

## EIA-1

# THURROCK FLEXIBLE GENERATION PLANT

Land south west of Station Road near Tilbury, Essex

## Supporting Information in Response to ExA Q1.8.2

Comparison between the Tilbury and Warley sites



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# 1 INTRODUCTION

## 1.1 Purpose of this Note

- 1.1.1 This note has been prepared by RPS to respond to the ExA question 1.8.2. That question is:  
*Can the Applicant explain where a comparison of environmental and sustainability risks and opportunities between the Tilbury and Warley sites has been provided?*
- 1.1.2 It should be noted that whilst the applicant has not used the phrase ‘sustainability risks’ in the Planning Supporting Statement [APP-135], the applicant has addressed planning and environmental issues, which themselves embed sustainability principles, in its site selection process. This process is explained more fully in this note.
- 1.1.3 As set out in the response to ExA Q1.8.2, environmental and sustainability risks and opportunities were also considered in Chapter 3 of the Environmental Statement [APP-046]. There is some overlap in what might be defined as ‘environmental’ or ‘sustainability’ factors (for example, opportunities to reduce the need for road transport would fall into both categories). However, as referenced in paragraph 3.1.2 of Chapter 3, responding sustainably to the environmental risks and opportunities was the focus in particular of ‘Stage 2’ of the consideration of alternatives in the masterplanning of site design options at the Tilbury location.
- 1.1.4 This note draws upon work previously prepared by the applicant and provides a more detailed analysis of the comparison process that the applicant went through when assessing shortlisted sites, including in particular the comparison of the planning and environmental constraints and opportunities between the Tilbury and Warley sites. This process and comparison exercise is set out in the note and explains why Tilbury was selected as the preferred site for the project.
- 1.1.5 In overview, the project has to be located in a position where the balance between a sufficiency of electrical export capacity and the availability of a suitable gas supply can be made to work technically and commercially. These locations also had to address key planning and environmental criteria to ensure they caused least harm in an area generally dominated by dense urban development and/or washed over by large areas of Green Belt. To do that 20 broad search areas, based around existing substations on the 275 kV electricity transmission network, were initially considered for the development. These search areas were then assessed individually against planning and commercial criteria (ref: paragraph 6.38 of Appendix 1 (Green Belt Statement) to the Planning Statement of Case [APP-135]) in order to identify a shortlist of search areas within which the project could be accommodated. The best-performing search areas were shortlisted, including Tilbury and Warley.
- 1.1.6 At this point, in order to distinguish between the relative merits of the shortlisted search areas and to narrow down a location within one or more that could be suitable for the project, buffer zones around nearby residential areas were also mapped. Applying these buffer zones then left areas which were less constrained and potentially suitable for the project. Following the addition of the residential buffer zones, it was still clear that there were large tracts of land that might accommodate the project so it was necessary to plot sites that were of a suitable size and shape that addressed the commercial layout requirements of the project i.e. the space required for peaking plant, battery storage plant and electrical equipment all within a site of 15 ha.
- 1.1.7 The residential buffer zones and potential project site areas at Tilbury and Warley are shown at Appendix 1 of this submission.
- 1.1.8 Finally, in order to differentiate between potential project sites within the shortlisted locations, a second sieve exercise was undertaken using a number of further evaluation criteria: these included vehicular access considerations; local land use considerations; the location of sensitive receptors and heritage asset issues; and an assessment of effect upon Green Belt. Figures illustrating this evaluation stage can be found at Appendix 2 of this submission.
- 1.1.9 This final sieving exercise allowed a comparative analysis to be undertaken which led to the selection of the preferred site.

## 2 IDENTIFICATION OF SHORTLIST & PREFERRED SITE

### Shortlisting Search Areas

- 2.1.1 Based on grid-related factors (availability, location and capacity of electricity and gas grid connections), commercial considerations including cost analysis, as well as planning and environmental constraints, the study narrowed down the search areas to centre around three existing substations on the 275 kV transmission network around Greater London. These search areas met the criteria set out in Table 6.1 of Appendix 1 (Green Belt Statement) to the Planning Statement of Case [APP-135], and met the overall suitability criteria set out within Table 6.2 of the Green Belt Statement. These substation areas were:
- Elstree;
  - Tilbury; and
  - Warley.
- 2.1.2 As the ExA wish us to specifically address Tilbury and Warley, and as Elstree was ultimately rejected in any event, the evaluation of Elstree is not considered further in this note.
- 2.1.3 The search areas were advanced to the shortlist due to their potential to offer an acceptable site in planning and commercial terms in comparison to the other 18 sites. Table 6.2 of the Green Belt Statement summarised the search area assessments. Whilst all the shortlisted areas were in Green Belt locations which presented a major constraint in planning terms, these areas were not ruled out on this basis if there was potential to offset that harm with very special circumstances and/or possibly sighting the development in a location that caused least harm to Green Belt. In addition, all the relevant planning authorities were at the time, and still are, reviewing their Green Belt boundaries so this opened up the relatively rare opportunity of Green Belt boundaries being reviewed and recast and for land to be removed from the Green Belt in order to accommodate the need for development generally in the area. This review process might still mean that sites for significant energy development could be released from the Green Belt or a new policy framework designed to accommodate such development even in Green Belt locations. Briefly, therefore, the key reasons for shortlisting were as follows.

#### Why was Tilbury shortlisted?

- 2.1.4 National Grid confirmed that there was sufficient export capacity headroom at the substation. Tilbury was therefore shortlisted for this reason and due to the area's current and historical industrial and power generation land-uses around the substation, availability of land away from sensitive residential receptors, minimal environmental constraints, and availability of land with a good balance of proximity to both the substation and gas national transmission system (NTS), minimising the connection lengths for each.
- 2.1.5 In addition, the view was taken that an area of Green Belt around Tilbury Substation performed less well than other areas of Green Belt. In land use terms it sits on the edge, and not in the heart, of the Green Belt, and is adjacent to compatible land uses i.e. the former Tilbury Power Station, the operational Tilbury docks, the approved Tilbury2 development and the proposed nationally significant Lower Thames Crossing. These were considered to be very positive attributes. While some of the area comprises Common Land, this was not necessarily considered to be a constraint to development in planning terms providing suitable replacement land can compensate for any loss. At this time discussions were also being held with the landowners in the vicinity of the substation; it became clear that much of the land was in a single ownership thus offering the potential to replace areas of Common Land that might otherwise be taken for the development in a relatively straight forward and beneficial way.

#### Why was Warley shortlisted?

- 2.1.6 Warley was shortlisted as it was considered that land around the substation was largely free from built development, relatively free from environmental constraints, as well as being in close proximity to the gas NTS. Against these attributes was that this openness meant that arguably it

performed a vital Green Belt function, but nonetheless for shortlisting purposes this area warranted further evaluation.

## Evaluating Site Locations

- 2.1.7 After being shortlisted, the Tilbury and Warley search areas then went through a further two-stage sieving process with a view to identifying the most sustainable site location.

### Stage 1 – Identifying Potential Project Site Locations

- 2.1.8 The first stage was to apply additional evaluation criteria in the form of residential buffer zones to see whether there was still suitable and available land to accommodate the main works site, i.e. a suitably sized contiguous area of land sufficient to accommodate the project (excluding associated infrastructure) amounting to an area of 15 ha (see Green Belt Statement paras 3.61 and 6.53). The buffer zone applied was a 400 m buffer around residential areas (including single residential properties), within which it was deemed that the project may have unacceptable adverse effects, principally noise effects but also potentially adverse visual effects.
- 2.1.9 The remaining areas outside the residential buffer zone are therefore those in which, in principle, potential sites might suitably be located to accommodate the project. However, following the addition of the residential buffer zones, it was still clear that there were large tracts of land that might accommodate the project so it was necessary to plot sites that were of a suitable size and shape that addressed the commercial layout requirements of the project i.e. the space required for peaking plant, battery storage plant and electrical equipment all within a site of 15 ha. The figures attached at Appendix 1 to this submission show the outcome of this exercise.
- 2.1.10 For Tilbury, key factors for selection of the potential project site location were availability of suitable gas and grid connections, land of sufficient size in proximity both to the substation and to other compatible land uses, and being on the edge of the Green Belt, not at its heart. The adjacent compatible land uses include the development of Tilbury2, the Tilbury Energy Centre (as proposed at that time) and the proposed Lower Thames Crossing (LTC) works. Locating the project adjacent to these land uses, at the fringe of the Green Belt and existing or proposed industrial development, together with minimal environmental constraints was an important factor.
- 2.1.11 In terms of the potential site areas to the south west, it became clear that there was insufficient land around the Anglian Water Sewage Treatment Works west of the substation, and development at this location would be much more prominent in the setting of the Tilbury Fort Scheduled Monument.
- 2.1.12 In the east of the search area beyond the buffer zones, the Tilbury Marshes become more open in aspect and potential locations would be closer to housing around East Tilbury. The subsequent plans for the proposed LTC safeguard much of the land for the next 12-15 years. Land north of the railway was also outside the buffer zones, however, it was considered less suitable than land south of the railway as it is rising ground, more easily visible to housing in Tilbury and East Tilbury, and the railway would create an obstacle for connection to the substation. This more open area of land is deemed as having a 'fundamental' importance to the Thurrock Green Belt, according to Stage 1 of Thurrock Council's Green Belt Assessment.
- 2.1.13 For these reasons the land immediately north of the substation was considered as the optimum potential project site location.
- 2.1.14 For Warley, the potential project site location area was relatively straightforward to identify. Neither the area to the north of the substation nor the area to the west, both outside the buffer zones, were large enough to accommodate the project. The area in the west of the search area was also constrained by the M25. This left an area of land to the east and south east of the search area which was identified as the potential project site location.

### Stage 2 – Comparative Assessment of Potential Project Site Locations

- 2.1.15 Having narrowed down the most sustainable potential project site locations within the Tilbury and Warley search areas, further planning and environmental criteria were applied in order to compare and rank the merits of each site. These criteria were:

- access;
- sensitive receptors including heritage assets;
- local land use context; and
- Green Belt policy.

2.1.16 Table 2.1, below, provides a summary of the shortlisted sites and the assessment in relation to the criteria listed above and the figures at Appendix 2 illustrate the constraints on plan. Each aspect is then discussed further in the sections below where comparisons are then drawn.

**Table 2.1: Shortlisted search area assessment summary**

	<b>Tilbury</b>	<b>Warley</b>
<b>Access</b>	<p>The principal access would be available from Fort Road, largely using existing private roads via Tilbury2 and the RWE Tilbury B Power Station site. This access would require to be extended around the east side of the substation to reach the project site.</p> <p>The construction of Tilbury2 involves important upgrades to the access route from Fort Road, with a new junction and link road that improve this access and the local highway network to accommodate heavy vehicle traffic to the port. This also benefits the Thurrock Flexible Generation Plant project site location.</p> <p>The potential project site is in close proximity to a major international port for materials delivery. With the Tilbury2 development, the port also now includes a major aggregates terminal directly adjacent to the development site. There is excellent potential to avoid long-distance road transport for bulk materials such as aggregates and the balance of plant due to proximity to major ports on the Thames.</p>	<p>An access has been created off the B186 (Clay Tye Road) to allow better access to the substation; this may be possible to use as access beyond the substation to the potential project site location further east. There is also an access track just south of this leading to agricultural buildings serving Fairplay Farm, south east of the substation; an extension of this track beyond the farm may also be suitable.</p>
<b>Sensitive Receptors including Heritage Assets</b>	<p>The Tilbury Fort Scheduled Monument lies at the edge of the search area to the south west, approximately 1km from the nearest point of the potential project site location. The main structure of the Fort is outside the 1km search area boundary. There is existing industrial development between the potential project site location the Fort, providing screening from this heritage asset.</p> <p>There is Common Land at and nearby the potential project site but no footpaths connecting to or crossing it.</p> <p>The nearest residential receptors are at approximately 600 m distance and West Tilbury Conservation Area is at a similar distance.</p>	<p>The land at this location is very open and exposed when viewed from the surrounding road network, and rural in character making it more susceptible to adversely affecting sensitive receptors. In addition to largely open views into the site from the surrounding road network, there are a number of listed buildings in close proximity to the potential project site area including Bury Farmhouse to the north. The setting of these buildings may be adversely affected if the project was sited in this location.</p>

<b>Local Land Use Context</b>	<p>The potential project site is located on land adjacent to an industrial area. To the south and west are Tilbury2 port site, Anglian Water sewage treatment works, the main Tilbury Port and Tilbury town. To the north and east are a railway line, agricultural land, some light industry (such as a metals recycling business) and an extensive area of ash field landfill from the former Tilbury B coal power station. The ash fields are currently being mined out and much of this land to the east is also being used for Thames Tideway Tunnel spoil deposit. Notably, the LTC also requires large areas of land during the construction phase.</p>	<p>The potential project site area is within a predominantly open rural setting. There are residential properties to the west and the Puddledock Farm Fishery is to the north. Single or small clusters of residential dwellings also lie to the north and east. There is a golf course further to the south.</p>
<b>Green Belt Policy</b>	<p>All of the potential project site area is in the Green Belt.</p> <p>The LPA has yet to conclude its Green Belt review studies (see relevant policy below) to determine whether they should make any adjustments to its Green Belt boundaries in order to accommodate the need for new development</p> <p>Relevant development Plan policies: (Thurrock Core Strategy 2015: Policy CSSP4 Sustainable Green Belt; Policy PMD6: Development in the Green Belt. Thurrock Strategic Green Belt Assessment Stages 1a and 1b.</p> <p>Peter Brett rating (considering GB purposes 1, 2, and 3) is:</p> <p>‘Major’ (from slight/negligible, moderate, major, fundamental)</p>	<p>All of the potential project site area is in the Green Belt.</p> <p>The LPA has yet to conclude its Green Belt review studies (see relevant policy below) to determine whether they should make any adjustments to its Green Belt boundaries in order to accommodate the need for new development</p> <p>Relevant development Plan policies: Havering Core Strategy and Development Control Policies 2008: CP14 - Green Belt; DC45 - Appropriate Development in the Green Belt. Havering Local Plan 2016-2031 Green Belt Study 2016.</p> <p>Peter Brett rating (considering GB purposes 1, 2, and 3) is:</p> <p>‘Fundamental’ (from low, moderate, high, fundamental)</p>

## Access

- 2.1.17 All potential access tracks from established roads into the areas of potential project site location can be seen on the shortlisted search area constraints maps accompanying this submission at Appendix 2.
- 2.1.18 Access at Tilbury would make use of existing roads to the substation, beyond which a short section of new road around the substation would be needed to access the potential development site. The access point from the public highway would be from Fort Road. This benefits from the substantial improvements (with new junction and link road) that have been constructed for the Tilbury2 development to accommodate port traffic. The search area at Tilbury also benefits from a potential marine access at the Port of Tilbury or London Gateway Port for shipped goods (with the important potential sustainability benefit of reducing long-distance road transport for bulk materials and plant as the port is a major hub for this, including the new aggregates terminal at Tilbury2) and a potential direct access<sup>1</sup> from the Thames Estuary for abnormal loads that cannot be transported on the road network (at any shortlisted site) without substantial disruption, cost and practical difficulty.

<sup>1</sup> This possibility originally focussed on the already consented jetty and pontoon, if constructed (see paragraph 3.35 of the Scoping Report) and later developed into the Applicant's own causeway proposal within the DCO itself.

- 2.1.19 In respect of Warley, an access has been created off the B186 (Clay Tye Road) to allow better access to the substation; this may be possible to use as access to the potential project site location further east once beyond the substation. There is also an access track just south of this leading to agricultural buildings serving Fairplay Farm, south east of the substation; an extension of this track beyond the farm may also be suitable.

### Summary

- 2.1.20 It is considered that Tilbury performs better than Warley, as it has the most extensive existing access infrastructure close to the site, largely avoiding routes through sensitive land uses, and with the additional benefit of proximity to the River Thames for potential marine access from the south for import of materials including abnormal loads, which Warley does not offer.

## Sensitive Receptors including Heritage Assets

- 2.1.21 The relative location of sensitive receptors including residential or other land uses where the public live or congregate, including location of footpaths as well as the location and setting of heritage assets, were used as another filter to allow a possible distinction to be drawn between the potential project locations.
- 2.1.22 Beyond the Tilbury potential project site area, approximately 1km to the south west of the substation is the Tilbury Fort Scheduled Monument. There are large scale industrial uses between the site and Tilbury Fort: these intervening developments provide a screen to avoid any unacceptable adverse effect arising in relation to the setting of the Fort. The project site is Common Land but is not crossed or linked to by footpaths. The Common Land can only be accessed by crossing the railway line, and this has been observed to be closed and overgrown, with no signs of public use.
- 2.1.23 The Warley potential project site area is relatively unconstrained by the proximity of sensitive receptors although there are several heritage assets including a conservation area approximately 0.5km to the south west, and listed buildings are also located a similar distance away to the east and north. This location is very rural in character, open, and is therefore considered to be very sensitive to change brought about by the introduction of industrial structures in this location. The setting of the heritage assets may be adversely affected.

### Summary

- 2.1.24 Warley is considered to be the worst performing site insofar as it is the area in closest proximity to conservation areas and listed buildings and ancient woodland, compared to Tilbury. Warley is very rural and very open in character and as a consequence is likely to have a potentially greater effect upon the setting of nearby heritage assets compared to the Tilbury location.

## Local Land Use Context

- 2.1.25 At Tilbury the potential project site is located on Common Land and adjacent to an industrial area. However, Common Land is not regarded as determinative of the development potential of the site, providing that suitable replacement land can be located to replace any lost to development. To the south and west are Tilbury2 port site, Anglian Water sewage treatment works, the main Tilbury Port and Tilbury town. To the north and east are a railway line, agricultural land, some light industry (such as a metals recycling business) and an extensive area of ash field landfill from the former Tilbury B coal power station. The ash fields are currently being mined out and much of this land to the east is also being used for Thames Tideway Tunnel spoil deposit. Large areas of land would also be required by the Lower Thames Crossing project, particularly during its construction phase. Almost all currently undeveloped land between the proposed site and the LTC route alignment may be used in some form by the LTC.
- 2.1.26 At Warley the land use in the search area is dominated by agricultural land with residential properties scattered throughout and concentrated in the west along Clay Tye Road. In the north of the search area the Puddledock Farm fishery can be found along with a small industrial estate and small mobile park home site. The M25 passes through the very edge of the search area to the

west. The potential project site area identified at Warley is very open and rural in character and the introduction of industrial structures of the type proposed will therefore be viewed as potentially incongruous and incompatible with the character of the area.

### Summary

- 2.1.27 Despite occupying a large amount of Common Land, Tilbury is the better performing site in land use terms. A large part of the potential project site area is dominated by adjacent industrial uses, or has major infrastructure overhead in the form of electricity pylons, or is planned nearby. Providing any Common Land lost by its redevelopment can be replaced by suitable alternative land provision, this location offers many advantages.
- 2.1.28 While there is a reasonably large amount of open agricultural land within the Warley search area, the setting is largely dominated by agricultural uses, not industrial uses like the Tilbury location. In land use planning terms this is a relative disadvantage compared to Tilbury. Tilbury is therefore the preferred location from a land use perspective.

### Green Belt Policy

- 2.1.29 As both of the shortlisted potential project sites contain Green Belt land, local Green Belt policies have been examined for each respective potential project site location. As one would expect, Green Belt policy across both planning authorities regard development in the Green Belt as inappropriate. However, in both of the potential project site locations, the local planning authorities are reviewing their Green Belt boundaries in order to accommodate emerging development needs across their areas. There is a recognition therefore that boundaries will need to change to accommodate development, but this review process has only partially been completed by independent consultants on behalf of the relevant planning authorities. Whilst neither of the planning authorities' partially completed reviews looks directly at the sites being appraised for this project, regard is had where relevant to their general findings. Table 2.1, above, has summarised the findings in terms of the how well the Green Belt parcels perform against certain Green Belt purposes.
- 2.1.30 This submission will not go into detail of the individual Green Belt policies, although they are listed in Appendix 1 (Green Belt Statement) to the Planning Statement of Case, Section 3 (Green Belt Policy) [APP-135] and, in very special circumstances, are also set out in respect of the site selected from this sieve exercise.
- 2.1.31 Paragraph 134 of the NPPF states the five purposes of the Green Belt:
1. to check the unrestricted sprawl of large built-up areas;
  2. to prevent neighbouring towns merging into one another;
  3. to assist in safeguarding the countryside from encroachment;
  4. to preserve the setting and special character of historic towns; and
  5. to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.
- 2.1.32 The two local authorities' Green Belt assessments have been reviewed to obtain any information that could relate to the shortlisted project locations and their impact upon the Green Belt.

### Tilbury

- 2.1.33 The Tilbury search area is within the administrative area of Thurrock Council, which has appointed Peter Brett Associates to conduct the Thurrock Strategic Green Belt Assessment Stages 1A and 1B as evidence to support the new Local Plan.
- 2.1.34 Stage 1A and B relates to the identification of strategic Green Belt parcels and the assessment of those parcels against the purposes of the Green Belt. Stage 1B relates to implications for the strategic Green Belt assessment of the preferred route announced by Government on the route and location of the proposed Lower Thames Crossing. The report does not provide a full

reassessment of all the Green Belt parcels, which the Council may wish to undertake at a later date.

- 2.1.35 If completed, the Stage 2 assessment would identify detailed assessment of sites and boundaries in the Green Belt to identify defensible long-term boundaries and provide recommendations on detailed boundary changes. Stage 2 will proceed only in the event that there is a clearly demonstrated exceptional circumstance to amend the boundaries of the Metropolitan Green Belt in order to meet future development needs.
- 2.1.36 In Thurrock Council's Green Belt Assessment, once the parcels were identified, each was assessed in terms of its performance in fulfilling Green Belt purposes. The study examined the parcels by using the first three of the Green Belt purposes for including land in the Green Belt set out in the NPPF. The parcels were then measured on their fulfilment of the three Green Belt purposes, ranked as None, Slight/Negligible, Moderate, Major and Fundamental.
- 2.1.37 The vast majority of the Tilbury search area is within identified land parcel 34, while the area north of the rail line is within parcel 33. The potential project site location is within parcel 34.
- 2.1.38 The overall importance of parcel 34 was considered to be Major. Parcel 33, to the north of the rail line, beyond the main project site location, was considered to have a 'Fundamental' importance.
- 2.1.39 Parcel 34 was deemed to have no relevance to the first two purposes of the Green Belt and therefore received a ranking of None for both. For purpose 3, the summary was as follows:

*"The designation provides very important protection to the countryside of the open West and East Tilbury Marshes lying within LCA F2, Tilbury Marshes. Area forms the first significant area of open land alongside the estuary east of the Thurrock urban area and the area is perceived as open countryside, despite intrusion of the adjacent power station (outside Green Belt), related infrastructure, and an extensive area disturbed by landfilling to the east of the power station and Green Belt designation provides important protection of the countryside and its openness."*

## Warley

- 2.1.40 The London Borough of Havering, in which the Warley search area is situated, undertook a Green Belt study with Peter Brett Associates and Enderby Associates. The study explains that based on best practice, first three purposes are assessed in most detail and the Green Belt land is split into more manageable parcels.
- 2.1.41 A total of 24 parcels were identified. All parcels were found to make a contribution to Green Belt purposes. The identified parcels have been ranked for fulfilment of the first three Green Belt objectives. The rankings are either None, Slight/Negligible, Moderate, Major or Paramount. These ranking then culminate into an overall contribution to the Green Belt, ranked in the same manner.
- 2.1.42 Although there is a variation on performance of the parcels for individual purposes, it was found that 19 of the parcels make a fundamental contribution. A further four parcels make a high or moderate/high contribution. Only one parcel makes a low contribution.
- 2.1.43 The Warley preferred area of site location, and entire search area, is within land parcel 10, which received a rank of None for the first two purposes but a Paramount ranking for purpose 3, safeguarding the countryside from encroachment. The study stated:

*"A broad expansive fenland landscape with a strong sense of openness and long-distance views with development limited primarily to farmsteads and small areas of development along roads on north, west and east sides; greater incidence of scattered development at North Ockendon creating some sense of encroachment. Designation provides high level of protection against piecemeal encroachment of inappropriate development, particularly adjoining existing development."*

## Summary

- 2.1.44 Insofar as one can apply the outcome of the current independent Green Belt assessments undertaken on behalf of each planning authority (and this is fraught with difficulty given the methods and terms used in each and the relatively high level of the assessment), Warley is considered as the worst performing search area when considering Green Belt policy due to its overall ranking of 'Fundamental' and the openness of the preferred site location area.

- 2.1.45 Tilbury is the better performing of the two as the land parcel within which the preferred site location sits has no bearing on the first two Green Belt purposes and is not considered fundamental for the third. It is therefore considered to perform relatively well in comparison to Warley.
- 2.1.46 If one accepts that a suitable site for the project has to be located within the Green Belt, then it becomes relevant to consider which is likely to be least harmful in Green Belt terms. The two high level assessments undertaken by the consultants for both councils cannot be relied upon to deliver this overall assessment with any confidence. The most that either can allude has been described in general terms in the paragraphs above.
- 2.1.47 The difficulty in seeking to apply the Green Belt assessments undertaken by the independent consultants is that their conclusions can only be regarded as a high level assessment and a guide as to where new development might be acceptable. None of the authorities has completed these assessments to judge where within their administrative boundaries new releases of Green Belt may be acceptable.
- 2.1.48 To inform the selection of a preferred site therefore, from the two potential project site locations, it was relevant to consider which was likely to be least harmful to Green Belt. It was clear that Tilbury offered a site on the edge of the Green Belt, not surrounded by Green Belt on all sides as Warley is, in a location at the very periphery of a relatively wide expanse of Green Belt, making it arguably less vulnerable to affecting other Green Belt purposes. In openness terms, taking such a parcel from the Green Belt is less harmful than if the same parcel was taken from the Warley location.
- 2.1.49 It is clear that the main project site could be set on the edge of the Green Belt (not at its heart), fitting alongside existing industrial development and the railway line such that a new defensible boundary could be easily re-established with sufficient land between it and other built development to the north and east, thereby still offering a robust Green Belt buffer and avoid harm to other Green Belt purposes. Also, it is evident that in land use terms it is remote from sensitive receptors and is compatible with adjacent land uses. The land plot is within one ownership and whilst on Common Land, replacement land could also be found adjacent to the edge of the existing Common Land to compensate for the loss but where safe public access could also be achieved.

## Conclusion and Preferred Site

- 2.1.50 Table 2.2 shows the direct comparison results between the two potential project site locations: Green shading indicating compatibility with the criteria and a positive outcome, red a negative outcome and amber a mixed outcome

**Table 2.2: Comparative summary of the potential project site areas within the shortlisted search areas**

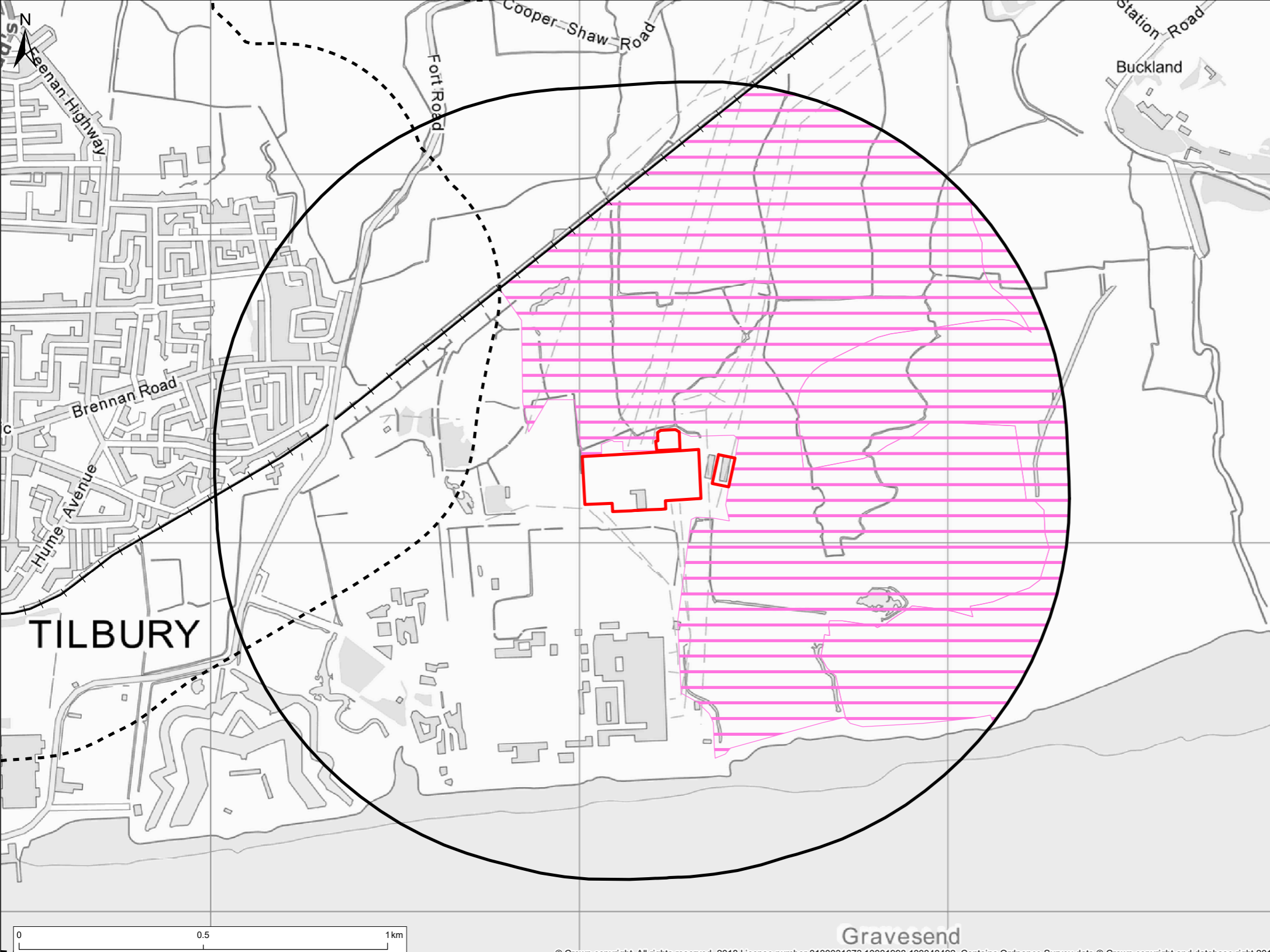
	Tilbury	Warley
Access		
Sensitive Receptors including Heritage Assets		
Local Land Use Context		
LPA Consultant Green Belt Assessments of Land Parcels		
Applicant's Overall Project Site Ranking		

- 2.1.51 Based on the above it was concluded that Tilbury should be taken forward for further design and a development work. Overall, the main core site could be located on the edge of the Green Belt, adjacent to compatible land uses with very good access, and least harm to sensitive receptors.

- 2.1.52 A single land holding was identified that satisfied the search criteria and was capable of providing development land that wasn't affected by other development proposals. That land holding is the main development site.
- 2.1.53 The main development site would occupy circa 10 ha of Walton Common. To mitigate the permanent loss of that common land, the Applicant has committed to provide circa 11.6 ha of replacement common land, located to the north of the railway. This location will provide improved public access compared to the existing route on an un-managed railway crossing, as has been described in more detail in Appendix 1 (Green Belt Statement) to the Planning Statement of Case [APP-135].
- 2.1.54 The project complies with and furthers the objectives of the local development plan, particularly Core strategy Policy PMD6, by providing an enhancement of the beneficial use of the Green Belt by improving access to the countryside, enhancing the landscape through landscaping and planting thereby improving visual amenity for users of the Common Land.
- 2.1.55 If the project did not facilitate the change in the provision of Common Land in this location, this would not take place, and Walton Common would continue to be underused and poorly connected to the nearest communities and potential user groups. With provision of the exchange common land (which would be before development commences on Walton Common), access to common land for residents of Tilbury will be significantly improved, in terms of accessibility, quality and user experience.
- 2.1.56 In conclusion, the potential project site area identified within the Tilbury search area was the best performing of the shortlisted sites against criteria which embraced both environmental and sustainability considerations. This was taken forward to develop the project detail, including precise siting, design, layout and other considerations. During this process there was no reason to revisit the rationale for site selection and as a consequence, the site was confirmed as being the preferred project site.

## Appendix 1

### Stage 1 Figures Showing Buffer Zones & Potential Project Site Areas



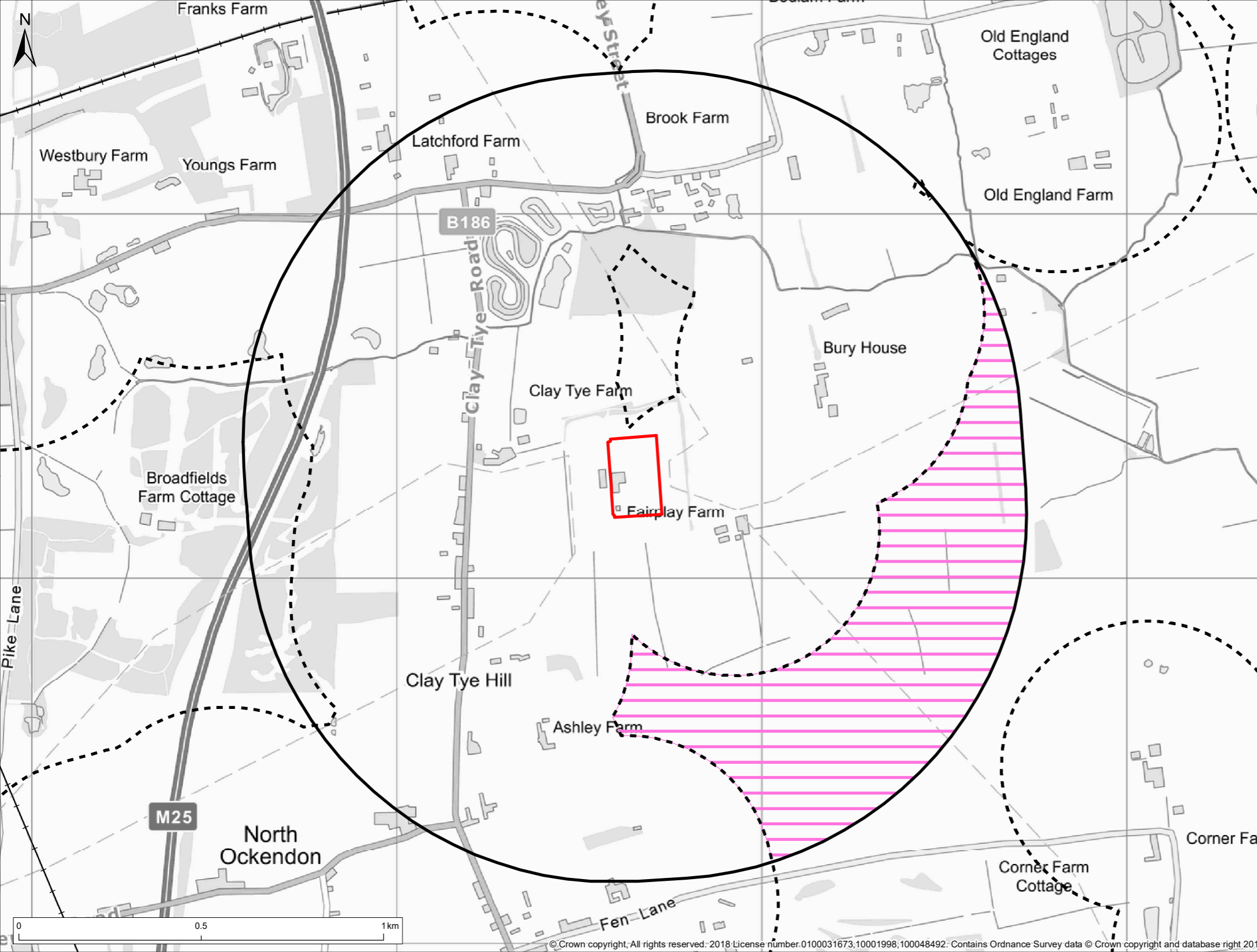
### Legend

- Tilbury substation
- 1km search area
- 400m buffer from residential receptors
- Railway
- Potential project site area

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Checked by: EN Doc no: 10872-0267-01

Thurrock Flexible Generation Plant  
TILBURY SITE CONSTRAINTS  
(Shortlisting Assessment- Stage 1)





- Legend**
- Warley substation
  - 1km search area
  - Railway
  - Potential project site area

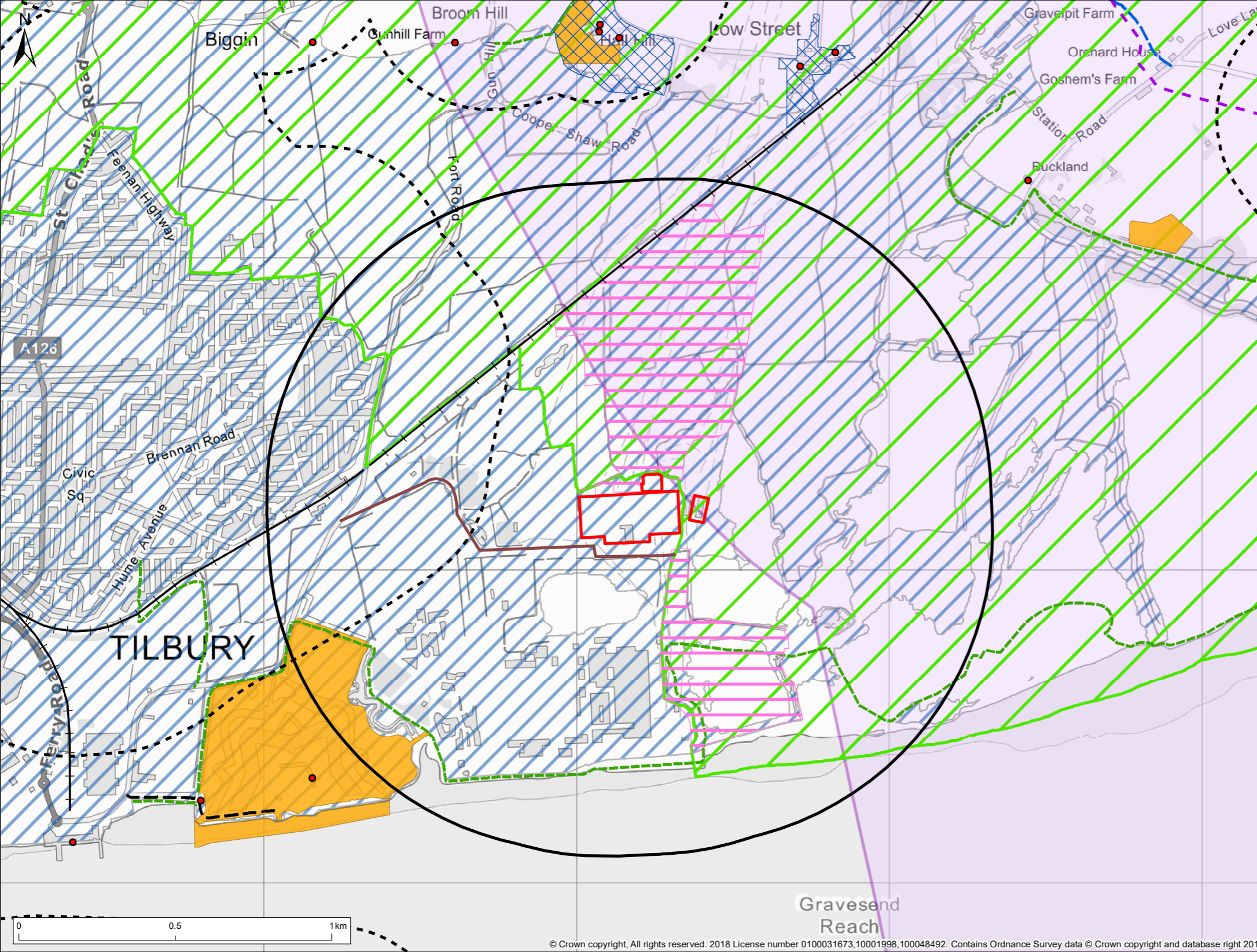
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Checked by: RT Doc no: 10872-0266-01

Thurrock Flexible Generation Plant  
WARLEY SITE CONSTRAINTS  
(Shortlisting Assessment- Stage 1)



## Appendix 2

### Stage 2 Figures Showing Potential Project Site Areas & Additional Constraints



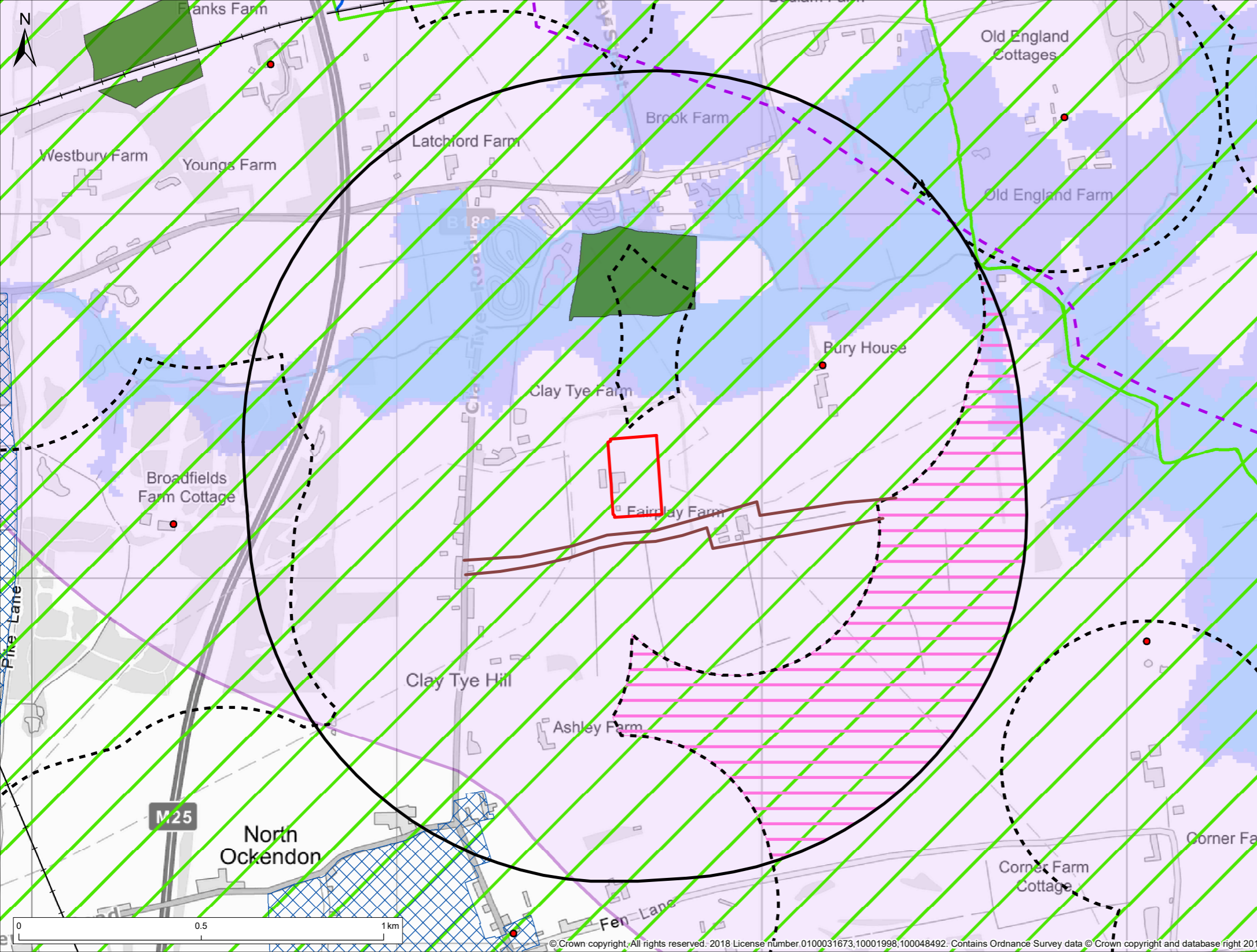
- Legend**
- Tilbury substation
  - 1km search area
  - 400m buffer from residential receptors
  - Footpath
  - Bridleway
  - Byway Open to All Traffic
  - Listed Building
  - Conservation Area
  - Scheduled Monument
  - Green Belt
  - Areas benefiting from flood defences
  - Gas pipe
  - 2km search area from gas pipe
  - Railway
  - Potential project site area
  - Potential access

Flood zones 3 and 2 not shown

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Checked by: EN    Doc no: 10872-0261-06

Thurrock Flexible Generation Plant  
TILBURY SITE CONSTRAINTS  
(Shortlisting Assessment- Stage 2)





- Legend**
- Warley substation
  - 1km Buffer
  - Listed Building
  - Bridleway
  - Conservation Area
  - Green Belt
  - Ancient Woodland
  - Gas pipe
  - 2km search area from gas pipe
  - Railway
  - Potential project site area
  - Flood Zone 2
  - Flood Zone 3
  - Potential access

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Checked by: RT Doc no: 10872-0263-04

Thurrock Flexible Generation Plant  
WARLEY SITE CONSTRAINTS  
(Shortlisting Assessment - Stage 2)