

**Applicant's Post Hearing Submissions
(CAH, ISH 2 and ISH3)
Inglewood Engineering Note**

The West Midlands Rail Freight Interchange Order 201X

Four Ashes Limited

INGLEWOOD INVESTMENTS LAND DEVELOPMENT - ENGINEERING NOTE

Table of contents

1	Introduction	2
2	Earthworks (cut and fill).....	2
3	Road Infrastructure.....	4
4	Drainage Infrastructure.....	4
5	Utilities Diversions.....	5
6	Conclusions	7

1 Introduction

- 1.1 The suggestion of the Inglewood Investment company is that the development zones in their ownership, which are the subject of compulsory purchase, could be developed by Inglewood themselves within the overall infrastructure and the green infrastructure provided by West Midlands Interchange (WMI). This note reviews the objector's proposition from an engineering perspective.
- 1.2 In practice, it would not be feasible to develop the Inglewood parcels in isolation, as the land owned by Inglewood Investments is part of a comprehensive, site-wide scheme for the West Midlands Interchange.
- 1.3 This note is to be read in conjunction with **Minerals Resource Statement** (Document 14.3, submitted at Deadline 4).

2 Earthworks (cut and fill)

- 2.1 Proposed levels for the Inglewood Investments land areas have been designed to meet the following core objectives of the site wide earthworks strategy and the areas are a requisite part of that strategy which:
 - Provides a gravity drainage network for the land north of Vicarage Road;
 - Provides development platforms at the lowest possible height to minimise visual impact;
 - Provides stable development platforms with the capability of supporting ground bearing foundations and floor slabs for a typical warehousing use;
 - Provides development platforms with foundation depths that are not in the vicinity of the groundwater table;
 - Provides practicable interfaces between building and yard levels and the elevations of road, rail and drainage infrastructure, without the need for special engineering measures;
 - Provides sufficient material for bunding to provide visual and acoustic mitigation; and
 - Provides flexibility in the development platform levels to suit alternative site arrangements and phasing.
- 2.2 The Inglewood land north of Vicarage Road forms development zone A5a, this zone forms part of the Minerals Local Plan allocation and it has been confirmed that sand and gravel is present below the surface in this zone. Should Inglewood elect to quarry the area, it is estimated that this would reduce the ground level in this zone by 3 metres and generate approximately 360,000 m³ of spoil material. Development zone A5 is at the upstream end of the gravity drainage network which is proposed to serve the land north of Vicarage Road. Therefore, any significant reduction in the zone A5 development platform level would prevent the established drainage strategy from being implemented.
- 2.3 The earthworks mounds are designed to achieve a specified height relative to the finished plot level to provide adequate levels of acoustic and visual mitigation. This has been achieved in the proposed earthworks strategy with a net cut and fill balance, meaning no import or export of bulk fill materials. These provisions have been assessed and agreed with the relevant stakeholders in the creation of the Environmental Statement chapters and appendices. Therefore, the development of all of the plots need to be controlled in a comprehensive manner to ensure that the mitigation measures are achieved within the site-wide strategy.

- 2.4 The land south of Vicarage Road is not identified within the Minerals Local Plan although the area is, in part, within the Staffordshire minerals safeguarding area. Independent investigations undertaken in the design of the WMI have confirmed that there are small quantities of sand and gravel in this area relative to the footprint. It is therefore not considered viable to quarry this land.
- 2.5 All areas of the Inglewood land are covered by a layer of topsoil, which must be removed prior to construction. Across the Inglewood Investments development zones this equates to approximately 137,500 cubic metres of topsoil material. The material volumes have been accommodated within the proposed earthworks strategy for the WMI and are intended to be used in the mounding and landscaped areas around the site, and for restoration of landscaping in the existing open quarry areas. F The total material surplus from Inglewood Investment land might therefore be as much as 497,500 cubic metres following quarrying.
- 2.6 The only mounding on the Inglewood Investments land is the long feature which surrounds development zone A7a. This mounding would require approximately 83,500 cubic metres of material, in the WMI earthworks strategy this includes topsoil, excavated earth from around the site and spoil material taken from the existing quarry.
- 2.7 As independently developed areas, the Inglewood Investments designers would need to consider earthworks materials management only within the isolated areas and it is estimated that between approximately 137,500 and 497,500 cubic metres (9,160 and 33,170 HGV loads¹) of topsoil and quarry spoil material would need to be exported from the development zones to create stable development platforms and maximise the development footprint.
- 2.8 The WMI earthworks strategy seeks to stabilize the existing quarries by removing the unsuitable quarry spoil and replacing it with suitable earth excavated from other areas on the site. The quarry spoil is to be placed in the landscaping and mounding around the site. The translocation of materials within the development site will ultimately be dependent on the final levels and phasing, however, in the current WMI earthworks strategy, 6% (43,000 cubic metres) of the good quality fill material which forms new development platforms is won from the Inglewood Investment land areas and 22% of the total WMI mounding volume is provided in the Inglewood Investment area of Calf Heath Community Park, and is relative to development zone A7a This demonstrates the contribution of the Inglewood land areas in the overall WMI earthworks scheme.
- 2.9 The levels parameters which have been designed for the WMI would allow sufficient flexibility to accommodate the loss of the Inglewood Investment land areas by re-allocating material from other areas on the site. However, this flexibility would not be available to Inglewood Investments in the proposed scenario and the import and import of material would be unavoidable.
- 2.10 It is the Applicant's considered opinion that the Inglewood Investment land zones cannot feasibly be developed in isolation, within the parameters established in the design of the WMI, as the earthworks and material management strategies intrinsically link these areas with the rest of the WMI development.

¹ HGV load based on 8 wheeled tipper carrying 15 cubic metres.

3 Road Infrastructure

- 3.1 The Inglewood land would require new accesses onto Vicarage Road if they were developed independently of the WMI, to avoid reliance on the private WMI road network.
- 3.2 The creation of new accesses onto Vicarage Road for the Inglewood Investment development zones would require independent assessments in respect of road safety and traffic management all 100% of traffic generated would be required to use Vicarage Road. This would exacerbate issues on the existing road network which had been considered and mitigated as part of the WMI proposals.
- 3.3 Access from development zones A5 and A7 to the rail terminal is proposed to be via the private road network maintained by FAL. The Inglewood development areas would not be tenable as part of the SRFI if Inglewood developed the plots individually, as rail cargo would need to be moved via Vicarage Road, the A5 and A449.
- 3.4 Access issues would be exacerbated if Inglewood Investments sought to develop Zone A5a following the extraction of minerals, as the resultant yard platform level would be significantly below the interface level with Vicarage Road. To achieve an acceptable gradient for the plot access the developer would require a significant ramp length which would be likely to impact significantly on the developable area.
- 3.5 Development of the Inglewood Investment zones should be as part of the comprehensive accessibility and transport scheme which has been designed for the WMI.

4 Drainage Infrastructure

- 4.1 Surface Water runoff from the Inglewood areas has been designed to discharge into the gravity drainage network which is to be maintained by FAL.
- 4.2 The Inglewood land south of Vicarage Road forms development zone A7a and contributes almost half of the Calf Heath Community Park. The drainage strategy for the development zones south of Vicarage Road relies on the network of open basins and ponds within Calf Heath Community Park to provide attenuation and water quality treatment using sustainable drainage principles in accordance with NPS. There would not be space for Sustainable Drainage Systems (SuDS) on the Inglewood development zones without significantly reducing the developable area. Drainage features are included on the Parameters Plan - Green Infrastructure Plan (Document 2.7).
- 4.3 Foul water drainage is proposed to be via a private foul drainage network installed and maintained by FAL, this includes all requisite foul attenuation and pumping station upgrades which are to be agreed with Severn Trent Water at detailed design stage.
- 4.4 There are no existing foul sewers in the vicinity of the Inglewood development plots which could accept foul water drainage.
- 4.5 The use of local foul water treatment systems has been discussed with the EA and they would be suitable only as a short-term solution during construction, so would not be a feasible means of permanently draining foul water from the Inglewood land.
- 4.6 The foul drainage strategy for WMI, which has been principally agreed by Severn Trent Water, requires that a new foul rising main is installed across the Inglewood Investment land that forms Calf Heath Community Park, see figure 1 below. For the foul drainage strategy to be implemented and

coordinated with the surface water infrastructure and landscaping in the Inglewood Investment areas, it is a requirement that these areas are integrated as part of a comprehensive scheme.

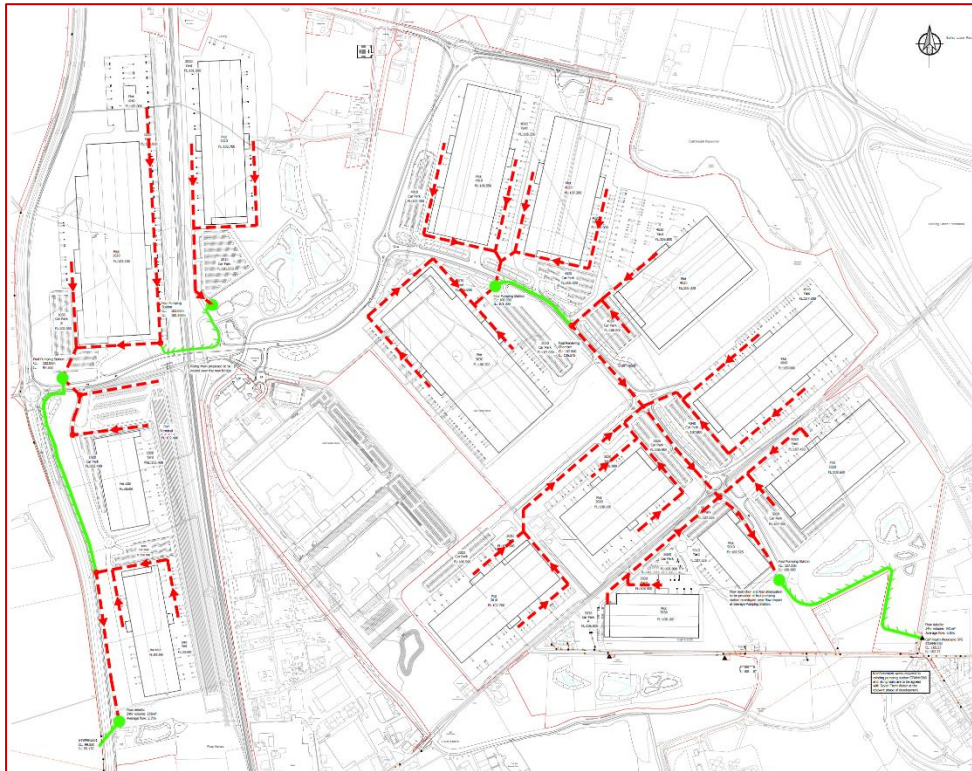


Figure 1: Preliminary foul drainage strategy for WMI

- 4.7 The Inglewood sites would be landlocked with no adjacent public sewers or watercourses if developed independently

5 Utilities Diversions

- 5.1 There are a number of utilities which cross the existing site and require diverting or nullifying, some of these cross the Inglewood land.
- 5.2 As part of the WMI development it is proposed to divert existing 132kV HV cables which currently pass over Inglewood land and across the land north of Vicarage Road, the diversion works propose to bury the cables on a route which would follow the WMI site road network around the development zones.

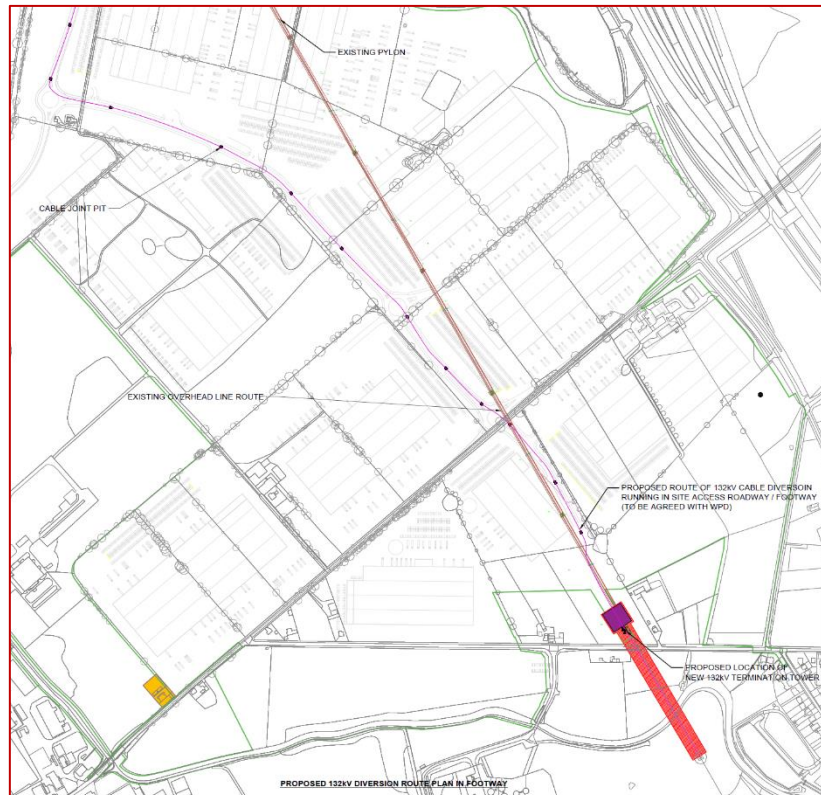


Figure 2: Proposed 132kV cable diversion

- 5.3 Without this diversion, the sway zones for the HV cables may not allow sufficient head room in the Inglewood development zones to construct warehousing at the scale identified in the market demand study.
- 5.4 Without inclusion of the Inglewood Land, which provides the space for the HV infrastructure, new areas would have to be found within the WMI development zones to accommodate the terminal towers and isolators which facilitate the diversion works. The Applicant's development would consequently be constrained.
- 5.5 11kV HV cables and South Staffordshire Water utilities which serve Heath Farm are also proposed to be diverted as part of the demolition works for this property. Should Inglewood Investment develop their sites independently, the supplies for Heath Farm would need to be maintained across land within the title of FAL and would clash with the proposed drainage and earthworks within Calf Heath community park.
- 5.6 To develop their land independently, Inglewood Investment would need to secure new agreements with the utilities companies and develop new diversion schemes.

6 Conclusions

- 6.1 The WMI earthworks strategy principally seeks to remove topsoil and unsuitable quarry spoil from areas where stable development platforms are to be created and place this material in landscaped areas around the site. Where stable development platforms are required over voids that have been created by the removal of unsuitable soils or by historic quarrying, good quality earth is to be obtained from other areas of the site and used to up-fill.
- 6.2 The current earthworks strategy for the WMI includes the Inglewood Investment Company development zones. The strategy accommodates the ecological, environmental, access and transport requirements which have been agreed with the relevant stakeholders, and strikes a 1:1, cut:fill balance across the site.
- 6.3 The omission of the Inglewood Investments development zones would impact the overall earthworks strategy for the WMI.
- 6.4 Inglewood Investment Company could not develop their plots in isolation without significant exportation of material for off-site disposal which would compromise the environmental and transport mitigation measures which have been designed for the WMI.
- 6.5 The established access and transport strategy for the WMI relies on all areas of the site having access to the rail terminal via the new private road network and the new adoptable link road. Inglewood Investments Company would not benefit from the use of the private road network and would require independent accesses onto Vicarage Road.
- 6.6 Inglewood Investment Company would have no established strategy for the disposal of foul or surface water from their development zones if they elected to develop independently, leaving their plots 'land-locked'.
- 6.7 The development zones would not be included as part of the site-wide utilities strategy and independent supplies and diversions would need to be sought without the benefits of the agreements obtained by the Applicant with the undertakers and with 3rd parties to cross their land.
- 6.8 A single, comprehensive solution for the whole of the WMI site is obviously necessary.

**Applicant's Post Hearing Submissions
(CAH, ISH 2 and ISH3)
Compelling Need and VSC**

The West Midlands Rail Freight Interchange Order 201X

Four Ashes Limited

SCALE : COMPELLING NEED AND VSC

1 Introduction

1.1 This note responds to issues raised by the Examining Authority (ExA) during the Compulsory Acquisition and Issue Specific Hearings held on 5 and 6 June 2019 in relation to the strength of the case for the scale of development proposed, having particular regard to the relevant tests for compulsory acquisition and development in the Green Belt. The issues particularly arose during the Hearing on 5 June relating to the Inglewood land but the issues have an importance to the case as a whole.

1.2 Amongst the matters raised were the following:

- the scale of development in relation to demand (including “*why the demand for logistics development demonstrated by the Applicant should all be accommodated on one site*”);
- the scale and characteristics of the development in relation to earlier schemes promoted by the Applicant;
- the Applicant’s case in relation to viability;
- the need or otherwise to incorporate the Inglewood land; and
- what might be the most appropriate Green Belt boundary?

1.3 This note is provided at Deadline 4 as requested by the Inspector. In addition, as agreed, further detailed information will be provided at Deadline 5 in relation to:

- the relevance of other SRFI decisions made under the Town and Country planning procedure or the DCO procedure; and
- the potential to agree issues raised in the viability appraisal submitted to the examination by the Inglewood Investment Company Limited (Inglewood).

1.4 Deadline 5, therefore, will be important in providing detailed information to the Examination but the principles of the Applicant’s case are set out here.

2 Overview of the Applicant’s case

2.1 The tests to be applied in relation to compulsory acquisition and development in the Green Belt, of course, are different. At the heart of both issues, however, are matters relating to the strength of need for the proposed development and the benefits of that development. The Applicant’s case in these respects is summarised below.

Information on these matters is already before the examination and the Applicant respectfully draws the Examination’s attention to Chapters 5, 6 16 and 17 of the Planning Statement (APP-252) and the Update on Green Belt issues provided at Deadline 2.¹ This note does not seek to repeat those matters but instead to distil the essence of the Applicant’s case. In the Applicant’s view, the strength of the case for the scale of

¹ Green Belt – an update provided in response to ExQ1.1.4 at Document 10.1, Appendix 3

the SRFI proposed could scarcely be stronger. The principal components of that case are summarised below.

- a) The Government has concluded at a strategic level that there is a compelling need for development of the national rail network to meet the need set out at paragraphs 2.28 and 2.29 of the NPS. Paragraph 2.29 makes clear that *“the railway must...provide for the transport of freight across the country, and to and from ports, in order to help meet environmental goals and improve the quality of life”*.²

To facilitate this modal transfer, a network of SRFIs is needed across the regions, to serve regional, sub-regional and cross-regional markets.³ Consequently, the Government has concluded *“that there is a compelling need for an expanded network of SRFIs”*.⁴

The NPS considers but rejects the idea that this need could be met by a series of smaller rail freight interchanges.⁵

For the required network to be effective, SRFI development is necessary in the West Midlands. Given the strength and importance of the West Midlands economy, one of the most striking gaps in the national network is the 120km gap between SRFIs at Birch Coppice/Hams Hall and Widnes/Port Salford.⁶ Government policy will be thwarted and forecasts for rail freight growth will not be achieved unless SRFI development takes place in the vicinity of the application site. Network Rail forecasts which underpin the NPS rely on the assumed development of a new SRFI in this location (the location described as *“Four Ashes/ Featherstone”* in Network Rail’s Freight Market Study 2013).⁷

- b) The need for SRFI development in this quadrant of the West Midlands has been identified since at least 2004 by the Strategic Rail Authority⁸, the West Midlands Regional Logistics Study⁹ and successive drafts of the West Midlands Regional Spatial Strategy, including conclusions of the appointed examining panel.¹⁰ That work described the identified need as requiring *“priority attention”*, *“most urgent”* and recognised that the absence of SRFI development would be *“most likely to present a constraint to growth in the West Midlands”*. The immediate vicinity of the application site was identified as one of the *“best regional logistics locations”*.¹¹
- c) The need is not disputed by the planning authorities. Consistent with the Inspector’s report, the SSDC Core Strategy recognises that the need remains outstanding. The need was confirmed in the URS and PBA/JLL studies in 2013 and 2015.¹² Whilst the URS study suggested that a need for a SRFI facility existed to serve the Black Country and southern Staffordshire but that need might be met in a more

² NPS paragraphs 2.36 and 2.29

³ NPS paragraph 2.54

⁴ NPS paragraph 2.56

⁵ NPS Table 4

⁶ Planning Statement paragraphs 5.5.5-5.5.6

⁷ Planning Statement paragraphs 5.1.7-5.1.8 and Network Rail Long Term Planning Process : Freight Market Study, October 2013, page 15

⁸ Planning Statement paragraph 5.1.11

⁹ Planning Statement paragraph 5.2.13

¹⁰ Planning Statement paragraphs 5.2.12-5.2.17

¹¹ All of these references are contained within the same paragraph numbers of the Planning Statement

¹² Planning Statement paragraphs 5.2.24 – 5.2.39

remote location, the Statement of Common Ground (SoCG) with SSDC (REP2-006) confirms (at paragraph 7.17) that such a suggestion would be inconsistent with the NPS. The SoCG with Staffordshire County Council (REP2-007) further accepts the need for a SRFI in southern Staffordshire is established (paragraph 5.23), with no other site having come forward that could meet this need.

- d) It is a matter of evidence and agreement with SSDC that there are no alternative sites on which the need can be met¹³, and with SCC that no other appropriate sites have come forward to meet the need¹⁴ and that the approach taken by the Applicant to the Alternative Sites Assessment is appropriate, accurate and fair¹⁵ (Section 7 of the SCC SoCG).
- e) The Applicant has provided detailed evidence to demonstrate the ideal suitability of the site and this location to meet the identified need (see again Planning Statement (APP-252)). The SoCG with Network Rail confirms the application site as a “*geographically optimal location*”.¹⁶ Network Rail confirmed at the Examination that a number of factors combined to make this “*such an optimal location for a SRFI*”.¹⁷
- f) Evidence of market demand demonstrates an extreme shortage of rail served warehousing in the market area.

2.2 It is difficult to imagine a stronger, evidenced need case for a development which is so strongly supported by Government policy because of the nationally important economic and environmental benefits which it brings.

2.3 These considerations are fundamentally important to the Examination.

3 Questions of scale

3.1 Issues relating to the scale of the development proposed are addressed directly in the Applicant’s response to ExQ1.2.5, ExQ1.2.6, ExQ1.2.18 and ExQ1.2.19, with updates to relevant policy provided in the Applicant’s response to ExQ1.2.4 at Appendix 3 (REP2-010). In particular, the response to ExQ1 1.2.18 is set out in Appendix 9 to the Applicant’s Deadline 2 submissions and is commended again to the Examining Authority rather than repeated here. In very brief summary, however, that appendix:

- compares the scale of the application proposal to the scale of need identified in previous and recent studies undertaken by the planning authorities;
- confirms that the scale proposed is comparable to the scale of other recent SRFI development in other parts of the country; and
- makes the point that in the absence of any alternative rail served sites of any significant scale “*if the need is to be addressed in line with national policy, optimum use must be made of the opportunity at WMI*”.¹⁸

¹³ Statement of Common Ground with SSDC paragraphs 9.9-9.10

¹⁴ paragraph 5.23 of the SCC SoCG

¹⁵ Section 7 of the SCC SoCG

¹⁶ Statement of Common Ground with Network Rail paragraph 3.2

¹⁷ Evidence to the examination from Richard Dougdale on behalf of Network Rail, 5 June 2019

¹⁸ Document 10.1, Appendix 9, paragraph 5.7

3.2 Appendix 3 (REP-010) also provided an update on the evidence base position for the region, including the Black Country Core Strategy evidence base (see paragraphs 3.7 - 3.29), with a brief summary of the Black Country Economic Development Needs Assessment, May 2017 (BC EDNA) set out below:

- The BC EDNA notes a chronic and worsening shortage of employment land in the Black Country;
- The Identified available land supply is estimated at 263 ha, leaving a shortfall to 2036 of 537 ha.
- The EDNA provides the clearest recommendation to date, stating at paragraph 4.9 *“In summary, the Black Country does not have sufficient land within the urban area to meet its housing and employment growth needs. NPPF requires that local authorities meet such needs and therefore new sources of supply must be explored”*;
- To meet this shortfall the EDNA takes into account potential contributions from other authorities including South Staffordshire with (paragraph 8.4) *“potentially to 350 ha if the future contribution of Four Ashes is taken into account”*, suggesting that WMI (paragraph 8.5) *“would potentially contribute to meeting the needs/jobs for the Black Country”*;
- With the EDNA assuming that at least 30-35% of the Proposed Development could contribute towards the Black Country needs, should it not come forward, the requirement to plan for new employment land (likely to be in the Green Belt) near to the Black Country increase by a minimum of c.100 ha. This would increase the shortfall in the Black Country to closer to 450ha (rather than the 350ha calculated in the BC EDNA).

3.3 In this context, we further commend the response which the Applicant gave to ExQ1.2.5. The analysis contained in that response identified that the scale of need identified in previous studies was almost certainly conservative and presented an up to date assessment, which concluded that the scale of need identified today **was approximately five times the scale of the WMI application proposals**¹⁹.

3.4 It is not the case, therefore, that the demand for logistics is being proposed all on one site by the WMI application.

3.5 It may be suggested that the need could be met by being spread across the West Midlands but:

- the NPS counsels against meeting the need in a series of smaller locations because, even if practical, to do so would diminish the quality of rail service which larger SRFIs are intended to provide;
- the alternative sites assessment provides a very detailed analysis agreed by the planning authorities which concludes that there are no alternative locations within the Green Belt or elsewhere on which the need could be met;
- that conclusion is reinforced by the submissions of the Black Country Authorities (Wolverhampton and Walsall (REP2-032)) and by the intended necessary reliance of the emerging Black Country Plan on the WMI development to meet a proportion of its employment requirements which cannot be met within the urban or Green Belt areas of the Black Country.

¹⁹ Assuming that a plan undertaken today would project that to say 2035 the total requirement would approximate to 3,707,552 sq m (the Proposed Development is 743,200 sq m), as set out in the Applicant’s response to ExQ1.2.5.

- 3.6 Whilst the scale of the application proposals necessarily involves greater land take and more loss of Green Belt land than a smaller scheme, it is the Applicant's case that:
- the evidence demonstrates that the need for employment and particularly rail served employment development significantly exceeds the capacity of brownfield land and that the authorities accept that the need will not be met unless Green Belt land is developed (on a scale greater than the application proposals);
 - it is a matter of evidence that there is no preferable or alternative site;
 - the scale of the application proposals brings significant benefit, particularly in terms of:
 - its ability to meet the aims of the Government's rail freight policy; and
 - the scale of employment generated.
- 3.7 The Applicant's case in relation to the second point (employment) is set out in the Planning Statement at Chapter 16 and in response to ExQ1.4.1.
- 3.8 The Applicant's case in relation to the first point (the rail benefits of scale) is set out in **Appendix 3** (Rail Connectivity Note) of Document 14.1.

4 Viability

- 4.1 It is the Applicant's case that there is a compelling need for the scale of development proposed and that very special circumstances exist to justify its development in the Green Belt. The case is fully evidenced and its component parts are not significantly disputed by the planning authorities. Against that background, the Applicant did not submit viability evidence as part of the justification for the application proposals. The need case is strong and free-standing and is not dependent upon a viability case.
- 4.2 Nevertheless, issues of viability have been raised by the Inglewood objections and by subsequent questions from the Examining Authority. The applicant considers that issues of viability strongly reinforce its case and is happy, therefore, to provide the information requested as a reinforcement of its overall case in relation to both need and scale.
- 4.3 Viability issues also help to inform a discussion about the timing of rail freight infrastructure. At Deadline 5, the Applicant will review lessons to be learned from other SRFI decisions but wishes to record one point at this stage in relation to the connection between the timing of rail freight infrastructure and the Green Belt case. That point is as follows:
- a) development consent can be granted for the application proposals if very special circumstances exist for the development proposed;
 - b) those very special circumstances are described above, and they do not depend upon the speed with which the rail freight interchange can be delivered;
 - c) the application should be judged as a whole, not least for its credentials as a SRFI which "*when constructed*" should have the characteristics of an SRFI set out in Section 26 of the Planning Act 2008 and required by the NPS;
 - d) issues relating to the timing of rail freight infrastructure are separate and the relevant position is well established in the East Midlands Gateway case – see in particular the Secretary of State's decision letter

at paragraphs 16 and 24. The Applicant's case in this respect is set out in Appendix 2 to submissions at Deadline 2 (REP2-010);

- e) as discussed at the Issue Specific Hearing on 6 June, the Applicant would be pleased to receive any suggestions in relation to its proposed commitments to rail infrastructure set out in the draft Requirements submitted on 24 April 2019 (Document 3.1B). In principle, however, the applicant is seeking to do everything it can to commit to bringing forward the rail infrastructure as quickly as practicable. The scale of up-front infrastructure investment required to be funded means that the Applicant has every incentive to complete the rail interchange and to unlock the remaining 75% of the proposed development floorspace. No party seriously doubts the Applicant's commitment the Application before the Examination demonstrates that the proposed SRFI would be of the highest quality, meeting the full requirements of the Planning Act 2008 and the NPS. It is on that basis that the application should be judged.

4.4 By Deadline 5, the applicant will have attempted to respond to the action agreed at the examination on 5 June and attempt to find what common ground may be agreed with Inglewood. In any event, the information already available to the examination (set out in Appendix 10 to the Applicant's Deadline 2 submissions (REP2-011)) identifies:

- the objectors (Inglewood) suggest that the application would achieve an overall return on cost of approximately 12%, which is significantly below the necessary return of 15-20% on gross development value advised by the PPG;
- even the 12% return on cost is only achievable if the development consistently exceeds rental levels achieved by the best comparable locally and achieves the best yield from the potential range advised by the objectors' agents, whilst omitting some material costs.

4.5 It is anticipated that further analysis will demonstrate not only the need for the full scale of the application proposals, but also:

- accelerating the delivery of the rail freight interchange (even if it was practical) would not be viable;
- "losing" the c.111,020 sq m of the net lettable floorspace (or 15.28%) of development on the Inglewood land would not be viable; and
- a smaller scale of development, which carried a comparable infrastructure cost, would also not be viable.

5 Specific issues relating to Inglewood

5.1 The Applicant's case has been set out in Appendix 4 to its Deadline 3 submissions and in response to ExQ1.2.19, which is set out at Appendix 9 of the Applicant's Deadline 2 submissions. At the examination, a representative for Inglewood confirmed that there was no objection to the "planning element" of the DCO application and that the need for a comprehensive approach to green infrastructure may justify the compulsory acquisition of the "green" element of the Inglewood land. Objection was maintained, however, to the acquisition of development zones A5 and A7. **Appendix 1** to the Applicants Deadline 4 submission provides the "case study" requested by the Examining Authority, which demonstrates the need for a comprehensive approach to ground levels and drainage. The Inglewood development plots cannot be separately developed from the related green infrastructure.

6 SRFI development in the Green Belt

- 6.1 These matters will be addressed in more detail at Deadline 5 with the benefit of a review of other SRFI decisions, as requested by the Examining Authority. At this deadline, however, it may be helpful to identify the following:
- a) it is a matter of detailed, evidence agreed with the relevant local authorities that there is no alternative location at which the identified need can be met apart from this Green Belt site;
 - b) the review requested by the Examining Authority will identify that large-scale rail served development has been approved in the Green Belt elsewhere by the Secretary of State and by a local planning authority under the Town and Country planning process. If there is a distinction in principle to be drawn between the Town and Country planning process and the DCO process it would need to consider the nature of any differences in planning policy. Both policy regimes identify a presumption against inappropriate development within the Green Belt and require very special circumstances to be demonstrated. The NPS confirms that the Secretary of State will attach substantial weight to the harm to the Green Belt when considering any application for such development. That policy emphasis, however, is directly consistent with the comparable policy applicable to the Town and Country planning regime set out in the NPPF and previously set out in PPG2.
- 6.2 For the DCO regime, however, there are some notable components of the NPS policy. In particular:
- a) SRFI development is identified as nationally important for which there is in principle a “*compelling need*” (NPS paragraph 2.56) and “*a presumption in favour of granting development consent*” (NPS paragraph 4.2);
 - b) Paragraphs 2.56 and 2.45 of the NPS recognise that SRFIs will need to be “*located near the business markets that they will serve*” and “*near to the conurbations that consume the goods*” and that “*it may be that countryside locations are required for SRFIs*” (NPS paragraph 4.84); and
 - c) (as the country’s principal conurbations are each surrounded by Green Belt) the NPS is clear that “*promoters of SRFI may find that the only viable sites for meeting the need are on Green Belt land*” (paragraph 5.172).
- 6.3 These paragraphs do not diminish the importance of Green Belt policy but they do identify SRFI development in particular as a type of development which may be able to demonstrate very special circumstances. The necessary size and locational characteristics of SRFI development are (in the Applicant’s opinion) the reason why no other form of land use is recognised in this way in national planning policy.
- 6.4 It is also relevant that there is an acknowledged need in local planning policy to review Green Belt boundaries in order to meet requirements for housing and employment development. This much is established in the South Staffordshire Core Strategy (Core Policy 1, following the recommendations of the Inspector²⁰) and in the emerging Local Plan Review which recognises that it may be “*unavoidable*” to locate development within the Green Belt given the scale of housing and employment requirements.²¹

²⁰ Planning Statement paragraph 6.3.30

²¹ Issues relating to the SSDC Local Plan review are set out in document 10.1, appendix 3 from paragraphs 3.38

6.5 The Applicant's case in relation to the impact of the proposed development on the Green Belt is set out at Appendix 3 of the Applicant's Responses to ExQ1 (REP2-010).

7 Green Belt boundary south of Vicarage Road

7.1 Issues were also raised at the examination about the most appropriate Green Belt boundary and whether that might be best formed by Vicarage Road or by the boundary to the development proposed south of Vicarage Road. In this respect, the Applicant's case is as follows:

- a) the application proposes the development of the frontage land (Zones A7A-C) but with the development deliberately oriented towards Vicarage Road in order to protect the character of the land to the south and the amenity of Calf Heath village. In this respect, substantial bunding and landscaping is proposed to create a clear boundary to the development, reinforced by the Calf Heath Community Park, which is permanently committed as open green infrastructure through the DCOB;
- b) the Applicant's discussions with SSDC officers have suggested any future Local Plan review would respond to a DCO consent for WMI by re-drawing the Green Belt boundary along the rear of Development Zones A7a-c, using the green infrastructure (and particularly the bunds) to provide clear, visible physical boundaries to the Green Belt;
- c) the land to the south would have an open landscaped aspect with significant community access, creating a high-quality landscaped environment connecting to the canal and providing an important buffer with Calf Heath village. That land would be far less susceptible to proposals for future development than the land immediately south of Vicarage Road; and
- d) even if it were practical and viable, limiting WMI to the land north of Vicarage Road would leave the land to the south vulnerable to future development. Inglewood's interest in the land is demonstrative of the market speculation that would inevitably arise from such immediate proximity to WMI on land which is directly accessible to WMI, fronting a principal road and with no obvious other constraints to development.²²

7.2 Questions were raised in the examination about the applicant's earlier illustrative proposals for WMI in 2011 and in 2015, which drew the boundary at Vicarage Road. The Applicant can confirm the oral evidence given at the examination to the following effect:

- a) those earlier proposals were not tested or developed to the same extent as the DCO application proposals and were put forward without a fully detailed understanding of the costs or constraints of the development, many of which have become apparent through detailed engagement with stakeholders in the preparation of the DCO application;
- b) those proposals were illustrated by reference to a smaller scale rail freight interchange of c.6m sq ft. The previous indicative scheme was based on a scheme providing smaller warehouse units and an assumption that the rail terminal sidings and unloading pad would be no longer than 400m in length rather than 750m in length as now proposed. Since these proposals were brought forward occupier requirements have changed, with much larger footprints now required and with the NPS clearly setting

²² The Applicant's response to EXQ1.2.19 set out in Appendix 10 to its Deadline 2 submissions explain the relative lack of constraints on the land south of Vicarage Road

out that SRFIs should have capability to handle 775m trains and minimise the need for shunting (paragraph 4.89);

- c) as the evidence has identified, SRFI developments nationally are evolving at a larger scale in recognition of the limited opportunities for SRFI development, the scale of necessary infrastructure investment and the benefits of scale which larger schemes generate (see the Rail Connectivity Note (**Appendix 3** of Document 14.1).
- d) The evolution of the design process for the wider scheme is set out in the Design and Access Statement (APP-258) which contains a specific section on how the rail terminal design in particular evolved from the smaller version into the full 750m layout (APP-258, Para 5.4). The shorter terminal was consulted on in Stage 1 consultation (see SPP-258, Fig 48) as a result of the factors set out in the DAS, the full length terminal was taken forward.
- e) The scale of development proposed now has the benefit of providing more floorspace and therefore more customers and a greater volume of traffic to help make the rail terminal as effective as possible and achieve the desired modal shift. Both the number of occupiers and the volume of floorspace help to contribute to this achievement making scale an important aspect of a successful SRFI. These arguments are set out in the Rail Connectivity Note (**Appendix 3** of Document 14.1).
- f) the decision to promote development south of Vicarage Road was taken in response to these considerations, taking account of the factors set out in the Applicant's response to ExQ1.2.19;
- g) the application falls to be considered as at today's date based on its merits and the Applicant considers that the arguments of need, scale, benefits and viability are compelling.

**Applicant's Post Hearing Submissions
(CAH, ISH 2 and ISH3)
Rail Connectivity Note**

The West Midlands Rail Freight Interchange Order 201X

Four Ashes Limited

APPLICANT'S NOTE FOLLOWING DCO PANEL HEARING 5TH JUNE 2019 RELATING TO RAIL CONNECTIVITY (AGENDA ITEM 3)

1. Applicant to provide evidence of other SRFI GRIP stages at time of submission for DCO

East Midland Gateway: Formal GRIP 2 approval was due to be issued at the time of submission of the DCO application with the work for GRIP 2 completed.

iPort: iPort has confirmed that no GRIP approvals had been achieved by the time of the planning application submission, but discussions had been held with Network Rail and a letter of support was provided.

DIRFT 3: This project already had a mainline connection from DIRFT 1&2 so the stage of GRIP approval for DIRFT 3 is not as relevant to WMI as other projects in terms of the level of design achieved at the submission of the planning application.

2. Applicant to confirm proportion of iPort occupiers using rail

iPort has confirmed to the Applicant that three out of the four occupiers at iPort are now using rail services (see further below).

3. Applicant to provide evidence of quantum of floor space occupied when the first freight train became operational at other SRFIs and provide a view on where the “tipping point” lies in terms of demand to support the first rail freight service.

1. There has been an evolution of SRFIs with the first generation based on smaller footprints of buildings and overall quantum of floorspace as a result of historic rail connections at the relevant sites. These are reviewed below in order to establish the likely point that effective rail services can begin.

Factors affecting the number of rail services

2. DIRFT is the largest and the earliest example of SRFIs and therefore provides a good basis for assessing the progress of other later SRFIs taking into account the changes in market conditions and customer requirements.
3. DIRFT 1 progressed before the DCO process for national infrastructure was introduced and at a time when the market demand for B8 units concentrated on unit sizes of between 20,000 sq m and 50,000 sq m. Prologis also took a stake in DIRFT 1 at a point when the rail had already been built so, although the rail infrastructure had already been provided, it can be seen from the graph below that the increase in train services developed as the increase in floorspace and the number of customers progressed.

4. This supports the common sense view that the larger the amount of floor space the greater the number of train services that will be delivered, up to the point that the rail terminal reaches its capacity. The progress in the development of floor space and the development of the rail services is set out below, which highlights the relationship between total floorspace and the number of rail services.
5. It should be noted that DIRFT 1 rail terminal approached its capacity for handling intermodal containers when 10 trains per day were achieved, hence the subsequent DCO application for DIRFT 3.
6. ProLogis notes on its website¹ about how DIRFT has evolved since construction:

“The Daventry International Rail Terminal (DIRFT), one of the earliest of these new developments, was originally designed to handle freight in transit to and from the Port of Felixstowe and the Channel Tunnel. A 364-acre [147 Ha] logistics park with planning permission for around 4 million square feet [371,000 square metres], the first phase of DIRFT included a rail terminal to operate on the electrified West Coast Main Line. By the time DIRFT was officially opened in November 1997 by HRH The Princess Royal, the rail terminal was fully operational and the first building, a 475,000 square foot [44,129 square metre] facility for Eddie Stobart, was complete.

Less than 10 years later, when Prologis secured a holding in DIRFT, the original 364 acre site had been built out and at the rail terminal, container traffic was increasing year on year. In short, growing number of companies were realising that it is faster, more cost-effective and more environmentally-friendly to transport goods by rail than by road.

We became owners of the rail terminal and a 130 acre [52 Ha] expansion site at DIRFT when we acquired Severn Trent Property Ltd in 2006. We started developing the phase two land in 2010, with an 840,000 square foot [78,000 square metre] national distribution centre for Tesco. This was followed by a 1 million square foot [92,900 square metre] general merchandise distribution hub for Sainsbury’s and a 420,000 square foot [39,000 square metre] intermodal hub for Eddie Stobart. By 2015, the second phase of the development, which was now known as Prologis RFI DIRFT, was complete.

All three phase two buildings are rail-connected and the process of linking the new rail infrastructure to the existing freight line was complex. We linked the Tesco facility to the rail terminal on the original site through a 20 metre rail tunnel that we built under the A5 trunk road. While for Sainsbury’s, which has its own intermodal facility, we adopted a different approach. We built a bridge across the A428, so that we could extend the existing freight line to a railhead beside the new distribution centre. This extended line will also serve the third phase of Prologis RFI DIRFT, carrying on to a new bridge over the A5 and onwards to a new rail terminal that will be part of the latest stage of the development.

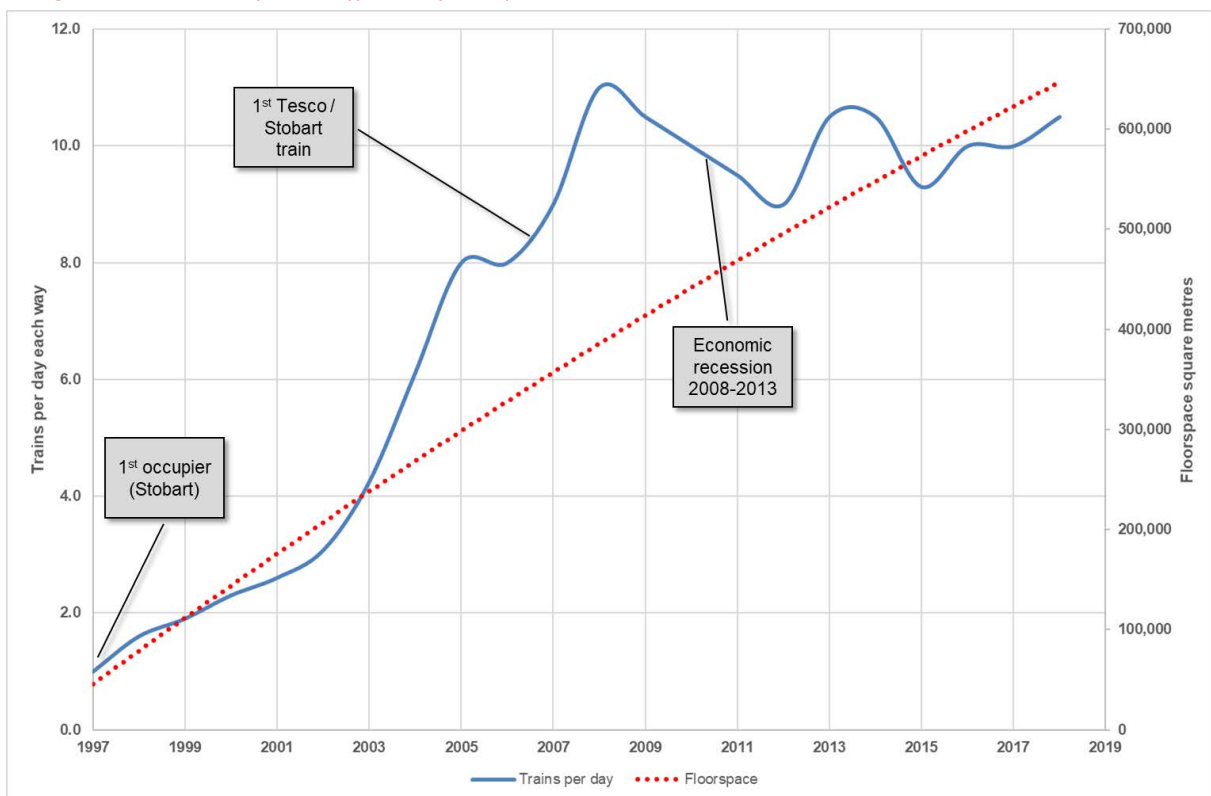
¹ <https://www.prologis.co.uk/our-stories/on-the-right-track-20-years-at-dirft>

In 2014, the Planning Inspectorate granted Prologis a Development Consent Order for a further 7.8 million square feet [725,000 square metres] of rail-served logistics space at DIRFT...

Work on the third phase is moving forward. The initial stage of infrastructure - providing building plateaux, access roads and full servicing - is complete and the first two logistics buildings, which total 520,000 square foot, are under construction. At the rail estate freight trains now run to and from Barking, Coatbridge, Felixstowe, Grangemouth, Mossend, Southampton and Wentloog. However, the next phase will include a new terminal that will offer customers even more capacity for intermodal rail freight as an alternative to road haulage."

7. The annotated chart below shows the evolution of rail traffic through DIRFT against growth in floorspace and other major milestones:

Figure 1 Evolution of rail traffic and floorspace at DIRFT



8. It can be seen from the above graph that rail services increased in proportion to floor space up to the point that 10 trains per day were achieved, which was close to the capacity constraint for trains at DIRFT 1&2.
9. It should be noted that the volume of floor space and the number and diversity of occupiers drive not only the number of rail services but also the number of destinations available to customers. The greater the number of customers at the SRFI the greater the likely number and frequency of trains and the number of destinations for the containers.

An SRFI which can support frequent trains in multiple directions is clearly more likely to be attractive to rail-based occupiers and more efficient and effective as an SRFI.

10. Since DIRFT 1 was built the market demand for unit sizes has increased significantly to nearly double the average size of warehouse unit footprint. For a given volume of floorspace, that results at WMI in a reduction in the number of occupiers.² Larger units may generate more demand for rail, but more large units will support both rail volumes and a diversity of rail origins.
11. The combination of total floorspace and the number of occupiers increases the likelihood of achieving full train loads and therefore a competitive cost of rail haulage rate per container. Occupiers who may only have a half train load of containers for say destination “A” will be able to combine traffic with others and thereby increase their ability to form full train loads for a choice of destinations and achieve the economies of scale to make rail attractive.

Factors affecting the “tipping point” for cost effective rail services to start

12. The tipping point referred to in the above title refers to the point at which an SRFI can begin to establish effective rail services for its customers and for those services to be attractive to its users compared to road. Arguments over the timing of the delivery of the rail infrastructure from the point of view of the viability of the development rather than the viability of the rail services are different and not the objective of this note.
13. There are a number of more recent examples than DIRFT of when rail services have been able to start at SRFIs, in particular at iPort and EMG.
14. The SRFI developed at iPort was granted a TCPA consent with a condition (Condition22) that the rail infrastructure was to be opened before a warehouse could be occupied. That condition proved not possible to meet and so the developer sought a variation to that condition to allow 130,000 sq m of floorspace before the rail terminal was opened (9th July 2015 Ref: 15/01055/MAT). The rail terminal was opened in February 2018 with the first rail service, but it is only in 2019 that occupiers have been able to achieve the quantum of demand to launch rail services for three out the four occupiers at iPort. Public information suggests that iPort at that stage has achieved 156,000 sq m (1.7m sq ft) of warehousing.

² Market trends in the size of distribution units are explained in the Applicant’s response to ExQ1 1.2.18, which comprised Appendix 9 of the Applicant’s Deadline 2 submissions and in the updated Market Assessment Report (Document 7.4A) at paragraphs 4.4.2-4.4.5.

15. East Midlands Gateway (EMG) is proposing to open its rail terminal in December 2019 following the sale or letting of approximately 232,000 sq m (2.5m sq ft) of warehouse space by June 2018 comprising several units which is in the process of delivery (the first unit is occupied), as per its public website.

Conclusion

16. The DIRFT graph above is helpful in identifying the relationship between total floorspace and the number of rail services and also suggests that the first services based on smaller unit footprints was possible at around 60,000 to 70,000 sq m.
17. iPort Doncaster has achieved the effective rail service threshold this year with some 156,000 sq m (1.7 million sq ft) of floorspace now occupied with similar building footprints to WMI.
18. EMG is estimated to achieve the first rail services at the point that approximately 232,000 sq m of floorspace has been occupied or under construction.
19. Based on this evidence it appears that the effective tipping point” for first rail services is approximately 186,000 sq m (2m sq ft) with three to four customers in occupation. Thereafter additional floorspace and occupiers drive an increase in both rail service frequency and the number of destinations served.
20. Rail services provided after the “tipping point” should have the best chance of achieving full train loads to different destinations thereby bringing haulage costs down and making rail attractive to new customers.

**Applicant's Post Hearing Submissions
(CAH, ISH 2 and ISH3)
Bus Subsidy Calculations**

The West Midlands Rail Freight Interchange Order 201X

Four Ashes Limited

WMI - Bus Subsidy Calculations

06-Aug-18

Estimated Calculation Factors

Annual Operating Costs	£150,000
Fare (Based on National Express West Midlands Day Saver £4.60)	£2.30
Expected Operating Days (Working Days)	252
Mode Share (Public Bus) Baseline	3.0%
Target Mode Share (Public Bus) Target	5.5%

Vehicle Assumptions

Additional vehicles to improve existing no. 54 service	2
Shuttle buses required to operate service between Cannock Chase, Wolverhampton	3

Proposed Enhanced Public Bus Service Calculations (Target Bus Mode Share)

Build Out Year	Expected Number of Employees	Employees Travelling by Bus	All Day Demand	Annual Demand	Annual Revenue	Number of Buses	Annual Cost	Annual Subsidy / Profit	Cumulative Subsidy
2021	570	31	63	15800	£36,341	2	£300,000	-£263,659	-£263,659
2022	1140	63	125	31601	£72,682	2	£300,000	-£227,318	-£490,977
2023	1710	94	188	47401	£109,023	2	£300,000	-£190,977	-£681,954
2024	2280	125	251	63202	£145,364	2	£300,000	-£154,636	-£836,591
2025	2850	157	314	79002	£181,705	2	£300,000	-£118,295	-£954,886
2026	3420	188	376	94802	£218,046	2	£300,000	-£81,954	-£1,036,841
2027	3990	219	439	110603	£254,386	2	£300,000	-£45,614	-£1,082,454
2028	4560	251	502	126403	£290,727	2	£300,000	-£9,273	-£1,091,727
2029	5130	282	564	142204	£327,068	2	£300,000	£27,068	
2030	5700	314	627	158004	£363,409	2	£300,000	£63,409	
2031	6270	345	690	173804	£399,750	2	£300,000	£99,750	
2032	6840	376	752	189605	£436,091	2	£300,000	£136,091	
2033	7410	408	815	205405	£472,432	2	£300,000	£172,432	
2034	7980	439	878	221206	£508,773	2	£300,000	£208,773	
2035	8550	470	941	237006	£545,114	2	£300,000	£245,114	
	8550							Maximum Cumulative Subsidy	-£1,091,727
								On-going Profit/Loss	£245,114

Proposed Shuttle Bus Calculations

Build Out Year	Expected Number of Employees	Number of Shuttle Buses	Annual Cost	Service Charge	Annual Subsidy Required	Cumulative Subsidy
2021	570	1	£150,000	£10,000	-£140,000	-£140,000
2022	1140	1	£150,000	£20,000	-£130,000	-£270,000
2023	1710	1	£150,000	£30,000	-£120,000	-£390,000
2024	2280	1	£150,000	£40,000	-£110,000	-£500,000
2025	2850	1	£150,000	£50,000	-£100,000	-£600,000
2026	3420	2	£300,000	£120,000	-£180,000	-£780,000
2027	3990	2	£300,000	£140,000	-£160,000	-£940,000
2028	4560	2	£300,000	£160,000	-£140,000	-£1,080,000
2029	5130	2	£300,000	£180,000	-£120,000	-£1,200,000
2030	5700	2	£300,000	£200,000	-£100,000	-£1,300,000
2031	6270	3	£450,000	£330,000	-£120,000	-£1,420,000
2032	6840	3	£450,000	£360,000	-£90,000	-£1,510,000
2033	7410	3	£450,000	£390,000	-£60,000	-£1,570,000
2034	7980	3	£450,000	£420,000	-£30,000	-£1,600,000
2035	8550	3	£450,000	£450,000	£0	-£1,600,000
	8550					

Service Charge

£450,000