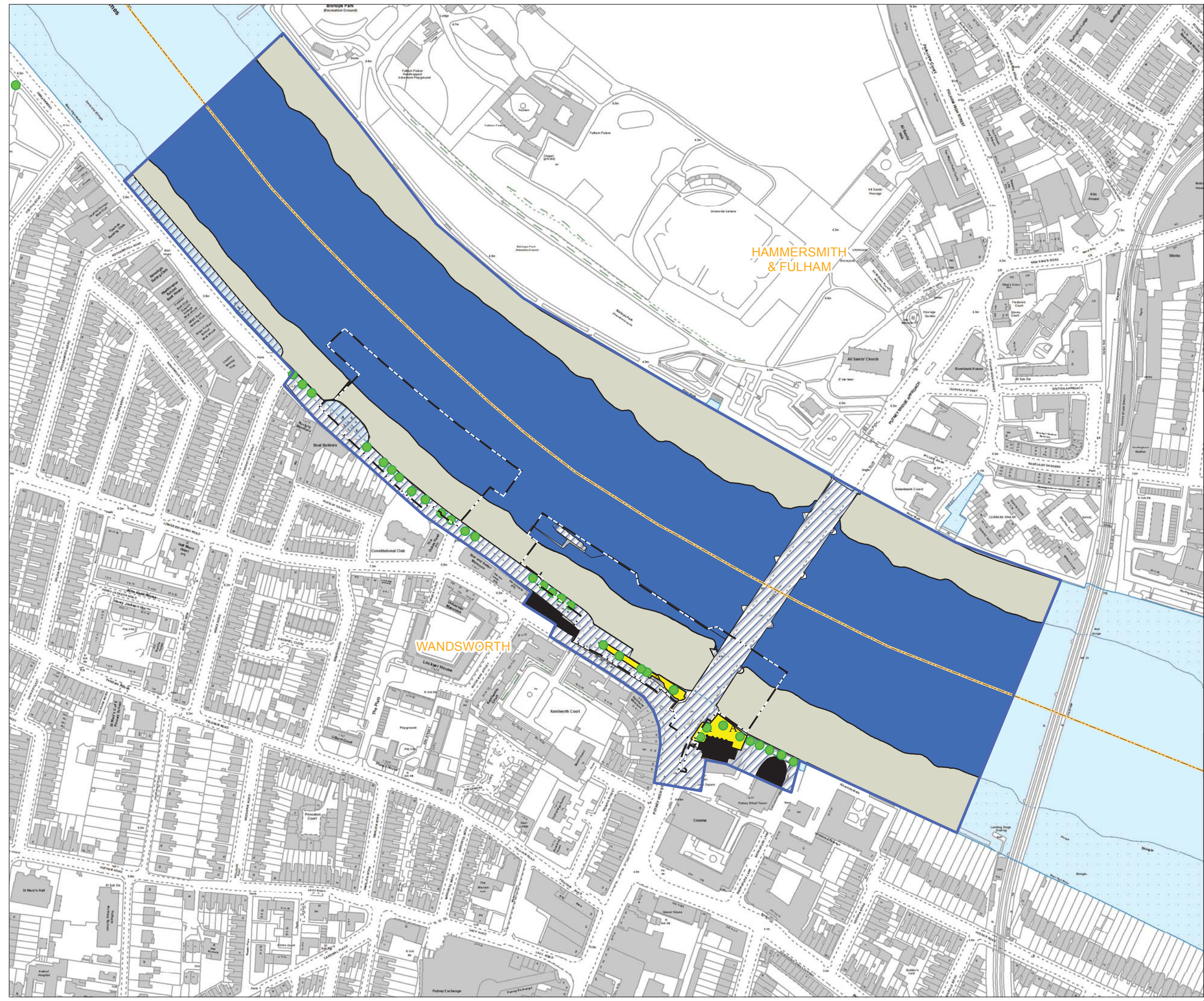


FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Terrestrial ecology – Phase 1 Habitat Survey

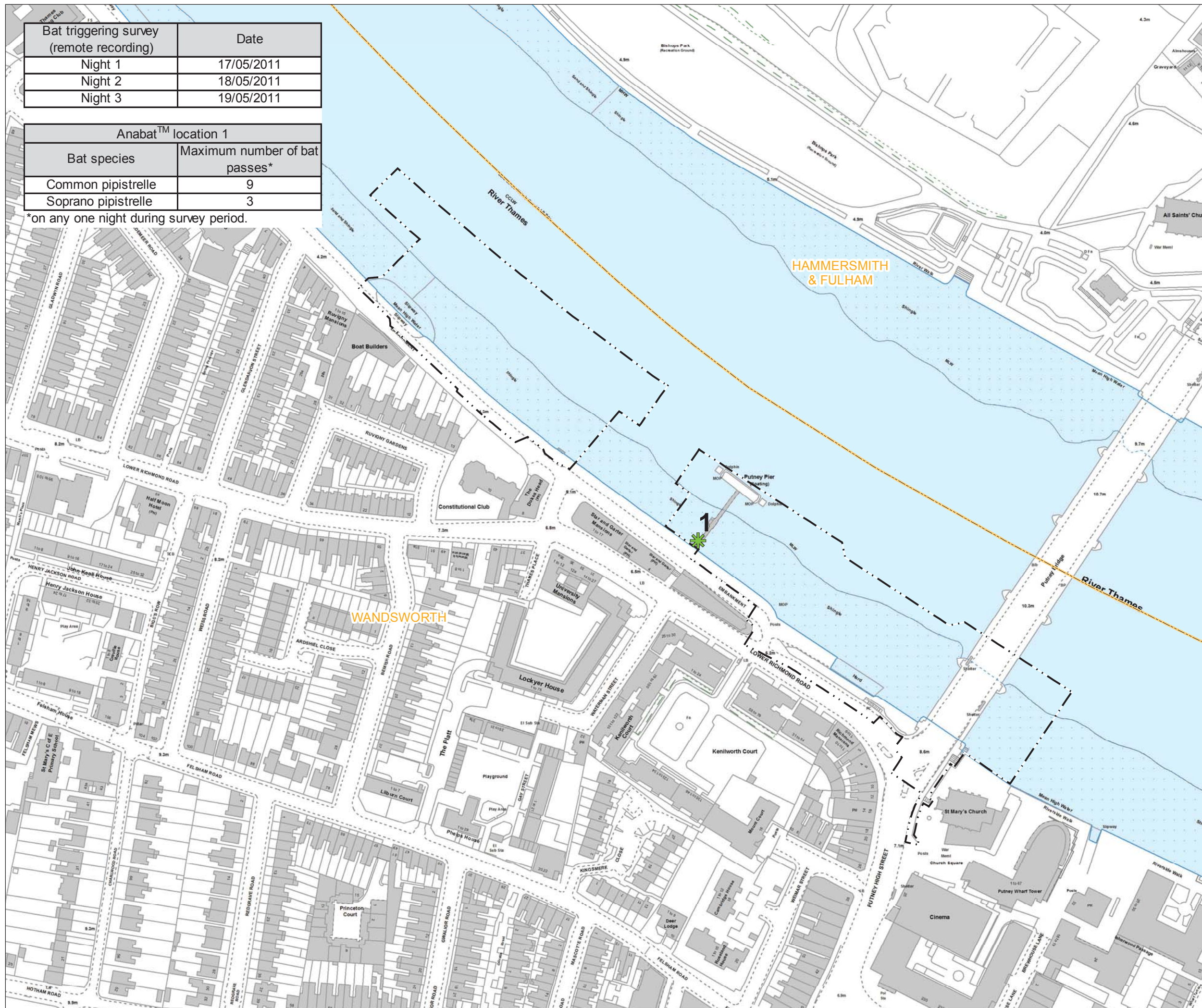
Vol. 7 Figure 6.4.2
 1PL03-TE-40167
 January 2013



Bat triggering survey (remote recording)	Date
Night 1	17/05/2011
Night 2	18/05/2011
Night 3	19/05/2011

Anabat™ location 1	
Bat species	Maximum number of bat passes*
Common pipistrelle	9
Soprano pipistrelle	3

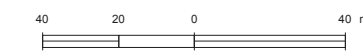
*on any one night during survey period.



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- Key**
- Limits of Land to be Acquired or Used
 - Local Authority Boundary
 - ★ Bat Triggering Survey (Remote Recording)
 - ★ Anabat™ Location (1)



Scale 1 : 2,000 at A3

FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Terrestrial ecology – bat triggering (remote recording) survey
Vol. 7 Figure 6.4.3

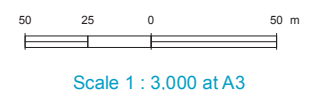
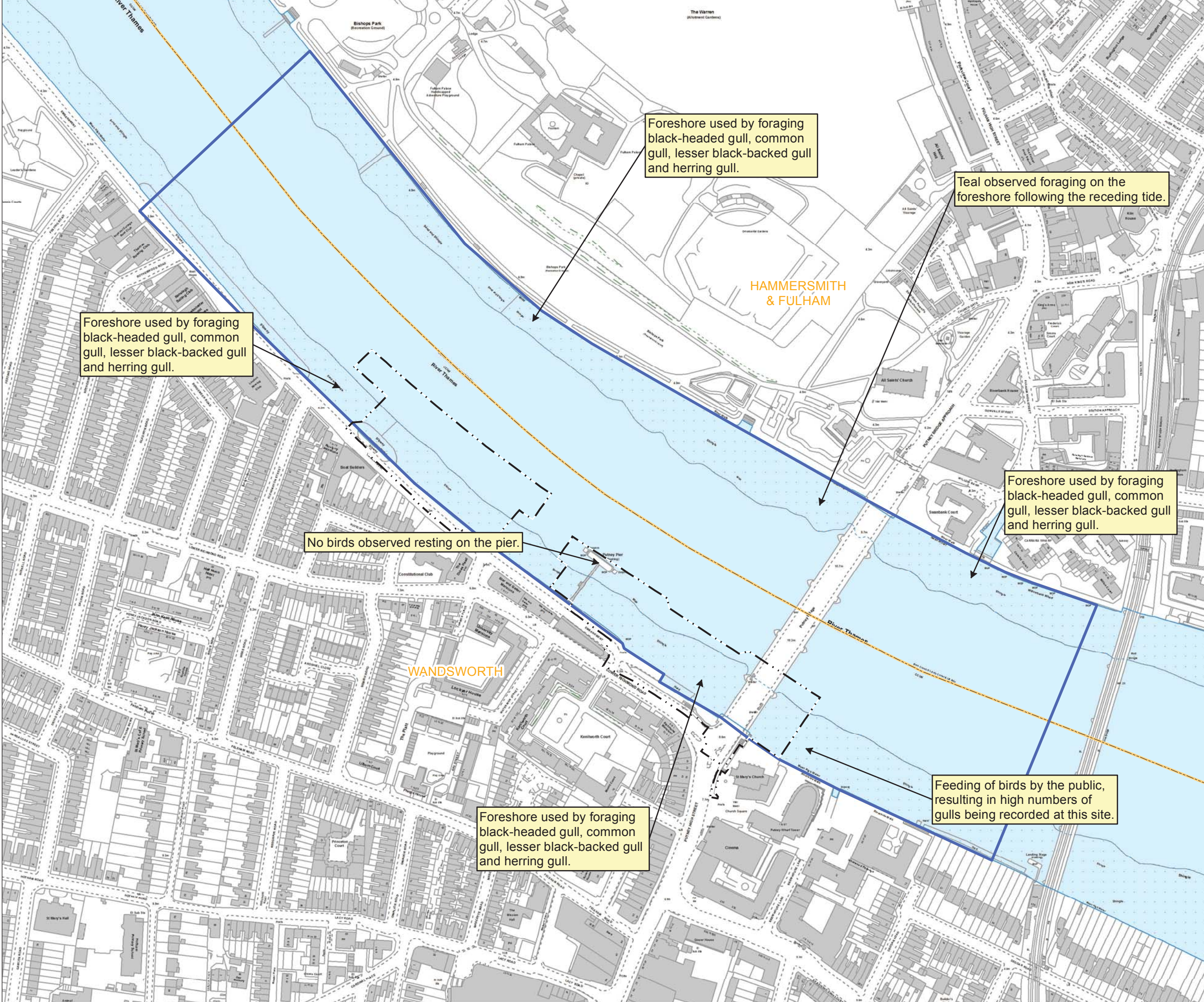
1PL03-TE-40197
January 2013

Thames Tideway Tunnel
Creating a cleaner, healthier River Thames





- Key
- Limits of Land to be Acquired or Used
 - Survey Area
 - Local Authority Boundary



FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

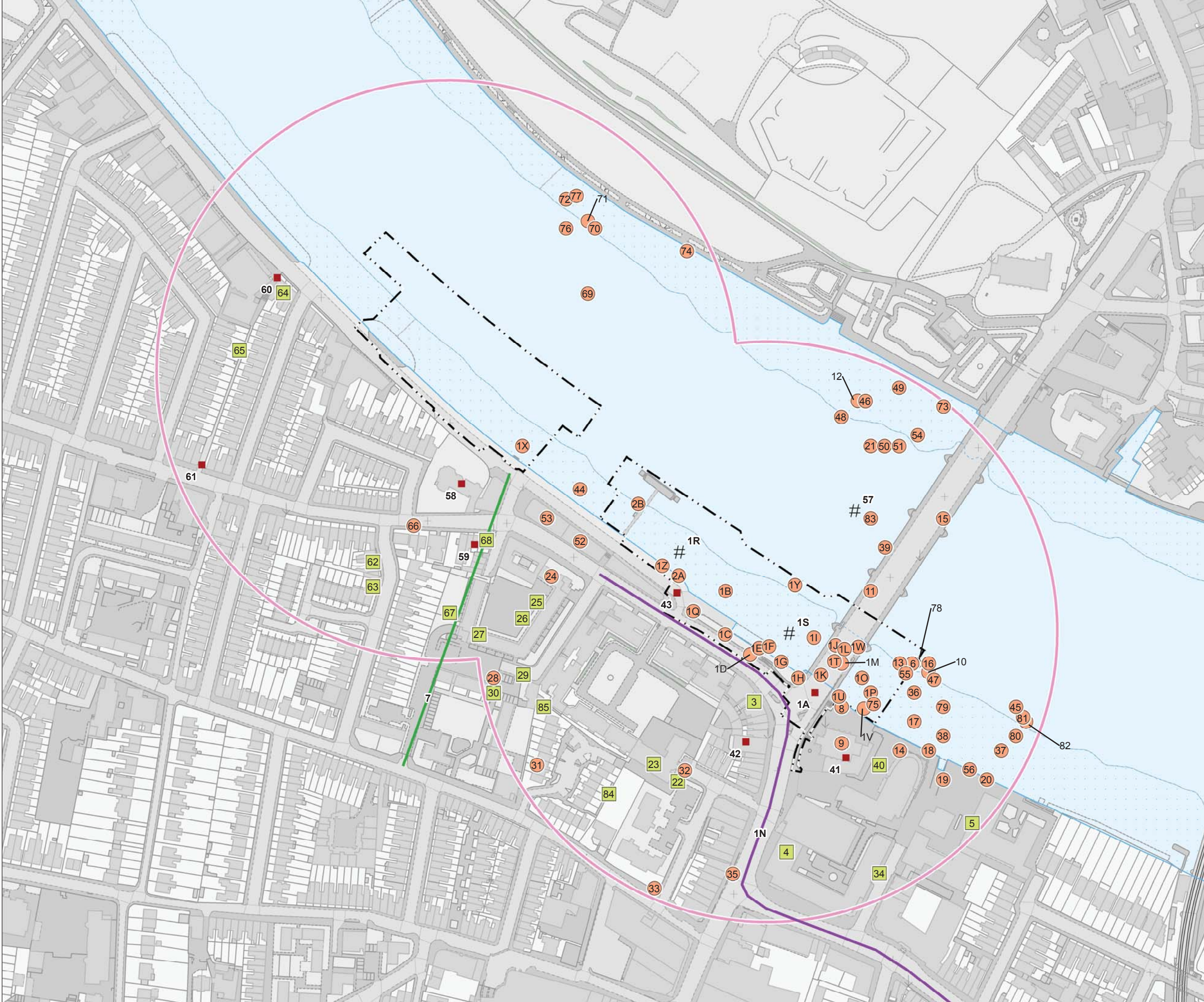
Document Information
Environmental Statement
Terrestrial ecology – wintering birds survey

Vol. 7 Figure 6.4.4
1PL03-TE-40078
January 2013



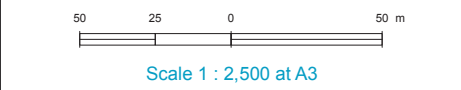


- Key**
- Limits of Land to be Acquired or Used
 - Assessment Area
 - Heritage Feature/Findspot
 - Past Archaeological Investigation
 - Statutorily Listed Building
 - Wreck/Obstruction
 - Bazalgette Sewer
 - Projected Line of Roman road



The reference numbers for historic environment features correspond to the descriptions in the 'Gazetteer of known heritage assets' in Environmental Statement Vol. 7 Appendix E.1

Note: Archaeological Priority Zones/ Conservation Areas not shown



FOR INFORMATION

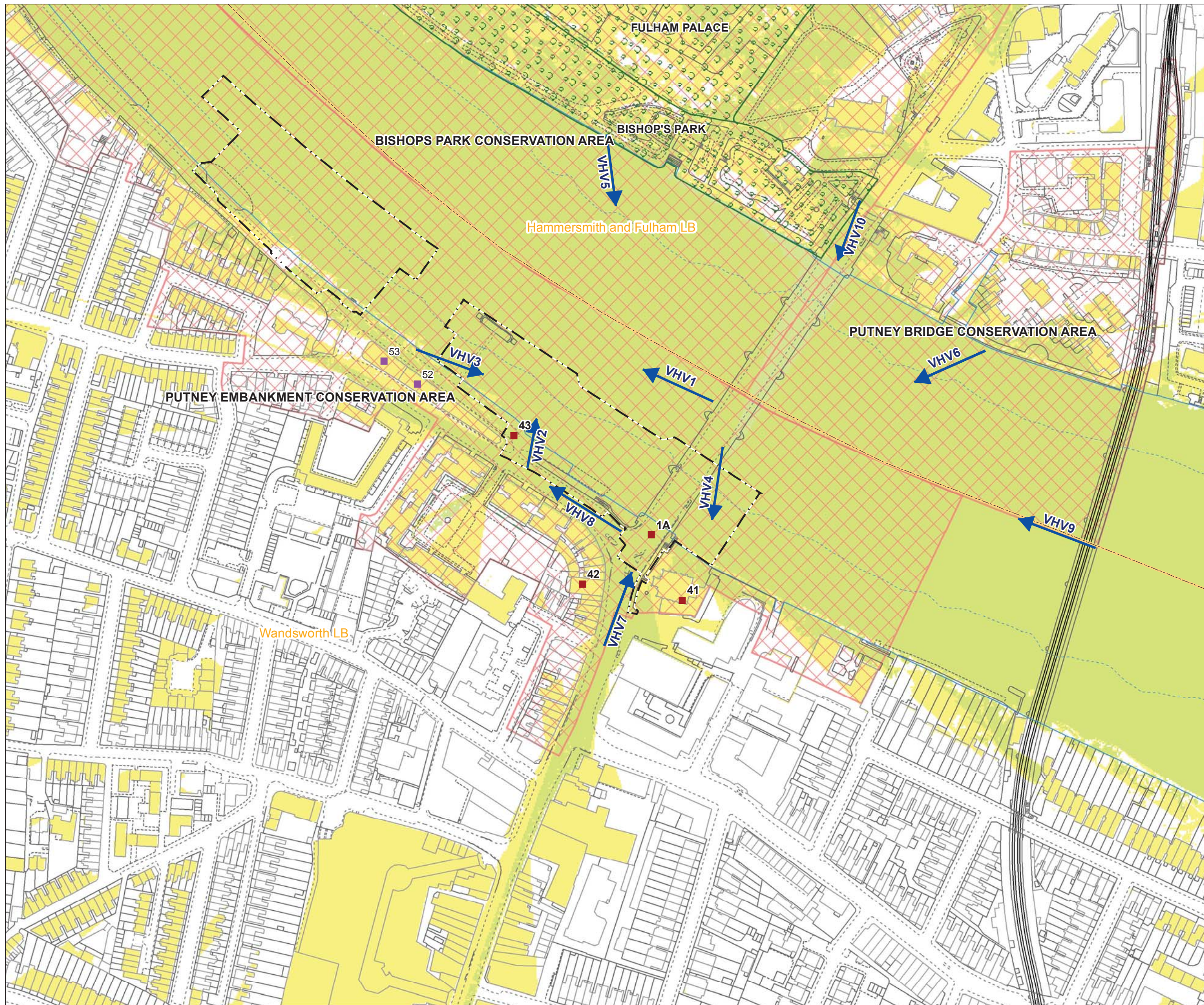
Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Historic environment -
 historic environment features map
 Vol.7 Figure 7.4.1
 1PL03-HE-60092
 January 2013

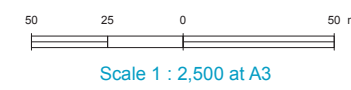




- Key**
- Limits of Land to be Acquired or Used
 - Local Authority Boundary
 - Statutorily Listed Building
 - Locally Listed Building
 - Registered Park/Garden
 - Conservation Areas
 - View of Heritage Value (VHV)
 - Operational phase ZTV
 - Construction phase ZTV



The reference number for historic environment features correspond to the descriptions in the 'Gazetteer of known heritage assets' in Environmental Statement Vol. 7 Appendix E.1



FOR INFORMATION

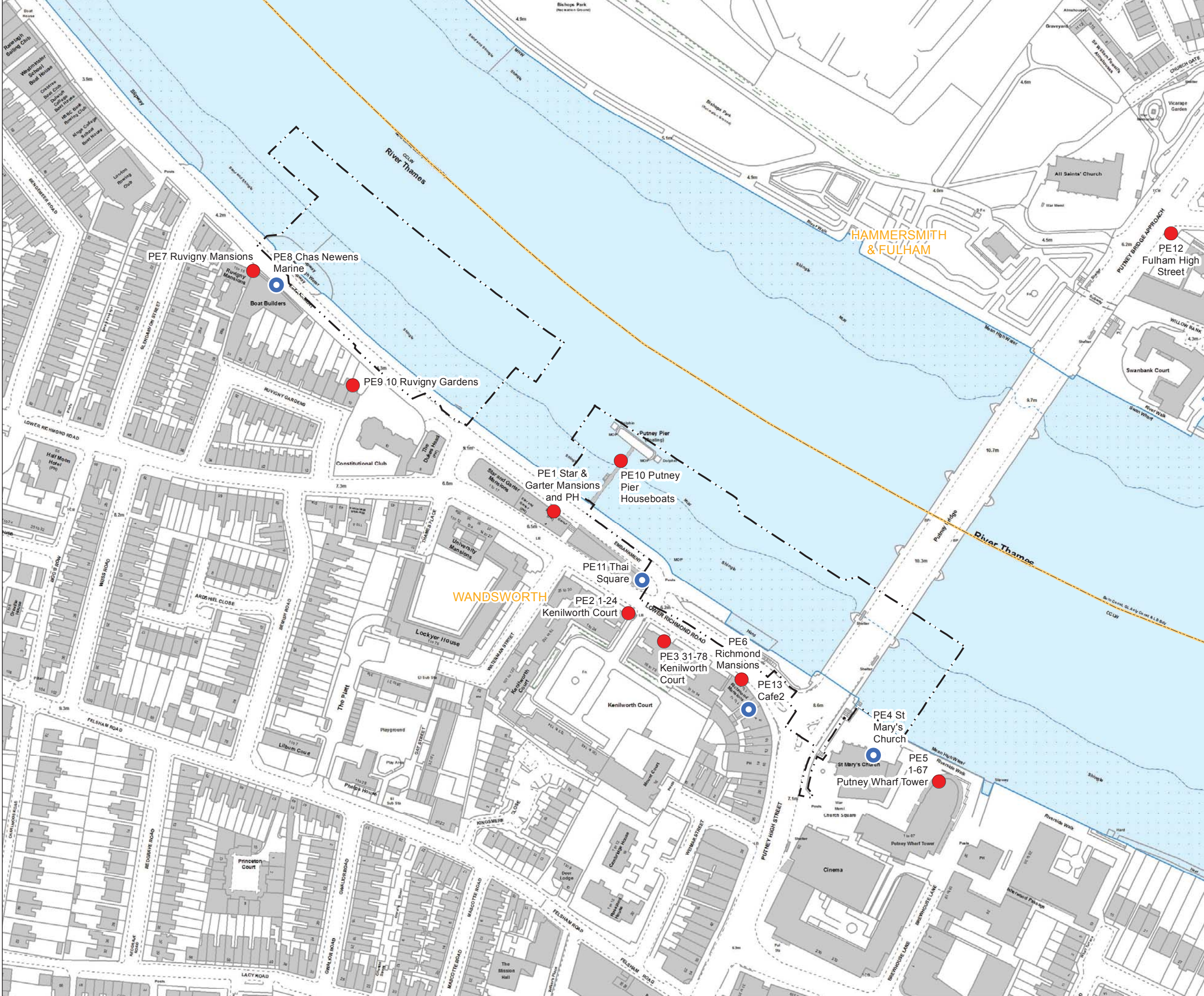
Location
Putney Bridge Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Historic environment - historic character and setting of heritage assets
 Vol. 7 Figure 7.4.2
 1PL03-HE-65215
 January 2013

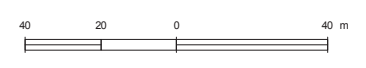




- Key**
- Limits of Land to be Acquired or Used
 - Local Authority Boundary
- Representative Receptor Locations:**
- Residential
 - Non-residential



Note:
The receptors are selected on the basis that they are representative of sensitive land uses closest to the site.



Scale 1 : 2,000 at A3

FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Noise and vibration - receptor locations

Vol.7 Figure 9.4.1
1PL03-NV-40125
January 2013

Keyplan:



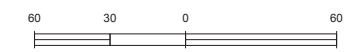
Key

- Limits of Land to be Acquired or Used
- Thames Path
- National Cycle Route 4
- Receptors and Site Context Features

Receptors and Site Context Features

1. Waterman's Green
2. Fulham Palace Gardens / Bishop's Park
3. St Mary's Church
4. River Foreshore Space
5. Slipway
6. Star and Garter Public House
7. Winchester House
8. Putney Pier
9. Businesses - Cafés / Restaurants
10. Thai Square

Note: Residential receptors have been identified on land use plans for this site.



Scale 1 : 3,000 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

Socio-economics - context plan

Vol.7 Figure 10.4.1

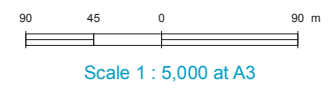
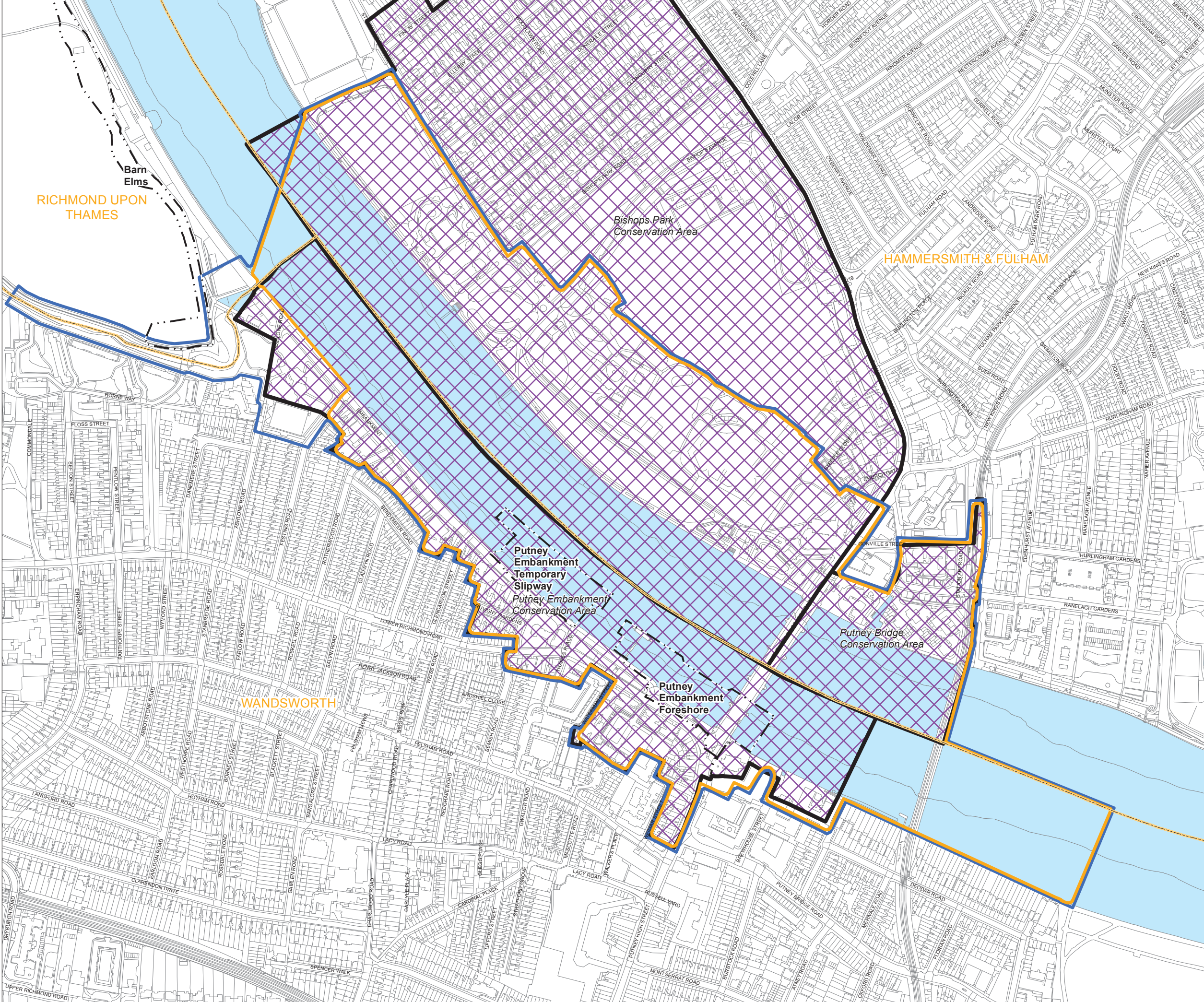
1PL03-SE-20052

January 2013

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- Key:**
- Limits of Land to be Acquired or Used
 - Local Authority boundary
 - Extents of construction phase townscape assessment area
 - Extents of operational phase townscape assessment area
 - Conservation areas
 - River Thames and tidal tributaries



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement

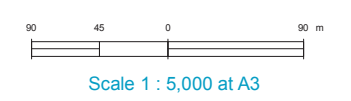
Townscape and visual
 Conservation areas
 Vol. 7 Figure 11.4.1
 1PL03-TS-40365
 January 2013



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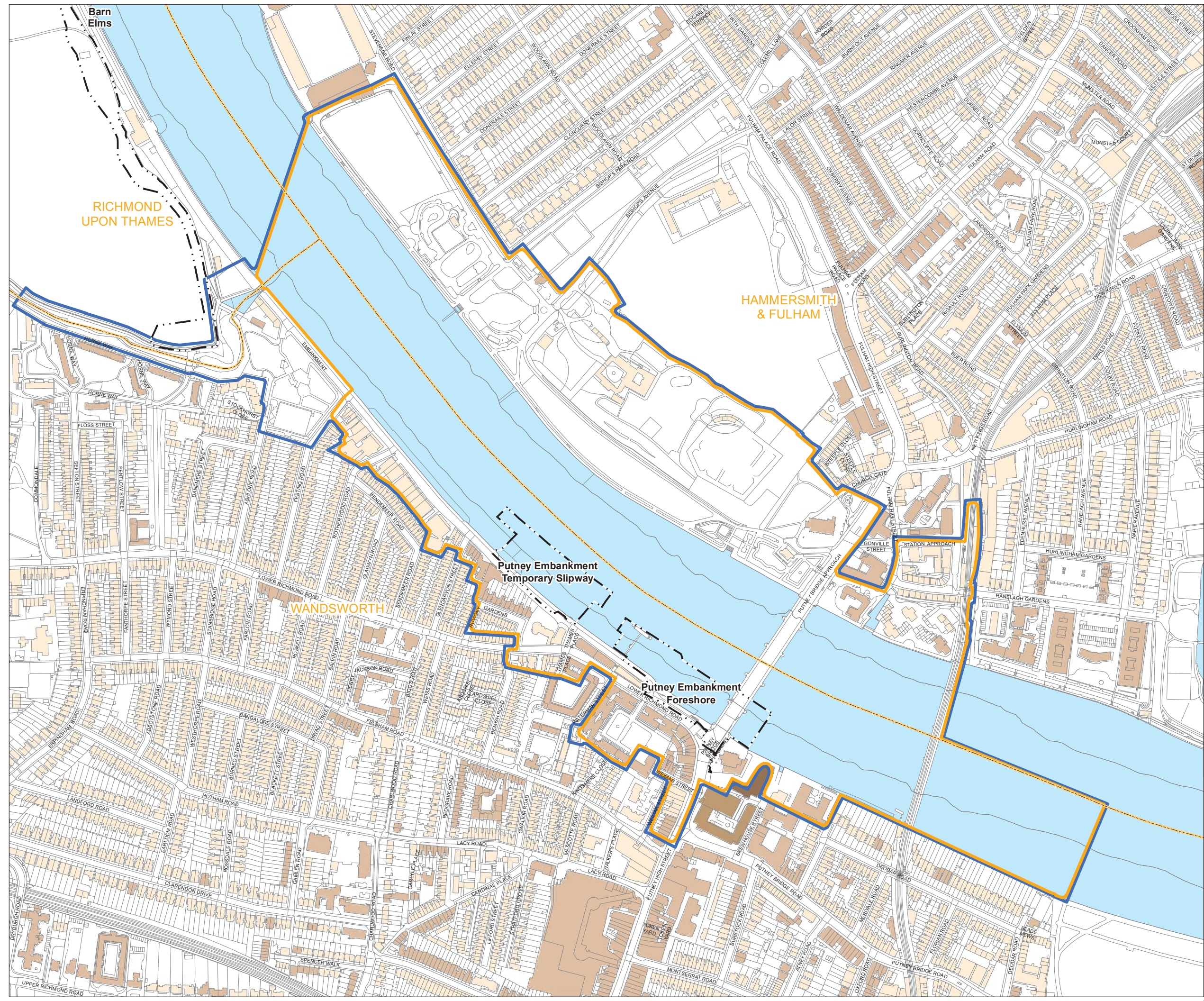
- Key:**
- Limits of Land to be Acquired or Used
 - Local Authority boundary
 - Extents of construction phase townscape assessment area
 - Extents of operational phase townscape assessment area
 - River Thames and tidal tributaries
- Building heights**
- 0 - 20m
 - 20 - 40m
 - 40 - 60m
 - 60 - 80m
 - 80 - 100m
 - >100m

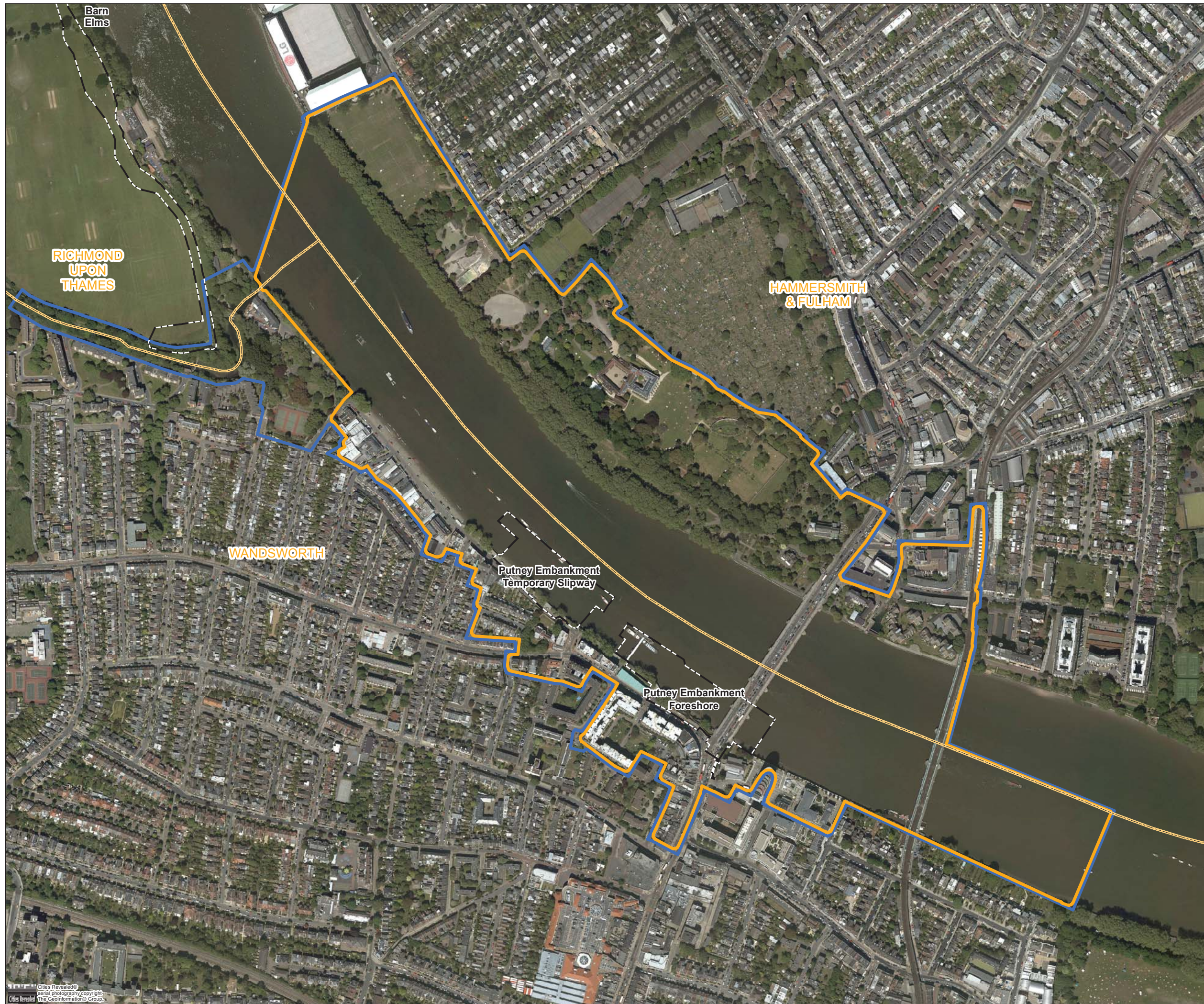


FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Townscape and visual
 Development pattern and scale
 Vol. 7 Figure 11.4.2
 1PL03-TS-40366
 January 2013

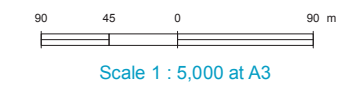




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- Key:
- Limits of Land to be Acquired or Used
 - - - Local Authority boundary
 - Extents of construction phase townscape assessment area
 - Extents of operational phase townscape assessment area



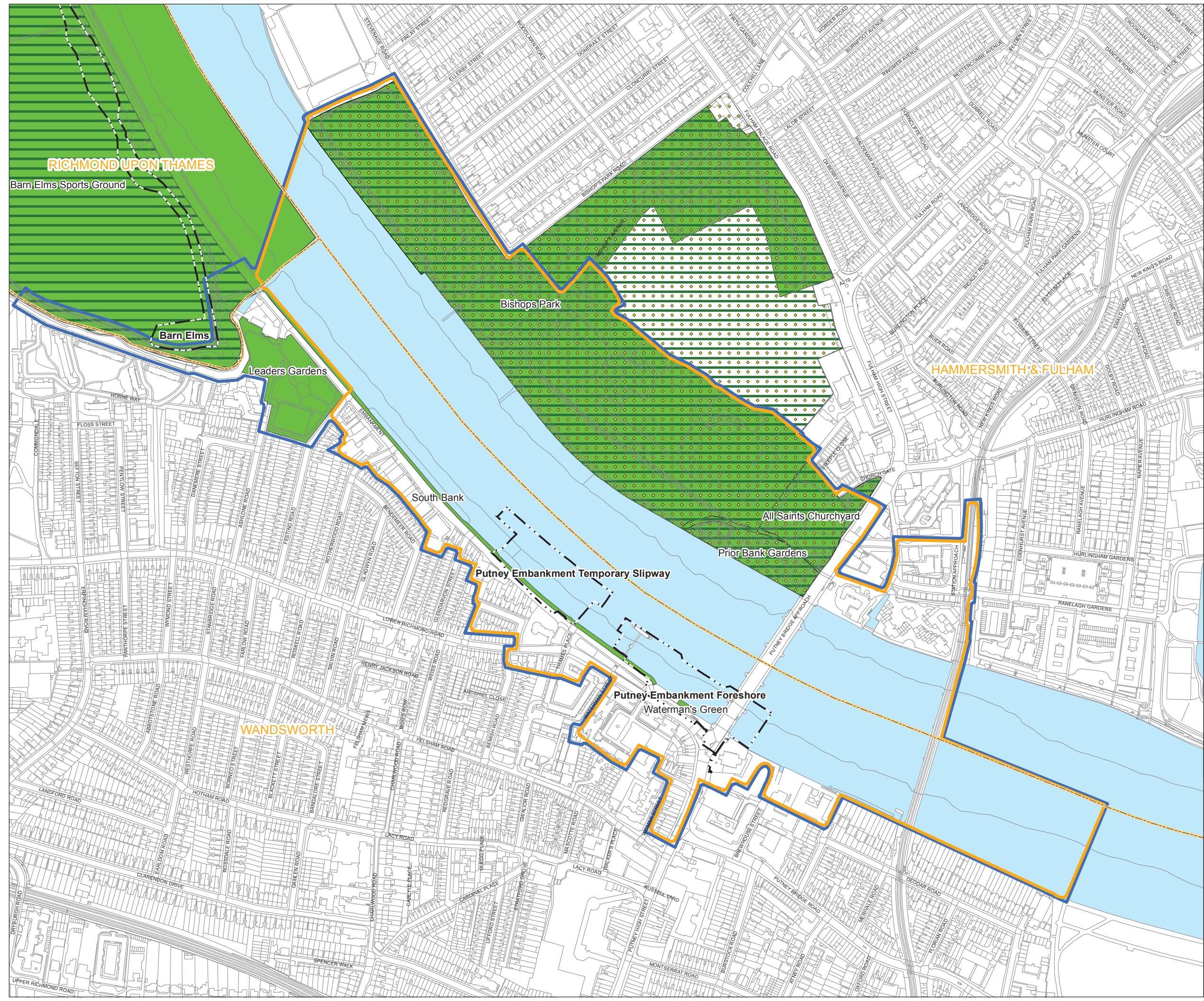
FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

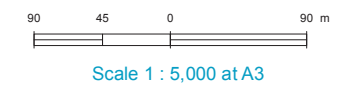
Document Information
Environmental Statement
 Townscape and visual
 Aerial photo showing pattern of vegetation
 Vol. 7 Figure 11.4.3
 1PL03-TS-40367
 January 2013



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- Key:**
- Limits of Land to be Acquired or Used
 - Local Authority boundary
 - Extents of construction phase townscape assessment area
 - Extents of operational phase townscape assessment area
 - Metropolitan Open Land
 - Historic Parks and Gardens
 - Public open space
 - River Thames and tidal tributaries



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Townscape and visual Open spaces
 Vol. 7 Figure 11.4.4
 1PL03-TS-40368
 January 2013

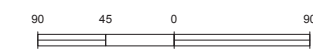


Keyplan:



Key:

- Limits of Land to be Acquired or Used
- Local Authority boundary
- Extents of construction phase townscape assessment area
- Extents of operational phase townscape assessment area
- London Underground
- Thames Path
- Provision for cyclists alongside busy roads
- London cycle routes
- Rail
- A roads
- River Thames and tidal tributaries



Scale 1 : 5,000 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

Townscape and visual
Transport routes
Vol. 7 Figure 11.4.5

1PL03-TS-40369
January 2013



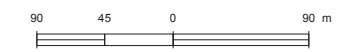
Keyplan:



Key:

- Limits of Land
- to be Acquired or Used
- Local Authority boundary
- Extents of construction phase townscape assessment area
- Extents of operational phase townscape assessment area

The colour fills shown on the plan are used to differentiate between townscape character areas



Scale 1 : 5,000 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

Townscape and visual
Townscape character areas
Vol. 7 Figure 11.4.6

1PL03-TS-40370

January 2013



Keyplan:



Key:

The zone of theoretical visibility (ZTV) is a computer generated model which indicates the theoretical visibility of the construction works (including cranes) and operational structures. As described in Volume 2 the ZTV is a starting point for defining the assessment area and for informing the assessment of likely significant effects. Theoretical visibility does not necessarily mean a location would be subject to adverse effects.

- Limits of Land
- to be Acquired or Used
- Local Authority boundary
- Visual assessment points
- Verifiable photomontage locations
- Construction phase ZTV
- Operational phase ZTV
- River Thames and tidal tributaries



Scale 1 : 5,000 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
London Borough of Wandsworth

Document Information

Environmental Statement

Townscape and visual
Viewpoints
Vol. 7 Figure 11.4.7

1PL03-TS-40371
January 2013



Current baseline

St Mary's Church

Kenilworth Court

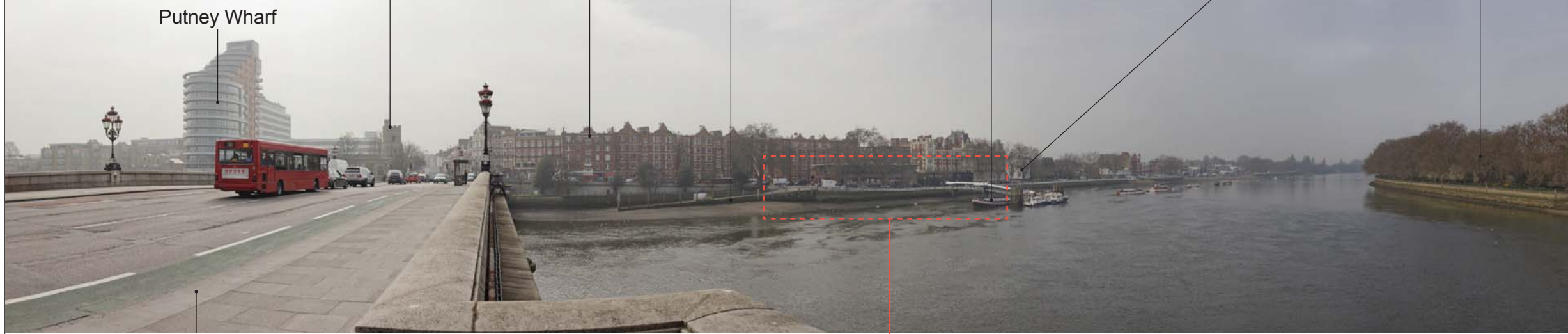
Historic slipway

Putney Pier

London Rowing Club

Bishop's Park

Putney Wharf



Putney Bridge

Expanded image



Operational phase verifiable photomontage



Expanded image



New river wall

Ventilation column

Timber fendering

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Keyplan:



Technical information

Location: Viewpoint 2.1: View southwest from Putney Bridge
 Date taken: 15 March 2011
 Time taken: 12.40
 Tide position: High tide
 Focal length: 51.694mm

This verifiable photomontage shows an illustration of the site in Year 1 of operation. The layout of the proposed development may change within the zones shown on the Site works parameter plan [see volume of figures – Section 1], however the assessment of effects would be no worse than that described in the Environmental Statement Vol 7 Putney Embankment Foreshore – Section 11 Townscape and visual.

FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Townscape and visual
 Viewpoint 2.1
 Operational phase verifiable photomontage
 Vol 7 Figure 11.6.1
 1PL03-TS-40372
 January 2013



Current baseline



Putney Bridge

St Mary's Church

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Keyplan:



Technical information

Location: Viewpoint 2.4: View northwest from Putney High Street outside St Mary's Church
 Date taken: 15 March 2011
 Time taken: 13.27
 Focal length: 51.692mm

This verifiable photomontage shows an illustration of the site in Year 1 of operation. The layout of the proposed development may change within the zones shown on the Site works parameter plan [see volume of figures – Section 1], however the assessment of effects would be no worse than that described in the Environmental Statement Vol 7 Putney Embankment Foreshore – Section 11 Townscape and visual.

Expanded image



Operational phase verifiable photomontage



FOR INFORMATION

Expanded image



Ventilation column

Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Townscape and visual
 Viewpoint 2.4
 Operational phase verifiable photomontage
 Vol 7 Figure 11.6.2
 1PL03-TS-40373
 January 2013



Current baseline

Bishop's Park

Riverbank House

Putney Pier

Star & Garter Mansions

The Duke's Head

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Keyplan:



Technical information

Location: Viewpoint 2.7: View southeast from Embankment outside the Dukes Head
 Date taken: 15 March 2011
 Time taken: 12.58
 Tide position: Low tide
 Focal length: 51.697mm

This verifiable photomontage shows an illustration of the site in Year 1 of operation. The layout of the proposed development may change within the zones shown on the Site works parameter plan [see volume of figures – Section 1], however the assessment of effects would be no worse than that described in the Environmental Statement Vol 7 Putney Embankment Foreshore – Section 11 Townscape and visual.



Expanded image

Thames Path



Operational phase verifiable photomontage



Expanded image



Ventilation column

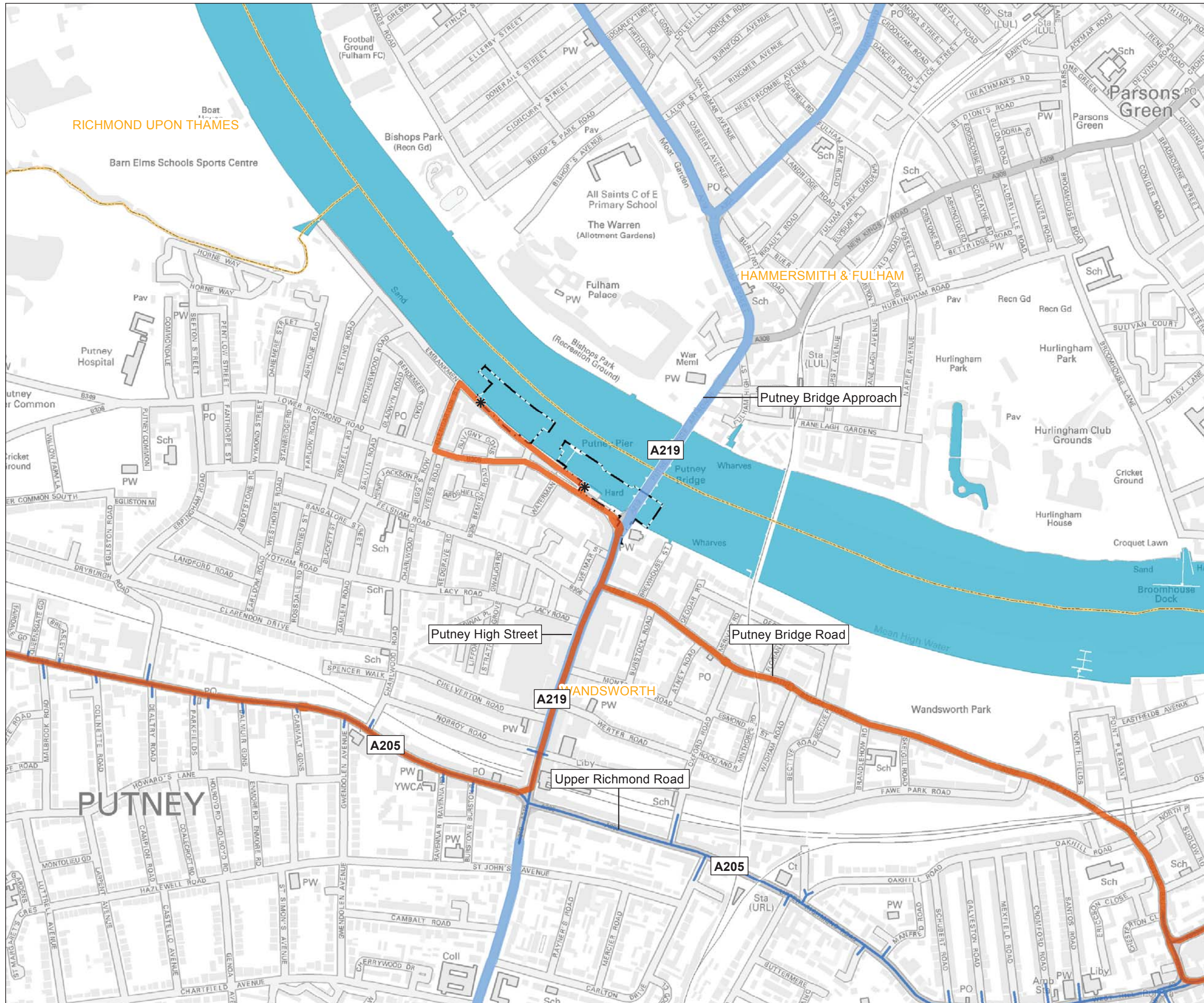
New river wall

FOR INFORMATION

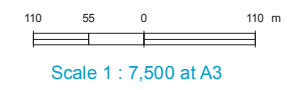
Location
 Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Townscape and visual
 Viewpoint 2.7
 Operational phase verifiable photomontage
 Vol 7 Figure 11.6.3
 1PL03-TS-40374
 January 2013





- Key**
- * Site access
 - TFL road network
 - Strategic road network
 - Primary construction route
 - Limits of Land to be Acquired or Used
 - Local authority boundary



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough Of Wandsworth

Document Information
Environmental Statement
 Transport - construction traffic routes

Vol.7 Figure 12.2.1
 1PL03-TT-50454
 January 2013









Keyplan:



Key

-  TFL road network
-  Strategic road network
-  Limits of Land to be Acquired or Used
-  Local authority boundary

110 55 0 110 m

Scale 1 : 7,500 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
London Borough Of Wandsworth

Document Information

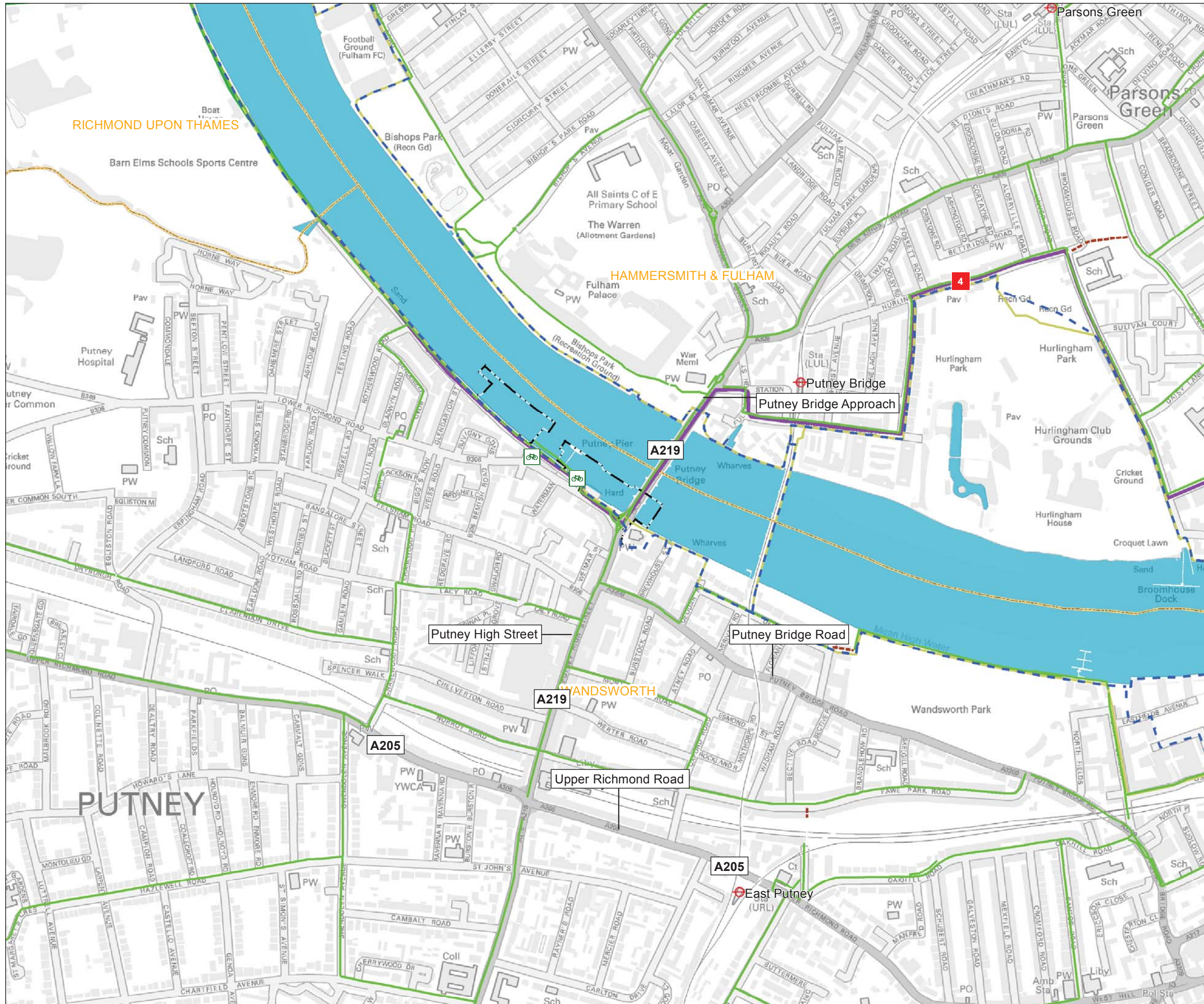
Environmental Statement
Transport - site location plan

Vol.7 Figure 12.4.1

1PL03-TT-50462
January 2013

Thames Tideway Tunnel
Creating a cleaner, healthier River Thames

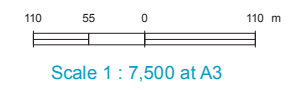




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- Key**
- Cycle Parking
 - National rail stations with cycle parking
 - Underground stations with cycle parking
 - Cycle superhighway (open)
 - Cycle superhighway (open 2013)
 - Cycle superhighway (open 2015)
 - London cycle routes
 - Thames path
 - London strategic walk network
 - Pedestrian routes
- National cycle network**
- Route Type**
- Open Traffic Free
 - Open on-road
- Limits of Land to be Acquired or Used**
- Limits of Land to be Acquired or Used
 - Local authority boundary



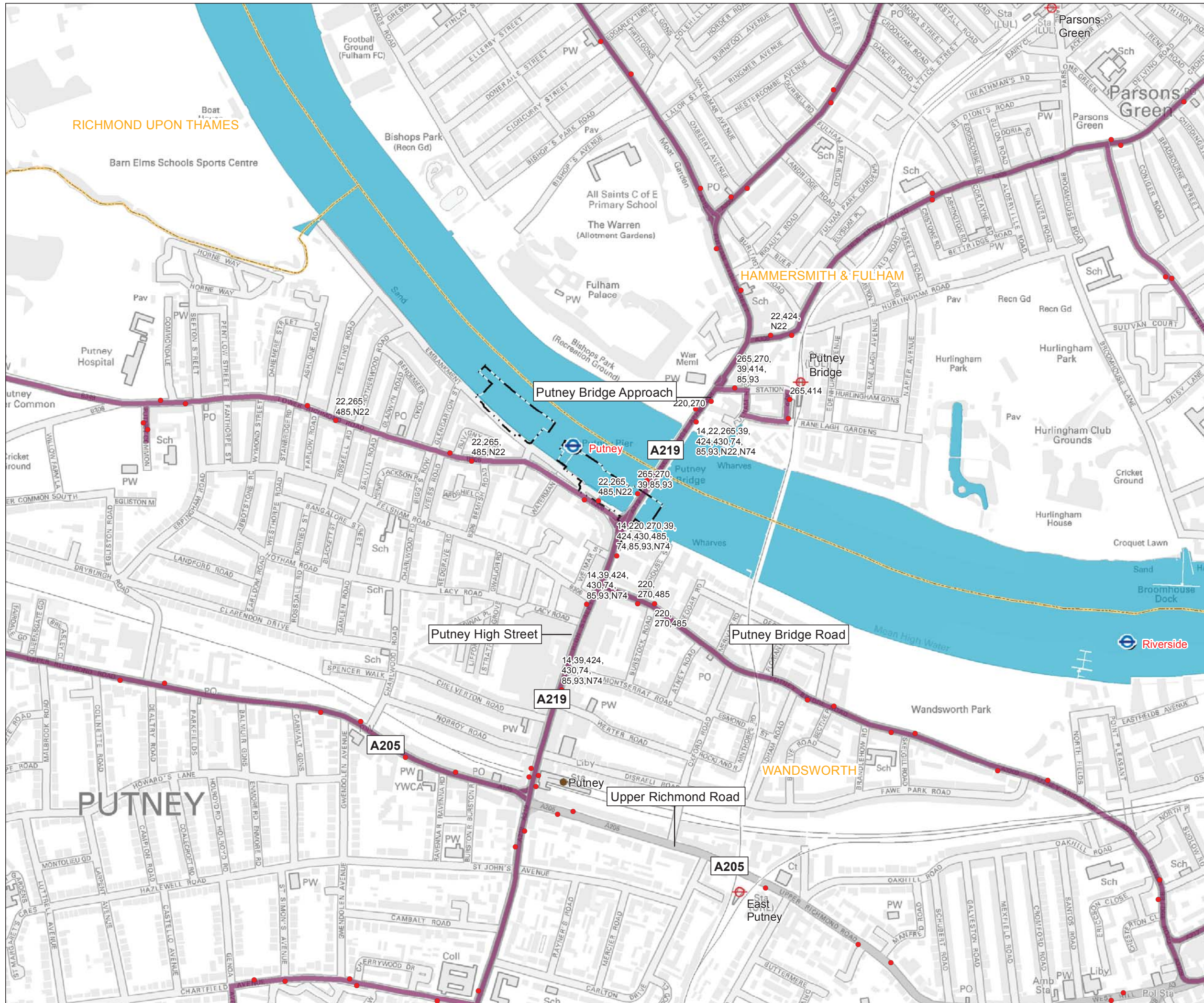
FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough Of Wandsworth

Document Information
Environmental Statement
 Transport - pedestrian and cycle network

Vol.7 Figure 12.4.2
 1PL03-TT-50470
 January 2013

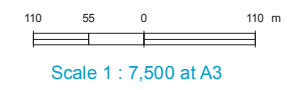




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- Key**
- TFL bus stops
 - Pier locations
 - National rail stations
 - London underground stations
 - TfL bus routes
 - Limits of Land to be Acquired or Used
 - Local authority boundary



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough Of Wandsworth

Document Information
Environmental Statement
 Transport - public transport

Vol.7 Figure 12.4.3
 1PL03-TT-50478
 January 2013

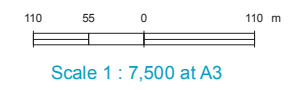




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- Key**
- City Car
 - Green Wheels
 - Zip Car
 - Private car parking
 - Controlled Parking Zones and hours of operation
 - Limits of Land to be Acquired or Used
 - Local authority boundary



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Transport - parking

Vol.7 Figure 12.4.4
 1PL03-TT-50486
 January 2013



Keyplan:



Key

- Pedestrian and cycle surveys
- Junction surveys
- Parking surveys
- Limits of Land to be Acquired or Used
- Local authority boundary



Scale 1 : 4,000 at A3

FOR INFORMATION

Location

Putney Embankment Foreshore
London Borough Of Wandsworth

Document Information

Environmental Statement
Transport - survey locations

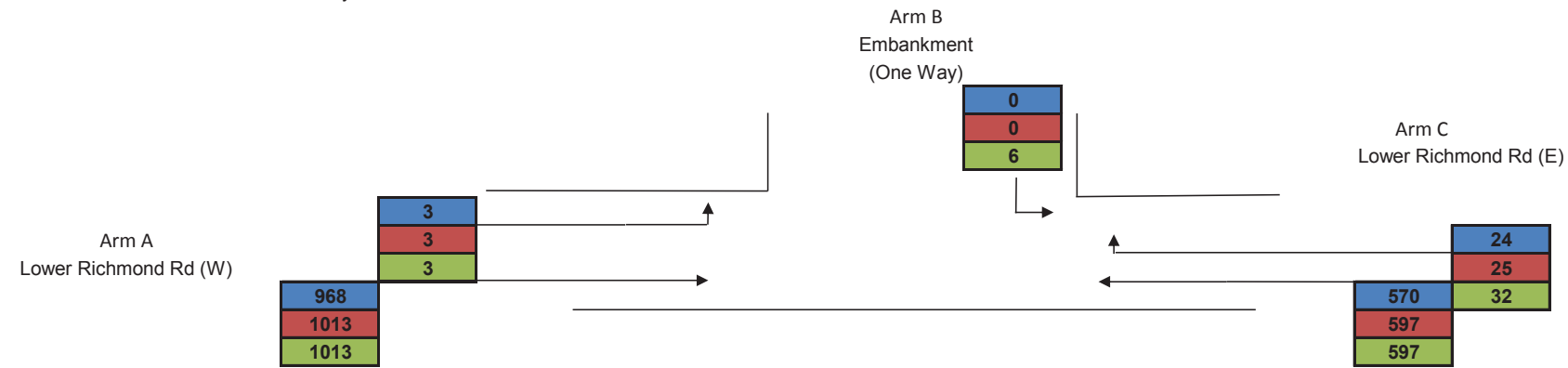
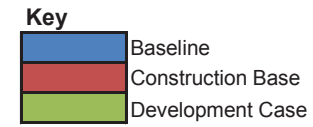
Vol.7 Figure 12.4.5

1PL03-TT-50494
January 2013



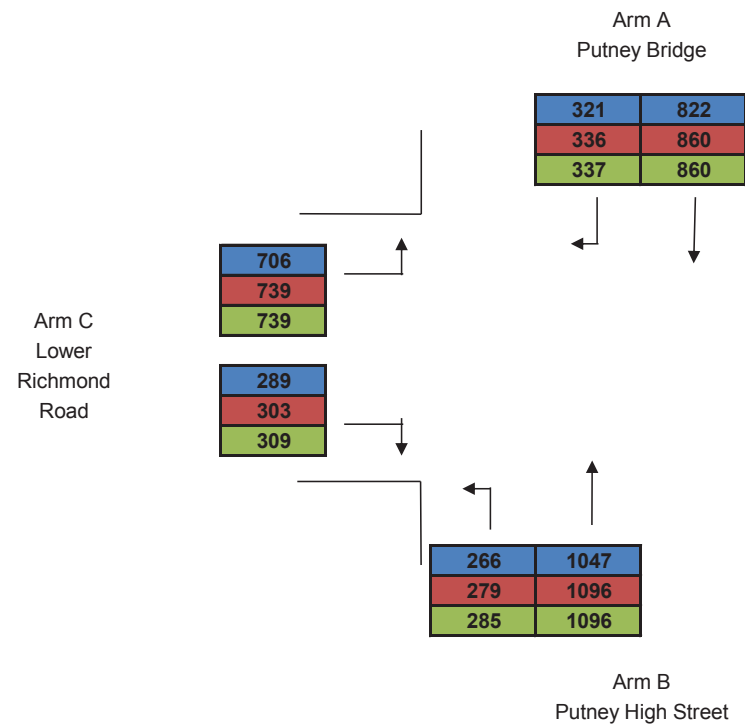
Site: Putney Bridge Foreshore
 Borough: Wandsworth
 Junction: Lower Richmond Rd/ Embankment
 Junction no.: PBA 11

Data: Traffic Flow in PCUs - PM Peak Hour
 from Traffic Survey



Site: Putney Bridge
 Borough: Wandsworth
 Junction: Putney Bridge / Putney High Street / Lower Richmond Road
 Junction no.: PBA 47

Data: Traffic Flow in PCUs - PM Peak Hour
 from Traffic Survey



FOR INFORMATION

Location
 Putney Bridge Foreshore
 London Borough of Wandsworth

Document Information
 Environmental Statement

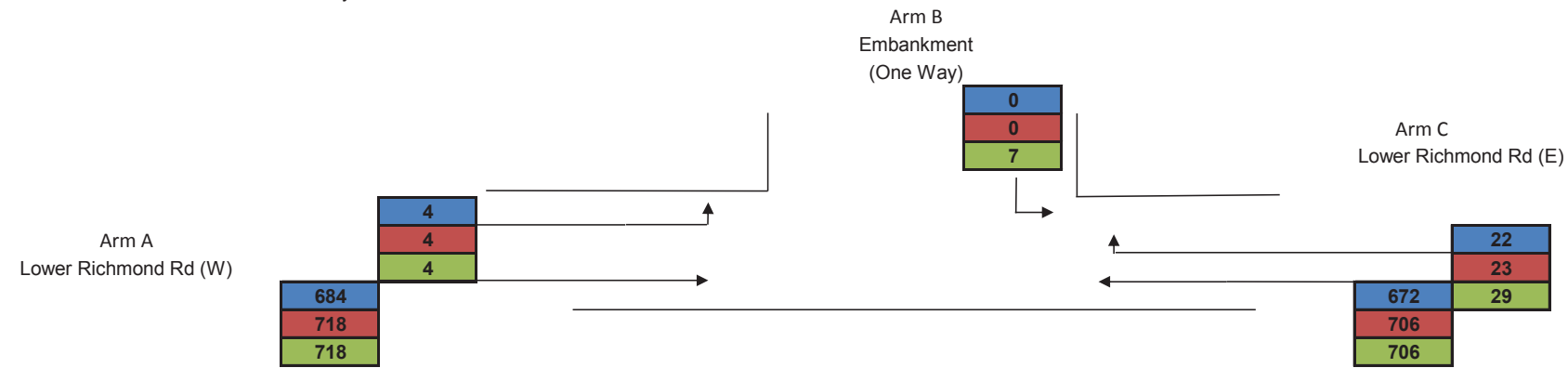
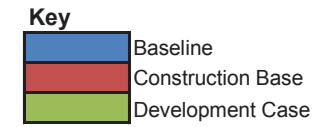
Baseline, Construction and
 Development case traffic flow
 (AM peak hour)

Vol. 7 Figure 12.4.6
 1PL03-TT-50865
 January 2013



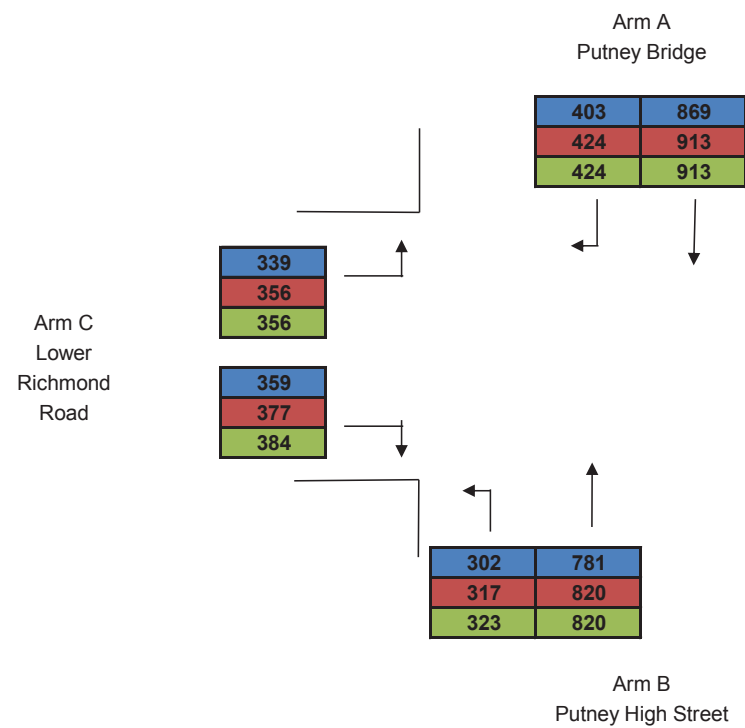
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 Borough: Wandsworth
 Junction: Lower Richmond Rd/ Embankment
 Junction no.: PBA 11

Data: Traffic Flow in PCUs - PM Peak Hour
 from Traffic Survey



Site: Putney Bridge
 Borough: Wandsworth
 Junction: Putney Bridge / Putney High Street / Lower Richmond Road
 Junction no.: PBA 47

Data: Traffic Flow in PCUs - PM Peak Hour
 from Traffic Survey



FOR INFORMATION

Location
 Putney Bridge Foreshore
 London Borough of Wandsworth

Document Information
 Environmental Statement

Baseline, Construction and
 Development case traffic flow
 (PM peak hour)

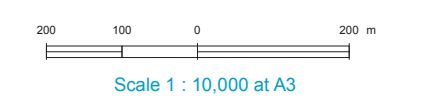
Vol. 7 Figure 12.4.7
 1PL03-TT-50889
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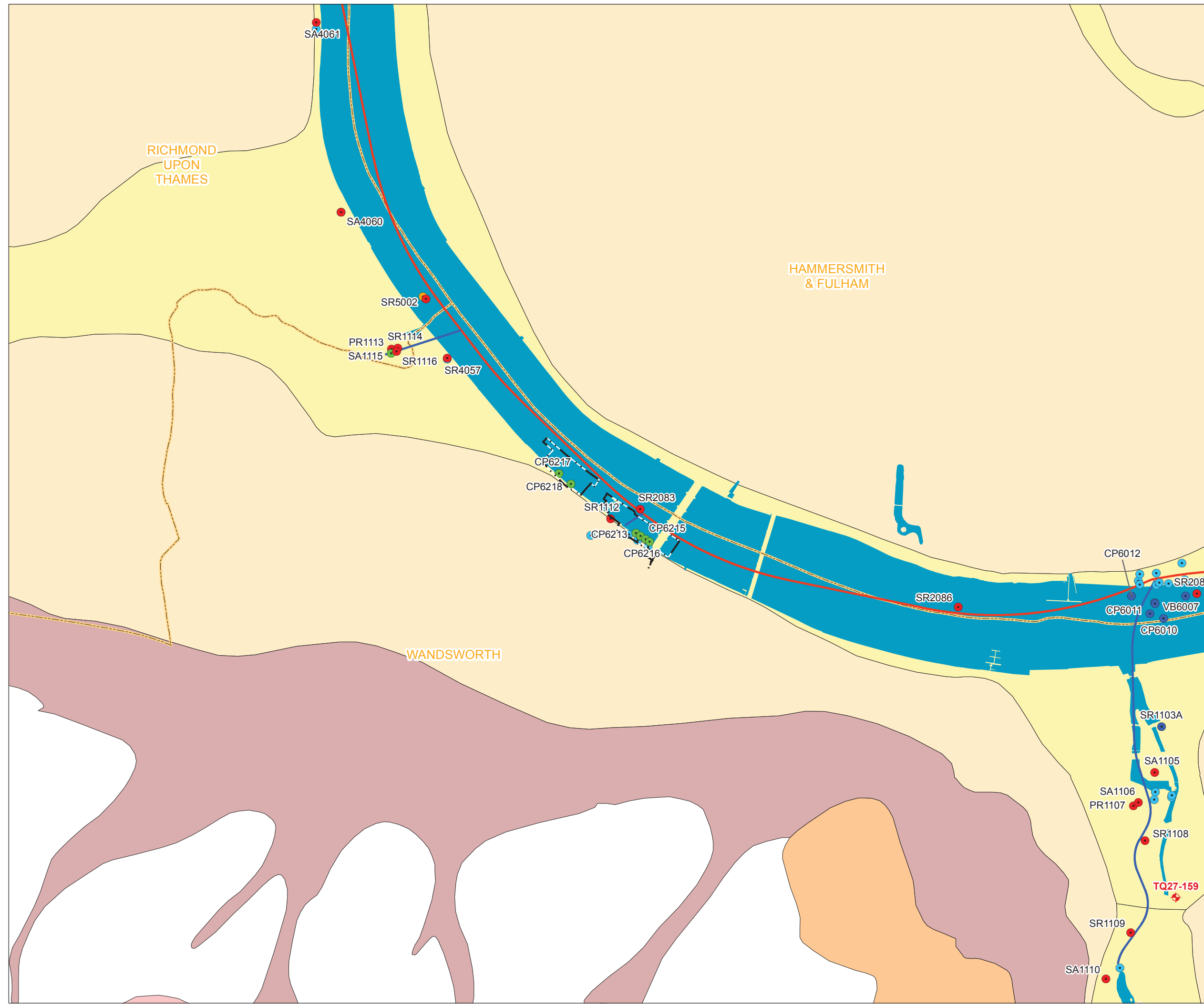
- Key**
- Limits of Land to be Acquired or Used
 - Main Tunnel
 - Connection Tunnel
 - Local Authority Boundary
 - Drilled Boreholes
 - Depth (m)
 - 0 - 10
 - 10 - 30
 - 30+
 - Proposed Boreholes
 - Water
 - Land
 - EA Groundwater Level Monitoring Locations
 - ◆ Recent Data Available
 - Superficial Geology
 - Head
 - Alluvium
 - Kempton Park Gravel Member
 - Hackney Gravel Member
 - Boyn Hill Gravel Member



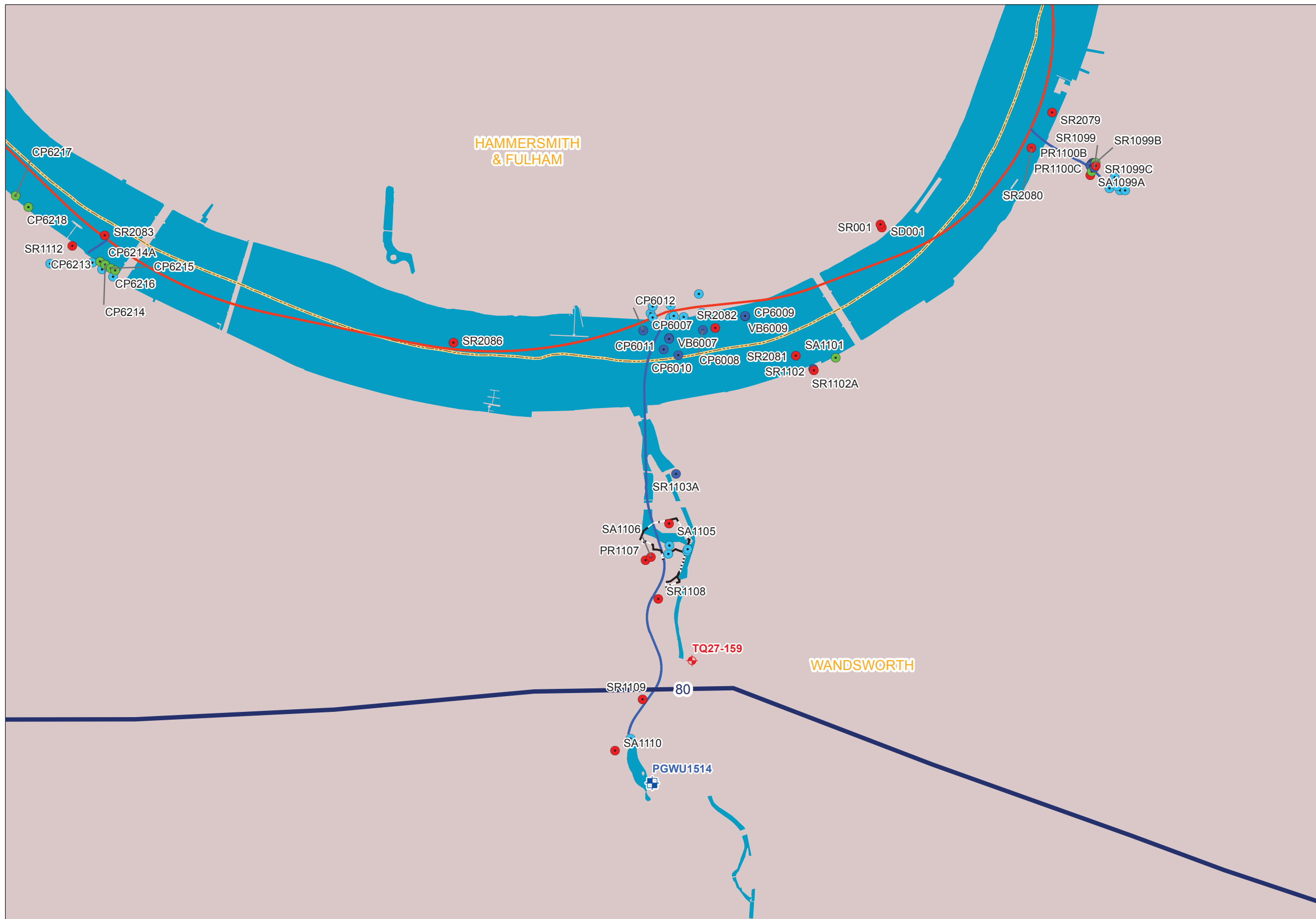
FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

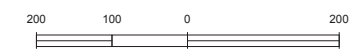
Document Information
Environmental Statement
Water resources – groundwater - superficial geology
Vol.7 Figure 13.4.1
1PL03-WR-20115
January 2013



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- Key**
- Limits of Land to be Acquired or Used
 - Thames Tideway Tunnel
 - Main Tunnel
 - Connection Tunnel
 - Local Authority Boundary
 - Drilled Boreholes
 - Depth (m)
 - 0 - 10
 - 10 - 30
 - 30+
 - Proposed Boreholes
 - Land
 - EA Groundwater Level Monitoring Locations
 - ⊕ Recent Data Available
 - ⊕ EA Water Quality Monitoring Locations
 - EA Chalk Piezometric Level (mATD) - Jan 11
 - Solid Geology
 - London Clay Formation



Scale 1 : 10,000 at A3

FOR INFORMATION

Location

Dormay Street
London Borough of Wandsworth

Document Information

Environmental Statement

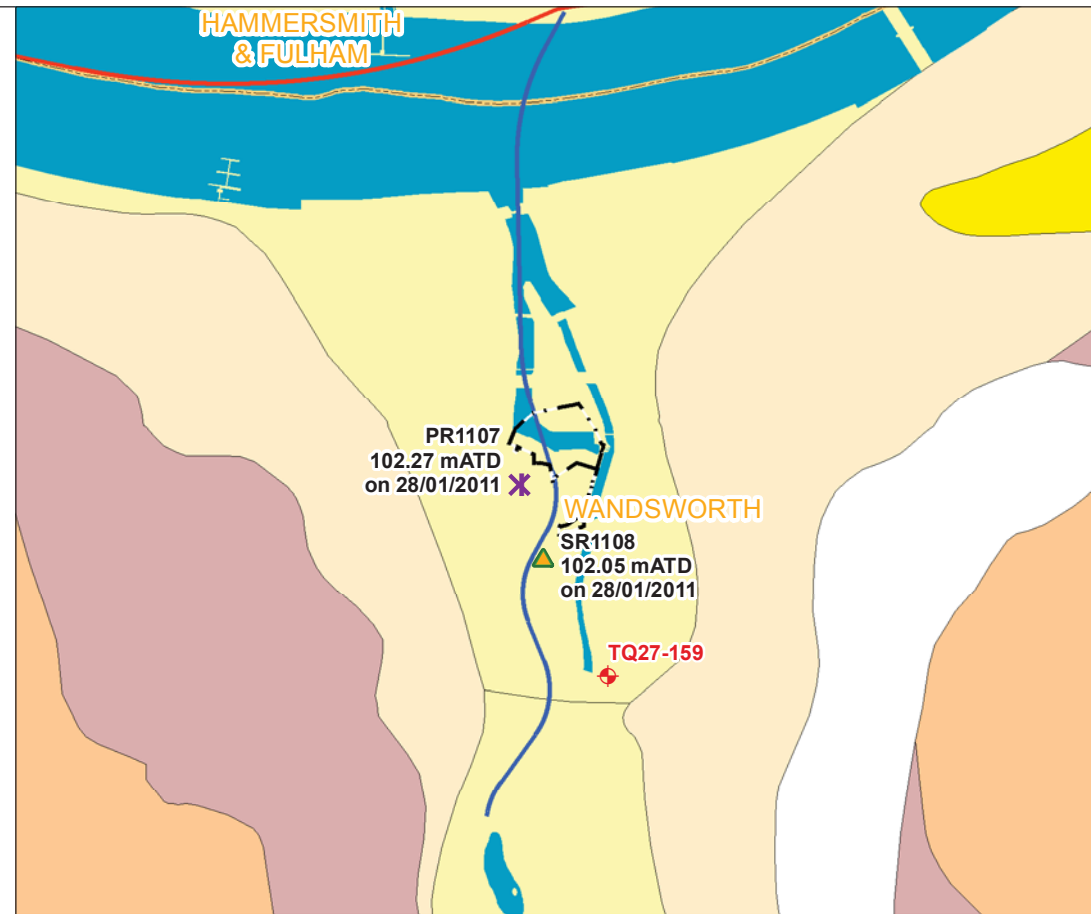
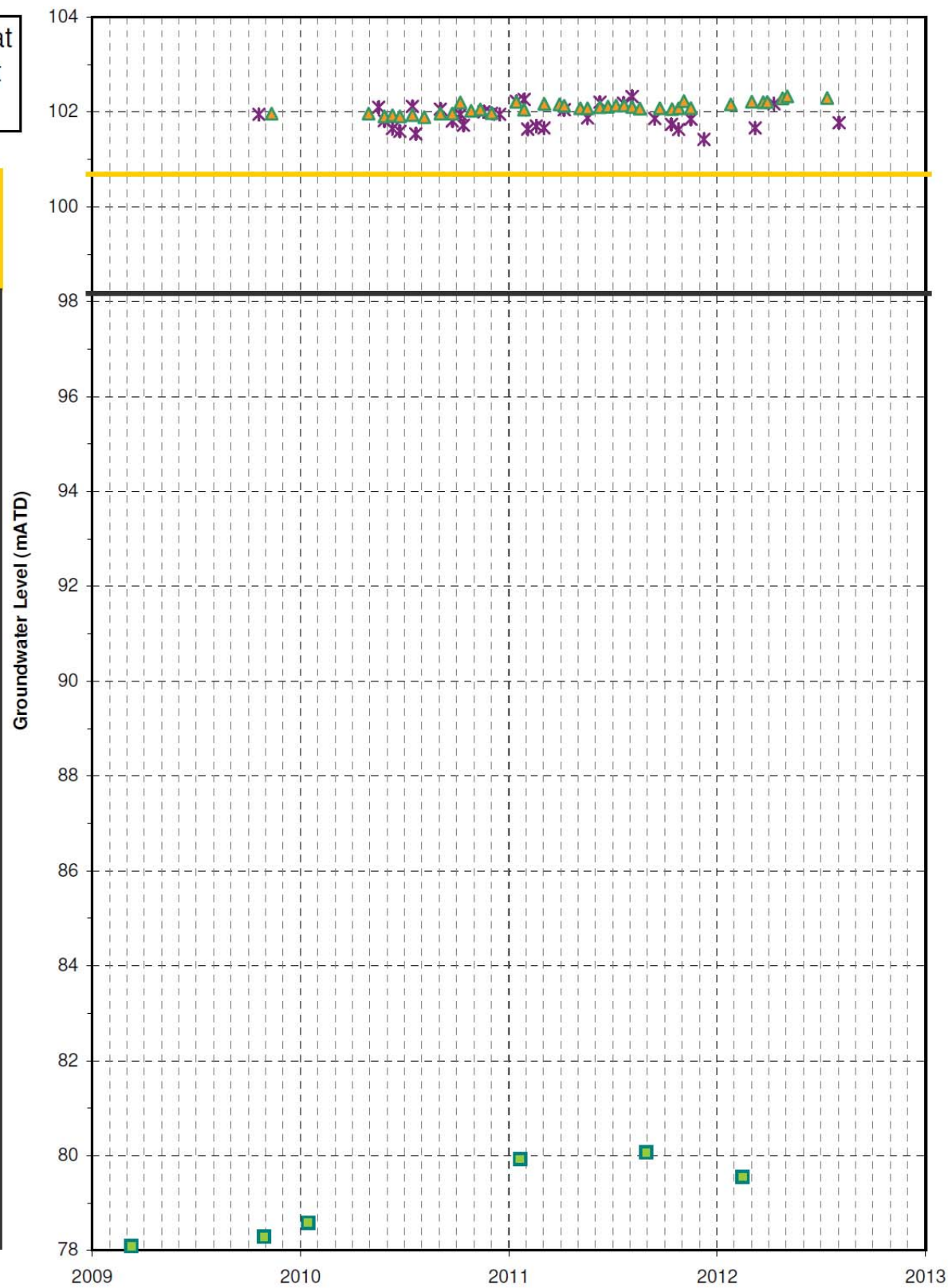
Water resources – groundwater - solid geology
Vol.8 Figure 13.4.2
1PL03-WR-20120
January 2013



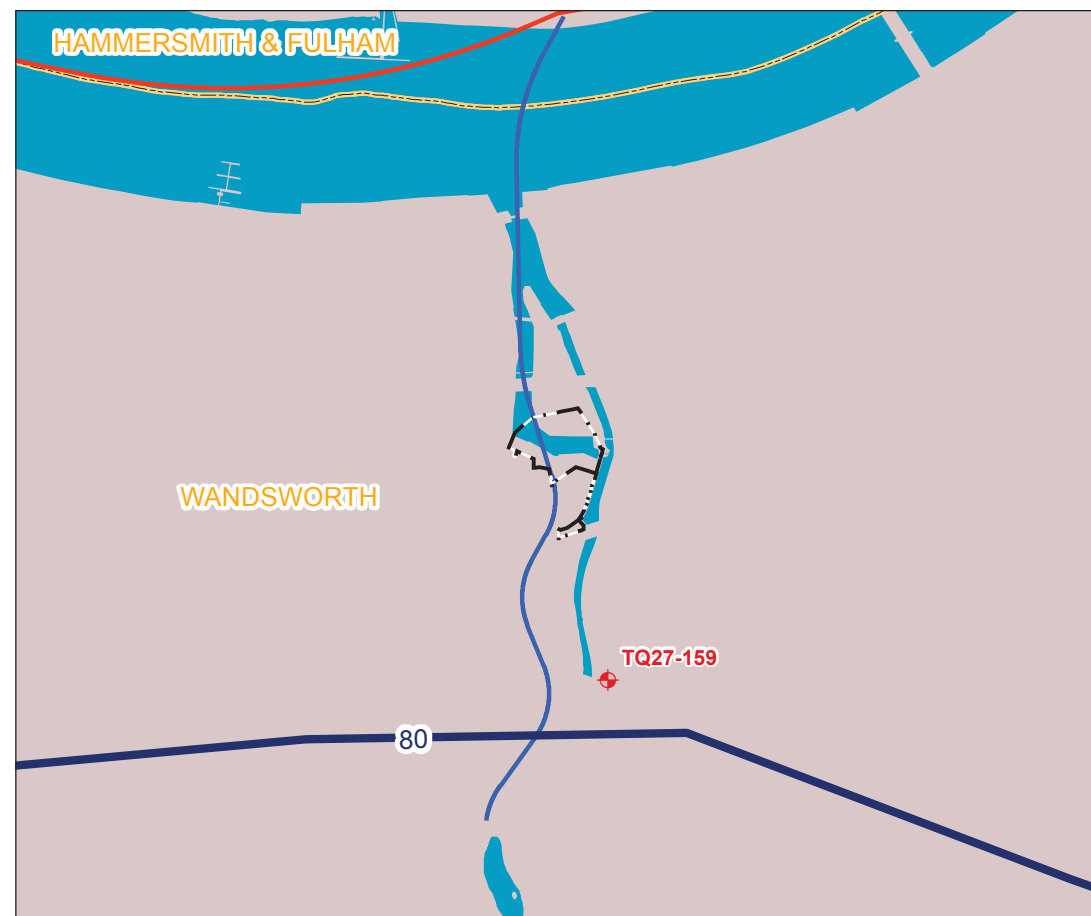
Geology at the Shaft Site

Alluvium & River Terrace

London Clay



Upper aquifer monitoring locations

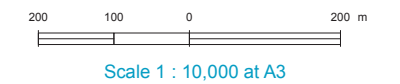


Lower aquifer monitoring locations

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- Key**
- Limits of Land to be Acquired or Used
 - Thames Tideway Tunnel
 - Main Tunnel
 - Connection Tunnel
 - - - Local Authority Boundary
 - Drilled Boreholes Upper Aquifer Water Levels
 - ✱ PR1107
 - ▲ SR1108
 - EA Groundwater Level Monitoring Locations
 - ◆ Recent Data Available
 - EA Chalk Piezometric Level (mATD) - Jan 11
 - Superficial Geology
 - Head
 - Alluvium
 - Kempton Park Gravel Member
 - Langley Silt Member
 - Hackney Gravel Member
 - Solid Geology
 - London Clay Formation



FOR INFORMATION

Location
 Dormay Street
 London Borough of Wandsworth

Document Information
Environmental Statement
 Water resources – groundwater - monitoring locations
 Vol.8 Figure 13.4.3
 1PL03-WR-20121
 January 2013



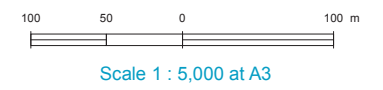


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Key

- Limits of Land to be Acquired or Used
- Automatic Quality Monitoring Station Locations

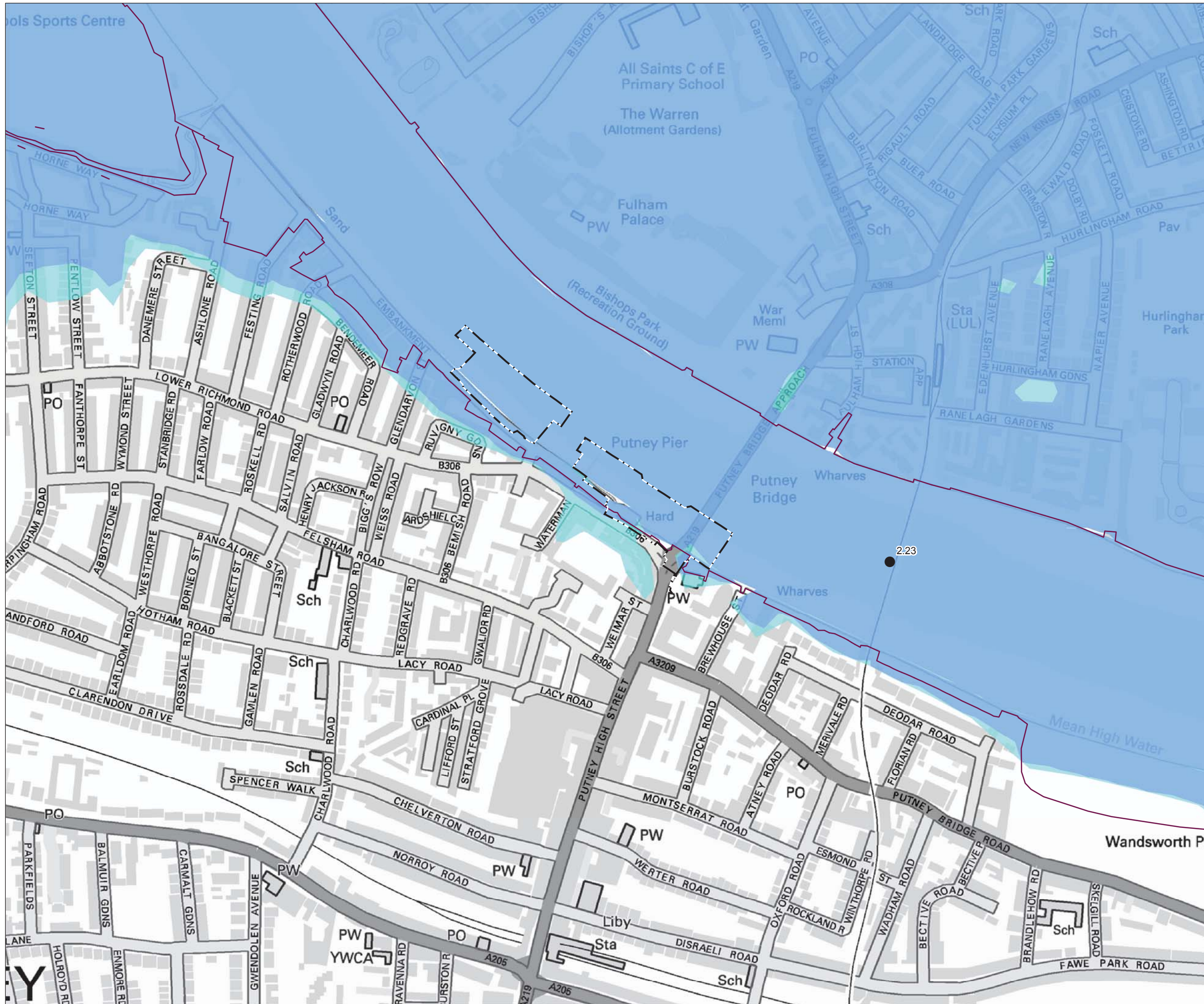


FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Water resources - surface water - water quality monitoring points
 Vol.7 Figure 14.4.1
 1PL03-WR-21004
 January 2013

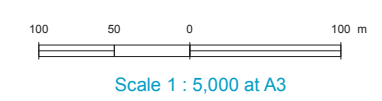




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- Key**
- Limits of Land to be Acquired or Used
 - Water Level Node
 - Thames Tidal Defences
 - EA Flood Zone 3
 - EA Flood Zone 2
- Note: Water Level Node - Thames Tidal Joint Probability Extreme Water Levels 2008



FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Flood risk - EA flood zones

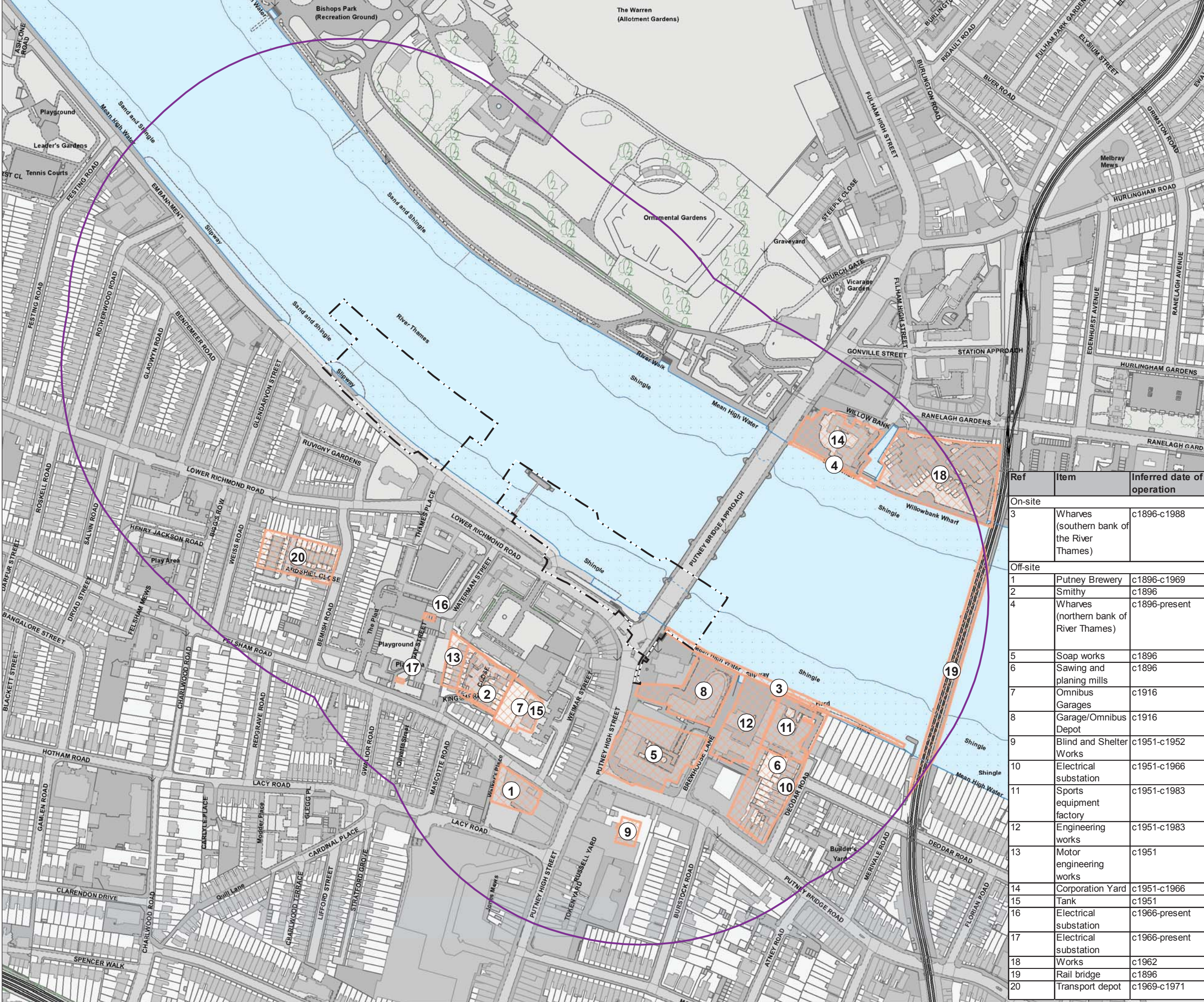
Vol.7 Figure 15.3.1
1PL03-FL-20131
January 2013



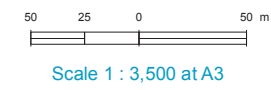
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- Key**
- Limits of Land
 - - - to be Acquired or Used
 - Limit of Land 250m Buffer
 - ▨ Potentially Contaminating Land-Uses



Ref	Item	Inferred date of operation
On-site		
3	Wharves (southern bank of the River Thames)	c1896-c1988
Off-site		
1	Putney Brewery	c1896-c1969
2	Smithy	c1896
4	Wharves (northern bank of River Thames)	c1896-present
5	Soap works	c1896
6	Sawing and planing mills	c1896
7	Omnibus Garages	c1916
8	Garage/Omnibus Depot	c1916
9	Blind and Shelter Works	c1951-c1952
10	Electrical substation	c1951-c1966
11	Sports equipment factory	c1951-c1983
12	Engineering works	c1951-c1983
13	Motor engineering works	c1951
14	Corporation Yard	c1951-c1966
15	Tank	c1951
16	Electrical substation	c1966-present
17	Electrical substation	c1966-present
18	Works	c1962
19	Rail bridge	c1896
20	Transport depot	c1969-c1971



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Land quality - potentially contaminating land-uses
 Vol.7 Figure F.1.1
 1PL03-LQ-30135
 January 2013

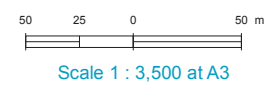




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- Key**
- Drilled Boreholes**
- Depth (m)
- 0 - 10
 - 10 - 30
 - 30+
- Limits of Land
- - - to be Acquired or Used
- Limit of Land 250m Buffer



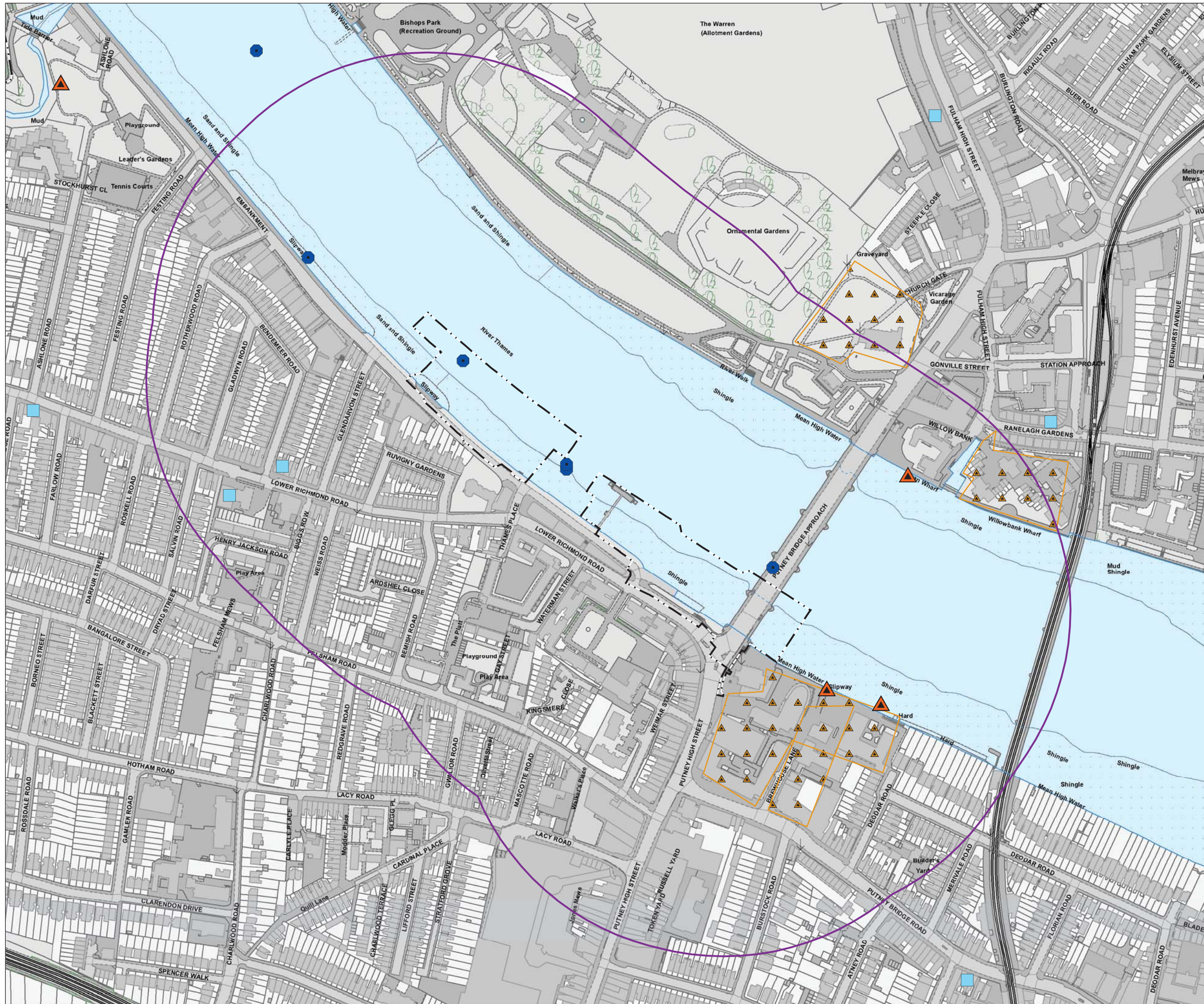
FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

Document Information
Environmental Statement
 Land quality - borehole locations

Vol.7 Figure F.1.2
 1PL03-LQ-30133
 January 2013

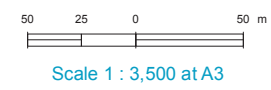




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- Key**
- Limits of Land
 - - - to be Acquired or Used
 - Limit of Land 250m Buffer
- Waste**
- ▲ Past Potential Contaminated Industrial Uses
- Hazards**
- Pollution Incidents to Controlled Waters
 - LA Pollution Prevention & Controls
 - ▲ Past Potentially Contaminated Industrial Uses



FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

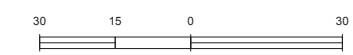
Document Information
Environmental Statement
 Land quality - hazard and waste sites

Vol.7 Figure F.1.3
 1PL03-LQ-30134
 January 2013





- Key**
- Limits of Land to be Acquired or Used
 - Local Authority Boundary
 - Noise Survey Locations
 - Attended



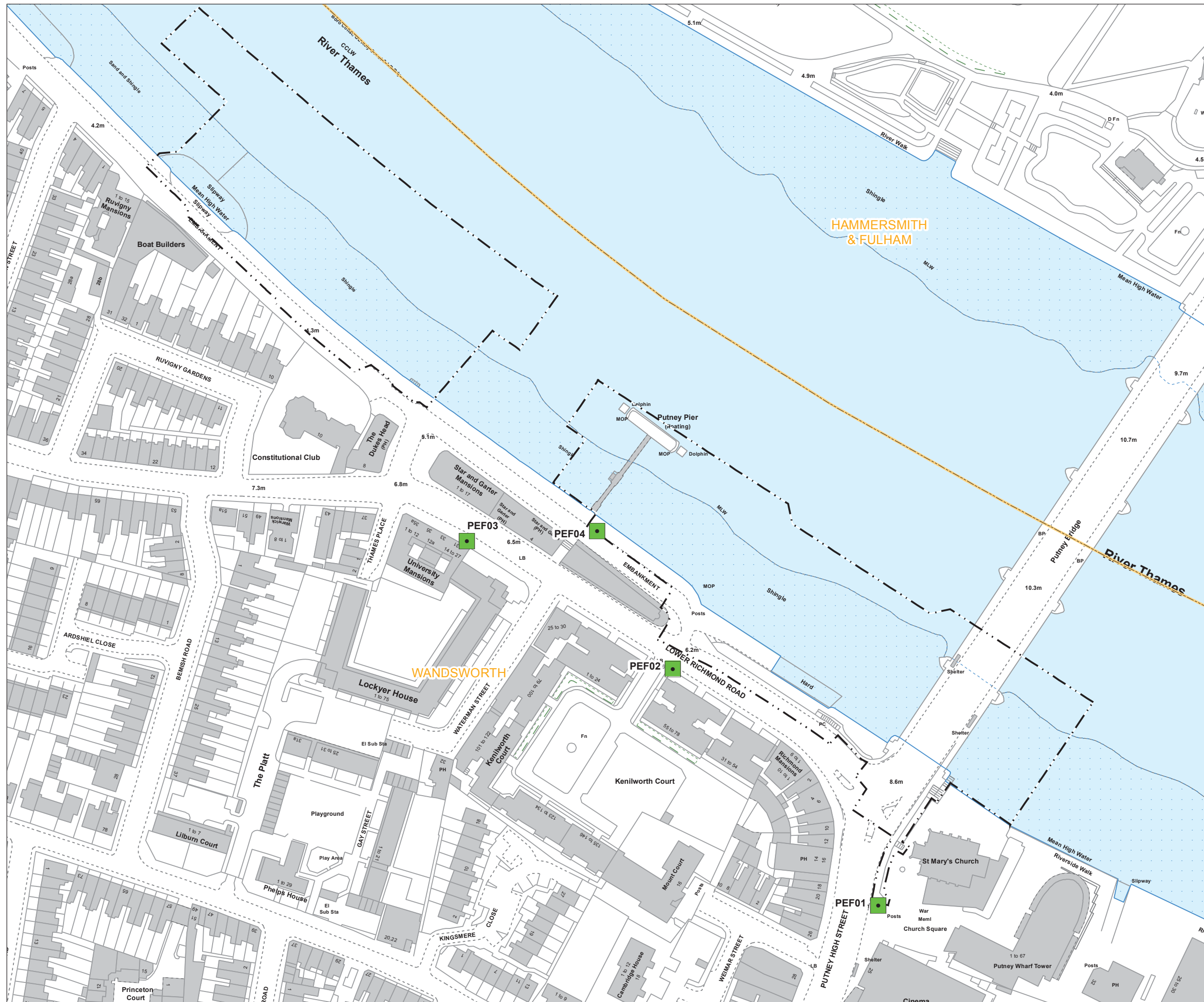
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FOR INFORMATION

Location
Putney Embankment Foreshore
 London Borough of Wandsworth

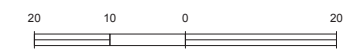
Document Information
Environmental Statement
 Noise and vibration - noise survey locations

Vol. 7 Figure G.1
 1PL03-NV-40151
 January 2013





- Key
- Survey Zone
 - 1 - Waterman's Green - West
 - 2 - Waterman's Green - East



FOR INFORMATION

Location
Putney Embankment Foreshore
London Borough of Wandsworth

Document Information
Environmental Statement
Socio-economics - usage survey plan

Vol.7 Figure H.1
1PL03-SE-20026
January 2013



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