

Southampton to London Pipeline Project

Deadline 6

Site Specific Plan - Fordbridge Park (clean)

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1 Introduction

- 1.1.1 This plan provides further detail on the potential impacts, construction techniques and mitigation measures in this area as a standalone document that is certified as part of the Development Consent Order (DCO). Esso is required to comply with and implement the Site Specific Plan under Requirement 17 of the granted DCO.
- 1.1.2 The methodology covers the following:
- construction programme;
 - access;
 - vegetation removal;
 - Open Cut installation through the park;
 - trenchless crossing from Ashford Road to the park (TC038);
 - trenchless crossing from the park to western side of Woodthorpe Road (TC039);
and
 - reinstatement.
- 1.1.3 Esso and its supply chain of contractor(s) will adopt the control measures set out in this Site Specific Plan when undertaking the installation of the pipeline.



2 Construction Programme

- 2.1.1 Assessment of the preferred construction methodology indicates that works within the park will take approximately 12 months. However, this may not be 12 months of continuous work, as the works may be staged to facilitate safe working by undertaking the Open Cut work at a different time to the trenchless works.
- 2.1.2 There is a two-year working window for the construction works, as the programme will need to take account of any seasonality such as ecological constraints and optimum replanting periods. Notwithstanding the above constraints, the detailed scheduling of the works will look to rationalise and work simultaneously where there is the ability to do so, to reduce disturbance to the park.
- 2.1.3 Below is a summary of works and estimated durations, but this is subject to detailed programming and uncertainties such as weather and ground conditions.

Table 2.1: Estimated duration of works (based on working 6 days per week)

Works	Estimated Duration
Enabling works	2–3 weeks.
Open Cut	8 weeks. There will be additional time for site setup/demobilisation.
Trenchless crossing from Ashford Road to the park (TC038)	3 months
Trenchless crossing from the park to Woodthorpe Road (TC039)	3 months
Reinstatement	4–6 weeks. Reinstatement of Fordbridge Park will take into account seasonal constraints, including tree planting seasonality, and will occur in the first available planting season after installation works are completed.

- 2.1.4 As noted above, this represents the case in which works are carried out individually. An example of how this might be rationalised would be to undertake both the trenchless works simultaneously, with the Open Cut being undertaken separately as they are distinct work activities.
- 2.1.5 Once the construction plans have been finalised, the local community will be informed and updated in line with the Community Engagement Plan.
- 2.1.6 All works will be planned to take place within the normal working hours as defined by the DCO. It is only in exceptional or emergency circumstances that the works will continue outside of the standard working hours.



3 Description of Works

3.1 Access

- 3.1.1 Public access into the park will not be prevented by the works. The majority of the park will remain accessible during installation of all works. The undesignated paths/tracks within the park will be crossed by the working area. At the intersection between the working area and path/tracks, pedestrian crossing points will be installed, similar to those used for Public Rights of Way crossings. Pedestrians will have priority at these crossing points – the gates will only be 'closed' when works require. At such times, operatives will be stationed at the crossing point to facilitate public access. Additional signage for diversions on to alternative existing paths will be put in place as appropriate in advance of any closures.
- 3.1.2 Access to this northwest side of the park is planned to be via Celia Crescent access, but Spelthorne Borough Council has requested that the project creates a temporary vehicle entrance from Woodthorpe Road. The project will use its reasonable endeavours to secure alternative access from Woodthorpe Road into Fordbridge Park. This will require a permit from Surrey Highways Authority and voluntary land rights from Spelthorne Borough Council, as the relevant land is outside of the Order Limits. If this alternative access has been secured, the project agrees it will not use Celia Crescent as a vehicular access route into Fordbridge Park.
- 3.1.3 In either case, the access into the park and the access route within the park will be fenced for the duration of the works, with pedestrian crossing points, similar to those used for Public Rights of Way crossings, available to cross the access route within the park. Pedestrians will have priority at these crossing points.
- 3.1.4 Access to the southeast end of the park and to the drive pit for TC038 will be via the B377 Ashford Road access.

3.2 Vegetation Removal

- 3.2.1 The local landscape character of Fordbridge Park comprises formal paths within amenity grassland and trees. Trees are scattered within the Order Limits, primarily within the northern part of the park and also partly in a line of a formal path that crosses the Order Limits. Tree species comprise primarily non-native ornamental species and a few native species, including Poplar, Silver Birch, Himalayan Birch, Lime, Damson, Crab Apple, False Acacia, Cherry, Purple leaf Plum, Leyland Cypress, Dawn Redwood, Horse Chestnut and Rowan.
- 3.2.2 It is anticipated that the Open Cut installation will require the removal of four trees. Those trees to be removed have been identified in the plans in Appendix B
- 3.2.3 It is anticipated that the TC038 trenchless working area may require the removal of a further two trees to support the trenchless works. However, detailed design of the trenchless crossing will consider options for retaining these two trees.
- 3.2.4 None of these trees are mature and none are identified as memorial trees. Where not identified for removal, the remaining identified trees will be retained.



3.2.5 Sections 3.5 to 3.7 below outline the approach that will be taken during construction to reduce the impact to vegetation and trees within the park, and this is reflected in the construction stage plan at Appendix B. As per Requirement 8(1)(a) of the DCO, the retention and removal of vegetation within the park must be undertaken in accordance with this Site Specific Plan (including the construction stage plan) unless otherwise agreed by the relevant planning authority.

3.3 Security

3.3.1 The work areas will be fully secure with locked gates and on-site, 24-hour security and CCTV.

3.3.2 Heras-type fencing bolted together, or strong-wall fencing, will be used during the works. All plant and operatives will work within the fencing and compound.

3.3.3 The on-site, 24-hour security will monitor all working areas within the park.

3.4 Enabling Works

3.4.1 This will consist of:

- creating/re-establishing the access route from the highways;
- setting up the worksite;
- delivery of plant, pipe materials; and
- fencing.

3.4.2 Users will be informed before the construction work. This will be covered in the location specific plan within the Community Engagement Plan.

3.5 Open Cut Installation

3.5.1 The Open Cut (generic) installation approach described in the Code of Construction Practice (CoCP) will be tailored to the conditions of the park to reduce the amount of vegetation and tree clearance required. Details on how this will be applied at this location are summarised below.

3.5.2 Topsoil will only be stripped from the area required for the trench. Ground protection, similar to the methodology set out for sports fields and golf courses, will be used when crossing larger grassed areas.

3.5.3 Open Cut installation will take place from the horizontal directional drilling (HDD) work area for crossing TC038 to the HDD work area for crossing TC039.

3.5.4 Before any Open Cut works can continue, works to the six trees identified to be removed and any vegetation will be undertaken by a licenced specialist.

3.5.5 Any necessary vegetation clearance works would take place before the construction fencing is erected. During vegetation clearance, warning signage to indicate safe zones will be erected to alert the public to the works. All material will be removed and recycled.



- 3.5.6 Trees being retained will be protected from installation activity in line with commitment G95: *'The contractor(s) will apply the relevant protective principles set out in the British Standard BS5837:2012 - Trees in Relation to Design Demolition and Construction. This will be applied to trees within the Order Limits which will be preserved through the construction phase, and to trees outside of the Order Limits where such measures do not hinder or prevent the use of the relevant working width for construction.'*
- 3.5.7 The project Environmental Clerk of Works and arboriculturalist will provide advice when any works to trees, such as branch removal, are required. Hand digging and air lance techniques or similar British Standard–approved techniques will be utilised when excavating within the root protection area.
- 3.5.8 The Open Cut installation working area will be narrowed to a maximum 10m wide working area (narrow working commitment NW30) with an approximate working length of 50m. A 10m wide fencing/barrier system, will be erected within the Order Limits – this is to segregate the 'live' working area from publicly accessible areas. As the works progress, the fenced area will be relocated/extended so that no more than 50m of continuous fencing is in place before a public crossing point.
- 3.5.9 The existing paths are in good condition. These paths cross the working area. As such, a gate system, similar to those used for Public Rights of Way, will be implemented with the priority given to pedestrians. When the works are crossing the footpath, a local diversion will be put in place, and once complete, the path will be reinstated or a temporary surface installed until reinstatement is completed.
- 3.5.10 The intended pipeline alignment has been designed to reduce the removal of trees within the park.
- 3.5.11 There is a pinch point within the park, as shown in the illustration below, where the route passes between the residential property on the northeastern end of the Crescent, mature trees and the electricity pylon located within the park. Through the design process, the Order Limits and limits of deviation have been narrowed in this area, due to this restriction.

Illustration 3.1: Pinch point in Fordbridge Park



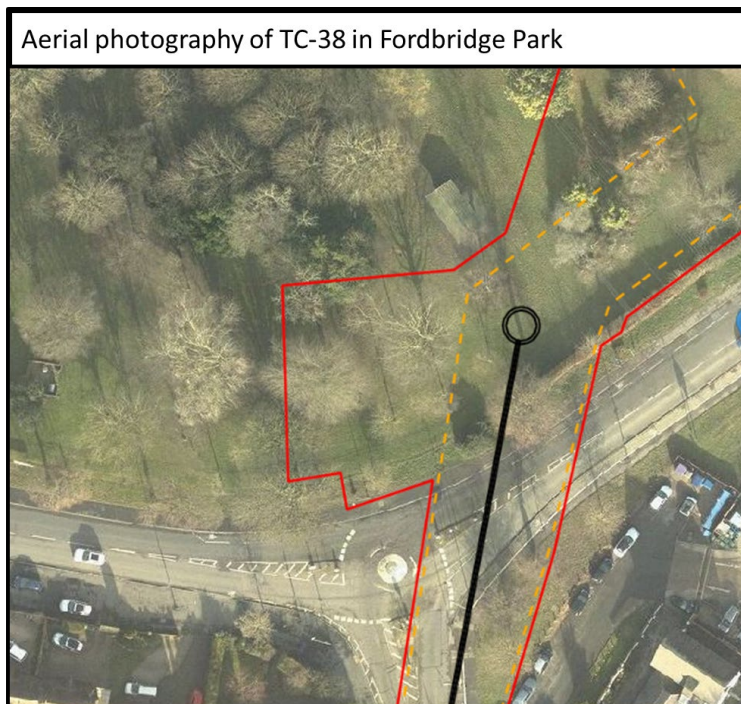
- 3.5.12 Through the park and within the whole narrow working area, there is room for mobile welfare units, plant parking, materials and vehicles to be safely accommodated.
- 3.5.13 Through the park, the size of plant (machinery and vehicles) used will be smaller than for traditional Open Cut working.
- 3.5.14 The steel pipes will be brought to site in a 'just-in-time' delivery sequencing and distributed through the working area.
- 3.5.15 All fabrication works (such as grinding, welding, coating and testing) will be undertaken behind screens or within shelters in order to reduce impacts on the users of the park. These screens will include acoustic protection if required.
- 3.5.16 The Open Cut working will be completed when the ends are connected into the pipeline installed during the two trenchless installations in the southeast and northwest corners of the park. Therefore, depending on the sequence of the works, the end section of trench will be suitably fenced off and secured until the connection of the pipe to the trenchless section is concluded.

3.6 TC038 (HDD Staines Reservoir Aqueduct and B377 Ashford Road)

- 3.6.1 The works for this trenchless crossing will follow the methodology as outlined in the CoCP which will be tailored to the conditions of the park to reduce the amount of vegetation and tree clearance required. Details on how this will be applied at this location are summarised below.
- 3.6.2 The HDD drive area will be situated adjacent to Ashford Road, near to an existing vehicle access for the park.

- 3.6.3 The set-up of this area will follow the standard HDD methodology. There are no existing formal paths in this area. The launch pit will be located in the park, so no pipe stringing will be required in the park.
- 3.6.4 Some vegetation will need to be cleared from this area, but no mature trees will be removed. The area will then be scanned for utilities and ground protection laid to reduce topsoil stripping.
- 3.6.5 The current assessment shows that two trees may be removed to create a safe working area. Some trees overhanging the working area may need to be pruned.
- 3.6.6 Once the HDD section is complete, the pit will be fenced off and left in situ until the Open Cut section connecting the pipe to the trenchless section is concluded.
- 3.6.7 The detail for this pipe string area is covered in the Site Specific Plan for Ashford Road.

Illustration 3.2: Aerial photography of TC038 in Fordbridge Park



3.7 TC039 (Staines Bypass A308, River Ash and Woodthorpe Road)

- 3.7.1 The works for this trenchless crossing will follow the methodology as outlined in the CoCP and will be tailored to the conditions of the park to reduce the amount of vegetation and tree clearance required. Details on how this will be applied at this location are summarised below.
- 3.7.2 The HDD work area will be situated in the northwest corner of the park.
- 3.7.3 The set-up of this area will follow the standard HDD methodology. The launch pit will be located in the park, so no pipe stringing is required in the park.

- 3.7.4 There is one existing undesignated public path that crosses this area. This will be diverted for the duration of the works.
- 3.7.5 Noise as a result of drilling has been assessed, and no significant effects on local receptors have been identified.
- 3.7.6 Once the HDD section is complete, the pit will be fenced off and left in situ until the Open Cut section connecting the pipe to the trenchless section is concluded.

Illustration 3.3: Aerial photography of TC039 in Fordbridge Park



3.8 Reinstatement

Vegetation

- 3.8.1 Vegetation will be reinstated as shown in the reinstatement plan attached at Appendix B. This reinstatement plan will be included within Appendix B of the Landscape and Ecological Management Plan (LEMP) for the approval of the relevant planning authority as per Requirement 8(1)(b) and Requirement 12 of the DCO.
- 3.8.2 Where the topsoil has been stripped and stored, this will then be replaced after the works have been completed and either turfed or seeded with an amenity mix specific to Fordbridge Park.
- 3.8.3 Where trees have been removed, they will be replaced at the nearest location whilst outside of the 6.3m pipeline easement.



- 3.8.4 The vegetation will be subject to a five-year aftercare period to ensure it becomes established.

Undesignated Paths

- 3.8.5 Paths crossed by the working area will be reinstated once the Open Cut works are complete. Like-for-like footpath surfacing will be used for reinstatement, unless otherwise agreed between the project and Spelthorne Borough Council.



Appendix A – Area Plan



- Legend**
- Order Limits
 - Fordbridge Park boundary (area covered by this site specific plan)
 - Point of interest
 - Existing aviation pipeline and multifuel lines
 - River
 - Undesignated path
 - Statutory services line
 - Memorial tree

0	30/01/2020	For Issue	LM	BM	BM	PG
Rev.	Rev. Date	Purpose of revision	Orig/Dwn	Checkd	Rev'd	Apprv'd

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Project

Southampton to London Pipeline Project

Drawing title

**SITE SPECIFIC PLAN
 FORDBRIDGE PARK**

Drawing Status	For Issue	
Scale	1:1,900 @ A3	DO NOT SCALE
Jacobs No.	B2325300	
ProjectWise No.		
Drawing number	Sheet 1 of 1	Rev 0

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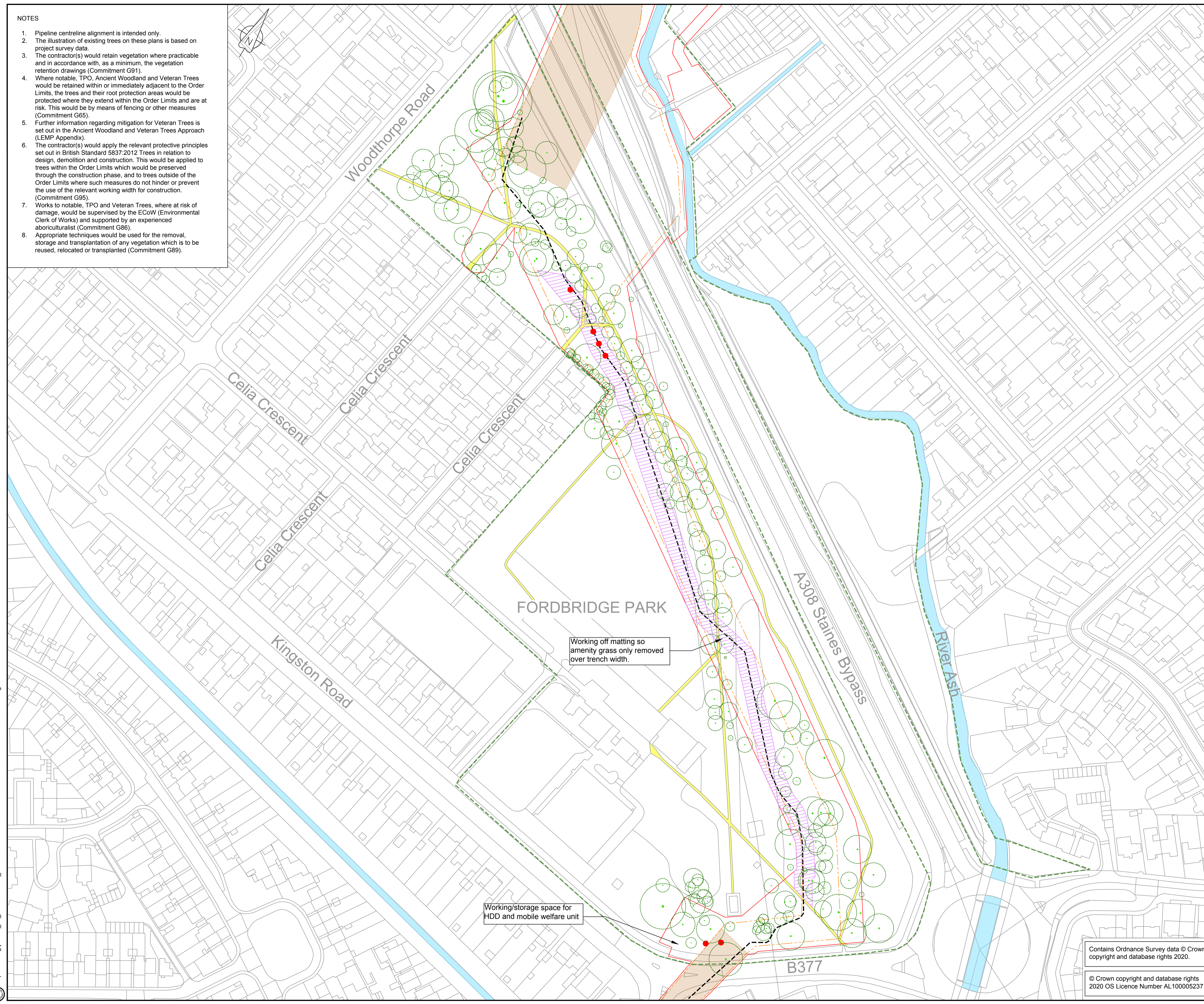
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Appendix B – Construction and Reinstatement Plans

NOTES

1. Pipeline centreline alignment is intended only.
2. The illustration of existing trees on these plans is based on project survey data.
3. The contractor(s) would retain vegetation where practicable and in accordance with, as a minimum, the vegetation retention drawings (Commitment G91).
4. Where notable, TPO, Ancient Woodland and Veteran Trees would be retained within or immediately adjacent to the Order Limits, the trees and their root protection areas would be protected where they extend within the Order Limits and are at risk. This would be by means of fencing or other measures (Commitment G65).
5. Further information regarding mitigation for Veteran Trees is set out in the Ancient Woodland and Veteran Trees Approach (LEMP Appendix).
6. The contractor(s) would apply the relevant protective principles set out in British Standard 5837:2012 Trees in relation to design, demolition and construction. This would be applied to trees within the Order Limits which would be preserved through the construction phase, and to trees outside of the Order Limits where such measures do not hinder or prevent the use of the relevant working width for construction. (Commitment G95).
7. Works to notable, TPO and Veteran Trees, where at risk of damage, would be supervised by the ECOW (Environmental Clerk of Works) and supported by an experienced arboriculturalist (Commitment G86).
8. Appropriate techniques would be used for the removal, storage and transplantation of any vegetation which is to be reused, relocated or transplanted (Commitment G89).



Working off matting so amenity grass only removed over trench width.

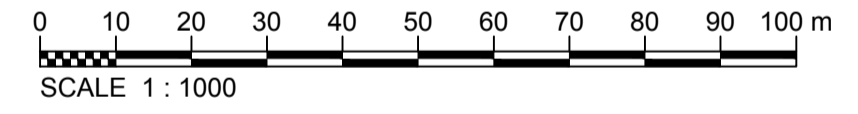
Working/storage space for HDD and mobile welfare unit



LOCATION PLAN
SCALE 1:500,000

LEGEND

- ORDER LIMITS
 - INTENDED PIPELINE CENTRELINE
 - NARROW WORKING AREA (NW30)
 - TRENCHLESS CROSSING (TC)
- EXISTING CONTEXT**
- ROOT PROTECTION AREAS
 - PARK FOOTPATHS
 - WATER FEATURES
 - PARK BOUNDARY
- EXISTING FEATURES TO BE RETAINED**
- INDIVIDUAL TREES RETAINED
- EXISTING FEATURES TO BE REMOVED**
- TREE TO BE REMOVED



P01.2	05/03/20	DEADLINE 6 SUBMISSION				
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd



Client: Esso Petroleum Company, Limited
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**8.59 SSP FORDBRIDGE PARK:
CONSTRUCTION STAGE**

Drawing status: **Fit for Stage Approval**

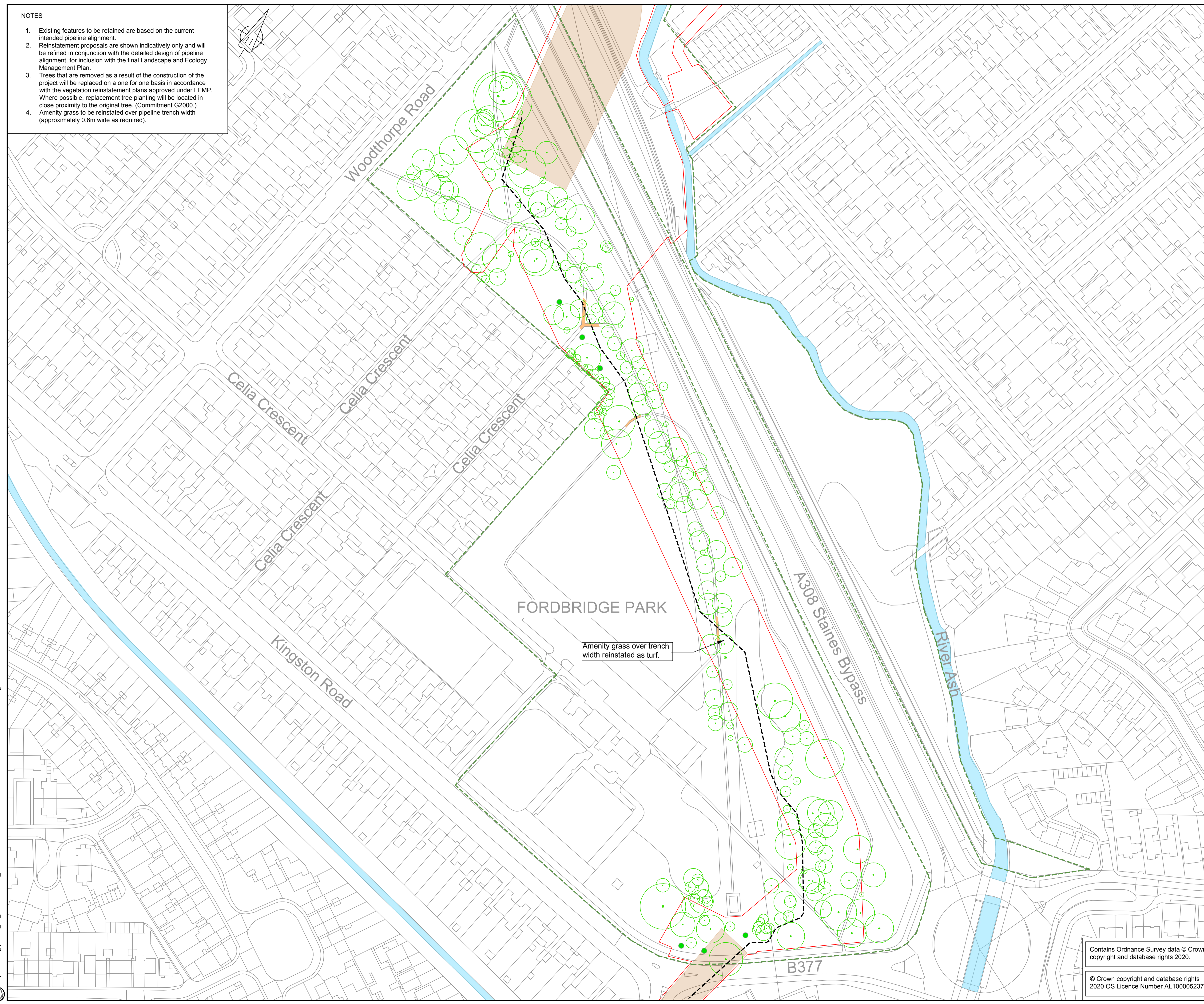
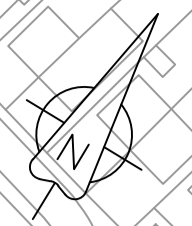
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Jacobs No.	B2325300	Rev
Client no.		P01.2

Drawing number: **B2325300-JAC-000-ENV-DRG-111149**

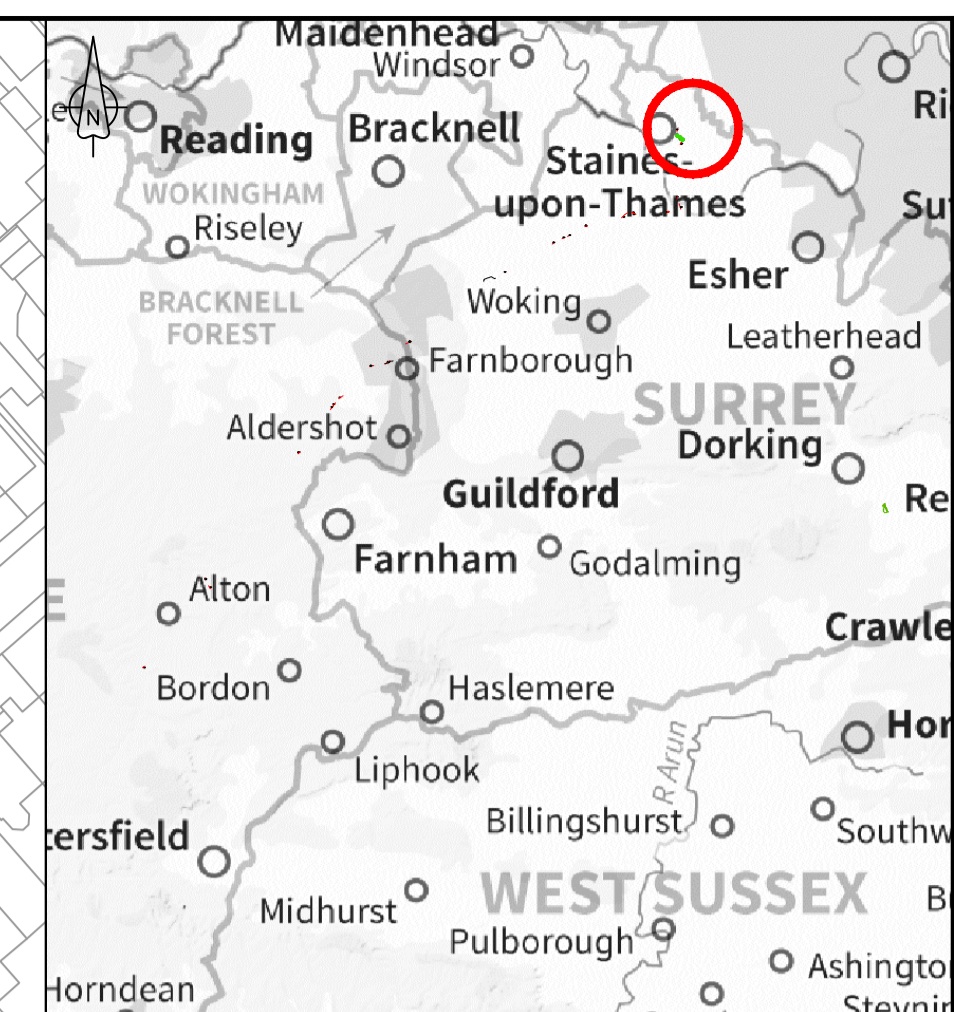
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NOTES

- Existing features to be retained are based on the current intended pipeline alignment.
- Reinstatement proposals are shown indicatively only and will be refined in conjunction with the detailed design of pipeline alignment, for inclusion with the final Landscape and Ecology Management Plan.
- Trees that are removed as a result of the construction of the project will be replaced on a one for one basis in accordance with the vegetation reinstatement plans approved under LEMP. Where possible, replacement tree planting will be located in close proximity to the original tree. (Commitment G2000.)
- Amenity grass to be reinstated over pipeline trench width (approximately 0.6m wide as required).

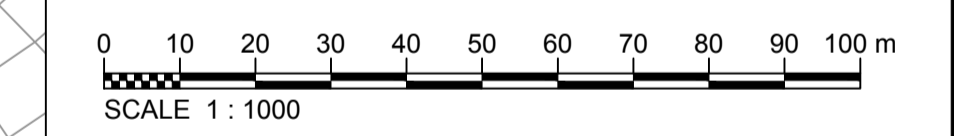


Amenity grass over trench width reinstated as turf.



LOCATION PLAN
SCALE 1:500,000

- LEGEND**
- ORDER LIMITS
 - INTENDED PIPELINE CENTRELINE
- EXISTING CONTEXT**
- WATER FEATURES
 - PARK BOUNDARY
- EXISTING FEATURES TO BE RETAINED**
- INDIVIDUAL TREES RETAINED
- FEATURES TO BE REINSTATED**
- SOFT LANDSCAPE**
- INDIVIDUAL TREE REINSTATEMENT PLANTING
- HARD LANDSCAPE**
- FOOTPATH SURFACING REINSTATEMENT



P01.2	05/03/20	DEADLINE 6 SUBMISSION				
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Appr'd

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Esso Southampton to London Pipeline Project

**8.59 SSP FORDBRIDGE PARK:
REINSTATEMENT PLAN**

Drawing status: **Fit for Stage Approval**

Scale: 1:1000 **DO NOT SCALE**

Jacobs No.	B2325300	Rev	P01.2
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Drawing number: **B2325300-JAC-000-ENV-DRG-111154**

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